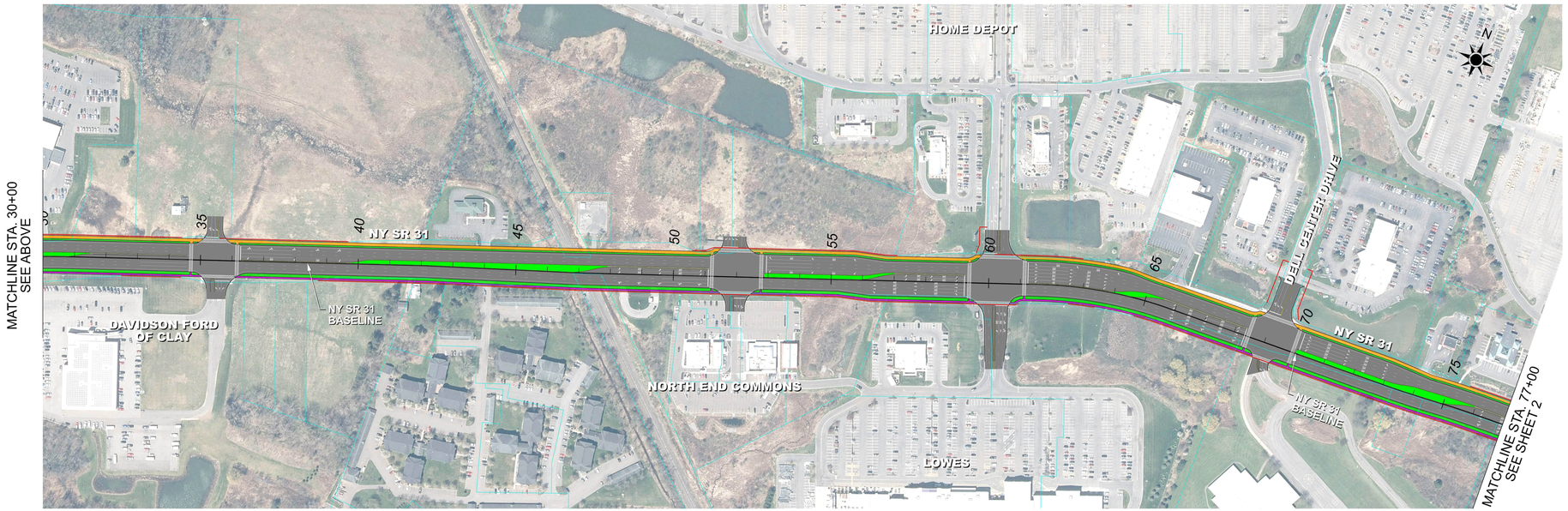




NEW YORK STATE
Department of Transportation

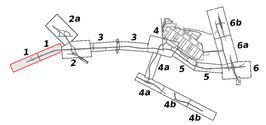
Micron Semiconductor Fab Project

Clay, New York

Legend

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Key Map



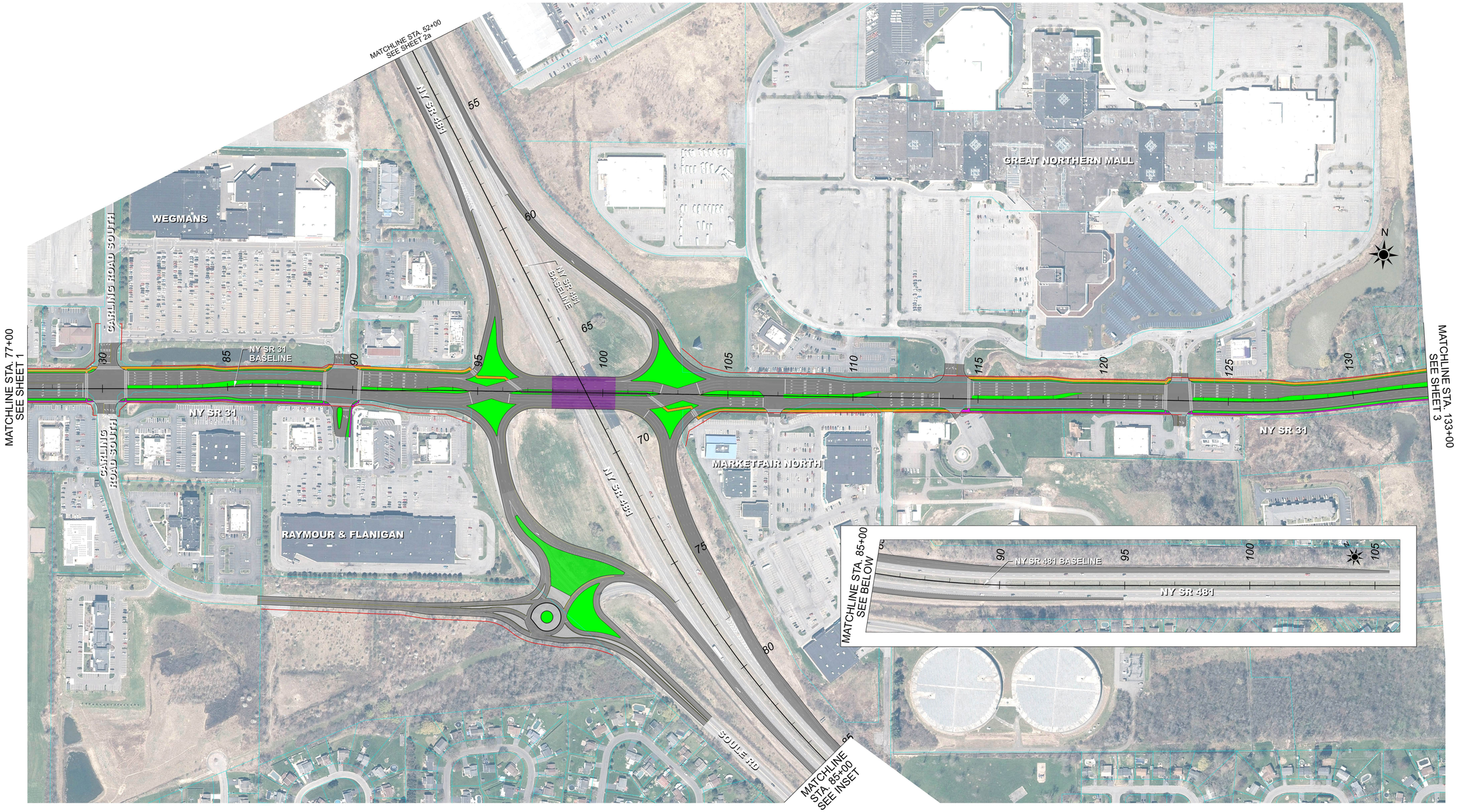
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Sheet Number

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NEW YORK STATE
Department of Transportation

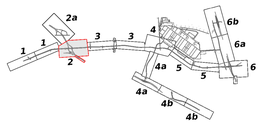
Micron Semiconductor Fab Project

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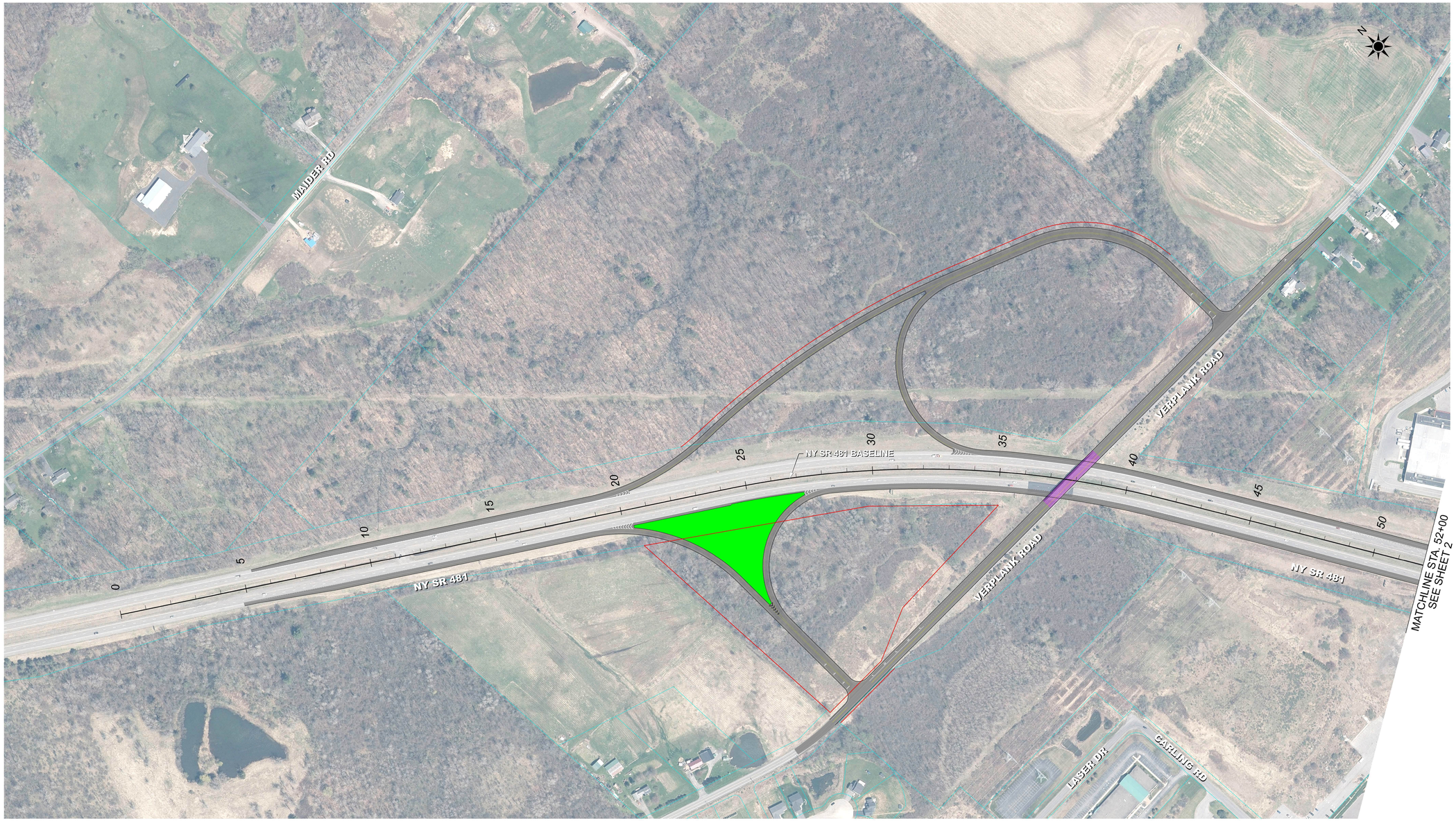


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Sheet Number

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NEW YORK STATE
Department of Transportation

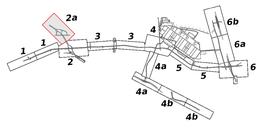
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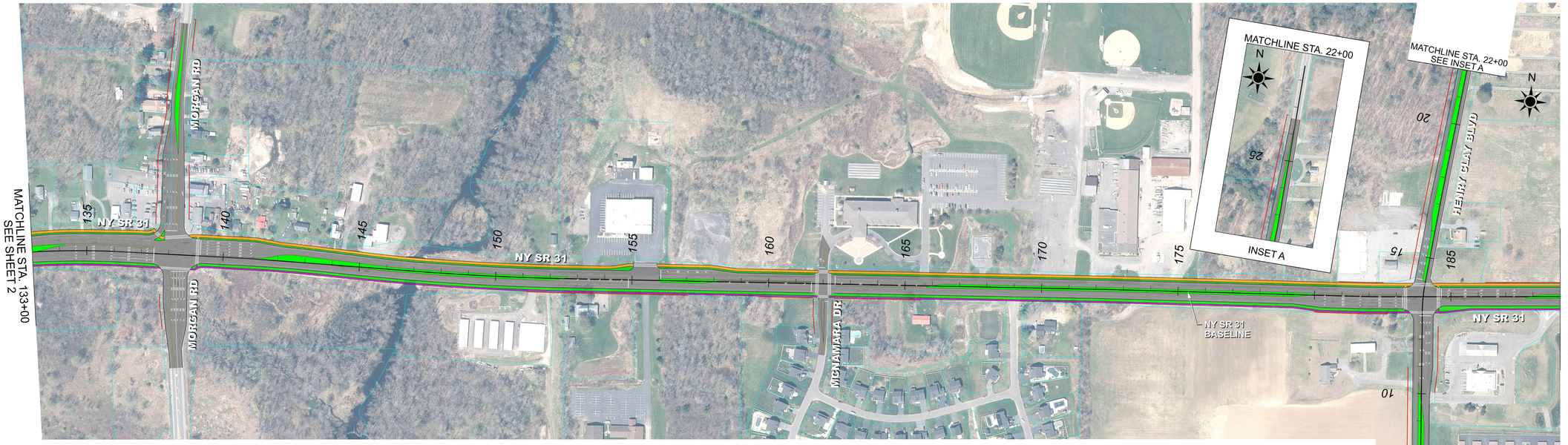
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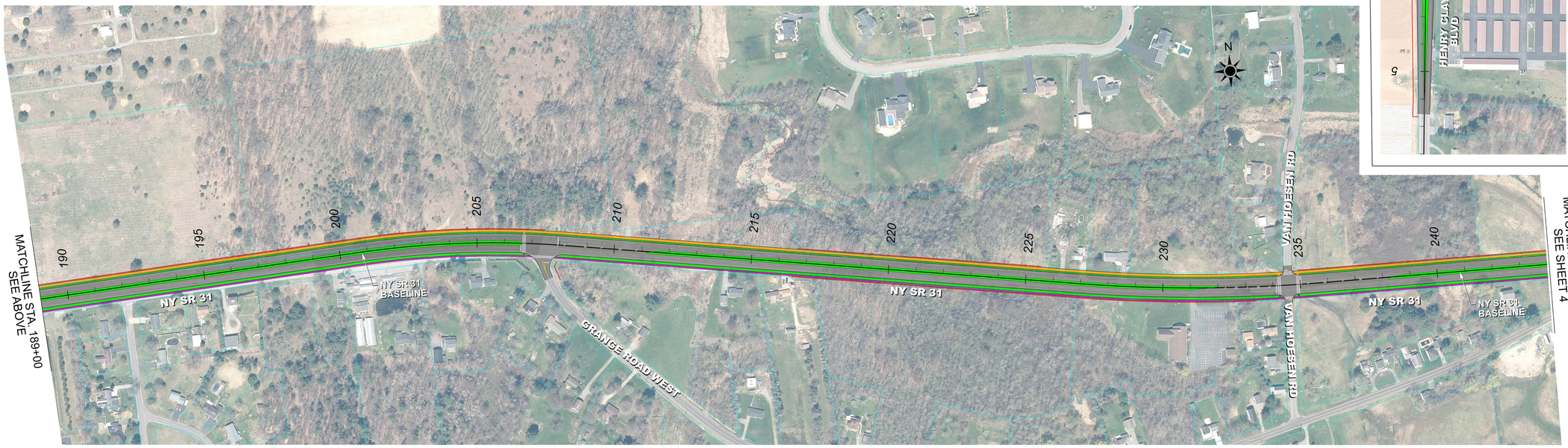
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Department of Transportation

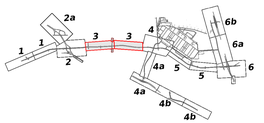
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Sheet Number

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NEW YORK STATE
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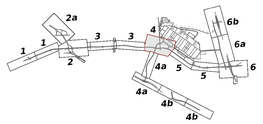
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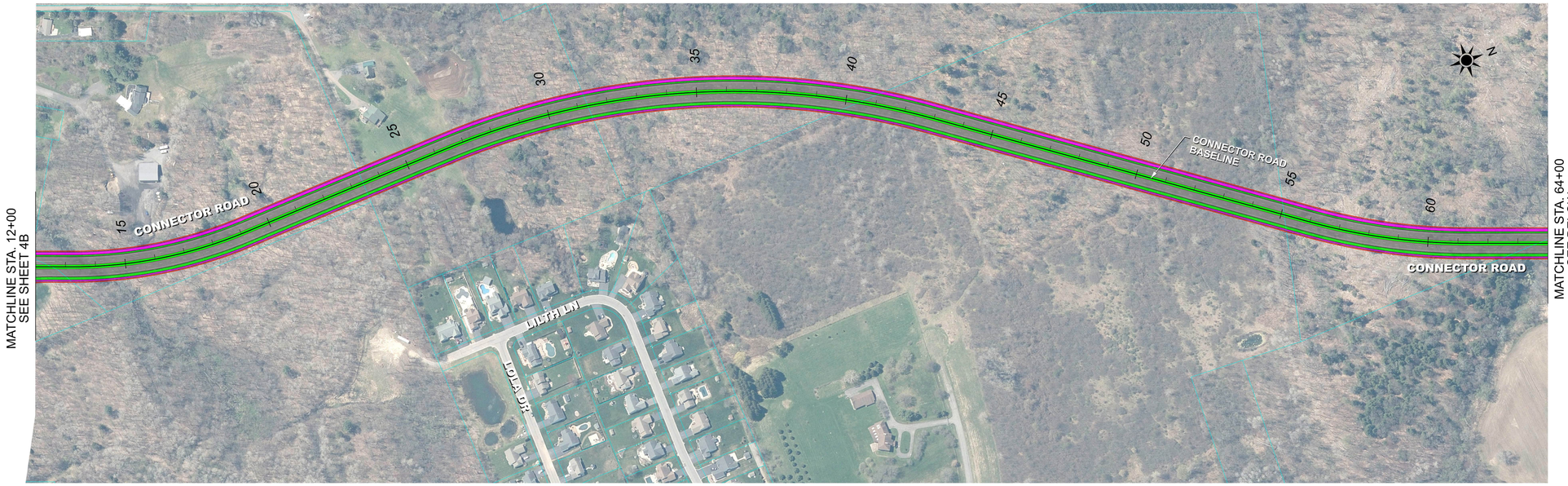
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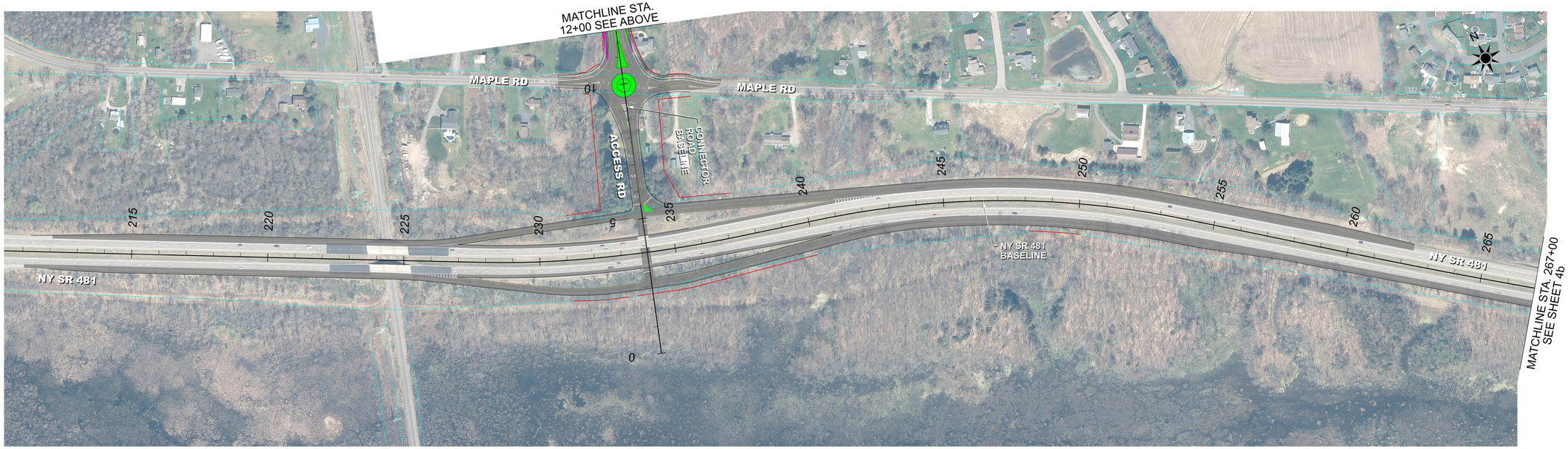
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Department of Transportation

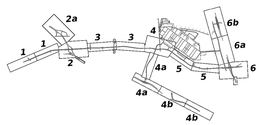
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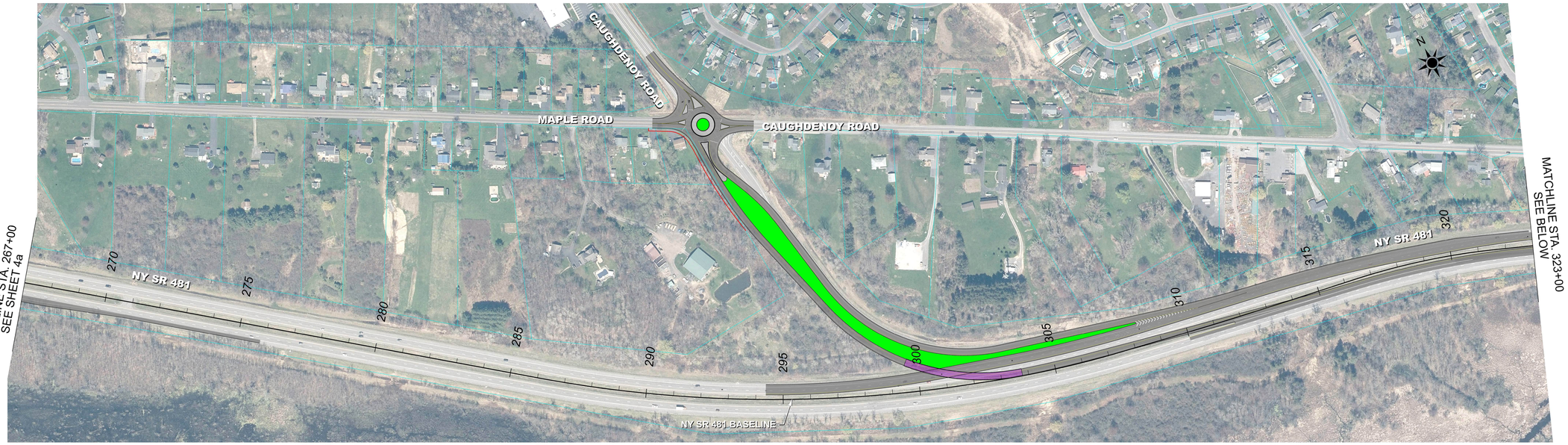
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4a





NEW YORK STATE
Department of Transportation

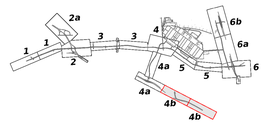
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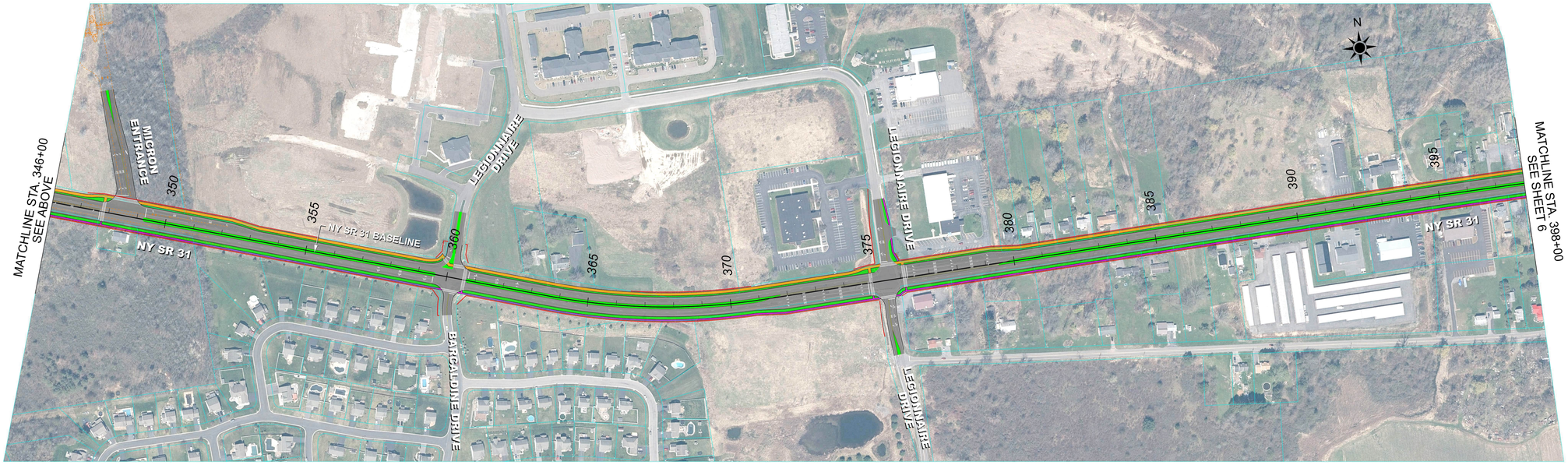
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Sheet Number

4b





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Department of Transportation

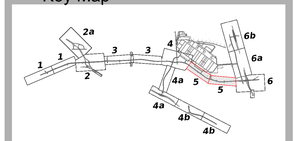
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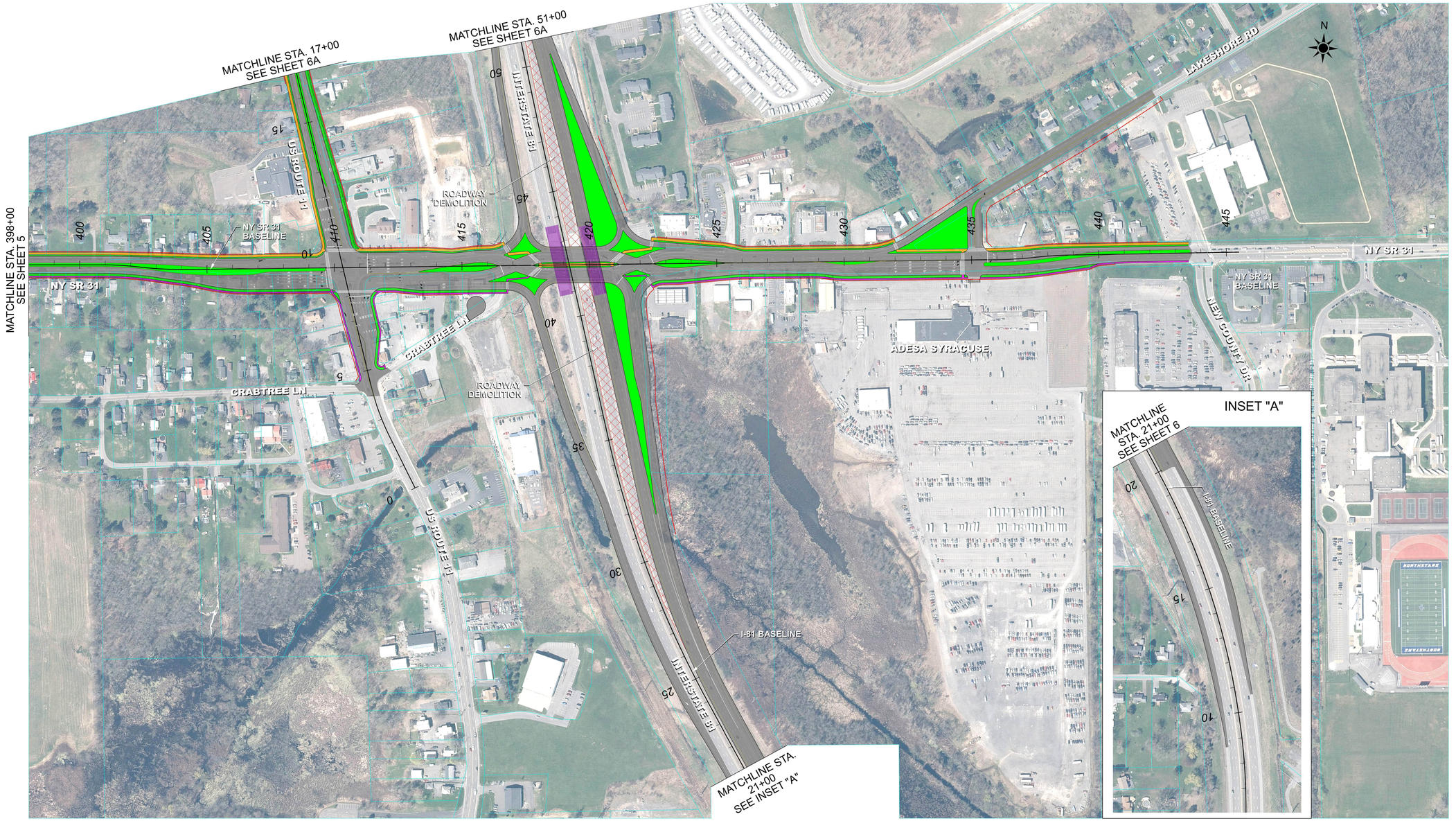


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NEW YORK STATE
Department of Transportation

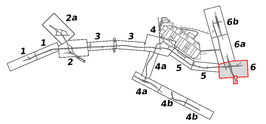
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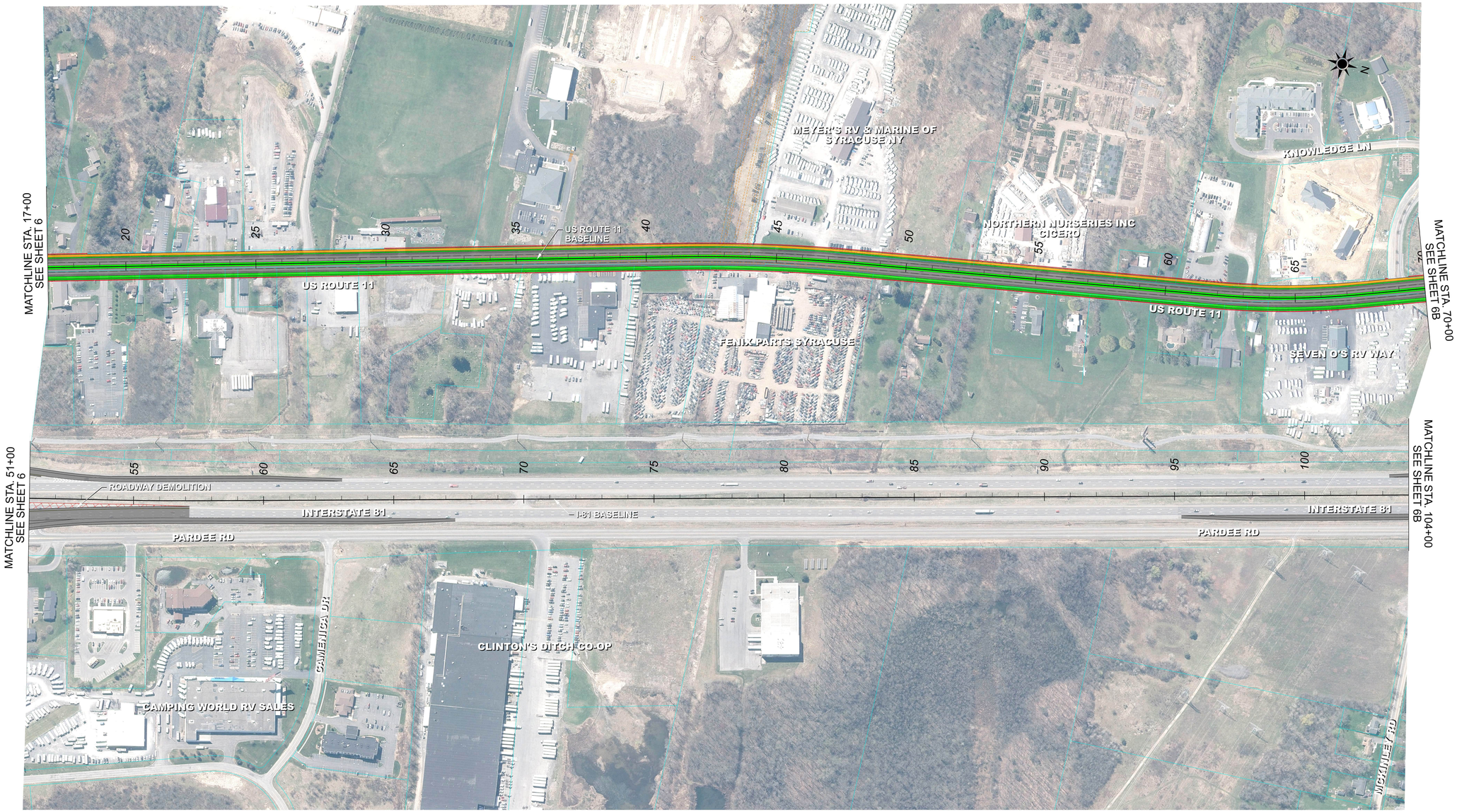


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NEW YORK STATE
Department of Transportation

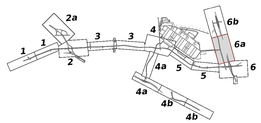
Micron Semiconductor Fab Project

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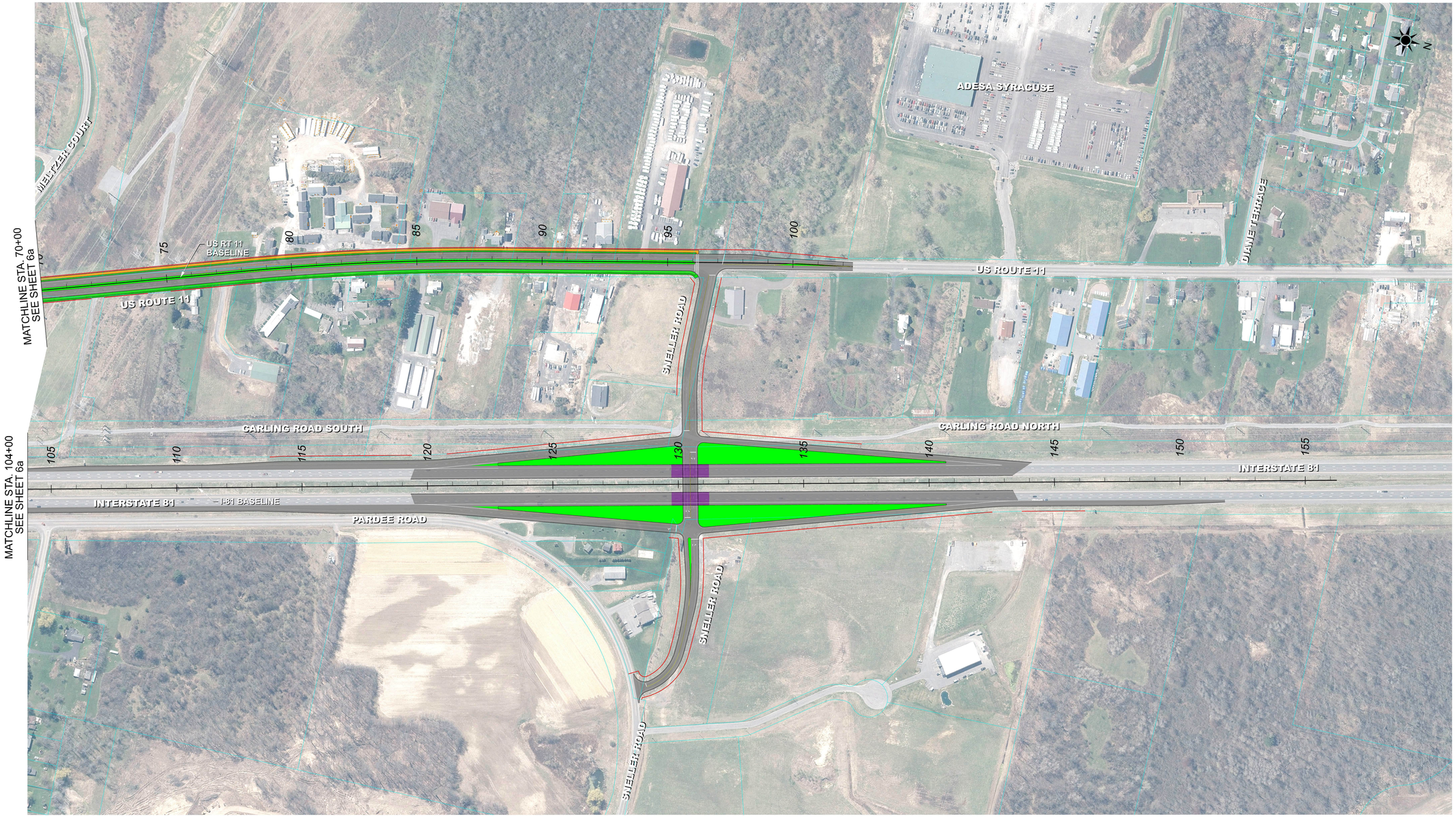


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NEW YORK STATE
Department of Transportation

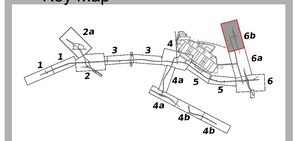
Micron Semiconductor Fab Project

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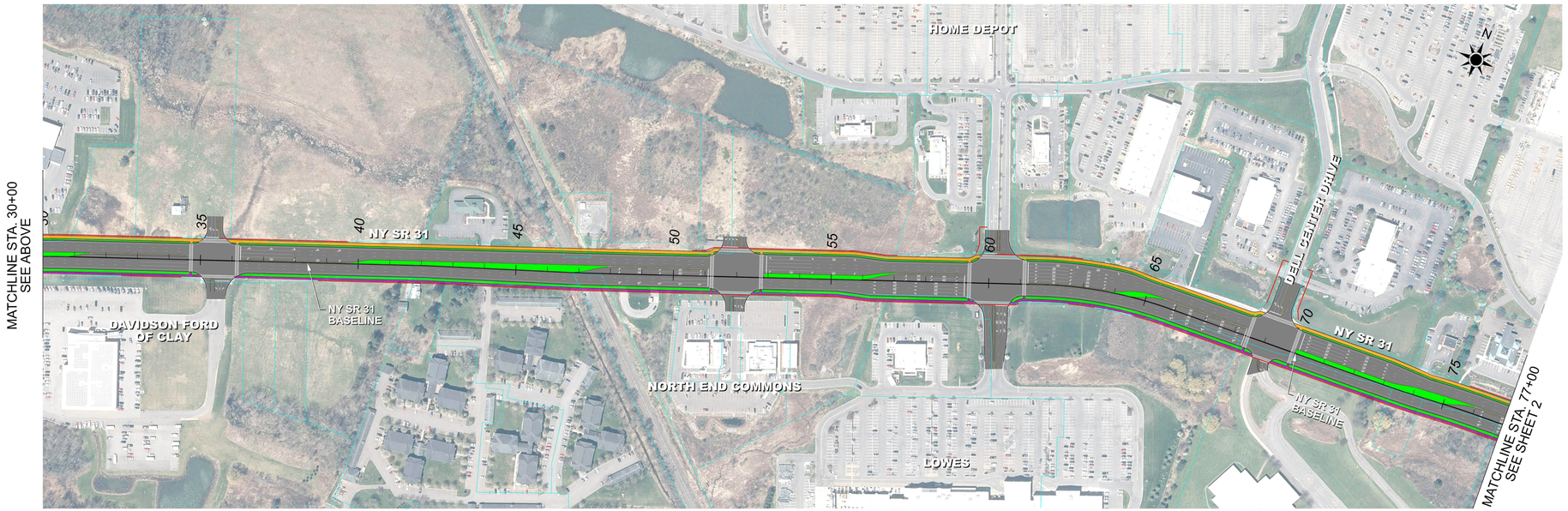
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Sheet Number

6b





NEW YORK STATE
Department of Transportation

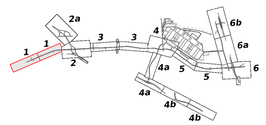
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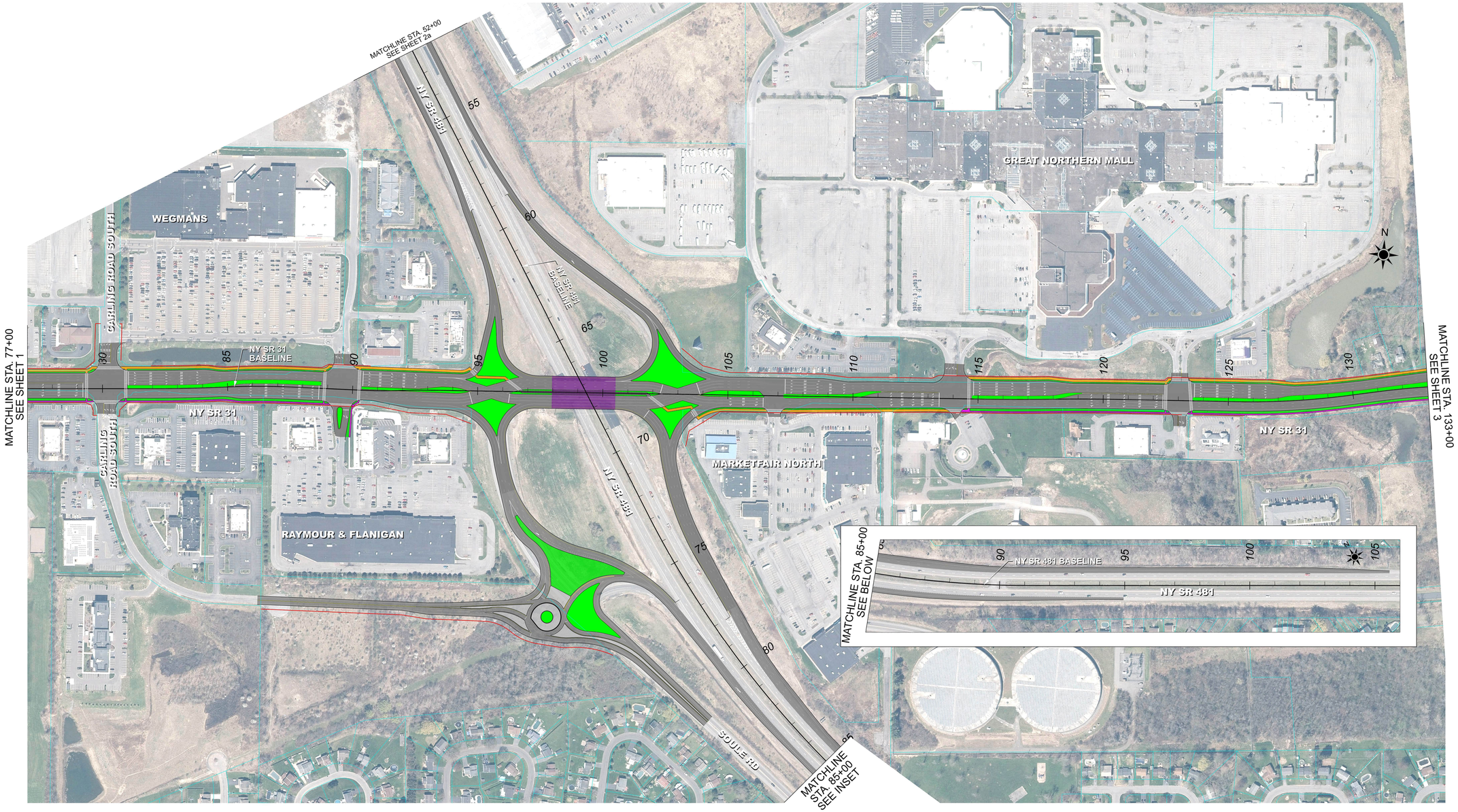
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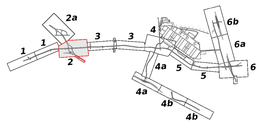
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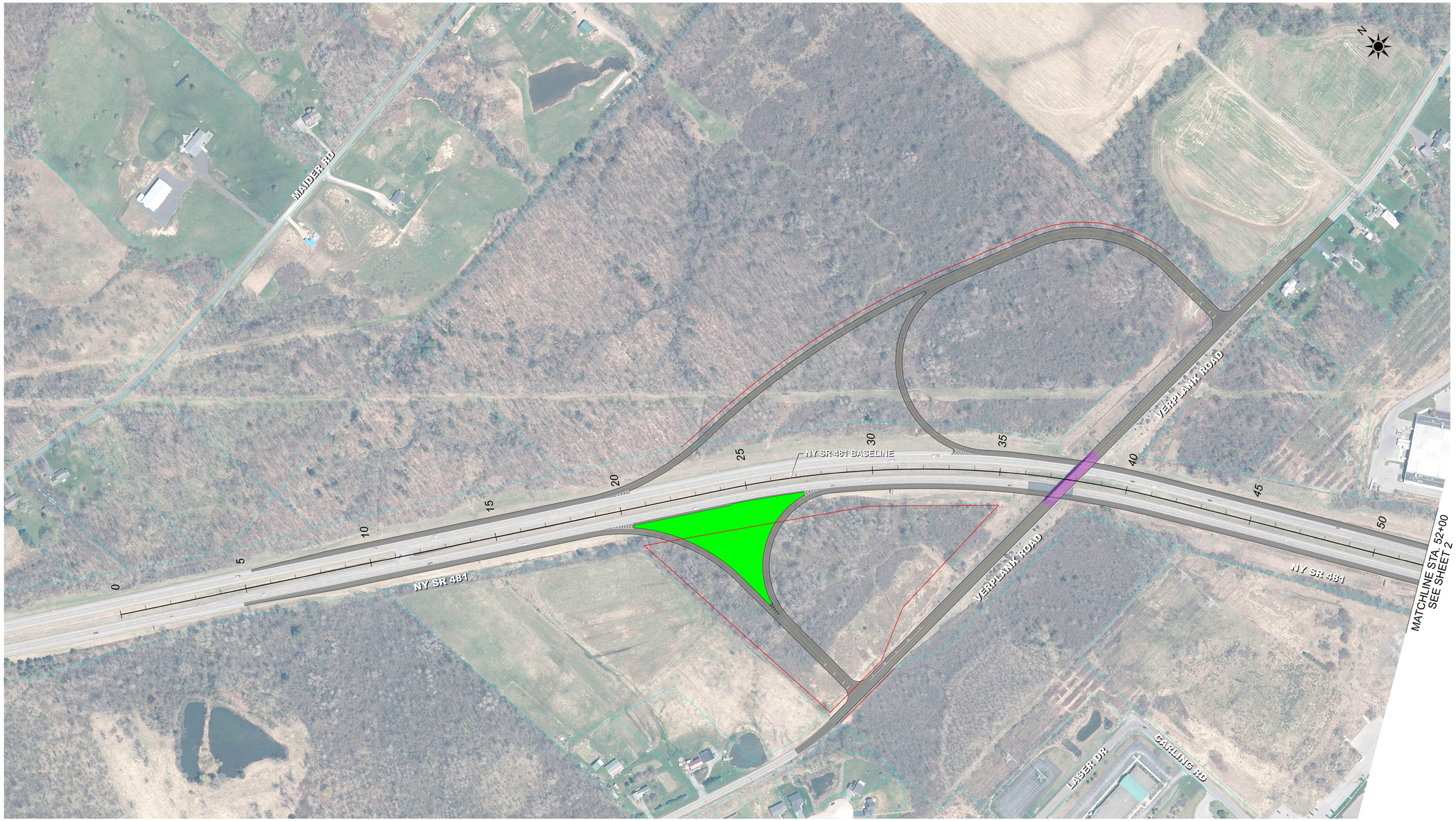


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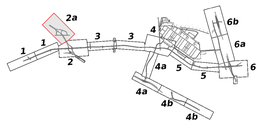
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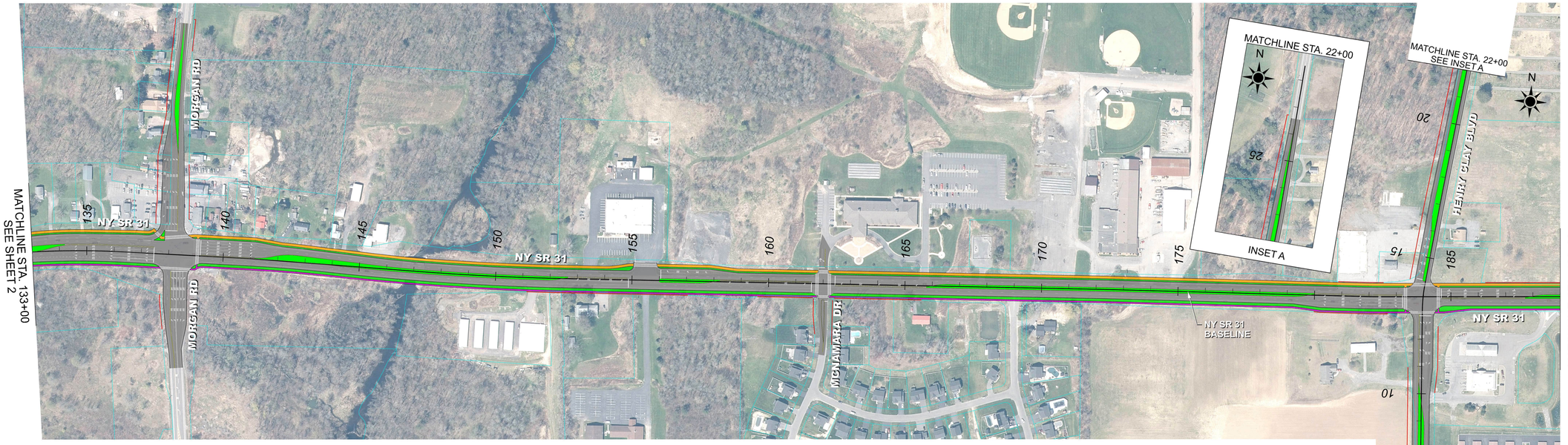
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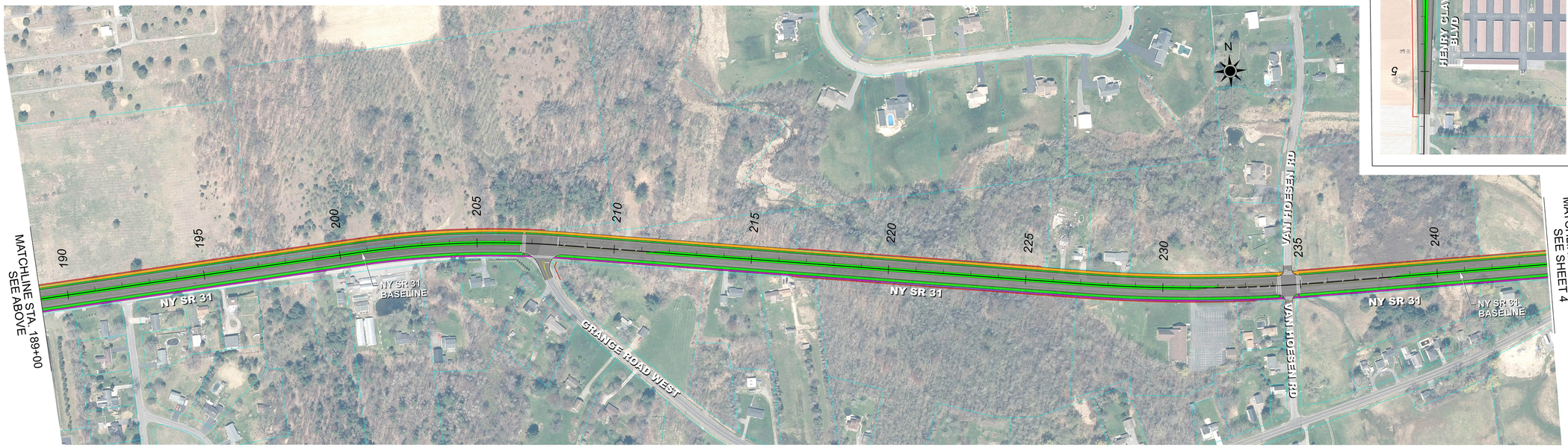
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2a





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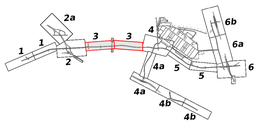
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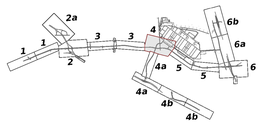
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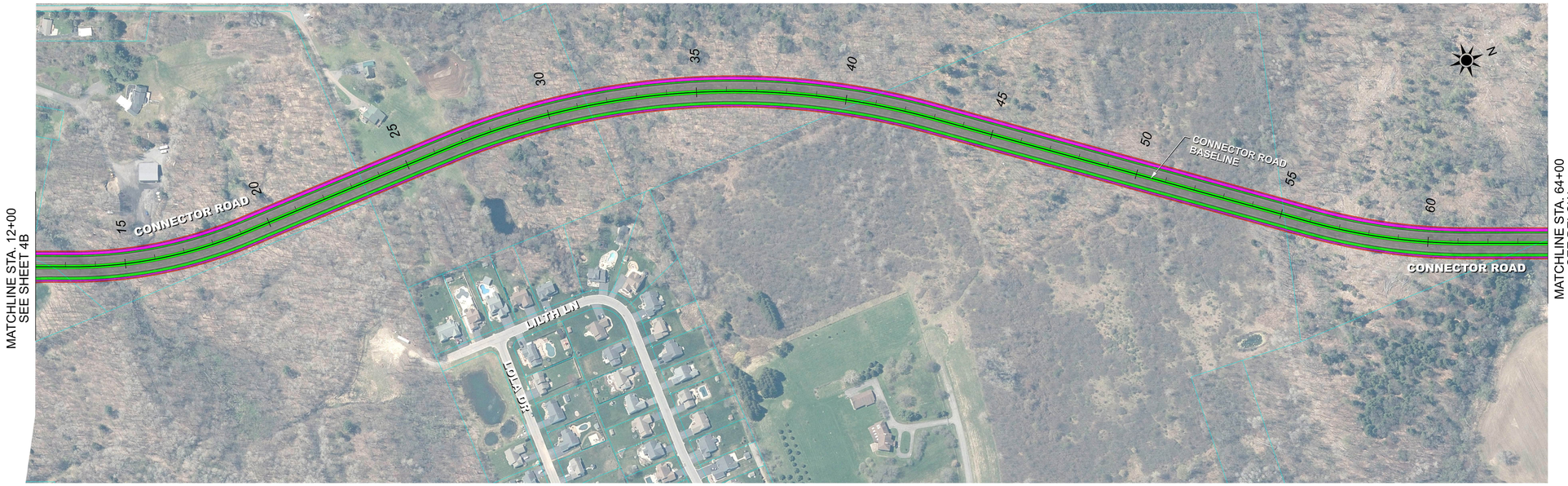
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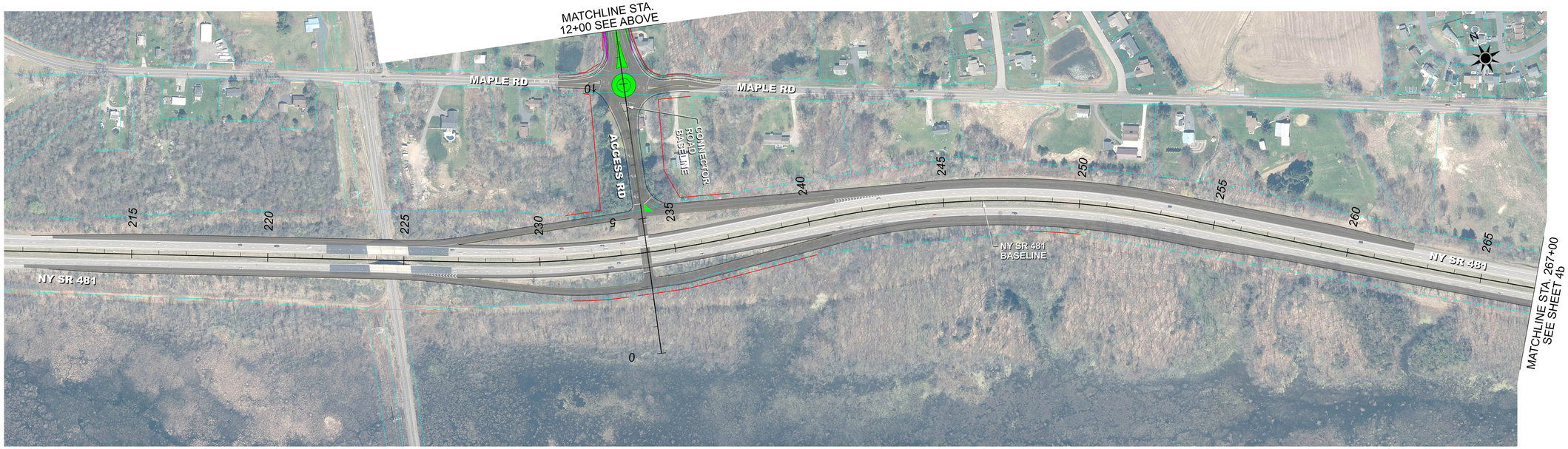
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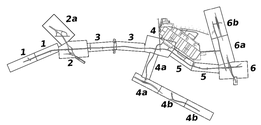
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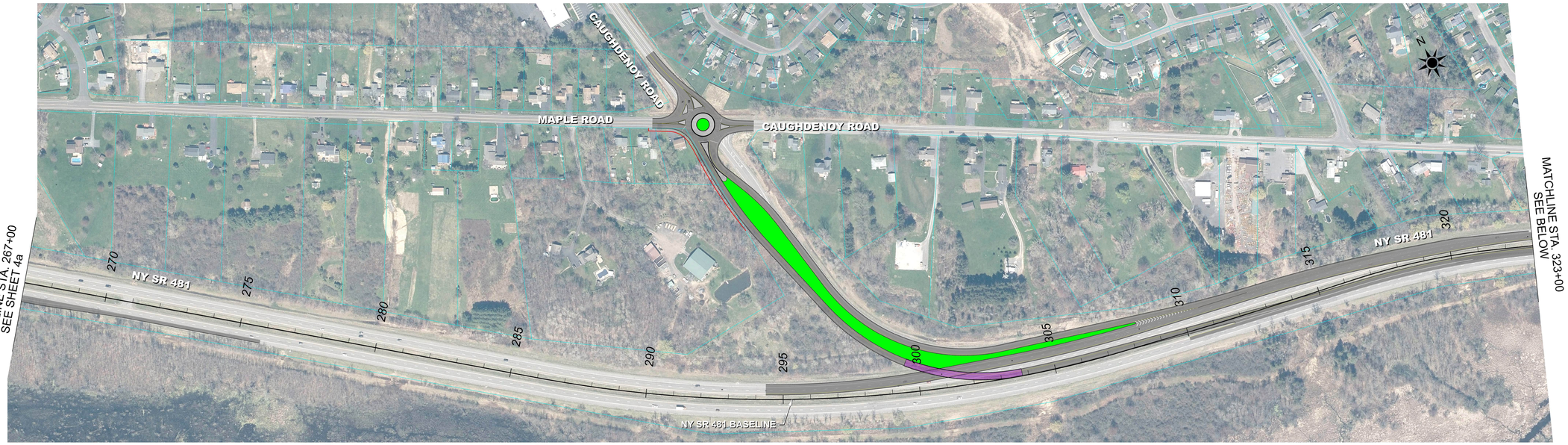
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4a





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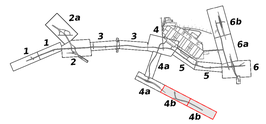
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Key Map



Scale

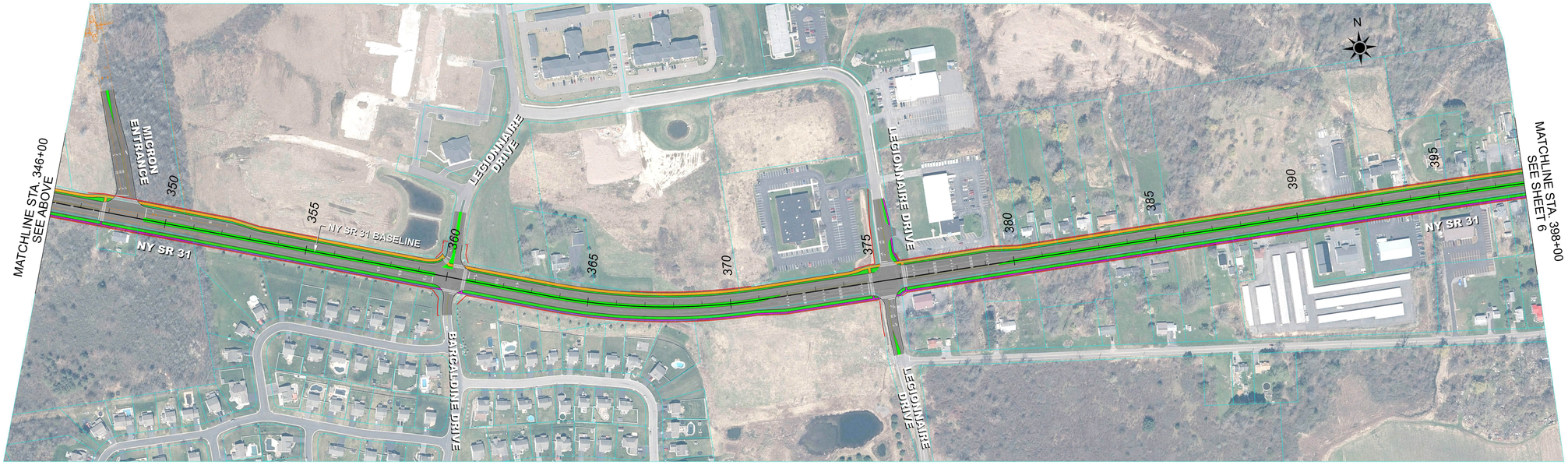
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Sheet Number

4b





NEW YORK STATE
Department of Transportation

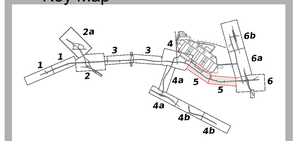
Micron Semiconductor Fab Project

Clay, New York

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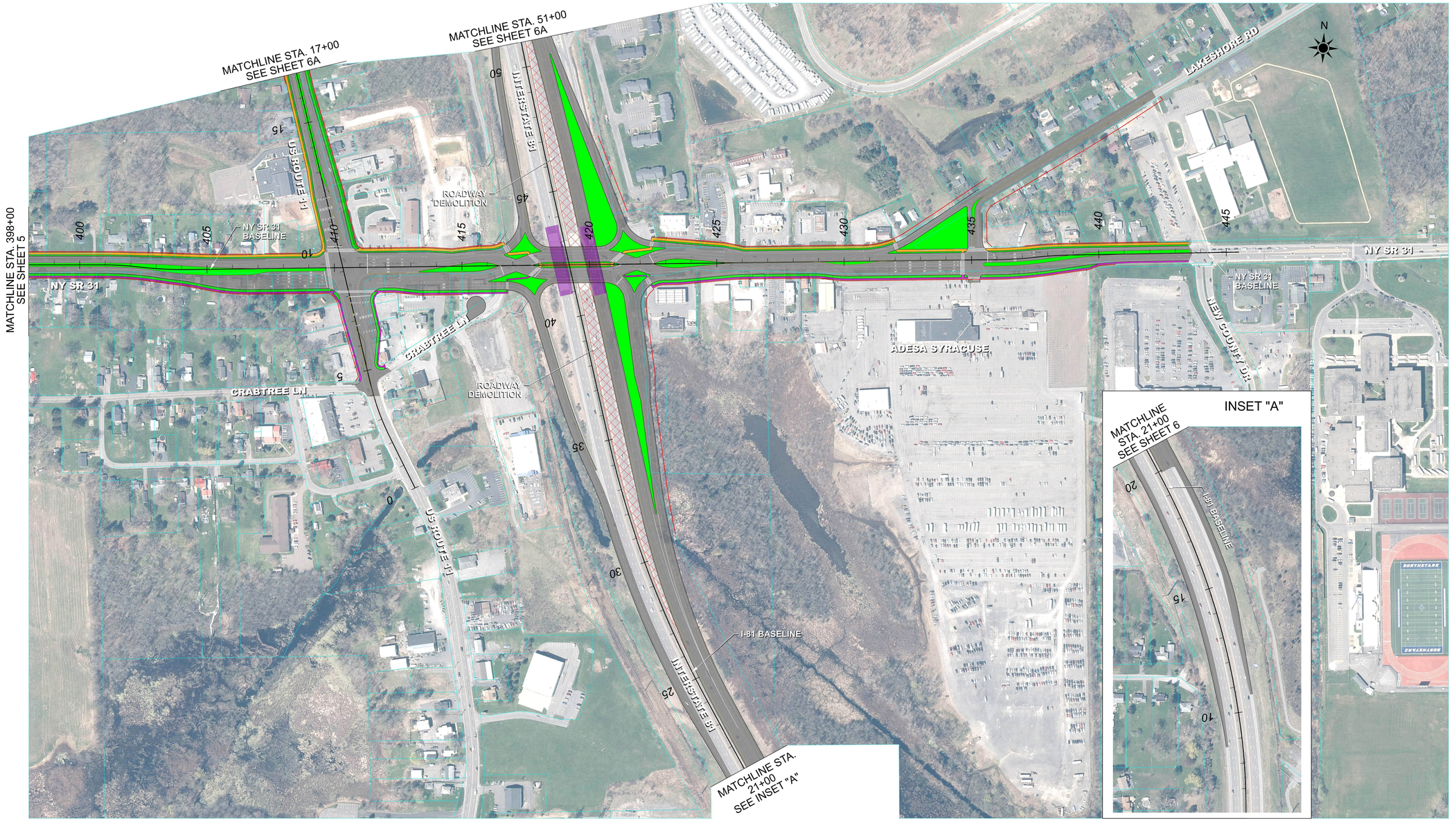


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NEW YORK STATE
Department of Transportation

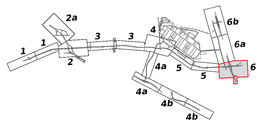
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NEW YORK STATE
Department of Transportation

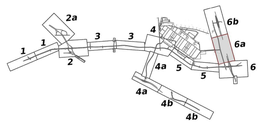
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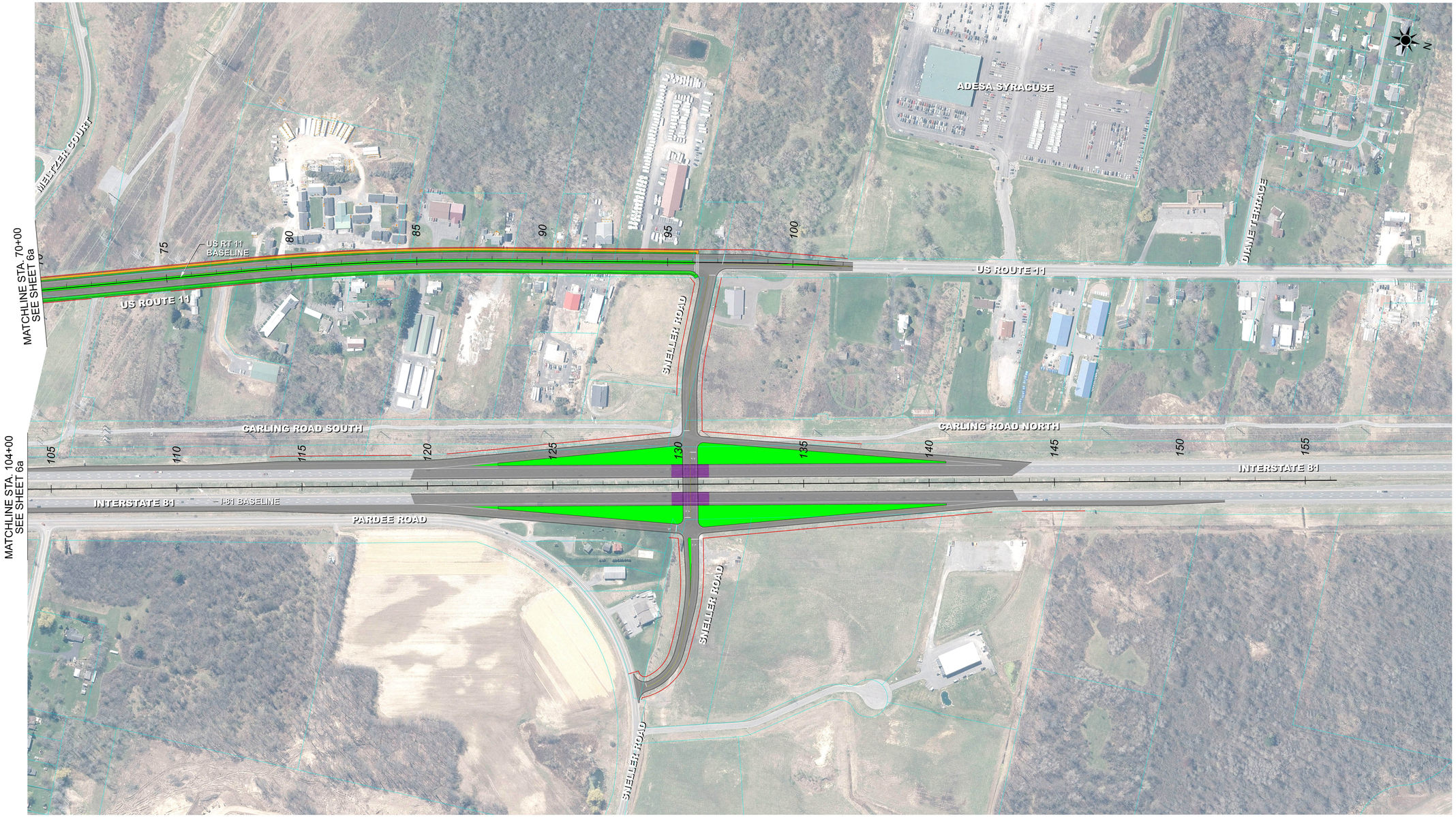


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6a



NEW YORK STATE
Department of Transportation

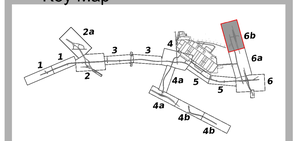
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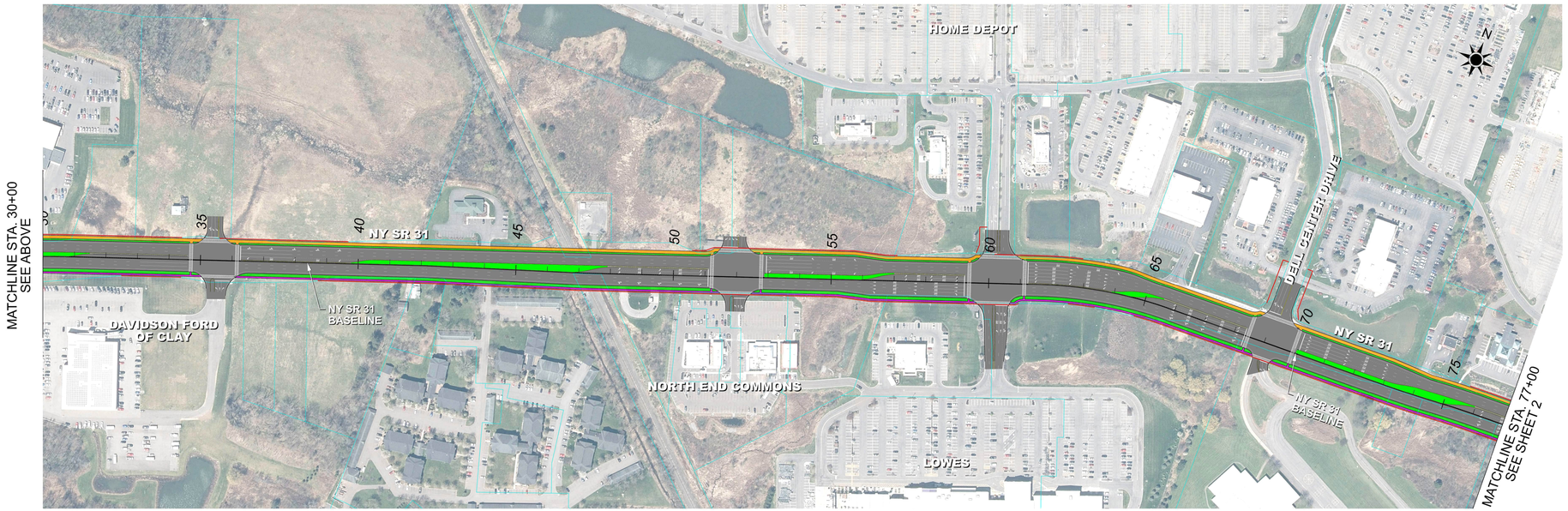
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Sheet Number

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NEW YORK STATE
Department of Transportation

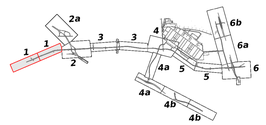
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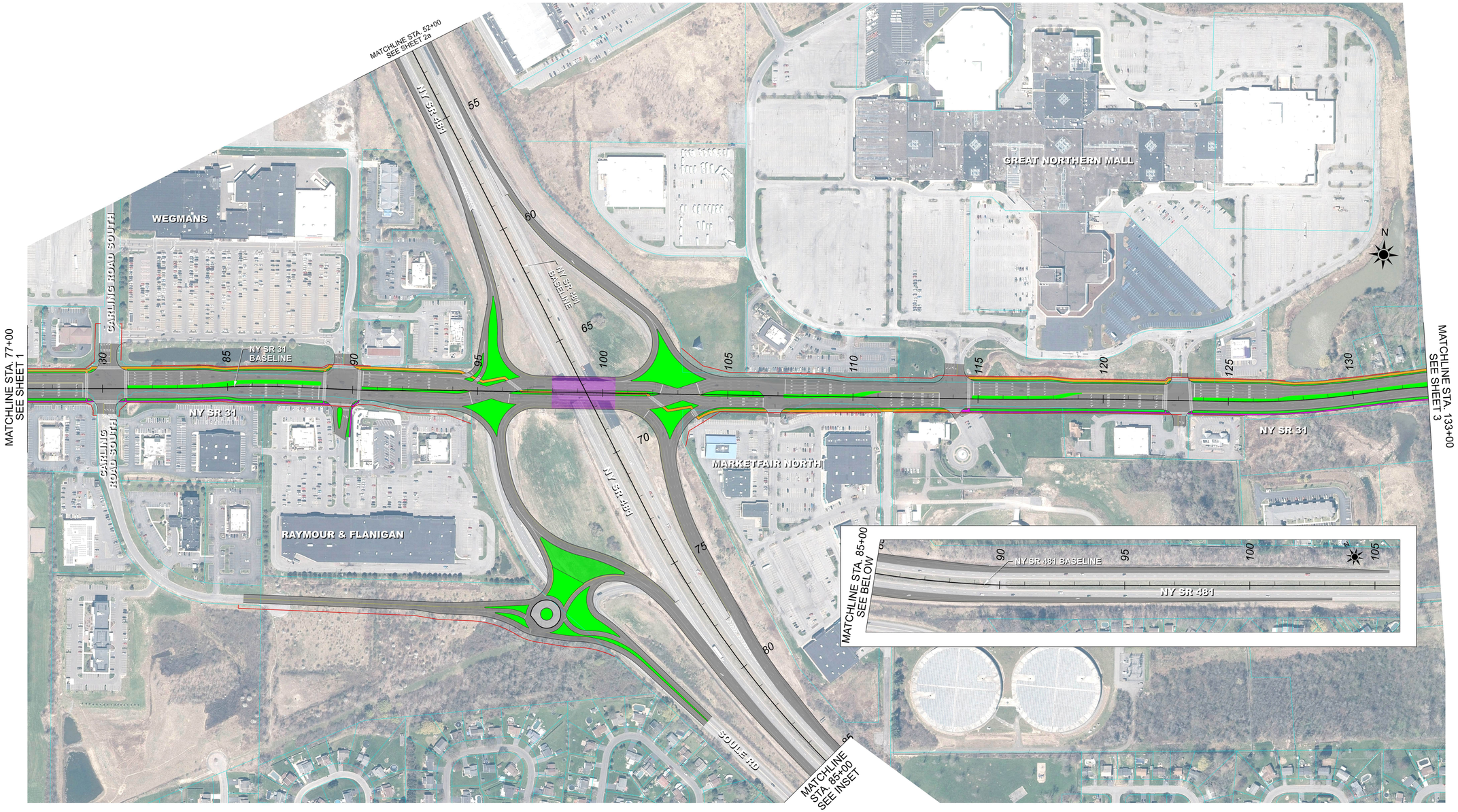
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NEW YORK STATE
Department of Transportation

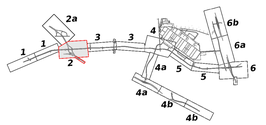
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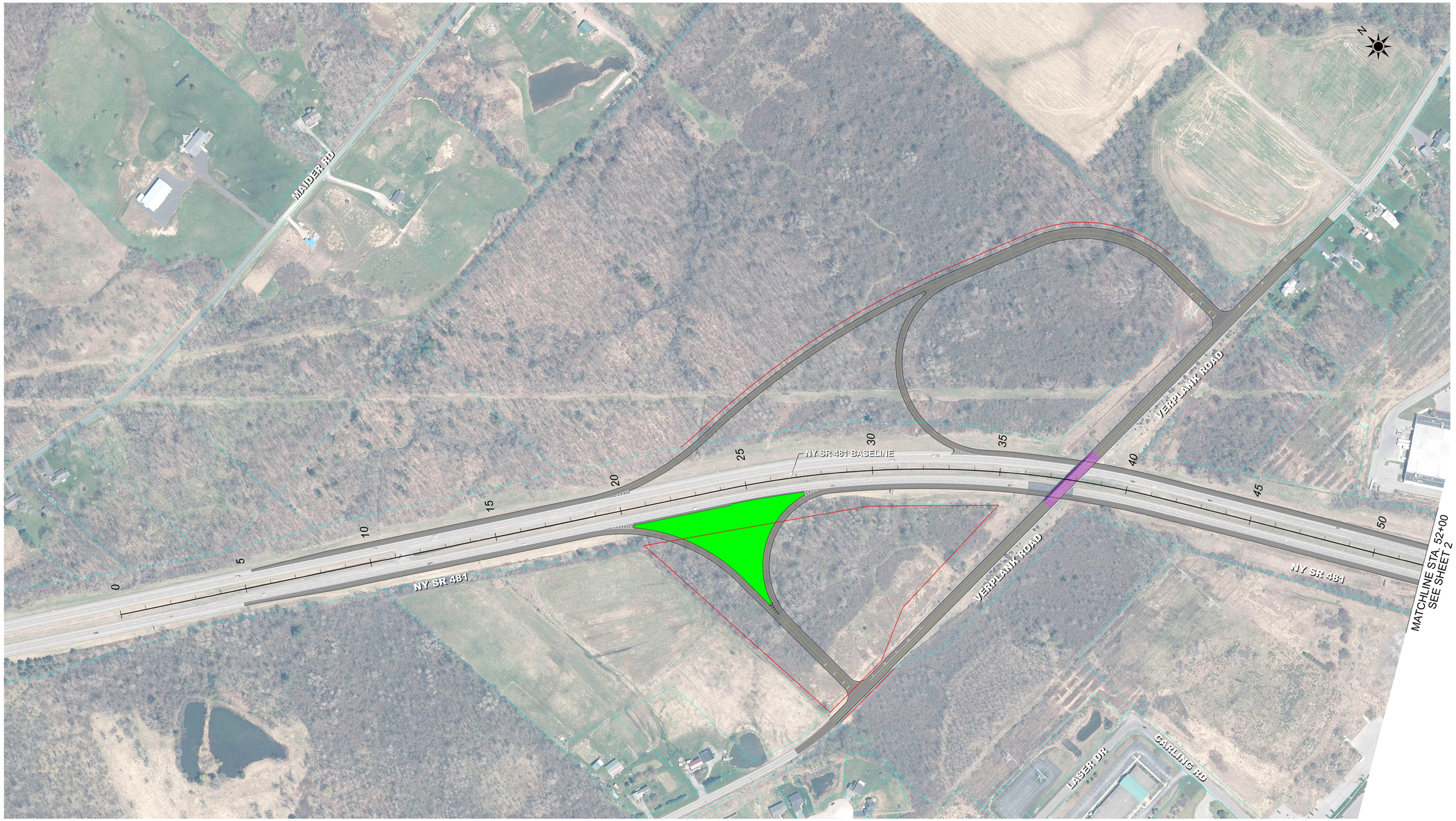


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NEW YORK STATE
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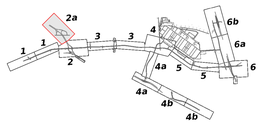
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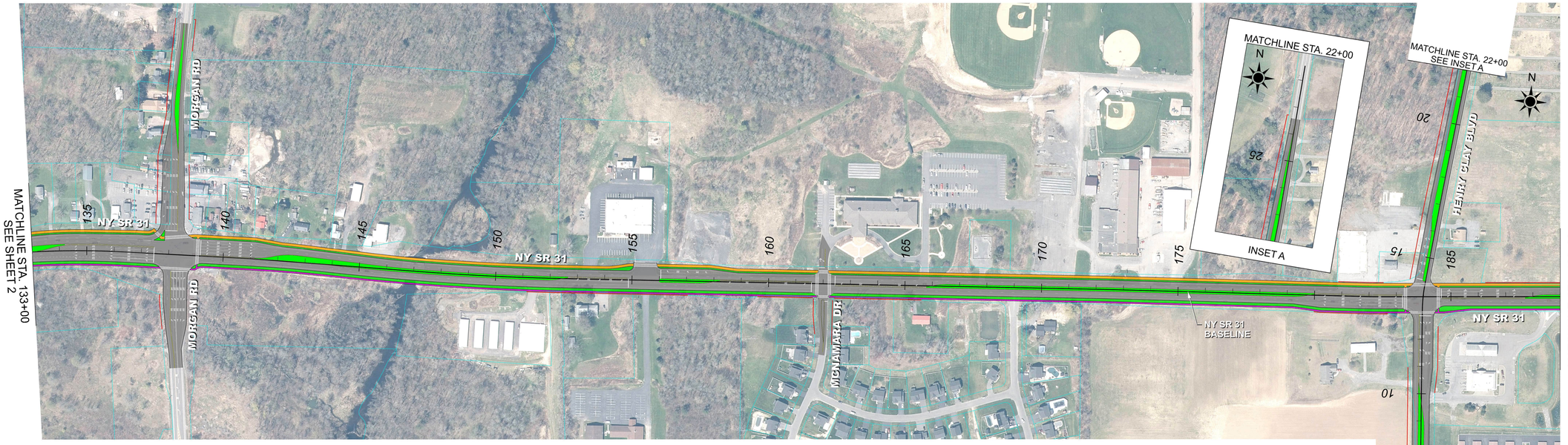
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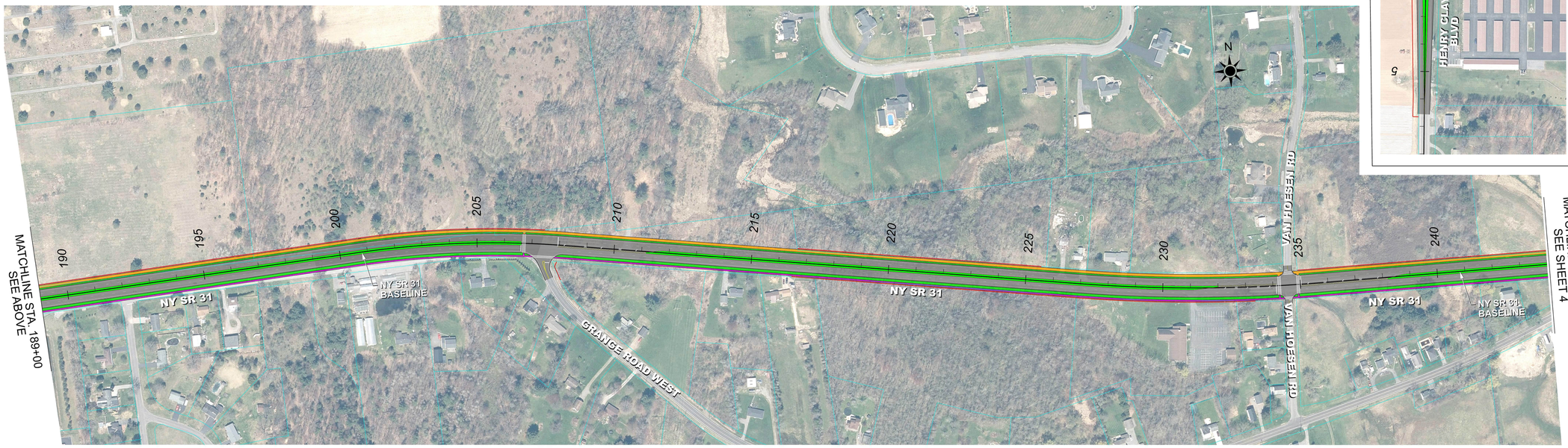
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NEW YORK STATE
Department of Transportation

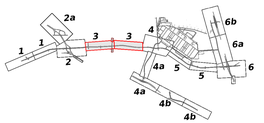
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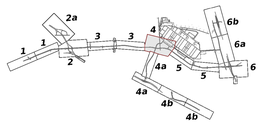
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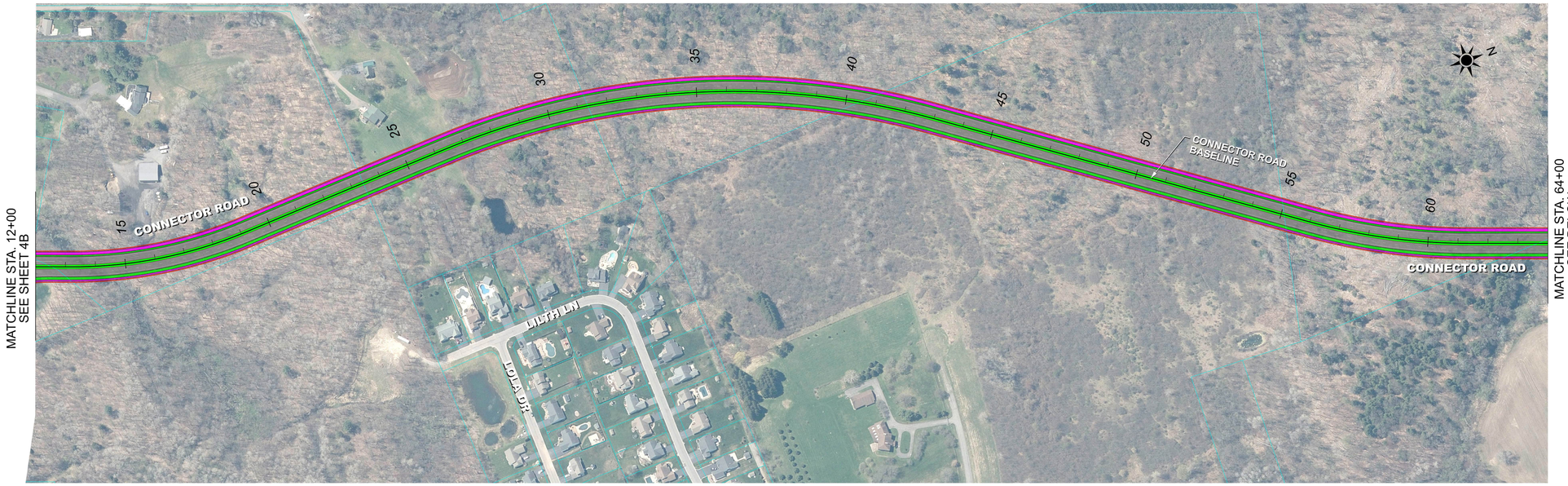
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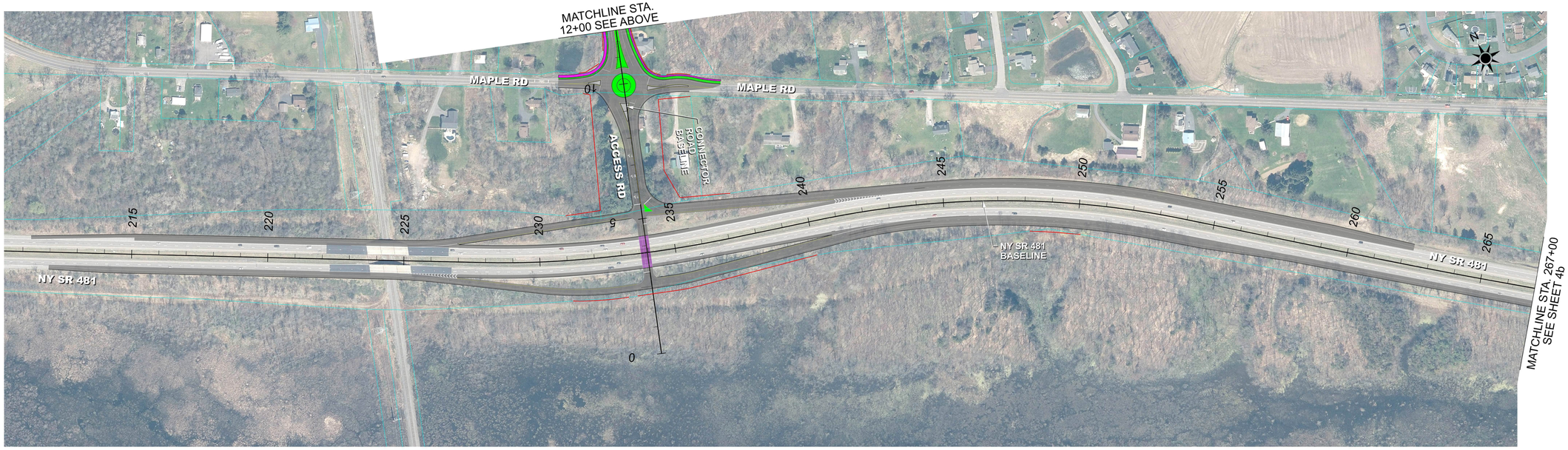
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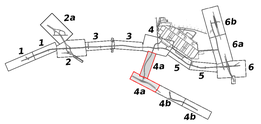
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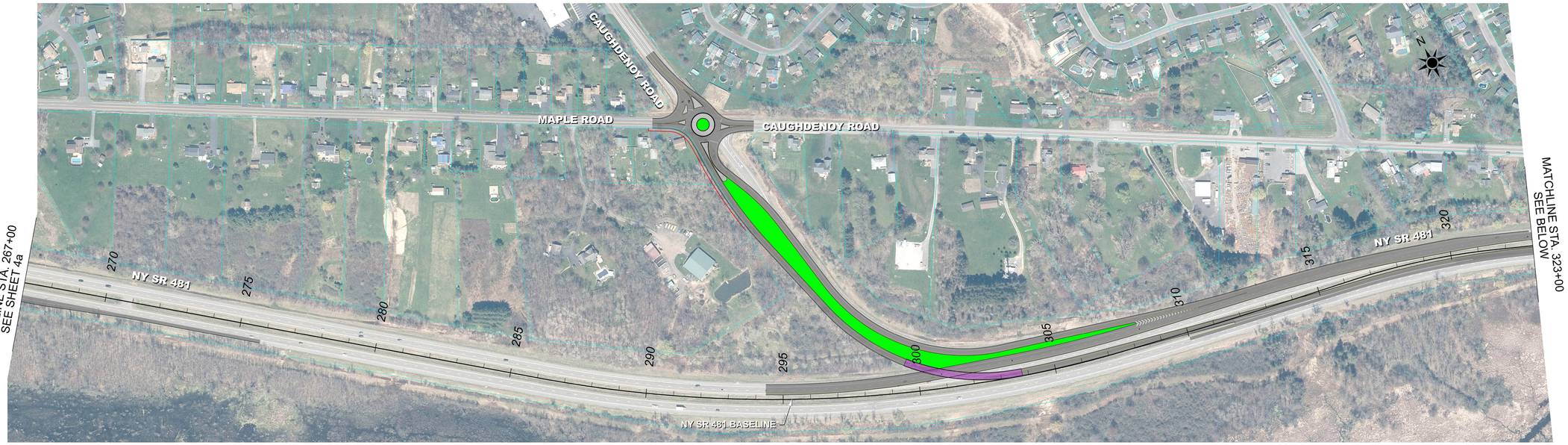
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NEW YORK STATE
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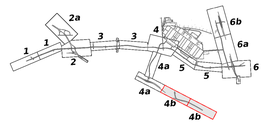
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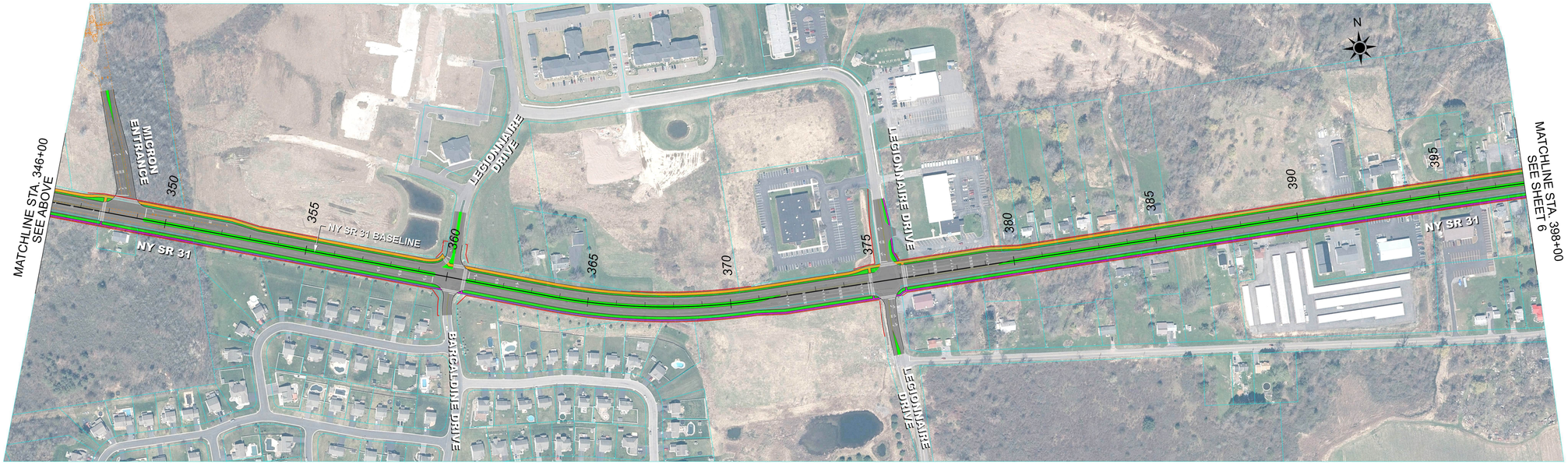
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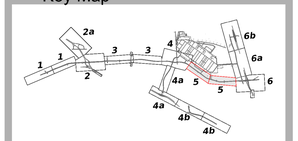
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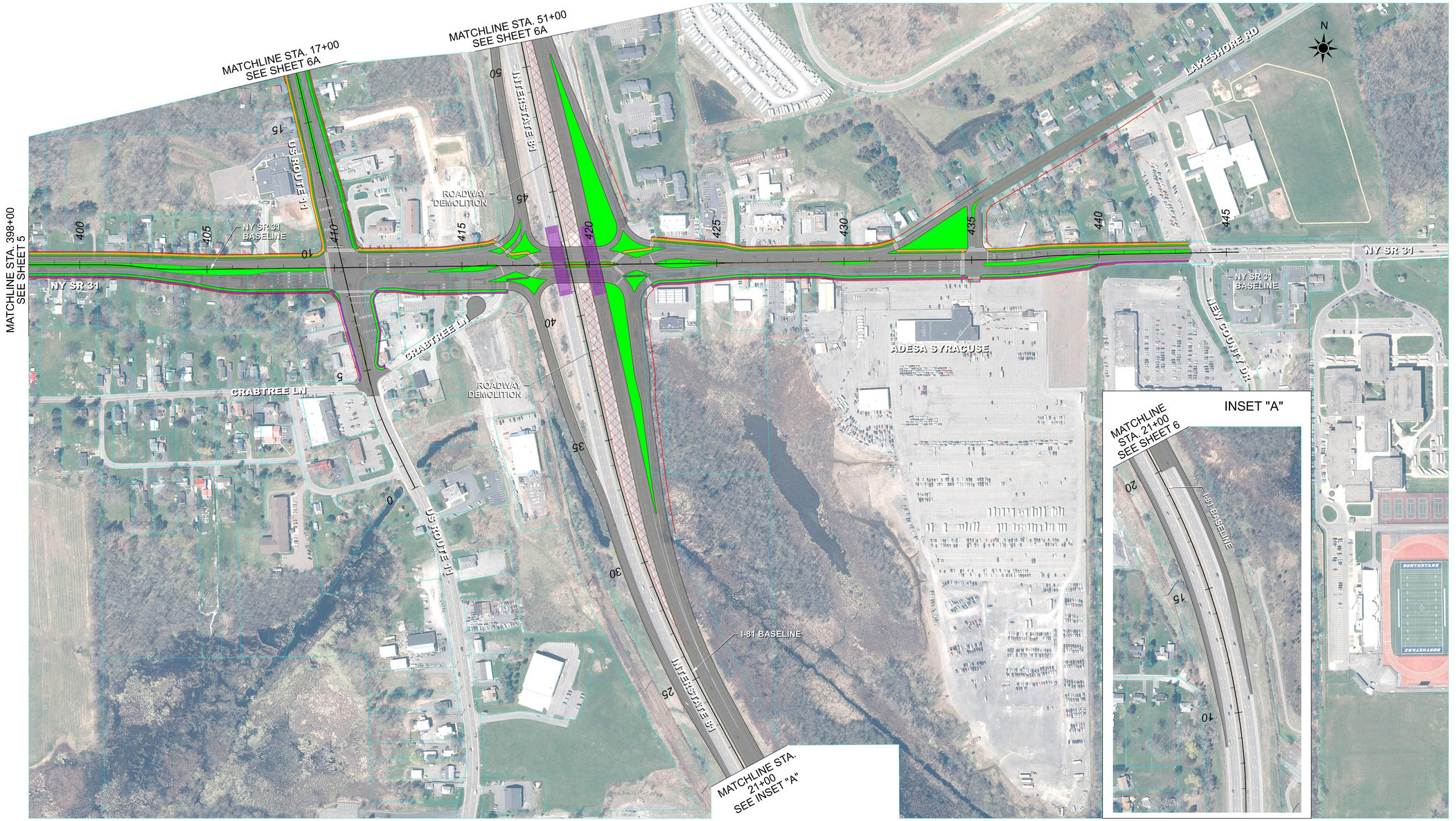


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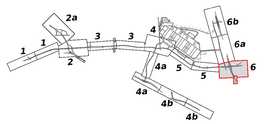
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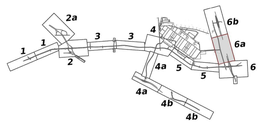
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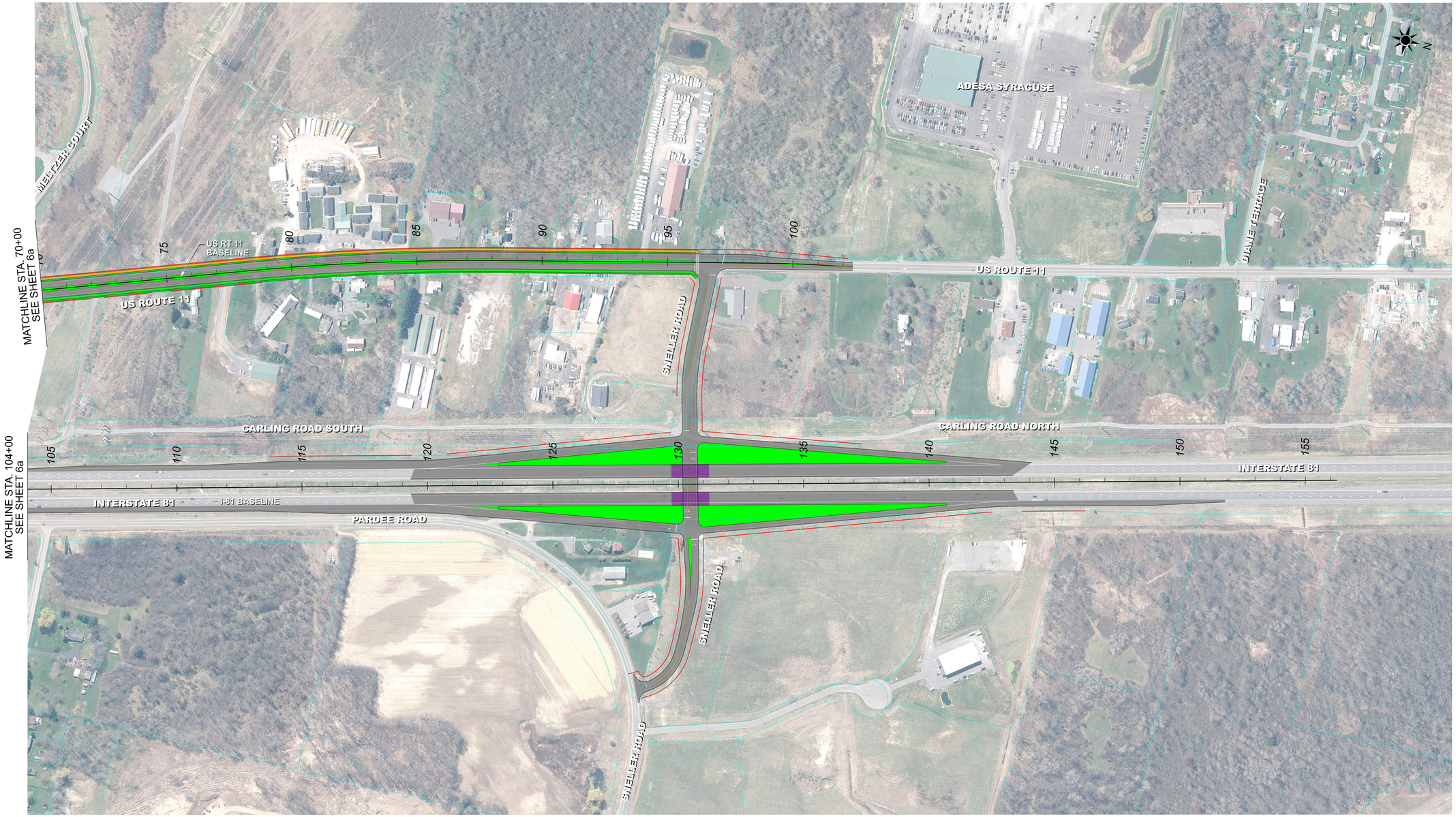


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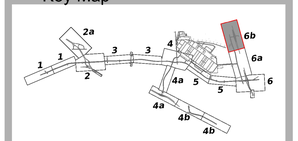
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6b

Priority?	intersection #	location	2026 mitigation ideas	2029 mitigation ideas	NYSDOT Comments	
	1	NY 31 & NY 481 SB		DDI lanes added	optimize timing	
	2	NY 31 & NY 481 NB	NBL lane extended	DDI lanes added	optimize timing - consider lengthen storage within ROW - check with CME on status	
	5	NY 31 & Great Northern Mall East Parking Lot	PM signal optimized	PM signal optimized	optimize timing	
	7	NY 31 & Henry Clay Boulevard		EBR & WBR lanes added; NBL lane ex	**can't justify as existing problem, EBR, NBR, WBR possible**	we are now justifying for safety - see email from 9/12 @ 10:24 am
	8	NY 31 & Grange Road West	Signal added	AM signal optimized	can't justify as existing problem	we are now justifying for safety - see email from 9/12 @ 10:24 am
	11	NY 31 & Caughdenoy Road	NBL, EBL, WBL, SBR lanes added, EB & WB l	AM signal optimized	**can't justify as existing problem but need to improve since main entrance to Micron - NBL or NBR, EBL, WBL possible - have CME take quick look and Rich is investigating**	we are now justifying for safety - see email from 9/12 @ 10:24 am
	12	NY 31 & Stearns Road		Signal added	can't justify as existing problem	we are now justifying for safety - see email from 9/12 @ 10:24 am
	15	NY 31 & Legionnaire Drive/Lawton Road	PM signal optimized; EB approach & receivi		optimize timing	
	16	NY 31 & US 11	PM signal optimized; Crabtree Ln closed	PM signal optimized	optimize timing	
	17	NY 31 & I-81 SB Service Road	EBR lane & SB receiving lanes added; signal	AM signal optimized	Close Crabtree Ln, add EB dedicated right, widen ramp to 2 lanes and taper before 81, optimize timing	
	18	NY 31 & Pardee Road/I-81 NB Service Road		NB lanes reconfigured to 2 NBL, 1 NB	Lengthen NB storage as much as possible within ROW, NB is double left, 1 NB thru, NBR added, optimize timing - check with CME on status	
	19	NY 31 & Lakeshore Road	Signal added; clustered with node 20		add signal, cluster with node 20	
	26	Verplank Road & Caughdenoy Road		Signal added	can't justify as existing problem	STILL CAN'T JUSTIFY
	31	NY 481 SB On-Ramp & Soule Road	NBR RTOR disabled		**what do we gain by disabling NB RTOR? Consider making SB middle lane a thru/left and adding short 2nd receiving lane on SB on-ramp**	
	34	US 11 & Bear Road	SB lanes reconfigured to 2 SBL, 1 SBT, 1 SBR		as described in 2026 mitigation	
	35	Bear Road & I-481 EB Ramps	EBL turn bay extended; EB lanes reconfigure		as described in 2026 mitigation	
	39	US 11 & Caughdenoy Road	Signal added		optimize exsting signal	
	40	Caughdenoy Road & Maple Road & NY 481 NB Off-Ramp			temp signal with wooden poles since DOT EIS will modify again	
	42	NY 31 & Crabtree Lane	Intersection closed		Close Crabtree Ln, add EB dedicated right, widen ramp to 2 lanes and taper before 81, optimize timing - same as INT # 17	
	43	US 11 & Crabtree Lane	Signal added; WBL WBT movements added		leave as-is, if we add a signal 31/11 could get worse - very little traffic will be on Crabtree once closed on other end	
	69	Morgan Road & Verplank Road		Signal added; EBL lane added; NB la	can't justify as existing problem	we are now justifying for safety - see email from 9/12 @ 10:24 am - need to get county involved since these aren't state roads - correct?
	70	Morgan Road & Great Northern Mall Driveway 3		Signal added	can't justify as existing problem	STILL CAN'T JUSTIFY
	72	Morgan Road & Great Northern Mall Driveway 4		Signal added	can't justify as existing problem	STILL CAN'T JUSTIFY

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: Micron Improvements - Int. 2

P.I.N. 3807.95.401

County: Onondaga **S.H.** SR-31 at SR-481 NB

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 329,315.00
TRAFFIC SIGNALS		$ -
EARTHWORK		$ 59,896.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 8,000.00
LANDSCAPING		$ 8,000.00
ENVIRONMENTAL		$ -
WZTC		$ 32,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 42,000.00
MOBILIZATION	4%	$ 19,169.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 499,000.00**
CONTINGENCY/RISK	20%	$ 99,800.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 599,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 599,000.00**
FINAL DESIGN	10%	$ 59,900.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 17,970.00
CONSTRUCTION INSPECTION	7%	$ 41,930.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 720,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

NY 31 & Henry Clay Blvd

Job Title: I-81 Micron - Estimate_Int 7

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 234,905.00
TRAFFIC SIGNALS		$ 235,642.00
EARTHWORK		$ 37,500.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ 40,000.00
DRAINAGE		$ 5,398.00
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 12,000.00
LANDSCAPING		$ 12,000.00
ENVIRONMENTAL		$ -
WZTC		$ 45,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 60,000.00
MOBILIZATION	4%	$ 27,298.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 710,000.00**
CONTINGENCY/RISK	20%	$ 142,000.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 852,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1901
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 852,000.00**
FINAL DESIGN	10%	$ 85,200.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 25,560.00
CONSTRUCTION INSPECTION	7%	$ 59,640.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 1,030,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

NY 31 & Grange Rd

Job Title: I-81 Micron - Estimate_Int 8

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ -
TRAFFIC SIGNALS		$ 219,517.00
EARTHWORK		$ -
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 5,000.00
LANDSCAPING		$ -
ENVIRONMENTAL		$ -
WZTC		$ 18,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 24,000.00
MOBILIZATION	4%	$ 10,661.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 278,000.00**
CONTINGENCY/RISK	20%	$ 55,600.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 334,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1901
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 334,000.00**
FINAL DESIGN	10%	$ 33,400.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 10,020.00
CONSTRUCTION INSPECTION	7%	$ 23,380.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 410,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

NY 31 & Caughdenoy Rd

Job Title: I-81 Micron - Estimate_Int 11

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 512,981.00
TRAFFIC SIGNALS		$ 272,114.00
EARTHWORK		$ 61,973.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 17,000.00
LANDSCAPING		$ 17,000.00
ENVIRONMENTAL		$ -
WZTC		$ 68,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 91,000.00
MOBILIZATION	4%	$ 41,603.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 1,082,000.00**
CONTINGENCY/RISK	20%	$ 216,400.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 1,299,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 1,299,000.00**
FINAL DESIGN	10%	$ 129,900.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 38,970.00
CONSTRUCTION INSPECTION	7%	$ 90,930.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 1,560,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

NY 31 & Stearns Rd

Job Title: I-81 Micron - Estimate_Int 12

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ -
TRAFFIC SIGNALS		$ 219,517.00
EARTHWORK		$ -
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 5,000.00
LANDSCAPING		$ -
ENVIRONMENTAL		$ -
WZTC		$ 18,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 24,000.00
MOBILIZATION	4%	$ 10,661.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 278,000.00**
CONTINGENCY/RISK	20%	$ 55,600.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 334,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1901
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 334,000.00**
FINAL DESIGN	10%	$ 33,400.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 10,020.00
CONSTRUCTION INSPECTION	7%	$ 23,380.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 410,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: Micron Improvements - Int. 17

P.I.N. 3807.95.401

County: Onondaga

S.H SR-31 at I-81 SB

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 147,358.00
TRAFFIC SIGNALS		$ 41,584.00
EARTHWORK		$ 51,088.00
CURB AND SIDEWALKS		$ 86,771.00
GUIDE RAIL AND MEDIAN BARRIER		$ 48,176.00
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 8,000.00
LANDSCAPING		$ 8,000.00
ENVIRONMENTAL		$ -
WZTC		$ 30,000.00
SURVEY OPERATIONS		$ 4,000.00
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 41,000.00
MOBILIZATION	4%	$ 18,640.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 485,000.00**
CONTINGENCY/RISK	20%	$ 97,000.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 582,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 582,000.00**
FINAL DESIGN	10%	$ 58,200.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 17,460.00
CONSTRUCTION INSPECTION	7%	$ 40,740.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 700,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: Micron Improvements - Int. 18

P.I.N. 3807.95.401

County: Onondaga

S.H. SR-31/Pardee/I-81 NB

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 98,626.00
TRAFFIC SIGNALS		$ 87,089.00
EARTHWORK		$ 1,748.00
CURB AND SIDEWALKS		$ 7,079.00
GUIDE RAIL AND MEDIAN BARRIER		$ 13,122.00
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 5,000.00
LANDSCAPING		$ 5,000.00
ENVIRONMENTAL		$ -
WZTC		$ 17,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 23,000.00
MOBILIZATION	4%	$ 10,307.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 268,000.00**
CONTINGENCY/RISK	20%	$ 53,600.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 322,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 322,000.00**
FINAL DESIGN	10%	$ 32,200.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 9,660.00
CONSTRUCTION INSPECTION	7%	$ 22,540.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 390,000.00**

NY 481 SB On-Ramp & Soule Rd

Job Title: I-81 Micron - Estimate_Int 31

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 253,428.00
TRAFFIC SIGNALS		$ 21,200.00
EARTHWORK		$ 16,100.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ 17,562.00
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 7,000.00
LANDSCAPING		$ 13,000.00
ENVIRONMENTAL		$ -
WZTC		$ 25,000.00
SURVEY OPERATIONS		$ 4,000.00
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 34,000.00
MOBILIZATION	4%	$ 15,652.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 407,000.00**
CONTINGENCY/RISK	20%	$ 81,400.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 489,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 489,000.00**
FINAL DESIGN	10%	$ 48,900.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 14,670.00
CONSTRUCTION INSPECTION	7%	$ 34,230.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 590,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: Micron Improvements - Int. 34

P.I.N. 3807.95.401

County: Onondaga **S.H.** US-11 at Bear

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 111,650.00
TRAFFIC SIGNALS		$ 146,310.00
EARTHWORK		$ 20,371.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 12,000.00
LANDSCAPING		$ 6,000.00
ENVIRONMENTAL		$ -
WZTC		$ 23,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 31,000.00
MOBILIZATION	4%	$ 14,014.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 365,000.00**
CONTINGENCY/RISK	20%	$ 73,000.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 438,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 438,000.00**
FINAL DESIGN	10%	$ 43,800.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 13,140.00
CONSTRUCTION INSPECTION	7%	$ 30,660.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 530,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: Micron Improvements - Int. 35

P.I.N. 3807.95.401

County: Onondaga **S.H.** SR-481 at Bear

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 281,787.00
TRAFFIC SIGNALS		$ -
EARTHWORK		$ 60,766.00
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 14,000.00
LANDSCAPING		$ 7,000.00
ENVIRONMENTAL		$ -
WZTC		$ 28,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 38,000.00
MOBILIZATION	4%	$ 17,183.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 447,000.00**
CONTINGENCY/RISK	20%	$ 89,400.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 537,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 537,000.00**
FINAL DESIGN	10%	$ 53,700.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 16,110.00
CONSTRUCTION INSPECTION	7%	$ 37,590.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 650,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Job Title: I-81 Micron - Estimate_Int 40

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ -
TRAFFIC SIGNALS		$ 170,396.00
EARTHWORK		$ -
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ -
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 4,000.00
LANDSCAPING		$ -
ENVIRONMENTAL		$ -
WZTC		$ 14,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 18,000.00
MOBILIZATION	4%	$ 8,256.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 215,000.00**
CONTINGENCY/RISK	20%	$ 43,000.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 258,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1901
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 258,000.00**
FINAL DESIGN	10%	$ 25,800.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 7,740.00
CONSTRUCTION INSPECTION	7%	$ 18,060.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 310,000.00**

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

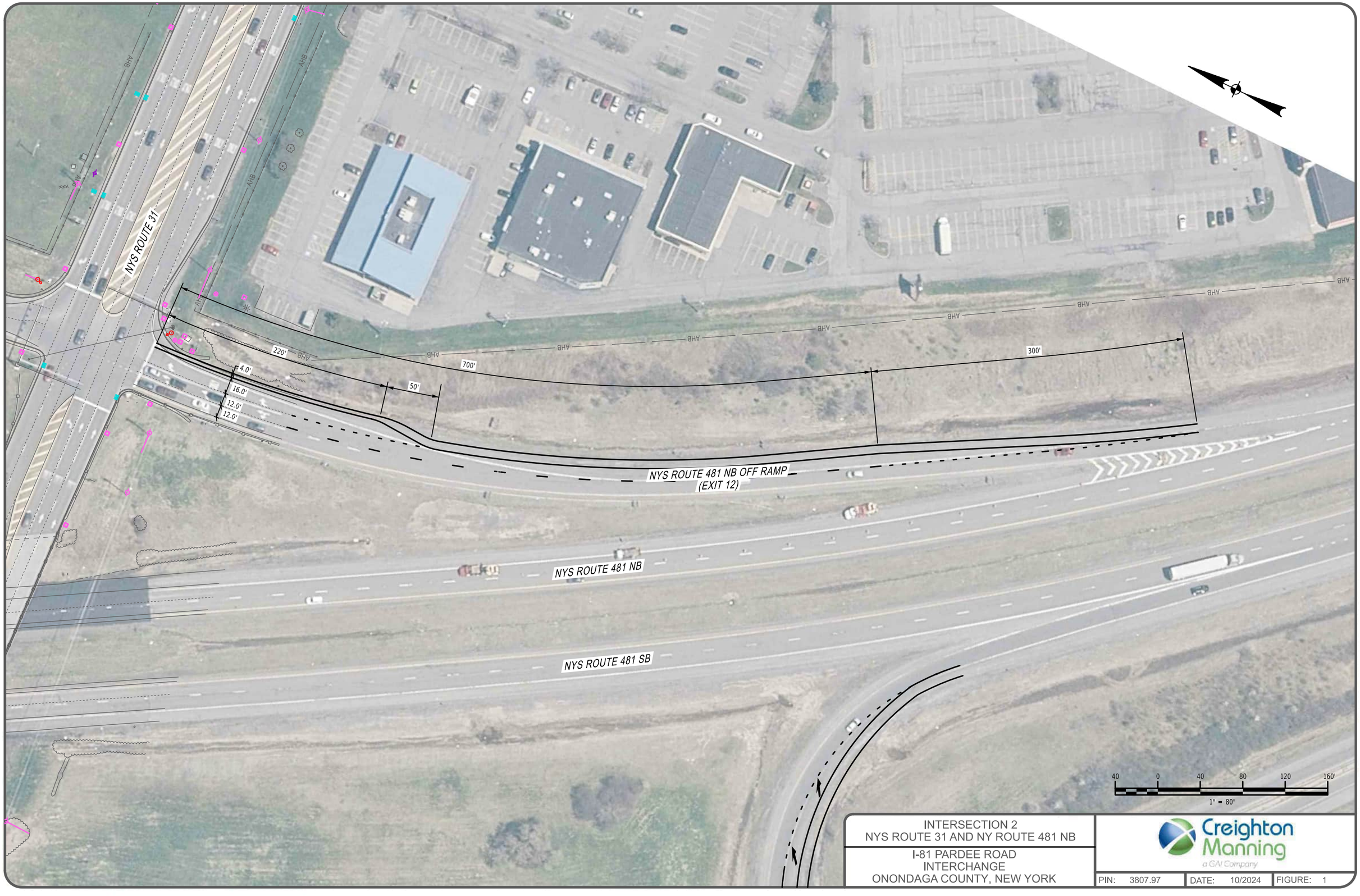
NY 31 & Crabtree Lane

Job Title: I-81 Micron - Estimate_Int 42

P.I.N. 3807.95

County: Onondaga **S.H.** 1039

PROJECT COSTS - DESIGN BID BUILD		AMOUNT
PAVEMENT		$ 86,731.00
TRAFFIC SIGNALS		$ -
EARTHWORK		$ -
CURB AND SIDEWALKS		$ -
GUIDE RAIL AND MEDIAN BARRIER		$ -
LIGHTING		$ 17,562.00
RETAINING WALLS		$ -
NOISE WALLS		$ -
UTILITIES		$ -
DRAINAGE		$ -
LARGE CULVERT		$ -
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 7,000.00
LANDSCAPING		$ 3,000.00
ENVIRONMENTAL		$ -
WZTC		$ 9,000.00
SURVEY OPERATIONS		$ -
BRIDGE		$ -
STRUCTURES DEMOLITION		$ -
MISCELLANEOUS/INCIDENTALS	0%	$ -
FIELD CHANGE L =	0.050	$ 12,000.00
MOBILIZATION	4%	$ 5,412.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 141,000.00**
CONTINGENCY/RISK	20%	$ 28,200.00
SUBTOTAL IN BASE YEAR DOLLARS		**$ 170,000.00**
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2024	1900
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ -
AWARD/CONSTRUCTION COST		**$ 170,000.00**
FINAL DESIGN	10%	$ 17,000.00
QC AND ADMINISTRATION OF FINAL DESIGN AND CONTRACT	3%	$ 5,100.00
CONSTRUCTION INSPECTION	7%	$ 11,900.00
ROW		
TOTAL PROJECT COST (ROUNDED TO NEAREST $10K):		**$ 210,000.00**



INTERSECTION 2
NYS ROUTE 31 AND NY ROUTE 481 NB

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97	DATE: 10/2024	FIGURE: 1

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USER = dfrisher



INTERSECTION 18
NYS ROUTE 31 AND I-81 NB

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97	DATE: 10/2024	FIGURE: 2

FILE NAME = N:\Projects\2020\120-283.88 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.88_fig_loc_02 - int_18.dgn
DATE/TIME = 10/25/2024
USER = dfrisher

US ROUTE 11

285'

155'

12.0'

12.0'

12.0'

12.0'

ONLY

ONLY

ONLY

BEAR ROAD
(CR 191)

BEAR ROAD

14.0'

14.0'

14.0'

8.0'

E

REPLACE THRU ONLY SIGN
WITH LEFT TURN ONLY SIGN

REPLACE THREE SECTION SIGNAL WITH THREE SECTION
LEFT TURN ARROW SIGNAL

REPLACE FOUR SECTION LEFT TURN ARROW SIGNAL
WITH THREE SECTION LEFT TURN ARROW SIGNAL

REMOVE YEILD ON FLASHING YELLOW ARROW SIGN

25 0 25 50 75 100'

1" = 50'

INTERSECTION 34
US ROUTE 11 AND BEAR ROAD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 3

FILE NAME = N:\Projects\2020\120-283.88 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.88_fig_loc_03 - int. 34.dgn
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USER = dfisher



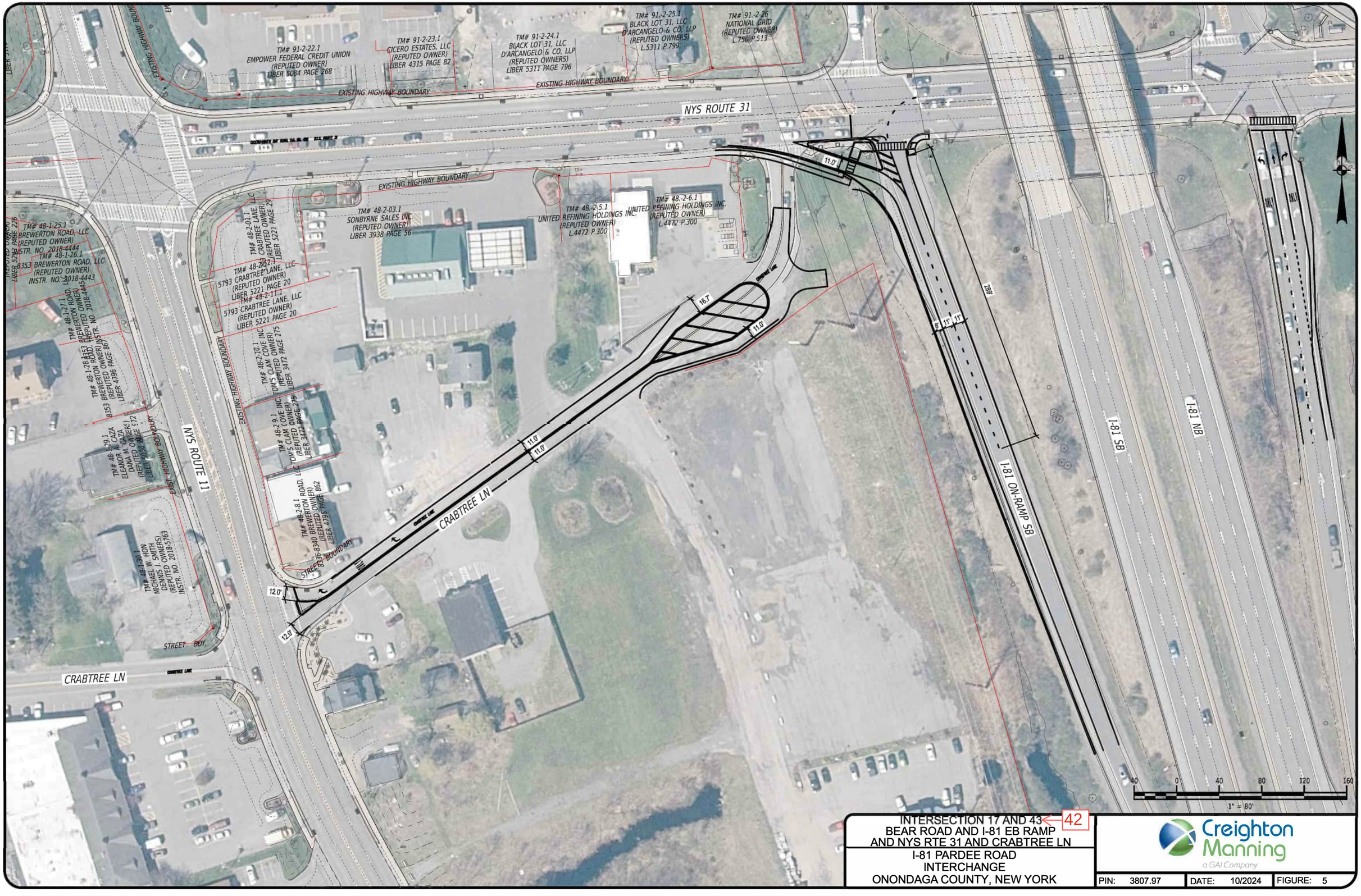
INTERSECTION 35
NEAR ROAD (CR 191) &
US ROUTE I-481 EB RAMP

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97	DATE: 10/2024	FIGURE: 4

FILE NAME = N:\Projects\2020\120-283.88 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\figures\120-283.88_fig_loc_84 - int. 35.dgn
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USER = dfisher



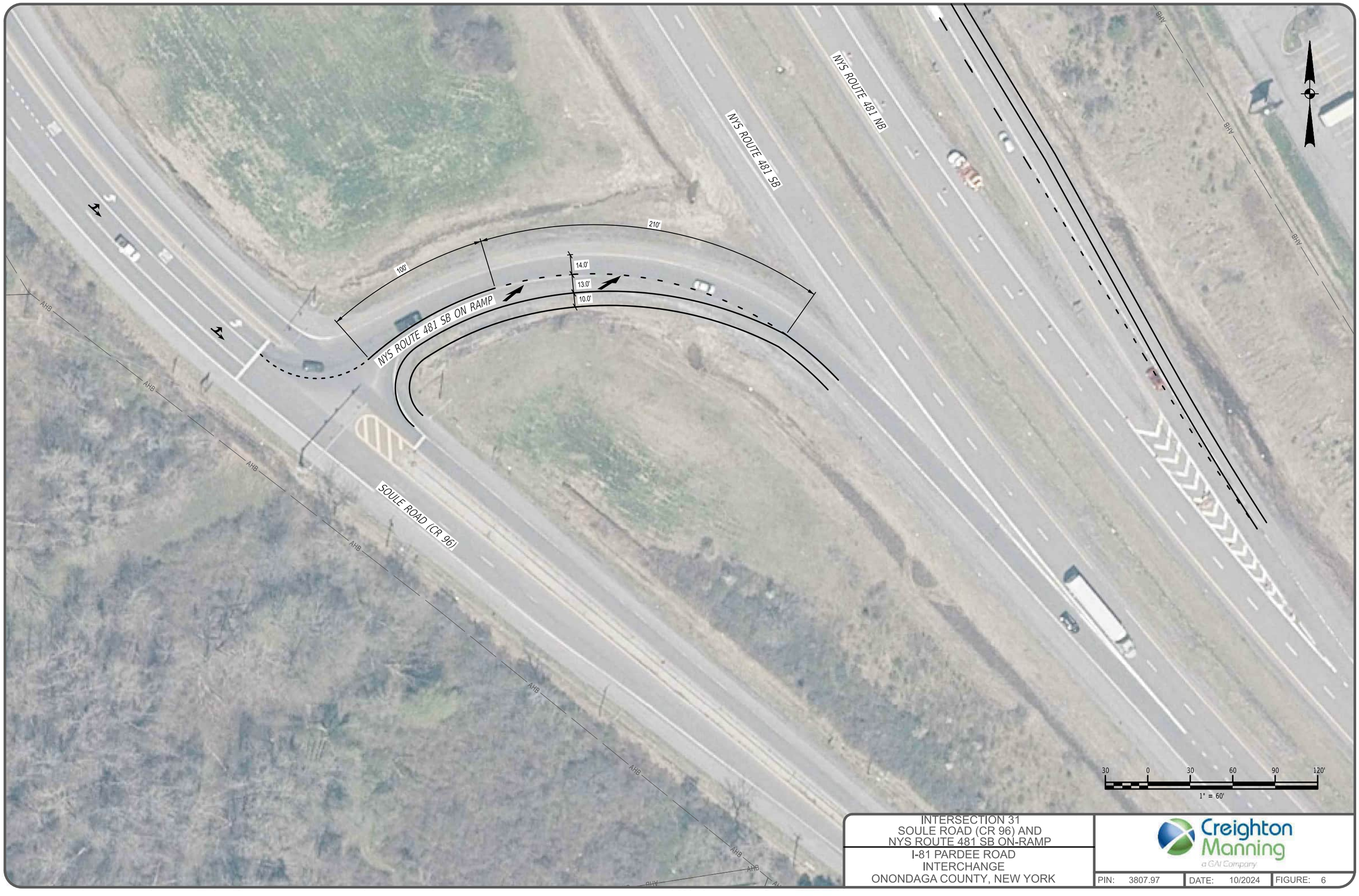
INTERSECTION 17 AND 43 42
BEAR ROAD AND I-81 EB RAMP
AND NYS RTE 31 AND CRABTREE LN

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97	DATE: 10/2024	FIGURE: 5

FILE NAME = N:\Projects\2020\128-283.68 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn.connect\Figures\128-283.68_fig_loc_05 - int. 17 and 43.dgn
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USER = drfisher



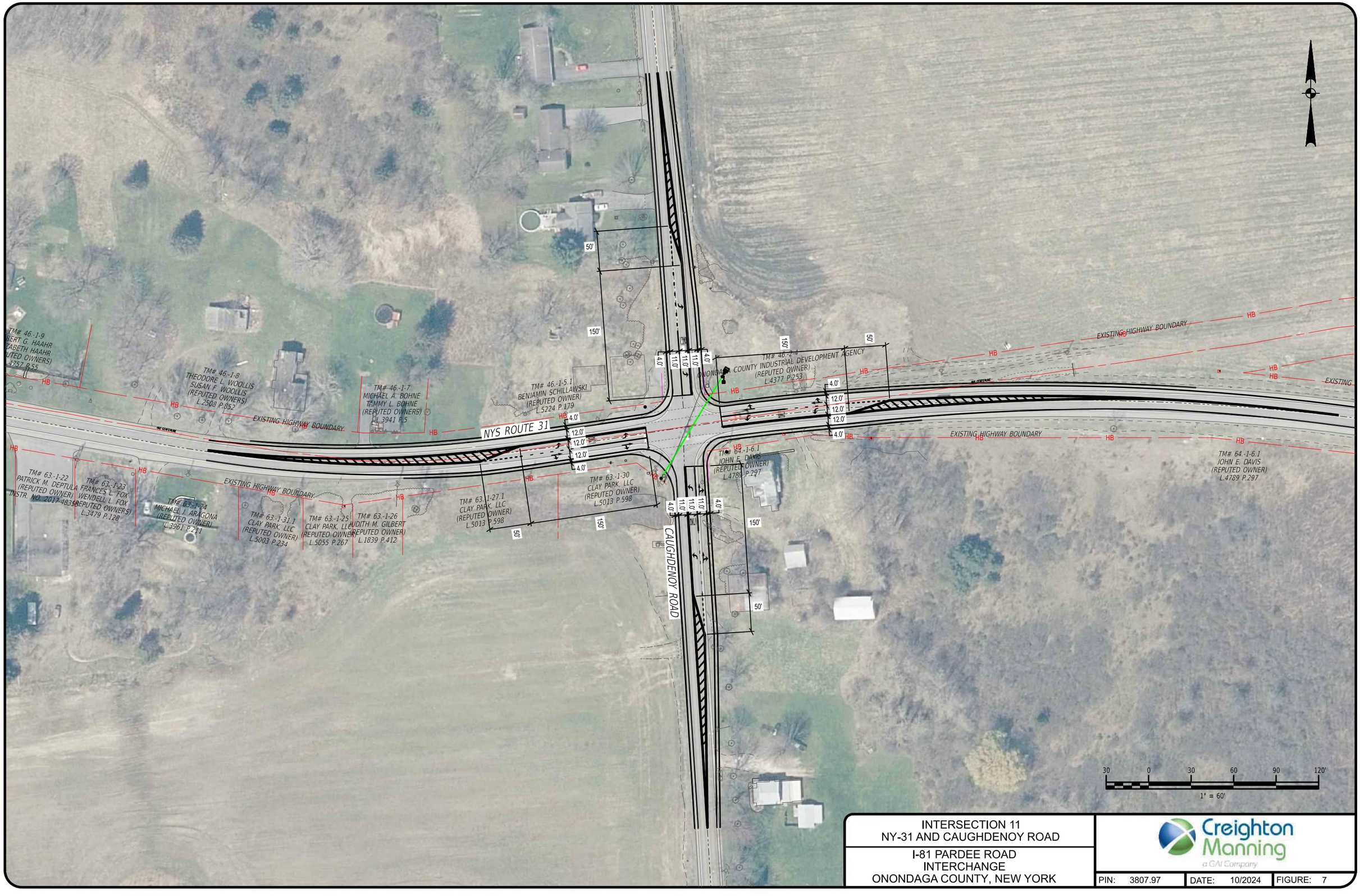
INTERSECTION 31
SOULE ROAD (CR 96) AND
NYS ROUTE 481 SB ON-RAMP

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 6

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USER = dfisher



INTERSECTION 11
NY-31 AND CAUGHDENOY ROAD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97	DATE: 10/2024	FIGURE: 7

FILE NAME = N:\Projects\2020\120-283.08 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.08_fig_loc_07 - int_11.dgn
DATE/TIME = 10/25/2024
USER = dfisher

NY ROUTE 31

HENRY CLAY BOULEVARD CR 121

EXISTING HIGHWAY BOUNDARY

TM# 59-1-20.1
JAMES F. MILLS
BARBARA A. MILLS
(REPUTED OWNERS)

TM# 29-1-11.1
THE GLIDER OIL COMPANY INC.
(REPUTED OWNER)
L.5201 P.746

TM# 29-1-10.1
THE GLIDER OIL COMPANY INC.
(REPUTED OWNER)
L.5201 P.746

TM# 29-1-9.1
THE GLIDER OIL COMPANY INC.
(REPUTED OWNER)
L.5201 P.746

TM# 61-1-16.1
CST NEW YORK, LLC
(REPUTED OWNER)
INSTR. NO. 2020-8004

TM# 45-1-2.1
GROUP ONE DEVELOPMENT LLC
(REPUTED OWNER)
L.4882 P.422

TM# 45-1-2.2
ANTHONY R. FALSO
(REPUTED OWNER)
L.5221 P.840

ADDITIONAL ANALYSIS OF THE EXISTING SIGNAL POLES IS REQUIRED TO DETERMINE WHETHER MODIFICATIONS TO THE CURRENT SIGNAL OR A COMPLETE REPLACEMENT WITH A NEW SIGNAL IS NECESSARY

50 0 50 100 150 200'
1" = 100'

INTERSECTION 7
NYS ROUTE 31 AND
HENRY CLAY BOULEVARD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 8

FILE NAME = N:\Projects\2020\120-283.08 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.08_fig_loc_08.dgn
DATE/TIME = 10/25/2024
USER = dfisher

LAKE SHORE ROAD (CR123)

NYS ROUTE 31

50'

600'

TM# 90-1-22.1
HESS RETAIL STORES LLC
(REPUTED OWNER)
L.5287 P.570

TM# 90-1-21.1
PPD AMATOS INC.
(REPUTED OWNER)
L.5150 P.790

TM# 89-1-1.1
CICERO PROPERTIES NRM, LLC
(REPUTED OWNER)
L.5156 P.285

TM# 51.00-1-7.1
PATRICIA A. OWENS
(REPUTED OWNER)
L.2970 P.27

TM# 51.00-1-9.1
TRI STATE AUTO AUCTION
(REPUTED OWNER)
L.3580 P.33

TM# 51.00-1-9.1
TRI STATE AUTO AUCTION
(REPUTED OWNER)
L.3580 P.33

EXISTING HIGHWAY BOUNDARY

1992 HIGHWAY BOUNDARY

HB

A/C

25 0 25 50 75 100'

1" = 50'

INTERSECTION 19 AND 20
NY 31 AND LAKE SHORE ROAD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 9

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DATE/TIME = 10/25/2024
USER = dfisher



INTERSECTION 8
NYS RTE 31 AND GRANGE ROAD (CR 197)

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 10

FILE NAME = N:\Projects\2020\120-283.B8 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\figures\120-283.B8_fig_loc_10 - int. 8.dgn
DATE/TIME = 10/25/2024
USER = drfisher

GRID NORTH

TM# 50.-1-3.1
CLAY VOLUNTEER FIRE DEPT. INC.
(REPUTED OWNER)
L.4899 P.390

A.P.

HB

NYS RTE 31

EXISTING HIGHWAY BOUNDARY

APPROX. STREET

BDY.

STEARNS ROAD

APPROX. S/E

15 0 15 30 45 60'
1" = 30'

INTERSECTION 12
NYS RTE 31 AND STEARNS RD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 11

FILE NAME = N:\Projects\2020\120-283.B8 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.B8_fig_loc_11 - int. 12.dgn
DATE/TIME = 10/25/2024
USER = dfisher



INTERSECTION 40
CAUGHDENOY ROAD AND MAPLE ROAD

I-81 PARDEE ROAD
INTERCHANGE
ONONDAGA COUNTY, NEW YORK

Creighton Manning
a GAI Company

PIN: 3807.97 | DATE: 10/2024 | FIGURE: 12

FILE NAME = N:\Projects\2020\120-283.B0 NYSDOT - I-81 Pardee Road Interchange\Working\CADD\dgn_connect\Figures\120-283.B0_fig_loc_12 - int. 40.dgn
DATE/TIME = 10/25/2024
USER = dfisher

Onondaga County Short Term Intersection Improvements
Priority List

Priority: 2025

Interse	Location	Recommendation	Modeller Comments
2	NY 31 & NY 481 NB	Optimize timing; Lengthen NB R storage length	
7	NY 31 & Henry Clay Boulevard	EBR & WBR lanes added; NBL lane extended; AM signal optimized	
8	NY 31 & Grange Road West	Signal added	
11	NY 31 & Caughdenoy Road	Add left turn lanes to all approaches	
12	NY 31 & Stearns Road	Signal added	
17	NY 31 & I-81 SB Service Road	Close Crabtree Ln, add EB dedicated right, widen ramp to 2 lanes and taper before 81, optimize timing	Followed Synchro Design?
18	NY 31 & Pardee Road/I-81 NB Service Ro	Lengthen NB storage as much as possible within ROW, 1 NB left, 1 NB thru, 1 NBR, optimize timing	Confirm the extended length of the NB storage?
19	*NY 31 & Lakeshore Road*	*Close Node 19 and improve 20 to include a left turn lane*	Confirm this change?
31	NY 481 SB On-Ramp & Soule Road	what do we gain by disabling NB RTOR? Consider making SB middle lane a thru/left and adding short 2nd rec	SB middle lane to be shared thru and left?
34	US 11 & Bear Road	SB lanes reconfigured to 2 SBL, 1 SBT, 1 SBR; SBL permitted phase removed	
35	Bear Road & I-481 EB Ramps	EBL turn bay extended; EB lanes reconfigured to 2 EBL, 1 EBT (with 2 EBL lanes); PM signal optimized	Confirm the layout for the NB RT movement
40	Caughdenoy Road & Maple Road & NY 4	temp signal with wooden poles since DOT EIS will modify again	
42	NY 31 & Crabtree Lane	Close Crabtree Ln, add EB dedicated right, widen ramp to 2 lanes and taper before 81, optimize timing - same as INT # 17	

Confirm US11 & Crabtree Ln design?

56696
56697

90002	
2814351	90050
2814352	90051
2814355	90052
2814356	90053
2814357	90054
2814358	90055
453030029	90056
453030031	90057
453030032	90058
453030033	90059
453030034	90060
453030036	90061
453030039	90062
453030040	90063
453030041	90064
453030042	90065
453030043	90066
453030044	90067
453030045	90068
453030046	90069
453030047	90070
453030048	90071
453030049	90072
453030050	90073
453030051	90074
453030052	90075
453030053	90076
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453030079	90101
453030081	90102
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453030104	90120
453030105	90121
453030106	90122
453030107	90123
553127575	90124
553127576	90125
553138564	90126


Hwy 31
Carling Rd
Skyle Rd
481
Google Earth

SMTC TRAVEL MODEL DOCUMENTATION

VERSION 5.0

5.6.2022





PREPARED FOR:
SYRACUSE METROPOLITAN PLANNING COUNCIL

SUBMITTED BY:
RSG

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SMTC Travel Demand Model
Version 5.0 Documentation

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This document was prepared with financial assistance from the Federal Highway Administration and the Federal Transit Administration of the U.S. Department of Transportation through the New York State Department of Transportation. The Syracuse Metropolitan Transportation Council is solely responsible for its contents.

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1.0 INTRODUCTION

The Syracuse Metropolitan Transportation Council (SMTC) is the designated Metropolitan Planning Organization (MPO) for the greater Syracuse Metropolitan Region, which includes the City of Syracuse, Onondaga County, and small portions of Madison and Oswego Counties. SMTC is responsible for the development of the region's Long Range Transportation Plan (LRTP), Transportation Improvement Program (TIP) and Unified Planning Work Program (UPWP). These three items serve as the basis for transportation planning and programming in the region. This also involves conducting transportation planning and needs assessment studies as well as ensuring the LRTP and TIP conform to Air Quality Standards.

To assist with the conduct of these responsibilities SMTC maintains a Travel Demand Model ("the model"). The model was originally run in the Tmodel2 software package, which was installed and calibrated for the Syracuse region in the early 1990's. In 2004 SMTC retained the transportation consulting firm of Edwards and Kelcey to update the region's travel demand forecasting capabilities and build a new model using the TransCAD modeling platform. The completed model was installed onto the SMTC computers in 2005.

In 2009, SMTC retained RSG under the I-81 Travel Demand Modeling contract to review and update the model for use in the I-81 Alternatives Analysis project and to support the SMTC's other planning needs. In 2014, the model was further refined and updated to cover the region's expanded Metropolitan Planning Area (MPA). In 2019, RSG updated the model code to run in TransCAD version 7 and recalibrated the model to 2017 conditions.

The purpose of this SMTC Travel Demand Model Documentation is to:

- Describe in detail the latest model's structure, input data, and parameter estimation,
- Present model validation results that demonstrate that the model is suitable for use as the SMTC's travel demand modeling tool, and
- Describe how the model meets the minimum requirements of and responds to the suggested good practices of federal and state guidelines.

2.0 MODEL OVERVIEW

The STMC Travel Demand Model, Version 5.0 ("the model") is an integrated transportation demand model developed by Resource Systems Group (RSG) for the Syracuse Metroplotain Transportation Council.

The model estimates the movement of people and vehicles within the region during an average fall weekday in 2017. The 2017 Model is a daily model with hourly traffic assignments. The 2017 model is based on updated housing and employment estimates from 2017, and includes a revised network. The model has also been transferred from TransCAD 5.0 to TransCAD 7.0. The model includes 1,125 internal Transportation Analysis Zones (TAZs) covering the City of Syracuse, Onondaga County, and several towns in Madison and Oswego Counties. Traffic entering and exiting the region does so through 68 external zones.

Transportation planners can use the model to perform comprehensive regional transportation analyses, and to evaluate traffic impacts resulting from:

multi-modal transportation improvements,
changes in traveler behavior,
changes to the roadway system,
changes in land use activity, and
implementation of demand management strategies.

The purpose of this report is to describe:

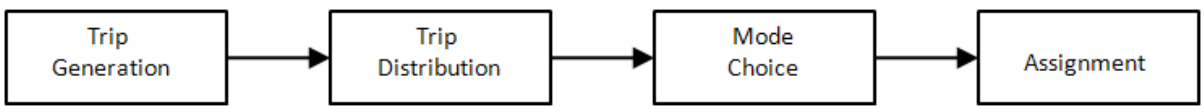
the data sources and parameter estimation that are the foundation of the model,
the structure of the model itself,
the use of the model for forecasting purposes, and
the history of enhancements and changes made to the model.

2.1 | CONCEPTUAL OVERVIEW OF MODEL STRUCTURE

The SMTC model is based on a four-step modeling process: trip generation, trip distribution, mode choice, and vehicle assignment. An overview of the model system is shown in Figure 1.

At the start of a full model run, trip generation uses land-use data to calculate person trip ends at the transportation analysis zone (TAZ) level. These person trip ends are then paired into origins and destinations in the distribution model. In the next step, the person trips are split into each respective mode (e.g. auto, bus). Finally, the vehicle trips are assigned to the highway network in the assignment model.

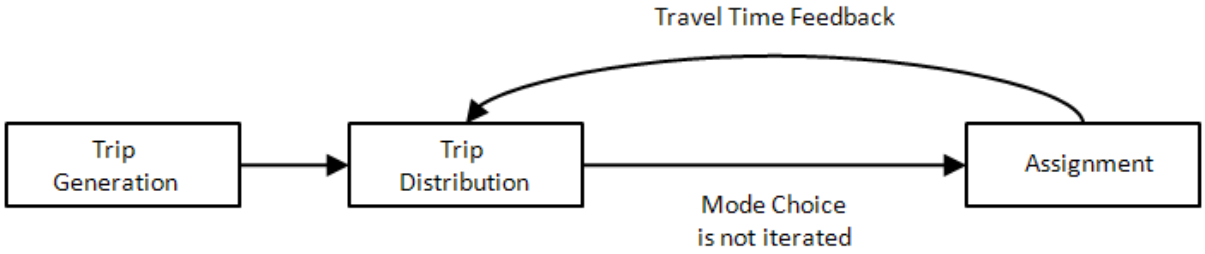
FIGURE 1: 4-STEP MODEL CONCEPT



The model has an important feedback loop that has been added in Figure 2. Accessibility, which is a measure of the relative ease of travel, is calculated based on outputs from the

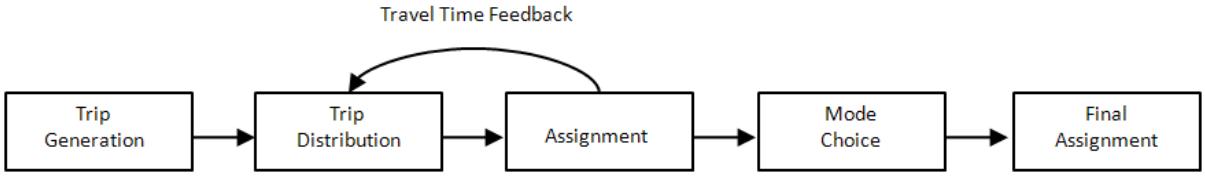
assignment model, which is also an important determinant of trip distribution. Simply put, the decisions individuals make about where and how far to travel are a function of congestion levels and travel times. Therefore, it is customary to iterate between the trip distribution and assignment models in order to reach a convergent solution. The iteration loop in Figure 2 occurs within a given simulation year.

FIGURE 2: 4-STEP MODEL CONCEPT WITH FEEDBACK



While transit travel is critical for many people in the SMTC region, the reality is transit carries a relatively small portion of the overall travel market in the region at this time. Since transit demand in the SMTC region does not measurably impact roadway level-of-service, a decision was made to not include the mode choice model in the feedback loop to reduce model run time and complexity. However, the mode choice model is still part of the overall model, and the SMTC model operates as presented in Figure 3. This model application decision does not limit the ability of the modeling system to adequately represent non-auto modes, and does not bias the model results, but it does significantly reduce model run time since the mode choice component takes the longest to run due to the nature of the complex path-building that is required.

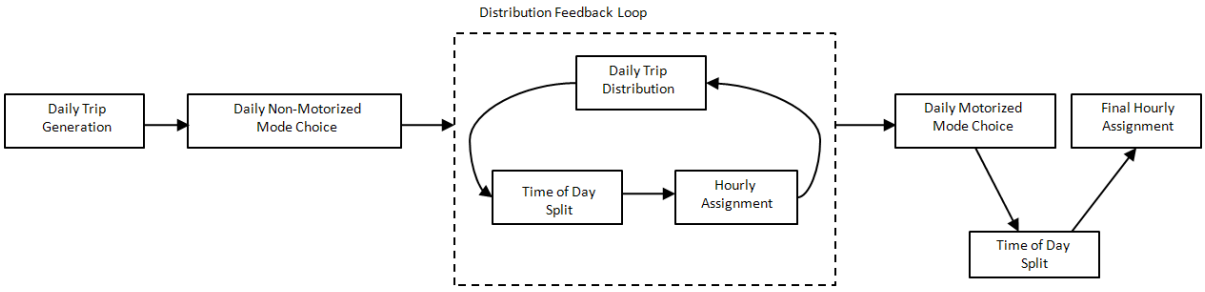
FIGURE 3: FEEDBACK IN THE SMTC MODEL STRUCTURE



The model is calibrated to reflect traffic conditions on an average weekday in Fall 2017. Fall was chosen because it is a time during which public schools and colleges are in session, while seasonal (summer) traffic is still observed.

The model is a daily model that performs hourly traffic assignments so as to account for both travel across an entire day and to adequately depict peak hour congestion. To accomplish this, the model relies on static time of day factors that divide the daily trips by hour for the purposes of assignment. This process is illustrated in Figure 4.

FIGURE 4: COMPLETE SMTC MODEL STRUCTURE



2.2 | BRIEF DESCRIPTION OF MODEL COMPONENTS

While the model is a traditional 4-step model, the modeling process itself consists of several steps worth noting. Each of the steps below will be discussed in-depth later in the document.

Daily trip generation, which calculates the number of person trip ends generated by and attracted to each zone.

Daily trip distribution, which pairs the trip-ends for each zone for each of six trip purposes. The result of this is a person trip table for each trip type. One output of trip distribution is the person trip table for home to work that can be compared to the "Journey-to-Work" data provided by the Census Bureau.

Time of day (diurnal) distribution, which takes the daily production-attraction trip matrices and converts them to origin-destination matrices by time period (e.g. AM peak hour). Trips by time of day were initially estimated using the 2004 SMTC Household Travel Survey and the NHTS in the previous version of this model.

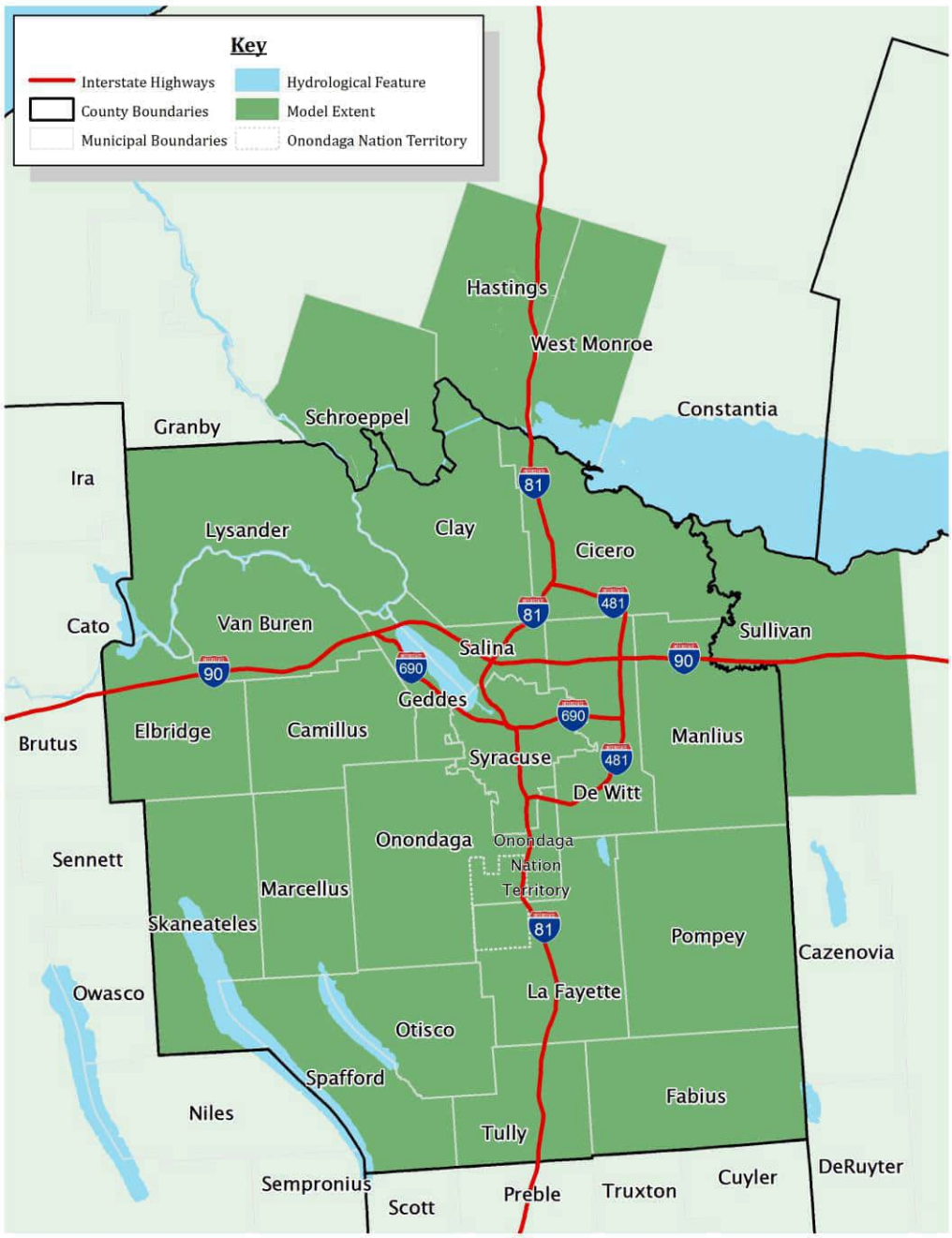
Vehicle assignment, the most widely used model, which locates the best routes between each origin/destination pair and assigns the vehicle trips accordingly. An important output of this step is the number of vehicles on each roadway segment. Several other pieces of data can be extracted, including operating speeds, travel times, VMT, VHT, and V/C. In addition, one can configure the vehicle assignment to save all the vehicle trips that use a single link in either direction (select link analysis) or all the vehicle trips that originate or are destined for a zone (select zone analysis).

Highway/transit skim builder finds the best available travel path via each of the travel modes explicitly modeled and describes the attributes of the best paths for each mode (i.e. travel time, cost, distance, etc.). Several modes are explicitly modeled in the SMTC model, including auto, transit, and non-motorized modes. Skims are reasonable approximations of the travel time and cost between all pairs of TAZs, and skims are described for each travel mode. The path-finding algorithms are calibrated based on observed travel paths and observed relationships between volumes and congested speeds.

Mode choice model calculates which mode the person trips are likely to take based on availability and mode-specific parameters (e.g. time, cost, transit frequency). Mode choice provides a breakdown of person trips by mode. The mode choice model is

developed based on observed data on mode preferences and what those preferences imply about sensitivities to mode attributes.

FIGURE 5: SMTC MODEL REGION



3.0 ZONE SYSTEM AND DATA

3.1 | TAZ SYSTEM

The SMTC model is a zone-based forecasting tool, modeling traffic flows between TAZs. The model includes a total of 1,193 TAZs. Table 1 shows a breakdown of the TAZ structure: 1,125 cover the 41 municipalities and the Onondaga Nation in the SMTC region, while traffic entering and exiting the region does so through 68 external zones. Of the internal TAZs, most are in Onondaga County, which accounts for the majority of the SMTC region. The quantity of households and employment in each of these zones is used to develop estimates of the trips produced by and attracted to them. Sixteen TAZs are special generators, which are specific locations such as Syracuse Airport, Hospitals and large educational institutions that are modeled differently than zones containing more typical residential and commercial land. External TAZs are used to generate traffic at the cordon of the SMTC region. The 68 external TAZs are located where major roadways cross the SMTC region boundary. Traffic counts recorded at these points are used as input data to modeling trip generation at these locations, which is discussed in Section 6.0.

TABLE 1: TAZ SUMMARY

	DESCRIPTION	NUMBER OF ZONES
Within SMTC MPA	Onondaga County*	920
	Outside Onondaga County	189
	Special Generators	16
	Total in MPA	**1,125**
External Stations		68
Total in Model		**1,193**

*Excluding special generator TAZs

The previous version of the model included 1,185 TAZs, of which 1,117 were internal and 68 external. The model update included splitting a few zones within Onondago County to provide higher detail at these locations. Figure 6 shows the TAZ structure for the SMTC region.

In the updated SMTC model, the socioeconomic, trip production and trip attraction attributes are maintained outside of the TAZ geographic file. Now only geograhic data is maintained in the TAZ file, and socioeconomic, trip production and trip attraction attributes are maintained in support files within the the Inputs\3_TAZ and TripGen folder. These include the 'LandUse.bin' file, which contains all household and employment data.

Attributes associated with TAZs are listed in Table 2. The development of these data are discussed in Section 3.2 |.

FIGURE 6: SMTC REGION TAZ STRUCTURE

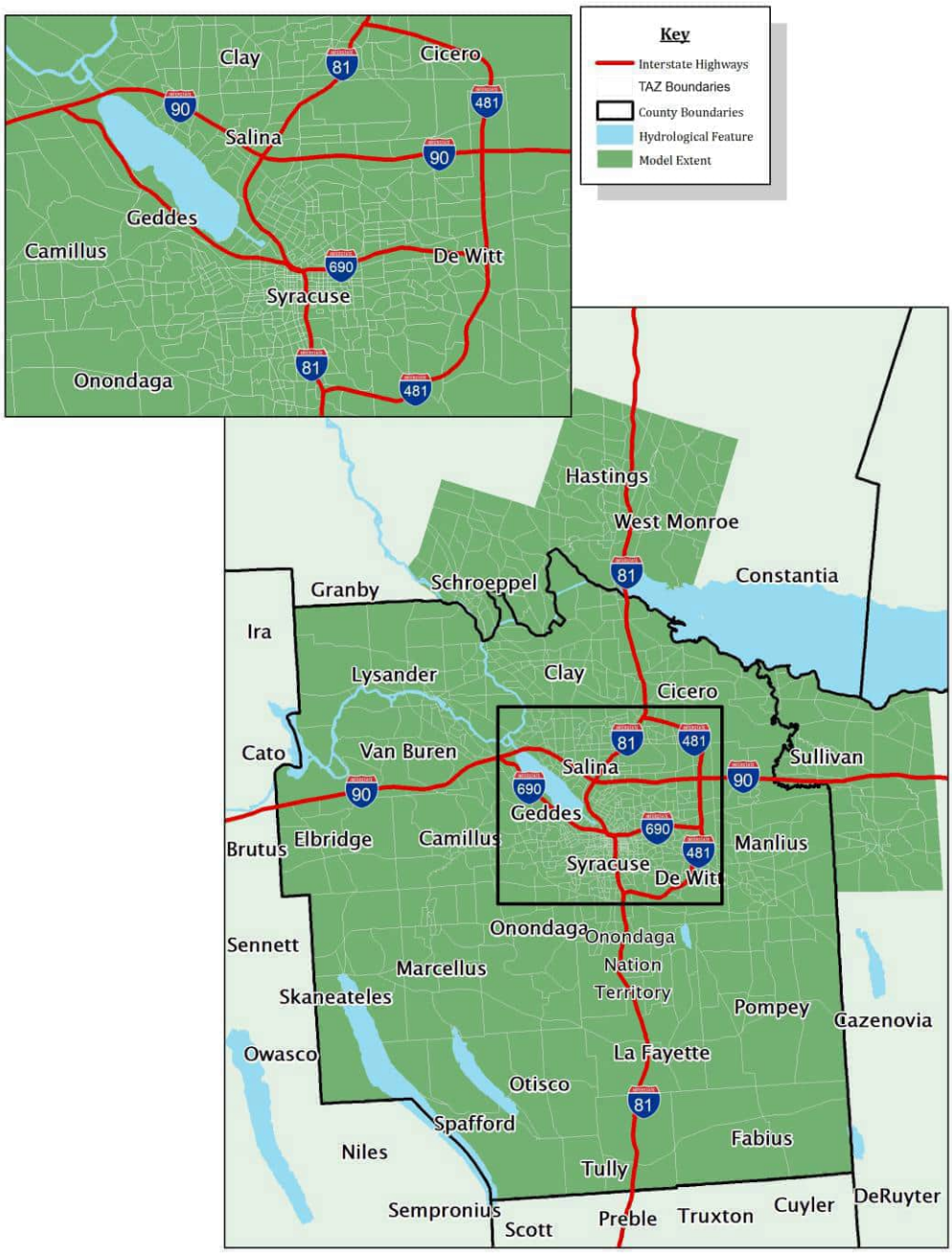


TABLE 2: TAZ ATTRIBUTES

Field	Description	Update Type
ID	TAZ identification number	Immutable
Area	TAZ Area (square miles)	User-maintained
TAZ	TAZ identification number	User-maintained
Zone_Type	Zone type	User-maintained
Town_City	Town/City name	User-maintained
Town/Ext.Station	Town/external	User-maintained
Outside_Onondaga	Onondaga Indicator	User-maintained
TerminalTime	Terminal Time (minutes)	User-maintained
Downtown District	District Indicator	User-maintained
IntDens	Sqrt of Intersection Density	User-Maintained
Walkable	Indication of walkability	User-Maintained
Description	Description	User-maintained

3.2 | SOCIOECONOMIC DATA

Socioeconomic (SE) data are essentially the number of households and jobs located in each of the model's TAZs. The number of households and jobs are the key explanatory variables of the number of trips produced and attracted to each TAZ. Therefore, if the model is to reflect travel in the region it is important to correctly locate and quantify households and jobs. Furthermore, the change in land use – growth or decline in the number of household and jobs – is the key driver of changes in the amount of regional travel between the base and future forecast years.

A multistep process was undertaken to develop the base and future year data:

- Conversion of the model's forecast years: the base year was moved forward from 2014 to 2017, and the future year was maintained as 2050.
- The addition of more detail to the TAZ system required the disaggregation of employment and households reflect where TAZs were split.
- Version 5.0 SE data was developed based on current socio-economic and census data sources, including data from the NY State Department of Labor, in combination with SMTC local knowledge and maintaining local adjustments established with local partners during previous outreach in generating Version 4.0 2014 SE data inputs.
- Updated 2050 projections were then obtained by reviewing previous 2014 and 2050 SE data, along with the newly updated 2017 SE data and strategically updating the previous 2050 SE data to reflect changes from 2014 to 2050. Logic was applied to maintain previous 2050 values for a given TAZ when the 2017 values reflect a natural progression along the previously defined growth trajectory – i.e. where 2017

values fall between the 2014 and 2050 values and reflect incremental change due to time passing from 2014 to 2017. However, in some cases, 2017 SE data was updated to reflect corrections to 2014 SE allocations (often the number and/or type of employees in a given zone). In such cases, logic was used to translate these corrections to the 2050 values. In all cases, town-wide control totals were applied after redistribution, with exceptions for any cases if 2017 values exceeded 2050 totals for a given town.

As mentioned previously, the Socioeconimic data is maintained outside of the TAZ system in the 'LandUse.bin' file. The attributes associated with the Socioeconimic data are listed in Table 3.

The remainder of this section describes each step in the process of developing the socioeconomic data in more detail and presents regional summaries of the socioeconomic data.

TABLE 3: SOCIOECONOMIC DATA ATTRIBUTES

Field	Description	Update Type
TAZ	TAZ identification number	Immutable
Town	Town/City name	User-maintained
CBD	Central Business District	User-maintained
HH_IncludingGQ	Households including Group Quarters	User-maintained
HH	Households	User-maintained
HH_GQ	Group Quarters	User-maintained
Population	Population (persons)	User-maintained
Vehicles	Vehicles	User-maintained
Agriculture	Agricultural sector employees	User-maintained
Bus_Legal_Personal	Business, Legal, Personal sector employees	User-maintained
Communications	Communication sector employees	User-maintained
Construction	Construction sector employees	User-maintained
Eat_Drinking	Eating, Drinking sector employees	User-maintained
Education	Education sector employees	User-maintained
FIRE	Fire sector employees	User-maintained
Government	Government sector employees	User-maintained
Health	Health sector employees	User-maintained
Hotels_Lodge	Hotels, Lodging sector employees	User-maintained
Manufacturing	Manufacturing sector employees	User-maintained
Mining	Mining sector employees	User-maintained
NonClassifiable	Nonclassifiable sector employees	User-maintained
RetailTrade	Retail sector employees	User-maintained
Service	Service sector employees	User-maintained
SocialServices	Social Services sector employees	User-maintained
Transportation	Transportation sector employees	User-maintained
Utilities	Utilities sector employees	User-maintained
WholesaleTrade	Wholesale sector employees	User-maintained
Total	Total employees	User-maintained

DATA COLLECTION

Collecting and verifying housing and employment data is a very intensive process and requires input from local experts. In developing model SE data , the SMTC met with local officials and professionals with experience in demographic analysis and/or knowledge of local demographic conditions. For this current update, SMTC staff further reviewed and updated SE data to reflect 2017 conditions.

A comprehensive socioeconomic data update outreach was completed over a several week period in the spring of 2014 and included representatives from various geographic levels. This projecess, which formed the initial foundation of the 2017 model data – currently updated to reflect 2017 condtions – is described below.

The SMTC met with the Empire State Development Corporation and the New York State Department of Labor to understand current conditions and trends at the state level. The central New York Regional Planning and Development Board, Syracuse-Onondaga County Planning Agency, Onondaga County Office of Economic Development, CenterState Corporation for Economic Opportunity, City of Syracuse Department of Neighborhood and Business Development, City of Syracuse Industrial Development Agency and the City of Syracuse Bureau of Planning & Sustainability provided feedback on socioeconomic data at the city, county and region level. Additionally, in 2009, the SMTC collected information from local representatives from the Towns of Camillus, Cicero, Clay, DeWitt, Lysander, Manlius, Onondaga, Salina and Van Buren. These municipalities were determined to be the most dynamic in regards to household and employment change over the 36 year modeling period.

Socioeconomic information that was previously gathered, during a similar effort in 2009, was presented to these representatives in tabular and graphic format. Each representative had the opportunity to review and comment on the previous work to update the datasets to the new base and horizon model years. Comments were collected and compiled into a single database and the appropriate changes were made to the base and horizon year datasets.

The development of data in 2009 utilized New York State Department of Transportation (NYSDOT) forecasted employment data created by Global Insight. In addition to the database compiled during meetings with local representatives, other datasets were referenced to update the model data to 2014 and 2050 for the version 4.0 model:

- 2000 U.S. Census data on households at the block level (U.S. Census Bureau)
- 2010 U.S. Census data on households at the block level (U.S. Census Bureau)
- 2012 U.S. Census American Community Survey (ACS) 3-year data on households (U.S. Census Bureau)
- 2012 parcel data for Onondaga County (Syracuse-Onondaga Planning Agency)
- 2009 Business Location Analysis Tool (BLAT) data on employment (NYSDOT)
- 2013 Infogroup data on employers with 10+ employees (NYSDOT)
- 2012 Onondaga County employment totals by sector (New York State Department of Labor)

- 2012-2013 aerial photography for household and employment location confirmation (NYSDOT)
- 2010 US Bureau of Economic Analysis (BEA) Onondaga County full-time employment by industry sector (CA25N)
- 2012 Onondaga County Industrial Development Agency (OCIDA) employment report
- 2013 Downtown Committee of Syracuse employment data

Previous Future year forecasts:

- 2020 employment projections by sector for Central New York (New York State Department of Labor)
- 2035 employment projections by sector and population projections for Onondaga County (Woods and Poole Economics, Inc.)
- 2040 population projections for Onondaga County (Cornell University Program on Applied Demographics)

DEVELOPMENT OF BASE YEAR HOUSEHOLDS & POPULATION

Prior to updating the model base year from 2007 to 2014 the 2007 household data were reviewed for accuracy and completeness. Parcel data and aerial photography were used to validate the placement of households in the 2007 TAZ structure[1]. Otherwise, the updated demographic data for 2014 was prepared using the 2010 Census and 2012 parcel data. For the latest 2017 data update, previous 2014 HHs were again reviewed and updated by SMTC staff.

3.3 | DEVELOPMENT OF FUTURE YEAR HOUSEHOLDS & POPULATION

In the SMTC version 4 model, previous 2035 household and population data served as the basis for projecting 2050 conditions. The 2035 year household and population data were previously presented to local representatives for review and comment. The general consensus was to retain the 2035 conditions out to 2050 with a few exceptions. The local representatives identified site-specific locations of growth or decline in their geographic areas of expertise. This feedback was applied to the household data at the TAZ level and the remaining growth or decline, projected for 2050, was added and distributed using the previous model growth rates. The 2035 household totals were used as the 2050 household control totals at the municipal and county level. These control totals (approximately 208,000 total households in Onondaga County - not including group quarters) were validated with results of a trend analysis using Decennial Census data, American Community Survey 3-year data, Cornell University projections, and Woods and Poole Economics projections. The projections for the City of Syracuse were adjusted in this version of the model based on the

[1] For more information on how the 2003 household and population data was derived please refer to the SMTC Travel Demand Model Data Development Report (Version 1.2) dated November 2006. This report also describes the development of 2027 household and population data and 2003 and 2027 employment data

2010 Census data showing a lower level of decline than had been expected and that has been incorporated in to the projections.

For the current SMTC version 5 model, previous 2050 projections were used as a starting point for updated 2050 projections. The current version 5 model 2050 SE data projections were obtained by reviewing previous version 4 2014 and 2050 SE data, along with the newly updated 2017 SE data and strategically updating the previous 2050 SE data to reflect changes from 2014 to 2050. Logic was applied to maintain previous 2050 values for a given TAZ when the 2017 values reflect a natural progression along the previously defined growth trajectory – i.e. where 2017 values fall between the 2014 and 2050 values and reflect incremental change due to time passing from 2014 to 2017. However, in some cases, 2017 SE data was updated to reflect corrections to 2014 SE allocations. In such cases, logic was used to translate these corrections to the 2050 values. In all cases, town-wide control totals were applied after redistribution, with exceptions for any cases if 2017 values exceeded 2050 totals for a given town.

3.4 | DEVELOPMENT OF BASE YEAR EMPLOYMENT

Employment data for the 2017 base year in version 5.0 were developed by SMTC based on employment data provided by NYSDOT and comparison to historical employment data by TAZ from the version 4 model.

Historical version 3 base year employment numbers relied on BLAT data, provided by NYSDOT (geocoded locations of business which include employment sector and employee information), 2010 Census Local Employment Dynamics (LED) data, aerial photos, and 2010 county-level BEA control totals and parcel data to correct any large discrepancies.

For the previous version 4 update, local representatives were presented with employment data tables and maps to review and comment. The goal of this outreach was to review the current model conditions and to determine areas of growth and/or decline in regards to total employment and employment sector for the new model years. In some cases, local representatives were able to identify employment changes that occurred between 2007 and 2014. The remaining employment change, using the same rates as the 2007 to 2035 projections, was applied to the 2014 TAZ structure. Additionally, 2009 BLAT and 2013 Inforgroup employment data were used for verifying employer locations, employment sector and number of employees at the TAZ level. The final 2014 employment data from version 4 were controlled at the county level using 2012 New York State Department of Labor employment data and at the municipal level using 2010 LEHD data.

The employment sectors used in previous model iterations are again retained for the version 5 update of employment data. The sectors are combinations of Standard Industrial Classification (SIC) codes. The sectors and corresponding SIC codes are shown in Table 4.

TABLE 4: EMPLOYMENT SECTORS AND SIC CODES

EMPLOYMENT SECTORS	SIC CODES
Agriculture	0100 – 999
Mining	1000 – 1499
Construction	1500 – 1800
Manufacturing	2000 – 4000
Transportation	4100 – 4799
Communications	4800 – 4899
Utilities	4900 – 4999
Wholesale Trade	5000 – 5199
Retail Trade	5200 – 5799, 5900 – 5999
Eating and Drinking Establishments	5800 – 5899
Financial / Insurance / Real Estate	6000 – 6800
Hotels / Lodging	7000 – 7099
Business / Legal / Personal	7200 – 7400, 8100 – 8200, 8700 – 8799
Service (General)	8400 – 8500, 8600 – 8700, 8800 – 8999
Health Services	8000 – 8100
Educational Services	8200 – 8299
Social Services	8300 – 8399
Government	9100 – 9800
Non**classifiable**	9900+

DEVELOPMENT OF FUTURE YEAR EMPLOYMENT

In the SMTC version 4 model, the previous horizon year (2035) employment data were developed using a combination of local knowledge and forecasted employment data created by Global Insight, provided by NYSDOT. Projecting the employment data using only the Global Insight data did not take into account all local considerations related to site-specific development plans. Therefore, during the meetings with local representatives they were asked to provide information on any economic development that had or was likely to occur between 2007 and 2035. These details were incorporated into the final projected 2035 TAZ level employment data in the version 3 model.

The effort put into projecting the 2035 employment data was utilized for the version 4 model update and also largely influences the current version 5 update. During outreach efforts in the spring of 2014 it was determined the employment numbers that were projected

for 2035 were to be used in 2050. There was an overall consensus on this assumption due to then current economic conditions that had slowed growth for several years and in some sectors created a decline. In addition, local representatives provided updated information on site-specific development plans as well as projected job gains/losses by sector. Large potential but unapproved developments (such as future portions of Destiny USA) have not been included in the future employment forecasts.

Based on information provided by the New York State Department of Labor, the projected annual growth rate for central New York is 0.04%, which equals just over 1,000 jobs per year in Onondaga County. The 34,000 jobs (approximately 1,000 jobs per year over a 36 year period) were distributed to TAZ's using previously projected rates and site-specific information collected during the outreach effort. Combining the previous efforts to develop 2035 forecasts with updated information resulted in an updated and refined 2050 employment dataset at the TAZ level.

SUMMARY OF SOCIOECONOMIC DATA

The results of the socioeconomic data development process for the version 5 model are shown in Table 5, which summarizes household and employment data by municipality[2]. The table shows that the number of households in the model region is projected to grow by 6% from 220,487 in 2017 to 233,358 in 2050, and the number of jobs in the model region is projected to grow by 13% from 267,276 in 2017 to 303,125 in 2050. Figure 7 and Figure 8 show 2017 and 2050 household density by TAZ, and Figure 10 and Figure 11 show 2017 and 2050 employment density by TAZ. Figure 9 and Figure 12 show the change in household density and employment density between 2017 and 2050 respectively. There is, generally, relatively little change in households in the City of Syracuse and growth in communities outside the City. Most employment growth is expected to occur (in absolute terms) in the City of Syracuse and towns such as DeWitt, Clay, Cicero, and Lysander. The growth rates of regional households and employment are similar to those in the previous model.

CROSS CLASSIFICATION OF HOUSEHOLD DATA

The socioeconomic data development process created base and future year household numbers by TAZ. For trip generation purposes, the households are cross classified by household size and vehicle ownership as input in the HHandVeh_Percent.bin file (See section 6.2 | for more details of the trip generation model). The base year cross classification was controlled using 2010 Census block group data. Each TAZ was joined to one of the 418 block groups composing the SMTC region and assigned with the corresponding block group's joint distribution of household size (1,2,3,4+ person households) and number of vehicles (0, 1, 2, and 3+ vehicles) as documented in the 2006-

[2] TAZ geography does not overlay exactly municipal geography; therefore, data for certain municipalities may vary.

2010 ACS data. Bucket rounding was applied across joint distributions and across TAZs to round to whole households.

The modeled population of Onondaga County derived from the cross classified households was confirmed to match closely to the 2013 population of 468,400 at an average of 2.42 people per household (based on 2013 ACS population estimates). The household size distribution was skewed lower in each TAZ so that this region-wide population control was matched.

TABLE 5: HOUSEHOLDS AND EMPLOYMENT BY MUNICIPALITY IN 2017 AND 2050

	Households Including Group Quarters				Employment			
Town/City	2017	2050	Change	% Change	2017	2050	Change	% Change
Baldwinsville	2,608	2,765	157	6%	2,114	2,219	105	5%
Camillus	10,230	11,017	787	8%	7,975	8,850	875	11%
Central Square	1,036	1,148	112	11%	1,231	1,443	212	17%
Chittenango	1,622	1,730	108	7%	1,360	1,601	241	18%
Cicero	11,655	12,713	1,058	9%	12,079	13,400	1,321	11%
Clay	21,857	24,012	2,155	10%	20,817	28,169	7,352	35%
Dewitt	10,371	10,675	304	3%	41,148	45,401	4,253	10%
East Syracuse	1,366	1,364	-2	0%	3,037	3,254	217	7%
Elbridge	2,360	2,497	137	6%	2,466	3,391	925	38%
Fabius	728	778	50	7%	605	619	14	2%
Fayetteville	922	926	4	0%	534	692	158	30%
Geddes	4,457	4,494	37	1%	5,066	5,520	454	9%
Granby	44	47	3	7%	9	10	1	11%
Hastings	2,865	3,105	240	8%	1,277	1,356	79	6%
Lafayette	2,306	2,546	240	10%	1,204	1,257	53	4%
Liverpool	1,052	1,052	0	0%	1,482	1,585	103	7%
Lysander	7,781	9,250	1,469	19%	4,883	6,889	2,006	41%
Manlius	12,149	13,061	912	8%	9,778	10,263	485	5%
Marcellus	2,479	2,835	356	14%	1,651	1,797	146	9%
Minoa	660	660	0	0%	218	258	40	18%
North Syracuse	3,131	3,167	36	1%	2,879	3,056	177	6%
Onondaga	9,263	10,527	1,264	14%	7,586	8,283	697	9%
Otisco	978	1,013	35	4%	290	311	21	7%
Phoenix	1,020	1,098	78	8%	922	970	48	5%
Pompey	2,557	2,832	275	11%	446	512	66	15%
Salina	14,127	14,279	152	1%	18,707	20,069	1,362	7%
Schroeppel	2,337	2,472	135	6%	800	853	53	7%
Skaneateles	3,019	3,128	109	4%	4,646	5,061	415	9%
Solvay	3,033	2,978	-55	-2%	2,739	2,876	137	5%
Spafford	724	738	14	2%	172	183	11	6%
Sullivan	4,631	4,987	356	8%	2,227	2,567	340	15%
Syracuse	69,978	71,642	1,664	2%	102,078	114,971	12,893	13%
Tully	1,083	1,173	90	8%	1,063	1,158	95	9%
Van Buren	4,630	5,133	503	11%	3,364	3,819	455	14%
West Monroe	1,428	1,516	88	6%	423	462	39	9%
Total	220,487	233,358	12,871	6%	267,276	303,125	35,849	13%

FIGURE 7: HOUSEHOLD DENSITY IN 2017

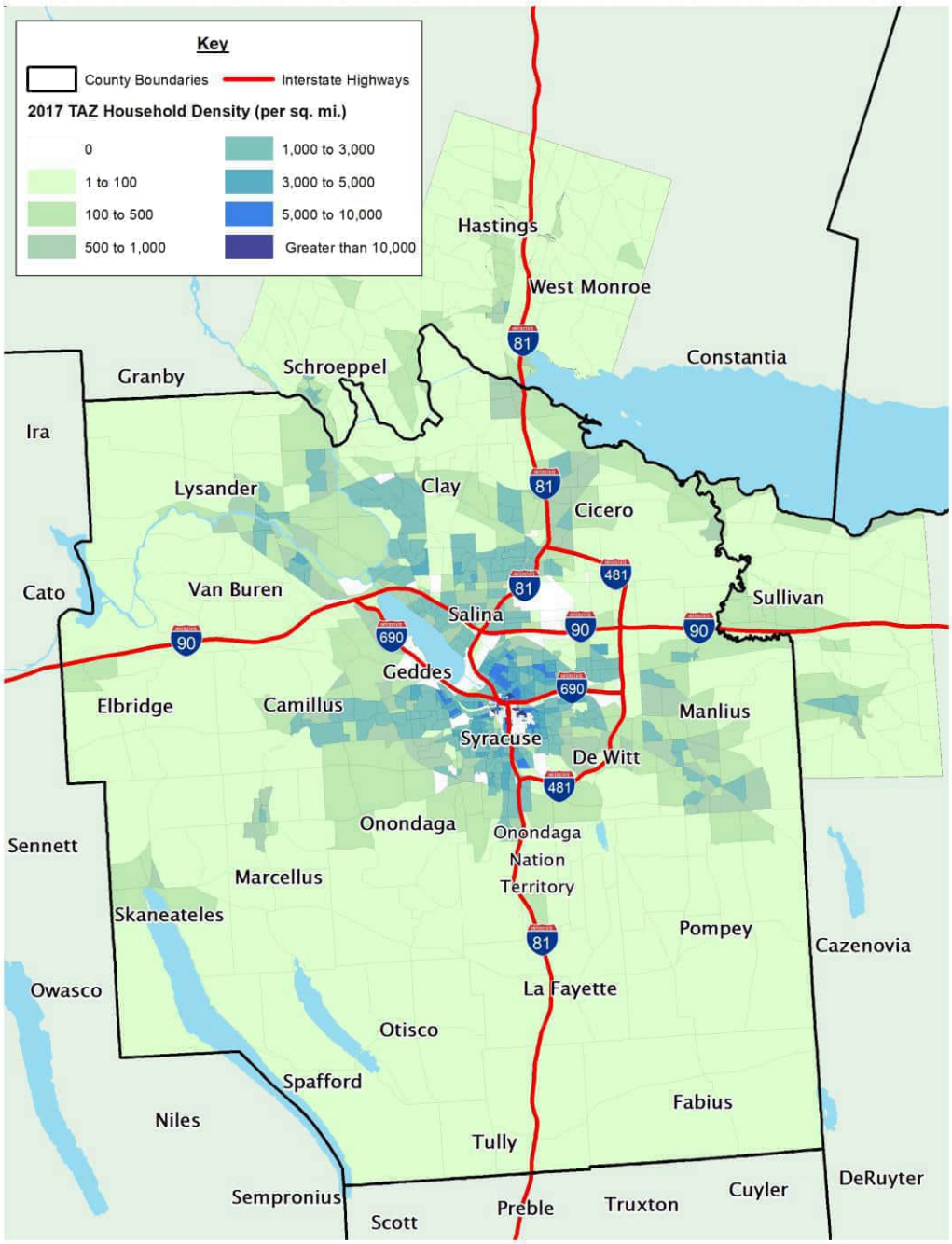


FIGURE 8: HOUSEHOLD DENSITY IN 2050

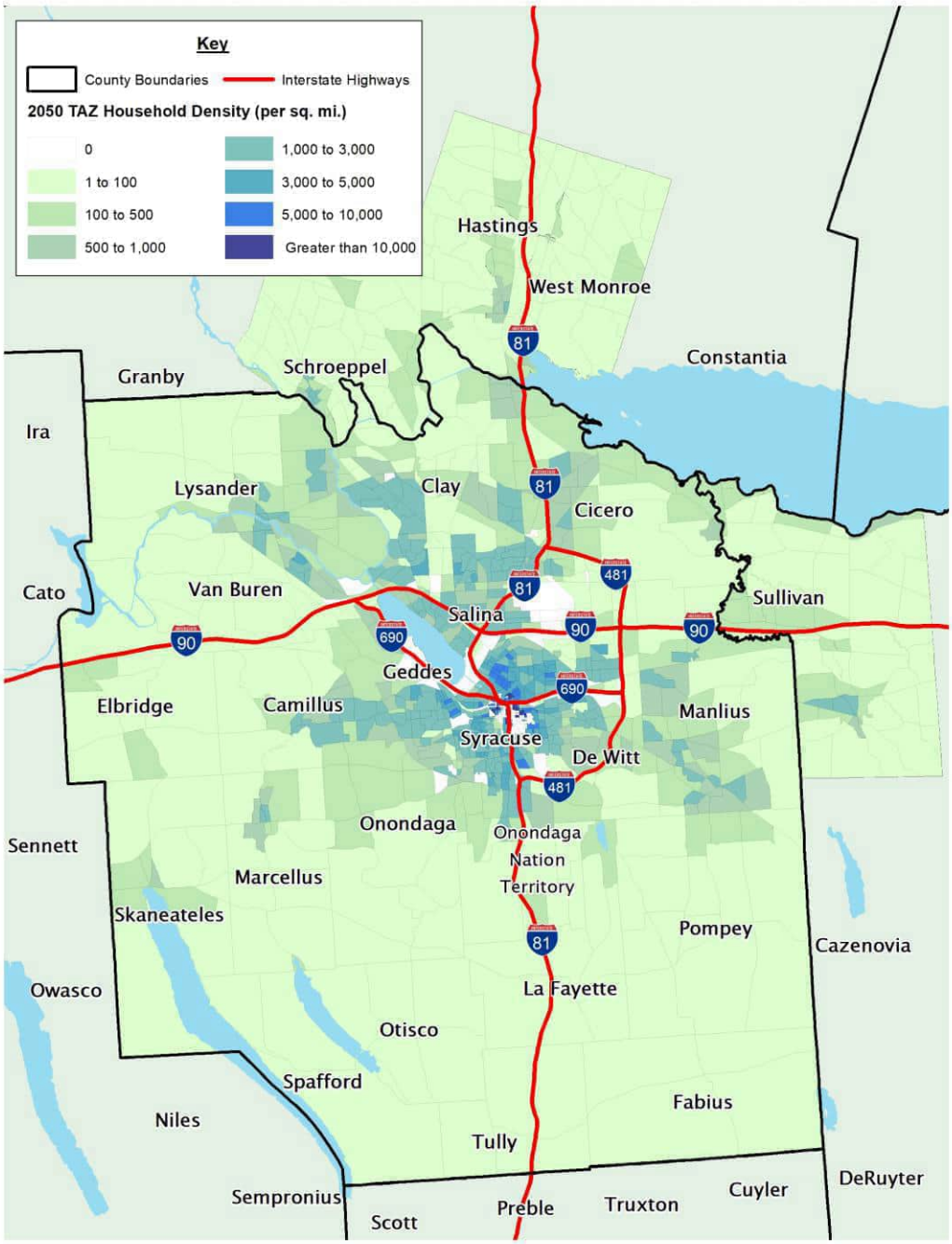


FIGURE 9: CHANGE IN HOUSEHOLD DENSITY BETWEEN 2017 AND 2050

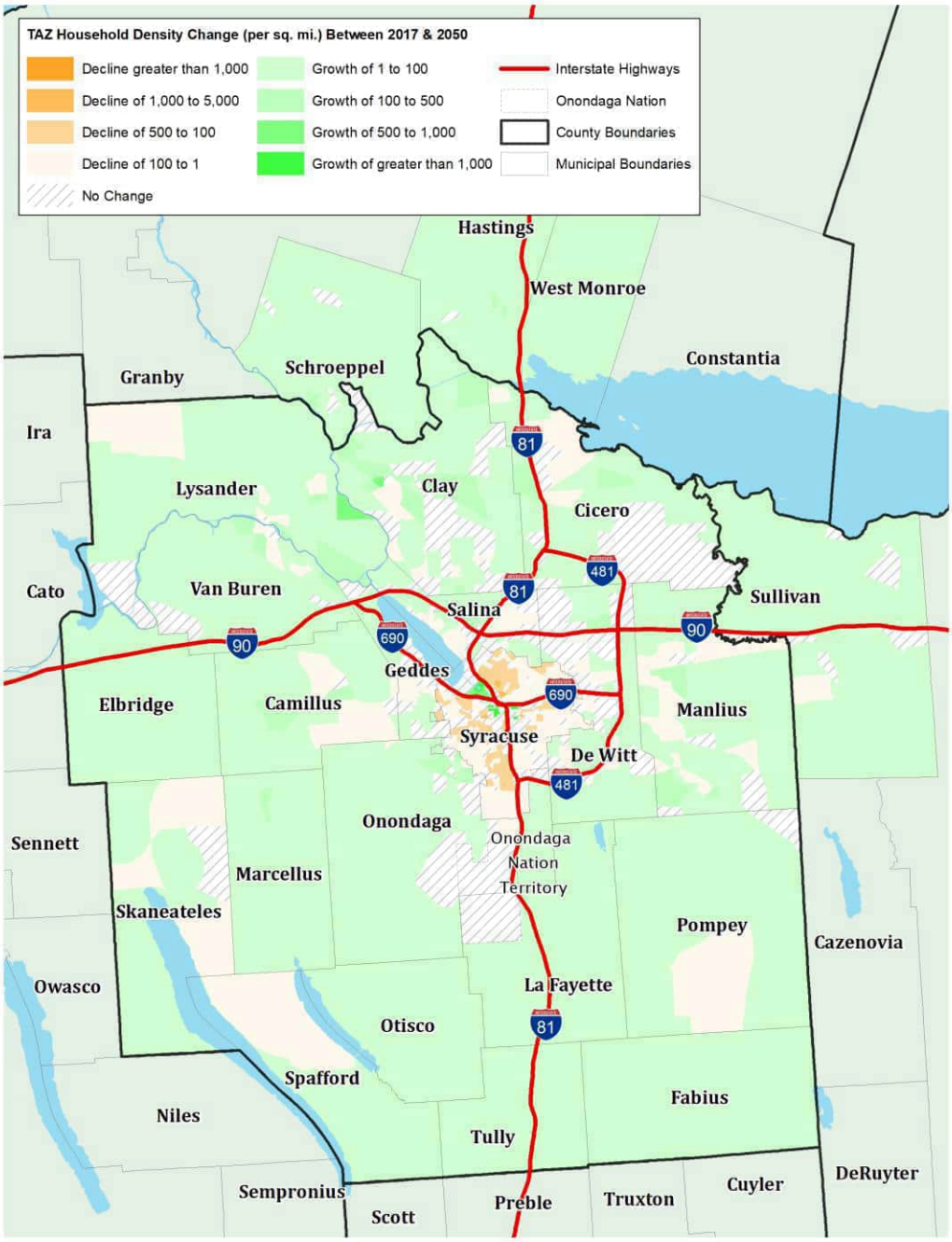


FIGURE 10: EMPLOYMENT DENSITY IN 2017

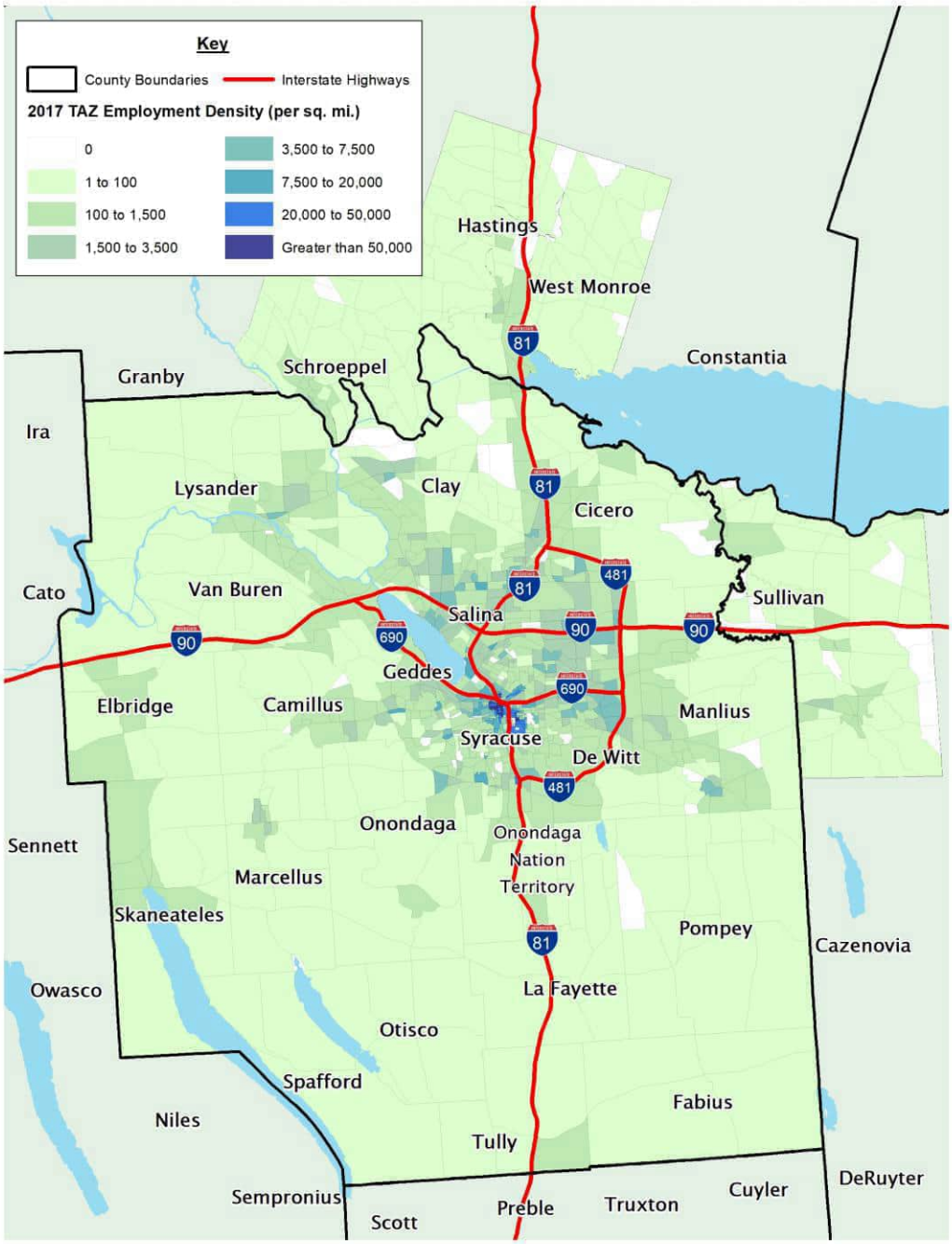


FIGURE 11: EMPLOYMENT DENSITY IN 2050

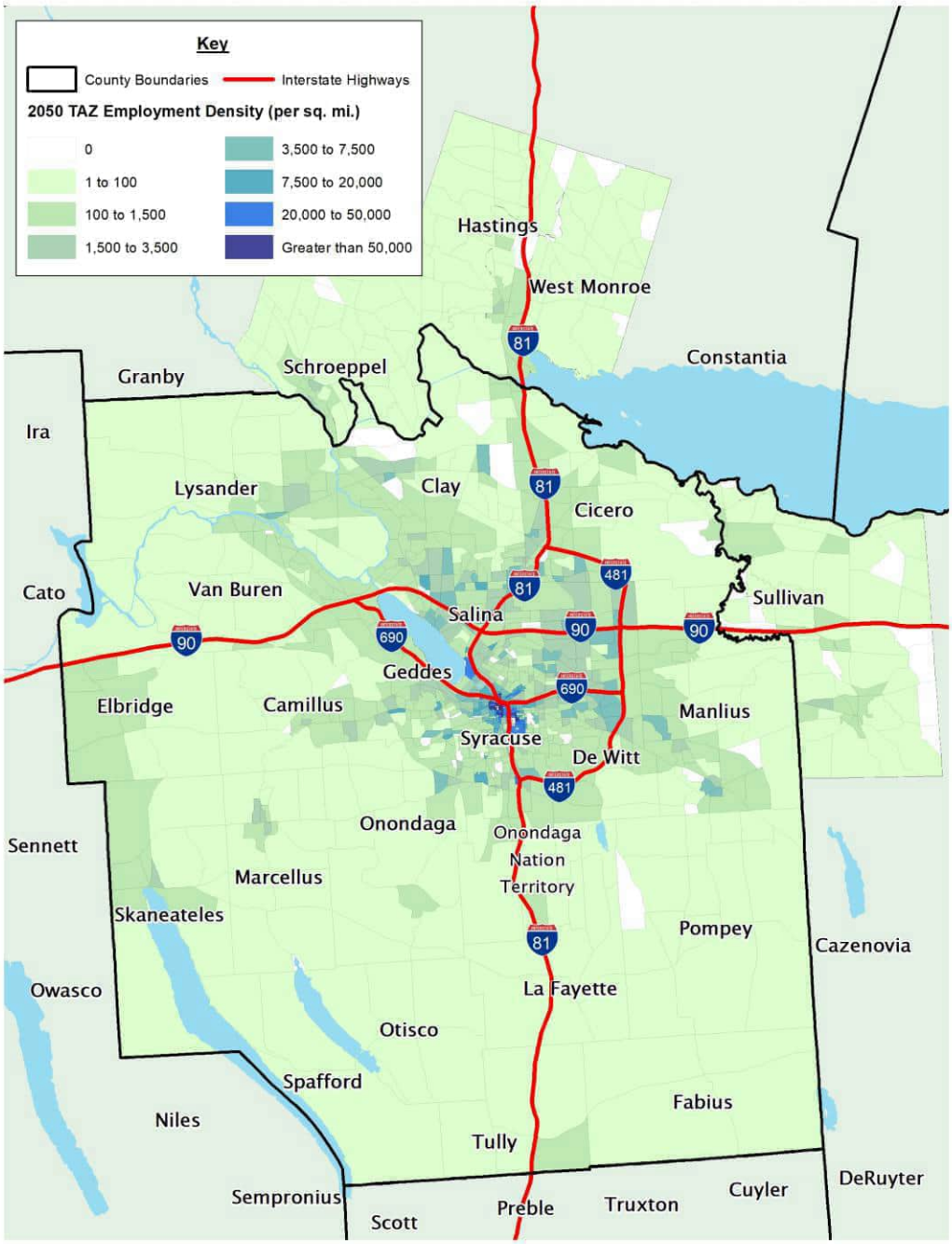
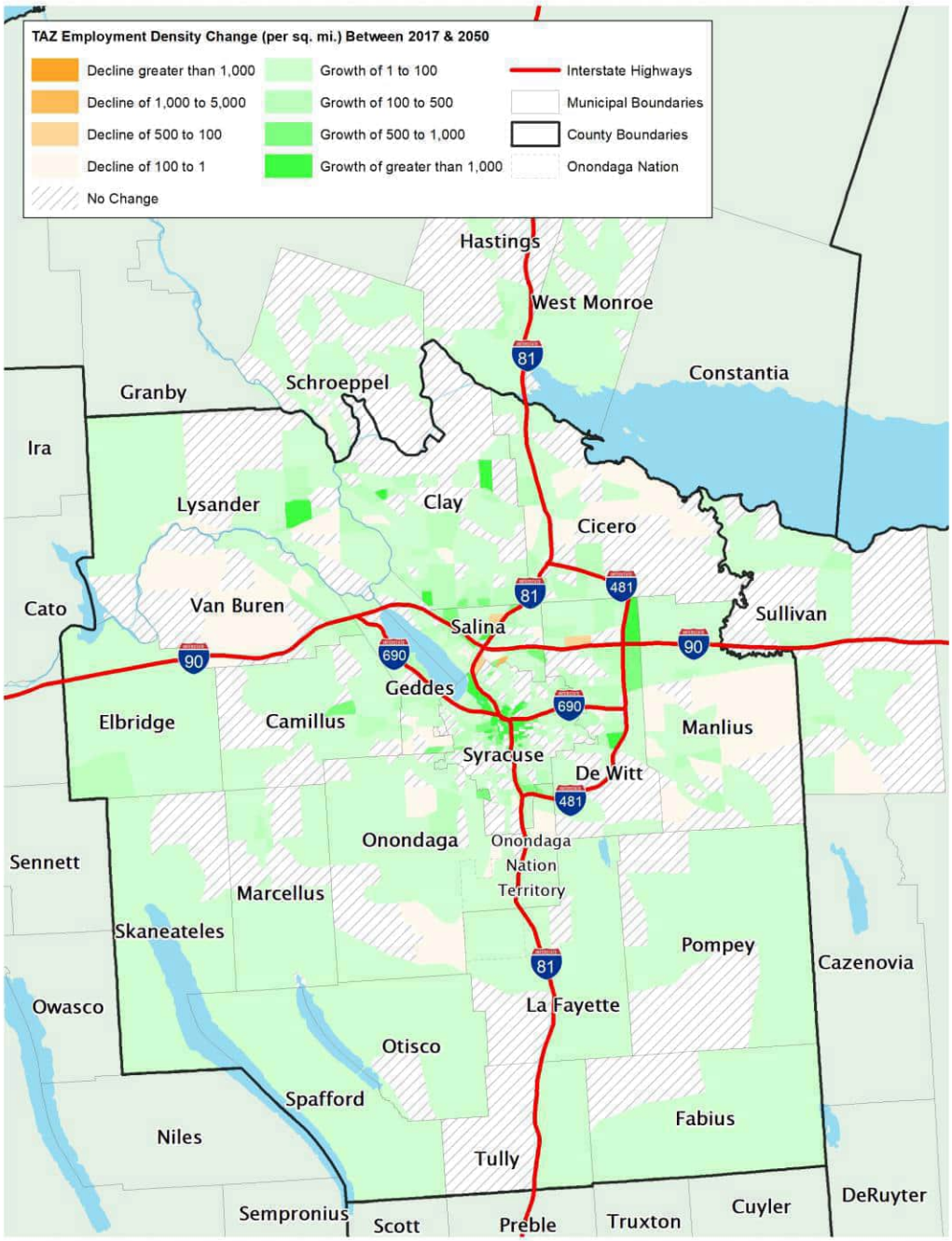


FIGURE 12: CHANGE IN EMPLOYMENT DENSITY BETWEEN 2017 AND 2050



4.0 MODEL HIGHWAY NETWORK

For modeling purposes, a set of roadways within the modeling region was selected to reliably represent the entire highway network. In application, there are over 11,500 road segments represented as network links, of which approximately 1,418 are one-way only. The model includes a limited number of local roads – most local roads are represented and accounted for in the model by centroid connectors that link TAZ centroids to the rest of the model's highway network. There are 8,649 endpoints (known as "nodes") in the model, which include intersections and TAZs. Figure 13 shows the highway network in the SMTC region. As part of this model update, SMTC refined the highway network. A combination of field verification and review of aerial images were used to verify network attributes such as number of lanes, posted speeds, turn penalties, intersection types, and centroid connector placement.

4.1 | NETWORK ATTRIBUTES

In the SMTC model, some of the link and node attributes are maintained in the roadway geographic file while other attributes are maintained in lookup tables. The attributes associated with the links and nodes include:

Functional classification
Link direction, number of lanes, length, and tolls
Link and node hourly capacities
Free flow and congested speeds and travel times
Turn prohibitions and turn penalties
Area type, i.e. Syracuse, Urban, Other Census Designated Place, or Rural

Table 6 and Table 7 list the node attributes and the highway link attributes, respectively.

TABLE 6: HIGHWAY NODE ATTRIBUTES

Field	Description	Update Type
ID	Node identification code	Immutable
Longitude	Longitude of node	Immutable
Latitude	Latitude of node	Immutable
Elevation	Elevation of node	Immutable
ID:1	Secondary Node ID code	User-maintained
Centroid	Highway Centroid	User-maintained
Transit_CE	Transit Centroid	User-maintained
TAZ	TAZ number	User-maintained
Model_Node	Model Node	User-maintained
Transit_Node	Transit Node	User-maintained
Node_Type	Node type	User-maintained
HCAP	Intersection capacity (vph)	Lookup Table
Daily_Vol	Daily model volume (vehicles)	Computed
AM_Vol	AM hour model volume (vehicles)	Computed
PM_Vol	PM hour model volume (vehicles)	Computed
AM_VoC	AM hour volume-capacity ratio	Computed
PM_VoC	PM hour volume-capacity ratio	Computed
TurnPen	Indication of Turn Penalty at node	User Maintained

FIGURE 13: SMTC REGION HIGHWAY NETWORK

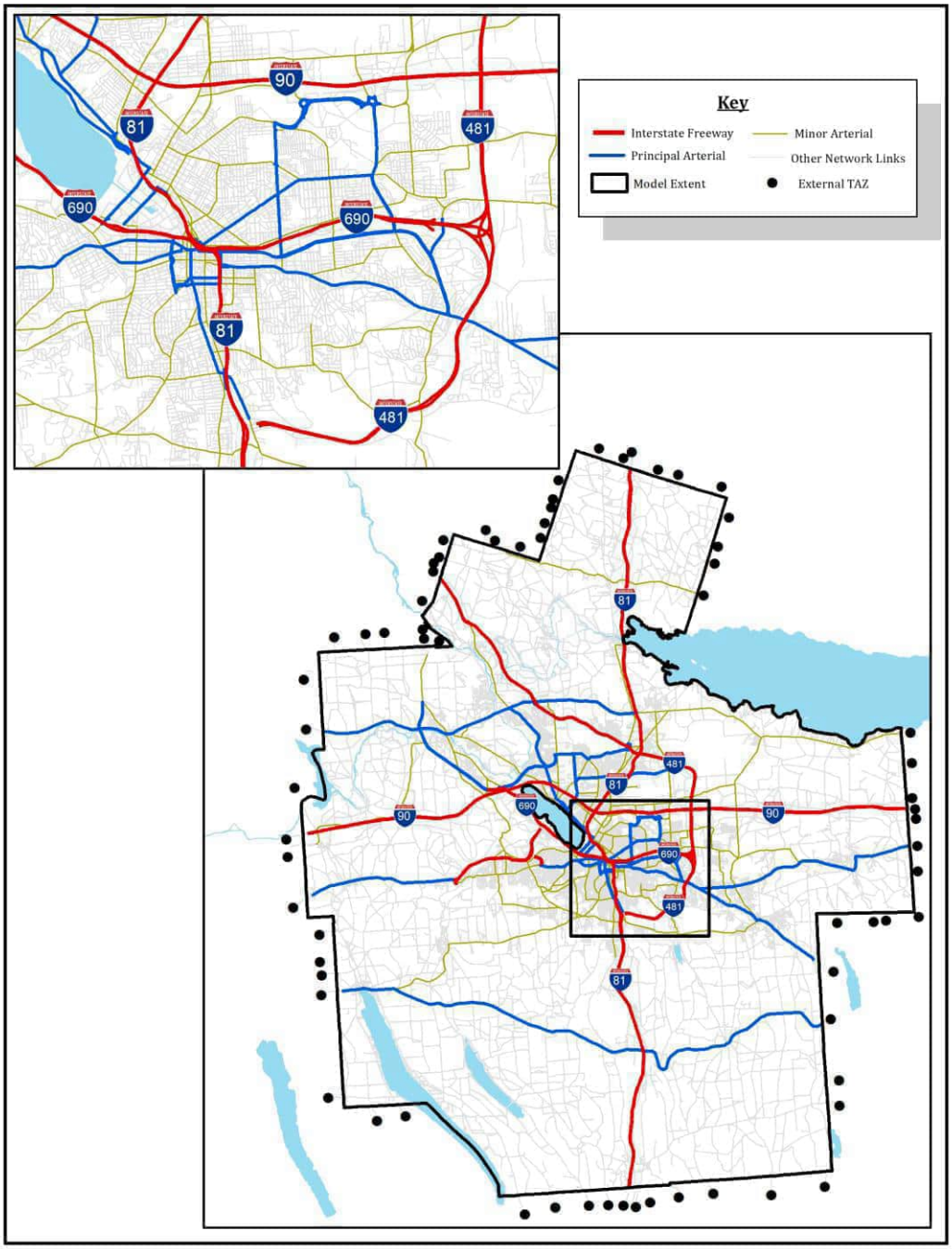


TABLE 7: HIGHWAY LINK ATTRIBUTES

Field	Description	Update Type
ID	Link identification code	Immutable
Dir	Link Direction	User-maintained
Length	Link length (miles)	Immutable
NAME	Road name	User-maintained
MODEL_LINK	Model link Indicator	User-maintained
CENTROID_CONNECTOR	Centroid Indicator	User-maintained
Walk Link	Walkable link Indicator	User-maintained
AB_LANES	Number of AB lanes	User-maintained
BA_LANES	Number of BA lanes	User-maintained
FUNCCLASS_NUM	Model functional class number	User-maintained
FUNCCLASS	Model functional class	User-maintained
Area_Type	Area Type for capacity mapping (rural, urban, Syracuse, other CDB)	User-maintained
COUNTY	County	User-maintained
TownorCity	Town	User-maintained
Municipality	Municipality	User-maintained
CDP	Census Designated Place Indicator	User-maintained
UZA	Urban Area Indicator	User-maintained
Transit_Walk_Link	Walk Link Indicator	User-maintained
Transit_Walk_Time	Walk access/egress time (mins)	Computed
AB_TOLL	AB toll cost (dollars)	User-maintained
BA_TOLL	BA toll cost (dollars)	User-maintained
AB_CapPerLane_UI	AB Capacity override	User-maintained
BA_CapPerLane_UI	BA Capacity override	User-maintained
AB_Speed_UI	AB Speed override	User-maintained
BA_Speed_UI	BA Speed override	User-maintained
RCSTATIONS	Count station identifier	User-maintained
AB_DLY_Count	AB daily count (vehicles)	User-maintained
BA_DLY_Count	BA daily count (vehicles)	User-maintained

Field	Description	Update Type
ABBA_DLY_Count	Two-way daily count (vehicles)	User-maintained
AB_AM_Count	AB AM hour count (vehicles)	User-maintained
BA_AM_Count	BA AM hour count (vehicles)	User-maintained
AB_PM_Count	AB PM hour count (vehicles)	User-maintained
BA_PM_Count	BA PM hour count (vehicles)	User-maintained
MODE_USED	transit mode used (70)	User-maintained
BUS_LANE	Bus only lane	User-maintained
AB_DAILY_COUNT_2014	2014 AB daily count (vehicles)	User-maintained
BA_DAILY_COUNT_2014	2014 BA daily count (vehicles)	User-maintained
ABBA_DAILY_2014	2014 Two-way daily count (vehicles)	User-maintained
AB_AM_COUNT_2014	2014 AB AM hour count (vehicles)	User-maintained
BA_AM_COUNT_2014	2014 BA AM hour count (vehicles)	User-maintained
AB_PM_COUNT_2014	2014 AB PM hour count (vehicles)	User-maintained
BA_PM_COUNT_2014	2014 BA PM hour count (vehicles)	User-maintained
Bearing_AB	AB bearing of link	User-maintained
Bearing_BA	BA bearing of link	User-maintained
AB_Dir	AB cardinal direction	User-maintained
BA_Dir	BA cardinal direction	User-maintained
SelectedAreaLink	Indication for special link reporting	User-maintained
CountStation	Count Station Indicator	User-maintained
CountSource	Source of count data	User-maintained
CountYear	Year of count	User-maintained
countGrowth	Growth applied to count	User-maintained
Base	Base year link indicator	User-maintained
Modeled	Modeled Link Indicator	User-maintained

LINK FUNCTIONAL CLASSES

For modeling purposes, links are organized into 10 functional classes (Table 8). Links of the same functional class have similar speeds, capacities, and volume-delay parameters. To allow aggregation of VMT for emissions calculations, the Federal Highway Administration

(FHWA) Functional Class designation (including urban/rural designation) is also maintained on the highway network for each link.

TABLE 8: LINK FUNCTIONAL CLASSES

MODEL CLASS NUMBER	FHWA FUNCTIONAL CLASS	MPA LANE MILES	ONONDAGA COUNTY LANE MILES	CITY OF SYRACUSE LANE MILES
1	Interstate/Freeway	1,305	1074	147
2	Principal Arterial	513	499	112
3	Minor Arterial	668	620	152
4	Major Collector	824	697	66
5	Minor Collector	339	258	0
6	Local	1,681	1378	153
7	High Capacity Ramp	115	111	33
8	Low Capacity Ramp	28	28	3
9	Centroid Connector	N/A	N/A	N/A
10	External Connector	N/A	N/A	N/A

LINK CAPACITIES AND FREE-FLOW SPEEDS

Table 9 and Table 10 show link free-flow speeds and capacity, which are defined by link functional class and area type. The speed and capacity values are stored in lookup tables and automatically imported to the network each time the model runs. The main benefits of importing these data from a lookup table, as opposed to maintaining an explicit speed and capacity for every link within the highway network, are that the user has less data to manage and can easily quote values. However, there are some links in the SMTC network that warrant special attention because their actual speed or capacity is substantially different from what the lookup tables say. Therefore, the SMTC model also supports the ability to code a speed or capacity for each link by entering a value into the "CapPerLane_UI" or "Speed_UI" fields on the network (see). A null value in either of these fields, the default condition, indicates that the lookup table is to be used.

TABLE 9: FREE-FLOW SPEED (MPH) LOOKUP TABLE

FUNCTIONAL CLASS	SYRACUSE	OTHER CDP	URBAN	RURAL
Interstate/Freeway	55	65	65	65
Principal Arterial	40	50	50	55
Minor Arterial	30	35	45	55
Major Collector	25	25	35	40
Minor Collector	25	25	35	40
Local	25	25	30	35
High Capacity Ramp	40	40	40	40
Low Capacity Ramp	30	30	30	30
Centroid Connector	30	30	30	30

TABLE 10: CAPACITY (VEHICLES PER LANE PER HOUR) LOOKUP TABLE

FUNCTIONAL CLASS	SYRACUSE	OTHER CDP	URBAN	RURAL
Interstate/Freeway	1,900	1,900	1,900	1,900
Principal Arterial	1,600	1,600	1,600	1,600
Minor Arterial	1,200	1,200	1,200	1,200
Major Collector	1,000	1,000	1,000	1,000
Minor Collector	950	950	950	950
Local	450	450	450	450
High Capacity Ramp	1,500	1,500	1,500	1,500
Low Capacity Ramp	1,500	1,500	1,500	1,500
Centroid Connector	99,999*	99,999	99,999	99,999

*99,999 = unconstrained capacity

LINK TRAVEL TIMES

The free-flow speeds (Table 9) are used along with the link length field to calculate a free-flow travel time which is used during the first model iteration in the distribution and mode choice steps. Following an initial highway assignment and feedback step (see section 13.0), congested travels times are loaded onto the network and used in the subsequent iteration through the distribution and mode choice steps.

INTERSECTION CAPACITIES

The SMTC model uses 54 node types (Table 11); 45 of these node types describe different signalized intersections designs. Each node type is associated with a different intersection capacity.

TABLE 11: NODE CLASSES

NODE DESCRIPTION	NODE TYPE VALUE	CAPACITY
Signalized Intersections	1-28; 70-86	From Lookup Table
1 or 2 way stop	30	Governed by cap. of local street with stop control
3 or 4 way stop	41-43	From Lookup Table
Ramp Merge/Lane Drop	51	Governed by cap. of entering/exiting segments
Ramp Diverge/Lane Addition	52	Governed by cap. of entering/exiting segments
Tollbooth	61	By Equation: [(1,400* # E-Z Pass Lanes) + (360* # Cash Lanes)] where 1,400 is the hourly capacity of an E-ZPass lane and 360 is the hourly capacity of a cash lane
Internal Centroid	101	N/A
External Centroid	102	N/A

Signalized Intersections

Previously for the SMTC model, a series of capacity analyses were performed in Synchro/SimTraffic (version 5.0) to determine appropriate planning-level capacities for signalized intersections. Several assumptions were necessary:

- Cycle length = 90 seconds
- Traffic volume on the main street is directionally balanced and is distributed among turning movements in the ratio of 1:4:1 (left turns: through vehicles: right turns)
- Traffic volume on the side street is directionally balanced and is distributed in the ratio of 1:2:1
- Capacity is reached when critical movements have a v/c ratio between 1.0 and 1.1

The capacities of the nodes that represent signalized intersections are based on analyses historically performed in Synchro/SimTraffic (version 5.0). The node capacities for signalized intersections and the intersection codes used to identify the type of signalized intersection in the node attribute table are shown Table 12. The intersection codes are shown in parentheses in each cell in the table and the node capacities are shown as approximate daily capacities, which are calculated as the hourly capacity multiplied by 10.

TABLE 12: SIGNALIZED INTERSECTION CODES AND 24-HOUR CAPACITY VALUES

	Minor Lane Groups									
Major Lane Group		Single	Left Turn Bays	Left & Right Turn Bays	Left & 2 Through	Left, Right & 2 Through	2 Throughs	3 Throughs	Left & 3 Through	Left, Right and Three Through
	Single	(1) 23,000								
	Left Turn Bays	(2) 28,000	(3) 33,000							
	Left & Right Turn Bays	(4) 31,000	(5) 36,000	(6) 38,000						
	Left & 2 Through	(7) 40,000	(8) 44,000	(9) 49,000	(10) 53,000					
	Left, Right & 2 Throughs	(11) 46,000	(12) 50,000	(13) 54,000	(14) 58,000	(15) 62,000				
	2 Throughs	(16) 29,000	(17) 33,000	(18) 37,000	(19) 39,000	(20) 43,000	(21) 35,000			
	3 Throughs	(22) 32,000	(23) 36,000	(24) 40,000	(26) 46,000	(26) 46,000	(27) 38,000	(28) 40,000		
	Left & 3 Through	(70) 48,000	(71) 52,000	(72) 56,000	(73) 60,000	(74) 64,000	(75) 50,000	(76) 54,000	(77) 66,000	
	Left, Right and Three Through	(78) 50,000	(79) 54,000	(80) 58,000	(81) 62,000	(82) 66,000	(83) 52,000	(84) 56,000	(85) 68,000	(86) 72,000

Unsignalized Intersections

Unsignalized intersections are separated into two types: two-way stop controlled and four-way stop controlled. Delay at a two-way stop-controlled intersection is typically much greater on the stop sign controlled approaches than the uncontrolled (no stop sign) approaches. Since stop-controlled approaches are generally local streets which intersect with each other or higher functional class roadways, the link capacity of local streets was set at 450 vehicles per lane per hour to reasonably replicate the capacity of stop-controlled approaches. In this way, delay is attributed to the local street links that are stop controlled, and no delay is attributed to the uncontrolled approaches. Four-way stop control intersections have more uniform delay for the intersection because all approaching vehicles must stop. Capacity analysis runs were performed for four-way stop control intersections to develop hourly intersection capacities; the daily node capacities shown in Table 13 are calculated as the hourly capacity multiplied by 10. The table also shows, in parentheses in each cell, the intersection codes used to identify the type of unsignalized intersection in the node attribute table.

TABLE 13: UNSIGNALIZED 4-WAY STOP INTERSECTION CODES AND 24-HOUR CAPACITY VALUES

	Minor Lane Groups		
Major Lane Group		Single	2 Throughs
	Single	(41) 14,000	
	2 Throughs	(42) 19,000	(43) 24,000

Ramp Junctions

Ramp junctions are found where a ramp joins either another ramp or a freeway. Ramp junctions can be classified as either "merges" or "diverges". A merge is where traffic flows come together, such as an onramp, and a diverge is the opposite. The Highway Capacity Manual (HCM) indicates that the capacity of a merge or diverge area is controlled by the capacity of the freeway segments upstream and downstream of the merge/diverge area, or the ramp itself.[3] Therefore, since the freeway segments and ramp both have link capacities, it is redundant to also apply a capacity restraint to the merge point. Ramp junctions are identified using a unique value for the "node type" field for tracking purposes, but are not given capacity values independent of the adjacent links.

Lane Additions/Drops

Similar to ramp junctions, the HCM indicates that lane additions and drops are controlled by the lower of the capacity of either the segment upstream or downstream of the lane addition/drop.[4] In the case of a lane addition, the governing capacity is the upstream link; vice versa for a lane drop. Since these capacity values are contained in the roadway links themselves, it would be redundant to also include a capacity restraint at the lane addition/drop, and these situations were treated in a similar manner to ramp junctions.

Tollbooths

Tollboths are found in the SMTC area only at the entrances/exits to the NY Thruway. The on and off toll plazas are modeled separately. Capacity is determined by the following equation:

Hourly Directional Capacity = [1,400 * (# E-Z Pass Lanes)] + [360 * (# Cash Lanes)]

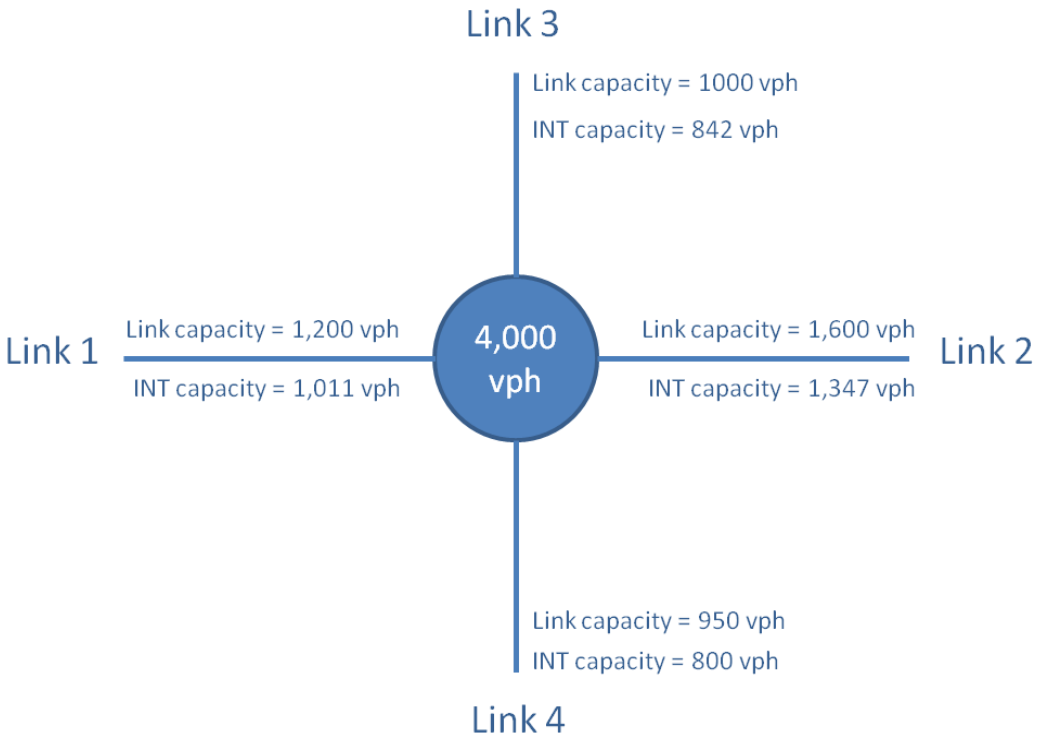
[3] HCM 2000 Edition; page 25-3
[4] HCM; page 25-9

Where 1,400 is the hourly capacity of an E-ZPass lane and 360 is the hourly capacity of a cash lane.

Allocation of Intersection Capacity to Links

Intersection delay is calculated separately for each of the approach links and necessitates having an "intersection" capacity, separate from the "link" capacity of each link. The delay calculations are described in Section 11.0. For signalized intersections, each approach link is awarded a share of the total intersection capacity based on the shares of link capacity between the approaches. Table 14 presents a sample calculation of node capacity allocation, showing what the intersection capacity for each of four approaches to a intersection would be, based on assumed link capacities. This method was adopted because it awards intersection capacity based on the expected shares of green time between the approaches and their ability to move vehicles through the intersection.

TABLE 14: SAMPLE ALLOCATION OF NODE CAPACITY



Link Segment	Link Capacity (vph)	Share	Node Capacity (vph)	INT Capacity (vph)
1	1,200	25%	x 4000 =	1,011
2	1,600	34%		1,347
3	1,000	21%		842
4	950	20%		800
Total	4,750	100%		4,000

TURN PENALTIES AND PROHIBITIONS

Turn penalties were included in the model for two general reasons. First, turn penalties were included to simulate the extra time typically needed to make a left or right turn at an intersection. Second, turn penalties were included to discourage the model from building routes with abrupt or complicated movements. In the absence of turn penalties, the route builder may select a zigzagging shortcut to save a few seconds of travel time, while in reality drivers generally prefer simpler routes with few turns. A 1/6 minute penalty was applied to left turns, and a 1/12 minute penalty was applied to right turns.

Freeway ramp penalties were also added to discourage trips from switching to the freeway for short distances, Since the ramp penalties are a constant amount of time they have the most impact on short (one or two exit) freeway trips. Switching to the freeway for these small distances will typically only gain a small time saving compared to the best arterial path, and so adding the ramp penalty maintains most of these trips on the best arterial path. Trips that might benefit from longer freeway segments, spanning several exits, which have a large time savings compared to the best arterial path, are less likely to be pushed to the best arterial path by the ramp penalties.

The ramp penalties add 20 seconds of delay to transitions from freeway to ramps. The ramp penalties were adjusted during the model calibration process to improve the goodness of fit compared to observed data.

The model also includes a number of turn prohibitions. The list of turn prohibitions includes all of the posted, illegal movements, U-Turns, and other link-to-link movements that involve greater than 90-degree turns.

5.0 MODEL TRANSIT NETWORK

Transit routes were coded into the model based on information obtained from the SMTC region's transit operator, CENTRO, including routes, fare, and headway information. The service offered by CENTRO is represented in the model by 104 routes serving 2,145 stop locations. Figure 14 shows the model's transit network.

5.1 | TRANSIT NETWORK DESIGN

The model's transit network is built at run-time from a series of text files that enumerate the routes (Table 16), stops (Table 15), and stops visited by each route in the region (Table 17). This design, as opposed to one where the transit network is precompiled to a geographic database, allows for better data management and ease and flexibility in making edits. The transit network is built on top of the highway network and has access to all of the highway network attributes (Table 7).

ROUTE SIMPLIFICATIONS

The CENTRO bus system is quite detailed, with base routes and multiple route deviations/extensions for most of the base routes. In general, the route deviations associated with a base route overlap to a large degree with each other and serve largely the same population, but the deviations provide infrequent service to some riders/destinations which otherwise are not as well served. Because transit modeling methodologies used in regional models are not sensitive to the very precise detail in CENTRO's bus system, minor and infrequent deviations of primary routes were grouped into one or two routes to represent bus service in a corridor. Therefore, although the model route system is a simplification of the CENTRO bus system, the forecasting results are similar to results that would have been achieved if the full detail of the route network had been included.

STOP SIMPLIFICATIONS

Local bus service is assumed to stop at every model node, while express service only stops at specified locations. This assumption was made to ease the burden of managing the stops layer. For local services, key stops (those indicated in the CENTRO schematic maps) visited by local bus routes are indicated and the route-building procedure adds in the intermediate stops. Although this assumption leads to an over prediction in the number of local bus stops, the transit travel times are not altered by this procedure.

ROUTE BUILDING

The transit route system is built by the following procedure:

Each stop in the stops file (Table 15) is coded to the closest node in the highway network.

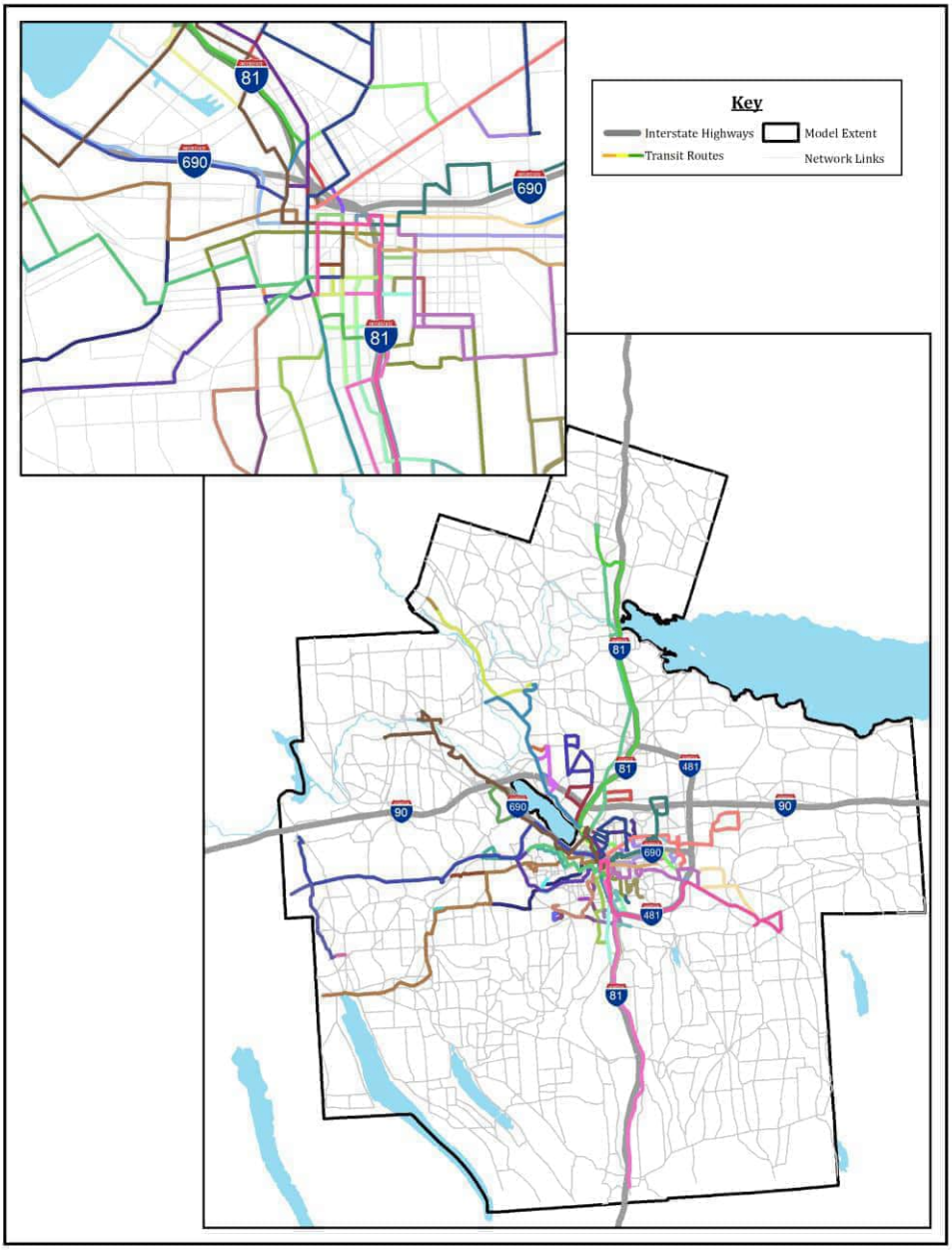
1. For each route, the schedule of bus stops (Table 17) is translated into a schedule of highway nodes.
2. The shortest path between successive stops is calculated by minimizing generalized cost.

3. For local bus routes, stops are added in at each highway node along the traversed path.

WALK ACCESS/EGRESS/TRANSFERS LINKS

Transit models need a set of links to support the access/egress/transfer walk movements made in traveling to a destination. In this model, the highway network doubles as the set of valid walk links.

FIGURE 14: SMTC REGION TRANSIT NETWORK



5.2 | TRANSIT NETWORK ATTRIBUTES

Some of the attributes of the transit network, such as travel times, are inherited from the highway network, while others are maintained in either the transit routes table (Table 16), transit stops table (Table 15), transit route-stops table (Table 17), or the transit mode table (Table 18). The key variables in the transit network are travel times (peak and off-peak), walk times, headways (peak and off-peak), and fares.

TRAVEL TIMES

Transit travel times were estimated by scaling up auto travel times. The auto travel times were scaled to account for time lost by transit vehicles as they are making stops (deceleration before the stop, dwell time at the stop, and acceleration away from the stop) and their slower speeds than autos in general. The scale factors were estimated by taking scheduled travel times for a set of transit routes, and dividing these times by the modeled auto travel times for the corresponding paths. Local bus service was set to travel at 60% of the congested auto speed and express bus service was set to travel at 95% of the congested auto speed. Peak transit travel times were developed using the AM auto travel times and off-peak transit travel times were developed using the midday highway auto travel times.

WALK TIMES

Transit walk times (access/egress/transfer) were calculated for each link by assuming a 4 mph walk speed, which was retained from the previous version of the SMTC model.

HEADWAYS

Peak and off-peak headway times were developed for each route by considering the route schedules obtained from CENTRO. Two estimates of the headway time were calculated and judgment was used to select between them. The traditional method of dividing the period length by the number of buses run in that period was used to obtain one estimate, but also, the route schedules were inspected to see if a mode (highest frequency) time interval appeared between subsequent runs. For instance, if the first half-hour of the AM period had no transit trips, but the service then ran at regular 15 minutes intervals for the rest of the period, then 15 minutes would have been selected as the headway time.

FARES

The model assumes a one dollar fare with free transfers. The one dollar fare is less than the generic, one-ride fare because there are a number of special deals for children, students, the elderly, and frequent riders, that would drive the realized average cost down.

TABLE 15: TRANSIT STOPS TABLE

FIELD	DESCRIPTION	UPDATE TYPE
RecordID	Transit stop identification number	Immutable
STOP_ID	Transit stop identification number	User-Maintained

FIELD	DESCRIPTION	UPDATE TYPE
STOP	Transit stop name	User-Maintained
DIRECTION	Transit stop direction (inbound, outbound)	User-Maintained
LONGITUDE	Longitude of stop	User-Maintained
LATITUDE	Latitude of stop	User-Maintained
NODE_ID	Highway node identification number	Computed

TABLE 16: TRANSIT ROUTES

FIELD	DESCRIPTION	UPDATE TYPE
RTE_ID	Transit route identification number	User-Maintained
RTE_NAME	Transit route name	User-Maintained
INOUTBOUND	Inbound (In) or Outbound (Out)	User-Maintained
CENTRO_BASE_NUM	CENTRO route number	User-Maintained
CENTRO_RTE_NUM	CENTRO route number	User-Maintained
PEAK_BUSES	Number of buses in peak period	User-Maintained
OFFPEAK_BUSES	Number of buses in off-peak period	User-Maintained
PEAK_HEADWAY	Peak headway (mins)	User-Maintained
OFFPEAK_HEADWAY	Off-Peak headway (mins)	User-Maintained
MODE_USED	Mode Used = 1	User-Maintained

TABLE 17: TRANSIT ROUTE STOPS

FIELD	DESCRIPTION	UPDATE TYPE
RTE_ID	Transit route identification number	User-Maintained
CENTRO_BASE_NUM	CENTRO route number	User-Maintained
CENTRO_RTE_NUM	CENTRO route number	User-Maintained
RTE_NAME	Transit route name	User-Maintained
DIRECTION	Router direction (inbound, outbound)	User-Maintained
STOP_ID	Transit stop identification number	User-Maintained
NODE_ID	Node identification code	User-Maintained
STOP_NAME	Transit stop name	User-Maintained
VALID_STOP	0=invalid stop, 1=valid stop	User-Maintained

TABLE 18: MODE ATTRIBUTES

FIELD	DESCRIPTION	UPDATE TYPE
MODE_NAME	Transit mode name	User-Maintained
MODE_ID	Mode identification number	User-Maintained
TYPE	Mode type (1, 2, 70)	User-Maintained
FARE_TYPE	Fare type	User-Maintained
SPEED	Default mode speed (mph)	User-Maintained
P_HEADWAY	Default peak headway (mins)	User-Maintained
OP_HEADWAY	Default off-peak headway (mins)	User-Maintained
FARE	Mode fare (dollars)	User-Maintained
MODE_USED	0=no, 1=yes	User-Maintained
MODE2	0=no, 1=yes	User-Maintained
IMP_FIELD	Network impedance field	User-Maintained

6.0 TRIP GENERATION

The trip generation model estimates person-trips produced in and attracted to each TAZ in the model. These estimates result from multiplying the land-use data for each TAZ, such as the number of dwelling units and employment numbers, by regional trip generation coefficients.

6.1 | TRIP PURPOSE AND MODEL STRUCTURE

The model has four internal trip purposes (which include trips with one trip end outside of the model region), commercial trips, and external trips. These trip purposes are shown in Table 19.

TABLE 19: TRIP PURPOSE DEFINITIONS

TRIP PURPOSE	ABBREVIATION	DESCRIPTION
Home-Based Work	HBW	A trip where one end is home and the other end is work
Home-Based Shopping	HBS	A trip where one end is home and the other end is a shopping location
Home-Based Other	HBO	A trip where one end is home and the other end is NOT work or shopping
Non Home-Based	NHB	A trip where neither end is home
Light Commercial	L_COMM	A trip made by a commercial vehicle with 4 tires
Medium Commercial	M_COMM	A trip made by a commercial vehicle with 6 tires
Heavy Commercial	H_COMM	A trip made by a commercial vehicle with >6 tires
Internal to External	IX	A trip with origin inside and destination outside model
External to Internal	XI	A trip with origin outside and destination inside model
External-to-External	XX	A trip originating and terminating outside of the model, but passing through the model en route

Productions and attractions are most useful in describing home-based trips. For home-based trips, the production ends occur at the trip maker's residence. Trip productions are estimated from the number and type of housing units within a TAZ. Non home-based (NHB) trips do not feature a "trip maker's residence" and so the production end is defined as being the origin end. Attraction ends are estimated from the quantity of trip-attracting land uses in the TAZ, including workplaces, shops, other residences and schools. For home-based trips, the attraction end is defined as the end that is not the trip maker's residence. For NHB trips, the attraction end is defined as being the destination end. The total number of attractions for each trip type must equal the total number of productions; if productions and attractions are out of balance, the total regional attractions are adjusted to match total regional productions.

Productions and attractions are different from origins and destinations in that productions and attractions do not indicate the direction of travel for 1-way trips. When one leaves home for work in the morning, the origin (home) is also the production. In the afternoon, when one returns home from work, it is the destination (home) which is the production. The origin end is defined as the starting point of any 1-way trip, and the destination end is defined as the ending point of any 1-way trip.

Daily trip production and attraction models were developed for the 2014 model from a combination of sources, including the 2004 SMTC Household Travel Survey, the 2001 NHTS, and the Institute of Transportation Engineers (ITE) trip generation manual.

6.2 | TRIP PRODUCTION RATES

The model uses a cross-classification approach to estimate trip productions. For each TAZ, households are cross classified according to size (1 person, 2 persons, 3 persons, or 4+ persons) and auto ownership (0 auto, 1 auto, 2 autos, or 3+ autos). Separate trip production estimates are used for each of the 16 household types and for each trip purpose. Table 23 shows the trip production rates for internal HBW, HBS, HBO and NHB trip productions, and the total trip production rates.

ESTIMATION

An initial estimate of the trip production rates was calculated from the 2004 SMTC Household Travel Survey by dividing the number of survey trips by total households for each cross-class (Table 20). A number of refinements were then made to the initial estimates. It was asserted that as household size increases, the production rate must also increase, and as number of vehicles increases, the production rate must not decrease. This assertion was important for obtaining reasonable production rates for cross-class combinations that were poorly represented in the survey, such as one person, 2+ vehicle households. The production rates were smoothed manually, but the general heuristic applied was that cross-class combinations involving more survey records, such as one person, one vehicle households, should be used as the guide values on which to base the row and column trends. The 2004 SMTC production rates were also checked for reasonableness against the 2001 and 2009 NHTS production rates (Table 21) for Rochester, NY, a city of comparable size.

TABLE 20: INITIAL DAILY TRIP PRODUCTION RATES

	HH VEHICLES			
HH SIZE	0	1	2	3+
1	1.6	4.0	3.4	3.7
2	4.3	7.2	7.7	7.3
3	6.2	12.0	10.2	8.6
4+	10.2	12.9	17.1	16.0

TABLE 21: 2001 NHTS DAILY TRIP PRODUCTION RATES FOR ROCHESTER, NY

	HH VEHICLES			
HH SIZE	0	1	2	3+
1	3.4	4.5	3.9	6.0
2	4.5	6.8	7.2	7.8
3	7.0	9.7	11.2	12.6
4+	10.8	13.2	13.8	15.4

Each trip in the 2004 SMTC Household Travel Survey was classified as belonging to one of the four model trip purposes, and then trip purpose shares were calculated for each household size group as shown in Table 22. These trip purpose shares were then multiplied into the smoothed daily trip production rates to calculate the number of trip productions.

TABLE 22: TRIP PURPOSES SHARES BY HOUSEHOLD SIZE

HH SIZE	HBW	HBS	HBO	NHB	Total
1	19.8%	24.1%	28.9%	27.1%	100%
2	21.3%	22.0%	33.1%	23.6%	100%
3	22.3%	10.8%	43.1%	23.8%	100%
4	18.0%	7.9%	52.3%	21.8%	100%

ADJUSTMENTS TO TRIP PRODUCTIONS

In the SMTC version 4.0 model, a number of adjustments to the trip productions were made at run-time. These adjustments were made to help calibrate the model, discard trips using special, non-auto modes, and/or compensate for biases typically introduced into household travel surveys (the model production rates are based on household travel survey data). The current model employs only one of these former adjustments (school bus trip reduction). Other previous adjustments are no longer made, however, the overall production rate table has been updated to accomplish a similar goal. The following cumulative change is made to the initial productions totals:

School bus trips are removed from the initial production because they represent a negligible number of vehicle-trips and would otherwise add unneeded complexity; in accordance with the number of school bus trips in the 2004 Household Survey, 22.6% of HBO trips are discarded.

The version 5 production rate table is shown below.

TABLE 23: PRODUCTION RATES (TRIPS/HOUSEHOLD/DAY) BY TRIP PURPOSE, HOUSEHOLD SIZE AND HOUSEHOLD VEHICLES SMTC MODEL 5.0

		HH VEHICLES			
	HH SIZE	0	1	2	3+
HBW	1	0.5	0.7	0.7	0.8
	2	0.9	1.4	1.5	1.5
	3	1.3	2.1	2.3	2.4
	4+	1.8	2.2	2.6	2.8
HBS	1	0.8	1.1	1.2	1.2
	2	1.2	1.9	2.0	2.0
	3	0.8	1.4	1.5	1.5
	4+	1.0	1.3	1.5	1.6
HBO	1	0.8	1.2	1.2	1.3
	2	1.5	2.5	2.5	2.6
	3	2.8	4.6	5.0	5.1
	4+	5.7	7.2	8.3	8.9
NHB	1	0.8	1.3	1.3	1.4
	2	1.2	2.0	2.1	2.2
	3	1.8	2.9	3.2	3.3
	4+	2.8	3.5	4.1	4.3
Total	1	2.8	4.3	4.4	4.6
	2	4.7	7.9	8.1	8.3
	3	6.8	11.0	12.1	12.3
	4+	11.2	14.2	16.4	17.5

6.3 | TRIP ATTRACTION RATES

Trip attraction rates for HBW, HBS, HBO and NHB trip purposes were developed using ITE trip generation rates by land-use type and are shown in Table 24. The trip attraction rates are in units of person-trips per employee per day (or person-trips per housing unit per day in the case of households). The attraction rates vary across trip purposes and (possibly) within each trip purpose to reflect the nature of the trip in conjunction with the nature of the employment class. HBW attraction rates, for instance, do not vary by employment class

because the number of trips a worker is expected to make to/from her place of work does not vary much based on what type of job she has. However, HBS/HBO/NHB attractions rates do vary by employment class because certain businesses, such as restaurants, have many more non-work attractions per employee than others, such as factories.

TABLE 24: ATTRACTIONS RATES (TRIPS PER EMP/HH/DAY) BY PURPOSE AND LAND-USE

LAND USE EMPLOYMENT CLASS	HBW	HBS	HBO	NHB
AGRICULTURAL	1.45	-	-	1.57
BUS_LEGAL_PERSONAL	1.45	-	1.12	0.75
COMMUNICATION	1.45	-	-	2.55
CONSTRUCTION	1.45	-	-	0.55
EAT_DRINKING	1.45	-	10.83	7.22
EDUCATION	1.45	-	3.63	2.42
FIRE (Financial, Insurance & Real Estate)	1.45	-	1.12	0.75
GOVERNMENT	1.45	-	3.78	2.52
HEALTH	1.45	-	4.48	2.98
HOTELS_LODGE	1.45	-	-	12.89
MANUFACTURING	1.45	-	-	2.55
MINING	1.45	-	-	1.57
NONCLASSIFIABLE	1.45	-	-	1.87
RETAILTRADE	1.45	14.02	-	9.34
SERVICE	1.45	-	-	1.87
SOCIALSERVICES	1.45	-	3.78	2.52
TRANSPORTATION	1.45	-	-	5.54
UTILITIES	1.45	-	-	2.55
WHOLESALETRADE	1.45	4.06	-	2.7
HOUSEHOLDS	-	-	0.84	0.56

6.4 | NON-MOTORIZED TRIPS

The SMTC Version 5.0 model includes a pre-distribution non-motorized binomial logit model where non-motorized shares are related to zone's walkability, residential density, employment density, and intersection density, which serve as proxies for variables which tend to increase walking and bicycling activity. A subsequent post-distribution nested multinomial logit-form mode choice model is used to estimate the split among auto trips,

bus trips, and rail trips, and there are separate mode choice models for work and non-work trips.

The 4-step model process arbitrarily splits a simultaneous decision-making process into 4 sequential steps in order to facilitate computation. This simplification can introduce a number of errors when it comes to replicating travel behavior. Some of these errors can be addressed programmatically or algorithmically. However, there is no obvious way to correct for non-motorized trip behavior in a standard 4-step model formulation. In the typical 4-step model, travelers first decide where to travel without considering potential walking destinations, realize they can't walk to the destination and then chose to drive. In such a model, walk trips can only substitute or replace very short driving trips. Moving the non-motorized mode choice ahead of the trip distribution step attempts to solve this problem.

A binomial logit mode split model is applied to calculate non-motorized mode shares. Non-motorized shares are calculated for all TAZ-to-TAZ pairs based on urban form variables on each end of the trip. Then, zone pairs with walk times greater than 20 minutes (approximately 1 mile) are eliminated from consideration. Intrazonal non-motorized trips are always permitted, but this approach limits the number of interzonal trips to those that are actually feasible. The urban form variables used in the logit model are zone's walkability, housing density, employment density, and intersection density. At first glance it may appear strange that walk time is not included as part of the model. However, walk time is implicitly included in the urban form variables. When there is a high density of land uses and a dense street grid, walk times to some destinations will be short.

Finally, the trip distribution and mode choice steps are adjusted to properly account for the pre-distribution non-motorized trip model. The walk trips are removed from the production-attraction trip table prior to the main model distribution step, so that only motorized person trips are then distributed.

6.5 | SPECIAL GENERATORS

Special generators are TAZs with unique characteristics and whose trip making is best represented with a custom model. The special generator designation is typically given to land uses that attract or produce an unusually high number of trips, or are characterized by an unusually flat or steep trip distribution, such as airports, which attract auto trips by passengers from near and far, and universities, which predominantly attract short, walk trips by students living on or close to campus.

Attractions to the 16 special generator TAZs (Figure 15) were developed using ITE trip generation rates in conjunction with data collected by the SMTC from the principal employers in each special generator. In most cases, the total attractions to each special generator were calculated by multiplying the amount of a key variable, such as the number of beds in a hospital, into an ITE formula specifically designed for that key variable. The key variable is either a proxy (e.g. the number of square feet in a mall) or related to the actual reason (e.g. the number of students in a university) for why each business attracts trips. The specific key variable selected for each special generator was based both on what data the

SMTC could collect from specific employers and what variables the ITE has developed attraction rates for.

For two of the special generators, the normal technique for estimating trip attractions (as described in Section 6.2 |) of multiplying the number of employees categorized by SIC code by the ITE based rates shown in Table 24 was used. This approach was used where the custom ITE trip generation rate approach did not yield reasonable results. Three of the special generators were not modeled because they attract trips at only infrequent/irregular intervals and are unlikely to impact traffic on a typical weekday. For instance, the Carrier Dome is not modeled because it attracts a significant number of trips only when it hosts events. Table 25 presents the type of calculation ("type"), which indicates whether the special generator is modeled by a key variable or based on employment by SIC code; if there is a key variable, then the table presents that variable ("key variable"), the key variable amount ("VAR Amount"), and the corresponding formula ("Trip End Formula"); finally, the table presents the resulting number of total attractions ("Attractions").

The SIC employment data were used to allocate special generator attractions among the four trip purposes. First, the standard technique, as described in Section 6.2 |, of estimating trip attractions from SIC data was used to calculate total attractions by trip purpose. Then, these shares were multiplied into the total trip-ends presented into Table 25. Finally, the resulting trip purpose splits were adjusted using judgment.

For special generators containing households, home-based productions were estimated using the same methodology as employed for internal TAZs (see Section 6.2 |). Non-home-based productions were set equal to the number of non-home-based attractions.

FIGURE 15: SPECIAL GENERATORS

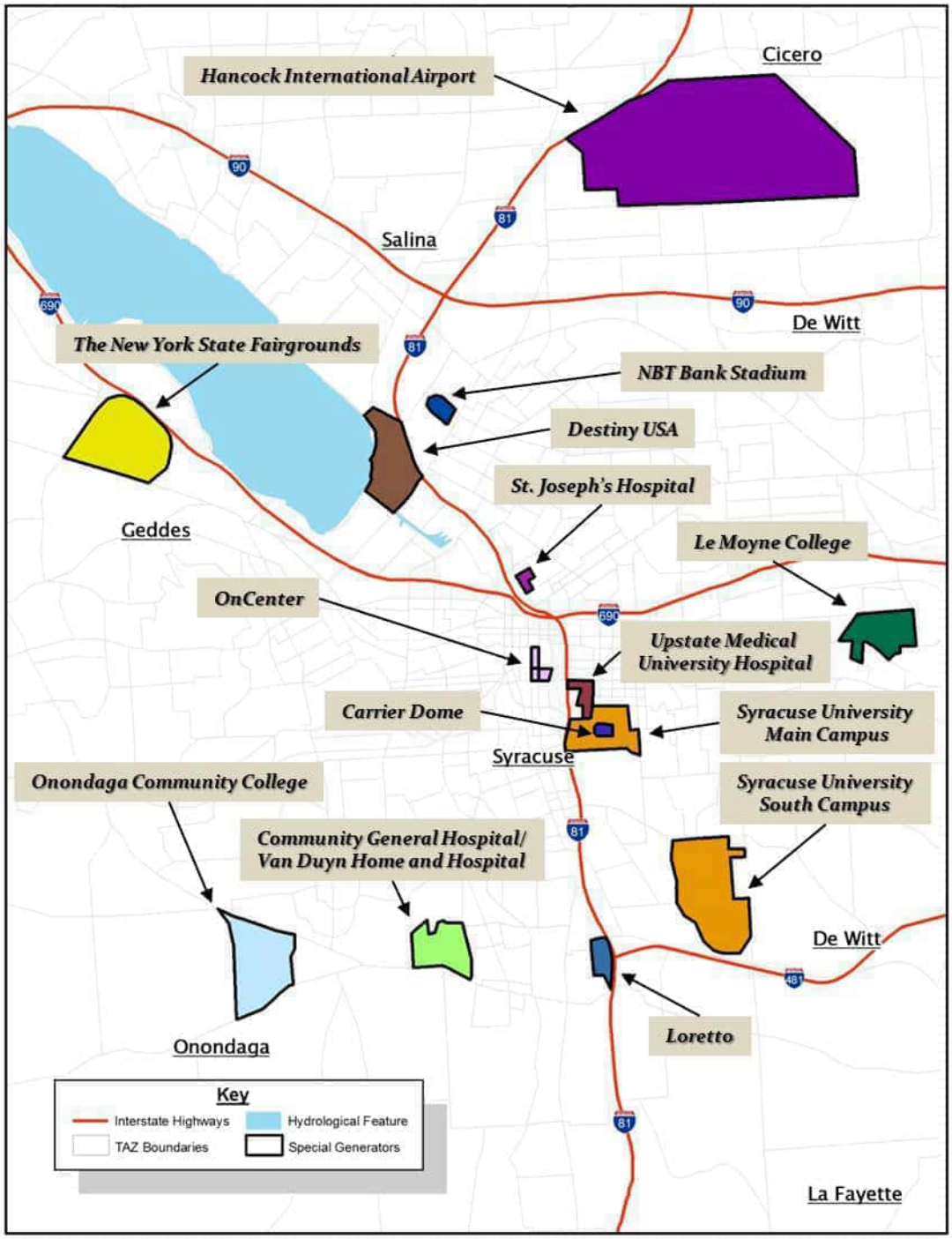


TABLE 25: TOTAL ATTRACTIONS BY SPECIAL GENERATOR

TAZ	NAME	TYPE	KEY VARIABLE	VAR AMOUNT	TRIP END FORMULA	TRIPS
8001	NY State Fairgrounds	Not Modeled	-	-	-	-
8002	Destiny USA	Key Variable	000s sq ft	2,400	2.718^(0.65*LN(VAR)+5.83)	53,528
8003	Onondaga Community College	Key Variable	Students	10,269	2.718^(0.89*LN(VAR)+1.24)	12,834
8004	Van Duyn Home & Hospital	Key Variable	Beds	882	-	5,591
	Van Duyn Home	-	Beds	526	(2.3*VAR) +6.07	-
	Community General Hospital	-	Beds	356	(7.42*VAR)+1733.31	-
8005	Loretto	Key Variable	Beds	820	(2.3*VAR)+6.07	1,892
8006	SU South Campus	SIC Based	-	-	-	2,891
8007	OnCenter	Key Variable	-	-	Trip-Ends * Share of Attractions	23
8008	OnCenter	Key Variable	-	-	Trip-Ends * Share of Attractions	17,506
8009	OnCenter	Key Variable	-	-	Trip-Ends * Share of Attractions	3,453
	OnCenter	-	Employees	2,615	7.75*VAR	-
	OnCenter	-	Employees	80	3.32*VAR	-
	OnCenter	-	Visitors	225	2*VAR	-
8010	Lemoyne College	Key Variable	Students	3,533	(2.23*VAR)+440	8,319
8011	University Hill Hospitals	SIC Based	-	-	-	40,703
8012	Syracuse University	Key Variable	Students	22,484	(2.23*VAR)+440	50,579
8013	Carrier Dome	Not Modeled	-	-	-	-
8014	St. Joe's Hospital	Key Variable	Beds	451	(7.42*VAR)+1733.31	5,080
8015	NBT Bank Stadium	Not Modeled	-	-	-	-
8016	Hancock Airport	Key Variable	Employees	1,300	18.1*VAR	23,530

Table 26 summarizes the motorized trip productions and attractions in the special generator TAZs.

TABLE 26: SPECIAL GENERATOR PRODUCTIONS AND ATTRACTIONS

TAZ	SPECIAL GENERATOR	PRODUCTIONS	ATTRACTIONS
8001	NY State Fairgrounds	(SE)	(SE)
8002	Destiny USA	13,566	39,963
8003	Onondaga Community College	4,323	8,511
8004	Van Duyn Home & Hospital	541	5,050
8005	Loretto	622	1,816
8006	SU South Campus	5,349	2,891
8007-8009	OnCenter	3,833	17,149
8010	Lemoyne College	4,409	3,910
8011	University Hill Hospitals	16,867	40,703
8012	Syracuse University	9,303	42,276
8013	Carrier Dome	(SE)	(SE)
8014	St. Joe's Hospital	325	4,755
8015	NBT Bank Stadium	(SE)	(SE)
8016	Hancock Airport	5,285	18,245

(SE): Special Event locations that are not included in a model run that represents a typical day

6.6 | EXTERNAL TRIPS

Trips can be categorized based on whether both the origin and destination are internal to the model region, or whether the trip has an external trip end. External trips can be classified as internal-to-external (IX), external-to-internal (XI), and external-to-external (XX). In the SMTC model, IX and XI trips are classified as being HBW, HBS, HBO, or NHB, and are treated no differently from internal-to-internal (II) trips in model distribution. XX trips, on the other hand, are a modeled as a fifth trip purpose and have a fixed distribution.

In the base year, the total IX, XI and XX trips are set to match base year traffic count data at the 68 external stations (shown in Figure 13). The percentage of XX trips is derived in large part from an external license plate survey conducted as part of the I-81 Corridor Study[5]. The license plate survey recorded and matched vehicles at several locations on the interstate network to identify whether they were passing through the region or destined for a location

[5] See Draft Final Technical Memorandum #1: Physical Conditions Analysis, pp 2-25 to 2-31, available at: http://thei81challenge.org/cm/ResourceFiles/resources/Technical_Memorandum_s.pdf

inside the region (however, the survey did not capture I-90 pass through trips). The remaining external trips are split among IX and XI trips based on traffic count data. Base year IX and XI trips are set to match base year traffic count data (less XX trips) at the external stations. Future year external trips are assumed to grow annually at a rate of 0.5% per year, based on historical growth rates calculated using NYSDOT traffic count data.

6.7 | TRIP BALANCING

It is common practice in transportation modeling to balance attractions to productions. The rationale is that productions are more fundamental. More housing will produce more trips; more retail space, for example, may simply draw customers from other retail space.

This practice has important implications for using the model to analyze regional traffic impacts emanating from changes in employment land use. For example, if traffic impacts of a proposed major employer are to be analyzed, the projected amount of new employment must be inserted into appropriate TAZ in the socioeconomic database. These new jobs will attract new trips. However, without also increasing by some amount the number of residences in the region, no net increase in trips will result. Thus, these types of scenarios must be carefully considered as to their employment and residential impacts in order for the model to lend proper insight into transportation implications.

Incorporating special generator attraction rates introduces some complexity to the balancing calculations. Balancing adjustment factors are calculated for each of the trip purposes. It is not desirable to factor the special generator attractions because they are based on location specific traffic counts that reflect the unique trip making characteristics of the land use. Therefore, only attractions that are not special generators are factored in the balancing process. The following general formula is used to calculate the balancing factors for each trip type:

> Balancing Adjustment Factor = (Productions – Special Generator Attractions)/(Non Special Generator Attractions)

For NHB trips, where the connection to home-based productions is less obvious, the destination trip end (an attraction) is balanced to the origin trip end (a production) and then productions are set equal to attractions in each TAZ.

6.8 | TRIP GENERATION SUMMARY

Table 27 summarizes the number of motorized trips produced by trip purpose inside the SMTC model region for the 2017 base year, and those produced externally to the SMTC model region but attracted to locations inside the SMTC model region. External-to-external travel is not included in this table (see Section 6.6 |), nor is non-motorized travel (see Section 6.4 |).

TABLE 27: INTERNAL AND EXTERNAL TRIPS BY PURPOSE

PURPOSE	INTERNAL TRIPS	% TRIPS
HBW	324,643	16%
HBS	314,446	15%
HBO	606,680	29%
NHB	540,395	26%
L_COMM	18,195	1%
M_COMM	8,364	0%
H_COMM	4,362	0%
IX	112,438	5%
XI	114,642	6%
XX	29,386	1%
ALL PURPOSES	2,073,549	100%

7.0 NETWORK SKIMMING

Network skimming is the model process that traces the shortest path (highway skims) or composite path (transit skims) between every TAZ pair, and then writes out the quantity of key attributes, such as travel times, costs, and distances, "skimmed" between each TAZ. These "skims" are used in the trip distribution (highway skims only) and mode choice models.

7.1 | HIGHWAY NETWORK SKIMMING

The highway skims are built by minimizing a simple "generalized cost" formula, a metric that accounts for the out-of-pocket costs (tolls), implied costs (travel times, operating expenses) and biases (turn penalties) that are incurred in traveling between each TAZ pair.

AUTO GENERALIZED COST

The formula for auto generalized cost is presented in Figure 16. Because in-vehicle travel time varies by model period, the generalized cost equation is solved four times, once for each of the model periods (AM, MD, PM, OP). The asserted value of time, used to convert monetary values to time values in the generalized cost calculation, is $20/hour.

FIGURE 16: AUTO GENERALIZED COST

GC = IVT + OVT + .6*DIST + 6*TOLL + TP

Where: GC = Generalized Cost (minutes)

IVT = In-Vehicle Time (minutes)

OVT = Out-of-Vehicle Time (minutes)

Dist = Distance (miles)

Toll = Toll fare (dollars)

TP = Turning penalties

Value of Time = $20/hour

Operating Cost = $.19/mile

Tolls

The SMTC network features one toll road, I-90. The assumed toll rate along I-90 is $.048/mile, based on an average of the per mile rate of exit to exit tolls charged on I-90.

Operating Costs

The assumed average auto operating cost is $.19/mile and represents just fuel costs and not long term costs such as vehicle costs or maintenance costs. In reality, operating cost varies depending on speed and acceleration/deceleration, fluctuations in gas costs, and variations in vehicle fuel economy from vehicle to vehicle, but basing operating cost only on distance is a

reliable simplification and helps bias the model towards picking more direct paths with fewer turns.[6]

In-Vehicle Travel Times

In the first iteration of the model, the in-vehicle times for all four generalized cost equations (AM, MD, PM, OP) is assumed to be the free-flow travel times. After the first iteration, in-vehicle travel times vary by time period depending on the results of the assignment model. Section 11.0 explains how these congested travel times are calculated.

Out-of-Vehicle Travel Times

An auto walk access/egress time is assumed for each TAZ. TAZs located in the downtown or University Hill area of Syracuse are assumed to have 3 minute access/egress times and all other TAZs are assumed to have 1 minute access/egress times; for instance, a trip from outside of Syracuse to the downtown area would be assigned 4 minutes of total out-of-vehicle time. The out-of-vehicle time for trip-ends in the downtown or University Hill area is assumed to be greater than elsewhere in the region, because travelers to those areas may often need to park off-site and walk to their destination.

Turning Penalties

Turning penalties, as discussed in Section 4.1 |, are added are used to guide the model towards tracing a particular shortest path that tends to avoid excessive zigzagging movement. Although these turning penalties are expressed in minutes, they do not represent actual travel time and they are not added to the In-Vehicle Travel Time or Generalized Cost skims so as not to affect the results of the trip distribution or mode choice models. .

SKIMMED VARIABLES

For each of the four time periods (AM, MD, PM, OP) the model creates the following skims:

Distance
Toll
IVTT (In-Vehicle Travel Time)
OVTT (Out-of-Vehicle Travel Time)
Operating Cost
Generalized Cost (where generalized cost does not include any biases such as turning penalties)

From these skims, a set of "work" and "non-work" skims, and a set of "peak" and "off-peak" skims are created for use in application where the work and non-work skims are used in the distribution model, and the peak and off-peak skims are used in the mode choice

[6] For forecasting purposes, operating cost assumptions remain static, i.e. base year values are used in the future. Future forecasts of vehicle operating costs are uncertain, and the relationship between future vehicle operating costs, future household income, and resulting route choice behavior are sufficiently uncertain and complex to make any adjustments for forecasting unsupportable.

model. However, at this time, the work and peak skims are simply duplicates of the AM skim, and the non-work and off-peak skims are duplicates of the MD skim.

7.2 | TRANSIT NETWORK SKIMMING

The transit skims are built by minimizing a generalized cost formula, subject to a number of special constraints and the possibility of combining service across alternative routes to create a more favorable, composite path. The composite path (if one exists) is solved by Caliper's Pathfinder algorithm.

TRANSIT GENERALIZED COST

The generalized cost formula used in creating the transit network is presented in Figure 17. The transit generalized cost formula uses a lower value of time ($12/hour) than is used for highway generalized cost ($20/hour) because transit users tend to have a lower income and are more sensitive to cost. The transit generalized cost formula also double weights OVT, which is the standard convention.

FIGURE 17: TRANSIT GENERALIZED COST

GC = IVT +2*OVT + 7.5*FARE

Where:
- GC = Generalized Cost (minutes)
- IVT = In-Vehicle Time (minutes)
- OVT = Out-of-Vehicle Time (minutes)
- Fare = Transit Fare (dollars)
- Value of Time = $12/hour

In-Vehicle Travel Times

Transit in-vehicle travel times are created by factoring up the auto in-vehicle times. The model does not explicitly assume a dwell time at each stop or model deceleration/acceleration when visiting stops, so these factors are needed to decrease the average speed of the transit service. Local bus service is assumed to travel at 60% of the auto speed, and express bus service is assumed to travel at 95% of the auto speed, as explained in Section 5.2 |.

Out-of-Vehicle Travel Times

The out-of-vehicle time in the transit network is composed of:

Walk access time
Initial wait time

(Possible) Transfer walk and wait times
Walk egress time

The wait times are calculated by taking 50% of the route headway, subject to a few constraints (see section 5.2 |). Out-of-vehicle times are all double-weighted to account for the fact that out-of-vehicle time is perceived as more onerous to riders than in-vehicle time.

Fare

Transit fares are discussed in section 5.2 |. However, because all transit fares were assumed to be $1 with free transfer, at this point, fares do not have an impact on the transit skimming.

PATH-FINDING PARAMETER CONSTRAINTS

The transit path-finding algorithm is subject to a number of constraints that may disallow certain paths or constrain attributes used in the generalized cost formula or written to the skims. The constraints are presented within Figure 18. For a path to be allowed by the model, the total travel time must be less than 180 minutes, there must be fewer than three transfers, and the walk access and egress times must be less than 20 minutes. Disallowing these paths ensures that the model will award zero trips to these paths instead of some small number.

The transit pathfinder puts a floor/ceiling on the range of values certain attributes can take on. In particular, the maximum wait time for a transit trip is 45 minutes and the minimum initial wait time is set to 2 minutes.

FIGURE 18: TRANSIT PATH-FINDING PARAMETER CONSTRAINTS

PARAMETER	VALUE	UNITS
Max Xfers	2	
Value of Time	.133	$/Minute
Flat Fare	1	$
Xfer Cost	0	$
Weighting Factors		
Fare	1	
Link Time	1	
Init Wait Time	2	
Xfer Wait Time	2	
Dwell Time	0	
Walk Time	2	
Headway	Route Specific	Minutes

PARAMETER	VALUE	UNITS
Max Init Wait Time	45	Minutes
Max Xfer Wait Time	45	Minutes
Min Init Wait Time	2	Minutes
Min Xfer Wait Time	0	Minutes
Dwelling Time	0	Minutes
Max Access Walk Time	20	Minutes
Max Egress Walk Time	20	Minutes
Max Total Time	180	Minutes
Park and Ride	No	
Interarrival Parameter	0.5	
Path Threshold	0	

PATHFINDER

Pathfinder is the route-building algorithm developed by Caliper to solve for composite, transit paths where having several options for how to go from A to B would allow the transit user to pick the first available service, and reduce average wait times. In the SMTC transit model, the "combination factor" parameter is set to 0, the minimum level, where a composite path will be created only if there are two or more equally fast paths (i.e. there is more than one, single "best path"). The skims generated from composite paths have reduced wait times according to their combined headway.

8.0 TRIP DISTRIBUTION

Trip distribution is the pairing of productions and attractions to form complete trips. The pairing is done separately within each trip purpose. For example, HBW productions from residences are paired with HBW attractions at work places. The trip distribution within a trip purpose is done using a gravity model. The concept underlying a gravity model is that trip end locations that are closer together will exhibit a stronger attraction than those that are farther apart, and that trip end locations with higher trip generation will be more attractive than trip end locations with lower trip generation.

8.1 | GRAVITY MODEL

The functional form of the distribution model is shown in Figure 19. The model uses a doubly constrained gravity model for the HBW and commercial trip purposes and a singly constrained gravity model for the HBS, HBO, and NHB trip purposes, as well as IX and XI externals.

To doubly-constrain a trip distribution an iterative process is used that alternatively balances productions by evaluating the first equation and then balances to attractions by evaluating the second equation. This function is applied separately for each of the trip types.

FIGURE 19: GRAVITY MODEL FUNCTIONAL FORM

$$T_{ij} = P_i * \frac{A_j * f(d_{ij})}{\sum_{all\ zones\ z} A_z * f(d_{iz})}$$ (Constrained to Productions)

$$T_{ij} = A_j * \frac{P_i * f(d_{ij})}{\sum_{all\ zones\ z} P_z * f(d_{iz})}$$ (Constrained to Attractions)

Where:	T_{ij}	=	the forecast flow produced by zone *i* and attracted to zone *j*
	P_i	=	the forecast number of trips produced by zone *i*
	A_j	=	the forecast number of trips attracted to zone *j*
	d_{ij}	=	the impedance between zone *i* and zone *j*
	$f(d_{ij})$	=	the friction factor between zone *i* and zone *j*

The inputs to trip distribution include productions and attractions by TAZ, and a generalized cost impedance matrix representing the cost of travel between each pair of TAZs. The impedance is used in the trip distribution model to estimate friction factors, which represent the impact of travel time on the likelihood of travel and are calibrated so that observed trip lengths and times are reasonable and match patterns in survey data. Observed trip length distributions were estimated using 2004 SMTC Household Travel Survey.

The friction factor equations take the form shown in Figure 20, with the estimated parameter values shown in

Table 28 and are plotted in Figure 21, with the values scaled between 0 and 1 to be comparable across trip purposes. HBW trips tend to be longer than NHB, HBO, or HBS trips, and this is reflected in the calibrated friction factors.

FIGURE 20: FRICTION FACTOR FUNCTIONAL FORM

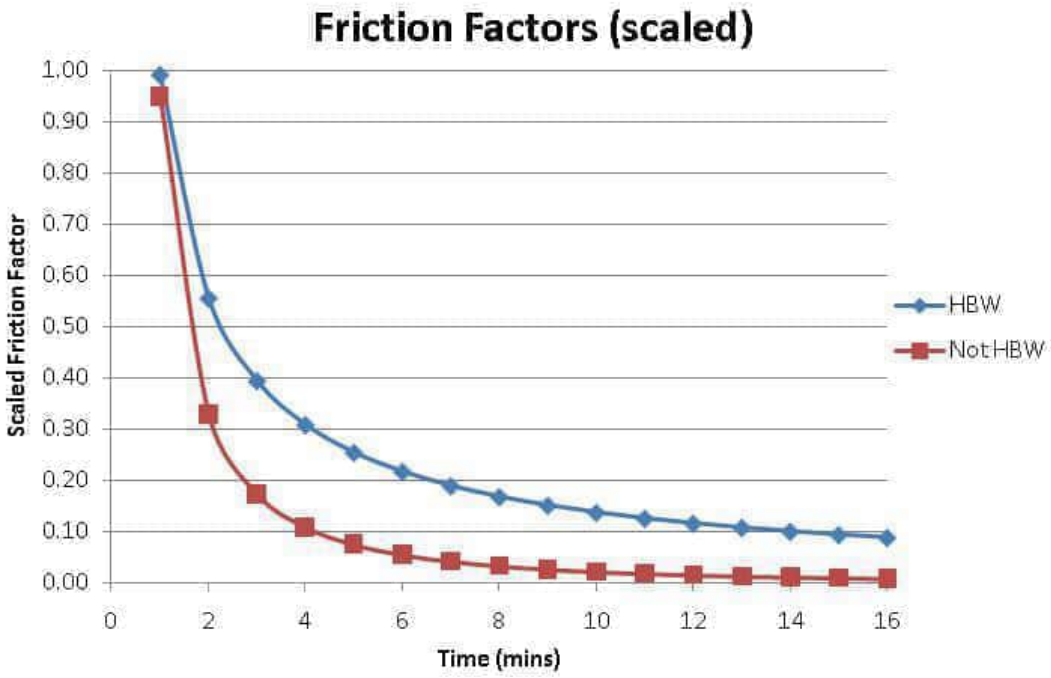
$$f(d_{ij}) = \frac{a}{d_{ij}^{\ b} * e^{c(d_{ij})}}$$

Where: $f(d_{ij})$ = the friction factor between zone *i* and zone *j*
d_{ij} = the impedance between zone *i* and zone *j*
a,b,c = constants derived for each trip type to replicate survey data

TABLE 28: ESTIMATED FRICTION FACTOR PARAMETERS

TRIP TYPE	A	B	C
HBW	28,507	0.823	0.010
HBS	139,173	1.456	0.052
HBO	139,173	1.456	0.052
NHB	139,173	1.456	0.052

FIGURE 21: FRICTION FACTORS CURVES BY TRIP PURPOSE



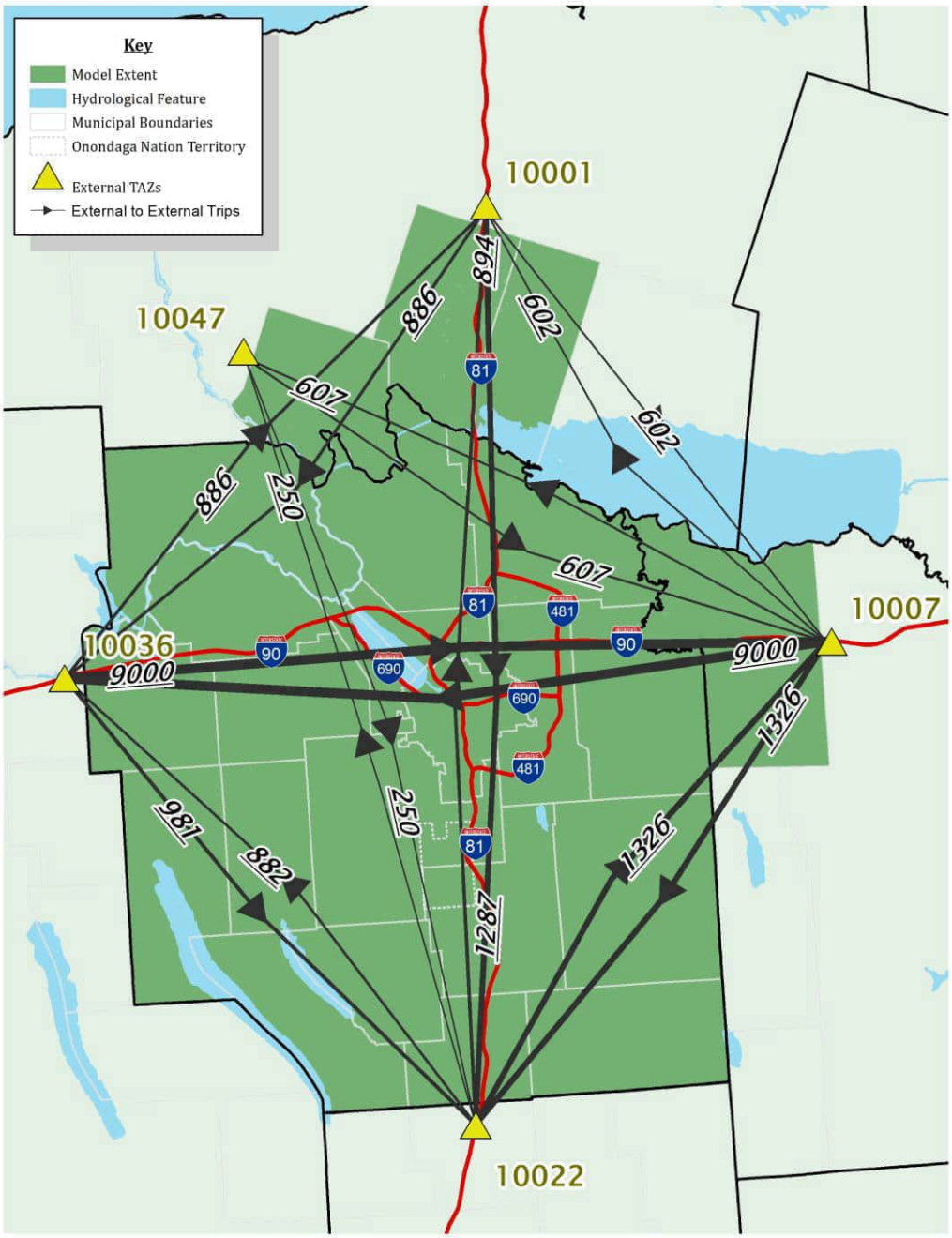
8.2 | EXTERNAL TRIPS

The distribution of external-to-external trips is input to the model as a fixed trip table. Major externals – I-81 North and South, the New York State Thruway East and West, and Route 481 – have any external-to-external trips. Table 29 and Figure 22 show the flow of external-to-external trips. As part of the recent I-81 planning effort, NYSDOT conducted a pass through study, using license plate capture at several locations on the Interstate Highway system, to identify the number of trips passing through the area using I-81. The results of this study were used during the development of the external-to-external trip table.

TABLE 29: EXTERNAL-TO-EXTERNAL TRIPS

EXTERNAL ORIGIN TAZ	ORIGIN HIGHWAY	EXTERNAL DESTINATION TAZ	DESTINATION HIGHWAY	AM TRIPS	PM TRIPS	DAILY TRIPS
10001	I-81 (N)	10007	I-90 (E)	35	43	602
10001	I-81 (N)	10022	I-81 (S)	75	92	1,287
10001	I-81 (N)	10036	I-90 (W)	52	63	886
10007	I-90 (E)	10001	I-81 (N)	35	43	602
10007	I-90 (E)	10022	I-81 (S)	78	95	1,326
10007	I-90 (E)	10036	I-90 (W)	526	644	9,000
10007	I-90 (E)	10047	Route 481	35	43	607
10022	I-81 (S)	10001	I-81 (N)	52	64	894
10022	I-81 (S)	10007	I-90 (E)	78	95	1,326
10022	I-81 (S)	10036	I-90 (W)	52	63	882
10022	I-81 (S)	10047	Route 481	15	18	250
10036	I-90 (W)	10001	I-81 (N)	52	63	886
10036	I-90 (W)	10007	I-90 (E)	526	644	9,000
10036	I-90 (W)	10022	I-81 (S)	57	70	981
10047	Route 481	10007	I-90 (E)	35	43	607
10047	Route 481	10022	I-81 (S)	15	18	250
			TOTAL	**1,718**	**2,102**	**29,386**

FIGURE 22: EXTERNAL-TO-EXTERNAL TRIPS



9.0 MODE SPLIT

The mode choice model estimates the fraction of person-trips between each origin and destination that use public transit vs. auto. Auto trips are then converted to vehicle-trips using an auto occupancy factor and the resulting auto vehicle-trips are loaded onto the highway network.

The split of person-trips among modes is estimated using a logit model. A logit model is shown in Figure 23. The share of trips using each mode in the mode choice model is a function of the relative attractiveness of each mode. The attractiveness of each mode is a function of the characteristics of the mode and the preferences of different travelers.

FIGURE 23: EXAMPLE LOGIT MODEL

$$Transit\ \ Mode\ \ Share\ = \frac{1}{1 - e^{(V_{auto} - V_{transit})}}$$

$$Auto\ \ Mode\ \ Share\ = 1 - Transit\ \ Share$$

$$Where: V_{auto} = f(auto\ \ service,\ \ traveler\ \ attributes)$$
$$V_{transit} = f(transit\ \ service,\ \ traveler\ \ attributes)$$

The utility functions (Vs) in this equation can contain mode-specific travel time, cost and access variables as well as traveler-specific variables, each multiplied by parameters.

The multinomial logit model is an extension of this form that allows comparisons among more than two alternative modes. A further extension, the nested logit model allows for differential competition among modes. A multinomial logit model assumes that each alternative mode draws in fixed proportions from all other alternatives. This is an appropriate assumption when the alternatives are substantially unique but becomes less appropriate when subsets of the alternatives have important shared attributes.

The SMTC mode choice model is not estimated from survey data as survey data of the type typically used to estimate mode choice models, such as a transit on-board origin-destination survey coupled with a stated preference survey taken by transit riders, are not available. Instead, it is asserted based on professional judgment and experience estimating mode choice models in dozens of U.S. cities. The parameters are consistent with FTA guidance and are defensible representations of mode choice behavior. The mode choice model is calibrated to match the observed regional shares of trips between transit and auto.

The mode split macro skims the network for the optimal path in each mode. In the current version of the model, this includes an auto path and a bus path. The mode skims are then input to the mode split model and the trips are divided among the available modes. The auto and bus skimming process are described in Section 7.0.

The utility equations used in the mode choice model are shown in Figure 24 and the mode choice model parameters are shown in Table 30.

FIGURE 24: MODE CHOICE MODEL UTILITY EQUATIONS

$V_i = \alpha + \beta_1*WalkTime + \beta_2*IVTT + \beta_3*OVTT + \beta_4*OperatingCost + \beta_5*Xfer + \beta_6*EmpDens + \beta_7*CBD$

i= auto, bus

WalkTime = walk time (minutes)

IVTT = in-vehicle time (minutes)

OVTT = out-of-vehicle time (minutes)

OperatingCost = auto operating cost (minutes)

Xfer = number of transit transfers

EmpDens = employment density (employees/square mile)

CBD = indication of central business district (1 = CBD)

TABLE 30: MODE CHOICE MODEL COEFFICIENTS

			α	β_1	β2	β3	β4	β5	β6	β7
HBW	Non-Motor		-0.95	-0.04	-	-	-	-	0.00002	0.3
	Motor	Auto	-	-	-0.03	-0.06	-0.03	-	-	-
		Bus	-0.90		-0.03	-0.06	-0.003	-0.3	0.00002	0.1
HBS	Non-Motor		-1.75	-0.04	-	-	-	-	0.00002	0.3
	Motor	Auto	-	-	-0.02	-0.04	-0.02	-	-	-
		Bus	-2.70		-0.02	-0.04	-0.003	-0.2	0.00002	0.1
HBO	Non-Motor		-1.75	-0.04	-	-	-	-	0.00002	0.3
	Motor	Auto	-	-	-0.02	-0.04	-0.02	-	-	-
		Bus	-2.70	-	-0.02	-0.04	-0.003	-0.2	0.00002	0.1
NHB	Non-Motor		-2.10	-0.04					0.00002	0.3
	Motor	Auto	-	-	-0.02	-0.04	-0.02	-	-	-
		Bus	-2.70	-	-0.02	-0.04	-0.003	-0.2	0.00002	0.1

The auto person-trips calculated by the mode choice model are converted to auto vehicle-trips using the occupancy factors shown in Table 31. These rates were informed by the 2004 Household Survey and the 2009 NHTS.

TABLE 31: AUTO OCCUPANCY FACTORS BY TRIP PURPOSE

TRIP PURPOSE	AVERAGE AUTO OCCUPANCY
HBW	1.05
HBS	1.25
HBO	1.75
NHB	1.50

10.0 DIURNAL DISTRIBUTION

The trip generation, trip distribution and mode split models estimate daily trips. The traffic assignment model then assigns traffic for each hour. Trips from each trip purpose are allocated to each time period based on time-of-day factors derived from the 2004 SMTC Household Travel Survey (and adjusted to more closely match observed traffic counts and following comparison to the 2001 and 2009 NHTS data). For home-based trips, the time-of-day (diurnal) distribution is unique by direction (e.g. home-to-work vs. work-to-home), but for NHB trips the directionality of the trip matrix does not vary by time of day. The estimated diurnal distribution for all trips is shown in Figure 25. Figures 27-30 show the same information by trip purpose. "DEP" stands for departing trips and implies trips from the production TAZ (home for home-based trips) to the attraction TAZ. Conversely, "RET" stands for returning trips (from attraction to production).

FIGURE 25: DIURNAL DISTRIBUTION FOR ALL TRIPS

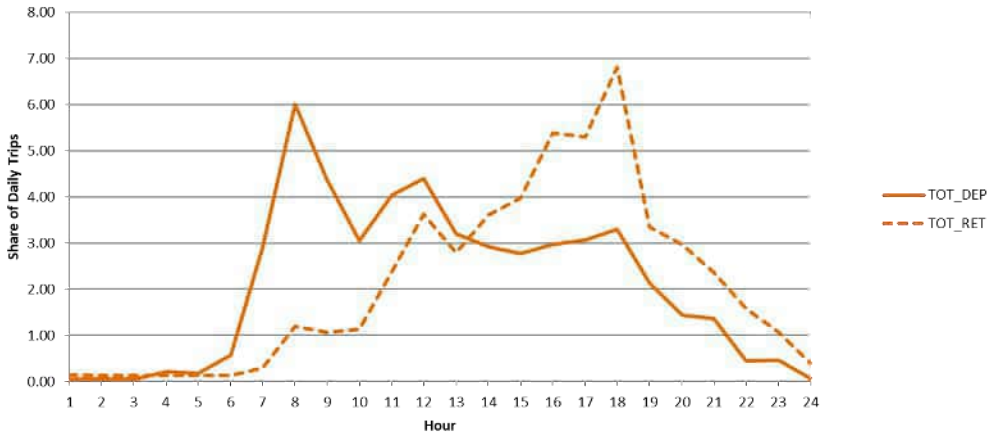


FIGURE 26: DIURNAL DISTRIBUTION OF HOME-BASED WORK (HBW) TRIPS

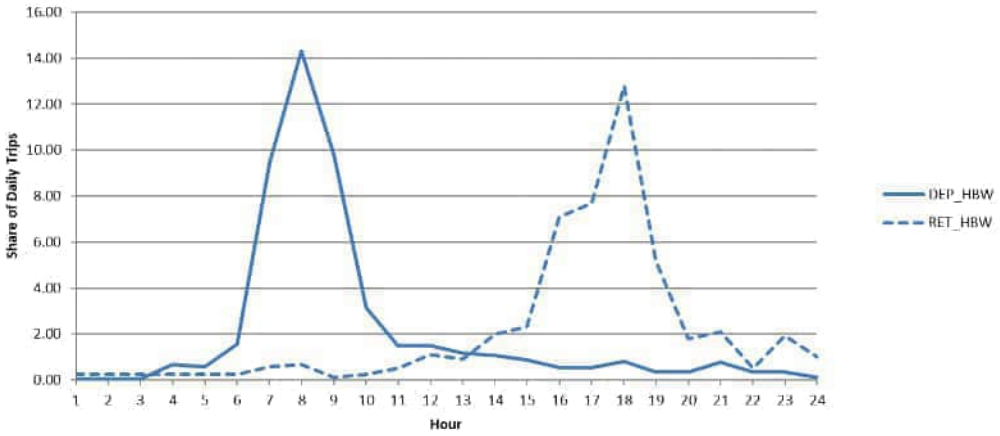


FIGURE 27: DIURNAL DISTRIBUTION OF HOME-BASED SHOPPING (HBS) TRIPS

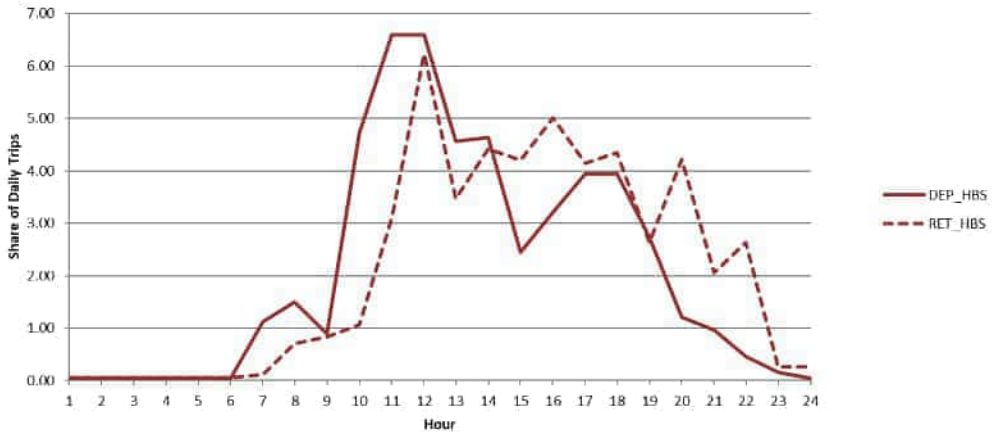


FIGURE 28: DIURNAL DISTRIBUTION OF HOME-BASED OTHER (HBO) TRIPS

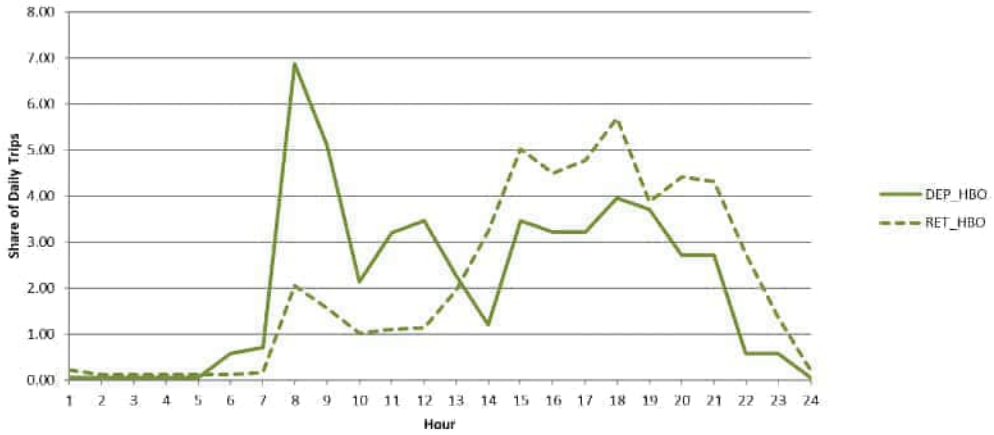
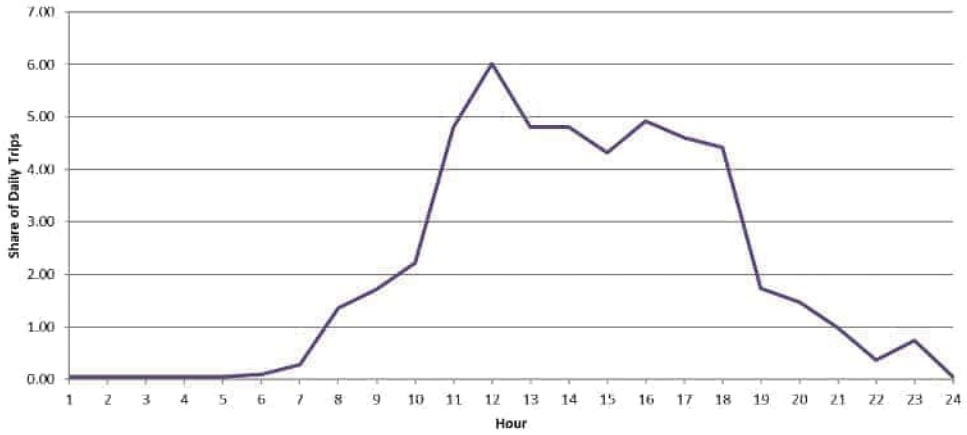


FIGURE 29: DIURNAL DISTRIBUTION OF NHB TRIPS



11.0 HIGHWAY ASSIGNMENT

The purpose of the assignment model is to locate a specific route along links and through intersections for every vehicle trip. The vehicle-trips calculated in the mode split model, which are in the form of an origin/destination matrix, are "assigned" to the network based on a user equilibrium model. The user equilibrium model is an iterative process that finds a convergent solution in which no travelers can improve their travel times by switching to another route.

The assignment model includes travel delay from five sources:

- Volume-Dependent Link Delay – calculated using volume-delay functions described below.
- Volume-Dependent Node Delay – calculated using volume-delay functions described below.
- Global Turn Penalties – specified as 10 seconds per left turn and 5 seconds for right turns. U-turns are prohibited.
- Facility Type Penalties – specified in seconds for ramp access from arterials, collectors, and locals to reduce the number of very short trips routed via interstates/freeways.
- Specific Turn Prohibitions – these are specified in the Turn Penalty Table.

The model was calibrated to 2014 daily traffic conditions. The assignment calibration is assessed based on how accurately the model output link volumes match observed traffic counts and speeds by direction and time of day. Calibration of the assignment model involves adjusting the delays for turning movements and on links.

The volume-delay function used in the SMTC model estimates both link and node delay. The function equations are shown in

Figure 30. Table 33 shows the volume-delay function parameters for interstates/freeways and all other roads. The parameters are the values that, when entered into the equations of the volume-delay function, affect its shape and hence the relationship between traffic volume and the amount of delay. Interstates/freeways operate very differently in traffic flows terms than other types of road, and in particular intersection delay is not a meaningful concept and speeds fall more slowly as volume to capacity ratios increase.

FIGURE 30: SMTC MODEL VOLUME-DELAY FUNCTION EQUATIONS

$$d = D_l + I_l$$

$$D_l = t_0 \cdot c_1 \left[\frac{1}{1 - \frac{c_2}{1 + exp\left(c_3 - c_4 \cdot \frac{x}{C}\right)}} \right]$$

Where:

D_l = link delay

t_0 = free − flow travel time

x = traffic flow

C = link capacity

c_1 , c_2 , c_3 , c_4 = link parameters

$$I_l = d_0 \cdot p_1 \left[1 + \frac{p_2}{1 + exp\left(p_3 - p_4 \cdot \frac{x}{X}\right)} \right]$$

Where:

I_l = node delay

d_0 = free − flow travel time

x = traffic flow

X = node capacity

p_1 , p_2 , p_3 , p_4 = node parameters

TABLE 32: VOLUME-DELAY FUNCTION PARAMETERS

Facility Type	LINK PARAMETERS				NODE PARAMETERS			
	C1	C2	C3	C4	P1	P2	P3	P4
Local	0.9526	1	3	3	0.04046	500	3	3
Centroid Connector	0.9526	1	3	3	0.04046	500	3	3
Low Capacity Ramp	0.9526	1	3	3	0.04046	500	3	3
High Capacity Ramp	0.9526	1	3	3	0.04046	500	3	3
Minor Collector	0.9526	1	3	3	0.04046	500	3	3
Major Collector	0.9526	1	3	3	0.04046	500	3	3
Minor Arterial	0.9526	1	3	3	0.04046	500	3	3
Principal Arterial	0.9526	1	3	3	0.04046	400	3	3
Interstate/Freeway	1.0000	0.975	6.5	6.3	-	-	-	-

12.0 TRANSIT ASSIGNMENT

The transit assignment model tabulates the number of riders using each stop and route. Unlike highway assignment, transit assignment is not formally constrained by a capacity, and therefore, the transit routing computed between each TAZ pair during the transit skimming procedure (see section 7.2 |) is imitated in assignment. The SMTC transit assignment model relies on Caliper's "pathfinder" algorithm, the compatible assignment algorithm to that used in skimming, and for cases where pathfinder built a composite path between TAZ pairs in skimming, the trips are apportioned among the alternative routes based on the ratio of headway times.

13.0 FEEDBACK AND MODEL CONVERGENCE

The model is converged if and only if the outputs are consistent with the inputs. This means that the congested travel times coming out of assignment must be consistent with the travel times that were used in trip distribution. Because the SMTC model starts "cold" and uses free-flow times in the first pass of trip distribution, it is expected that assignment travel times will look slower than those used in trip distribution. To account for this discrepancy, the assignment travel times are used to create new congested skims for trip distribution. However, this is not the end of the process. Because the first pass of trip distribution used free-flow times, each destination appeared unrealistically accessible, leading to too much VMT and slow travel times on the highway. Therefore, the assignment travel times sent to the second pass of distribution are expected to make destinations appear too inaccessible. In turn, this leads to lower VMT on the highway and faster travel times in the second round of assignment. Continuing this feedback process indefinitely leads to oscillating VMT and travel times, but with each subsequent loop, the absolute change decreases. Eventually, the absolute change is judged to be small enough where the model has reached equilibrium.

13.1 | MSA FEEDBACK

The SMTC model follows the method of successive averages (MSA) process of feedback where new travel times are calculated by applying the volume-delay function to an unweighted average of volumes from each assignment iteration (see Figure 31). Because the weight of the next assignment run is inversely proportional to the number of iterations, the new travel times change less and less, and convergence will be reached in a finite amount of time.

FIGURE 31: MSA FEEDBACK

$$\mathbf{MSAFLOW_N = MSAFLOW_{N-1} + (1/N)*(FLOW_N - MSAFLOWN-1)}$$

where:

n = current MSA iteration number

$MSAFlow_n$ = calculated MSA flow at iteration n

$Flow_n$ = resulting flow directly from trip assignment

13.2 | FEEDBACK CRITERIA

Some of the symptoms of an unconverged model include: fluctuations in travel times and in VHT, fluctuations in assignment volumes and in VMT, and fluctuations in trip tables between subsequent iteration. The SMTC model includes tight overall assignment convergence criteria including a global convergence criterion of 0.000001 and a maximum of 500 iterations. While this adds to model runtimes it ensures a convergence is reached. Additionally, the SMTC model performs a link volume convergence check for each time period during the DA Feedback loop. Within this loop, at least 98% of link volumes must change by less than 1% between loop iterations. This test is run for each assignment period.

14.0 FUTURE YEAR MODELS

The future year models use the same structure and parameters as the base year model, but several of the inputs are updated. The adjusted inputs include the highway network, socioeconomic data for TAZs, demand for special generator TAZs, external demand to/from internal TAZs, and external demand to/from other external TAZs.

The focus of the future modeling was on creating reasonable inputs for a 2050 horizon year. Once the 2050 inputs were created, weighted interpolations/extrapolations of the 2017 to 2050 data were developed to build assumptions for two other future years: 2030 and 2040 .

14.1 | HIGHWAY NETWORKS

The future year highway network includes projects that are suggested (i.e. included in the SMTC LRTP, or otherwise programmed by NYSDOT, Onondaga County, or other municipalities) to be built before 2050. Projects that are coded in future year networks are presented in Table 33. The table indicates which future year scenario the project first appears in. Most of the projects involved changes to network and network attributes, such as a change in the number of lanes, and edits to the node types to reflect intersection improvements.

TABLE 33: FUTURE YEAR NETWORK PROJECTS

Project	Year
Route 370 at John Glenn Blvd intersection improvements	2030
Onondaga Lake Parkway safety improvements	2030
Reconstruct Rt 11 at Rt 49 intersection	2030
NY 31 at Thompson Rd and South Bay Rd intersection improvements	2030
Route 481 NB Off-Ramp at Circle Drive	2030
Caughdenoy Rd and NY 31 improvements	2030
Buckley Road from Hopkins Rd to Taft Rd Improvements	2030
N, S, E, W corridors interconnect expansion	2030
CENTRO Change in future peak and off-peak headways	2030
CENTRO New express transit route along I81	2030
CENTRO Two new BRT routes with identified stops	2030
I-81 Interchange at Rt 31	2040
Intersection improvements at NY 5 and NY 257	2040
Buckley Rd shared turn lane and Buckley at Bear intersection upgrades	2040
7th North Street at Buckley Rd intersection upgrades	2040
James Street three lane cross section from State to Grant and Shotwell	2040
Conversion of downtown streets to 2-way	2040
Roundabout at James and Shotwell/Grant	2040
Water St closure	2040

14.2 | SOCIOECONOMIC DATA

The development of 2050 socioeconomic data was discussed in sections 3.3 | (households and population) and 3.4 | (employment).

14.3 | SPECIAL GENERATORS

For special generators that relied on a hand-selected ITE formula in base year estimation (see Table 25), the 2050 attractions were estimated by growing the key variable by the same percentage that total employees grew between 2017 and 2050 and reapplying the ITE formula. The attractions for other special generators were estimated based on projected growth in employment totals. Table 34 presents the 2050 motorized productions and attractions.

TABLE 34: 2050 SPECIAL GENERATOR MOTORIZED PRODUCTIONS AND ATTRACTIONS

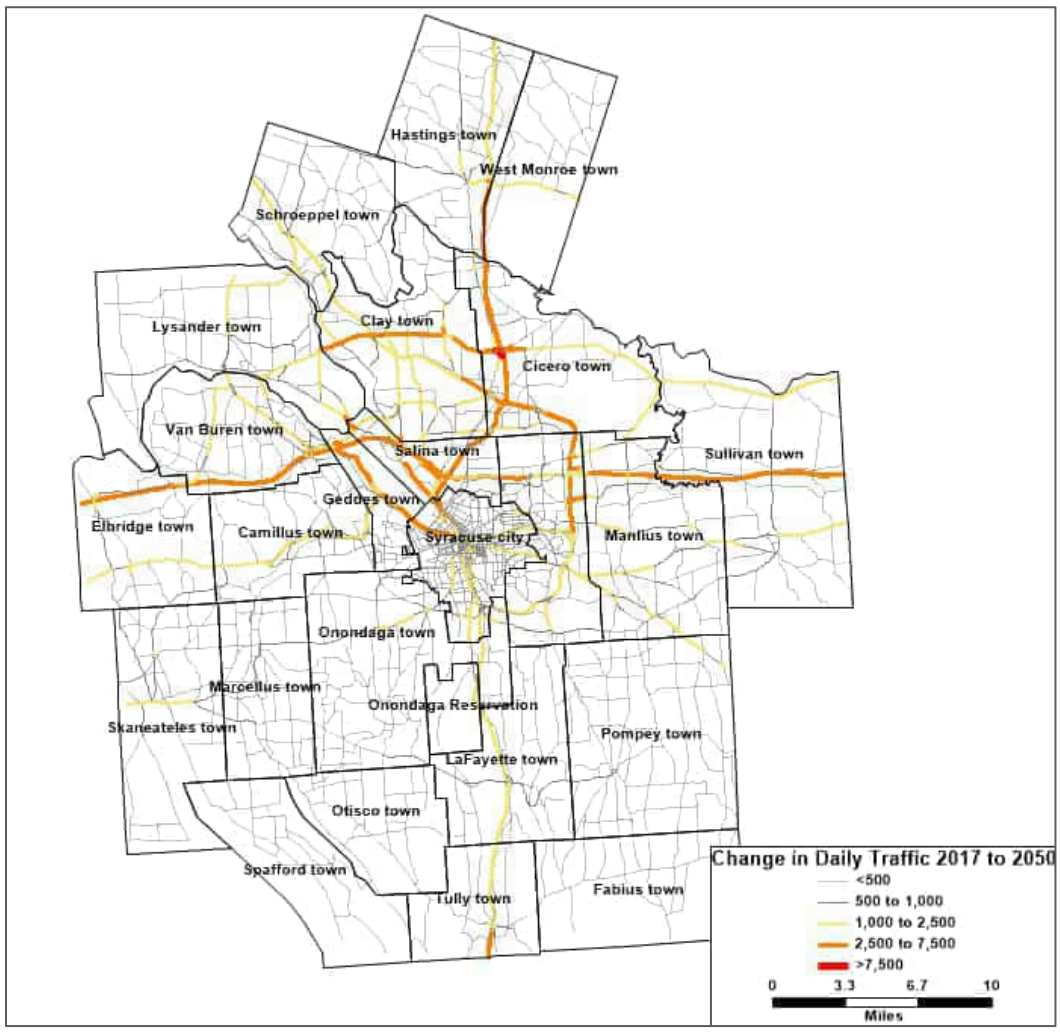
TAZ	SPECIAL GENERATOR	PRODUCTIONS	ATTRACTIONS
8001	NY State Fairgrounds	(SE)	(SE)
8002	Destiny USA	14,342	42,249
8003	Onondaga Community College	4,719	9,292
8004	Van Duyn Home & Hospital	561	5,235
8005	Loretto	631	1,839
8006	SU South Campus	6,949	3,757
8007-8009	OnCenter	4,014	17,958
8010	Lemoyne College	4,570	4,052
8011	University Hill Hospitals	17,871	43,126
8012	Syracuse University	9,459	41,968
8013	Carrier Dome	(SE)	(SE)
8014	St. Joe's Hospital	339	4,972
8015	NBT Bank Stadium	(SE)	(SE)
8016	Hancock Airport	5,867	20,254

(SE): Special Event locations that are not included in a model run that represents a typical day

14.4 | EXTERNAL TRIPS

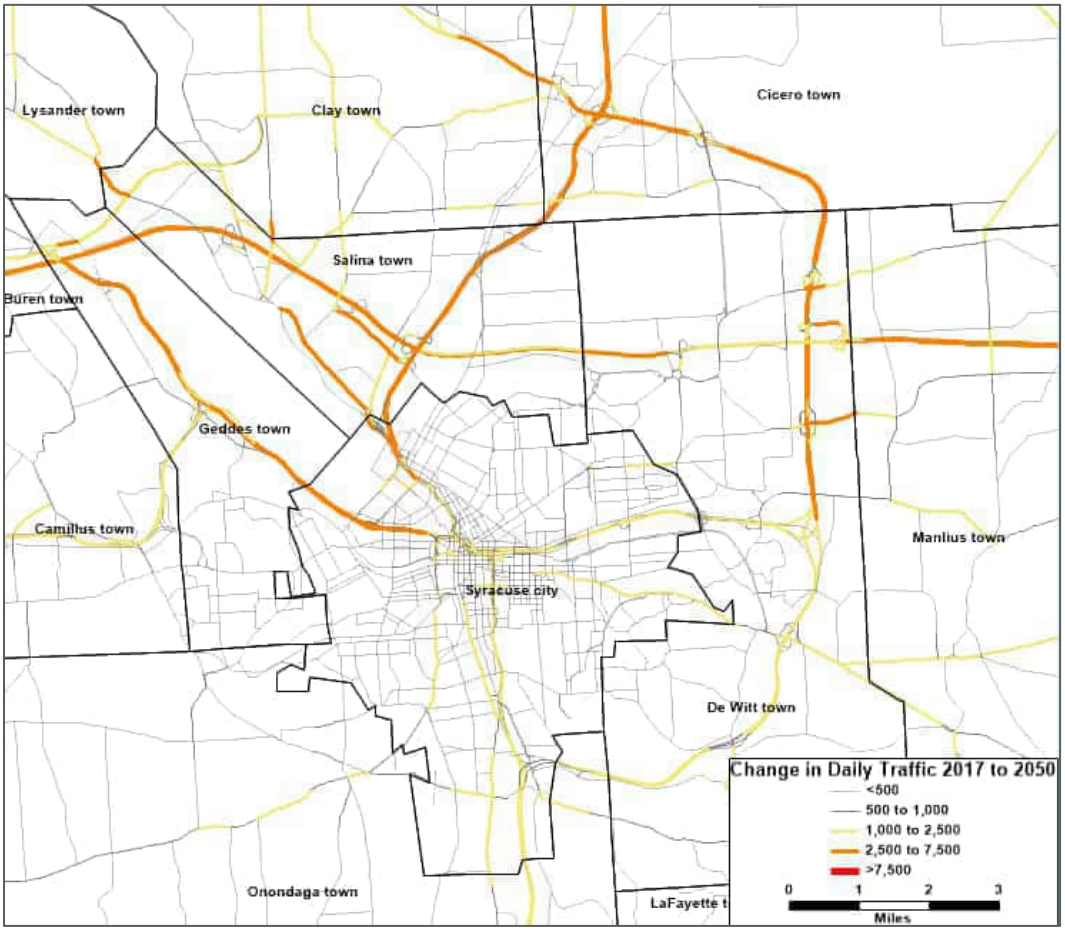
External demand was assumed to grow at 0.5% per year from 2017 to 2050. However, this rate can be user adjusted by chaning input values in the ExtTAZGR.bin input file.

FIGURE 32: FUTURE INCREASES IN DAILY TRAFFIC VOLUMES (MODEL REGION)



Note: Volume increases for divided roadways are shown for only one-direction of travel only.

FIGURE 33: FUTURE INCREASES IN DAILY TRAFFIC VOLUMES (CITY OF SYRACUSE AND VICINITY)



Note: Volume increases for divided roadways are shown for only one-direction of travel only.

14.5 | FUTURE YEAR TRANSIT NETWORK

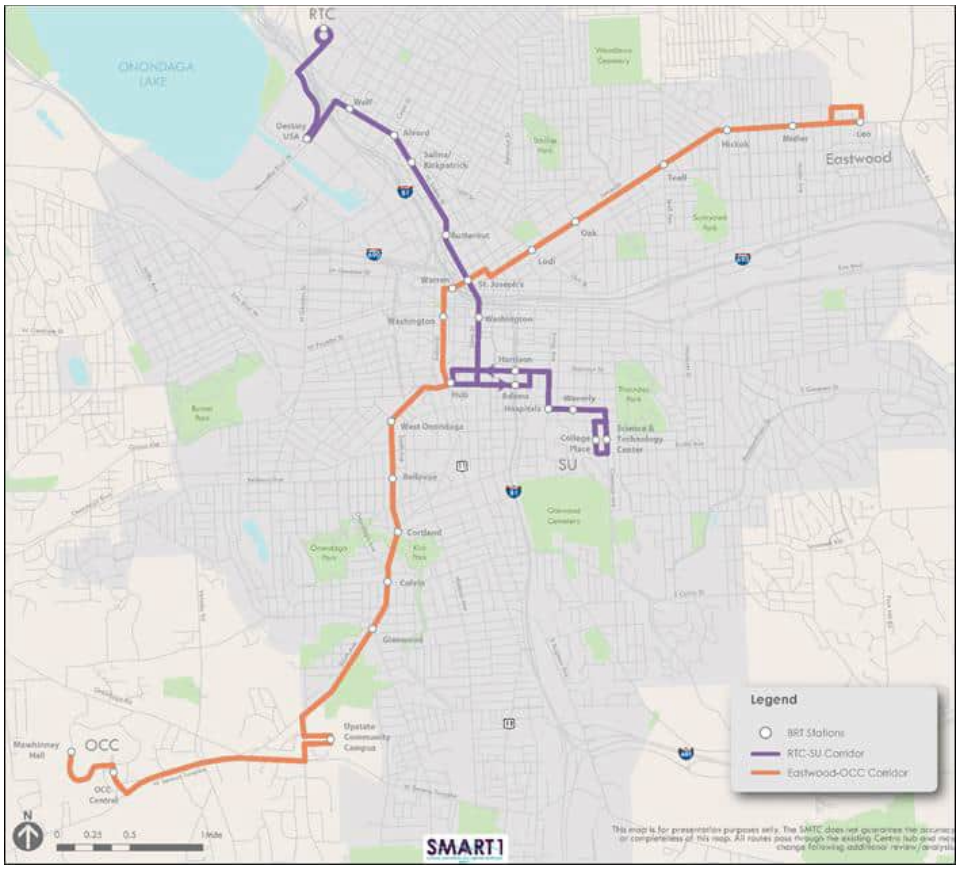
Several changes were made to the future year transit networks that are detailed in this section. In the transit network for 2030, 2040, and 2050, the peak and offpeak headways were altered for certain bus routes.

In the 2050 transit network, one express bus route and two new BRT routes were added as follows:

1) A new express transit route along I-81 that stops at the following Park-n-Ride facilities.
    a. I-81 & Taft Road
    b. I-81 & I-481
    c. I-81 & RT 31
    d. I-81 & Bartel Road (in Brewerton)
    e. I-81 & RT 49 (in Central Square)
2) Two new BRT routes with identified stops (see Figure 34).
    a. Added as additional bus service on these corridors.

b. The services have 10 minute headways

FIGURE 34: FUTURE BRT ROUTES



15.0 MODEL CALIBRATION, VALIDATION AND REASONABLENESS CHECKS

Model calibration is the process of reviewing and adjusting parameter values in the various model steps to ensure that it reasonably replicates the existing conditions. Model validation and reasonableness checking is performed for each step in the model. Generally speaking, the model is calibrated when the model-generated roadway volumes and speeds reasonably reflect reality, and other key indicators and parameters are reasonable from a behavioral standpoint and consistent with other models, survey data and industry benchmarks.

Examples of parameters that can be modified as part of the calibration process include:

Trip generation rates;
Friction factors in the gravity model (trip distribution);
Coefficients in the mode split equations (e.g. the relative weight of time vs. money);
Time-of-day parameters;
Network and TAZ structures;
Free-flow speeds and capacities on the roadway network; and
Coefficients in the assignment model relating V/C ratio to delay.

Calibration is as much an art as a science, and it requires the model developer to exercise considerable judgment as to "reasonableness." There is an inherent balance in the process, between the extremes of an uncalibrated model that does not accurately replicate measurable field conditions and a model that is "overcalibrated" through the use of unjustifiable correction factors such that a model's ability to predict future travel conditions is compromised.

Four (4) publications used to guide the calibration effort were:

Calibrating and Adjustment of System Planning Models, FHWA, December 1990. Publication No. FHWA-ED-90-015
NCHRP Report 365 – Travel Estimation Techniques for Urban Planning, TRB, 1998
Model Validation and Reasonableness Checking Manual – Second Edition; FHWA, September 2010
NCHRP Report 716 – Travel Demand Forecasting: Parameters and Techniques, TRB, 2012

The calibration process used in the SMTC model development included evaluating the following metrics:

Trip generation
Trips/person per day
Trips/household per day
Trip distribution
Average trip duration by trip purpose
Trip length frequencies by trip purpose
Mode choice

Regional transit ridership
Auto occupancy
Traffic assignment
Regional 24-hour ground counts v. model volumes
24-hour ground counts v. model volumes by functional class
Highway Performance Monitoring System (HPMS) data

15.1 | TRIP GENERATION

To validate the overall output from the trip generation model, the total regional trip productions were compared to trip rates extracted from the 2001 and 2009 NHTS. The average number of trips per household in the model is 8.8, close to the 9.6 trips per household in the NHTS.

15.2 | TRIP DISTRIBUTION

To validate the trip distribution model, the trip length frequency distributions were extracted from the survey and the model to determine if the model was replicating the overall shape of the observed frequency distributions. The model and the survey frequency distributions are examined at 2-mile distance bins (0-2 miles, 2-4 miles, etc) and 3-minute time bins (0-3 minutes, 3-6 minutes, etc). The average trip distance and average trip time can then be determined from the modeled and observed frequency distributions. Table 35 and Table 36 compare the modeled and observed average trip distance and time respectively. In both cases, the model matches closely with the observed trip lengths.

TABLE 35: AVERAGE TRIP DISTANCE (MILES)

TRIP TYPE	OBSERVED	MODEL
HBW	9.0	9.9
HBS	5.2	6.0
HBO	6.0	6.3
NHB	6.1	4.9

TABLE 36: AVERAGE TRIP TIME (MINUTES)

TRIP TYPE	OBSERVED	MODEL
HBW	19.4	17.0
HBS	10.3	8.3
HBO	11.9	11.3
NHB	12.3	9.0

Figure 35 to Figure 38 present comparisons of the observed and modeled trip distance frequency distribution. Figure 39 to Figure 42 present comparisons of the observed and

modeled trip time frequency distribution. In all cases, the model replicates the observed trip length frequency distributions closely.

FIGURE 35: HOME-BASED WORK TRIP DISTANCE DISTRIBUTIONS

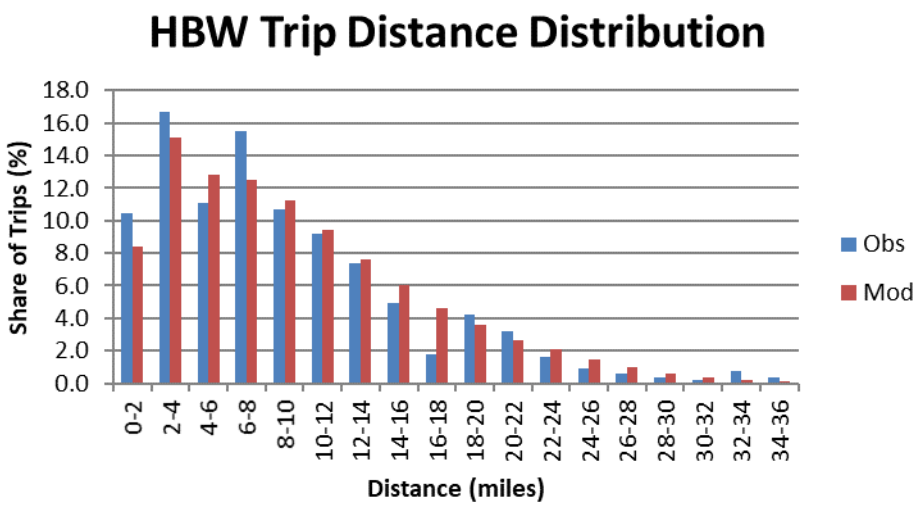


FIGURE 36: HOME-BASED SHOPPING TRIP DISTANCE DISTRIBUTIONS

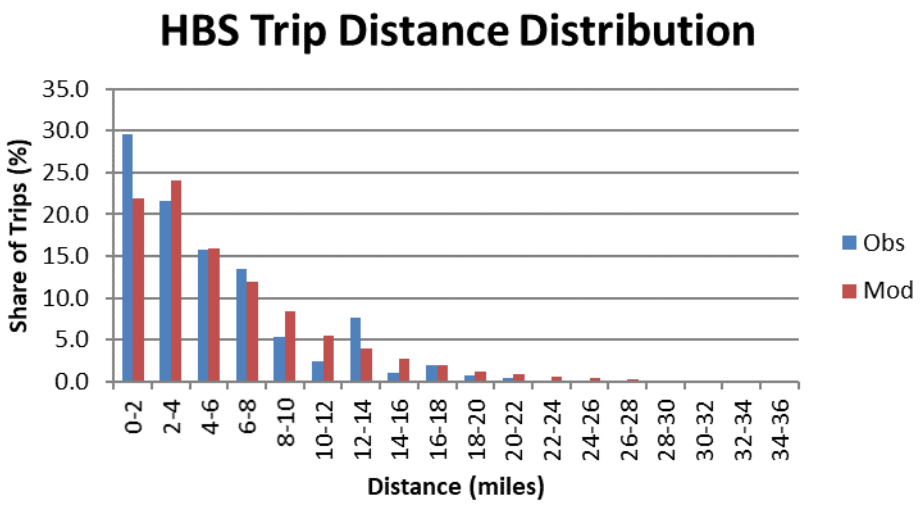


FIGURE 37: HOME-BASED OTHER TRIP DISTANCE DISTRIBUTIONS

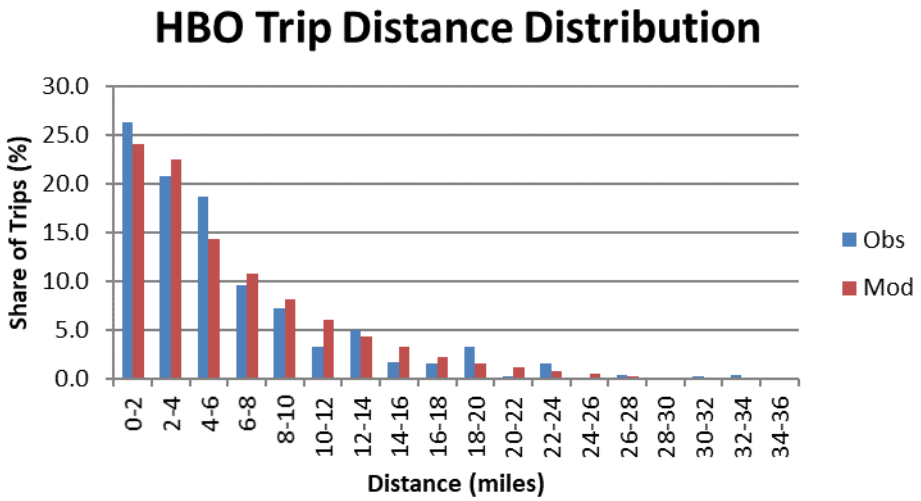


FIGURE 38: NON HOME-BASED TRIP DISTANCE DISTRIBUTIONS

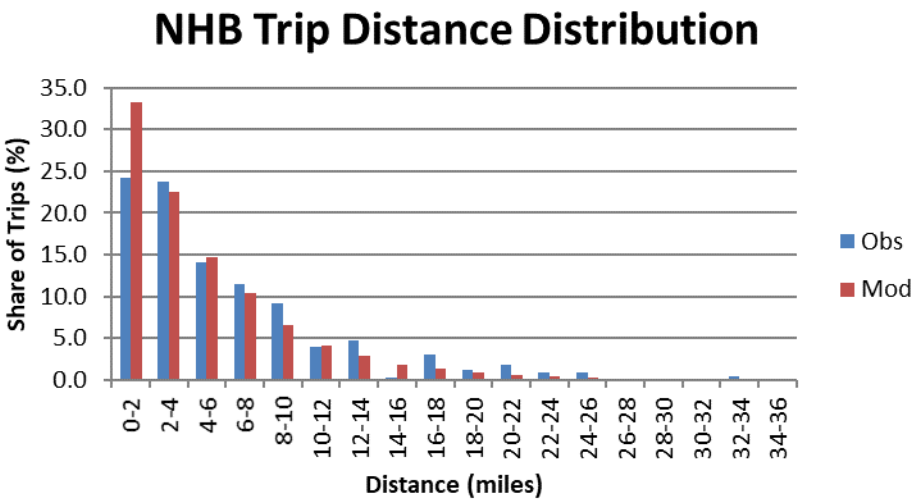


FIGURE 39: HOME-BASED WORK TRIP TIME DISTRIBUTIONS

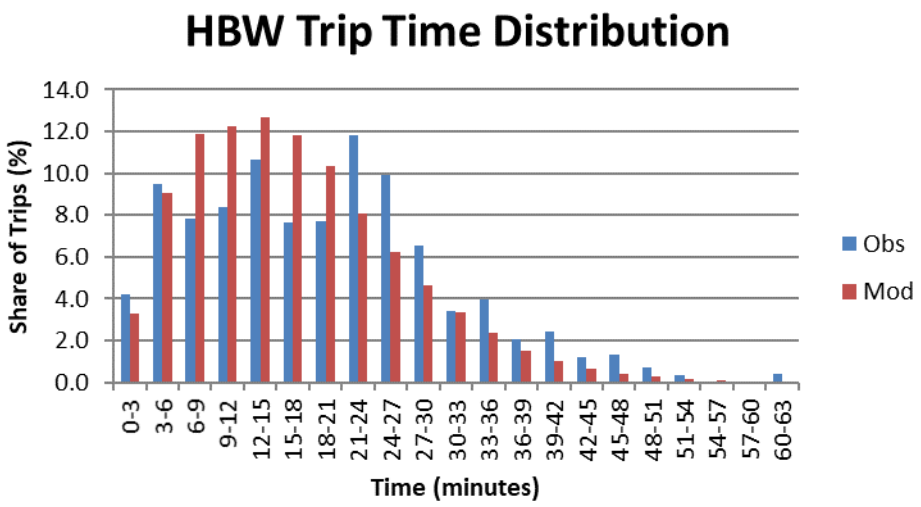


FIGURE 40: HOME-BASED SHOPPING TRIP TIME DISTRIBUTIONS

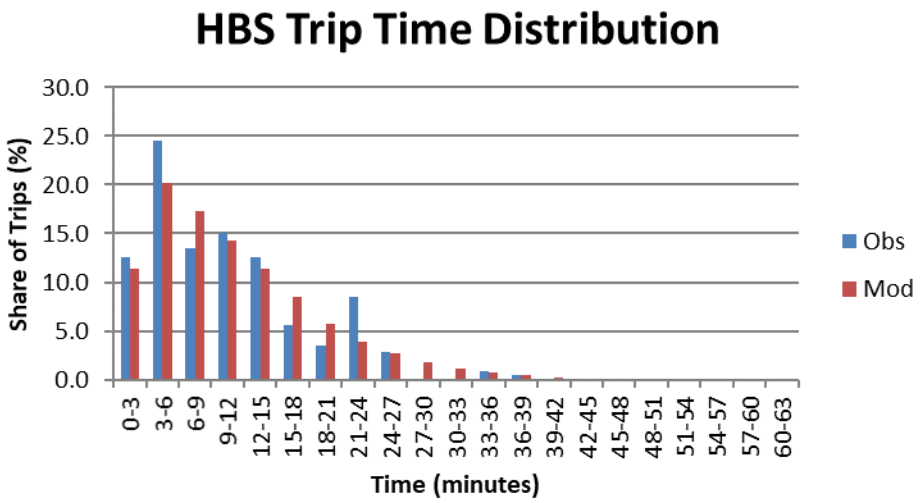


FIGURE 41: HOME-BASED OTHER TRIP TIME DISTRIBUTIONS

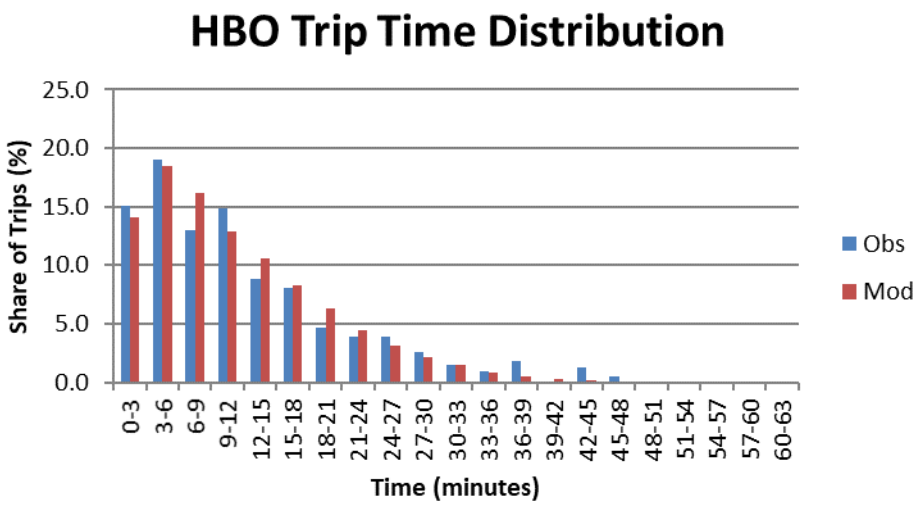
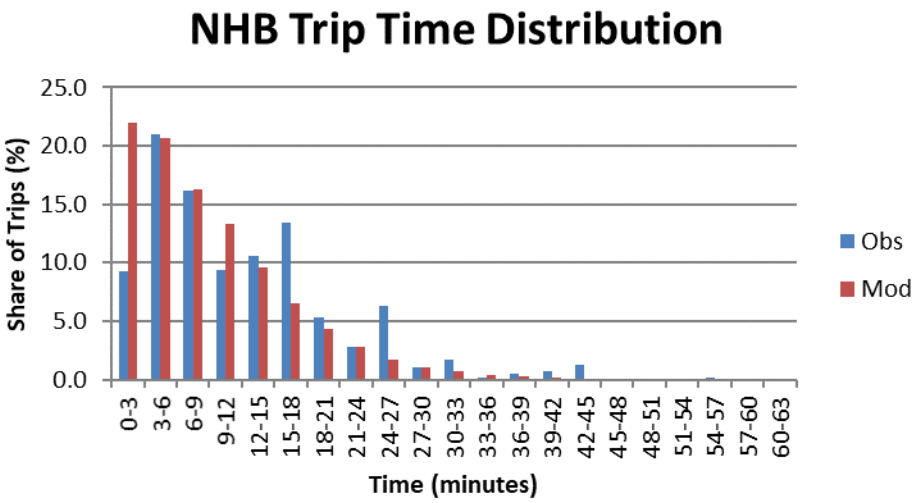


FIGURE 42: NON HOME-BASED TRIP TIME DISTRIBUTIONS



15.3 | MODE CHOICE

Transit demand was compared with observed data – ridership counts by time of day – to confirm that the mode choice model was producing reasonable results. While the model choice model parameters are not estimated statistically using survey data, the comparison shown in Table 37 confirms that the asserted model produces results that match closely to daily transit boardings.

TABLE 37: COMPARISON OF MODEL AND OBSERVED TRANSIT BOARDINGS

	MODEL	CENTRO
Daily Boardings	39,211	42,000

15.4 | ASSIGNMENT

The FHWA has developed recommendations for calibration standards. The following sections detail the calculation of the various statistics used to measure calibration. Individual link errors were calculated by subtracting the model link volume from the ground count for that link.

COEFFICIENT OF CORRELATION

The coefficient of correlation, "R", is commonly used to measure the strength and direction between two sets of variables. An R value of 1.0 would indicate a perfect one to one correlation between the two variables, an r value of zero would indicate a completely random correlation, and an R value of -1 would indicate a perfect inverse correlation. The value of R can be estimated using the following formula.

$$r = \frac{\sum(x \cdot y) - n \cdot \bar{x} \cdot \bar{y}}{\sqrt{\left(\sum(x^2) - n \cdot \bar{x}^2\right)\left(\sum(y^2) - n \cdot \bar{y}^2\right)}}$$

where:

x = Ground count

y = Calibration volume

n = Number of observations

FHWA recommends a minimum R-squared value of 0.88; the daily model has a correlation coefficient (R) of 0.94 which is equivalent to an R-squared of 0.88. Note, the most recent FHWA manual on calibration and validation has downplayed the importance of the Coefficient of Correlation (R-squared) metric. However, the statistic is included in this section of the model documentation because it continues to be a common industry measure.

> *"R-squared probably tells more about the coding of facility type and number of lanes than about how the model and assignment is performing. Thus, achieving a regional R-squared of 0.88, as has been suggested as a "standard" for determining a model's validity, has little if any meaning."*

ROOT MEAN SQUARED ERROR

The root mean squared error (RMSE) is an average link error that weights the larger volume errors in a network. It should be noted that the RMSE is always higher than the actual average network error because of the weighting scheme. RMSE is calculated as:

$$\text{RMSE} = \frac{\sqrt{\frac{\sum\left[(x-y)^2\right]}{n}}}{\frac{\sum x}{n}}$$

where:

x = Ground count

y = Calibration volume

n = Number of observations

The RMSE should generally be less than 40%; the daily model has an RMSE of 36.5%.

SUM OF DIFFERENCES

The sum of differences is the average error of the network. It is similar to FHWA's percent error region-wide threshold.

$$\text{SumDif} = \sum(y-x) \quad \text{or} \quad \frac{\sum(\text{y - x})}{n} \times 100\%$$

where:

x = Ground count

y = Calibration volume

n = Number of observations

The region-wide percent sum of differences for the daily model is -1.93%.

COMPARISON TO CALIBRATION THRESHOLDS

A comparison between the FHWA recommendations and the calibrated daily model is shown in Table 38. All measures of performance exceed thresholds published by the FHWA.

TABLE 38: FHWA ASSIGNMENT CALIBRATION THRESHOLDS

	FHWA	MODEL
Correlation Coefficient	0.88	0.94
Percent Error Region-Wide	+ / - 5%	-2.31%
Sum of Differences by Facility		
Freeways	+ / - 7%	4.93%
Principal Arterials	+ / - 10%	-0.74%
Minor Arterials	+ / - 15%	-10.13%
Collectors	+ / - 25%	-3.78%

Table 39 presents the assignment validation reports generated by the model for the all day (Daily), the AM Peak Hour and the PM Peak Hour. The tables show the correlation, percent error overall, and percent error by facility type.

TABLE 39: ASSIGNMENT VALIDATION

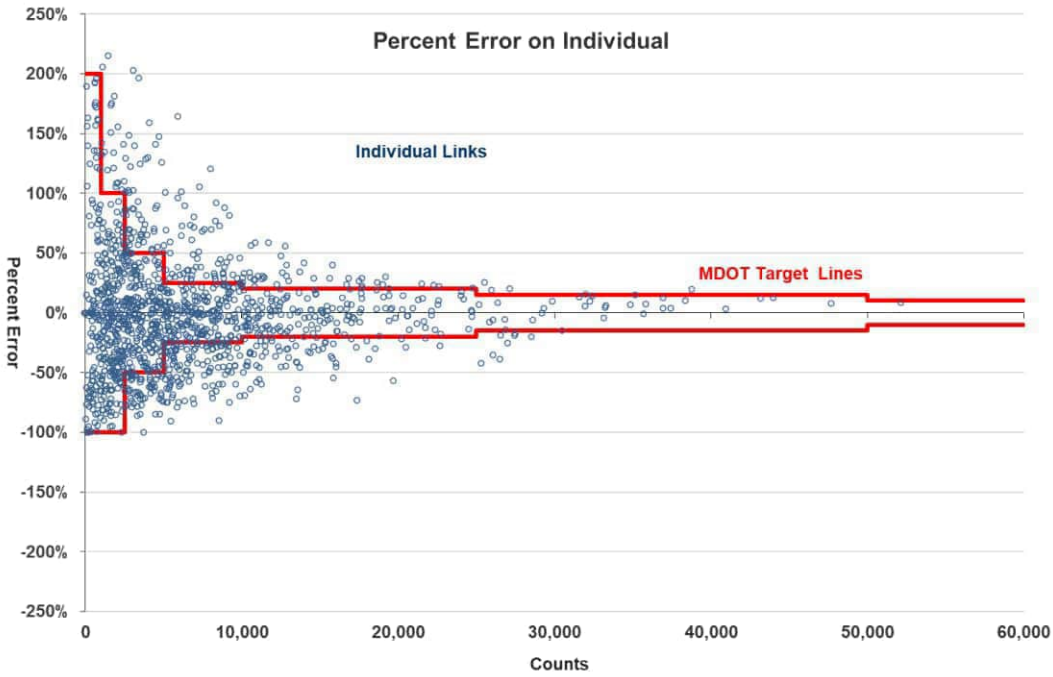
Calibration Statistics	FHWA Recommendations	Daily Model	AM Peak Hour Model	PM Peak Hour Model
Coefficient of Correlation {R}	0.880	0.942	0.930	0.927
Percent Error Region-Wide	+ / - 5%	-2.31%	2.20%	-1.04%
Sum of Differences				
Freeways	+ / - 7%	4.93%	1.62%	1.46%
Principal Arterials	+ / - 10%	-0.74%	6.72%	-1.49%
Minor Arterials	+ / - 15%	-10.13%	3.88%	-0.67%
Collectors	+ / - 25%	-3.78%	-3.34%	-5.08%

The Michigan Department of Transportation (MDOT) has developed error targets for comparing daily model and observed volumes for individual links. The MDOT error targets are presented in Table 40 and are displayed as the red lines in Figure 43. Outliers are expected and typically having a majority of the data points within the error boundary is deemed acceptable with more stringent criteria applied to the high volume links.

TABLE 40: MICHIGAN DOT VOLUME-BASED CALIBRATION STANDARDS

(Upper Bound) Link Volume	MDOT error
0	200%
1,000	100%
2,500	50%
5,000	25%
10,000	20%
25,000	15%
50,000	10%

FIGURE 43: COMPARISON OF INDIVIDUAL LINK LEVEL ERRORS USING MDOT CRITERIA



Scattergrams which plot the observed count on the x-axis versus the model volume on the y-axis are used to visually inspect the model fit to observed data. A 'perfect fit' is illustrated by the y=x line where the model volume is equal to the count volume on the link. Data points distant from the y=x line are cases where the model is not well-aligned with the observed count data. Again, as the link volumes increase, the model should do a better job matching existing counts on the high class facilities such as interstates and freeways. Figure 44, Figure 45, and Figure 46 show daily, AM and PM scattergrams respectively.

FIGURE 44: SCATTERGRAM SHOWING DAILY COUNTS VS. MODEL VOLUMES

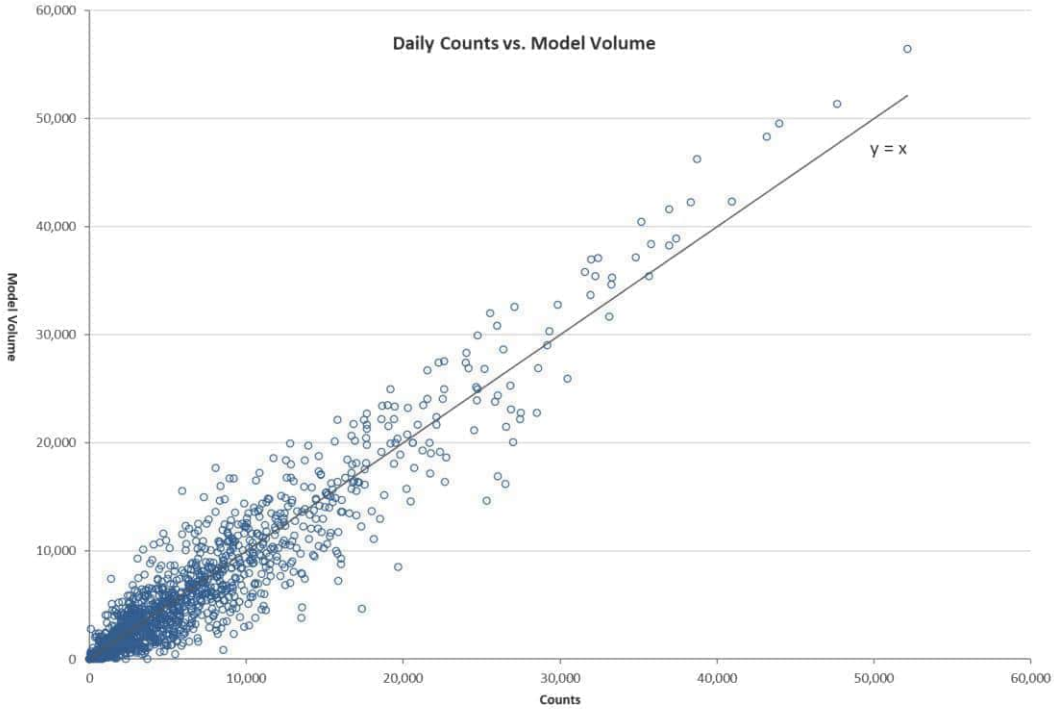


FIGURE 45: SCATTERGRAM SHOWING AM COUNTS VS. MODEL VOLUMES

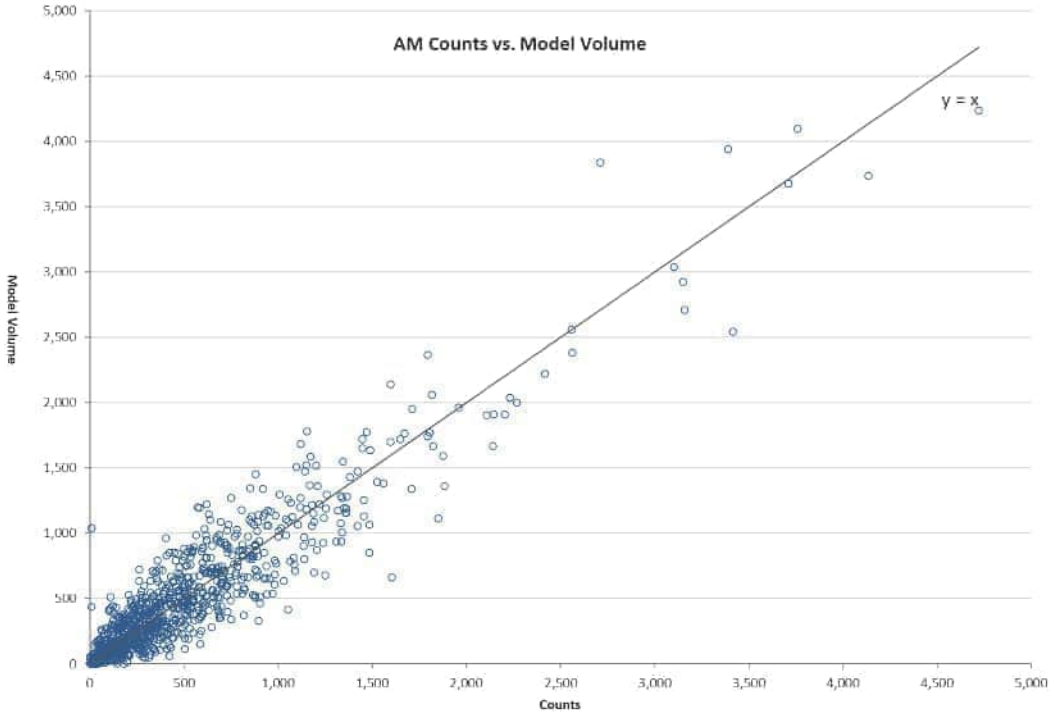


FIGURE 46: SCATTERGRAM SHOWING PM COUNTS VS. MODEL VOLUMES

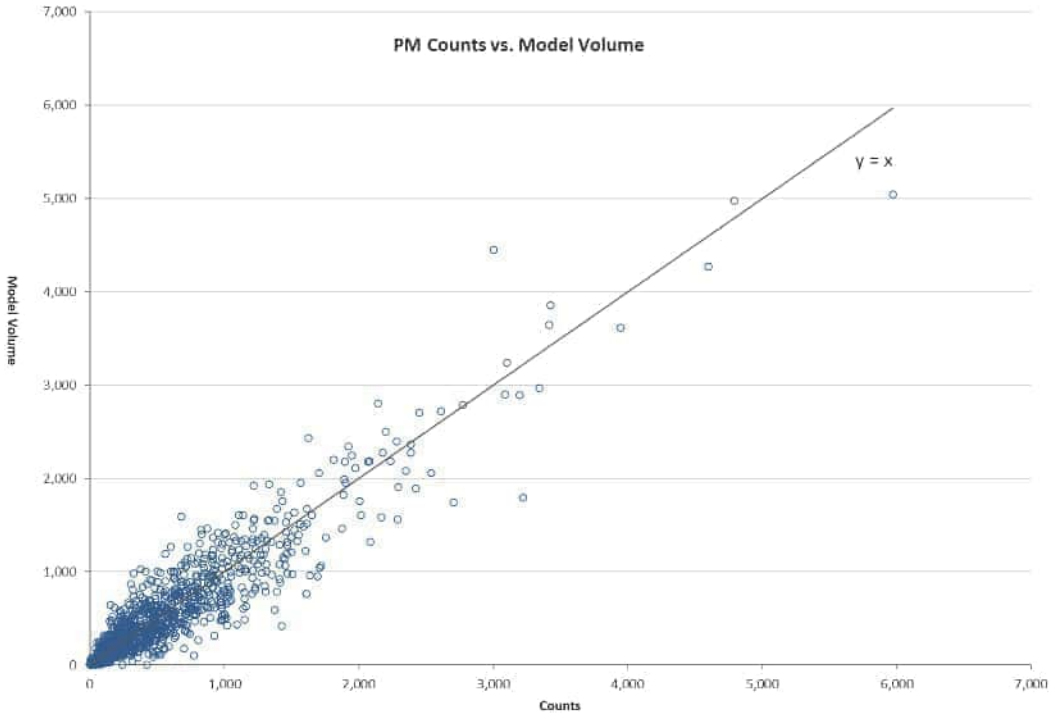


Figure 47 shows volume error (Model Volume – Observed Counts) and Figure 48 shows the same volume area with a focus on Syracuse proper.

FIGURE 47: VOLUME ERROR MODEL REGION

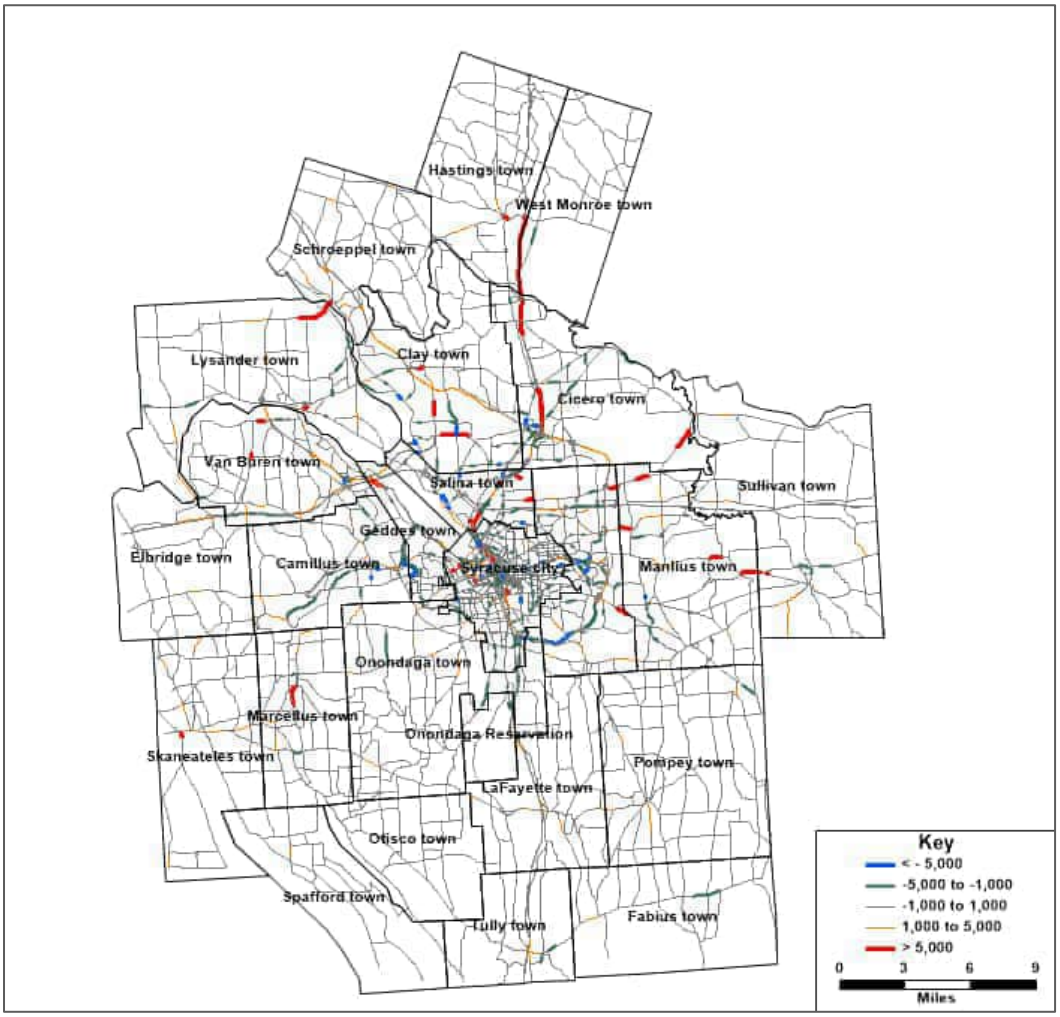
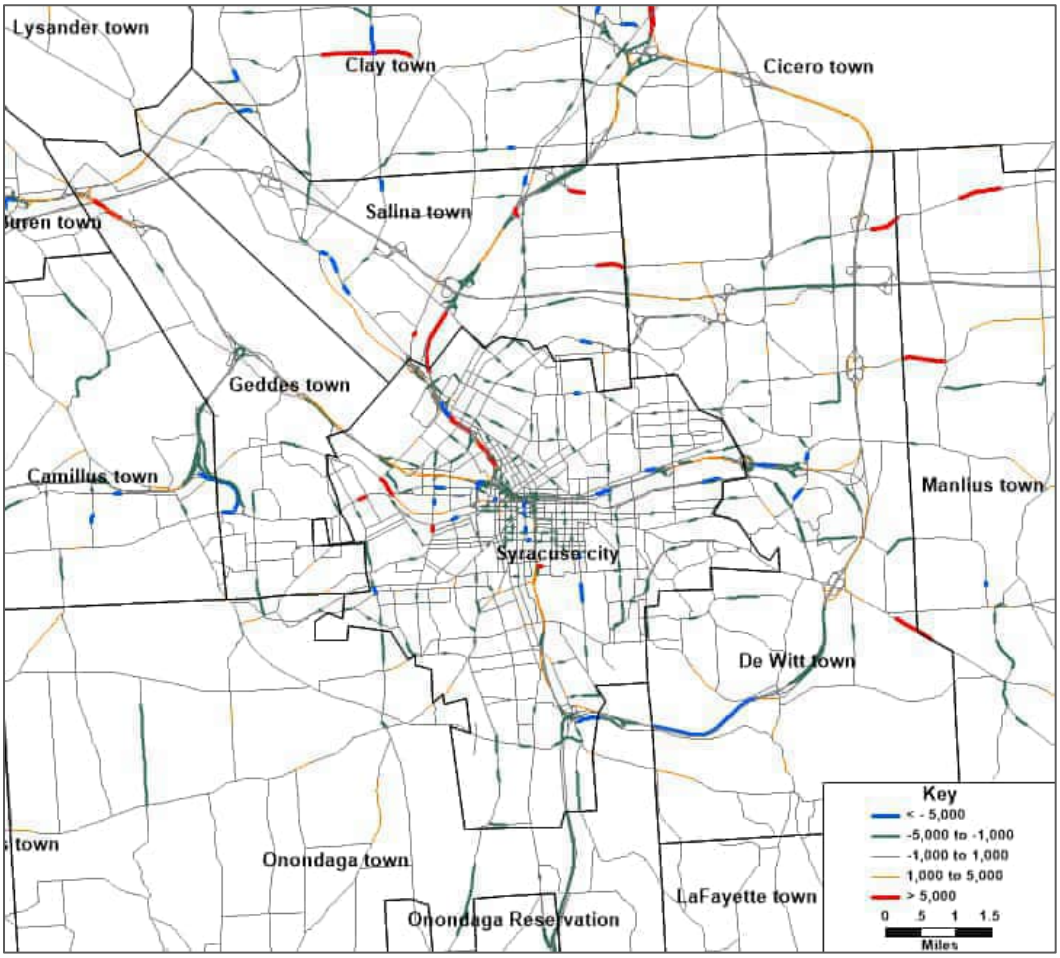


FIGURE 48: VOLUME ERROR SYRACUSE PROPER



16.0 MODEL CHANGES BY VERSION

This section of the report lists the changes that were made in this revision to the model. This section is a cumulative record of changes that have been made since SMTC Travel Demand Model, Version 3.00, which was documented in the SMTC Travel Demand Model Validation Report (December 2010)[7].

16.1 | SMTC TRAVEL DEMAND MODEL, VERSION 3.02 (NOVEMBER 2011)

The changes made in this revision to the model are:

As part of the I-81 Corridor Study, calibration adjustments were made to the model to better match traffic count data in the area around the I-81 viaduct in central Syracuse. Adjustments were made to some turn penalties and ramp penalties, through trip numbers on I-90, and parameters in the highway network skimming process. While the changes made insignificant differences on a regional level, they did improve the match with observed traffic patterns in the I-81 study area, and resolved a small number of anomalous locations close to I-81 that had been identified during model output reviews by the I-81 Corridor Study team.

16.2 | SMTC TRAVEL DEMAND MODEL, VERSION 3.023 (APRIL 2012)

The changes made in this revision to the model are:

Changes to the land-use data describing the number of households, the household population and the group quarters population in the City of Syracuse for both the base year (2007) and the future year (2035) to better reflect observed growth rates seen in the 2010 Census data for Syracuse, which was not available when the land-use inputs to model version 3.02 were developed. These changes are described in Section 3.2.6 of SMTC Travel Demand Model Version 3.023 Documentation.

16.3 | SMTC TRAVEL DEMAND MODEL, VERSION 4.04 (NOVEMBER 2014)

The changes made in this revision to the model are:

Expanded the model coverage north of the existing model coverage area into the towns of Schroeppel, Hastings, West Monroe, and a portion of Granby, and west of the existing model area into the town of Sullivan area.

Changes to the land-use data describing the number of households, the household population and the group quarters population in the City of Syracuse for both the base year (2014) and the future year (2050) to better reflect observed growth rates seen in the 2010 Census data for Syracuse, which was not available when the land-

[7] Note that the model version number used in this report was SMTC Travel Demand Model, Version 2.2; this was later revised to be SMTC Travel Demand Model, Version 3.00

use inputs to model version 3.02 were developed. These changes are described in the sections above.

Added interim model years 2020 and 2030.

Reviewed the existing transit system and updated it based on the latest information from CENTRO.

16.4 | SMTC TRAVEL DEMAND MODEL, VERSION 5.0 (JUNE 2020)

The changes made in this revision to the model are:

Updated model code to work in TransCAD version 7.

Updated base-year land use data based on more recent NY state employment data.

Updated future land-use distributions based on base-year revisions.

Increased the number of TAZs from 1,185 to 1,193.

Updated non-motorized mode-split.

Created a new Master Network tool.

Added interim model years 2030 and 2040.

Updated base-year validation to 2017 conditions.

17.0 MODEL INPUT FILES

This section lists the input files to the SMTC model.

17.1 | HIGHWAY NETWORK INPUTS

Model Network ("SMTC_Network_20**.dbd") – A geographic file that contains the structural detail and lists (most of) the link and node attributes of the highway network.

Link Type Lookup Table ("LTLTable.bin") – A binary table that contains some link data organized by facility and area type.

Node Type Lookup Table ("NTLTable.bin") – A binary table that contains some intersection data organized by node type.

Link Turn Prohibitions ("Link_Turn_Prohibitions.bin") – A binary table that lists all the link-to-link turn prohibitions and penalties.

Interfacility Turn Penalties ("FC_TurnProhibitions.bin") – A binary table that lists all the inter facility turn penalties.

Volume-Delay Function Parameters ("VDF_Param.bin") – A binary table that lists the volume-delay parameters by functional class.

17.2 | TRANSIT NETWORK INPUTS

Transit Stops Layer ("Stops.bin") – A binary table that lists the key stops and via points in transit network.

Transit Route Stops ("RouteStops.bin") – A binary table that lists each stop or via point visited by each route.

Transit Routes ("Routes.bin") – A binary table that lists each route in the transit network.

Transit Mode Table ("transitModeTable.bin") – A binary table that lists the argument to various network parameters by transit submode.

Headway table ("headwayTab.bin") – A binary table that lists the peak and off-peak headways by route.

17.3 | TRIP GENERATION INPUTS

TAZ Layer ("SMTC_TAZs_20**.dbd") – A geographic file that contains the structural detail of the TAZ layer.

Land Use table ("LandUse.bin") – A binary table that lists socio-economic inputs for each TAZ.

Special Gen ("SpecialGen_PA.bin") – A binary file that lists the productions and attractions by special generator.

IXXI Trips ("IXXI_ExternalTripEnds.bin") – A binary file that lists the productions and attractions by external TAZ.

IX Production percent ("IXProdPercentage.bin") – A binary file that lists the percent of internal productions by TAZ destined for externals.

IXXI_Truck Percent ("IXXI_Truck.bin") – A binary file that lists the IXXI truck percentages for each zone.

Production Rates ("ProdRates.bin") – A binary table that lists trip production rates by the joint distribution of trip purpose, household size, and number of vehicles.

17.4 | TRIP DISTRIBUTION INPUTS

XX Trip Distribution ("XXTrips.mtx") – A matrix that lists the number of daily external-to-external trips.

External Growth ("ExtTAZGR.bin") – A binary file that lists percent annual growth applied to future-year scenarios for external stations.

17.5 | DIURNAL DISTRIBUTION INPUTS

Diurnal Distribution ("hourlyLookupTable.bin") – A binary table that lists the distribution of trips by time of day.

17.6 | ASSIGNMENT INPUTS

Query File ("****.qry") – An optional query file that may be used in assignment.

17.7 | REPORTING INPUTS

Calibration report aggregations ("calrepinfo.bin") – A binary table that lists the functional class and geographic aggregation scheme to be used in reporting.

18.0 MODEL SCRIPTS

This section lists the scripts used to run the SMTC model. There are a total of 14 scripts. One script is responsible for declaring the other 13 scripts, which are used to execute different phases of the model.

MacrosLIST_SMTC.lst – Declares each of the scripts used in the model by specifying their paths.
Utility_SMTC.rsc – Contains general purpose utility macros.
GUI_SMTC.rsc – Controls the graphical user interface.
Globals_SMTC.rsc – Declares which variables are shared between scripts.
Defaults_SMTC.rsc - defines the output file paths
InitializeNetwork_SMTC.rsc – Initializes the highway network for a new model run.
PrepareSEData_SMTC.rsc – Prepares SE data for trip generation.
TripGeneration_SMTC.rsc – Executes the trip generation model
CreateNetwork_SMTC.rsc – Executes the highway network creation and skimming procedure
CreateTransitNetwork.rsc – Executes the transit route-building and skimming procedures
DistributionTimeSkim_SMTC.rsc – Executes time skims for distribution.
TripDistribution_SMTC.rsc – Executes the trip distribution model.
AutoTrips_SMTC.rsc – removes non-auto trips prior to assignment.
Assignment_SMTC.rsc – Executes peak period assignment.
TerminalTime_SMTC.rsc – converts terminal time bin file into matrix format.
ModeSplit_SMTC.rsc – Executes the mode choice model and converts auto person-trips to vehicle-trips
Diurnal_SMTC.rsc – Tabulates hourly, auto demand
FinalAssignment_SMTC.rsc – Executes the final iteration of highway assignment.
DAFeedback_SMTC.rsc – Test for model convergence
Calibration_SMTC.rsc – Prepares summary reports for model validation.
Reports_SMTC.rsc – Generates a number of model reports

19.0 MODEL OUTPUTS AND REPORTING

This section lists the commonly used outputs of the SMTC model.

19.1 | HIGHWAY NETWORK OUTPUTS

Highway Network File ("network.net") – A network file that contains all the compiled data for the highway network.

Model Network ("NetworkOut.dbd") – The data within the highway network (see section 17.1 |) is updated during model application.

19.2 | TRANSIT NETWORK OUTPUTS

Valid Transit Nodes ("PotentialTransitStops.dbd") – A geographic file that contains the set of valid highway nodes for which the transit stops are snapped to.

Route Stops ("Bus_RouteStops_Adj.bin") – A binary table that lists all stops visited by all routes, including those that were automatically added in the route-building process.

Transit Route System ("TransitRoutes.rts") – A geographic file that contains the structural detail and lists stop and route attributions of the transit network.

Transit Network File ("transitnetwork.tnw") – A network file that contains all the compiled data for the transit network.

Transit Skim Matrices ("***.mtx") – A series of matrices (peak, off-peak) that list the skimmed transit attributes between valid TAZ pairs.

19.3 | TRIP GENERATION OUTPUTS

Trip Productions Table ("ProductionTrips.bin") – A binary table that lists the number of productions by TAZ by trip purpose.

Attraction Trips Table ("AttractionTrips.bin") – A binary table that lists the number of attractions by TAZ by trip purpose.

IXXI Passenger Table ("IXXI_Passenger.bin") – A binary table that lists the IX productions and XI attractions by TAZ.

19.4 | TRIP DISTRIBUTION OUTPUTS

Distribution Matrix ("****.mtx") – Matrix files that lists the productions and attractions and distribution metrics by trip purpose for TAZ pair.

19.5 | MODE CHOICE OUTPUTS

Mode Choice Probability Matrices ("***Prob.mtx") – A series of matrices that list mode choice probabilities.

Mode Choice Trip Matrices ("***TripsOut.mtx") – A series of matrices that list person-trips by mode.

19.6 | DIURNAL DISTRIBUTION OUTPUTS

Hourly, Auto Origin-to-Destination Matrix ("odVehicleTripByHour.mtx") – A matrix that lists the number of origin-to-destination auto trips by trip purpose and hour.

Auto Origin-to-Destination Matrix ("allODTripsByHour.mtx) – A matrix that lists the number of origin-to-destination auto trips by trip purpose and period.

19.7 | HIGHWAY ASSIGNMENT OUTPUTS

Highway Assignment Table ("flowTable xx.bin") – A series of binary tables (by hour) that list the assignment results by network link.

Final assignment table ("finalAssignmentTable.bin") – A table that lists assignment results for all hours by link

Assigned trip matrices ("****Trips.mtx") – A series of matrices containing the assigned auto, bus, and rail (placeholder) trips by between each TAZ pair.

Highway Congested Travel Times ("***CongTTSkim.mtx") – A series of matrices that list the congested travel times between each TAZ pair.

19.8 | TRANSIT ASSIGNMENT OUTPUTS

Transit Flow Table ("buFlowTable) – A binary table that list the transit volume along each route segment.

Transit Boardings Table ("busOnOff.bin") – A binary table that lists the transit boardings and alightings at each stop for each route.

19.9 | REPORTS

Summary report visualizer ("Reports_****.xlsm") – A macro-enabled excel file that collects data from co-located model-generated reports and summarizes in an excel format.

- Trip statistics
- Daily and peak hour calibration statistics
- Mode choice summary
- Trip length distance and time distribution summaries

20.0 GLOSSARY

Accessibility: measure describing the ease with which travelers can reach activities and/or destinations.

Accuracy: degree of conformity of a measure to a standard, known or true value

Aggregate: a collection of units into a single body or mass (in this case TAZs)

Attractions: the non-home end of any home-based trip or the destination of any non-home-based trips

Calibration: procedure used to estimate the various parameters and coefficients of a travel demand model so the results produced replicate known travel behavior for a base year

Computed Data: data that the model will automatically calculate at during a model run. No maintenance is needed by the analyst)

Delay: the difference between congested travel time and free-flow travel time

Free-flow travel time: travel time under free-flow conditions typically calculated as the distance divided by the posted speed limit

Friction Factors: represent the reluctance of persons to make trips of various duration or distances. The general friction factor indicates that as travel times increase, travelers are increasingly less likely to make trips of such lengths. Calibration of the gravity model involves adjusting the friction factor

Gravity Model: a mathematical model of trip destination based on the premise that trips produced in any given area will distribute themselves in accordance with the accessibility of other areas and the attractions those areas offer

HOV2: 2-person high occupant vehicle

HOV3+: 3+person high occupant vehicle

Immutable Data: data that should never be edited by the analyst. The immutable status is typically reserved for identification fields in tables .

Logit Choice Model: statistical procedure that describes choices made by people among a finite set of alternatives

Lookup Table Data: data that is automatically imported from another source, such as a text file. Although the model executes this import during a model run, the analyst typically needs to manage the lookup source (e.g. a binary file with link speeds and capacities)

Pivoting: process used to adjust raw model volumes by applying the difference between two scenarios to observed ground counts

Precision: strictly conforming to a pattern, standard or convention

Productions: the home end of a home-based trip and the origin end of non-home-based trip

Shortest path: the shortest path between two locations measured in terms of either distance, time or both distance and time

Skimming: the process of collecting all the shortest-path information for all zones in the travel model network. An automated process that typically uses commercially available transportation planning software such as TransCAD

Smart Growth: building urban, suburban and rural communities with housing and transportation choices near jobs, shops and schools. This approach supports local economies and protects the environment.

SOV: single occupant vehicle

Transporation analysis zone (TAZ): geographical unit the region is broken down into for the purpose of collecting and analyzing land-use data. Model calculations are performed at this level of spatial disaggregation

Transit Oriented Development (TOD) - is a mixed-use residential or commercial area designed to maximize access to public transport

Trip length frequency: a graphical distribution which shows the number of trips plotted by trip time

Value of time (VOT) - is the opportunity cost of the time that a traveler spends on his/her journey. In essence, this makes it the amount that a traveler would be willing to pay in order to save time, or the amount they would accept as compensation for lost time

Volume-delay function: a set of functions that calculate congested travel time base on the relationship between a road's volume and capacity

User-Maintained Data: data that the analyst is responsible for entering and maintaining

VMT: vehicle miles of travel (link volume multiplied by link distance summed for all links in the network)

VHT: vehicle hours of travel (link time multiplied by link volume summed for all links in the network)

The following is a list of projects that are documented in the SMTC LRTP (https://smtcmpo.org/publications/lrtp/) and included in the regional travel demand model when applicable. This information was collected in 2020 as part of our LRTP update process. Limited information was available for most of these projects and general assumptions were made to include them in the model. The changes made in the model for these projects are a proxy for creating or constraining capacity. Please note that the current SMTC TDM does not include the planned changes for the NYSDOT I-81 project (community street grid alternative) in any of its future years. The following list includes projects that may no longer be valid based on the I-81 project and other recent project updates by member agencies. Coordination with the identified agencies is recommended for more detail.

Short-Term Projects (2030) – Included in Regional Travel Demand Model

NYSDOT

- **Route 370 at John Glenn Blvd intersection improvements**
  - Install additional thru lane on Route 370 NB, right turn lane Route 370 SB, right turn lane John Glenn WB, left turn lane John Glenn EB.

- **Onondaga Lake Parkway safety improvements**
  - Onondaga Lake Parkway from 4 lanes to 2 lanes from Ska Center to I-81
  - Reduce speed on same section from 55 to 45mph
  - Add left turn lakes on Old Liverpool Road at Electronics Parkway

- **Reconstruct Rt 11 at Rt 49 intersection**
  - Basic single lane roundabout assumed

- **31 at Thompson Rd and South Bay Rd intersection improvements**
  - Basic single lane roundabouts assumed at both intersections

- **Route 481 NB Off-Ramp at Circle Drive**
  - Install a designated right turn lane (300'), and longer left turn lane (1000') for the Route 481 off ramp approach.
  - Install an additional 400' right turn lane for the westbound Circle Drive approach at its intersection with Route 11. This would create a signalized dual right turn lane at this intersection.

OCDOT

- **Caughdenoy Rd and NY 31 improvements**
  - Route 31 and Caughdenoy left turn lanes all approaches, right turn lanes N, W, E and signal.
  - Caughdenoy Road add second northbound lane to railroad tracks

- **Buckley Road from Hopkins Rd to Taft Rd Improvements**
  - Add new signal at Buckley and Dolshire including turn lanes from Buckley

City of Syracuse

- **N, S, E, W corridors interconnect expansion – signal coordination**
  - Project limits include James St from Teall Ave to City Line (9 intersections), S. Salina St from Taylor St to Dorwin Ave (16 intersections), Seneca Turnpike from S. Salina St to Valley Drive (2 intersections), E. Genesee St from Beech St to Carlton Rd (9 intersections), South Ave from W. Onondaga St to Glenwood Ave (8 intersections), Valley Drive from South Ave to West Seneca Turnpike.

Centro

- **Change in future peak and off-peak headways**
  - as shown in table below

Centro Average Headways - September 2019

						Estimated Headways		
		2015	2019	2019	2019	2030	2030	2030
Line Abbr	Line Name	Average Peak Headways	Average **AM Peak**	Average **Off-Peak**	Average **PM Peak**	Average **AM Peak**	Average **Off-Peak**	Average **PM Peak**
Sy 10	South Salina - Nedrow	10	8.6	27.7	13.3	8.6	15	13.3
Sy 16	North Salina - Buckley Rd	20	20	72	30	20	20	30
Sy 20/21/22/23/323	James Street	15	7.5	25.7	10	7.5	15	10
Sy 26	South Ave	15	20	36	30	20	15	30
Sy 30	Westcott - SU	40	30	72	30	30	72	30
Sy 36	Camillus	20	20	45	20	20	45	20
Sy 40/240/340	Drumlins - Nob Hill	15	12	27.7	13.3	12	15	13.3
Sy 46/Osw46	Liverpool - Route 57 / Oswego	50	15	60	40	15	60	40
Sy 48	Liverpool - Morgan	48	30	180	40	30	180	30
Sy 50	Destiny USA *	20	60	36	24	60	20	24
Sy 52	Court Street	15	15	32.7	20	15	32.7	20
Sy 54	Midland - Valley Drive	20	15	90	20	15	90	20
Sy 58	Park Hill	20	20	120	30	20	120	30
Sy 62	Manlius	30	20	120	30	20	120	30
Sy 64	Western Lights & Grand Avenue	25	15	40	20	15	15	20
Sy 68	East Fayette - Erie Blvd	25	20	36	30	20	15	30
Sy 72	Townsend - East Colvin	20	30	180	40	30	180	40
Sy 74	Solvay	25	15	60	17.1	15	60	17.1
Sy 76	Salt Springs	30	20	45	24	20	45	24
Sy 80	Grant Blvd	40	20	90	30	20	90	30
Sy 82	Baldwinsville	40	43	180	40	43	90	40
Sy 84	Mattydale	30	20	90	30	20	90	30
Sy 86	Henry Clay	40	43	180	60	43	180	60
Sy 88	North Syracuse - Central Square	30	15	120	20	15	120	20

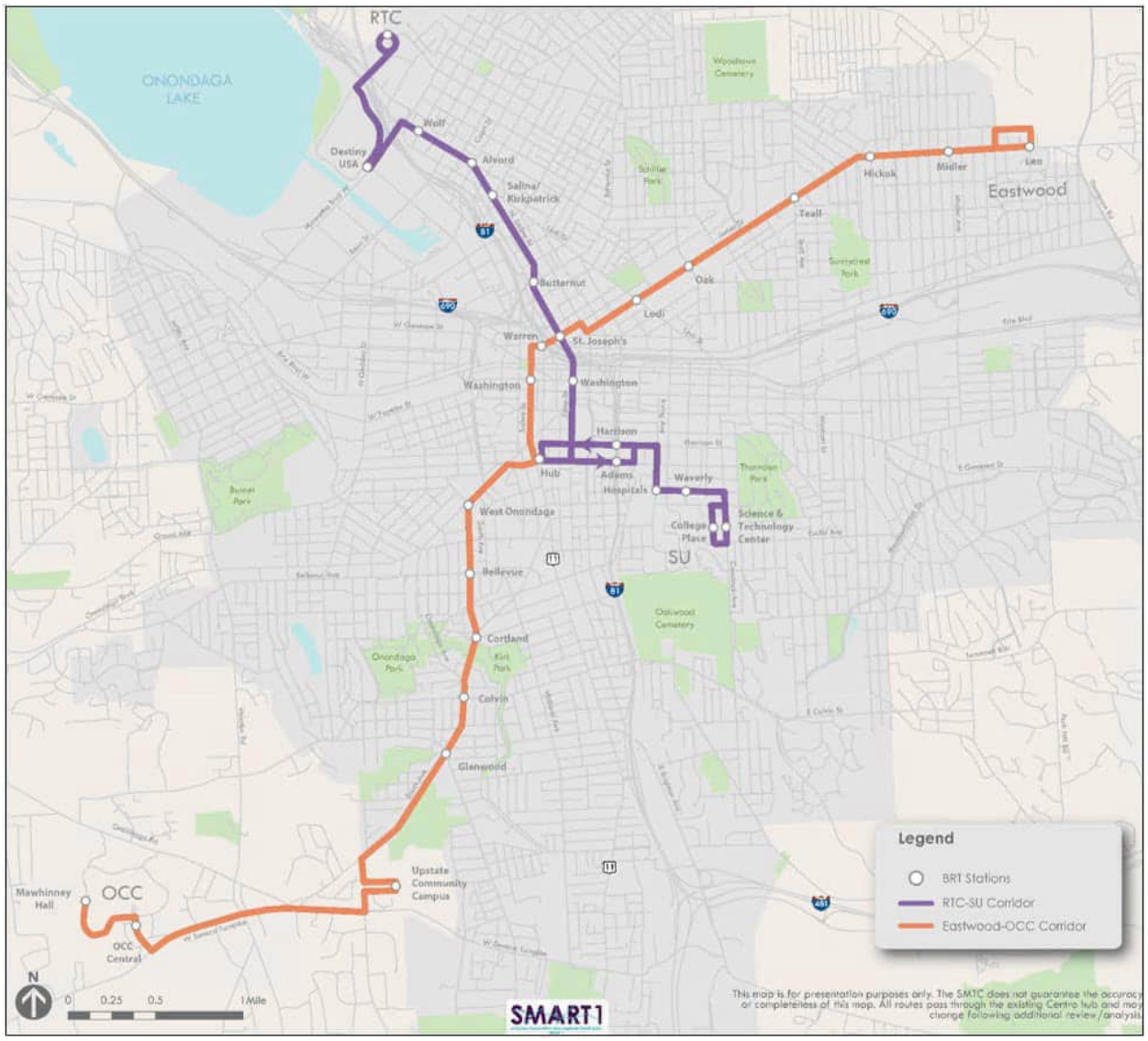
* Multiple lines go to Destiny USA during the AM peak.

  - * The AM headway to Destiny USA from all routes is approximately 15 minutes.

- **New express transit route along I81**
  - stops at the following Park-n-Ride facilities
    - I-81 & Taft Road
    - I-81 & I-481
    - I-81 & RT 31
    - I-81 & Bartel Road (in Brewerton)
    - I-81 & RT 49 (in Central Square)

- **New BRT routes with identified stops**
  - See map from SMART study below

- Added as additional bus service on these corridors
- The services have 10-minute headways



Mid-Term Projects (2040) - Included in Regional Travel Demand Model

NYSDOT

- **I-81 Interchange at Rt 31**
  - To improve capacity issues there will be a complete interchange replacement. The interchange will be upgraded from the current configuration to a cloverleaf interchange. Remove Crabtree access to Route 31. End Pardee at Cracker Barrel. Use Carmenica Drive as access from Pardee to Lakeshore.

- **Intersection improvements at NY 5 and NY 257**
  - Include basic intersection capacity improvements

OCDOT

- **Buckley Rd shared turn lane and Buckley at Bear intersection upgrades**
  - Addition of a shared turn lane along the entire length of Buckley Road (from Old Liverpool Road to Morgan Road) – not included in model. The intersection of Buckley/Bear will be expanded with the addition of EB left, EB thru and NB left turn lanes.

- **7th North Street at Buckley Rd intersection upgrades**
  - The intersection of Seventh North/Buckley will be upgraded with the addition of SB and EB lefts, and NB and SB thru lanes

City of Syracuse

- **James Street three lane cross section from State to Grant and Shotwell**
  - Change from 2 lanes each direction to 1 lane each direction. Center turn lane (not included in regional model), transition to left-turn only lanes at signalized intersections.

- **Conversion of downtown streets to 2-way**
  - Alternative 2b from study - https://smtcmpo.org/partner/downtown-syracuse-two-way-feasibility-technical-analysis/
  - Jefferson St
    - Montgomery to State – 1NB 1SB lane
  - Montgomery Street (North of Jefferson)
    - Erie to Water – 2NB 1SB lanes
    - Water to Washington – 1NB 1SB lane
    - Washington to Fayette – 2NB 1SB lanes
    - Fayette to Jefferson – 1NB 1SB lane
  - Montgomery Street (South of Jefferson)
    - Jefferson to Adams – 1NB 1SB lane
  - Warren Street
    - Willow to Washington – 1NB 1SB lane
  - Clinton Street
    - Herald to Water – 1NB 2SB lanes

        - Water to Washington – 1NB 3SB lanes
        - Washington to Fayette – 2NB 1SB lanes
        - Fayette to Dickerson – 1NB 1SB lane
        - Dickerson to Adams – 1NB 2SB lanes

- **Roundabout at James and Shotwell/Grant**
    - Roundabout

- **Water St closure**
    - Close Water St from to S. Crouse to S. Beech

Mid-Term Projects (2040) - NOT Included in Regional Travel Demand Model

The following projects were not included in the regional model because they could not be adequately represented in a meaningful way.

- **Rt 31 widening: center turn lane Morgan Rd to Rt 11**

- **Soule Road widening: center turn lane**

- **South Bay Rd: center turn lane Bear Road to Rt 31**

- **Henry Clay Blvd: center turn lane Wetzel Rd to Rt 31**

- **Kirkville Rd widening: center turn lane I-481 to Fremont Rd**

- **Commerce Blvd and Vine St intersection improvements and Vine St widening: center turn lane Thruway to Henry Clay Blvd**

Long-Term Projects (2050)

- **None identified**

MEMO

TO:	Jason Deshaies
FROM:	Ben Swanson; Colin Smith
DATE:	May 4, 2023
SUBJECT:	SMTC Travel Demand Modeling for Micron

On behalf of the Syracuse Metropolitan Council (SMTC), RSG has conducted a series of scenario model runs, using the SMTC Version 5.0 travel model, to assist ongoing analysis for the proposed Micron facility in Clay, NY.

The SMTC Version 5.0 travel model has a base-year of 2017. Future-year scenarios were previously developed for planning purposes to represent anticipated land-use and roadway conditions in 2030, 2040, and 2050. Each of these future-year scenarios were run with minor adjustments (removing previously assumed employment at the Micron site and previously assumed improvements at the SR-31 & Caughdenoy Road intersection) to serve as No Build reference scenarios.

The following model No Build scenario runs were included in this effort[1]:

1. 2017 No Build – Base-year model with no Micron investments.
2. 2030 No Build – includes 2030 regional employment projections and road network.
3. 2040 No Build – includes 2040 regional employment projections and road network.
4. 2050 No Build – includes 2050 regional employment projections and road network.

Micron Build scenarios were run by adding various levels of site employment, regional household growth, increased external trips to/from the site, and secondary household and employment growth to the established No Build scenarios. Build scenarios for various phases of site development were added onto No Build scenarios for the most appropriate No Build year available, rather than interpolating multiple new No Build scenarios for specific estimated development years.

The following model Build scenario runs were included in this effort:

1. 2025 Build – adds 2025 Micron land-use projections to 2030 No Build.

[1] All scenarios remove previously assumed general employment assumptions for the Micron site and previously assumed roadway improvements at the SR-31 & Caughdenoy Road intersection, which have been included in prior planning efforts for other projects.

2. 2030 Build – adds 2030 Micron land-use projections to 2030 No Build.
3. 2036 Build – adds 2036 Micron land-use projections to 2040 No Build.
4. 2041 Build – adds 2041 Micron land-use projections to 2040 No Build.
5. 2044 Build – adds 2044 Micron land-use projections to 2050 No Build.

Regional Land Use Assumptions

AKRF developed projections of Micron employee residence locations both within the modeled area and in nearby parts of Oswego, Madison, Cortland, and Cayuga counties outside of the model boundary.

For Micron workers and contractors with residence locations internal to the model, RSG added households to their residence zones that will produce additional trips and added employees to the Micron site that will attract work trips from residents, as indicated in the projections provided by AKRF.

For the remaining Micron employees and contractors projected to live outside the model area, additional internal-to-external (IX) and external-to-internal (XI) trips were needed to reflect travel by these individuals. By default, the model can generate IX and XI trips by balancing traffic counts at the external ends with either user-specified percentage of productions (for IX trips) or the sum of internal model attractions based on employment (for XI trips). RSG determined that simply adding employment to the Micron site and adjusting external counts to match the increase in external traffic would not reliably direct these trips to the Micron site without the need for significant modifications to trip distribution. RSG instead added the assumed work trips made by these external households to the Micron site as exogenous inputs in the form of new Micron externals matrices, by adding 2 trips per employee (XI for home to work and IX for work to home) to the trips matrix after trip distribution. These new Micron external trips were allocated to model external stations based on the total amount of external employment per cardinal direction (North, East, South, or West) provided by AKRF and proportionately to Base-Year 2017 external traffic levels at each station.

Additionally, AKRF provided estimates of secondary household growth at a zonal level, assumed to occur in response to increased economic activity created by the Micron development and their employees' households. These secondary-growth households were added to Build scenarios as presented by AKRF, and additional secondary employment was added to accompany these households by scaling No Build employment at the same rate as the increase in households projected by AKRF in each town.

Allocation of Workers across the Micron Site

The future Micron site is represented by 2 traffic analysis zones (TAZs) in the SMTC model (1111 and 1112). Workers were allocated to these zones based on the expected construction phasing.

SCENARIO YEAR	ZONE 1111 (WEST)	ZONE 1112 (EAST)
2025	**3/5** of construction jobs	**2/5** of construction jobs
2030	**3/5** of construction and all operations jobs	**2/5** of construction jobs
2036	**2/5** of construction jobs and **1/2** of operations jobs	**3/5** of construction jobs and **1/2** of operations jobs
2041	**2/5** of construction jobs and **1/3** of operations jobs	**3/5** of construction jobs and **2/3** of operations jobs
2044	**1/4** of operations jobs	**3/4** of operations jobs

For employees residing internally, these jobs were added to the Micron zones as specified above. For employees residing externally, the internal ends of the added IX/XI trips were allocated as shown above while the external ends were allocated to model externals as described above.

Future Year Road Networks

The future year road networks are based on a master network design such that individual road projects may be included or excluded by the user. The following road projects were included in the future network scenarios:

SCENARIO YEAR	INCLUDED PROJECTS
2017	*Base network with no projects*
2030	- Route 370 at John Glenn Blvd intersection improvements - Onondaga Lake Parkway safety improvements - Reconstruct Rt 11 at Rt 49 intersection - NY 31 at Thompson Rd and South Bay Rd intersection improvements - Route 481 NB Off-Ramp at Circle Drive

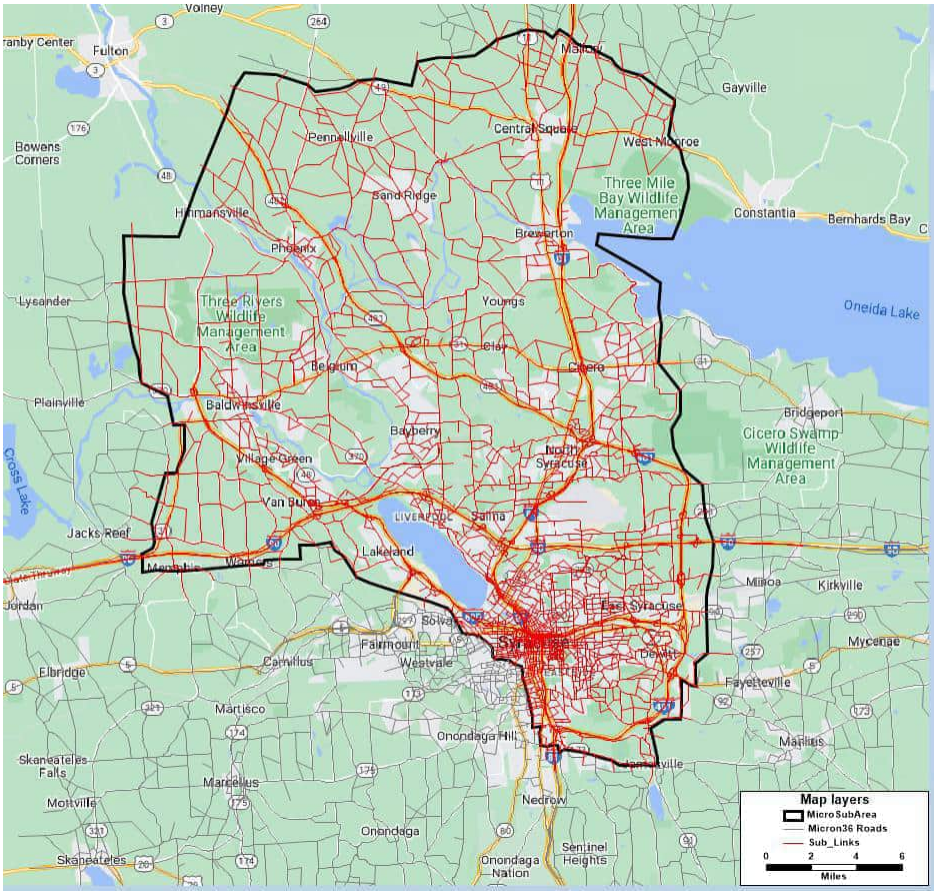
	- Buckley Road from Hopkins Rd to Taft Rd Improvements - N, S, E, W corridors interconnect expansion - For Build runs, additional centroid connectors were added to the Micron site for the Caughdenoy Rd service entrance and Rt 11 access
2040	*Items listed above plus:* - I-81 Interchange at Rt 31 - Intersection improvements at NY 5 and NY 257 - Buckley Rd shared turn lane and Buckley at Bear intersection upgrades - 7th North Street at Buckley Rd intersection upgrades - James Street three lane cross section from State to Grant and Shotwell - Conversion of downtown streets to 2-way - Roundabout at James and Shotwell/Grant - Water St closure - For Build runs, additional centroid connectors were added to the Micron site for Rt 31 east access
2050	*All projects listed above*

While previous modelling efforts for long-range planning have included an assumed intersection improvement at the SR-31 & Caughdenoy Road, this project was not included in any analysis scenarios at the request of the project team.

Subarea Analysis

RSG conducted subarea analyses on all scenario runs to assist in translating regional model outputs to the dimensions of a smaller Visum model currently in development by WSP. Figure 1 presents the subarea provided by WSP for this analysis and the resulting selection set of model roadways created by the subarea analysis.

FIGURE 1: SUBAREA SELECTION MAP



Subarea analyses were conducted using the TransCAD Multi-Modal Multi-Class Subarea Analysis module for the AM (7:00-8:00) and PM (17:00-18:00) peak hours.

Peak hour demand from the hourAutoTrips.mtx model output assigned to the output network using the output scenario networks and .net files for the subarea analysis. Because the subarea analysis module in TransCAD does not support the Israel Institute of Transportation Planning and Research (IITPR) volume delay function implemented in the SMTC travel model, the precise model assignment for each scenario could not be recreated within the subarea analysis. Instead, following exploratory analysis to best match the model assignment, the AM or PM congested travel times were used as input to the Bureau of Public Roads (BPR) volume delay function within the subarea analysis model along with model link capacities and default parameters for alpha and beta values.

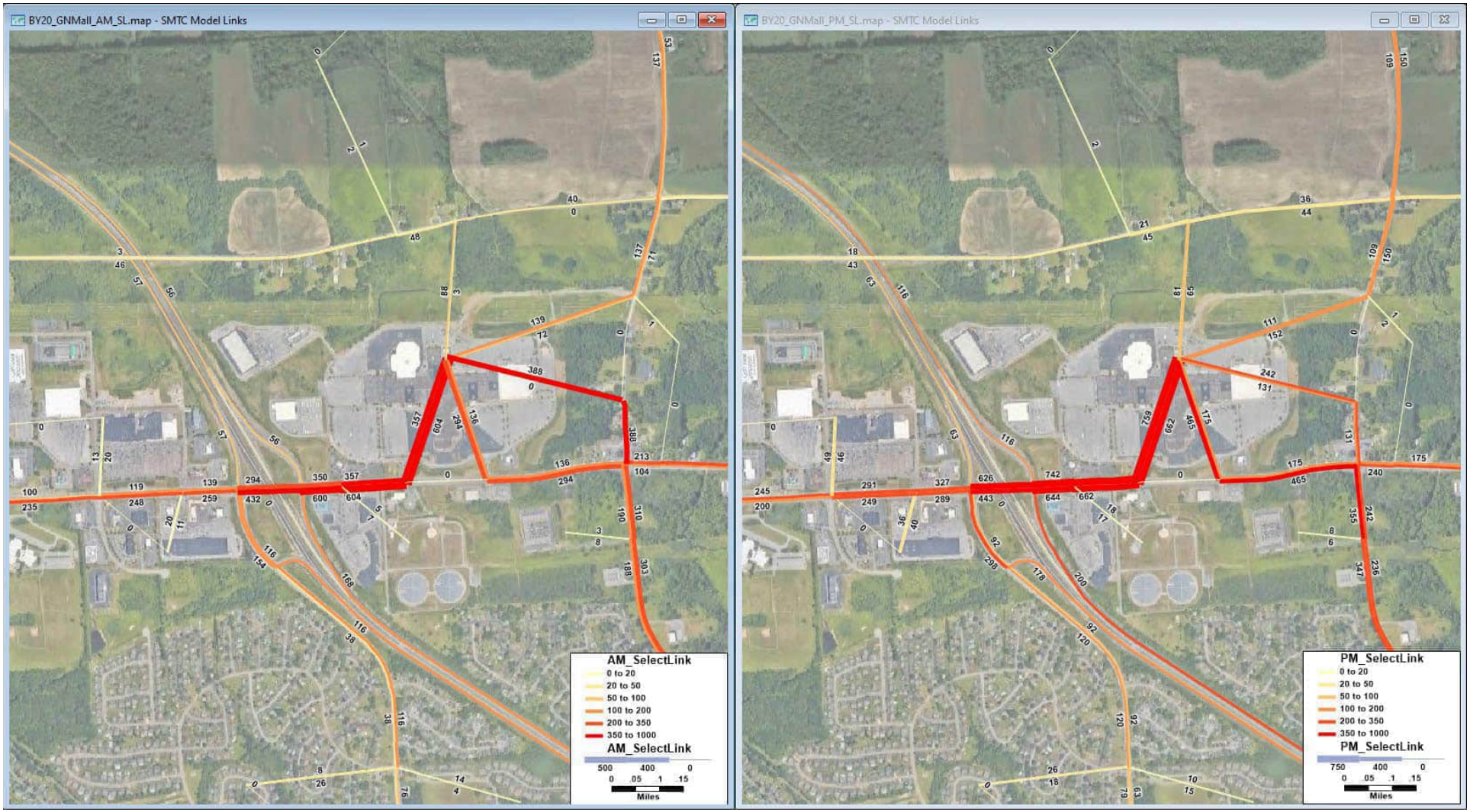
Analysis Outputs

The following output files are provided for each scenario run:

- The hourly assignment matrices from the full model run (*hourAutoTrips_<scenarioYY>.mtx*)
- AM peak hour subarea OD matrix (*AM_MMA_Subarea OD.mtx*)

- AM peak hour assigned subarea link flows (*AM_MMA_LinkFlows.bin*)
- PM peak hour subarea OD matrix (*PM_MMA_Subarea OD.mtx*)
- PM peak hour assigned subarea link flows (*PM_MMA_LinkFlows.bin*)
- Subarea network export (*<scenario>_<YY>_subarea_links.dbd*)
    - Includes network link and node ids to accompany subarea OD outputs
    - Includes original model scenario network attributes and assignment results for reference

Figure 1A: Local View Select Link Analysis - 2020 Base + GN Mall Redevelopment

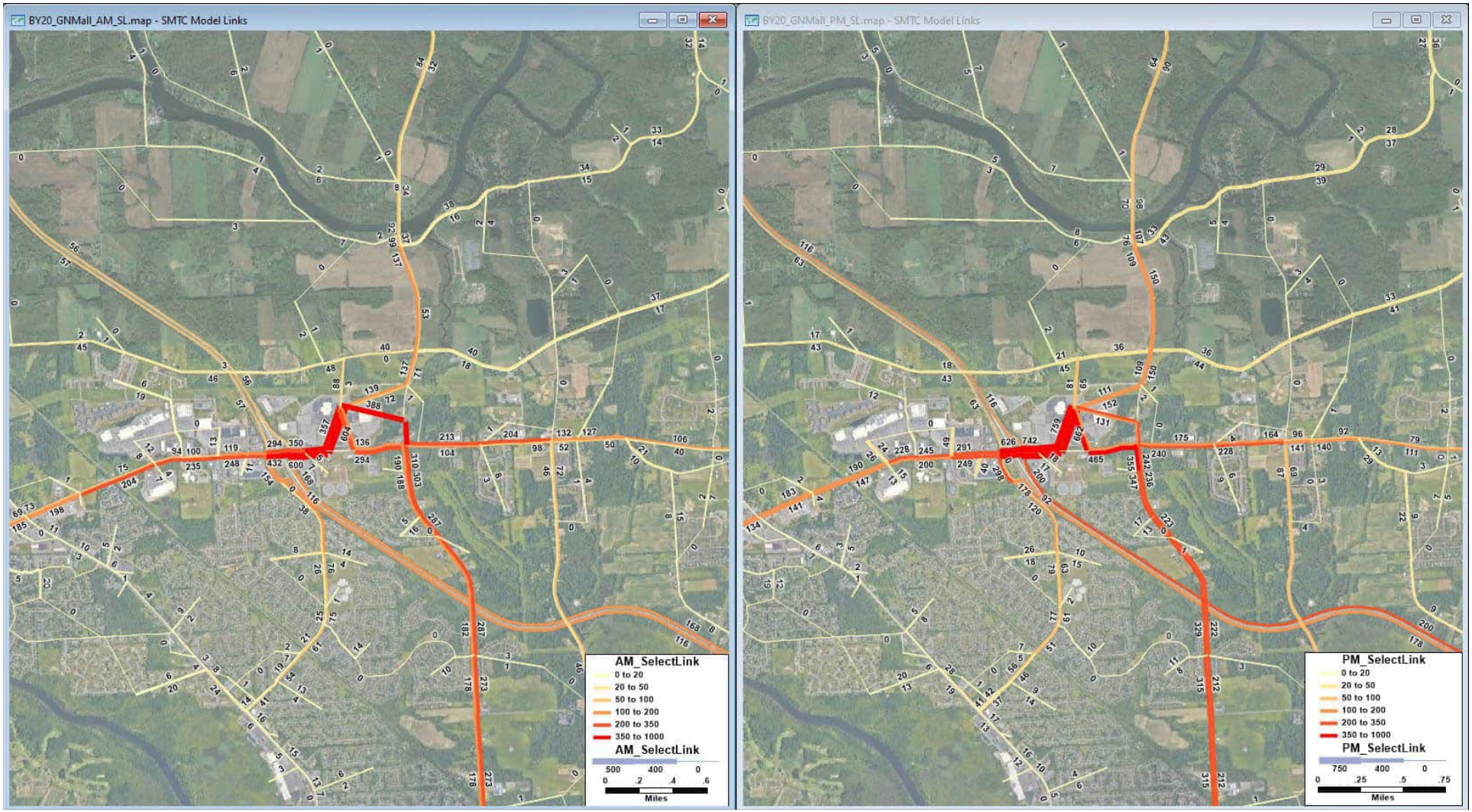


AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 1B: Neighborhood View Select Link Analysis - 2020 Base + GN Mall Redevelopment

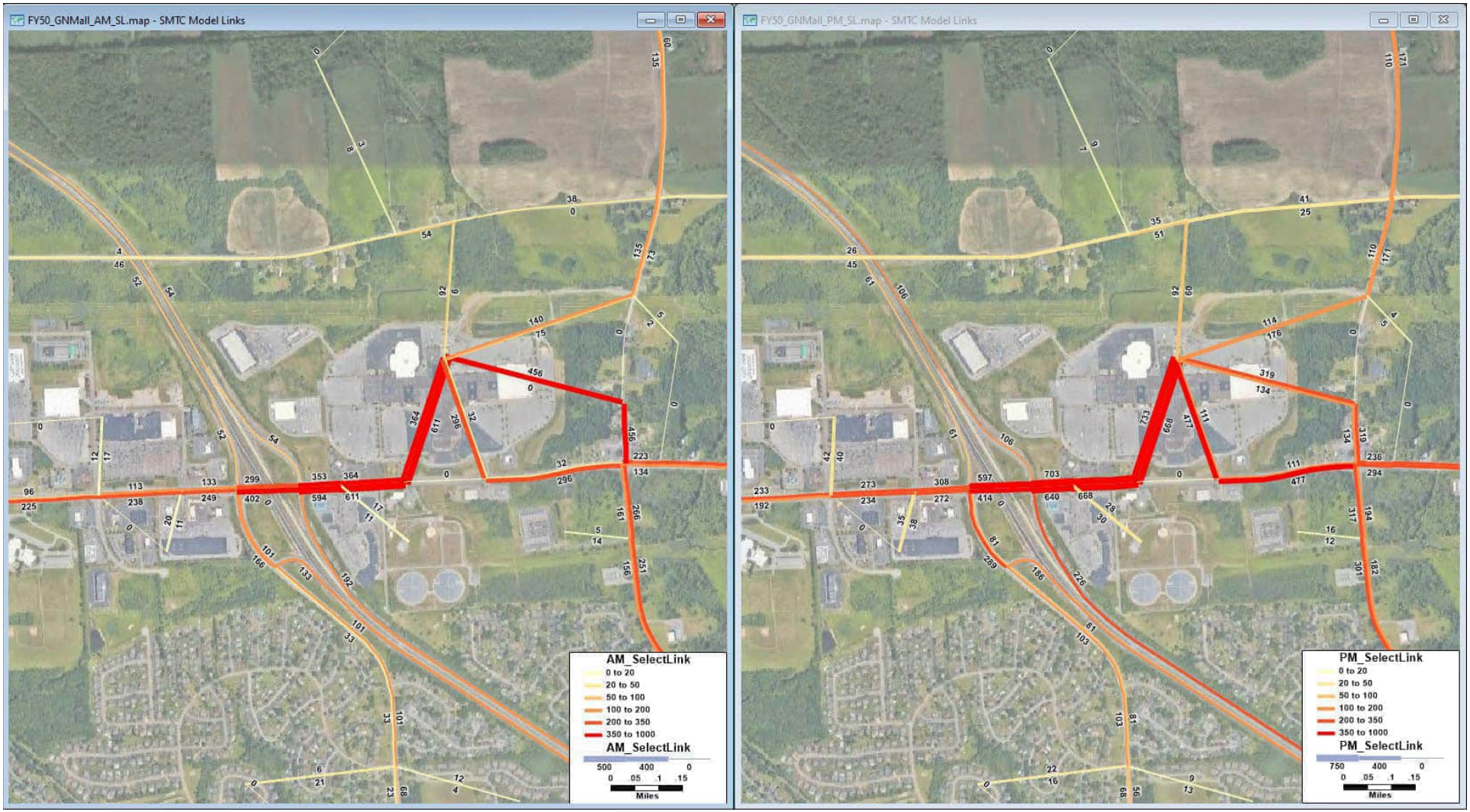


AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 2A: Local View Select Link Analysis - 2050 Future + GN Mall Redevelopment

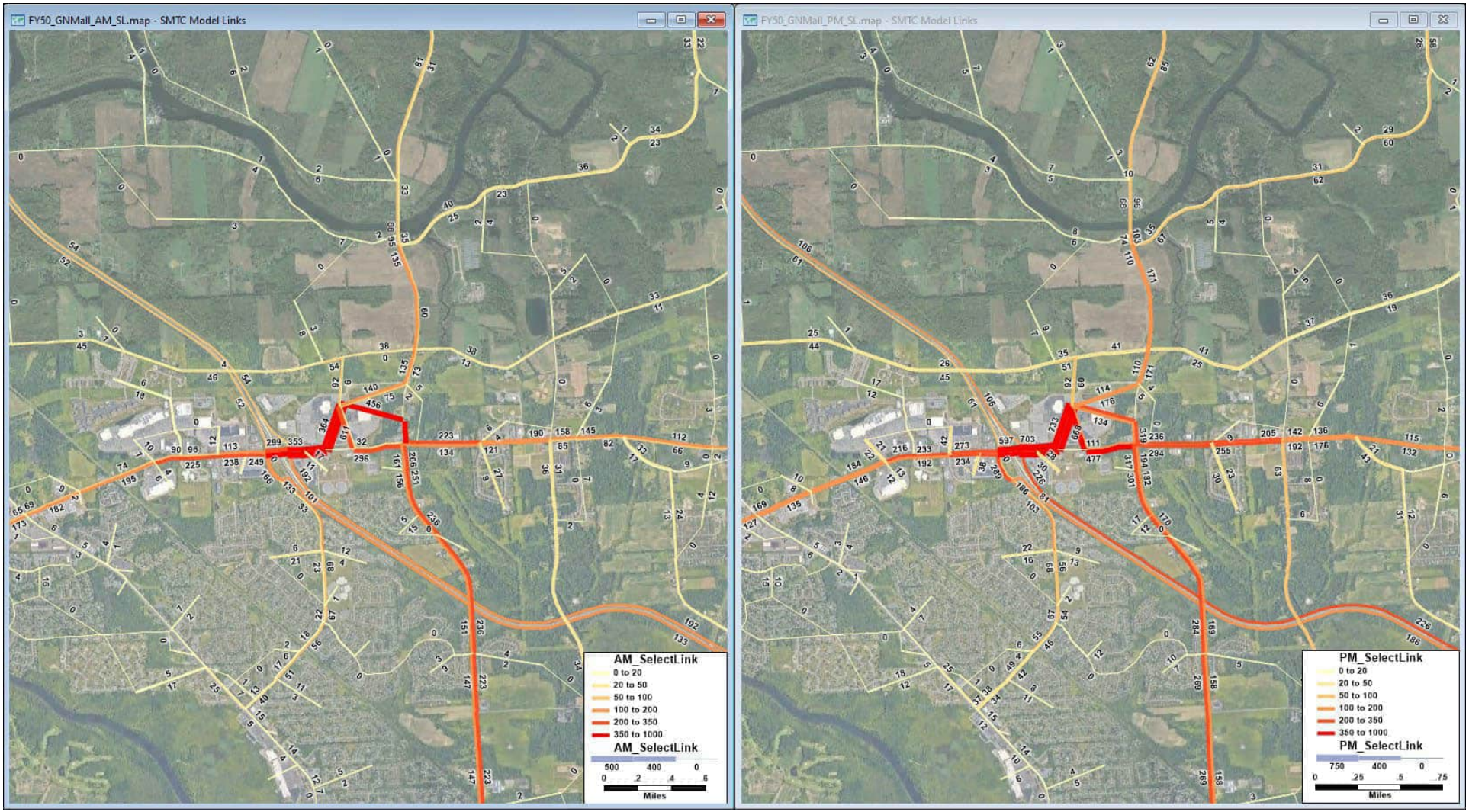


AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 2B: Neighborhood View Select Link Analysis - 2050 Future + GN Mall Redevelopment

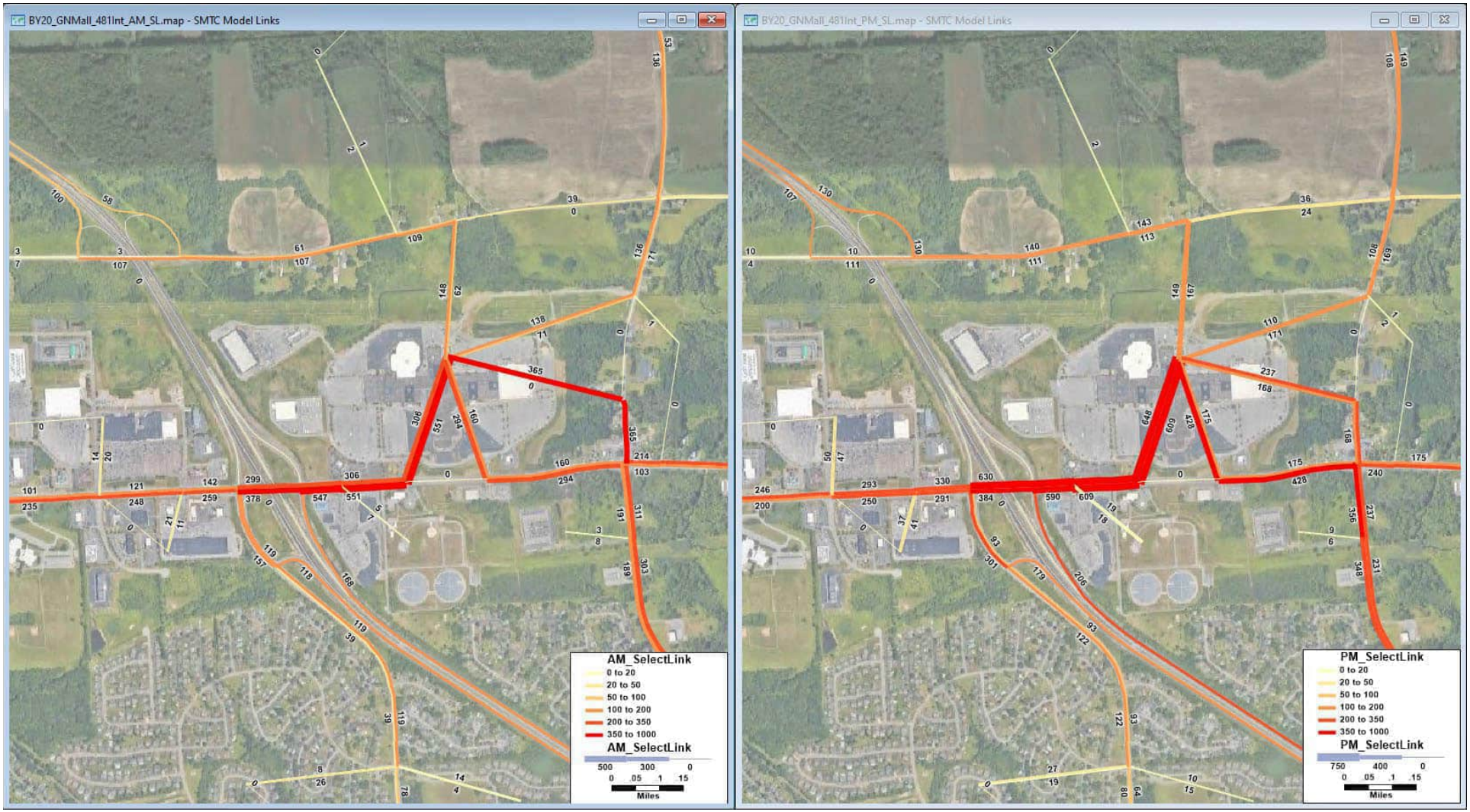


AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 3A: Local View Select Link Analysis - 2020 Base + GN Mall Redevelopment + Interchange at Verplank

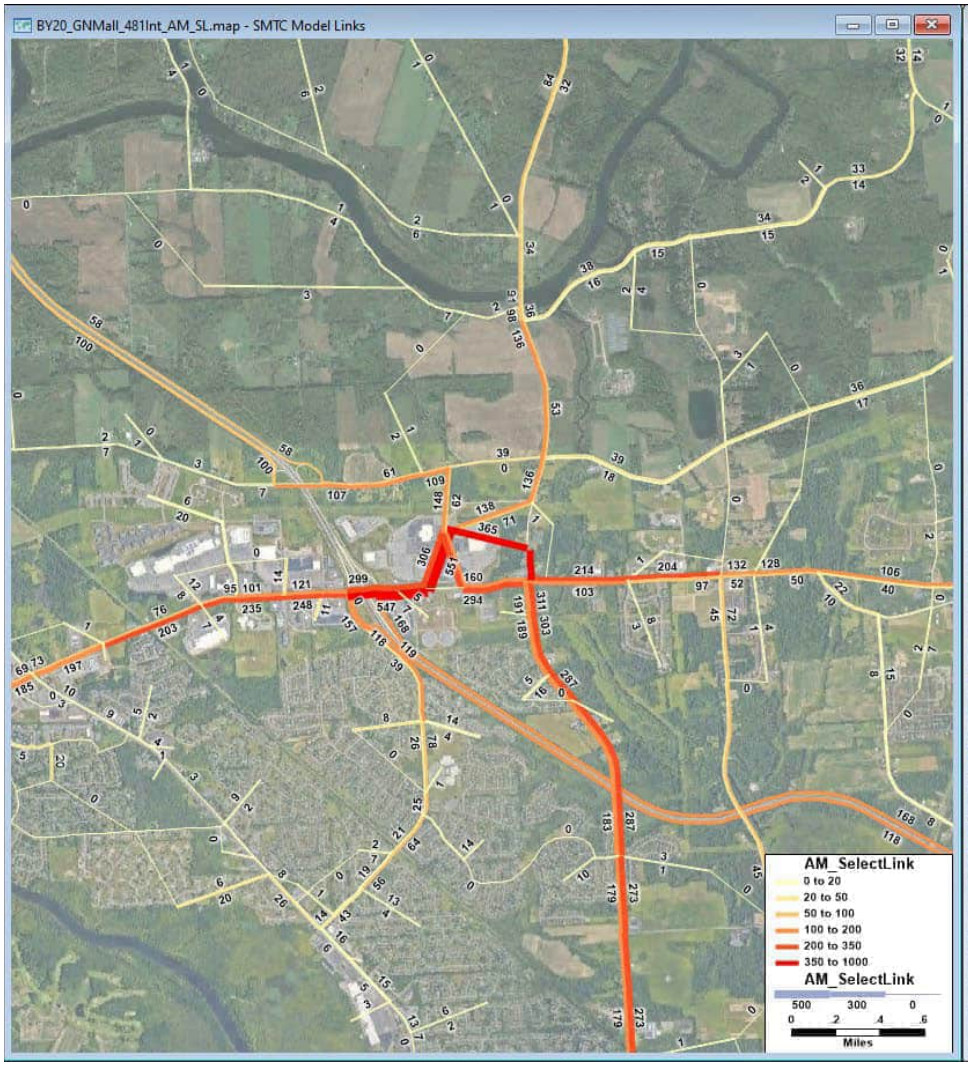


AM Peak Hour Volumes (7am-8am)

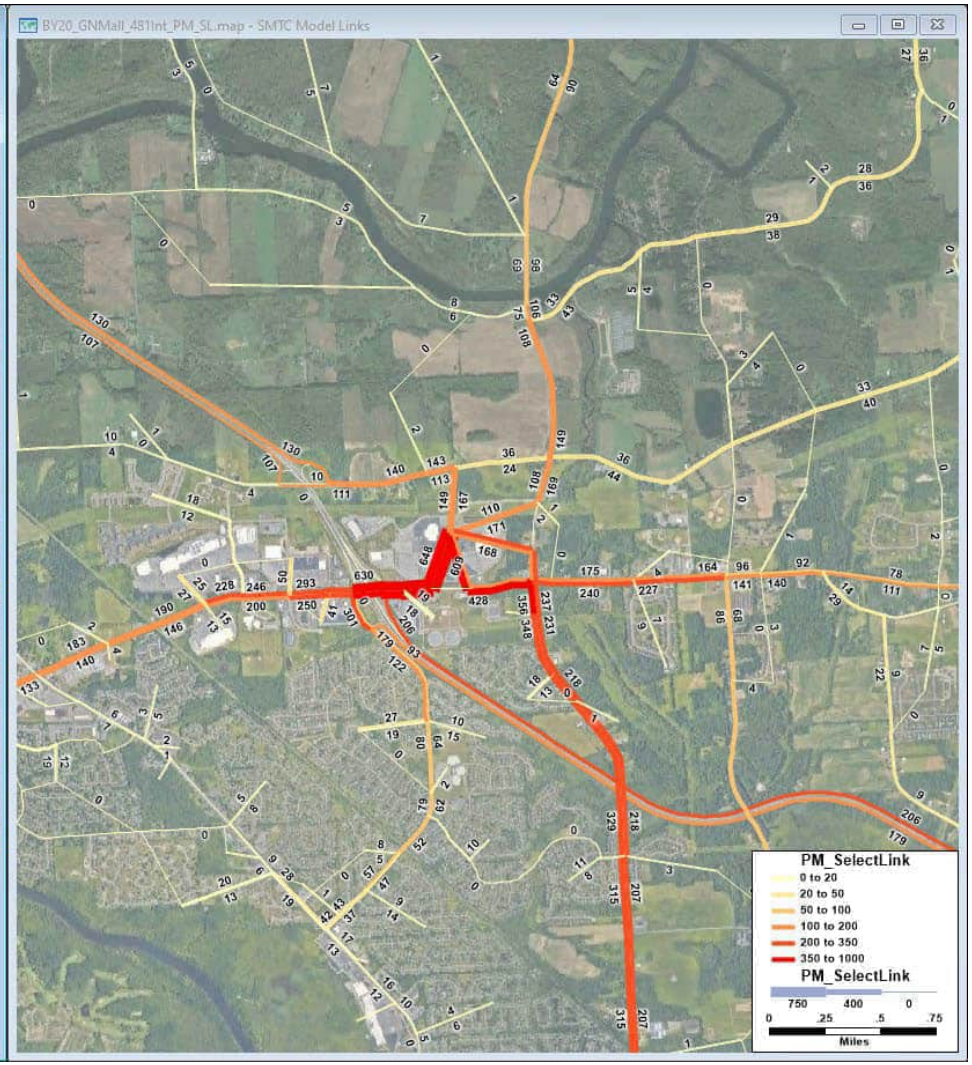
PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 3B: Neighborhood View Select Link Analysis – 2020 Base + GN Mall Redevelopment + Interchange at Verplank



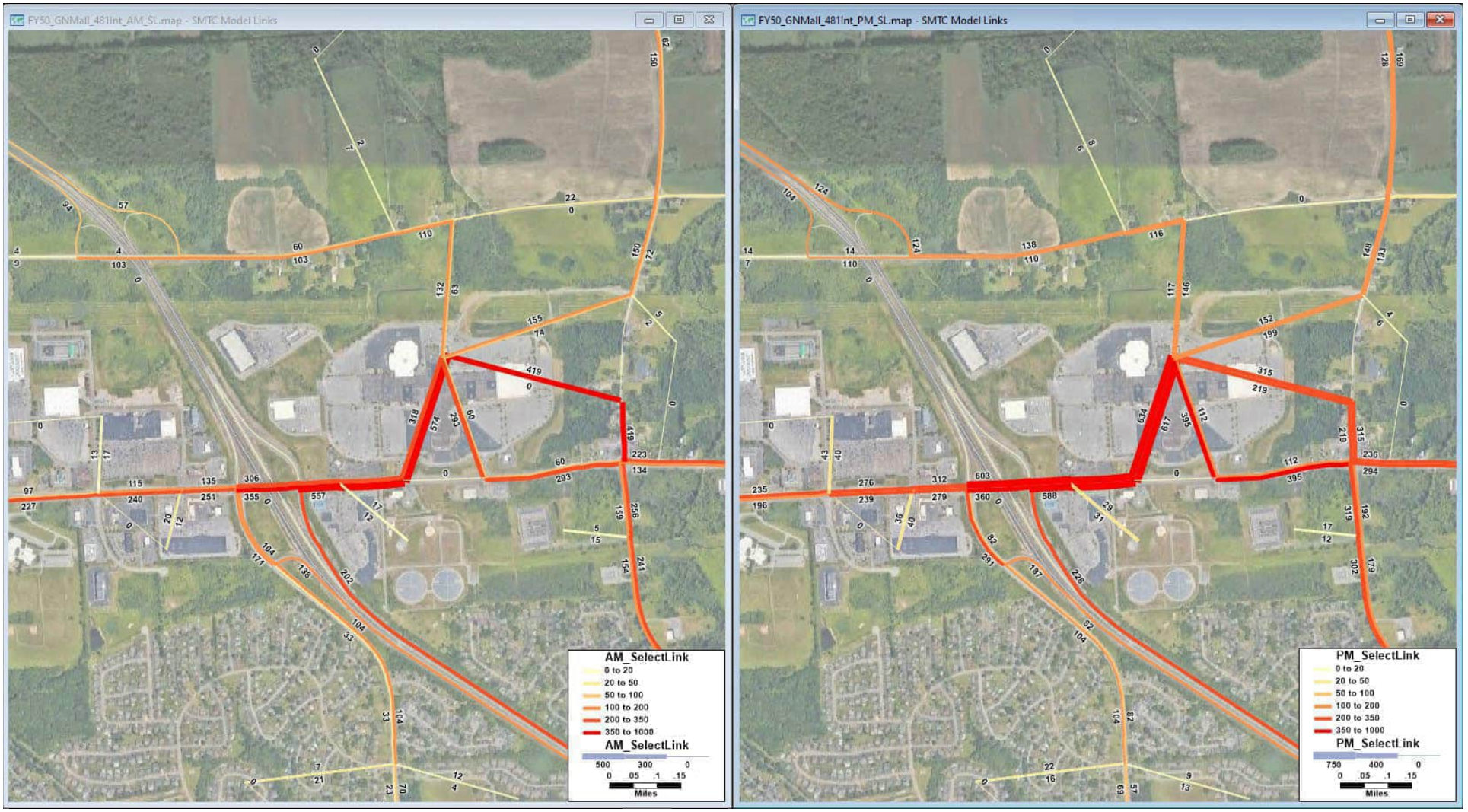
AM Peak Hour Volumes (7am-8am)



PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 4A: Local View Select Link Analysis – 2050 Future + GN Mall Redevelopment + Interchange at Verplank

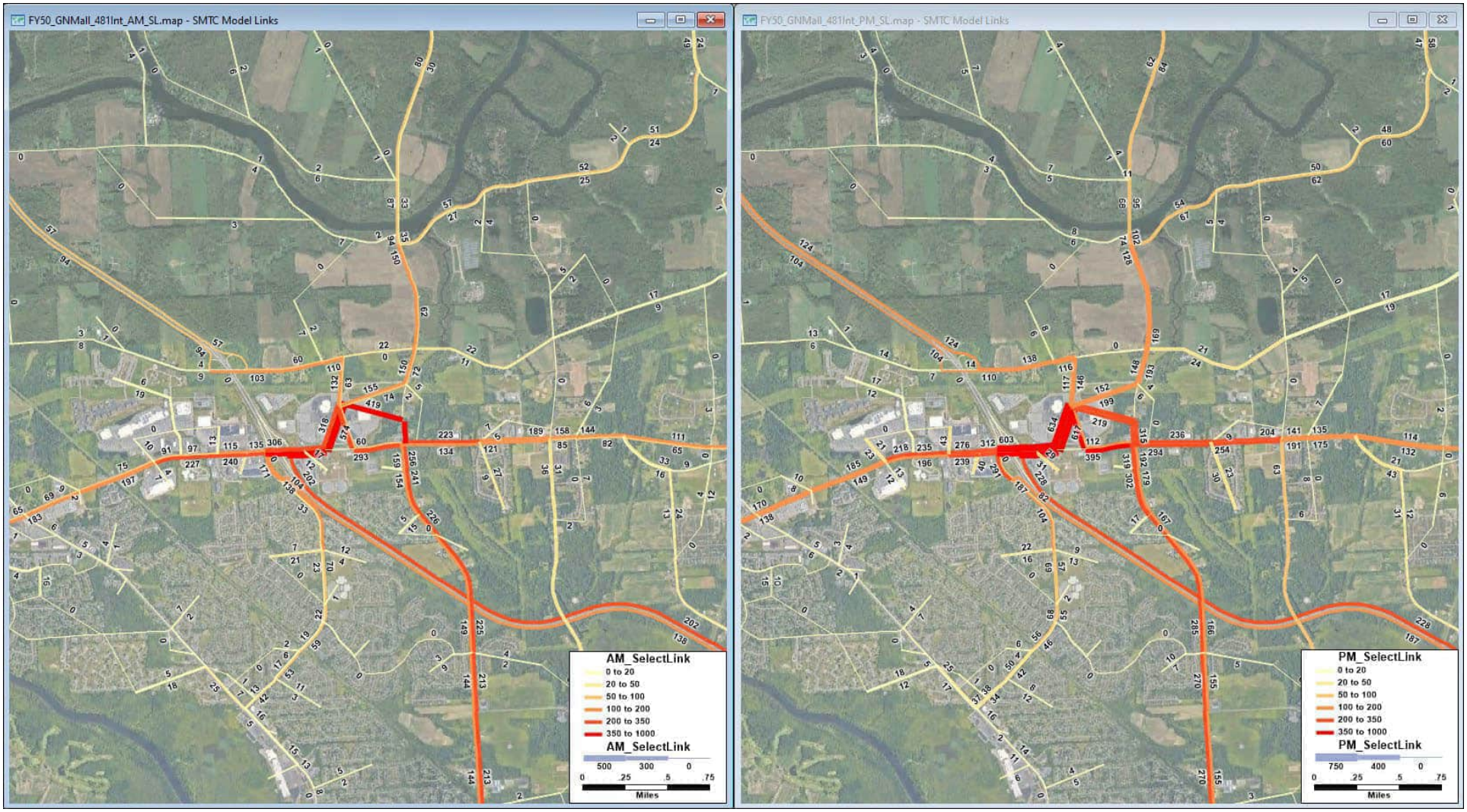


AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

Figure 4B: Neighborhood View Select Link Analysis – 2050 Future + GN Mall Redevelopment + Interchange at Verplank



AM Peak Hour Volumes (7am-8am)

PM Peak Hour Volumes (4pm-5pm)

Source : SMTC Regional Travel Demand Model (3/26/2024)

SMTC

MEMORANDUM

TO: Ethan Smolinsky

FROM: Jason Deshaies JRD

DATE: 3/27/2024

RE: SMTC Great Northern Mall Redevelopment Select Link Analysis

The Syracuse Metropolitan Transportation Council (SMTC) was asked by the New York State Department of Transportation (NYSDOT) to assist with a select link analysis for the Great Northern Mall redevelopment area Traffic Analysis Zone (TAZ). This memorandum serves as documentation of the files being transmitted.

As requested, the SMTC utilized the most current version of the regional travel demand model to do a select link analysis for the Great Northern Mall (GNM) TAZ. The model used for this effort is not the same as the version used for the Micron no-build analysis (completed in early 2023) and does not include all the same details that are included in the model used for the Micron build alternatives analysis. The standard SMTC 2020 Base and 2050 Future models were used for this analysis to simplify the process and meet the tight schedule as requested. Below are the details of what is included in this package.

The SMTC added the provided GNM redevelopment land use details to the 2020 existing conditions base as well as the 2050 future scenario. Both models were also run with the addition of a new interchange at NY481 and Verplank Road to see how that might generally impact traffic patterns. This is not intended to be an analysis of the NY481/Verplank Road interchange.

The purpose of this effort is to provide trip distribution results, or the relative trip flows by direction, to the site. The total peak period trips to the site will not match the consultant's estimates because the standard SMTC model trip generation and time-of-day assumptions were used for these runs. However, the consultant could factor, or redistribute, its own forecasts based on the SMTC model's trip tables and select link results. It should be noted that the standard SMTC model trip distribution assumptions were used for these runs, which does not consider if the site holds special regional appeal (like Destiny USA).

As discussed on the last coordination call, the GNM redevelopment household and employment details as well as anticipated transportation mitigation should be incorporated in the more detailed Micron build scenario modeling effort. Due to the size of the proposed redevelopment, it may be more appropriate to treat the GNM TAZ as a special generator for that separate effort.

The following model runs were completed by the SMTC, all these runs include a select link analysis for the GNM connectors:

1. 2020 Base + GNM Redevelopment (details below)
2. 2020 Base + GNM Redevelopment (details below) + New Interchange at 481 & Verplank
3. 2050 Base + GNM Redevelopment (details below)
4. 2050 Base + GNM Redevelopment (details below) + New Interchange at 481 & Verplank

GNM Redevelopment Details

- New centroid connectors for the GNM TAZ were added to generally represent the proposed new access locations.

- The internal mall roads were removed as model links and the connectors were relocated to connect directly to the surrounding road system to be consistent with all connectors.

- Added 1,452 total households and adjusted the household size and number of vehicle classification for the TAZ to better represent the proposed apartment breakdown:
    - 799 - 1-bedroom apartments
    - 653 - 2-bedroom apartments

- Total number of jobs by sector are an input to the regional model but were not provided by the consultant teams. The SMTC estimated the number of jobs for **TAZ 3073** based on the proposed square feet:

Sector	SF	Estimated Jobs
NAICS 44 - Retail Trade	425,225	910
NAICS 62 - Health Care & Social Assistance	818,913	1,800
NAICS 71 - Arts, Entertainment, Recreation	67,890	80
NAICS 72 - Accommodation & Food Service	20,000	600*
Total	**1,332,028**	**3,390**

*This also includes jobs for 875 hotel rooms not included in the SF

File Transmittal

Please find the following files included with this document.

1) Maps displaying AM and PM peak hour directional volumes to and from the GNM TAZ for all four scenarios at local and neighborhood scales.

2) Loaded Model Network (*NetworkOut.dbd*) for each scenario – includes directional and peak hour volume select link output fields:

    - AB/BA_AM_SelectLink
    - AB/BA_PM_SelectLink

3) An assignment matrix (*hourAutoTrips.mtx*) for each scenario – includes trips between each TAZ pair.

    - GNM redevelopment area is within TAZ 3073.
    - A TAZ boundary file is included for reference.

A link to the files will be provided via email. Please confirm receipt of this data and let us know if you have any questions.

CC: James D'Agostino, SMTC
Howard McCulloch , NYSDOT

TAZ	Town	CBD	HH_Includ	HH	HH_GQ	Populatior	Vehicles	Bicycle & F	Agriculture	Bus_Legal_	Communic	Constructi	Eat_Drinki	Education	FIRE	Governme	Health	Hotels_Lo	Manufactu	Mining	NonClassif	RetailTrad	Service	SocialServi	Transporta	Utilities	Wholesale	Total
1	Tully	0	217	217	0	--	--	3.114187	0	49	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	20	98
2	Tully	0	316	316	0	--	--	3.856041	0	0	0	31	58	284	0	0	0	17	0	0	8	80	120	71	25	0	27	721
3	Tully	0	133	133	0	--	--	5.339095	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
4	Spafford	0	280	280	0	--	--	1.260512	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7	0	0	0	0	20
5	Tully	0	305	303	2	--	--	5.3391	1	13	0	0	25	79	6	0	7	0	0	0	0	2	3	32	16	0	0	184
6	Fabius	0	125	125	0	--	--	0.56	1	6	0	4	0	217	0	0	0	0	3	0	0	0	9	0	0	0	0	240
7	Fabius	0	157	157	0	--	--	0.56	150	2	0	8	6	0	2	0	15	0	23	0	0	0	44	5	2	0	0	257
8	Tully	0	112	112	0	--	--	5.339119	0	35	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
9	Fabius	0	198	198	0	--	--	3.36	3	3	0	0	0	0	0	12	0	47	0	0	0	0	3	0	0	0	0	68
10	Fabius	0	248	248	0	--	--	3.36	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	40
11	Otisco	0	113	113	0	--	--	2.045728	0	0	0	6	4	0	0	0	0	0	0	0	0	9	12	0	0	2	0	33
12	Otisco	0	384	384	0	--	--	2.045728	0	15	0	0	22	0	0	0	0	0	0	0	0	7	0	0	12	0	0	56
13	Otisco	0	148	148	0	--	--	2.045728	4	6	0	8	0	0	0	45	0	0	0	0	0	0	47	0	0	4	0	113
14	Otisco	0	176	176	0	--	--	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	13	28
15	Otisco	0	157	157	0	--	--	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	25	0	25	60
16	Spafford	0	232	232	0	--	--	0.553661	0	0	0	20	53	0	0	0	0	0	32	0	0	0	0	0	0	0	0	105
17	Spafford	0	212	212	0	--	--	0.553661	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	47
18	Lafayette	0	89	89	0	--	--	0.815651	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
19	Lafayette	0	351	351	0	--	--	0.815672	0	19	0	84	21	0	6	0	37	0	0	0	0	10	35	0	0	0	43	255
20	Lafayette	0	159	154	5	--	--	1.973684	0	0	0	0	0	0	2	0	0	0	5	0	0	0	2	0	0	0	0	9
21	Lafayette	0	197	197	0	--	--	1.973684	0	7	0	5	8	5	15	0	0	0	0	0	4	4	7	14	0	0	0	69
22	Pompey	0	239	239	0	--	--	4.808743	0	0	0	14	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	28
23	Pompey	0	245	245	0	--	--	4.808743	2	0	0	0	0	0	0	17	0	0	0	0	0	2	12	0	0	0	0	33
24	Pompey	0	127	127	0	--	--	4.808743	15	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
25	Skaneatele	0	400	400	0	--	--	1.678236	15	12	0	10	0	0	7	0	0	22	0	0	0	0	10	15	0	37	0	0	128
26	Skaneatele	0	171	167	4	--	--	1.678236	0	0	0	10	0	0	0	0	7	346	0	0	0	0	46	0	0	0	0	20	429
27	Lafayette	0	120	120	0	--	--	5.086391	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	70
28	Lafayette	0	55	55	0	--	--	5.086385	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
29	Lafayette	0	251	251	0	--	--	5.086385	0	84	0	0	78	0	0	0	0	0	0	0	0	39	0	0	128	0	0	329
30	Pompey	0	120	120	0	--	--	0.831937	2	0	0	5	10	7	0	0	0	0	0	0	0	6	22	0	0	7	5	64
31	Pompey	0	94	89	5	--	--	0.831937	0	10	0	2	2	2	0	0	0	0	0	0	0	2	6	0	0	2	0	26
32	Pompey	0	80	80	0	--	--	0.831937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Pompey	0	150	150	0	--	--	0.831937	0	0	0	2	2	2	0	0	0	0	0	0	0	2	6	0	0	2	1	17
34	Pompey	0	59	59	0	--	--	0.831973	0	1	0	1	1	0	1	7	0	0	0	0	0	0	1	0	0	0	0	12
35	Pompey	0	51	51	0	--	--	0.831973	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14
36	Marcellus	0	102	102	0	--	--	3.67893	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	31
37	Marcellus	0	23	23	0	--	--	3.67893	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Marcellus	0	80	80	0	--	--	3.67893	6	13	0	15	27	0	0	0	0	0	0	0	0	11	24	0	0	0	0	96
39	Lafayette	0	253	253	0	--	--	5.060974	0	0	0	0	0	0	0	96	0	0	0	0	0	0	24	0	55	0	0	175
40	Skaneatele	0	296	293	3	--	--	1.828157	0	50	29	2	89	0	69	0	3	0	0	0	0	100	6	110	6	24	0	488
41	Skaneatele	0	17	17	0	--	--	1.828157	0	8	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	10
42	Skaneatele	0	212	212	0	--	--	1.828157	2	5	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	8	22
43	Onondaga	0	120	120	0	--	--	0.734388	14	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	39
44	Onondaga	0	216	216	0	--	--	0.734388	10	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
45	Lafayette	0	83	83	0	--	--	5.086334	0	0	0	9	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	17
46	Lafayette	0	76	76	0	--	--	5.08639	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
47	Pompey	0	79	79	0	--	--	5.021834	1	0	0	2	1	0	0	0	0	0	0	0	0	1	0	8	0	1	0	3	17
48	Pompey	0	279	272	7	--	--	5.021834	0	9	0	3	2	0	0	0	6	0	0	0	2	1	12	0	2	0	4	41
49	Onondaga	0	76	72	4	--	--	1.445571	0	0	0	0	0	157	0	41	0	0	0	0	0	0	0	0	0	0	0	198
50	Onondaga	0	92	92	0	--	--	1.445571	0	15	0	2	4	142	0	0	0	0	0	0	0	0	10	0	0	0	0	173
51	Onondaga	0	225	225	0	--	--	1.445571	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
52	Onondaga	0	6	6	0	--	--	1.445571	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
53	Marcellus	0	111	111	0	--	--	4.437394	0	0	0	12	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	17
54	Marcellus	0	183	183	0	--	--	4.437394	3	0	0	0	10	0	0	0	0	0	0	0	0	2	1	0	0	0	0	16
55	Marcellus	0	83	83	0	--	--	4.437394	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	11
56	Lafayette	0	306	306	0	--	--	0	0	0	0	0	9	89	0	0	7	0	0	0	9	3	0	9	0	0	0	125
57	Skaneatele	0	241	241	0	--	--	6.632658	0	6	0	0	0	185	240	0	0	0	0	0	0	9	0	0	0	0	0	440
58	Skaneatele	0	185	185	0	--	--	6.632658	0	0	0	0	0	0	0	157	0	0	0	0	0	5	3	0	0	0	0	165
59	Skaneatele	0	494	494	0	--	--	6.632651	1	67	10	8	196	0	211	100	62	12	78	0	0	157	64	27	56	0	21	1070
60	Onondaga	0	189	189	0	--	--	2.10391	0	0	0	0	0	0	0	49	0	0	0	0	0	0	0	0	0	0	0	49

61	Lafayette	0	241	241	0	--	--	0	4	0	0	17	0	0	0	0	0	0	0	0	0	74	0	0	0	0	95
62	Marcellus	0	109	109	0	--	--	1.796431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
63	Onondaga	0	361	361	0	--	--	0	0	3	0	8	31	0	0	0	4	0	3	0	0	1	3	3	0	0	55
64	Skaneatele	0	150	150	0	--	--	2.484472	0	0	0	0	0	0	2	0	0	0	0	0	0	0	14	0	0	0	16
65	Skaneatele	0	318	318	0	--	--	2.484472	0	0	0	22	0	32	6	0	0	0	26	0	0	12	126	0	0	0	225
66	Skaneatele	0	42	42	0	--	--	2.484472	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
67	Onondaga	0	202	202	0	--	--	2.499991	0	5	0	0	10	0	0	0	5	0	0	0	0	2	5	0	6	0	33
68	Pompey	0	153	153	0	--	--	0.94086	0	1	1	1	1	2	1	1	2	0	2	0	0	2	1	1	1	0	18
69	Pompey	0	243	237	6	--	--	0.94086	0	32	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	62
70	Pompey	0	316	316	0	--	--	0.94086	0	4	2	2	2	6	4	2	6	0	6	0	0	6	4	2	2	0	50
71	Lafayette	0	125	125	0	--	--	0.000542	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	21
72	Pompey	0	127	127	0	--	--	8.370044	0	1	1	1	1	2	1	1	2	0	2	0	0	2	1	1	1	0	18
73	Pompey	0	195	195	0	--	--	8.370044	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	7	19
74	Marcellus	0	413	413	0	--	--	7.08157	0	0	0	9	18	0	8	0	72	0	0	0	8	122	0	33	24	0	18	312
75	Onondaga	0	12	12	0	--	--	2.467097	0	0	0	0	0	0	0	0	0	0	77	0	0	15	0	0	0	0	0	92
76	Onondaga	0	256	256	0	--	--	1.716163	55	34	0	24	107	97	10	12	0	0	16	0	0	44	40	0	18	0	16	473
77	Onondaga	0	212	212	0	--	--	2.252645	0	0	0	0	0	0	0	9	0	0	26	0	0	0	0	0	0	0	0	35
78	Marcellus	0	111	111	0	--	--	2.252645	1	0	0	3	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	17
79	Marcellus	0	17	17	0	--	--	7.10492	0	3	1	1	1	3	3	1	4	0	3	0	0	4	1	1	1	0	1	28
80	Marcellus	0	15	15	0	--	--	7.10492	1	0	0	59	0	0	0	114	0	0	5	0	0	8	10	0	0	0	18	215
81	Onondaga	0	425	425	0	--	--	2.499972	0	3	0	0	0	0	0	0	5	0	0	0	0	49	5	0	0	0	0	62
82	Onondaga	0	286	286	0	--	--	0.063096	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	7
83	Skaneatele	0	493	493	0	--	--	2.066773	0	464	0	48	37	0	0	0	20	0	1017	0	0	18	0	0	37	0	9	1650
84	Manlius	0	16	16	0	--	--	0.00013	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
85	Manlius	0	145	145	0	--	--	0.00013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	Manlius	0	345	345	0	--	--	0.00013	0	3	0	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	12
87	Manlius	0	215	215	0	--	--	0.00013	0	5	0	4	0	0	12	0	7	0	4	0	0	7	0	0	0	4	0	43
88	Marcellus	0	200	200	0	--	--	5.712801	0	2	0	0	37	124	6	429	0	0	5	0	0	11	0	0	0	0	0	614
89	Marcellus	0	207	207	0	--	--	5.712801	0	3	0	0	16	0	10	0	12	0	7	0	0	70	34	8	20	0	0	181
90	Dewitt	0	373	373	0	--	--	0.506296	3	14	0	0	8	0	0	136	0	0	0	0	0	5	16	0	21	0	0	203
91	Dewitt	0	50	50	0	--	--	3.225817	0	0	0	0	0	0	0	111	0	0	0	0	0	0	0	0	0	0	0	111
92	Marcellus	0	142	142	0	--	--	11.57805	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	1	0	9
93	Marcellus	0	156	156	0	--	--	3.714994	0	1	0	0	0	1	1	0	0	0	0	0	0	3	0	0	0	0	1	7
94	Marcellus	0	133	133	0	--	--	3.714994	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26
95	Onondaga	0	634	630	4	--	--	2.114484	0	268	0	0	0	0	5	0	0	0	0	0	0	29	32	0	0	0	0	334
96	Syracuse	0	758	758	0	--	--	3.185067	0	0	0	0	0	0	0	0	63	0	0	0	0	48	22	0	0	0	0	133
97	Manlius	0	62	62	0	--	--	2.920962	1	40	0	23	39	0	5	0	63	0	303	0	3	77	8	5	0	0	11	578
98	Manlius	0	619	619	0	--	--	2.920962	0	54	0	11	0	0	0	0	18	0	0	0	0	227	14	3	0	0	23	350
99	Syracuse	0	763	763	0	--	--	0.630392	0	0	0	0	0	0	0	0	0	0	0	0	0	100	24	0	0	0	0	124
100	Syracuse	0	318	311	7	--	--	3.971682	0	0	0	0	0	0	4	0	5	0	0	0	0	2	9	0	0	0	0	20
101	Onondaga	0	463	456	7	--	--	0.043631	0	5	0	13	0	16	38	0	6	0	0	0	0	31	49	0	20	0	0	178
102	Syracuse	0	350	326	24	--	--	5.971782	0	22	0	0	0	180	11	0	0	0	0	0	0	13	28	20	0	0	0	275
103	Marcellus	0	242	242	0	--	--	0.700534	0	4	1	2	2	5	3	2	5	0	4	0	0	6	2	1	2	0	2	41
104	Marcellus	0	152	152	0	--	--	0.700534	0	3	0	4	0	0	0	0	0	0	3	0	0	0	12	0	0	0	3	25
105	Manlius	0	711	710	1	--	--	1.257862	1	35	0	15	7	305	15	0	6	0	18	0	0	9	6	50	4	0	9	480
106	Dewitt	0	242	236	6	--	--	3.141876	0	21	17	0	48	0	8	0	27	0	16	0	0	7	6	9	0	0	9	168
107	Syracuse	0	33	33	0	--	--	1.730095	0	0	0	0	0	0	4	0	0	21	0	0	0	3	8	0	0	0	0	36
108	Syracuse	0	40	40	0	--	--	1.730095	0	9	0	0	31	0	0	0	0	0	0	0	0	12	0	0	0	0	0	52
109	Syracuse	0	290	290	0	--	--	1.730095	0	0	0	0	21	0	0	0	0	0	0	0	0	40	0	0	0	0	0	61
110	Syracuse	0	49	49	0	--	--	1.730095	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
111	Onondaga	0	242	241	1	--	--	0.001515	0	0	37	31	0	13	0	24	9	0	6	0	0	9	9	43	0	0	11	192
112	Onondaga	0	171	171	0	--	--	0.001515	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	6
113	Onondaga	0	11	11	0	--	--	2.167082	0	0	0	6	0	0	0	0	78	0	0	0	0	0	4	0	0	0	0	88
114	Dewitt	0	35	35	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0	0	0	190
115	Manlius	0	791	791	0	--	--	0	0	17	0	10	27	0	24	0	13	0	70	0	0	20	7	0	0	0	0	188
116	Onondaga	0	551	541	10	--	--	0	2	6	0	0	0	0	0	0	0	0	32	0	0	5	5	9	0	0	0	59
117	Onondaga	0	643	643	0	--	--	0.41189	0	0	0	0	15	0	0	102	0	0	0	0	0	5	0	0	0	0	8	130
118	Syracuse	0	696	696	0	--	--	4.542517	4	81	0	11	74	0	34	0	256	0	0	0	34	68	8	43	0	0	59	672
119	Syracuse	0	705	705	0	--	--	8.817335	0	56	11	18	95	82	0	0	26	2	0	0	0	47	29	9	0	0	5	380
120	Manlius	0	222	222	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	87	0	0	0	0	96
121	Syracuse	0	314	314	0	--	--	2.334158	0	29	0	13	25	0	15	0	0	0	0	0	0	6	11	3	0	0	0	103

122	Syracuse	0	127	127	0	--	--	2.175182	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	14	0	0	4	63
123	Syracuse	0	331	331	0	--	--	2.175182	0	5	1	2	3	6	4	2	6	0	5	0	0	7	3	1	2	0	3	50
124	Onondaga	0	78	78	0	--	--	2.031805	1	0	153	0	0	18	22	127	4	0	4	0	0	5	7	7	0	0	0	347
125	Manlius	0	390	390	0	--	--	7.783208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	Manlius	0	156	156	0	--	--	7.783208	3	107	0	7	61	0	32	63	8	0	21	0	0	1116	109	16	0	0	7	1550
127	Manlius	0	373	373	0	--	--	7.706893	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	50
128	Syracuse	0	283	276	7	--	--	0.064559	0	31	0	0	83	0	27	0	0	0	0	0	0	143	0	0	0	0	0	284
129	Dewitt	0	2	2	0	--	--	0.090649	0	0	0	27	0	0	0	0	0	0	0	0	0	36	12	0	0	0	0	75
130	Syracuse	0	116	116	0	--	--	2.664003	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4	0	0	0	0	13
131	Syracuse	0	86	86	0	--	--	0.057264	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
132	Syracuse	0	89	89	0	--	--	0.057264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	Onondaga	0	217	203	14	--	--	0.037051	0	5	0	0	15	108	7	0	0	0	0	0	0	0	3	0	0	0	0	138
134	Manlius	0	266	266	0	--	--	6.602251	0	13	0	16	35	0	55	0	0	0	39	0	7	40	7	78	91	0	0	381
135	Manlius	0	185	185	0	--	--	6.602251	0	0	0	0	0	0	2	0	0	0	4	0	0	3	0	0	0	0	0	9
136	Manlius	0	198	198	0	--	--	0.008753	0	2	0	1	1	2	1	1	2	0	1	0	0	3	1	1	1	0	1	18
137	Manlius	0	196	196	0	--	--	4.091375	0	0	0	80	0	0	64	0	0	0	0	0	0	37	85	60	0	0	0	325
138	Onondaga	0	383	383	0	--	--	0	2	1	0	2	0	0	0	18	0	0	0	0	0	0	0	0	0	0	1	24
139	Onondaga	0	119	119	0	--	--	0	0	0	0	1	0	0	0	18	0	0	0	0	0	0	0	0	0	0	1	20
140	Onondaga	0	0	0	0	--	--	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	61
141	Onondaga	0	79	79	0	--	--	0	1	8	1	2	3	7	6	2	9	1	6	0	0	11	3	2	2	1	3	68
142	Onondaga	0	457	451	6	--	--	0.007274	0	0	0	0	0	0	9	63	0	0	0	0	0	7	0	5	0	0	0	85
143	Syracuse	0	95	94	1	--	--	2.445112	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
144	Syracuse	0	224	210	14	--	--	2.445112	0	0	0	1	0	48	0	0	0	5	0	0	0	6	0	0	0	0	0	60
145	Syracuse	0	362	362	0	--	--	0.463757	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	Syracuse	0	24	24	0	--	--	4.133406	0	6	3	1	66	1	0	1	140	8	9	0	0	0	1	30	0	0	2	268
147	Syracuse	0	15	15	0	--	--	4.133406	2	91	2	221	2	51	35	3	4	1	211	0	0	47	37	3	39	3	367	1119
148	Syracuse	0	836	836	0	--	--	4.133406	0	6	0	14	0	10	3	0	1	0	21	0	0	2	3	0	3	0	2	65
149	Syracuse	0	291	291	0	--	--	2.21963	0	10	0	6	0	0	15	0	0	0	0	0	0	9	0	9	0	0	0	49
150	Syracuse	0	492	487	5	--	--	0.010898	0	0	0	0	0	0	0	0	0	0	0	0	0	13	6	0	0	0	0	19
151	Syracuse	0	198	192	6	--	--	3.68821	0	0	0	0	0	206	0	0	0	0	0	0	0	0	0	11	0	0	0	217
152	Onondaga	0	6	6	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	Onondaga	0	13	13	0	--	--	0	12	21	0	24	12	0	0	0	57	0	0	0	0	19	0	0	17	0	0	162
154	Manlius	0	82	82	0	--	--	2.639621	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
155	Syracuse	0	299	295	4	--	--	11.54331	0	4	5	0	4	4	0	0	3	1	5	0	0	0	0	0	0	0	0	26
156	Dewitt	0	445	445	0	--	--	0.232648	0	0	0	0	0	0	11	0	171	0	0	0	0	0	0	94	0	0	9	285
157	Syracuse	0	158	158	0	--	--	0.079881	0	6	0	0	12	90	0	0	0	0	0	0	0	1	0	0	0	0	0	109
158	Syracuse	0	287	283	4	--	--	1.844171	0	2	0	0	16	96	0	0	0	0	0	0	0	15	8	0	0	0	5	142
159	Dewitt	0	241	241	0	--	--	0.855222	0	25	0	17	0	0	22	0	25	0	17	0	0	0	0	0	0	0	0	106
160	Dewitt	0	313	313	0	--	--	0.855222	0	328	0	0	0	22	38	0	35	4	0	0	0	15	9	5	0	0	4	460
161	Dewitt	0	242	242	0	--	--	2.98412	0	0	0	8	26	58	5	6	0	0	0	0	0	0	8	0	0	0	4	115
162	Dewitt	0	59	59	0	--	--	2.98412	0	20	0	0	20	0	0	0	0	0	0	0	0	237	11	0	33	0	0	321
163	Onondaga	0	361	361	0	--	--	0.027085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	0	0	0	0	64
164	Onondaga	0	353	353	0	--	--	0.006435	1	0	0	32	2	73	2	0	0	0	44	0	0	3	2	0	0	0	0	159
165	Onondaga	0	100	100	0	--	--	0.006435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	5
166	Manlius	0	103	103	0	--	--	2.637489	0	0	0	0	0	174	0	0	0	0	0	0	0	0	0	0	0	0	0	174
167	Syracuse	0	127	127	0	--	--	0.654891	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	Syracuse	0	19	19	0	--	--	0.654891	0	0	0	0	5	137	0	0	0	0	0	0	0	0	0	0	0	0	0	142
169	Dewitt	0	31	31	0	--	--	5.345486	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
170	Syracuse	0	177	177	0	--	--	0.547555	0	1	0	0	12	0	7	0	0	0	0	0	0	0	3	0	0	0	0	23
171	Syracuse	0	700	700	0	--	--	2.968699	0	10	0	14	0	78	3	0	0	0	0	0	0	2	0	0	0	0	0	108
172	Camillus	0	196	196	0	--	--	0.173517	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	40
173	Syracuse	0	251	251	0	--	--	2.986632	0	0	0	0	0	45	0	0	0	0	0	0	0	59	0	0	0	0	0	104
174	Syracuse	0	34	34	0	--	--	2.986632	0	0	0	0	0	29	0	0	0	0	0	0	0	17	0	0	0	0	0	46
175	Manlius	0	54	54	0	--	--	2.618652	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	Manlius	0	126	126	0	--	--	2.618652	0	9	0	20	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	46
177	Syracuse	0	274	265	9	--	--	0.012588	0	2	1	1	1	4	2	1	4	0	4	0	0	4	2	1	1	0	1	29
178	Manlius	0	522	522	0	--	--	0.003229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	0	0	0	79
179	Dewitt	0	344	340	4	--	--	0.076047	0	0	0	0	0	0	0	0	0	0	22	0	0	15	0	0	0	0	9	46
180	Syracuse	0	144	144	0	--	--	15	0	2	0	0	0	134	0	0	4	0	0	0	0	1	0	0	0	0	0	140
181	Syracuse	0	201	201	0	--	--	15	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0	9
182	Syracuse	0	76	76	0	--	--	10.13334	0	0	0	0	30	0	25	0	0	0	0	0	0	0	13	0	0	0	0	68

183	Syracuse	0	33	33	0	--	--	10.13334	0	0	0	0	0	14	0	0	0	0	0	0	0	0	3	0	0	0	0	17
184	Syracuse	0	62	61	1	--	--	10.13334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	33
185	Dewitt	0	277	268	9	--	--	0.014031	0	2	0	0	0	18	13	0	0	0	0	0	0	0	12	7	25	0	0	77
186	Syracuse	0	24	24	0	--	--	2.274165	0	0	0	0	0	136	0	0	0	0	0	0	0	0	0	0	0	0	0	136
187	Manlius	0	651	646	5	--	--	2.548554	0	85	0	0	75	139	160	0	32	0	46	0	0	168	0	0	0	0	8	713
188	Manlius	0	113	113	0	--	--	2.548554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26
189	Syracuse	0	218	218	0	--	--	1.086497	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
190	Syracuse	0	101	101	0	--	--	1.086497	0	5	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	28
191	Onondaga	0	373	373	0	--	--	0.260395	0	0	0	4	2	13	6	2	0	0	7	0	0	0	0	0	3	0	0	36
192	Syracuse	0	379	379	0	--	--	1.360265	0	4	1	1	2	4	2	1	3	0	2	0	0	1	1	0	1	0	2	25
193	Syracuse	0	143	143	0	--	--	1.360265	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	5
194	Elbridge	0	140	135	5	--	--	2.727273	0	3	0	0	7	28	0	0	0	0	15	0	0	30	3	0	0	0	2	88
195	Elbridge	0	217	217	0	--	--	2.727273	8	7	0	0	21	0	37	18	0	0	26	0	0	0	1	0	0	0	7	125
196	Syracuse	0	194	194	0	--	--	3.996721	2	9	0	0	6	0	0	0	12	0	5	0	0	0	0	0	0	0	0	34
197	Onondaga	0	1	1	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0	0	0	0	92
198	Onondaga	0	24	24	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	Syracuse	0	95	95	0	--	--	0.015934	0	3	0	0	0	0	0	0	0	0	12	0	0	2	3	0	10	0	0	30
200	Syracuse	0	167	167	0	--	--	0.096402	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
201	Syracuse	0	217	217	0	--	--	0.096402	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
202	Fayettevill	0	450	450	0	--	--	2.639292	2	23	0	14	18	29	14	0	0	0	237	0	5	20	5	8	0	0	5	378
203	Syracuse	0	145	145	0	--	--	0.140317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10
204	Syracuse	0	286	281	5	--	--	10.98307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	0	17
205	Syracuse	0	12	12	0	--	--	10.98307	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	11
206	Syracuse	0	99	99	0	--	--	4.982461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Syracuse	0	91	91	0	--	--	4.982461	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21
208	Dewitt	0	580	576	4	--	--	1.883991	0	39	0	0	0	246	0	0	0	0	0	0	0	0	0	0	0	0	0	285
209	Onondaga	0	322	322	0	--	--	1.465791	0	5	0	0	10	0	0	66	56	0	0	0	0	13	6	0	0	0	0	156
210	Onondaga	0	81	76	5	--	--	1.465791	0	28	0	0	23	0	0	0	14	0	0	0	0	3	14	0	0	0	0	82
211	Syracuse	0	270	262	8	--	--	2.256462	2	0	0	0	0	124	0	0	0	0	0	0	0	0	29	10	0	0	0	165
212	Syracuse	0	488	483	5	--	--	0.020548	0	0	0	0	0	160	0	0	0	0	0	0	0	0	5	7	0	0	0	172
213	Camillus	0	225	225	0	--	--	1.706925	1	29	0	0	42	0	4	0	0	11	0	0	0	4	0	0	2	0	0	93
214	Camillus	0	294	294	0	--	--	1.706925	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	10
215	Camillus	0	41	41	0	--	--	1.706925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	Onondaga	0	129	128	1	--	--	1.615259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	Syracuse	0	262	258	4	--	--	0.667898	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	5
218	Syracuse	0	173	173	0	--	--	0.667898	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
219	Dewitt	0	124	124	0	--	--	2.139762	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	Dewitt	0	281	276	5	--	--	2.139762	3	5	0	0	17	0	23	0	0	0	0	0	0	81	0	0	0	0	0	129
221	Syracuse	0	170	170	0	--	--	4.256793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	Syracuse	0	158	158	0	--	--	4.256793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9
223	Syracuse	0	141	120	21	--	--	7.750176	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	18	0	0	0	29
224	Syracuse	0	57	57	0	--	--	7.687288	0	0	0	0	0	0	0	0	5	0	0	0	0	0	29	0	0	0	0	34
225	Syracuse	0	74	74	0	--	--	7.687288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	Fayettevill	0	472	466	6	--	--	0.000267	0	6	0	0	0	0	0	0	0	0	63	0	0	43	32	6	0	0	6	156
227	Syracuse	0	110	68	42	--	--	15	0	0	0	0	21	0	0	0	0	0	0	0	0	0	27	15	29	0	0	92
228	Manlius	0	184	184	0	--	--	0.076914	0	61	33	0	510	0	109	0	90	0	60	0	0	918	33	39	61	0	4	1918
229	Onondaga	0	73	73	0	--	--	1.46989	0	0	0	0	0	104	0	0	0	0	0	0	0	0	14	5	0	0	0	123
230	Onondaga	0	130	130	0	--	--	1.46989	0	15	0	0	0	0	5	0	22	0	0	0	0	0	0	0	0	0	22	64
231	Syracuse	0	322	322	0	--	--	0.984892	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
232	Syracuse	0	77	77	0	--	--	15	0	0	0	35	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	39
233	Syracuse	0	148	94	54	--	--	15	0	25	0	0	0	0	13	0	0	0	18	0	0	42	21	14	0	0	0	133
234	Syracuse	0	385	385	0	--	--	15	0	0	0	24	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	65
235	Syracuse	0	36	36	0	--	--	15	0	0	0	0	0	125	5	0	0	0	0	0	0	13	5	4	43	0	14	209
236	Syracuse	0	50	50	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	6	0	0	0	11
237	Dewitt	0	111	111	0	--	--	0.014017	1	36	2	40	26	2	42	0	55	0	0	0	0	5	21	7	0	0	0	237
238	Dewitt	0	154	154	0	--	--	0.014017	0	15	6	56	80	9	45	44	0	0	0	0	0	499	4	0	0	0	5	763
239	Syracuse	0	534	534	0	--	--	15	2	4	0	0	0	0	0	0	0	0	0	0	0	3	3	0	9	0	3	25
240	Geddes	0	22	15	7	--	--	0	0	0	0	0	0	50	1	0	486	0	0	0	0	1	4	0	0	0	0	542
241	Manlius	0	324	324	0	--	--	1.172205	0	72	0	13	38	0	24	53	7	0	51	0	0	42	27	19	18	0	2	366
242	Syracuse	0	60	60	0	--	--	15	0	0	0	0	0	8	0	0	0	0	36	0	0	13	6	0	8	0	0	71
243	Syracuse	0	38	38	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	423	0	118	0	0	541

244	Manlius	0	498	498	0	--	--	0.034934	0	0	0	0	83	0	0	0	51	27	0	0	0	0	0	0	0	0	161
245	Syracuse	0	170	170	0	--	--	4.882883	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
246	Syracuse	0	169	169	0	--	--	4.882883	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	30
247	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	57
248	Syracuse	0	83	83	0	--	--	15	0	0	0	0	0	101	0	0	0	0	0	0	0	0	0	0	0	0	101
249	Syracuse	0	306	290	16	--	--	6.905163	0	0	0	0	0	17	29	0	0	51	0	0	0	0	175	0	0	0	3	275
250	Syracuse	0	206	206	0	--	--	6.905163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	Syracuse	0	149	149	0	--	--	7.897091	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	13	0	0	0	57
252	Syracuse	0	85	85	0	--	--	7.897091	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	1	0	0	0	9
253	Syracuse	0	146	140	6	--	--	5.454634	0	9	0	0	0	0	0	0	0	0	0	0	0	0	61	37	0	0	0	107
254	Dewitt	0	133	124	9	--	--	5.454634	0	20	0	6	51	89	24	0	26	5	0	0	0	38	10	2	14	0	0	285
255	Dewitt	0	274	270	4	--	--	5.454634	0	3	0	5	0	116	8	13	19	4	0	0	0	30	4	2	11	0	0	215
256	Camillus	0	1308	1304	4	--	--	0.078177	0	36	0	0	136	38	43	0	148	0	28	0	0	32	22	28	59	0	27	597
257	Camillus	0	801	801	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	40
258	Geddes	0	452	452	0	--	--	0.000236	0	0	0	36	0	163	0	0	0	0	0	0	0	0	0	0	0	0	0	199
259	Geddes	0	1	1	0	--	--	0	0	36	0	0	335	0	12	0	60	0	0	0	0	65	3	0	0	0	0	511
260	Syracuse	0	70	65	5	--	--	0	0	67	0	9	76	0	11	0	9	0	0	0	1	467	19	0	0	0	0	659
261	Syracuse	0	494	494	0	--	--	12.9954	0	0	0	0	0	0	0	0	4	0	0	0	0	10	31	4	0	0	0	49
262	Syracuse	0	107	107	0	--	--	2.478088	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	9
263	Syracuse	0	133	123	10	--	--	2.478088	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	3	0	0	0	13
264	Camillus	0	159	159	0	--	--	3.271145	0	21	0	17	18	22	9	0	0	31	0	0	0	0	7	0	0	0	0	125
265	Camillus	0	262	262	0	--	--	3.271145	0	0	0	0	30	0	0	0	8	0	0	0	0	15	0	0	0	0	0	53
266	Camillus	0	172	165	7	--	--	3.271145	0	12	0	7	0	0	0	0	0	0	21	0	0	8	4	6	0	0	4	62
267	Camillus	0	586	582	4	--	--	1.746723	0	42	0	0	34	0	32	0	38	0	0	0	0	0	9	0	0	0	0	155
268	Geddes	0	503	503	0	--	--	0.010062	0	3	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
269	Syracuse	0	1	1	0	--	--	13.56077	0	2	0	0	7	0	0	0	0	0	0	0	0	18	4	0	0	0	0	31
270	Syracuse	0	0	0	0	--	--	1.932763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
271	Syracuse	0	419	417	2	--	--	1.932763	0	0	0	6	20	153	10	0	0	0	10	0	0	7	0	0	0	0	10	215
272	Syracuse	0	239	206	33	--	--	8.734152	0	1	0	0	6	0	2	0	18	0	0	0	0	0	1	0	0	0	0	28
273	Syracuse	0	55	4	51	--	--	15	0	10	0	8	6	0	0	0	0	0	8	0	0	4	19	5	0	0	0	60
274	Syracuse	0	344	295	49	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	39	25	0	0	0	0	64
275	Camillus	0	63	63	0	--	--	0	0	16	0	7	70	366	37	41	9	0	0	0	0	476	12	0	0	0	0	1034
276	Syracuse	0	265	265	0	--	--	4.45837	0	0	0	0	0	0	0	0	0	0	16	0	0	9	0	0	0	0	0	25
277	Syracuse	0	182	179	3	--	--	4.45837	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
278	Syracuse	0	85	85	0	--	--	4.45837	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	23
279	Syracuse	0	668	0	668	--	--	20	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
280	Syracuse	0	659	1	658	--	--	20	0	89	0	34	0	0	0	0	0	0	173	0	0	1	0	0	0	0	0	297
281	Syracuse	0	360	340	20	--	--	10.61111	0	0	0	3	0	13	0	0	11	0	0	0	0	0	3	3	0	0	3	35
282	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
283	Syracuse	0	311	280	31	--	--	15	0	0	43	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	45
284	Syracuse	0	842	142	700	--	--	15	0	6	1	2	3	7	4	2	6	1	4	1	0	2	3	2	2	1	2	49
285	Syracuse	0	271	265	6	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
286	Syracuse	0	193	193	0	--	--	15	0	0	29	0	52	0	18	0	0	0	0	0	0	23	19	33	0	0	0	174
287	Elbridge	0	254	254	0	--	--	2.072539	0	8	0	0	3	42	0	0	0	1	0	0	0	2	3	0	0	0	15	75
288	Elbridge	0	221	217	4	--	--	2.072539	3	65	0	24	0	140	1	1	0	0	0	0	0	9	9	0	24	1	0	276
289	Elbridge	0	218	218	0	--	--	2.072539	0	51	0	0	10	0	7	0	12	0	942	0	0	65	0	3	0	0	0	1090
290	Syracuse	0	193	151	42	--	--	10.27161	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
291	Geddes	0	428	420	8	--	--	1.702312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19
292	Syracuse	0	12	12	0	--	--	4.11152	0	472	0	0	0	0	0	0	6	0	10	0	0	161	33	4	0	0	66	752
293	Syracuse	0	0	0	0	--	--	4.11152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	Syracuse	0	29	29	0	--	--	1.599884	0	0	0	0	0	102	0	0	94	0	0	0	0	3	1	9	0	0	0	209
295	Syracuse	0	272	272	0	--	--	1.599884	0	0	0	0	0	0	0	0	65	0	0	0	0	0	16	72	0	0	0	153
296	Syracuse	0	337	337	0	--	--	10.32984	0	0	0	9	0	25	0	0	0	0	0	0	0	0	20	9	0	0	0	63
297	Geddes	0	444	444	0	--	--	0.080242	0	63	0	0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0	126
298	Syracuse	0	428	0	428	--	--	20	0	27	43	0	0	493	0	0	0	0	0	0	0	0	0	0	0	0	0	563
299	Syracuse	0	59	0	59	--	--	20	0	0	0	0	0	357	0	0	0	0	0	0	0	0	0	0	0	0	16	373
300	Dewitt	0	310	310	0	--	--	6.477802	0	52	13	21	61	0	47	0	29	0	6	0	0	37	46	3	5	0	0	320
301	Syracuse	0	638	637	1	--	--	15	0	0	0	0	0	0	283	0	10	0	21	0	0	5	0	6	0	0	0	325
302	Syracuse	0	70	70	0	--	--	15	0	6	1	2	3	7	4	2	6	0	4	0	0	4	2	1	2	0	3	47
303	Syracuse	0	0	0	0	--	--	15	0	5	1	2	2	6	3	2	5	1	3	0	0	2	2	1	2	1	2	40
304	Syracuse	0	41	41	0	--	--	15	0	4	0	9	17	0	0	0	0	0	8	0	1	4	0	0	0	0	0	43

305	Syracuse	0	47	47	0	--	--	15	0	19	0	0	0	124	0	0	0	0	52	0	5	28	0	0	0	0	0	228
306	Syracuse	0	21	21	0	--	--	15	0	16	0	0	0	0	0	0	0	0	0	0	3	1	0	58	318	0	0	397
307	Syracuse	0	48	21	27	--	--	15	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	13
308	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	Syracuse	0	70	0	70	--	--	5.377607	0	74	0	0	0	249	0	0	0	0	0	0	0	344	77	49	0	0	0	793
310	Syracuse	0	1	1	0	--	--	5.377607	0	5	0	0	30	0	0	0	41	0	0	0	0	1	4	19	0	0	0	100
311	Syracuse	0	420	414	6	--	--	2.210858	0	16	0	0	0	0	31	0	0	0	0	0	6	3	5	0	16	0	0	76
312	Syracuse	0	0	0	0	--	--	20	0	178	0	0	65	0	106	0	715	0	0	0	0	62	24	0	10	0	0	1160
313	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0	0	94
314	Syracuse	0	96	0	96	--	--	20	0	3	0	0	0	124	0	0	0	149	0	0	0	0	11	0	0	0	0	287
315	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	329	0	0	33	0	0	0	0	34	5	5	0	0	0	406
316	Syracuse	0	0	0	0	--	--	20	0	0	49	0	0	344	0	0	0	0	0	0	0	1	9	0	0	0	0	403
317	Syracuse	0	243	33	210	--	--	20	0	9	173	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	207
318	Syracuse	0	260	6	254	--	--	20	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
319	Syracuse	0	0	0	0	--	--	1.718498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	135	0	0	0	185
320	Syracuse	0	198	198	0	--	--	15	0	1	0	0	0	0	0	0	9	0	12	0	0	4	1	2	0	0	0	29
321	Syracuse	0	72	72	0	--	--	15	0	1	0	0	0	124	3	0	26	0	1	0	0	1	8	7	0	0	0	171
322	Syracuse	0	62	62	0	--	--	15	0	1	0	0	0	12	2	0	35	0	0	0	0	0	31	13	0	0	2	95
323	Syracuse	0	92	92	0	--	--	15	0	0	0	0	0	0	0	0	10	0	0	0	0	1	0	3	0	0	0	14
324	Manlius	0	241	241	0	--	--	2.618662	3	0	0	0	0	0	0	0	0	0	0	0	0	8	42	0	0	0	12	65
325	Manlius	0	136	136	0	--	--	2.618662	0	0	0	0	0	0	7	0	32	30	0	0	0	0	32	0	0	0	13	114
326	Syracuse	0	83	1	82	--	--	15	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
327	Syracuse	0	131	65	66	--	--	15	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
328	Syracuse	0	464	0	464	--	--	20	0	0	0	0	0	15	0	0	0	0	0	0	0	0	1	0	0	0	0	16
329	Syracuse	0	225	0	225	--	--	20	0	0	0	0	0	192	0	0	0	0	0	0	0	0	0	1	0	0	0	193
330	Syracuse	0	123	123	0	--	--	15	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
331	Syracuse	0	85	85	0	--	--	15	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
332	Dewitt	0	233	233	0	--	--	2.711263	0	46	0	0	0	75	0	0	0	0	0	0	0	0	14	0	0	0	0	135
333	Dewitt	0	140	130	10	--	--	2.711263	0	13	0	0	85	0	0	0	0	25	0	0	0	147	56	0	0	0	0	326
334	Camillus	0	610	606	4	--	--	0.002711	1	38	0	0	18	109	99	136	0	0	4	0	0	124	37	0	0	29	0	595
335	Syracuse	0	168	168	0	--	--	5.485097	0	0	0	0	0	110	2	0	1	0	0	0	0	8	5	9	0	0	0	135
336	Syracuse	0	217	217	0	--	--	5.485097	0	0	0	0	28	0	8	0	27	0	0	0	0	1	22	35	0	0	0	121
337	Syracuse	0	0	0	0	--	--	20	0	35	33	7	65	37	0	0	16	0	0	0	0	1	81	0	0	0	134	409
338	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11
339	Syracuse	0	67	67	0	--	--	20	0	1	0	0	0	0	61	0	0	0	0	0	0	0	0	3	0	0	0	65
340	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	0	191	0	0	0	0	0	0	0	0	0	0	191
341	Syracuse	0	0	0	0	--	--	20	0	12	0	0	0	224	0	0	16	0	0	0	0	0	0	0	0	0	0	252
342	Syracuse	0	0	0	0	--	--	20	0	33	12	0	186	6	27	0	216	0	5	0	0	59	0	10	27	0	0	580
343	Syracuse	0	196	196	0	--	--	20	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
344	Syracuse	0	4	0	4	--	--	20	0	7	0	0	0	36	0	0	0	0	0	0	0	0	1	0	0	0	0	45
345	Syracuse	0	136	136	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	10	0	0	19
346	Syracuse	0	62	0	62	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
347	Syracuse	0	208	208	0	--	--	15	0	0	0	0	0	24	0	0	0	0	0	0	0	0	1	0	0	0	0	25
348	Syracuse	0	223	223	0	--	--	15	0	8	0	8	3	2	1	0	226	1	0	0	0	0	5	54	0	0	0	308
349	Geddes	0	211	211	0	--	--	2.802125	0	0	0	11	0	0	9	0	0	0	0	0	0	2	9	0	0	0	0	31
350	Camillus	0	501	501	0	--	--	0.188091	0	16	0	0	0	0	0	0	400	0	0	0	0	0	83	32	0	0	0	531
351	Manlius	0	380	380	0	--	--	1.354432	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	75	0	0	95
352	Manlius	0	57	52	5	--	--	1.354432	0	0	0	0	0	0	0	145	0	0	0	0	0	0	0	0	0	0	0	145
353	Syracuse	0	370	321	49	--	--	12.93815	0	0	0	0	0	15	2	0	0	0	0	0	0	21	4	28	0	0	0	70
354	Syracuse	0	77	77	0	--	--	12.93815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
355	Syracuse	0	0	0	0	--	--	20	2	89	4	0	0	0	310	6	6	0	1	0	0	6	24	2	0	1	11	462
356	Syracuse	0	0	0	0	--	--	20	1	66	0	0	1	0	3	1	16	0	0	0	0	0	31	5	0	0	0	125
357	Geddes	0	380	380	0	--	--	0.542659	0	1	0	3	0	9	0	0	1	0	0	0	0	0	3	0	0	0	1	18
358	Syracuse	0	154	145	9	--	--	13.30585	0	0	0	0	0	0	3	0	7	0	0	0	0	0	0	4	0	0	0	14
359	Syracuse	0	142	142	0	--	--	13.30585	0	0	0	0	0	0	3	0	12	0	0	0	0	0	0	8	0	0	0	23
360	Syracuse	0	60	60	0	--	--	13.30585	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
361	Syracuse	0	5	5	0	--	--	5.371134	0	19	0	9	50	0	0	11	4	0	0	0	0	38	19	0	0	0	19	168
362	Syracuse	0	181	180	1	--	--	5.371134	0	29	0	6	18	46	38	0	0	0	0	0	0	5	9	0	6	0	0	157
363	Syracuse	0	261	260	1	--	--	5.371134	0	29	0	2	24	208	10	0	14	0	0	0	0	54	32	54	0	0	22	449
364	Syracuse	0	236	236	0	--	--	8.430134	1	2	0	1	2	3	2	1	3	0	2	0	0	3	1	0	1	0	2	24
365	Syracuse	0	155	136	19	--	--	8.430134	0	39	0	0	0	84	19	0	86	0	0	0	0	9	87	291	30	0	0	645

366	Solvay	0	225	225	0	--	--	2.016784	0	44	0	38	21	0	15	0	91	0	0	0	0	43	6	11	0	0	6	275
367	Geddes	0	186	186	0	--	--	0.093832	0	0	0	0	0	56	7	0	4	0	0	0	0	0	9	0	0	0	7	83
368	Syracuse	0	59	59	0	--	--	2.008414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
369	Syracuse	0	485	485	0	--	--	2.008414	0	5	0	11	20	0	0	26	0	0	0	0	0	0	0	18	0	0	0	80
370	Syracuse	0	298	298	0	--	--	2.008414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
371	Syracuse	1	0	0	0	--	--	20	0	43	0	0	4	0	5	0	8	0	3	0	44	0	629	0	12	0	0	748
372	Syracuse	0	840	840	0	--	--	20	0	24	0	0	5	0	13	0	228	0	10	0	14	1	233	10	5	0	33	575
373	Syracuse	0	140	0	140	--	--	20	0	3	0	0	5	0	56	0	127	0	0	0	15	4	0	0	4	0	9	223
374	Syracuse	0	282	0	282	--	--	15	0	49	0	0	0	0	0	0	0	0	71	0	0	17	9	208	0	0	7	361
375	Syracuse	0	0	0	0	--	--	20	0	1111	0	0	0	0	295	0	10	0	0	0	0	24	0	0	0	0	0	1440
376	Syracuse	0	0	0	0	--	--	20	0	62	0	11	26	0	26	0	0	24	13	0	0	34	41	17	0	0	0	254
377	Syracuse	0	81	81	0	--	--	20	0	72	0	0	31	366	529	380	0	43	8	0	0	78	49	0	196	0	0	1752
378	Syracuse	0	188	0	188	--	--	20	0	0	0	2	0	138	0	352	44	41	30	0	0	21	25	0	0	0	7	660
379	Syracuse	0	24	0	24	--	--	20	0	1	0	3	0	43	0	342	325	39	29	0	0	1	0	20	0	0	8	811
380	Syracuse	0	0	0	0	--	--	20	0	0	0	0	14	2	0	0	126	0	0	0	0	0	1	0	0	0	0	143
381	Syracuse	0	0	0	0	--	--	20	0	0	0	0	43	6	0	0	333	0	0	0	0	0	0	0	0	0	0	382
382	Syracuse	0	0	0	0	--	--	20	0	32	0	2	0	65	24	375	10	42	30	0	0	28	141	0	0	0	8	757
383	Geddes	0	171	167	4	--	--	2.828985	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
384	Syracuse	0	108	108	0	--	--	15	0	31	5	3	9	204	27	96	28	0	69	0	4	44	9	0	19	0	110	660
385	Syracuse	0	195	195	0	--	--	15	0	19	4	78	2	19	2	55	11	0	25	0	2	137	8	0	12	0	19	393
386	Dewitt	0	164	160	4	--	--	0.076502	0	606	285	46	0	17	1418	6	3	0	8	0	217	176	21	0	12	3	35	2853
387	Dewitt	0	112	112	0	--	--	0.076502	0	135	168	0	0	22	65	0	23	0	7	0	283	1058	29	0	15	4	6	1814
388	Syracuse	0	154	154	0	--	--	15	0	0	0	7	0	0	11	0	14	0	0	0	0	1	0	0	0	0	0	33
389	Syracuse	0	190	190	0	--	--	15	0	0	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	5
390	Syracuse	0	146	146	0	--	--	20	0	0	0	22	0	0	39	0	57	0	0	0	0	0	0	0	0	0	0	118
391	Syracuse	0	211	201	10	--	--	15	0	6	0	2	0	0	4	0	0	0	0	0	0	2	0	15	0	0	0	29
392	Syracuse	0	39	39	0	--	--	20	0	9	0	8	0	0	12	0	4	0	0	0	0	3	0	0	0	0	0	36
393	Camillus	0	28	28	0	--	--	0	0	0	0	0	187	0	11	0	0	0	0	0	0	1011	0	0	0	0	0	1209
394	Camillus	0	382	379	3	--	--	2.437705	0	17	0	0	53	0	0	0	21	31	0	0	0	0	0	17	0	0	0	139
395	Syracuse	0	0	0	0	--	--	15	4	252	412	23	90	41	184	3	1	11	158	0	0	0	37	1	1	1	9	1228
396	Syracuse	0	78	78	0	--	--	15	6	231	102	17	385	11	91	3	131	48	28	0	0	78	64	31	5	2	15	1248
397	Syracuse	0	185	185	0	--	--	15	0	4	0	4	49	0	61	0	0	7	0	0	0	7	129	1	5	0	0	267
398	Camillus	0	1322	1318	4	--	--	1.364506	0	71	0	5	0	0	98	15	55	0	0	0	0	330	9	81	0	61	0	725
399	Syracuse	0	461	458	3	--	--	8.910176	0	0	0	0	0	16	0	0	0	0	0	0	0	0	3	0	0	0	0	19
400	Syracuse	0	124	124	0	--	--	15	0	5	0	0	8	0	0	0	0	0	0	0	0	10	0	0	0	0	0	23
401	Syracuse	0	21	21	0	--	--	15	0	5	0	24	24	0	30	0	10	0	0	0	0	24	0	0	0	0	0	118
402	Camillus	0	646	642	4	--	--	1.400718	0	26	0	0	34	143	154	0	81	0	85	0	0	90	20	0	7	52	0	692
403	Syracuse	0	0	0	0	--	--	20	0	74	0	0	0	9	0	0	48	0	0	0	0	0	12	0	0	0	0	143
404	Syracuse	0	133	133	0	--	--	20	0	1	0	0	0	1	0	0	10	0	0	0	0	0	1	58	0	0	0	71
405	Syracuse	0	230	230	0	--	--	20	0	27	0	0	22	7	0	0	77	0	0	0	0	27	15	0	0	0	0	175
406	Syracuse	0	66	66	0	--	--	2.099814	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
407	Syracuse	0	216	214	2	--	--	2.099814	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
408	Syracuse	0	0	0	0	--	--	20	0	63	0	0	0	55	0	42	0	0	0	0	6	5	0	14	0	0	0	185
409	Syracuse	0	0	0	0	--	--	20	0	33	0	0	0	0	0	31	65	0	0	0	5	1	0	0	0	0	84	219
410	Syracuse	0	137	137	0	--	--	20	0	168	0	16	69	0	68	0	22	0	70	0	2	25	22	0	0	0	0	462
411	Syracuse	0	0	0	0	--	--	20	0	523	0	19	1	0	256	0	1	0	0	0	3	0	2	0	0	0	0	805
412	Syracuse	0	222	128	94	--	--	20	0	107	0	31	3	0	69	7	61	0	0	0	0	17	51	54	5	2	0	407
413	Syracuse	0	0	0	0	--	--	20	0	77	0	0	0	0	406	0	0	0	0	0	0	0	0	0	0	3	0	485
414	Syracuse	0	31	31	0	--	--	20	0	30	0	0	3	30	342	12	4	0	1	0	0	20	11	0	0	2	0	455
415	Syracuse	0	140	140	0	--	--	20	0	472	0	0	7	0	135	106	18	0	4	0	0	31	10	122	3	4	0	913
416	Camillus	0	335	335	0	--	--	4.254137	0	17	0	0	73	0	0	0	0	0	8	0	0	28	0	4	22	0	0	152
417	Syracuse	0	27	27	0	--	--	20	0	50	0	0	6	21	209	438	0	0	0	0	0	2	4	58	0	0	0	788
418	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
419	Syracuse	0	0	0	0	--	--	20	0	16	0	13	10	0	123	179	12	0	0	0	0	0	0	25	0	0	6	384
420	Syracuse	0	0	0	0	--	--	20	0	10	12	0	0	0	0	149	11	0	0	0	0	4	0	20	0	0	0	205
421	Syracuse	0	389	389	0	--	--	7.317591	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	39
422	Syracuse	0	0	0	0	--	--	15	0	2	148	0	0	0	3	0	0	0	9	0	2	2	12	0	0	0	7	185
423	Syracuse	0	0	0	0	--	--	20	0	1	0	0	0	0	1	14	0	0	0	0	1	7	14	0	19	0	11	68
424	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	6	0	80	0	0	0	3	16	0	0	0	0	0	105
425	Syracuse	0	34	34	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6
426	Syracuse	0	0	0	0	--	--	15	0	17	0	0	0	0	7	43	19	0	0	0	1	36	12	0	0	0	0	135

427	Syracuse	0	4	4	0	--	--	20	0	3	0	2	17	0	0	10	0	0	0	0	1	0	3	0	0	0	0	36
428	Syracuse	0	28	28	0	--	--	15	0	24	0	39	0	0	29	76	25	0	68	0	2	72	1	8	11	0	85	440
429	Syracuse	0	192	192	0	--	--	14.58859	0	6	0	15	4	0	70	23	6	0	70	0	0	17	6	6	39	0	4	265
430	Syracuse	0	137	137	0	--	--	14.58859	0	6	0	8	2	0	51	0	4	2	251	0	0	10	0	2	61	0	90	487
431	Syracuse	0	3	0	3	--	--	14.58859	0	4	0	23	6	11	99	207	2	3	13	0	0	21	6	1	76	0	19	491
432	Syracuse	0	35	35	0	--	--	15	0	0	0	0	0	0	0	26	14	0	7	0	0	0	0	0	0	0	0	47
433	Syracuse	0	15	15	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
434	Syracuse	0	196	196	0	--	--	15	0	11	0	6	0	0	0	0	11	0	21	0	0	20	0	0	0	2	0	71
435	Syracuse	0	5	5	0	--	--	20	0	3	3	0	0	18	0	607	0	0	1	0	0	0	14	11	0	0	7	664
436	Syracuse	0	0	0	0	--	--	20	0	2	7	0	0	0	0	0	0	0	4	0	0	1	2	0	0	0	2	18
437	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	3	15	14	0	0	5	37
438	Syracuse	0	0	0	0	--	--	20	0	16	0	0	0	0	5	0	0	0	0	0	0	23	0	0	0	0	0	44
439	Syracuse	0	82	82	0	--	--	2.536177	0	0	0	4	4	0	0	0	0	0	0	0	0	15	4	0	0	0	0	27
440	Syracuse	0	207	207	0	--	--	2.536177	0	0	0	5	13	0	0	0	0	0	0	0	0	8	3	0	0	0	0	29
441	Solvay	0	110	110	0	--	--	0	1	106	40	19	98	0	41	0	20	0	55	0	0	118	24	0	0	0	3	525
442	Syracuse	0	512	455	57	--	--	4.90632	0	33	0	0	50	0	0	0	0	0	17	0	0	48	44	114	5	0	50	361
443	Syracuse	0	449	445	4	--	--	7.721142	0	96	0	9	63	9	0	0	0	0	49	0	0	27	53	0	0	7	11	324
444	Camillus	0	238	238	0	--	--	7.235539	0	94	31	5	112	0	17	0	5	0	23	0	0	99	18	0	0	0	37	441
445	Syracuse	0	0	0	0	--	--	15	0	4	0	360	0	0	4	0	4	0	9	0	0	123	4	4	0	0	13	527
446	Dewitt	0	22	22	0	--	--	0.332182	0	217	0	205	38	0	20	20	28	0	220	0	0	232	179	6	100	0	132	1397
447	Geddes	0	200	200	0	--	--	4.241554	0	23	0	0	113	0	0	0	0	0	0	0	0	47	8	0	0	0	0	191
448	Geddes	0	144	137	7	--	--	2.74395	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	29
449	Syracuse	0	49	49	0	--	--	7.532137	0	3	0	3	11	0	35	15	5	0	19	0	0	3	0	6	0	0	26	126
450	Manlius	0	577	577	0	--	--	0.000036	0	17	0	0	0	0	39	0	0	0	0	0	0	63	0	0	0	0	0	119
451	Solvay	0	839	834	5	--	--	2.675367	0	12	0	0	0	77	10	0	5	0	0	0	0	0	0	10	0	0	0	114
452	Manlius	0	673	673	0	--	--	0.006161	0	0	0	59	5	0	2	0	11	0	0	0	5	21	5	19	0	0	0	127
453	Syracuse	0	2	2	0	--	--	15	0	122	0	0	0	0	29	0	0	0	0	0	0	27	6	0	14	22	0	220
454	Syracuse	0	104	104	0	--	--	20	0	320	44	32	77	0	298	420	156	0	58	0	0	59	47	31	0	0	0	1540
455	Syracuse	0	6	6	0	--	--	15	0	10	13	0	13	0	32	0	4	0	60	0	0	8	30	19	135	0	51	375
456	Syracuse	0	3	3	0	--	--	7.307918	0	1	0	10	0	0	0	0	4	0	5	0	0	9	18	9	0	0	18	74
457	Syracuse	0	26	26	0	--	--	7.307918	0	4	0	4	0	0	0	0	14	0	0	0	0	94	20	36	0	0	4	175
458	Syracuse	0	95	95	0	--	--	1.687125	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	3	0	0	0	10
459	Syracuse	0	277	277	0	--	--	1.687125	0	0	0	0	27	0	60	0	19	0	14	0	0	0	0	13	0	0	14	147
460	Syracuse	0	176	176	0	--	--	15	0	129	7	13	42	10	10	14	74	0	45	0	0	0	47	33	5	0	0	427
461	Syracuse	0	0	0	0	--	--	15	0	63	0	0	0	0	1998	0	0	0	0	0	0	0	0	0	0	619	0	2680
462	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	0	0	197	0	0	0	27	0	0	0	0	224
463	Syracuse	0	0	0	0	--	--	20	0	48	0	0	0	0	0	319	0	0	0	0	0	0	0	0	0	0	0	367
464	Syracuse	0	34	34	0	--	--	15	0	78	0	0	0	0	160	286	0	0	0	0	0	8	26	9	2	26	78	673
465	Syracuse	0	8	8	0	--	--	9.117903	0	1	0	49	0	0	0	0	0	0	18	0	0	5	6	0	0	0	6	85
466	Syracuse	0	199	199	0	--	--	15	4	149	45	21	31	4	15	0	107	4	12	0	0	16	74	29	0	0	24	535
467	Syracuse	0	0	0	0	--	--	15	0	5	0	0	0	0	0	0	198	0	0	0	0	0	0	45	0	0	0	248
468	Syracuse	0	155	155	0	--	--	15	0	6	0	3	0	0	0	0	0	13	12	0	0	3	27	0	0	0	0	64
469	Syracuse	0	128	128	0	--	--	15	0	7	0	2	2	0	2	0	2	0	6	0	0	0	2	32	0	0	0	55
470	Syracuse	0	193	185	8	--	--	15	0	14	0	2	0	0	11	0	1	0	10	0	0	4	2	0	0	0	0	44
471	Syracuse	0	189	189	0	--	--	15	0	7	0	6	15	44	10	0	0	0	57	0	6	17	7	0	2	0	5	176
472	Syracuse	0	306	306	0	--	--	15	0	6	0	0	14	83	0	0	0	0	0	0	8	25	12	0	3	0	0	151
473	Dewitt	0	465	313	152	--	--	2.569431	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11
474	Dewitt	0	364	364	0	--	--	2.569431	0	87	0	0	180	0	0	0	21	0	0	0	0	156	26	0	2	0	14	486
475	Syracuse	0	433	432	1	--	--	5.47805	0	4	0	26	16	18	0	0	0	0	54	0	0	37	12	0	0	0	0	168
476	Syracuse	0	41	41	0	--	--	6.523777	0	0	9	0	0	0	0	0	0	0	0	0	0	100	6	0	0	0	0	115
477	Syracuse	0	37	37	0	--	--	6.523777	0	1	6	1	20	0	0	0	0	0	0	0	0	57	2	0	10	0	0	97
478	Syracuse	0	15	15	0	--	--	6.523777	0	4	21	3	0	0	0	0	0	0	405	0	0	60	6	0	0	0	4	503
479	Syracuse	0	33	33	0	--	--	6.523777	0	3	6	0	0	0	0	0	0	0	0	0	0	16	19	0	0	0	25	69
480	Syracuse	0	202	190	12	--	--	1.954129	0	18	0	40	13	265	5	29	116	0	15	0	0	66	91	11	16	0	106	791
481	Syracuse	0	108	108	0	--	--	1.954129	0	1	0	0	0	62	7	0	27	0	5	0	0	84	15	2	2	0	12	217
482	Syracuse	0	315	315	0	--	--	1.606681	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
483	Syracuse	0	294	294	0	--	--	1.606681	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
484	Dewitt	0	0	0	0	--	--	5.714856	19	774	2	72	10	18	94	4	61	1	107	0	0	254	329	28	2	2	19	1797
485	Dewitt	0	0	0	0	--	--	5.714856	1	48	42	1	212	9	300	1	0	26	25	0	0	164	86	4	3	0	19	945
486	Syracuse	0	170	170	0	--	--	4.230112	0	15	0	8	78	0	0	0	0	0	7	0	0	28	7	0	0	0	7	150
487	Elbridge	0	460	460	0	--	--	3.376906	4	0	0	8	0	0	0	0	0	0	0	0	0	70	13	0	0	0	0	95

488	Elbridge	0	324	320	4	--	--	3.376906	2	7	0	25	55	140	18	0	25	0	0	0	7	62	5	0	0	0	20	366
489	Syracuse	0	113	113	0	--	--	15	0	123	0	11	89	44	69	0	0	0	34	0	9	68	9	0	23	0	0	478
490	Syracuse	0	329	329	0	--	--	14.17692	3	63	0	0	0	0	0	0	0	0	0	0	0	20	0	12	0	0	0	98
491	Syracuse	0	425	400	25	--	--	15	0	72	0	6	17	0	6	0	233	0	0	0	0	7	12	0	0	0	0	352
492	Syracuse	0	340	331	9	--	--	15	0	53	0	0	13	0	37	0	180	0	0	0	0	15	11	0	0	0	0	309
493	Syracuse	0	0	0	0	--	--	4.748782	0	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	224
494	Syracuse	0	150	150	0	--	--	0	2	99	735	74	11	0	327	8	0	0	34	0	54	33	27	6	240	78	45	1773
495	Syracuse	0	29	29	0	--	--	0	0	0	56	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	8	67
496	Syracuse	0	287	287	0	--	--	2.288757	0	3	5	24	76	49	4	44	0	0	88	0	0	10	25	0	0	0	47	375
497	Syracuse	0	145	144	1	--	--	2.288757	0	4	2	0	0	0	0	14	0	0	27	0	0	2	0	45	0	0	0	94
498	Syracuse	0	223	223	0	--	--	7.087175	0	153	165	0	29	0	71	0	537	0	0	0	0	9	6	8	0	0	0	978
499	Syracuse	0	176	176	0	--	--	7.087175	0	38	321	25	9	20	30	0	104	0	0	0	0	16	46	15	0	0	0	625
500	Syracuse	0	586	582	4	--	--	2.782117	2	41	9	30	81	0	2	0	8	0	8	0	0	99	177	0	0	0	91	547
501	Syracuse	0	0	0	0	--	--	2.782117	0	15	3	0	287	0	15	0	218	0	0	0	0	532	4	0	0	0	17	1092
502	Solvay	0	634	634	0	--	--	0.488924	8	10	0	6	28	0	4	33	0	0	42	0	0	14	9	0	0	0	84	238
503	Syracuse	0	45	45	0	--	--	15	0	14	0	0	21	0	52	0	0	0	0	0	0	26	29	0	0	0	0	142
504	Syracuse	0	339	290	49	--	--	15	0	7	0	3	67	123	0	0	7	0	0	0	0	38	13	0	0	0	0	258
505	Solvay	0	744	743	1	--	--	0.482925	0	25	6	0	19	268	9	0	0	0	0	0	0	50	28	0	0	0	0	405
506	Camillus	0	183	183	0	--	--	2.390576	0	0	0	0	0	0	29	10	18	0	0	0	0	0	0	0	0	0	0	57
507	Syracuse	0	0	0	0	--	--	0.628943	0	7	0	72	0	0	0	0	0	0	0	0	0	73	15	0	53	0	0	220
508	Syracuse	0	228	228	0	--	--	13.11086	4	46	0	94	150	0	0	0	0	0	126	0	0	187	46	0	13	0	78	743
509	Syracuse	0	40	40	0	--	--	0.670655	0	10	0	162	0	0	0	17	0	0	20	0	0	29	25	0	9	0	41	313
510	Syracuse	0	436	339	97	--	--	6.352946	2	49	0	0	0	62	218	65	72	0	4	0	0	0	30	32	0	0	0	534
511	Syracuse	0	111	111	0	--	--	6.352946	0	103	0	0	0	0	41	0	11	0	0	0	0	0	16	49	0	0	0	220
512	Syracuse	0	365	365	0	--	--	3.546869	0	15	9	11	10	151	0	0	0	0	243	0	0	9	0	0	0	0	19	467
513	East Syracı	0	14	14	0	--	--	4.514478	0	174	0	25	68	178	31	0	73	0	18	0	0	332	83	22	35	0	65	1105
514	Syracuse	0	568	568	0	--	--	3.967118	0	4	0	0	3	11	12	0	0	0	0	0	0	2	5	0	0	0	0	37
515	Syracuse	0	103	103	0	--	--	14.35493	0	57	0	6	0	0	14	0	4	0	0	0	10	65	9	60	6	0	22	253
516	Solvay	0	0	0	0	--	--	2.838104	1	36	0	7	0	0	4	0	1	0	477	0	0	3	11	0	1	83	3	627
517	Solvay	0	481	481	0	--	--	2.838104	0	19	0	10	8	8	158	300	14	0	0	0	0	0	14	6	0	0	19	555
518	Syracuse	0	0	0	0	--	--	0.262022	0	13	0	11	0	0	0	0	0	0	100	0	0	21	19	0	149	0	53	366
519	East Syracı	0	85	85	0	--	--	10.78222	4	0	0	246	0	0	0	0	0	0	23	0	7	7	3	0	13	0	19	322
520	Syracuse	0	398	398	0	--	--	4.34803	1	54	0	12	52	0	3	0	3	0	4	0	0	65	43	9	0	0	26	272
521	Dewitt	0	0	0	0	--	--	1.990188	0	0	0	0	58	0	0	0	0	0	55	0	0	95	14	0	65	0	120	407
522	Syracuse	0	410	307	103	--	--	14.07796	0	5	0	11	44	25	0	13	33	0	0	0	0	103	15	0	0	0	36	285
523	Syracuse	0	334	334	0	--	--	2.276632	0	2	0	0	0	0	5	0	4	0	0	0	0	24	0	0	0	0	2	37
524	Syracuse	0	617	608	9	--	--	3.705318	0	8	0	0	41	0	0	0	0	0	0	0	0	0	0	67	0	0	0	116
525	Syracuse	0	485	485	0	--	--	5.150197	0	4	0	0	0	253	6	0	0	0	0	0	0	6	0	0	0	0	0	269
1114	Camillus	0	223	223	0	--	--	0	0	0	0	0	154	0	6	0	17	27	0	0	0	183	0	0	0	0	0	386
1113	Camillus	0	160	160	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
527	Syracuse	0	395	395	0	--	--	12.60583	0	0	0	0	27	98	4	0	0	0	7	0	0	12	7	7	0	0	7	169
528	Syracuse	0	481	481	0	--	--	2.235939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
529	Syracuse	0	261	261	0	--	--	0.087182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4
530	Syracuse	0	0	0	0	--	--	0.234723	0	0	0	0	0	0	0	46	0	0	0	0	0	0	5	0	0	0	0	51
531	Syracuse	0	1	0	1	--	--	0.098596	0	4	0	2	7	0	12	6	0	0	78	0	0	12	2	0	30	12	13	178
532	Syracuse	0	438	438	0	--	--	5.82436	0	6	0	0	11	0	0	0	0	0	0	0	0	5	0	0	0	0	0	22
533	Manlius	0	741	736	5	--	--	1.377006	0	27	0	0	0	176	58	0	0	0	0	0	0	18	8	0	0	0	0	287
534	Syracuse	0	0	0	0	--	--	0.217766	0	4	0	0	2	0	0	0	0	0	0	0	0	4	66	0	1	0	0	77
535	Syracuse	0	277	277	0	--	--	6.808841	0	9	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
536	East Syracı	0	6	0	6	--	--	9.694251	1	42	0	7	0	0	9	0	0	0	523	0	0	1	4	64	0	12	0	663
537	Syracuse	0	348	346	2	--	--	0.037295	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
538	Syracuse	0	302	302	0	--	--	7.127296	0	5	0	51	36	0	20	0	0	0	19	0	0	13	9	5	0	0	9	168
539	Syracuse	0	223	223	0	--	--	6.05977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
540	Syracuse	0	301	301	0	--	--	0.195971	0	24	0	0	0	0	0	0	5	0	0	0	0	0	11	0	0	0	0	40
541	Syracuse	0	104	104	0	--	--	0.513808	0	0	0	0	0	92	0	0	3	0	3	0	0	0	0	0	19	0	0	117
542	Syracuse	0	446	446	0	--	--	2.273101	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
543	East Syracı	0	501	501	0	--	--	4.525058	0	18	10	0	29	86	15	0	0	0	20	0	10	17	18	0	0	15	0	238
544	Syracuse	0	363	359	4	--	--	1.991434	0	0	0	33	22	0	0	0	0	0	11	0	0	93	0	0	0	0	16	175
545	Syracuse	0	370	370	0	--	--	10.77716	0	3	23	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	54
546	Syracuse	0	0	0	0	--	--	1.636022	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0
547	Syracuse	0	373	373	0	--	--	7.534382	0	5	0	0	0	0	0	0	93	0	0	0	0	10	51	0	0	0	5	164

548	East Syracı	0	318	318	0	--	--	3.157316	1	56	0	44	11	7	1	0	9	2	99	0	0	7	70	4	2	3	17	333
549	East Syracı	0	442	440	2	--	--	3.157316	1	35	12	30	11	101	14	54	47	2	7	0	0	25	21	12	1	1	2	376
550	Geddes	0	110	110	0	--	--	2.865304	0	0	0	10	4	0	0	0	0	0	159	0	79	28	4	0	0	5	38	327
551	Syracuse	0	201	201	0	--	--	6.808968	0	66	0	89	0	0	0	0	0	0	0	0	0	57	0	0	0	0	52	264
552	Syracuse	0	309	309	0	--	--	9.878653	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	5
553	Syracuse	0	364	330	34	--	--	0.018533	0	68	0	9	9	26	89	0	94	0	4	0	0	14	34	28	0	0	4	379
554	Syracuse	0	444	440	4	--	--	6.594307	0	0	0	7	7	9	0	0	0	0	0	0	0	1	6	32	0	0	13	75
555	Camillus	0	358	350	8	--	--	2.382616	0	0	0	5	109	0	0	0	0	0	0	0	0	3	7	0	70	0	0	194
556	Camillus	0	312	312	0	--	--	0.001992	1	5	0	0	0	0	0	8	0	0	7	0	0	0	2	0	2	0	0	25
557	Camillus	0	146	146	0	--	--	0.001992	0	0	0	0	0	284	0	0	0	0	0	0	0	5	16	12	0	0	0	317
558	Syracuse	0	414	414	0	--	--	0.937122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
559	Geddes	0	0	0	0	--	--	0	0	63	0	0	16	0	0	0	0	0	93	0	0	0	10	0	0	0	524	706
560	Manlius	0	148	148	0	--	--	0.001344	5	0	0	83	0	0	0	0	0	0	0	0	0	2	44	0	0	0	0	134
561	Syracuse	0	385	385	0	--	--	7.008668	0	0	0	6	12	0	0	0	0	0	0	0	0	0	0	0	0	0	3	21
562	Manlius	0	335	335	0	--	--	0.035299	0	0	0	0	0	0	0	0	0	0	0	0	0	49	0	0	0	0	0	49
563	Syracuse	0	656	656	0	--	--	4.993106	3	15	0	0	33	0	0	0	0	0	11	0	2	7	10	0	0	0	0	81
564	Syracuse	0	253	253	0	--	--	5.831994	0	8	0	32	41	0	0	0	0	0	27	0	15	16	36	0	0	0	53	230
565	Syracuse	0	311	311	0	--	--	0.820069	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	9	0	0	0	109
566	Syracuse	0	270	270	0	--	--	0.716666	0	35	0	0	0	0	0	0	23	0	0	0	0	18	0	0	0	0	0	76
567	Syracuse	0	334	334	0	--	--	2.336335	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	25
568	Elbridge	0	77	77	0	--	--	2.746383	0	0	0	3	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	9
569	Elbridge	0	205	205	0	--	--	2.746383	0	3	0	0	13	162	0	40	0	0	72	0	7	5	0	3	0	0	3	308
570	Syracuse	0	610	610	0	--	--	6.906892	3	33	5	0	96	0	230	0	3	0	8	0	0	55	17	0	0	0	0	449
571	Syracuse	0	543	543	0	--	--	3.311332	0	110	0	0	11	0	505	0	32	0	24	0	0	34	0	20	32	0	7	776
572	Syracuse	0	619	610	9	--	--	4.044306	0	0	0	0	0	0	0	0	0	0	0	0	0	126	0	0	0	0	0	126
573	Dewitt	0	316	307	9	--	--	0.059642	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
574	Syracuse	0	426	412	14	--	--	7.56005	0	13	11	0	19	33	13	0	11	0	62	0	0	39	103	11	0	0	72	387
575	Syracuse	0	404	397	7	--	--	5.866611	0	19	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	39	70
576	Dewitt	0	333	333	0	--	--	1.055264	0	0	43	0	38	62	0	0	0	0	7	0	0	276	0	0	8	0	28	461
577	Syracuse	0	126	126	0	--	--	0.417778	0	0	0	0	30	0	0	0	0	0	3	0	0	7	0	0	0	0	0	40
578	Syracuse	0	107	107	0	--	--	0.417778	0	0	0	0	0	0	0	0	0	0	11	0	0	19	0	0	0	0	0	30
579	Syracuse	0	511	511	0	--	--	10.61973	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
580	Syracuse	0	0	0	0	--	--	0	0	53	0	0	33	5	0	0	0	0	23	0	0	21	36	0	204	0	0	375
581	Syracuse	0	2	0	2	--	--	0	0	54	0	18	0	13	0	27	0	0	0	0	0	36	9	0	34	0	39	230
582	Syracuse	0	120	120	0	--	--	2.590051	0	4	0	28	14	0	0	0	2	0	0	0	0	5	2	0	0	2	0	57
583	Syracuse	0	162	162	0	--	--	2.590051	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
584	Syracuse	0	446	368	78	--	--	1.477204	0	9	0	35	17	200	0	0	0	0	0	0	0	13	40	30	0	0	0	345
585	Dewitt	0	1	1	0	--	--	3.840352	2	87	8	52	0	128	12	0	13	0	207	0	0	47	17	0	32	0	124	729
586	Dewitt	0	2	2	0	--	--	3.840352	0	86	0	6	77	0	0	0	16	22	86	0	0	14	32	36	208	0	32	615
587	Syracuse	0	46	42	4	--	--	2.600652	0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	61
588	Syracuse	0	81	81	0	--	--	2.600652	0	14	0	0	0	0	0	0	0	0	14	0	0	12	0	0	0	0	14	54
589	Syracuse	0	53	53	0	--	--	2.25424	0	1	0	0	14	0	0	0	0	0	12	0	0	7	3	0	12	0	16	65
590	Syracuse	0	259	256	3	--	--	2.25424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
591	Syracuse	0	271	271	0	--	--	3.359099	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
592	Salina	0	693	690	3	--	--	4.098106	3	66	10	89	99	0	31	0	0	0	82	0	5	164	18	0	81	83	46	777
593	Dewitt	0	476	476	0	--	--	0.937337	0	142	0	18	45	0	0	0	8	0	0	0	0	53	0	0	60	0	151	476
594	Dewitt	0	380	373	7	--	--	0.937337	0	7	0	0	0	0	58	0	67	0	0	0	0	0	9	22	0	0	0	163
595	Minoa	0	660	660	0	--	--	1.966243	0	24	0	0	20	28	0	57	0	0	0	0	0	0	30	0	0	0	59	218
596	Dewitt	0	197	197	0	--	--	9.055964	1	122	0	120	10	0	0	0	0	0	215	51	0	46	6	0	57	0	80	708
597	Syracuse	0	94	94	0	--	--	2.333923	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
598	Syracuse	0	101	101	0	--	--	2.333923	0	6	0	6	10	0	0	0	0	9	43	0	0	6	7	0	0	0	6	93
599	Dewitt	0	74	74	0	--	--	4.546257	0	10	0	7	0	0	0	0	0	0	192	0	0	55	10	0	22	0	11	307
600	Syracuse	0	328	328	0	--	--	2.480896	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
601	Syracuse	0	238	232	6	--	--	2.480896	0	0	0	6	0	0	0	0	0	0	5	0	0	0	0	5	12	0	0	28
602	Syracuse	0	88	88	0	--	--	0.373282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
603	Syracuse	0	253	245	8	--	--	0.373282	0	335	0	0	0	0	0	13	0	0	0	0	0	10	0	0	0	0	0	358
604	Syracuse	0	309	299	10	--	--	10.27257	0	5	0	0	5	78	0	0	0	0	0	0	0	2	0	9	0	0	0	99
605	Salina	0	93	93	0	--	--	10.27257	0	67	0	0	0	0	20	0	0	0	47	0	0	11	43	0	0	7	0	195
606	Salina	0	572	572	0	--	--	3.203025	0	15	0	0	15	0	71	0	62	0	0	0	0	39	23	7	0	0	0	232
607	Dewitt	0	52	52	0	--	--	4.37849	1	71	34	0	20	0	0	0	4	0	564	0	0	32	4	0	0	0	0	730
608	Salina	0	0	0	0	--	--	1.053001	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	41	62

609	Salina	0	3	3	0	--	--	1.053001	0	49	0	55	32	0	0	49	0	0	39	0	0	236	106	0	0	0	51	617
610	Dewitt	0	3	3	0	--	--	1.13625	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	40	0	0	69
611	Dewitt	0	43	43	0	--	--	1.13625	0	4	1	1	2	5	2	1	4	1	2	0	0	2	1	0	2	0	1	29
612	Camillus	0	101	95	6	--	--	0.196501	7	0	0	0	0	0	9	0	23	0	0	0	0	0	10	0	0	0	0	49
613	Camillus	0	55	55	0	--	--	0.196501	6	0	0	0	0	0	0	159	0	0	0	0	0	0	13	0	0	0	0	178
614	Camillus	0	172	172	0	--	--	0.196501	8	22	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	48
615	Camillus	0	351	351	0	--	--	0.196501	0	8	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	28
616	Dewitt	0	653	653	0	--	--	1.199572	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
617	Van Buren	0	19	19	0	--	--	5.394978	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	3	570	580
618	Van Buren	0	67	67	0	--	--	5.394978	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18
619	Salina	0	59	59	0	--	--	7.2209	0	4	0	57	0	0	0	15	0	0	11	0	0	24	2	0	0	0	25	138
620	Salina	0	0	0	0	--	--	3.313916	0	0	0	0	0	0	0	0	0	0	585	0	0	0	0	0	0	0	0	585
621	Dewitt	0	1	1	0	--	--	4.545483	0	51	14	277	0	28	35	0	5	0	332	0	0	31	23	15	39	0	268	1118
622	Dewitt	0	0	0	0	--	--	4.545483	0	13	9	32	118	0	38	0	1	184	226	0	53	3	46	6	0	0	211	940
623	Manlius	0	494	494	0	--	--	0.103964	11	18	0	0	0	261	46	0	0	0	0	0	0	40	10	0	0	0	0	385
624	Manlius	0	61	61	0	--	--	0.103964	0	0	0	17	0	0	0	15	0	0	0	0	0	0	0	9	0	0	0	41
625	Manlius	0	69	69	0	--	--	0.103964	2	35	28	0	0	306	0	0	0	0	0	0	0	17	30	0	0	0	0	418
626	Manlius	0	290	290	0	--	--	0.017698	0	0	0	3	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	19
627	Salina	0	796	796	0	--	--	2.94917	0	14	0	0	40	0	77	94	116	0	9	0	0	8	29	0	0	0	0	387
628	Salina	0	394	394	0	--	--	2.914754	0	3	0	0	329	106	15	0	0	0	0	0	0	8	0	0	0	0	0	461
1103	Salina	0	0	0	0	--	--	1.048512	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	18	0	0	22
1102	Salina	0	0	0	0	--	--	1.048512	0	63	7	72	0	44	8	0	30	0	0	0	0	0	69	0	0	0	0	293
1104	Salina	0	290	290	0	--	--	1.048512	0	0	0	0	76	0	0	0	0	79	0	0	0	0	0	0	0	0	0	155
630	Salina	0	0	0	0	--	--	1.048512	0	17	0	0	34	0	30	0	65	68	0	0	0	0	0	0	0	0	0	214
631	Dewitt	0	13	13	0	--	--	1.20108	0	61	160	48	35	0	531	0	103	10	1447	33	0	7	600	23	33	0	66	3159
632	Dewitt	0	40	40	0	--	--	1.20108	5	157	29	328	72	117	190	0	121	0	548	0	0	21	21	27	44	0	99	1779
633	Salina	0	17	17	0	--	--	1.180026	0	30	0	150	0	0	0	0	0	0	26	0	0	23	17	0	201	0	21	468
634	Salina	0	0	0	0	--	--	1.180026	0	71	0	0	0	0	0	0	0	0	50	0	0	49	0	0	0	0	79	249
635	Salina	0	71	71	0	--	--	1.180026	0	22	0	0	0	0	0	0	0	0	0	0	0	1	16	0	0	0	25	64
636	Van Buren	0	61	61	0	--	--	0	0	0	0	12	0	0	0	0	0	0	0	0	0	1	10	0	0	0	11	34
637	Salina	0	474	474	0	--	--	1.217568	0	0	0	5	0	0	7	0	0	0	0	0	0	0	0	0	3	0	0	16
638	Dewitt	0	10	10	0	--	--	4.5457	0	3	0	28	131	0	698	0	0	76	0	0	0	1	30	0	0	0	0	967
639	Geddes	0	396	396	0	--	--	1.373084	0	23	0	24	24	0	9	0	4	17	0	0	0	7	29	0	0	0	27	164
640	Salina	0	251	251	0	--	--	0.554503	1	72	134	18	15	0	20	0	50	40	0	0	0	120	52	17	0	0	13	552
641	Sullivan	0	145	145	0	--	--	4.2	0	22	5	9	13	26	18	10	26	2	23	0	1	27	14	5	11	1	12	225
642	Geddes	0	441	440	1	--	--	1.716859	0	7	0	20	41	144	32	0	5	0	0	0	0	29	14	0	0	0	68	360
643	Sullivan	0	86	86	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
644	Dewitt	0	15	0	15	--	--	4.545378	3	287	0	101	0	0	24	0	5	0	132	0	0	88	49	0	223	0	131	1044
645	Salina	0	78	78	0	--	--	1.842984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
646	Salina	0	534	534	0	--	--	1.842984	0	4	0	16	1	0	0	0	0	0	49	0	0	9	13	15	5	0	17	129
647	Salina	0	19	19	0	--	--	1.842984	0	5	0	0	5	0	0	0	0	0	0	0	0	14	14	9	9	0	0	56
648	Salina	0	236	236	0	--	--	0.138595	0	6	0	0	29	0	0	0	0	0	0	0	0	10	0	0	0	0	0	45
649	Salina	0	4	4	0	--	--	0.138595	22	299	24	156	195	148	96	0	45	20	144	0	0	36	32	0	15	0	28	1260
650	Dewitt	0	188	188	0	--	--	6.374065	4	11	0	0	10	0	62	0	0	0	21	0	0	0	27	0	0	0	151	285
651	Dewitt	0	29	29	0	--	--	4.554793	12	300	0	381	34	0	23	25	16	17	1483	0	265	92	51	23	44	0	465	3230
652	Salina	0	36	36	0	--	--	0.256727	0	1	0	0	1	2	1	1	2	0	1	0	0	1	1	0	0	0	1	12
653	Van Buren	0	22	22	0	--	--	0	0	0	36	0	0	0	0	0	0	0	0	0	0	47	44	0	0	0	0	127
654	Salina	0	490	490	0	--	--	3.240582	25	40	0	0	127	0	42	35	37	23	12	0	0	24	14	0	23	0	0	402
655	Salina	0	603	603	0	--	--	2.197023	0	13	0	15	4	49	4	0	0	0	0	0	0	4	38	0	23	0	4	154
656	Elbridge	0	244	244	0	--	--	2.746357	0	0	0	14	12	0	0	0	0	0	0	0	0	3	5	0	0	0	0	34
657	Salina	0	310	308	2	--	--	4.451798	0	48	0	130	48	0	29	0	16	0	232	0	0	34	75	19	13	0	37	681
658	Salina	0	419	419	0	--	--	5.53931	0	8	0	0	17	0	0	0	0	0	0	0	0	7	16	0	0	0	0	48
659	Sullivan	0	70	70	0	--	--	4.2	0	2	0	1	1	2	2	1	2	0	2	0	0	4	1	0	1	0	1	20
660	Sullivan	0	168	168	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
661	Salina	0	3	3	0	--	--	4.57825	0	0	0	0	0	0	0	50	0	0	0	0	0	15	0	0	0	0	0	65
662	Salina	0	54	54	0	--	--	0.095445	2	190	0	6	0	14	848	16	105	0	270	0	0	30	12	0	0	0	0	1493
663	Liverpool	0	68	68	0	--	--	6.248823	0	128	0	0	0	119	95	0	29	0	93	0	0	82	64	0	0	9	7	625
664	Liverpool	0	116	116	0	--	--	6.248823	0	57	13	84	62	0	14	0	22	0	0	0	0	16	39	17	36	0	15	375
665	Liverpool	0	154	154	0	--	--	6.248823	0	24	0	0	25	3	27	0	7	14	0	0	0	7	33	25	0	0	0	165
666	Geddes	0	247	247	0	--	--	0.019836	1	11	0	27	0	0	0	0	12	15	43	0	0	69	32	5	52	0	37	304
667	Salina	0	521	518	3	--	--	2.940461	0	122	8	33	261	0	12	0	4	82	0	0	0	11	12	15	0	0	15	575

668	Dewitt	0	17	17	0	--	--	6.135851	0	41	0	27	0	0	0	0	0	0	682	0	0	0	11	0	16	0	0	777
669	Van Buren	0	145	145	0	--	--	5.394997	0	0	0	15	4	0	4	0	0	0	0	0	0	1	0	0	10	3	0	37
670	Van Buren	0	61	61	0	--	--	5.394997	0	0	0	0	2	0	3	0	0	0	0	0	0	1	0	0	0	2	0	8
671	Sullivan	0	175	175	0	--	--	4.2	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	7
672	Dewitt	0	0	0	0	--	--	3.889606	3	288	0	112	0	0	2	7	14	0	13	0	0	35	9	43	197	10	218	951
673	Dewitt	0	36	13	23	--	--	3.889606	1	238	6	232	21	107	6	34	7	0	358	0	0	208	95	32	916	6	586	2851
674	Manlius	0	168	168	0	--	--	0	0	2	0	8	0	3	0	0	0	0	0	0	0	0	21	3	0	0	0	37
675	Manlius	0	232	225	7	--	--	0	0	6	0	23	0	13	0	0	96	0	0	0	0	0	9	9	0	0	0	156
676	Salina	0	336	330	6	--	--	2.57631	0	10	0	0	91	262	0	30	26	0	0	0	0	141	30	0	0	0	6	595
677	Salina	0	417	417	0	--	--	2.318817	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	0	0	15
678	Van Buren	0	84	84	0	--	--	0	0	37	0	3	38	0	0	11	0	0	0	0	0	1	19	0	19	0	5	133
679	Salina	0	1000	1000	0	--	--	2.43391	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	19	49	0	0	83
680	Salina	0	180	180	0	--	--	4.686657	1	22	8	36	30	94	11	8	12	3	2	0	0	125	35	4	137	7	16	550
681	Salina	0	485	485	0	--	--	4.686657	0	6	0	2	0	4	0	0	1	0	11	0	0	21	13	1	3	0	1	65
682	Van Buren	0	28	28	0	--	--	0	0	0	0	39	0	0	0	0	0	0	0	0	0	24	80	0	8	0	128	279
683	Salina	0	278	271	7	--	--	0.067075	0	11	0	0	0	0	0	17	29	0	0	0	0	0	144	0	0	144	479	824
684	Liverpool	0	103	103	0	--	--	4.34017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
685	Liverpool	0	319	312	7	--	--	4.34017	0	3	0	0	0	72	0	17	6	0	0	0	0	0	60	6	0	0	0	165
686	Dewitt	0	67	67	0	--	--	6.36034	0	51	0	25	9	0	27	0	4	0	7	0	0	20	35	11	497	0	55	741
687	Salina	0	285	285	0	--	--	2.877529	0	0	0	7	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	13
688	Van Buren	0	181	181	0	--	--	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	30
689	Van Buren	0	0	0	0	--	--	0	0	56	0	5	30	0	0	0	0	0	56	0	0	112	0	0	20	0	26	305
690	Dewitt	0	13	13	0	--	--	6.374453	12	388	1	82	0	1	39	1	328	0	2	0	0	36	41	76	2	2	156	1169
691	Dewitt	0	2	2	0	--	--	6.374453	0	69	10	23	0	0	7	5	10	0	261	0	0	109	21	2	100	2	146	766
692	Liverpool	0	292	273	19	--	--	3.143479	0	5	0	0	0	0	0	140	0	0	0	0	0	0	7	0	0	0	0	152
693	Salina	0	470	470	0	--	--	1.953036	0	54	0	152	55	0	7	9	0	18	1516	0	0	97	92	7	97	0	12	2116
694	Geddes	0	11	11	0	--	--	0.888701	0	53	0	67	7	0	19	0	0	0	132	0	2	30	3	0	6	0	73	392
695	Salina	0	4	4	0	--	--	2.160418	0	179	0	37	0	0	179	0	0	0	183	0	0	49	48	0	0	0	170	845
696	Van Buren	0	2	2	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205	0	0	205
697	Salina	0	200	200	0	--	--	0.201191	0	5	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	75
698	Salina	0	286	286	0	--	--	0.201191	0	0	0	3	4	0	0	0	0	1	0	0	0	0	3	1	0	0	0	12
699	Sullivan	0	70	70	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700	Van Buren	0	183	183	0	--	--	0.877729	0	0	0	42	17	0	0	0	0	0	0	0	0	1	19	0	0	0	0	79
701	Salina	0	552	552	0	--	--	1.949316	0	12	0	29	0	280	0	0	9	0	0	0	0	158	54	0	0	0	211	753
1107	Clay	0	10	10	0	--	--	2.366109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13
1108	Clay	0	50	50	0	--	--	2.366109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
703	Van Buren	0	103	103	0	--	--	5.394985	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
704	Geddes	0	110	104	6	--	--	0.05829	0	4	0	61	0	0	19	0	0	0	37	0	23	0	0	0	0	0	42	186
705	Salina	0	551	546	5	--	--	0.998095	0	31	9	0	100	31	11	46	0	0	14	0	0	250	36	0	0	32	2	562
706	Salina	0	4	4	0	--	--	0.998095	0	299	11	0	54	40	27	60	0	27	0	0	0	16	87	0	0	42	3	665
707	Geddes	0	0	0	0	--	--	0.005268	0	0	0	0	0	0	0	0	0	57	124	60	13	0	39	0	59	16	238	606
708	Van Buren	0	471	471	0	--	--	0.092026	0	26	0	0	18	33	3	0	11	0	0	0	0	34	28	4	0	0	10	167
709	Clay	0	42	42	0	--	--	1.642154	0	29	0	14	15	0	0	0	86	0	128	0	0	46	0	0	0	0	206	524
710	Clay	0	47	47	0	--	--	1.482841	0	34	0	0	8	50	278	0	1066	13	0	0	0	12	16	23	0	0	0	1500
711	Salina	0	30	30	0	--	--	0.715443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1105	Salina	0	0	0	0	--	--	0.715443	0	0	0	0	32	0	0	0	0	0	0	0	0	0	24	0	0	0	11	67
1106	Salina	0	4	4	0	--	--	0.715443	0	4	0	5	21	0	4	0	10	0	0	0	0	4	0	0	0	0	16	64
713	Clay	0	154	154	0	--	--	1.470938	0	0	0	0	0	0	0	0	39	0	0	0	0	0	17	0	0	0	0	56
714	Clay	0	1	1	0	--	--	2.400108	0	11	0	51	475	0	72	172	7	0	0	0	3	204	43	0	964	0	0	2001
715	Clay	0	224	224	0	--	--	1.722001	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
716	Cicero	0	9	9	0	--	--	0	2	157	0	13	0	0	21	0	0	0	55	0	0	38	8	0	29	0	13	336
717	Van Buren	0	197	197	0	--	--	0.919081	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	0	0	0	24	75
718	Van Buren	0	14	14	0	--	--	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
719	Cicero	0	16	16	0	--	--	2.658986	1	39	0	12	0	0	0	0	0	0	4	0	0	0	0	0	112	0	0	168
720	Cicero	0	29	29	0	--	--	2.658986	0	0	0	0	0	26	0	0	0	0	62	0	0	0	31	13	0	0	0	132
721	Cicero	0	16	16	0	--	--	2.658986	0	78	0	21	0	0	0	0	0	0	212	0	0	4	459	0	351	0	134	1259
722	Van Buren	0	160	160	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
723	Salina	0	652	652	0	--	--	0.568523	0	179	13	282	16	3	19	0	12	0	1	0	0	8	6	1	1	0	41	582
724	Salina	0	38	38	0	--	--	0.568523	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
725	Clay	0	368	368	0	--	--	1.701251	0	0	0	0	0	0	77	0	0	0	0	0	0	408	0	0	0	0	6	491
726	Clay	0	376	376	0	--	--	2.56148	0	40	0	0	0	421	33	0	27	0	0	0	0	21	0	0	0	0	11	553

727	Clay	0	223	223	0	--	--	2.56148	0	5	0	18	46	0	39	0	16	0	17	0	0	10	59	0	0	0	0	210
728	Cicero	0	0	0	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	7	0	84	0	3	106
729	Salina	0	452	446	6	--	--	0.072285	1	0	0	22	0	164	0	0	0	0	0	0	0	0	0	0	89	0	0	275
730	Salina	0	72	72	0	--	--	0.072285	1	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	4	0	0	14
731	Clay	0	273	273	0	--	--	4.303524	0	0	0	0	19	0	314	0	14	0	0	0	0	13	15	0	0	0	33	408
732	Clay	0	8	8	0	--	--	6.704257	0	66	0	0	6	71	0	0	0	0	690	0	26	83	17	14	27	0	11	1011
733	Clay	0	0	0	0	--	--	6.704257	0	39	0	0	7	83	10	0	0	0	315	0	32	146	88	15	54	0	88	877
734	Cicero	0	1	1	0	--	--	0.282692	0	2	0	0	1	3	2	1	3	0	2	0	0	5	2	1	1	1	1	25
735	Cicero	0	170	170	0	--	--	0.282692	0	26	0	25	37	0	0	0	0	0	242	0	4	28	148	0	0	0	16	525
736	North Syra	0	557	550	7	--	--	4.59757	0	77	38	81	26	211	77	20	10	0	42	0	0	137	71	9	11	0	89	900
737	Cicero	0	10	10	0	--	--	1.005513	0	0	0	19	33	0	0	0	0	0	0	0	0	14	128	0	0	0	53	245
738	Lysander	0	195	195	0	--	--	1.322751	0	0	0	6	9	0	0	0	0	1	0	0	0	0	1	0	10	0	0	27
739	Lysander	0	99	99	0	--	--	1.322751	7	12	0	0	62	0	0	0	0	7	1	0	0	0	32	1	0	0	0	122
740	North Syra	0	510	510	0	--	--	1.565878	1	120	0	10	84	18	85	0	9	0	22	0	0	118	81	11	0	0	111	669
741	Van Buren	0	200	200	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	19
742	Salina	0	606	606	0	--	--	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	6	0	0	0	0	42
743	Cicero	0	418	418	0	--	--	0.916457	0	1	0	20	6	0	4	0	0	0	0	0	0	14	1	0	0	0	7	53
744	Cicero	0	28	28	0	--	--	0.916457	0	331	0	0	0	0	11	0	0	0	0	0	0	32	14	0	52	0	0	440
745	Clay	0	222	222	0	--	--	0.000333	0	29	0	22	0	0	82	0	0	0	10	0	0	24	11	21	0	0	0	198
746	Clay	0	443	443	0	--	--	0.023661	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
747	Clay	0	739	739	0	--	--	1.547357	0	0	0	0	0	0	10	0	0	0	3	0	0	3	0	0	0	0	20	36
748	Clay	0	1	1	0	--	--	7.237124	0	105	0	0	0	115	50	206	17	0	12	0	0	262	236	0	41	0	690	1734
749	Clay	0	56	56	0	--	--	7.237124	0	59	0	22	19	0	233	0	46	0	14	32	0	45	8	3	23	0	91	595
750	Clay	0	1470	1462	8	--	--	2.556777	0	94	0	7	147	0	55	0	29	5	0	0	0	72	193	42	0	0	30	675
751	Cicero	0	0	0	0	--	--	0.001322	1	3	0	0	1	3	2	1	3	1	2	0	0	5	1	1	1	0	1	26
752	Cicero	0	320	315	5	--	--	0.001322	0	9	0	7	0	5	0	0	0	0	0	0	0	22	0	0	0	0	0	43
753	Clay	0	288	288	0	--	--	2.320176	0	0	0	0	14	81	5	0	43	0	0	0	0	91	0	17	6	0	0	257
754	North Syra	0	586	586	0	--	--	0.43022	0	3	0	5	0	0	3	0	3	5	0	0	0	26	19	0	4	0	4	70
755	Clay	0	389	389	0	--	--	0.083307	0	23	0	4	49	0	6	0	0	0	0	0	0	8	9	0	0	0	0	99
756	Clay	0	6	6	0	--	--	0.57235	0	0	0	0	75	0	0	0	0	0	0	0	0	250	0	0	0	0	0	325
757	Van Buren	0	693	693	0	--	--	0	0	12	0	0	0	74	18	0	0	0	0	0	6	0	0	0	0	0	0	110
758	Cicero	0	57	57	0	--	--	1.015246	0	15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	22
759	North Syra	0	146	146	0	--	--	1.622437	0	0	0	1	0	2	2	2	0	0	0	0	0	0	0	8	2	0	0	17
760	North Syra	0	195	195	0	--	--	1.622437	0	0	0	1	0	1	1	2	0	0	0	0	0	1	0	5	2	0	0	13
761	Clay	0	536	536	0	--	--	0.943724	0	19	0	17	45	0	113	0	13	0	21	0	0	68	14	0	70	0	6	386
762	Clay	0	363	363	0	--	--	0.002341	0	57	0	0	0	0	0	0	0	0	0	0	0	7	28	0	0	0	7	99
763	Salina	0	205	205	0	--	--	0	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0	0	0	0	0	77
764	Lysander	0	280	280	0	--	--	0	0	0	0	15	24	0	0	65	0	0	34	0	0	0	0	0	0	0	0	138
765	North Syra	0	9	9	0	--	--	1.350143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
766	North Syra	0	49	49	0	--	--	1.350143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
767	Van Buren	0	79	79	0	--	--	0.921056	0	7	0	8	0	0	0	0	0	0	66	0	0	6	14	0	0	0	0	101
768	Clay	0	243	243	0	--	--	0.097446	0	3	0	0	0	0	0	0	0	0	8	0	0	0	1	1	0	0	0	13
769	Cicero	0	124	124	0	--	--	2.803741	0	0	0	0	10	0	0	0	0	0	0	0	1	2	3	0	19	0	0	35
770	Cicero	0	37	37	0	--	--	2.803741	1	0	0	75	0	0	0	0	0	0	0	0	8	9	1	0	106	0	5	205
771	Van Buren	0	651	651	0	--	--	0	0	16	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	29
772	Van Buren	0	179	179	0	--	--	0.943396	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
773	Van Buren	0	111	111	0	--	--	0.943396	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
774	Clay	0	464	464	0	--	--	0.307083	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
775	Van Buren	0	257	257	0	--	--	0.000632	0	0	0	0	25	147	0	0	0	0	0	0	0	0	24	0	0	0	11	208
776	Van Buren	0	47	47	0	--	--	0.718731	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
777	Van Buren	0	27	27	0	--	--	0.718731	4	0	0	7	0	0	0	51	0	0	0	0	0	0	0	0	0	0	0	62
778	North Syra	0	497	497	0	--	--	0.000732	0	0	0	0	18	0	61	0	10	0	0	0	0	18	7	0	0	0	0	115
779	North Syra	0	134	134	0	--	--	0.000732	0	35	0	10	0	21	7	0	26	0	10	0	0	38	8	11	0	0	0	165
780	Cicero	0	140	140	0	--	--	0.040278	0	0	0	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	0	81
781	Clay	0	215	215	0	--	--	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	4
782	Clay	0	473	473	0	--	--	0	0	0	0	7	0	81	0	0	0	0	0	0	0	4	0	0	0	5	6	103
783	North Syra	0	25	25	0	--	--	10.33249	0	11	0	0	0	0	0	30	0	0	0	0	0	0	14	0	0	0	0	55
784	North Syra	0	423	420	3	--	--	10.33249	6	232	0	49	159	19	72	29	123	0	15	0	0	108	21	8	0	0	32	875
785	Clay	0	549	549	0	--	--	1.238498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	35
786	Lysander	0	262	262	0	--	--	0.014176	0	4	1	1	2	4	3	1	4	0	4	0	0	5	2	1	1	0	2	35
787	Lysander	0	415	415	0	--	--	0.014176	6	14	0	26	0	0	14	0	0	0	35	0	0	0	0	0	0	0	0	95

788	Clay	0	304	304	0	--	--	0.815182	0	5	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	19
789	Clay	0	88	88	0	--	--	0.815182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	181	0	0	0	185
790	Baldwinsvi	0	123	123	0	--	--	6.91018	0	25	0	0	0	0	0	34	0	0	0	0	0	0	22	5	0	0	0	86
791	Clay	0	416	416	0	--	--	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	319	9	0	0	9	349
792	Cicero	0	227	227	0	--	--	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
793	Clay	0	3	3	0	--	--	2.389424	0	10	0	0	0	0	13	211	0	0	0	0	0	0	15	0	0	15	0	9	275
794	Clay	0	391	391	0	--	--	0.815861	0	24	0	0	0	0	52	0	0	0	23	0	0	0	19	35	0	0	0	8	160
795	Clay	0	748	743	5	--	--	0.002658	0	27	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	80
796	Van Buren	0	59	59	0	--	--	0.921083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	87
797	Van Buren	0	122	122	0	--	--	3.412934	0	7	0	0	87	7	51	0	0	15	0	0	0	0	80	7	0	0	0	0	255
798	Baldwinsvi	0	717	717	0	--	--	3.412934	0	10	0	0	12	4	18	2	184	1	0	0	0	51	7	43	0	0	4	336
799	Clay	0	5	5	0	--	--	7.352911	0	63	0	125	7	50	0	0	0	0	115	0	38	24	0	3	0	5	18	448
800	Lysander	0	543	543	0	--	--	0	0	0	0	0	14	6	14	0	0	0	0	0	0	3	0	0	0	0	0	37
801	Cicero	0	456	447	9	--	--	0.643965	0	33	0	0	0	0	0	0	0	0	0	0	0	33	0	33	0	0	0	99
802	Clay	0	88	88	0	--	--	0.864663	0	0	0	5	0	340	18	0	19	0	0	0	0	24	22	0	0	0	42	470
803	Clay	0	228	228	0	--	--	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
804	Cicero	0	39	39	0	--	--	1.675749	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	59
805	Cicero	0	0	0	0	--	--	1.675749	0	74	0	0	180	0	71	0	7	4	0	0	0	109	60	0	0	0	41	546
806	Cicero	0	7	7	0	--	--	1.675749	0	46	0	0	42	0	9	0	1	4	0	0	0	709	140	0	0	0	0	951
807	Cicero	0	510	510	0	--	--	2.803643	1	9	2	3	4	10	6	2	9	1	7	1	0	8	4	2	3	1	4	75
808	Clay	0	264	260	4	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23
809	Baldwinsvi	0	401	386	15	--	--	6.720883	3	6	0	0	19	53	5	0	0	0	0	0	0	8	8	0	0	0	4	106
810	Baldwinsvi	0	110	110	0	--	--	6.720883	1	13	0	5	0	0	0	0	0	0	6	0	0	28	52	0	0	0	0	105
811	Baldwinsvi	0	93	93	0	--	--	6.720883	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
812	Van Buren	0	282	282	0	--	--	0.511894	0	6	0	27	12	0	10	0	0	0	0	0	0	0	0	0	0	8	10	73
813	Clay	0	1261	1258	3	--	--	0.012619	1	10	0	22	58	121	21	0	0	0	19	0	0	6	9	0	0	0	0	268
814	Van Buren	0	125	125	0	--	--	3.414275	0	59	0	15	0	0	14	0	0	0	0	0	0	178	15	0	0	0	0	282
815	Lysander	0	219	215	4	--	--	0.87505	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
816	Lysander	0	101	101	0	--	--	0.87505	0	16	0	80	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	109
817	Cicero	0	466	466	0	--	--	2.933986	0	0	0	13	0	166	0	0	33	0	0	0	0	0	4	0	0	0	0	215
818	Sullivan	0	22	22	0	--	--	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	0	1	15
819	Sullivan	0	46	46	0	--	--	4.2	0	35	0	0	0	0	0	0	0	0	0	0	0	0	71	0	0	0	0	106
820	Clay	0	29	29	0	--	--	1.562922	1	32	9	0	167	43	93	0	37	0	0	0	0	124	46	18	0	4	3	577
821	Baldwinsvi	0	104	104	0	--	--	7.077806	0	54	0	0	0	0	0	0	17	0	0	0	0	0	32	0	0	0	0	103
822	Baldwinsvi	0	85	85	0	--	--	7.077806	0	46	0	34	126	5	30	30	11	18	0	0	0	53	5	0	30	0	0	386
823	Baldwinsvi	0	186	186	0	--	--	7.077806	0	87	20	8	72	0	53	18	55	0	66	0	0	81	37	4	80	0	6	587
824	Baldwinsvi	0	192	192	0	--	--	7.077806	0	0	0	0	0	0	0	0	33	0	0	0	0	41	41	0	29	0	0	144
825	Baldwinsvi	0	134	134	0	--	--	7.077806	0	26	24	3	14	0	37	20	3	0	0	0	0	8	3	9	40	3	22	214
826	Clay	0	390	390	0	--	--	0	0	9	0	5	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	21
827	Clay	0	614	614	0	--	--	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	15
828	Cicero	0	603	603	0	--	--	0	0	0	0	41	0	0	136	0	0	0	0	0	0	36	3	0	0	0	0	216
829	Clay	0	103	103	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	60
830	Cicero	0	212	212	0	--	--	0	0	28	0	22	52	0	30	80	8	0	0	0	0	565	107	36	0	0	8	936
831	Clay	0	615	615	0	--	--	0.834104	0	4	0	0	0	0	0	0	82	0	0	0	0	0	0	6	0	0	66	158
832	Clay	0	1	1	0	--	--	0.000037	0	8	0	0	0	8	0	0	0	0	0	0	0	7	0	0	0	0	0	23
833	Clay	0	319	319	0	--	--	0.000037	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
834	Cicero	0	218	218	0	--	--	0	2	57	0	29	88	0	42	0	10	37	0	0	2	340	146	16	0	0	8	778
835	Lysander	0	180	180	0	--	--	0.132281	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
836	Lysander	0	305	305	0	--	--	0.87513	2	31	0	22	13	0	0	0	82	0	0	0	0	2	0	22	0	0	20	195
837	Clay	0	528	528	0	--	--	1.575587	0	20	0	0	28	0	7	0	0	0	0	0	0	5	36	0	0	0	0	96
838	Clay	0	409	409	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	45
839	Lysander	0	184	184	0	--	--	0.000228	0	11	0	15	0	0	77	0	62	0	2	0	0	23	19	15	0	0	0	225
840	Lysander	0	60	60	0	--	--	0.000228	1	59	0	16	0	0	4	26	15	0	864	0	0	150	1	3	431	0	15	1585
841	Clay	0	966	966	0	--	--	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
842	Lysander	0	254	254	0	--	--	0	0	27	0	0	14	534	0	0	0	0	0	0	0	71	0	0	0	20	0	666
843	Sullivan	0	161	161	0	--	--	4.2	0	1	0	0	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	7
844	Baldwinsvi	0	308	308	0	--	--	1.123708	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
845	Lysander	0	172	172	0	--	--	1.123708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
846	Lysander	0	627	623	4	--	--	1.123708	0	0	0	0	0	0	0	0	0	65	0	0	0	67	10	0	25	0	26	193
847	Baldwinsvi	0	155	155	0	--	--	1.123708	0	5	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7
848	Lysander	0	143	143	0	--	--	0.934406	16	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	57

849	Cicero	0	230	230	0	--	--	0	0	0	0	0	0	0	0	0	8	0	0	0	0	119	50	0	0	0	0	177
850	Cicero	0	504	504	0	--	--	0	0	8	0	0	25	404	14	0	25	0	0	0	0	2	139	14	0	0	0	653
851	Clay	0	1081	1079	2	--	--	0.06904	0	0	0	0	0	202	0	0	0	0	0	0	0	0	0	23	0	0	0	225
852	Cicero	0	93	93	0	--	--	1.524833	0	0	0	12	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	29
853	Cicero	0	150	150	0	--	--	1.524833	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
854	Cicero	0	31	31	0	--	--	1.524833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
855	Cicero	0	352	352	0	--	--	1.524833	0	8	0	35	0	0	16	0	1	0	55	0	0	4	3	0	0	0	0	122
856	Cicero	0	133	133	0	--	--	1.524833	1	4	0	16	0	0	7	0	0	0	27	0	0	2	1	0	0	0	0	58
857	Clay	0	357	357	0	--	--	0.953709	0	2	0	0	0	0	5	0	0	0	0	0	0	55	12	0	0	0	0	75
858	Clay	0	729	729	0	--	--	0.953709	11	44	0	14	14	0	68	0	50	0	0	0	0	1	29	0	15	0	0	246
859	Clay	0	1046	1046	0	--	--	0.802442	0	0	123	21	0	0	0	0	82	0	0	0	0	49	0	24	13	0	52	364
860	Sullivan	0	120	120	0	--	--	4.2	0	6	0	20	6	0	0	0	6	0	0	0	0	9	6	0	11	0	0	64
861	Clay	0	649	649	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
862	Clay	0	8	8	0	--	--	0.020726	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0	0	0	0	13
863	Clay	0	228	228	0	--	--	0.020726	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
864	Clay	0	118	118	0	--	--	0.020726	0	16	0	0	0	0	0	0	0	0	0	0	0	223	12	0	0	16	0	267
865	Sullivan	0	67	67	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
866	Cicero	0	422	422	0	--	--	0	0	9	0	0	47	118	94	28	41	0	0	0	0	45	15	7	6	3	0	413
867	Clay	0	156	156	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4	13	0	0	0	31
868	Clay	0	99	99	0	--	--	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
869	Lysander	0	292	292	0	--	--	0.00002	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
870	Lysander	0	601	601	0	--	--	0.00002	0	28	0	19	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	66
871	Cicero	0	16	16	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	22	0	0	0	0	33
872	Cicero	0	6	6	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	41
873	Cicero	0	572	572	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	48
874	Cicero	0	263	263	0	--	--	0.985222	0	57	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	92
875	Cicero	0	450	450	0	--	--	0.985222	0	0	0	0	0	99	0	0	0	0	25	0	0	0	0	0	0	0	0	124
876	Clay	0	0	0	0	--	--	0	0	0	0	0	0	140	0	0	0	0	0	0	0	184	0	0	0	0	0	324
877	Clay	0	0	0	0	--	--	0	0	0	0	0	0	183	0	0	0	0	0	0	0	247	0	0	0	0	0	430
878	Lysander	0	524	524	0	--	--	0	0	0	0	20	12	0	11	0	4	0	128	0	0	0	61	0	23	0	586	845
879	Clay	0	99	99	0	--	--	0.050476	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
880	Clay	0	2	2	0	--	--	0.050476	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
881	Clay	0	7	7	0	--	--	0.050476	1	8	0	1	3	8	7	1	11	0	7	0	0	9	3	1	1	1	3	65
882	Clay	0	64	64	0	--	--	0.050476	0	9	0	0	29	0	20	0	0	0	0	0	0	1	36	0	0	0	0	95
883	Lysander	0	19	19	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
884	Cicero	0	924	924	0	--	--	0.363196	0	0	0	7	1	5	23	0	4	0	6	0	0	2	1	0	0	0	2	52
885	Cicero	0	283	283	0	--	--	0.363196	0	3	0	0	1	0	2	1	1	0	2	0	0	0	0	0	0	0	6	17
886	Cicero	0	180	180	0	--	--	0.363196	0	68	0	0	123	0	0	0	0	0	291	0	0	10	0	0	0	0	0	492
887	Clay	0	277	277	0	--	--	0	0	32	0	0	111	0	25	0	0	11	0	0	0	1398	56	0	0	0	0	1633
888	Clay	0	15	15	0	--	--	0.567692	0	4	0	0	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	11
889	Clay	0	23	23	0	--	--	0.567692	0	50	24	0	207	0	18	0	0	0	8	0	0	690	4	17	13	0	18	1049
890	Lysander	0	339	339	0	--	--	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	10
891	Lysander	0	266	266	0	--	--	0.980392	2	0	0	0	11	0	0	34	0	0	0	0	0	18	0	0	0	0	0	65
892	Lysander	0	213	213	0	--	--	0.980392	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	47	0	0	72
893	Clay	0	26	26	0	--	--	5.501627	0	2	0	1	1	2	2	1	2	0	2	0	0	4	1	0	1	0	1	20
894	Clay	0	6	6	0	--	--	5.501627	0	0	0	41	17	0	0	71	0	0	17	0	0	25	10	0	0	0	0	181
895	Lysander	0	630	623	7	--	--	0	0	0	0	0	0	73	1	0	0	0	0	0	0	0	0	0	0	0	0	74
896	Lysander	0	249	249	0	--	--	1.039868	0	7	0	0	0	0	0	0	0	0	0	0	0	49	6	0	0	0	0	62
1112	Clay	0	65	65	0	--	--	5.411348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1109	Clay	0	9	9	0	--	--	5.411348	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1110	Clay	0	12	12	0	--	--	5.411348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	45
1111	Clay	0	10	10	0	--	--	5.411348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
898	Clay	0	37	37	0	--	--	5.498274	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	7	0	0	0	21
899	Clay	0	12	12	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
900	Clay	0	21	21	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
901	Clay	0	26	26	0	--	--	0	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
902	Cicero	0	403	403	0	--	--	0	0	0	0	6	55	0	14	0	0	0	0	0	0	1	88	0	0	0	0	164
903	Cicero	0	93	93	0	--	--	0.001508	0	16	6	38	5	0	0	0	0	38	8	0	0	22	19	0	0	0	4	156
904	Cicero	0	71	71	0	--	--	0.001508	0	24	0	6	123	11	20	0	31	0	3	0	0	49	6	20	47	0	33	373
905	Cicero	0	138	138	0	--	--	0.001508	0	35	0	9	90	0	24	0	0	0	0	0	0	68	48	0	0	0	0	275
906	Clay	0	27	27	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

907	Clay	0	26	26	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
908	Clay	0	119	119	0	--	--	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	3
909	Lysander	0	390	390	0	--	--	0	2	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	31
910	Lysander	0	81	81	0	--	--	0	0	0	0	16	0	0	0	0	0	0	0	0	0	4	0	0	0	20
911	Schroeppe	0	61	61	0	--	--	4.2	0	10	0	0	0	0	21	0	15	0	0	0	0	59	21	0	0	135
912	Cicero	0	304	304	0	--	--	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	23
913	Cicero	0	89	89	0	--	--	0	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99
914	Phoenix	0	105	101	4	--	--	4.2	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	45
915	Lysander	0	138	138	0	--	--	0	0	19	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	35
916	Cicero	0	493	493	0	--	--	0.020267	0	8	2	3	5	9	6	3	9	0	8	0	0	11	5	2	3	79
917	Phoenix	0	141	141	0	--	--	4.2	0	0	0	0	9	0	0	0	0	0	12	0	0	0	0	0	0	27
918	Clay	0	188	188	0	--	--	1.224585	0	3	0	2	2	5	3	2	5	0	2	0	0	8	2	0	2	40
919	Clay	0	165	165	0	--	--	1.224585	0	1	0	1	1	1	1	1	1	0	1	0	0	3	1	1	1	15
920	Phoenix	0	83	83	0	--	--	4.2	3	0	0	33	3	66	10	93	3	0	0	0	0	14	0	0	33	265
921	Phoenix	0	90	90	0	--	--	4.2	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	10
922	Clay	0	119	119	0	--	--	5.501619	0	0	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	4
923	Clay	0	28	28	0	--	--	5.501619	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
924	Phoenix	0	162	162	0	--	--	4.2	0	0	0	76	0	0	0	0	0	0	0	0	0	0	0	0	0	76
925	Phoenix	0	77	77	0	--	--	4.2	0	13	0	7	7	0	0	13	0	0	3	0	0	9	13	0	0	65
926	Phoenix	0	55	55	0	--	--	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	15
927	Cicero	0	282	282	0	--	--	2.233359	0	7	0	86	0	0	2	0	1	0	165	0	0	10	6	0	0	278
928	Cicero	0	390	390	0	--	--	2.233359	1	24	1	4	101	95	11	0	2	13	0	0	0	11	12	1	0	275
929	Cicero	0	408	408	0	--	--	2.233359	0	12	0	3	12	0	0	0	0	0	3	0	0	12	3	0	0	48
930	Phoenix	0	83	83	0	--	--	4.2	0	0	0	0	0	0	0	0	11	0	11	0	0	2	0	11	0	35
931	Phoenix	0	30	30	0	--	--	4.2	0	0	0	11	0	234	0	0	0	0	0	0	0	0	0	0	0	245
932	Phoenix	0	51	51	0	--	--	4.2	0	9	0	0	0	94	9	0	0	0	0	0	0	1	0	0	0	113
933	Cicero	0	126	126	0	--	--	5.362776	0	4	18	35	43	61	0	0	13	0	0	0	0	16	0	0	2	194
934	Cicero	0	136	136	0	--	--	5.362776	0	5	0	24	15	0	13	23	3	0	0	0	0	11	0	0	10	105
935	Phoenix	0	143	143	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	26
936	Hastings	0	74	74	0	--	--	4.2	0	3	1	1	1	4	3	1	4	0	4	0	0	4	3	1	1	32
937	Hastings	0	128	128	0	--	--	4.2	0	10	0	82	0	0	0	0	0	0	0	0	10	11	21	0	10	165
938	Hastings	0	161	161	0	--	--	4.2	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	25
939	Hastings	0	92	92	0	--	--	4.2	0	7	0	0	7	361	0	12	0	0	0	0	0	4	7	0	0	405
940	Central Sq	0	143	143	0	--	--	4.2	0	0	0	1	6	0	1	0	6	0	3	0	3	2	4	0	0	26
941	Central Sq	0	224	224	0	--	--	4.2	21	0	0	0	0	0	0	0	0	0	0	0	0	42	10	0	0	73
942	Central Sq	0	103	103	0	--	--	4.2	0	0	0	40	0	203	0	0	20	0	0	0	0	20	11	0	0	294
943	Central Sq	0	74	74	0	--	--	4.2	0	6	1	2	3	7	4	2	7	0	6	0	0	8	3	1	2	55
944	Central Sq	0	179	172	7	--	--	4.2	0	7	0	3	34	0	3	0	10	0	0	0	7	101	10	0	0	175
945	Central Sq	0	113	113	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	581	0	0	0	581
946	Central Sq	0	200	200	0	--	--	4.2	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	5	0	27
947	Hastings	0	23	23	0	--	--	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	15
948	Hastings	0	93	93	0	--	--	4.2	0	1	0	0	1	1	1	0	1	0	1	0	0	3	1	0	0	11
949	Hastings	0	22	22	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
950	Hastings	0	20	20	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
951	Hastings	0	120	120	0	--	--	4.2	0	7	2	3	4	9	6	3	9	1	8	0	0	8	5	2	4	75
952	Hastings	0	22	22	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
953	Hastings	0	78	78	0	--	--	4.2	0	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	0	9
954	Hastings	0	3	3	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
955	West Mon	0	101	101	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
956	Hastings	0	121	121	0	--	--	4.2	0	8	4	4	4	13	8	4	13	0	13	0	0	13	8	4	4	104
957	Sullivan	0	57	57	0	--	--	4.2	1	2	1	7	3	5	5	1	5	1	9	0	0	7	5	4	3	61
958	Sullivan	0	55	55	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
959	Sullivan	0	142	137	5	--	--	4.2	0	19	0	17	0	0	0	0	0	0	0	0	0	3	256	6	17	318
960	Sullivan	0	262	262	0	--	--	4.2	0	1	0	6	2	3	0	0	0	0	0	0	0	3	0	3	3	24
961	Sullivan	0	90	90	0	--	--	4.2	0	0	0	0	3	0	7	0	0	0	0	0	0	1	2	5	3	21
962	Sullivan	0	30	30	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	15
963	Sullivan	0	92	92	0	--	--	4.2	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	1	0	5
964	Sullivan	0	295	295	0	--	--	4.2	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	5
965	Sullivan	0	65	65	0	--	--	4.2	0	0	0	0	8	0	0	0	0	1	0	0	0	0	5	9	0	23
966	Sullivan	0	83	83	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	0	9
967	Sullivan	0	174	174	0	--	--	4.2	0	0	0	8	0	0	0	0	0	0	0	0	0	5	0	0	0	13

968	Sullivan	0	8	8	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
969	Sullivan	0	35	35	0	--	--	4.2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
970	Sullivan	0	31	31	0	--	--	4.2	48	0	0	12	0	0	0	0	0	0	0	0	0	0	2	0	0	62
971	Sullivan	0	16	16	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
972	Sullivan	0	12	12	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
973	Sullivan	0	50	50	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
974	Sullivan	0	42	42	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	0	16
975	Sullivan	0	104	104	0	--	--	4.2	2	5	0	5	0	0	5	0	0	0	0	0	0	0	2	5	0	24
976	Sullivan	0	43	43	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	4
977	Sullivan	0	90	90	0	--	--	4.2	0	0	0	6	0	0	0	0	0	0	0	0	2	1	2	0	0	11
978	Sullivan	0	24	24	0	--	--	4.2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	17
979	Sullivan	0	40	40	0	--	--	4.2	3	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	9
980	Sullivan	0	92	92	0	--	--	4.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	10
981	Sullivan	0	70	70	0	--	--	4.2	3	0	0	2	6	0	0	0	0	1	0	0	0	4	0	0	0	16
982	Sullivan	0	177	177	0	--	--	4.2	0	1	0	3	0	3	0	0	1	0	0	0	0	3	0	1	0	12
983	Sullivan	0	8	8	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
984	Sullivan	0	85	85	0	--	--	4.2	9	1	0	11	0	0	4	0	0	0	0	0	0	47	0	13	0	0	4	89
985	Sullivan	0	24	24	0	--	--	4.2	0	3	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	0	12
986	Sullivan	0	92	92	0	--	--	4.2	0	2	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	11
987	Sullivan	0	30	30	0	--	--	4.2	5	0	0	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	12
988	Sullivan	0	122	122	0	--	--	4.2	0	2	0	0	0	0	0	0	0	0	27	0	0	0	4	0	0	0	2	35
989	Chittenang	0	125	125	0	--	--	4.2	3	2	3	1	0	0	3	0	3	0	9	0	0	2	2	2	0	0	0	30
990	Chittenang	0	51	51	0	--	--	4.2	0	1	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8
991	Chittenang	0	33	33	0	--	--	4.2	0	2	0	6	0	0	2	0	2	0	0	0	0	4	2	0	0	0	0	18
992	Chittenang	0	478	478	0	--	--	4.2	0	1	35	10	0	97	1	0	3	0	0	0	0	33	12	8	0	0	7	207
993	Chittenang	0	147	147	0	--	--	4.2	0	11	6	12	56	0	62	18	16	8	62	0	0	46	16	3	0	0	6	322
994	Sullivan	0	74	74	0	--	--	4.2	0	4	15	4	3	0	4	7	0	1	183	0	0	47	4	0	7	0	11	290
995	Chittenang	0	325	318	7	--	--	4.2	0	2	0	4	9	15	79	6	22	1	3	0	0	10	8	7	6	0	0	172
996	Chittenang	0	463	463	0	--	--	4.2	1	8	0	1	0	15	10	0	35	0	45	9	0	1	454	15	9	0	0	603
997	Sullivan	0	118	118	0	--	--	4.2	0	0	1	3	0	0	5	0	3	0	0	0	0	8	0	1	0	0	0	21
998	Sullivan	0	300	295	5	--	--	4.2	1	2	0	6	9	12	0	0	1	1	0	0	0	3	1	1	4	0	0	41
999	Sullivan	0	8	8	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	Sullivan	0	32	32	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27
1001	Sullivan	0	31	31	0	--	--	4.2	0	1	0	16	12	0	0	0	0	2	0	0	0	2	0	0	0	0	0	33
1002	Sullivan	0	31	31	0	--	--	4.2	0	4	0	0	0	0	0	69	140	0	0	0	0	0	0	12	0	0	0	225
1003	Sullivan	0	63	63	0	--	--	4.2	0	5	0	9	0	0	0	0	33	0	28	0	0	0	5	9	0	0	0	89
1004	Sullivan	0	35	35	0	--	--	4.2	0	2	0	2	0	3	3	0	0	0	6	0	0	0	3	3	3	0	2	27
1005	Sullivan	0	21	21	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
1006	Sullivan	0	99	99	0	--	--	4.2	0	0	0	1	4	0	4	0	0	0	0	0	0	2	1	0	0	0	0	12
1007	Sullivan	0	69	69	0	--	--	4.2	0	0	0	3	0	0	5	0	111	0	2	0	0	6	2	2	0	0	0	131
1008	Sullivan	0	35	35	0	--	--	4.2	0	0	0	1	0	0	0	0	0	0	16	2	0	0	4	2	0	0	0	25
1009	Granby	0	44	44	0	--	--	4.2	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9
1010	Schroeppe	0	57	57	0	--	--	4.2	0	3	0	7	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	15
1011	Schroeppe	0	136	136	0	--	--	4.2	0	1	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	7
1012	Schroeppe	0	78	78	0	--	--	4.2	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5
1013	Schroeppe	0	29	29	0	--	--	4.2	2	2	0	0	0	83	0	0	6	0	23	0	0	10	17	2	3	0	13	161
1014	Schroeppe	0	40	40	0	--	--	4.2	0	0	0	12	0	0	0	0	6	0	6	0	0	0	10	0	0	0	0	34
1015	Schroeppe	0	34	34	0	--	--	4.2	0	0	0	3	0	2	0	0	0	0	0	0	0	8	2	2	0	0	0	17
1016	Schroeppe	0	17	17	0	--	--	4.2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
1017	Schroeppe	0	67	67	0	--	--	4.2	0	0	0	7	0	0	0	0	0	0	4	0	0	1	0	1	0	0	0	13
1018	Schroeppe	0	30	30	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
1019	Schroeppe	0	34	34	0	--	--	4.2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1020	Schroeppe	0	42	42	0	--	--	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3
1021	Schroeppe	0	66	66	0	--	--	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	6
1022	Schroeppe	0	15	15	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	Schroeppe	0	212	212	0	--	--	4.2	0	3	3	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	16
1024	Schroeppe	0	56	56	0	--	--	4.2	0	2	0	3	0	0	0	0	0	0	0	0	0	2	3	0	3	0	0	13
1025	Schroeppe	0	96	96	0	--	--	4.2	8	0	0	0	0	8	0	0	8	0	0	0	0	0	4	19	13	0	2	62
1026	Schroeppe	0	30	30	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1027	Schroeppe	0	46	46	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1028	Schroeppe	0	54	54	0	--	--	4.2	0	3	0	0	2	2	2	0	0	0	0	0	0	1	0	0	0	0	0	10

1029	Schroeppe	0	199	199	0	--	--	4.2	0	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	12
1030	Schroeppe	0	46	46	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	5
1031	Schroeppe	0	55	55	0	--	--	4.2	1	0	4	0	0	0	0	0	0	0	0	0	0	2	3	0	0	3	13
1032	Schroeppe	0	261	261	0	--	--	4.2	0	2	0	2	0	0	2	0	2	0	12	0	0	9	5	9	0	0	0	43
1033	Schroeppe	0	98	98	0	--	--	4.2	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	8
1034	Schroeppe	0	171	171	0	--	--	4.2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	6	0	0	0	10
1035	Schroeppe	0	29	29	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1036	Schroeppe	0	60	60	0	--	--	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1037	Schroeppe	0	11	11	0	--	--	4.2	0	4	0	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	46
1038	Schroeppe	0	21	21	0	--	--	4.2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	35	0	5	46
1039	Schroeppe	0	39	39	0	--	--	4.2	2	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	2	15
1040	Hastings	0	69	69	0	--	--	4.2	0	2	0	3	0	2	0	0	2	0	0	0	0	4	0	3	0	0	0	16
1041	Hastings	0	39	39	0	--	--	4.2	0	0	0	0	6	0	0	0	0	1	15	0	0	8	0	0	0	4	0	34
1042	Hastings	0	184	184	0	--	--	4.2	0	1	0	13	0	0	0	0	0	0	10	0	0	2	23	4	2	0	6	61
1043	Hastings	0	54	54	0	--	--	4.2	0	1	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20
1044	Hastings	0	30	30	0	--	--	4.2	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
1045	Hastings	0	12	12	0	--	--	4.2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1046	Hastings	0	118	118	0	--	--	4.2	0	0	1	3	0	0	0	0	0	0	1	0	0	2	1	1	0	0	0	9
1047	Hastings	0	35	35	0	--	--	4.2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	9
1048	Hastings	0	18	18	0	--	--	4.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1049	Hastings	0	27	27	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	2	4	0	0	12
1050	Hastings	0	33	33	0	--	--	4.2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1051	Hastings	0	71	71	0	--	--	4.2	0	0	0	16	0	0	0	0	0	0	0	0	0	2	0	12	0	0	0	30
1052	Hastings	0	111	111	0	--	--	4.2	0	2	0	3	2	0	1	0	0	0	1	0	0	5	1	1	0	0	0	16
1053	Hastings	0	41	41	0	--	--	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	2	2	0	0	9
1054	Hastings	0	96	96	0	--	--	4.2	0	2	0	0	0	0	0	0	0	0	7	0	0	16	2	0	0	0	0	27
1055	Hastings	0	79	79	0	--	--	4.2	0	0	0	0	6	0	2	7	0	1	0	0	0	1	0	2	0	3	0	22
1056	Hastings	0	108	108	0	--	--	4.2	1	1	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	13
1057	Hastings	0	78	78	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19
1058	Hastings	0	104	104	0	--	--	4.2	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	3	0	0	7
1059	Hastings	0	41	41	0	--	--	4.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1060	Hastings	0	111	111	0	--	--	4.2	0	0	0	7	0	0	0	0	2	0	0	0	0	3	0	2	2	0	5	21
1061	Hastings	0	64	64	0	--	--	4.2	0	0	0	5	11	0	0	0	0	1	0	0	0	0	8	5	0	0	5	35
1062	Hastings	0	12	12	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
1063	Hastings	0	26	26	0	--	--	4.2	0	0	0	13	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	20
1064	Hastings	0	24	24	0	--	--	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1065	Hastings	0	58	58	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1066	Hastings	0	29	29	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1067	Hastings	0	89	89	0	--	--	4.2	0	1	0	1	0	0	0	0	5	0	0	0	0	3	5	0	0	0	0	15
1068	West Mon	0	25	25	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1069	West Mon	0	34	34	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1070	West Mon	0	33	33	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1071	West Mon	0	19	19	0	--	--	4.2	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	0	0	0	0	10
1072	West Mon	0	59	59	0	--	--	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
1073	West Mon	0	25	25	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1074	West Mon	0	96	96	0	--	--	4.2	0	0	0	2	0	0	0	0	2	0	0	0	0	0	2	3	0	0	0	9
1075	West Mon	0	127	127	0	--	--	4.2	0	0	0	4	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	6
1076	West Mon	0	37	37	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1077	West Mon	0	51	51	0	--	--	4.2	0	0	0	15	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	21
1078	West Mon	0	75	75	0	--	--	4.2	0	1	0	0	0	0	0	0	0	0	4	0	0	3	0	0	0	0	0	8
1079	West Mon	0	106	106	0	--	--	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	8
1080	West Mon	0	49	49	0	--	--	4.2	0	0	0	0	0	0	0	13	0	0	0	0	0	9	3	0	0	0	0	25
1081	West Mon	0	80	80	0	--	--	4.2	0	1	0	6	0	0	0	0	0	0	13	0	0	0	0	6	6	0	0	32
1082	West Mon	0	66	66	0	--	--	4.2	0	3	0	2	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	10
1083	West Mon	0	69	69	0	--	--	4.2	5	5	0	19	0	0	0	0	0	0	0	0	0	27	0	0	19	0	0	75
1084	West Mon	0	59	59	0	--	--	4.2	0	0	0	0	0	5	0	0	1	0	0	0	0	86	0	5	8	0	0	105
1085	Hastings	0	37	37	0	--	--	4.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	7
1086	West Mon	0	48	48	0	--	--	4.2	0	3	0	0	0	0	0	0	0	0	19	0	0	12	0	0	0	0	0	34
1087	West Mon	0	103	103	0	--	--	4.2	0	0	0	3	0	0	1	0	0	0	0	1	0	1	14	0	2	0	0	22
1088	West Mon	0	82	82	0	--	--	4.2	0	2	0	6	0	0	0	0	1	0	12	0	0	1	3	2	4	0	0	31
1089	West Mon	0	31	31	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1090	Schroeppe	0	6	6	0	--	--	4.2	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	14
1091	Schroeppe	0	26	26	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	20	0	0	7	4	0	0	0	0	31
1092	Schroeppe	0	17	17	0	--	--	4.2	0	7	0	0	9	0	0	0	0	2	0	0	0	0	0	0	1	0	3	22
1093	Schroeppe	0	19	19	0	--	--	4.2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1094	Schroeppe	0	7	7	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1095	Schroeppe	0	72	72	0	--	--	4.2	1	1	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	6
1096	West Mon	0	17	17	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8	0	0	0	15
1097	West Mon	0	36	36	0	--	--	4.2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1098	Hastings	0	17	17	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
1099	Hastings	0	93	93	0	--	--	4.2	0	3	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0	11
1100	Sullivan	0	24	24	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101	Sullivan	0	21	21	0	--	--	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8001	Geddes	0	0	0	0	--	--	0	0	0	0	0	0	0	0	200	0	0	0	0	0	0	0	0	39	0	0	239
8002	Syracuse	0	0	0	0	--	--	0	0	434	127	12	1003	0	50	0	14	0	128	0	0	3348	101	21	223	0	40	5501
8003	Onondaga	0	571	0	571	--	--	0	0	0	0	0	0	1669	0	0	0	0	0	0	0	0	0	0	0	0	0	1669
8004	Onondaga	0	0	0	0	--	--	0	0	13	0	0	0	0	0	25	1893	0	0	0	0	3	3	0	0	0	0	1937
8005	Syracuse	0	0	0	0	--	--	3	0	0	0	0	0	0	0	0	1256	0	0	0	0	0	0	0	0	0	0	1256
8006	Syracuse	0	2507	0	2507	--	--	3	0	14	0	0	0	416	0	0	0	0	40	0	0	1	6	14	0	0	0	491
8007	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
8008	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	2155	0	0	0	0	0	0	20	0	0	0	0	2175
8009	Syracuse	0	0	0	0	--	--	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	996	0	0	0	0	996
8010	Dewitt	0	1289	5	1284	--	--	2.5	0	0	0	0	101	651	0	0	0	0	0	0	0	0	0	0	0	0	0	752
8011	Syracuse	0	0	0	0	--	--	15	0	70	77	0	55	0	14	50	10318	0	0	0	5	61	51	0	0	0	0	10700
8012	Syracuse	0	2766	0	2766	--	--	15	1	407	0	4	0	4350	8	13	3	0	22	0	0	4	25	12	0	0	0	4850
8013	Syracuse	0	0	0	0	--	--	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8014	Syracuse	0	0	0	0	--	--	15	0	26	0	0	0	0	6	0	3777	0	0	0	0	15	0	0	0	0	11	3835
8015	Syracuse	0	0	0	0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	59
8016	Dewitt	0	0	0	0	--	--	4	0	97	0	0	0	0	0	0	0	0	0	0	0	0	49	0	1489	0	0	1635

TAZ	Town	CBD	HH_Includ	HH	HH_GQ	Populatior	Vehicles	Bicycle & F	Agriculture	Bus_Legal_	Communic	Constructi	Eat_Drinki	Education	FIRE	Governme	Health	Hotels_Lo	Manufactu	Mining	NonClassif	RetailTrad	Service	SocialServi	Transporta	Utilities	Wholesale	Total
1	Tully	0	237	237	0	547	443	3.114187	0	49	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	20	98
2	Tully	0	346	346	0	745	613	3.856041	0	0	0	31	58	284	0	0	0	17	0	0	8	80	120	71	71	0	74	814
3	Tully	0	148	148	0	382	281	5.339095	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
4	Spafford	0	304	304	0	686	560	1.260512	0	0	0	0	0	0	0	0	0	0	0	0	0	14	7	0	0	0	0	21
5	Tully	0	310	308	2	713	573	5.3391	1	13	0	0	25	80	6	0	7	0	0	0	0	2	3	33	16	0	0	186
6	Fabius	0	135	135	0	324	265	0.56	1	7	0	5	0	218	0	0	0	0	4	0	0	0	10	0	0	0	0	245
7	Fabius	0	167	167	0	420	343	0.56	150	2	0	8	6	0	2	0	16	0	24	0	0	0	47	5	2	0	0	262
8	Tully	0	132	132	0	331	230	5.339119	0	35	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
9	Fabius	0	208	208	0	518	440	3.36	3	3	0	0	0	0	0	13	0	50	0	0	0	0	3	0	0	0	0	72
10	Fabius	0	268	268	0	654	545	3.36	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	40
11	Otisco	0	123	123	0	295	247	2.045728	0	0	0	6	4	0	0	0	0	0	0	0	0	9	12	0	0	2	0	33
12	Otisco	0	389	389	0	919	770	2.045728	0	16	0	0	23	0	0	0	0	0	0	0	0	7	0	0	12	0	0	58
13	Otisco	0	158	158	0	404	332	2.045728	4	6	0	8	0	0	0	48	0	0	0	0	0	0	50	0	0	4	0	120
14	Otisco	0	181	181	0	492	399	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	15	31
15	Otisco	0	162	162	0	426	339	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	29	0	29	69
16	Spafford	0	229	229	0	525	448	0.553661	0	0	0	21	55	0	0	0	0	0	34	0	0	0	0	0	0	0	0	110
17	Spafford	0	205	205	0	463	390	0.553661	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	52
18	Lafayette	0	108	108	0	209	171	0.815651	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9
19	Lafayette	0	361	361	0	885	701	0.815672	0	19	0	85	22	0	6	0	38	0	0	0	0	11	36	0	0	0	43	260
20	Lafayette	0	169	164	5	443	326	1.973684	0	0	0	0	0	0	2	0	0	0	5	0	0	0	2	0	0	0	0	9
21	Lafayette	0	207	207	0	506	397	1.973684	0	7	0	6	8	6	16	0	0	0	0	0	4	4	8	15	0	0	0	74
22	Pompey	0	238	238	0	640	525	4.808743	0	0	0	14	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	28
23	Pompey	0	252	252	0	649	522	4.808743	3	0	0	0	0	0	0	17	0	0	0	0	0	2	12	0	0	0	0	34
24	Pompey	0	132	132	0	342	285	4.808743	15	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
25	Skaneateles	0	406	406	0	944	859	1.678236	16	12	0	10	0	0	7	0	0	22	0	0	0	12	16	0	38	0	0	133
26	Skaneateles	0	178	174	4	403	384	1.678236	0	0	0	12	0	0	0	0	8	350	0	0	0	50	0	0	0	0	24	444
27	Lafayette	0	136	136	0	279	229	5.086391	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	78
28	Lafayette	0	62	62	0	158	116	5.086385	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
29	Lafayette	0	256	256	0	555	463	5.086385	0	85	0	0	80	0	0	0	0	0	0	0	0	40	0	0	131	0	0	336
30	Pompey	0	133	133	0	301	262	0.831937	3	0	0	5	10	8	0	0	0	0	0	0	0	7	22	0	0	7	5	67
31	Pompey	0	99	94	5	248	211	0.831937	0	11	0	3	2	2	0	0	0	0	0	0	0	2	7	0	0	2	0	29
32	Pompey	0	90	90	0	212	180	0.831937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Pompey	0	168	168	0	414	335	0.831937	0	0	0	4	2	2	0	0	0	0	0	0	0	2	11	0	0	3	1	25
34	Pompey	0	69	69	0	144	123	0.831973	0	2	0	3	1	0	1	9	0	0	0	0	0	0	2	0	0	0	0	18
35	Pompey	0	58	58	0	131	110	0.831973	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21
36	Marcellus	0	114	114	0	269	209	3.67893	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	33
37	Marcellus	0	26	26	0	43	43	3.67893	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Marcellus	0	90	90	0	208	170	3.67893	6	15	0	17	30	0	0	0	0	0	0	0	0	12	26	0	0	0	0	106
39	Lafayette	0	273	273	0	558	467	5.060974	0	0	0	0	0	0	0	101	0	0	0	0	0	0	26	0	58	0	0	185
40	Skaneateles	0	323	320	3	666	639	1.828157	0	54	32	2	97	0	75	0	3	0	0	0	0	109	7	121	7	27	0	534
41	Skaneateles	0	17	17	0	31	35	1.828157	0	9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	11
42	Skaneateles	0	210	210	0	513	461	1.828157	2	6	0	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	9	26
43	Onondaga	0	125	125	0	305	249	0.734388	17	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	44
44	Onondaga	0	221	221	0	593	469	0.734388	10	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
45	Lafayette	0	89	89	0	213	169	5.086334	0	0	0	10	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	19
46	Lafayette	0	88	88	0	203	158	5.08639	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
47	Pompey	0	87	87	0	204	176	5.021834	1	0	0	4	1	0	0	0	0	0	0	0	1	0	14	0	1	0	4	26
48	Pompey	0	298	291	7	755	622	5.021834	0	11	0	5	4	0	0	0	6	0	0	0	2	1	13	0	2	0	4	48
49	Onondaga	0	81	77	4	209	165	1.445571	0	0	0	0	0	155	0	41	0	0	0	0	0	0	0	0	0	0	0	196
50	Onondaga	0	97	97	0	217	188	1.445571	0	15	0	2	4	140	0	0	0	0	0	0	0	10	0	0	0	0	0	171
51	Onondaga	0	225	225	0	572	472	1.445571	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
52	Onondaga	0	11	11	0	16	16	1.445571	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
53	Marcellus	0	127	127	0	298	240	4.437394	0	0	0	12	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	17
54	Marcellus	0	214	214	0	484	382	4.437394	4	0	0	0	13	0	0	0	0	0	0	0	0	2	1	0	0	0	0	20
55	Marcellus	0	98	98	0	211	172	4.437394	5	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	13
56	Lafayette	0	306	306	0	442	468	0	0	0	0	0	9	89	0	0	7	0	0	0	9	3	0	9	0	0	0	126
57	Skaneateles	0	239	239	0	607	471	6.632658	0	6	0	0	0	190	245	0	0	0	0	0	0	14	0	0	0	0	0	455
58	Skaneateles	0	183	183	0	443	342	6.632658	0	0	0	0	0	0	0	157	0	0	0	0	0	7	6	0	0	0	0	170
59	Skaneateles	0	489	489	0	927	754	6.632651	2	70	10	8	200	0	214	100	62	12	83	0	0	162	69	30	59	0	24	1105
60	Onondaga	0	192	192	0	463	313	2.10391	0	0	0	0	0	0	0	51	0	0	0	0	0	0	0	0	0	0	0	51

61	Lafayette	0	316	316	0	574	463	0	4	0	0	19	0	0	0	0	0	0	0	0	0	83	0	0	0	0	106
62	Marcellus	0	129	129	0	287	205	1.796431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
63	Onondaga	0	366	366	0	945	764	0	0	3	0	9	34	0	0	0	4	0	3	0	0	1	3	3	0	0	60
64	Skaneatele	0	149	149	0	397	303	2.484472	0	0	0	0	0	0	2	0	0	0	0	0	0	0	14	0	0	0	16
65	Skaneatele	0	374	374	0	812	625	2.484472	0	0	0	22	0	32	11	0	0	0	26	0	0	17	131	0	0	0	239
66	Skaneatele	0	42	42	0	127	88	2.484472	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
67	Onondaga	0	195	195	0	537	326	2.499991	0	6	0	0	11	0	0	0	6	0	0	0	0	2	6	0	7	0	38
68	Pompey	0	198	198	0	449	344	0.94086	0	1	1	1	1	3	1	1	3	0	3	0	0	3	1	1	1	0	22
69	Pompey	0	316	310	6	633	526	0.94086	0	32	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	62
70	Pompey	0	323	323	0	980	720	0.94086	0	4	2	2	3	6	4	2	6	0	6	0	0	7	5	3	3	0	55
71	Lafayette	0	175	175	0	320	251	0.000542	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	23
72	Pompey	0	127	127	0	322	274	8.370044	0	1	1	1	1	3	1	1	3	0	3	0	0	3	1	1	1	0	22
73	Pompey	0	244	244	0	647	460	8.370044	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	10	28
74	Marcellus	0	429	429	0	853	697	7.08157	0	0	0	10	19	0	9	0	77	0	0	0	9	131	0	35	25	0	19	334
75	Onondaga	0	12	12	0	19	15	2.467097	0	0	0	0	0	0	0	0	0	0	76	0	0	15	0	0	0	0	91
76	Onondaga	0	250	250	0	671	444	1.716163	55	34	0	24	107	97	10	12	0	0	16	0	0	44	40	0	18	0	16	473
77	Onondaga	0	217	217	0	511	434	2.252645	0	0	0	0	0	0	0	10	0	0	28	0	0	0	0	0	0	0	38
78	Marcellus	0	149	149	0	338	237	2.252645	1	0	0	3	0	0	0	0	0	0	0	0	0	0	15	0	0	0	19
79	Marcellus	0	18	18	0	38	31	7.10492	0	3	1	1	1	3	3	1	4	0	3	0	0	4	1	1	1	0	1	28
80	Marcellus	0	16	16	0	36	27	7.10492	1	0	0	67	0	0	0	130	0	0	5	0	0	9	11	0	0	0	20	243
81	Onondaga	0	412	412	0	992	694	2.499972	0	3	0	0	0	0	0	0	5	0	0	0	0	49	5	0	0	0	0	62
82	Onondaga	0	302	302	0	780	552	0.063096	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	5	0	0	0	8
83	Skaneatele	0	518	518	0	1246	957	2.066773	0	560	0	57	51	0	0	0	24	0	1137	0	0	27	0	0	51	0	18	1925
84	Manlius	0	16	16	0	48	30	0.00013	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
85	Manlius	0	153	153	0	451	302	0.00013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	Manlius	0	351	351	0	803	630	0.00013	0	3	0	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	12
87	Manlius	0	223	223	0	514	381	0.00013	0	5	0	4	0	0	12	0	7	0	4	0	0	7	0	0	0	4	0	43
88	Marcellus	0	202	202	0	524	370	5.712801	0	2	0	0	41	135	7	454	0	0	5	0	0	15	0	0	0	0	0	659
89	Marcellus	0	208	208	0	429	345	5.712801	0	3	0	0	18	0	11	0	13	0	7	0	0	79	38	8	22	0	0	199
90	Dewitt	0	460	460	0	1023	713	0.506296	3	14	0	0	8	0	0	136	0	0	0	0	0	5	16	0	21	0	0	203
91	Dewitt	0	70	70	0	158	105	3.225817	0	0	0	0	0	0	0	124	0	0	0	0	0	0	0	0	0	0	0	124
92	Marcellus	0	162	162	0	369	261	11.57805	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	10
93	Marcellus	0	193	193	0	427	296	3.714994	0	1	0	0	0	1	1	0	0	0	0	0	0	4	0	0	0	0	1	8
94	Marcellus	0	156	156	0	352	248	3.714994	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	27
95	Onondaga	0	759	755	4	1600	1044	2.114484	0	265	0	0	0	0	5	0	0	0	0	0	0	29	32	0	0	0	0	331
96	Syracuse	0	755	755	0	1712	1190	3.185067	0	0	0	0	0	0	0	0	63	0	0	0	0	48	22	0	0	0	0	133
97	Manlius	0	81	81	0	127	103	2.920962	1	42	0	24	41	0	5	0	66	0	316	0	3	81	9	5	0	0	12	605
98	Manlius	0	625	625	0	1413	1050	2.920962	0	54	0	11	0	0	0	0	18	0	0	0	0	227	14	3	0	0	23	350
99	Syracuse	0	760	760	0	1298	807	0.630392	0	0	0	0	0	0	0	0	0	0	0	0	0	101	24	0	0	0	0	125
100	Syracuse	0	320	310	10	666	364	3.971682	0	0	0	0	0	0	4	0	5	0	0	0	0	2	9	0	0	0	0	20
101	Onondaga	0	463	456	7	1356	928	0.043631	0	5	0	14	0	17	41	0	6	0	0	0	0	33	53	0	21	0	0	190
102	Syracuse	0	351	325	26	837	566	5.971782	0	22	0	0	0	182	12	0	0	0	0	0	0	14	28	20	0	0	0	278
103	Marcellus	0	312	312	0	641	455	0.700534	0	4	1	2	2	5	3	2	5	0	4	0	0	6	2	1	2	0	2	41
104	Marcellus	0	192	192	0	406	283	0.700534	0	4	0	5	0	0	0	0	0	0	4	0	0	0	18	0	0	0	4	35
105	Manlius	0	721	720	1	1665	1318	1.257862	1	36	0	15	7	306	16	0	6	0	18	0	0	9	9	51	4	0	9	487
106	Dewitt	0	291	285	6	564	419	3.141876	0	26	21	0	58	0	10	0	33	0	19	0	0	8	7	11	0	0	11	204
107	Syracuse	0	33	33	0	61	34	1.730095	0	0	0	0	0	0	4	0	0	22	0	0	0	3	8	0	0	0	0	37
108	Syracuse	0	40	40	0	101	45	1.730095	0	10	0	0	33	0	0	0	0	0	0	0	0	13	0	0	0	0	0	56
109	Syracuse	0	289	289	0	667	350	1.730095	0	0	0	0	21	0	0	0	0	0	0	0	0	40	0	0	0	0	0	61
110	Syracuse	0	49	49	0	106	57	1.730095	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
111	Onondaga	0	342	341	1	734	489	0.001515	0	0	94	79	0	34	0	61	24	0	15	0	0	24	24	109	0	0	28	492
112	Onondaga	0	221	221	0	512	352	0.001515	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	6
113	Onondaga	0	15	15	0	35	21	2.167082	0	0	0	6	0	0	0	0	0	0	81	0	0	0	4	0	0	0	0	91
114	Dewitt	0	48	48	0	83	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0	0	0	190
115	Manlius	0	791	791	0	2038	1500	0	0	17	0	10	28	0	25	0	13	0	71	0	0	21	7	0	0	0	0	192
116	Onondaga	0	701	691	10	1619	1175	0	2	7	0	0	0	0	0	0	0	0	36	0	0	6	6	10	0	0	0	67
117	Onondaga	0	663	663	0	1893	1303	0.41189	0	0	0	0	15	0	0	101	0	0	0	0	0	5	0	0	0	0	8	129
118	Syracuse	0	693	687	6	859	561	4.542517	4	82	0	11	74	0	34	0	259	0	0	0	34	68	9	43	0	0	59	677
119	Syracuse	0	680	680	0	1479	572	8.817335	0	61	12	20	105	91	0	0	28	2	0	0	0	52	32	10	0	0	6	419
120	Manlius	0	376	376	0	590	450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	86	0	0	0	0	95
121	Syracuse	0	292	292	0	825	312	2.334158	0	29	0	13	25	0	15	0	0	0	0	0	0	6	11	3	0	0	0	102

122	Syracuse	0	126	126	0	285	153	2.175182	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	14	0	0	4	64
123	Syracuse	0	312	312	0	723	379	2.175182	0	5	1	2	3	6	4	2	6	0	5	0	0	0	7	3	1	2	0	3	50
124	Onondaga	0	80	80	0	176	136	2.031805	1	0	156	0	0	20	25	130	5	0	5	0	0	0	7	7	7	0	0	0	363
125	Manlius	0	386	386	0	1087	887	7.783208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	Manlius	0	154	154	0	244	213	7.783208	3	112	0	8	65	0	35	65	10	0	25	0	0	1127	113	17	0	0	10	1590
127	Manlius	0	369	369	0	531	413	7.706893	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	52
128	Syracuse	0	264	257	7	449	177	0.064559	0	31	0	0	84	0	27	0	0	0	0	0	0	144	0	0	0	0	0	286
129	Dewitt	0	2	2	0	3	3	0.090649	0	0	0	27	0	0	0	0	0	0	0	0	0	36	12	0	0	0	0	75
130	Syracuse	0	116	116	0	306	145	2.664003	0	0	0	0	0	0	0	0	0	0	0	0	0	13	6	0	0	0	0	19
131	Syracuse	0	86	86	0	220	110	0.057264	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
132	Syracuse	0	89	89	0	220	107	0.057264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	Onondaga	0	284	270	14	447	342	0.037051	0	6	0	0	19	111	8	0	0	0	0	0	0	0	4	0	0	0	0	148
134	Manlius	0	267	267	0	534	419	6.602251	0	14	0	18	39	0	60	0	0	0	43	0	8	44	8	85	100	0	0	419
135	Manlius	0	186	186	0	466	342	6.602251	0	0	0	0	0	0	2	0	0	0	4	0	0	3	0	0	0	0	0	9
136	Manlius	0	209	209	0	436	329	0.008753	0	4	0	2	2	4	2	2	4	0	2	0	0	6	2	2	2	0	2	36
137	Manlius	0	318	318	0	600	430	4.091375	0	0	0	80	0	0	64	0	0	0	0	0	0	38	86	60	0	0	0	328
138	Onondaga	0	400	400	0	1060	799	0	2	1	0	2	0	0	0	19	0	0	0	0	0	0	0	0	0	0	1	25
139	Onondaga	0	124	124	0	297	244	0	0	0	0	1	0	0	0	18	0	0	0	0	0	0	0	0	0	0	1	20
140	Onondaga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	0	0	0	0	0	0	0	0	0	0	0	76
141	Onondaga	0	82	82	0	132	117	0	1	8	1	2	3	7	6	2	9	1	6	0	0	11	3	2	2	1	3	68
142	Onondaga	0	482	476	6	762	667	0.007274	0	0	0	0	0	0	11	77	0	0	0	0	0	9	0	6	0	0	0	103
143	Syracuse	0	95	94	1	269	142	2.445112	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
144	Syracuse	0	211	197	14	541	306	2.445112	0	0	0	1	0	50	0	0	0	5	0	0	0	6	0	0	0	0	0	62
145	Syracuse	0	343	343	0	1004	452	0.463757	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	Syracuse	0	24	24	0	46	23	4.133406	0	7	4	1	85	1	0	1	180	10	11	0	0	0	1	38	0	0	3	342
147	Syracuse	0	15	15	0	43	17	4.133406	2	111	2	270	2	62	42	4	5	1	258	0	0	57	45	4	47	4	448	1364
148	Syracuse	0	832	832	0	1462	900	4.133406	0	9	0	20	0	14	4	0	1	0	30	0	0	3	4	0	4	0	3	92
149	Syracuse	0	276	276	0	730	414	2.21963	0	11	0	7	0	0	17	0	0	0	0	0	0	10	0	10	0	0	0	55
150	Syracuse	0	468	463	5	1391	421	0.010898	0	0	0	0	0	0	0	0	0	0	0	0	0	13	6	0	0	0	0	19
151	Syracuse	0	197	190	7	479	272	3.68821	0	0	0	0	0	218	0	0	0	0	0	0	0	0	0	11	0	0	0	229
152	Onondaga	0	10	10	0	20	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	Onondaga	0	15	15	0	33	26	0	12	21	0	24	12	0	0	0	57	0	0	0	0	19	0	0	17	0	0	162
154	Manlius	0	84	84	0	148	137	2.639621	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
155	Syracuse	0	299	294	5	597	487	11.54331	0	4	5	0	4	4	0	0	3	1	5	0	0	0	0	0	0	0	0	26
156	Dewitt	0	460	460	0	1071	677	0.232648	0	0	0	0	0	0	11	0	171	0	0	0	0	0	0	94	0	0	9	285
157	Syracuse	0	157	157	0	455	197	0.079881	0	6	0	0	13	98	0	0	0	0	0	0	0	1	0	0	0	0	0	118
158	Syracuse	0	269	265	4	807	240	1.844171	0	2	0	0	16	98	0	0	0	0	0	0	0	15	8	0	0	0	5	144
159	Dewitt	0	241	241	0	621	521	0.855222	0	25	0	17	0	0	22	0	25	0	17	0	0	0	0	0	0	0	0	106
160	Dewitt	0	321	321	0	821	701	0.855222	0	328	0	0	0	22	38	0	35	4	0	0	0	15	9	5	0	0	4	460
161	Dewitt	0	241	241	0	532	380	2.98412	0	0	0	9	29	65	6	7	0	0	0	0	0	0	9	0	0	0	4	129
162	Dewitt	0	59	59	0	147	99	2.98412	0	20	0	0	20	0	0	0	0	0	0	0	0	237	12	0	33	0	0	322
163	Onondaga	0	511	511	0	738	519	0.027085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	0	0	0	0	69
164	Onondaga	0	383	383	0	1008	618	0.006435	1	0	0	33	2	73	2	0	0	0	45	0	0	3	2	0	0	0	0	161
165	Onondaga	0	120	120	0	262	164	0.006435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	5
166	Manlius	0	106	106	0	241	187	2.637489	0	0	0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	176
167	Syracuse	0	126	126	0	343	147	0.654891	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	Syracuse	0	19	19	0	42	20	0.654891	0	0	0	0	5	142	0	0	0	0	0	0	0	0	0	0	0	0	0	147
169	Dewitt	0	33	33	0	79	53	5.345486	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
170	Syracuse	0	164	164	0	491	221	0.547555	0	1	0	0	13	0	7	0	0	0	0	0	0	0	3	0	0	0	0	24
171	Syracuse	0	697	697	0	1390	676	2.968699	0	11	0	15	0	79	3	0	0	0	0	0	0	2	0	0	0	0	0	110
172	Camillus	0	236	236	0	567	409	0.173517	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	40
173	Syracuse	0	236	236	0	626	234	2.986632	0	0	0	0	0	45	0	0	0	0	0	0	0	59	0	0	0	0	0	104
174	Syracuse	0	34	34	0	109	36	2.986632	0	0	0	0	0	30	0	0	0	0	0	0	0	18	0	0	0	0	0	48
175	Manlius	0	53	53	0	167	117	2.618652	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	Manlius	0	199	199	0	352	264	2.618652	0	9	0	20	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	46
177	Syracuse	0	273	264	9	638	415	0.012588	0	2	1	1	1	4	2	1	4	0	4	0	0	4	2	1	1	0	1	29
178	Manlius	0	529	529	0	1274	930	0.003229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	0	0	0	78
179	Dewitt	0	343	339	4	880	766	0.076047	0	0	0	0	0	0	0	0	0	0	22	0	0	15	0	0	0	0	9	46
180	Syracuse	0	143	143	0	305	161	15	0	2	0	0	0	136	0	0	4	0	0	0	0	1	0	0	0	0	0	143
181	Syracuse	0	200	200	0	333	203	15	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0	9
182	Syracuse	0	76	76	0	221	76	10.13334	0	0	0	0	30	0	25	0	0	0	0	0	0	0	13	0	0	0	0	68

183	Syracuse	0	33	33	0	98	34	10.13334	0	0	0	0	0	16	0	0	0	0	0	0	0	0	3	0	0	0	0	19
184	Syracuse	0	62	61	1	185	63	10.13334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	36
185	Dewitt	0	278	269	9	638	438	0.014031	0	2	0	0	0	19	14	0	0	0	0	0	0	0	13	8	27	0	0	83
186	Syracuse	0	24	24	0	54	44	2.274165	0	0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	144
187	Manlius	0	654	649	5	1205	965	2.548554	0	88	0	0	75	139	160	0	32	0	46	0	0	170	0	0	0	0	8	718
188	Manlius	0	112	112	0	301	228	2.548554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26
189	Syracuse	0	217	217	0	594	408	1.086497	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
190	Syracuse	0	101	101	0	291	124	1.086497	0	5	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	29
191	Onondaga	0	380	380	0	918	606	0.260395	0	0	0	4	2	13	6	2	0	0	7	0	0	0	0	0	3	0	0	37
192	Syracuse	0	377	377	0	1023	718	1.360265	0	4	1	1	2	4	2	1	3	0	2	0	0	1	1	0	1	0	2	25
193	Syracuse	0	142	142	0	359	263	1.360265	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	5
194	Elbridge	0	147	142	5	341	272	2.727273	0	3	0	0	8	30	0	0	0	0	18	0	0	34	3	0	0	0	2	98
195	Elbridge	0	228	228	0	565	432	2.727273	9	8	0	0	27	0	45	22	0	0	30	0	0	0	1	0	0	0	8	150
196	Syracuse	0	193	193	0	377	317	3.996721	2	10	0	0	7	0	0	0	14	0	6	0	0	0	0	0	0	0	0	39
197	Onondaga	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	0	0	0	0	96
198	Onondaga	0	52	52	0	51	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	Syracuse	0	95	95	0	270	120	0.015934	0	3	0	0	0	0	0	0	0	0	12	0	0	2	3	0	10	0	0	30
200	Syracuse	0	166	166	0	478	205	0.096402	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
201	Syracuse	0	204	204	0	592	268	0.096402	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
202	Fayettevill	0	454	454	0	908	710	2.639292	3	31	0	20	25	39	20	0	0	0	287	0	7	27	7	11	0	0	7	484
203	Syracuse	0	144	144	0	345	170	0.140317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10
204	Syracuse	0	264	258	6	776	279	10.98307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	5	0	0	20
205	Syracuse	0	12	12	0	30	9	10.98307	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2	4	2	0	0	13
206	Syracuse	0	99	99	0	278	95	4.982461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Syracuse	0	91	91	0	241	88	4.982461	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21
208	Dewitt	0	589	585	4	1463	1000	1.883991	0	39	0	0	0	246	0	0	0	0	0	0	0	0	0	0	0	0	0	285
209	Onondaga	0	328	328	0	608	430	1.465791	0	5	0	0	11	0	0	67	60	0	0	0	0	14	6	0	0	0	0	163
210	Onondaga	0	83	78	5	193	125	1.465791	0	28	0	0	23	0	0	0	14	0	0	0	0	3	14	0	0	0	0	82
211	Syracuse	0	270	260	10	581	449	2.256462	2	0	0	0	0	133	0	0	0	0	0	0	0	0	31	11	0	0	0	177
212	Syracuse	0	486	481	5	1231	892	0.020548	0	0	0	0	0	171	0	0	0	0	0	0	0	0	5	7	0	0	0	183
213	Camillus	0	313	313	0	589	464	1.706925	1	40	0	0	58	0	6	0	0	15	0	0	0	6	0	0	3	0	0	129
214	Camillus	0	527	527	0	801	620	1.706925	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	10
215	Camillus	0	45	45	0	58	57	1.706925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	Onondaga	0	132	131	1	300	193	1.615259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	Syracuse	0	261	257	4	561	459	0.667898	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	5
218	Syracuse	0	172	172	0	356	283	0.667898	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
219	Dewitt	0	124	124	0	355	235	2.139762	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	Dewitt	0	283	278	5	628	443	2.139762	3	5	0	0	17	0	23	0	0	0	0	0	0	82	0	0	0	0	0	130
221	Syracuse	0	158	158	0	443	148	4.256793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	Syracuse	0	157	157	0	473	147	4.256793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
223	Syracuse	0	140	119	21	352	91	7.750176	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	22	0	0	0	35
224	Syracuse	0	57	57	0	150	37	7.687288	0	0	0	0	0	0	0	0	6	0	0	0	0	0	34	0	0	0	0	40
225	Syracuse	0	74	74	0	210	49	7.687288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	Fayettevill	0	472	466	6	1264	943	0.000267	0	8	0	0	0	0	0	0	0	0	84	0	0	57	43	8	0	0	8	208
227	Syracuse	0	110	65	45	341	83	15	0	0	0	0	23	0	0	0	0	0	0	0	0	0	28	16	30	0	0	97
228	Manlius	0	182	182	0	195	160	0.076914	0	65	35	0	515	0	115	0	100	0	62	0	0	925	38	42	62	0	4	1963
229	Onondaga	0	74	74	0	147	104	1.46989	0	0	0	0	0	106	0	0	0	0	0	0	0	0	14	5	0	0	0	125
230	Onondaga	0	132	132	0	259	187	1.46989	0	15	0	0	0	0	5	0	23	0	0	0	0	0	0	0	0	0	23	66
231	Syracuse	0	307	307	0	886	497	0.984892	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
232	Syracuse	0	77	77	0	195	64	15	0	0	0	38	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	42
233	Syracuse	0	148	87	61	330	118	15	0	25	0	0	0	0	13	0	0	0	18	0	0	42	21	14	0	0	0	133
234	Syracuse	0	383	383	0	1000	590	15	0	0	0	24	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	66
235	Syracuse	0	36	35	1	72	18	15	0	0	0	0	0	126	5	0	0	0	0	0	0	13	5	4	43	0	14	210
236	Syracuse	0	50	50	0	144	33	15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	7	0	0	0	12
237	Dewitt	0	112	112	0	295	249	0.014017	1	40	2	45	29	2	47	0	62	0	0	0	0	6	24	8	0	0	0	266
238	Dewitt	0	157	157	0	363	338	0.014017	0	16	6	59	84	9	47	46	0	0	0	0	0	524	4	0	0	0	5	800
239	Syracuse	0	532	532	0	1503	1132	15	2	5	0	0	0	0	0	0	0	0	0	0	0	3	4	0	11	0	4	29
240	Geddes	0	22	15	7	37	26	0	0	0	0	0	0	62	0	0	605	0	0	0	0	0	4	0	0	0	0	671
241	Manlius	0	321	321	0	722	594	1.172205	0	81	0	15	43	0	27	60	8	0	57	0	0	48	31	22	21	0	2	415
242	Syracuse	0	60	60	0	122	31	15	0	0	0	0	9	0	0	0	0	0	37	0	0	14	7	0	9	0	0	76
243	Syracuse	0	38	38	0	110	20	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	428	0	119	0	0	547

244	Manlius	0	536	536	0	1151	892	0.034934	0	0	0	0	82	0	0	0	51	27	0	0	0	0	0	0	0	0	160
245	Syracuse	0	155	155	0	454	126	4.882883	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
246	Syracuse	0	154	154	0	417	121	4.882883	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	30
247	Syracuse	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	57
248	Syracuse	0	83	83	0	323	76	15	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0	117
249	Syracuse	0	289	273	16	697	280	6.905163	0	0	0	0	0	20	35	0	0	61	0	0	0	0	212	0	0	0	332
250	Syracuse	0	205	205	0	553	208	6.905163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	Syracuse	0	148	148	0	415	131	7.897091	0	0	0	0	0	49	0	0	0	0	0	0	0	0	0	15	0	0	64
252	Syracuse	0	85	84	1	266	79	7.897091	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	1	0	0	9
253	Syracuse	0	146	139	7	343	260	5.454634	0	9	0	0	0	0	0	0	0	0	0	0	0	0	64	39	0	0	112
254	Dewitt	0	135	126	9	307	206	5.454634	0	21	0	6	54	93	25	0	27	5	0	0	0	40	10	2	15	0	298
255	Dewitt	0	276	272	4	732	470	5.454634	0	3	0	5	0	123	8	14	20	4	0	0	0	32	4	2	12	0	227
256	Camillus	0	1295	1291	4	2907	2284	0.078177	0	40	0	0	146	41	46	0	159	0	30	0	0	35	25	30	63	0	29	644
257	Camillus	0	791	791	0	2062	1469	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	40
258	Geddes	0	459	459	0	1027	760	0.000236	0	0	0	35	0	162	0	0	0	0	0	0	0	0	0	0	0	0	197
259	Geddes	0	1	1	0	2	2	0	0	36	0	0	340	0	11	0	60	0	0	0	0	65	2	0	0	0	514
260	Syracuse	0	70	65	5	117	99	0	0	67	0	9	76	0	11	0	9	0	0	0	1	473	19	0	0	0	665
261	Syracuse	0	492	492	0	1136	705	12.9954	0	0	0	0	0	0	0	0	4	0	0	0	0	10	31	4	0	0	49
262	Syracuse	0	107	107	0	326	85	2.478088	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	9
263	Syracuse	0	132	121	11	391	107	2.478088	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	3	0	0	13
264	Camillus	0	161	161	0	325	201	3.271145	0	22	0	17	19	22	11	0	0	31	0	0	0	0	8	0	0	0	130
265	Camillus	0	264	264	0	590	360	3.271145	0	0	0	0	42	0	0	0	11	0	0	0	0	21	0	0	0	0	74
266	Camillus	0	174	167	7	347	219	3.271145	0	13	0	7	4	0	0	0	0	0	22	0	0	9	4	6	0	0	69
267	Camillus	0	579	575	4	1375	998	1.746723	0	53	0	0	43	0	41	0	48	0	0	0	0	0	12	0	0	0	197
268	Geddes	0	503	503	0	1237	870	0.010062	0	2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
269	Syracuse	0	1	1	0	1	0	13.56077	0	2	0	0	9	0	0	0	0	0	0	0	0	23	5	0	0	0	39
270	Syracuse	0	0	0	0	0	0	1.932763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
271	Syracuse	0	397	395	2	1136	425	1.932763	0	0	0	6	21	161	10	0	0	0	10	0	0	7	0	0	0	10	225
272	Syracuse	0	219	181	38	494	142	8.734152	0	2	0	0	9	0	3	0	26	0	0	0	0	0	2	0	0	0	42
273	Syracuse	0	55	4	51	203	29	15	0	10	0	8	6	0	0	0	0	0	8	0	0	4	19	5	0	0	60
274	Syracuse	0	324	275	49	667	102	15	0	0	0	0	0	0	0	0	0	0	0	0	0	39	25	0	0	0	64
275	Camillus	0	62	62	0	141	107	0	0	17	0	7	72	368	39	41	9	0	0	0	0	479	12	0	0	0	1044
276	Syracuse	0	264	264	0	628	477	4.45837	0	0	0	0	0	0	0	0	0	0	16	0	0	9	0	0	0	0	25
277	Syracuse	0	182	178	4	367	300	4.45837	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
278	Syracuse	0	85	85	0	183	142	4.45837	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	23
279	Syracuse	0	701	0	701	668	668	20	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
280	Syracuse	0	706	1	705	1941	1200	20	0	90	0	34	0	0	0	0	0	0	175	0	0	1	0	0	0	0	0	300
281	Syracuse	0	331	311	20	865	255	10.61111	0	0	0	4	0	17	0	0	14	0	0	0	0	0	4	4	0	0	4	47
282	Syracuse	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
283	Syracuse	0	310	273	37	870	662	15	0	0	43	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	45
284	Syracuse	0	838	141	697	326	157	15	0	8	1	3	4	10	6	3	8	1	6	1	0	3	4	3	3	1	3	68
285	Syracuse	0	259	253	6	742	432	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
286	Syracuse	0	192	192	0	454	279	15	0	0	29	0	52	0	18	0	0	0	0	0	0	23	19	33	0	0	0	174
287	Elbridge	0	266	266	0	672	510	2.072539	0	15	0	0	6	74	0	0	0	2	0	0	0	4	6	0	0	0	27	134
288	Elbridge	0	228	224	4	558	438	2.072539	5	105	0	45	20	230	2	2	0	0	0	0	0	15	15	0	45	2	0	486
289	Elbridge	0	228	228	0	566	438	2.072539	0	78	0	0	15	0	9	0	18	0	1420	0	0	90	0	5	0	0	0	1635
290	Syracuse	0	192	146	46	577	155	10.27161	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
291	Geddes	0	428	420	8	937	638	1.702312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18
292	Syracuse	0	12	12	0	26	3	4.11152	0	504	0	0	0	0	0	0	6	0	11	0	0	172	35	4	0	0	70	802
293	Syracuse	0	0	0	0	0	0	4.11152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	Syracuse	0	29	29	0	64	49	1.599884	0	0	0	0	0	116	0	0	107	0	0	0	0	3	1	10	0	0	0	237
295	Syracuse	0	271	271	0	567	457	1.599884	0	0	0	0	0	0	0	0	65	0	0	0	0	0	16	72	0	0	0	153
296	Syracuse	0	336	336	0	849	514	10.32984	0	0	0	9	0	25	0	0	0	0	0	0	0	0	20	9	0	0	0	63
297	Geddes	0	450	450	0	1028	702	0.080242	0	62	0	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	124
298	Syracuse	0	465	0	465	428	428	20	0	27	43	0	0	500	0	0	0	0	0	0	0	0	0	0	0	0	0	570
299	Syracuse	0	64	0	64	59	59	20	0	0	0	0	0	361	0	0	0	0	0	0	0	0	0	0	0	0	16	377
300	Dewitt	0	310	310	0	742	484	6.477802	0	59	15	24	70	0	54	0	33	0	7	0	0	42	52	3	6	0	0	365
301	Syracuse	0	606	605	1	1190	201	15	0	0	0	0	0	0	310	0	11	0	23	0	0	5	0	6	0	0	0	355
302	Syracuse	0	70	70	0	246	39	15	0	6	1	2	3	7	4	2	6	0	4	0	0	4	2	1	2	0	3	47
303	Syracuse	0	0	0	0	0	0	15	0	5	1	2	2	6	3	2	5	1	3	0	0	2	2	1	2	1	2	40
304	Syracuse	0	41	41	0	71	12	15	0	5	0	10	20	0	0	0	0	0	9	0	1	5	0	0	0	0	0	50

305	Syracuse	0	47	47	0	104	18	15	0	19	0	0	0	125	0	0	0	0	52	0	5	28	0	0	0	0	0	229
306	Syracuse	0	21	21	0	65	11	15	0	18	0	0	0	0	0	0	0	0	0	0	3	1	0	63	344	0	0	429
307	Syracuse	0	58	18	40	66	16	15	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	16
308	Syracuse	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	Syracuse	0	75	0	75	70	70	5.377607	0	80	0	0	0	269	0	0	0	0	0	0	0	371	83	52	0	0	0	855
310	Syracuse	0	1	1	0	1	0	5.377607	0	6	0	0	35	0	0	0	47	0	0	0	0	1	5	22	0	0	0	116
311	Syracuse	0	419	412	7	987	752	2.210858	0	16	0	0	0	0	32	0	0	0	0	0	6	3	5	0	16	0	0	78
312	Syracuse	0	0	0	0	0	0	20	0	183	0	0	66	0	109	0	738	0	0	0	0	63	24	0	10	0	0	1193
313	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	96	0	0	0	0	0	0	0	0	0	0	0	0	0	96
314	Syracuse	0	109	0	109	96	96	20	0	3	0	0	0	129	0	0	0	156	0	0	0	0	11	0	0	0	0	299
315	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	341	0	0	34	0	0	0	0	35	5	5	0	0	0	420
316	Syracuse	0	0	0	0	0	0	20	0	0	53	0	0	373	0	0	0	0	0	0	0	1	10	0	0	0	0	437
317	Syracuse	0	261	30	231	493	330	20	0	10	190	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	227
318	Syracuse	0	280	6	274	561	349	20	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
319	Syracuse	0	0	0	0	0	0	1.718498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	191	0	0	0	241
320	Syracuse	0	185	185	0	555	97	15	0	1	0	0	0	0	0	0	10	0	14	0	0	5	1	2	0	0	0	33
321	Syracuse	0	72	72	0	192	35	15	0	1	0	0	0	131	3	0	27	0	1	0	0	1	8	7	0	0	0	179
322	Syracuse	0	62	62	0	184	32	15	0	1	0	0	0	13	2	0	38	0	0	0	0	3	31	14	0	0	2	104
323	Syracuse	0	92	92	0	267	51	15	0	0	0	0	0	0	0	0	12	0	0	0	0	1	0	4	0	0	0	17
324	Manlius	0	288	288	0	557	431	2.618662	3	0	0	0	0	0	0	0	0	0	0	0	0	8	40	0	0	0	11	62
325	Manlius	0	183	183	0	291	244	2.618662	0	0	0	0	0	0	7	0	30	28	0	0	0	0	30	0	0	0	13	108
326	Syracuse	0	91	0	91	166	110	15	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
327	Syracuse	0	131	61	70	286	176	15	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
328	Syracuse	0	503	0	503	464	464	20	0	0	0	0	0	16	0	0	0	0	0	0	0	0	1	0	0	0	0	17
329	Syracuse	0	226	0	226	345	345	20	0	0	0	0	0	200	0	0	0	0	0	0	0	0	0	1	0	0	0	201
330	Syracuse	0	122	122	0	310	189	15	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
331	Syracuse	0	85	85	0	211	131	15	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
332	Dewitt	0	234	234	0	533	351	2.711263	0	46	0	0	0	75	0	0	0	0	0	0	0	0	14	0	0	0	0	135
333	Dewitt	0	140	130	10	258	179	2.711263	0	13	0	0	85	0	0	0	0	25	0	0	0	147	56	0	0	0	0	326
334	Camillus	0	607	603	4	1274	974	0.002711	1	42	0	0	20	109	101	136	0	0	4	0	0	129	41	0	0	32	0	615
335	Syracuse	0	167	167	0	426	171	5.485097	0	0	0	0	0	117	2	0	1	0	0	0	0	8	5	9	0	0	0	142
336	Syracuse	0	203	203	0	564	216	5.485097	0	0	0	0	31	0	9	0	30	0	0	0	0	1	24	39	0	0	0	134
337	Syracuse	0	5	0	5	0	0	20	0	35	41	9	82	46	0	0	20	0	0	0	0	1	102	0	0	0	169	505
338	Syracuse	0	3	0	3	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16
339	Syracuse	0	166	166	0	68	51	20	0	3	0	0	0	0	162	0	0	0	0	0	0	50	0	3	0	0	0	218
340	Syracuse	0	100	100	0	0	0	20	0	0	0	0	0	0	0	0	446	0	0	0	0	0	0	0	0	0	0	446
341	Syracuse	0	0	0	0	0	0	20	0	12	0	0	0	234	0	0	17	0	0	0	0	0	0	0	0	0	0	263
342	Syracuse	0	0	0	0	0	0	20	0	36	13	0	206	7	30	0	240	0	6	0	0	65	0	11	30	0	0	644
343	Syracuse	0	394	394	0	218	154	20	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
344	Syracuse	0	5	0	5	4	4	20	0	7	0	0	0	36	0	0	0	0	0	0	0	101	1	0	0	0	0	145
345	Syracuse	0	135	135	0	287	179	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	10	0	0	19
346	Syracuse	0	69	0	69	62	62	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
347	Syracuse	0	209	207	2	470	363	15	0	0	0	0	0	26	0	0	0	0	0	0	0	0	1	0	0	0	0	27
348	Syracuse	0	222	222	0	218	188	15	0	9	0	9	3	2	1	0	228	1	0	0	0	0	5	54	0	0	0	312
349	Geddes	0	212	212	0	528	375	2.802125	0	0	0	10	0	0	8	0	0	0	0	0	0	1	8	0	0	0	0	27
350	Camillus	0	505	505	0	1233	878	0.188091	0	18	0	0	0	0	0	0	410	0	0	0	0	0	85	34	0	0	0	547
351	Manlius	0	433	433	0	988	747	1.354432	0	20	0	0	0	0	20	0	0	0	0	0	0	0	30	0	85	0	0	155
352	Manlius	0	62	57	5	142	114	1.354432	0	0	0	0	0	0	0	143	0	0	0	0	0	0	0	0	0	0	0	143
353	Syracuse	0	351	298	53	724	160	12.93815	0	0	0	0	0	25	3	0	0	0	0	0	0	34	7	46	0	0	0	115
354	Syracuse	0	77	77	0	210	41	12.93815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
355	Syracuse	0	61	61	0	0	0	20	2	122	4	0	50	0	428	6	6	0	1	0	0	6	32	2	0	1	11	671
356	Syracuse	0	0	0	0	0	0	20	1	71	0	0	1	0	3	1	17	0	0	0	0	0	34	6	0	0	0	134
357	Geddes	0	385	385	0	969	670	0.542659	0	1	0	4	0	13	0	0	0	0	0	0	0	0	3	0	0	0	0	21
358	Syracuse	0	153	143	10	397	141	13.30585	0	0	0	0	0	0	3	0	8	0	0	0	0	0	0	5	0	0	0	16
359	Syracuse	0	141	141	0	294	125	13.30585	0	0	0	0	0	0	3	0	12	0	0	0	0	0	0	8	0	0	0	23
360	Syracuse	0	60	60	0	108	48	13.30585	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
361	Syracuse	0	5	5	0	12	9	5.371134	0	20	0	10	53	0	0	12	4	0	0	0	0	40	20	0	0	0	20	179
362	Syracuse	0	180	178	2	321	236	5.371134	0	30	0	6	19	48	40	0	0	0	0	0	0	5	9	0	6	0	0	163
363	Syracuse	0	248	247	1	557	379	5.371134	0	30	0	2	25	220	10	0	15	0	0	0	0	57	33	57	0	0	23	472
364	Syracuse	0	235	234	1	436	362	8.430134	1	2	0	1	2	3	2	1	3	0	2	0	0	3	1	0	1	0	2	24
365	Syracuse	0	157	133	24	346	269	8.430134	0	39	0	0	0	85	19	0	87	0	0	0	0	9	88	294	30	0	0	651

366	Solvay	0	202	202	0	480	343	2.016784	0	44	0	38	21	0	15	0	91	0	0	0	0	43	6	11	0	0	6	275
367	Geddes	0	187	187	0	468	310	0.093832	0	0	0	0	0	55	6	0	3	0	0	0	0	0	8	0	0	0	6	78
368	Syracuse	0	59	59	0	118	80	2.008414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
369	Syracuse	0	483	483	0	1025	710	2.008414	0	5	0	12	21	0	0	28	0	0	0	0	0	0	0	19	0	0	0	85
370	Syracuse	0	297	297	0	611	427	2.008414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
371	Syracuse	1	0	0	0	0	0	20	0	47	0	0	4	0	6	0	9	0	3	0	48	0	702	0	13	0	0	832
372	Syracuse	0	1194	1055	139	1193	593	20	0	27	0	0	6	0	15	0	259	0	11	0	16	1	237	11	6	0	37	626
373	Syracuse	0	139	0	139	140	140	20	0	3	0	0	5	0	56	0	381	0	0	0	15	4	0	0	4	0	9	477
374	Syracuse	0	294	0	294	457	127	15	0	55	0	0	0	0	0	0	0	0	80	0	0	19	10	236	0	0	8	408
375	Syracuse	0	0	0	0	0	0	20	0	1227	0	0	0	0	326	0	11	0	0	0	0	26	0	0	0	0	0	1590
376	Syracuse	0	29	29	0	0	0	20	0	62	0	11	26	0	26	0	0	24	13	0	0	34	41	17	0	0	0	254
377	Syracuse	0	101	101	0	81	81	20	0	85	0	0	36	434	628	450	0	50	9	0	0	92	57	0	233	0	0	2074
378	Syracuse	0	190	0	190	188	188	20	0	0	0	2	0	139	0	356	645	41	30	0	0	21	25	0	0	0	7	1266
379	Syracuse	0	24	0	24	124	124	20	0	1	0	3	0	48	0	385	366	43	32	0	0	1	0	22	0	0	9	910
380	Syracuse	0	0	0	0	0	0	20	0	0	0	0	19	3	0	0	170	0	0	0	0	0	1	0	0	0	0	193
381	Syracuse	0	0	0	0	0	0	20	0	0	0	0	43	6	0	0	337	0	0	0	0	0	0	0	0	0	0	386
382	Syracuse	0	0	0	0	0	0	20	0	33	0	2	0	68	25	395	10	44	31	0	0	29	148	0	0	0	8	793
383	Geddes	0	174	170	4	389	285	2.828985	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
384	Syracuse	0	108	108	0	296	55	15	0	33	5	3	9	217	29	102	30	0	73	0	4	46	9	0	20	0	117	697
385	Syracuse	0	182	182	0	496	95	15	0	21	5	88	3	21	3	61	12	0	27	0	3	155	9	0	13	0	21	442
386	Dewitt	0	164	160	4	423	268	0.076502	0	614	285	46	0	17	1454	6	3	0	8	0	217	176	21	0	12	3	35	2897
387	Dewitt	0	113	113	0	253	165	0.076502	0	167	209	0	0	27	81	0	28	0	9	0	351	1310	36	0	19	5	7	2249
388	Syracuse	0	153	153	0	99	58	15	0	0	0	14	0	0	22	0	28	0	0	0	0	2	0	0	0	0	0	66
389	Syracuse	0	189	189	0	492	212	15	0	0	0	7	0	0	14	0	14	0	0	0	0	0	0	0	0	0	0	35
390	Syracuse	0	145	145	0	212	148	20	0	0	0	24	0	0	43	0	62	0	0	0	0	0	0	0	0	0	0	129
391	Syracuse	0	198	188	10	427	226	15	0	6	0	2	0	0	4	0	0	0	0	0	0	2	0	15	0	0	0	29
392	Syracuse	0	39	39	0	77	42	20	0	13	0	11	0	0	17	0	6	0	0	0	0	5	0	0	0	0	0	52
393	Camillus	0	28	28	0	50	39	0	0	0	0	0	187	0	12	0	0	0	0	0	0	1025	0	0	0	0	0	1224
394	Camillus	0	387	384	3	945	687	2.437705	0	20	0	0	53	0	0	0	24	33	0	0	0	0	0	19	0	0	0	149
395	Syracuse	0	0	0	0	0	0	15	4	262	428	24	94	42	191	3	1	11	164	0	0	0	38	1	1	1	9	1274
396	Syracuse	0	145	145	0	93	49	15	6	245	108	18	409	12	96	3	138	50	29	0	0	83	67	33	5	2	16	1320
397	Syracuse	0	184	184	0	176	87	15	0	5	0	5	49	0	61	0	0	7	0	0	0	7	130	1	6	0	0	271
398	Camillus	0	1306	1302	4	2922	2050	1.364506	0	79	0	6	0	0	109	17	61	0	0	0	0	365	10	90	0	68	0	805
399	Syracuse	0	459	456	3	1251	503	8.910176	0	0	0	0	0	17	0	0	0	0	0	0	0	0	3	0	0	0	0	20
400	Syracuse	0	123	119	4	234	98	15	0	5	0	0	8	0	0	0	0	0	0	0	0	10	0	0	0	0	0	23
401	Syracuse	0	21	21	0	53	22	15	0	5	0	24	24	0	30	0	10	0	0	0	0	24	0	0	0	0	0	117
402	Camillus	0	638	634	4	1288	958	1.400718	0	26	0	0	39	148	159	0	83	0	85	0	0	91	22	0	7	52	0	712
403	Syracuse	0	0	0	0	0	0	20	0	87	0	0	0	10	0	0	56	0	0	0	0	0	14	0	0	0	0	167
404	Syracuse	0	132	132	0	315	234	20	0	1	0	0	0	1	0	0	13	0	0	0	0	0	1	76	0	0	0	92
405	Syracuse	0	229	229	0	15	8	20	0	110	0	0	22	7	0	0	78	0	0	0	0	110	60	0	0	0	0	387
406	Syracuse	0	66	66	0	125	81	2.099814	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
407	Syracuse	0	215	213	2	454	292	2.099814	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
408	Syracuse	0	3	0	3	0	0	20	0	68	0	0	0	59	0	45	0	0	0	0	6	5	0	15	0	0	0	198
409	Syracuse	0	3	0	3	0	0	20	0	36	0	0	0	0	0	34	71	0	0	0	5	1	0	0	0	0	92	239
410	Syracuse	0	212	212	0	181	96	20	0	170	0	16	69	0	68	0	22	0	70	0	2	25	22	0	0	0	0	464
411	Syracuse	0	0	0	0	0	0	20	0	594	0	21	1	0	290	0	1	0	0	0	3	0	2	0	0	0	0	912
412	Syracuse	0	245	140	105	219	108	20	0	112	0	32	4	0	72	8	63	0	0	0	0	18	53	56	6	2	0	426
413	Syracuse	0	0	0	0	0	0	20	0	78	0	0	0	0	411	0	0	0	0	0	0	0	0	0	0	3	0	492
414	Syracuse	0	116	116	0	31	16	20	0	387	0	0	3	30	1930	12	4	0	1	0	0	20	66	0	0	2	0	2455
415	Syracuse	0	139	139	0	141	71	20	0	479	0	0	8	0	151	119	20	0	5	0	0	32	11	124	3	5	0	957
416	Camillus	0	331	331	0	787	535	4.254137	0	19	0	0	82	0	0	0	0	0	9	0	0	32	0	4	24	0	0	170
417	Syracuse	0	27	27	0	39	20	20	0	58	0	0	7	24	246	515	0	0	0	0	0	2	5	67	0	0	0	924
418	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
419	Syracuse	0	0	0	0	0	0	20	0	24	0	20	15	0	189	276	18	0	0	0	0	0	0	37	0	0	9	588
420	Syracuse	0	0	0	0	0	0	20	0	12	14	0	0	0	0	176	13	0	0	0	0	5	0	23	0	0	0	243
421	Syracuse	0	388	387	1	946	540	7.317591	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	56
422	Syracuse	0	1	0	1	0	0	15	0	3	198	0	0	0	4	0	0	0	12	0	3	3	16	0	0	0	9	248
423	Syracuse	0	0	0	0	0	0	20	0	89	0	0	0	0	89	14	0	0	0	0	1	7	40	0	19	0	11	270
424	Syracuse	0	299	299	0	0	0	20	0	0	0	0	0	0	109	0	81	0	0	0	3	292	0	0	0	0	0	485
425	Syracuse	0	133	133	0	42	33	20	0	25	0	0	0	0	25	0	0	0	0	0	0	25	25	6	0	0	0	106
426	Syracuse	0	0	0	0	0	0	15	0	19	0	0	0	0	8	49	22	0	0	0	1	41	14	0	0	0	0	154

427	Syracuse	0	4	4	0	7	4	20	0	28	0	2	17	0	0	10	0	0	0	0	1	0	28	0	0	0	0	86
428	Syracuse	0	28	28	0	77	32	15	0	26	0	41	0	0	31	82	27	0	72	0	2	78	1	9	12	0	92	473
429	Syracuse	0	191	191	0	503	203	14.58859	0	6	0	15	4	0	70	23	6	0	70	0	0	17	6	6	39	0	4	266
430	Syracuse	0	136	136	0	99	47	14.58859	0	6	0	8	2	0	51	0	4	2	254	0	0	10	0	2	61	0	91	491
431	Syracuse	0	3	0	3	3	3	14.58859	0	4	0	24	6	12	106	221	2	3	14	0	0	22	6	1	82	0	20	523
432	Syracuse	0	35	35	0	93	39	15	0	0	0	0	0	0	0	27	15	0	7	0	0	0	0	0	0	0	0	49
433	Syracuse	0	15	15	0	40	14	15	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
434	Syracuse	0	177	177	0	388	179	15	0	12	0	7	0	0	0	0	12	0	23	0	0	22	0	0	0	2	0	78
435	Syracuse	0	5	5	0	8	5	20	0	3	3	0	0	19	0	640	0	0	1	0	0	0	15	11	0	0	7	699
436	Syracuse	0	0	0	0	0	0	20	0	4	13	0	0	0	0	0	0	0	7	0	0	2	3	0	0	0	4	33
437	Syracuse	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	3	15	14	0	0	5	37
438	Syracuse	0	2	0	2	0	0	20	0	17	0	0	0	0	5	0	0	0	0	0	0	25	0	0	0	0	0	47
439	Syracuse	0	82	82	0	157	102	2.536177	0	0	0	4	4	0	0	0	0	0	0	0	0	15	4	0	0	0	0	27
440	Syracuse	0	206	206	0	431	275	2.536177	0	0	0	5	14	0	0	0	0	0	0	0	0	9	3	0	0	0	0	31
441	Solvay	0	110	110	0	164	129	0	1	112	42	20	104	0	43	0	21	0	58	0	0	125	25	0	0	0	3	554
442	Syracuse	0	480	417	63	1161	506	4.90632	0	33	0	0	50	0	0	0	0	0	17	0	0	48	44	115	5	0	50	362
443	Syracuse	0	431	428	3	1082	457	7.721142	0	97	0	9	63	9	0	0	0	0	49	0	0	27	53	0	0	7	11	325
444	Camillus	0	238	238	0	544	406	7.235539	0	98	32	5	116	0	18	0	7	0	24	0	0	103	19	0	0	0	38	460
445	Syracuse	0	0	0	0	0	0	15	0	4	0	384	0	0	4	0	4	0	9	0	0	131	4	4	0	0	14	558
446	Dewitt	0	24	24	0	56	37	0.332182	0	217	0	205	38	0	20	20	28	0	222	0	0	234	180	6	100	0	132	1402
447	Geddes	0	200	200	0	504	356	4.241554	0	23	0	0	113	0	0	0	0	0	0	0	0	47	8	0	0	0	0	191
448	Geddes	0	144	137	7	290	220	2.74395	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	28
449	Syracuse	0	49	49	0	18	7	7.532137	0	3	0	3	12	0	39	17	6	0	21	0	0	3	0	7	0	0	29	140
450	Manlius	0	593	593	0	1470	1152	0.000036	0	17	0	0	0	0	39	0	0	0	0	0	0	62	0	0	0	0	0	118
451	Solvay	0	840	835	5	1769	1284	2.675367	0	12	0	0	0	77	11	0	5	0	0	0	0	0	0	11	0	0	0	116
452	Manlius	0	666	666	0	1348	1177	0.006161	0	0	0	62	5	0	2	0	12	0	0	0	5	23	5	20	0	0	0	134
453	Syracuse	0	2	2	0	2	1	15	0	127	0	0	0	0	31	0	0	0	0	0	0	28	7	0	15	23	0	231
454	Syracuse	0	135	135	0	144	65	20	0	341	46	34	82	0	318	448	166	0	61	0	0	62	50	33	0	0	0	1641
455	Syracuse	0	6	6	0	13	6	15	0	10	13	0	13	0	32	0	4	0	60	0	0	8	30	19	136	0	51	376
456	Syracuse	0	3	3	0	3	2	7.307918	0	1	0	11	0	0	0	0	4	0	6	0	0	10	20	10	0	0	20	82
457	Syracuse	0	29	29	0	35	19	7.307918	0	4	0	4	0	0	0	0	14	0	0	0	0	95	20	36	0	0	4	177
458	Syracuse	0	95	95	0	153	109	1.687125	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	3	0	0	0	10
459	Syracuse	0	262	262	0	524	350	1.687125	0	0	0	0	27	0	60	0	19	0	14	0	0	0	0	13	0	0	14	147
460	Syracuse	0	175	175	0	206	103	15	0	149	8	15	48	11	12	16	86	0	52	0	0	0	54	38	6	0	0	495
461	Syracuse	0	0	0	0	0	0	15	0	63	0	0	0	0	2024	0	0	0	0	0	0	0	0	0	0	652	0	2739
462	Syracuse	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	199	0	0	0	27	0	0	0	0	226
463	Syracuse	0	0	0	0	0	0	20	0	58	0	0	0	0	0	393	0	0	0	0	0	0	0	0	0	0	0	451
464	Syracuse	0	212	212	0	43	23	15	0	102	0	0	0	0	210	375	0	0	0	0	0	10	34	12	3	34	102	882
465	Syracuse	0	8	8	0	13	7	9.117903	0	1	0	50	0	0	0	0	0	0	18	0	0	5	6	0	0	0	6	86
466	Syracuse	0	200	198	2	316	129	15	4	150	45	22	33	4	16	0	114	4	13	0	0	17	79	31	0	0	25	557
467	Syracuse	0	0	0	0	0	0	15	0	5	0	0	0	0	0	0	202	0	0	0	0	0	0	46	0	0	0	253
468	Syracuse	0	154	154	0	162	63	15	0	7	0	4	0	0	0	0	0	14	13	0	0	4	31	0	0	0	0	73
469	Syracuse	0	127	127	0	193	68	15	0	41	0	10	12	0	12	0	14	0	33	0	0	0	12	160	0	0	0	294
470	Syracuse	0	192	184	8	264	100	15	0	18	0	3	0	0	14	0	1	0	13	0	0	5	3	0	0	0	0	57
471	Syracuse	0	188	188	0	392	126	15	0	7	0	6	16	46	11	0	0	0	60	0	6	18	7	0	2	0	5	184
472	Syracuse	0	305	305	0	848	224	15	0	6	0	0	15	88	0	0	0	0	0	0	8	26	13	0	3	0	0	159
473	Dewitt	0	463	311	152	950	621	2.569431	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13
474	Dewitt	0	363	363	0	737	490	2.569431	0	92	0	0	190	0	0	0	23	0	0	0	0	164	27	0	2	0	15	513
475	Syracuse	0	432	430	2	1013	501	5.47805	0	4	0	28	17	20	0	0	0	0	58	0	0	40	13	0	0	0	0	180
476	Syracuse	0	41	41	0	82	37	6.523777	0	0	9	0	0	0	0	0	0	0	0	0	0	101	6	0	0	0	0	116
477	Syracuse	0	37	37	0	76	33	6.523777	0	1	6	1	20	0	0	0	0	0	0	0	0	58	2	0	10	0	0	98
478	Syracuse	0	15	15	0	34	17	6.523777	0	4	21	3	0	0	0	0	0	0	416	0	0	61	6	0	0	0	4	515
479	Syracuse	0	33	33	0	68	30	6.523777	0	3	6	0	0	0	0	0	0	0	0	0	0	16	19	0	0	0	25	69
480	Syracuse	0	185	173	12	461	205	1.954129	0	18	0	40	13	268	5	29	117	0	15	0	0	66	92	11	16	0	107	797
481	Syracuse	0	96	96	0	202	99	1.954129	0	1	0	0	0	62	7	0	27	0	5	0	0	85	15	2	2	0	12	218
482	Syracuse	0	302	302	0	736	307	1.606681	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
483	Syracuse	0	281	281	0	684	292	1.606681	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
484	Dewitt	0	1	0	1	0	0	5.714856	19	779	2	72	10	18	94	4	61	1	107	0	0	254	329	28	2	2	19	1801
485	Dewitt	0	0	0	0	0	0	5.714856	1	48	42	1	212	9	300	1	0	26	25	0	0	164	86	4	3	0	19	941
486	Syracuse	0	169	169	0	414	254	4.230112	0	15	0	8	79	0	0	0	0	0	7	0	0	28	7	0	0	0	7	151
487	Elbridge	0	491	491	0	1077	871	3.376906	4	0	0	8	0	0	0	0	0	0	0	0	0	74	14	0	0	0	0	100

488	Elbridge	0	340	336	4	821	648	3.376906	2	7	0	27	57	145	19	0	26	0	0	0	7	65	5	0	0	0	21	381
489	Syracuse	0	113	113	0	158	61	15	0	124	0	11	90	44	69	0	0	0	34	0	9	68	9	0	23	0	0	481
490	Syracuse	0	328	328	0	727	227	14.17692	3	63	0	0	0	0	0	0	0	0	0	0	0	20	0	12	0	0	0	98
491	Syracuse	0	427	398	29	609	253	15	0	80	0	7	19	0	7	0	257	0	0	0	0	8	13	0	0	0	0	391
492	Syracuse	0	340	330	10	422	183	15	0	53	0	0	13	0	37	0	182	0	0	0	0	15	12	0	0	0	0	312
493	Syracuse	0	0	0	0	0	0	4.748782	0	256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	256
494	Syracuse	0	269	269	0	231	218	0	2	100	765	74	12	0	481	9	0	0	34	0	54	33	27	7	243	79	45	1965
495	Syracuse	0	65	65	0	68	47	0	0	0	64	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	9	76
496	Syracuse	0	286	286	0	687	281	2.288757	0	3	5	25	81	51	4	46	0	0	93	0	0	10	26	0	0	0	49	393
497	Syracuse	0	144	143	1	326	145	2.288757	0	4	2	0	0	0	0	14	0	0	27	0	0	2	0	45	0	0	0	94
498	Syracuse	0	222	222	0	259	119	7.087175	0	162	174	0	30	0	73	0	566	0	0	0	0	10	6	9	0	0	0	1030
499	Syracuse	0	180	175	5	294	118	7.087175	0	43	325	28	10	20	34	0	105	0	0	0	0	18	52	17	0	0	0	652
500	Syracuse	0	583	579	4	1186	755	2.782117	2	41	9	30	82	0	2	0	8	0	8	0	0	100	179	0	0	0	92	553
501	Syracuse	0	0	0	0	0	0	2.782117	0	15	3	0	290	0	15	0	220	0	0	0	0	538	4	0	0	0	17	1102
502	Solvay	0	627	627	0	1479	1034	0.488924	8	11	0	6	28	0	4	33	0	0	42	0	0	15	9	0	0	0	84	240
503	Syracuse	0	45	45	0	62	25	15	0	14	0	0	21	0	53	0	0	0	0	0	0	26	29	0	0	0	0	143
504	Syracuse	0	302	250	52	900	276	15	0	12	0	6	121	222	0	0	12	0	0	0	0	68	23	0	0	0	0	464
505	Solvay	0	728	727	1	1680	1173	0.482925	0	25	6	0	19	268	9	0	0	0	0	0	0	51	29	0	0	0	0	407
506	Camillus	0	195	195	0	377	293	2.390576	0	0	0	0	0	0	33	11	20	0	0	0	0	0	0	0	0	0	0	64
507	Syracuse	0	0	0	0	0	0	0.628943	0	7	0	72	0	0	0	0	0	0	0	0	0	73	15	0	53	0	0	220
508	Syracuse	0	287	287	0	192	187	13.11086	4	46	0	95	162	0	0	0	0	0	138	0	0	199	46	0	13	0	79	782
509	Syracuse	0	90	90	0	84	67	0.670655	0	10	0	169	0	0	0	18	0	0	21	0	0	30	26	0	9	0	42	325
510	Syracuse	0	443	338	105	554	236	6.352946	2	57	0	0	0	72	255	75	84	0	5	0	0	0	35	37	0	0	0	622
511	Syracuse	0	111	111	0	175	72	6.352946	0	116	0	0	0	0	46	0	12	0	0	0	0	0	18	55	0	0	0	247
512	Syracuse	0	363	363	0	779	529	3.546869	0	15	9	11	10	152	0	0	0	0	246	0	0	9	0	0	0	0	19	471
513	East Syracı	0	15	15	0	23	13	4.514478	0	188	0	27	74	193	34	0	79	0	20	0	0	359	90	24	38	0	71	1197
514	Syracuse	0	566	566	0	1294	670	3.967118	0	5	0	0	3	13	14	0	0	0	0	0	0	2	6	0	0	0	0	43
515	Syracuse	0	103	103	0	186	78	14.35493	0	64	0	7	0	0	16	0	4	0	0	0	11	73	10	67	7	0	25	284
516	Solvay	0	0	0	0	0	0	2.838104	1	41	0	8	0	0	5	0	1	0	539	0	0	3	12	0	1	94	3	708
517	Solvay	0	471	471	0	1099	700	2.838104	0	23	0	10	10	8	165	300	18	0	0	0	0	0	15	7	0	0	20	576
518	Syracuse	0	0	0	0	0	0	0.262022	0	14	0	12	0	0	0	0	0	0	108	0	0	22	20	0	161	0	57	394
519	East Syracı	0	85	85	0	185	115	10.78222	5	0	0	266	0	0	0	0	0	0	25	0	8	8	4	0	15	0	21	352
520	Syracuse	0	396	396	0	698	521	4.34803	1	56	0	12	54	0	3	0	3	0	4	0	0	67	44	9	0	0	27	280
521	Dewitt	0	0	0	0	0	0	1.990188	0	0	0	0	58	0	0	0	0	0	55	0	0	95	14	0	65	0	120	407
522	Syracuse	0	380	276	104	984	319	14.07796	0	5	0	12	48	27	0	14	36	0	0	0	0	113	16	0	0	0	39	310
523	Syracuse	0	333	333	0	992	211	2.276632	0	2	0	0	0	0	6	0	5	0	0	0	0	28	0	0	0	0	2	43
524	Syracuse	0	596	587	9	1552	384	3.705318	0	8	0	0	41	0	0	0	0	0	0	0	0	0	0	67	0	0	0	116
525	Syracuse	0	483	483	0	1104	697	5.150197	0	4	0	0	0	260	6	0	0	0	0	0	0	6	0	0	0	0	0	276
1114	Camillus	0	280	280	0	346	241	0	0	0	0	0	214	0	6	0	17	27	0	0	0	414	0	0	0	0	0	678
1113	Camillus	0	160	160	0	417	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
527	Syracuse	0	363	363	0	1070	337	12.60583	0	0	0	0	29	107	4	0	0	0	8	0	0	13	8	8	0	0	8	185
528	Syracuse	0	479	479	0	1001	686	2.235939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
529	Syracuse	0	260	260	0	591	399	0.087182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6
530	Syracuse	0	0	0	0	0	0	0.234723	0	0	0	0	0	0	0	53	0	0	0	0	0	0	6	0	0	0	0	59
531	Syracuse	0	1	0	1	1	1	0.098596	0	5	0	2	8	0	14	7	0	0	90	0	0	14	2	0	34	14	15	205
532	Syracuse	0	402	402	0	1066	351	5.82436	0	6	0	0	11	0	0	0	0	0	0	0	0	5	0	0	0	0	0	22
533	Manlius	0	733	728	5	1875	1361	1.377006	0	27	0	0	0	173	57	0	0	0	0	0	0	18	8	0	0	0	0	283
534	Syracuse	0	299	299	0	0	0	0.217766	0	19	0	0	11	0	0	0	0	0	0	0	0	21	326	0	4	0	0	381
535	Syracuse	0	276	276	0	600	411	6.808841	0	10	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
536	East Syracı	0	6	0	6	6	6	9.694251	2	43	0	8	0	0	9	0	0	0	527	0	0	2	5	65	0	12	0	673
537	Syracuse	0	347	345	2	797	522	0.037295	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
538	Syracuse	0	274	274	0	761	246	7.127296	0	5	0	54	38	0	21	0	0	0	20	0	0	14	10	5	0	0	10	177
539	Syracuse	0	206	206	0	658	198	6.05977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
540	Syracuse	0	300	300	0	722	524	0.195971	0	24	0	0	0	0	0	0	5	0	0	0	0	0	11	0	0	0	0	40
541	Syracuse	0	104	104	0	255	186	0.513808	0	0	0	0	0	100	0	0	3	0	3	0	0	0	0	0	20	0	0	126
542	Syracuse	0	444	444	0	976	668	2.273101	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
543	East Syracı	0	499	499	0	1118	669	4.525058	0	22	12	0	35	102	18	0	0	0	24	0	12	21	22	0	0	18	0	286
544	Syracuse	0	361	357	4	737	513	1.991434	0	0	0	33	22	0	0	0	0	0	11	0	0	94	0	0	0	0	16	176
545	Syracuse	0	348	348	0	925	429	10.77716	0	3	25	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	59
546	Syracuse	0	0	0	0	0	0	1.636022	2	47	9	21	30	57	38	24	56	70	49	0	3	62	31	11	23	3	25	561
547	Syracuse	0	371	371	0	724	501	7.534382	0	6	0	0	0	0	0	0	103	0	0	0	0	11	56	0	0	0	6	182

548	East Syracı	0	318	318	0	717	428	3.157316	2	57	0	46	12	8	2	0	10	3	103	0	0	8	72	5	3	4	17	352
549	East Syracı	0	441	439	2	972	590	3.157316	2	36	13	31	12	104	16	55	48	3	8	0	0	25	21	13	2	2	3	394
550	Geddes	0	108	108	0	232	188	2.865304	0	0	0	14	5	0	0	0	0	0	235	0	116	41	5	0	0	7	55	478
551	Syracuse	0	186	186	0	442	154	6.808968	0	66	0	90	0	0	0	0	0	0	0	0	0	57	0	0	0	0	52	265
552	Syracuse	0	290	290	0	815	347	9.878653	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	6	10
553	Syracuse	0	363	328	35	805	541	0.018533	0	79	0	10	10	30	103	0	108	0	5	0	0	16	39	32	0	0	5	437
554	Syracuse	0	409	406	3	1084	357	6.594307	0	0	0	8	8	10	0	0	0	0	0	0	0	1	7	36	0	0	15	85
555	Camillus	0	493	485	8	745	569	2.382616	0	0	0	5	115	0	0	0	0	0	0	0	0	3	7	0	74	0	0	204
556	Camillus	0	377	377	0	761	611	0.001992	1	5	0	0	0	0	0	9	0	0	8	0	0	0	2	0	2	0	0	27
557	Camillus	0	194	194	0	328	271	0.001992	0	0	0	0	0	284	0	0	0	0	0	0	0	5	16	12	0	0	0	317
558	Syracuse	0	412	411	1	969	709	0.937122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
559	Geddes	0	0	0	0	0	0	0	0	74	0	0	18	0	0	0	0	0	109	0	0	0	11	0	0	0	618	830
560	Manlius	0	172	172	0	358	287	0.001344	5	0	0	82	0	0	0	0	0	0	0	0	0	2	44	0	0	0	0	133
561	Syracuse	0	362	362	0	993	310	7.008668	0	0	0	6	13	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22
562	Manlius	0	579	579	0	874	618	0.035299	0	0	0	0	0	0	0	0	0	0	0	0	0	49	0	0	0	0	0	49
563	Syracuse	0	623	623	0	1544	741	4.993106	3	15	0	0	33	0	0	0	0	0	11	0	2	7	10	0	0	0	0	81
564	Syracuse	0	232	232	0	569	317	5.831994	0	9	0	34	44	0	0	0	0	0	29	0	16	17	39	0	0	0	57	245
565	Syracuse	0	310	310	0	549	447	0.820069	0	0	0	0	0	105	0	0	0	0	0	0	0	0	0	9	0	0	0	114
566	Syracuse	0	269	269	0	592	447	0.716666	0	35	0	0	0	0	0	0	23	0	0	0	0	18	0	0	0	0	0	76
567	Syracuse	0	319	319	0	886	380	2.336335	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	26
568	Elbridge	0	81	81	0	196	157	2.746383	0	0	0	4	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	13
569	Elbridge	0	216	216	0	426	355	2.746383	0	3	0	0	15	190	0	45	0	0	85	0	8	6	0	3	0	0	3	358
570	Syracuse	0	574	574	0	939	590	6.906892	3	36	5	0	105	0	253	0	3	0	9	0	0	60	18	0	0	0	0	492
571	Syracuse	0	541	541	0	1157	639	3.311332	0	111	0	0	11	0	511	0	32	0	24	0	0	34	0	20	32	0	7	782
572	Syracuse	0	587	576	11	1259	464	4.044306	0	0	0	0	0	0	0	0	0	0	0	0	0	132	0	0	0	0	0	132
573	Dewitt	0	311	302	9	764	530	0.059642	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
574	Syracuse	0	424	409	15	771	455	7.56005	0	14	12	0	20	35	14	0	12	0	65	0	0	41	110	12	0	0	76	411
575	Syracuse	0	380	373	7	964	533	5.866611	0	19	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	39	70
576	Dewitt	0	329	329	0	771	549	1.055264	0	0	43	0	38	62	0	0	0	0	7	0	0	276	0	0	8	0	28	462
577	Syracuse	0	125	125	0	324	186	0.417778	0	0	0	0	31	0	0	0	0	0	3	0	0	7	0	0	0	0	0	41
578	Syracuse	0	107	107	0	266	153	0.417778	0	0	0	0	0	0	0	0	0	0	11	0	0	19	0	0	0	0	0	30
579	Syracuse	0	483	483	0	1121	620	10.61973	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
580	Syracuse	0	0	0	0	0	0	0	0	53	0	0	33	5	0	0	0	0	23	0	0	21	36	0	206	0	0	377
581	Syracuse	0	2	0	2	2	2	0	0	54	0	18	0	13	0	27	0	0	0	0	0	36	9	0	34	0	39	230
582	Syracuse	0	119	119	0	288	161	2.590051	0	4	0	30	15	0	0	0	2	0	0	0	0	5	2	0	0	2	0	60
583	Syracuse	0	161	161	0	365	207	2.590051	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
584	Syracuse	0	429	348	81	1221	753	1.477204	0	9	0	36	18	209	0	0	0	0	0	0	0	13	41	31	0	0	0	357
585	Dewitt	0	1	1	0	1	1	3.840352	2	87	8	72	0	128	12	0	13	0	287	0	0	47	17	0	32	0	124	829
586	Dewitt	0	2	2	0	4	3	3.840352	0	86	0	6	77	0	0	0	16	22	86	0	0	14	32	36	208	0	32	615
587	Syracuse	0	46	42	4	98	64	2.600652	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	63
588	Syracuse	0	81	81	0	215	122	2.600652	0	14	0	0	0	0	0	0	0	0	14	0	0	12	0	0	0	0	14	54
589	Syracuse	0	53	53	0	133	69	2.25424	0	1	0	0	19	0	0	0	0	0	16	0	0	9	4	0	16	0	21	86
590	Syracuse	0	245	242	3	611	338	2.25424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
591	Syracuse	0	250	250	0	561	364	3.359099	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
592	Salina	0	695	692	3	1455	944	4.098106	3	69	10	93	103	0	32	0	0	0	85	0	5	171	18	0	84	86	48	807
593	Dewitt	0	477	477	0	784	635	0.937337	0	142	0	18	45	0	0	0	8	0	0	0	0	53	0	0	60	0	151	477
594	Dewitt	0	381	374	7	898	653	0.937337	0	7	0	0	0	0	58	0	67	0	0	0	0	0	9	22	0	0	0	163
595	Minoa	0	660	660	0	1424	1090	1.966243	0	29	0	0	24	34	0	63	0	0	0	0	0	0	37	0	0	0	71	258
596	Dewitt	0	199	199	0	409	297	9.055964	1	122	0	120	10	0	0	0	0	0	215	51	0	46	6	0	57	0	80	708
597	Syracuse	0	94	94	0	219	126	2.333923	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
598	Syracuse	0	101	101	0	233	126	2.333923	0	6	0	6	10	0	0	0	0	9	45	0	0	6	7	0	0	0	6	95
599	Dewitt	0	74	74	0	128	96	4.546257	0	10	0	7	0	0	0	0	0	0	194	0	0	56	10	0	22	0	11	310
600	Syracuse	0	316	316	0	697	449	2.480896	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
601	Syracuse	0	237	231	6	559	341	2.480896	0	0	0	7	0	0	0	0	0	0	6	0	0	0	0	6	13	0	0	32
602	Syracuse	0	88	88	0	181	118	0.373282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
603	Syracuse	0	252	243	9	586	356	0.373282	0	340	0	0	0	0	0	13	0	0	0	0	0	10	0	0	0	0	0	363
604	Syracuse	0	296	285	11	709	437	10.27257	0	5	0	0	5	81	0	0	0	0	0	0	0	2	0	9	0	0	0	102
605	Salina	0	88	88	0	199	128	10.27257	0	70	0	0	0	0	20	0	0	0	49	0	0	11	45	0	0	7	0	202
606	Salina	0	573	573	0	1314	818	3.203025	0	15	0	0	15	0	75	0	66	0	0	0	0	41	24	7	0	0	0	243
607	Dewitt	0	52	52	0	105	80	4.37849	1	71	34	0	20	0	0	0	4	0	564	0	0	32	4	0	0	0	0	730
608	Salina	0	0	0	0	0	0	1.053001	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	35	52

609	Salina	0	5	5	0	3	3	1.053001	0	45	0	50	29	0	0	45	0	0	34	0	0	212	95	0	0	0	46	556
610	Dewitt	0	6	6	0	3	3	1.13625	0	0	0	0	0	0	0	0	0	0	168	0	0	0	0	0	240	0	0	408
611	Dewitt	0	78	78	0	111	76	1.13625	0	73	18	18	37	92	37	18	73	18	37	0	0	37	18	0	37	0	18	531
612	Camillus	0	100	94	6	184	153	0.196501	7	0	0	0	0	0	9	0	24	0	0	0	0	0	10	0	0	0	0	50
613	Camillus	0	71	71	0	156	121	0.196501	6	0	0	0	0	0	0	160	0	0	0	0	0	0	13	0	0	0	0	179
614	Camillus	0	264	264	0	382	336	0.196501	8	22	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	48
615	Camillus	0	396	396	0	1037	793	0.196501	0	65	0	0	0	0	0	0	0	0	0	0	0	0	159	0	0	0	0	224
616	Dewitt	0	653	653	0	1581	1123	1.199572	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
617	Van Buren	0	20	20	0	48	35	5.394978	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	3	570	580
618	Van Buren	0	69	69	0	178	142	5.394978	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17
619	Salina	0	59	59	0	118	77	7.2209	0	2	0	34	0	0	0	9	0	0	6	0	0	14	1	0	0	0	15	81
620	Salina	0	0	0	0	0	0	3.313916	0	0	0	0	0	0	0	0	0	0	616	0	0	0	0	0	0	0	0	616
621	Dewitt	0	1	1	0	4	2	4.545483	0	51	14	277	0	28	35	0	5	0	332	0	0	31	23	15	39	0	268	1118
622	Dewitt	0	0	0	0	0	0	4.545483	0	13	9	32	118	0	38	0	1	184	226	0	53	3	46	6	0	0	211	940
623	Manlius	0	489	489	0	1292	928	0.103964	15	25	0	0	0	259	47	0	0	0	0	0	0	54	14	0	10	0	0	424
624	Manlius	0	67	67	0	145	109	0.103964	0	0	0	18	0	0	0	16	0	0	0	0	0	0	0	10	0	0	0	44
625	Manlius	0	72	72	0	169	124	0.103964	2	36	29	0	0	309	0	0	0	0	0	0	0	17	31	0	0	0	0	424
626	Manlius	0	287	287	0	752	585	0.017698	0	0	0	3	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	20
627	Salina	0	793	793	0	1500	996	2.94917	0	14	0	0	41	0	79	98	118	0	9	0	0	8	30	0	0	0	0	397
628	Salina	0	396	396	0	910	566	2.914754	0	3	0	0	362	116	16	0	0	0	0	0	0	9	0	0	0	0	0	506
1103	Salina	0	0	0	0	0	0	1.048512	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	18	0	0	22
1102	Salina	0	0	0	0	0	0	1.048512	0	68	7	77	0	46	8	0	31	0	0	0	0	0	72	0	0	0	0	309
1104	Salina	0	290	290	0	690	419	1.048512	0	0	0	0	79	0	0	0	0	82	0	0	0	0	0	0	0	0	0	161
630	Salina	0	0	0	0	0	0	1.048512	0	17	0	0	35	0	31	0	68	71	0	0	0	0	0	0	0	0	0	222
631	Dewitt	0	13	13	0	23	16	1.20108	0	61	160	48	35	0	550	0	103	11	1473	33	0	7	618	23	33	0	66	3221
632	Dewitt	0	40	40	0	93	66	1.20108	6	174	33	365	80	130	212	0	134	0	608	0	0	24	24	30	49	0	110	1979
633	Salina	0	17	17	0	37	23	1.180026	0	32	0	160	0	0	0	0	0	0	28	0	0	24	18	0	214	0	22	498
634	Salina	0	0	0	0	0	0	1.180026	0	124	0	0	0	0	0	0	0	0	94	0	0	92	0	0	0	0	139	449
635	Salina	0	72	72	0	174	105	1.180026	0	24	0	0	0	0	0	0	0	0	0	0	0	1	17	0	0	0	27	69
636	Van Buren	0	63	63	0	172	130	0	0	0	0	12	0	0	0	0	0	0	0	0	0	1	10	0	0	0	11	34
637	Salina	0	473	473	0	1098	679	1.217568	0	0	0	5	0	0	7	0	0	0	0	0	0	0	0	0	3	0	0	15
638	Dewitt	0	9	9	0	27	14	4.5457	0	3	0	28	136	0	698	0	0	81	0	0	0	1	30	0	0	0	0	977
639	Geddes	0	403	403	0	995	749	1.373084	0	26	0	27	27	0	10	0	4	19	0	0	0	7	33	0	0	0	31	184
640	Salina	0	249	249	0	519	332	0.554503	1	75	140	19	16	0	22	0	52	42	0	0	0	123	55	18	0	0	14	577
641	Sullivan	0	172	172	0	318	275	4.2	0	27	7	11	16	32	23	13	32	3	29	0	1	33	17	7	14	1	16	282
642	Geddes	0	444	443	1	1045	813	1.716859	0	9	0	20	41	147	32	0	6	0	0	0	0	29	19	0	0	0	68	371
643	Sullivan	0	105	105	0	220	176	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
644	Dewitt	0	15	0	15	15	15	4.545378	3	287	0	101	0	0	29	0	5	0	132	0	0	88	49	0	223	0	131	1048
645	Salina	0	78	78	0	194	112	1.842984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
646	Salina	0	531	531	0	1250	738	1.842984	0	4	0	16	1	0	0	0	0	0	51	0	0	9	13	15	5	0	17	131
647	Salina	0	18	18	0	52	26	1.842984	0	5	0	0	5	0	0	0	0	0	0	0	0	14	14	9	9	0	0	56
648	Salina	0	236	236	0	526	325	0.138595	0	7	0	0	33	0	0	0	0	0	0	0	0	11	0	0	0	0	0	51
649	Salina	0	4	4	0	10	7	0.138595	25	317	27	167	215	162	108	0	51	23	155	0	0	40	37	0	16	0	32	1375
650	Dewitt	0	246	246	0	521	350	6.374065	4	11	0	0	10	0	62	0	0	0	21	0	0	0	27	0	0	0	150	285
651	Dewitt	0	29	29	0	54	42	4.554793	12	291	0	369	33	0	22	24	15	16	1435	0	257	89	49	22	43	0	450	3127
652	Salina	0	36	36	0	86	56	0.256727	0	1	0	0	1	2	1	1	2	0	1	0	0	1	1	0	0	0	1	12
653	Van Buren	0	23	23	0	58	47	0	0	0	42	0	0	0	0	0	0	0	0	0	0	55	51	0	0	0	0	148
654	Salina	0	493	493	0	1019	738	3.240582	27	42	0	0	136	0	45	37	39	25	12	0	0	26	14	0	25	0	0	428
655	Salina	0	600	600	0	1465	856	2.197023	0	14	0	16	4	55	4	0	0	0	0	0	0	4	42	0	26	0	4	169
656	Elbridge	0	272	272	0	638	488	2.746357	0	0	0	15	13	0	0	0	0	0	0	0	0	3	5	0	0	0	0	36
657	Salina	0	308	306	2	542	411	4.451798	0	49	0	134	49	0	29	0	16	0	235	0	0	34	76	19	13	0	37	691
658	Salina	0	416	416	0	941	691	5.53931	0	9	0	0	19	0	0	0	0	0	0	0	0	8	18	0	0	0	0	54
659	Sullivan	0	77	77	0	149	127	4.2	0	3	0	1	1	3	3	1	3	0	3	0	0	5	1	0	1	0	1	26
660	Sullivan	0	210	210	0	335	304	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
661	Salina	0	2	0	2	3	3	4.57825	0	0	0	0	0	0	0	49	0	0	0	0	0	14	0	0	0	0	0	63
662	Salina	0	55	55	0	137	97	0.095445	3	252	0	8	0	18	998	22	135	0	305	0	0	40	16	0	0	0	0	1797
663	Liverpool	0	67	67	0	99	83	6.248823	0	140	0	0	0	130	103	0	31	0	101	0	0	89	70	0	0	9	7	680
664	Liverpool	0	115	115	0	243	184	6.248823	0	60	13	89	65	0	14	0	24	0	0	0	0	16	41	18	38	0	15	393
665	Liverpool	0	153	153	0	295	240	6.248823	0	26	0	0	27	3	29	0	7	14	0	0	0	7	36	27	0	0	0	176
666	Geddes	0	248	248	0	626	471	0.019836	0	11	0	28	0	0	0	0	12	15	45	0	0	73	33	4	55	0	39	315
667	Salina	0	524	521	3	1261	855	2.940461	0	136	9	37	287	0	13	0	4	87	0	0	0	12	13	16	0	0	16	630

668	Dewitt	0	17	17	0	36	24	6.135851	0	121	0	80	0	0	0	0	0	0	2016	0	0	0	33	0	47	0	0	2297
669	Van Buren	0	153	153	0	384	306	5.394997	0	0	0	14	4	0	4	0	0	0	0	0	0	1	0	0	10	3	0	36
670	Van Buren	0	61	61	0	170	131	5.394997	0	0	0	0	2	0	3	0	0	0	0	0	0	1	0	0	0	2	0	8
671	Sullivan	0	204	204	0	474	372	4.2	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	7
672	Dewitt	0	0	0	0	0	0	3.889606	3	310	0	121	0	0	2	8	15	0	14	0	0	38	10	46	212	11	235	1025
673	Dewitt	0	37	14	23	66	53	3.889606	1	238	6	232	21	107	6	34	8	0	377	0	0	208	95	32	934	6	586	2891
674	Manlius	0	181	181	0	450	343	0	0	2	0	8	0	4	0	0	0	0	0	0	0	0	21	4	0	0	0	39
675	Manlius	0	254	247	7	551	447	0	0	12	0	45	0	25	0	0	184	0	0	0	0	0	18	18	0	0	0	302
676	Salina	0	333	327	6	811	470	2.57631	0	10	0	0	93	269	0	31	27	0	0	0	0	144	31	0	0	0	6	611
677	Salina	0	423	423	0	884	668	2.318817	0	0	0	0	0	0	0	0	0	18	2	0	0	0	0	0	0	0	0	20
678	Van Buren	0	90	90	0	212	172	0	0	37	0	3	38	0	0	11	0	0	0	0	0	1	19	0	19	0	5	133
679	Salina	0	1083	1083	0	2390	1710	2.43391	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	20	53	0	0	89
680	Salina	0	179	179	0	436	309	4.686657	1	23	8	38	31	100	11	8	12	3	2	0	0	133	37	4	145	7	16	579
681	Salina	0	483	483	0	1209	862	4.686657	0	6	0	2	0	4	0	0	1	0	11	0	0	23	13	1	3	0	1	65
682	Van Buren	0	53	53	0	75	49	0	0	0	0	60	0	0	0	0	0	0	0	0	0	36	121	0	12	0	194	423
683	Salina	0	279	272	7	671	460	0.067075	0	9	0	0	0	0	0	13	24	0	0	0	0	0	125	0	0	128	445	744
684	Liverpool	0	103	103	0	232	186	4.34017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
685	Liverpool	0	321	314	7	709	539	4.34017	0	3	0	0	0	79	0	19	6	0	0	0	0	0	66	6	0	0	0	179
686	Dewitt	0	69	69	0	140	107	6.36034	0	88	0	44	16	0	47	0	7	0	12	0	0	35	61	19	861	0	95	1285
687	Salina	0	285	285	0	535	410	2.877529	0	0	0	7	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	13
688	Van Buren	0	184	184	0	517	392	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	29
689	Van Buren	0	4	0	4	0	0	0	0	56	0	5	30	0	0	0	0	10	56	0	0	112	0	0	20	0	26	315
690	Dewitt	0	13	13	0	25	18	6.374453	12	388	1	82	0	1	39	1	328	0	2	0	0	36	41	76	2	2	156	1167
691	Dewitt	0	2	2	0	5	3	6.374453	0	72	11	24	0	0	7	5	11	0	269	0	0	112	22	2	104	2	151	792
692	Liverpool	0	293	274	19	605	488	3.143479	0	5	0	0	0	0	0	145	0	0	0	0	0	0	7	0	0	0	0	157
693	Salina	0	472	472	0	789	665	1.953036	0	64	0	173	67	0	8	11	0	22	1767	0	0	113	109	8	110	0	14	2466
694	Geddes	0	12	12	0	25	19	0.888701	0	53	0	67	7	0	19	0	0	0	132	0	2	30	3	0	6	0	73	392
695	Salina	0	5	5	0	9	6	2.160418	0	181	0	38	0	0	181	0	0	0	187	0	0	51	49	0	0	0	173	860
696	Van Buren	0	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0	225
697	Salina	0	202	202	0	469	374	0.201191	0	5	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	80
698	Salina	0	289	289	0	731	563	0.201191	0	0	0	3	4	0	0	0	0	1	0	0	0	0	3	1	0	0	0	12
699	Sullivan	0	85	85	0	157	134	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700	Van Buren	0	184	184	0	414	309	0.877729	0	0	0	40	19	0	0	0	0	0	0	0	0	1	25	0	0	0	0	85
701	Salina	0	591	591	0	1221	907	1.949316	0	12	0	30	0	289	0	0	9	0	0	0	0	162	55	0	0	0	217	774
1107	Clay	0	10	10	0	20	14	2.366109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2142	0	0	2142
1108	Clay	0	50	50	0	108	71	2.366109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
703	Van Buren	0	110	110	0	291	219	5.394985	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
704	Geddes	0	112	106	6	281	213	0.05829	0	3	0	63	0	0	19	0	0	0	38	0	23	0	0	0	0	0	43	189
705	Salina	0	554	549	5	1153	777	0.998095	0	32	9	0	104	32	11	48	0	0	14	0	0	261	37	0	0	33	2	583
706	Salina	0	4	4	0	6	4	0.998095	0	339	12	0	60	45	30	68	0	30	0	0	0	17	98	0	0	47	3	749
707	Geddes	0	2	0	2	0	0	0.005268	0	0	0	0	0	0	0	0	0	57	124	60	13	0	39	0	59	16	251	619
708	Van Buren	0	517	517	0	1112	802	0.092026	0	26	0	0	28	33	3	0	11	0	0	0	0	44	28	4	0	0	10	187
709	Clay	0	68	68	0	95	78	1.642154	0	33	0	16	17	0	0	0	98	0	146	0	0	52	0	0	0	0	235	597
710	Clay	0	47	47	0	19	17	1.482841	0	36	0	0	8	52	293	0	1126	13	0	0	0	12	16	24	0	0	0	1580
711	Salina	0	31	31	0	71	54	0.715443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1105	Salina	0	0	0	0	0	0	0.715443	0	0	0	0	35	0	0	0	1	0	0	0	0	0	25	0	0	0	13	74
1106	Salina	0	4	4	0	6	4	0.715443	0	4	0	5	25	0	4	0	10	0	0	0	0	4	1	0	0	0	18	71
713	Clay	0	163	163	0	364	292	1.470938	0	0	0	0	0	0	0	0	57	0	0	0	0	0	25	0	0	0	0	82
714	Clay	0	1	1	0	4	2	2.400108	0	11	0	52	491	0	74	177	7	0	0	0	3	211	44	0	997	0	0	2067
715	Clay	0	228	228	0	453	375	1.722001	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
716	Cicero	0	13	13	0	15	11	0	3	215	0	18	0	0	29	0	0	0	77	0	0	52	11	0	41	0	18	464
717	Van Buren	0	374	374	0	485	351	0.919081	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	0	0	0	34	90
718	Van Buren	0	19	19	0	42	28	0	0	0	0	0	0	150	0	0	0	0	0	0	0	0	0	0	0	0	0	150
719	Cicero	0	18	18	0	34	22	2.658986	1	41	0	12	0	0	0	0	0	0	4	0	0	0	0	0	116	0	0	174
720	Cicero	0	31	31	0	71	48	2.658986	0	0	0	0	0	38	0	0	0	0	90	0	0	0	45	19	0	0	0	192
721	Cicero	0	17	17	0	49	30	2.658986	0	80	0	27	0	0	0	0	0	0	236	0	0	12	469	0	388	0	146	1358
722	Van Buren	0	162	162	0	370	268	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
723	Salina	0	658	658	0	1666	1234	0.568523	0	187	13	295	16	3	19	0	12	0	1	0	0	9	6	1	1	0	42	605
724	Salina	0	38	38	0	110	77	0.568523	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
725	Clay	0	369	369	0	635	530	1.701251	0	0	0	0	0	0	81	0	0	0	0	0	0	434	0	0	0	0	6	521
726	Clay	0	376	376	0	842	609	2.56148	0	46	0	0	0	493	38	0	32	0	0	0	0	24	0	0	0	0	12	645

727	Clay	0	223	223	0	532	380	2.56148	0	6	0	22	56	0	48	0	19	0	21	0	0	12	73	0	0	0	0	257
728	Cicero	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	7	0	86	0	3	108
729	Salina	0	455	449	6	885	746	0.072285	1	0	0	23	0	171	0	0	0	0	0	0	0	0	0	93	0	0	0	288
730	Salina	0	73	73	0	164	135	0.072285	1	0	0	1	0	8	0	0	0	0	0	0	0	0	0	4	0	0	0	14
731	Clay	0	285	285	0	711	563	4.303524	0	0	0	0	21	0	353	0	15	0	0	0	0	14	16	0	0	0	37	456
732	Clay	0	9	9	0	19	9	6.704257	0	81	0	0	7	87	0	0	0	0	850	0	32	102	20	17	33	0	13	1242
733	Clay	0	0	0	0	0	0	6.704257	0	45	0	0	8	96	11	0	0	0	365	0	37	168	102	17	62	0	102	1013
734	Cicero	0	1	1	0	1	1	0.282692	0	2	0	0	1	3	2	1	3	0	2	0	0	5	2	1	1	1	1	25
735	Cicero	0	176	176	0	368	260	0.282692	0	32	0	31	46	0	0	0	0	0	298	0	5	35	182	0	0	0	20	649
736	North Syra	0	564	557	7	1254	866	4.59757	0	81	40	83	29	220	81	22	11	0	45	0	0	142	75	10	12	0	93	944
737	Cicero	0	17	17	0	12	9	1.005513	0	0	0	23	40	0	0	0	0	0	0	0	0	17	128	0	0	0	64	272
738	Lysander	0	195	195	0	466	382	1.322751	0	0	0	6	9	0	0	0	0	1	0	0	0	0	1	0	10	0	0	27
739	Lysander	0	103	103	0	242	203	1.322751	7	12	0	0	64	0	0	0	0	7	1	0	0	0	33	1	0	0	0	125
740	North Syra	0	512	512	0	831	638	1.565878	1	124	0	10	87	20	88	0	9	0	23	0	0	122	85	12	0	0	113	694
741	Van Buren	0	201	201	0	374	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18
742	Salina	0	620	620	0	1003	948	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	6	0	0	0	0	45
743	Cicero	0	426	426	0	879	644	0.916457	0	2	0	30	9	0	6	0	0	0	0	0	0	21	2	0	0	0	11	81
744	Cicero	0	28	28	0	49	40	0.916457	0	352	0	0	0	0	12	0	0	0	0	0	0	35	15	0	56	0	0	470
745	Clay	0	226	226	0	541	441	0.000333	0	33	0	25	0	0	96	0	0	0	11	0	0	27	13	23	0	0	0	228
746	Clay	0	449	449	0	1054	739	0.023661	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
747	Clay	0	738	738	0	1221	1039	1.547357	0	0	0	0	0	0	11	0	0	0	3	0	0	3	0	0	0	0	22	39
748	Clay	0	1	1	0	2	2	7.237124	0	108	0	0	0	119	51	213	17	0	12	0	0	271	244	0	42	0	714	1791
749	Clay	0	57	57	0	107	77	7.237124	0	72	0	26	23	0	285	0	56	0	17	39	0	54	9	4	27	0	111	723
750	Clay	0	1468	1460	8	3199	2108	2.556777	0	103	0	7	161	0	60	0	32	5	0	0	0	78	212	46	0	0	33	737
751	Cicero	0	0	0	0	0	0	0.001322	1	3	0	0	1	3	2	1	3	1	2	0	0	5	1	1	1	0	1	26
752	Cicero	0	329	324	5	696	490	0.001322	0	9	0	7	0	5	0	0	0	0	0	0	0	23	0	0	0	0	0	44
753	Clay	0	288	288	0	675	531	2.320176	0	0	0	0	15	87	5	0	46	0	0	0	0	99	0	18	6	0	0	276
754	North Syra	0	591	591	0	1444	963	0.43022	0	3	0	5	0	0	3	0	3	5	0	0	0	29	21	0	4	0	4	77
755	Clay	0	392	392	0	996	795	0.083307	0	23	0	4	50	0	6	0	0	0	0	0	0	8	9	0	0	0	0	100
756	Clay	0	8	8	0	13	13	0.57235	0	0	0	0	77	0	0	0	0	0	0	0	0	265	0	0	0	0	0	342
757	Van Buren	0	691	691	0	1363	1063	0	0	12	0	0	0	72	18	0	0	0	0	0	6	0	0	0	0	0	0	108
758	Cicero	0	68	68	0	144	94	1.015246	0	15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	22
759	North Syra	0	149	149	0	310	229	1.622437	0	0	0	2	0	3	3	3	0	0	0	0	0	0	0	10	3	0	0	24
760	North Syra	0	196	196	0	449	320	1.622437	0	0	0	2	0	2	2	3	0	0	0	0	0	2	0	6	3	0	0	20
761	Clay	0	541	541	0	1452	1046	0.943724	0	20	0	18	47	0	121	0	13	0	22	0	0	72	14	0	74	0	6	407
762	Clay	0	372	372	0	973	688	0.002341	0	58	0	0	0	0	0	0	0	0	0	0	0	8	28	0	0	0	8	102
763	Salina	0	207	207	0	503	396	0	0	0	0	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	82
764	Lysander	0	688	688	0	690	526	0	0	0	0	15	24	0	0	65	0	0	34	0	0	0	0	0	0	0	0	138
765	North Syra	0	9	9	0	23	16	1.350143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
766	North Syra	0	49	49	0	92	76	1.350143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
767	Van Buren	0	82	82	0	203	145	0.921056	0	8	0	9	0	0	0	0	0	0	116	0	0	6	14	0	0	0	0	153
768	Clay	0	248	248	0	622	461	0.097446	0	3	0	0	0	0	0	0	0	0	8	0	0	0	1	1	0	0	0	13
769	Cicero	0	124	124	0	300	220	2.803741	0	0	0	0	10	0	0	0	0	0	0	0	1	2	3	0	19	0	0	35
770	Cicero	0	137	137	0	85	57	2.803741	3	0	0	254	0	0	0	0	0	0	0	0	28	31	3	0	361	0	17	697
771	Van Buren	0	666	666	0	1353	1024	0	0	15	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	27
772	Van Buren	0	181	181	0	448	375	0.943396	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
773	Van Buren	0	115	115	0	277	232	0.943396	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
774	Clay	0	471	471	0	1138	826	0.307083	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
775	Van Buren	0	262	262	0	485	391	0.000632	0	0	0	0	25	152	0	0	0	0	0	0	0	0	29	0	0	0	11	217
776	Van Buren	0	49	49	0	124	101	0.718731	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
777	Van Buren	0	29	29	0	67	57	0.718731	4	0	0	7	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	59
778	North Syra	0	506	506	0	1222	830	0.000732	0	0	0	0	20	0	72	0	11	0	0	0	0	20	8	0	0	0	0	131
779	North Syra	0	137	137	0	345	224	0.000732	0	41	0	11	0	25	8	0	31	0	11	0	0	44	9	12	0	0	0	192
780	Cicero	0	149	149	0	349	275	0.040278	0	0	0	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	82
781	Clay	0	218	218	0	539	414	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	5
782	Clay	0	475	475	0	1106	866	0	0	0	0	7	0	86	0	0	0	0	0	0	0	4	0	0	0	5	6	108
783	North Syra	0	26	26	0	56	40	10.33249	0	13	0	0	0	0	0	35	0	0	0	0	0	0	17	0	0	0	0	65
784	North Syra	0	428	425	3	891	664	10.33249	7	240	0	52	165	20	78	30	125	0	15	0	0	112	25	8	0	0	32	909
785	Clay	0	556	556	0	1484	1082	1.238498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	36
786	Lysander	0	680	680	0	756	510	0.014176	0	11	2	4	6	13	9	4	13	0	11	0	0	15	302	2	4	0	6	402
787	Lysander	0	589	589	0	1011	768	0.014176	8	19	0	35	0	0	19	0	0	0	47	0	0	0	0	0	0	0	0	128

788	Clay	0	303	303	0	765	595	0.815182	0	6	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	21
789	Clay	0	88	88	0	251	192	0.815182	0	0	0	0	0	0	0	0	0	0	0	0	0	4	192	0	0	0	196
790	Baldwinsvi	0	122	122	0	218	134	6.91018	0	26	0	0	0	0	0	36	0	0	0	0	0	23	5	0	0	0	90
791	Clay	0	415	415	0	1017	766	0	0	0	0	12	0	0	0	0	0	0	0	0	0	330	9	0	0	0	360
792	Cicero	0	231	231	0	657	445	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
793	Clay	0	3	3	0	3	3	2.389424	0	10	0	0	0	0	13	220	0	0	0	0	0	16	0	0	16	0	284
794	Clay	0	393	393	0	1003	744	0.815861	0	24	0	0	0	0	53	0	0	0	23	0	0	19	36	0	0	0	163
795	Clay	0	766	761	5	2231	1663	0.002658	0	27	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	81
796	Van Buren	0	63	63	0	140	102	0.921083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	87
797	Van Buren	0	132	132	0	290	175	3.412934	0	7	0	0	89	7	51	0	0	15	0	0	0	83	7	0	0	0	259
798	Baldwinsvi	0	816	816	0	766	602	3.412934	0	10	0	0	12	4	18	2	189	1	0	0	0	51	7	53	0	0	4	351
799	Clay	0	5	5	0	5	5	7.352911	0	63	0	124	7	49	0	0	0	0	114	0	38	23	0	3	0	5	17	443
800	Lysander	0	544	544	0	1745	1174	0	0	0	0	0	15	6	15	0	0	0	0	0	0	3	0	0	0	0	0	39
801	Cicero	0	477	468	9	1231	896	0.643965	0	33	0	0	0	0	0	0	0	0	0	0	0	33	0	33	0	0	0	99
802	Clay	0	95	95	0	214	159	0.864663	0	0	0	5	0	364	19	0	20	0	0	0	0	25	23	0	0	0	44	500
803	Clay	0	229	229	0	520	434	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
804	Cicero	0	47	47	0	80	72	1.675749	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	59
805	Cicero	0	2	0	2	0	0	1.675749	0	76	0	0	178	0	73	0	7	4	0	0	0	108	60	0	0	0	42	548
806	Cicero	0	7	7	0	13	10	1.675749	0	46	0	0	45	0	9	0	1	4	0	0	0	717	141	0	0	0	0	963
807	Cicero	0	513	513	0	1147	836	2.803643	1	11	2	3	6	10	8	2	9	1	8	1	0	10	7	2	3	1	4	89
808	Clay	0	271	267	4	701	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23
809	Baldwinsvi	0	398	383	15	969	617	6.720883	3	6	0	0	20	56	5	0	0	0	0	0	0	11	11	0	0	0	4	116
810	Baldwinsvi	0	110	110	0	256	166	6.720883	1	13	0	5	0	0	0	0	0	0	6	0	0	29	53	0	0	0	0	107
811	Baldwinsvi	0	93	93	0	247	149	6.720883	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
812	Van Buren	0	331	331	0	803	612	0.511894	0	6	0	26	12	0	11	0	0	0	0	0	0	0	0	0	0	9	11	75
813	Clay	0	1308	1305	3	3149	2364	0.012619	1	10	0	22	60	125	21	0	0	0	19	0	0	6	9	0	0	0	0	273
814	Van Buren	0	243	243	0	312	195	3.414275	0	64	0	14	0	0	22	0	0	0	0	0	0	184	18	0	0	0	0	302
815	Lysander	0	249	245	4	676	456	0.87505	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
816	Lysander	0	133	133	0	270	184	0.87505	0	16	0	79	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	108
817	Cicero	0	471	471	0	850	745	2.933986	0	0	0	13	0	164	0	0	33	0	0	0	0	0	4	0	0	0	0	214
818	Sullivan	0	23	23	0	52	43	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	0	1	15
819	Sullivan	0	50	50	0	94	80	4.2	0	35	0	0	0	0	0	0	0	0	0	0	0	0	81	0	0	0	0	116
820	Clay	0	29	29	0	75	52	1.562922	1	33	9	0	174	45	97	0	39	0	0	0	0	130	48	18	0	4	3	601
821	Baldwinsvi	0	103	103	0	200	159	7.077806	0	54	0	0	0	0	0	0	17	0	0	0	0	0	32	0	0	0	0	103
822	Baldwinsvi	0	154	154	0	198	142	7.077806	0	51	0	34	131	5	30	30	11	18	0	0	0	58	5	0	30	0	0	403
823	Baldwinsvi	0	185	185	0	433	321	7.077806	0	93	21	9	77	0	57	19	59	0	71	0	0	87	40	4	86	0	6	629
824	Baldwinsvi	0	190	190	0	412	345	7.077806	0	0	0	0	0	0	0	0	33	0	0	0	0	50	41	0	29	0	0	153
825	Baldwinsvi	0	134	134	0	339	239	7.077806	0	26	24	3	14	0	37	25	3	0	0	0	0	8	3	9	40	3	22	217
826	Clay	0	398	398	0	1085	792	0	0	9	0	5	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	21
827	Clay	0	628	628	0	1761	1250	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	16
828	Cicero	0	625	625	0	1741	1218	0	0	0	0	41	0	0	135	0	0	0	0	0	0	36	3	0	0	0	0	215
829	Clay	0	103	103	0	228	186	0	0	0	0	40	0	0	0	0	0	0	188	0	0	0	62	0	0	0	0	290
830	Cicero	0	226	226	0	508	394	0	0	29	0	22	62	0	31	80	8	0	0	0	0	565	107	37	0	0	8	949
831	Clay	0	614	614	0	1694	1235	0.834104	0	5	0	0	0	0	0	0	97	0	0	0	0	0	0	7	0	0	78	187
832	Clay	0	3	3	0	1	1	0.000037	0	26	0	0	0	26	0	0	0	0	0	0	0	23	0	0	0	0	0	75
833	Clay	0	344	344	0	971	672	0.000037	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
834	Cicero	0	227	227	0	461	368	0	2	57	0	29	88	0	42	0	10	37	0	0	2	340	146	16	0	0	8	777
835	Lysander	0	185	185	0	503	391	0.132281	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
836	Lysander	0	329	329	0	492	374	0.87513	2	31	0	22	13	0	0	0	81	0	0	0	0	2	0	22	0	0	20	193
837	Clay	0	542	542	0	1418	931	1.575587	0	19	0	0	27	0	7	0	0	0	0	0	0	5	36	0	0	0	0	94
838	Clay	0	573	573	0	1078	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	46
839	Lysander	0	209	209	0	426	306	0.000228	0	12	0	16	0	0	82	0	66	0	2	0	0	25	21	16	0	0	0	240
840	Lysander	0	98	98	0	127	98	0.000228	1	60	0	36	0	0	5	28	16	0	1943	0	0	153	2	3	439	0	16	2702
841	Clay	0	994	994	0	2835	1969	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
842	Lysander	0	263	263	0	541	404	0	0	28	0	0	14	545	0	0	0	0	0	0	0	73	0	0	0	21	0	681
843	Sullivan	0	168	168	0	345	297	4.2	0	1	0	0	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	7
844	Baldwinsvi	0	306	306	0	921	603	1.123708	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
845	Lysander	0	196	196	0	541	342	1.123708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9
846	Lysander	0	690	686	4	1548	1067	1.123708	0	0	0	0	0	0	0	0	0	70	0	0	0	72	11	0	27	0	28	208
847	Baldwinsvi	0	154	154	0	349	267	1.123708	0	5	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	8
848	Lysander	0	193	193	0	383	306	0.934406	16	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	57

849	Cicero	0	229	229	0	565	437	0	0	0	0	0	0	0	0	0	10	0	0	0	0	119	53	0	0	0	0	182
850	Cicero	0	503	503	0	1134	881	0	0	12	0	0	28	404	16	0	27	0	0	0	2	143	14	0	0	0	22	668
851	Clay	0	1379	1377	2	2958	2233	0.06904	0	0	0	0	0	213	0	0	0	0	0	0	0	0	23	0	0	0	0	236
852	Cicero	0	123	123	0	267	173	1.524833	0	0	0	11	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	27
853	Cicero	0	224	224	0	330	235	1.524833	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
854	Cicero	0	31	31	0	87	59	1.524833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
855	Cicero	0	401	401	0	1161	721	1.524833	0	8	0	33	0	0	15	0	1	0	52	0	0	4	3	0	0	0	0	116
856	Cicero	0	138	138	0	398	257	1.524833	1	4	0	16	0	0	7	0	0	0	27	0	0	2	1	0	0	0	0	58
857	Clay	0	456	456	0	723	653	0.953709	0	4	0	0	0	0	9	0	0	0	0	0	0	98	21	0	0	0	0	132
858	Clay	0	728	728	0	1976	1477	0.953709	11	45	0	14	15	0	73	0	51	0	0	0	0	1	31	0	15	0	0	256
859	Clay	0	1119	1119	0	2445	1764	0.802442	0	0	137	23	0	0	0	0	92	0	0	0	0	54	0	26	14	0	57	403
860	Sullivan	0	161	161	0	276	216	4.2	0	6	0	20	11	0	0	0	6	0	0	0	0	9	11	0	11	0	0	74
861	Clay	0	648	648	0	2077	1375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
862	Clay	0	8	8	0	16	13	0.020726	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	0	0	0	0	13
863	Clay	0	234	234	0	640	478	0.020726	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
864	Clay	0	142	142	0	58	46	0.020726	0	16	0	0	0	0	0	0	0	0	0	0	0	236	12	0	0	16	0	280
865	Sullivan	0	73	73	0	153	127	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
866	Cicero	0	443	443	0	1175	815	0	0	11	0	0	52	120	94	28	41	0	0	0	0	45	15	8	6	3	0	423
867	Clay	0	330	330	0	201	158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4	13	0	0	0	31
868	Clay	0	219	219	0	44	38	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
869	Lysander	0	318	318	0	899	603	0.00002	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
870	Lysander	0	600	600	0	1339	962	0.00002	0	28	0	19	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	66
871	Cicero	0	118	118	0	40	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	23	0	0	0	0	35
872	Cicero	0	8	8	0	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	41
873	Cicero	0	610	610	0	1622	1061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	48
874	Cicero	0	362	362	0	544	435	0.985222	0	57	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	92
875	Cicero	0	476	476	0	1277	829	0.985222	0	0	0	0	0	98	0	0	0	0	25	0	0	0	0	0	0	0	0	123
876	Clay	0	97	97	0	0	0	0	0	0	0	0	63	140	0	0	0	0	0	0	0	265	0	0	0	0	0	468
877	Clay	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0	0	0	0	0	257	0	0	0	0	0	447
878	Lysander	0	548	548	0	918	718	0	0	0	0	70	13	0	12	0	4	0	435	0	0	0	66	0	25	0	616	1241
879	Clay	0	109	109	0	225	190	0.050476	0	5	1	2	3	7	4	3	6	0	6	0	0	7	4	1	3	0	3	55
880	Clay	0	7	7	0	2	2	0.050476	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
881	Clay	0	12	12	0	18	15	0.050476	2	12	0	2	4	12	10	2	16	0	10	0	0	14	4	2	2	2	4	98
882	Clay	0	69	69	0	160	127	0.050476	0	12	0	0	40	0	27	0	0	0	0	0	0	1	49	0	0	0	0	129
883	Lysander	0	32	32	0	59	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	41
884	Cicero	0	922	922	0	2703	1886	0.363196	0	0	0	7	1	5	23	0	4	0	6	0	0	2	1	0	0	0	2	51
885	Cicero	0	282	282	0	850	582	0.363196	0	3	0	0	1	0	2	1	1	0	2	0	0	0	0	0	0	0	6	16
886	Cicero	0	180	180	0	486	342	0.363196	0	75	0	0	135	0	0	0	0	0	318	0	0	11	0	0	0	0	0	539
887	Clay	0	401	401	0	3	3	0	0	33	0	0	114	0	25	0	0	11	0	0	0	1446	57	0	0	0	0	1686
888	Clay	0	15	15	0	32	27	0.567692	0	4	0	0	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	11
889	Clay	0	23	23	0	62	46	0.567692	0	53	25	0	222	0	19	0	0	0	8	0	0	740	4	18	13	0	19	1121
890	Lysander	0	367	367	0	832	617	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	12
891	Lysander	0	265	265	0	695	532	0.980392	2	0	0	0	12	0	0	36	0	0	0	0	0	19	0	0	0	0	0	69
892	Lysander	0	218	218	0	590	458	0.980392	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	48	0	0	73
893	Clay	0	30	30	0	66	55	5.501627	0	2	0	1	1	2	2	1	2	0	2	0	0	4	1	0	1	0	1	20
894	Clay	0	6	6	0	9	9	5.501627	0	0	0	42	17	0	0	73	0	0	17	0	0	25	10	0	0	0	0	184
895	Lysander	0	648	641	7	1429	1055	0	0	0	0	0	0	77	1	0	0	0	0	0	0	0	0	0	0	0	0	78
896	Lysander	0	261	261	0	693	536	1.039868	0	7	0	0	0	0	0	0	0	0	0	0	0	49	6	0	0	0	0	62
1112	Clay	0	210	210	0	103	81	5.411348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1109	Clay	0	9	9	0	21	16	5.411348	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
1110	Clay	0	12	12	0	27	22	5.411348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	45
1111	Clay	0	10	10	0	23	18	5.411348	0	0	0	0	0	0	0	0	0	0	1000	0	0	0	0	0	2000	0	0	3000
898	Clay	0	73	73	0	59	46	5.498274	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	7	0	0	0	22
899	Clay	0	48	48	0	19	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
900	Clay	0	26	26	0	58	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
901	Clay	0	84	84	0	62	51	0	0	9	0	0	9	9	9	0	9	0	9	0	0	19	9	0	0	0	9	91
902	Cicero	0	483	483	0	1061	758	0	0	0	0	6	55	0	14	0	0	0	0	0	0	1	87	0	0	0	0	163
903	Cicero	0	143	143	0	188	147	0.001508	0	16	6	39	5	0	0	0	0	39	8	0	0	23	19	0	0	0	4	159
904	Cicero	0	196	196	0	107	87	0.001508	0	54	0	6	122	11	55	0	31	0	3	0	0	110	13	20	47	0	33	505
905	Cicero	0	183	183	0	348	258	0.001508	0	35	0	9	89	0	24	0	0	0	0	0	0	68	48	0	0	0	0	273
906	Clay	0	33	33	0	73	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

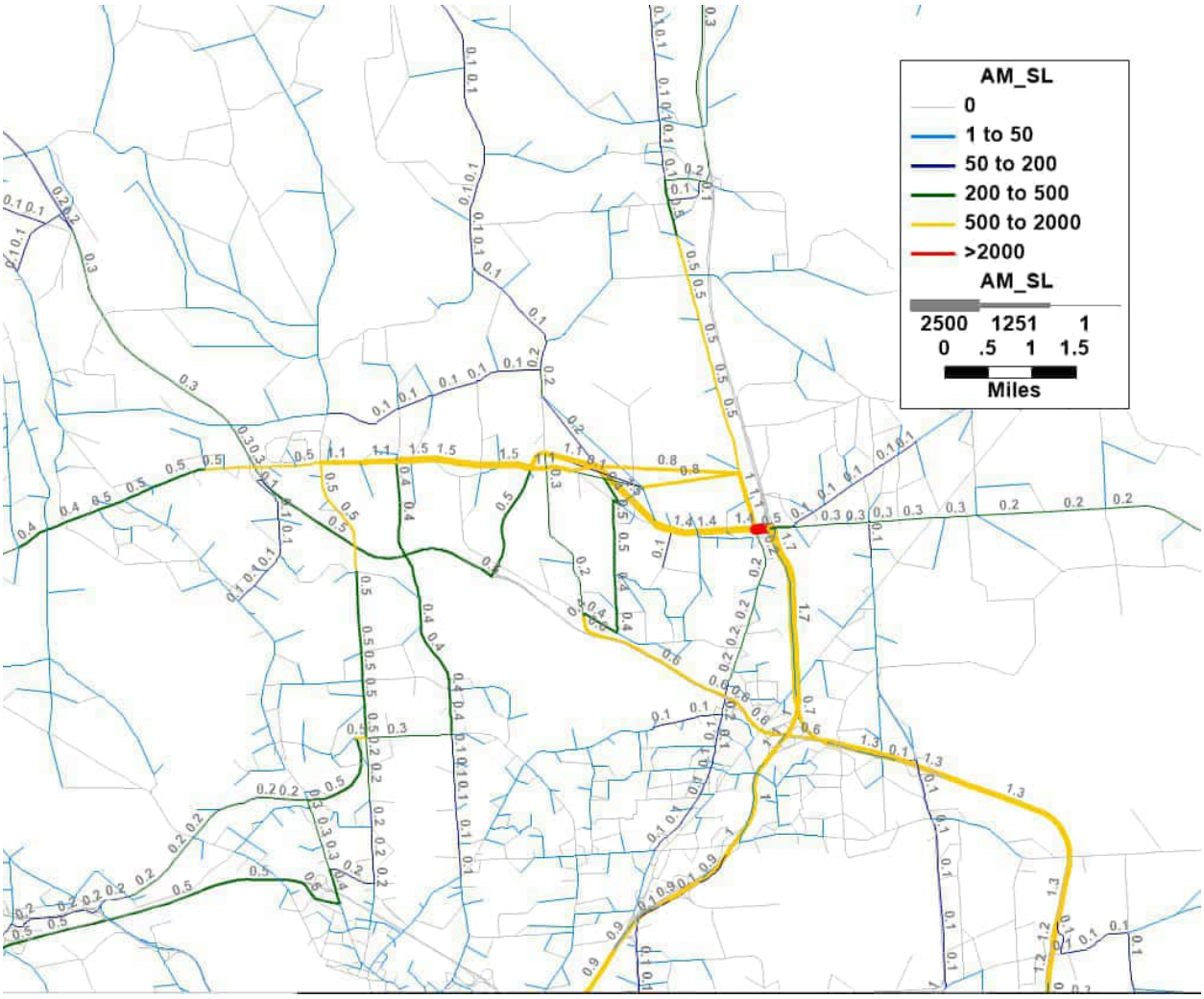
907	Clay	0	101	101	0	58	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
908	Clay	0	119	119	0	263	224	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	3
909	Lysander	0	404	404	0	1034	725	0	2	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	32
910	Lysander	0	95	95	0	187	164	0	0	0	0	16	0	0	0	0	0	0	0	0	0	4	0	0	0	20
911	Schroeppe	0	65	65	0	119	107	4.2	0	10	0	0	0	0	21	0	15	0	0	0	0	59	21	0	0	9	135
912	Cicero	0	303	303	0	683	532	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	23
913	Cicero	0	89	89	0	238	177	0	0	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138
914	Phoenix	0	111	107	4	242	166	4.2	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	44
915	Lysander	0	150	150	0	395	307	0	0	19	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	9	35
916	Cicero	0	512	512	0	1442	989	0.020267	0	9	2	4	5	9	6	3	9	0	8	0	0	11	5	2	3	0	5	81
917	Phoenix	0	151	151	0	353	225	4.2	0	0	0	0	9	0	0	0	0	0	12	0	0	0	0	0	6	0	0	27
918	Clay	0	198	198	0	485	379	1.224585	0	3	0	2	2	5	3	2	5	0	2	0	0	8	2	0	2	2	2	40
919	Clay	0	230	230	0	412	313	1.224585	0	1	0	1	1	1	1	1	1	0	1	0	0	3	1	1	1	0	1	15
920	Phoenix	0	92	92	0	209	133	4.2	3	0	0	37	3	74	11	104	3	0	0	0	0	16	0	0	37	0	8	296
921	Phoenix	0	98	98	0	217	144	4.2	0	1	0	0	1	1	1	0	1	0	1	0	0	2	1	0	0	0	1	10
922	Clay	0	333	333	0	224	170	5.501619	0	0	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	4
923	Clay	0	53	53	0	71	60	5.501619	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
924	Phoenix	0	175	175	0	392	249	4.2	0	0	0	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
925	Phoenix	0	83	83	0	151	103	4.2	0	15	0	8	8	0	0	15	0	0	4	0	0	11	15	0	0	0	0	76
926	Phoenix	0	59	59	0	147	96	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	0	1	15
927	Cicero	0	281	281	0	696	472	2.233359	0	7	0	86	0	0	2	0	1	0	170	0	0	10	11	0	0	0	1	288
928	Cicero	0	414	414	0	803	643	2.233359	1	24	1	4	101	95	11	0	2	13	0	0	0	11	12	1	0	0	0	276
929	Cicero	0	432	432	0	1183	816	2.233359	0	12	0	3	12	0	0	0	0	0	3	0	0	12	3	0	0	0	3	48
930	Phoenix	0	90	90	0	184	126	4.2	0	0	0	0	0	0	0	0	11	0	11	0	0	2	0	11	0	0	0	35
931	Phoenix	0	33	33	0	54	41	4.2	0	0	0	11	0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	253
932	Phoenix	0	55	55	0	135	83	4.2	0	9	0	0	0	96	9	0	0	0	0	0	0	1	0	0	0	0	0	115
933	Cicero	0	128	128	0	273	215	5.362776	0	8	19	36	49	64	0	0	14	0	0	0	0	21	0	0	2	0	2	215
934	Cicero	0	139	139	0	319	240	5.362776	0	5	0	25	20	0	14	24	3	0	0	0	0	11	5	0	10	0	1	118
935	Phoenix	0	151	151	0	243	189	4.2	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	4	23
936	Hastings	0	78	78	0	153	138	4.2	0	3	1	1	1	4	3	1	4	0	4	0	0	4	3	1	1	0	1	32
937	Hastings	0	136	136	0	273	207	4.2	0	12	0	82	3	0	0	0	0	0	0	0	10	14	23	0	10	0	21	175
938	Hastings	0	175	175	0	373	319	4.2	0	2	1	1	1	3	2	1	3	0	3	0	0	3	2	1	1	0	1	25
939	Hastings	0	111	111	0	216	158	4.2	0	7	0	0	55	361	0	12	0	0	0	0	0	4	7	0	0	0	7	453
940	Central Sq	0	147	147	0	387	274	4.2	0	0	0	2	13	0	2	0	13	0	6	0	6	4	9	0	0	0	0	55
941	Central Sq	0	233	233	0	293	251	4.2	22	0	0	0	0	0	0	0	0	0	0	0	0	44	10	0	0	0	0	76
942	Central Sq	0	108	108	0	245	181	4.2	0	0	0	44	0	226	0	0	22	0	0	0	0	22	12	0	0	0	0	326
943	Central Sq	0	92	92	0	173	129	4.2	0	6	1	2	3	7	4	2	7	0	6	0	0	8	3	1	2	0	3	55
944	Central Sq	0	210	203	7	472	319	4.2	0	9	0	4	46	0	4	0	13	0	0	0	9	138	13	0	0	0	0	236
945	Central Sq	0	128	128	0	214	207	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	662	0	0	0	0	0	662
946	Central Sq	0	230	230	0	566	381	4.2	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	33
947	Hastings	0	28	28	0	58	46	4.2	0	1	0	1	1	2	1	1	2	0	2	0	0	1	1	0	1	0	1	15
948	Hastings	0	114	114	0	237	196	4.2	0	1	0	0	1	1	1	0	1	0	1	0	0	3	1	0	0	0	1	11
949	Hastings	0	24	24	0	62	51	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
950	Hastings	0	22	22	0	58	41	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
951	Hastings	0	146	146	0	245	231	4.2	0	7	2	3	4	9	6	3	9	1	8	0	0	8	5	2	4	0	4	75
952	Hastings	0	24	24	0	56	43	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
953	Hastings	0	95	95	0	221	172	4.2	0	0	0	0	0	11	0	0	0	0	1	0	0	0	0	0	0	0	0	12
954	Hastings	0	4	4	0	13	10	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
955	West Mon	0	110	110	0	262	210	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
956	Hastings	0	132	132	0	349	266	4.2	0	8	4	4	4	13	8	4	13	0	13	0	0	13	8	4	4	0	4	104
957	Sullivan	0	60	60	0	145	115	4.2	1	2	1	8	8	6	10	1	6	1	10	0	0	12	6	5	4	0	2	83
958	Sullivan	0	58	58	0	128	111	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9
959	Sullivan	0	148	142	6	360	285	4.2	0	19	0	17	20	0	0	0	0	0	0	0	0	3	286	6	17	0	0	368
960	Sullivan	0	278	278	0	617	525	4.2	0	1	0	7	2	3	0	0	0	0	0	0	0	3	0	3	3	0	3	25
961	Sullivan	0	94	94	0	232	192	4.2	0	0	0	0	3	0	8	0	0	0	0	0	0	1	2	5	3	0	0	22
962	Sullivan	0	30	30	0	41	35	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
963	Sullivan	0	95	95	0	184	164	4.2	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	1	0	0	0	5
964	Sullivan	0	309	309	0	721	594	4.2	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	5
965	Sullivan	0	69	69	0	148	128	4.2	0	0	0	0	8	0	0	0	0	1	0	0	0	0	5	9	0	0	0	23
966	Sullivan	0	85	85	0	221	176	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	0	0	0	9
967	Sullivan	0	184	184	0	403	342	4.2	0	0	0	8	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	13

968	Sullivan	0	8	8	0	16	13	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
969	Sullivan	0	37	37	0	82	68	4.2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
970	Sullivan	0	33	33	0	91	71	4.2	48	0	0	12	0	0	0	0	0	0	0	0	0	0	0	2	0	0	62
971	Sullivan	0	17	17	0	44	35	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
972	Sullivan	0	12	12	0	22	17	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
973	Sullivan	0	53	53	0	141	106	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
974	Sullivan	0	44	44	0	105	88	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	0	16
975	Sullivan	0	110	110	0	277	215	4.2	2	5	0	5	0	0	5	0	0	0	0	0	0	0	0	2	5	0	0	24
976	Sullivan	0	45	45	0	121	91	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	4
977	Sullivan	0	93	93	0	242	194	4.2	0	0	0	7	0	0	0	0	0	0	0	0	0	2	1	2	0	0	12
978	Sullivan	0	25	25	0	56	48	4.2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	100	118
979	Sullivan	0	42	42	0	95	81	4.2	3	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10
980	Sullivan	0	97	97	0	244	196	4.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3	10
981	Sullivan	0	73	73	0	185	144	4.2	3	0	0	2	6	0	0	0	0	1	0	0	0	4	0	0	0	0	0	16
982	Sullivan	0	188	188	0	459	360	4.2	0	1	0	4	0	4	0	0	1	0	0	0	0	4	0	1	0	0	0	15
983	Sullivan	0	8	8	0	21	18	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
984	Sullivan	0	89	89	0	215	172	4.2	9	1	0	16	0	0	4	0	0	0	0	0	0	52	0	14	0	0	4	100
985	Sullivan	0	25	25	0	63	46	4.2	0	3	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	0	12
986	Sullivan	0	95	95	0	261	192	4.2	0	2	0	0	0	0	0	0	0	0	2	0	0	0	8	0	0	0	0	12
987	Sullivan	0	32	32	0	71	58	4.2	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	14
988	Sullivan	0	126	126	0	325	260	4.2	0	2	0	0	0	0	0	0	0	0	25	0	0	0	4	0	0	0	2	33
989	Chittenanç	0	133	133	0	341	230	4.2	4	2	4	1	0	0	4	0	4	0	10	0	0	2	2	2	0	0	0	35
990	Chittenanç	0	54	54	0	123	108	4.2	0	1	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8
991	Chittenanç	0	35	35	0	84	69	4.2	0	2	0	7	0	0	2	0	2	0	0	0	0	5	2	0	0	0	0	20
992	Chittenanç	0	510	510	0	1178	825	4.2	0	1	39	11	0	109	1	0	3	0	0	0	0	37	13	9	0	0	8	231
993	Chittenanç	0	157	157	0	327	279	4.2	0	12	7	13	62	0	69	20	18	9	69	0	0	51	18	3	0	0	7	358
994	Sullivan	0	78	78	0	165	120	4.2	0	5	16	5	3	0	5	8	0	1	199	0	0	49	9	0	8	0	12	320
995	Chittenanç	0	347	339	8	788	545	4.2	0	2	0	5	10	17	92	7	26	1	3	0	0	12	9	8	7	0	0	199
996	Chittenanç	0	494	494	0	1169	798	4.2	1	8	0	1	0	15	10	0	35	0	45	10	0	1	599	15	10	0	0	750
997	Sullivan	0	125	125	0	261	193	4.2	0	0	1	4	0	0	11	0	4	0	0	0	0	14	5	1	0	0	0	40
998	Sullivan	0	299	293	6	735	559	4.2	1	2	0	7	10	13	0	0	1	1	0	0	0	4	1	1	5	0	0	46
999	Sullivan	0	8	8	0	21	18	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	Sullivan	0	34	34	0	77	59	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27
1001	Sullivan	0	33	33	0	81	66	4.2	0	1	0	16	12	0	0	0	0	2	0	0	0	2	0	0	0	0	0	33
1002	Sullivan	0	33	33	0	84	64	4.2	0	4	0	0	0	0	0	69	140	0	0	0	0	0	0	12	0	0	0	225
1003	Sullivan	0	67	67	0	141	125	4.2	0	5	0	9	0	0	0	0	33	0	28	0	0	0	5	9	0	0	0	89
1004	Sullivan	0	37	37	0	70	68	4.2	0	2	0	2	0	3	3	0	0	0	7	0	0	0	3	3	3	0	2	28
1005	Sullivan	0	22	22	0	49	42	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
1006	Sullivan	0	104	104	0	225	164	4.2	0	0	0	1	4	0	4	0	0	0	0	0	0	2	1	0	0	0	0	12
1007	Sullivan	0	73	73	0	152	136	4.2	0	0	0	3	0	0	5	0	121	0	2	0	0	6	2	2	0	0	0	141
1008	Sullivan	0	37	37	0	92	74	4.2	0	0	0	1	0	0	0	0	0	0	16	2	0	0	4	2	0	0	0	25
1009	Granby	0	47	47	0	106	80	4.2	0	0	0	9	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10
1010	Schroeppe	0	60	60	0	133	109	4.2	0	3	0	7	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	15
1011	Schroeppe	0	145	145	0	381	284	4.2	0	1	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	7
1012	Schroeppe	0	83	83	0	224	162	4.2	2	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	8
1013	Schroeppe	0	30	30	0	69	55	4.2	2	2	0	0	0	96	0	0	7	0	27	0	0	12	20	2	3	0	15	186
1014	Schroeppe	0	42	42	0	109	85	4.2	0	0	0	12	0	0	0	0	6	0	6	0	0	0	10	0	0	0	0	34
1015	Schroeppe	0	36	36	0	83	66	4.2	0	0	0	3	0	2	0	0	0	0	0	0	0	8	2	2	0	0	0	17
1016	Schroeppe	0	18	18	0	43	34	4.2	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
1017	Schroeppe	0	71	71	0	170	135	4.2	0	0	0	8	0	0	0	0	0	0	4	0	0	1	0	1	0	0	0	14
1018	Schroeppe	0	32	32	0	75	62	4.2	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
1019	Schroeppe	0	36	36	0	102	74	4.2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1020	Schroeppe	0	44	44	0	117	87	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3
1021	Schroeppe	0	70	70	0	178	134	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	6
1022	Schroeppe	0	16	16	0	30	26	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	Schroeppe	0	226	226	0	592	433	4.2	0	3	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	17
1024	Schroeppe	0	59	59	0	131	106	4.2	0	2	0	3	0	0	0	0	0	0	0	0	0	2	3	0	3	0	0	13
1025	Schroeppe	0	100	100	0	248	191	4.2	9	0	0	0	0	9	0	0	9	0	0	0	0	0	4	21	14	0	2	68
1026	Schroeppe	0	32	32	0	74	59	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1027	Schroeppe	0	49	49	0	123	97	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1028	Schroeppe	0	57	57	0	121	99	4.2	0	3	0	0	2	2	2	0	0	0	0	0	0	1	0	0	0	0	0	10

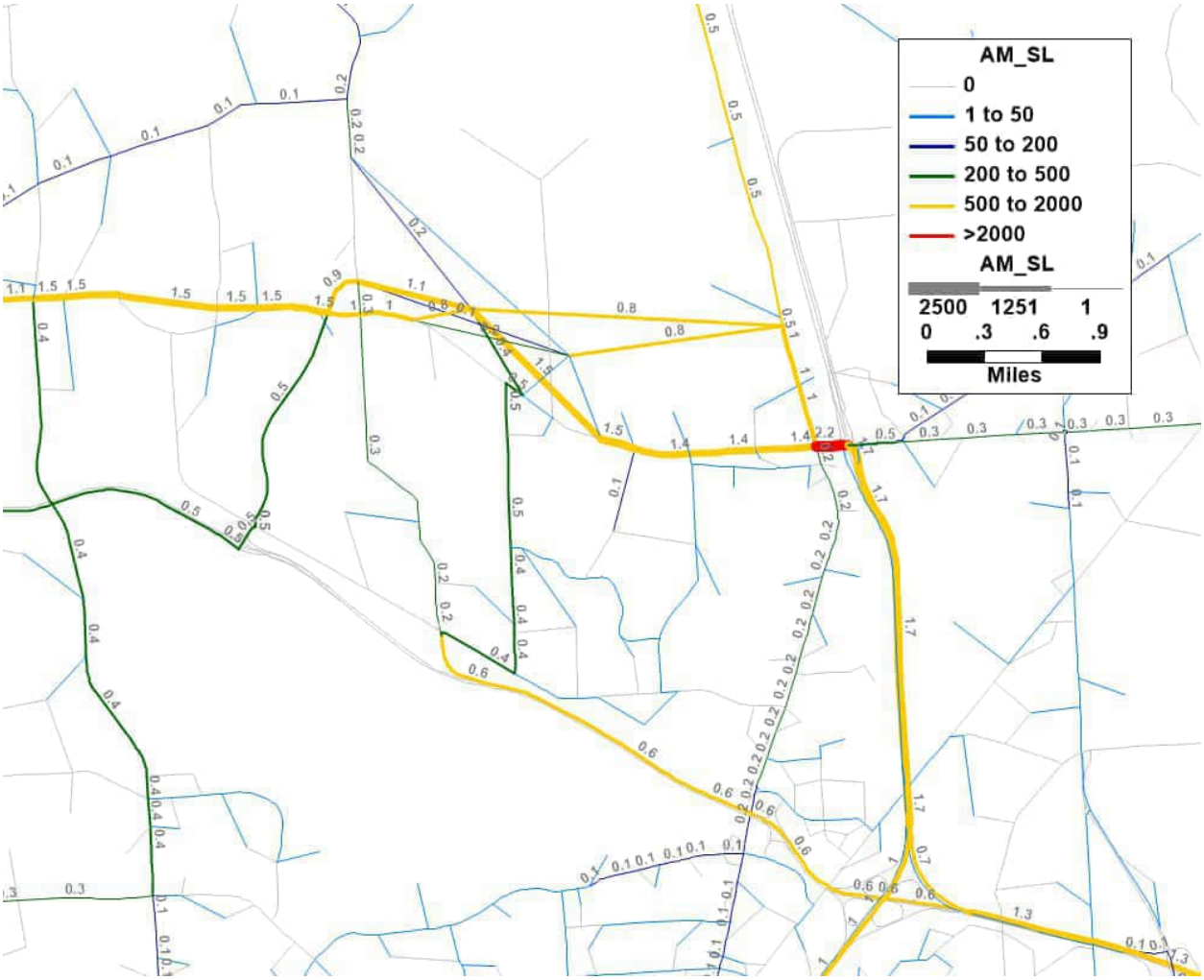
1029	Schroeppe	0	212	212	0	442	363	4.2	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	13
1030	Schroeppe	0	49	49	0	103	88	4.2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	5
1031	Schroeppe	0	58	58	0	141	113	4.2	1	0	4	0	0	0	0	0	0	0	0	0	0	2	3	0	0	3	13
1032	Schroeppe	0	278	278	0	697	530	4.2	0	2	0	2	0	0	2	0	2	0	12	0	0	9	5	9	0	0	0	43
1033	Schroeppe	0	104	104	0	284	207	4.2	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	8
1034	Schroeppe	0	178	178	0	402	323	4.2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	7	0	0	0	11
1035	Schroeppe	0	30	30	0	71	58	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1036	Schroeppe	0	64	64	0	153	121	4.2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1037	Schroeppe	0	11	11	0	23	22	4.2	0	4	0	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	50
1038	Schroeppe	0	22	22	0	41	35	4.2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	39	0	6	51
1039	Schroeppe	0	41	41	0	105	80	4.2	2	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	2	16
1040	Hastings	0	73	73	0	171	121	4.2	0	2	0	3	0	2	0	0	2	0	0	0	0	4	0	3	0	0	0	16
1041	Hastings	0	41	41	0	100	72	4.2	0	0	0	0	7	0	0	0	0	1	17	0	0	9	0	0	0	4	0	38
1042	Hastings	0	196	196	0	459	337	4.2	0	1	0	15	0	0	0	0	0	0	11	0	0	2	26	5	2	0	7	69
1043	Hastings	0	57	57	0	157	107	4.2	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	22
1044	Hastings	0	32	32	0	73	52	4.2	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
1045	Hastings	0	12	12	0	25	21	4.2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1046	Hastings	0	126	126	0	359	237	4.2	0	0	1	3	0	0	0	0	0	0	1	0	0	2	1	1	0	0	0	9
1047	Hastings	0	37	37	0	90	67	4.2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	9
1048	Hastings	0	19	19	0	56	40	4.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1049	Hastings	0	28	28	0	63	53	4.2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	2	4	0	0	12
1050	Hastings	0	35	35	0	90	70	4.2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1051	Hastings	0	75	75	0	218	159	4.2	0	0	0	16	0	0	0	0	0	0	0	0	0	2	0	12	0	0	0	30
1052	Hastings	0	114	114	0	309	236	4.2	0	2	0	3	2	0	1	0	0	0	1	0	0	5	1	1	0	0	0	16
1053	Hastings	0	43	43	0	97	83	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	2	2	0	0	9
1054	Hastings	0	102	102	0	307	222	4.2	0	2	0	0	0	0	0	0	0	0	7	0	0	16	2	0	0	0	0	27
1055	Hastings	0	84	84	0	189	165	4.2	0	0	0	0	7	0	2	8	0	1	0	0	0	1	0	2	0	3	0	24
1056	Hastings	0	113	113	0	260	220	4.2	1	1	0	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	14
1057	Hastings	0	83	83	0	204	164	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19
1058	Hastings	0	111	111	0	279	221	4.2	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	3	0	0	7
1059	Hastings	0	43	43	0	123	95	4.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1060	Hastings	0	118	118	0	334	250	4.2	0	0	0	8	0	0	0	0	2	0	0	0	0	3	0	2	2	0	5	22
1061	Hastings	0	68	68	0	202	144	4.2	0	0	0	5	11	0	0	0	0	1	0	0	0	0	8	5	0	0	5	35
1062	Hastings	0	12	12	0	19	21	4.2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
1063	Hastings	0	27	27	0	75	55	4.2	0	0	0	13	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	20
1064	Hastings	0	25	25	0	68	51	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1065	Hastings	0	61	61	0	174	128	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1066	Hastings	0	30	30	0	82	63	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1067	Hastings	0	95	95	0	242	195	4.2	0	1	0	1	0	0	0	0	5	0	0	0	0	3	5	0	0	0	0	15
1068	West Mon	0	26	26	0	70	55	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1069	West Mon	0	36	36	0	81	66	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1070	West Mon	0	35	35	0	94	72	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1071	West Mon	0	20	20	0	38	36	4.2	0	0	0	0	0	0	0	0	3	0	8	0	0	0	0	0	0	0	0	11
1072	West Mon	0	63	63	0	129	115	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
1073	West Mon	0	26	26	0	62	56	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1074	West Mon	0	100	100	0	287	207	4.2	0	0	0	2	0	0	0	0	2	0	0	0	0	0	2	3	0	0	0	9
1075	West Mon	0	135	135	0	337	260	4.2	0	0	0	5	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	7
1076	West Mon	0	39	39	0	83	69	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1077	West Mon	0	54	54	0	146	109	4.2	0	0	0	17	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	24
1078	West Mon	0	80	80	0	180	152	4.2	0	1	0	0	0	0	0	0	0	0	5	0	0	3	0	0	0	0	0	9
1079	West Mon	0	113	113	0	283	220	4.2	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	8
1080	West Mon	0	52	52	0	133	101	4.2	0	0	0	0	0	0	0	0	15	0	0	0	0	10	3	0	0	0	0	28
1081	West Mon	0	85	85	0	196	167	4.2	0	1	0	7	0	0	0	0	0	0	13	0	0	0	0	7	7	0	0	35
1082	West Mon	0	70	70	0	180	142	4.2	0	3	0	2	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	10
1083	West Mon	0	73	73	0	197	144	4.2	5	5	0	20	0	0	0	0	0	0	0	0	0	28	0	0	20	0	0	78
1084	West Mon	0	63	63	0	155	125	4.2	0	0	0	0	0	5	0	0	1	0	0	0	0	91	0	5	9	0	0	111
1085	Hastings	0	39	39	0	101	79	4.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	7
1086	West Mon	0	51	51	0	123	98	4.2	0	3	0	0	0	0	0	0	0	0	22	0	0	13	0	0	0	0	0	38
1087	West Mon	0	109	109	0	248	208	4.2	0	0	0	4	0	0	1	0	0	0	0	1	0	1	20	0	3	0	0	30
1088	West Mon	0	87	87	0	200	165	4.2	0	2	0	7	0	0	0	0	1	0	14	0	0	1	4	2	5	0	0	36
1089	West Mon	0	33	33	0	74	62	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1090	Schroeppe	0	6	6	0	21	14	4.2	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	15
1091	Schroeppe	0	27	27	0	74	57	4.2	0	0	0	0	0	0	0	0	0	0	20	0	0	7	4	0	0	0	0	31
1092	Schroeppe	0	18	18	0	42	33	4.2	0	8	0	0	10	0	0	0	0	2	0	0	0	0	0	0	1	0	3	24
1093	Schroeppe	0	20	20	0	52	38	4.2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1094	Schroeppe	0	7	7	0	20	16	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1095	Schroeppe	0	76	76	0	191	144	4.2	1	1	0	3	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	7
1096	West Mon	0	18	18	0	36	30	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	9	0	0	0	16
1097	West Mon	0	38	38	0	104	75	4.2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1098	Hastings	0	18	18	0	53	39	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
1099	Hastings	0	99	99	0	279	211	4.2	0	3	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0	11
1100	Sullivan	0	25	25	0	55	53	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101	Sullivan	0	22	22	0	60	43	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8001	Geddes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199	0	0	0	0	0	0	0	0	40	0	0	239
8002	Syracuse	0	0	0	0	0	0	0	0	439	128	12	1132	0	50	0	14	0	129	0	0	3701	102	21	225	0	40	5993
8003	Onondaga	0	984	0	984	571	571	0	0	0	0	0	0	1842	0	0	0	0	0	0	0	0	0	0	0	0	0	1842
8004	Onondaga	0	0	0	0	0	0	0	0	14	0	0	0	0	0	27	1993	0	0	0	0	3	3	0	0	0	0	2040
8005	Syracuse	0	20	0	20	0	0	3	0	0	0	0	0	0	0	0	1272	0	0	0	0	0	0	0	0	0	0	1272
8006	Syracuse	0	2596	0	2596	2507	2507	3	0	18	0	0	0	542	0	0	0	0	51	0	0	1	8	18	0	0	0	638
8007	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	0	0	0	108
8008	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	0	0	2233	0	0	0	0	0	0	20	0	0	0	0	2253
8009	Syracuse	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043	0	0	0	0	1043
8010	Dewitt	0	1286	5	1281	1284	1284	2.5	0	0	0	0	105	676	0	0	0	0	0	0	0	0	0	0	0	0	0	781
8011	Syracuse	0	74	0	74	689	689	15	0	70	78	0	55	0	14	50	10953	0	0	0	5	61	51	0	0	0	0	11337
8012	Syracuse	0	3053	0	3053	2766	2766	15	1	432	0	4	0	4406	8	13	3	0	23	0	0	4	26	12	0	0	0	4932
8013	Syracuse	0	0	0	0	0	0	15	0	4	1	2	3	5	3	2	5	0	4	0	0	5	3	1	2	0	2	42
8014	Syracuse	0	0	0	0	0	0	15	0	27	0	0	0	0	6	0	4041	0	0	0	0	16	0	0	0	0	12	4102
8015	Syracuse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	59
8016	Dewitt	0	0	0	0	0	0	4	0	103	0	0	0	0	0	0	0	0	0	0	0	0	77	0	1635	0	0	1815

Below is a map of the AM Select Link results for Scenario A “v4_SPUI_LowCap”. Numbers written on the map are 1000s of vehicles.



Select link zoomed



MEMO

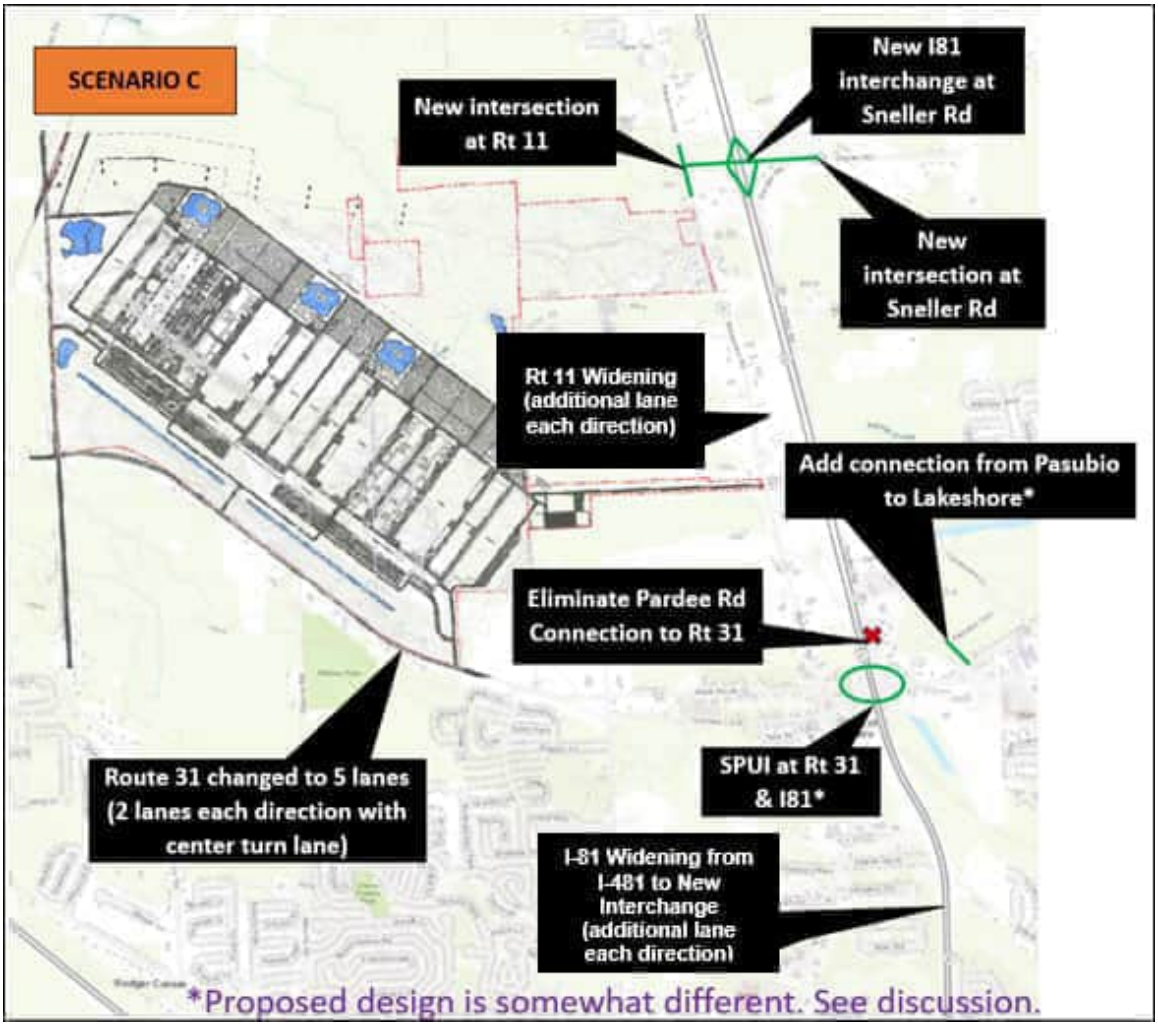
TO:	Jason Deshaies
FROM:	Stephen Tuttle; Colin Smith
DATE:	January 23, 2024
SUBJECT:	SMTC Travel Demand Modeling for Micron Scenario C

On behalf of the Syracuse Metropolitan Transportation Council (SMTC), RSG has conducted a series of scenario model runs, using the SMTC Version 6.0 travel model, to assist ongoing analysis for the proposed Micron facility in Clay, NY.

The latest runs examine network "Scenario C", a set of roadway projects proposed to mitigate traffic linked to the Micron facility. Figure 1 illustrates the significant roadway projects included in Scenario C. These roadway projects are in addition to the roadway projects included in the 2040 No Build scenario (as discussed in the December 10, 2023, memorandum for Scenario A).

Scenario C includes a new interchange at I-81 and Sneller Road, as well as an extra lane in each direction along Route 11. The actual Scenario C proposal also includes a diverging diamond interchange (DDI) at I-81 and Route 31; however, the model runs for Scenario C include a single-point urban interchange (SPUI) at the I-81 and Route 31 interchange (the same as in Scenario A) since it was felt that coding the DDI into the SMTC regional model would not result in an important difference, relative to the SPUI. The model runs for Scenario C also include a connection from Pasubio Terrace to Lakeshore Road that is not proposed. This connection provides a link between Lakeshore and Pardee that otherwise would be provided by Carmenica Drive, which is not included in the SMTC model. A signalized intersection was coded for the Micron driveway to US-11, but not for the other access points, which is analogous to the coding for Scenario A.

FIGURE 1: SCENARIO C NETWORK PROJECTS



Two versions of Scenario C were created:

1. "SC1" – This scenario is analogous to the "CCs Equal" version of Scenario A, where the all the Micron centroid connectors have the same travel time.
2. "SC2" – This scenario includes the changes from the "SC1" version and assumes the node capacity at the SR-31 SPUI decreases from 6600 to 4400 and the (midpoint) link capacity of the I-81 NB to SR-31 WB ramp decreases from 1500 to 400 vehicles per lane. (Note: the SMTC model employs static assignment where volume can exceed capacity. If volume exceeds capacity, the travel time keeps increasing and the route becomes less and less attractive.)

Summary of Results

Micron select link analyses were performed to help examine the results. Figure 2 and Figure 3 show the select link results for SC1 and Figure 4 and Figure 5 show the results for SC2. Key observations include:

- Demand from the north uses the new interchange at I-81 and Sneller.
- Demand from the south heavily uses the I-81 and SR-31 interchange. In SC2, which includes reduced capacity at the SPUI, some vehicles are diverted towards Caughenoy, Stearns, and US-11.
- The centroid connector along US-11 (connector 6) is significantly used by demand from the south and north.
- Demand from the west heavily uses SR-31.

FIGURE 2: SC1 AM SELECT LINK

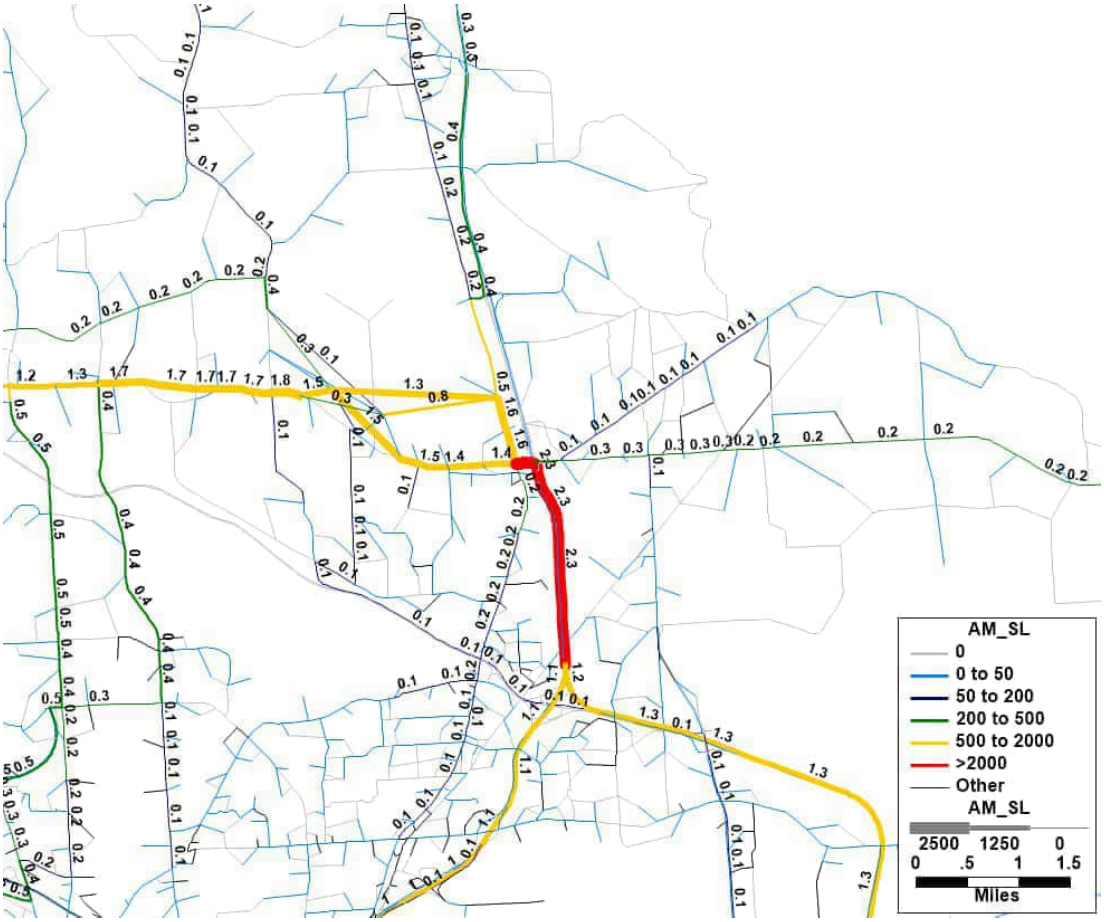


FIGURE 3: SC1 AM SELECT LINK ZOOMED

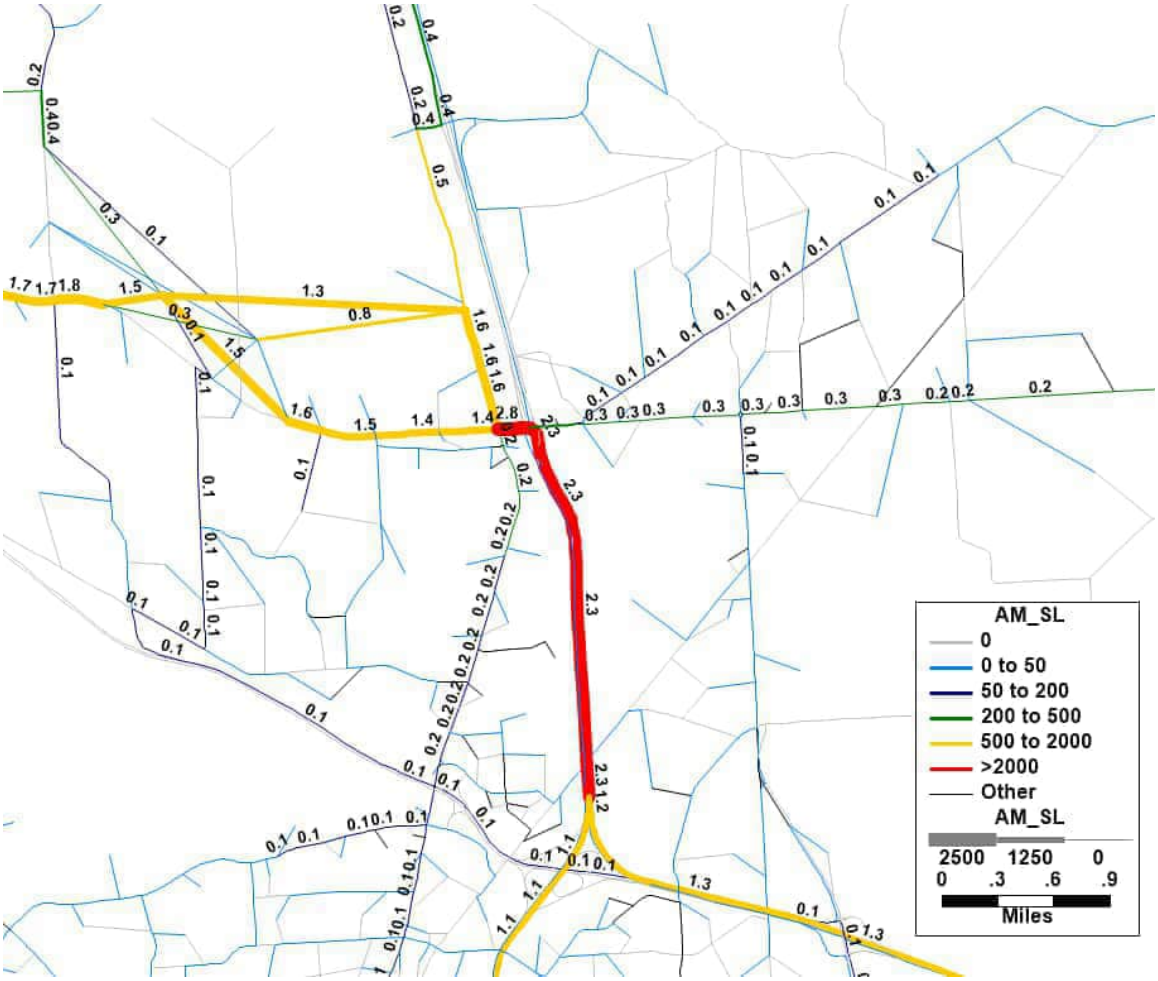


FIGURE 4: SC2 AM SELECT LINK

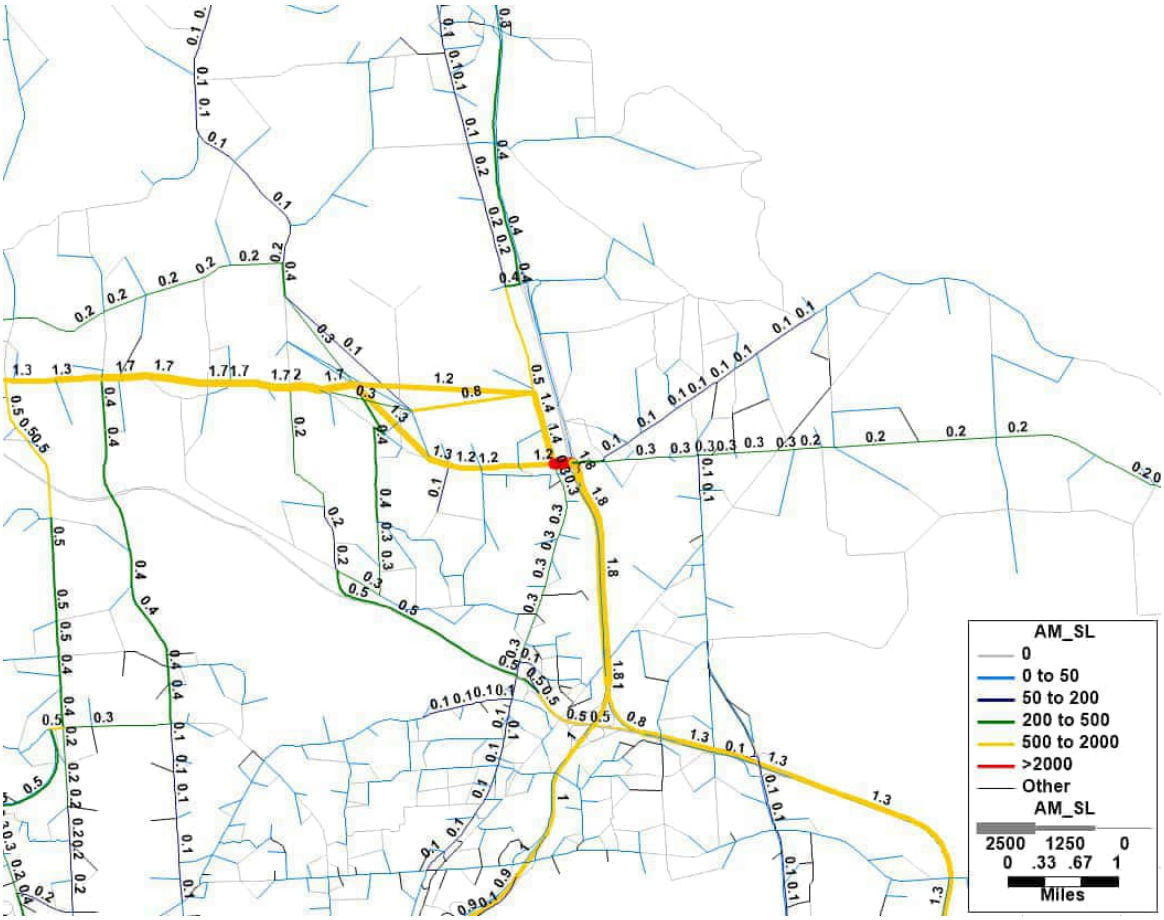


FIGURE 5: SC2 AM SELECT LINK ZOOMED



Analysis Outputs

The following output files are provided for the 2040 scenario runs:

- AM peak hour assigned link flows (*flowTable7.bin*)
- PM peak hour assigned link flows (*flowTable17.bin*)
- Loaded Model Network with select link flows (*NetworkOut.dbd*)
- Select Link Matrix

An assignment matrix (“hourAutoTrips.mtx”) is also included for the “SC1” scenario. This assignment matrix should be nearly identical to the ones used in the other scenarios, and it can be used for general analysis of Scenario C.

MEMO

TO:	Jason Deshaies
FROM:	Stephen Tuttle; Colin Smith
DATE:	January 3, 2024
SUBJECT:	SMTC Travel Demand Modeling for Micron Scenario A

On behalf of the Syracuse Metropolitan Transportation Council (SMTC), RSG has conducted a series of scenario model runs, using the SMTC Version 6.0 travel model, to assist ongoing analysis for the proposed Micron facility in Clay, NY.

The latest model runs examine changes to the original Scenario A runs. Three scenarios were created:

1. "481Conn 50MPH" – This scenario includes a correction to the free flow speed of the proposed SR-481 to SR-31 connector. The speed between the roundabout and the Micron connector (access point 2) is now coded as 50 MPH.
2. "CCs Equal" – This scenario includes the changes in "481Conn 50MPH" and assumes the Micron centroid connectors (CCs) have equal travel times. This means vehicles will enter the Micron facility as quickly as possible, and will not consider the length of centroid connectors. Previously, vehicles had to drive along the centroid connectors at 15MPH to reach designated parking lots.
3. "SPUI LowCap" – This scenario includes the changes from the "CCs Equal" and "481Conn 50MPH" scenarios and assumes the node capacity at the SR-31 SPUI decreases from 6600 to 4400 and the (midpoint) link capacity of the I-81 NB to SR-31 WB ramp decreases from 1500 to 400 vehicles per lane. (Note: the SMTC model employs static assignment where volume can exceed capacity. If volume exceeds capacity, the travel time keeps increasing and the route becomes less and less attractive.)

Summary of Results

AM flows were tabulated for a series of analysis links. The analysis links include all of the centroid connectors for the west and east zones as well as key routes that may be used for AM northbound travel to the Micron facility.

FIGURE 1: ANALYSIS LINKS

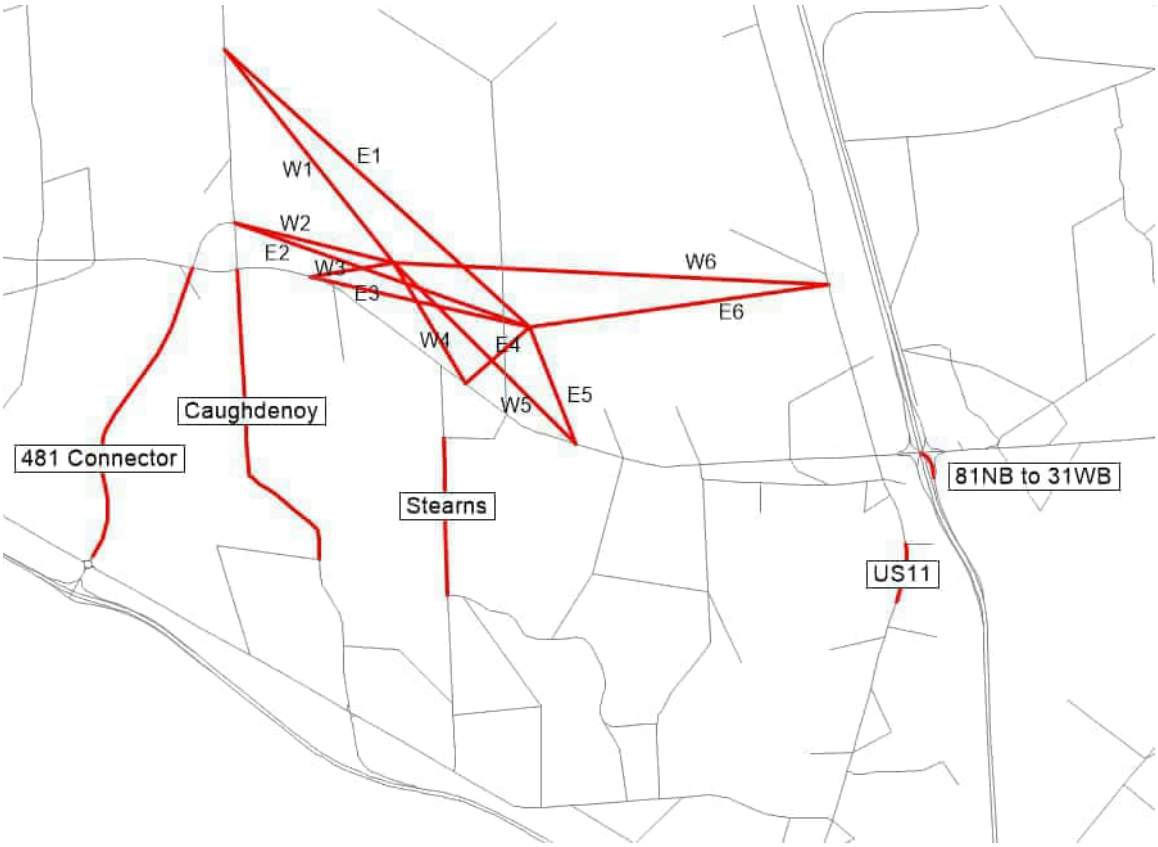


Figure 2 shows AM flows along the analysis links for the three scenarios and the original "SA15" scenario, which is the baseline scenario. Key observations include:

- Caughenoy, Stearns, and US-11 are all used as access routes. In other words, not all the traffic diverted away from the I-81/SR-31 interchange goes to the new 481 connector.
- The speed increase to 50 MPH on the 481 connector induces some traffic, but the overall flow on this link is similar to before.
- The equal travel time assumption for Micron centroid connectors makes access points 3 and 4 much less attractive and access points 1, 2, 5, and 6 more attractive.
- The SPUI capacity decrease resulted in about 400 vehicles being diverted away from the I-81/SR-31 interchange. The SPUI LowCap scenario added about a minute of new delay at the SPUI (in addition to diverting 400 vehicles).

FIGURE 2: AM FLOWS ON ANALYSIS LINKS

Link	SA15	481Conn 50mph	CCs Equal	SPUI LowCap
481 Connector	559	744	592	585
Caughdenoy	761	734	354	457
Stearns	606	562	327	512
US11	993	963	1,060	1,083
81NB to 31WB	1,619	1,580	2,313	1,914
W1	0	0	186	198
W2	166	232	966	1,077
W3	4,675	4,609	781	813
W4	0	0	260	449
W5	0	0	1,796	1,515
W6	9	9	862	798
E1	0	0	33	33
E2	28	109	90	97
E3	2	2	236	230
E4	1,119	1,039	11	7
E5	0	0	16	20
E6	25	24	788	788

Analysis Outputs

The following output files are provided for the 2040 scenario runs:

- AM peak hour assigned link flows (*flowTable7.bin*)
- PM peak hour assigned link flows (*flowTable17.bin*)
- Loaded Model Network (*NetworkOut.dbd*)

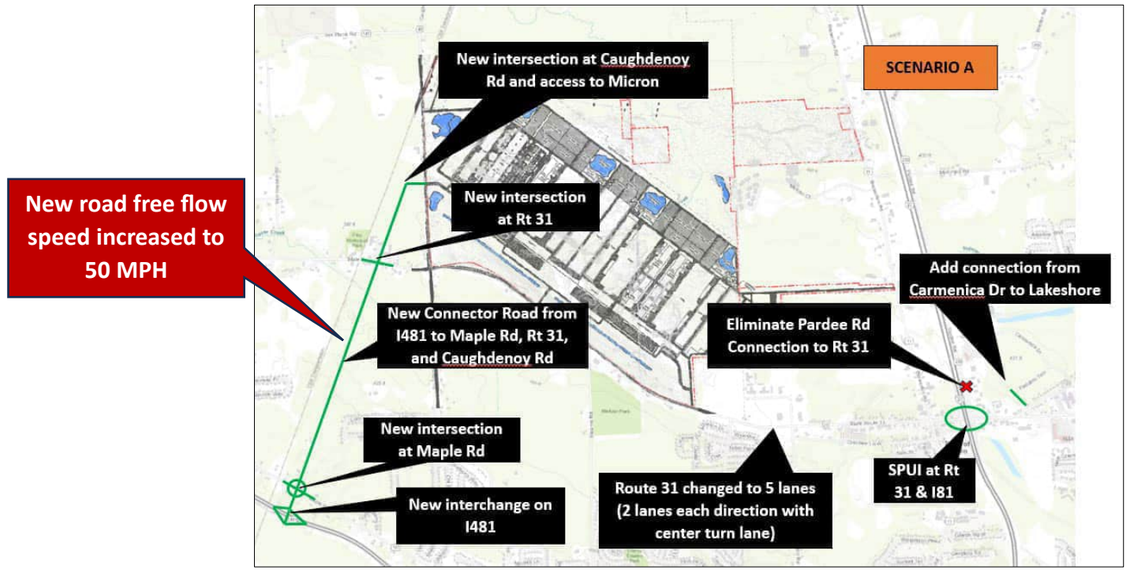
An assignment matrix ("hourAutoTrips.mtx") is also included for the "481Conn 50MPH" scenario. This assignment matrix should be nearly identical to the ones used in the other scenarios, and it can be used for general analysis of Scenario A.

SMTC Travel Demand Model Results: Scenario A v2 (15 MPH Micron TAZ Centroid Connectors and Increased New Road Free Flow Speed to 50 MPH) – AM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v2** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- No Build in this document refers to no Micron related road network changes
- RED callouts note the revisions made to Scenario A



The graphic to the right is an example of what is included in this document →

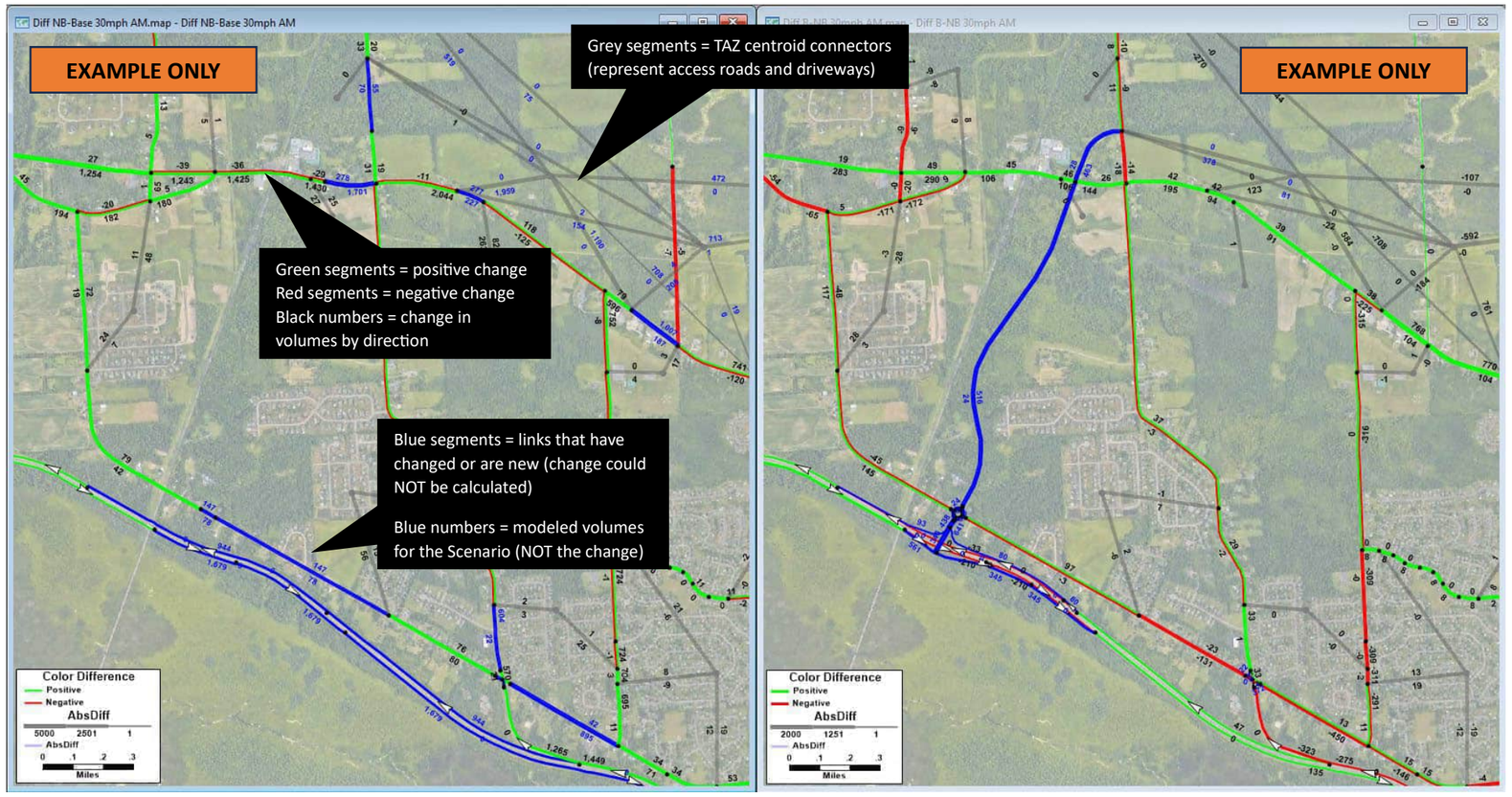
The map on the left displays the change in **AM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB AM Volumes less 2020 AM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **AM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build AM Volumes less 2040 NB AM volumes**).

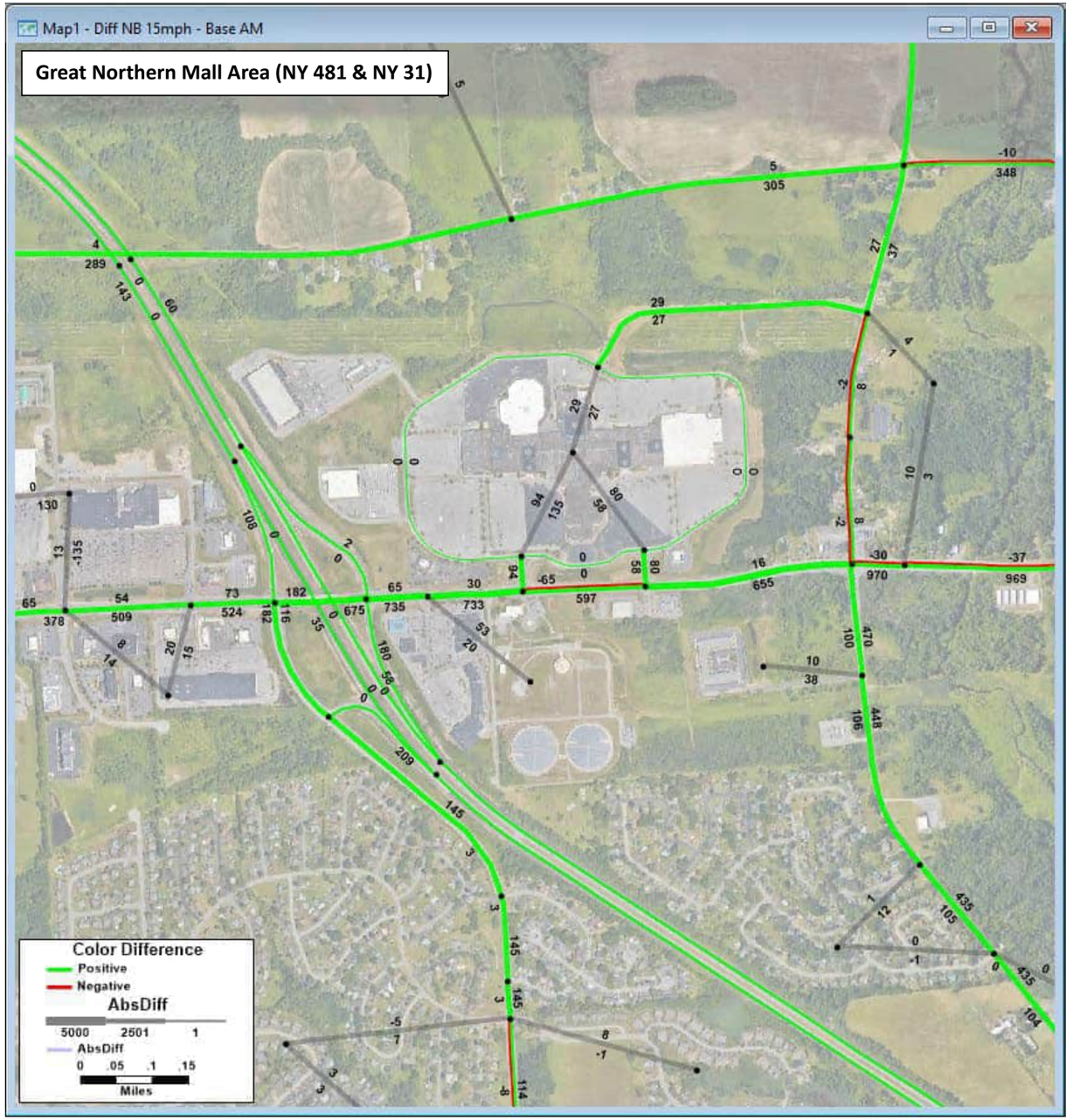
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

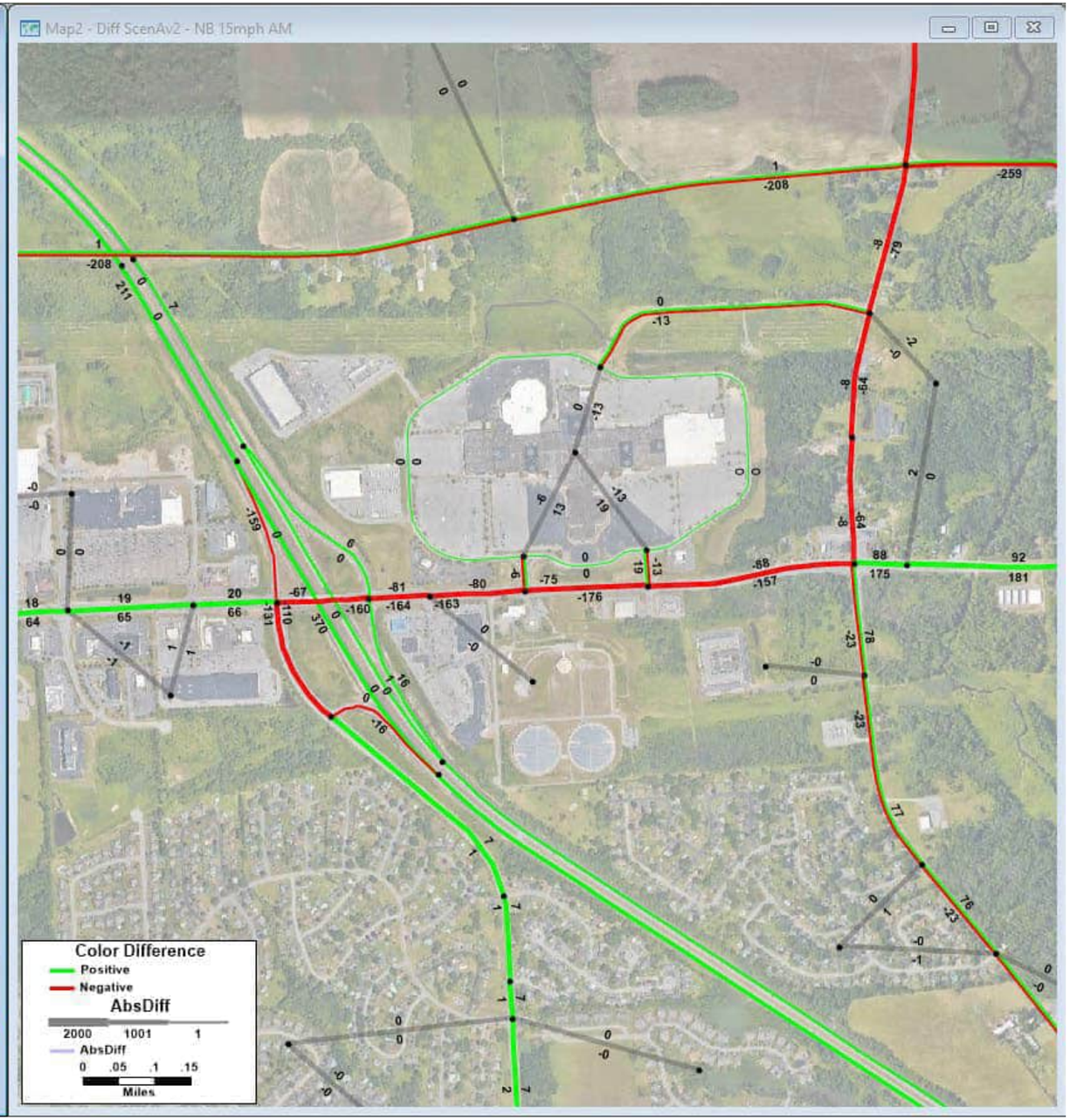
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

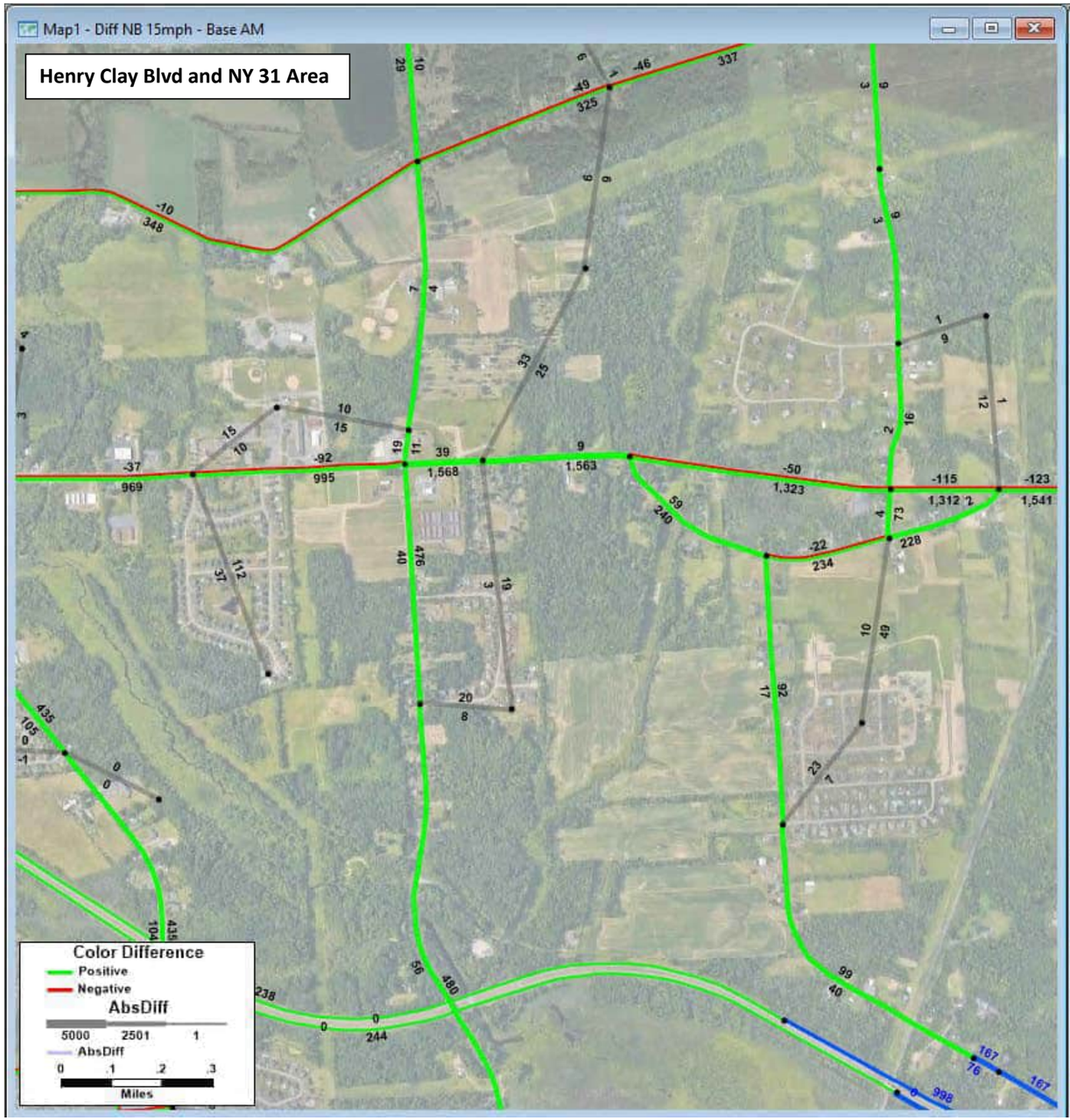


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

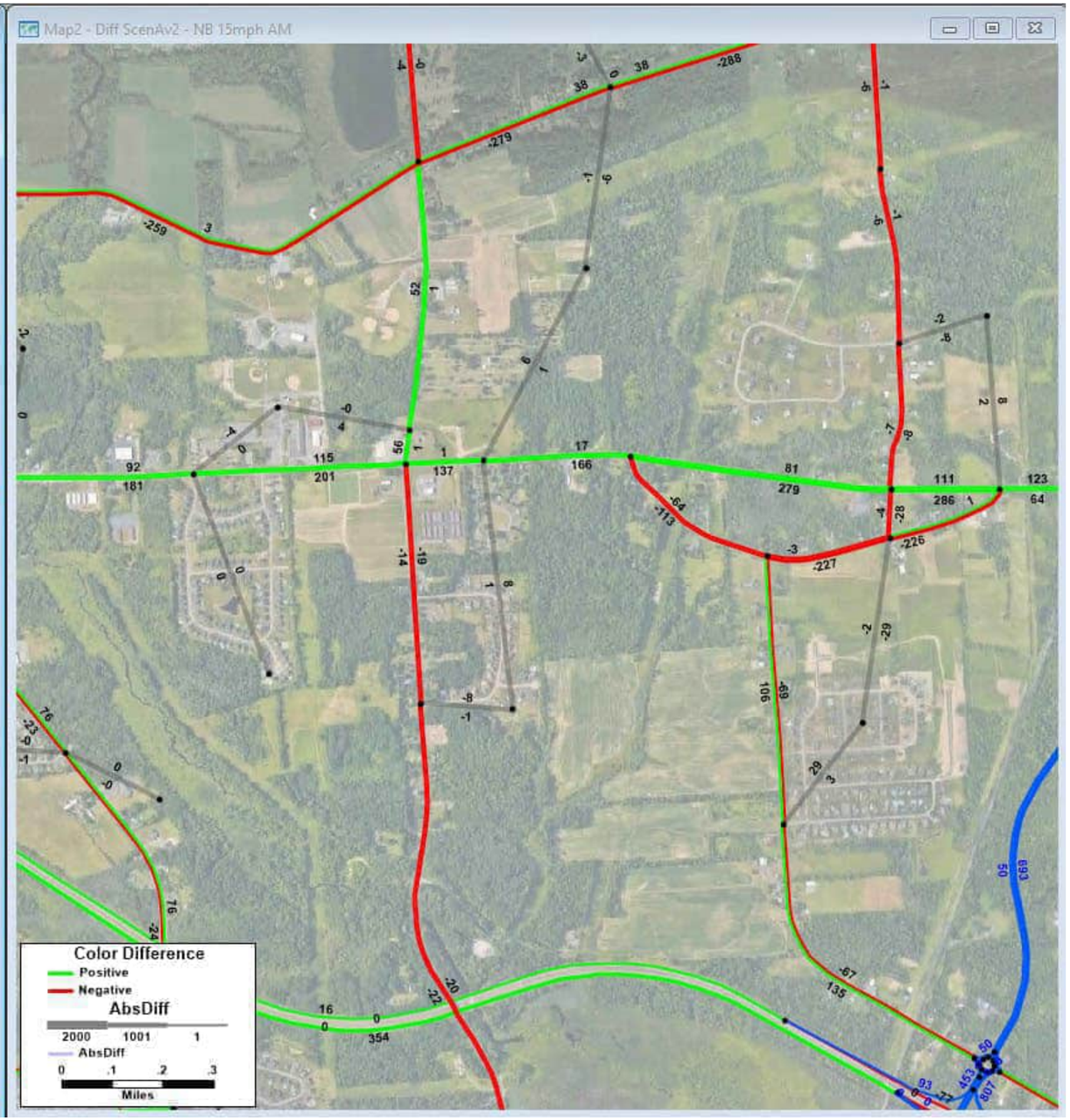


2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

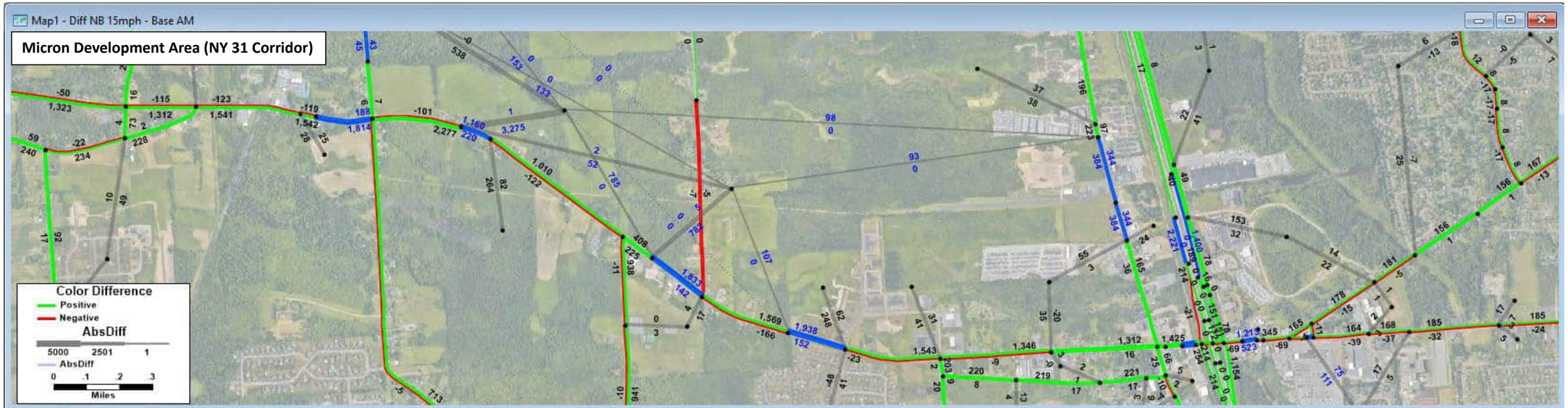


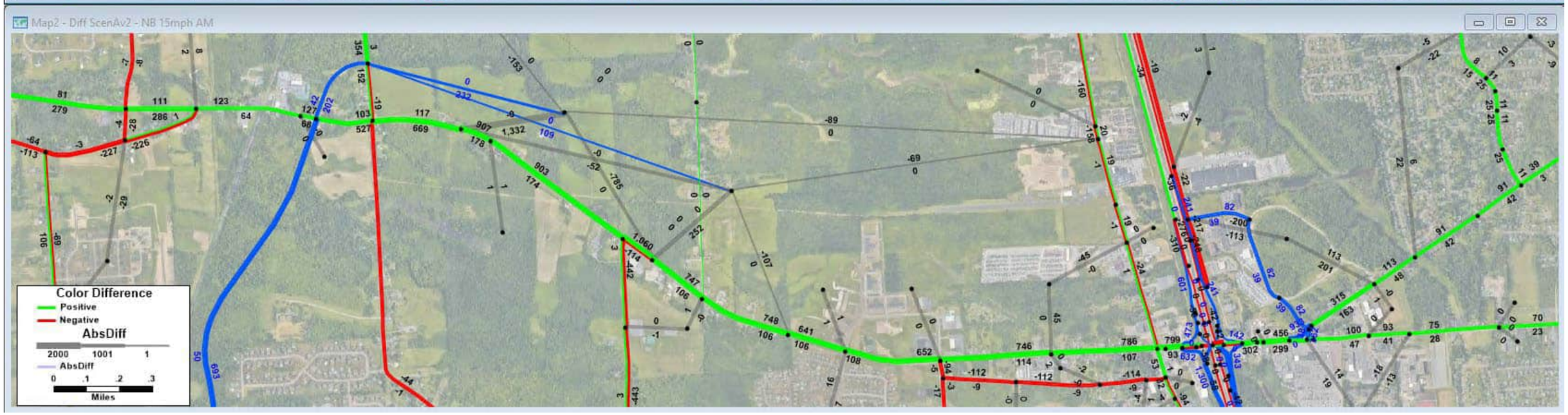
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
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Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

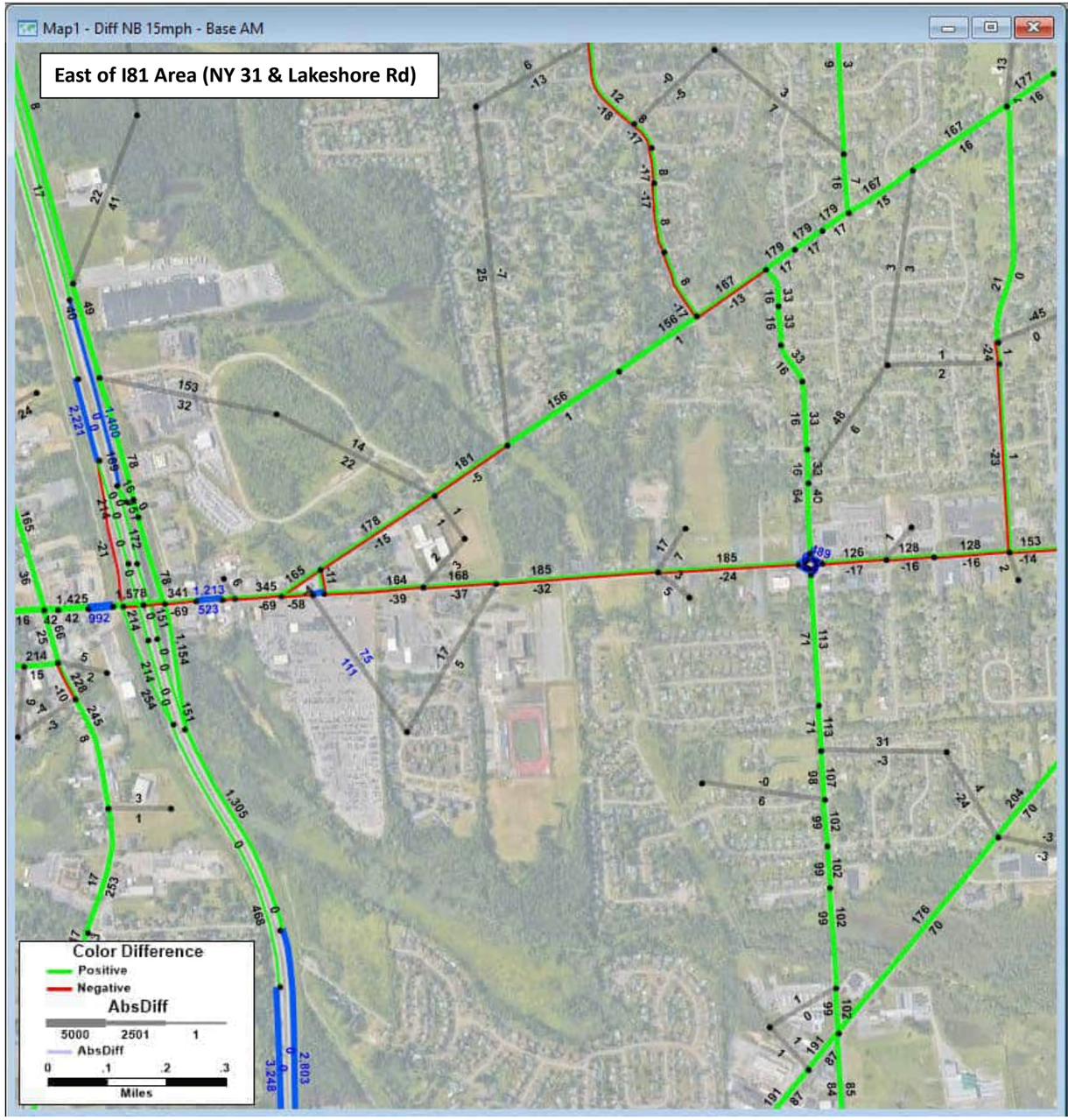


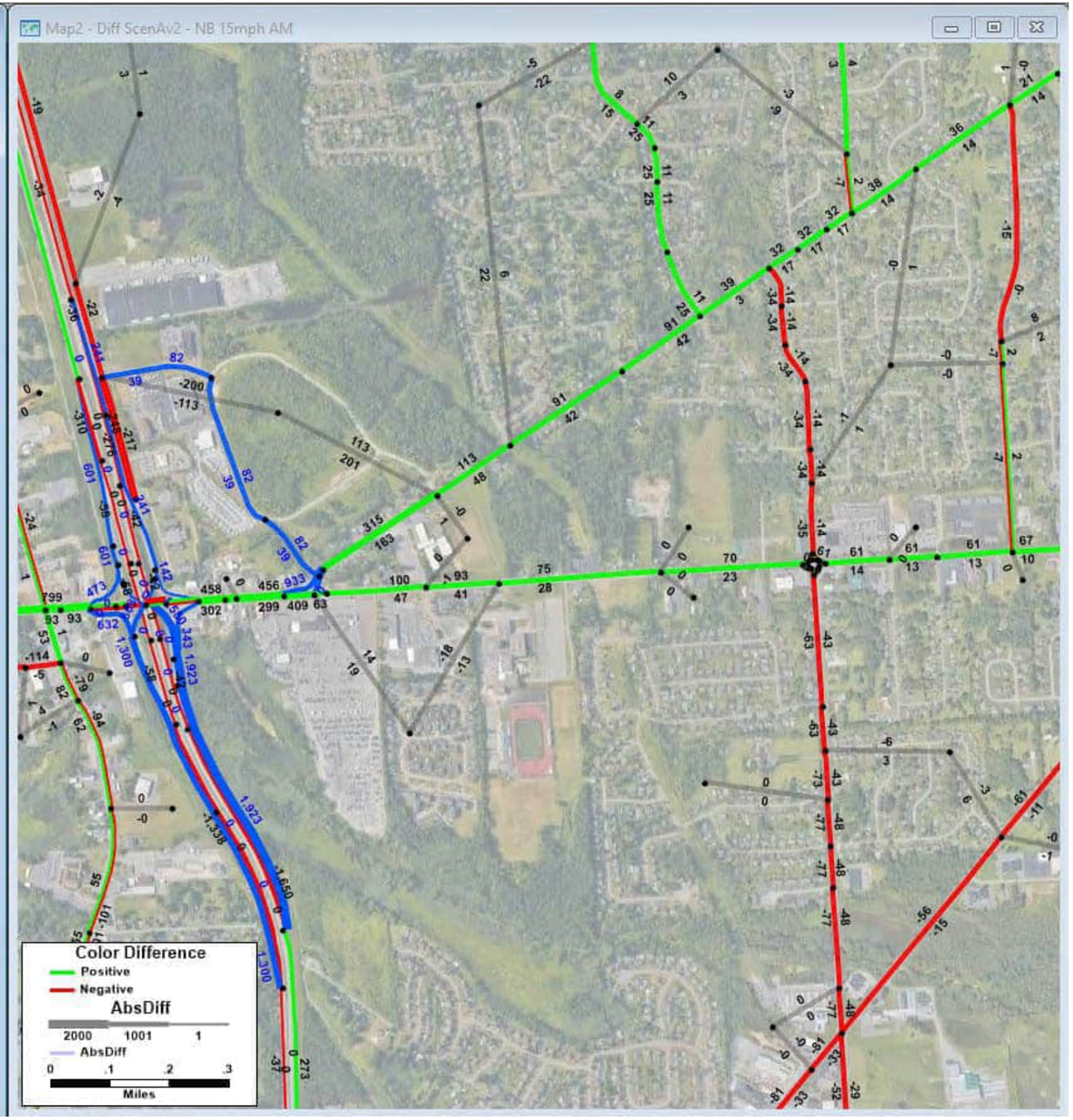


(TOP MAP) 2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

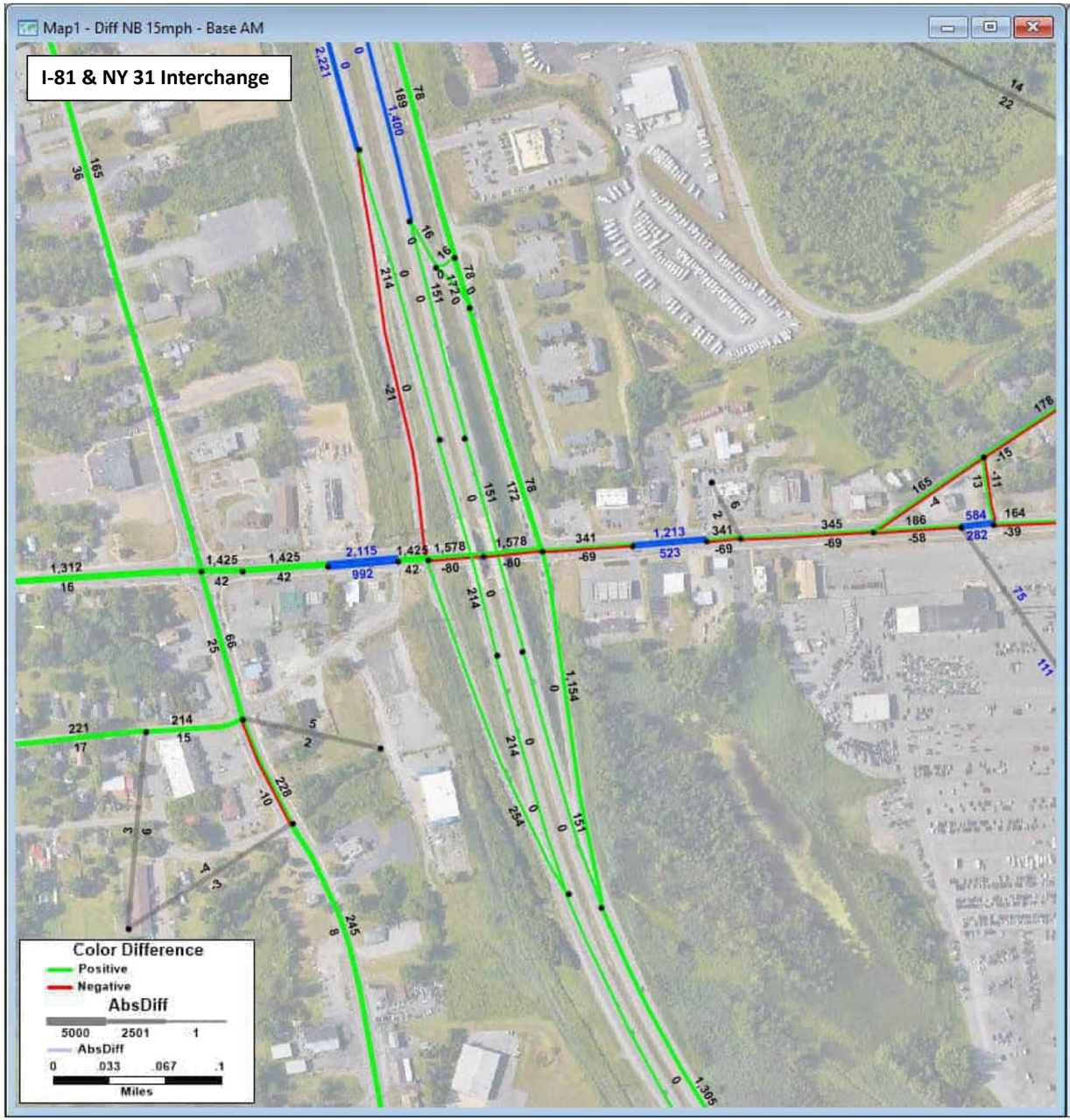


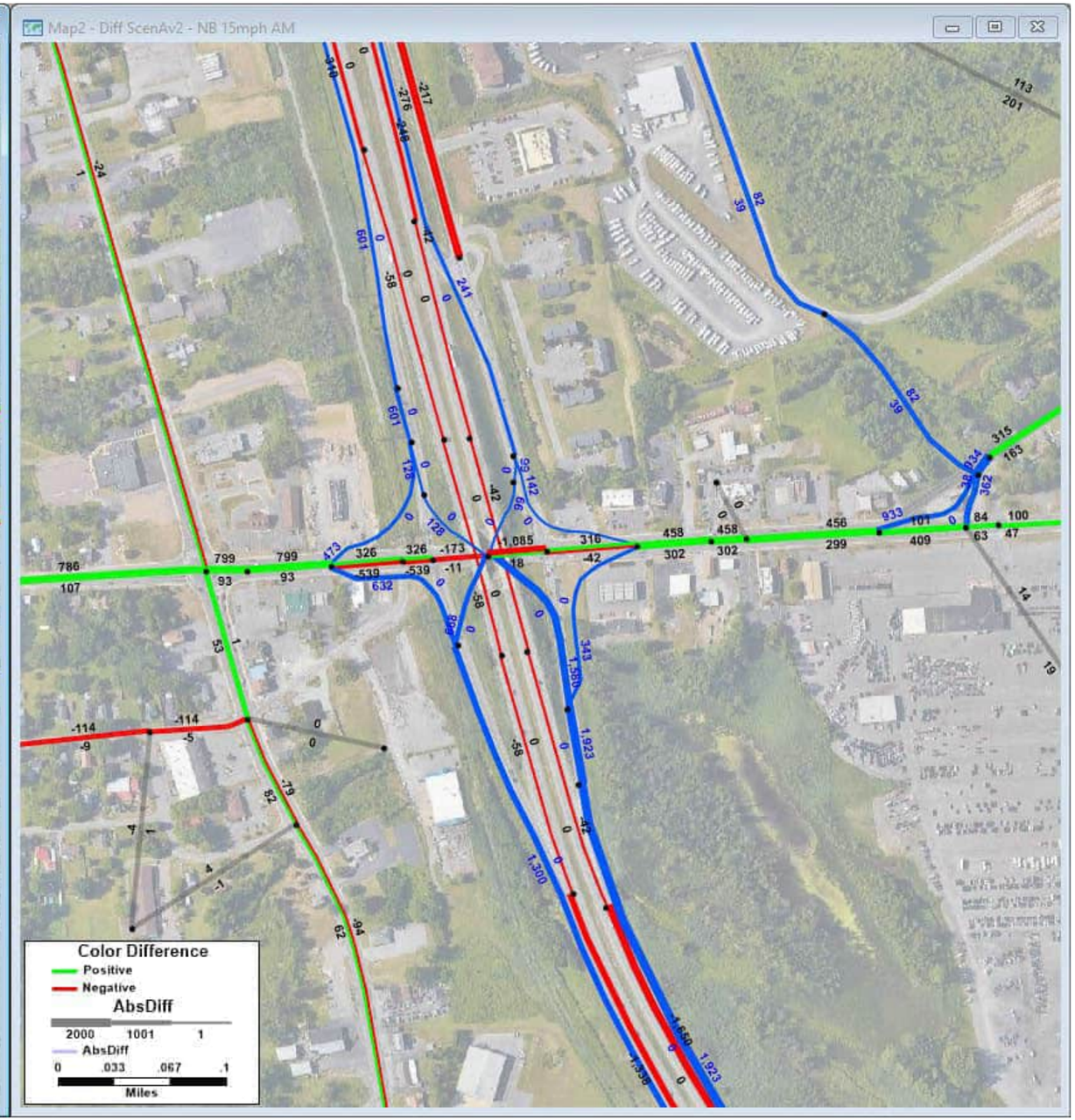


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

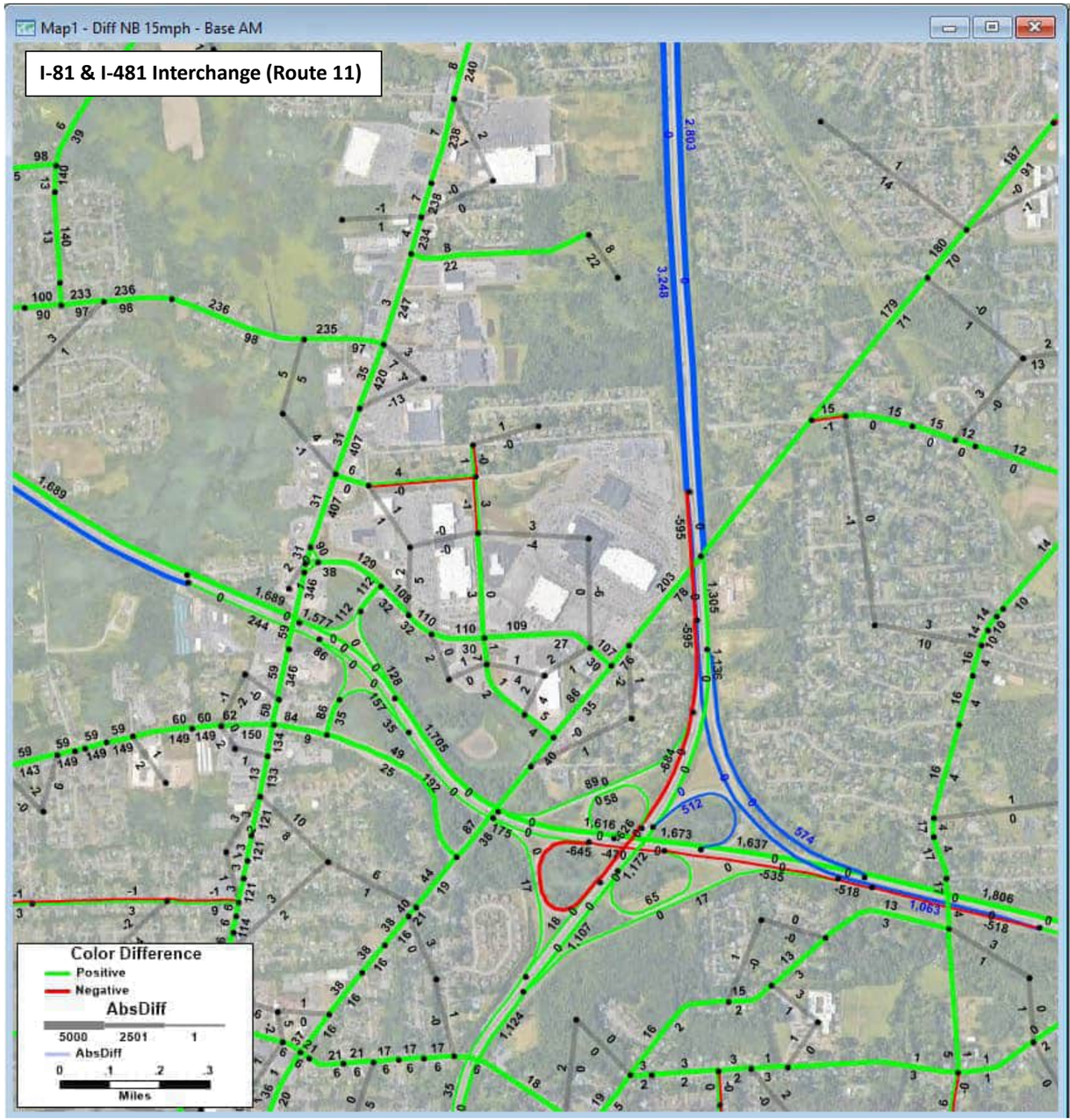




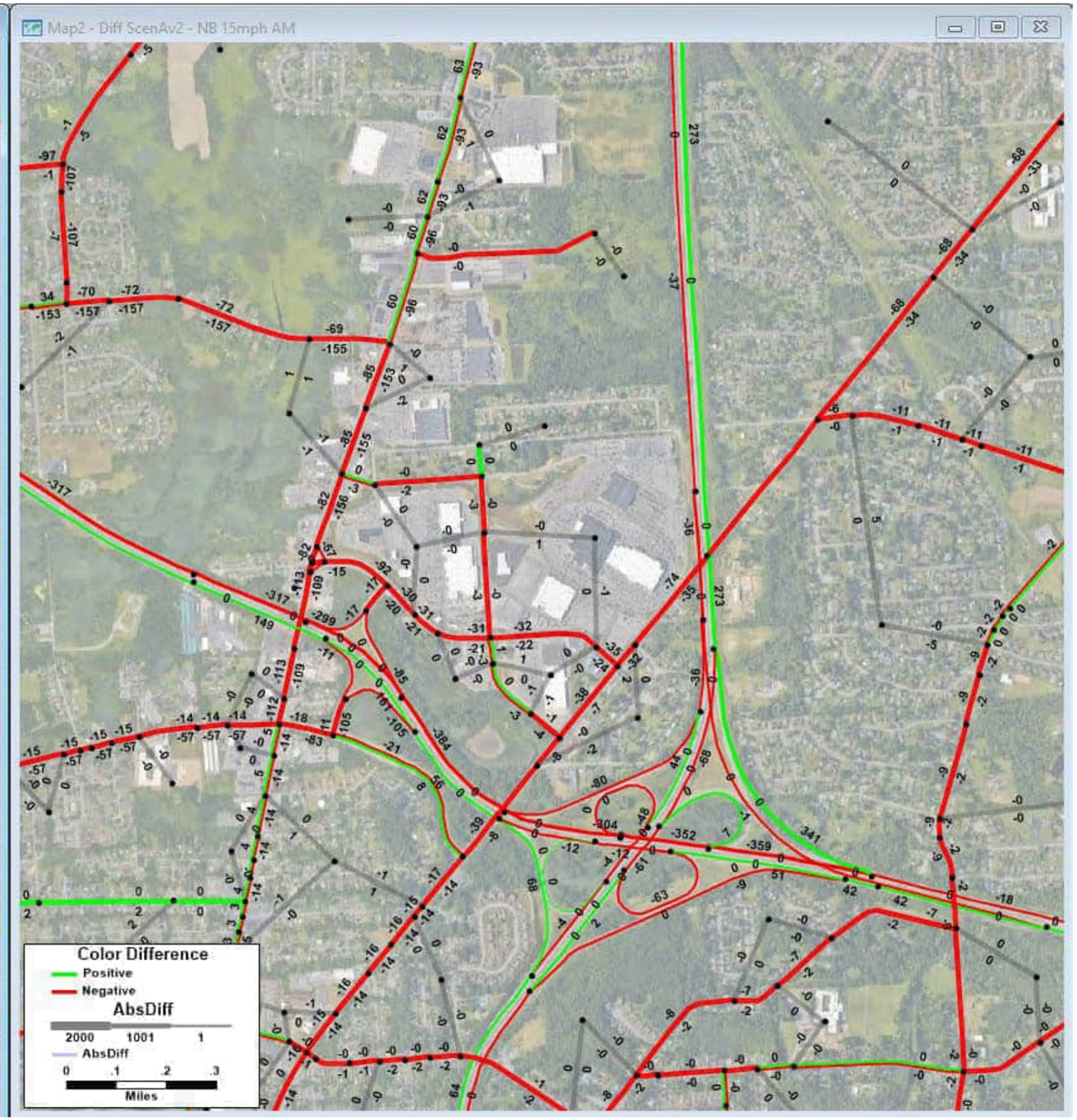
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

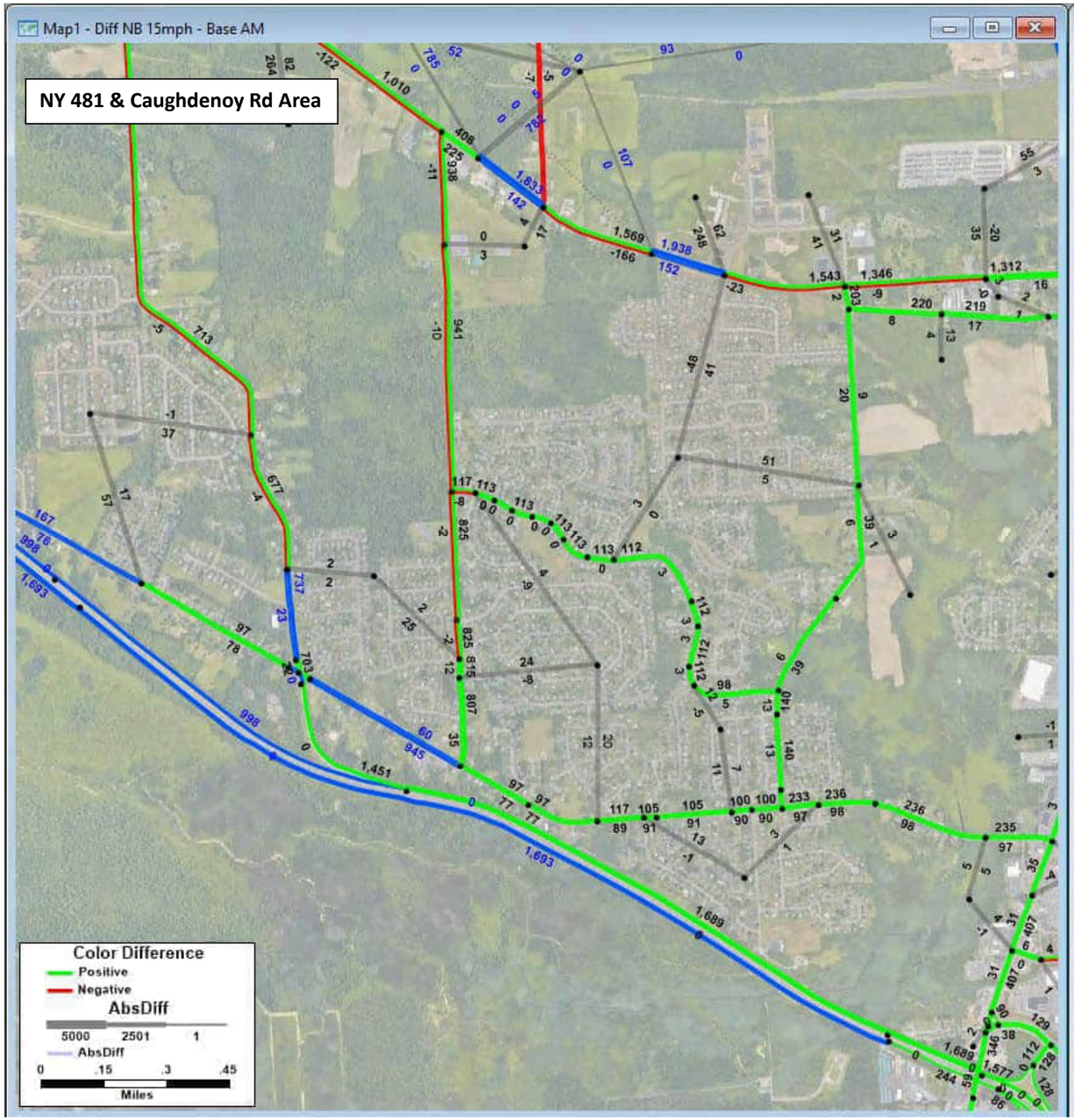


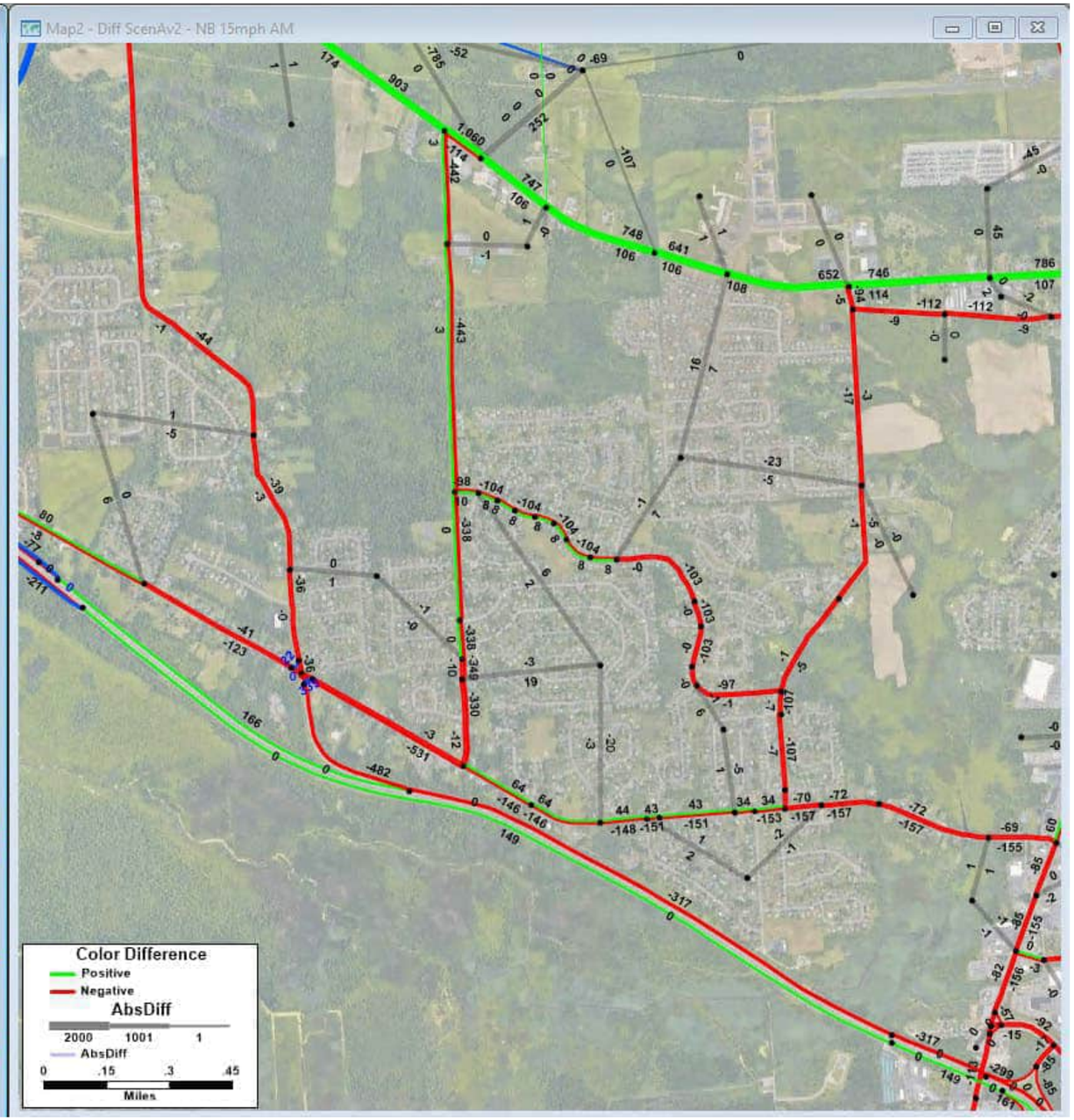
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

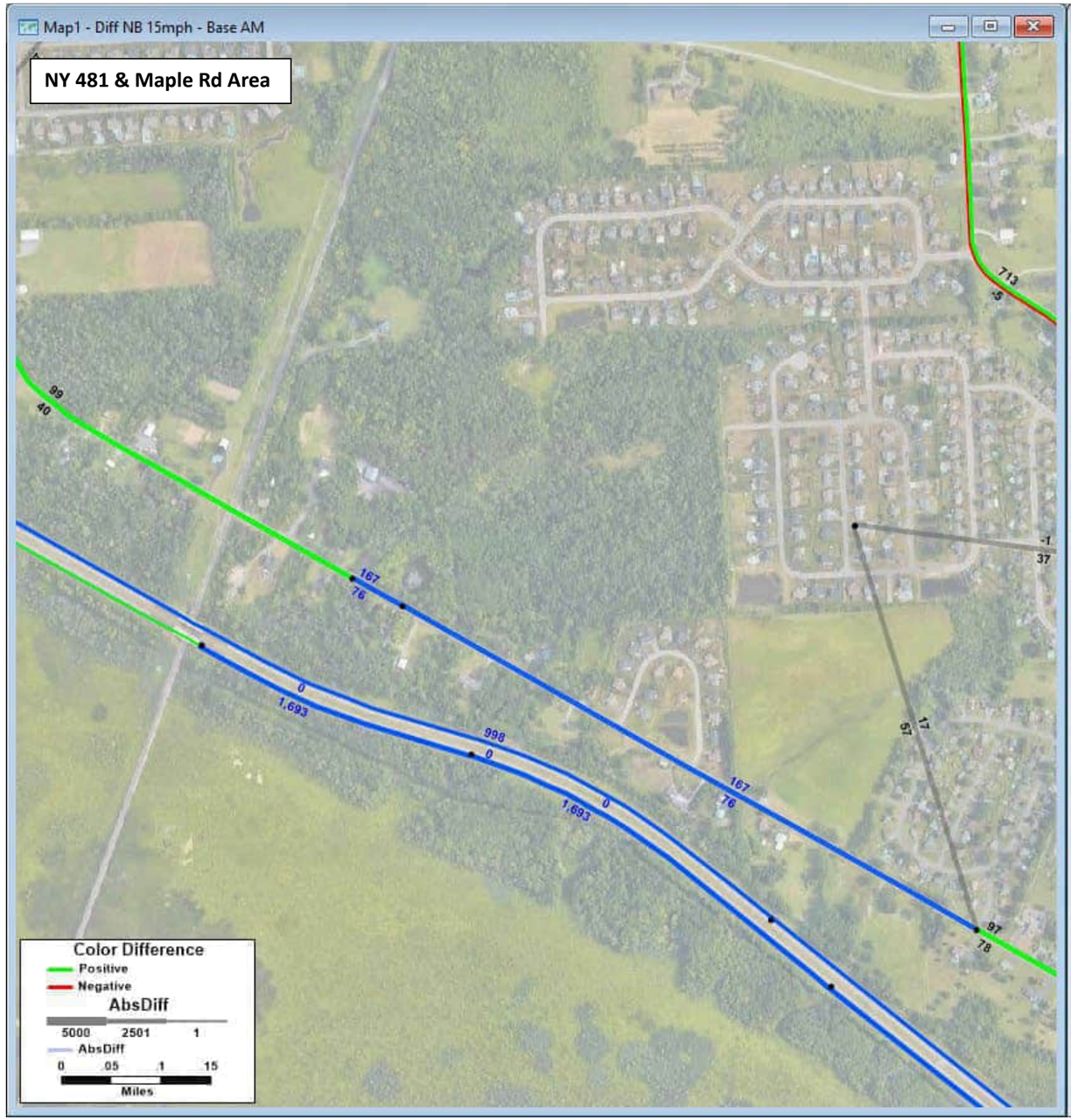




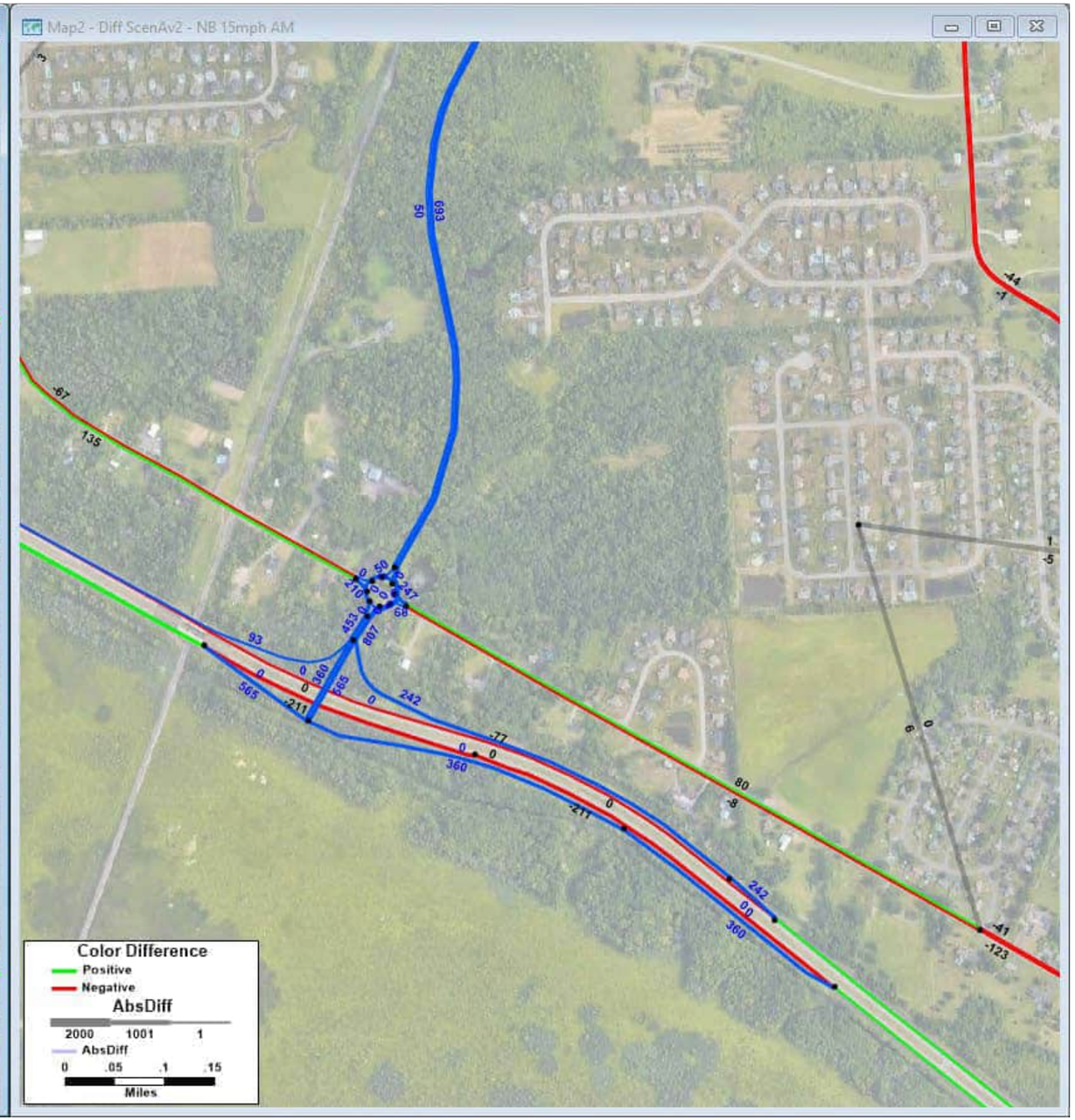
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

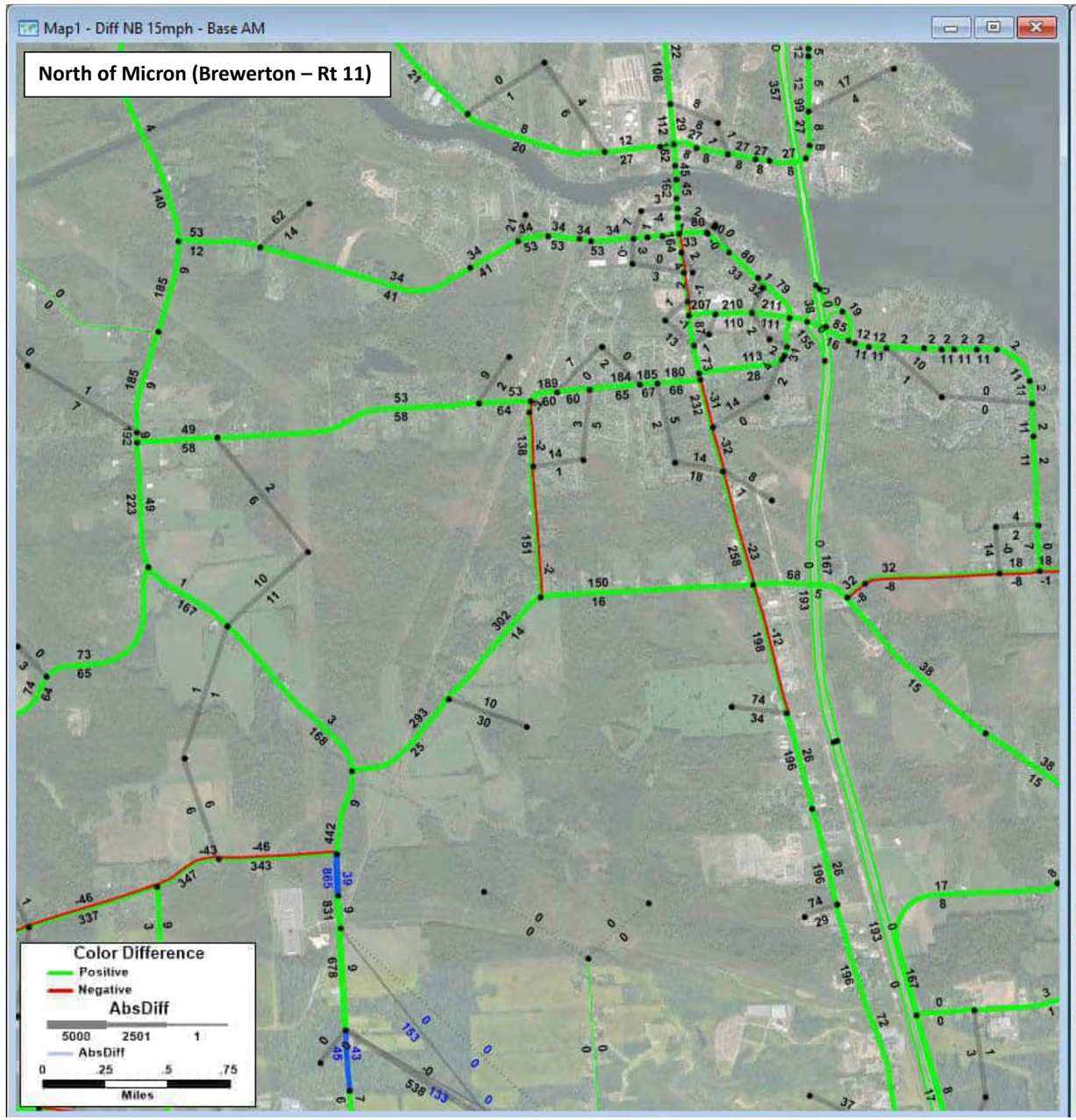


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
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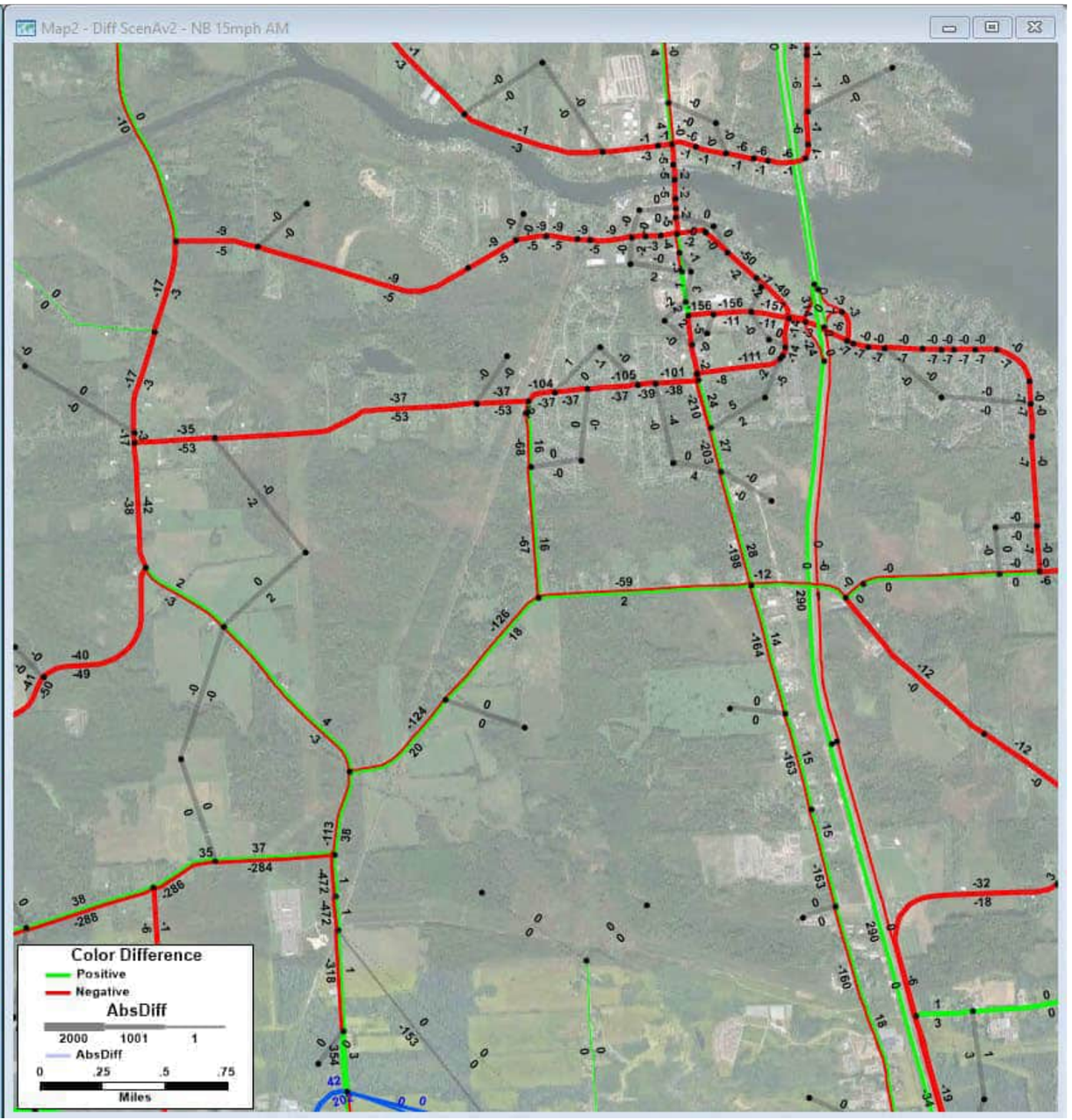


2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

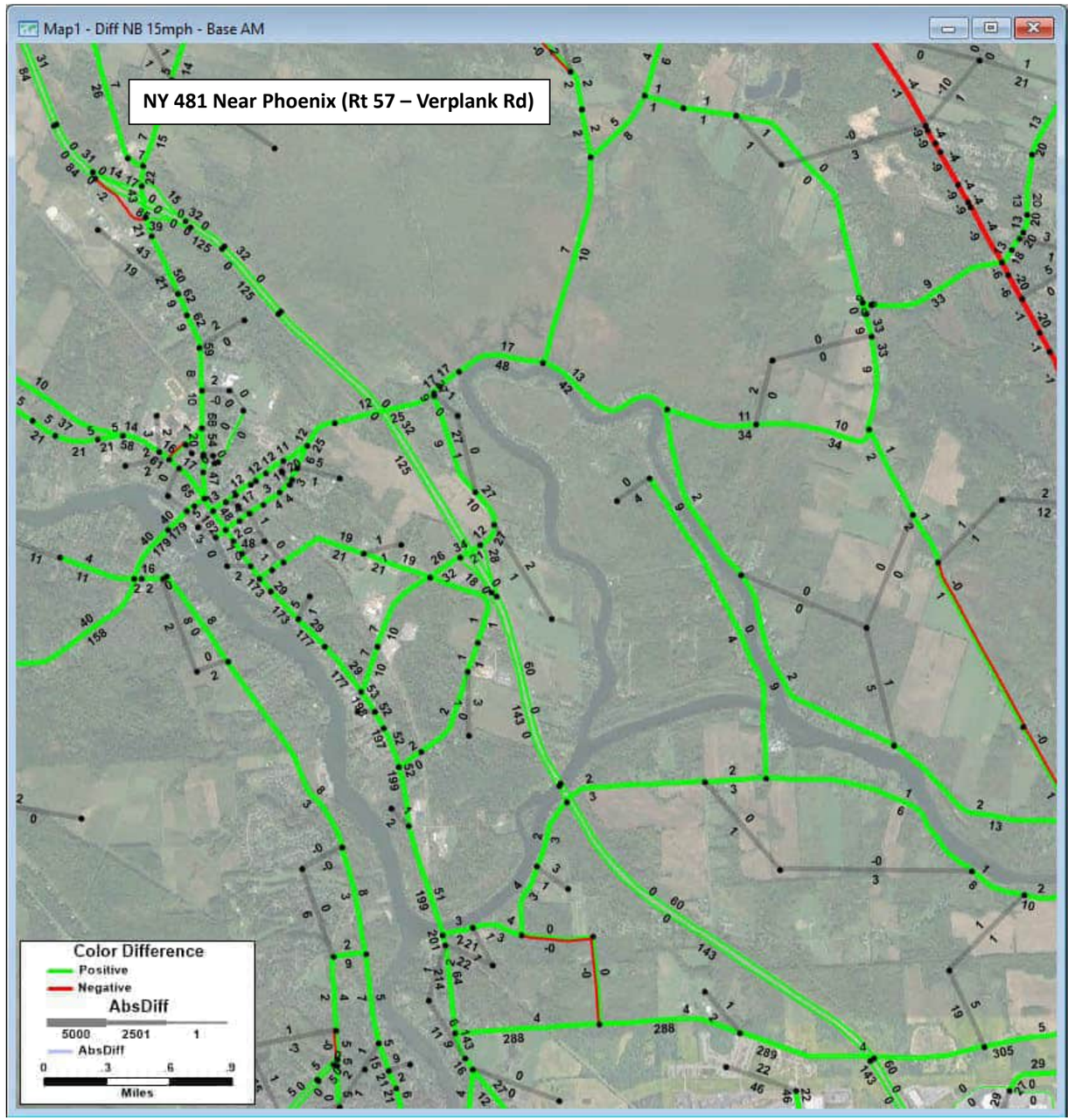


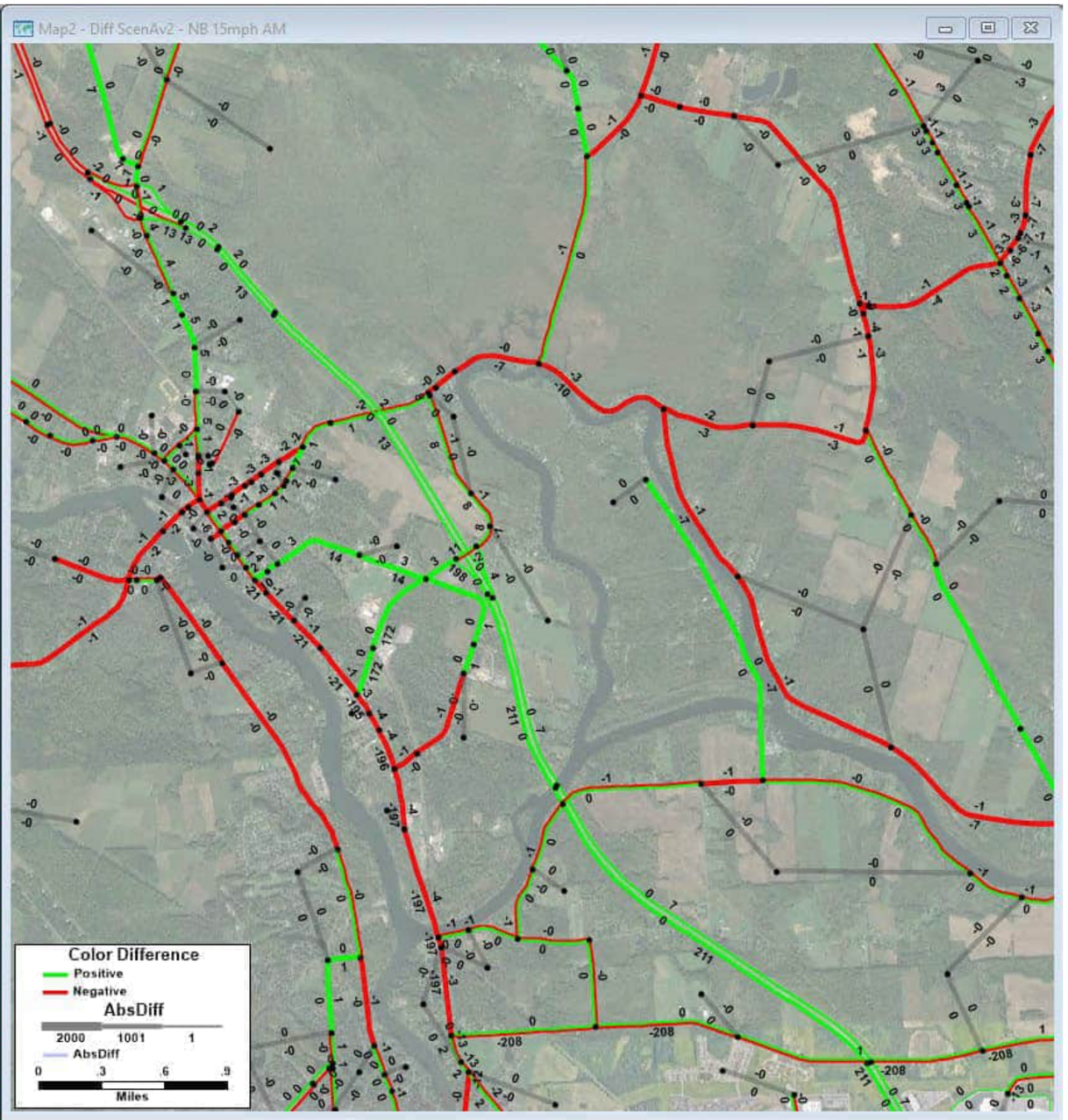
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2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

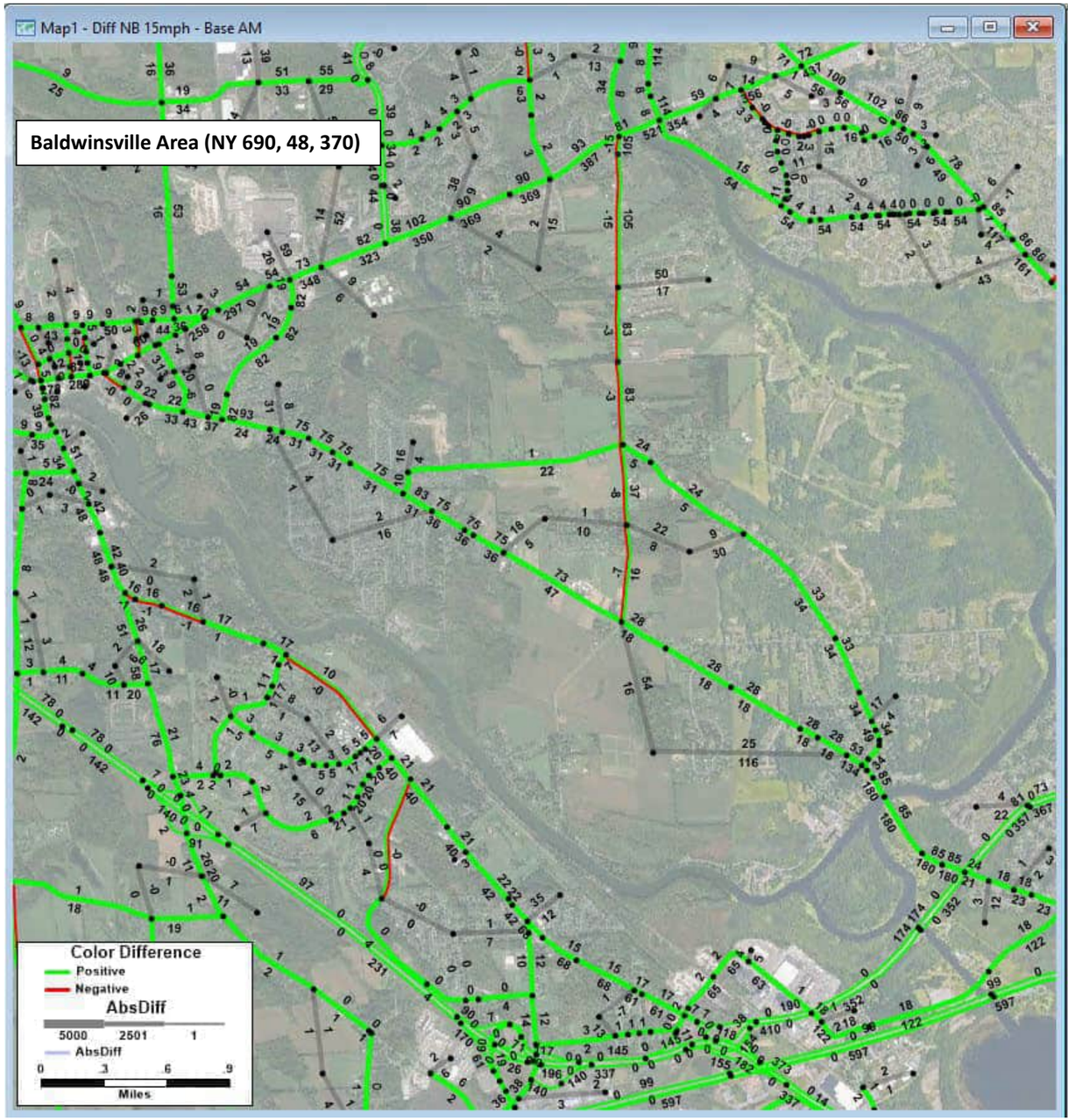




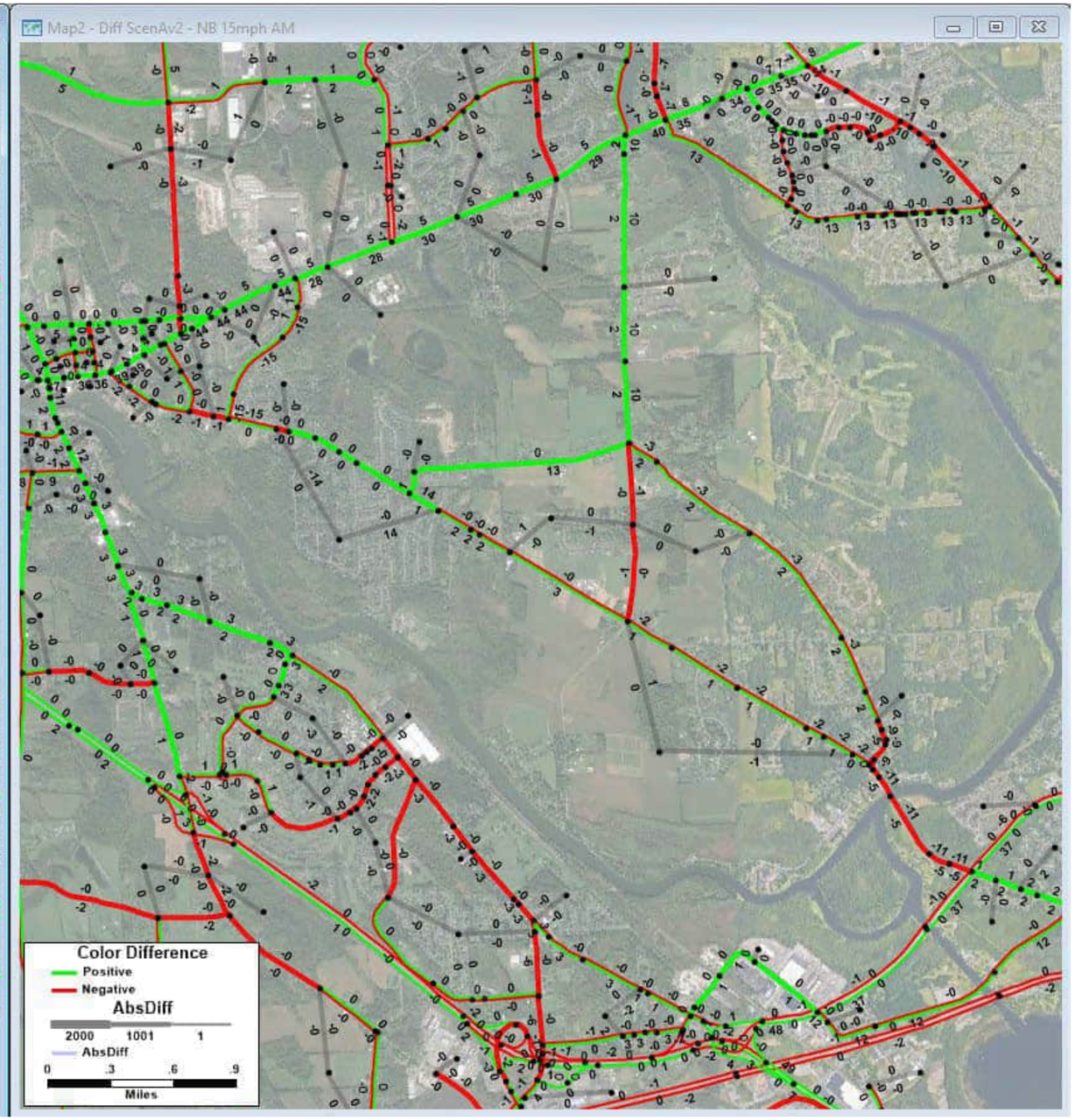
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
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2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

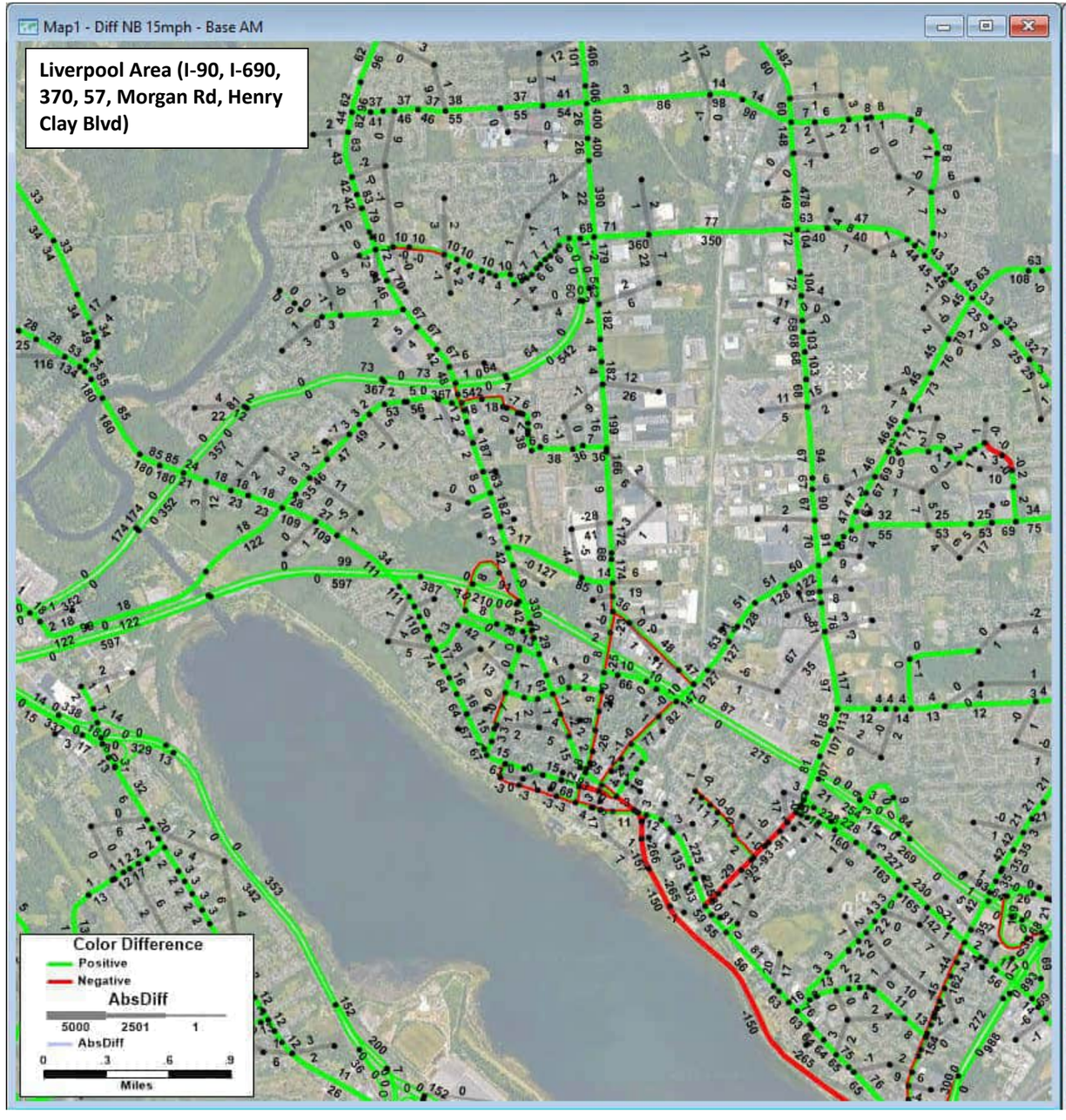


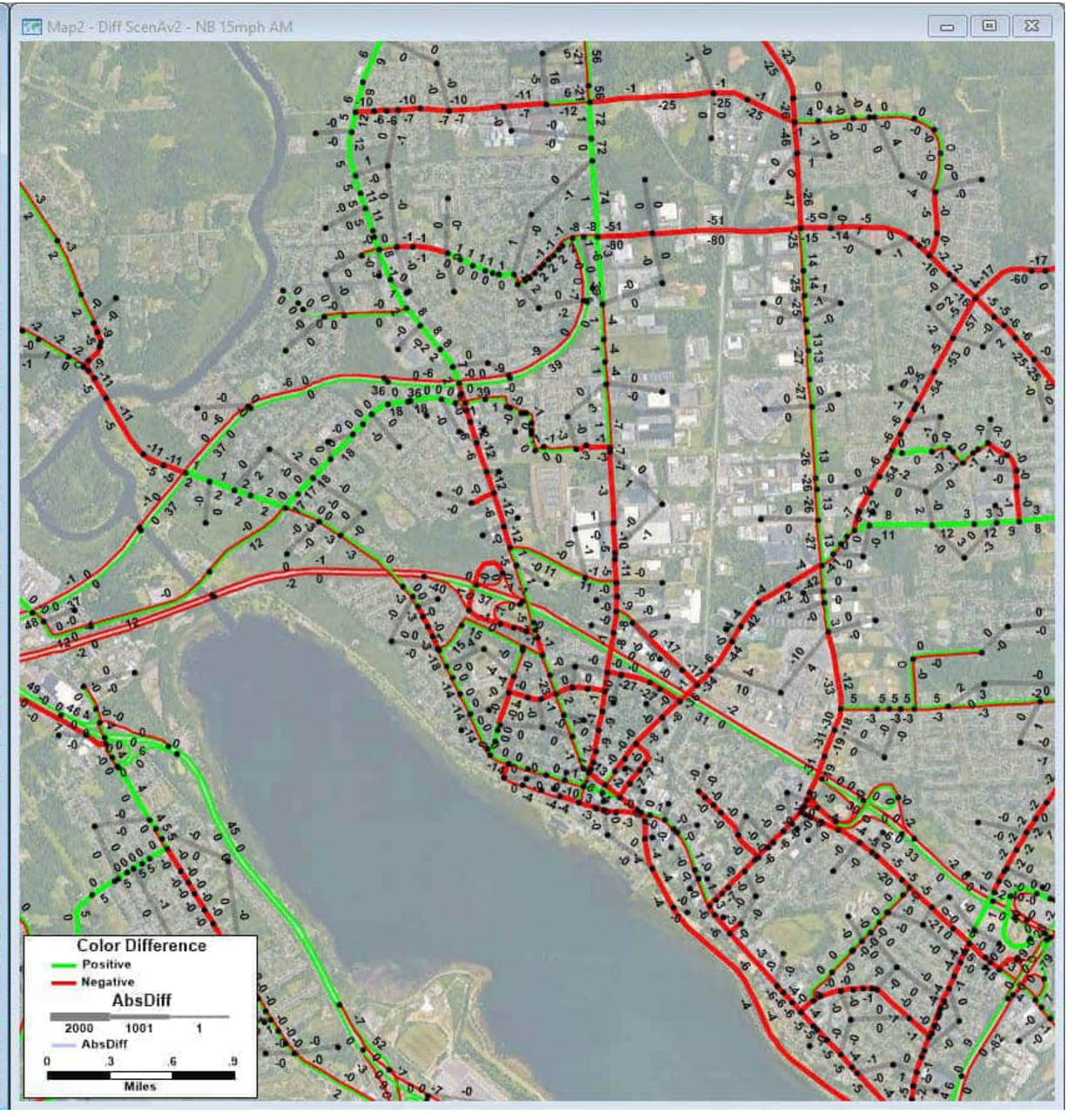
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

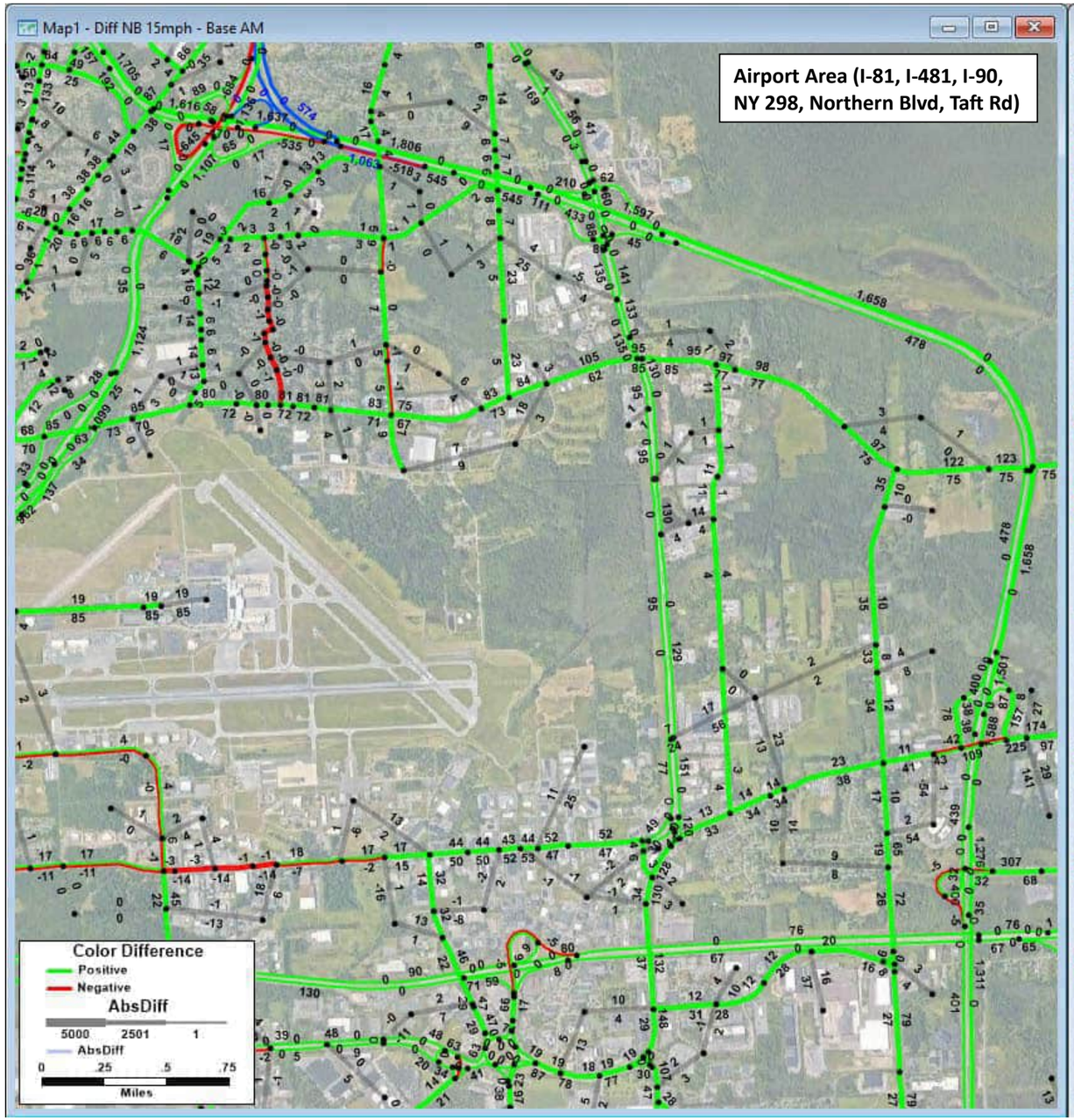




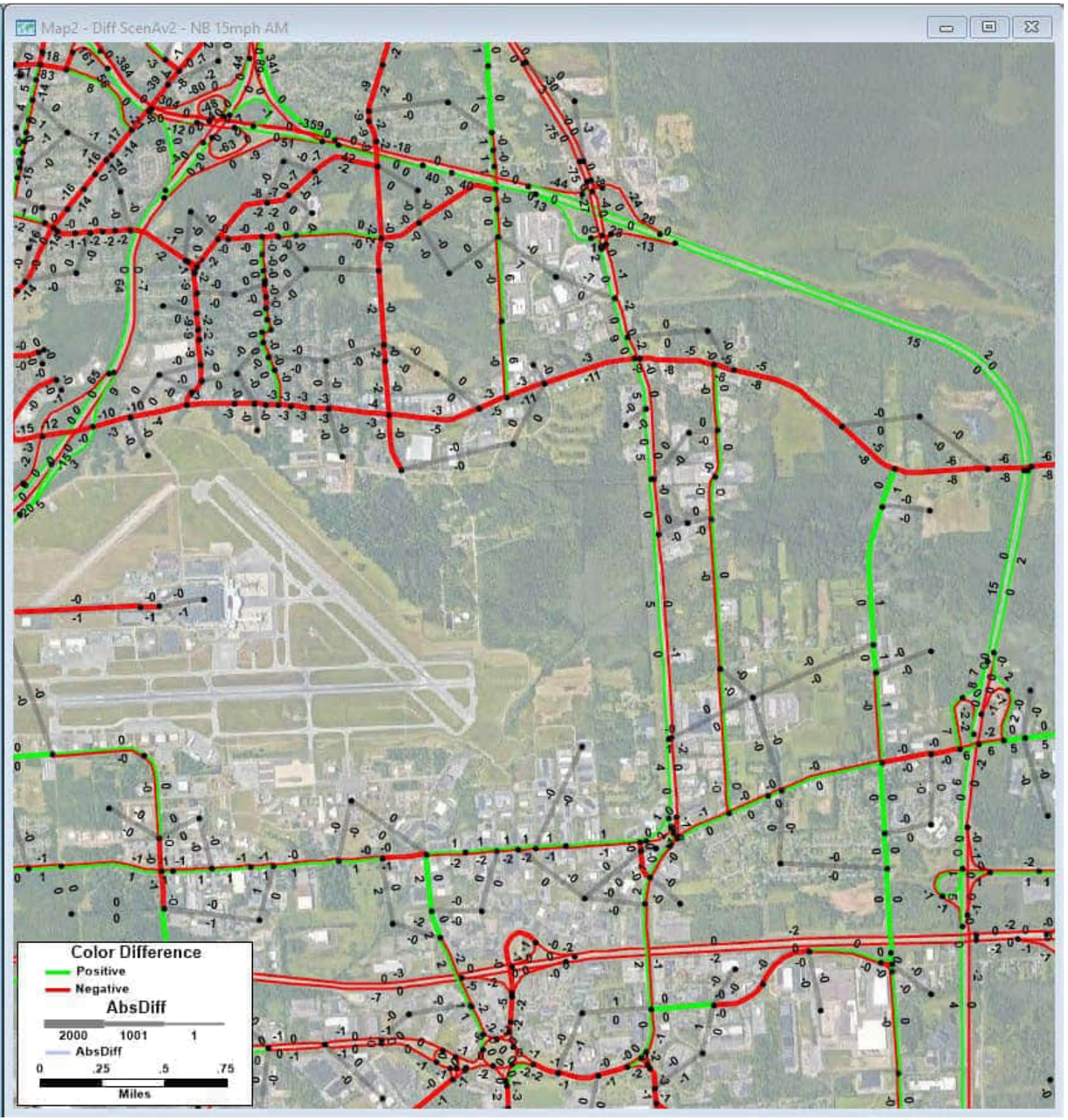
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
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2040 Scenario A v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)



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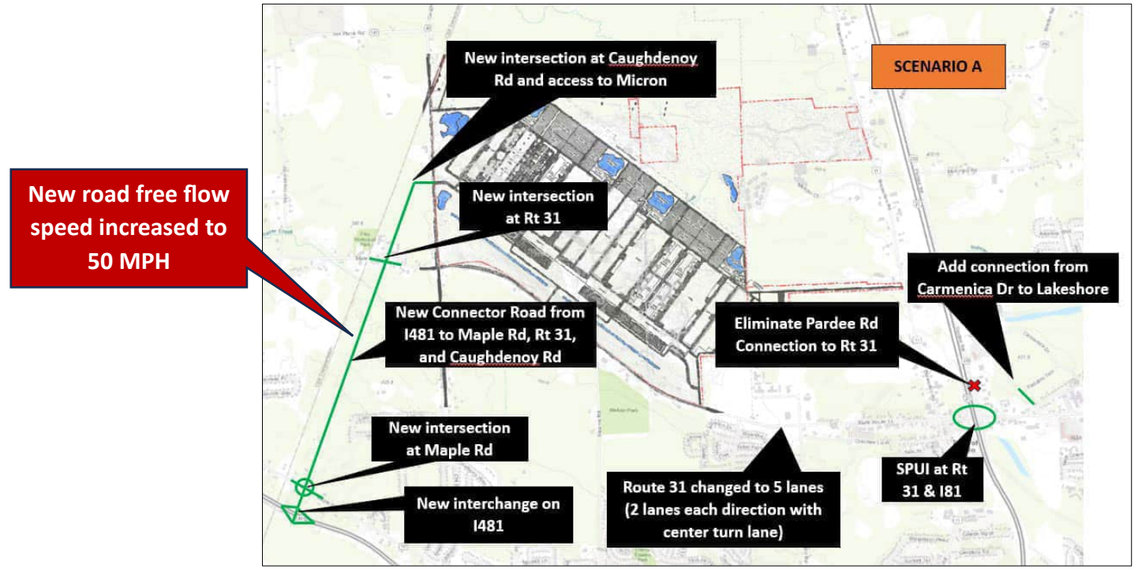
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario A v2 (15 MPH Micron TAZ Centroid Connectors and Increased New Road Free Flow Speed to 50 MPH) – PM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v2** →

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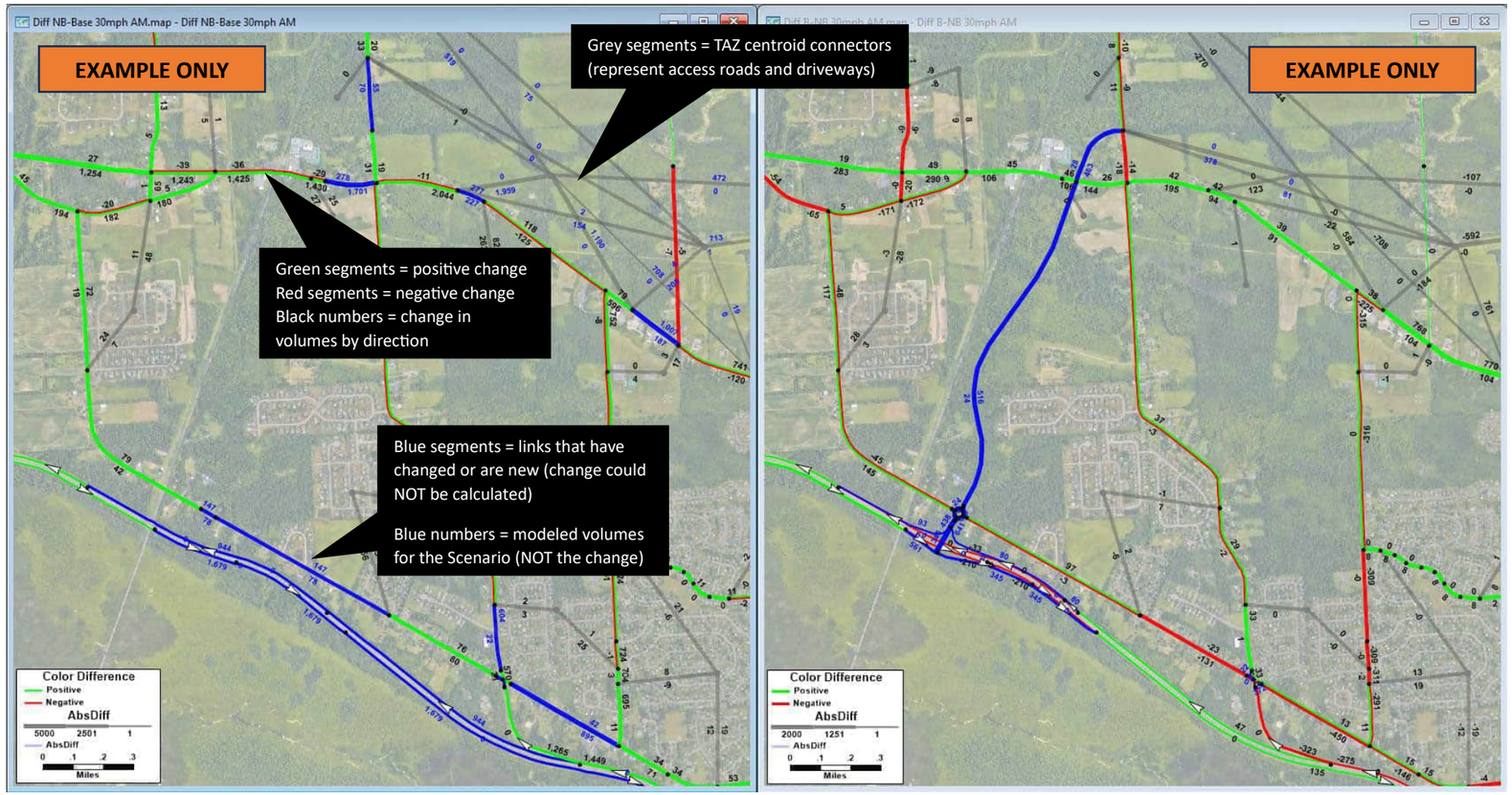
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The map on the right displays the change in **PM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build PM Volumes less 2040 NB PM volumes**).

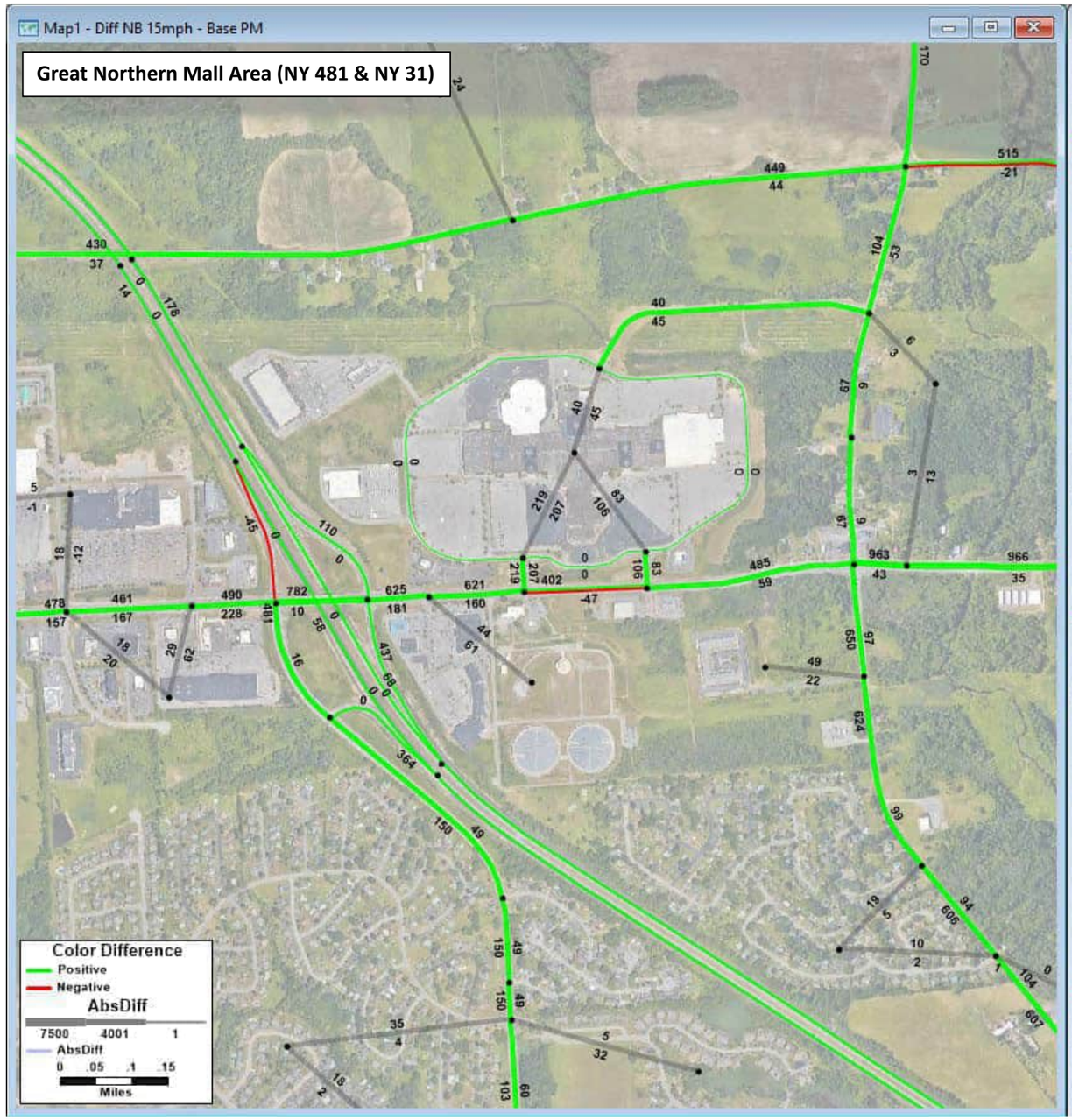
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

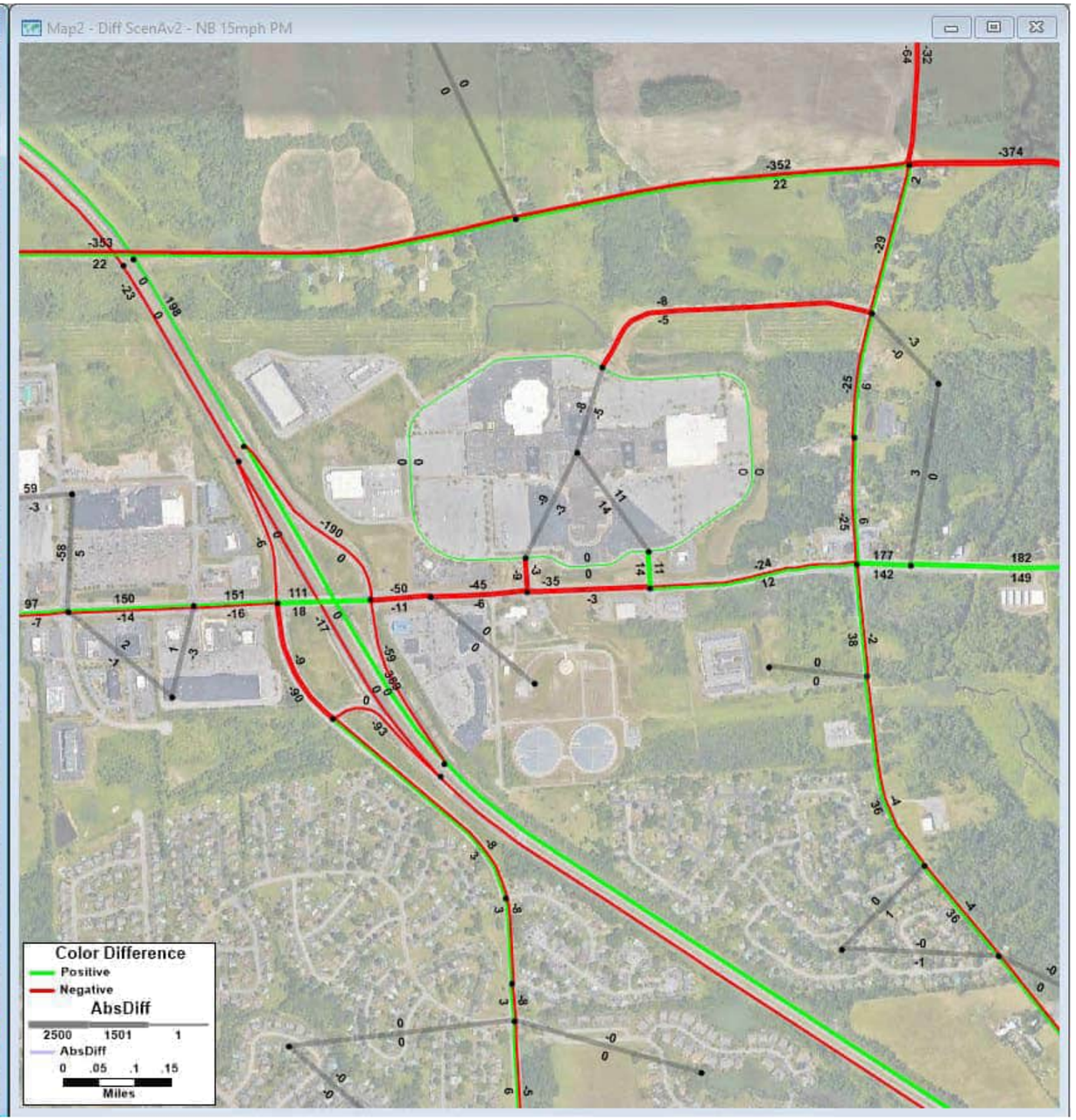
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

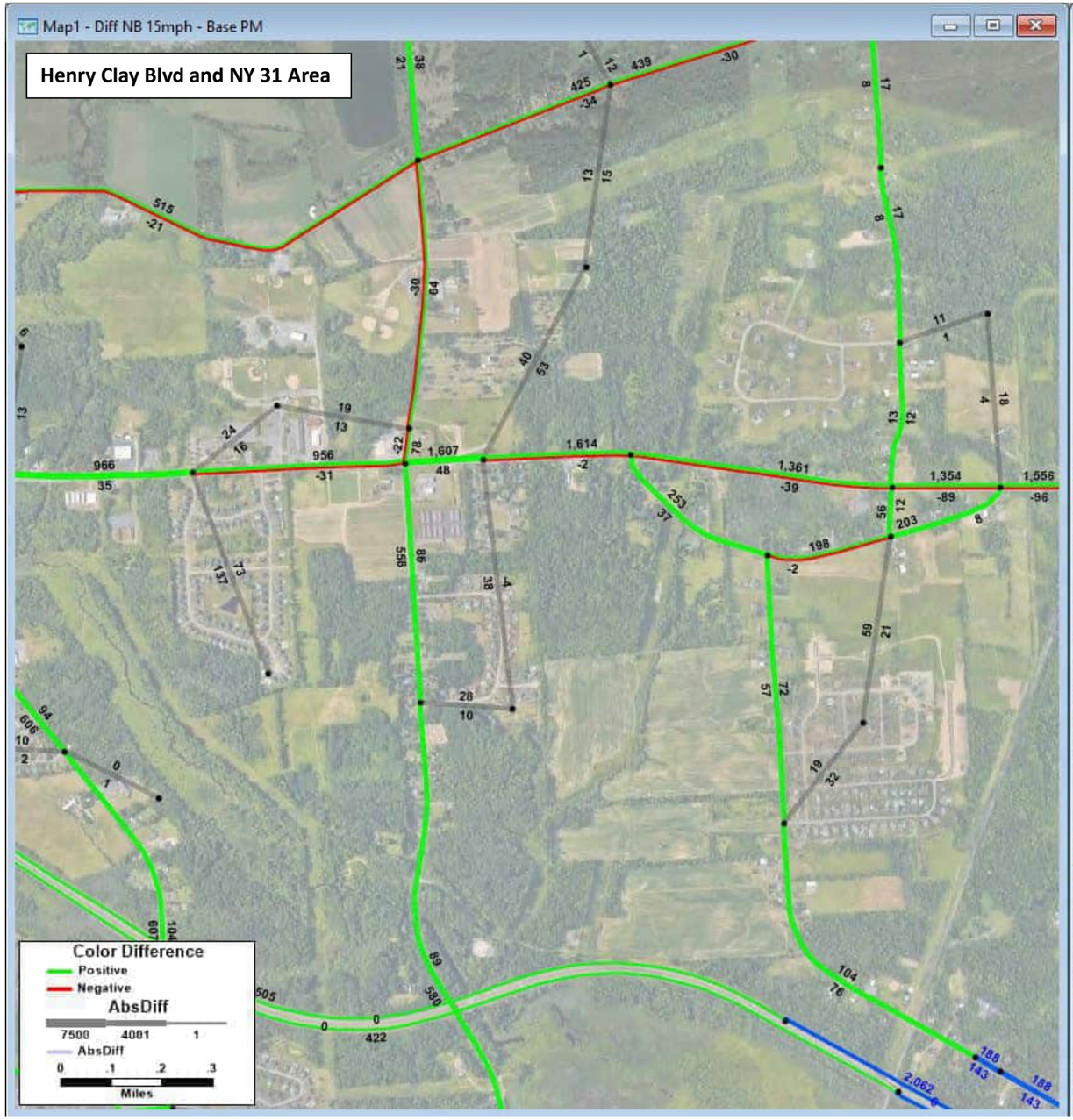


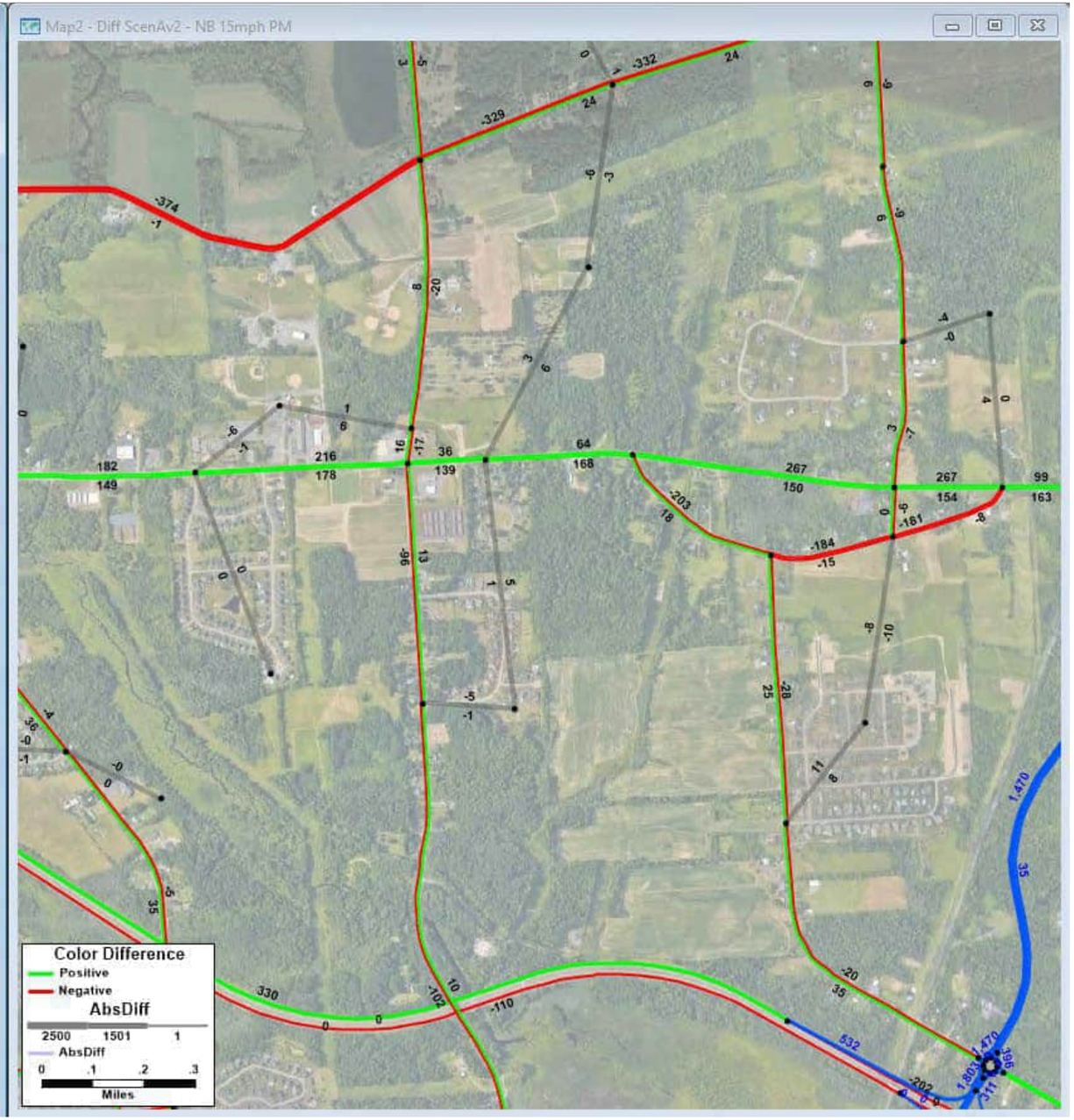
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

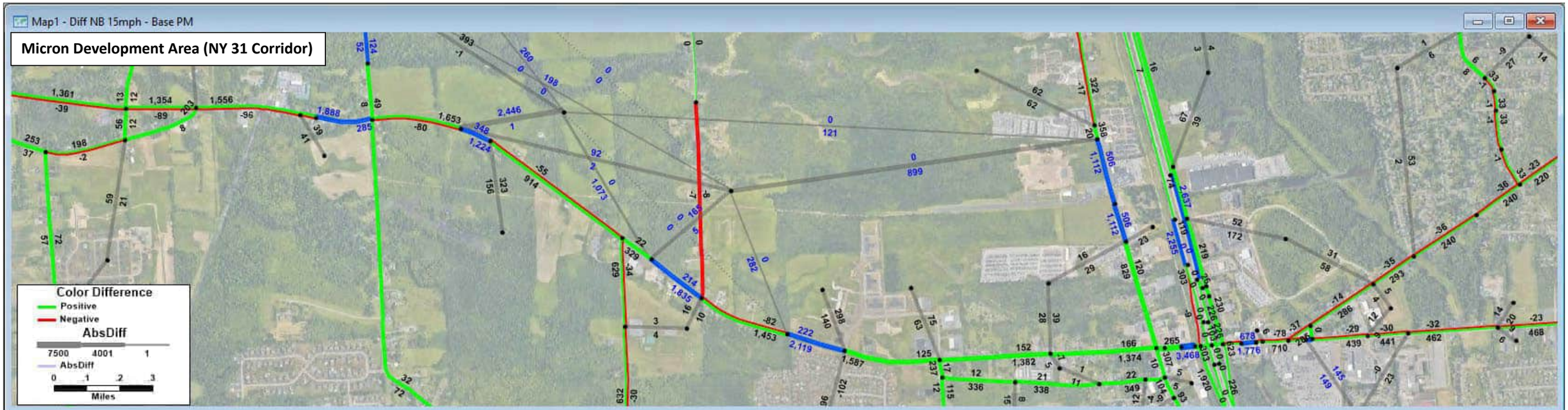


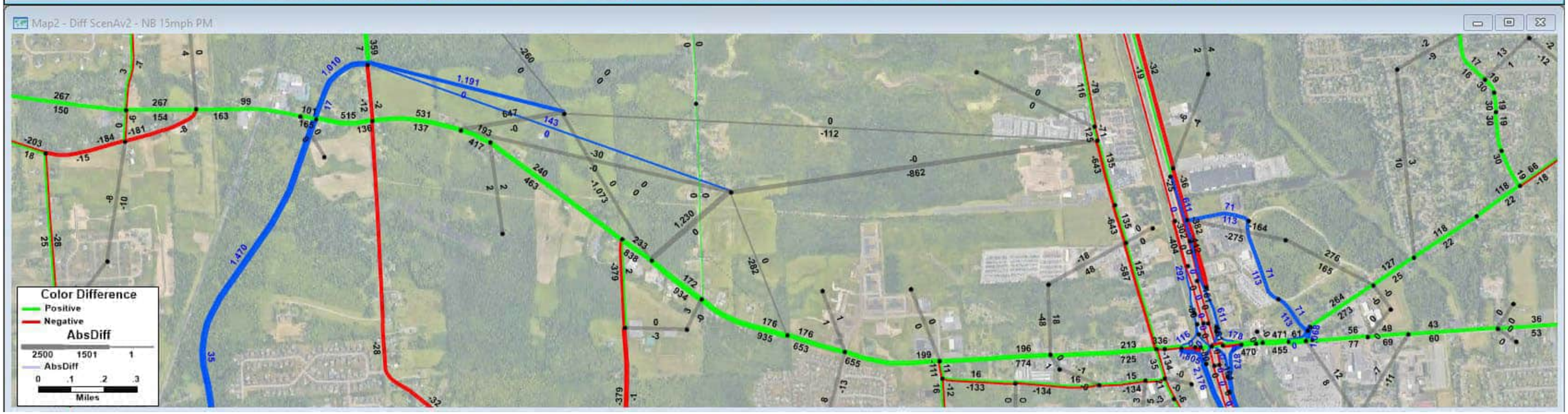


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

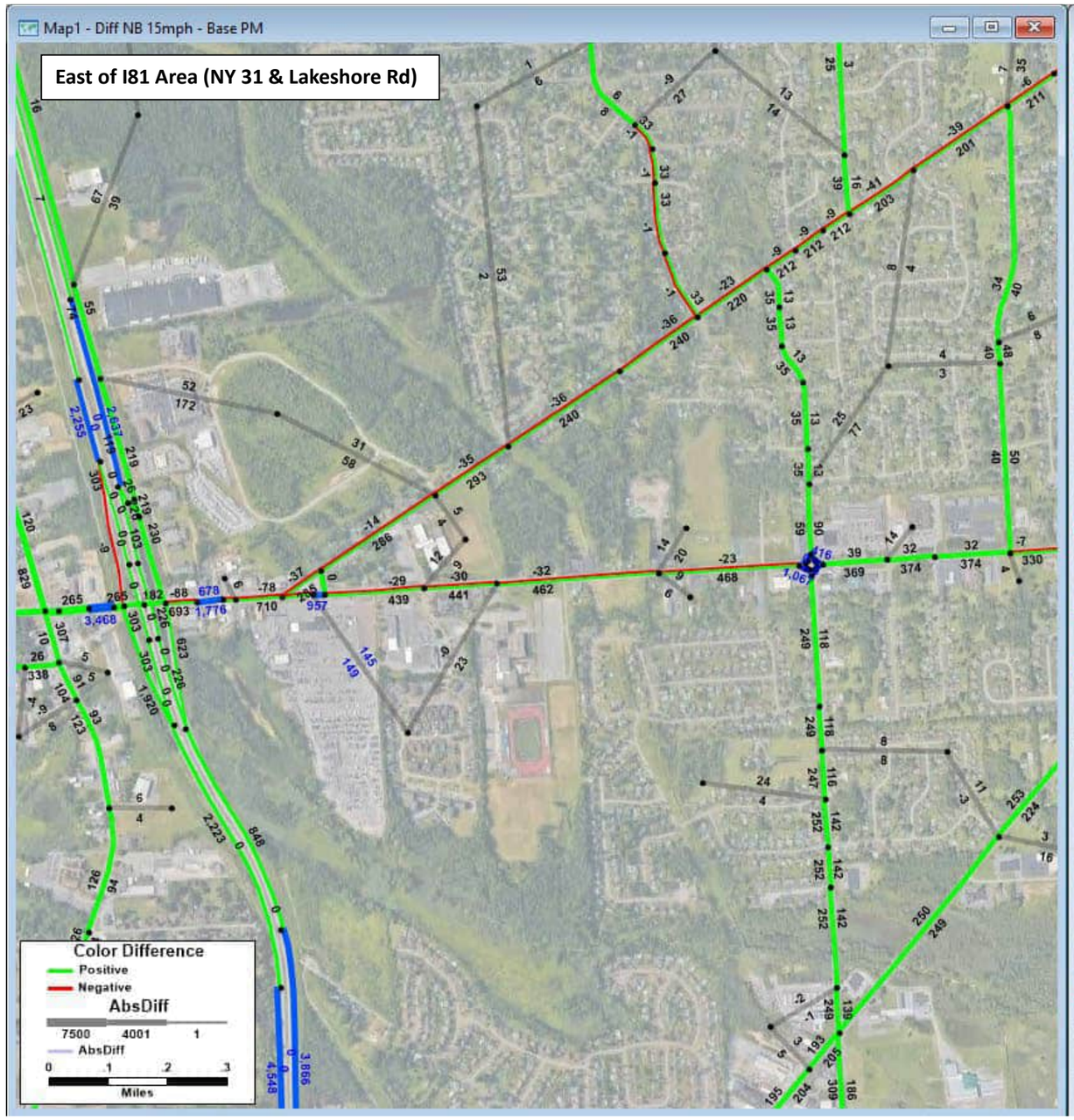


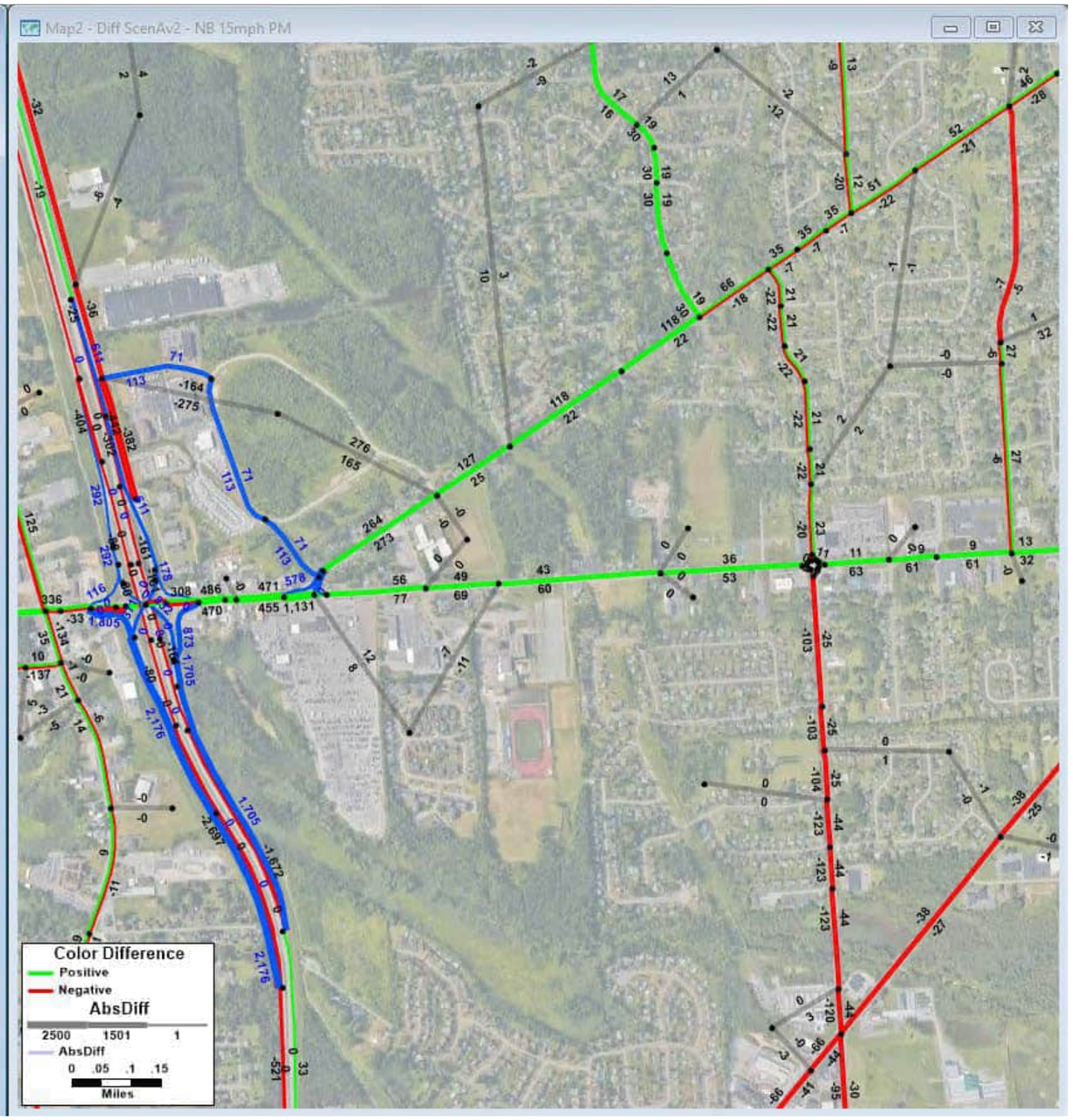


(TOP MAP) 2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

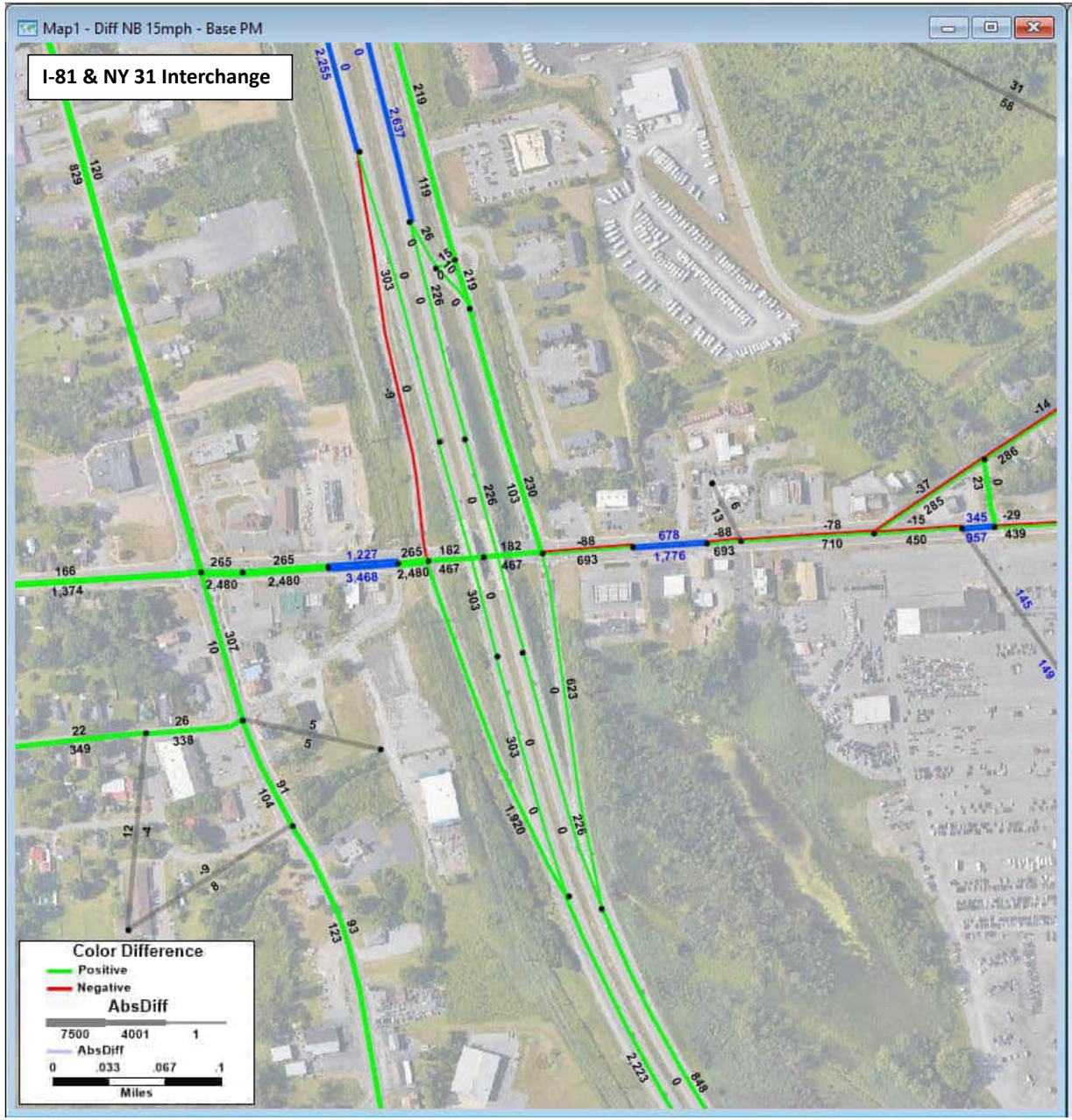


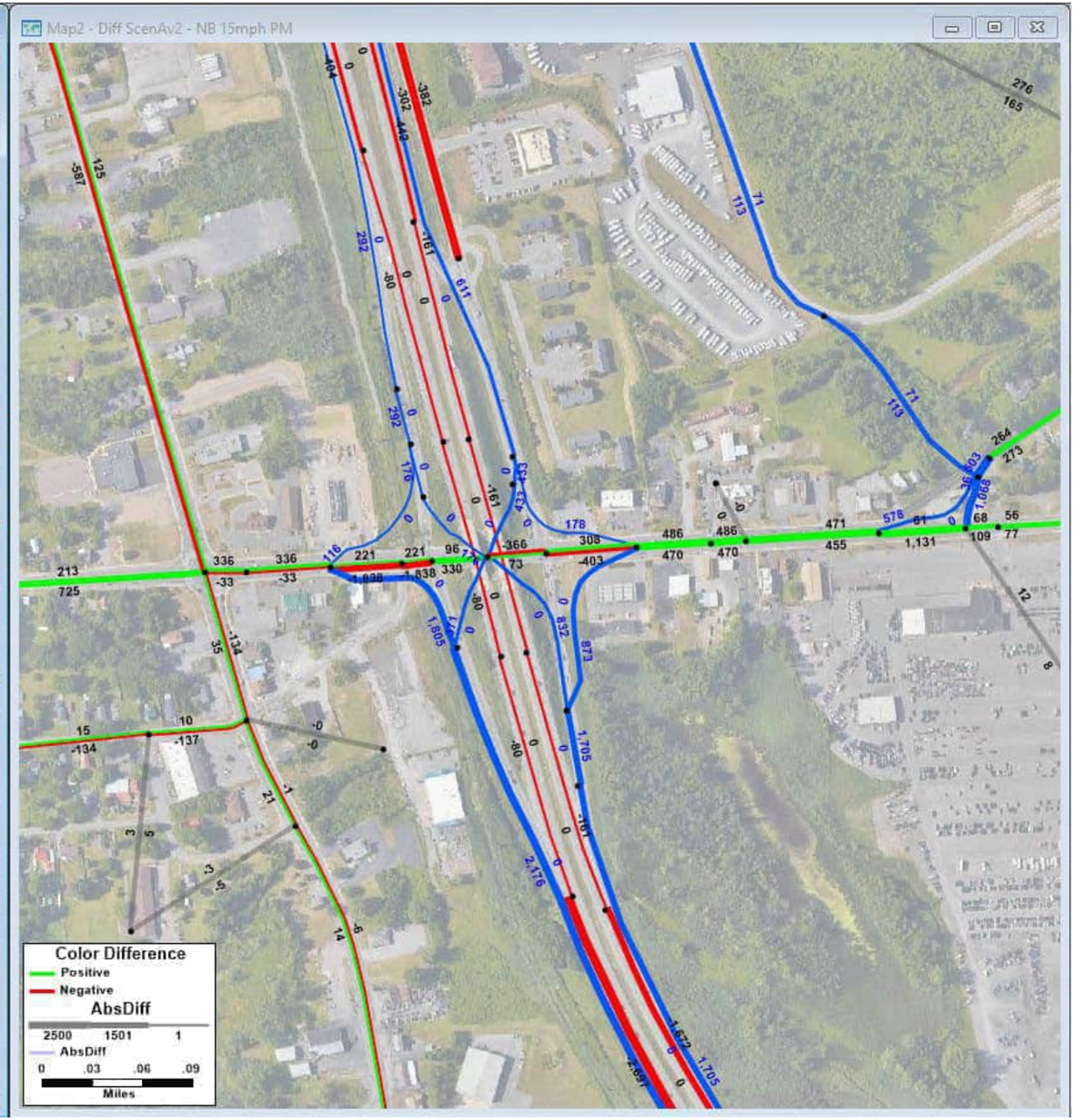


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

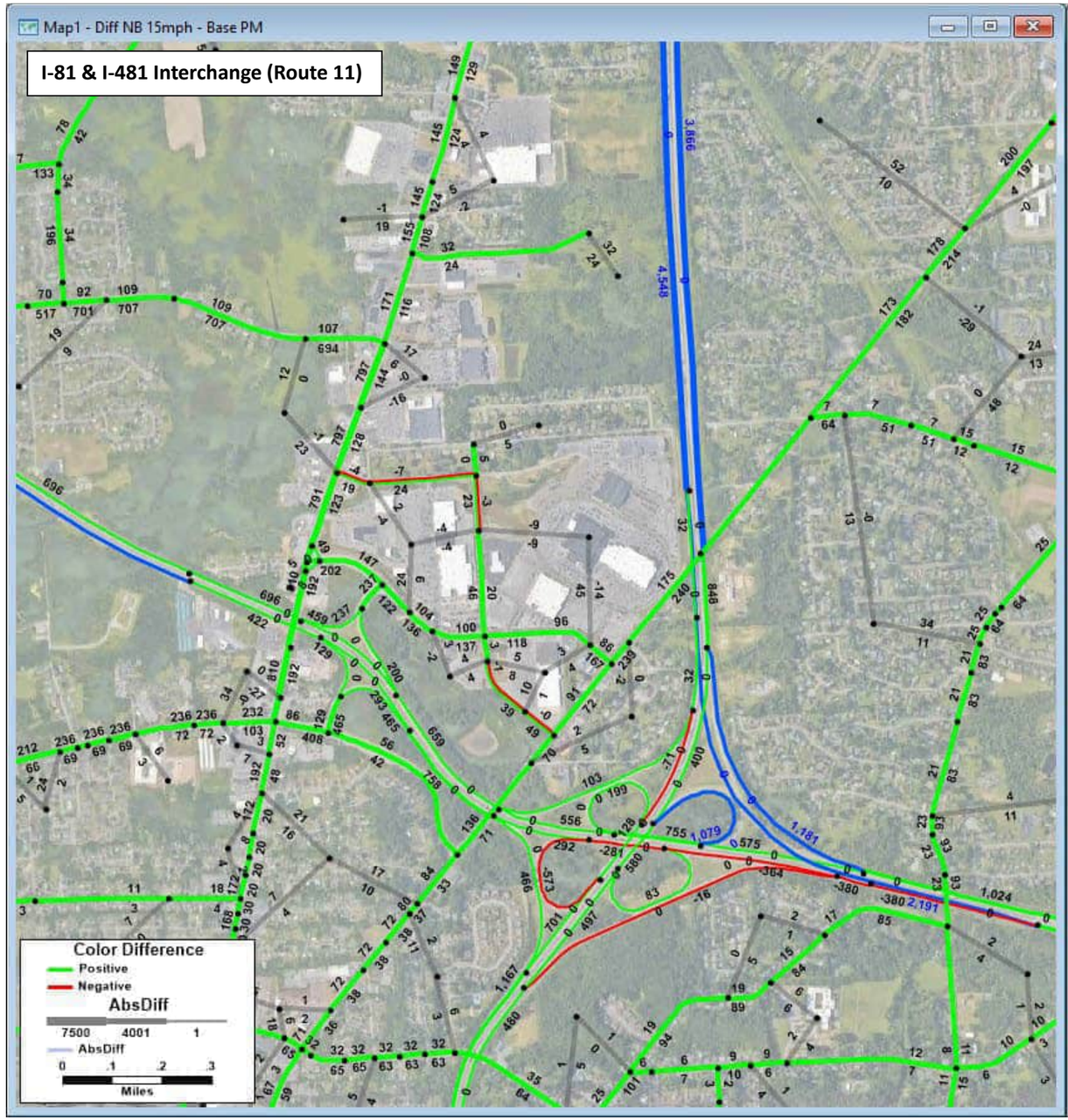




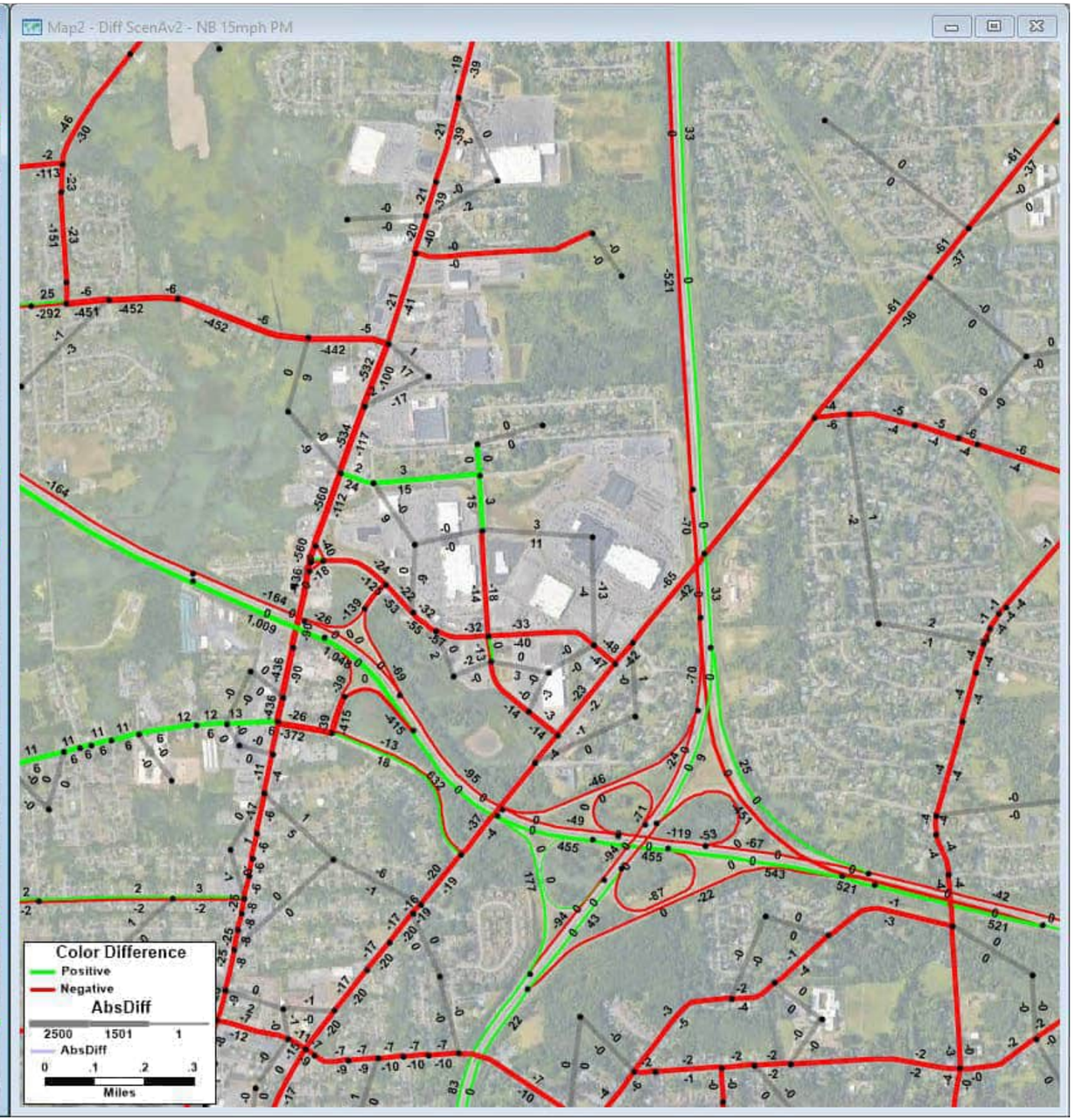
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

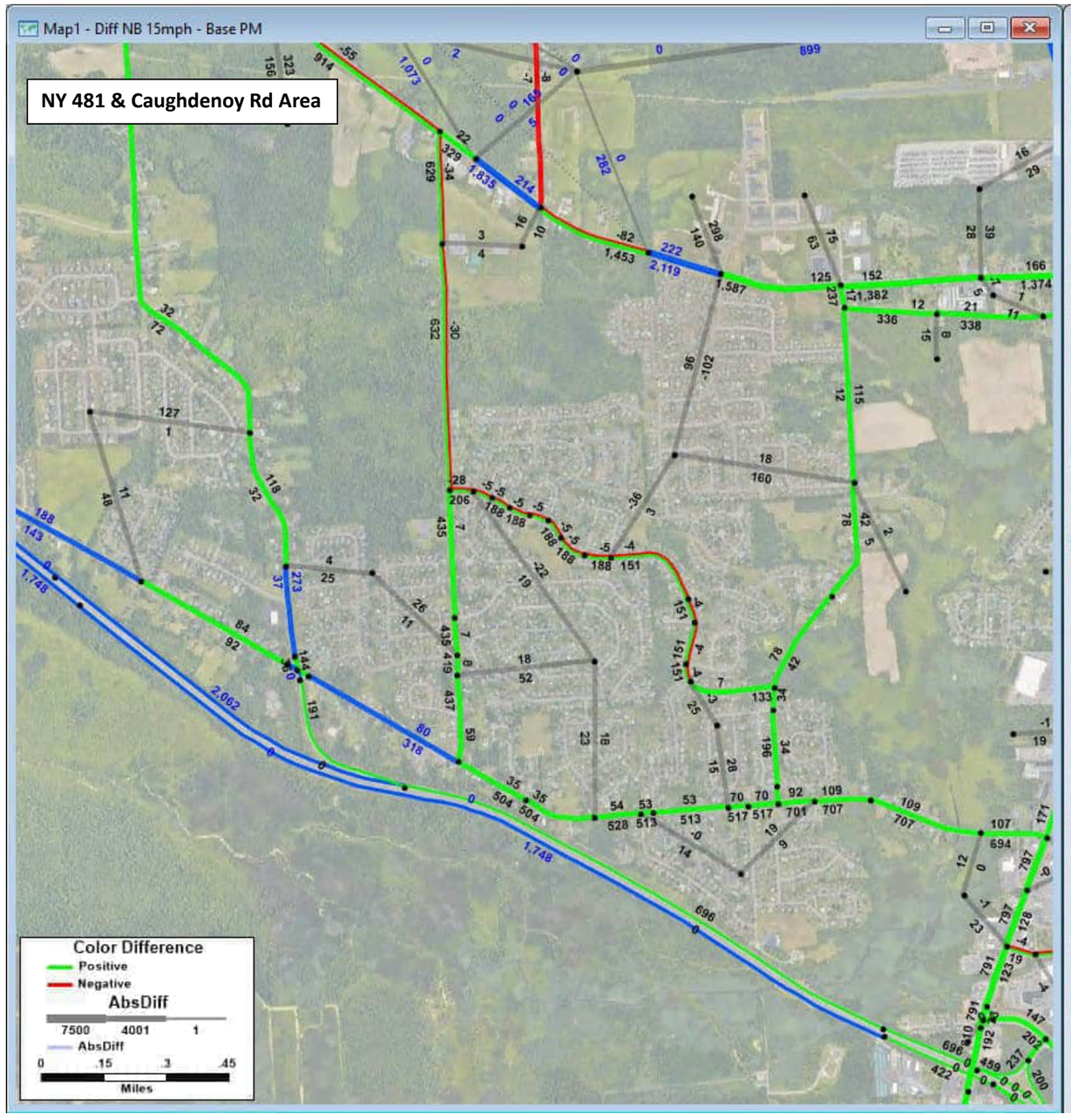


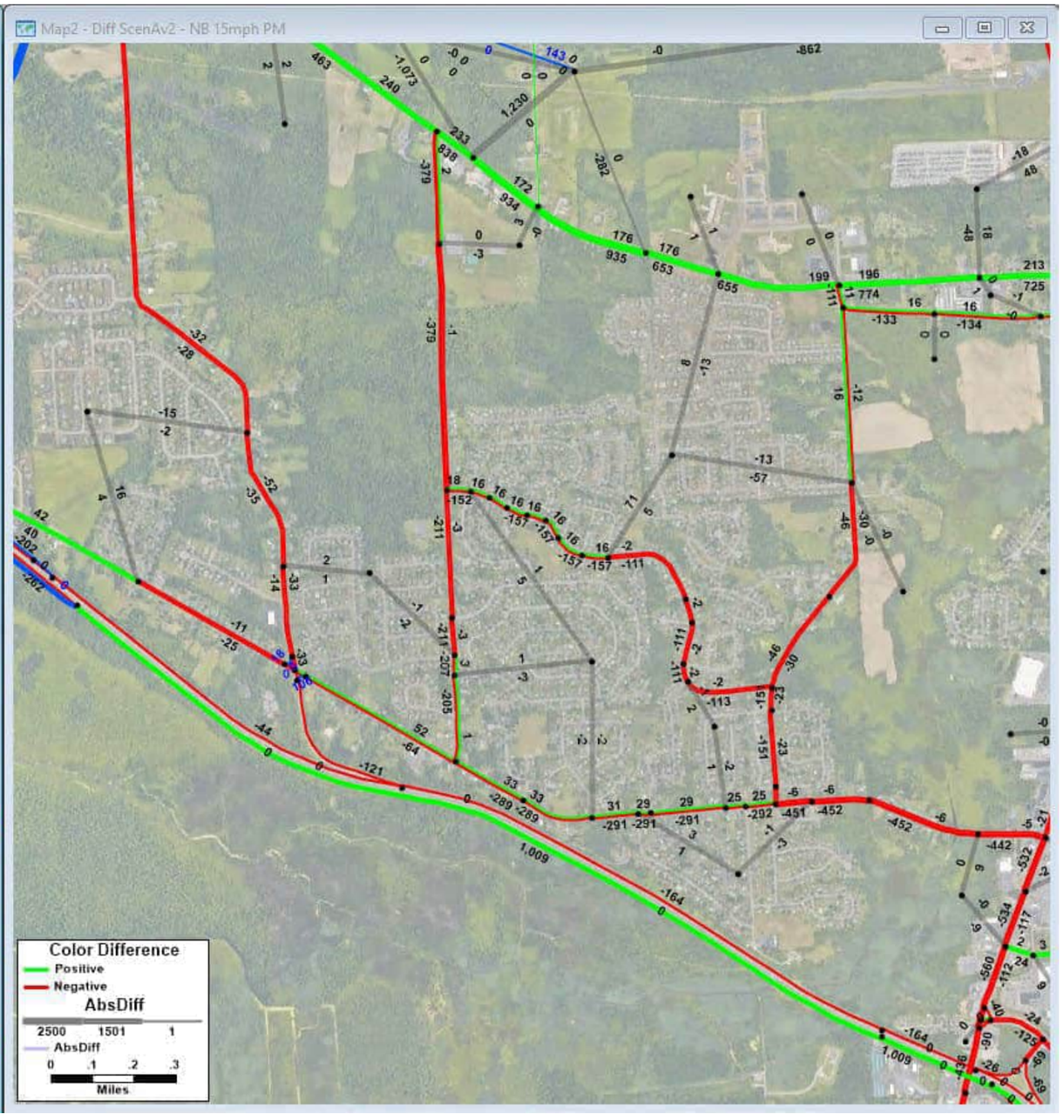
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

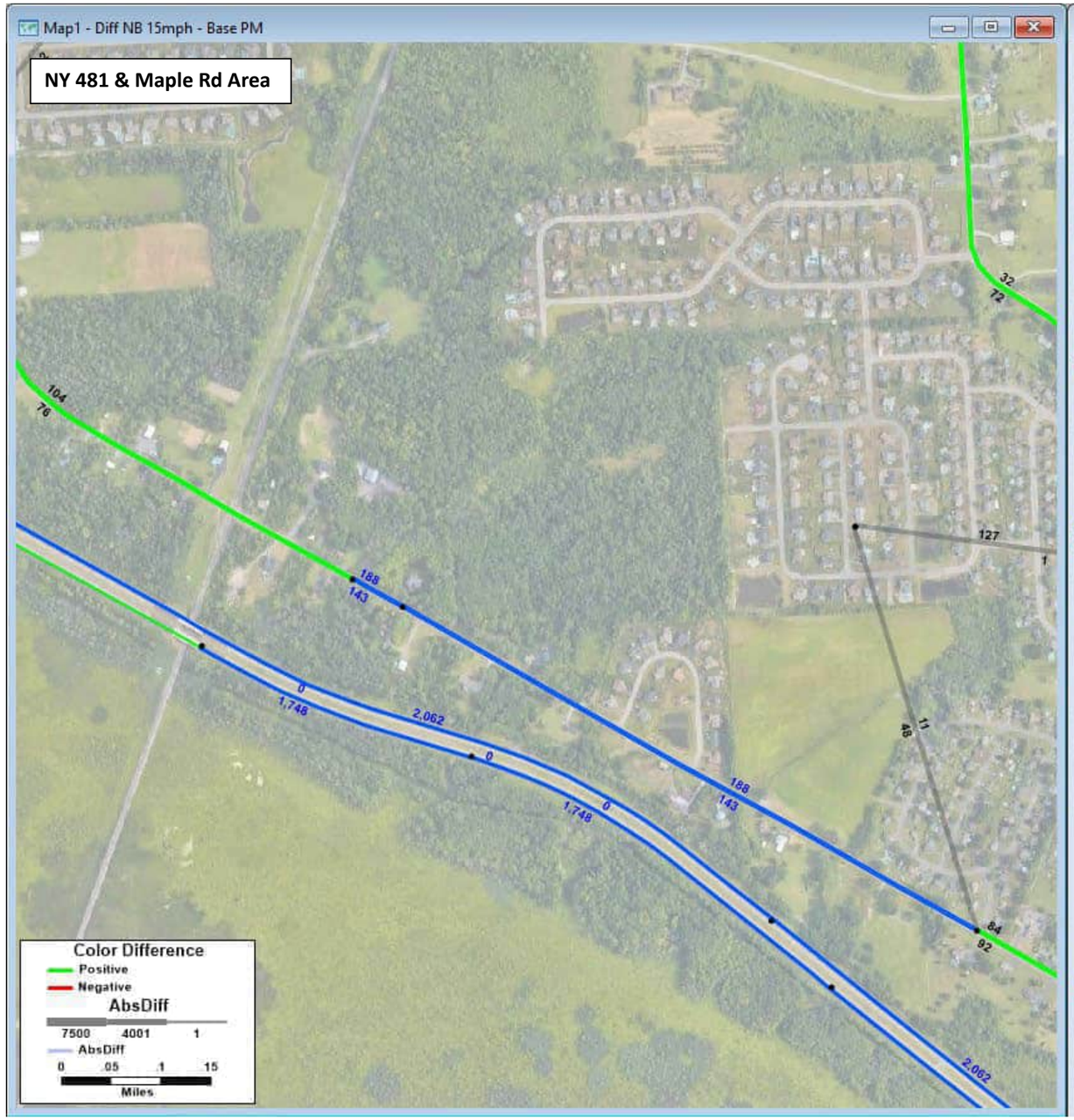


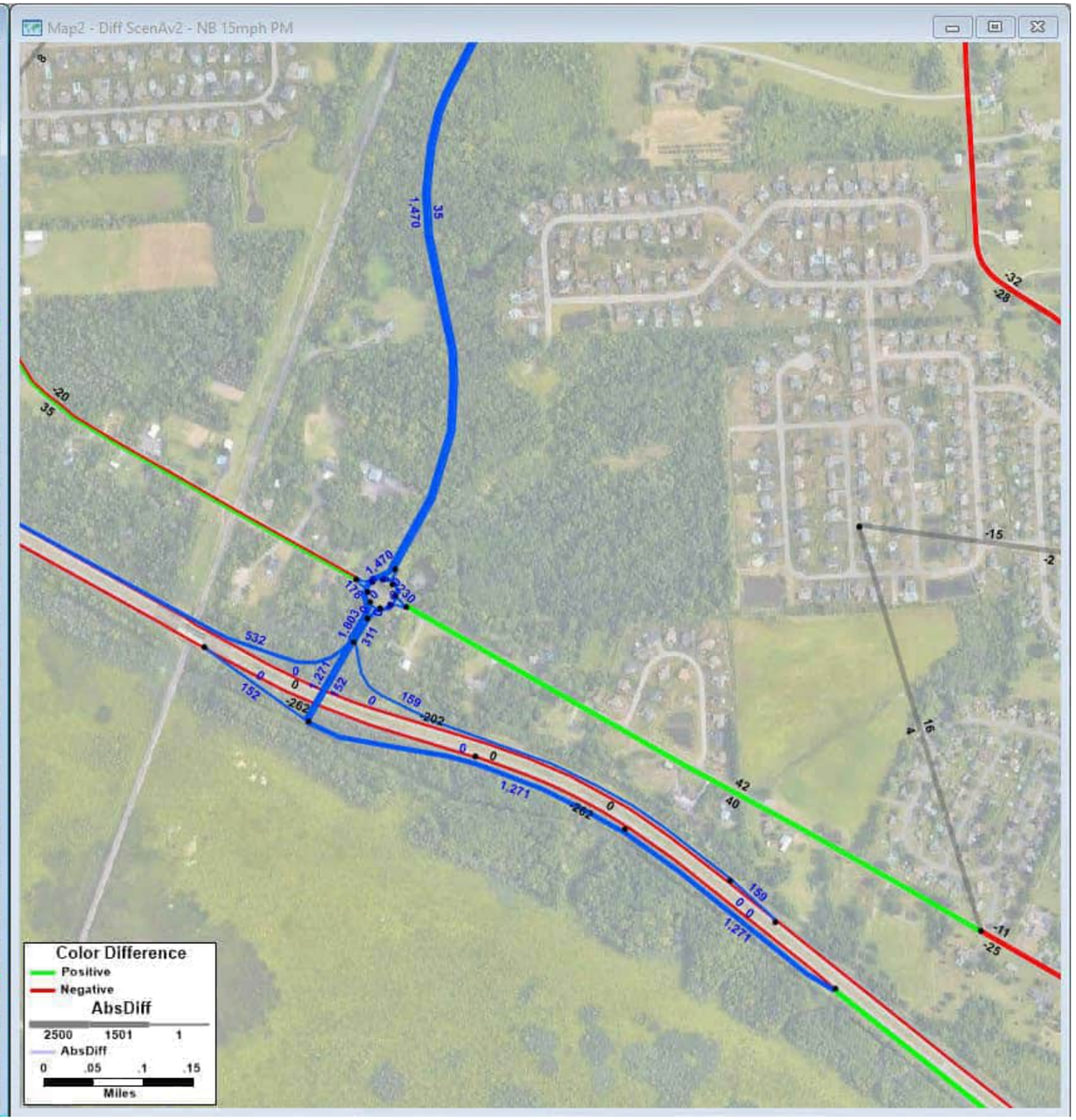


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

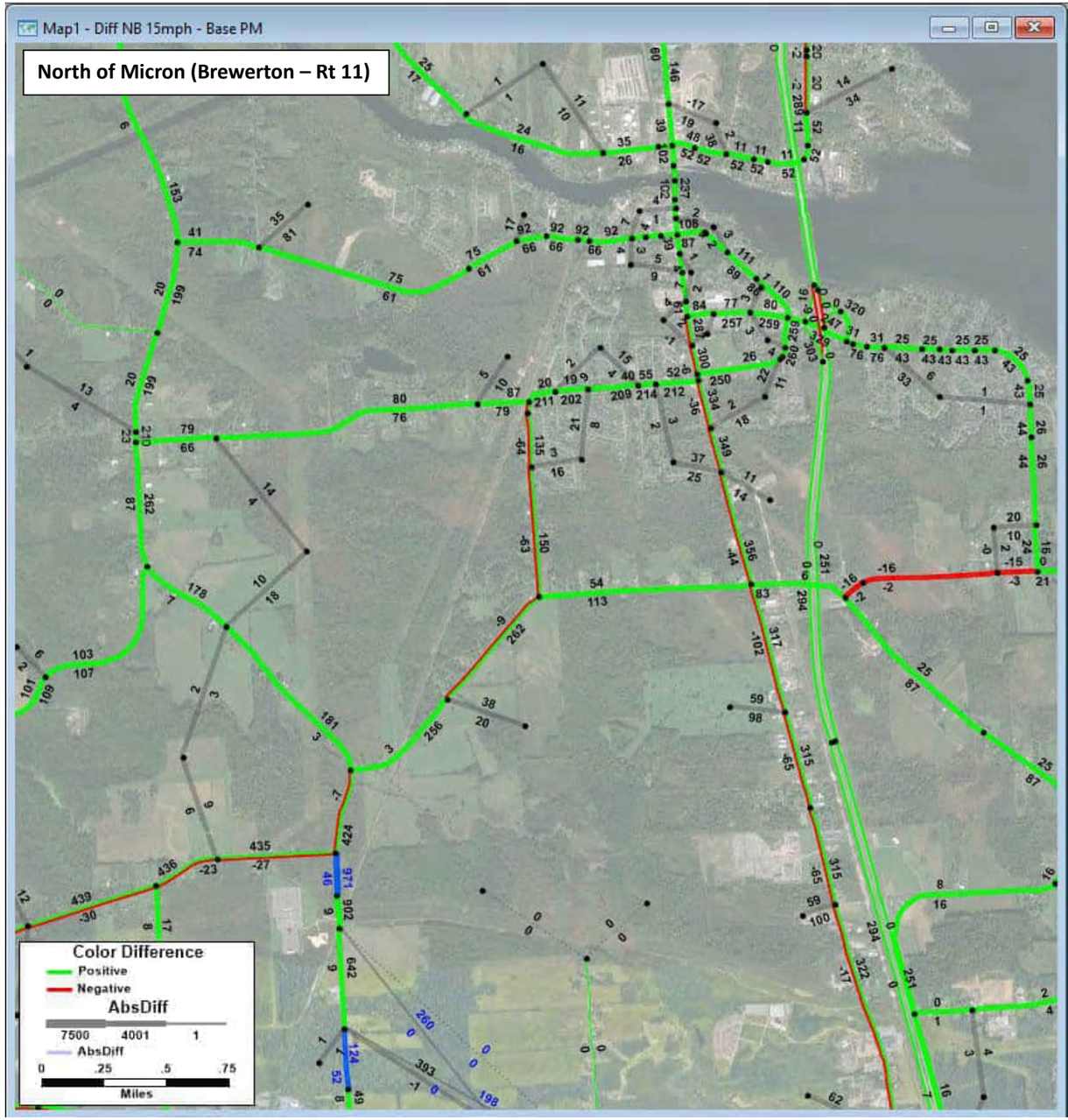


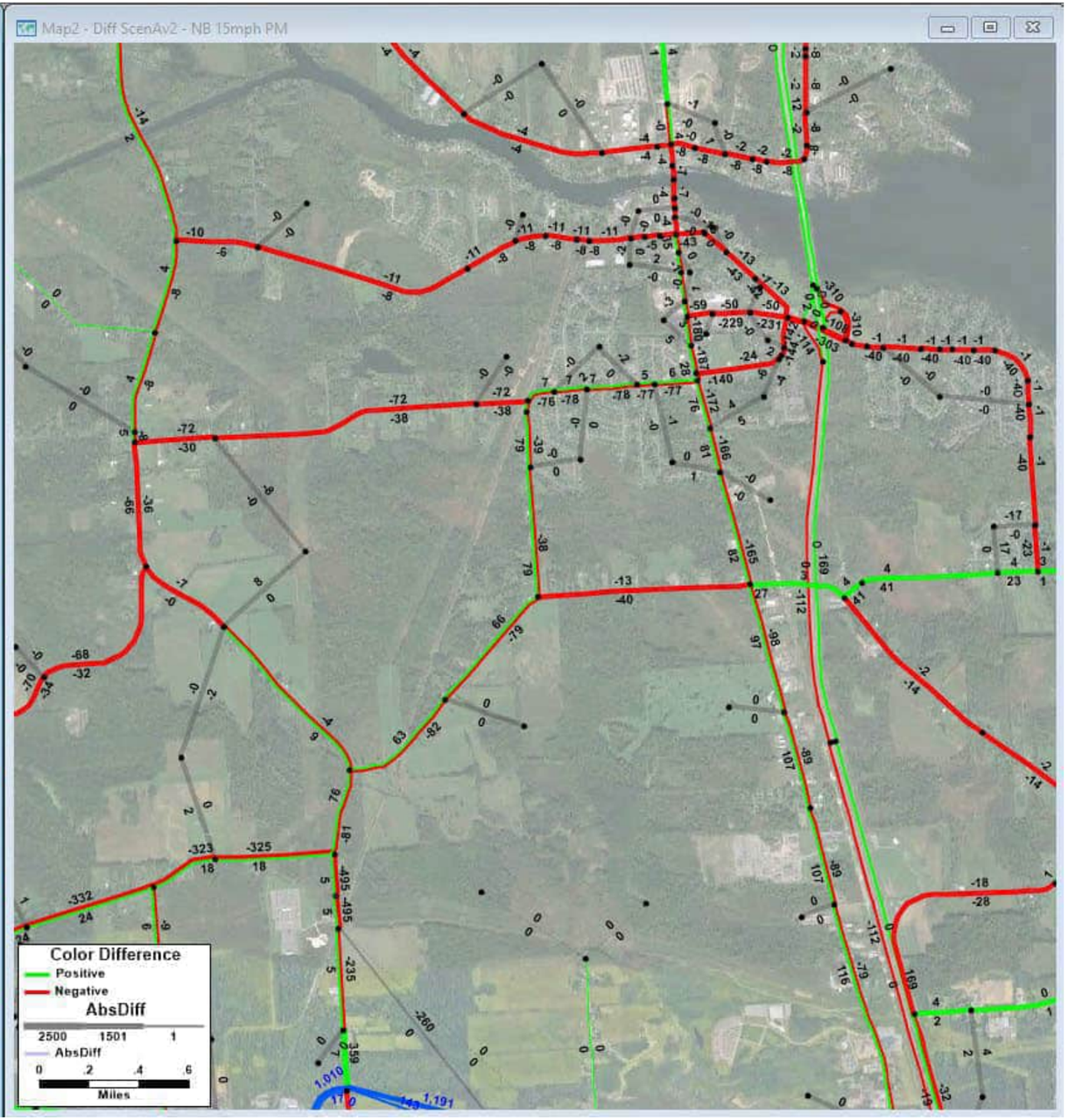


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

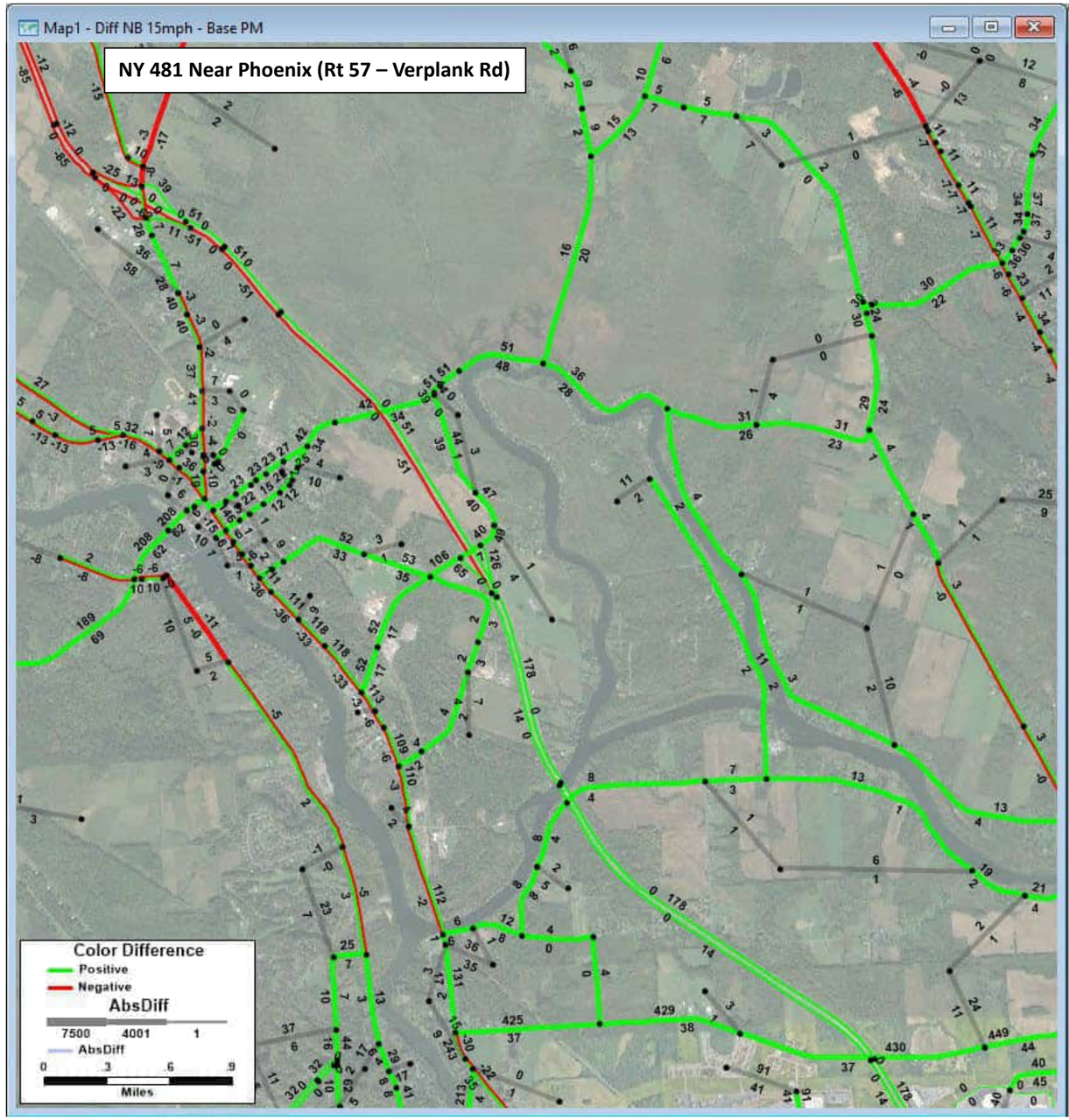


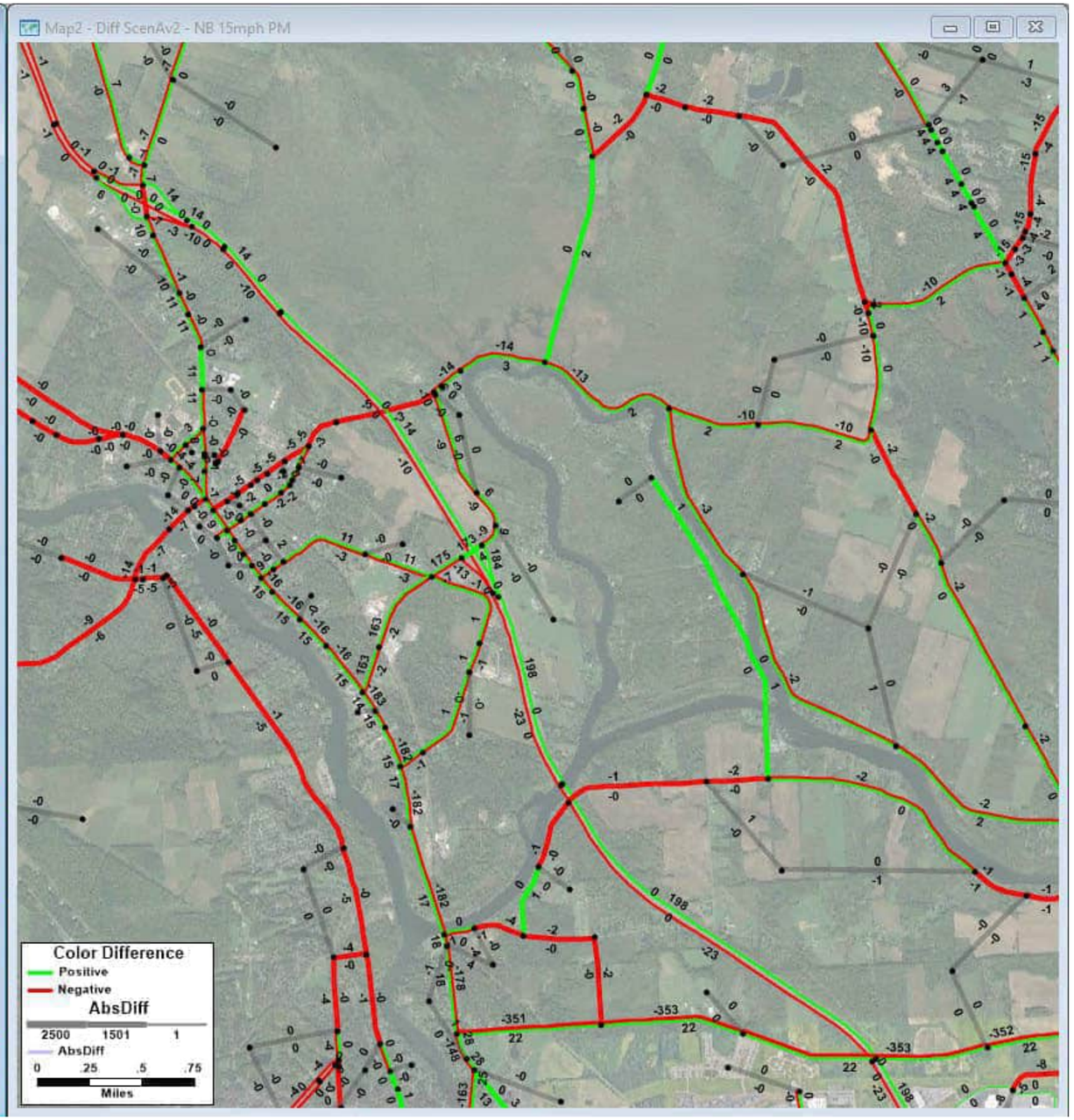


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

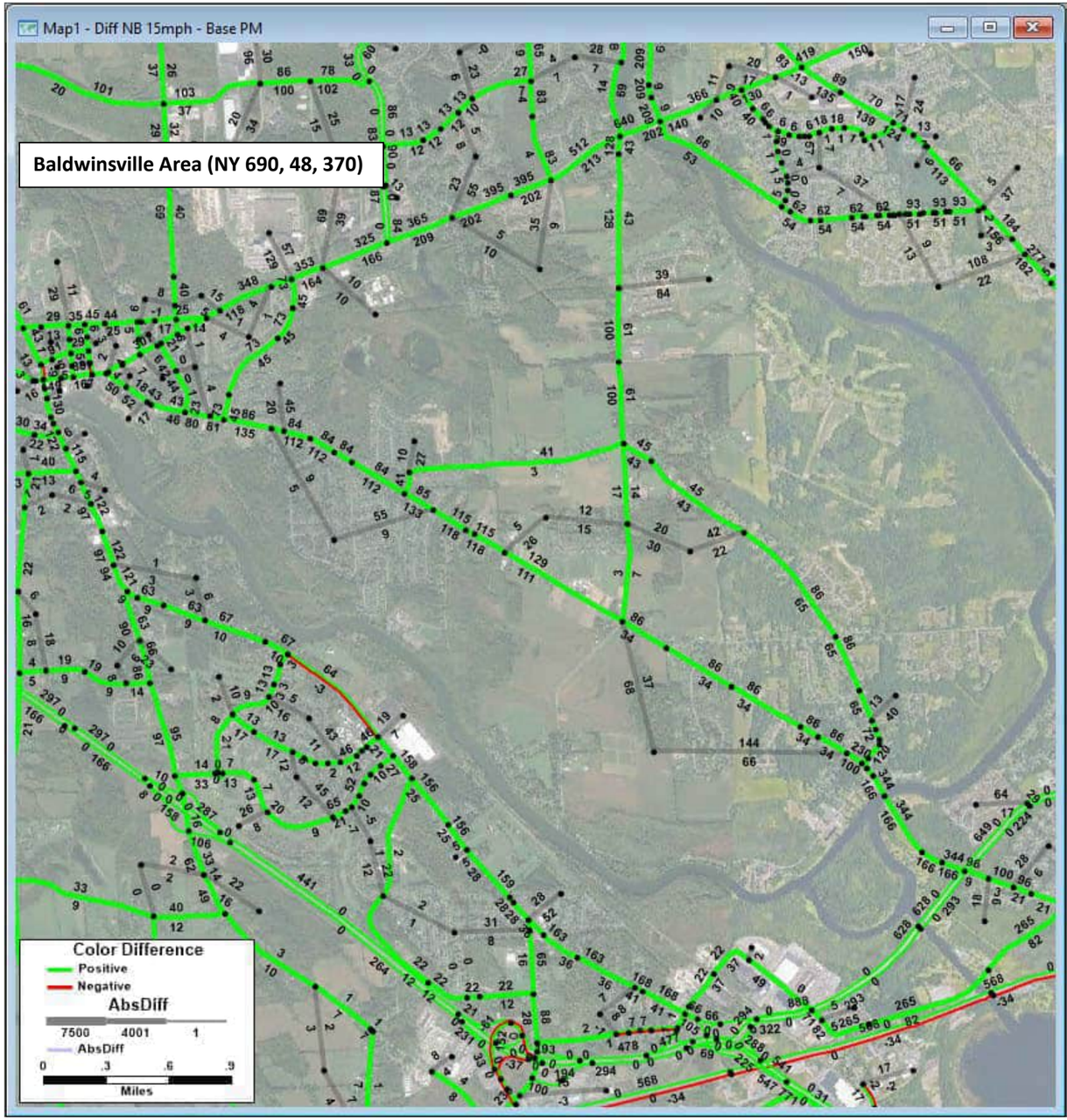




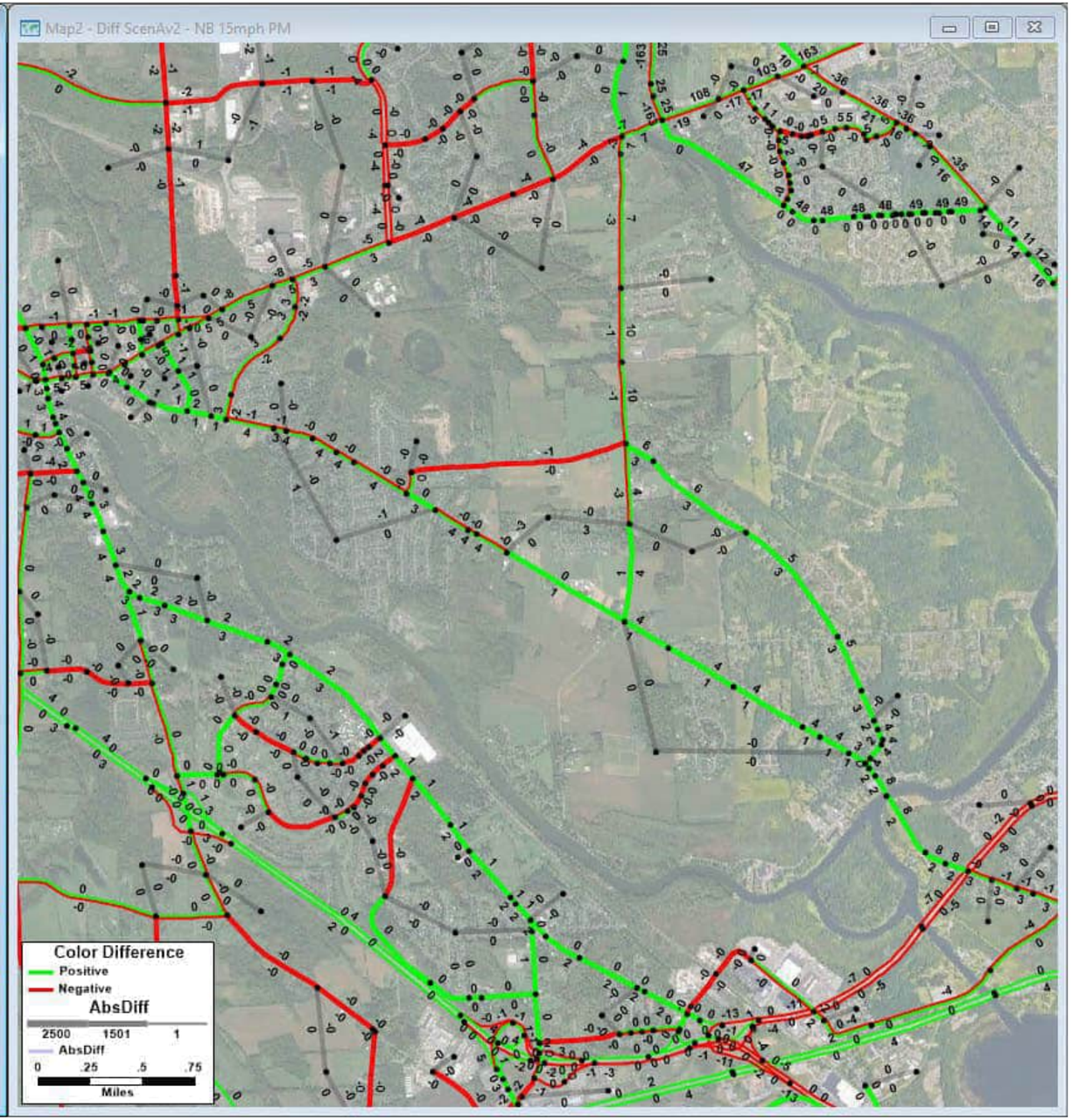
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

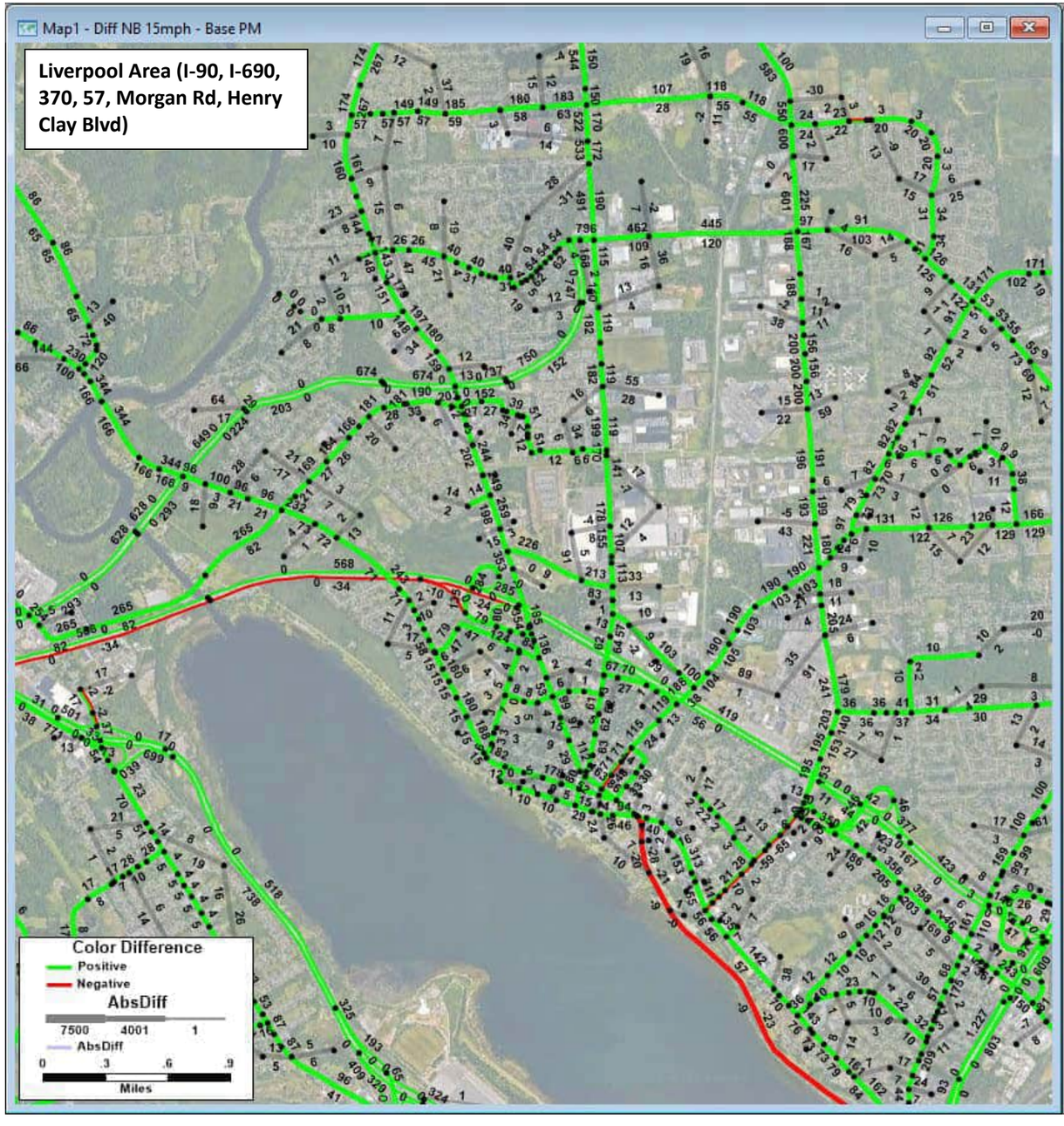


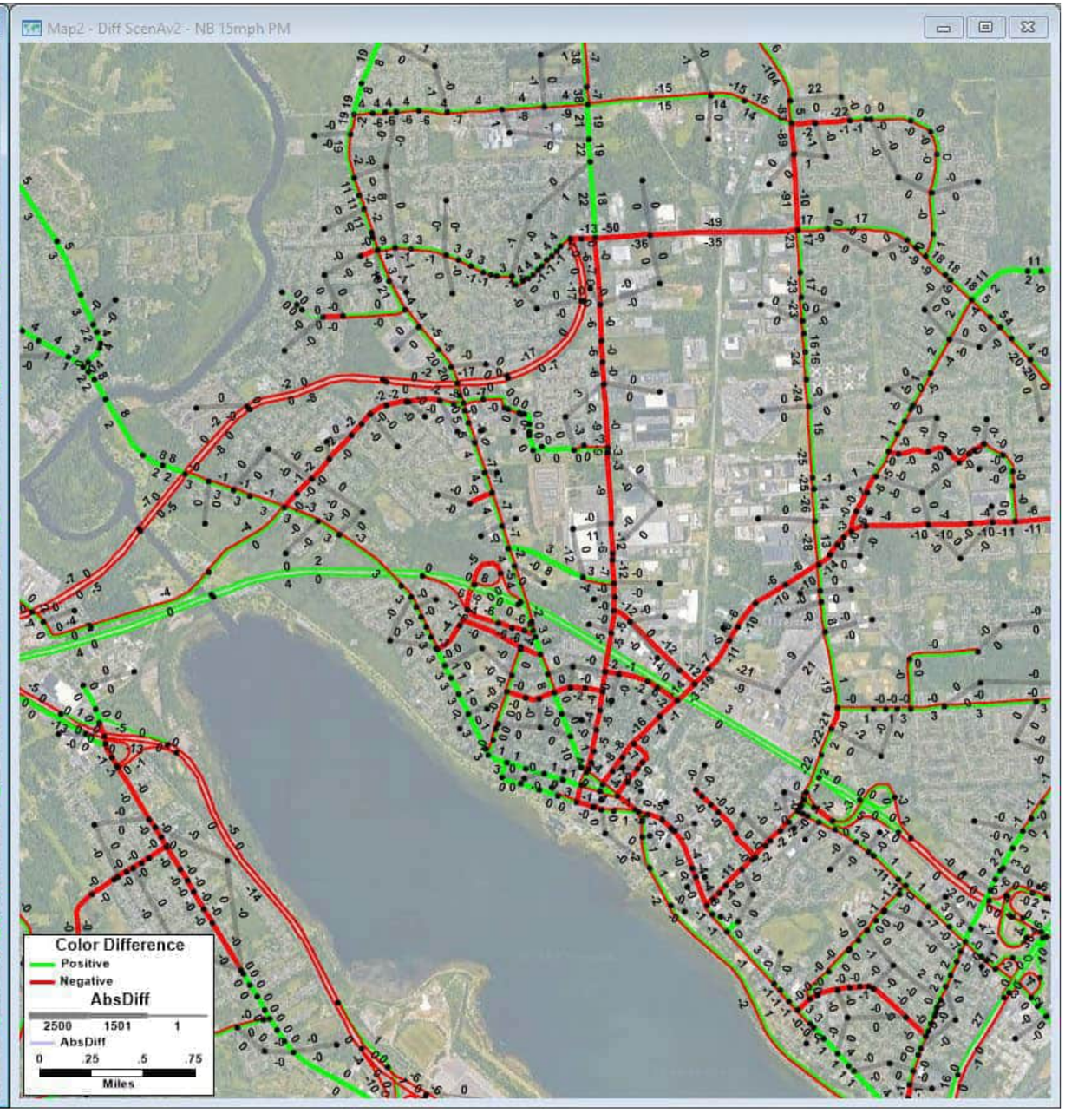
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

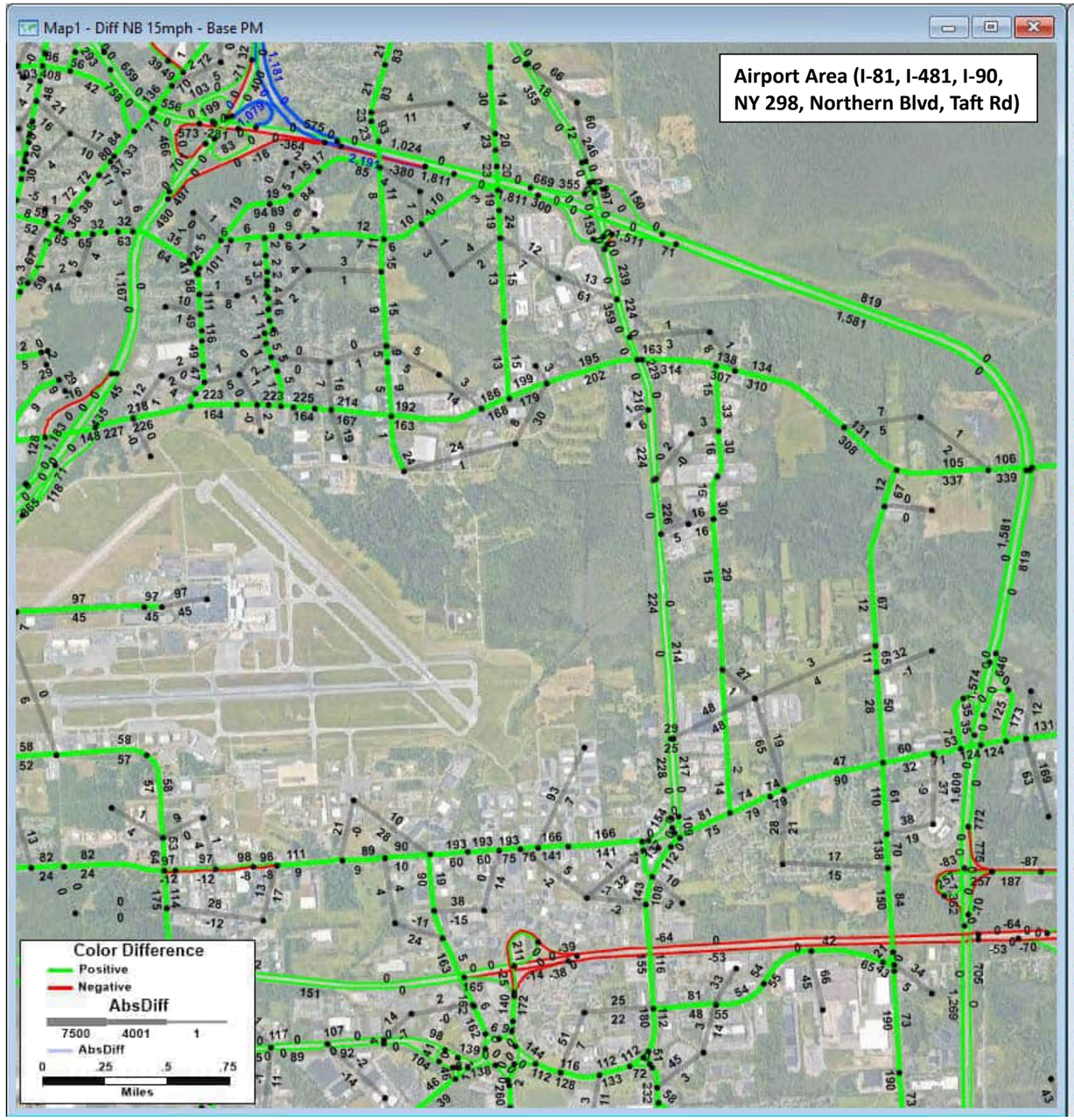




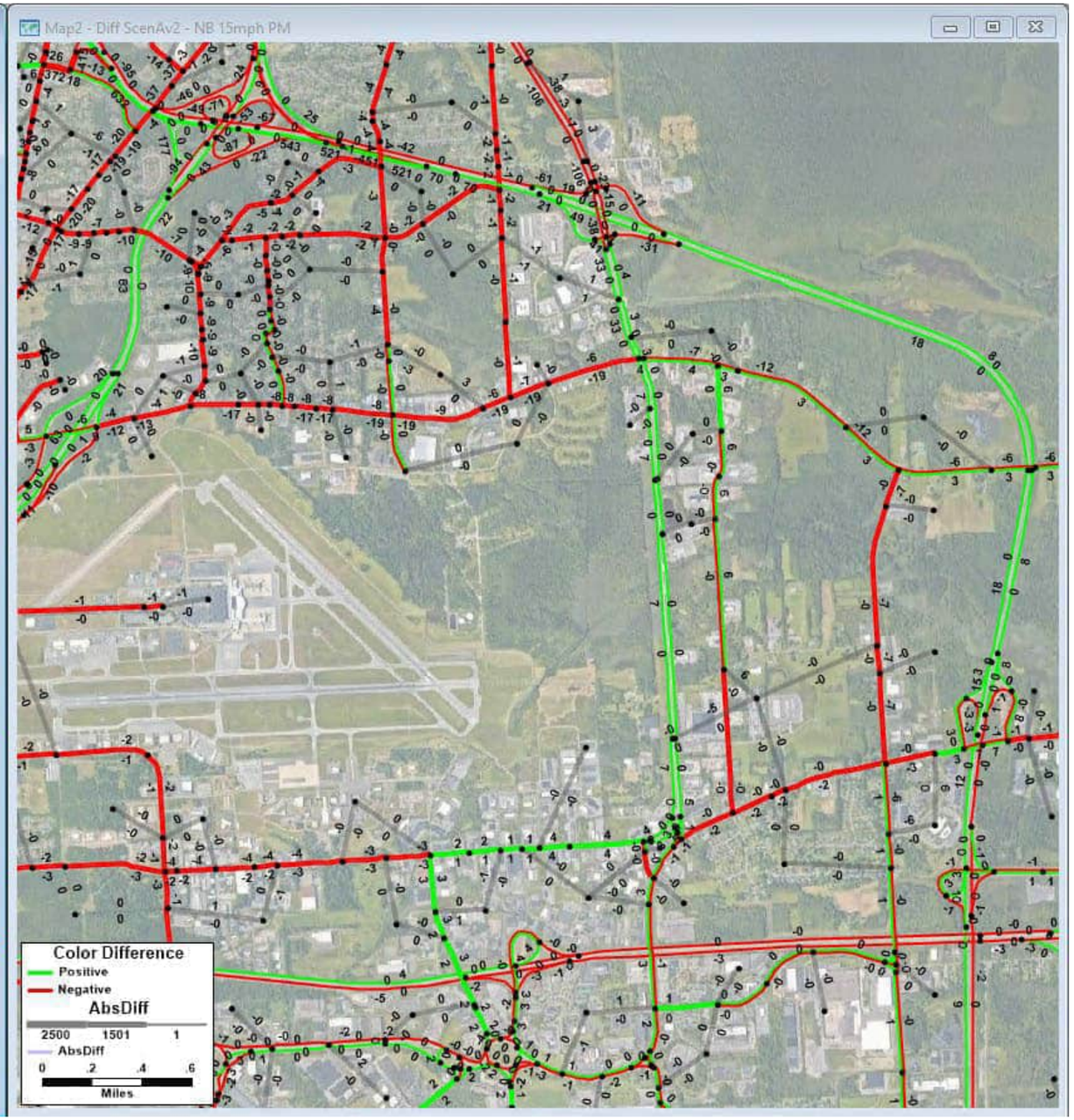
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)



2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

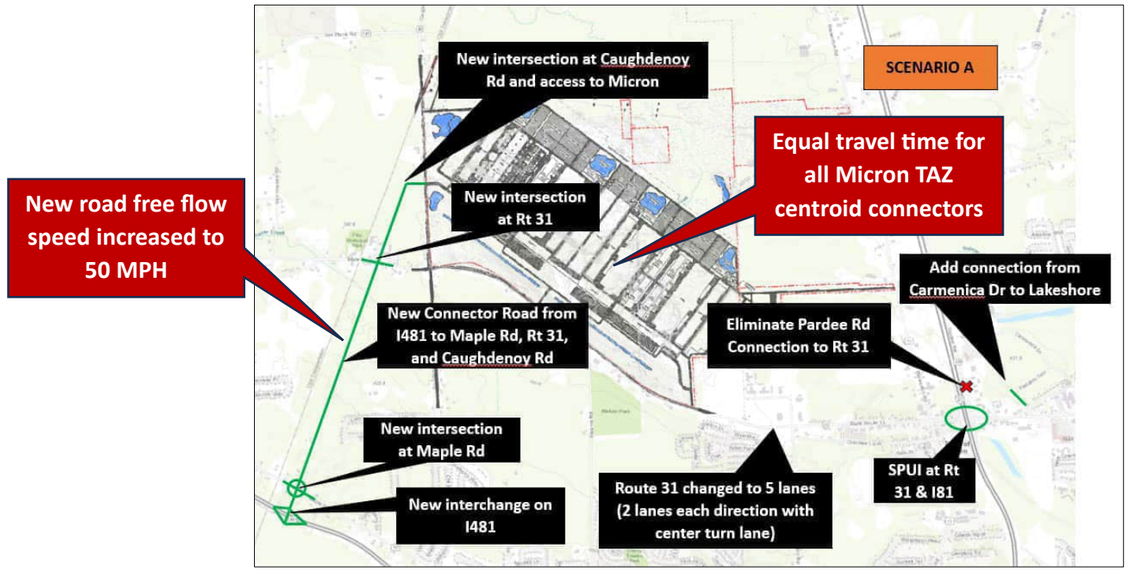
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario A v3 (Scenario A v2 and Equal Travel Time Micron Centroid Connectors) – AM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v3** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- No Build in this document refers to no Micron related road network changes
- RED callouts note the revisions made to Scenario A



The graphic to the right is an example of what is included in this document →

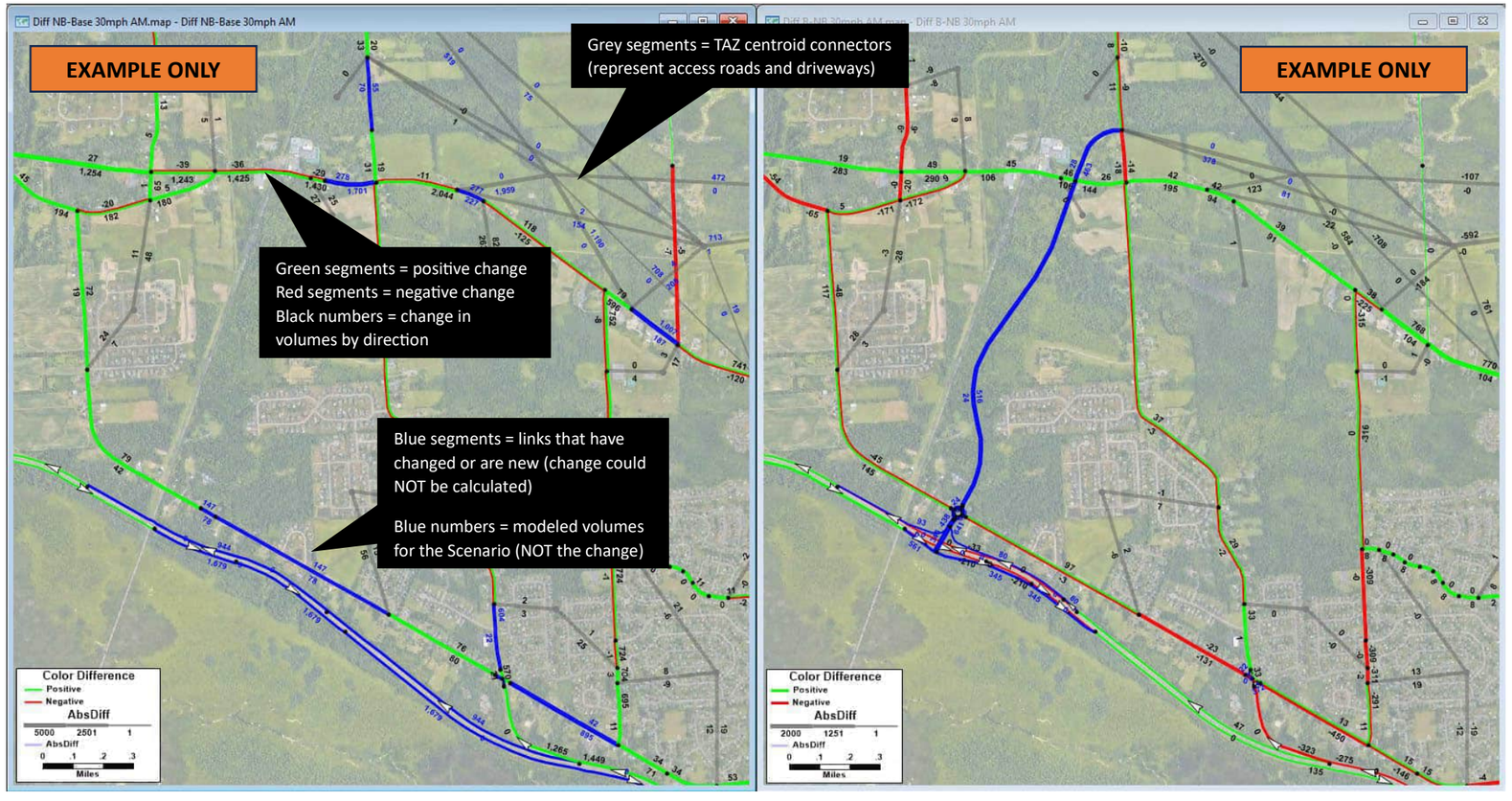
The map on the left displays the change in **AM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB AM Volumes less 2020 AM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **AM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build AM Volumes less 2040 NB AM volumes**).

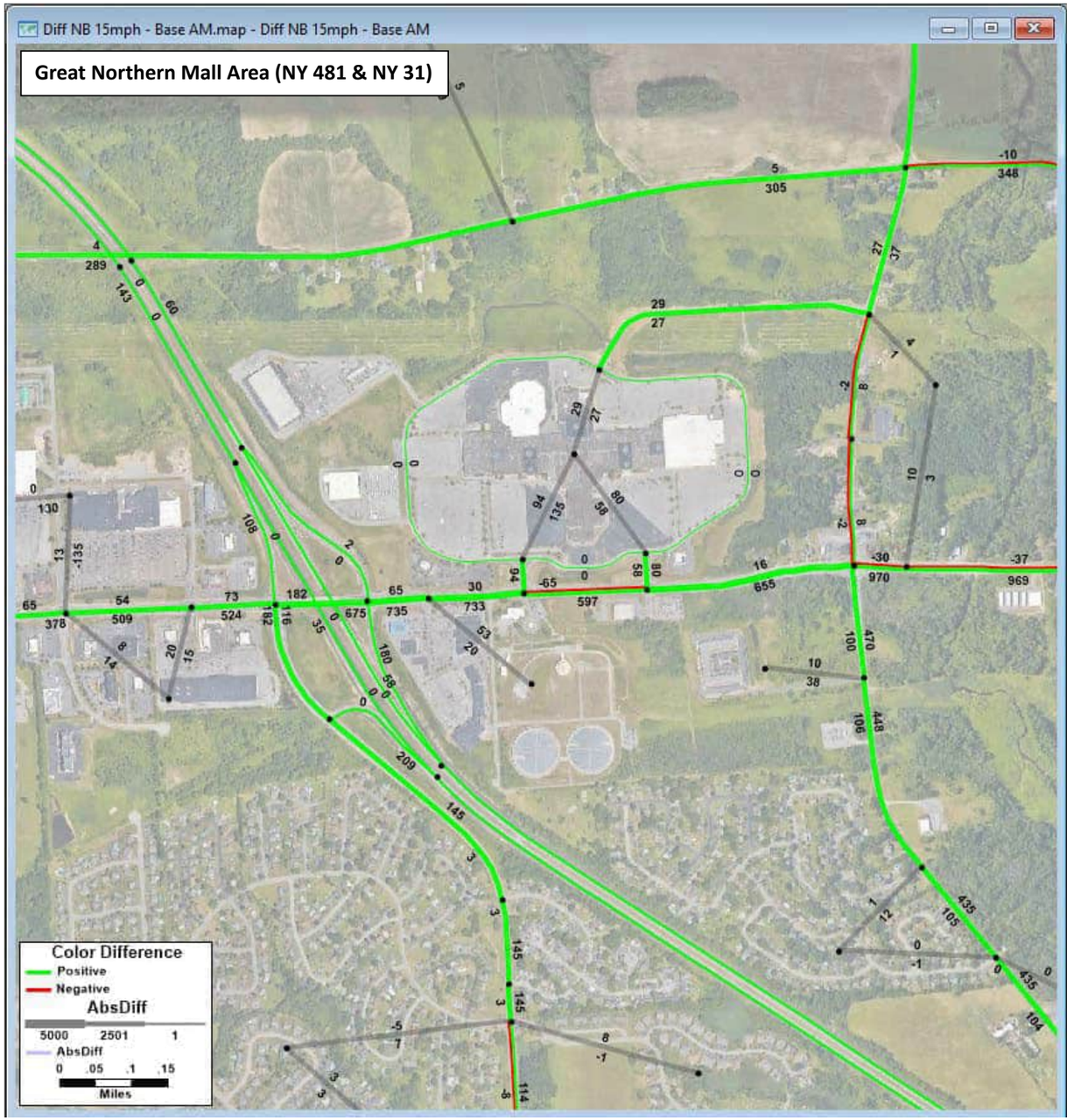
MAP NOTES:

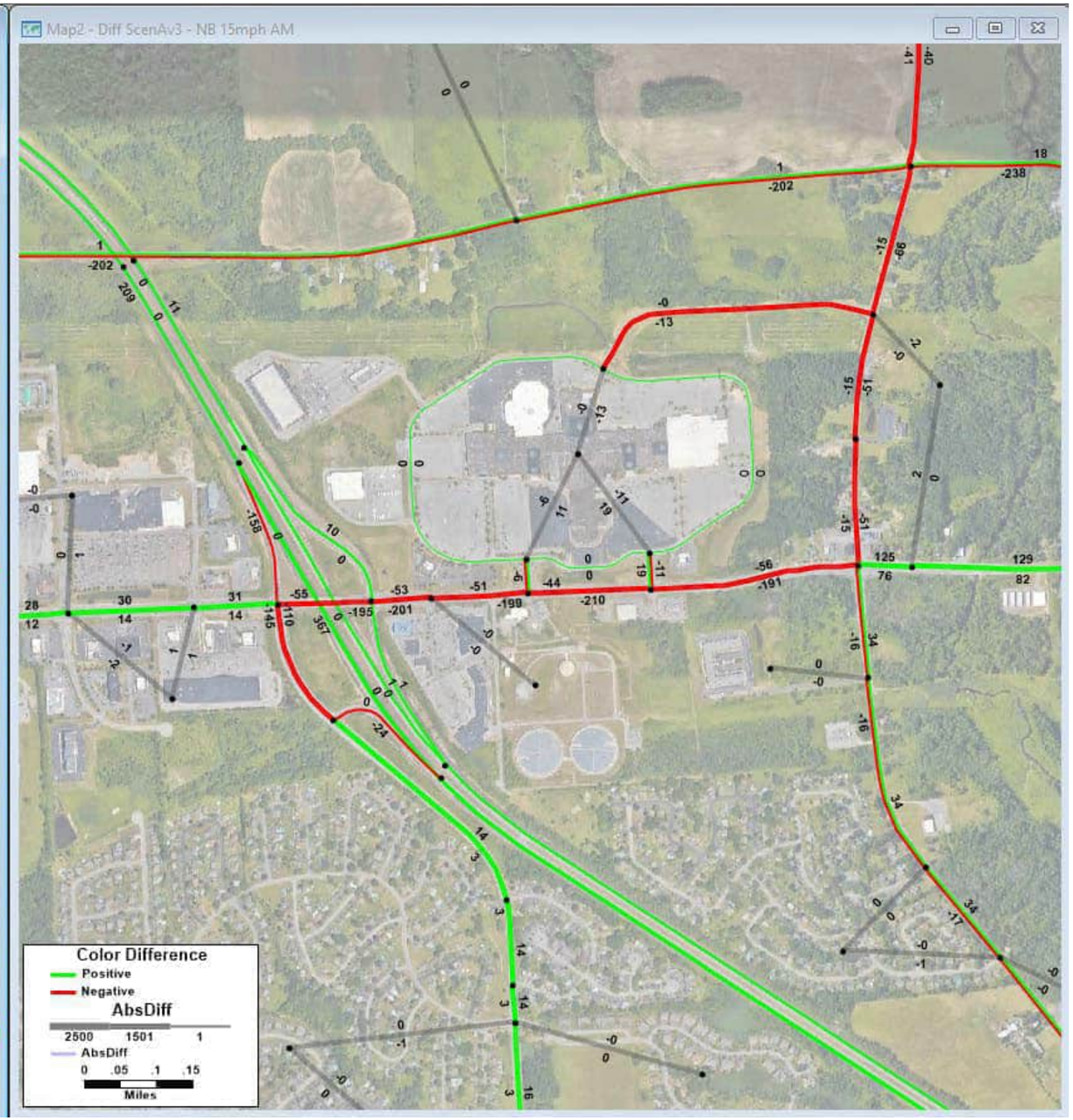
- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

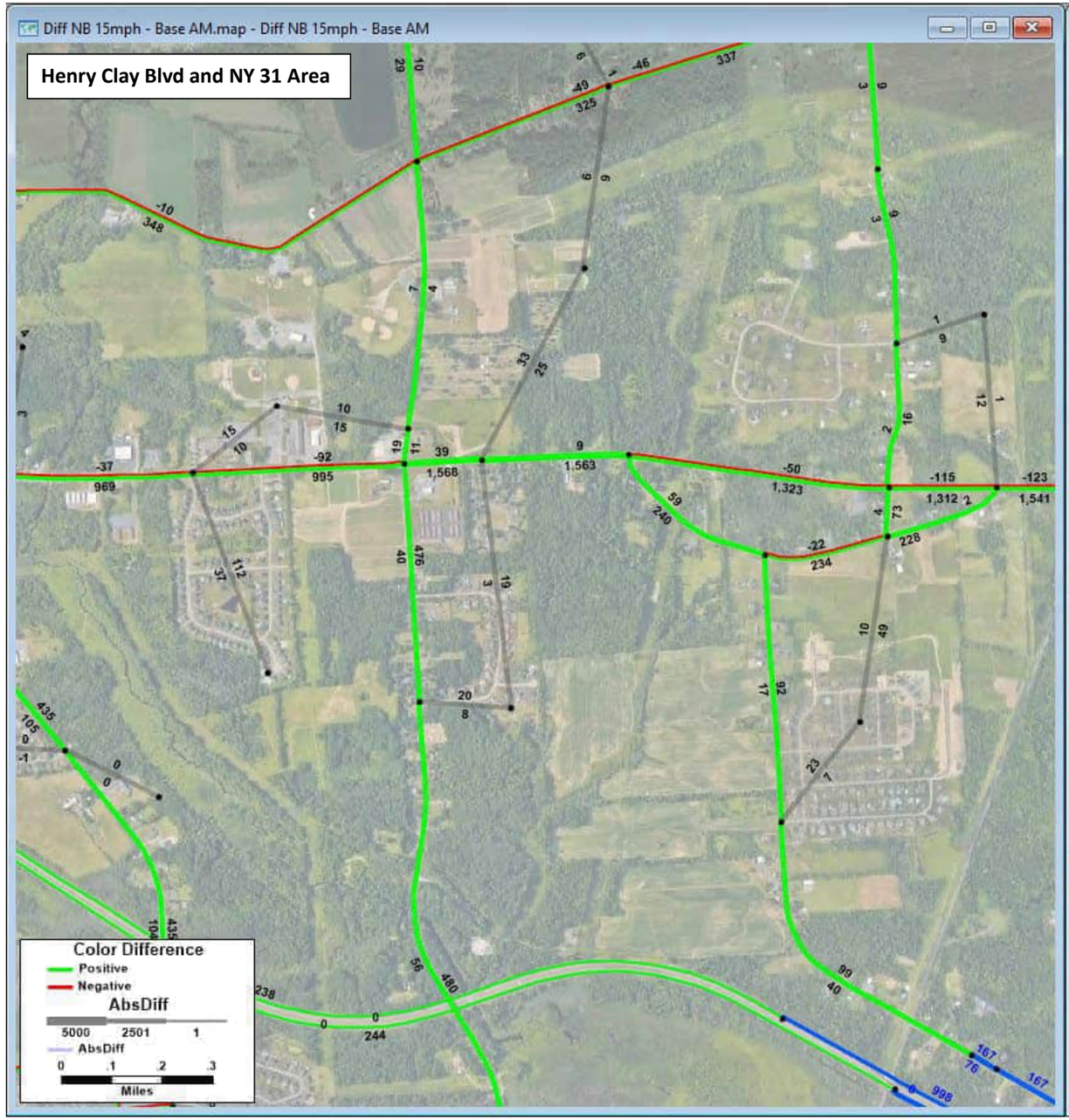


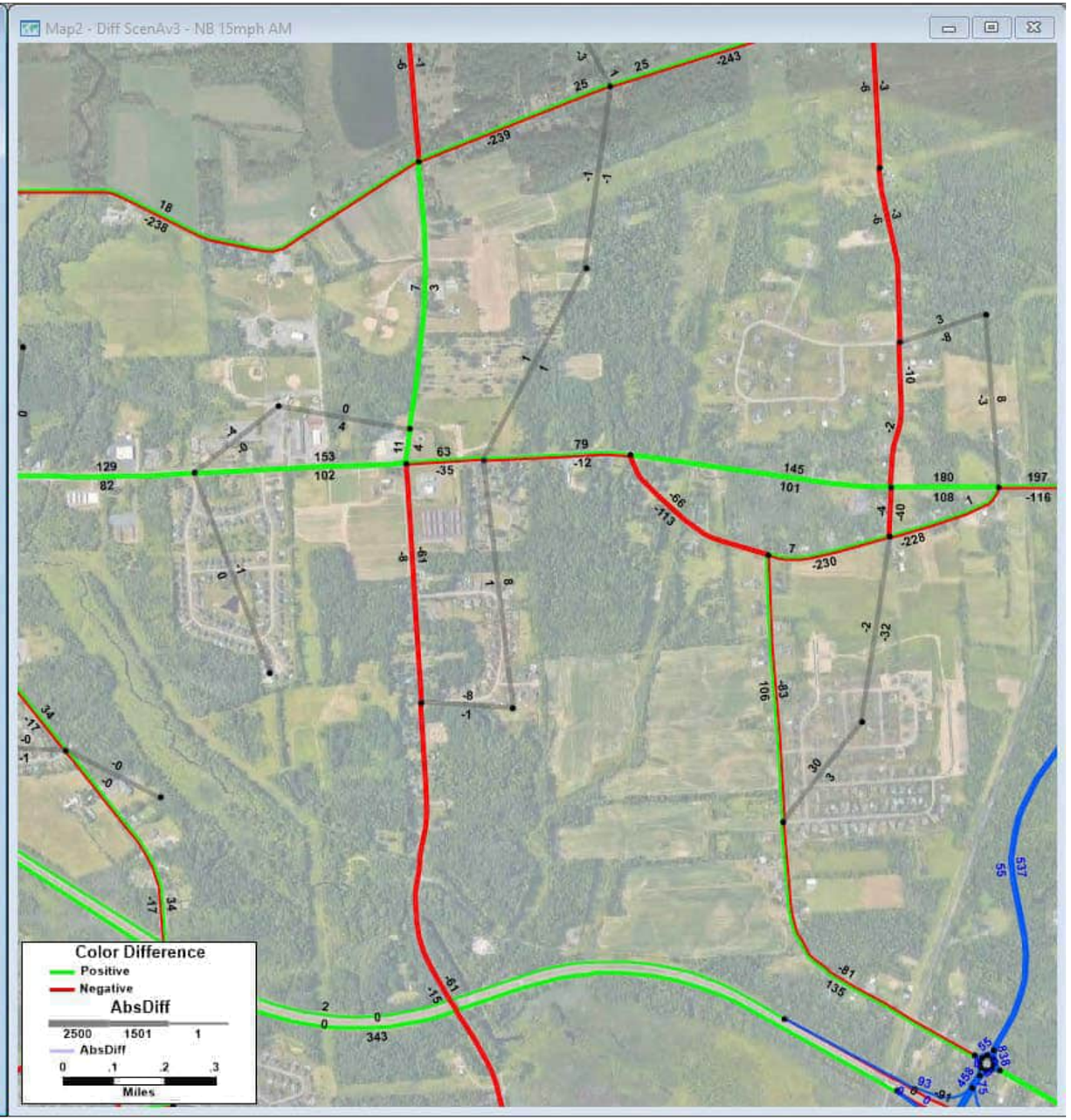


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

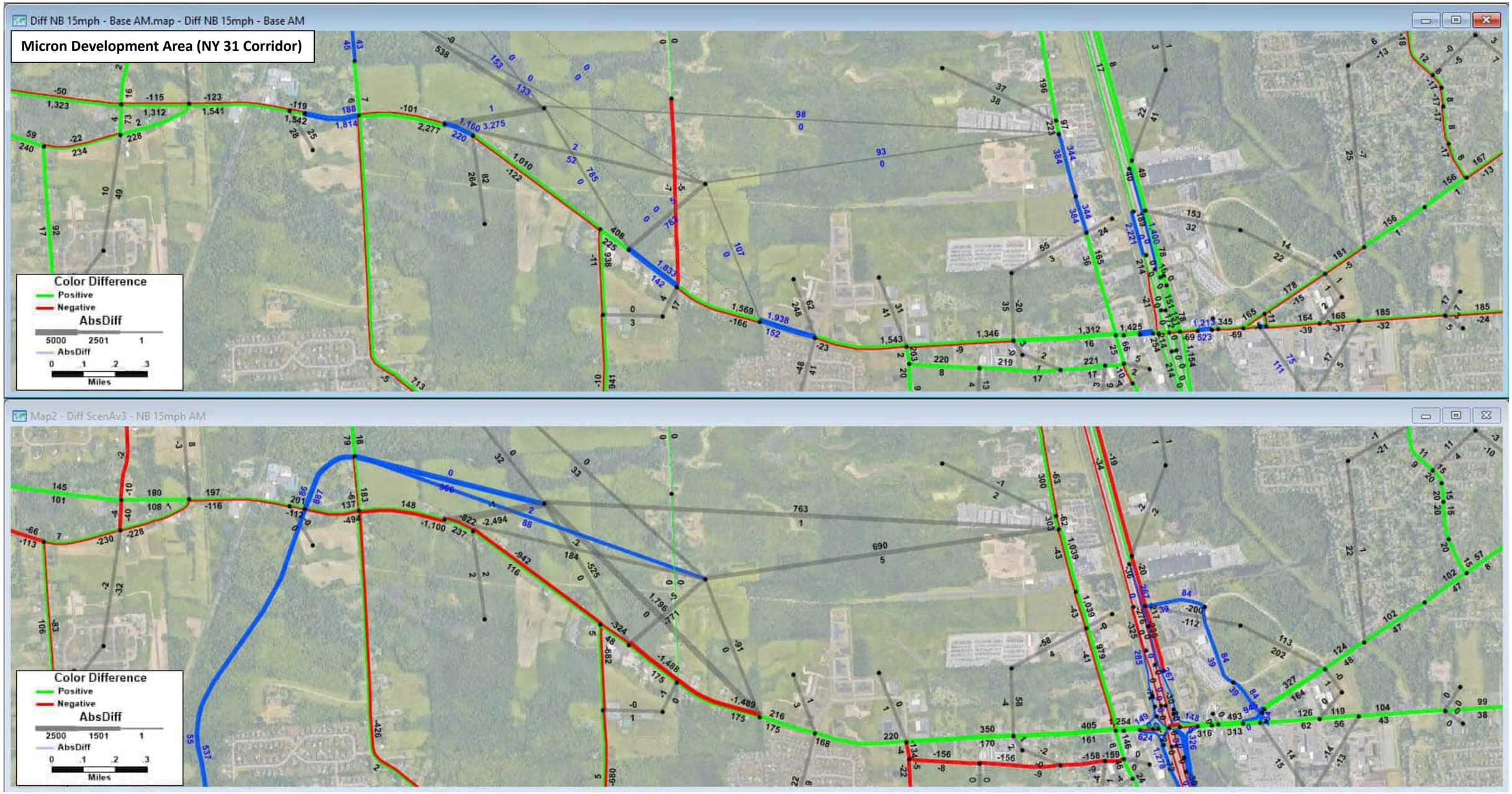




2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

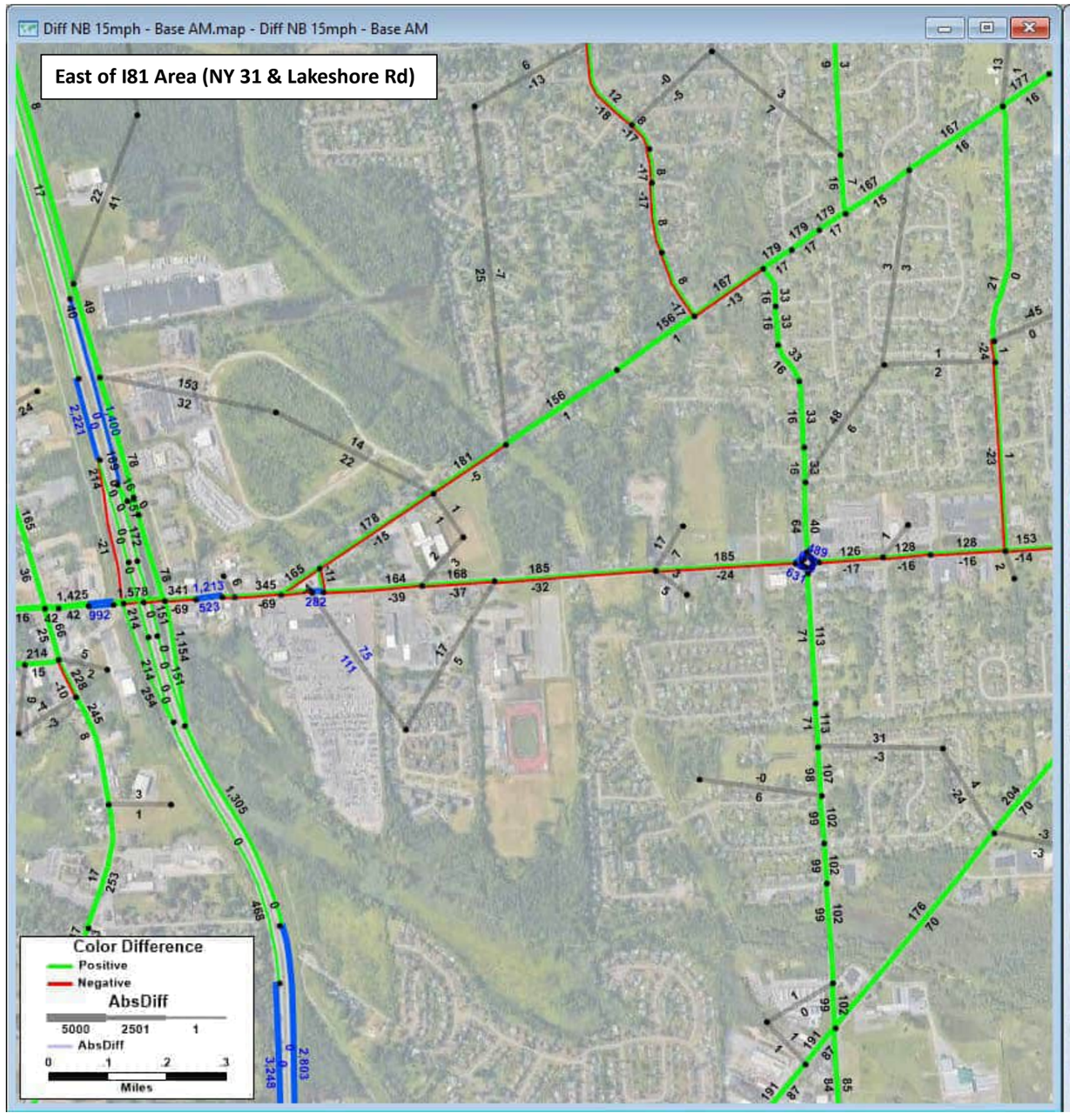
Source : SMTC Regional Travel Demand Model (1/3/2023)

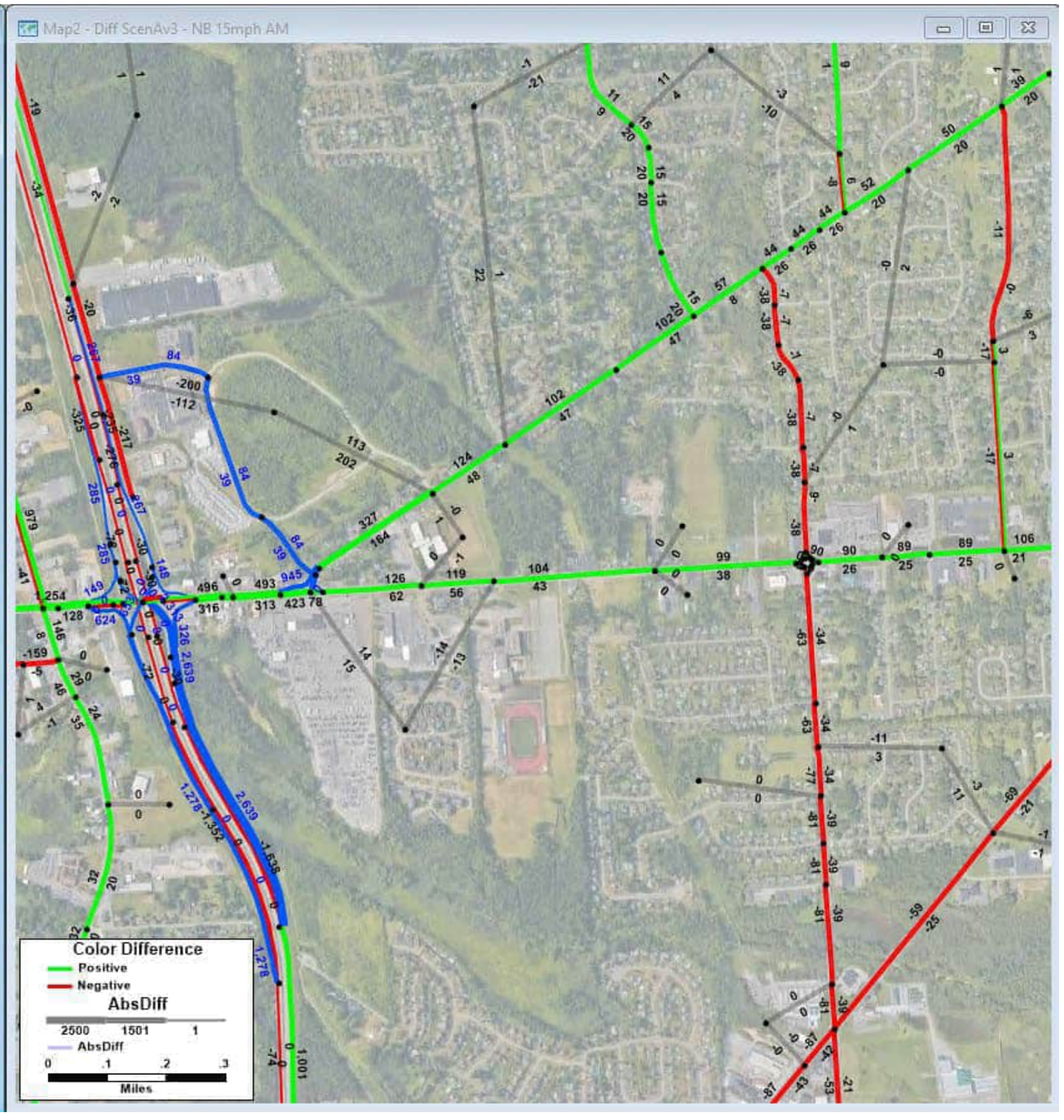


(TOP MAP) 2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

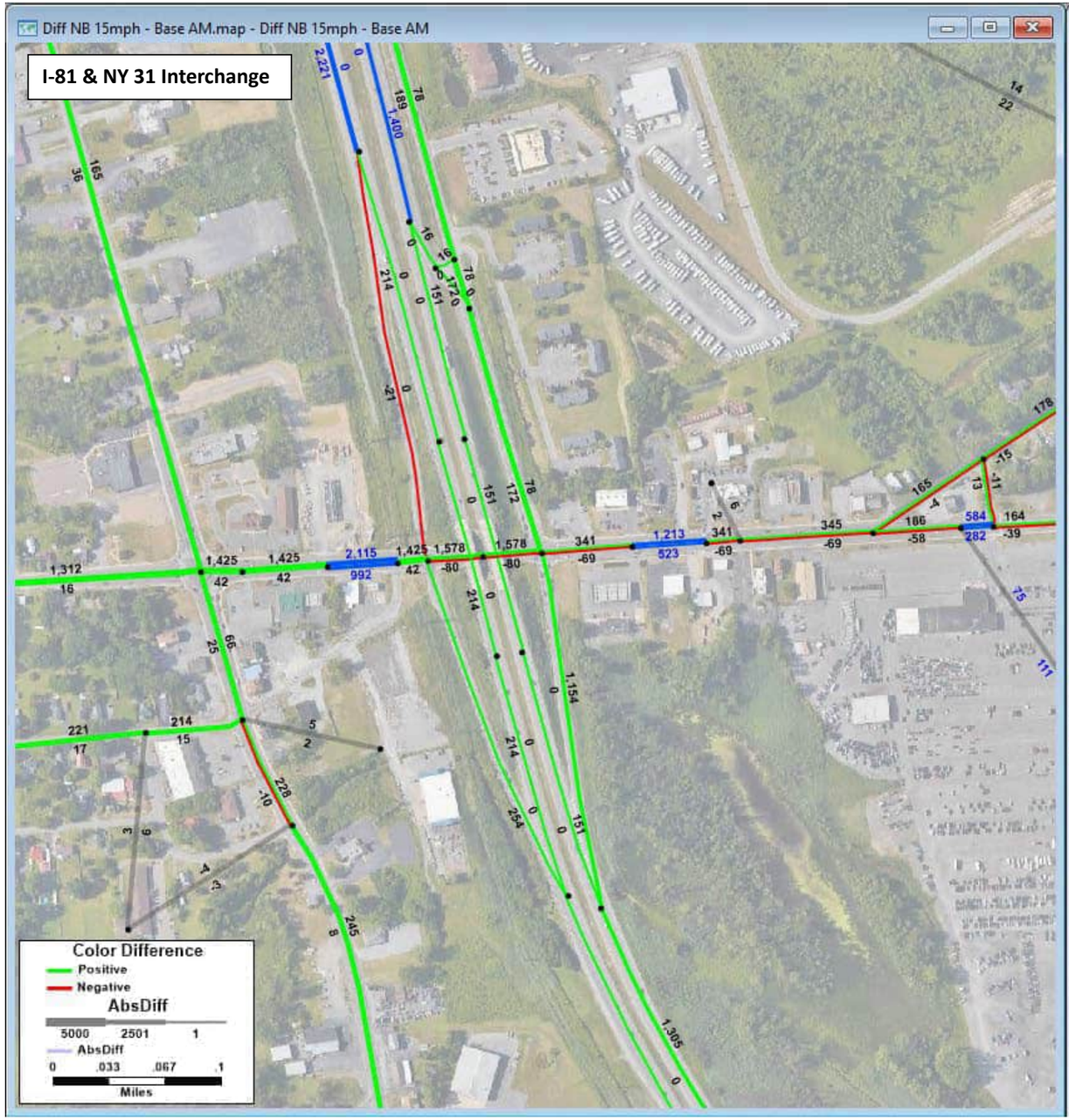


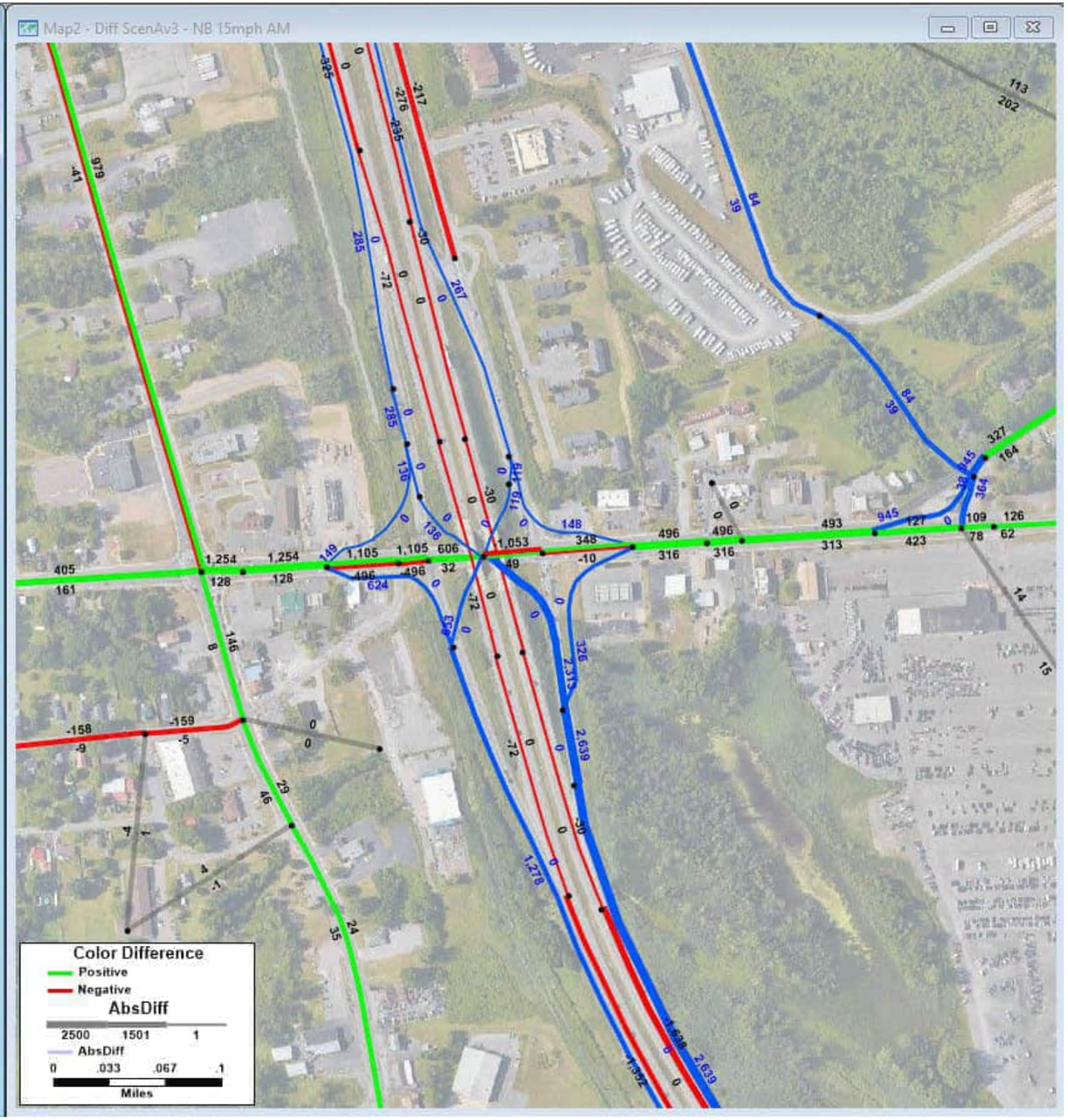


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

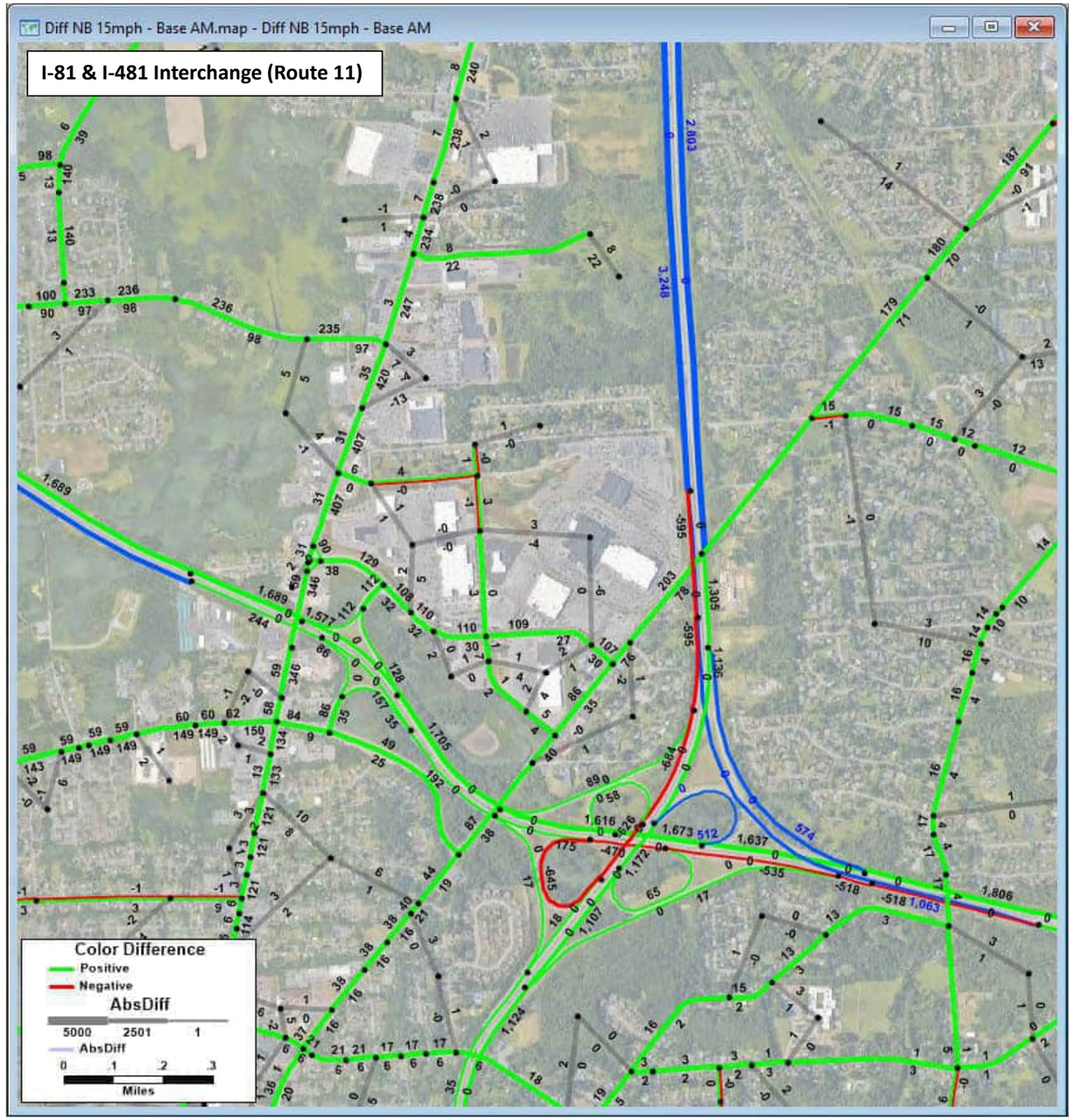




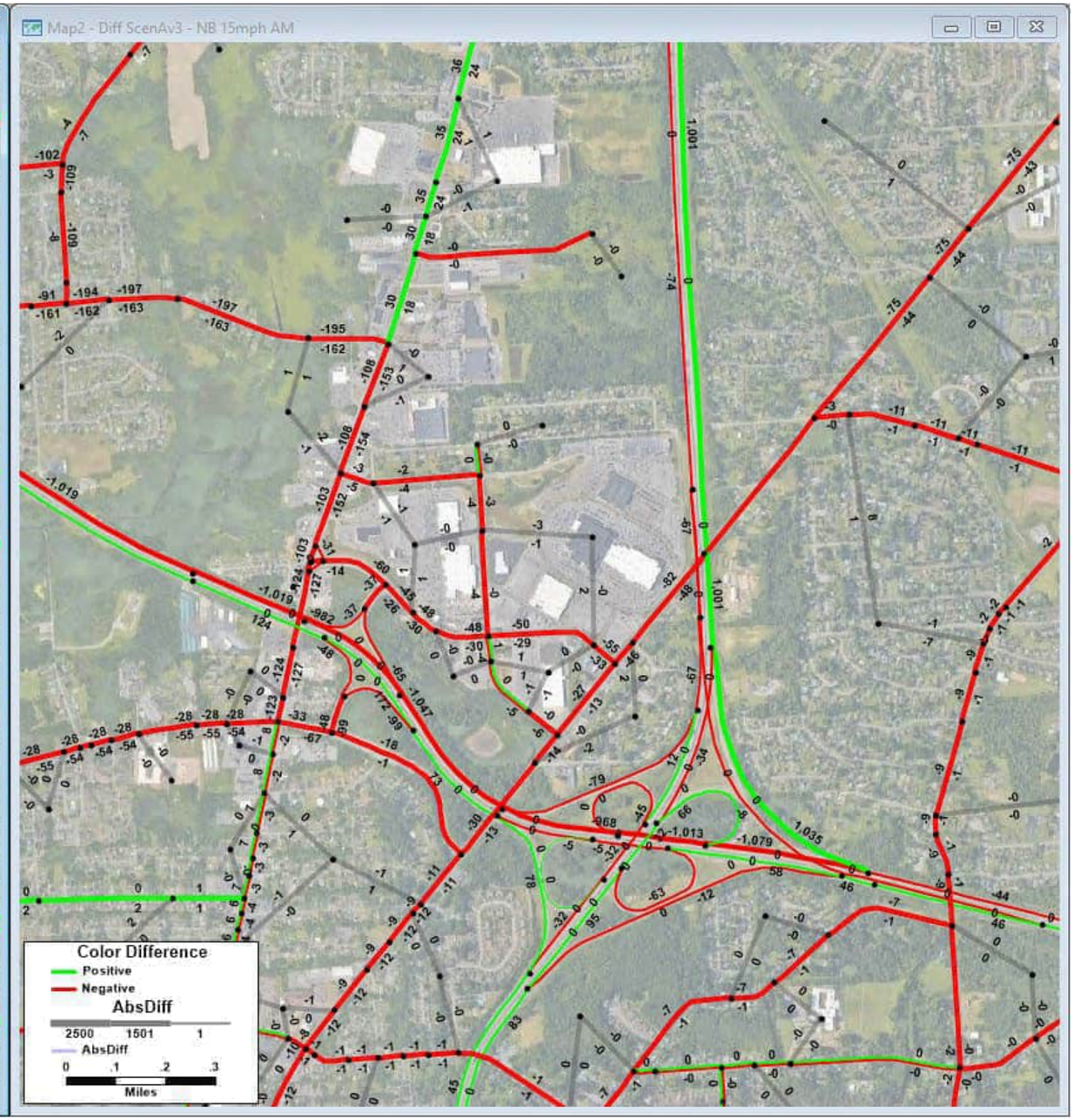
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

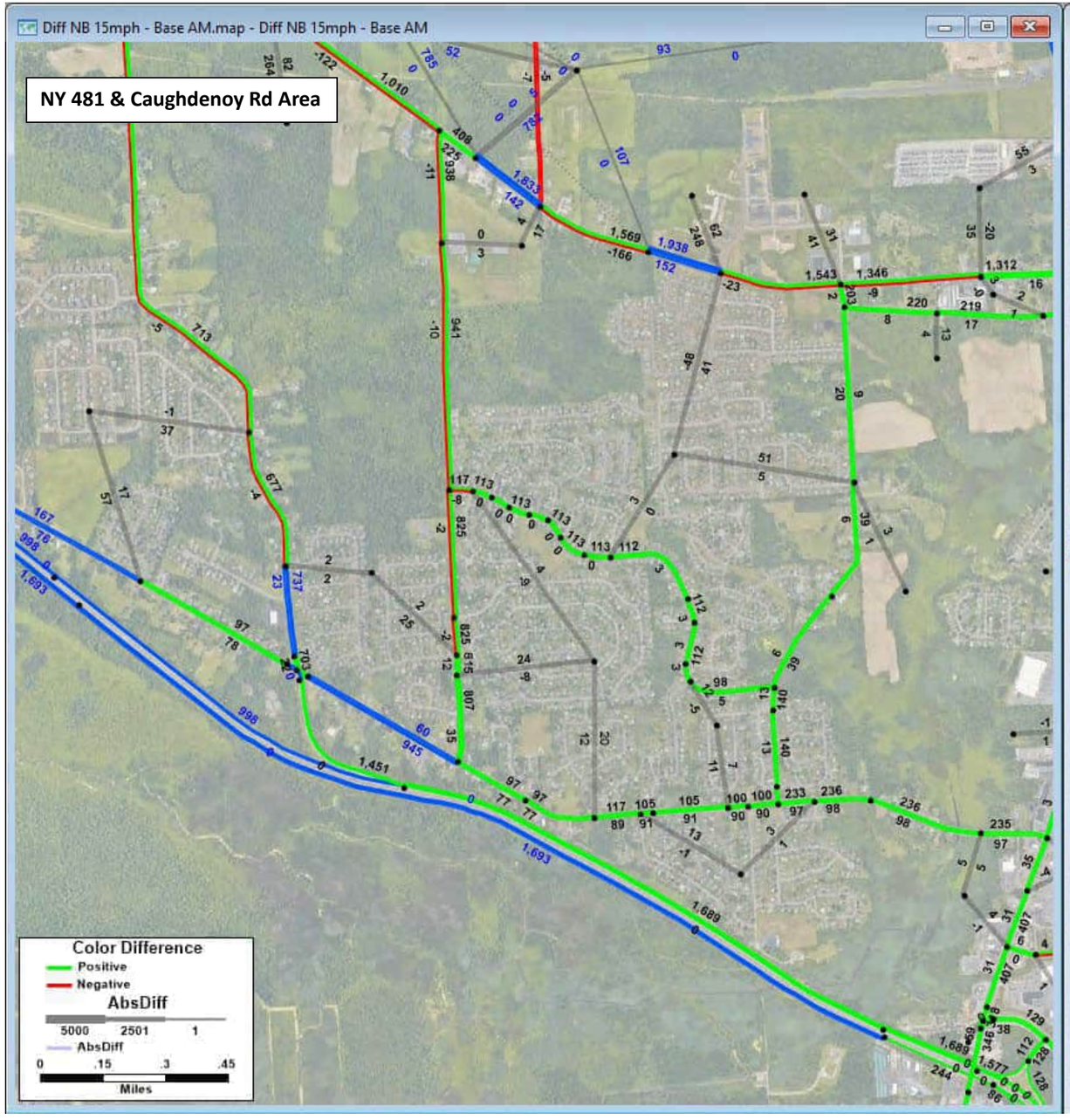


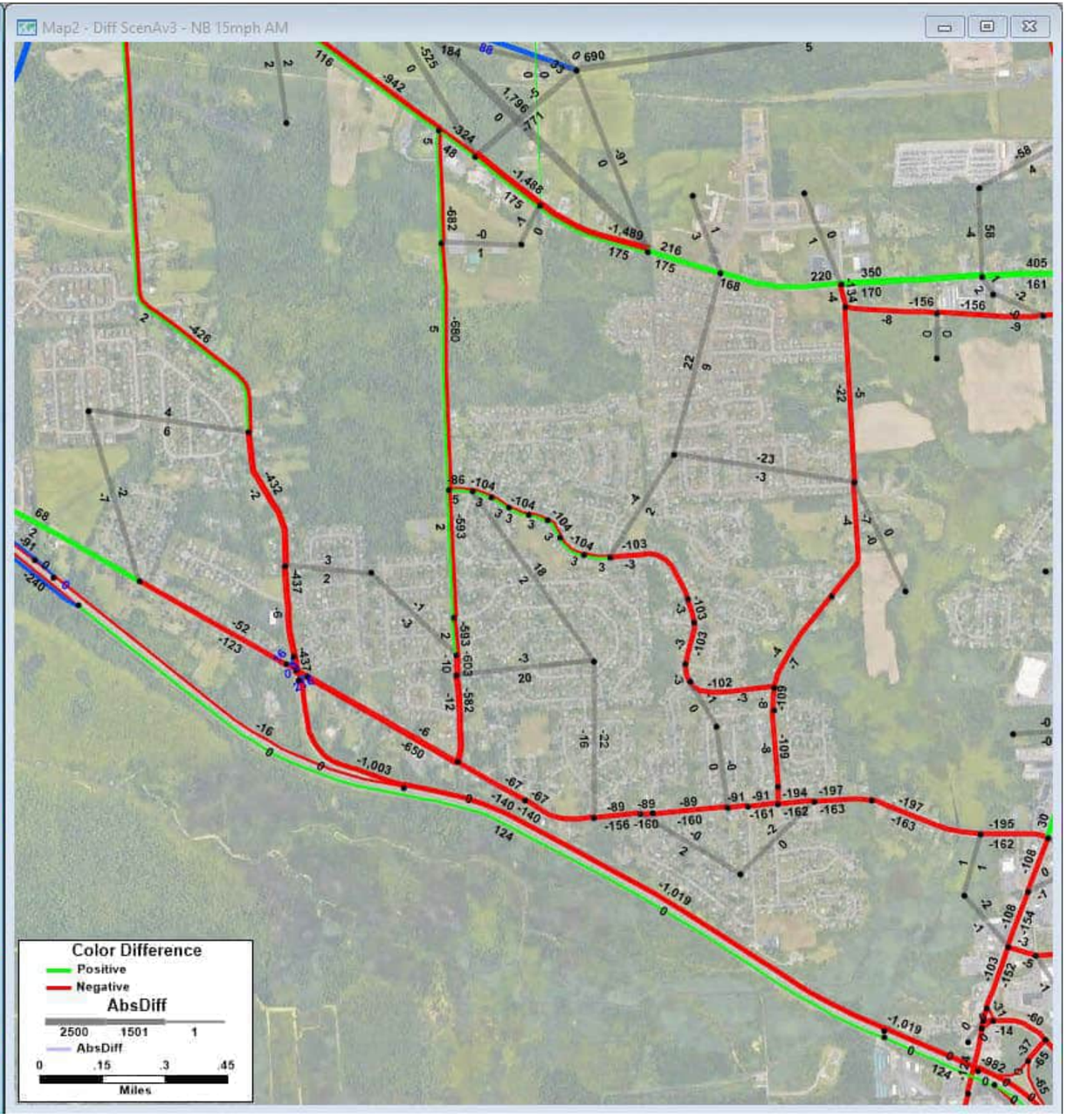
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

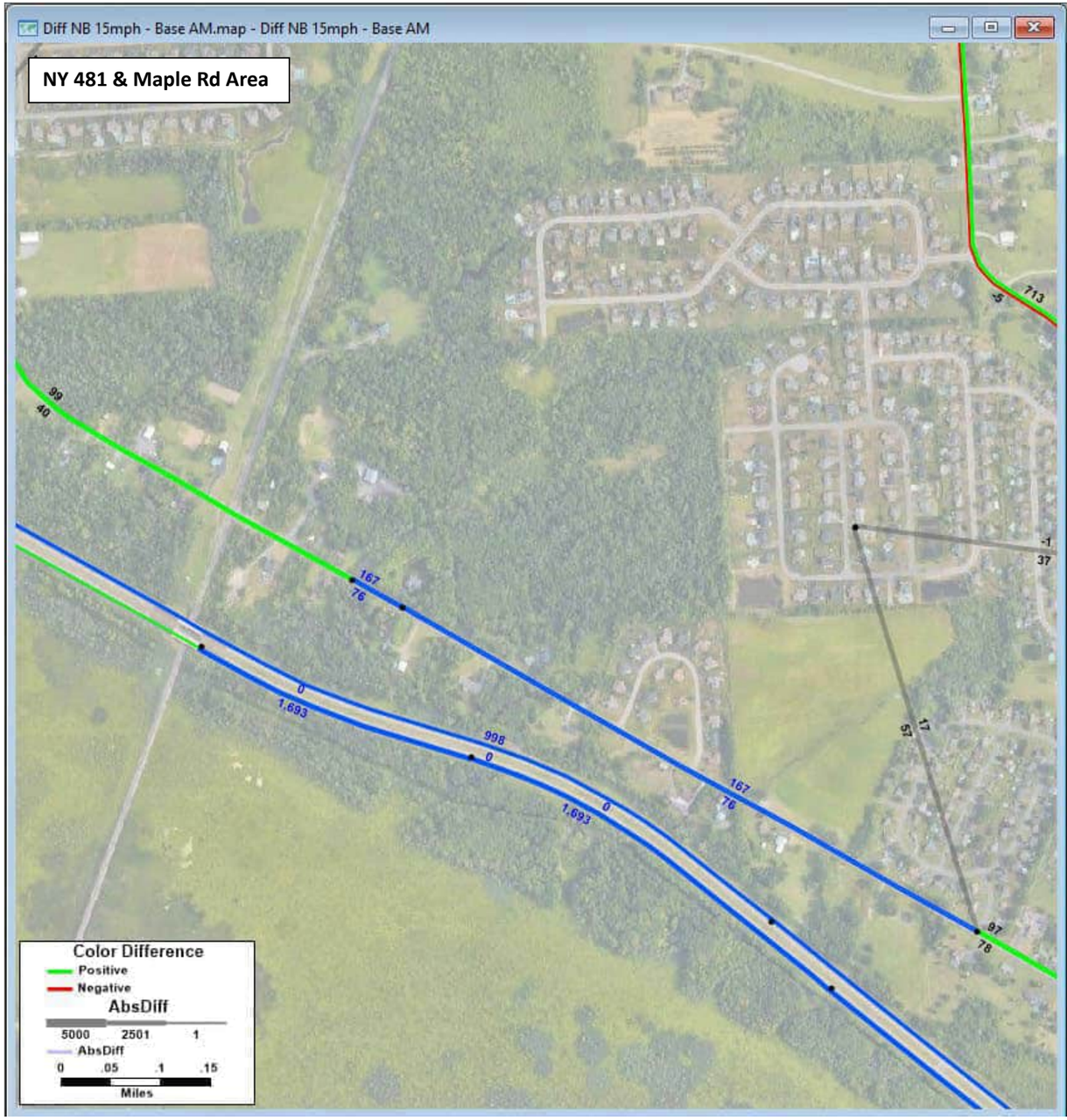


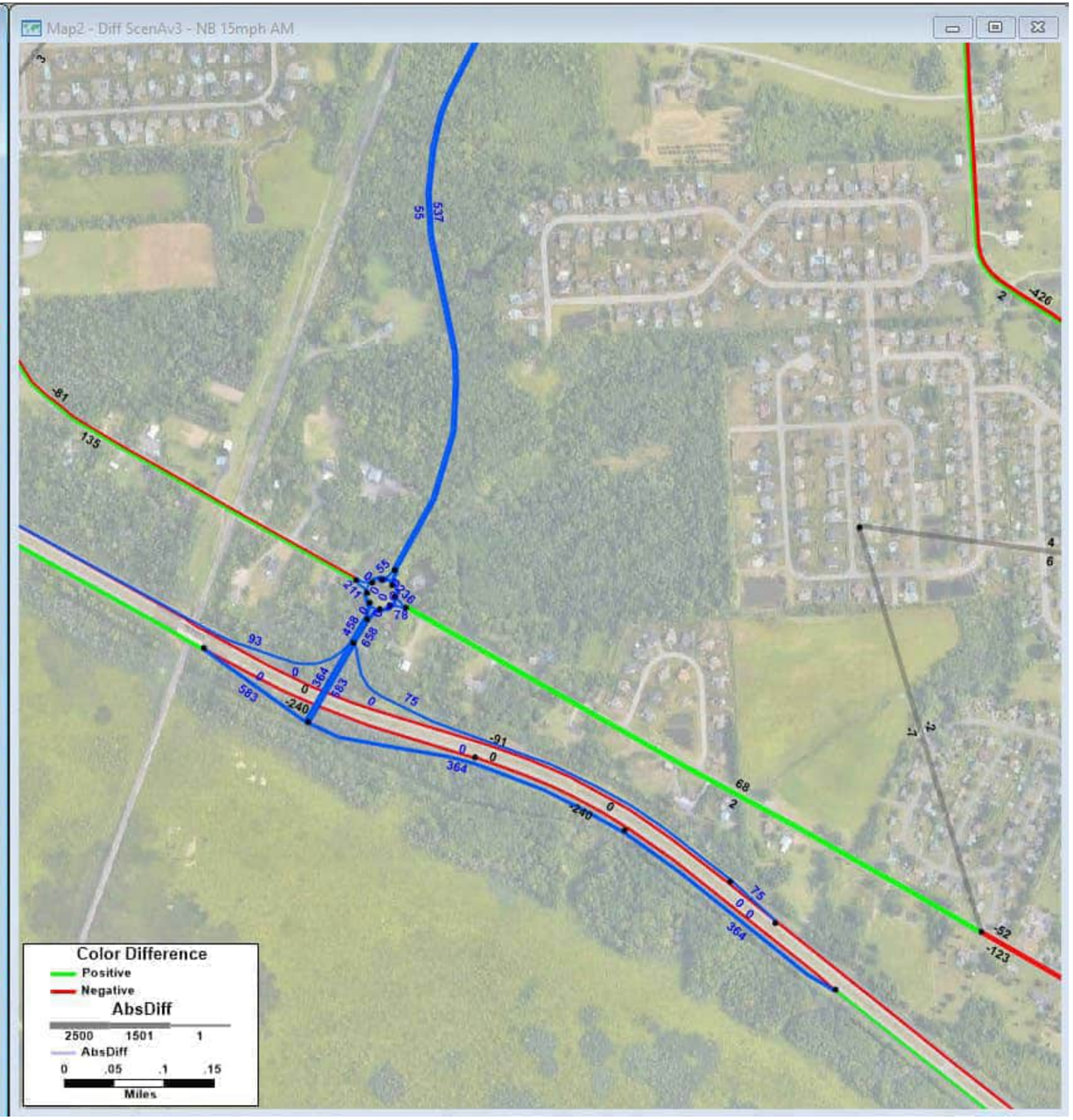


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

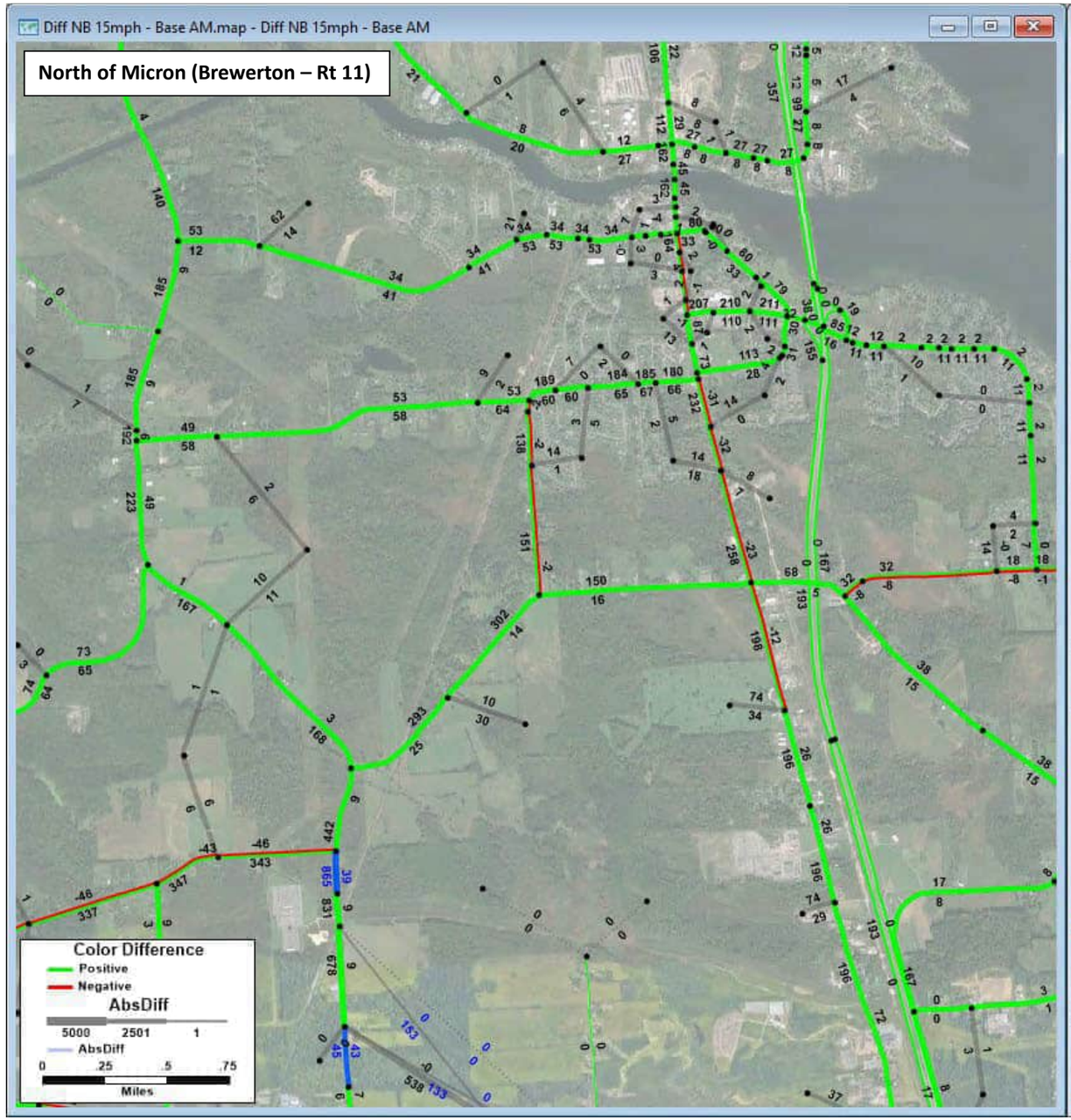




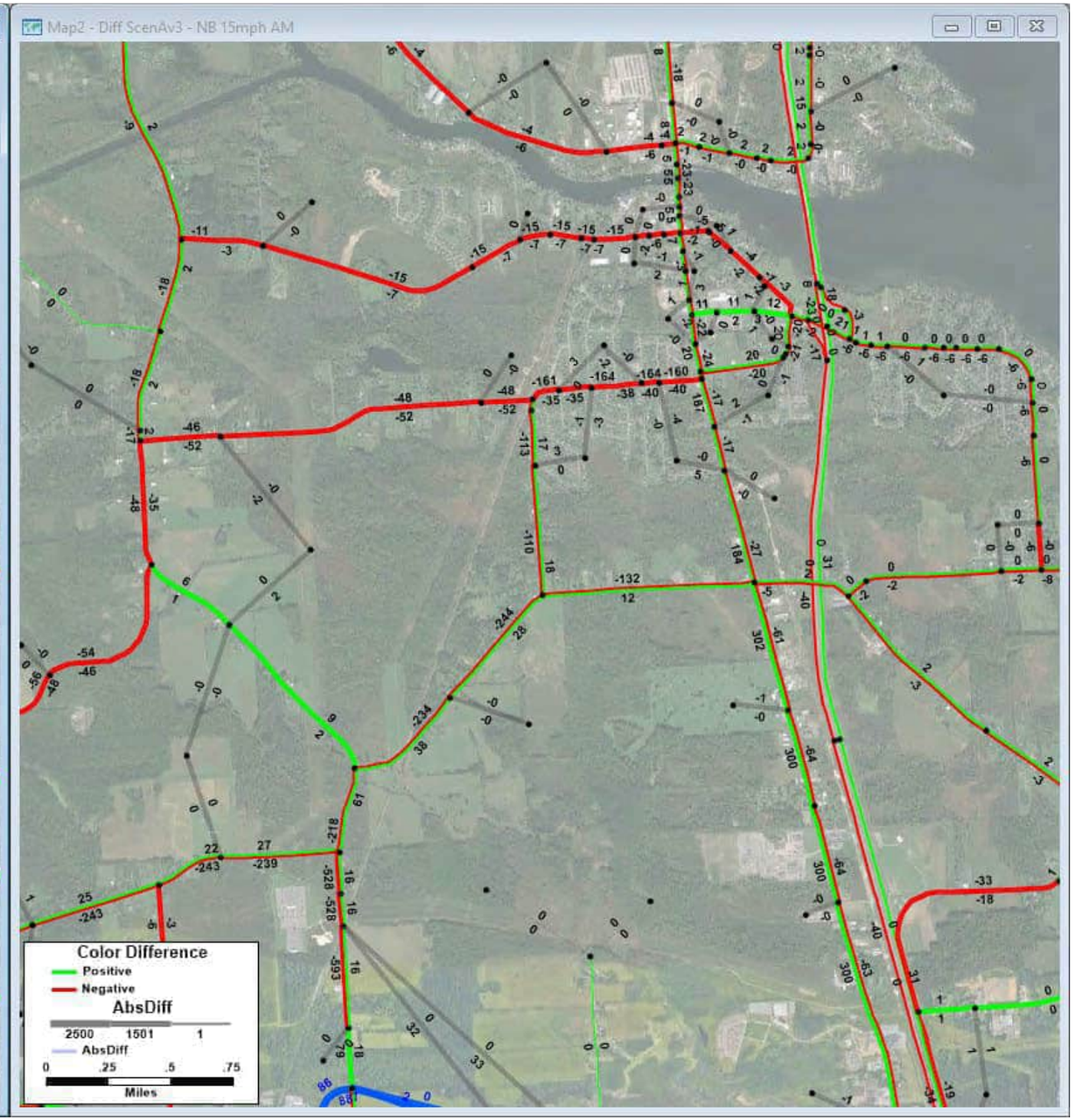
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

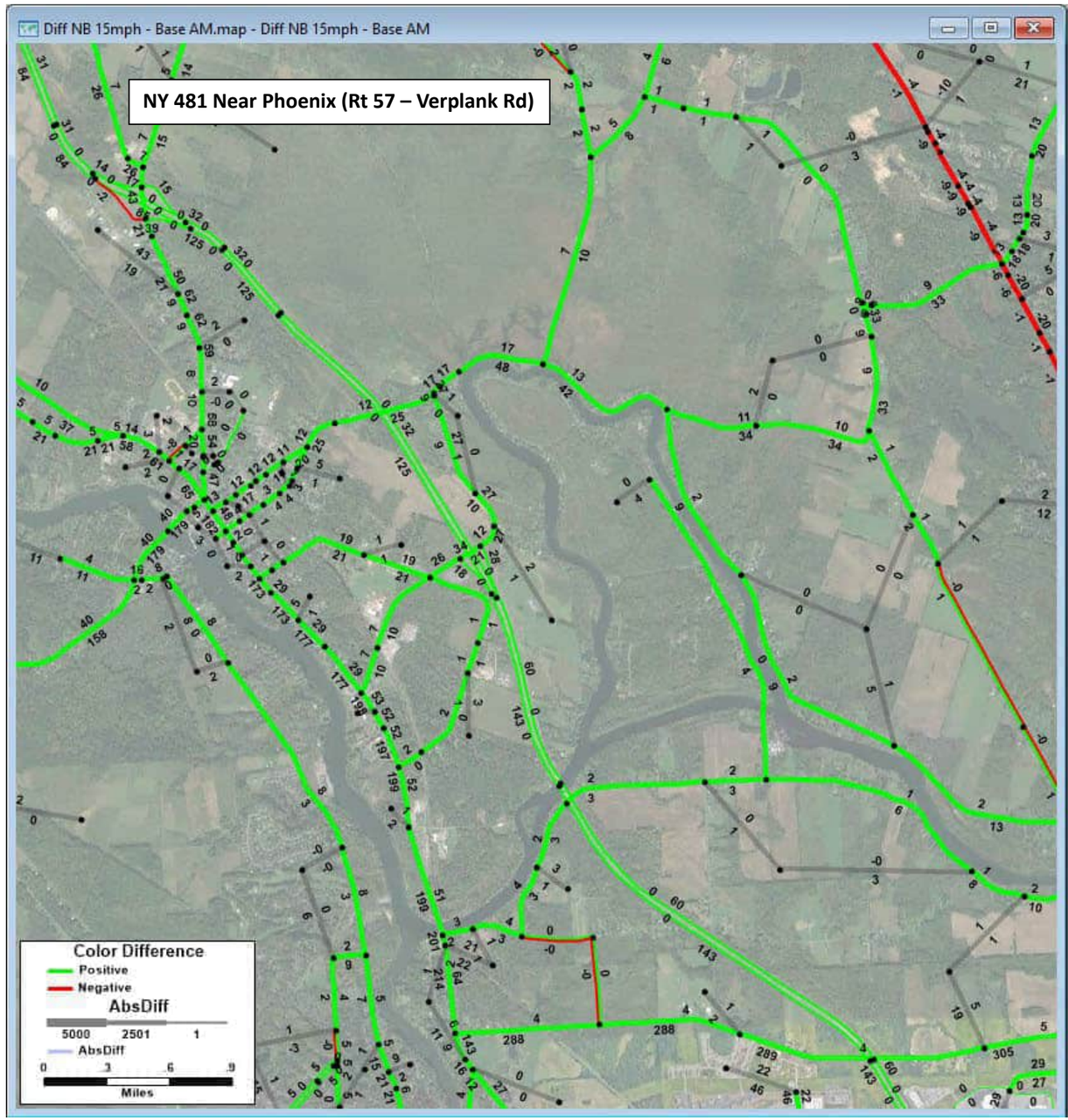


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

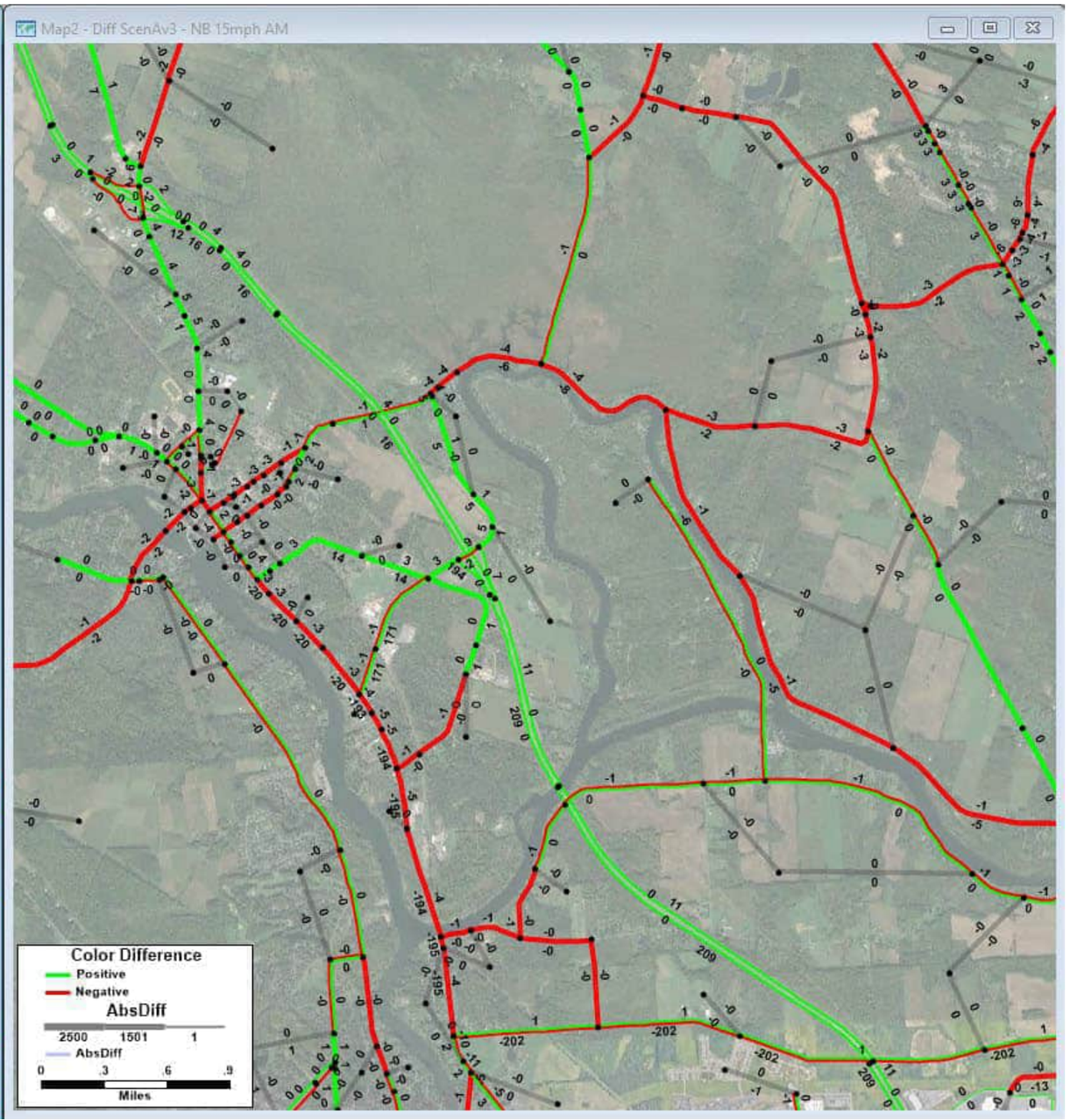


2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

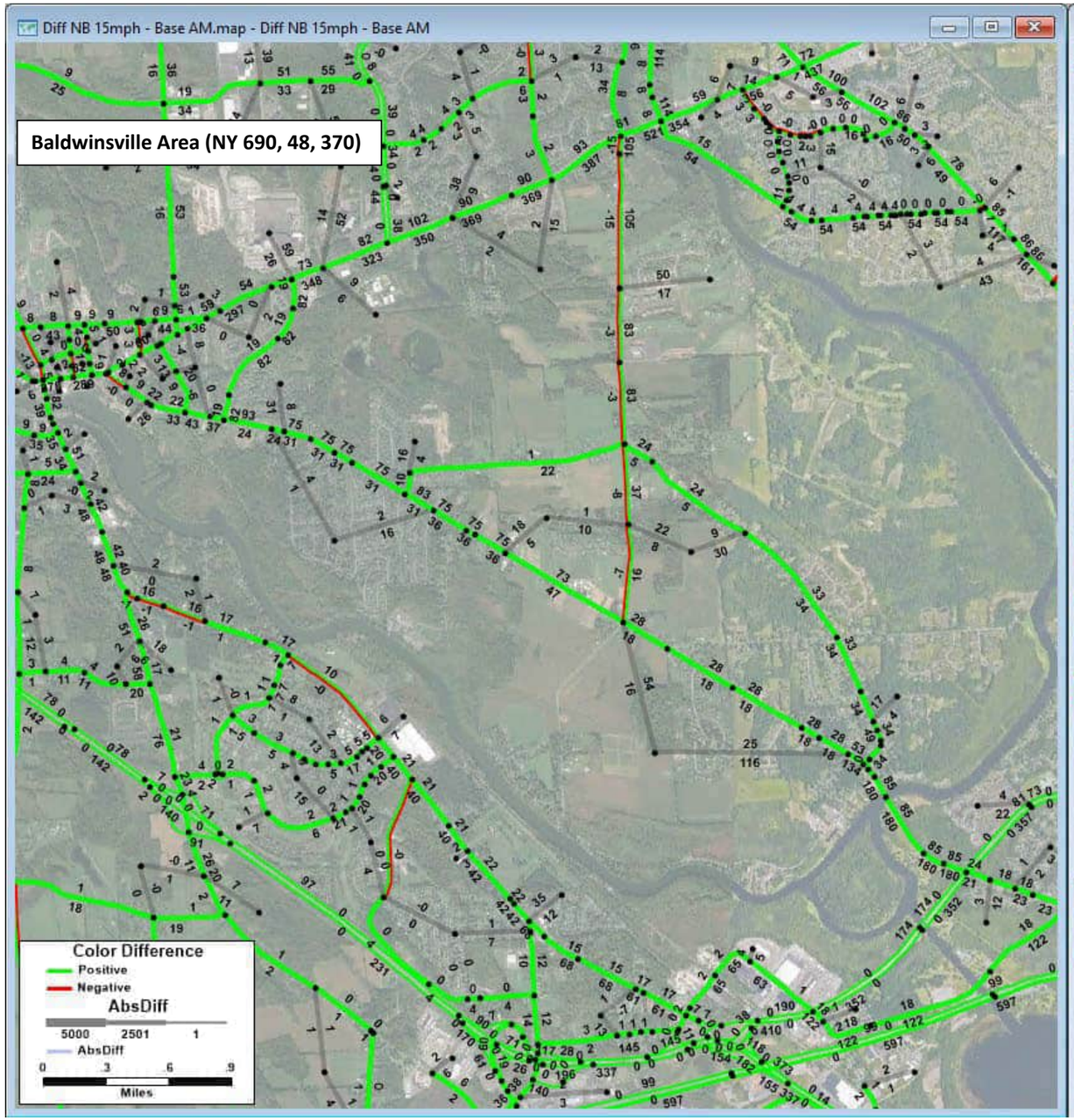


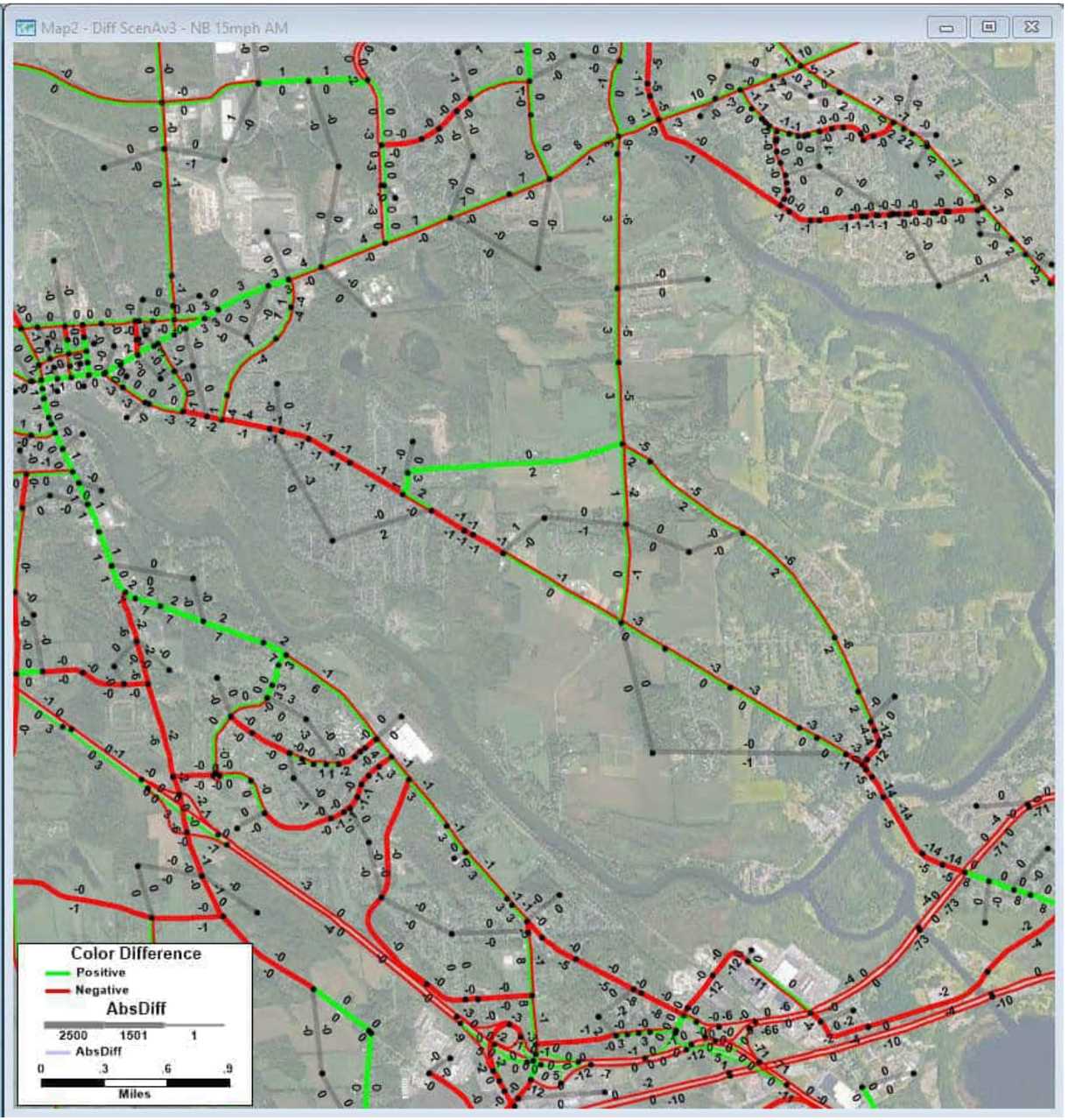
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

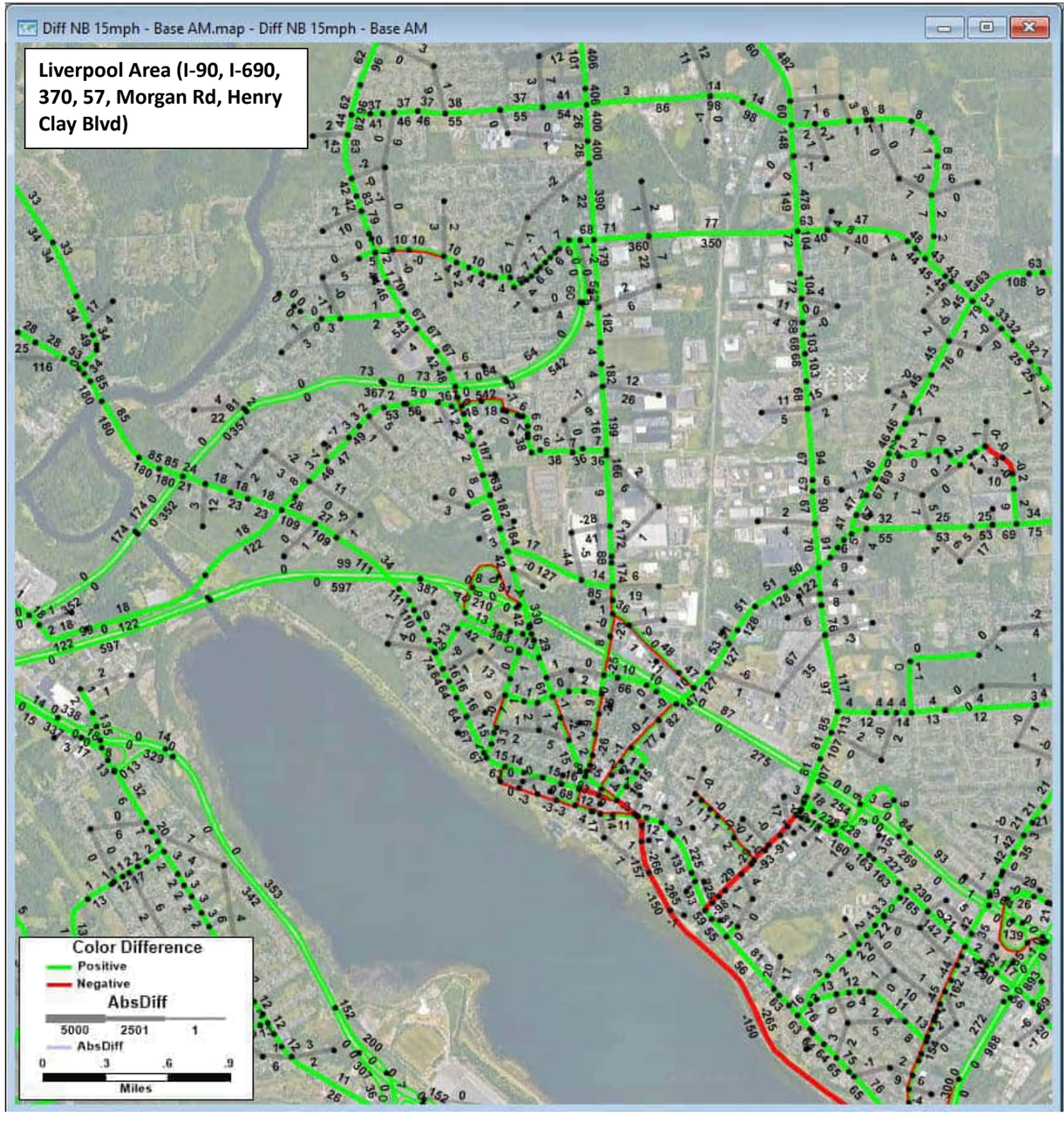


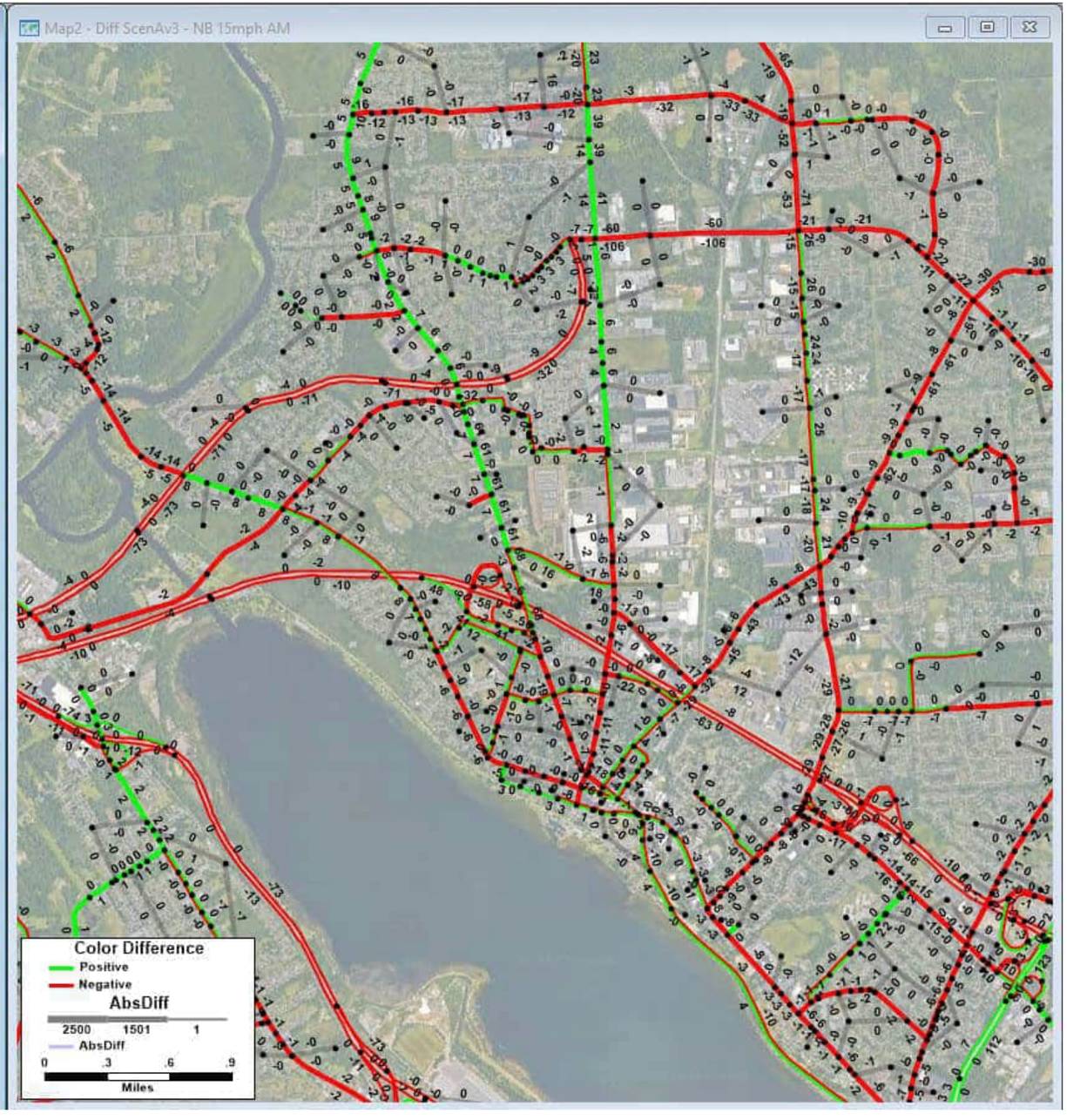


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

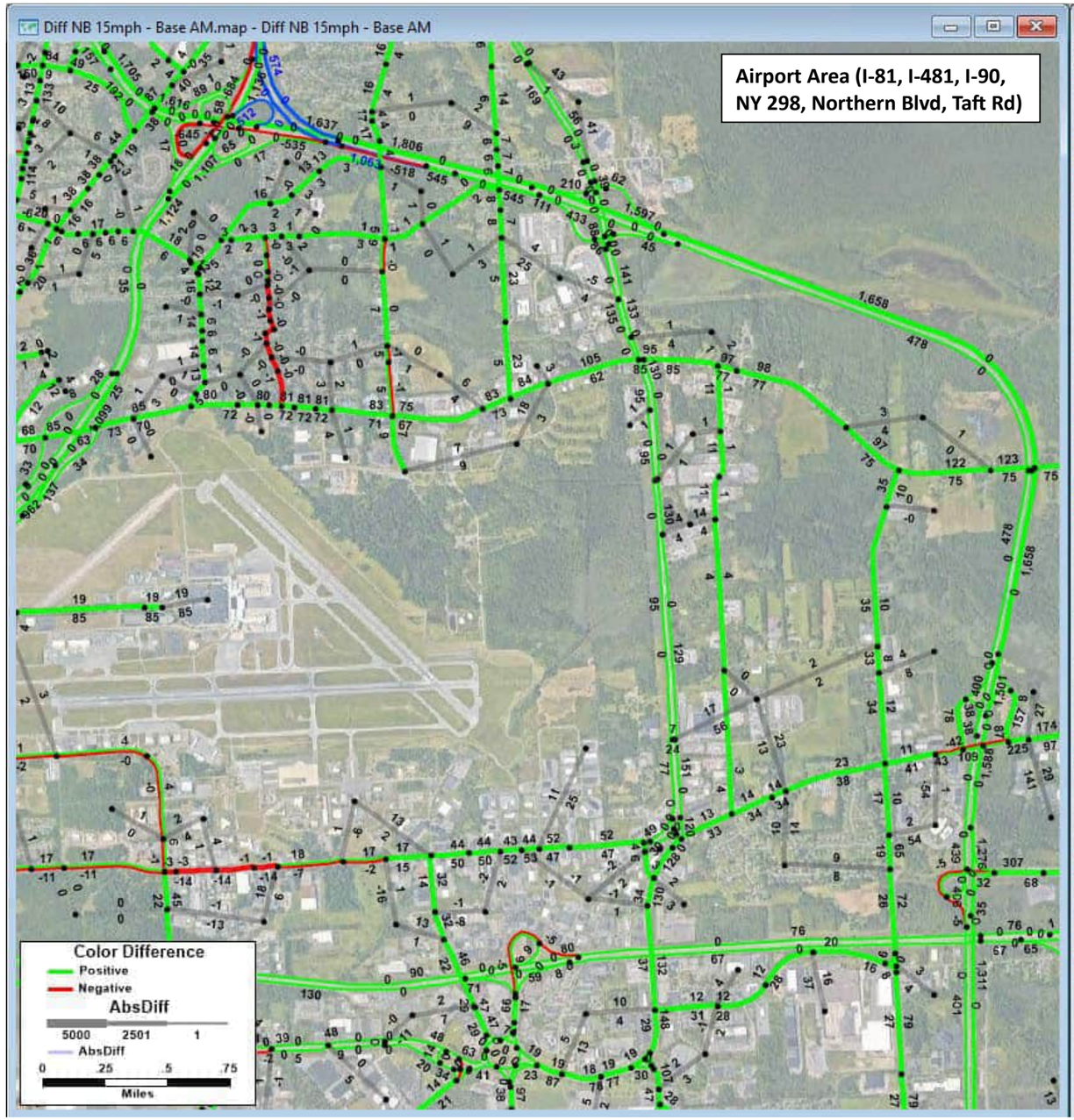


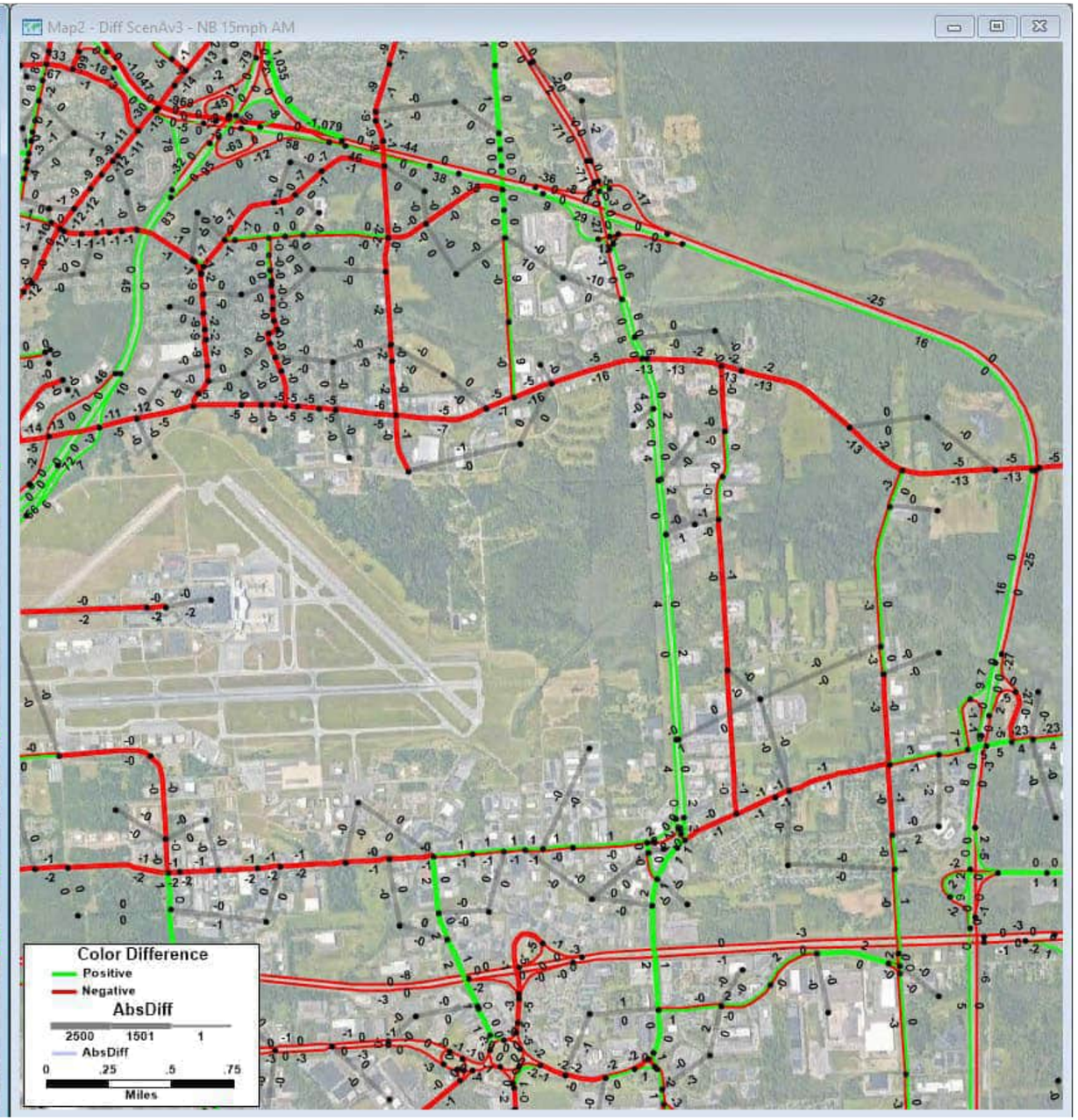


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)





2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

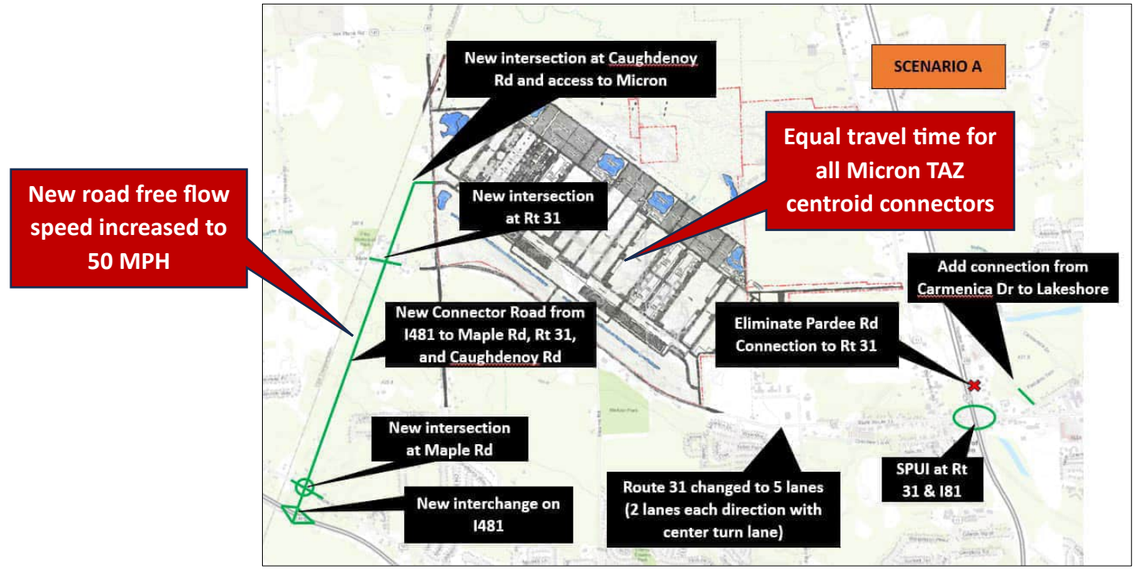
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario A v3 (Scenario A v2 and Equal Travel Time Micron Centroid Connectors) – PM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v3** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- No Build in this document refers to no Micron related road network changes
- RED callouts note the revisions made to Scenario A



The graphic to the right is an example of what is included in this document →

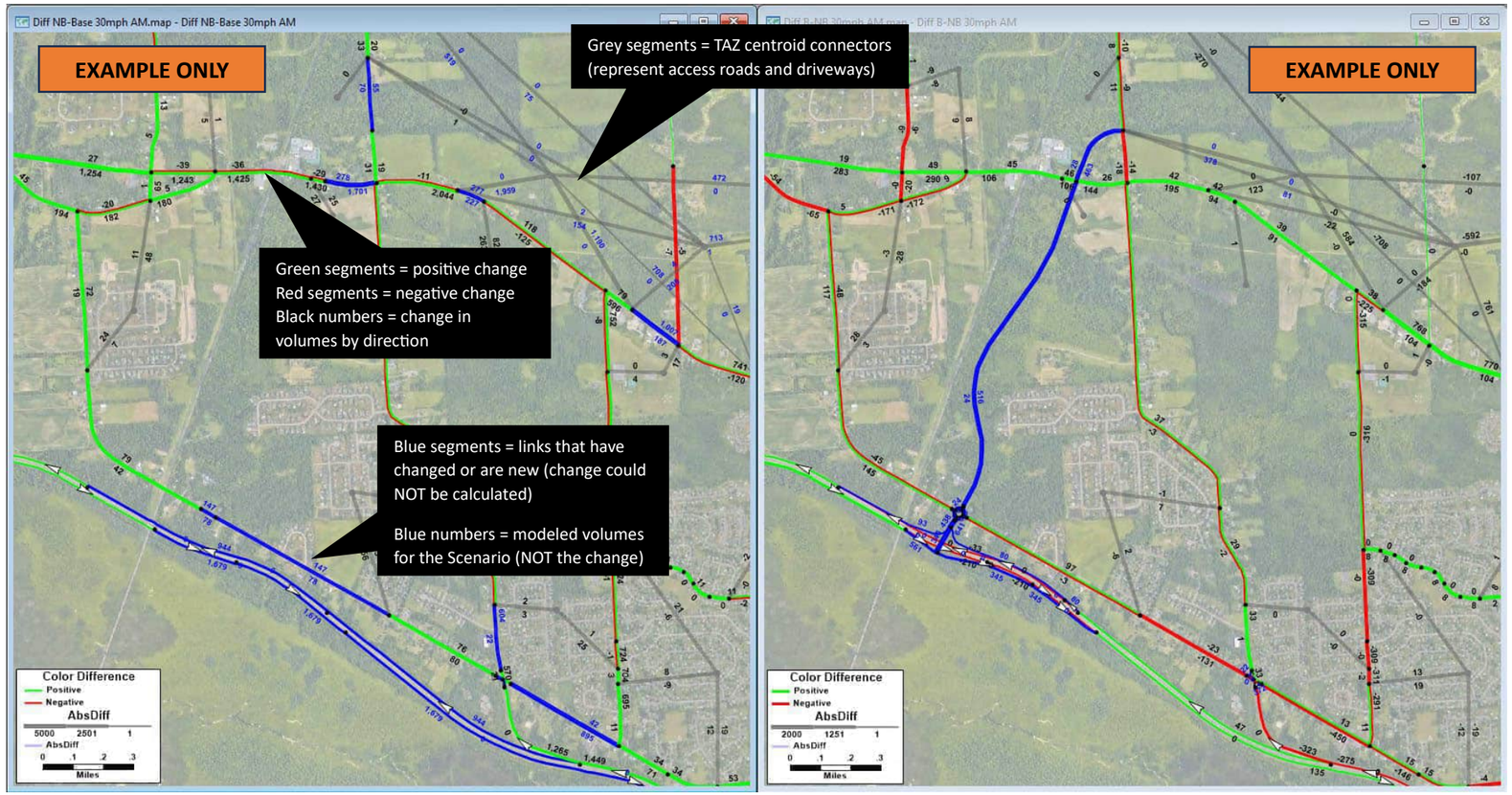
The map on the left displays the change in **PM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB PM Volumes less 2020 PM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **PM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build PM Volumes less 2040 NB PM volumes**).

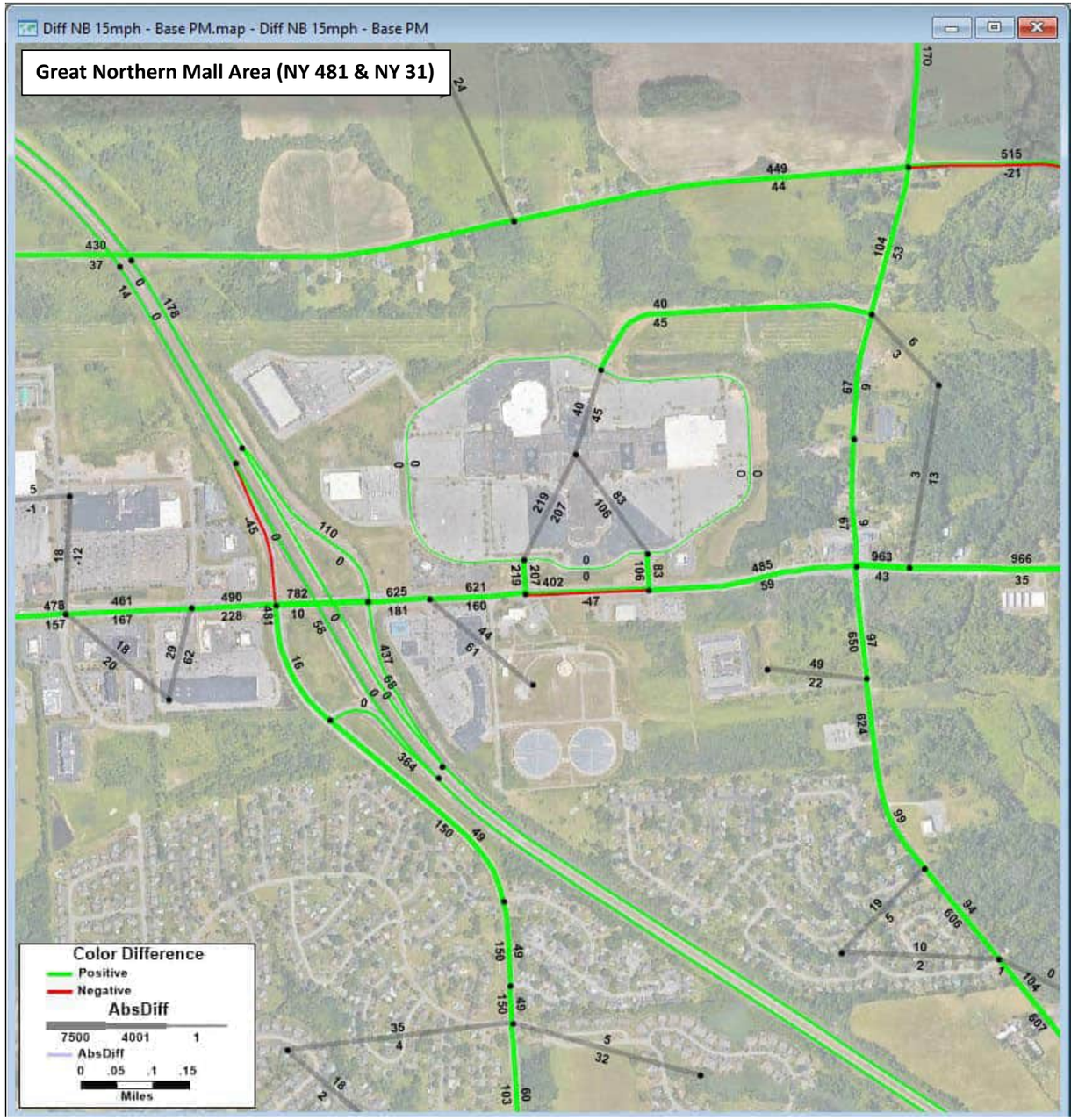
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

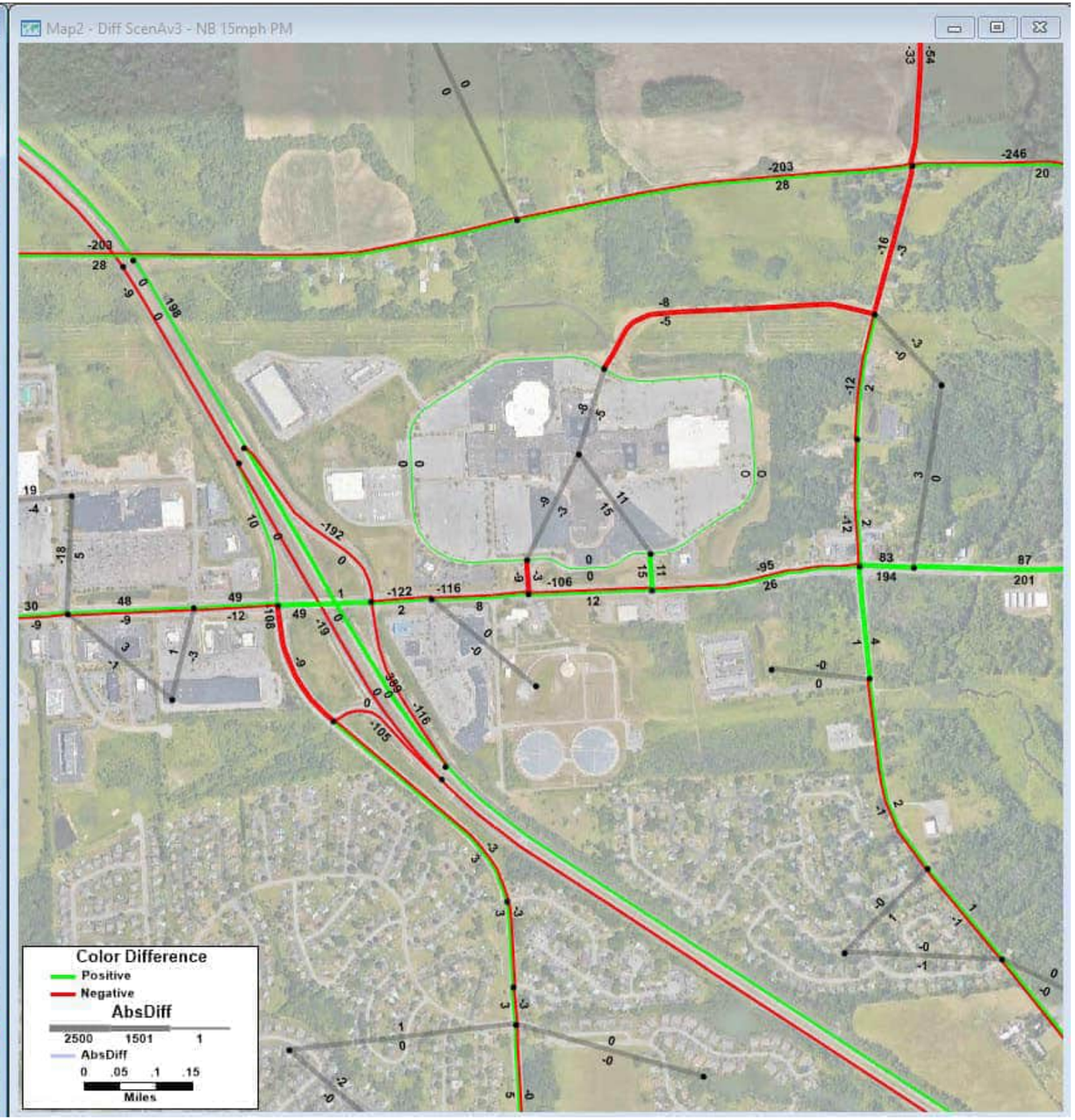
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

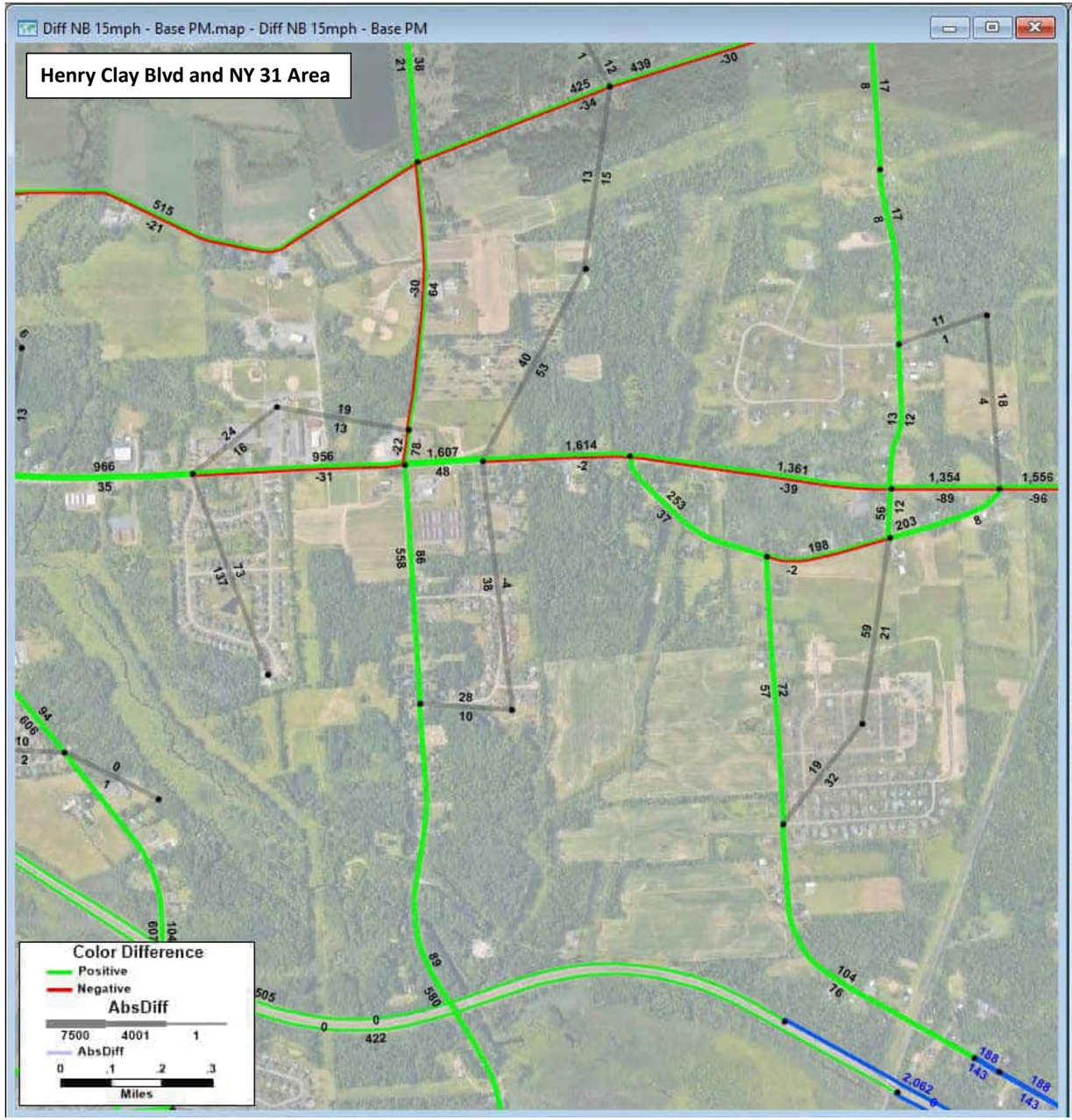


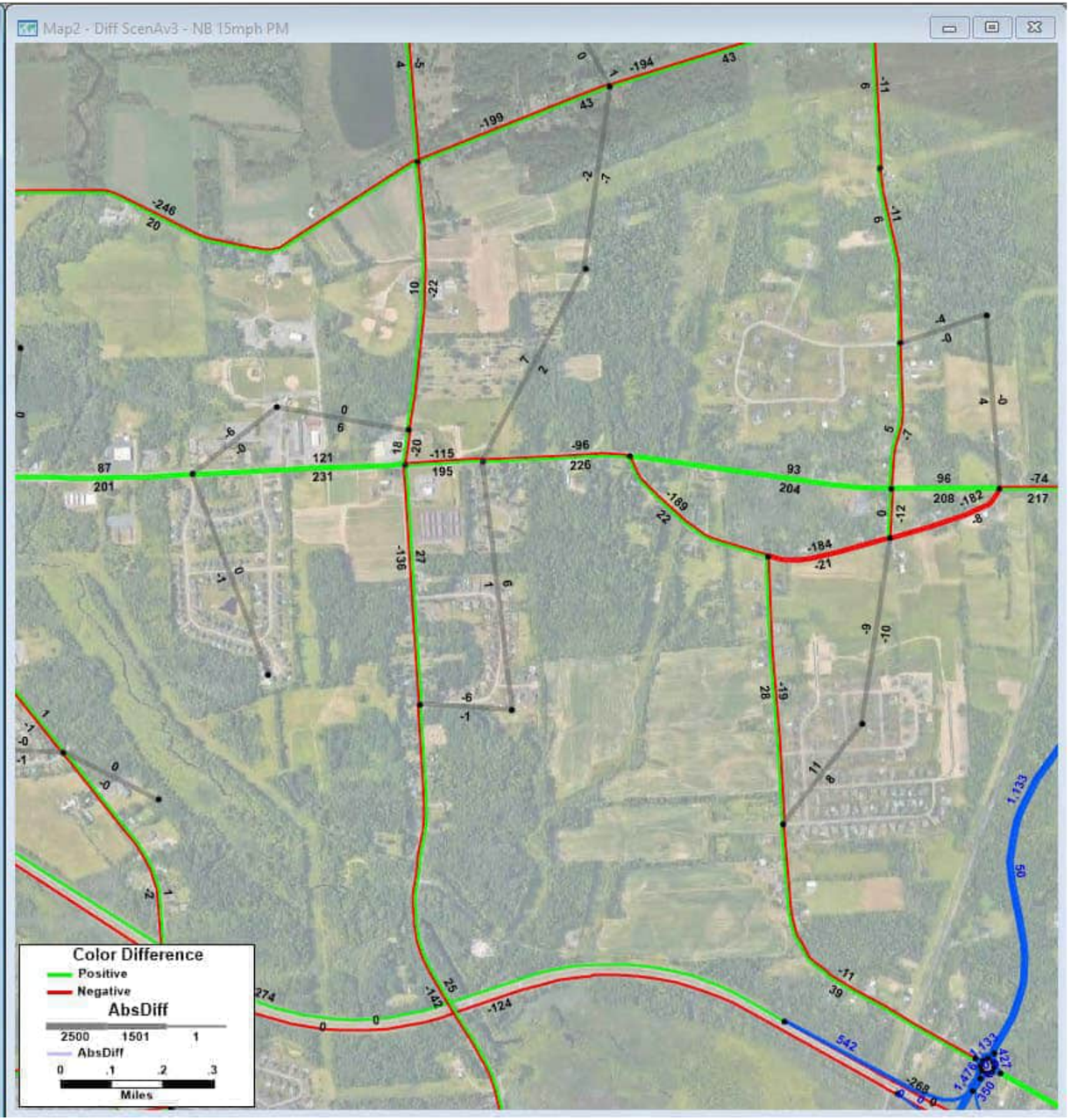
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

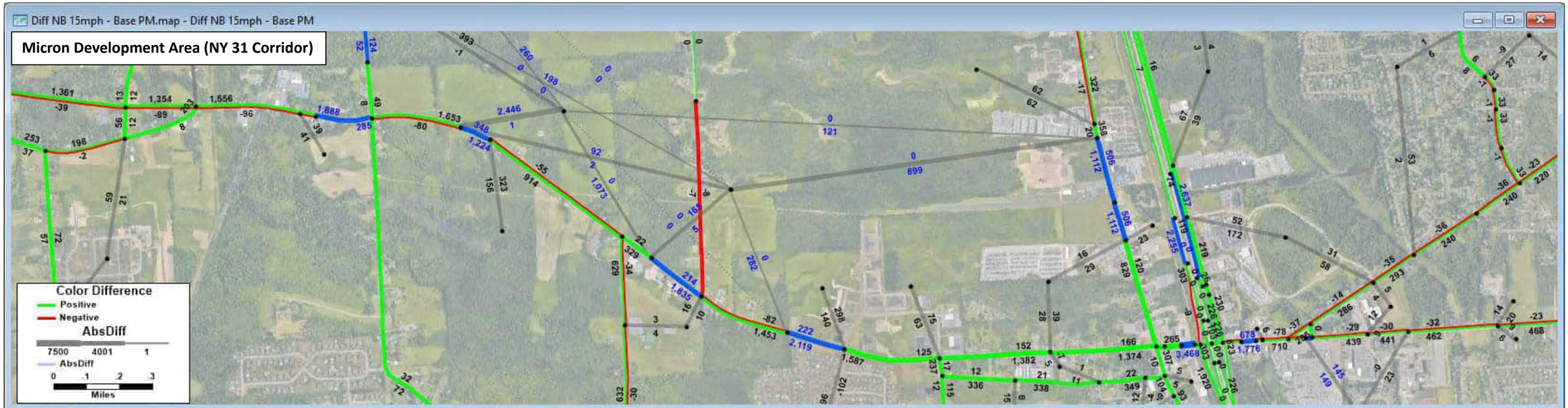


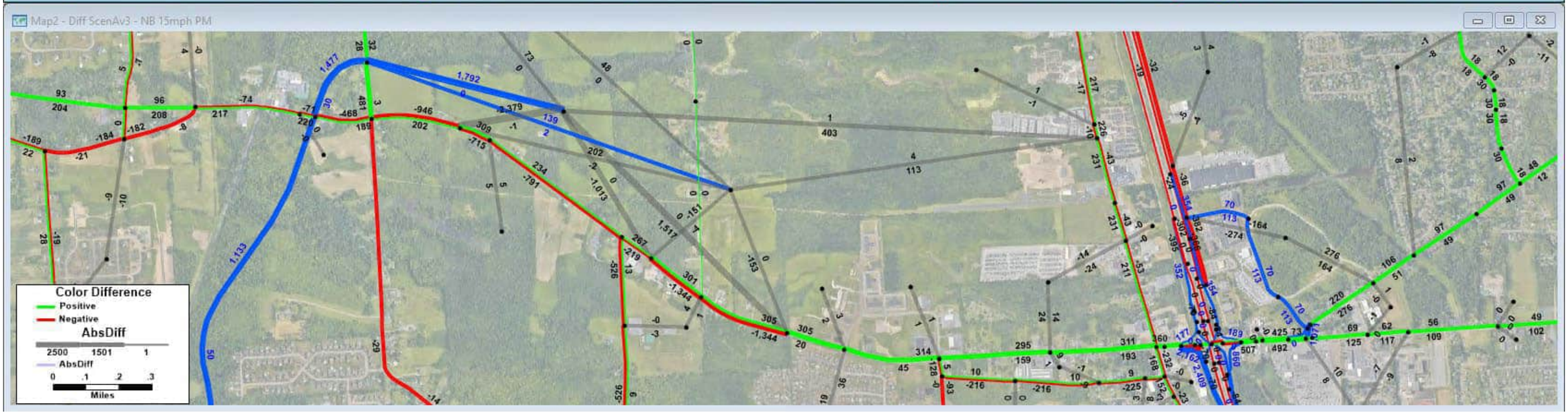


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

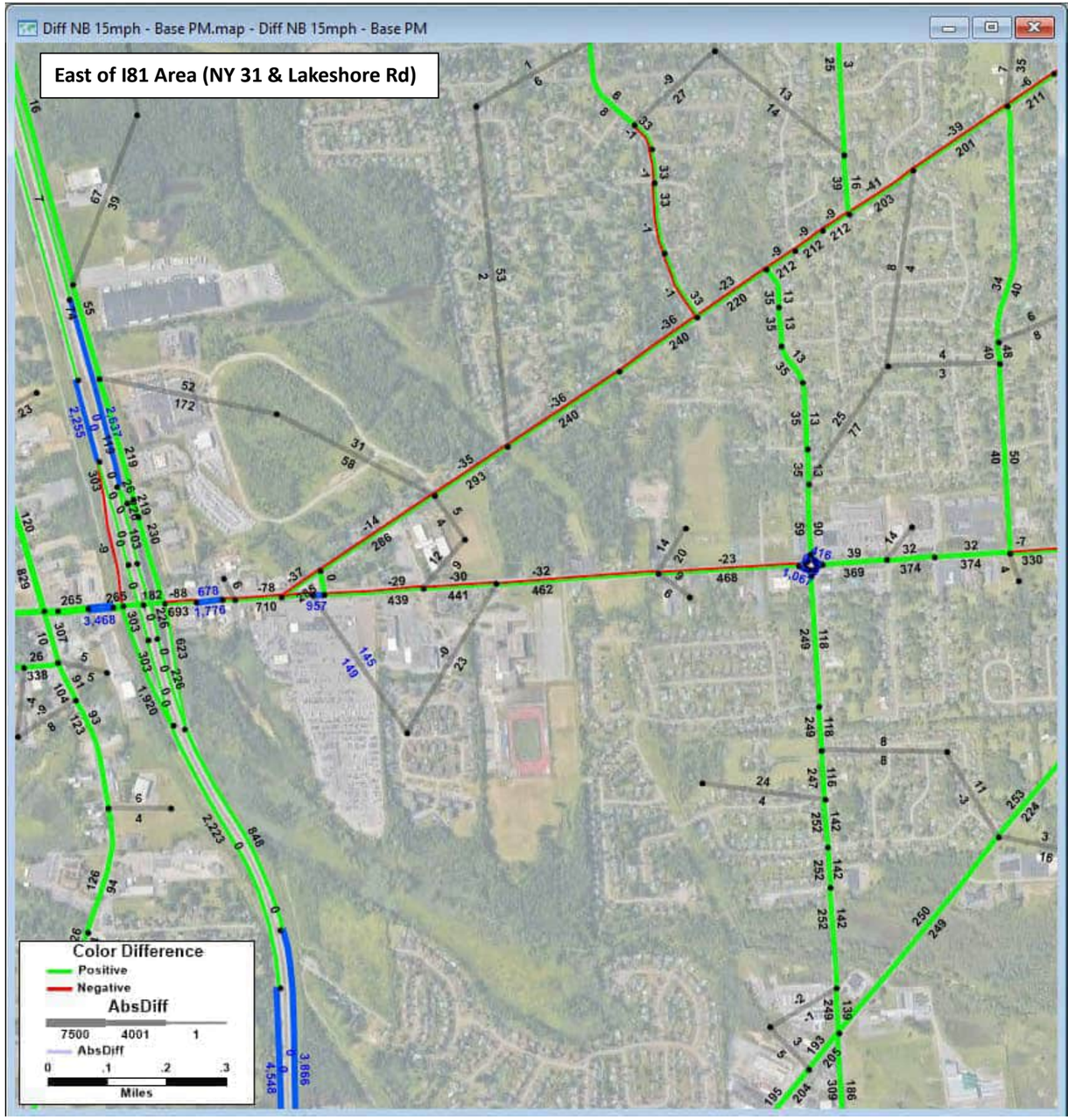


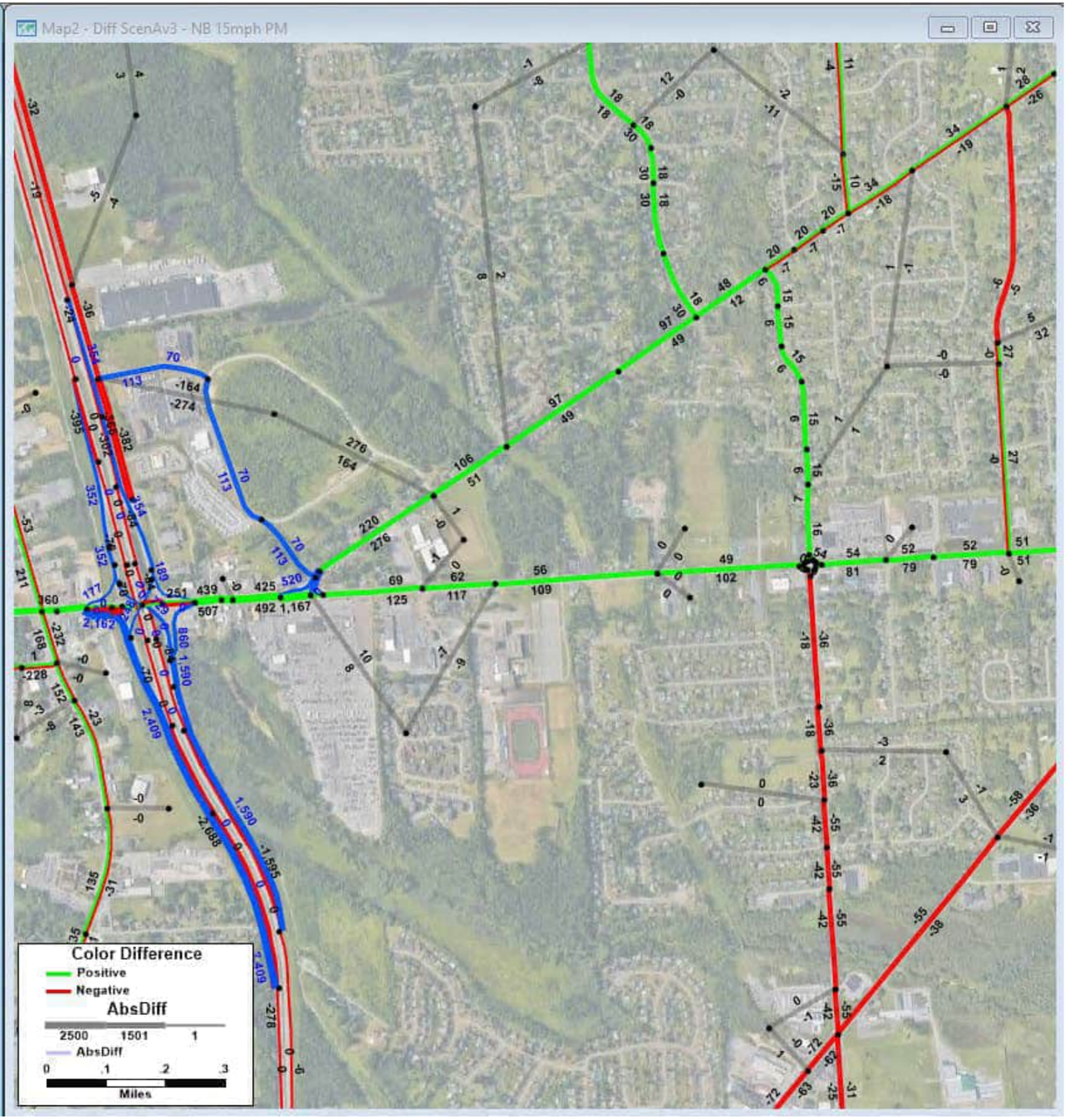


(TOP MAP) 2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

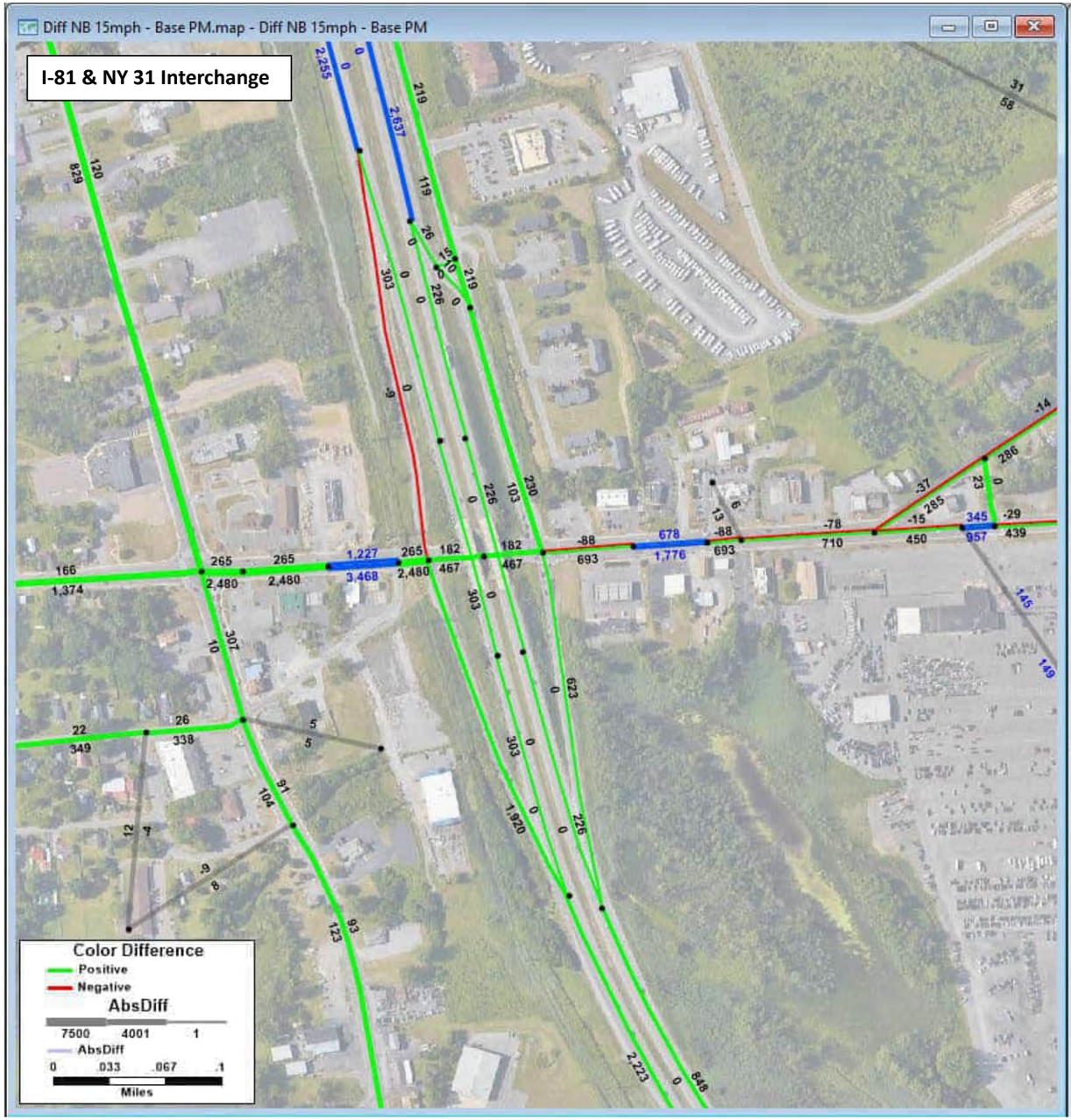


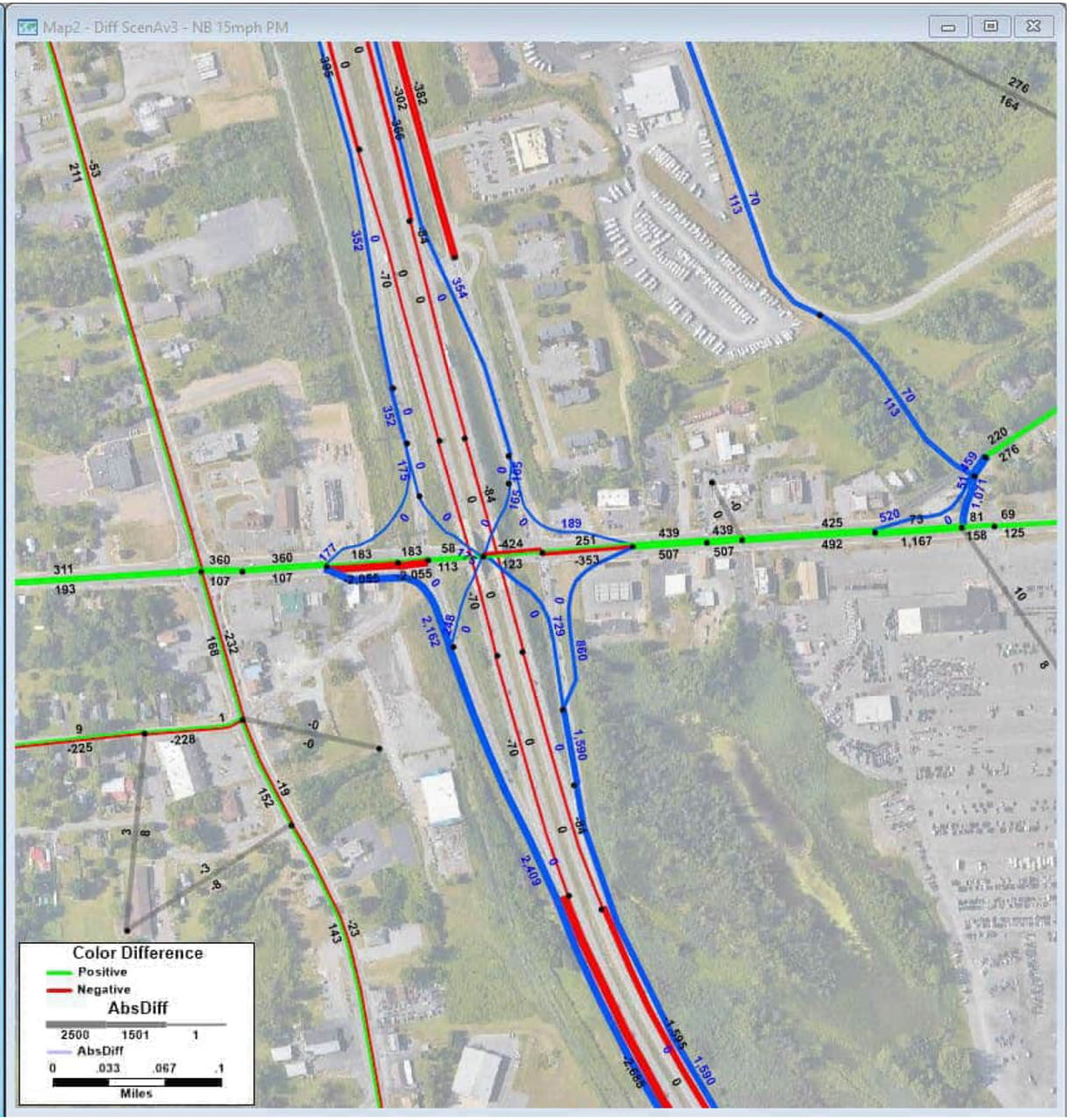


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

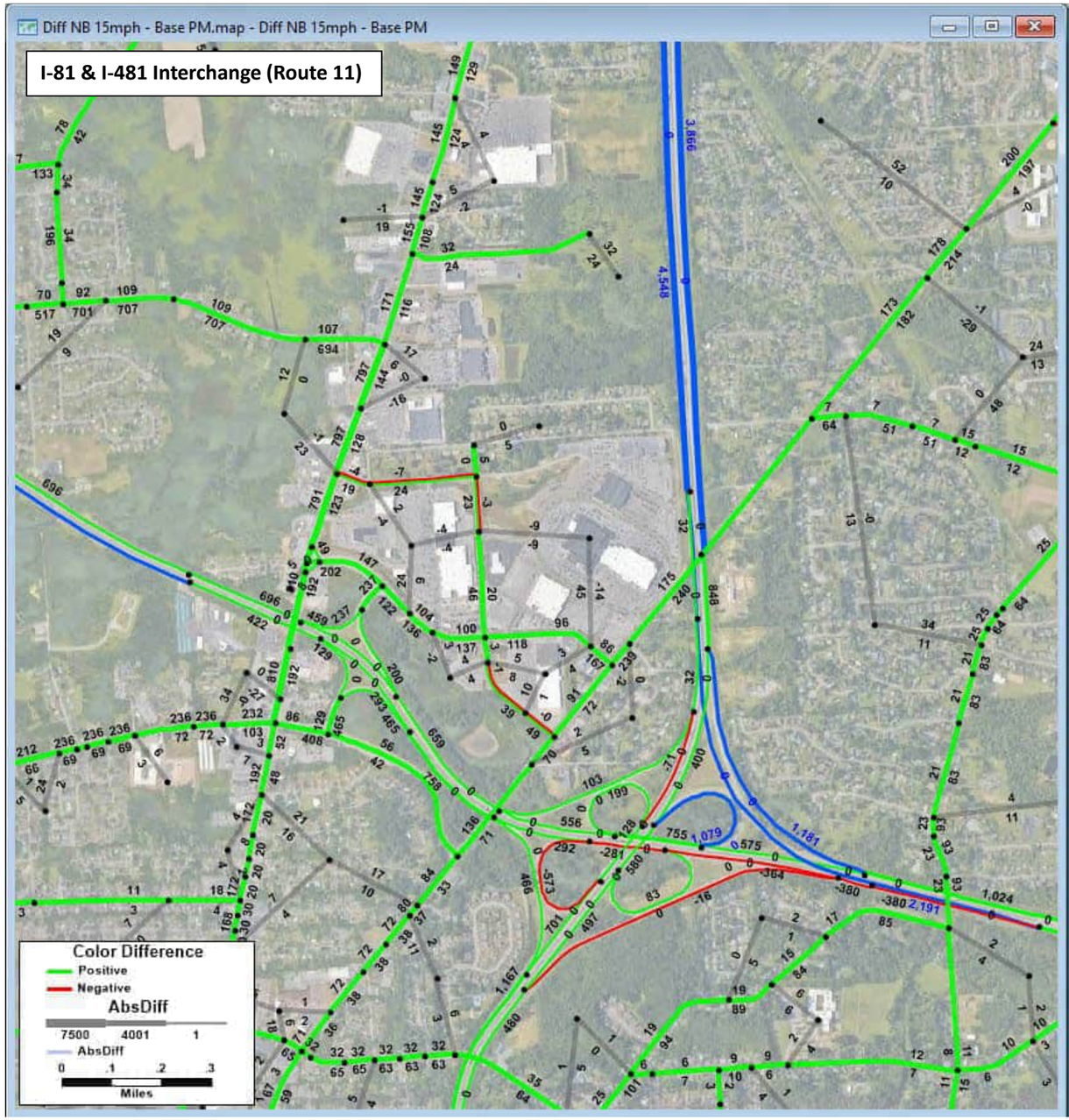




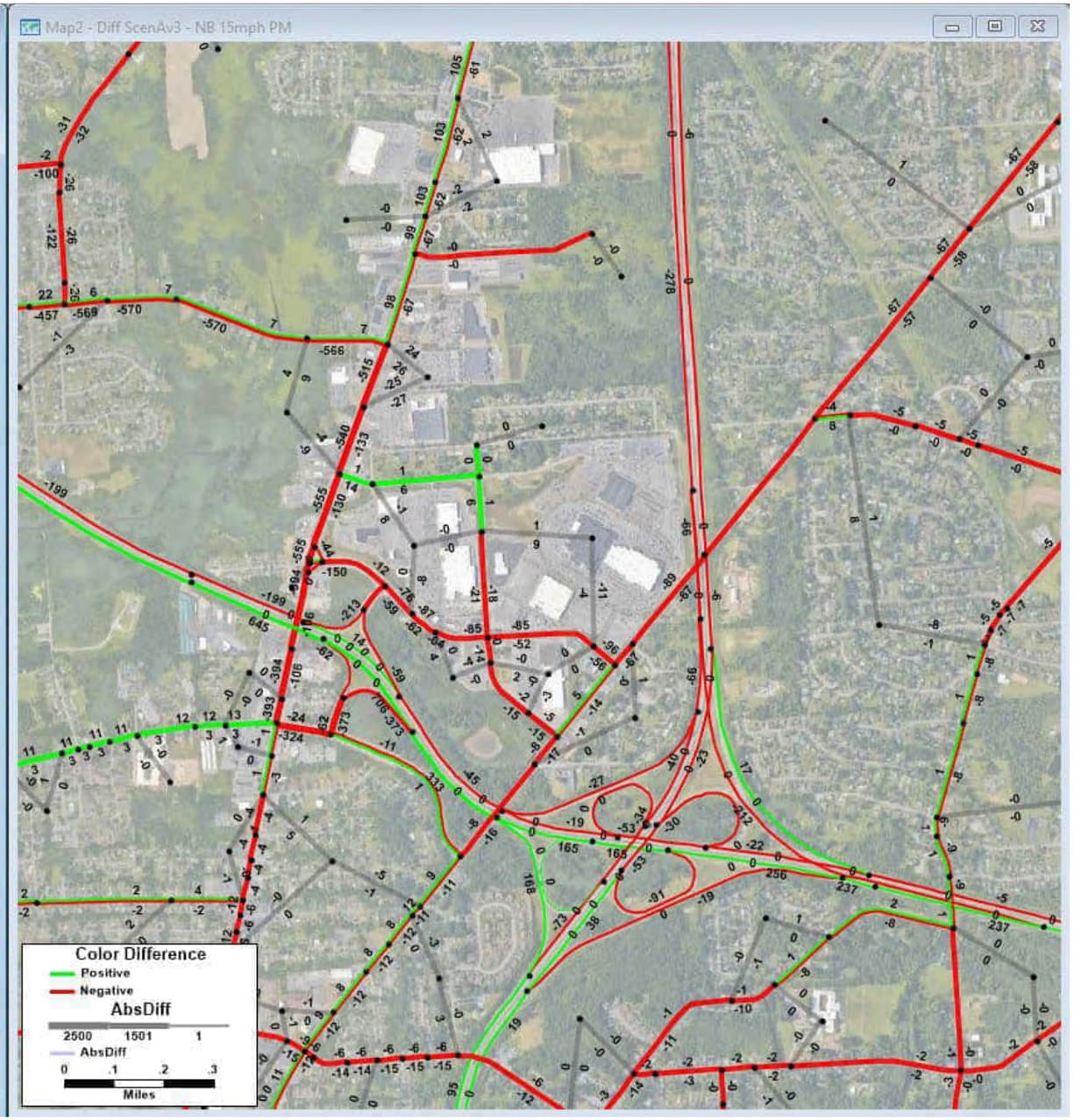
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

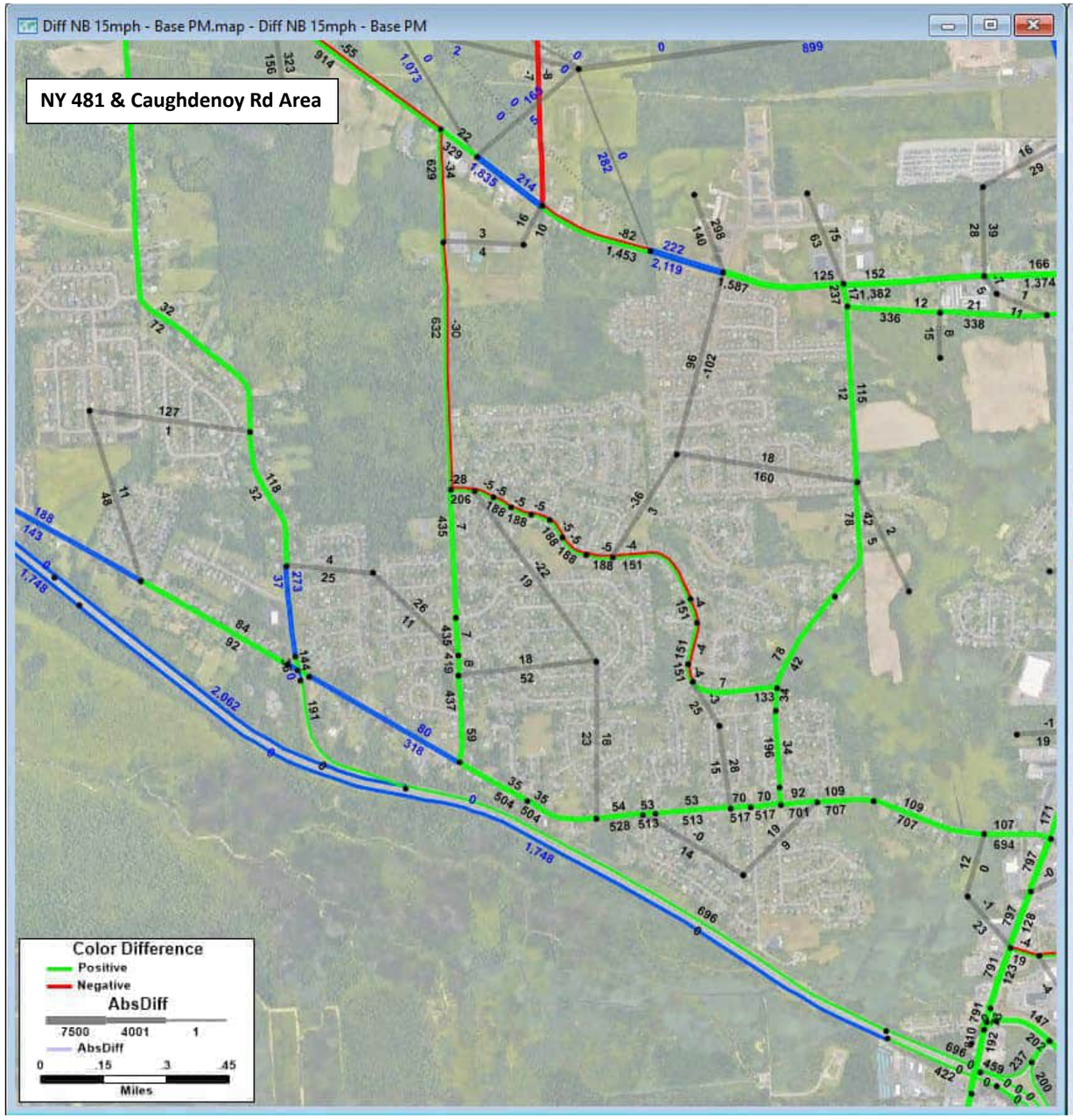


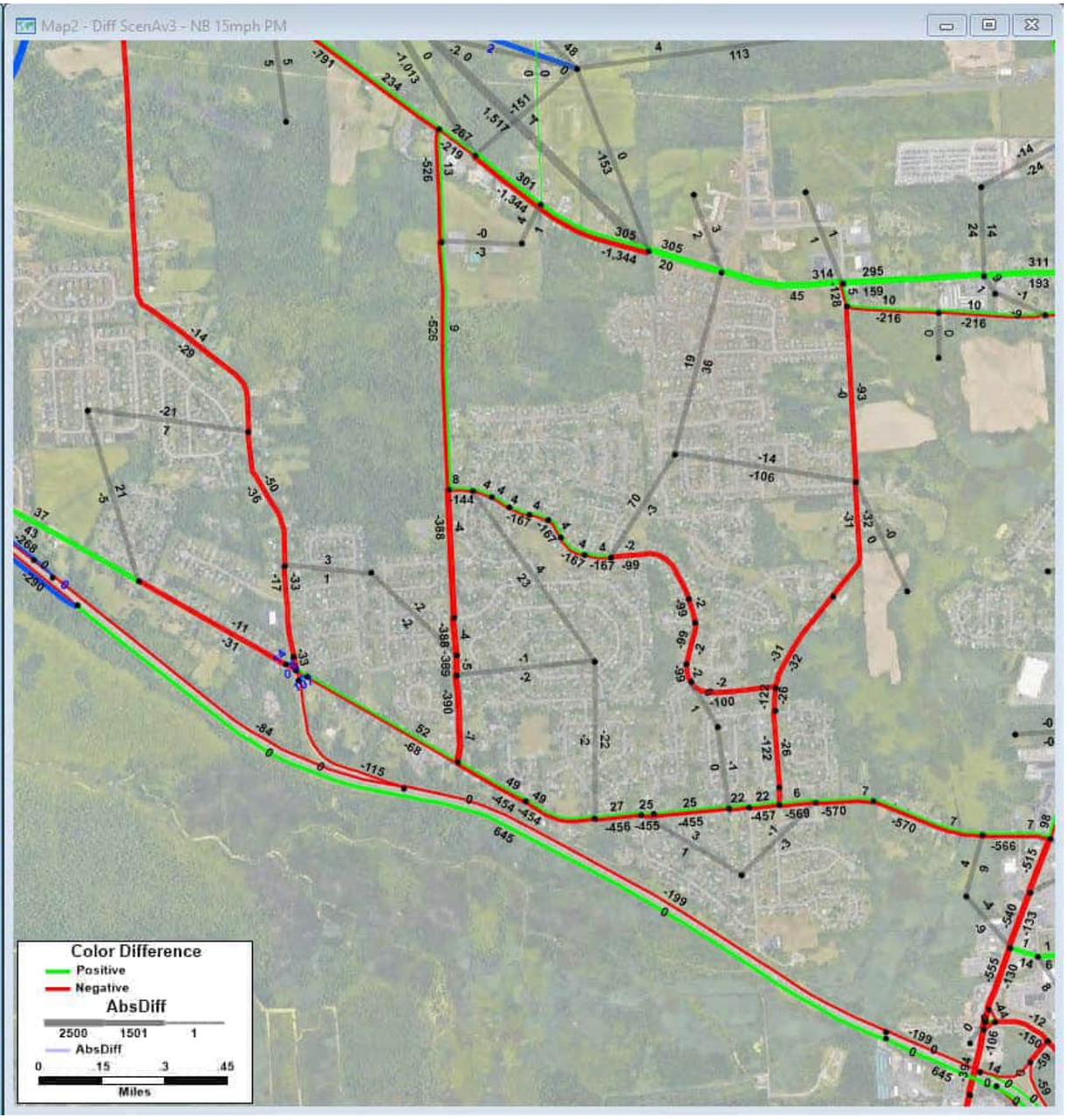
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

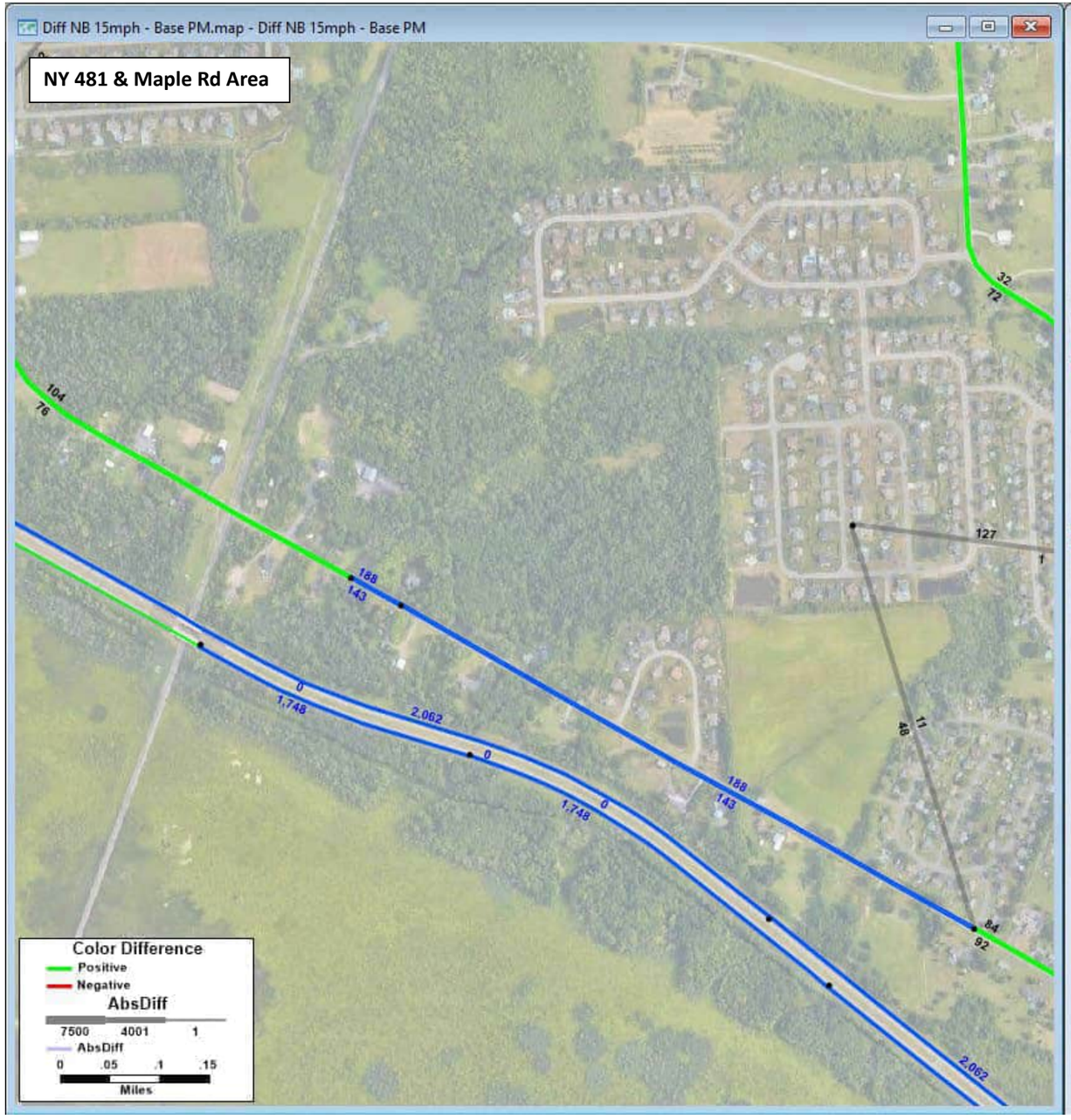


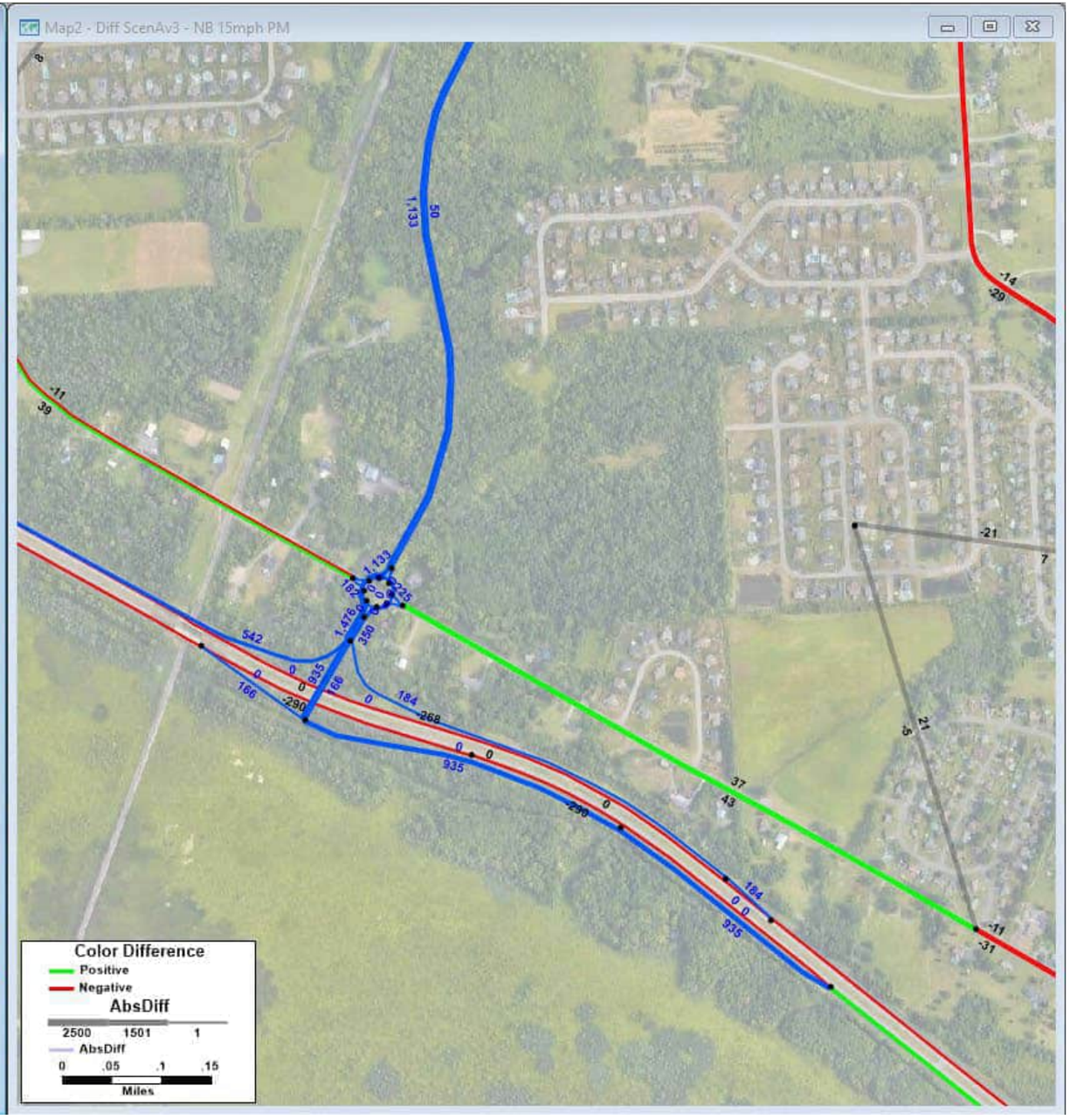


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

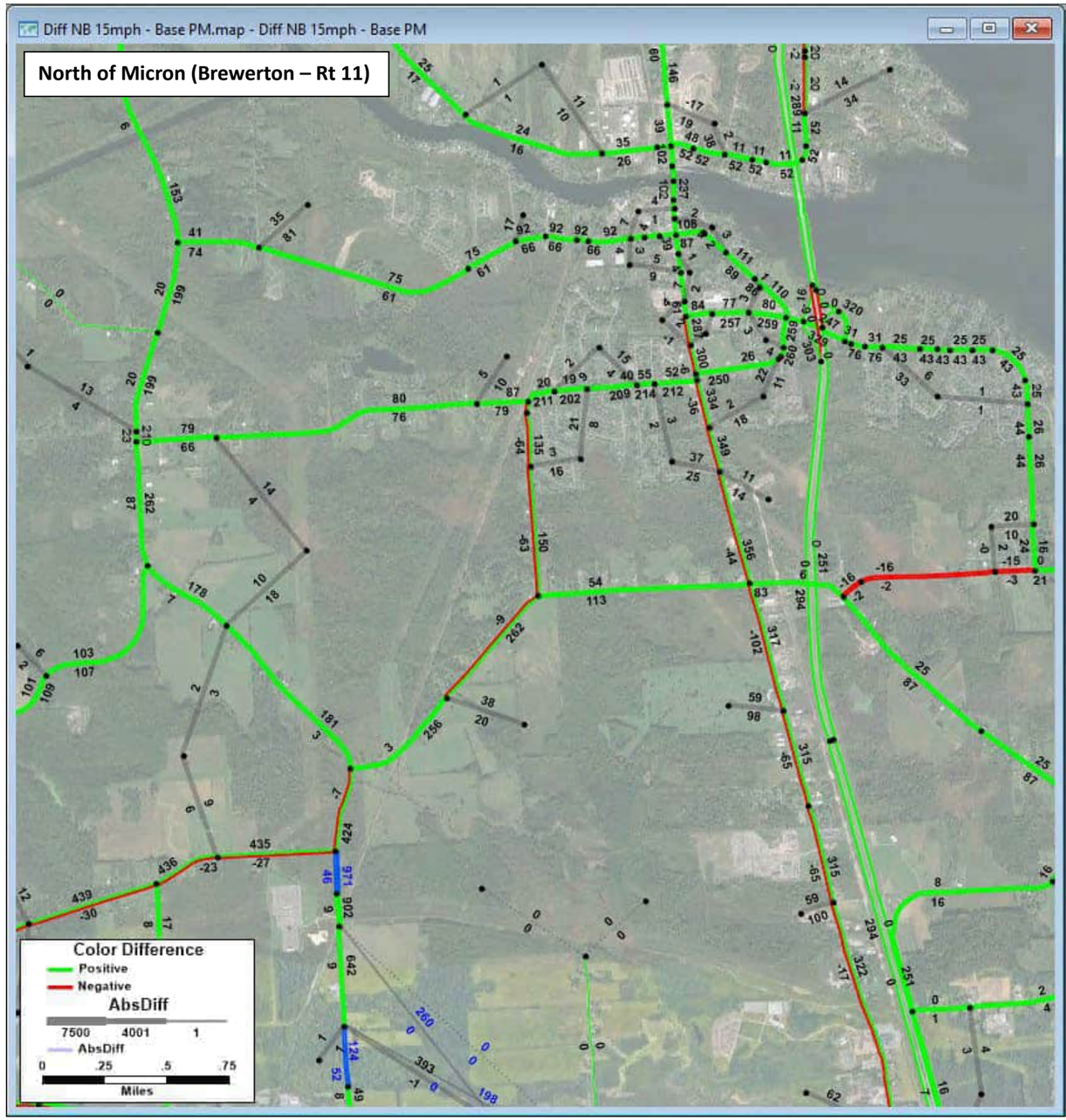




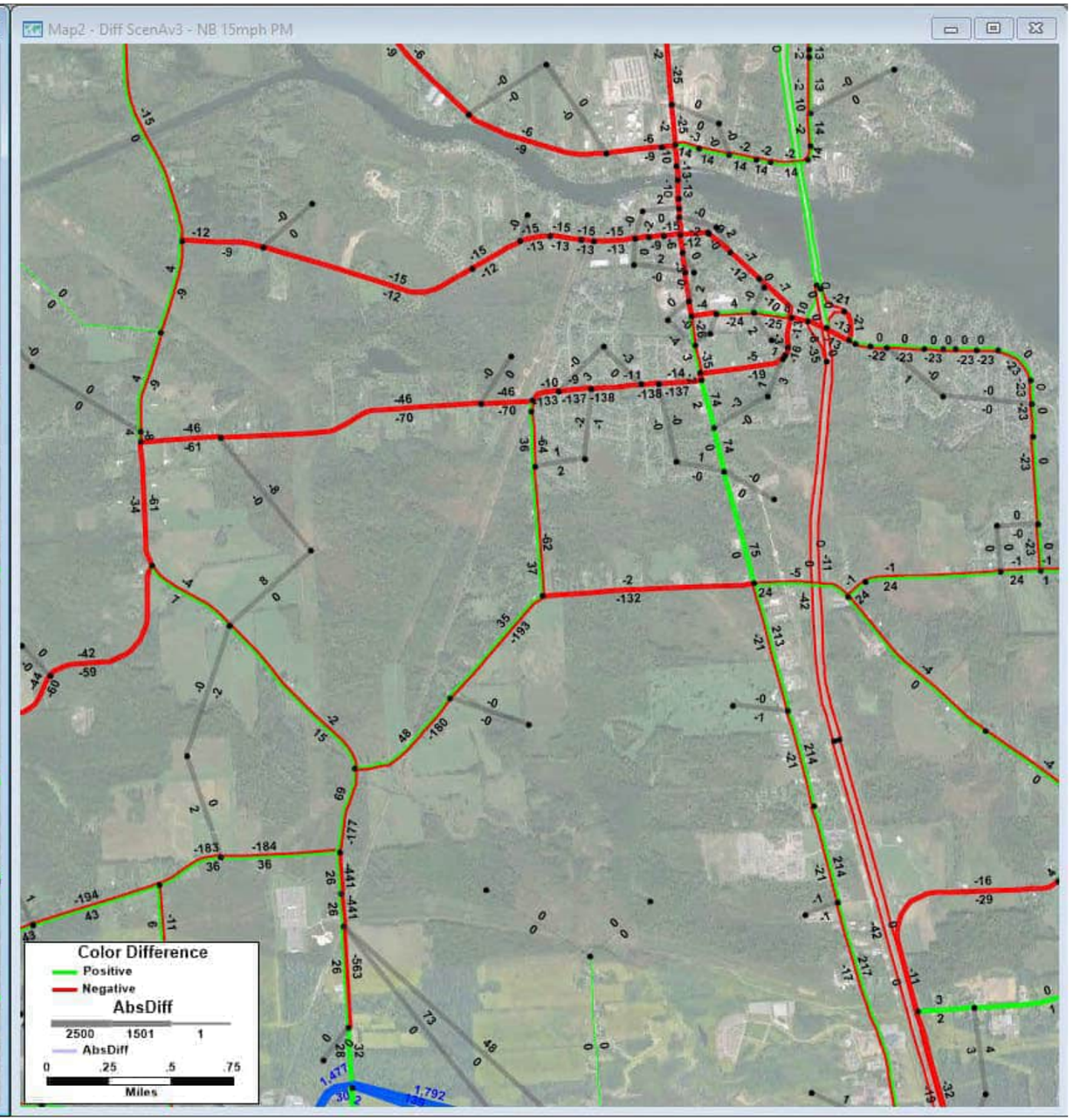
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

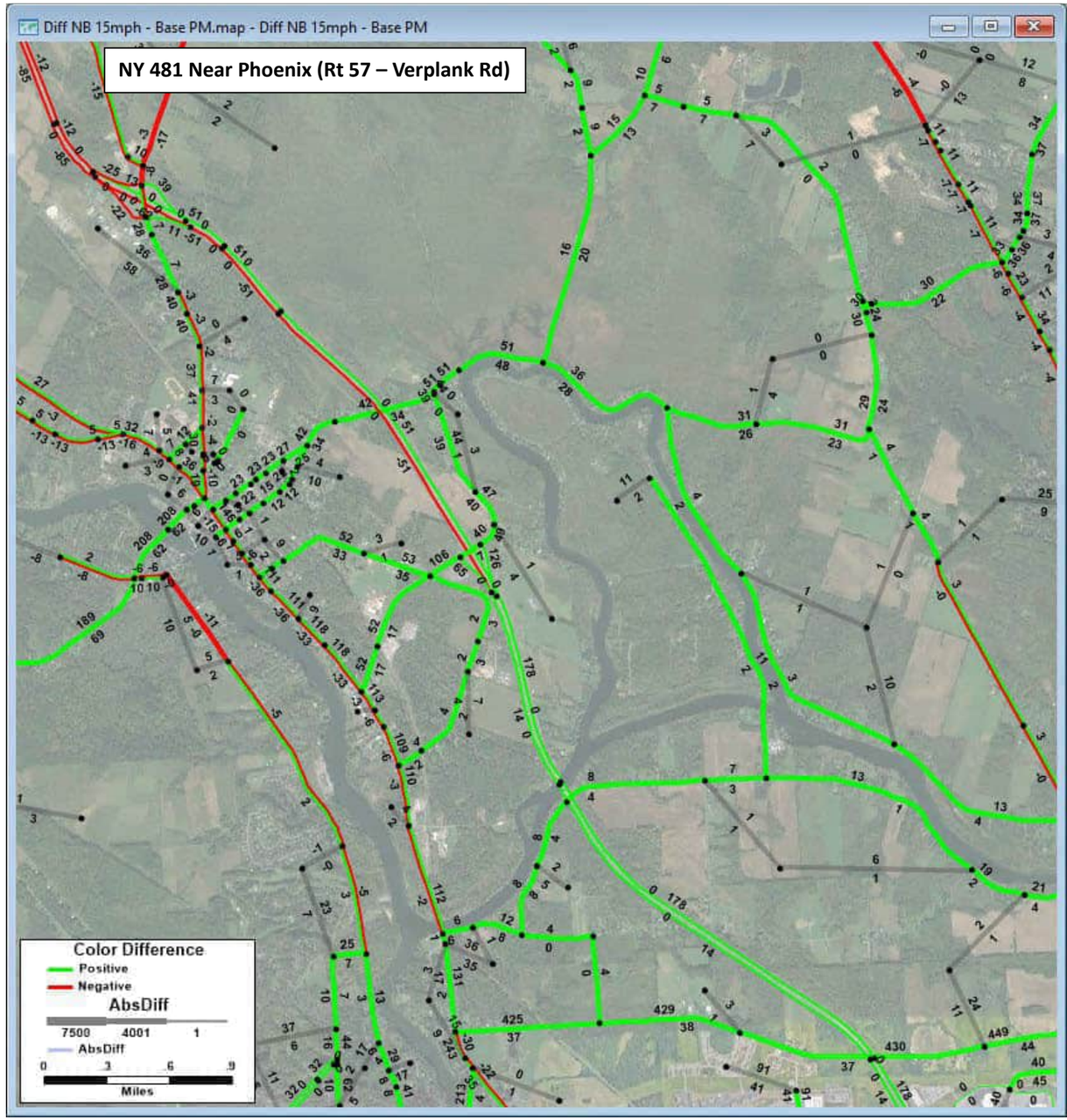


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

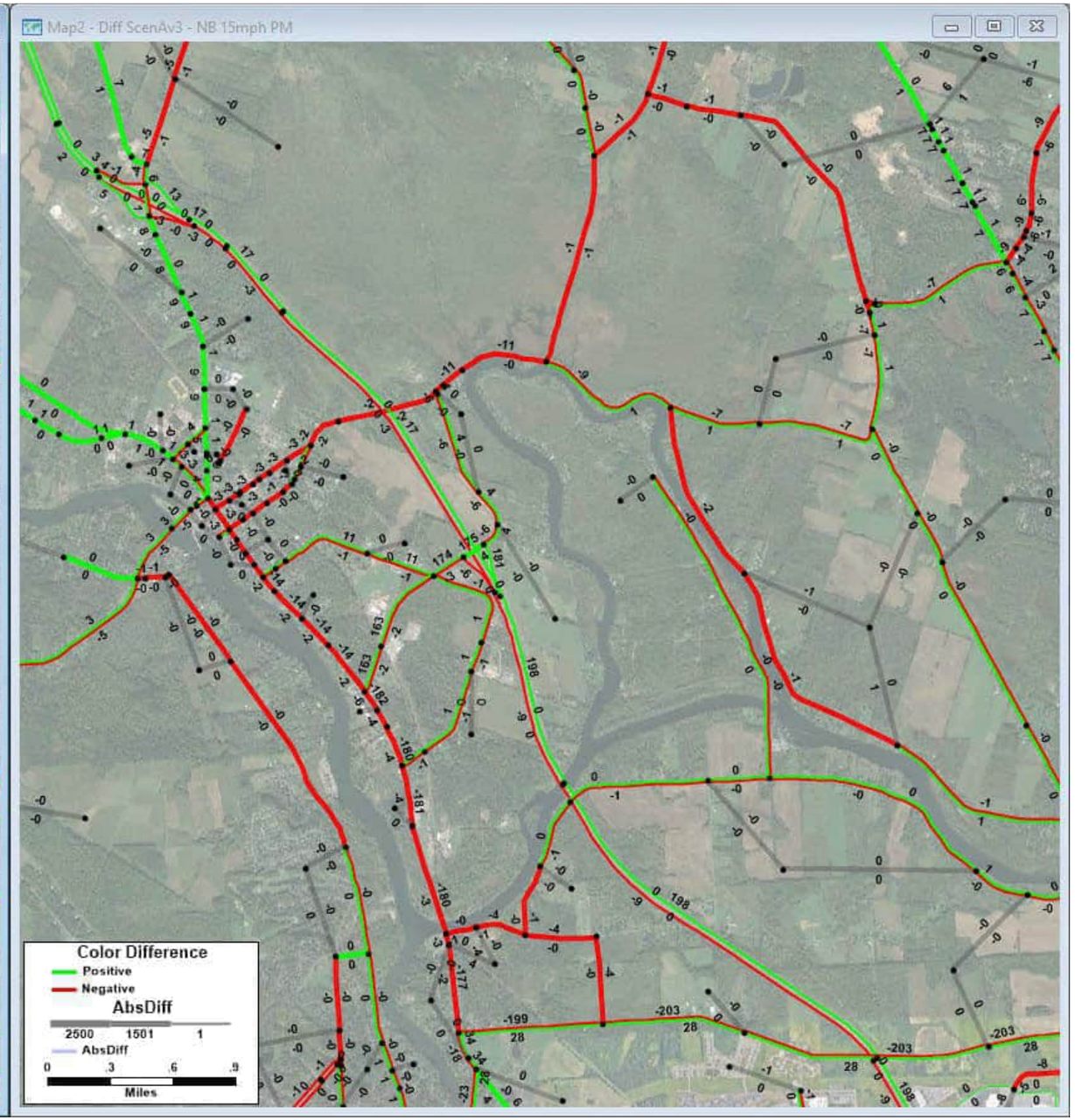


2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

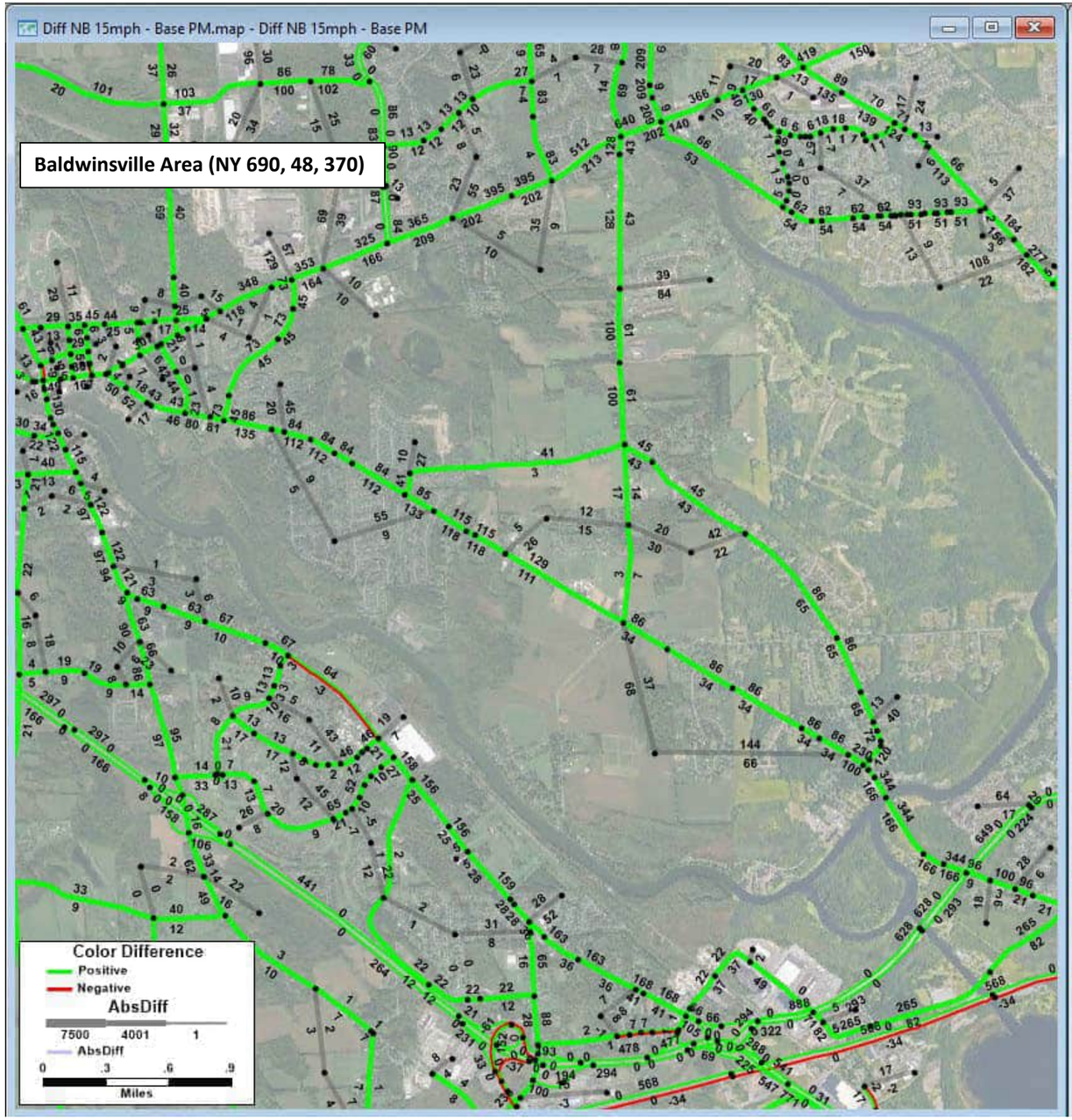


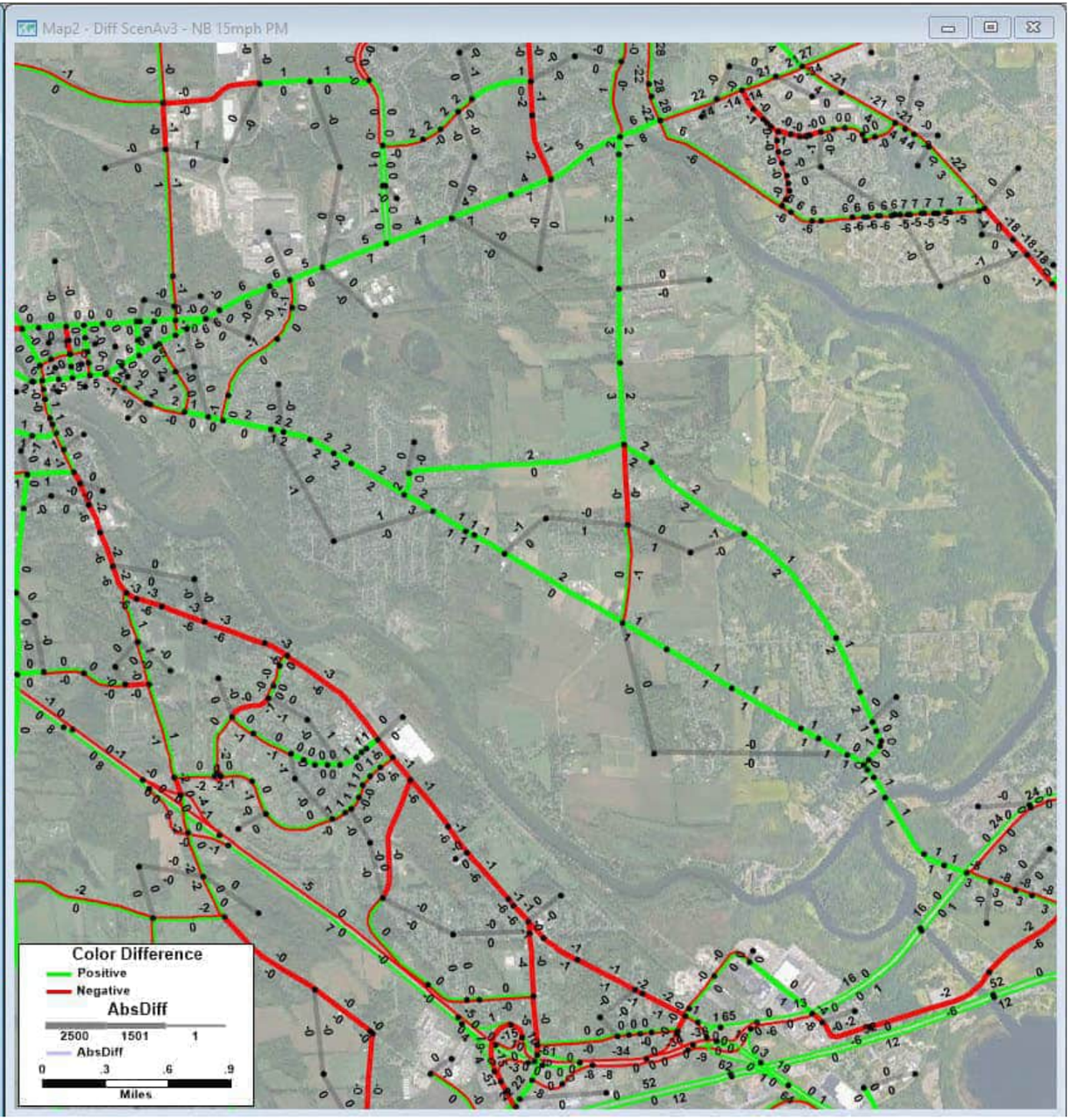
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)





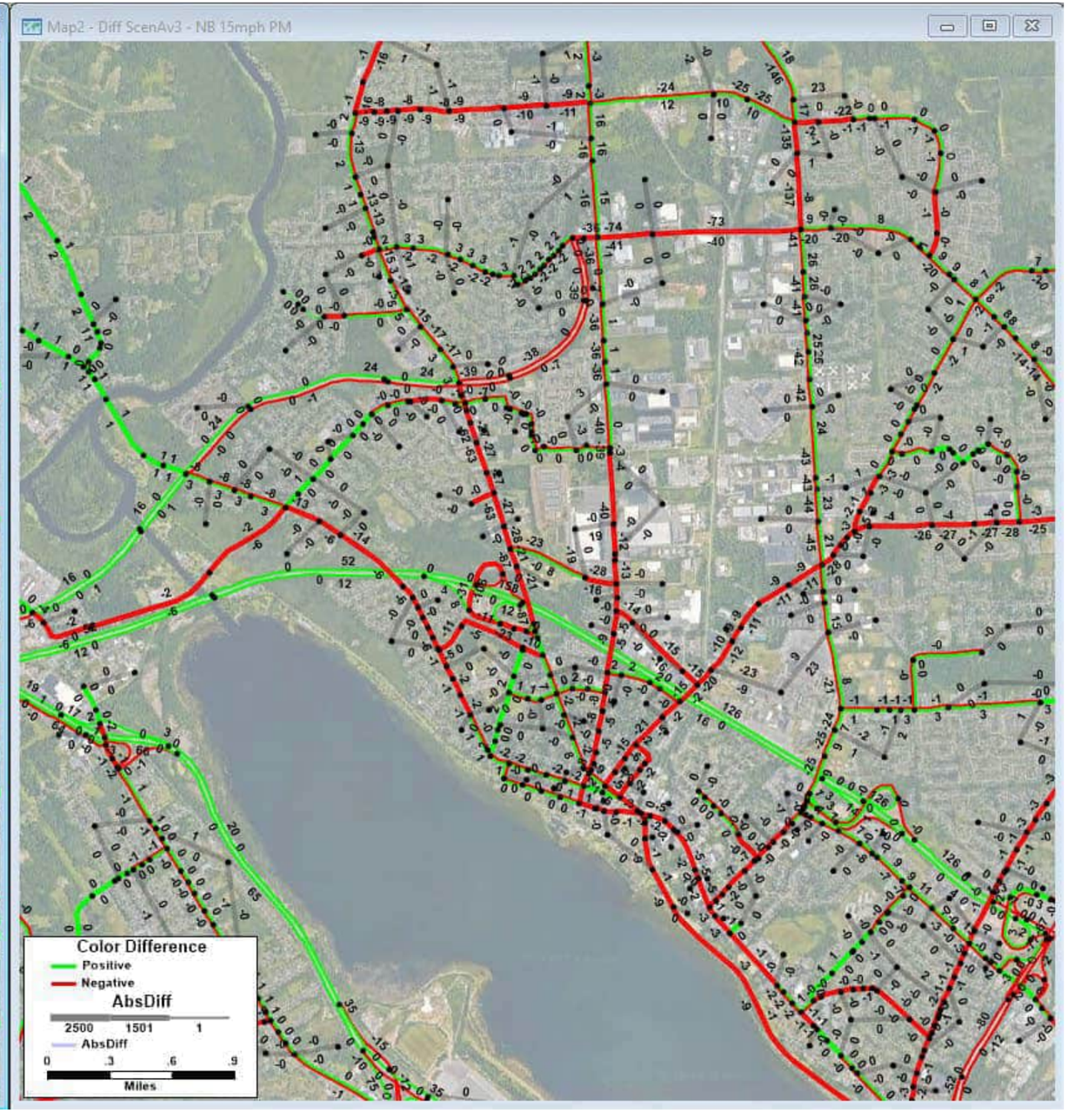
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

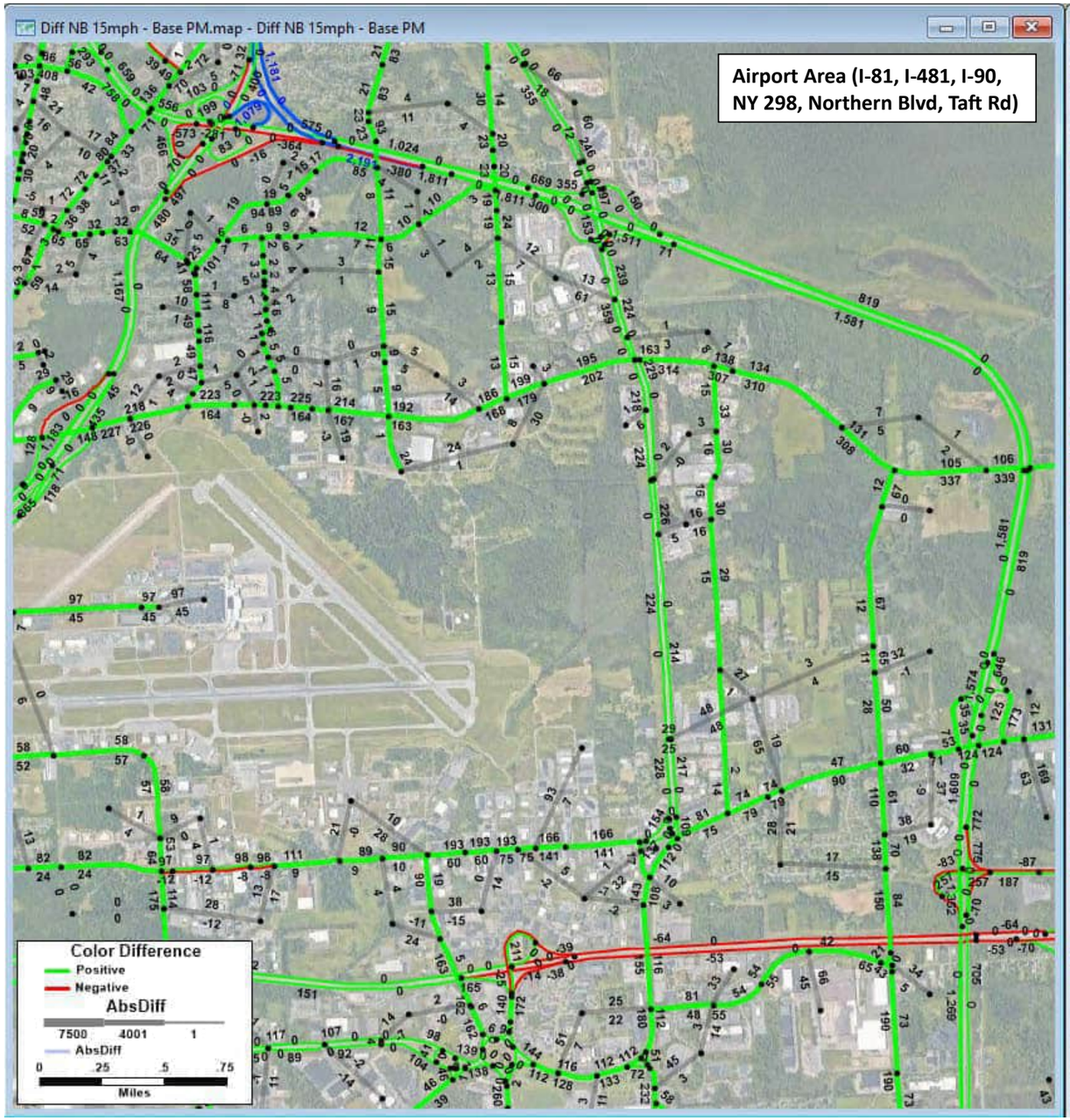


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

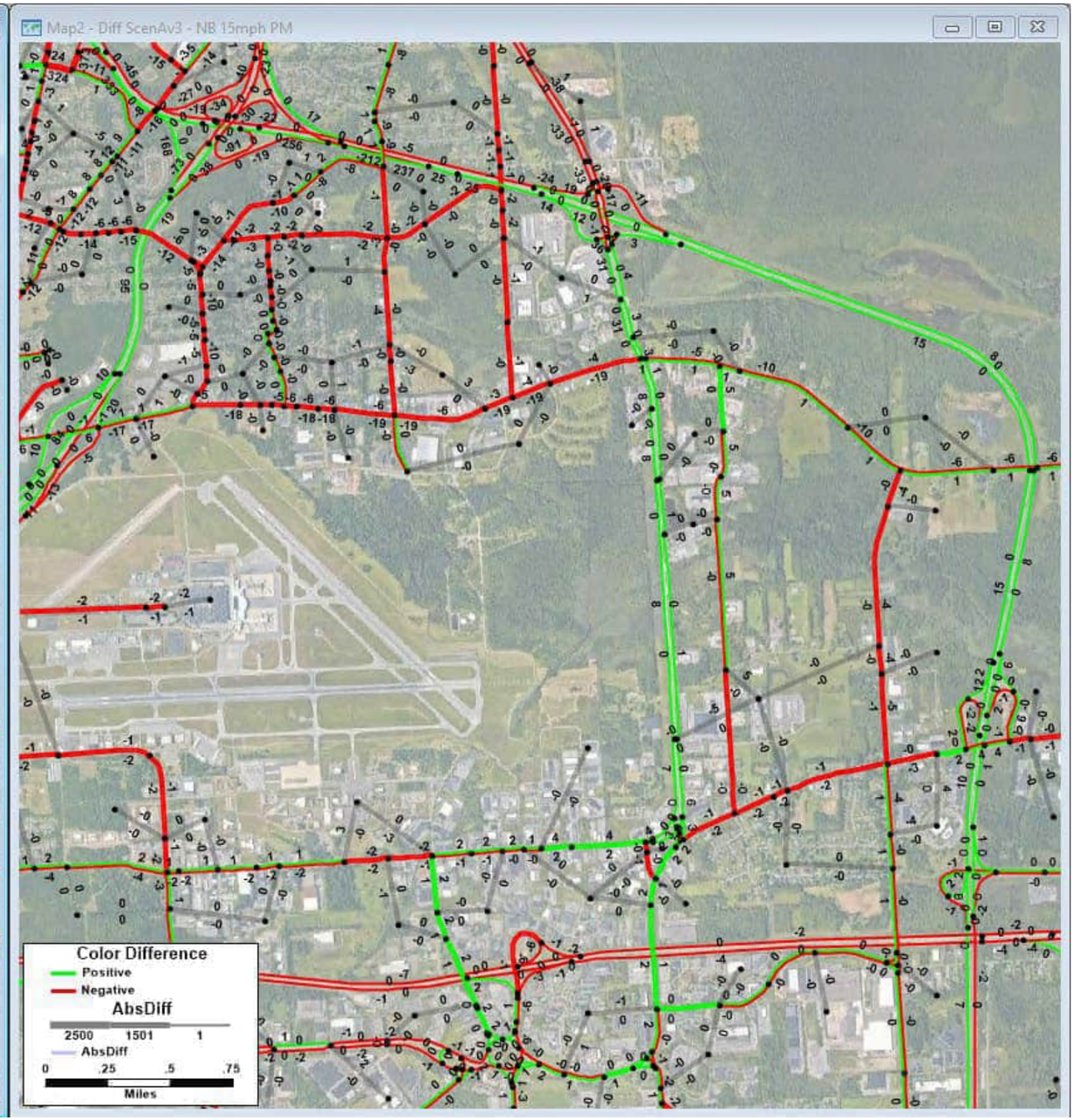


2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)



2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v3 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

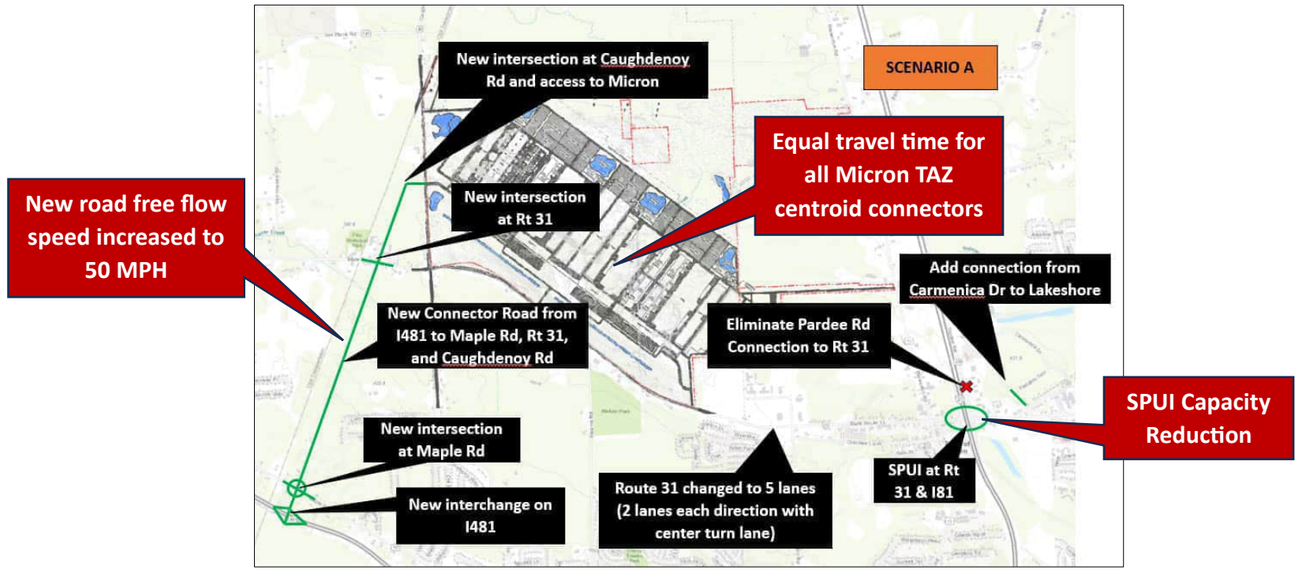
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario A v4 (Scenario A v3 and Rt31 SPUI Capacity Decrease) – AM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v4** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- No Build in this document refers to no Micron related road network changes
- RED callouts note the revisions made to Scenario A



The graphic to the right is an example of what is included in this document →

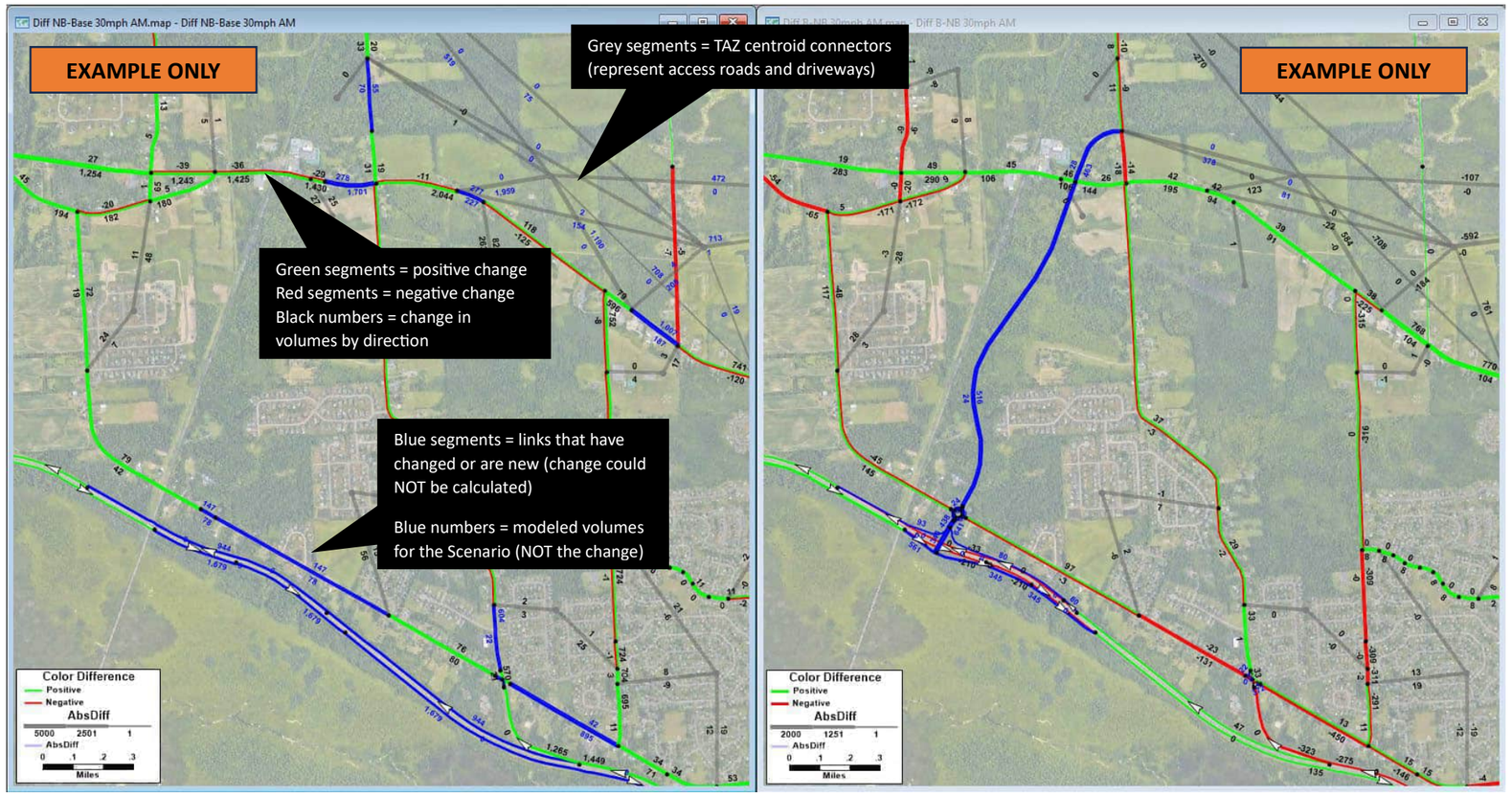
The map on the left displays the change in **AM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB AM Volumes less 2020 AM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **AM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build AM Volumes less 2040 NB AM volumes**).

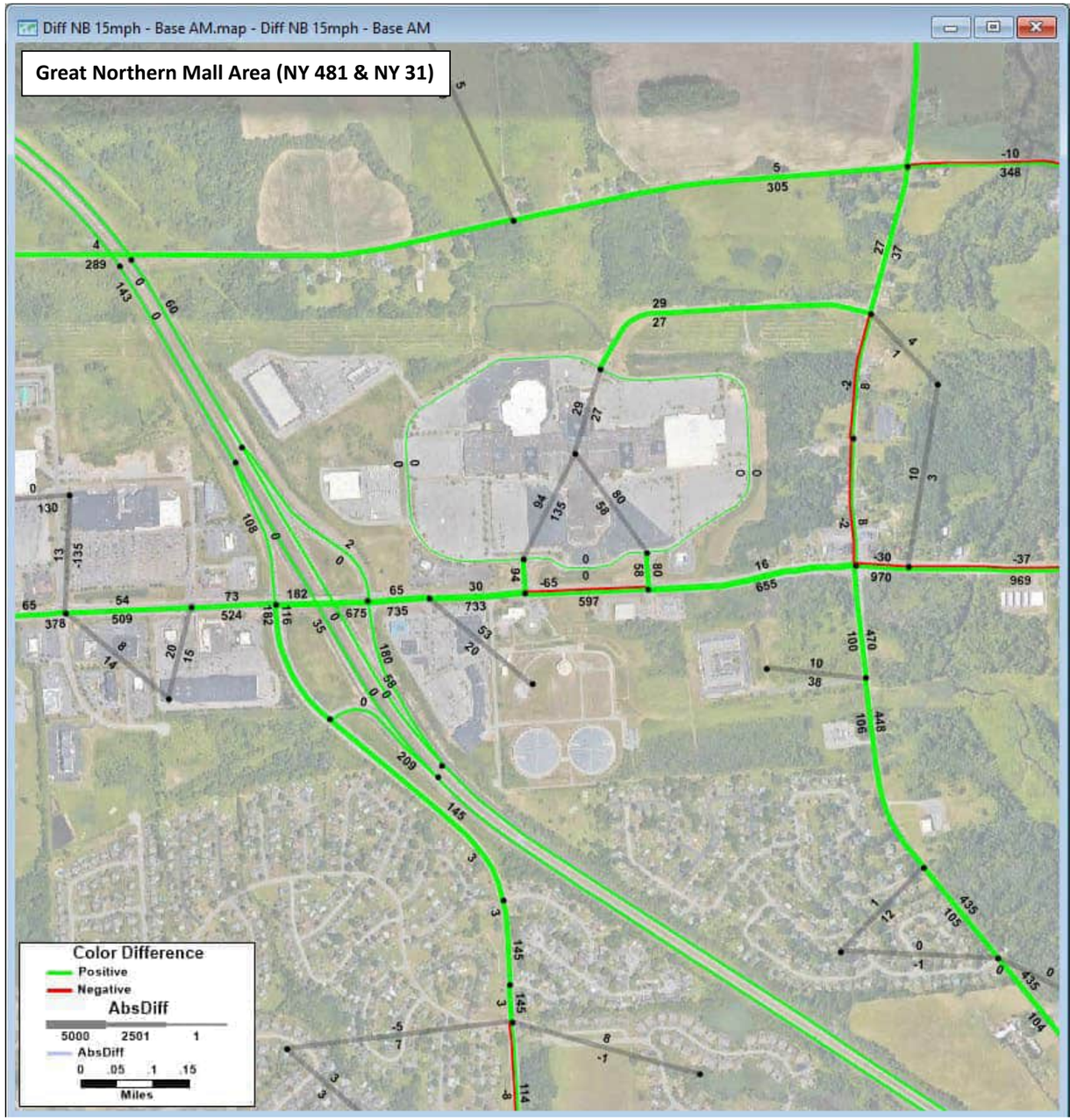
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

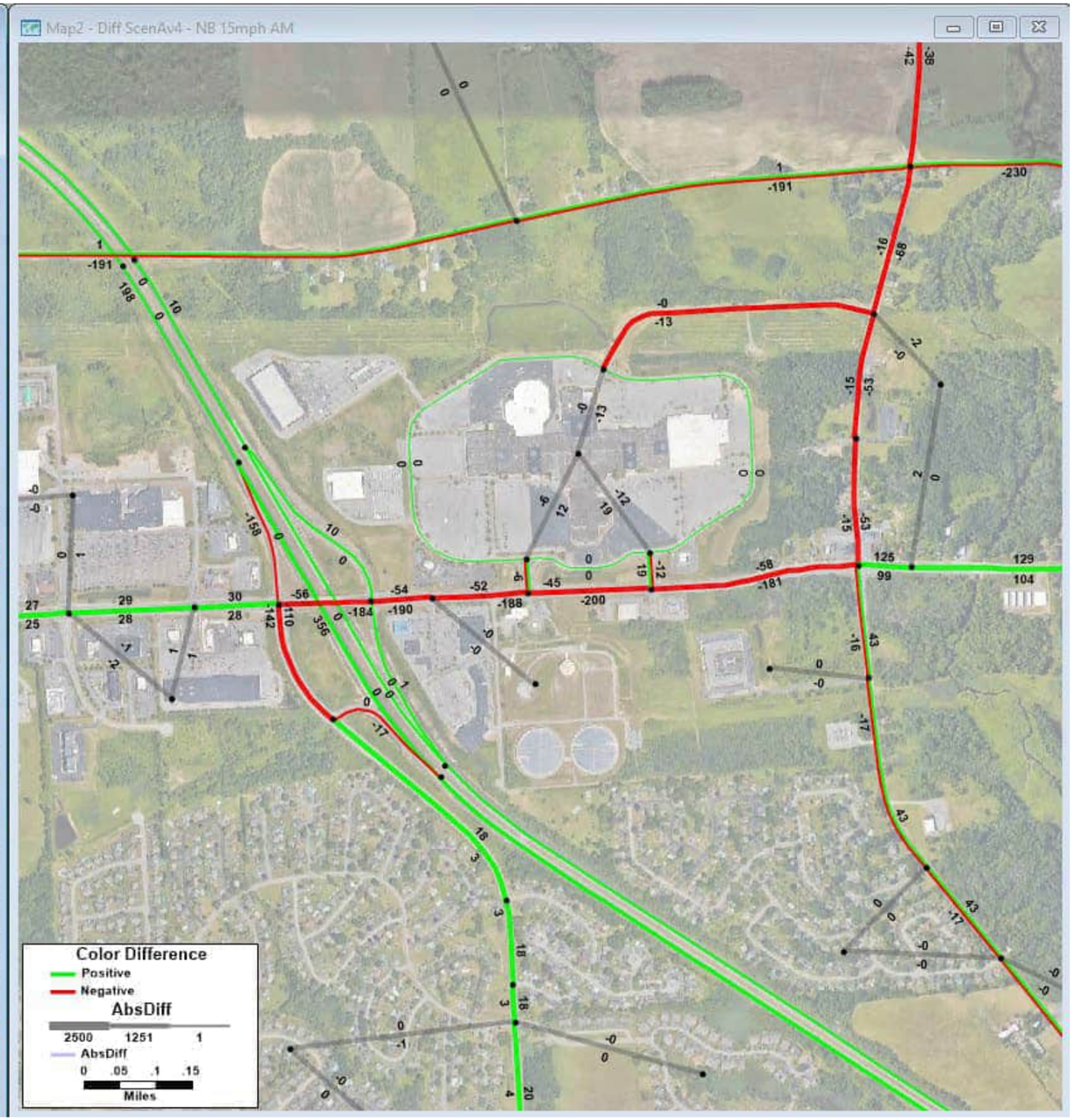
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

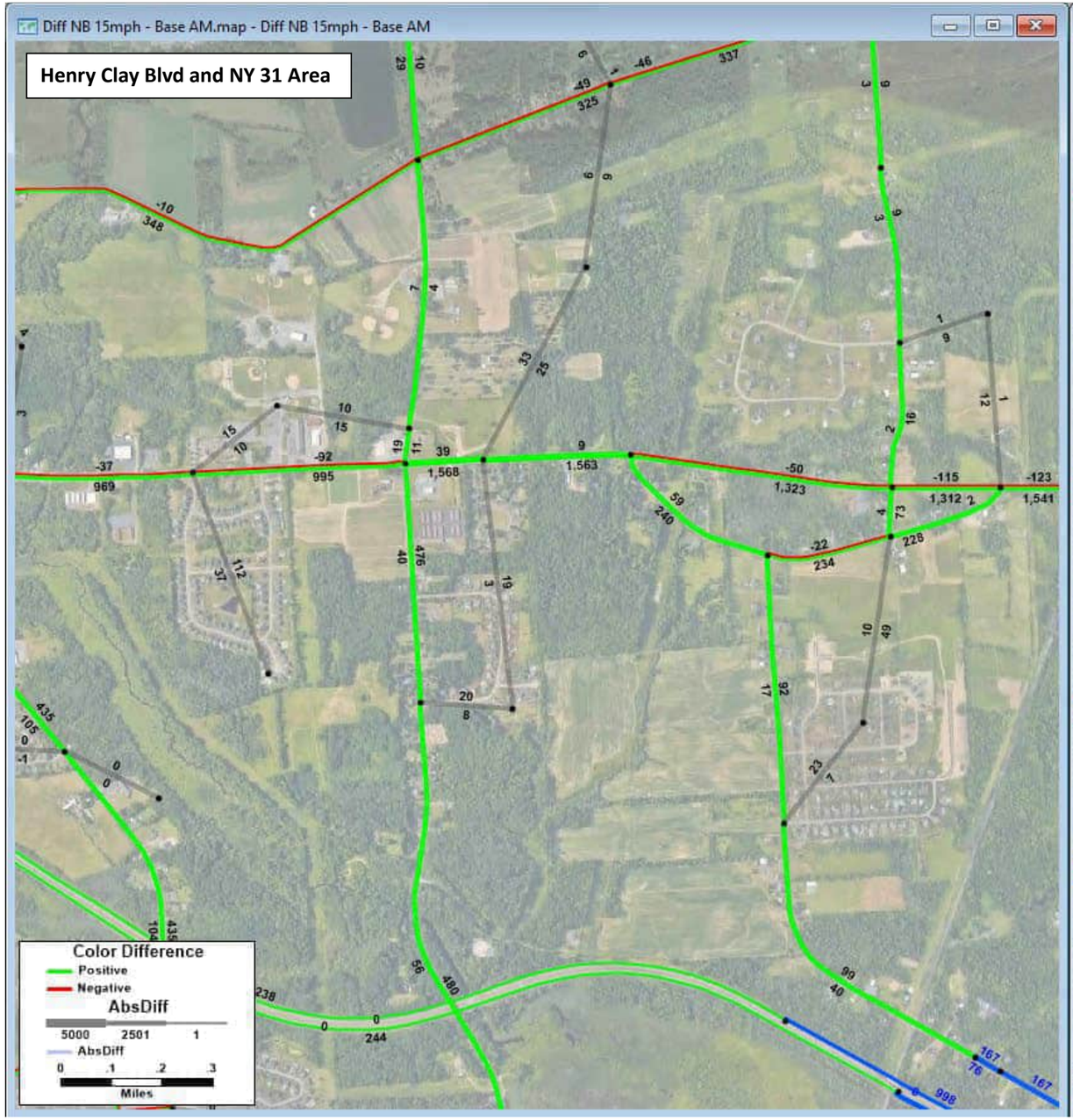


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

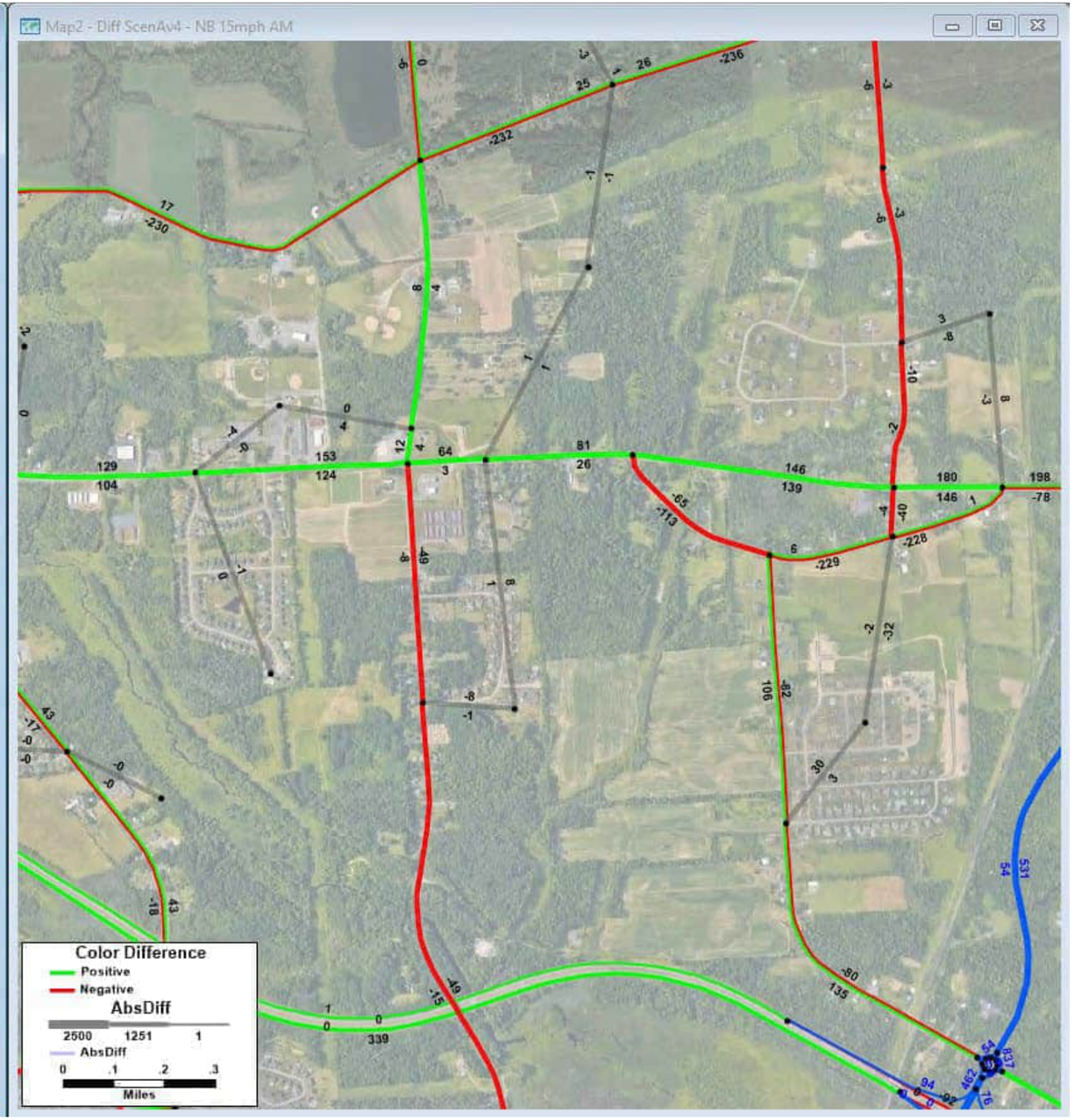


2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

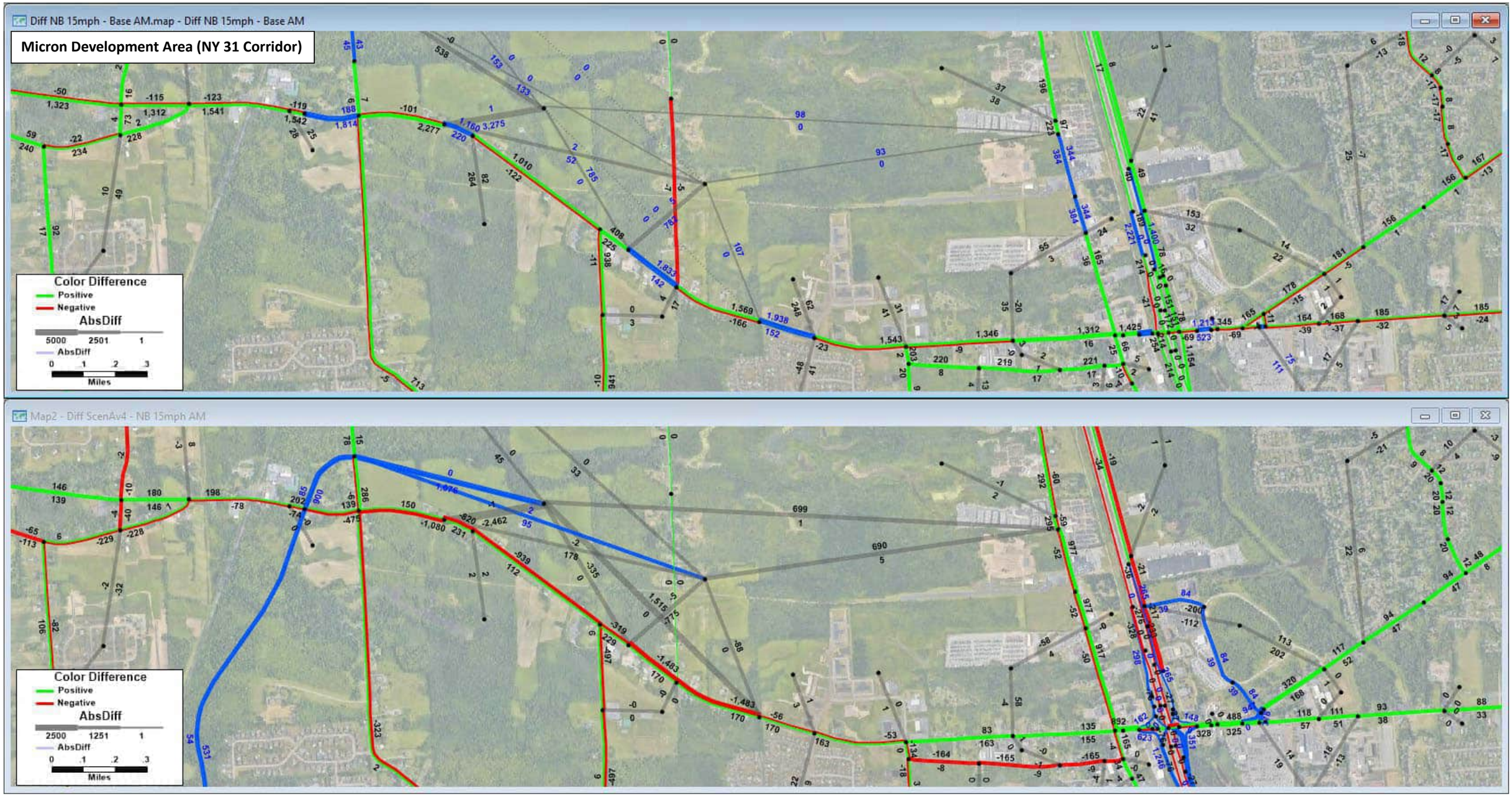


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

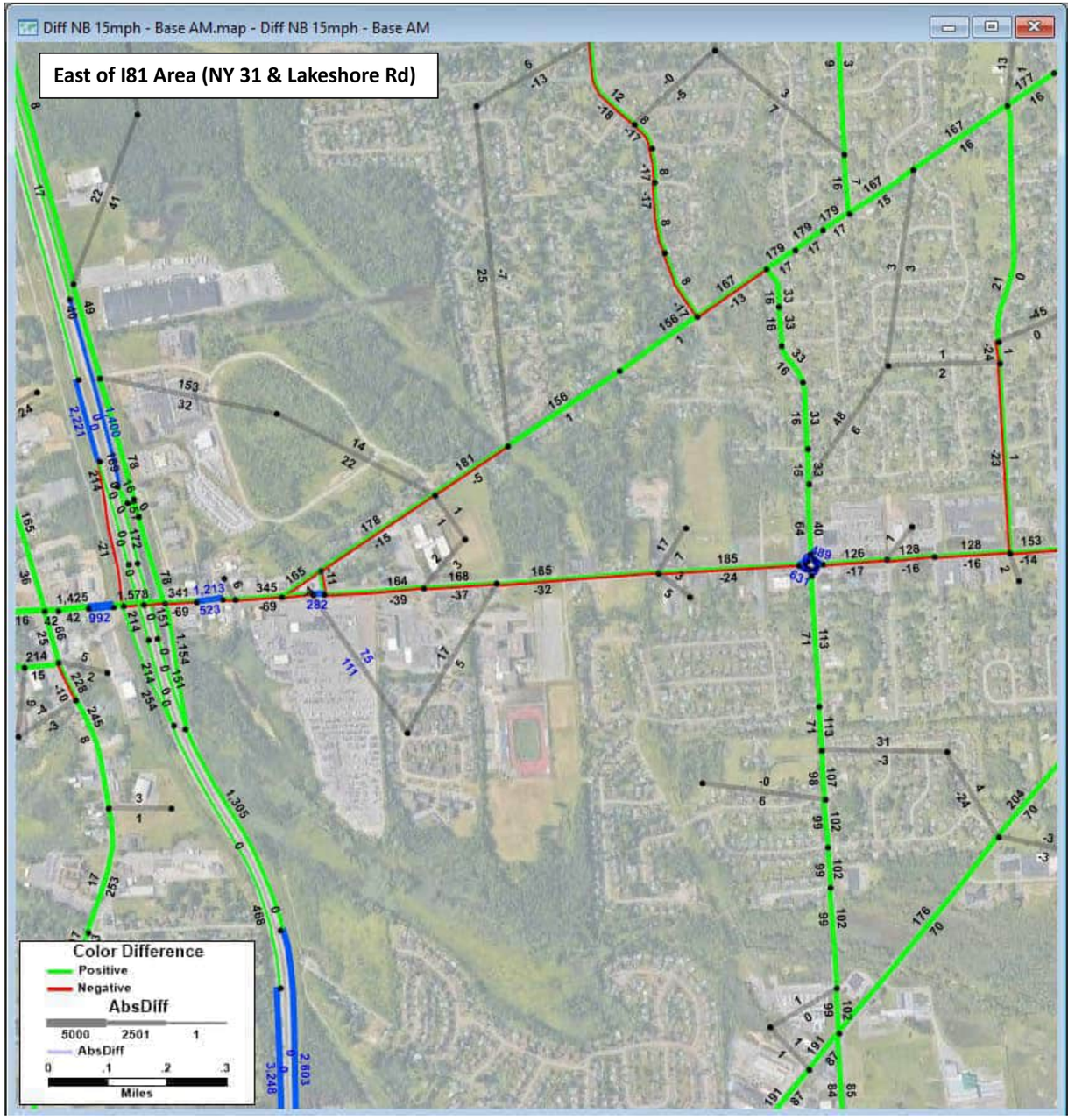
Source : SMTC Regional Travel Demand Model (1/3/2023)



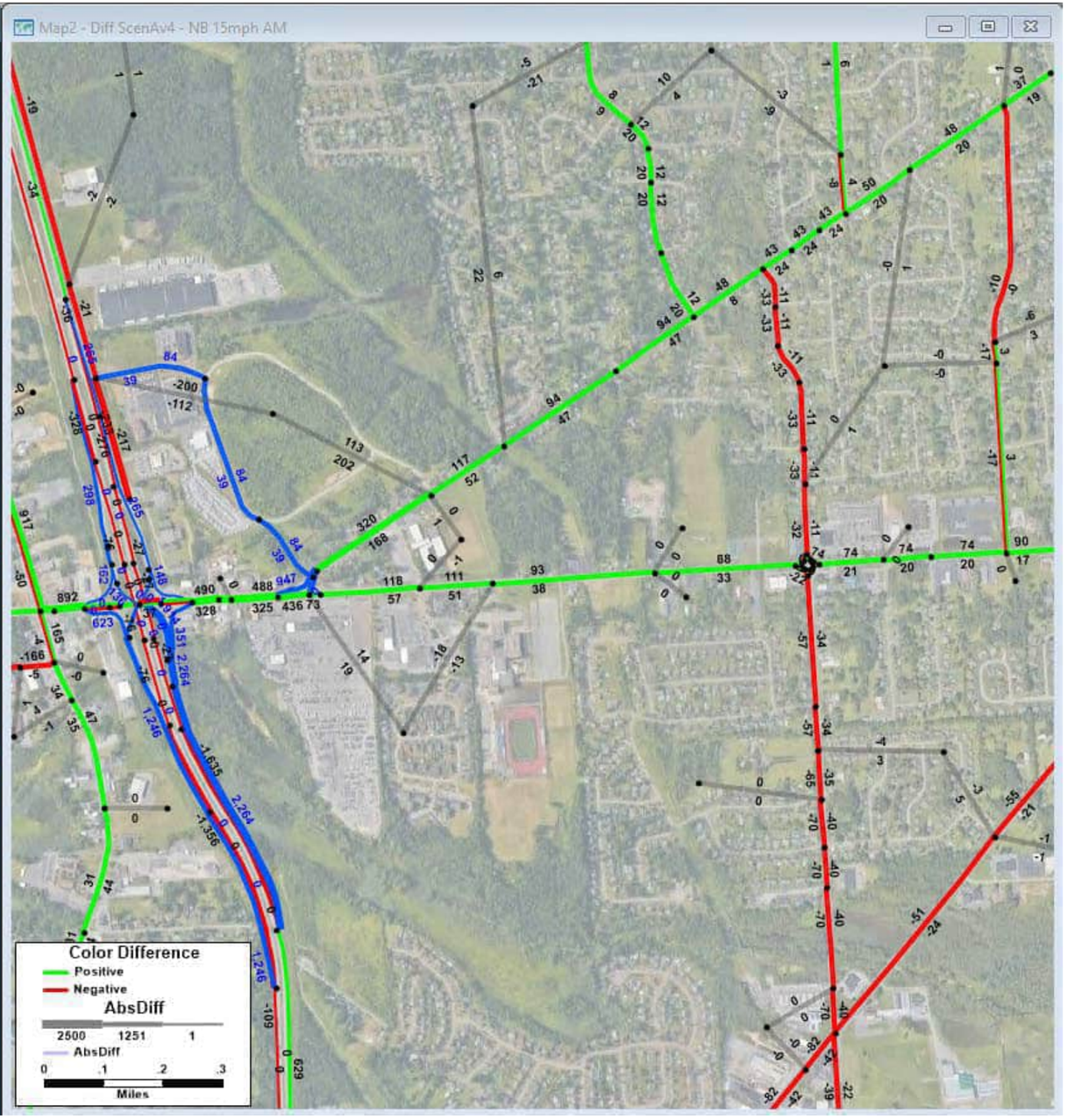
(TOP MAP) 2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

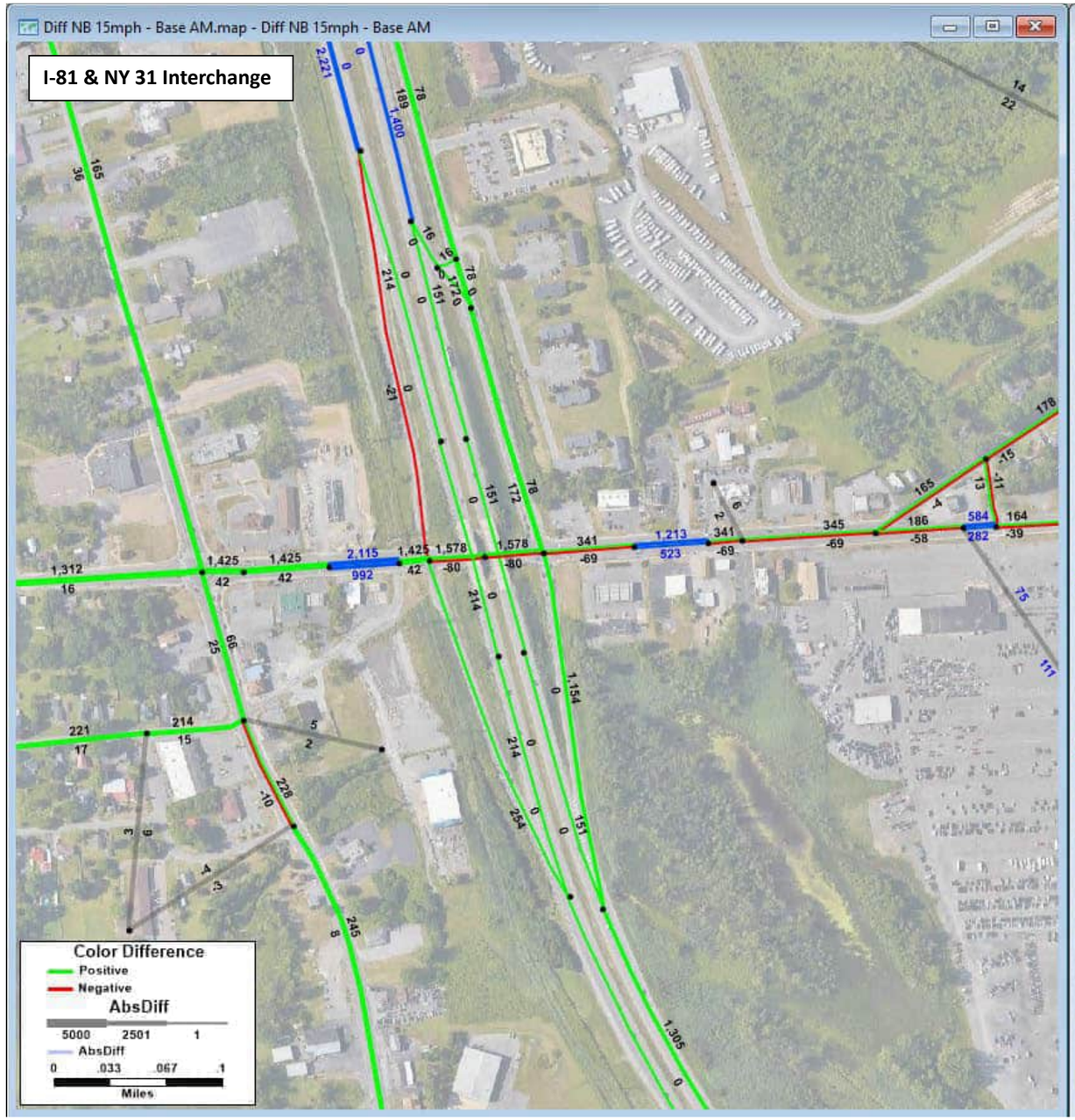


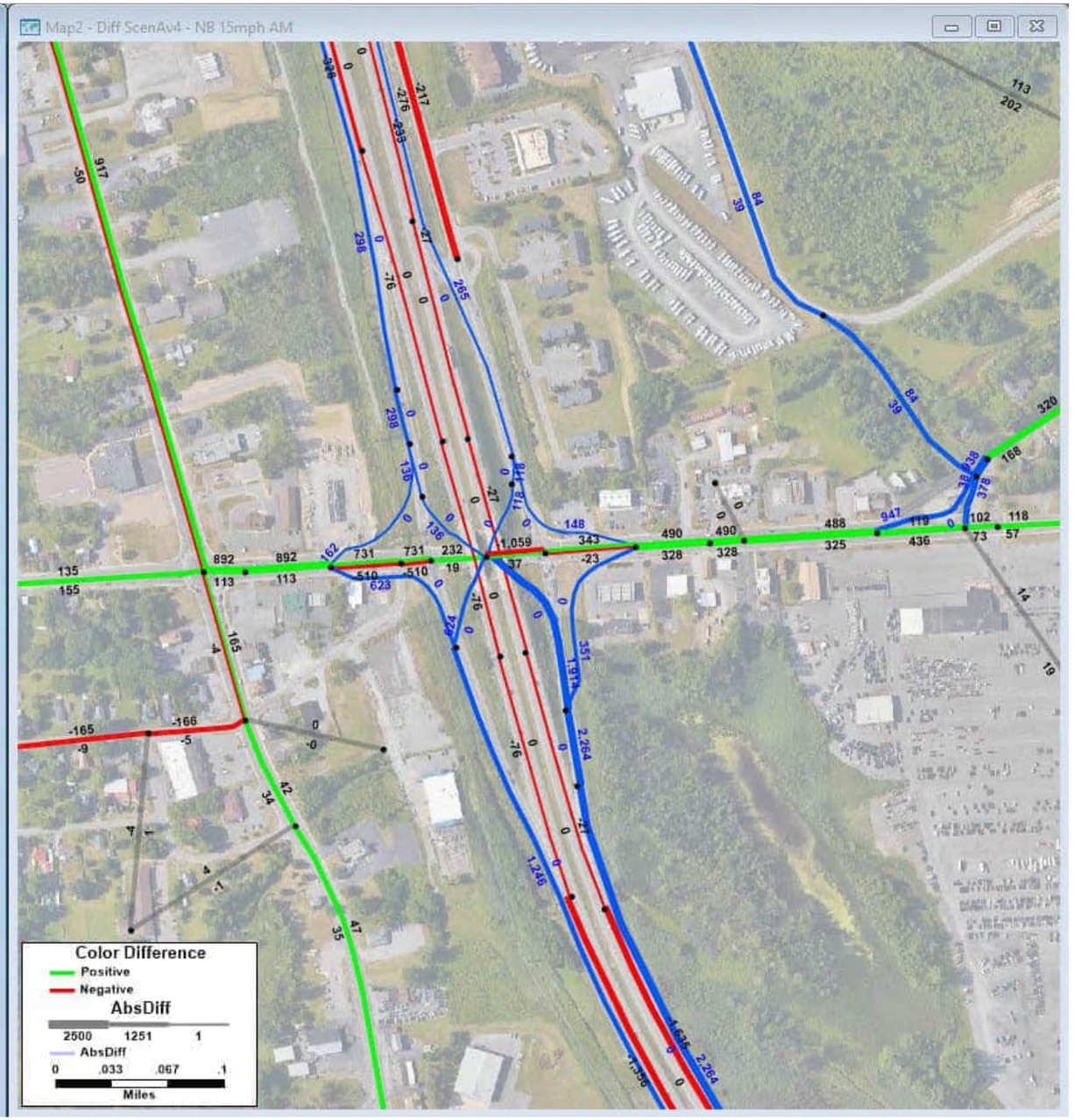
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

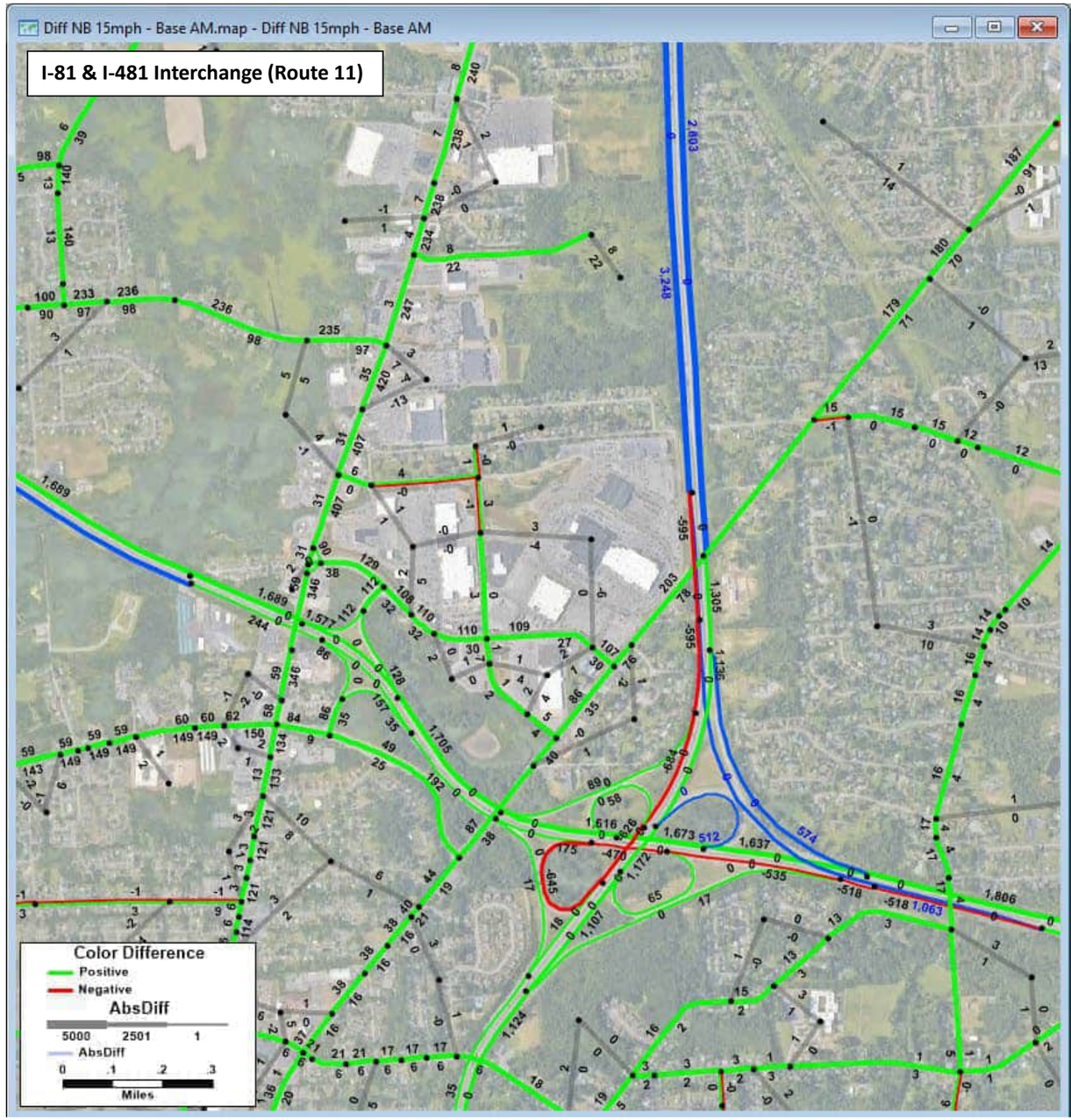




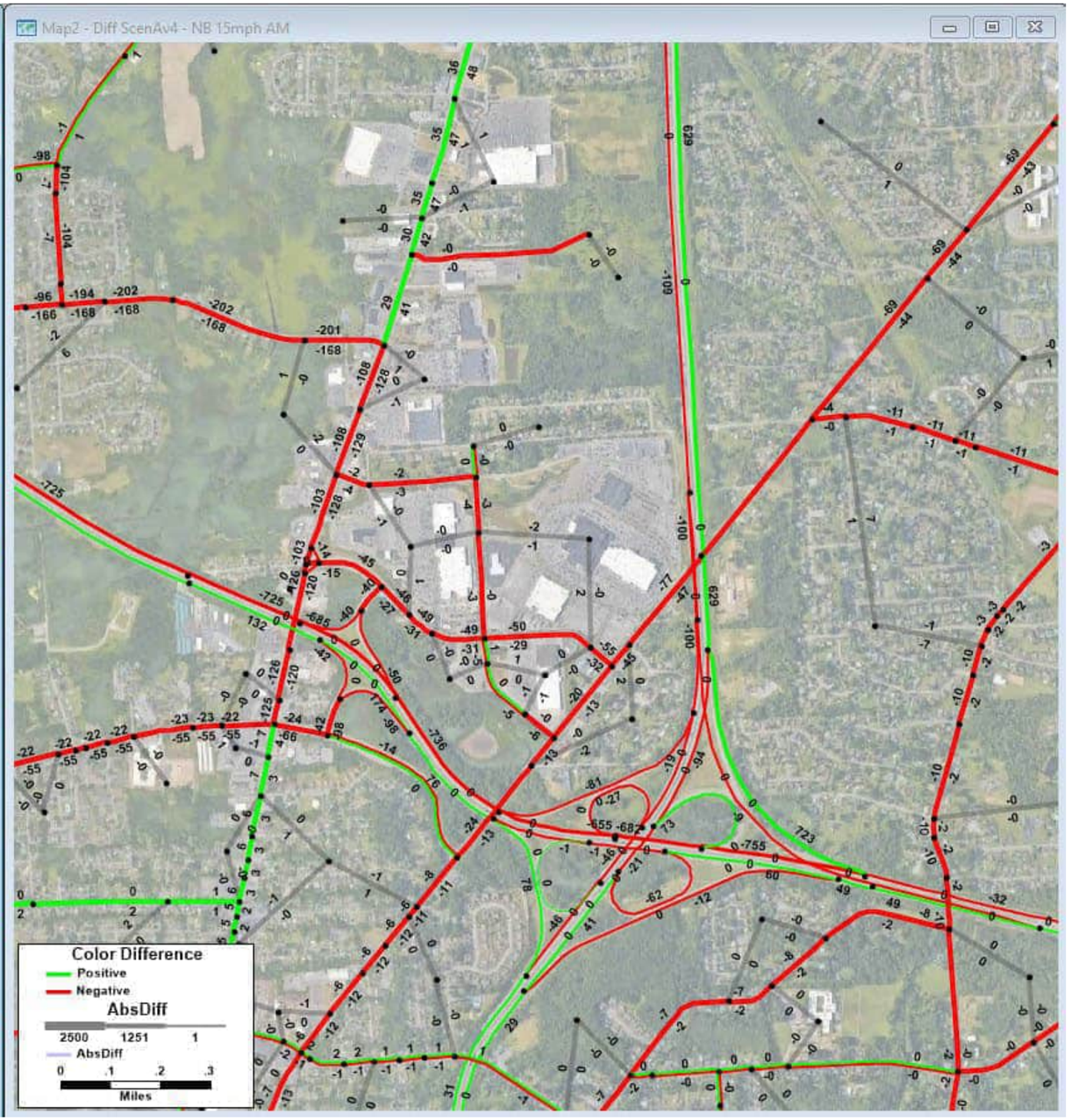
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

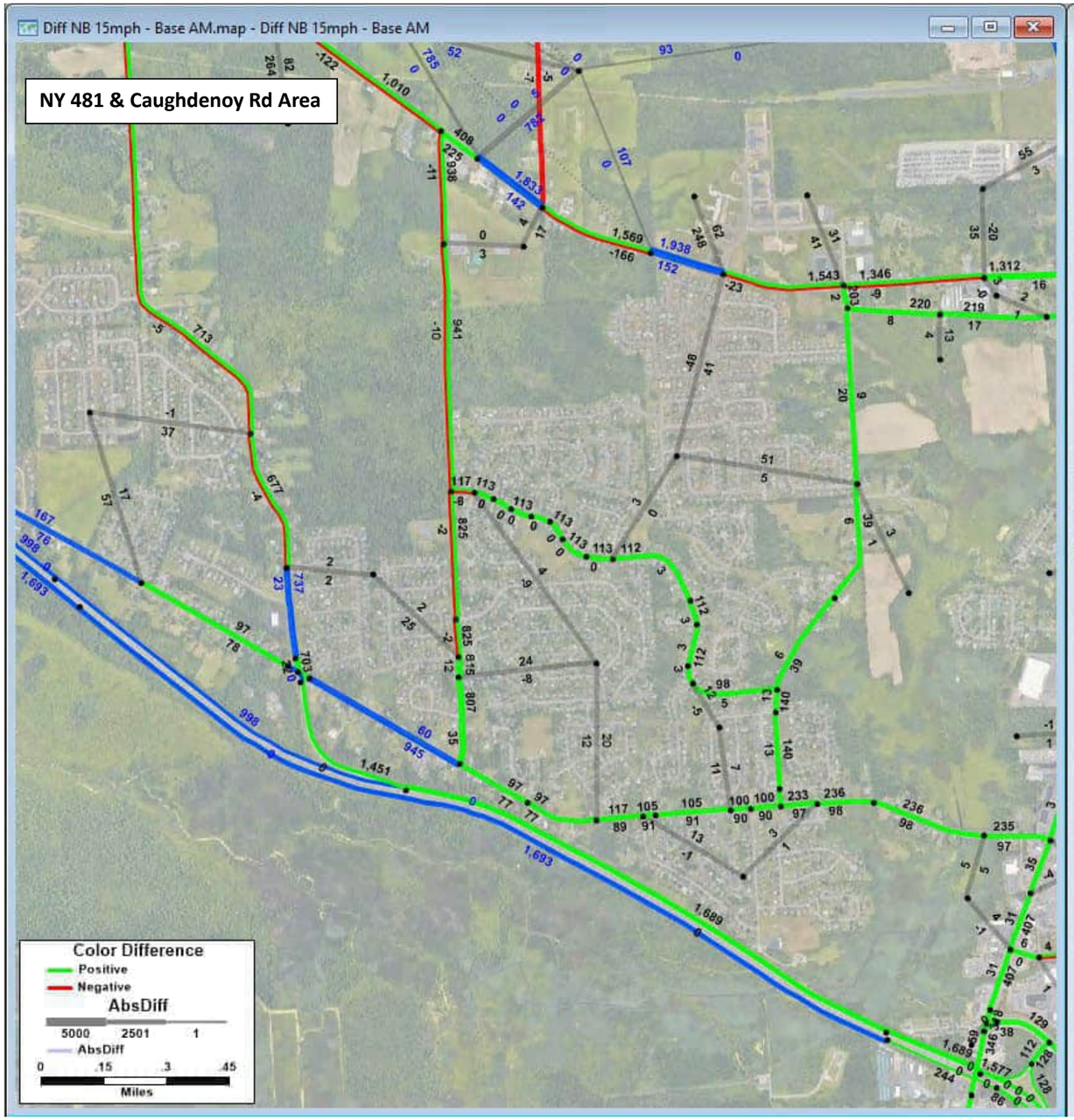


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

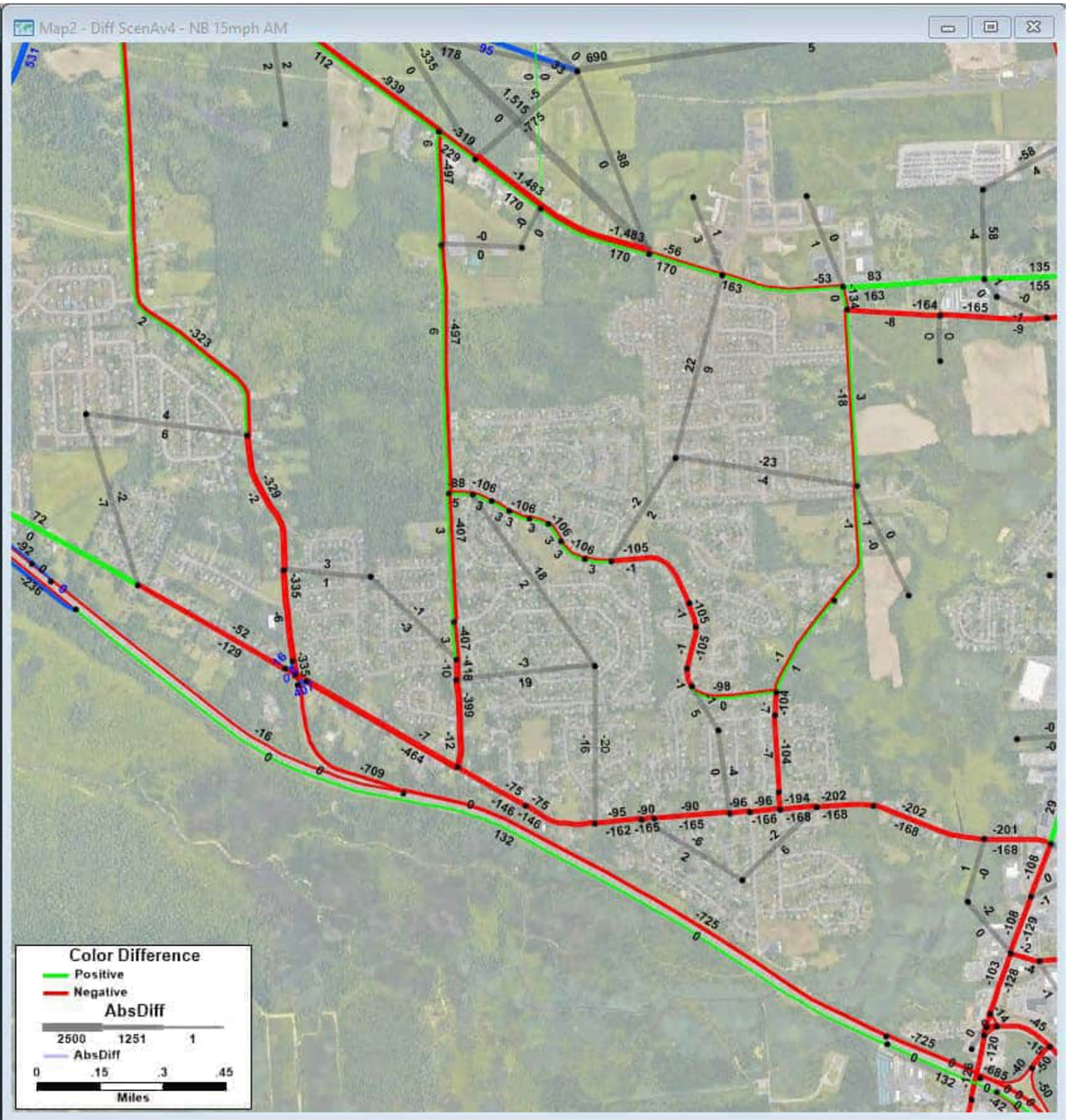


2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

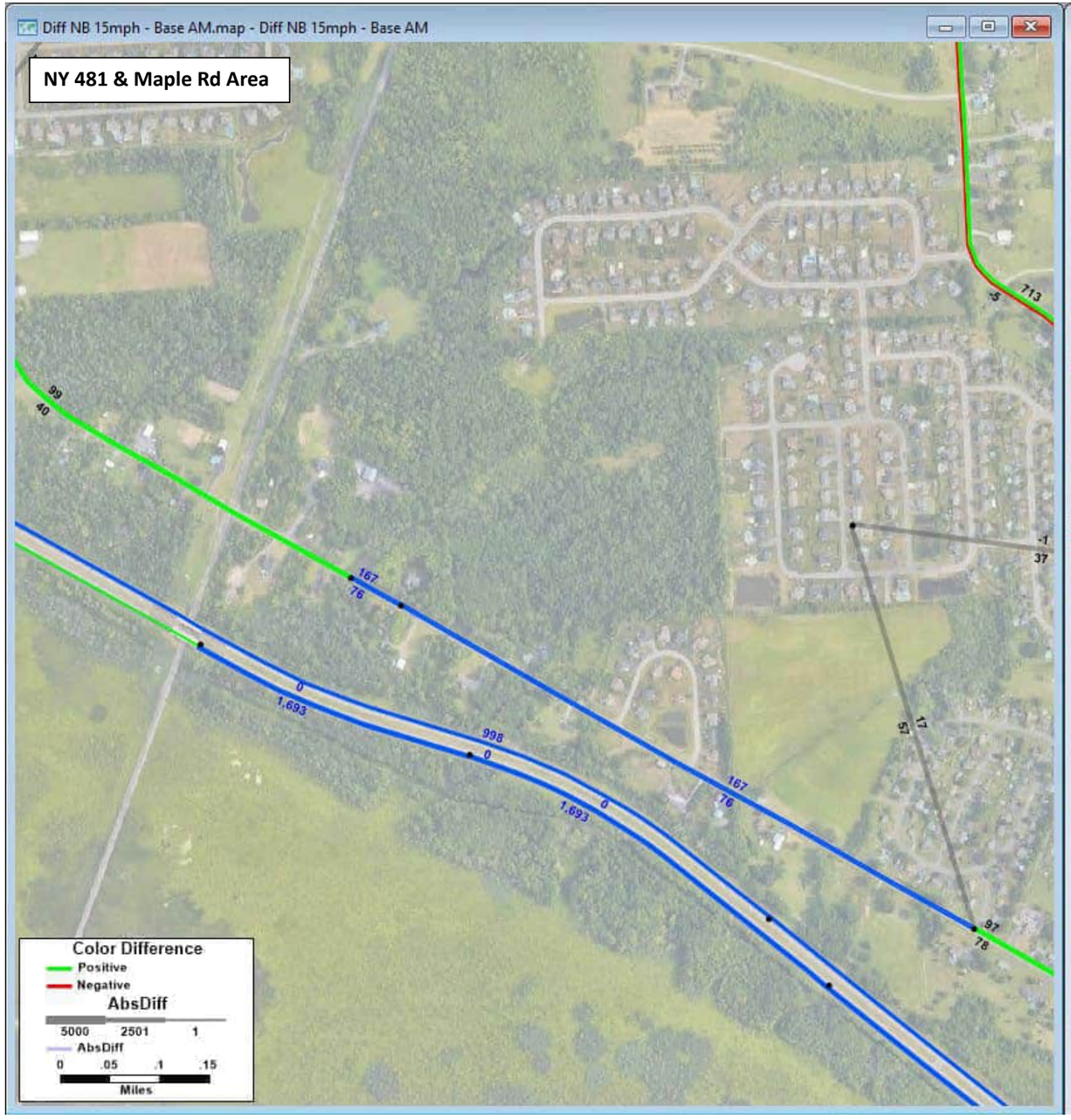


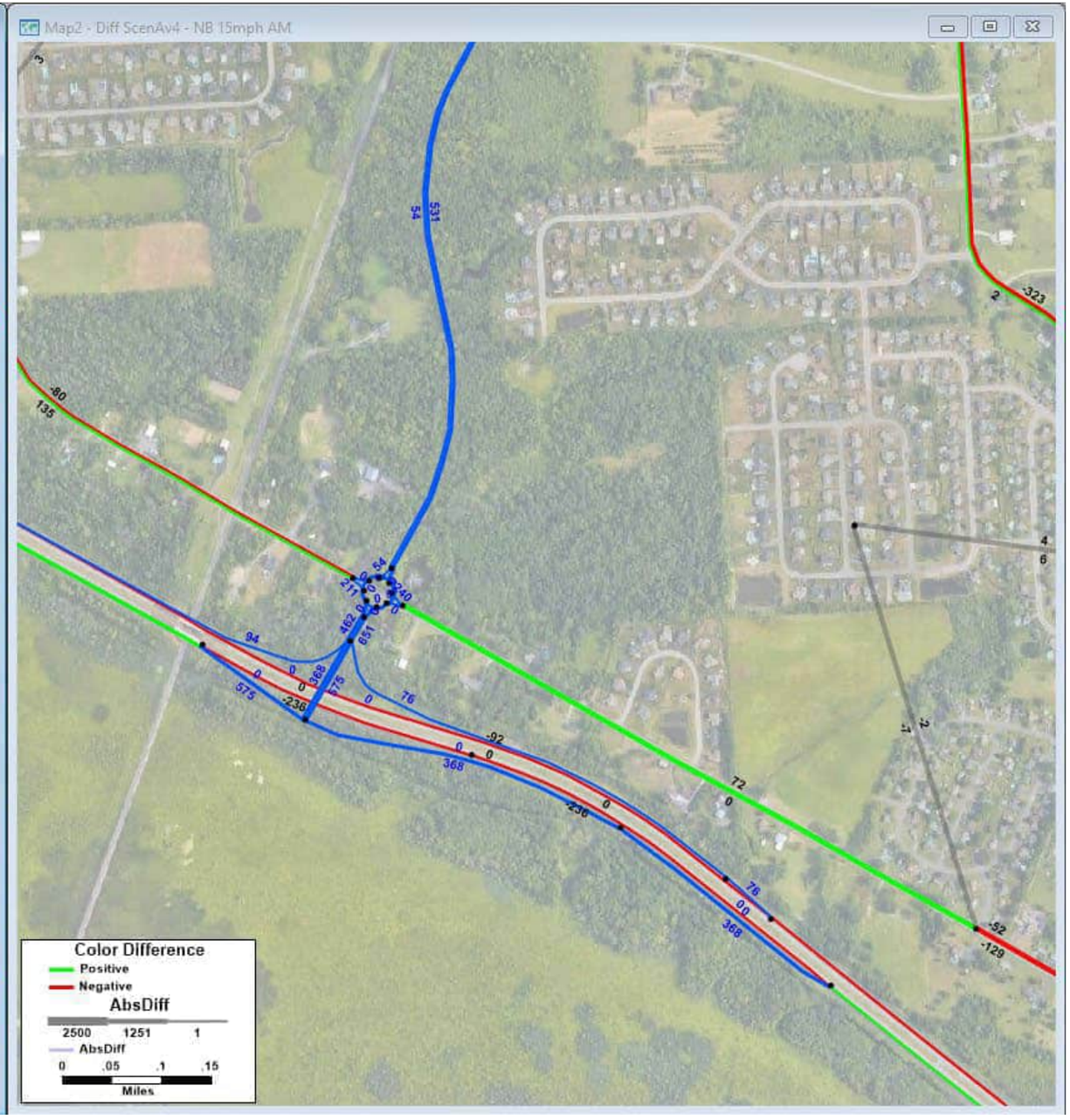
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

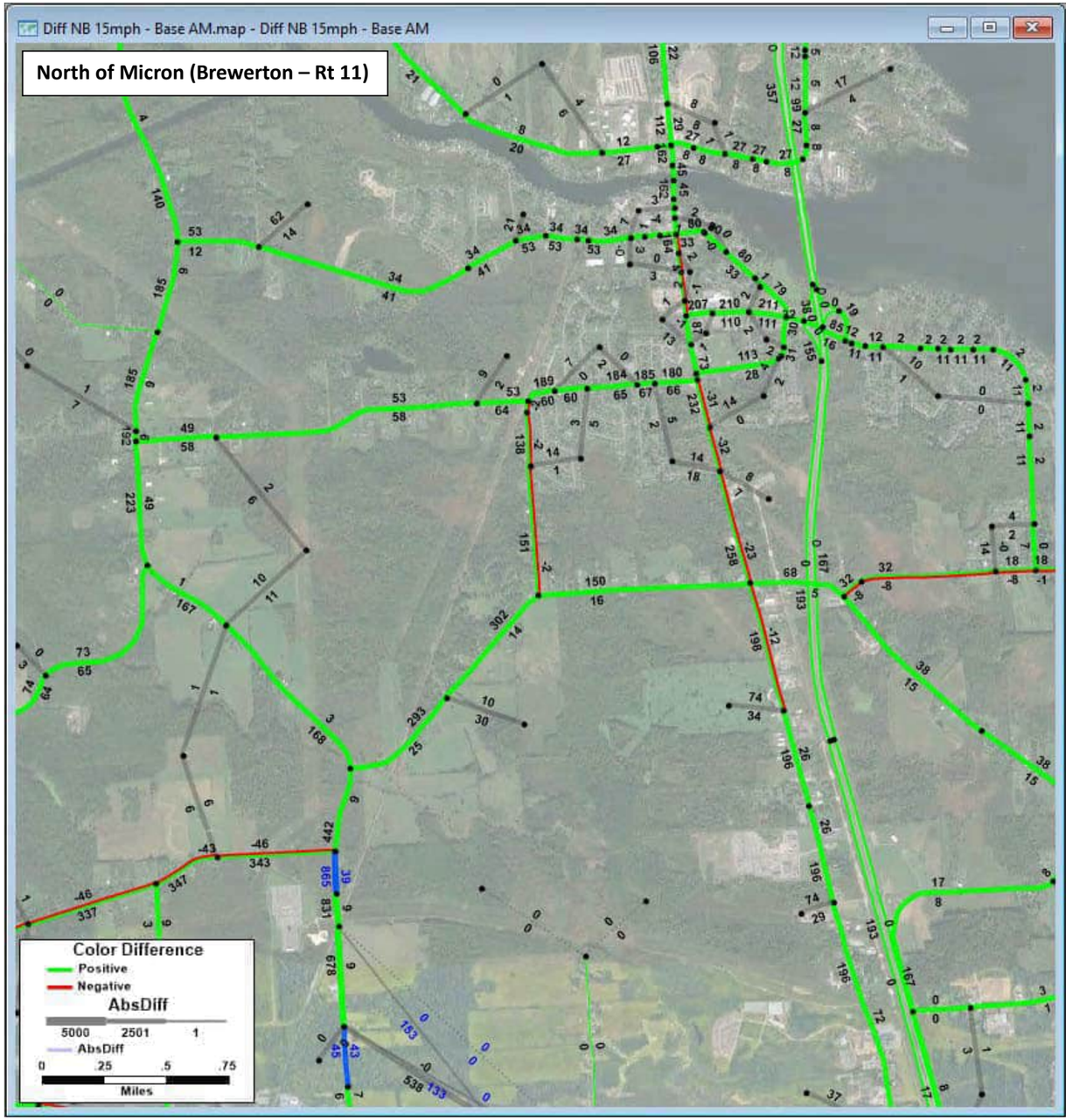




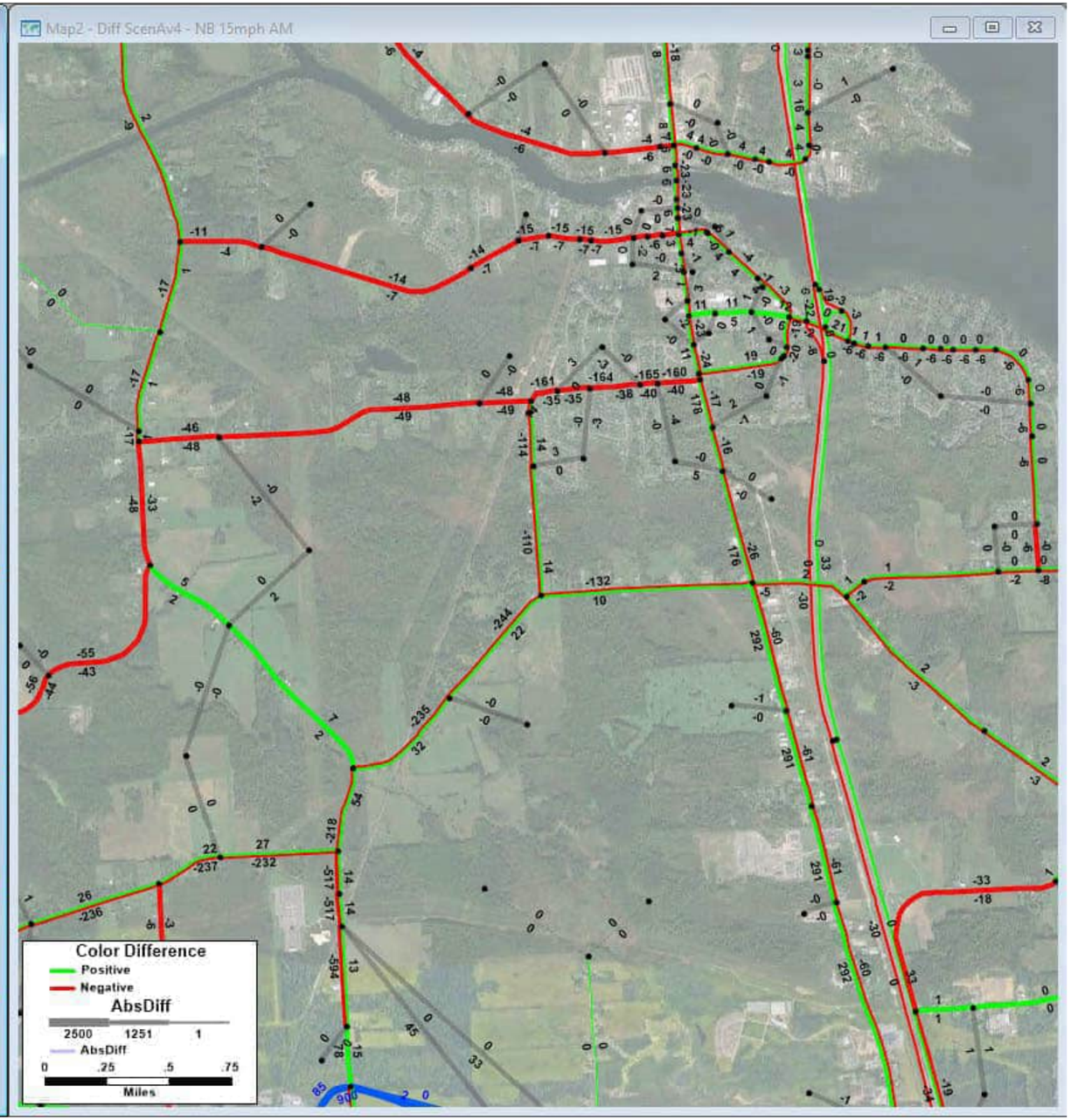
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

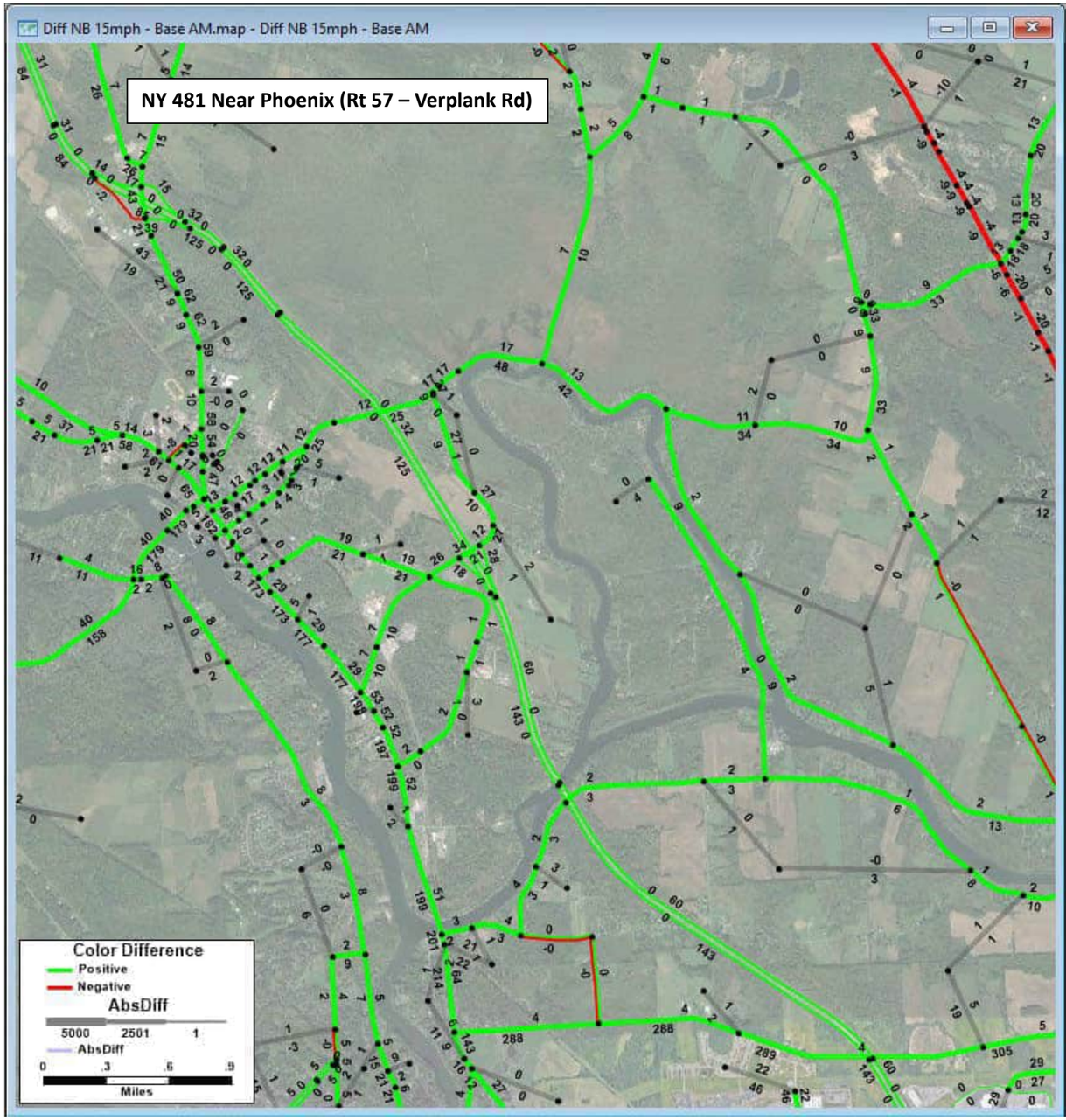


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

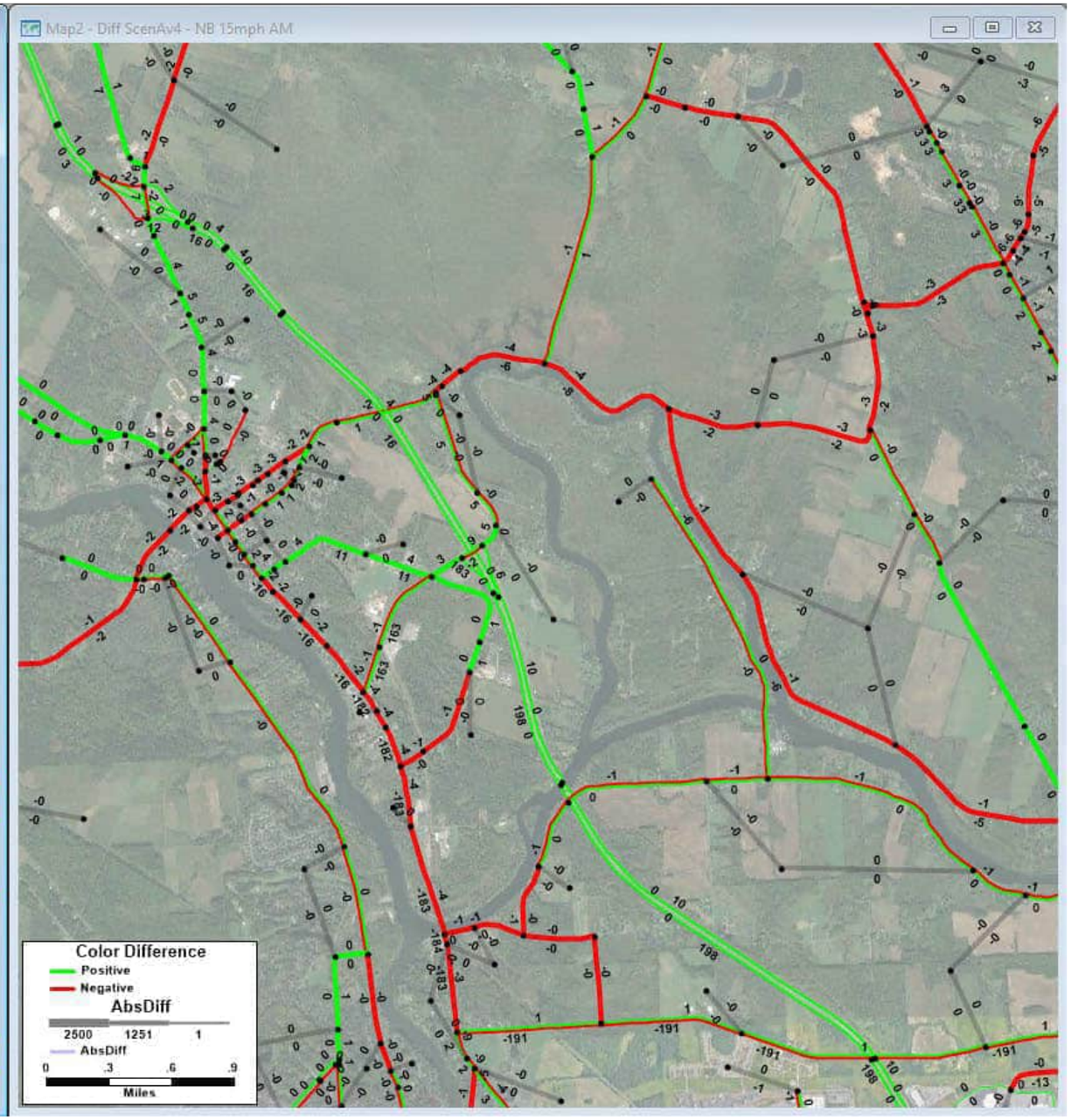


2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

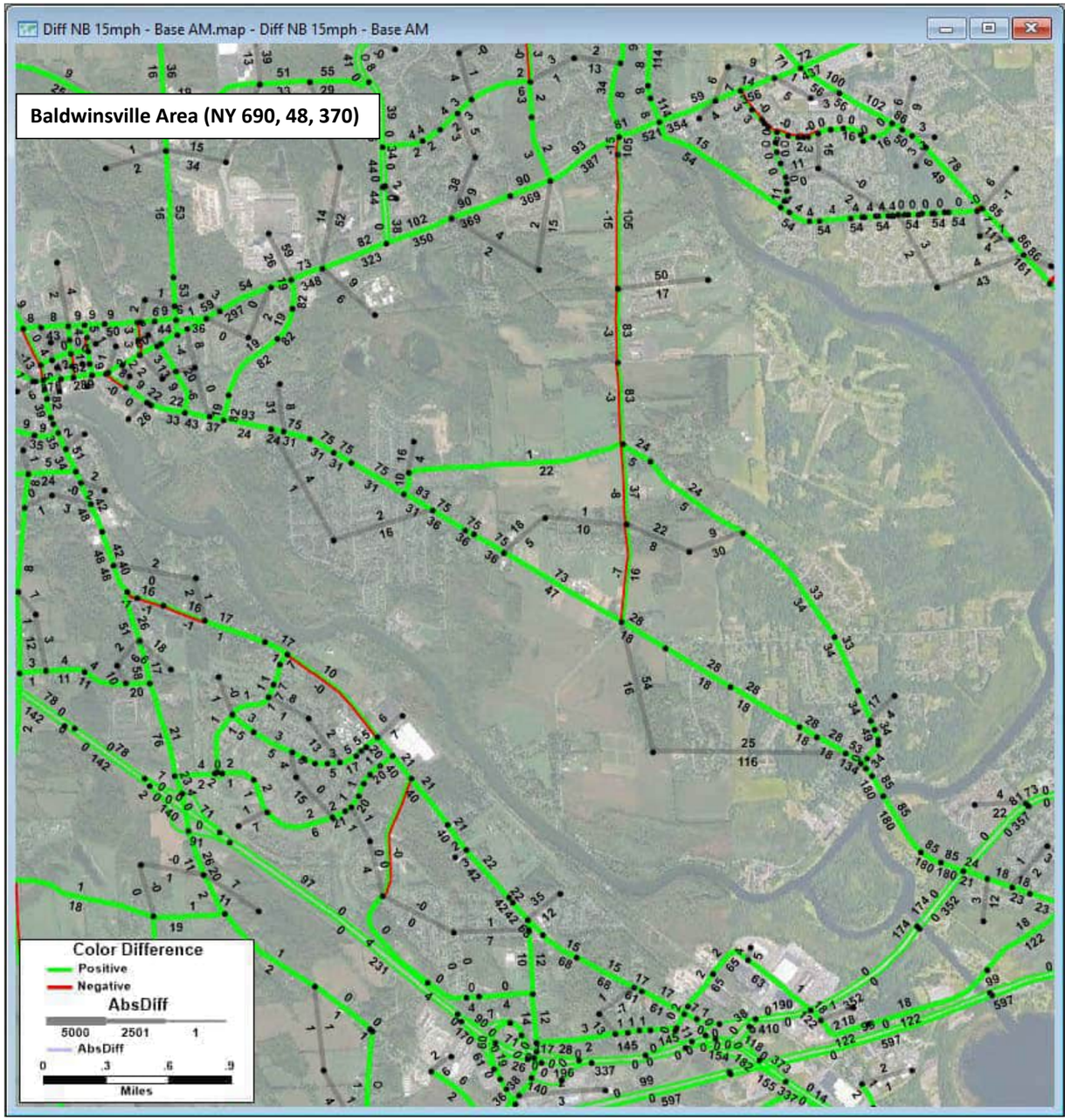


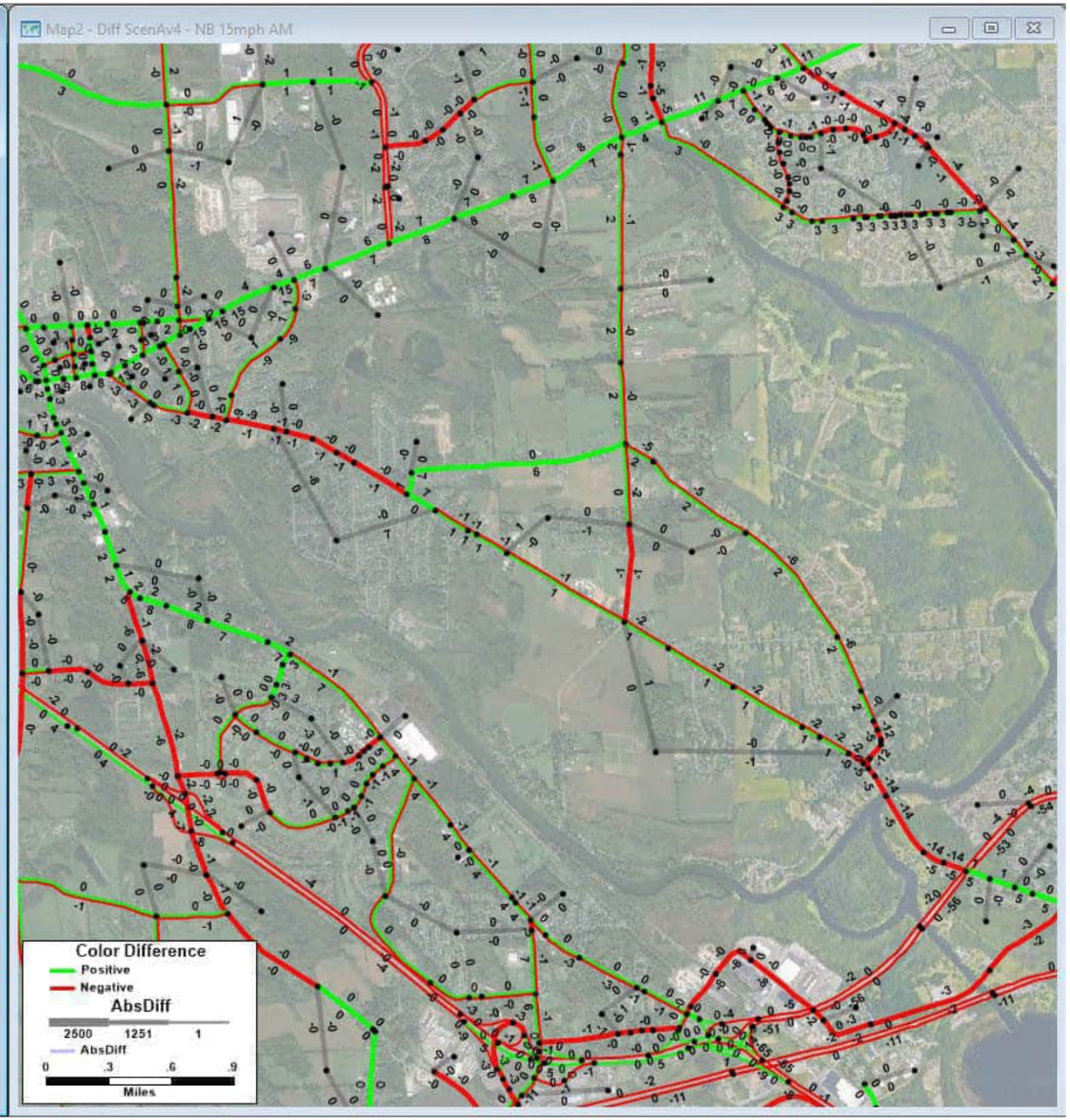
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

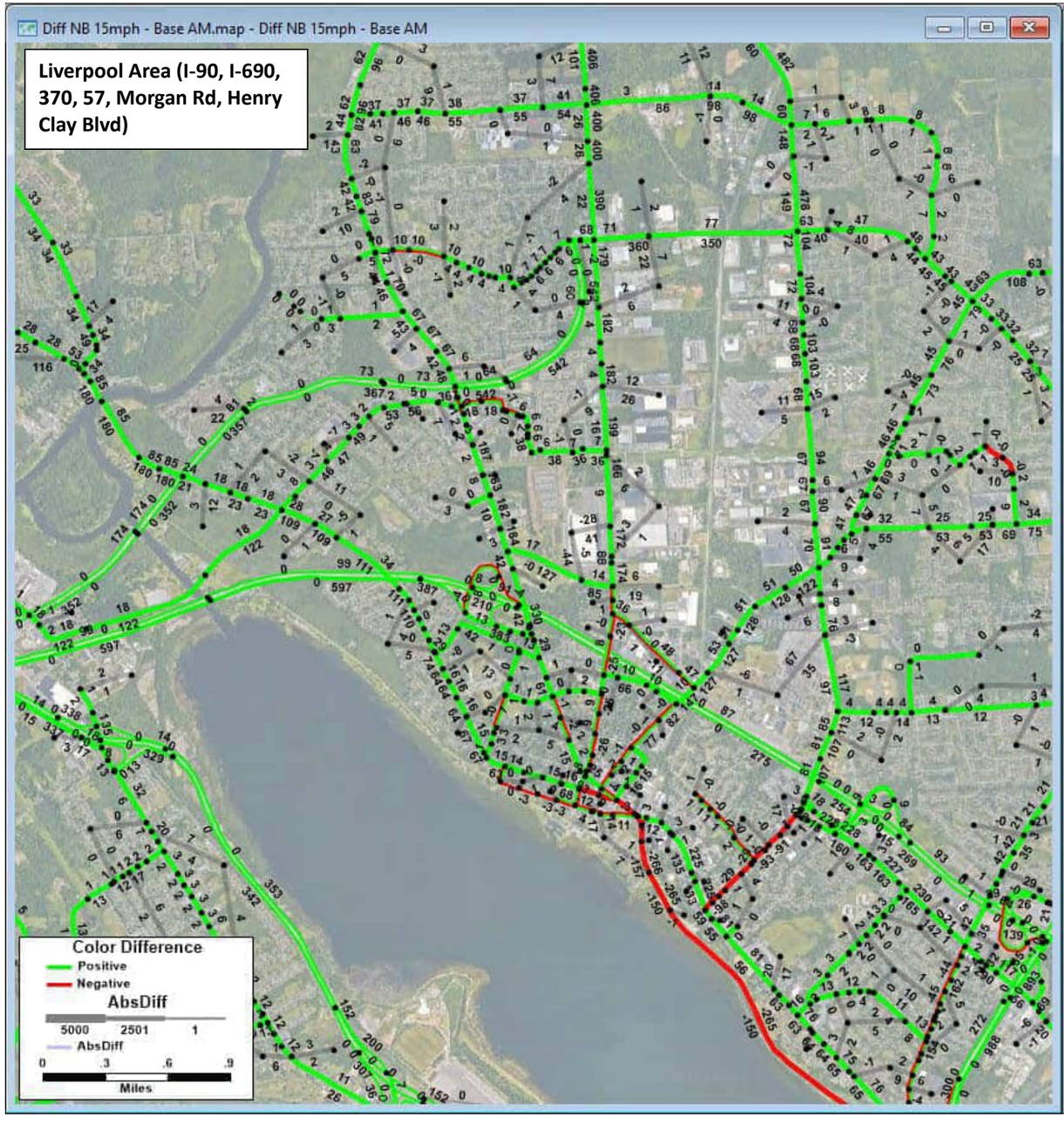


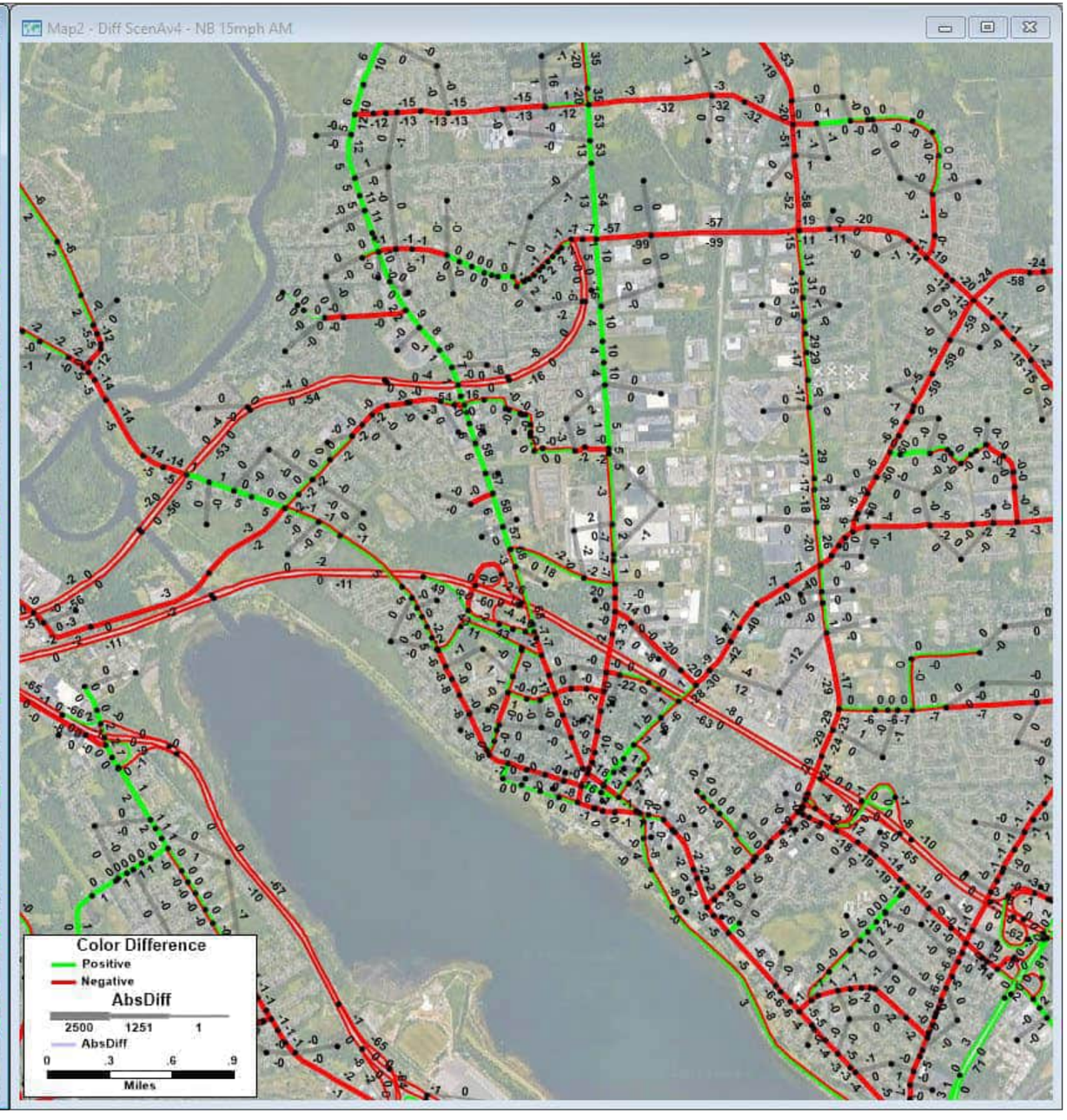


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

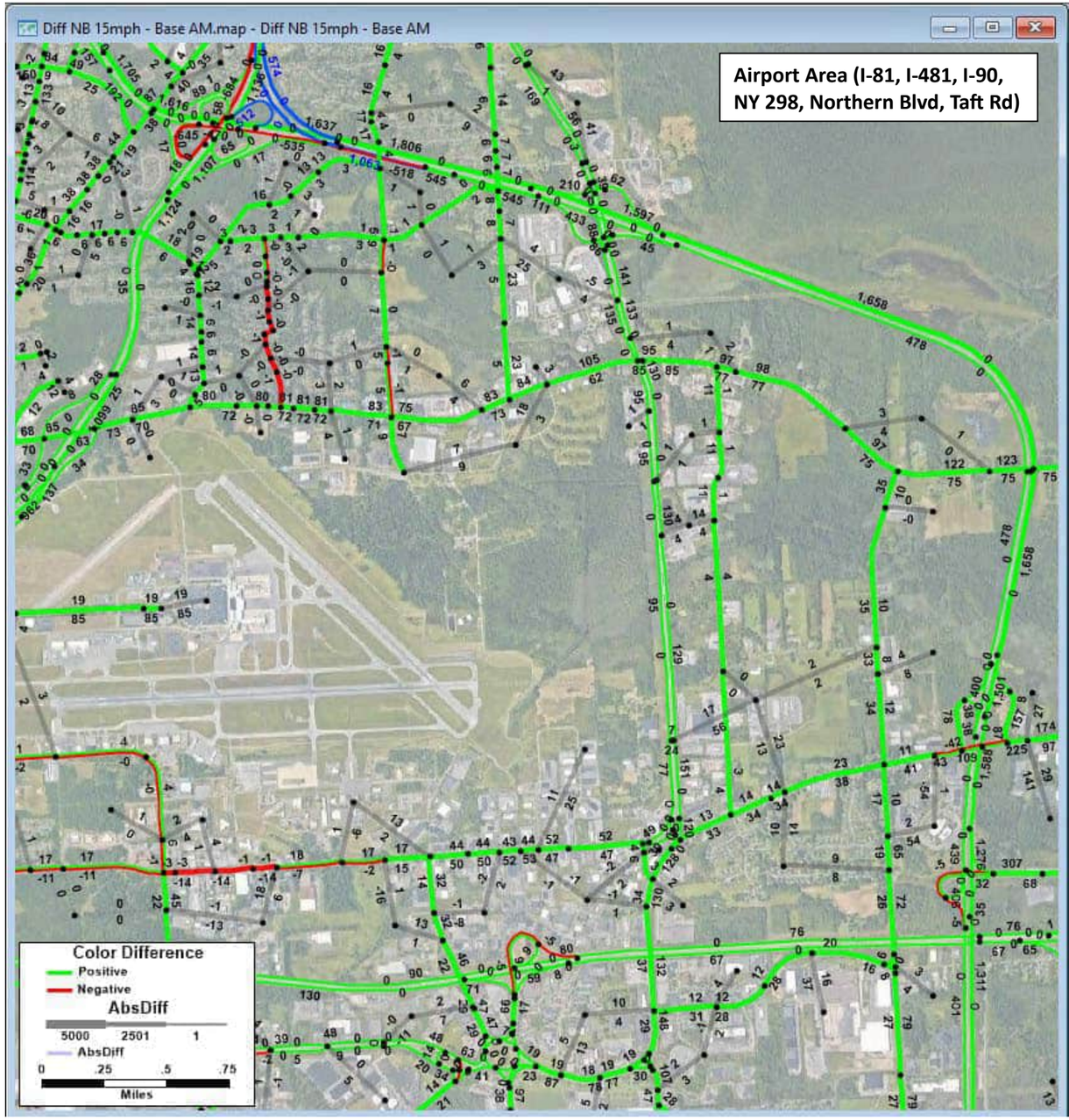




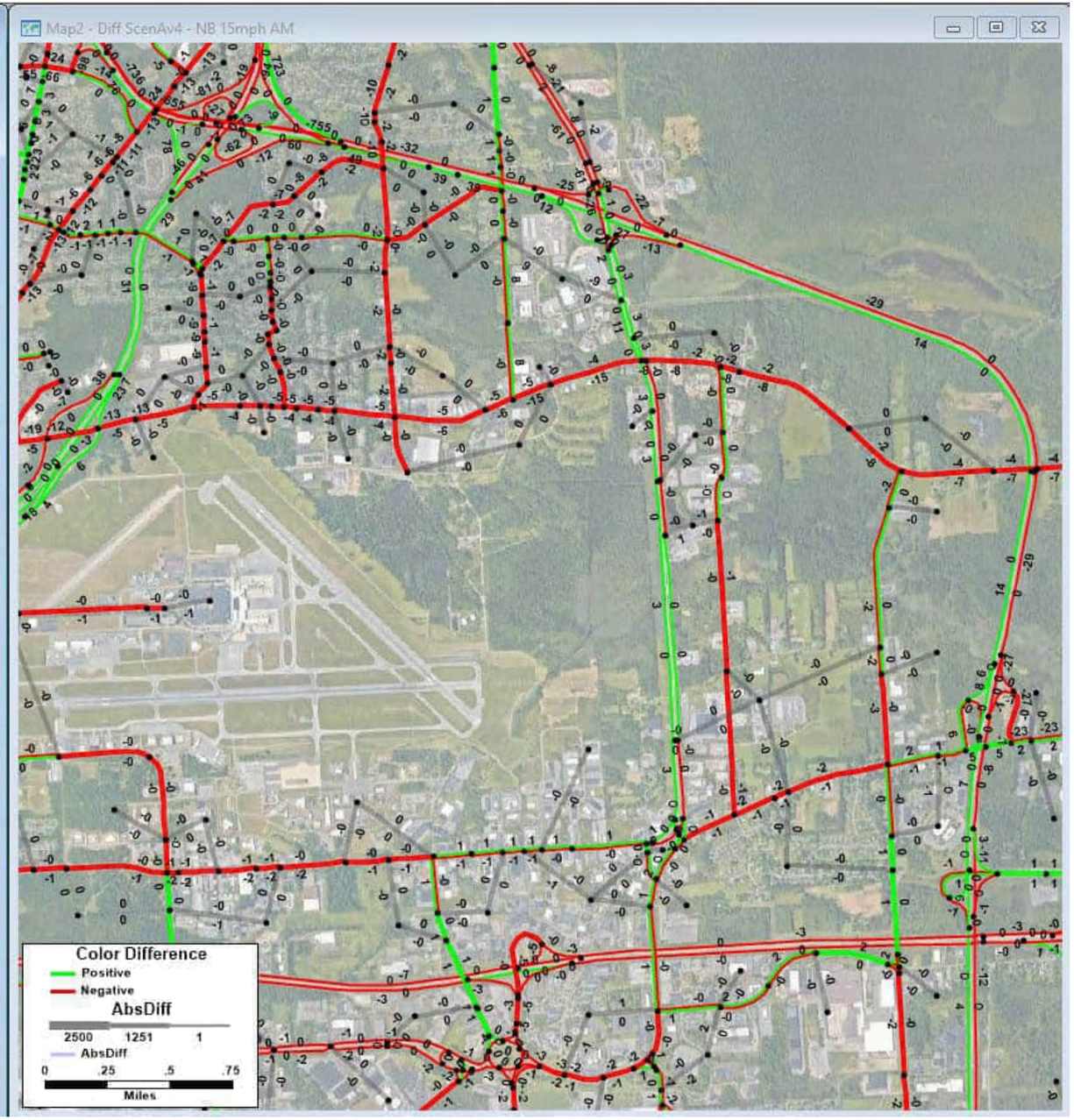
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)



2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

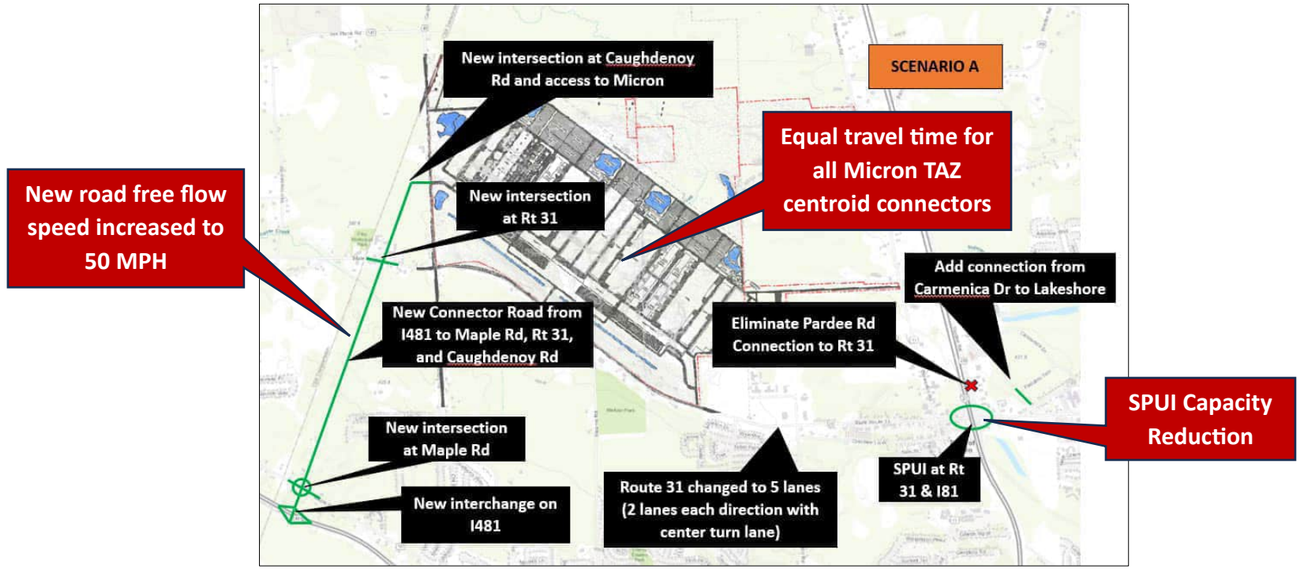
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario A v4 (Scenario A v3 and Rt31 SPUI Capacity Decrease) – PM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario A v4** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- No Build in this document refers to no Micron related road network changes
- RED callouts note the revisions made to Scenario A



The graphic to the right is an example of what is included in this document →

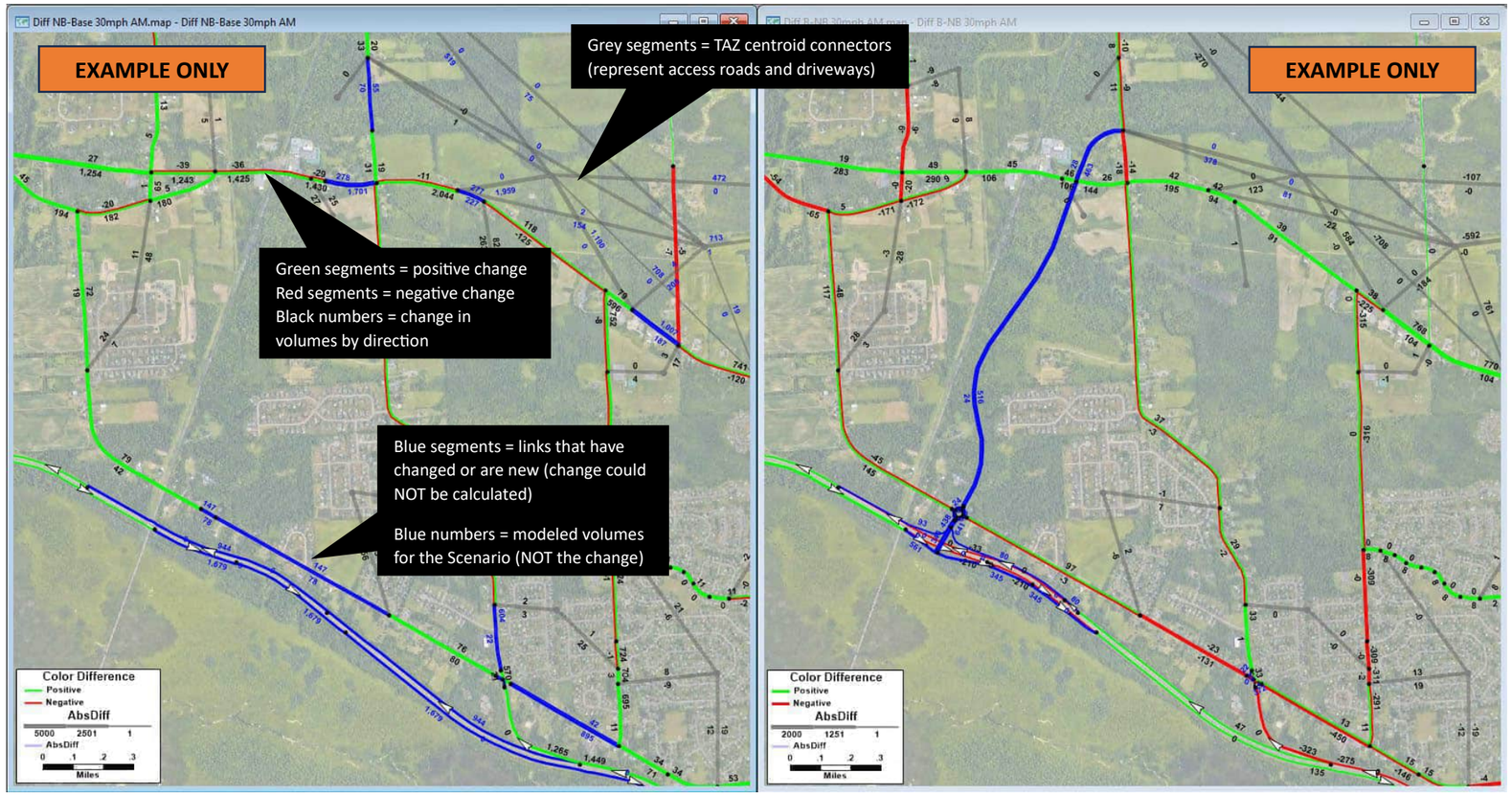
The map on the left displays the change in **PM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB PM Volumes less 2020 PM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **PM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build PM Volumes less 2040 NB PM volumes**).

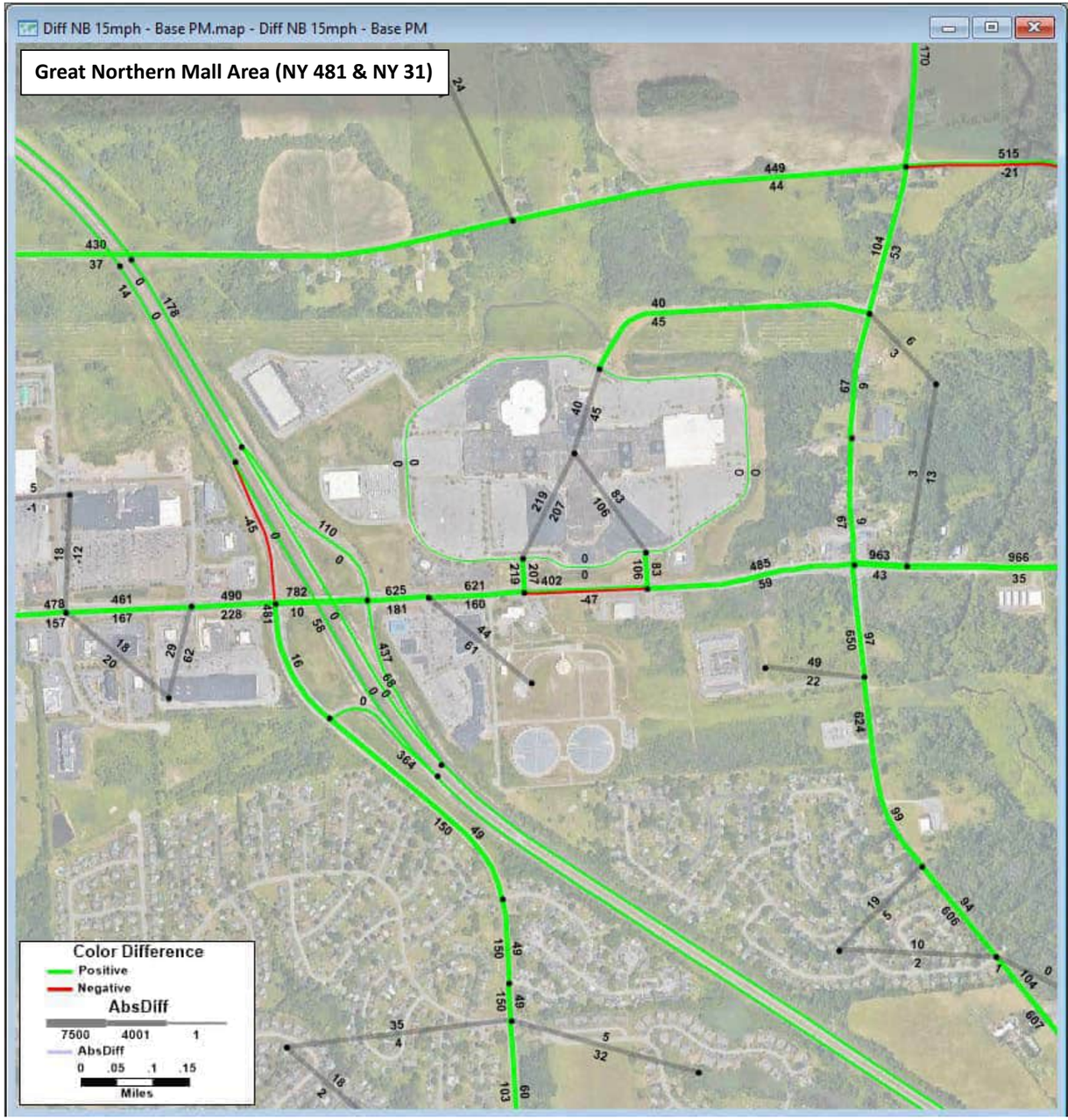
MAP NOTES:

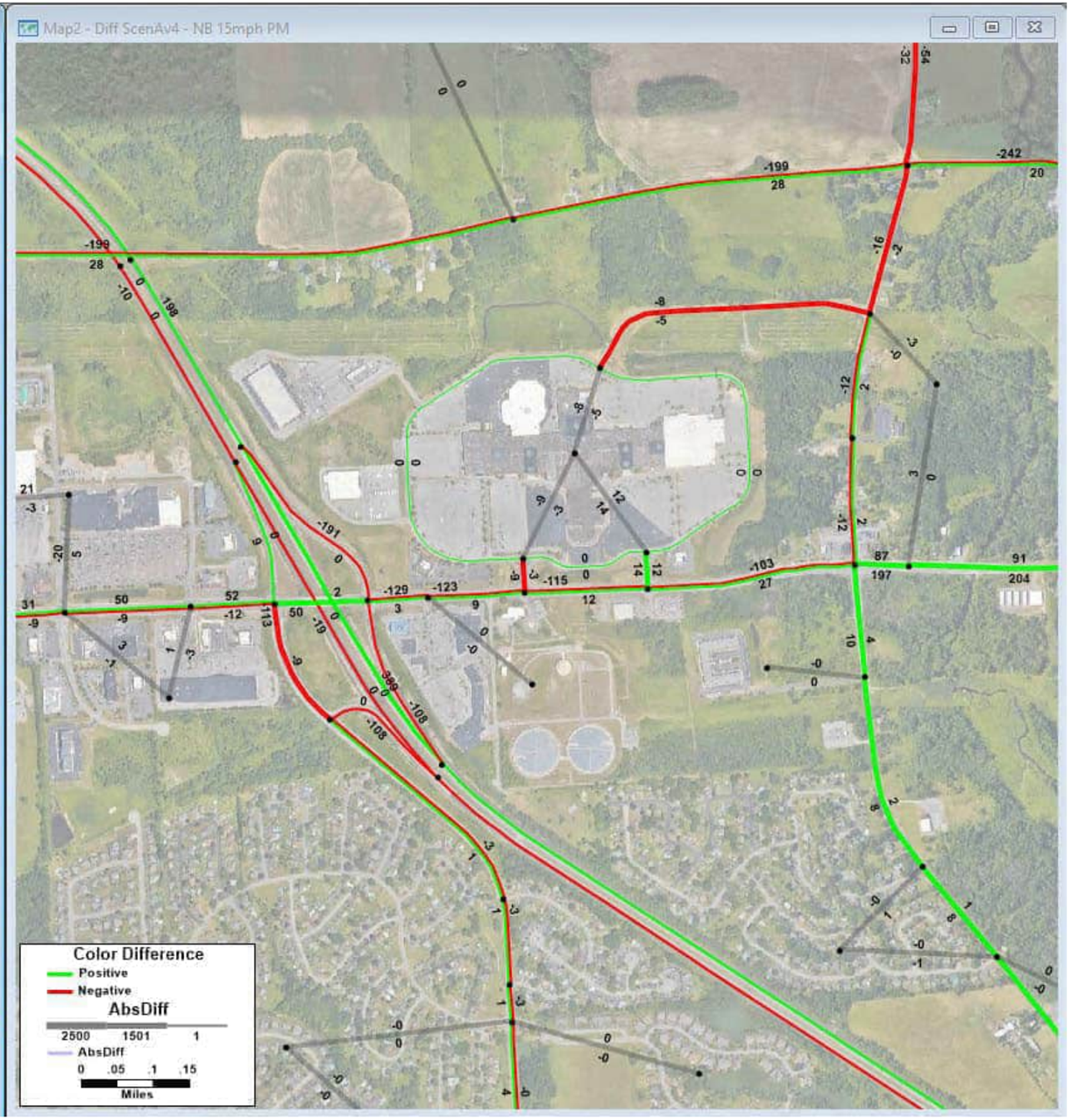
- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/3/2023)

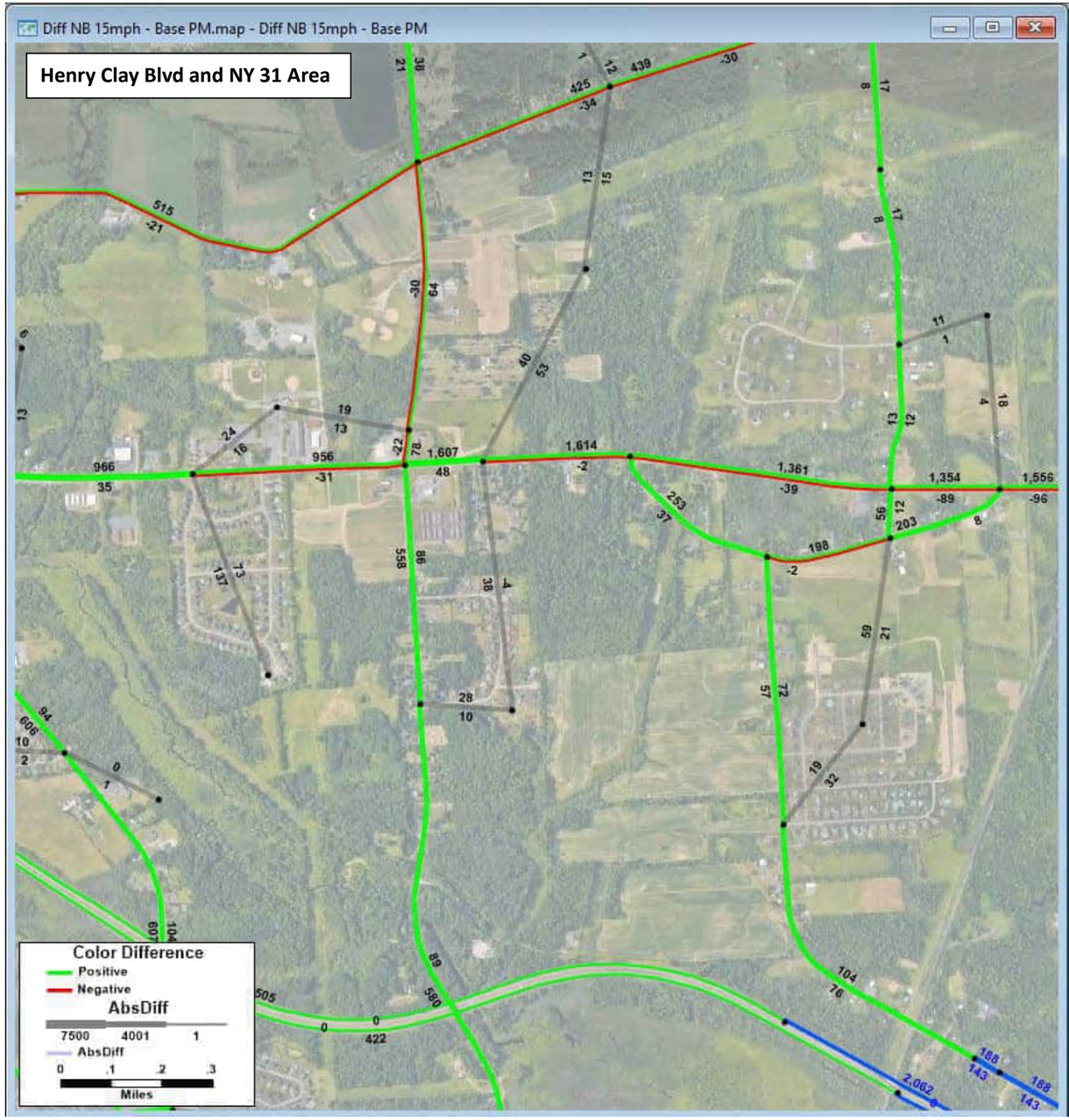




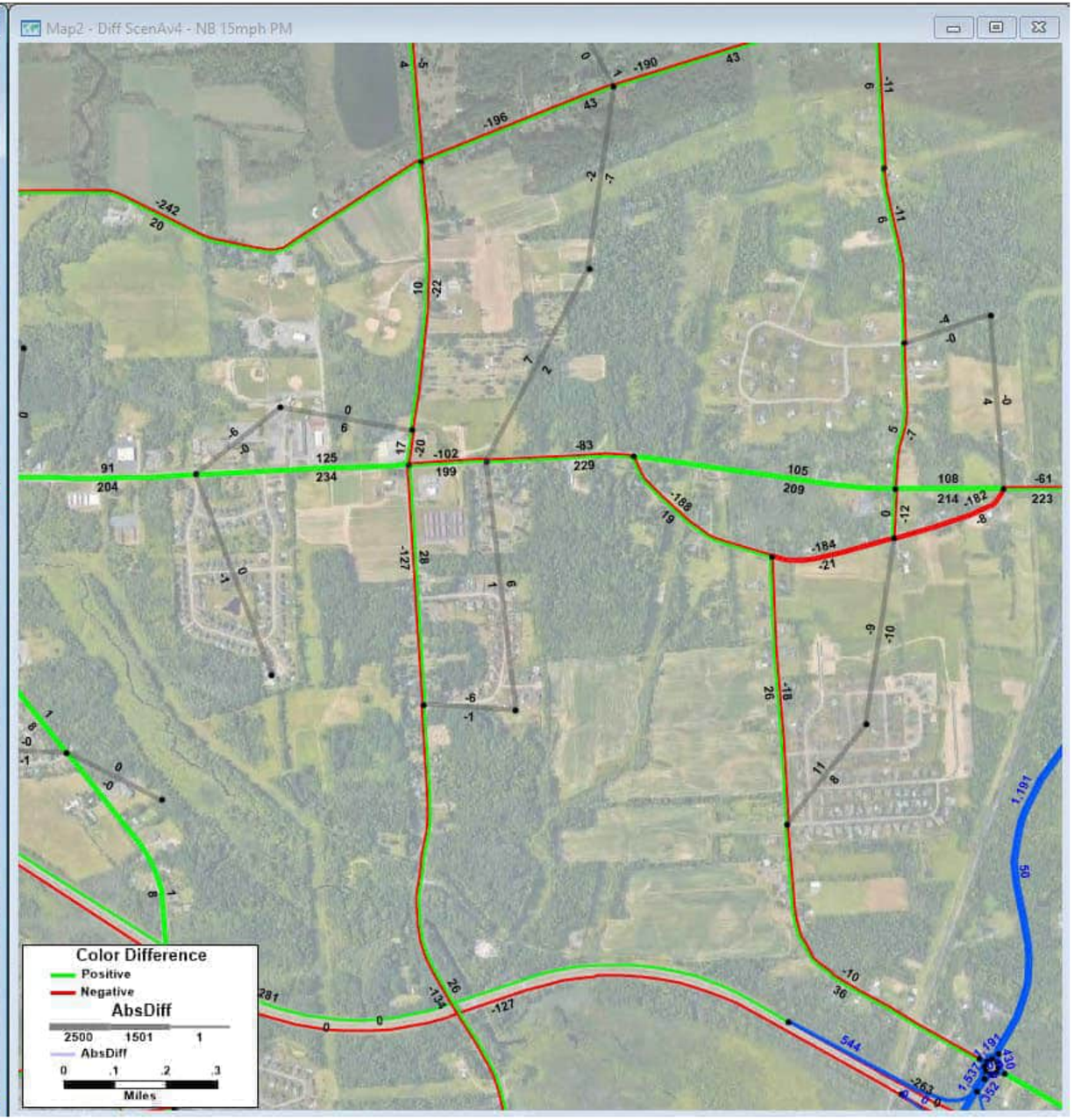
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

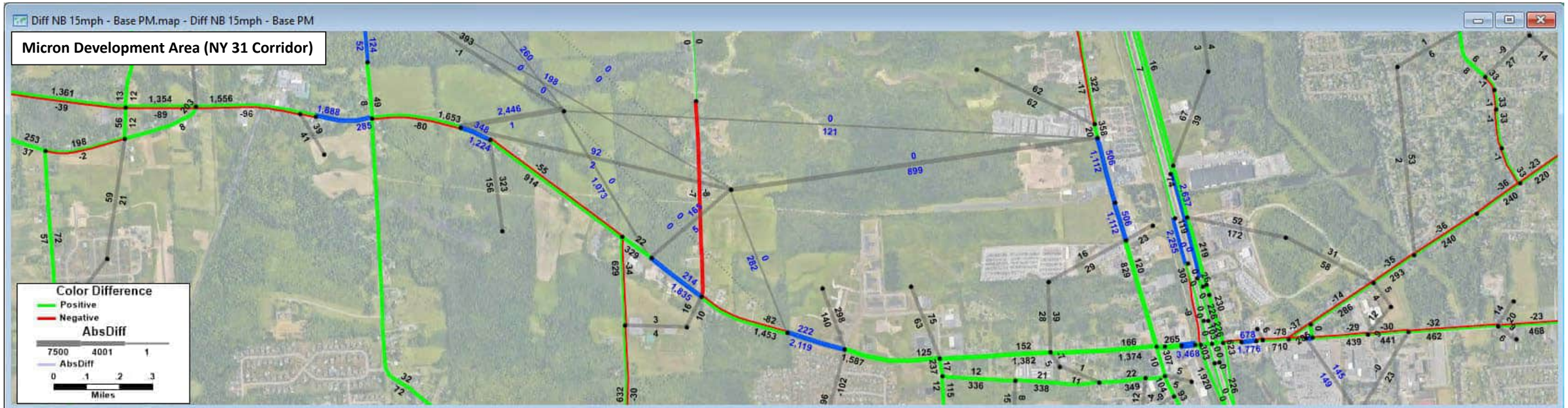


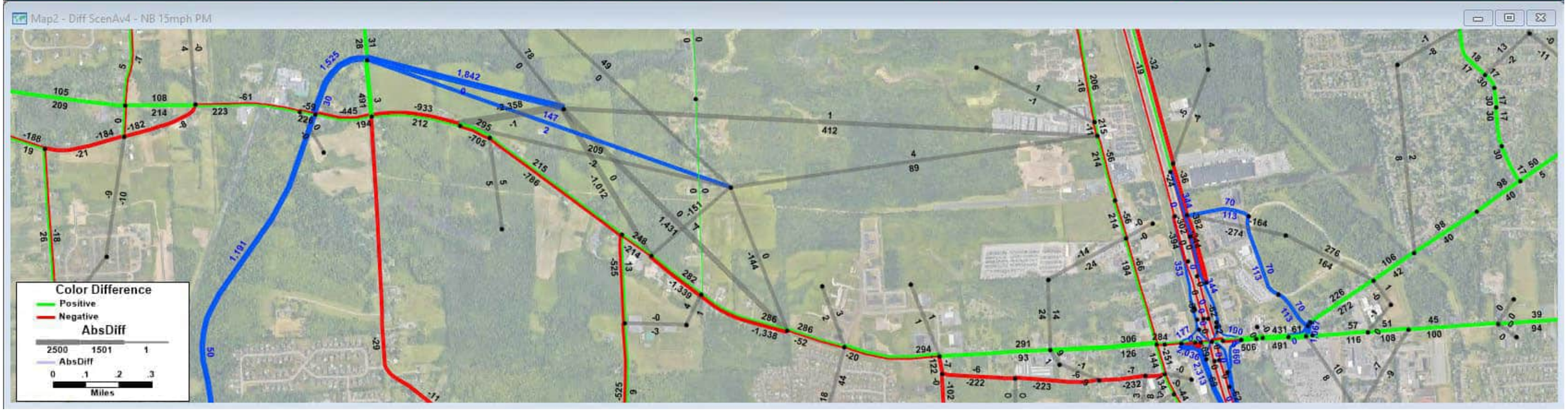
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

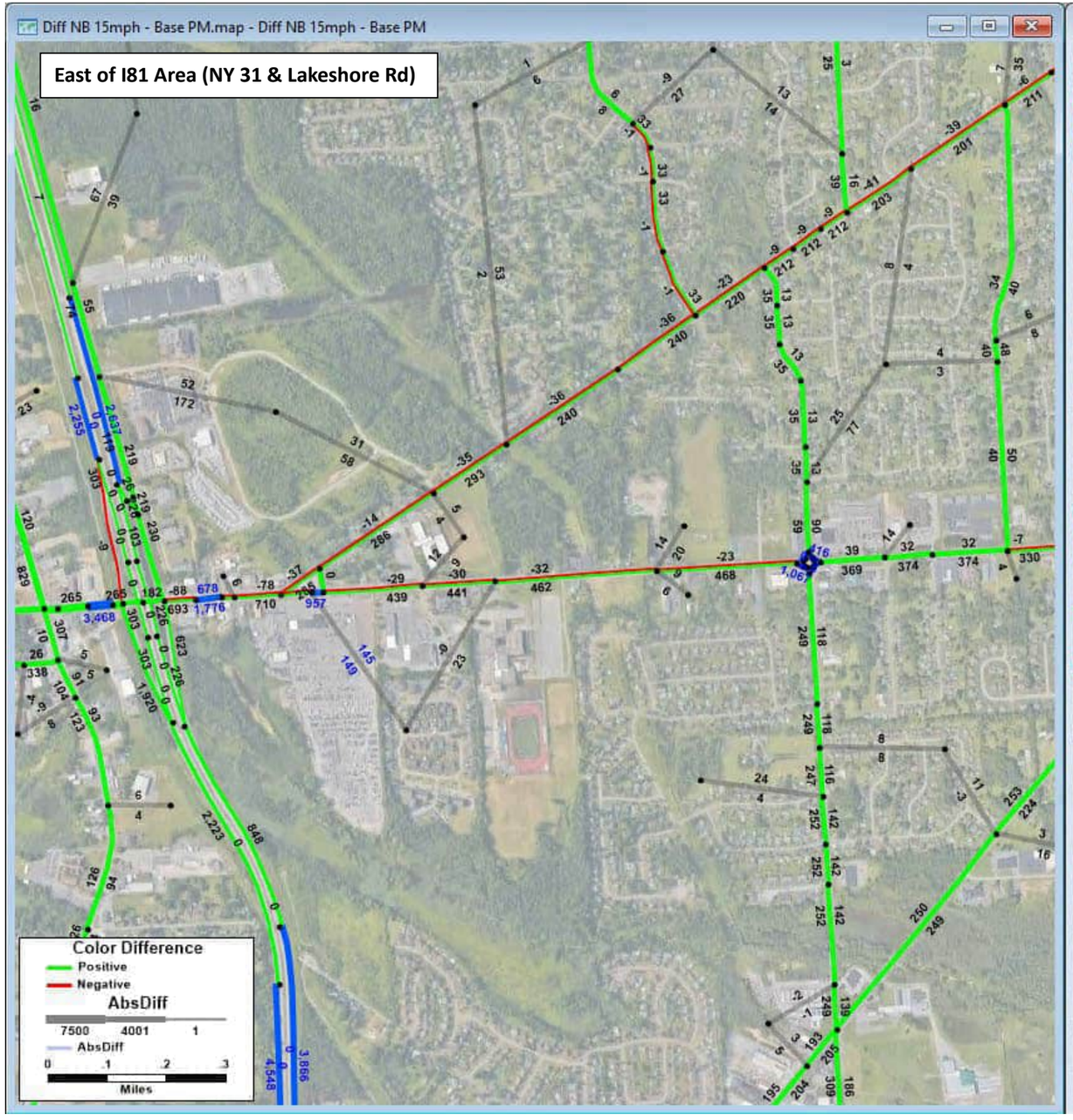


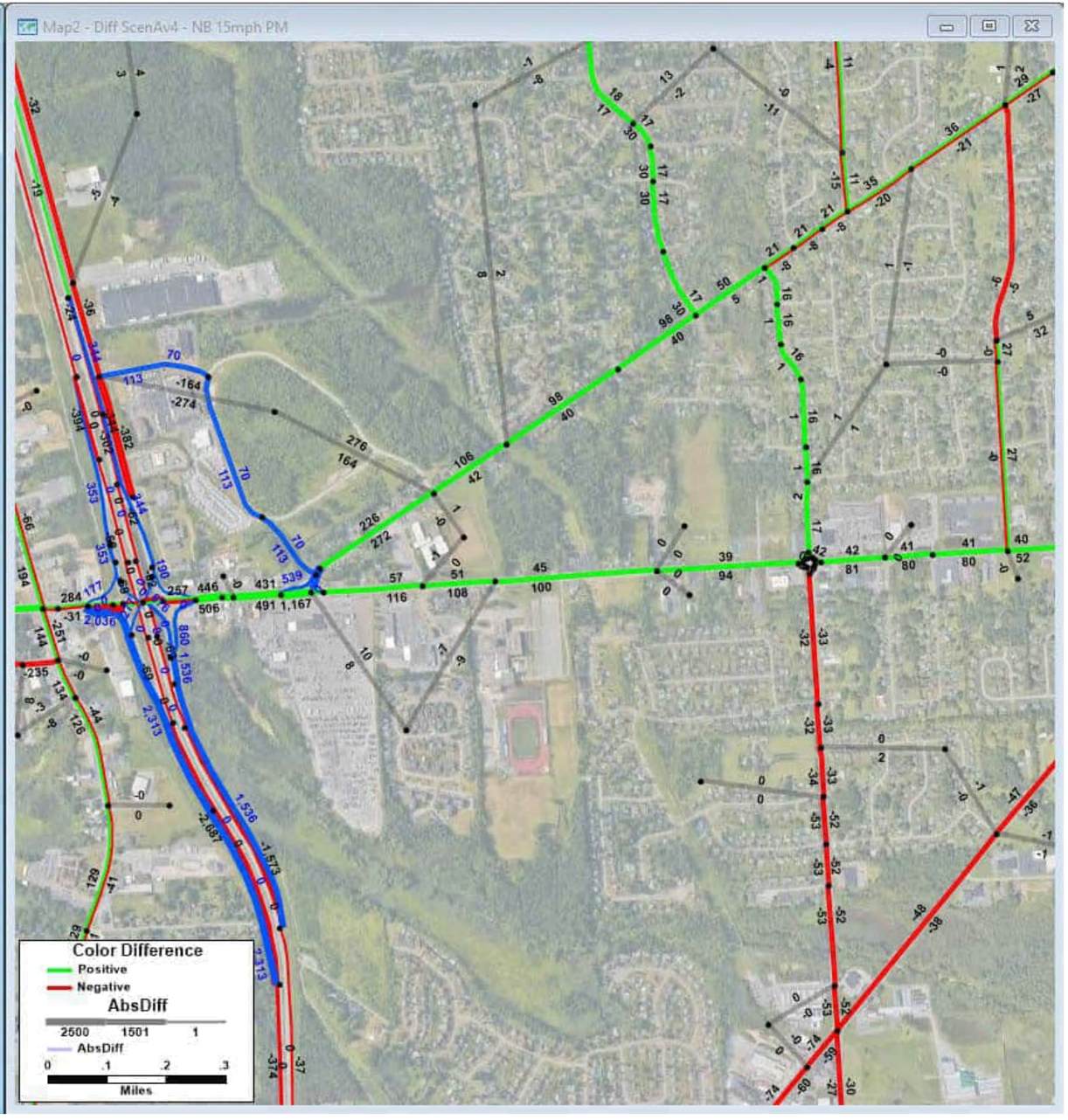


(TOP MAP) 2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

(Bottom MAP) 2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

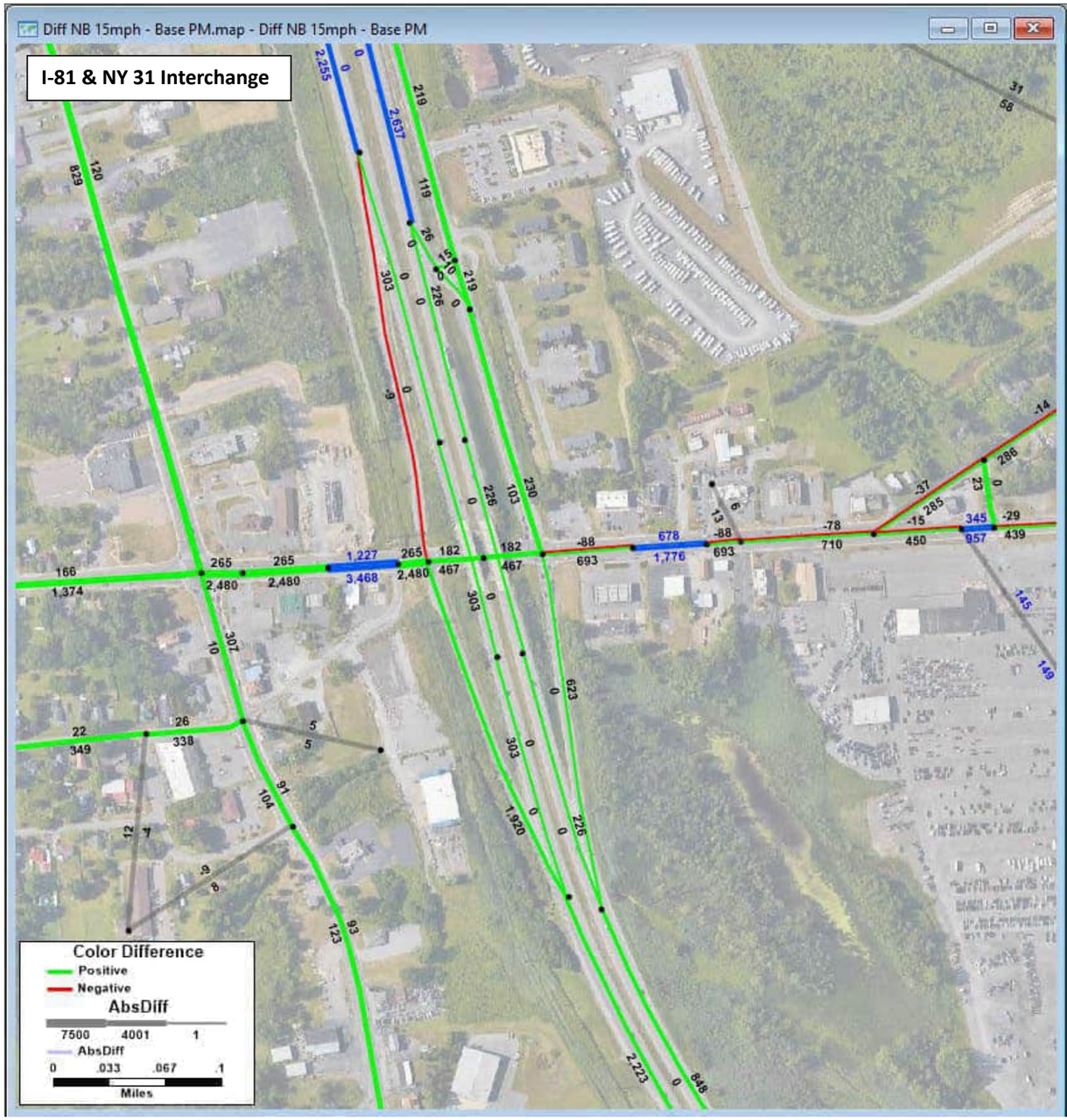


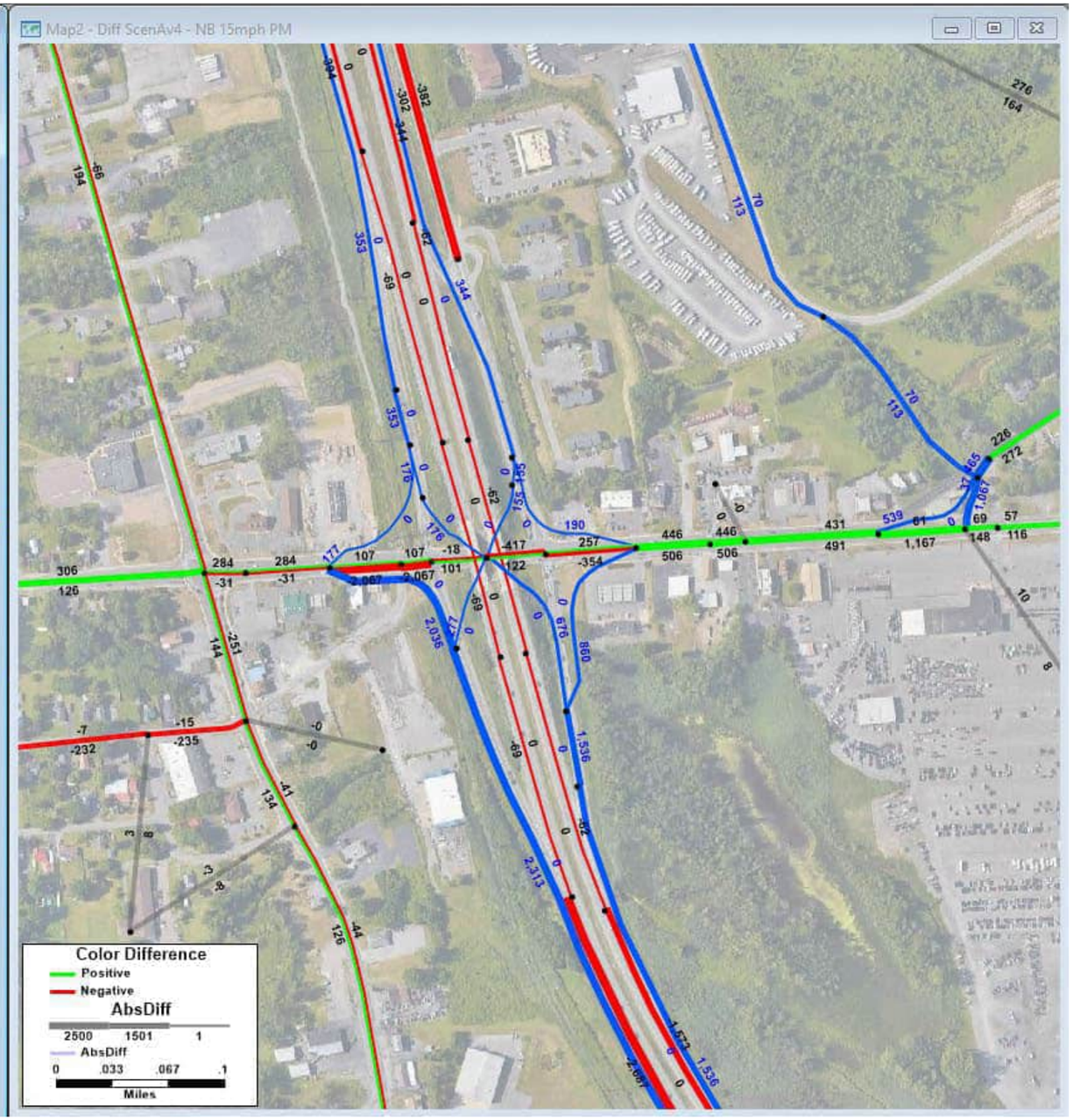


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

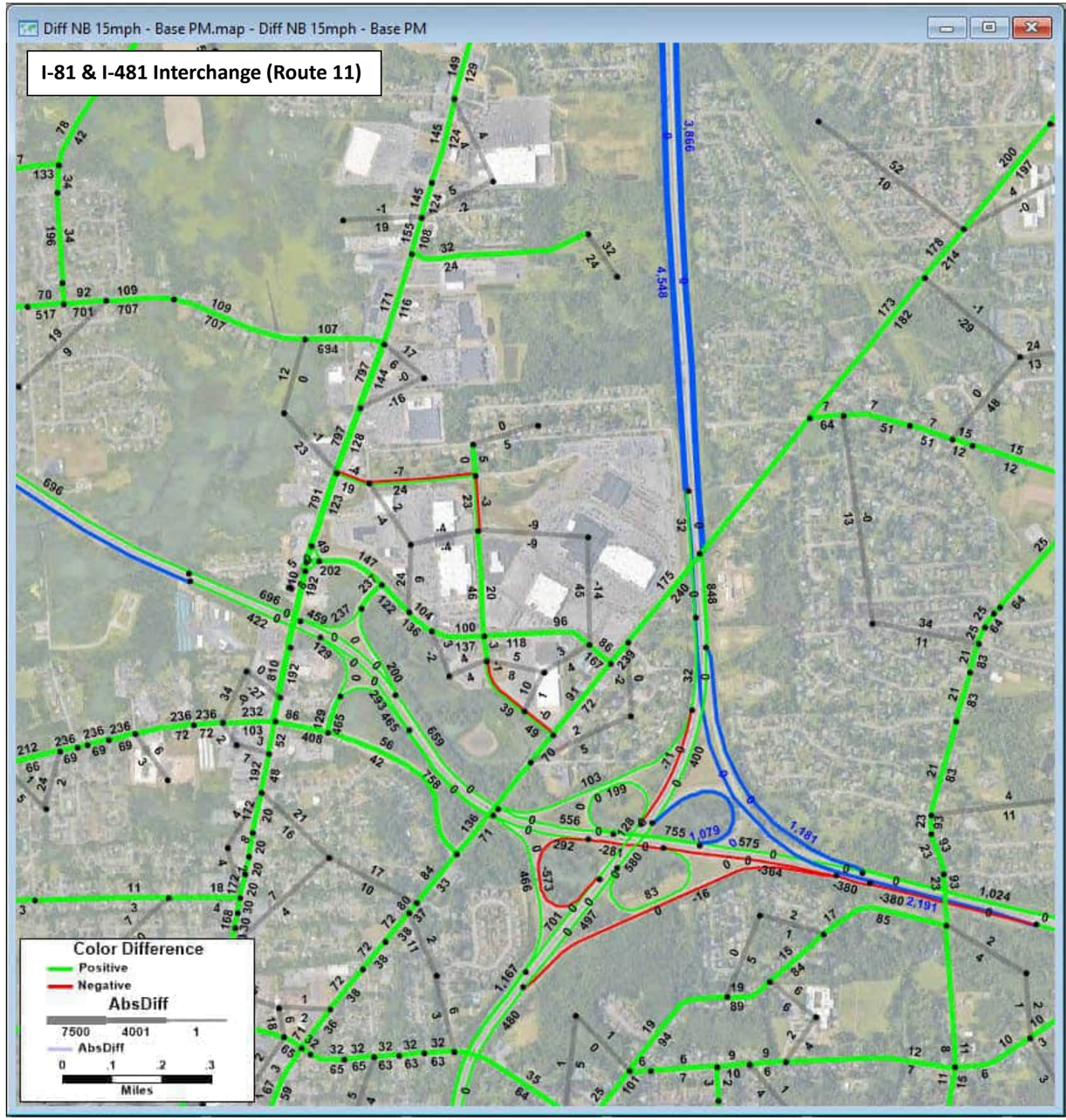




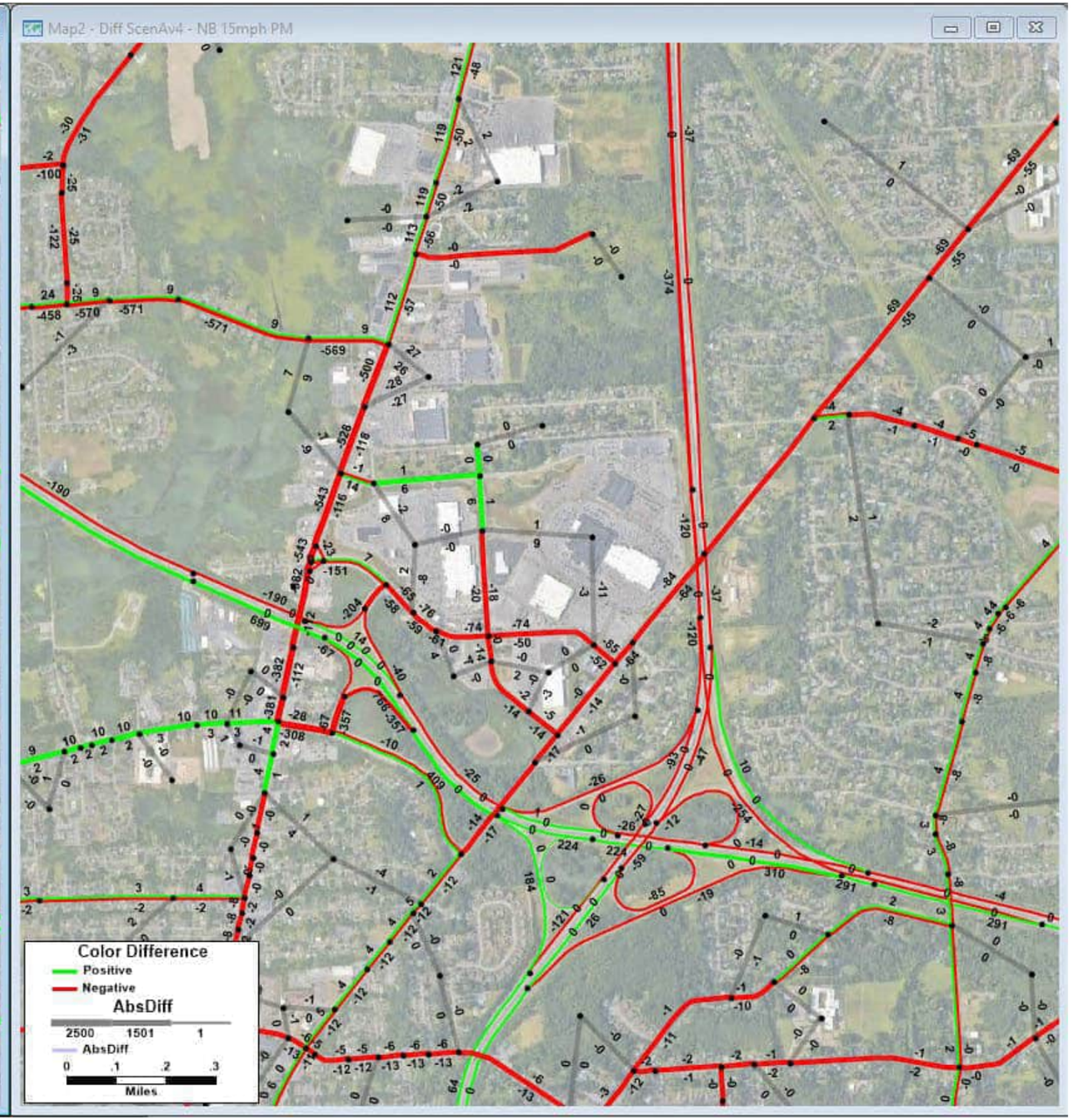
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

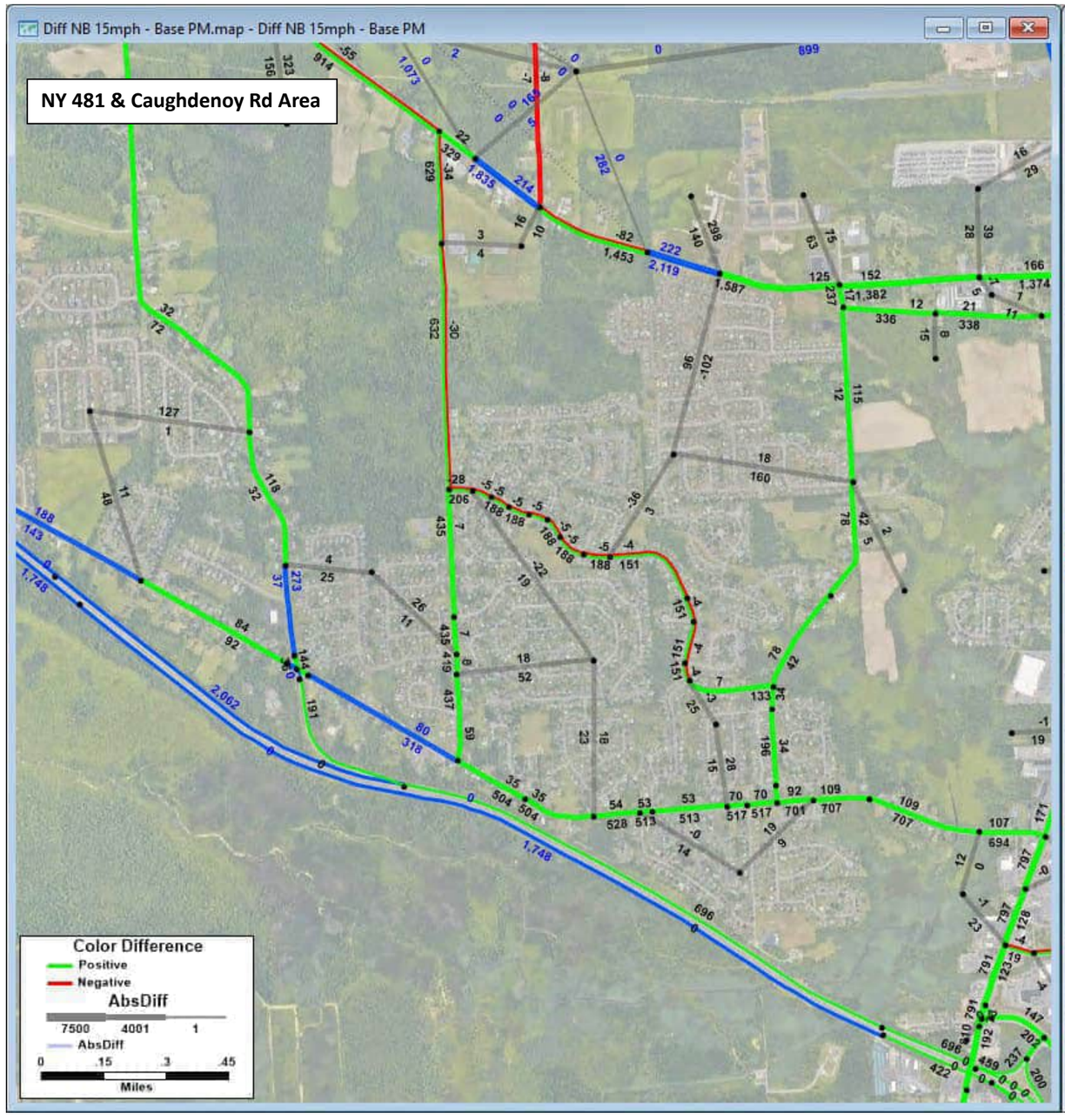


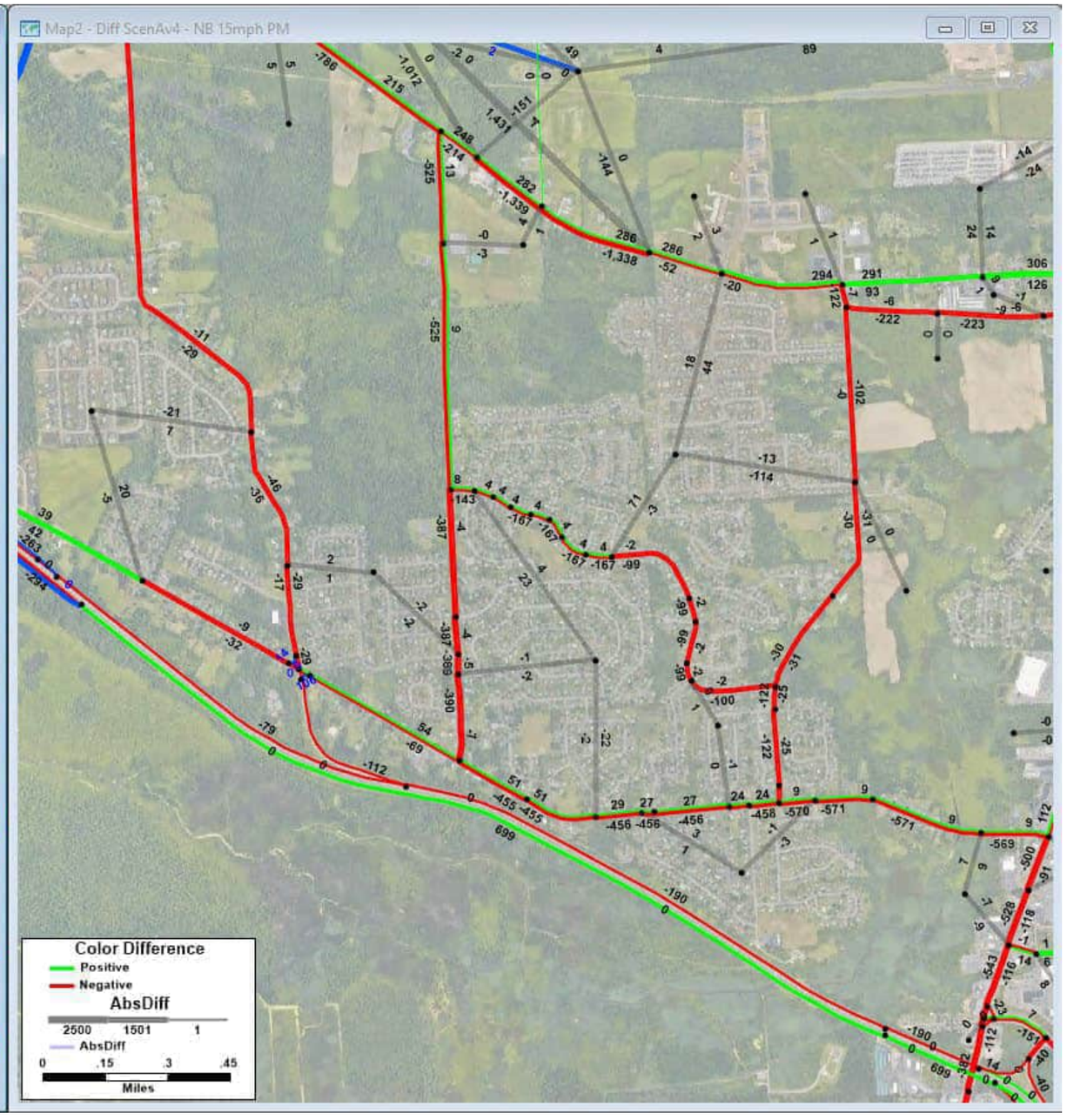
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

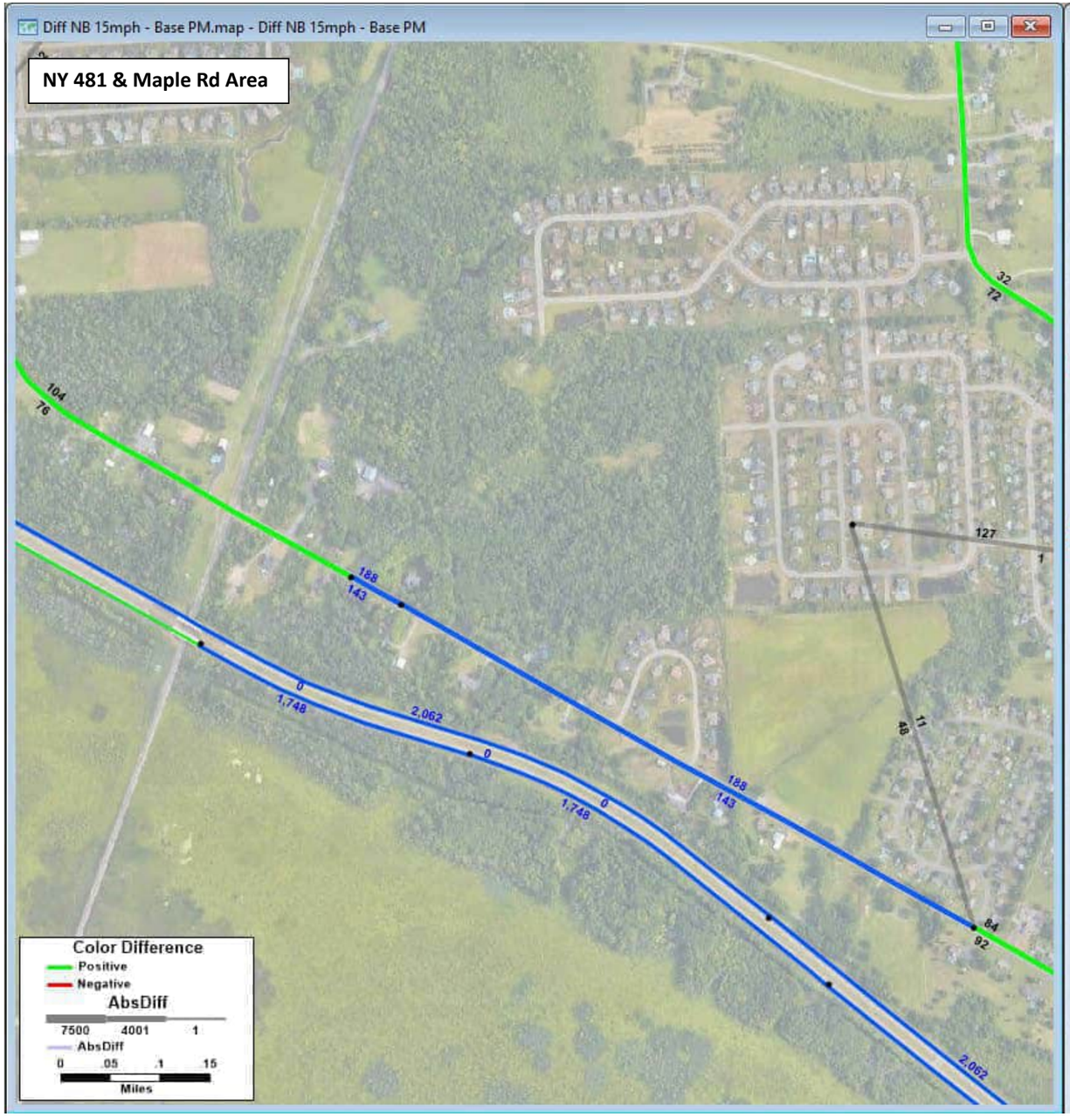


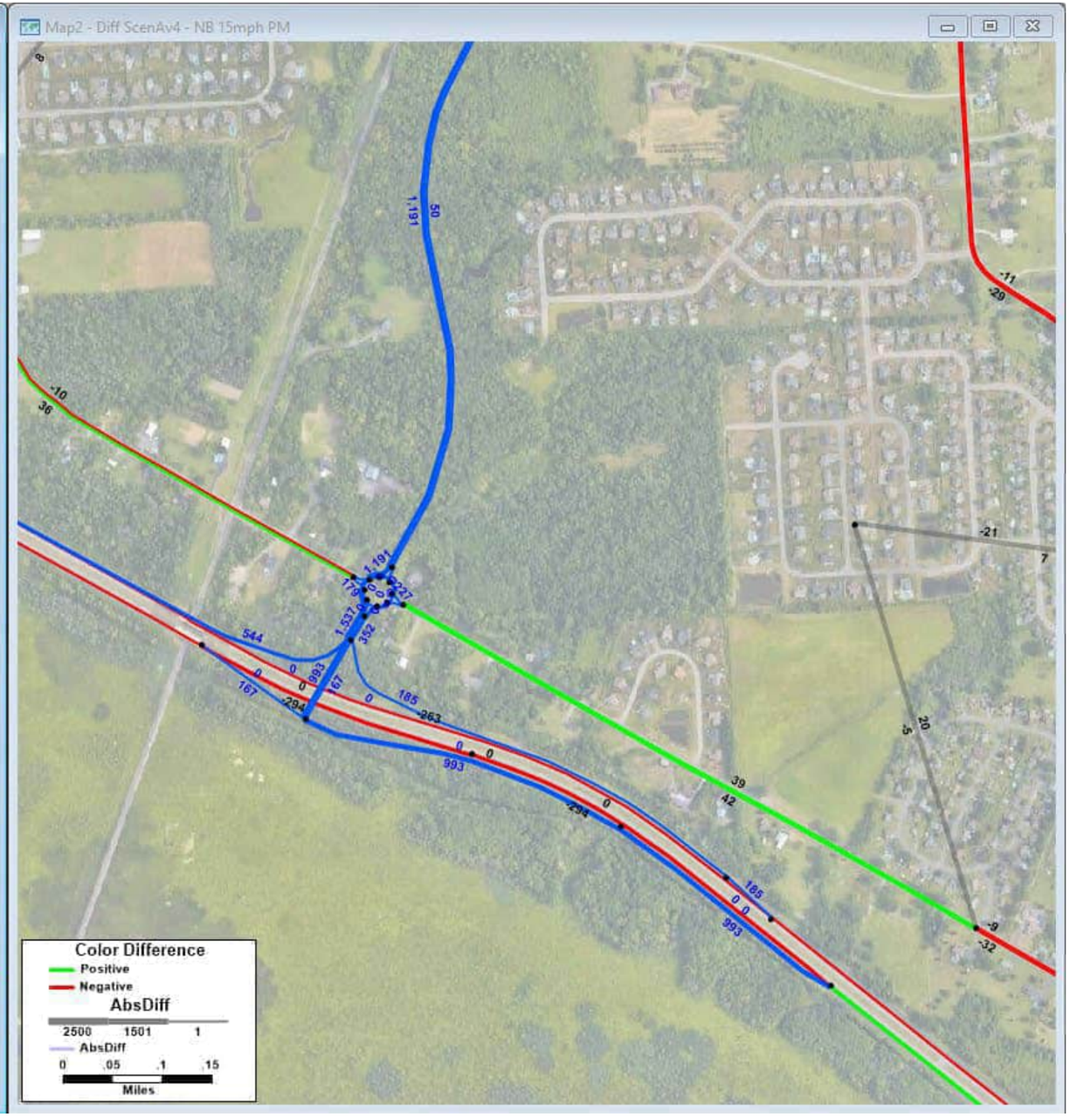


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

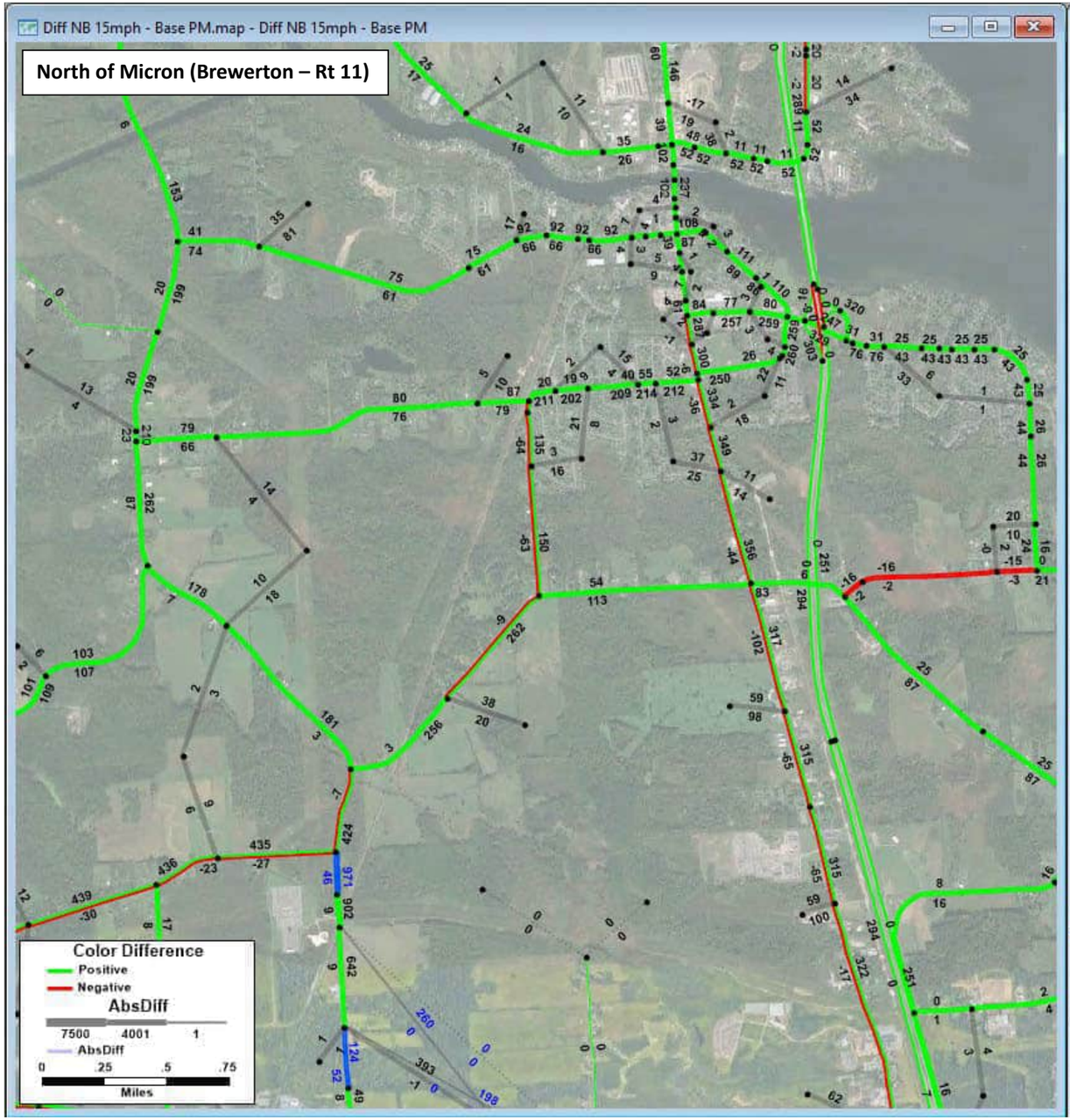




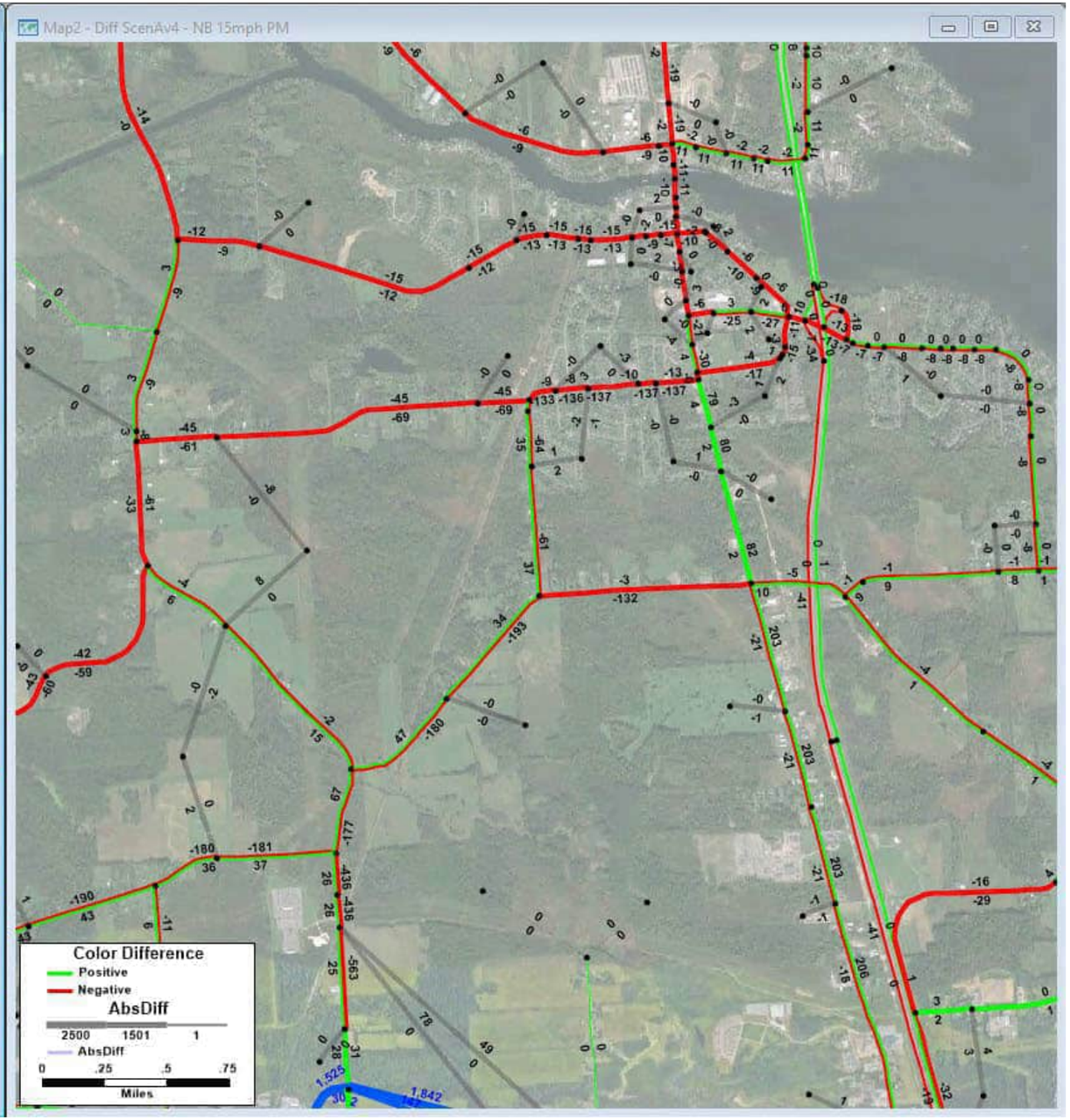
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

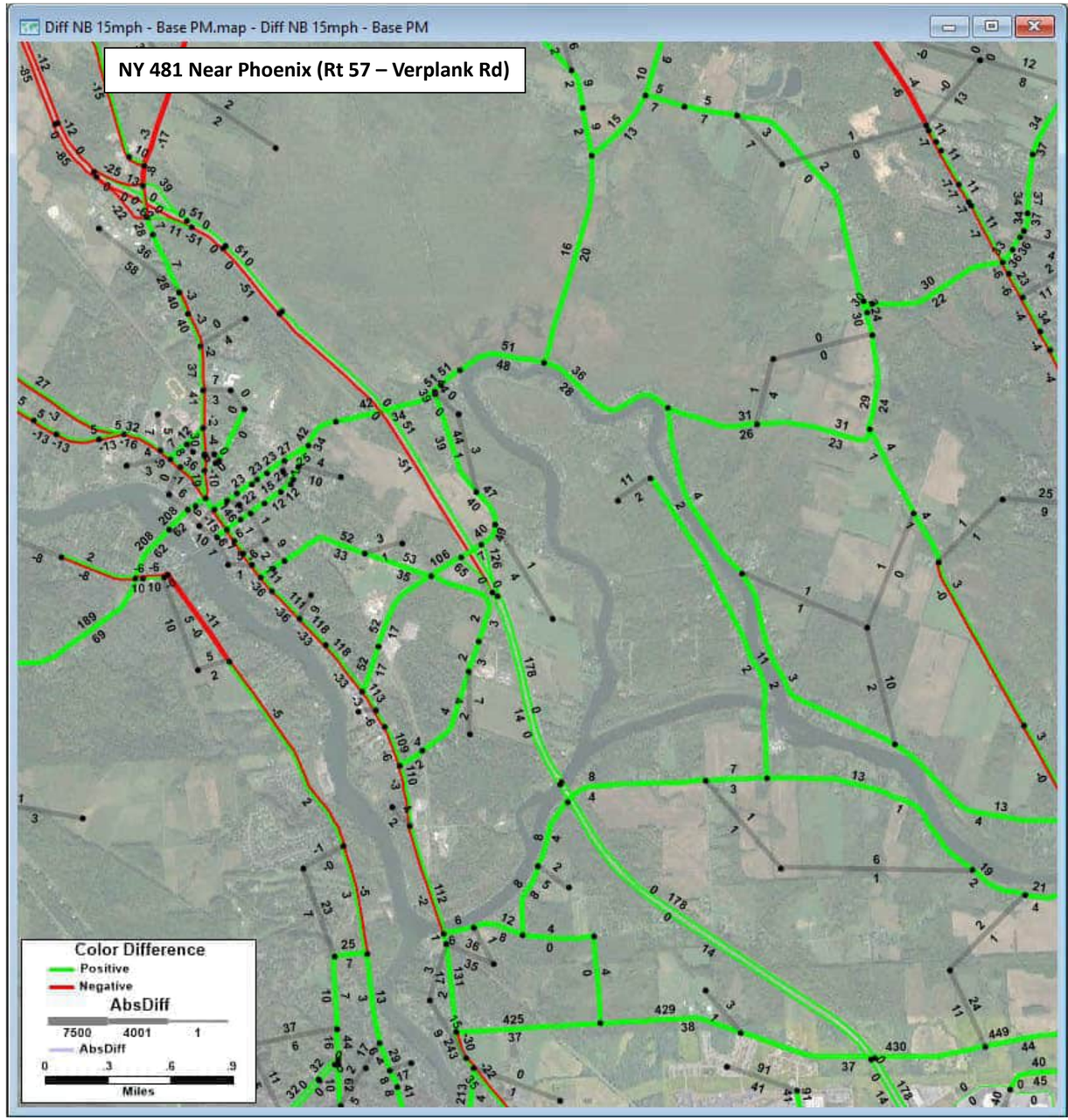


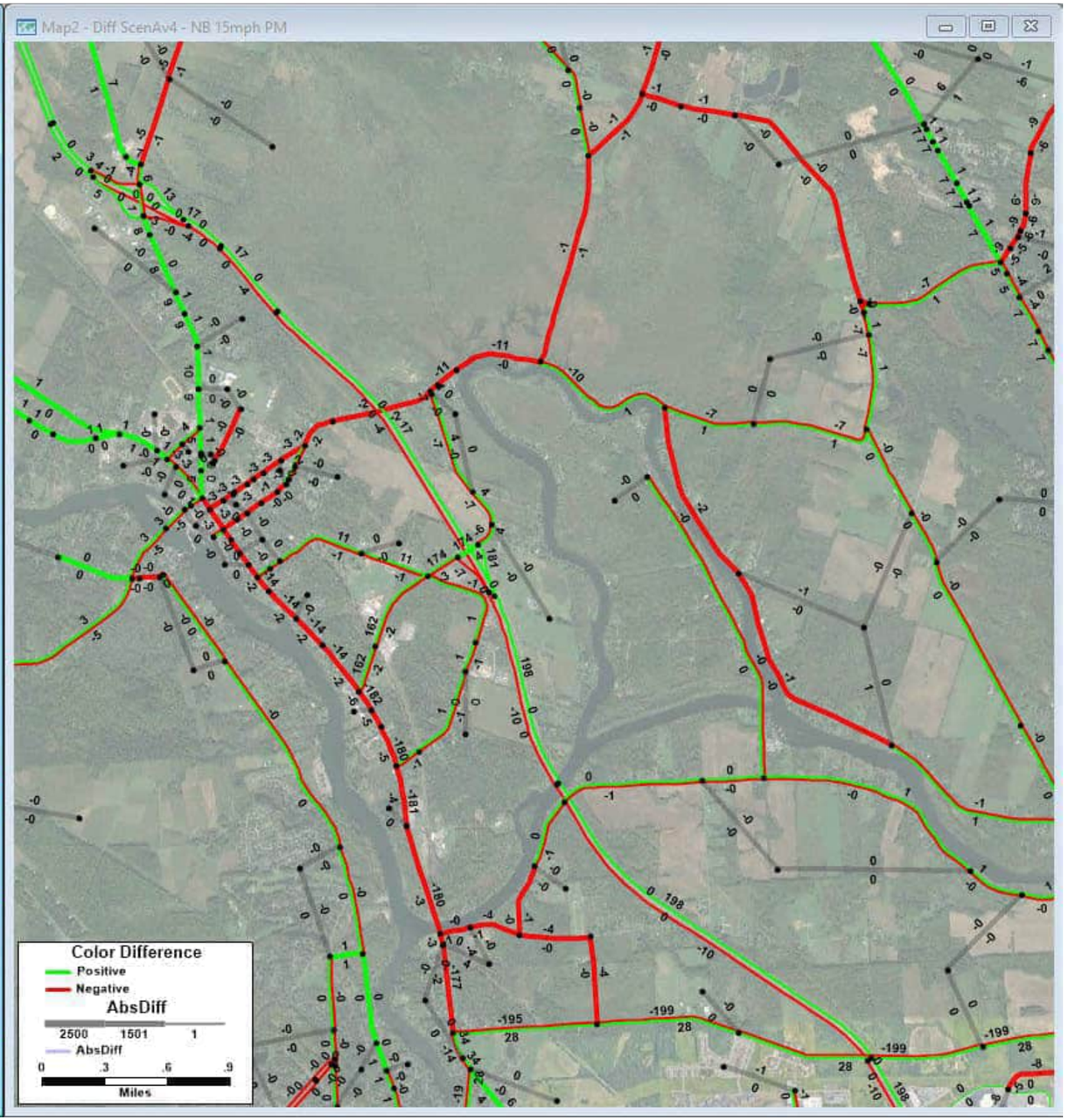
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

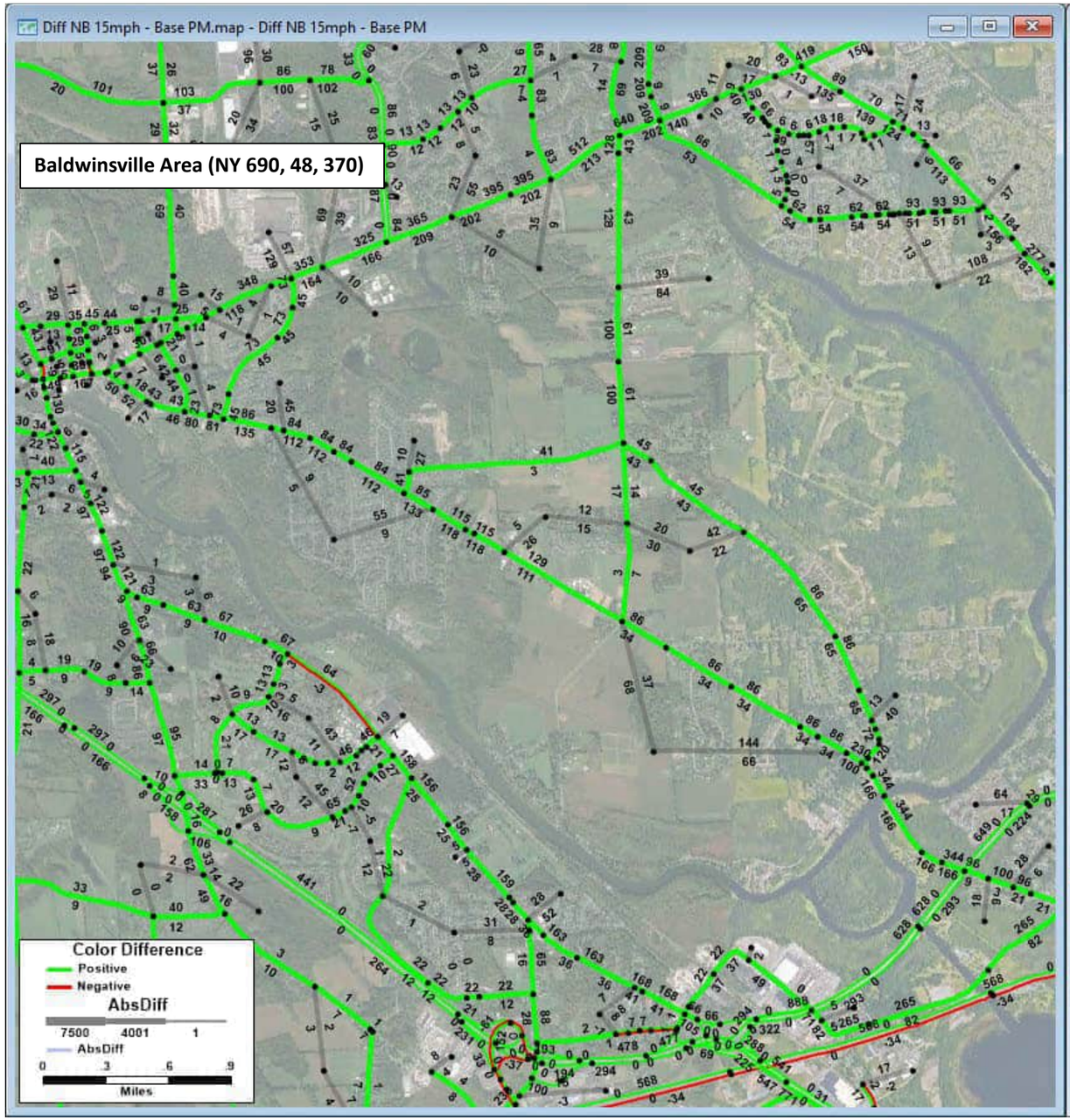




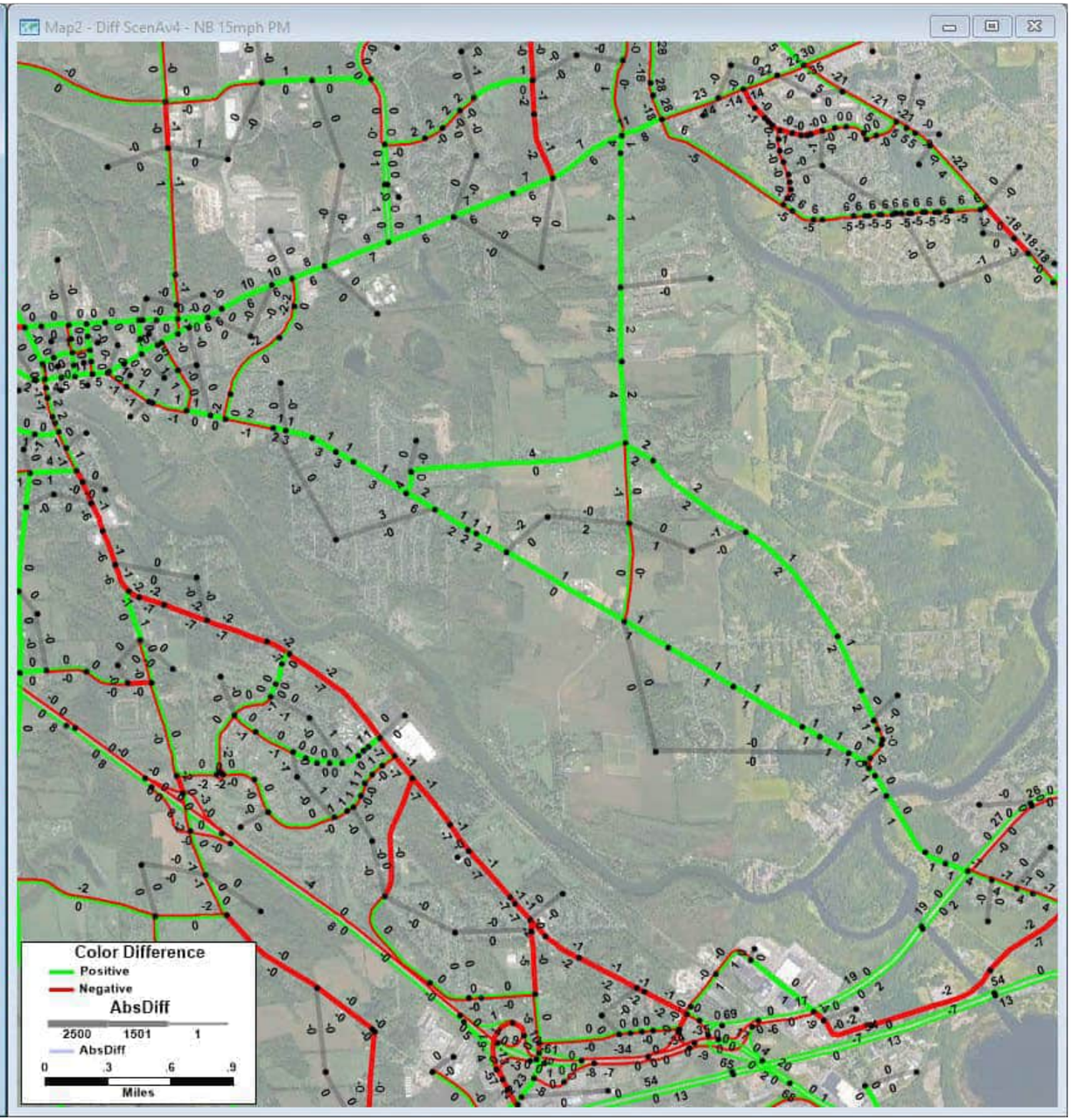
2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

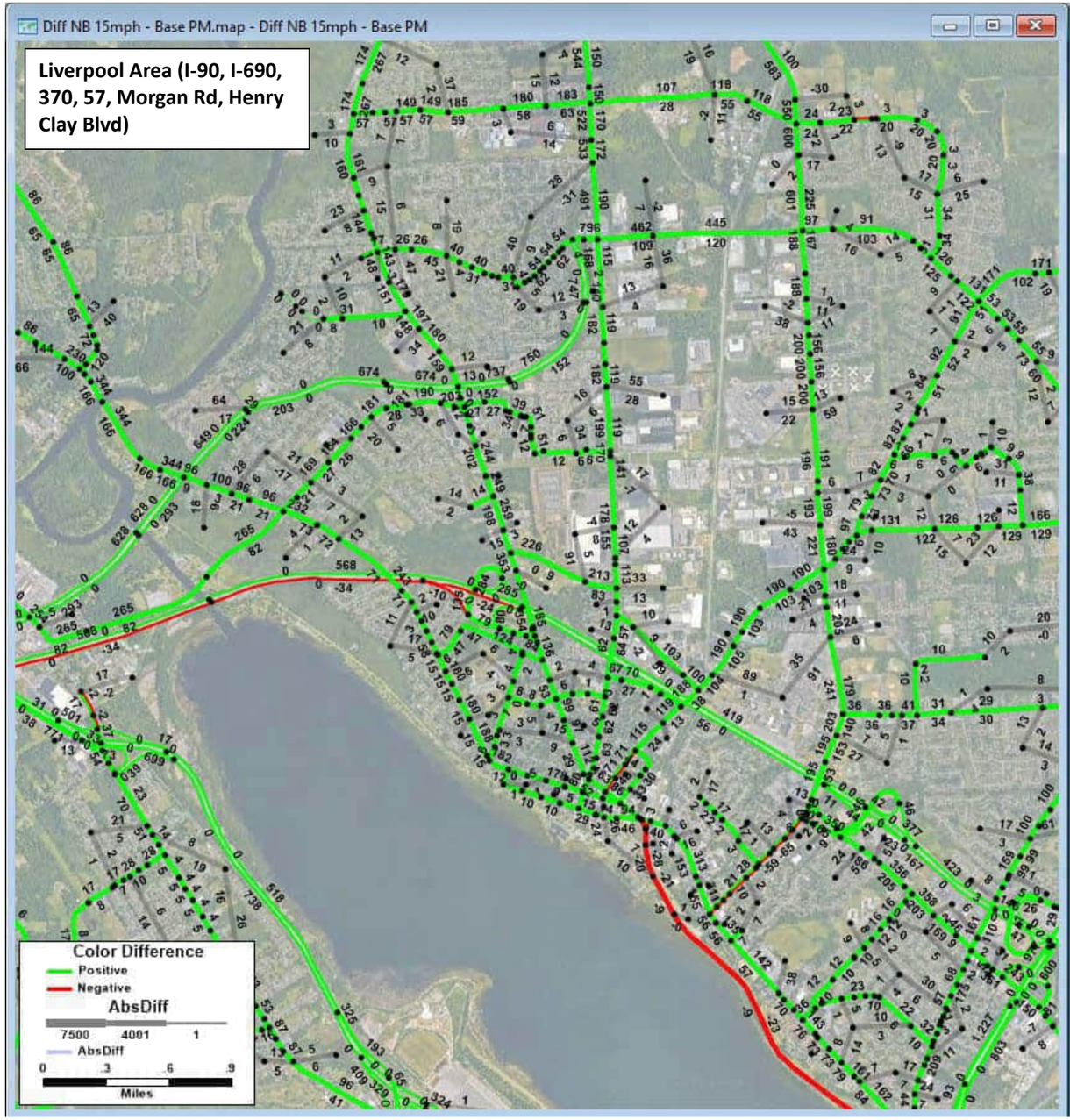


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

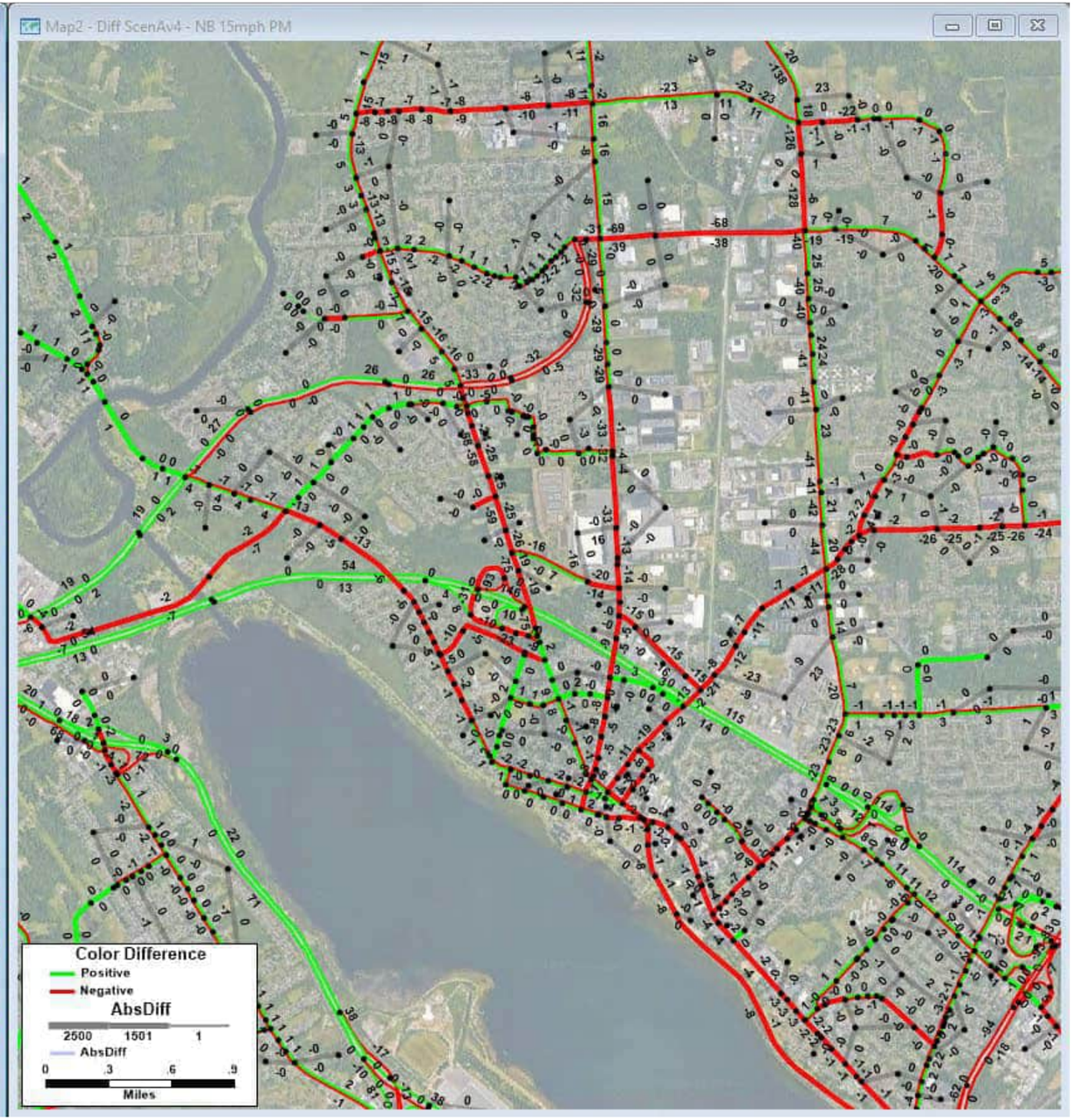


2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)

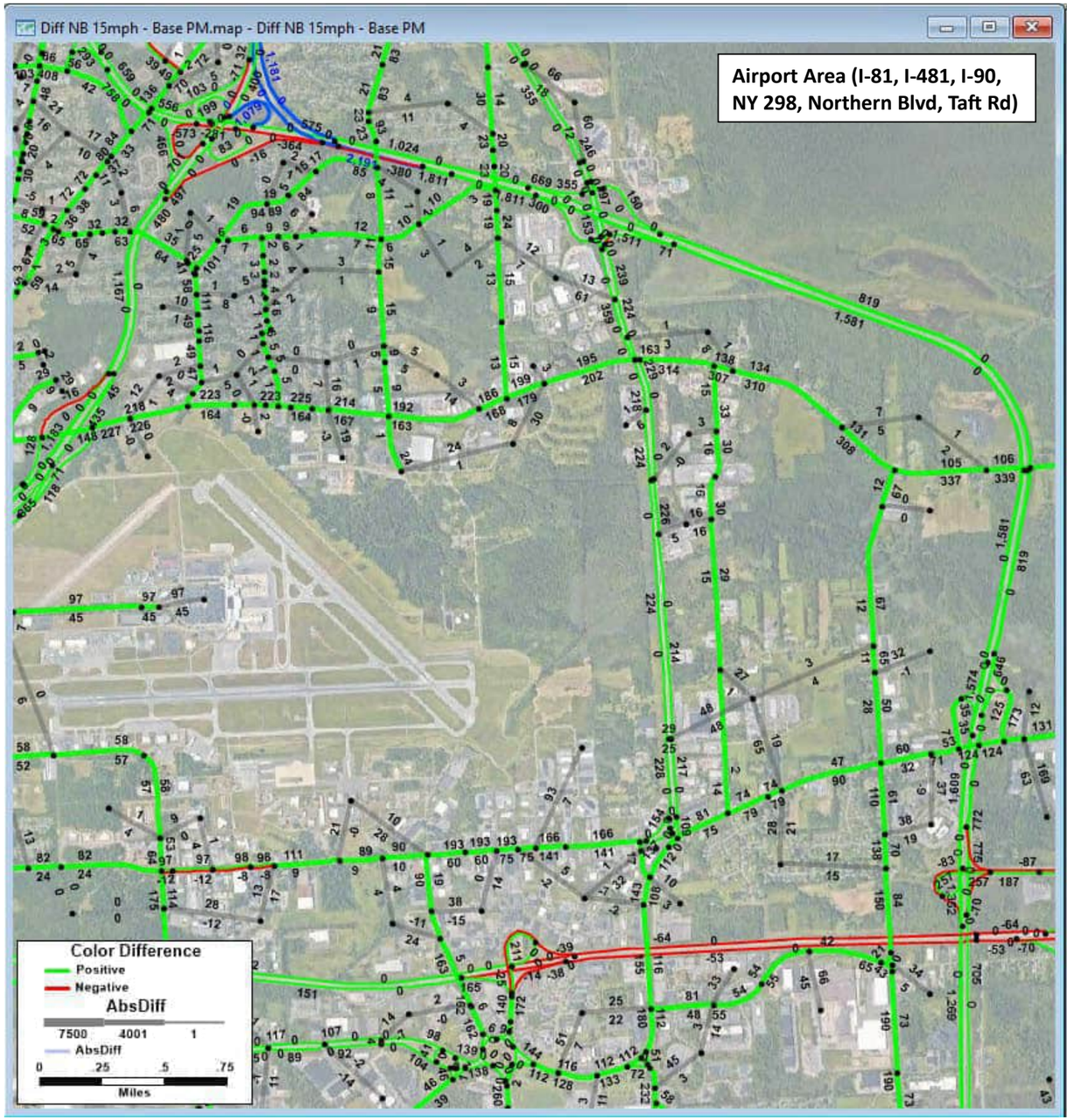


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

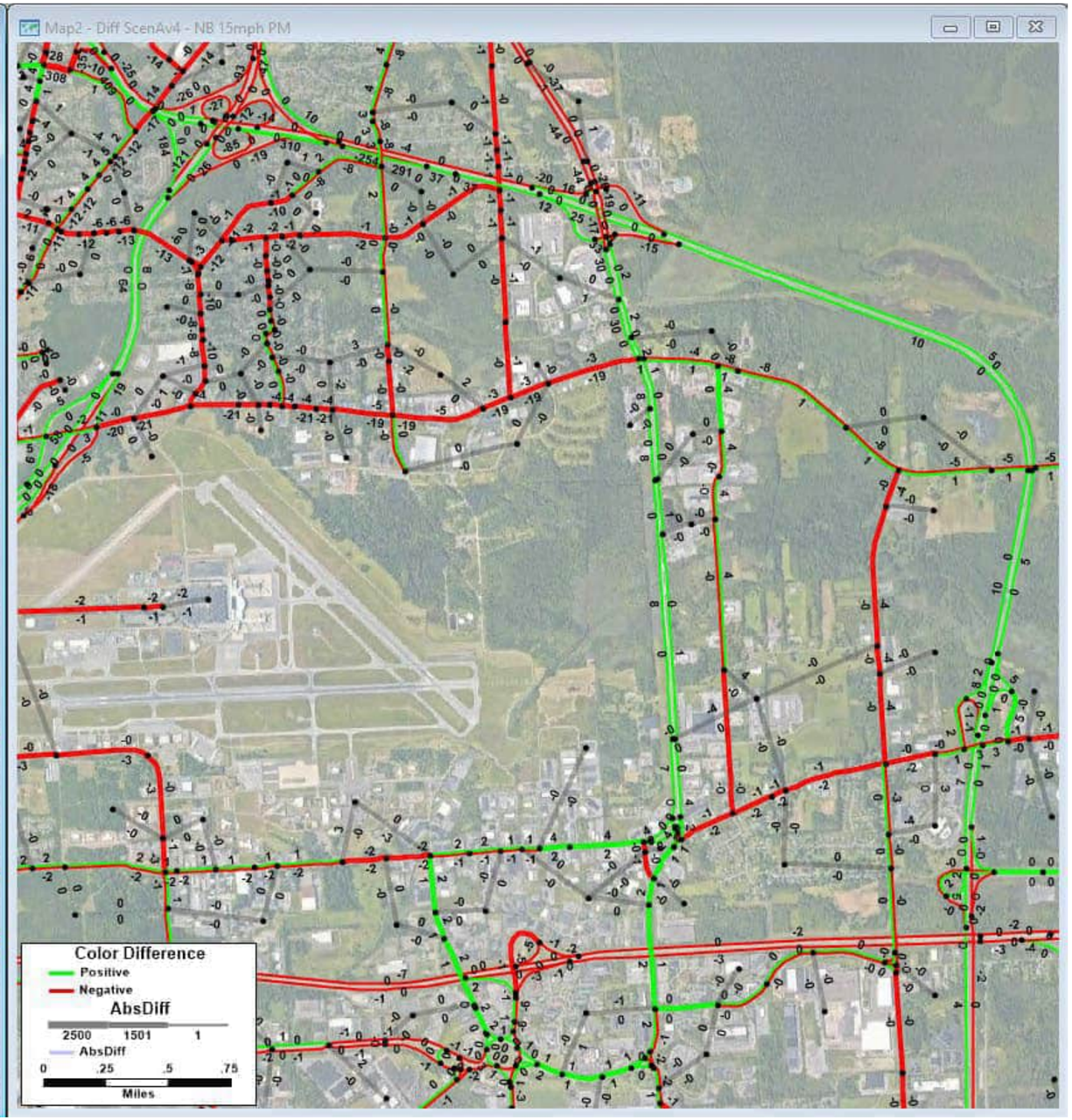


2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/3/2023)



2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario A v4 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario A network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

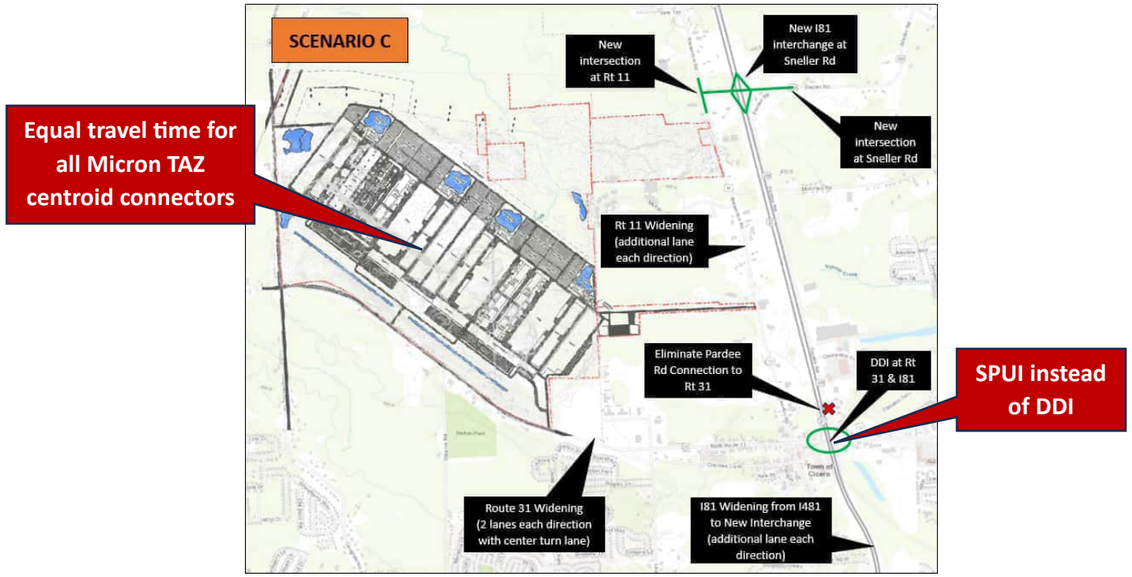
Source : SMTC Regional Travel Demand Model (1/3/2023)

SMTC Travel Demand Model Results: Scenario C v1 (New I81 Interchange & SPUI @ Rt31 & I81) – AM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario C v1** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- RED callouts note the revisions made to Scenario C



The graphic to the right is an example of what is included in this document →

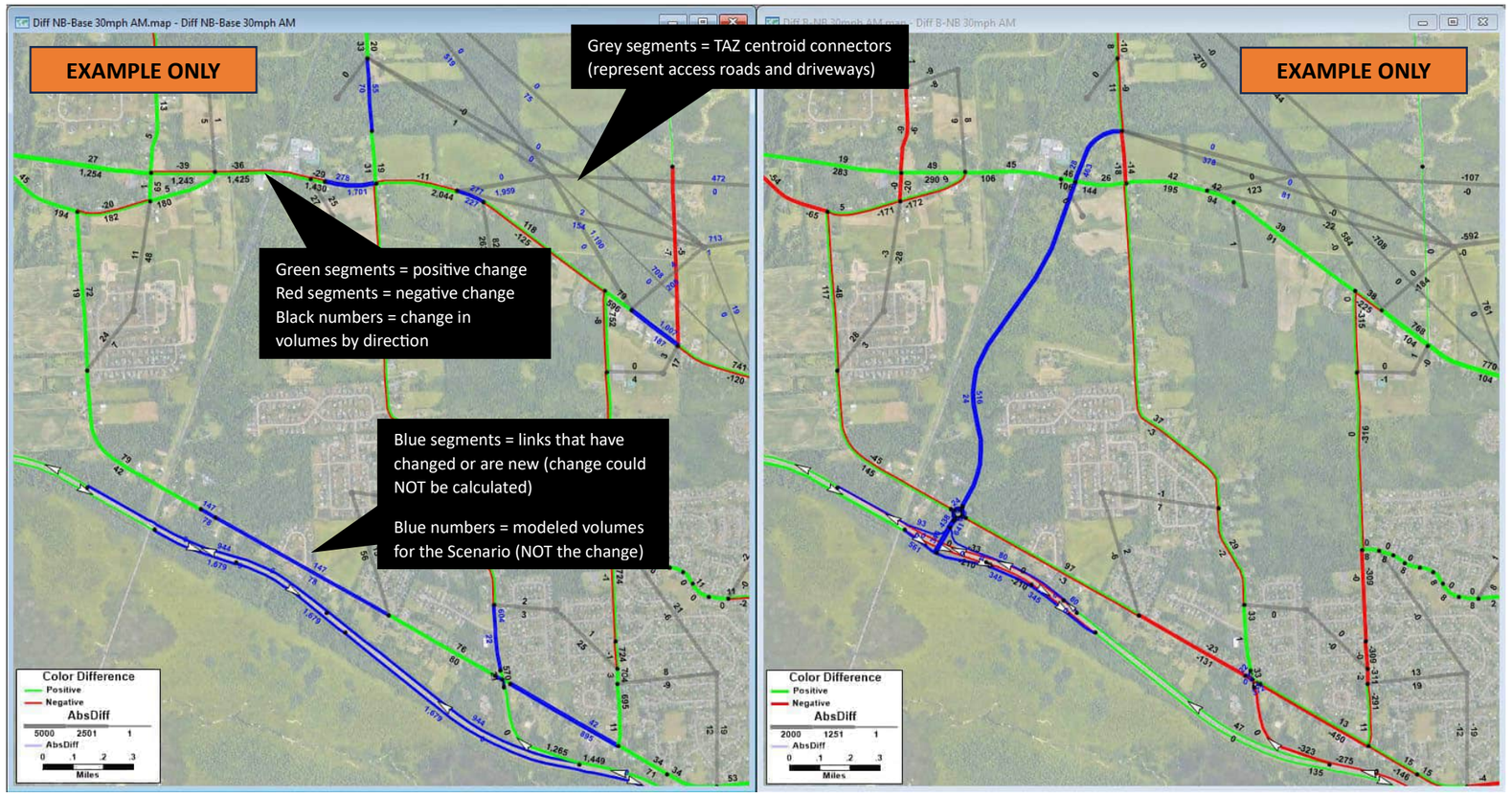
The map on the left displays the change in **AM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB AM Volumes less 2020 AM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **AM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build AM Volumes less 2040 NB AM volumes**).

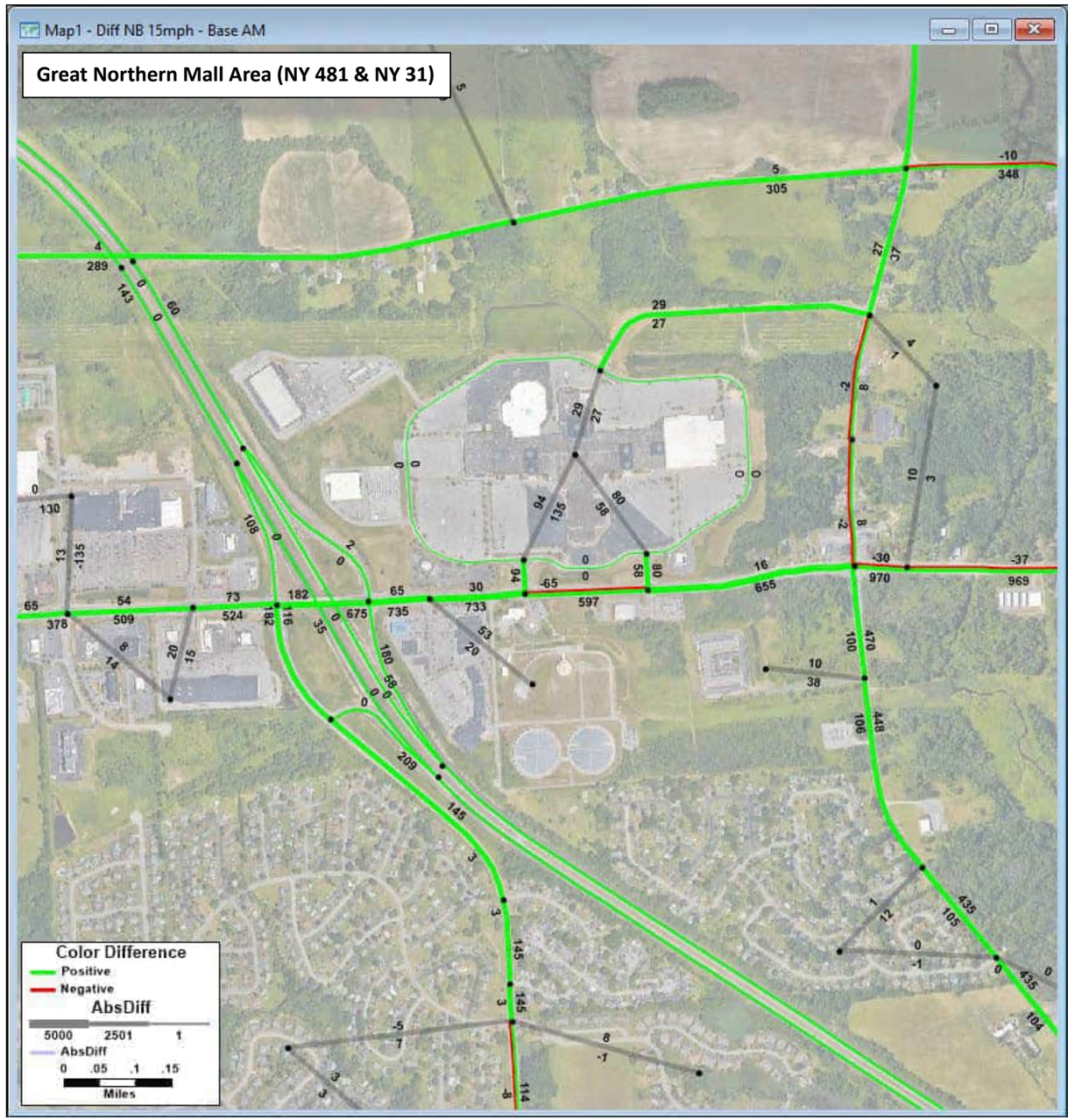
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

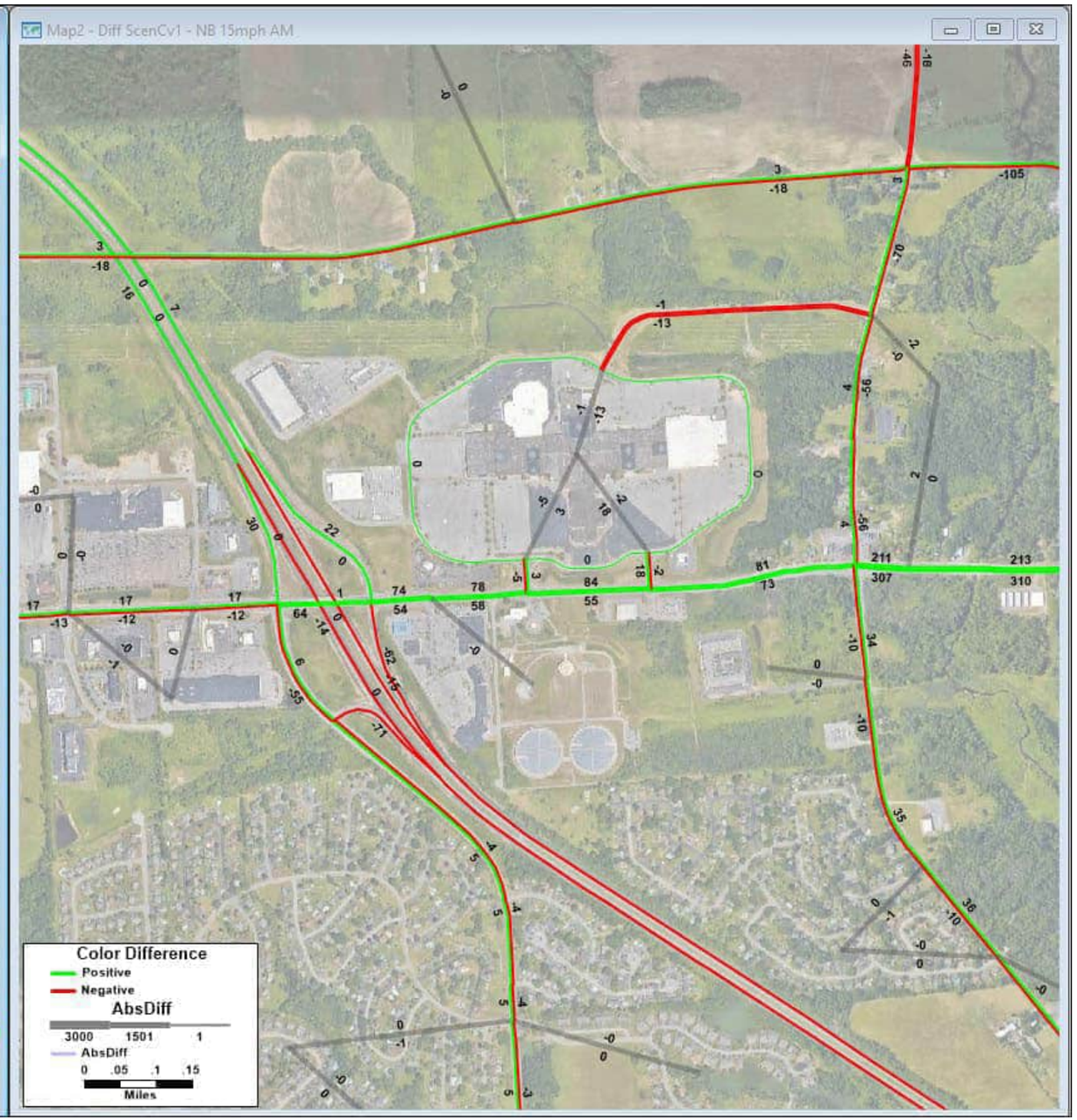
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/24/2023)

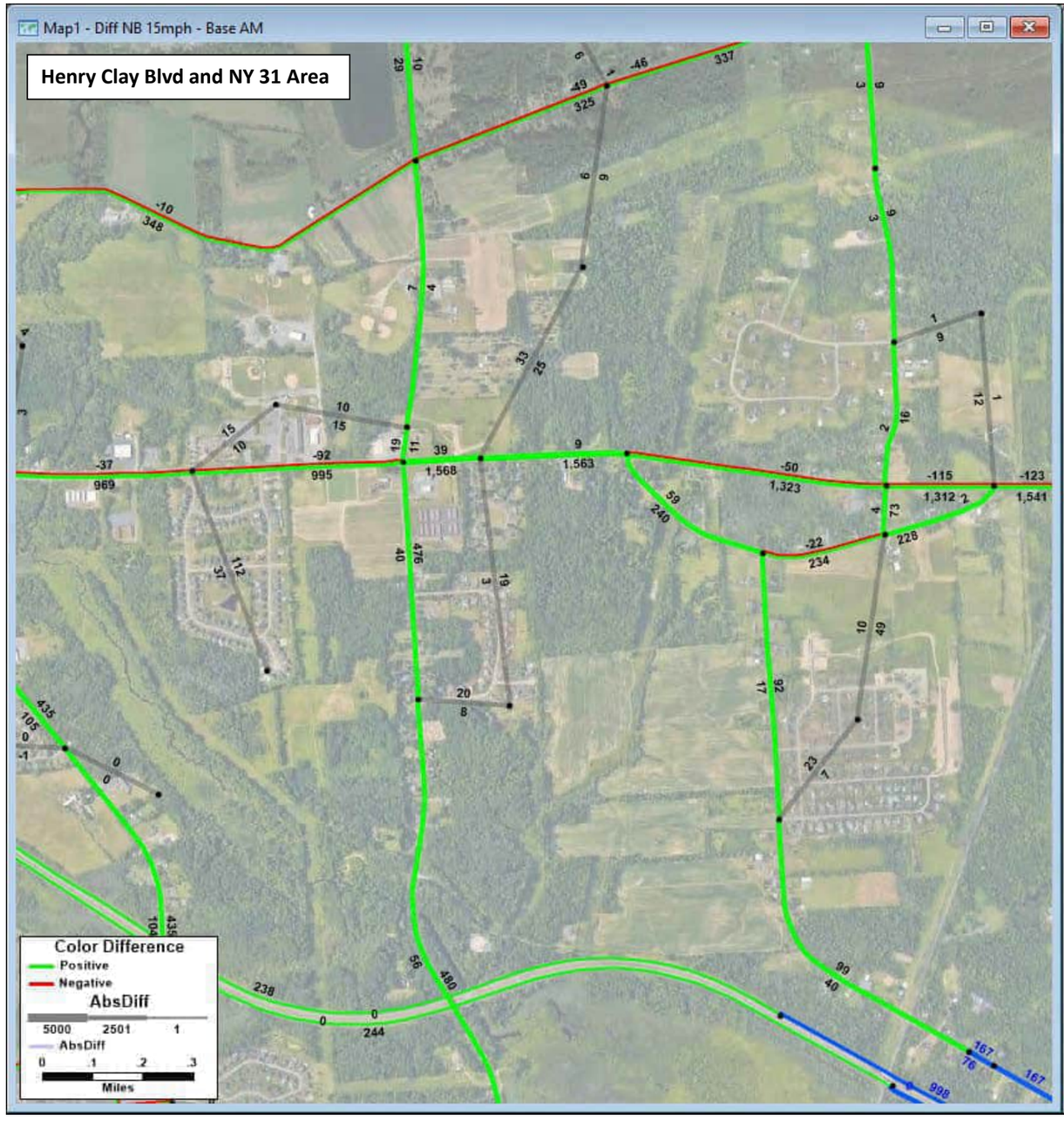


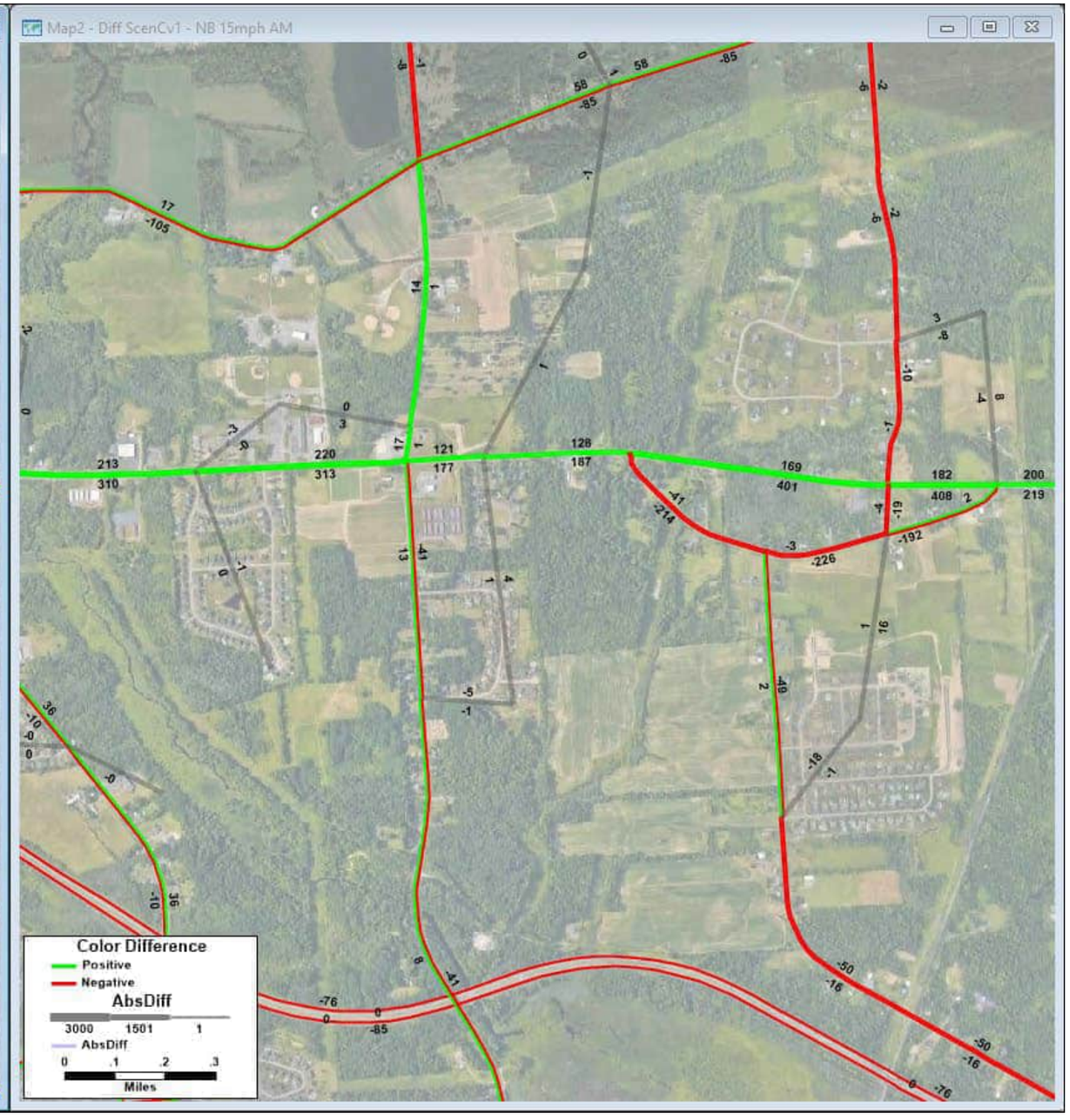
2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario C network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)



2040 Scenario C v1 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario C network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/24/2023)

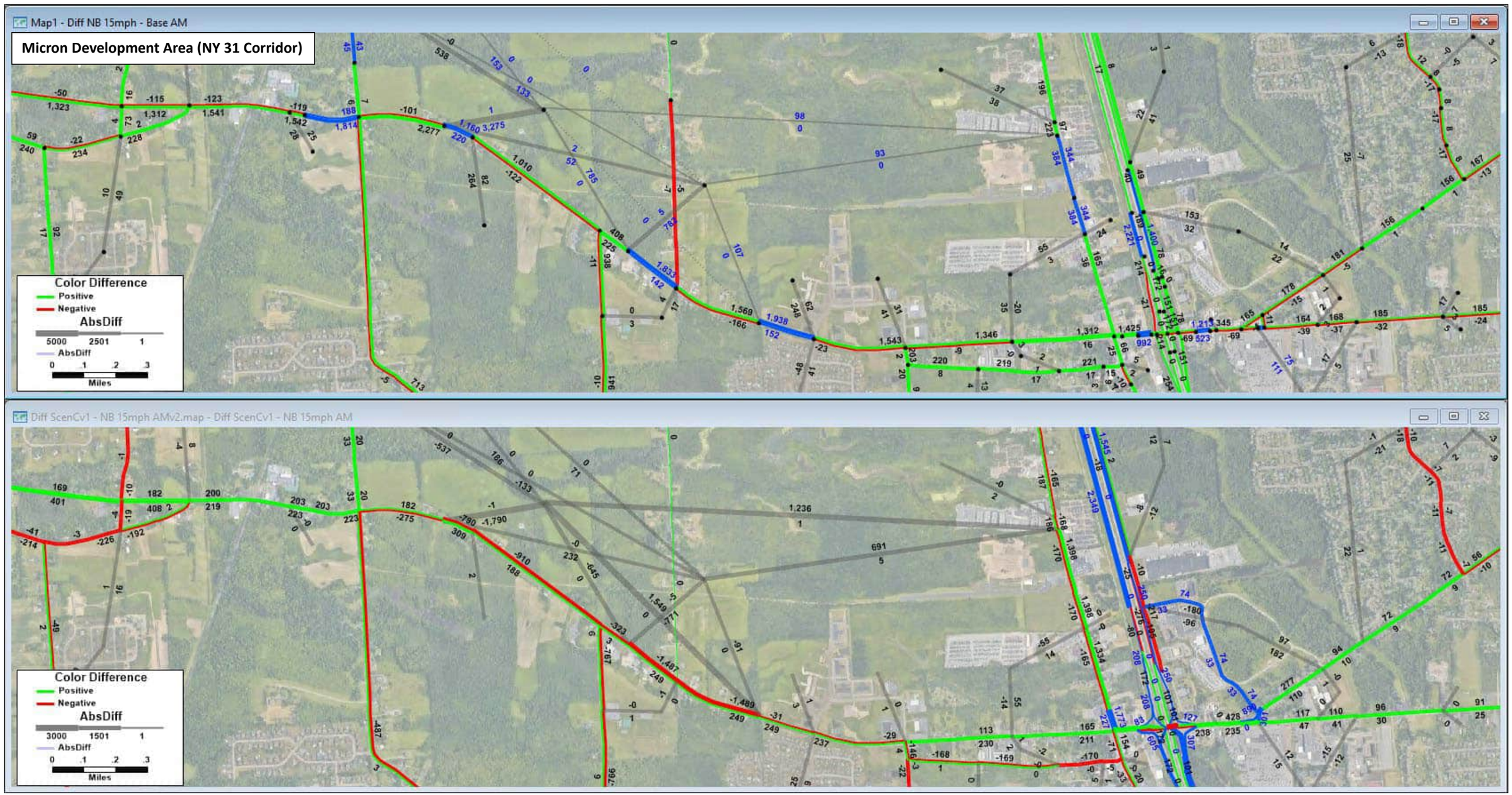




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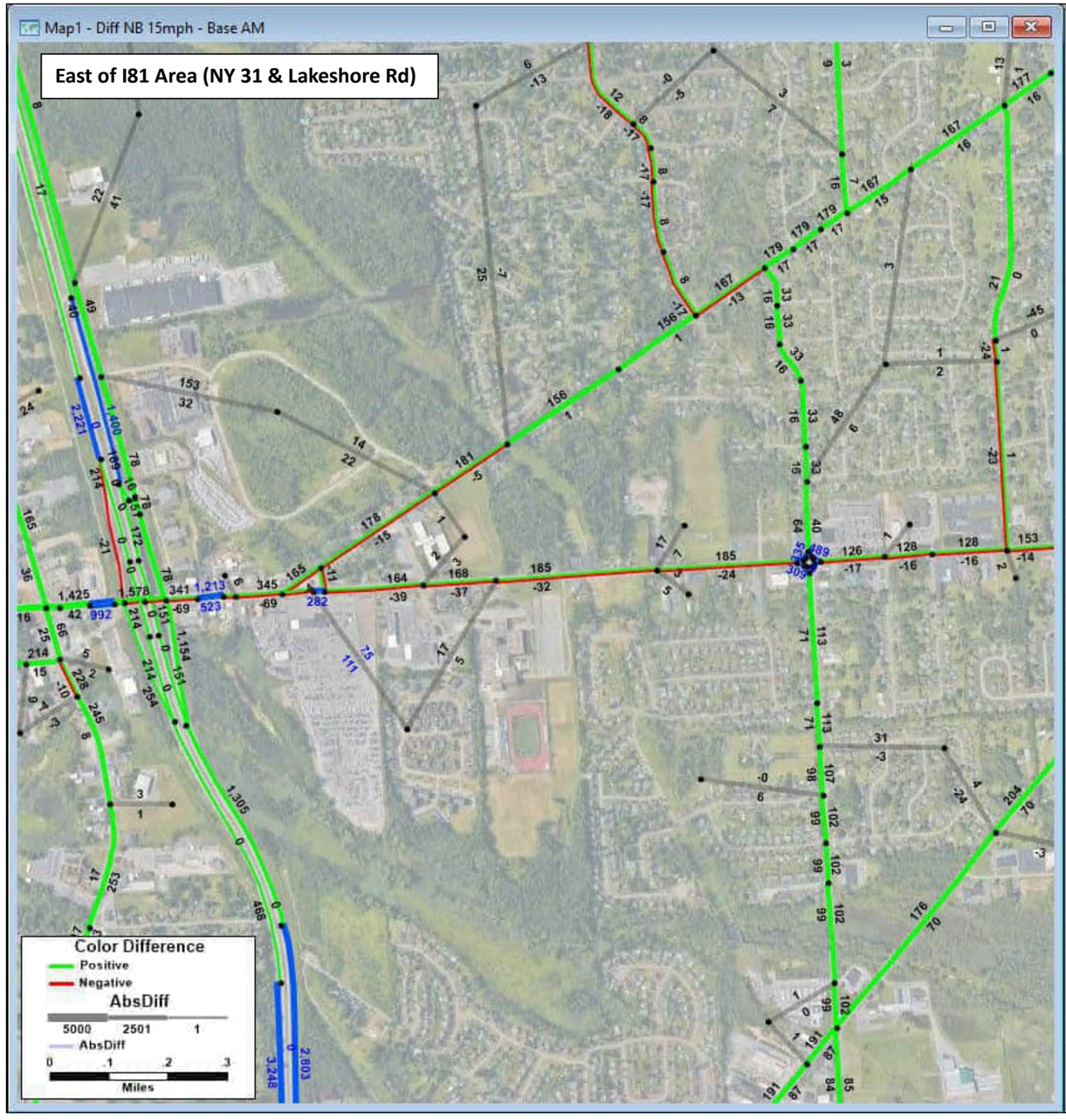
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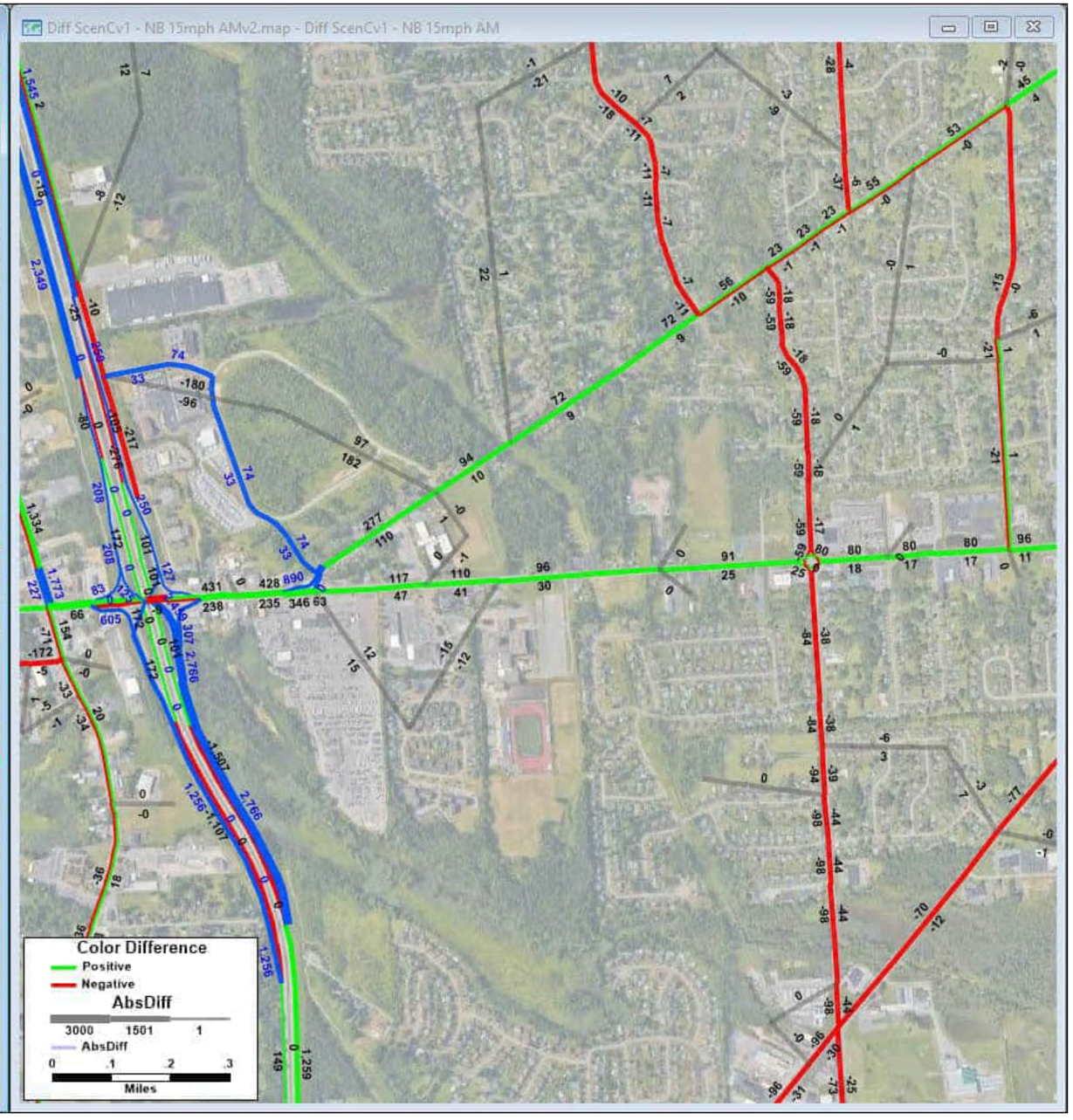


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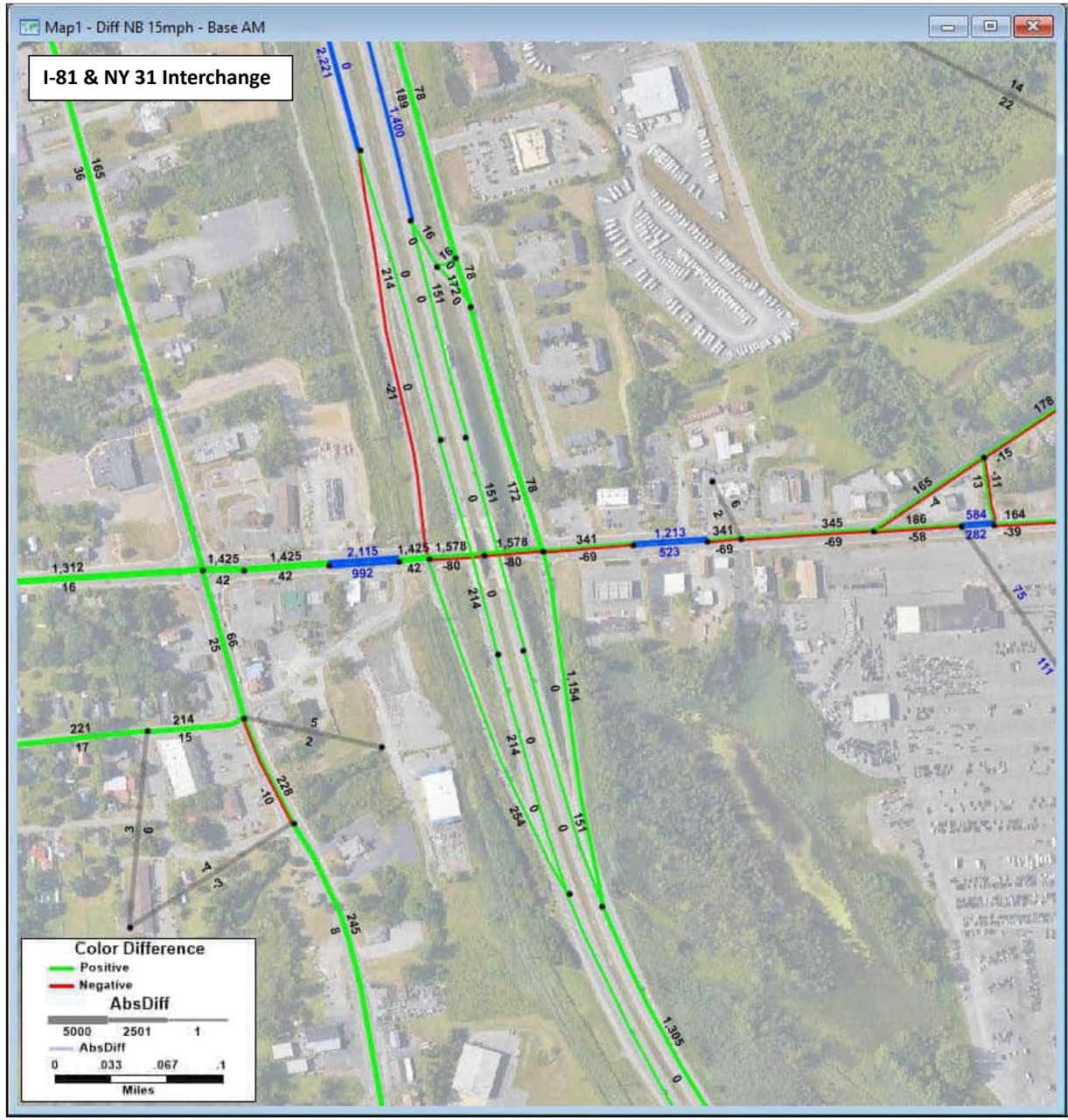


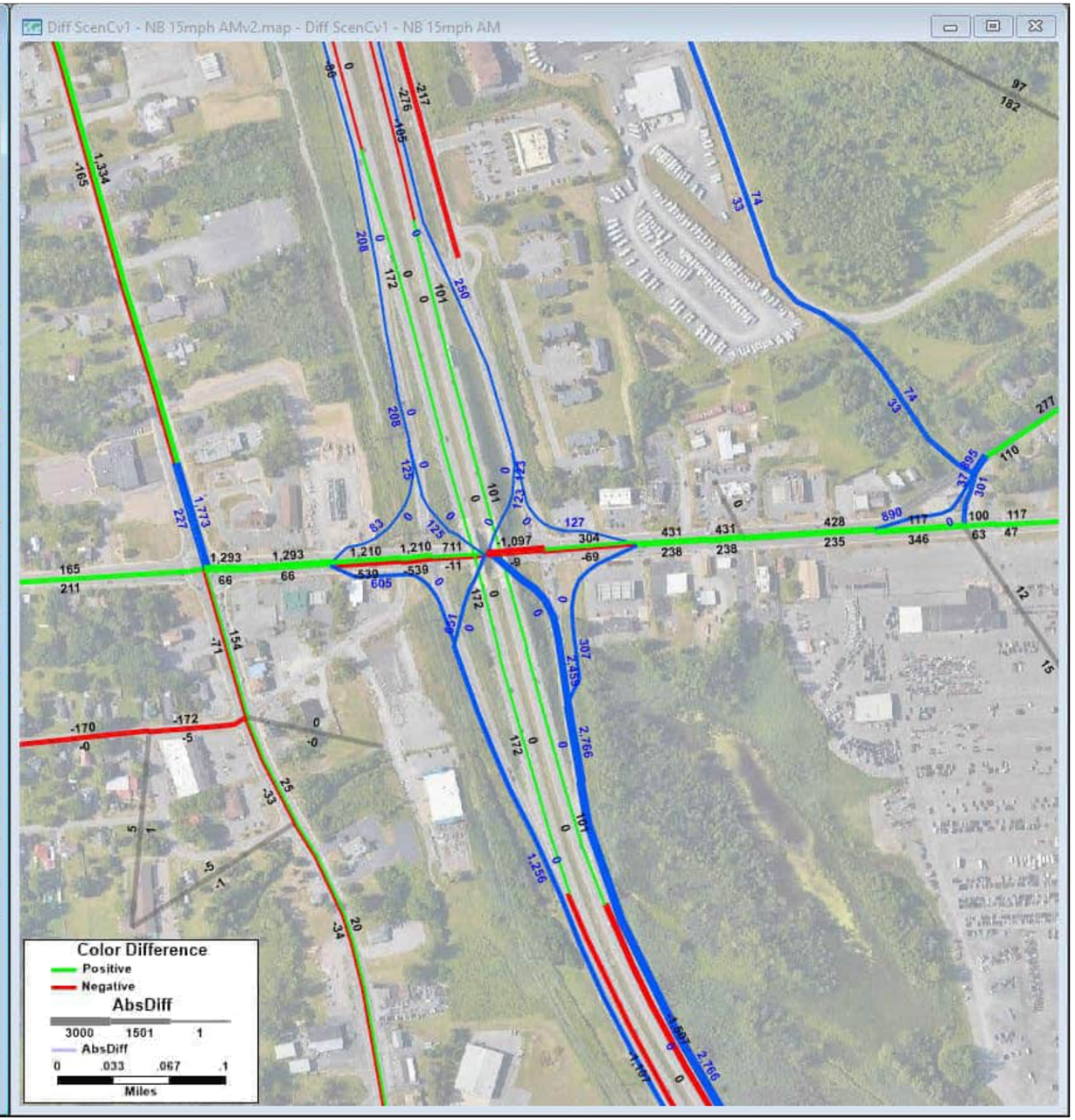


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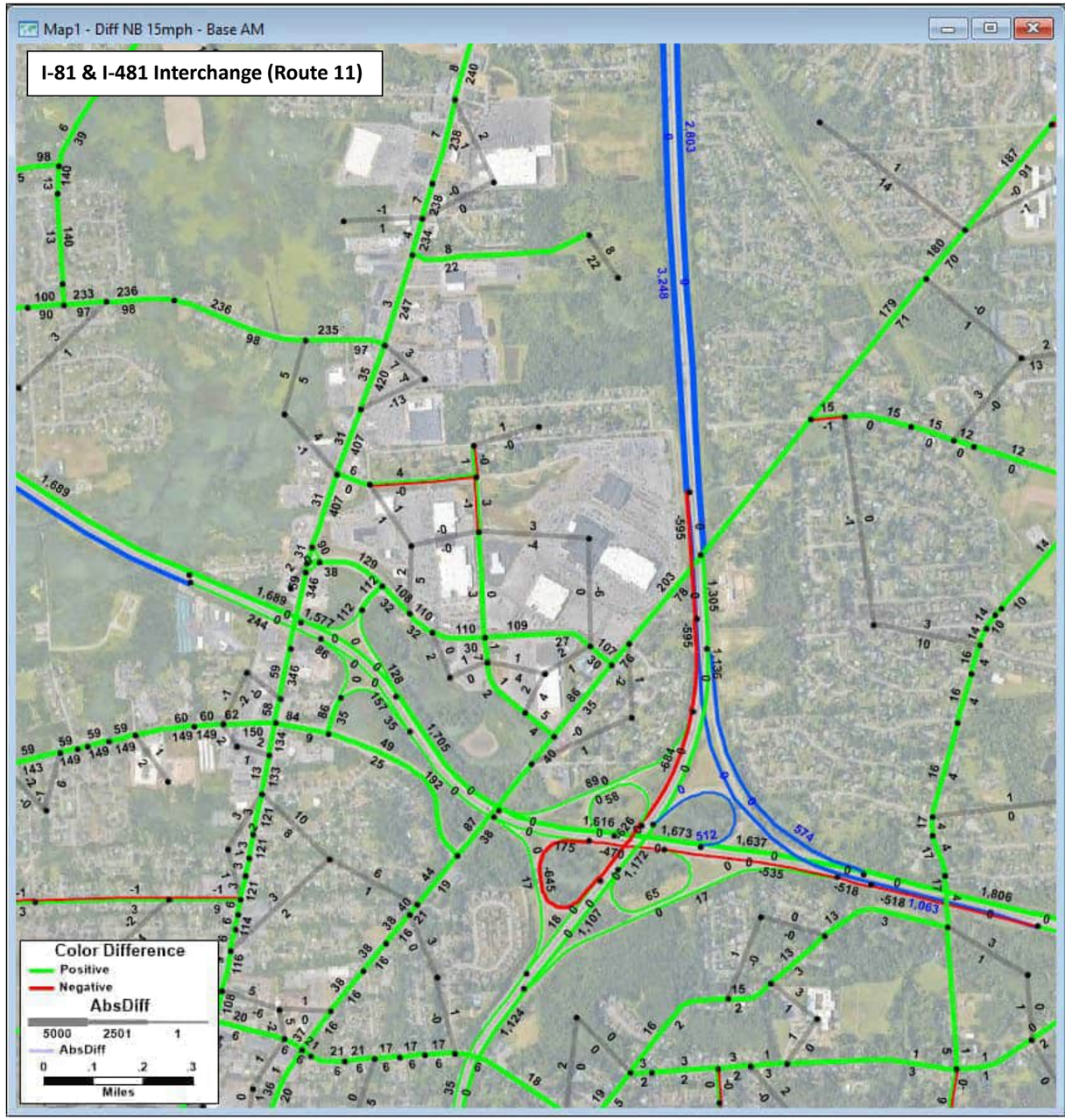


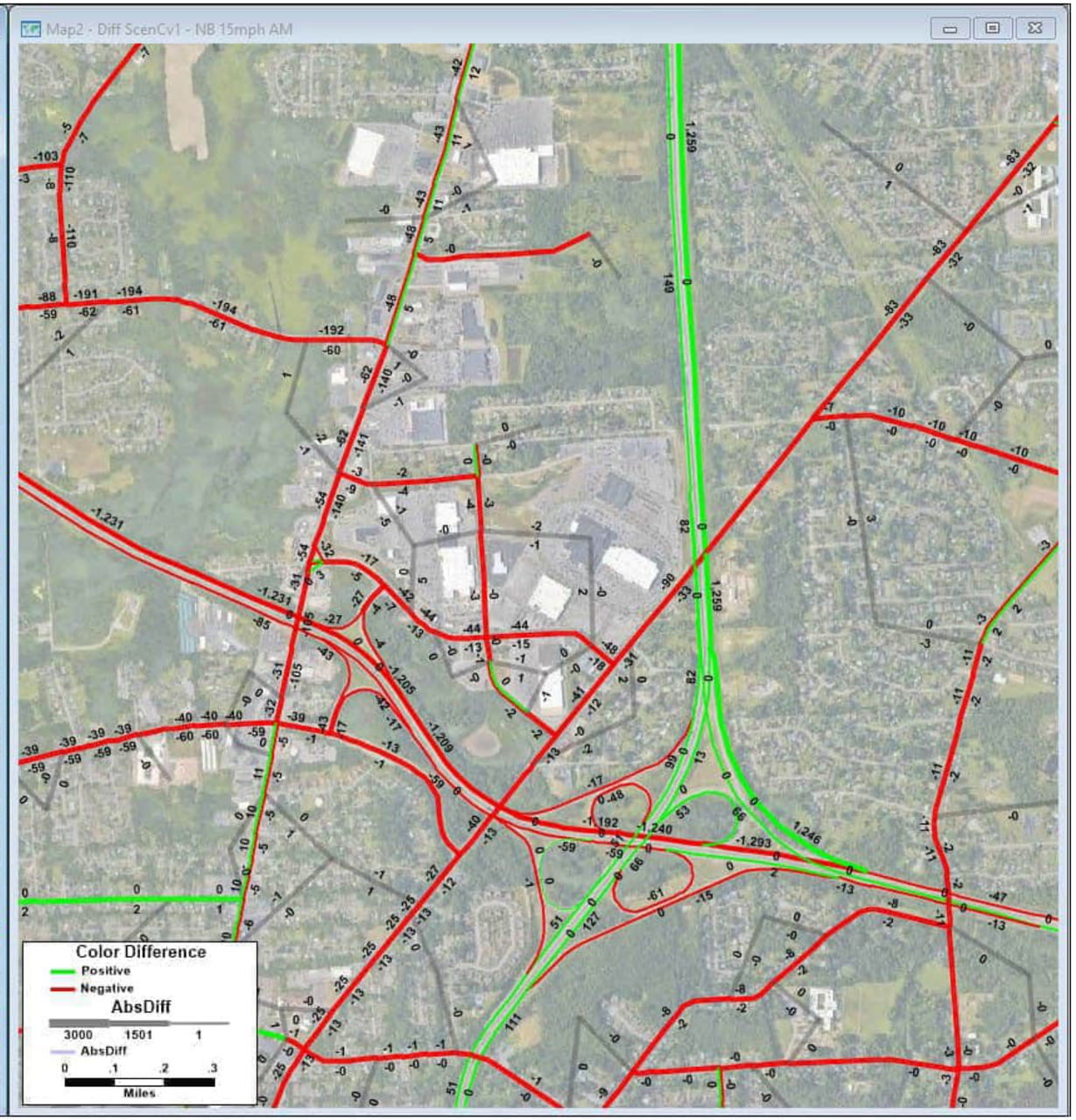


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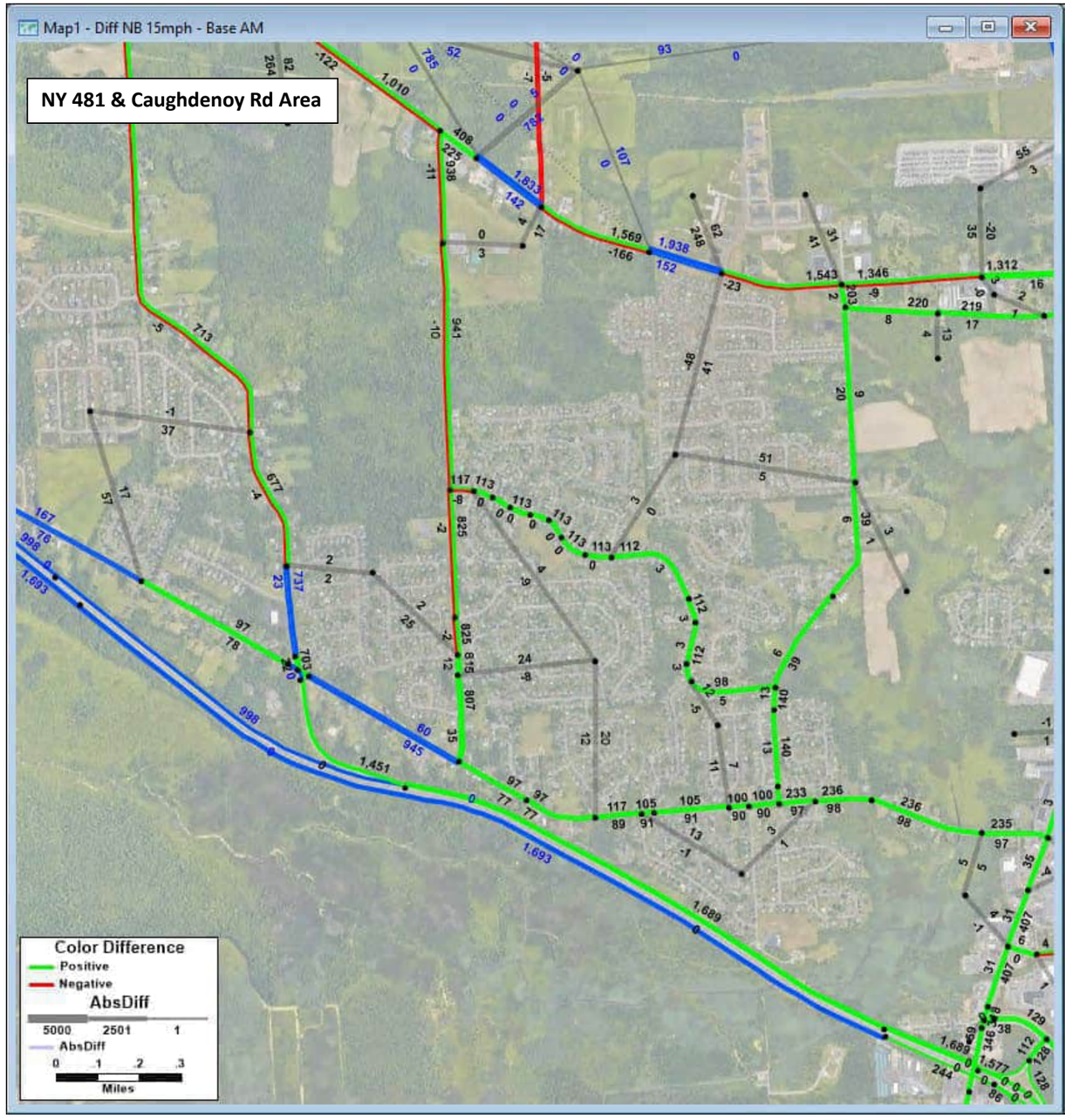


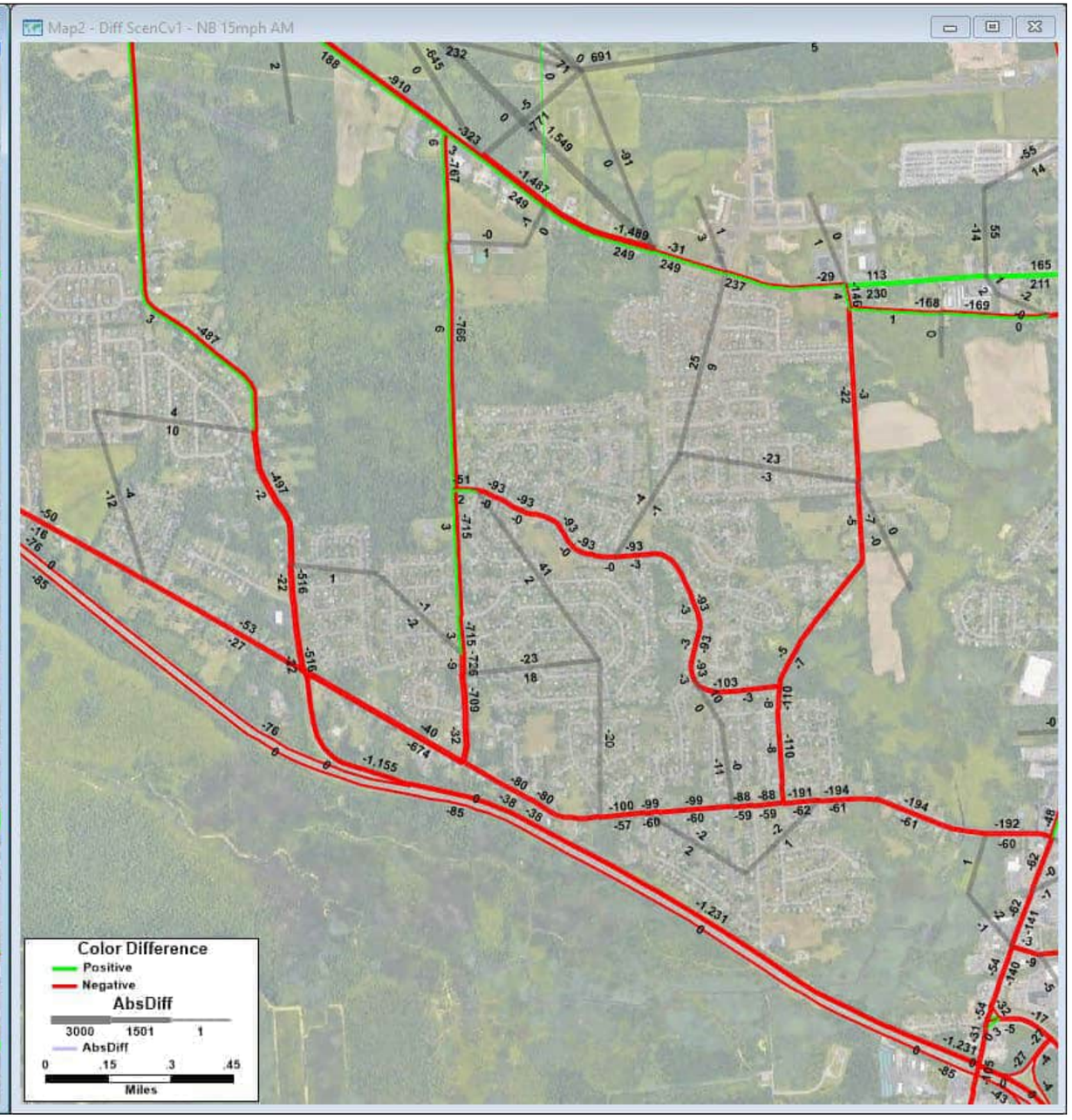


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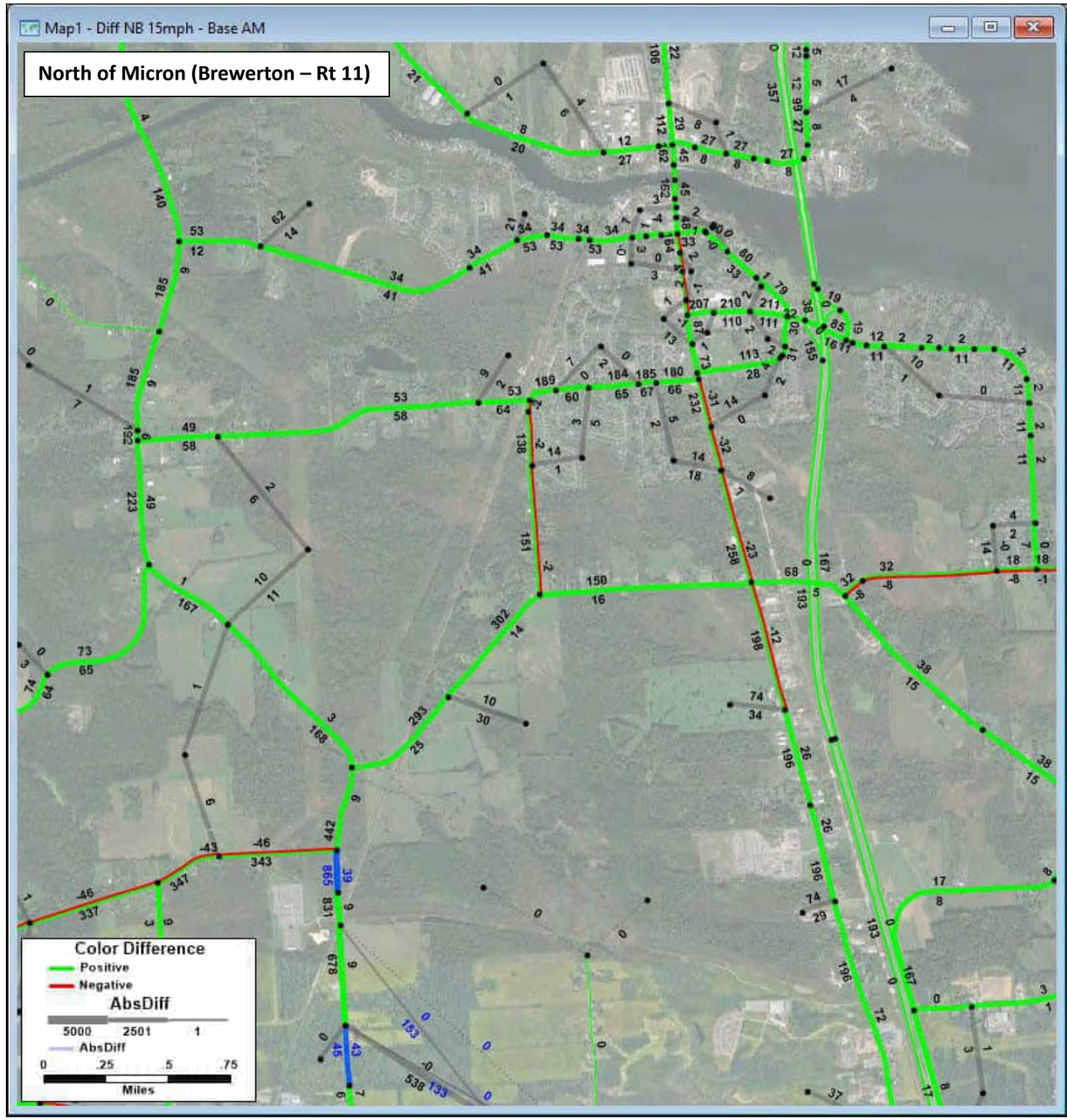


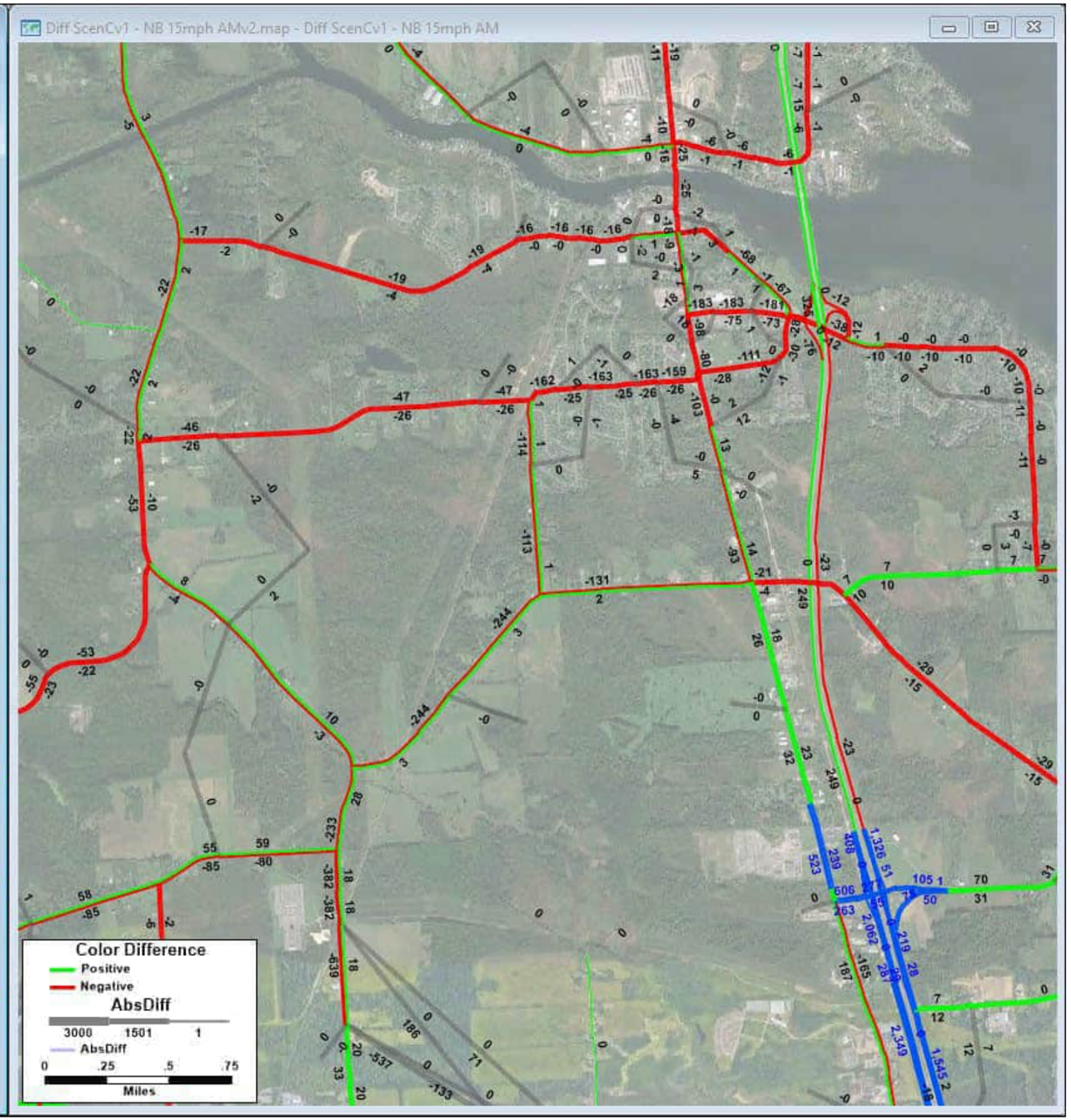


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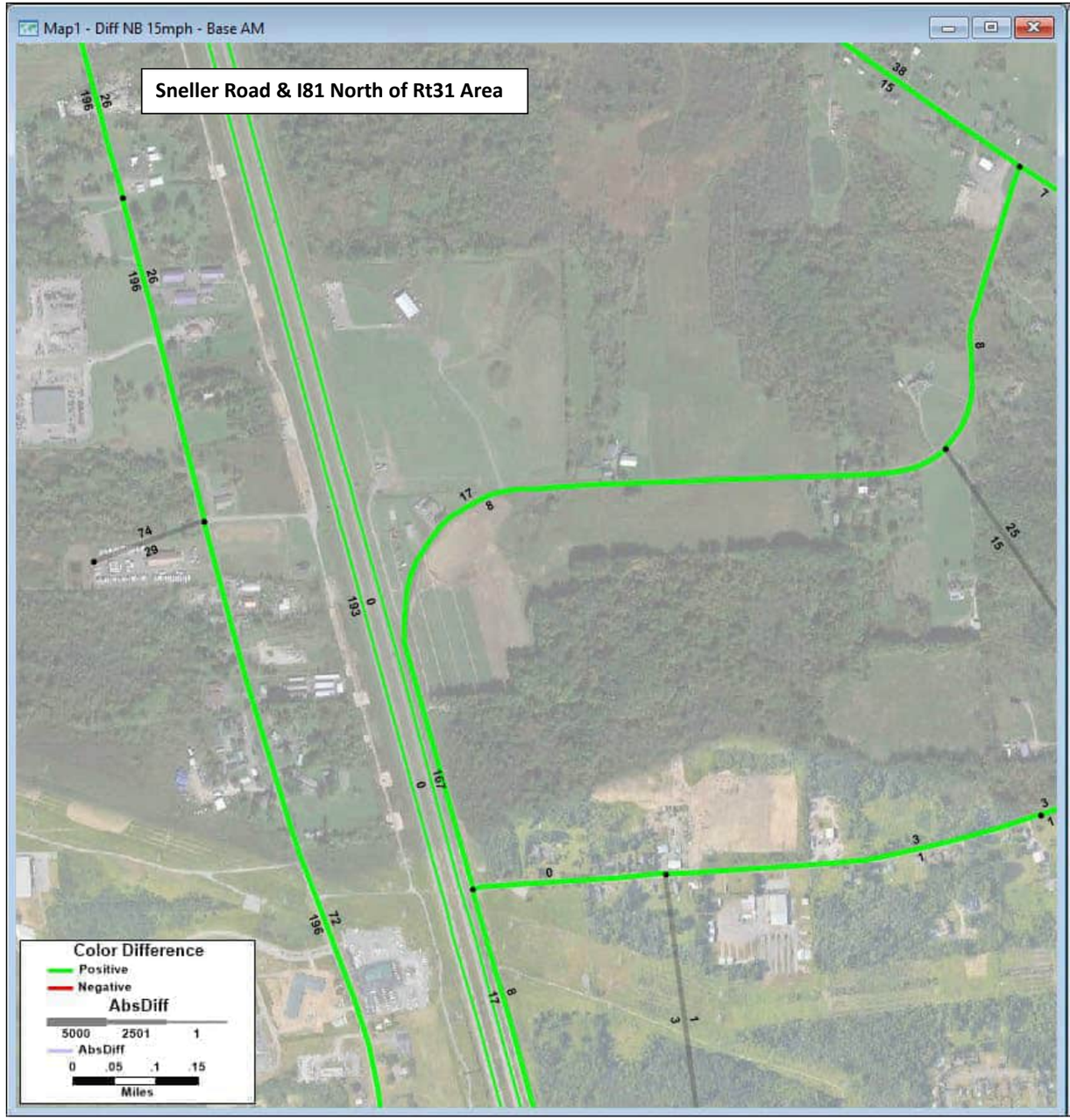


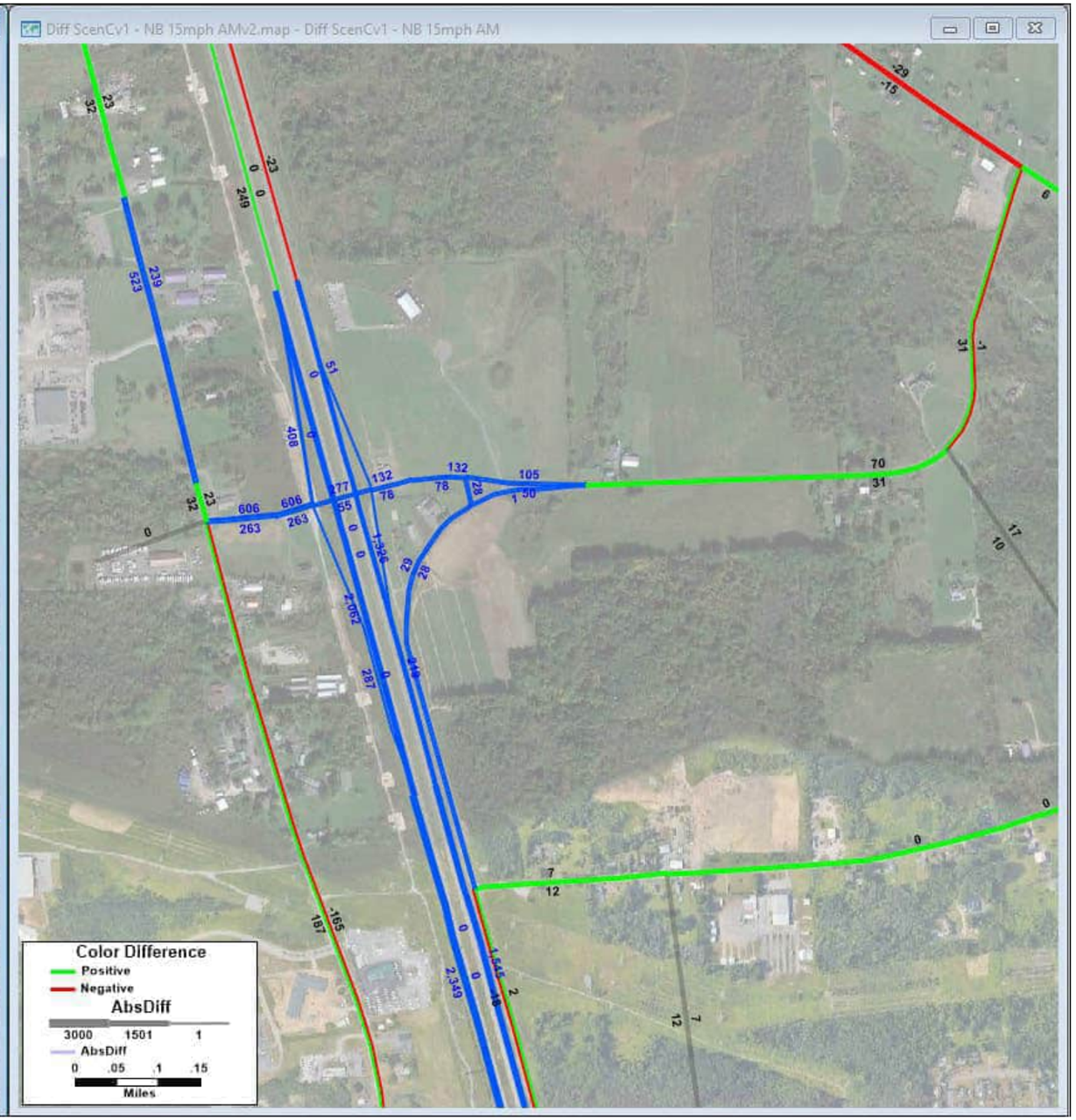


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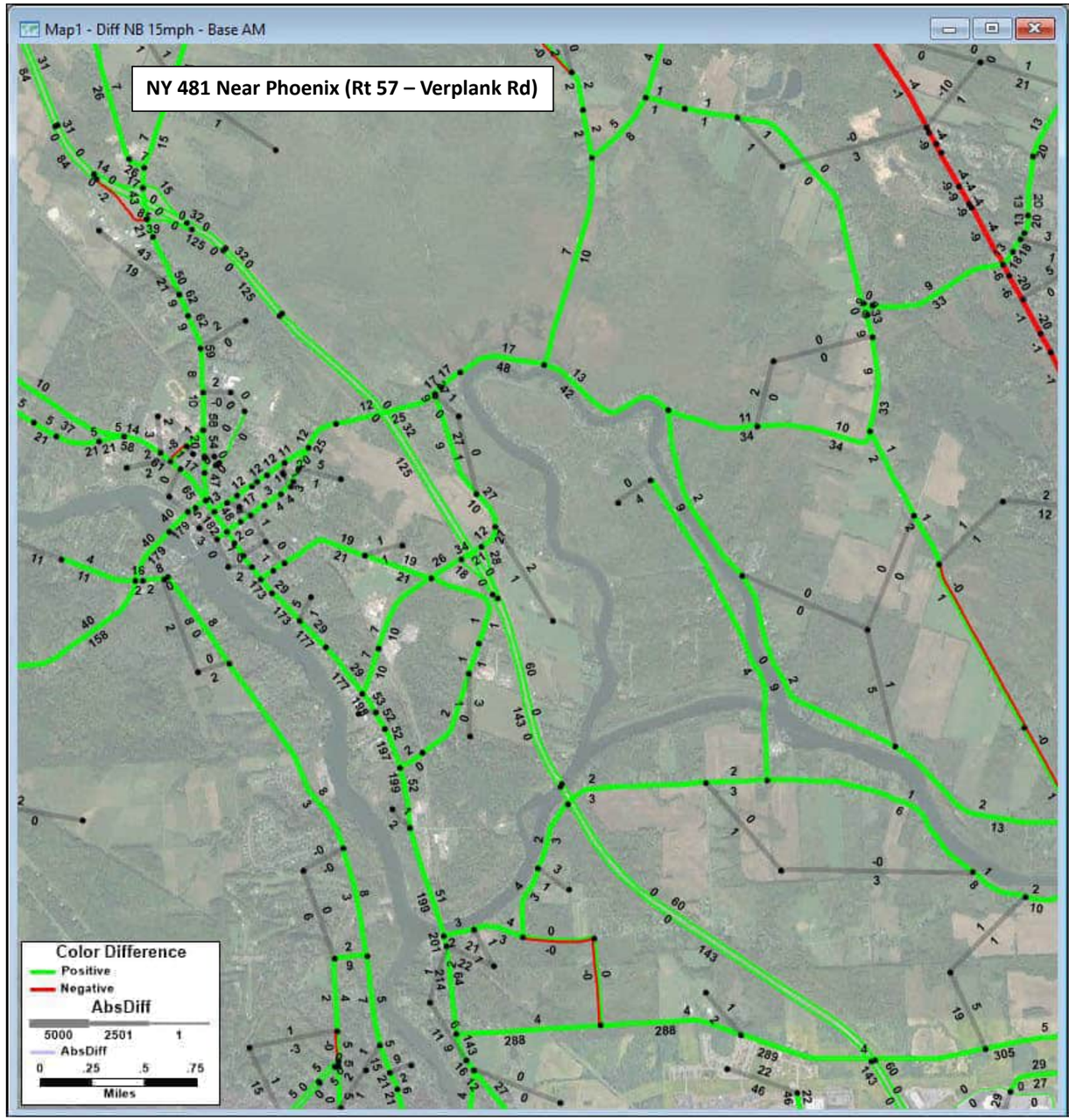


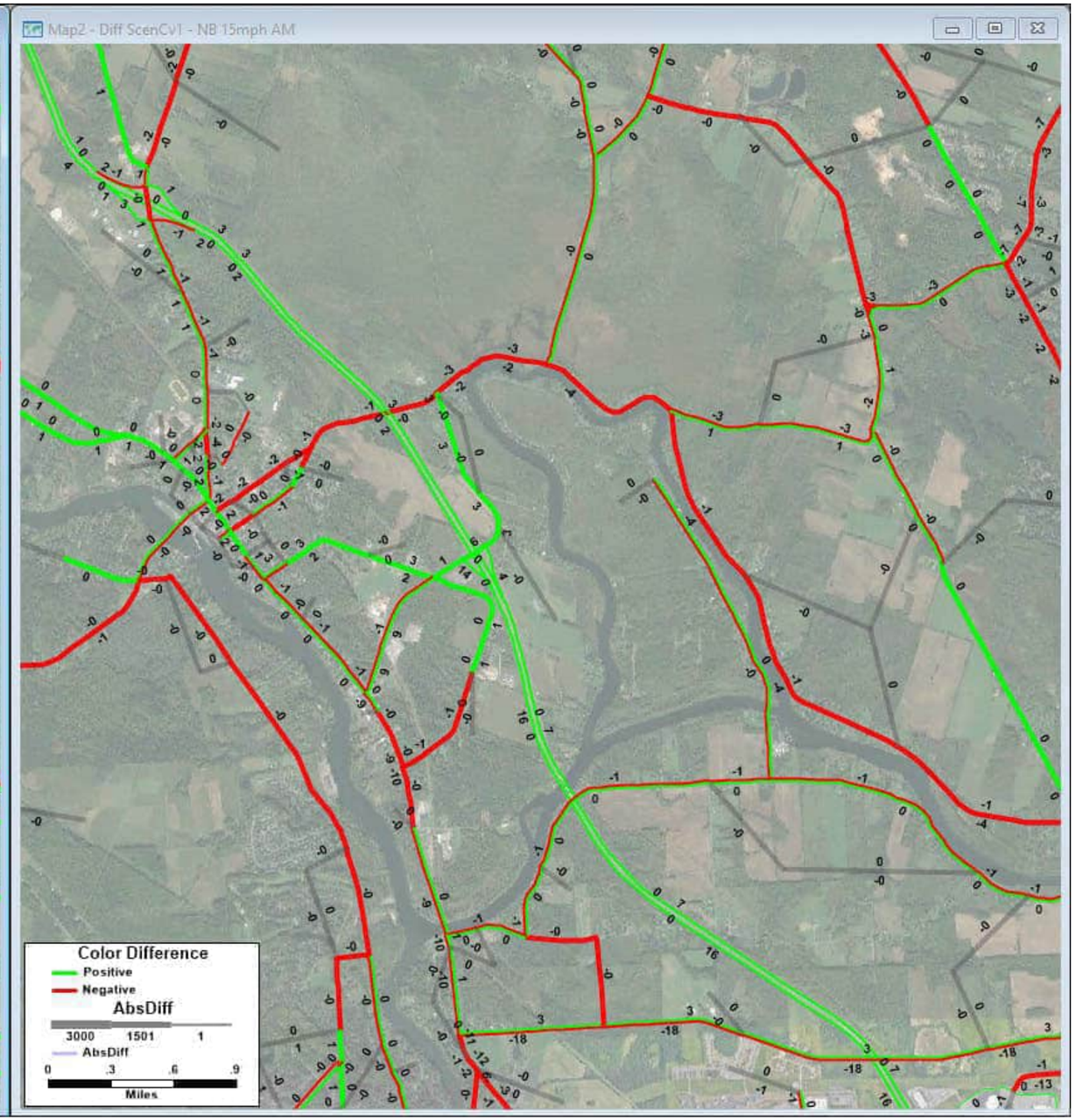


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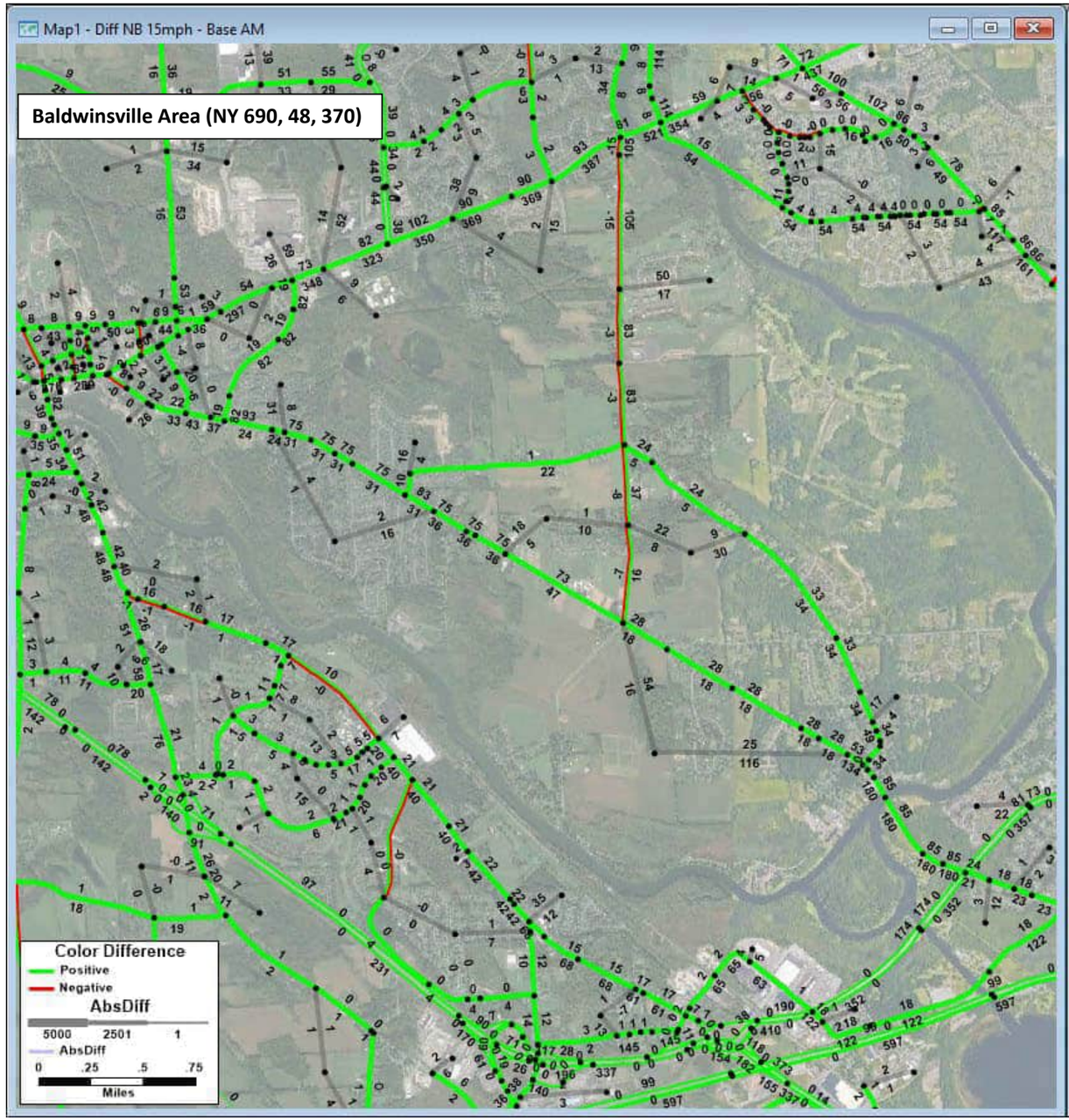


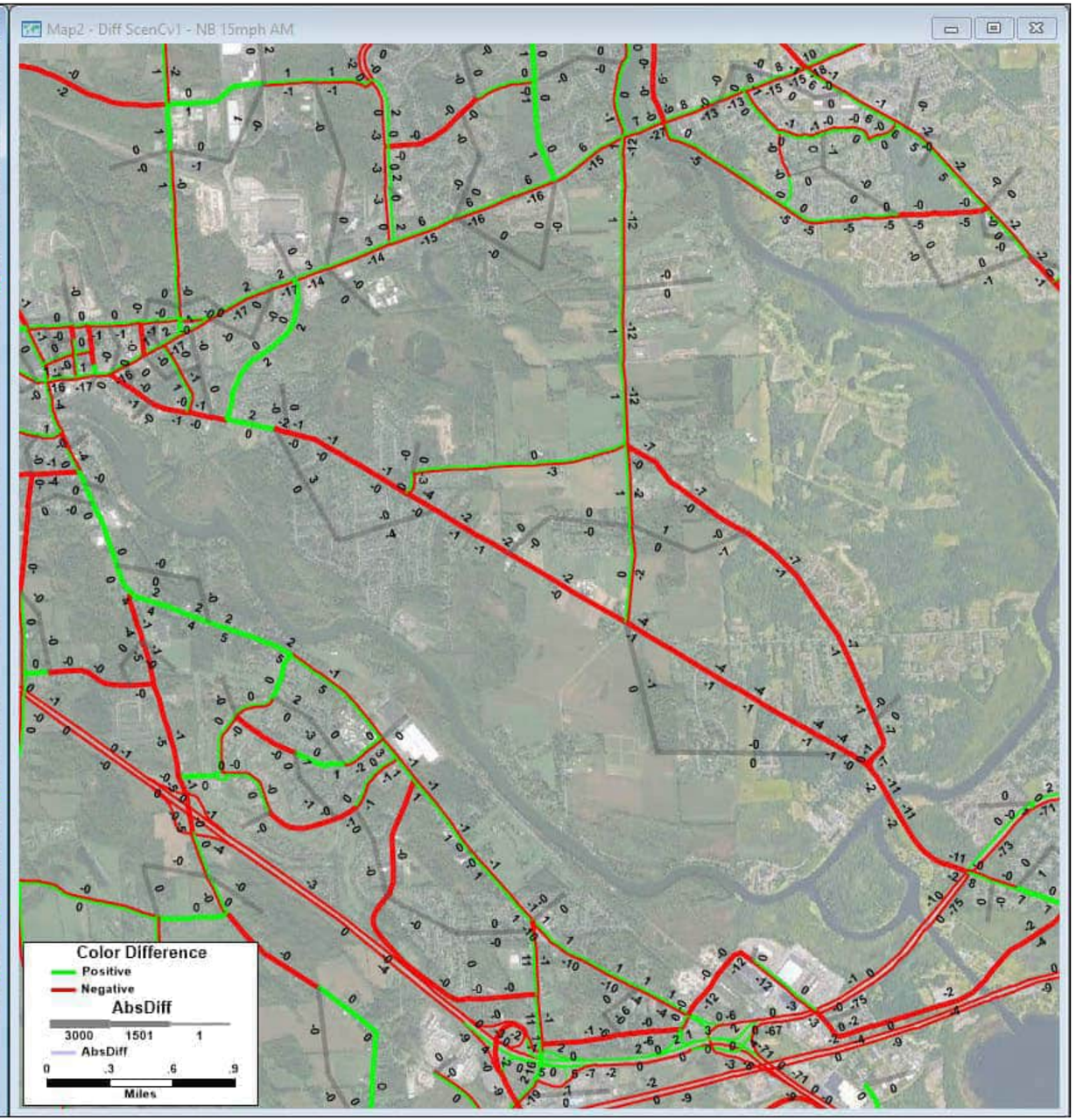


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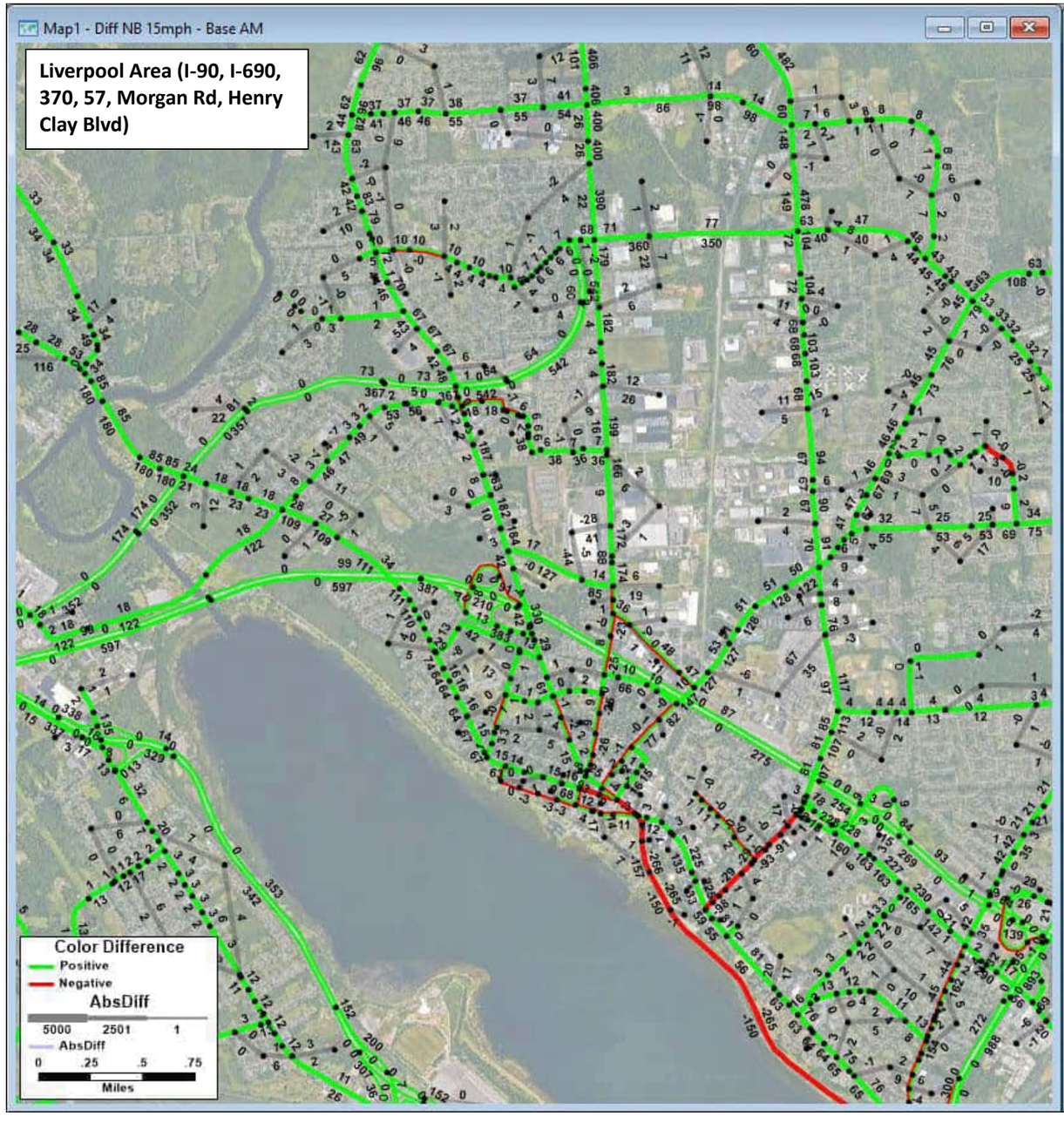




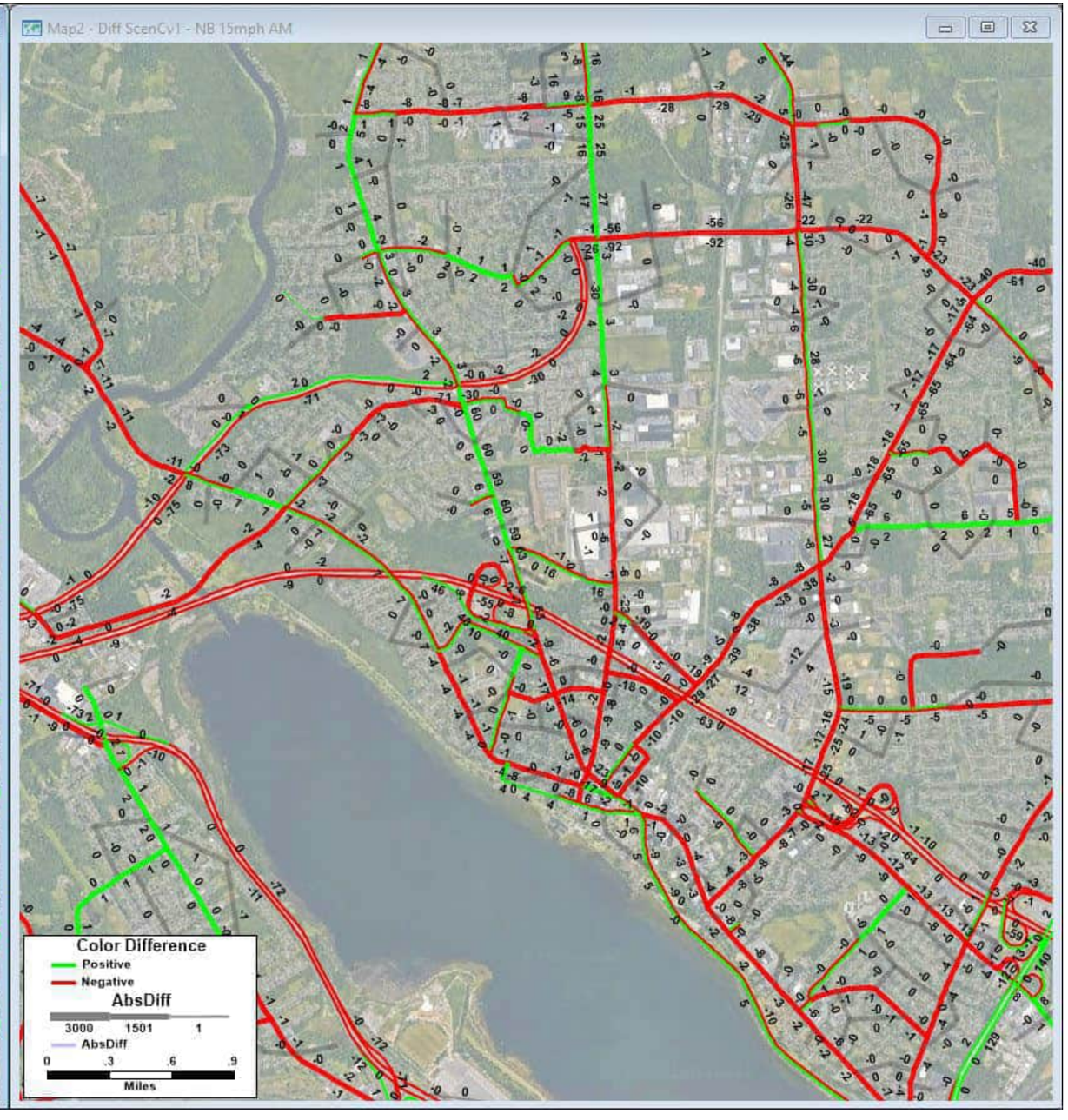
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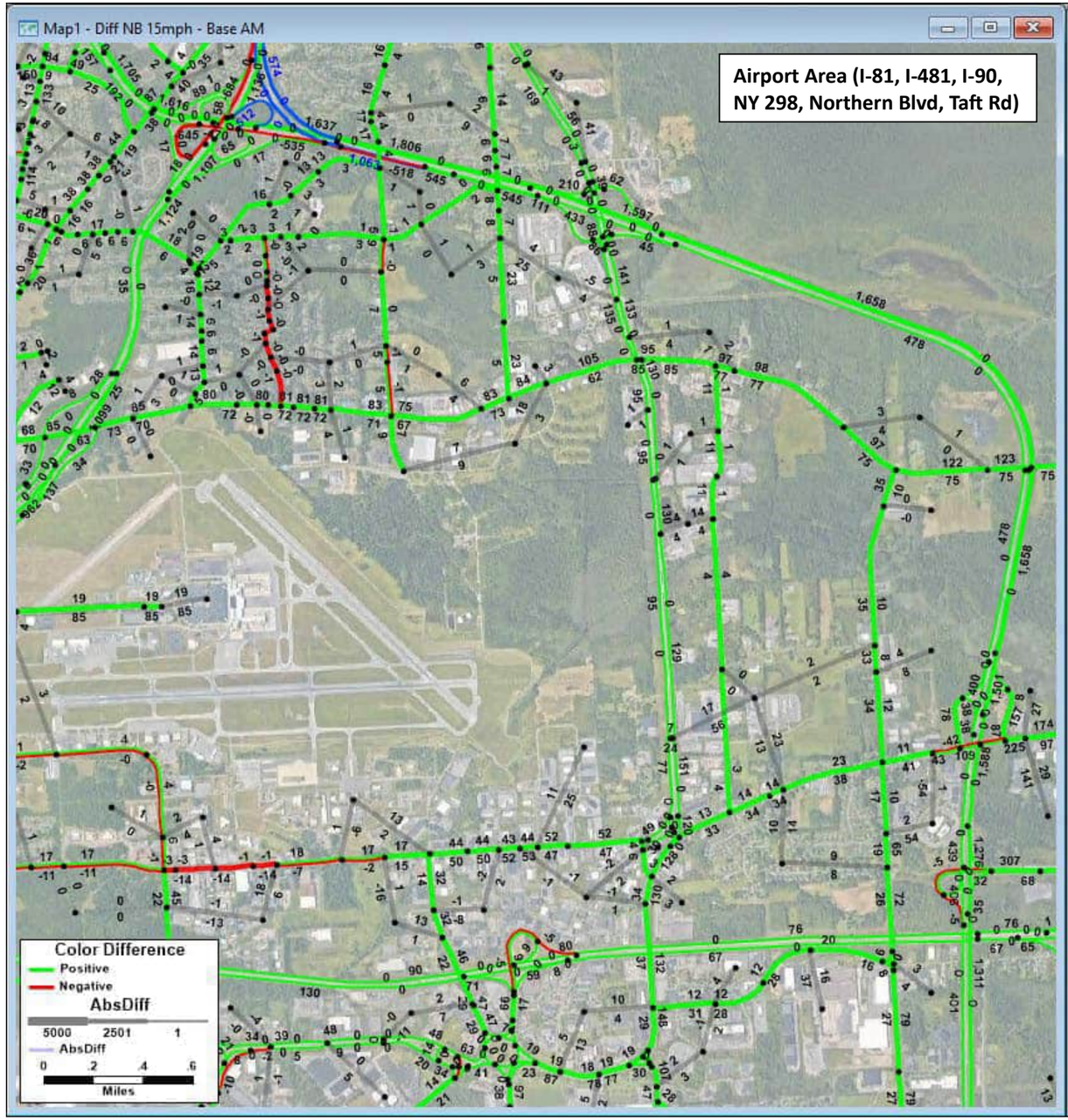


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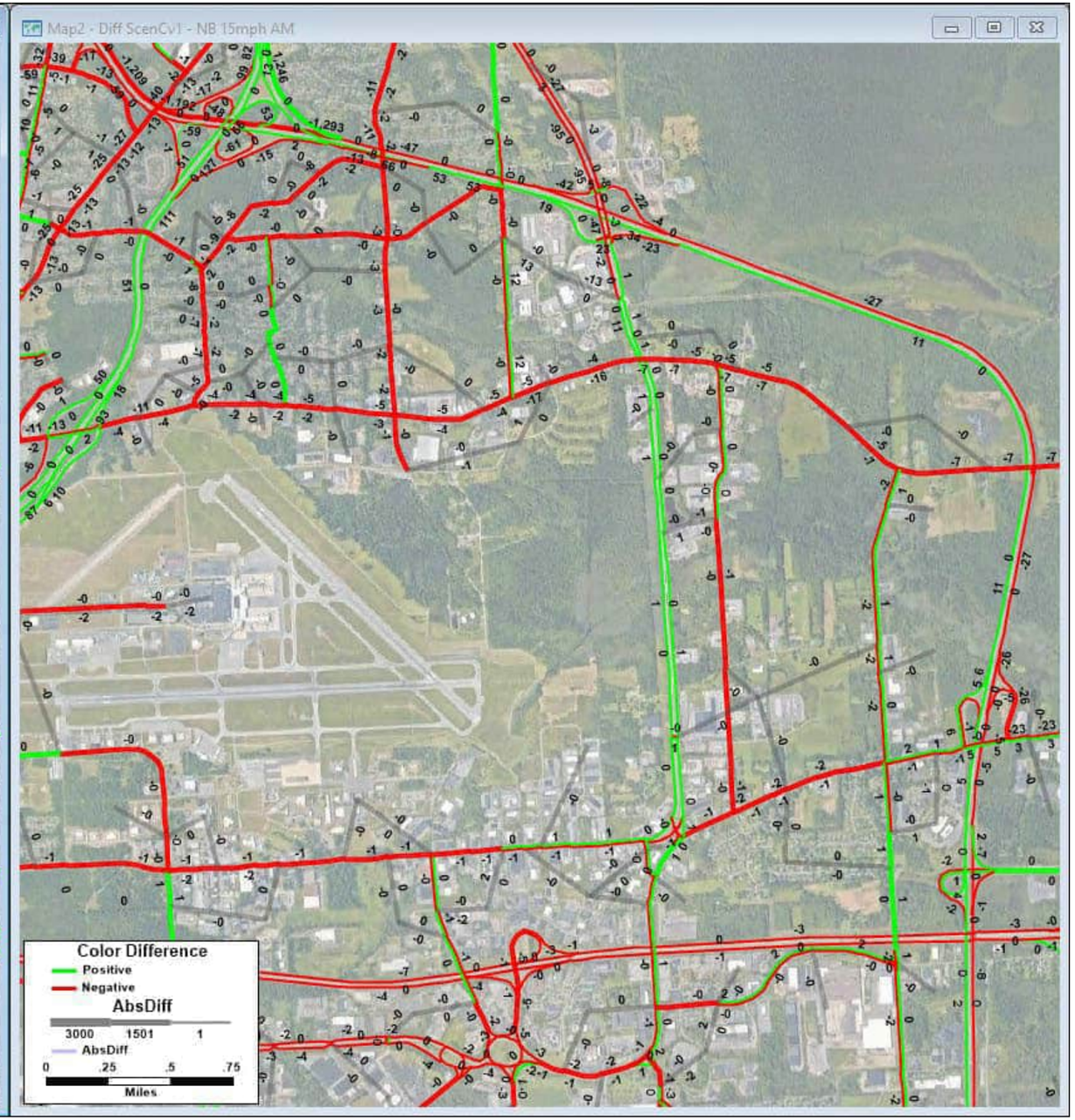


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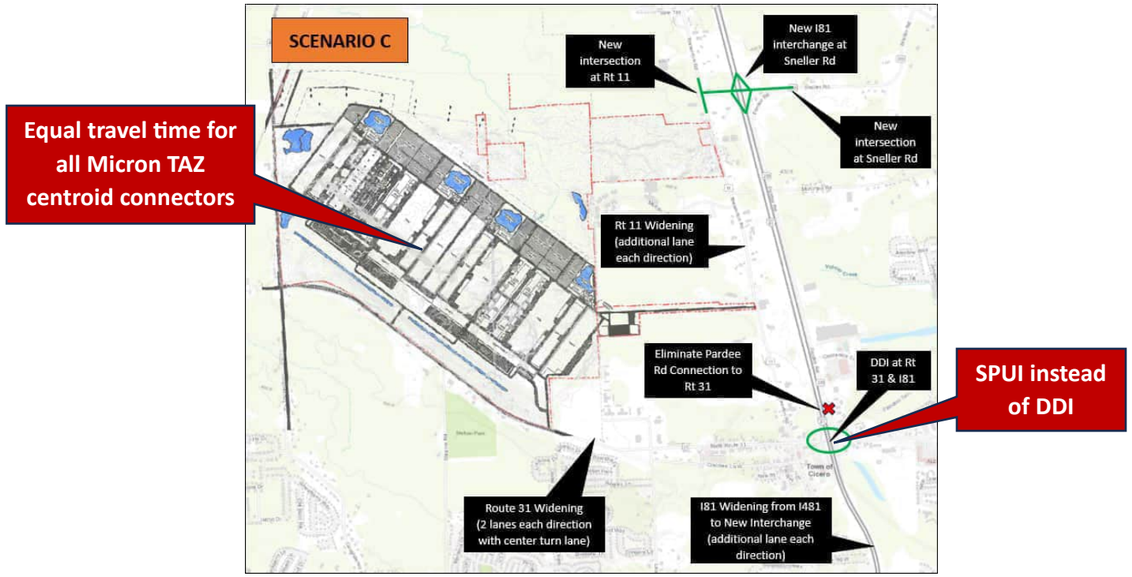
Source : SMTC Regional Travel Demand Model (1/24/2023)

SMTC Travel Demand Model Results: Scenario C v1 (New I81 Interchange & SPUI @ Rt31 & I81) – PM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario C v1** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- RED callouts note the revisions made to Scenario C



The graphic to the right is an example of what is included in this document →

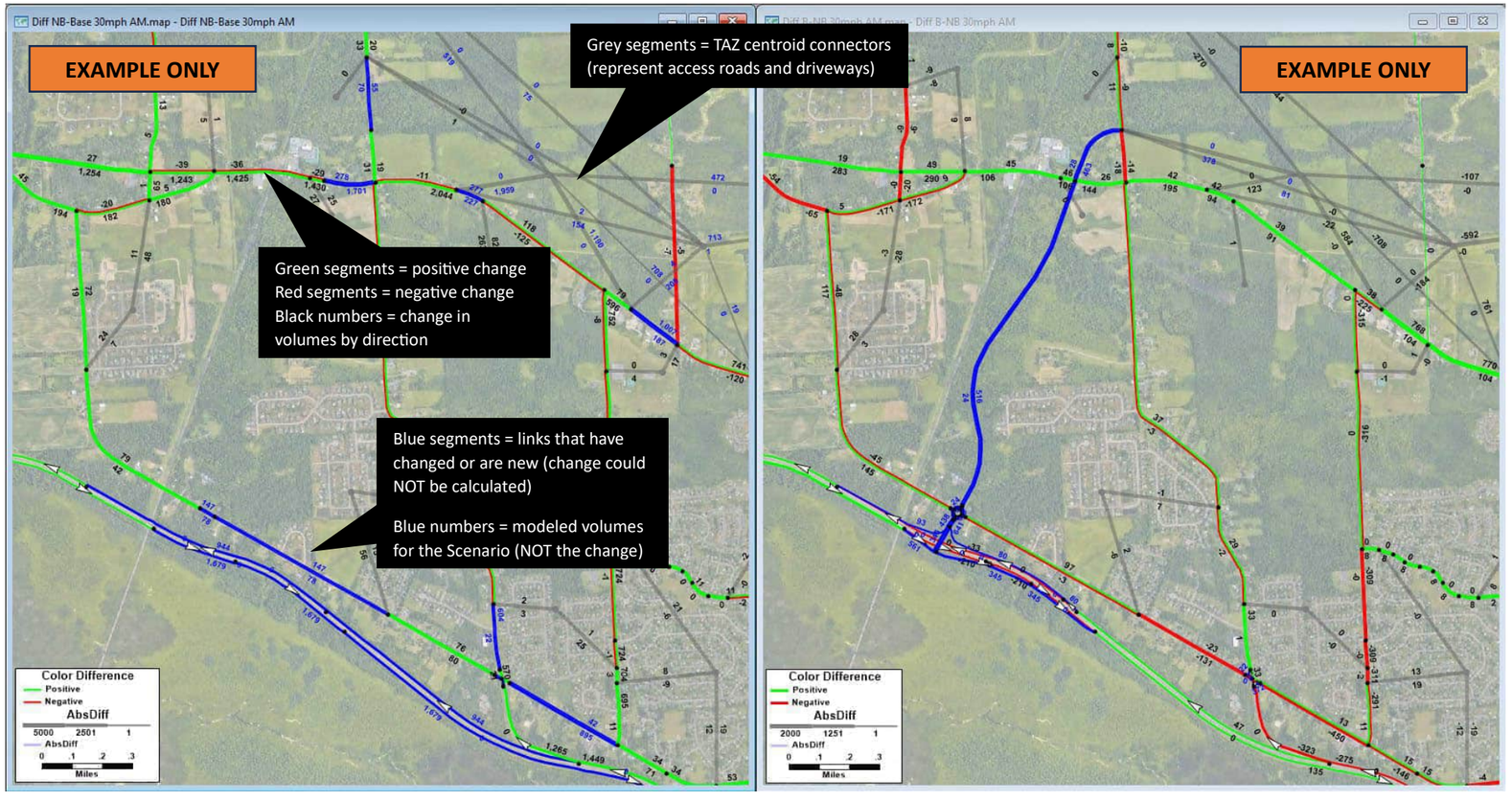
The map on the left displays the change in **PM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB PM Volumes less 2020 PM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **PM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build PM Volumes less 2040 NB PM volumes**).

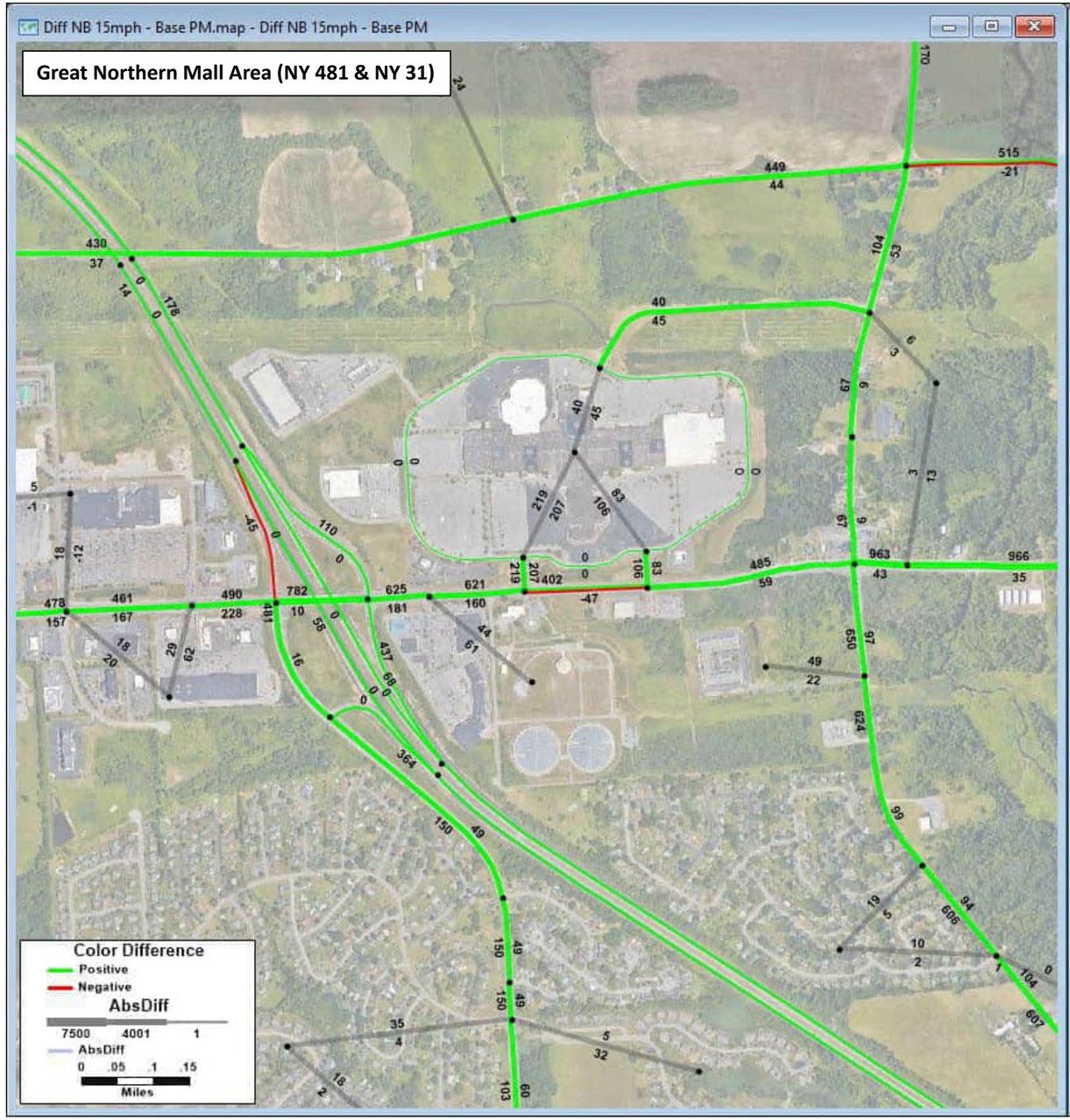
MAP NOTES:

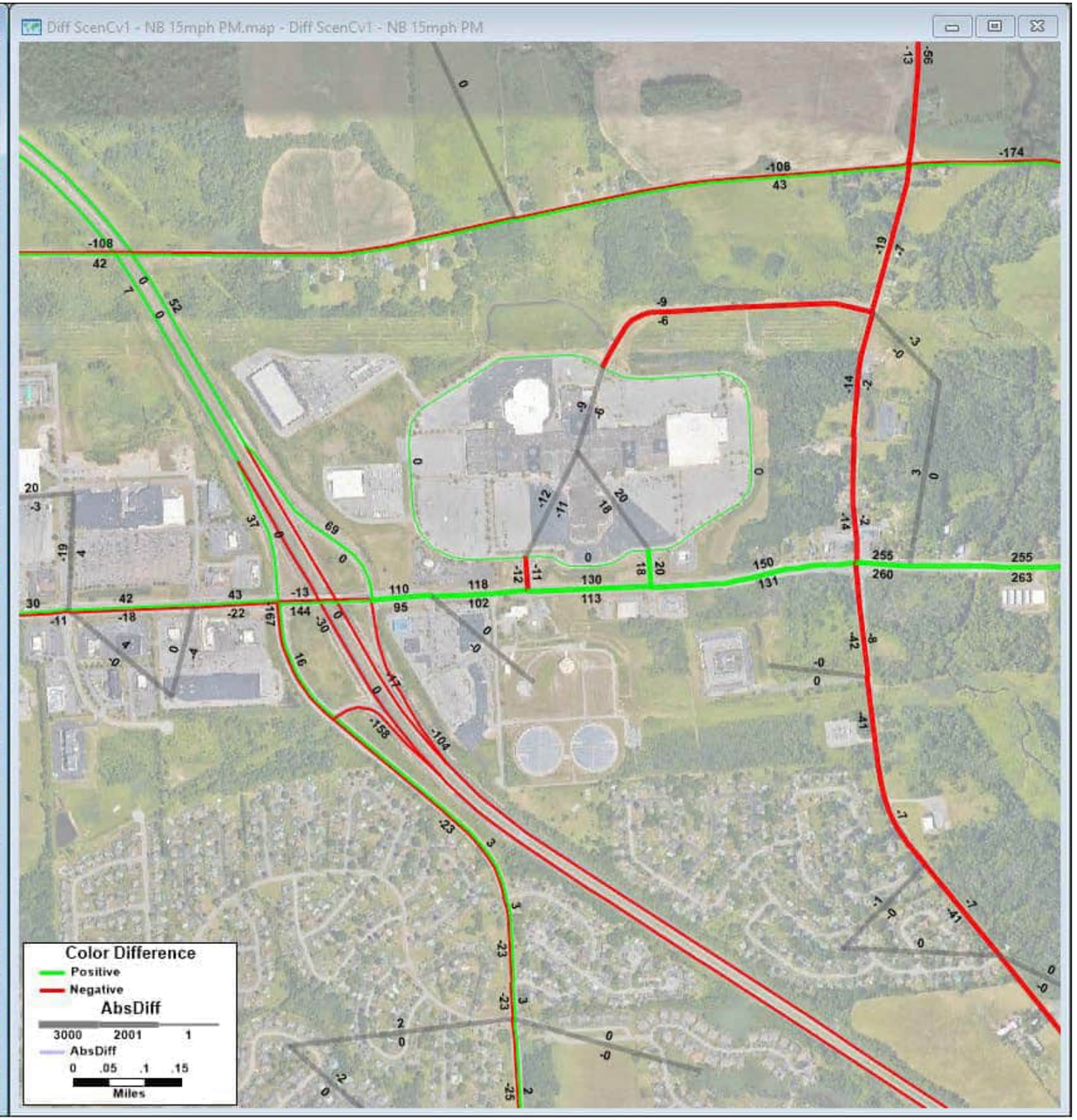
- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/24/2023)

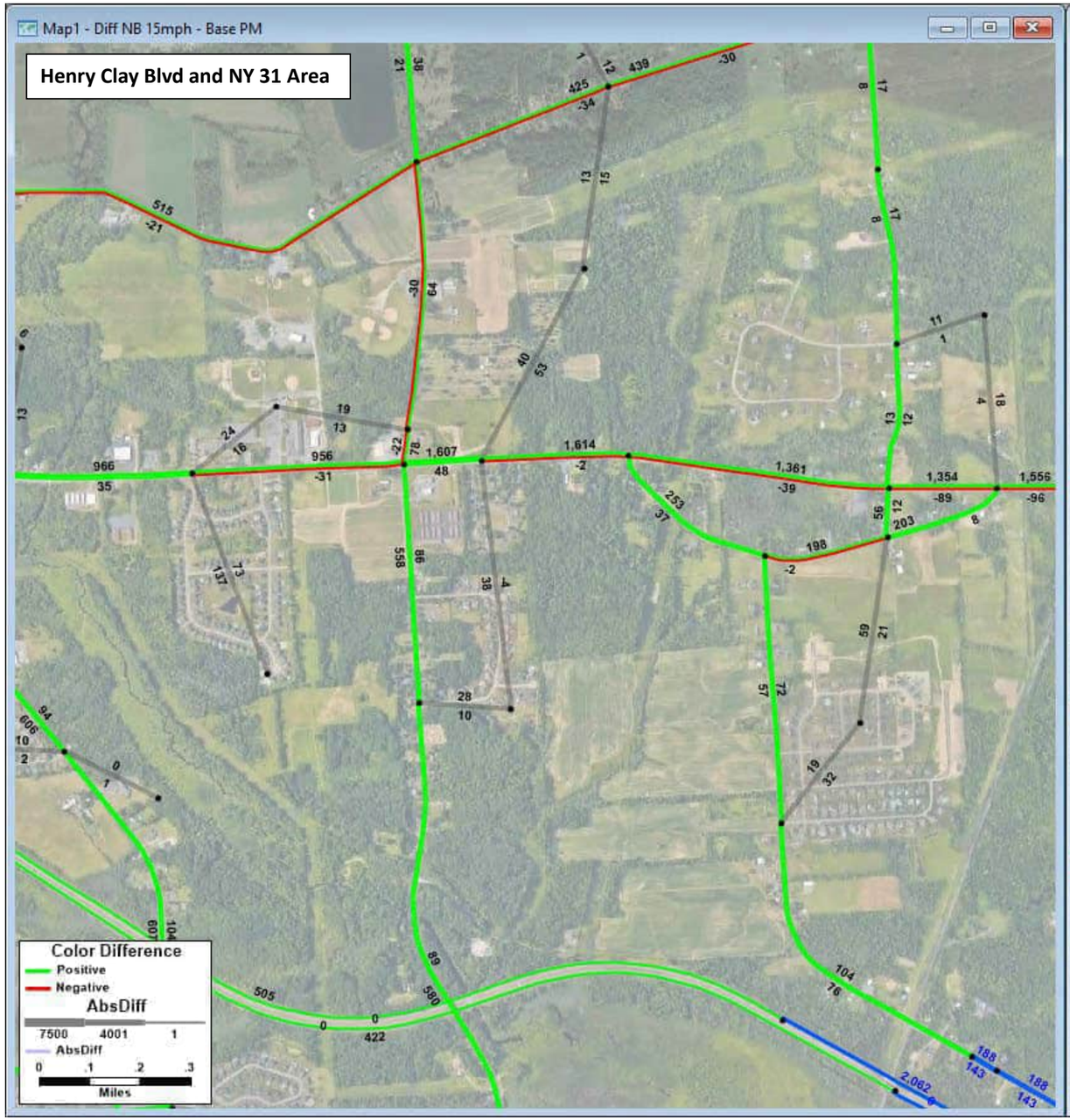


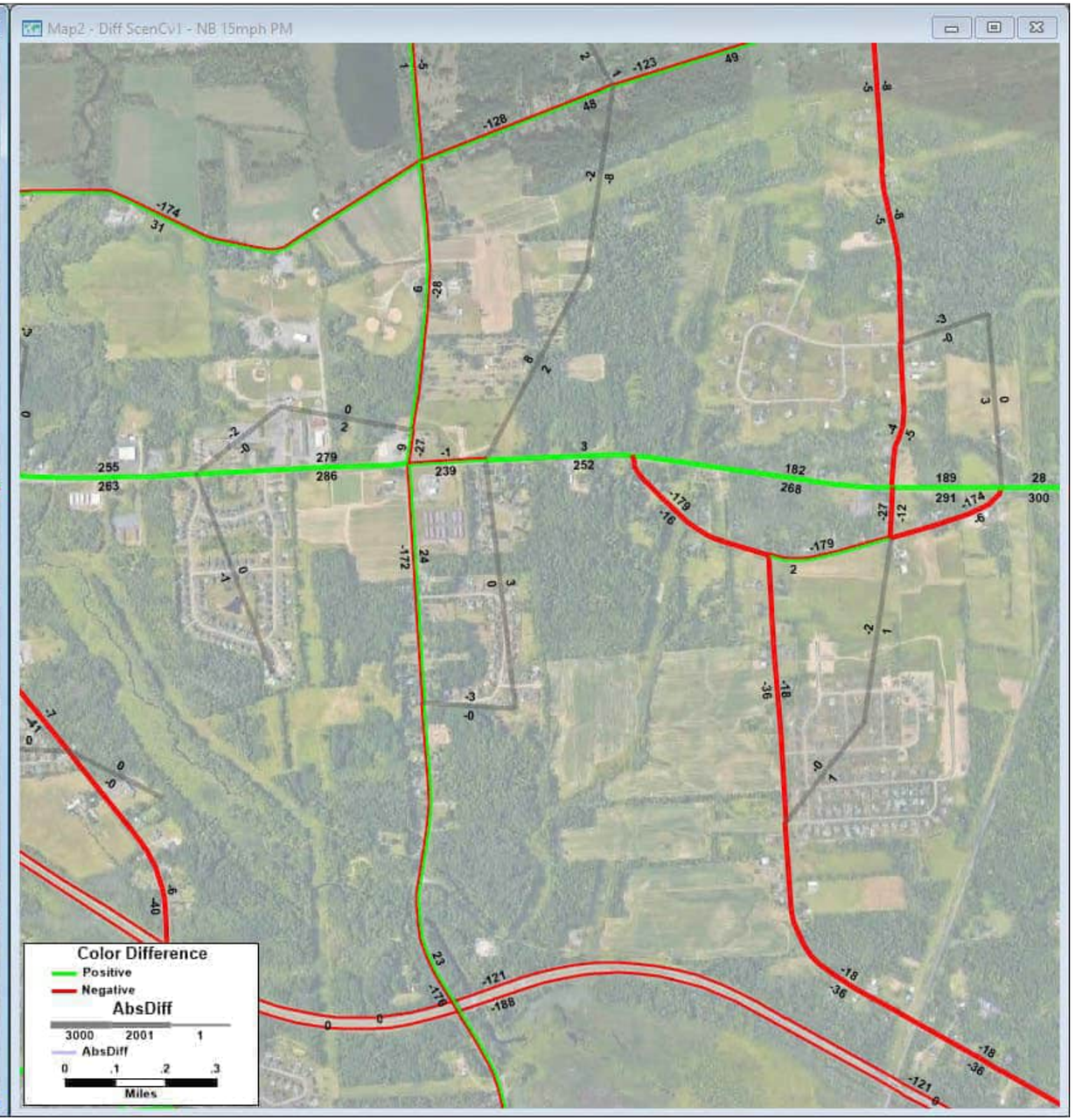


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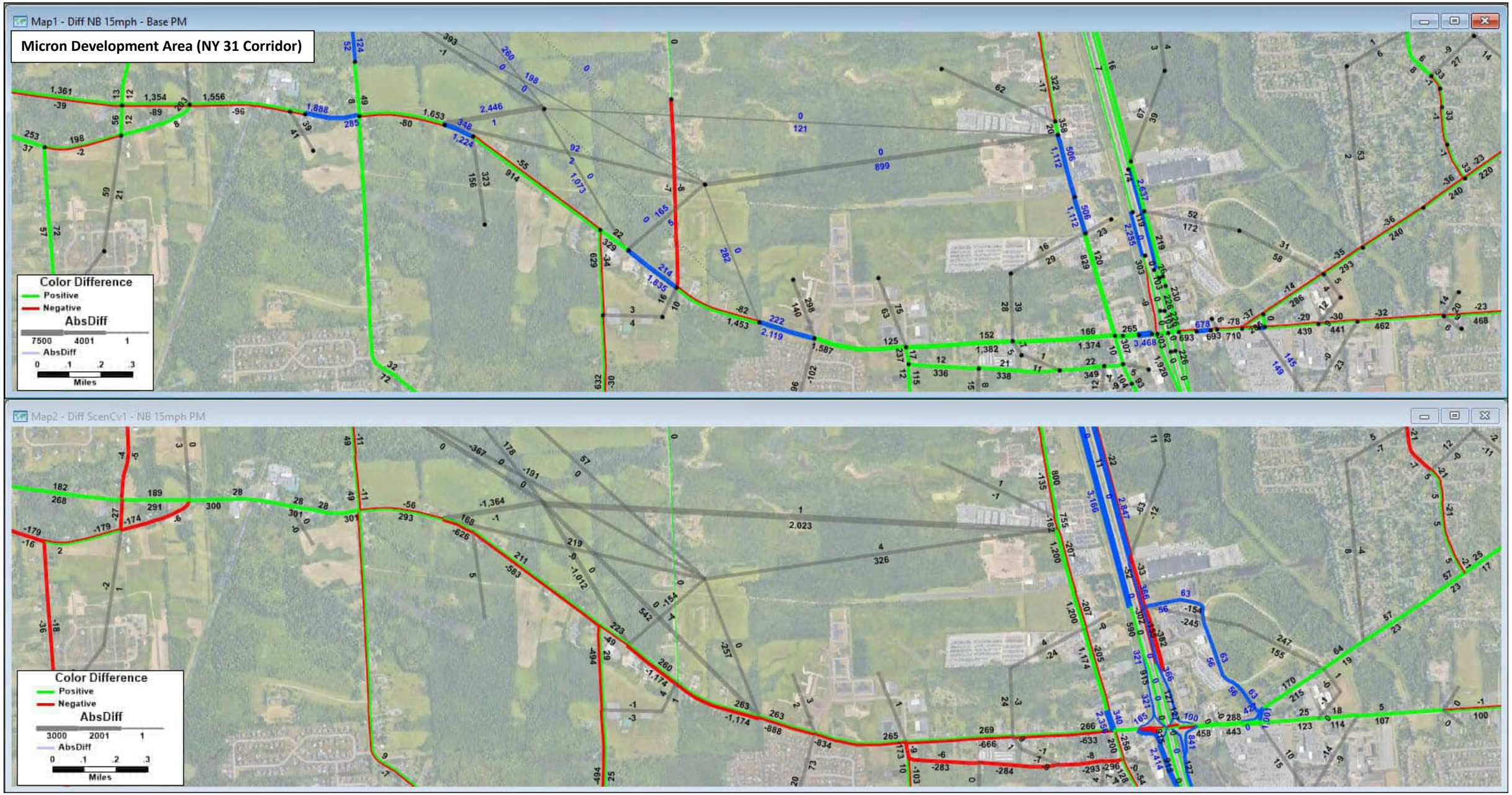




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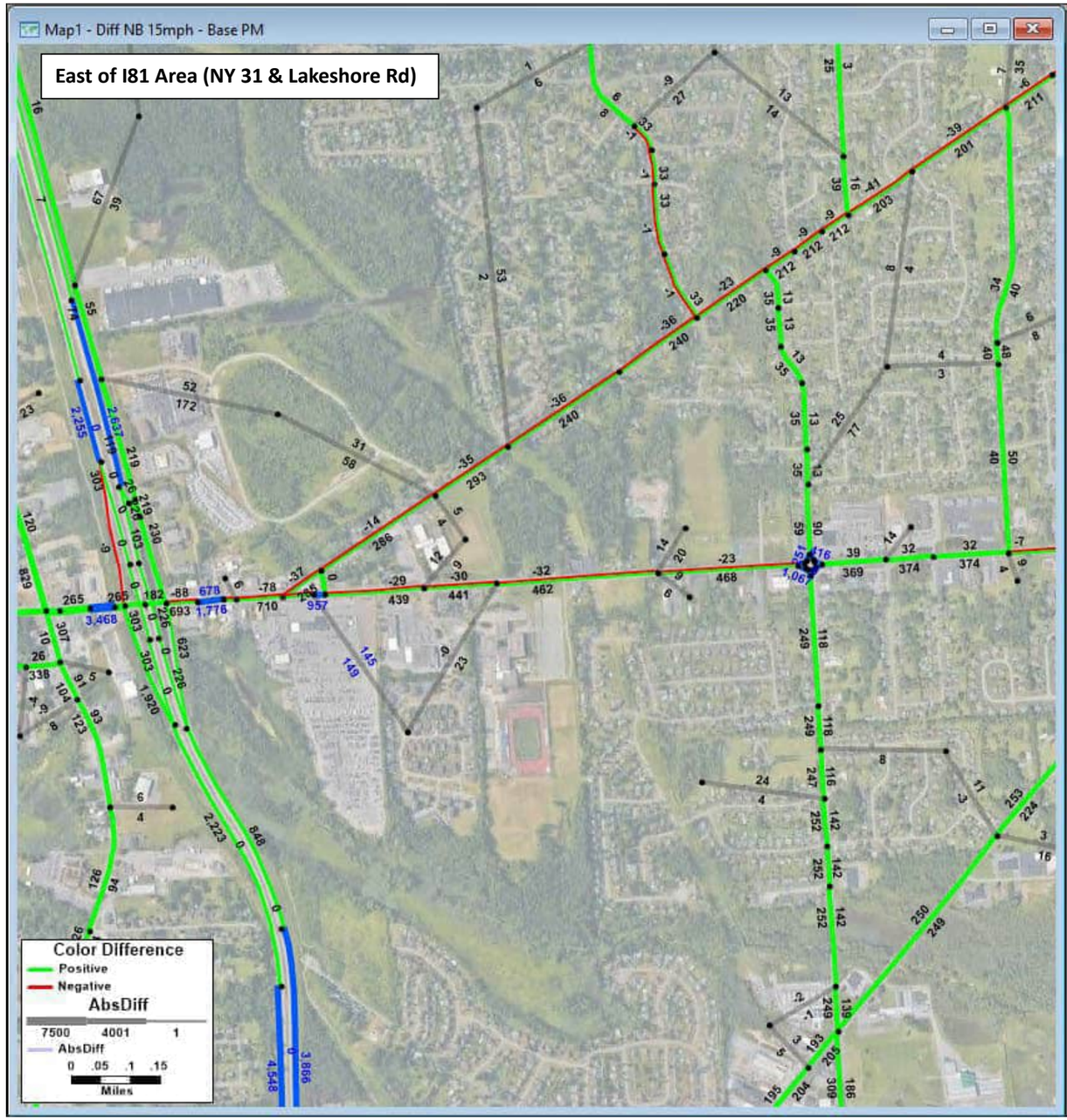
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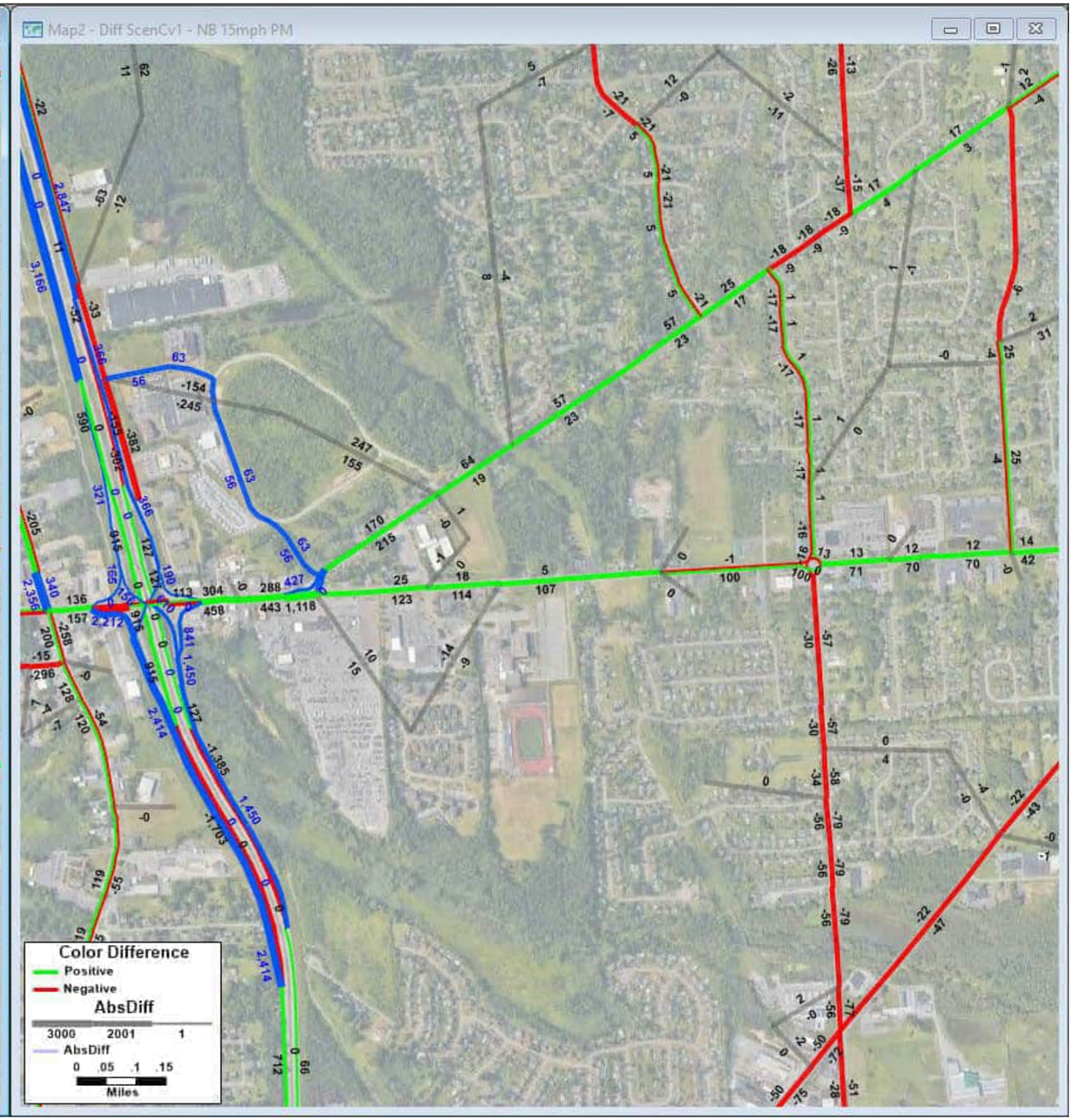


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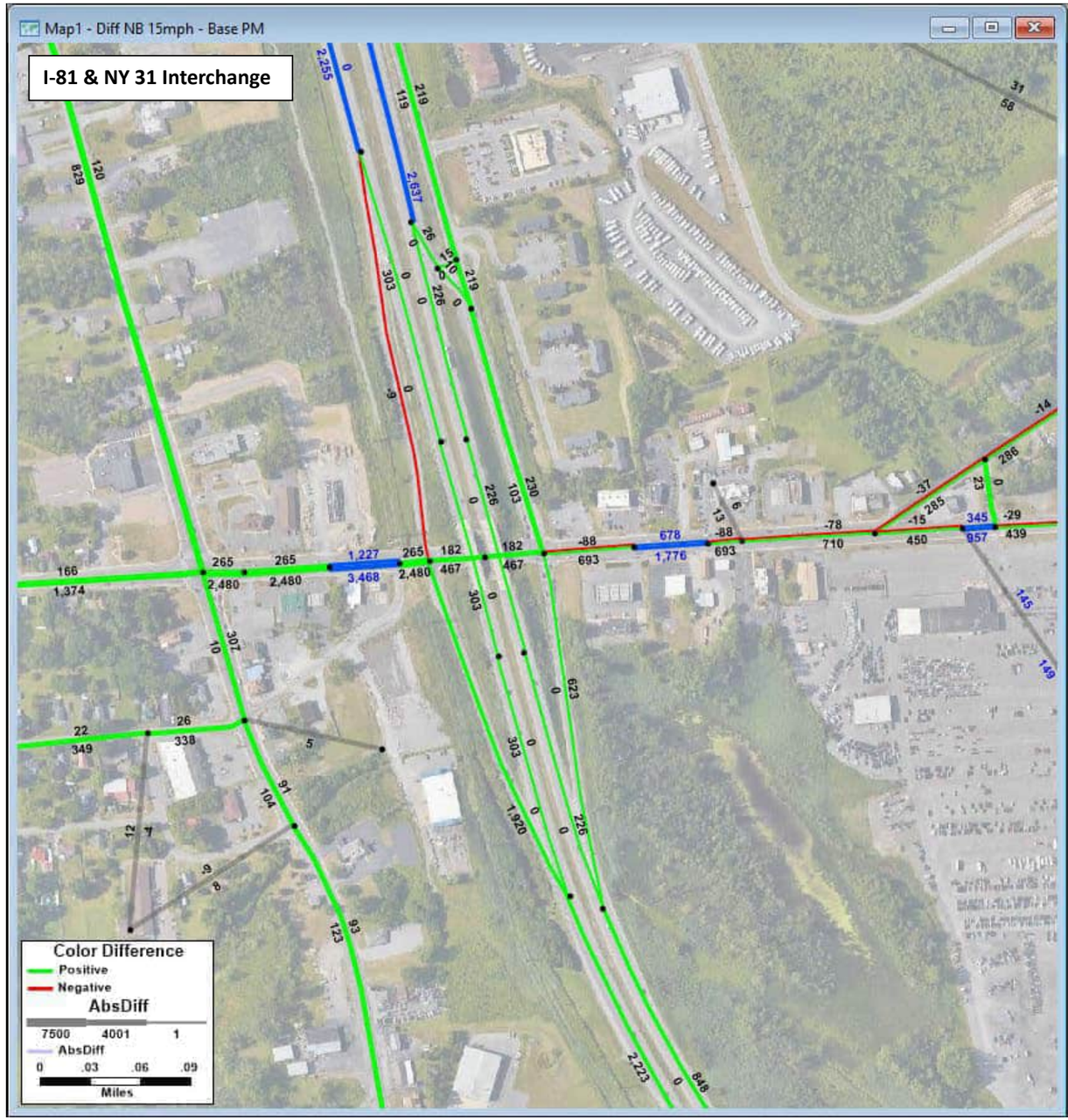


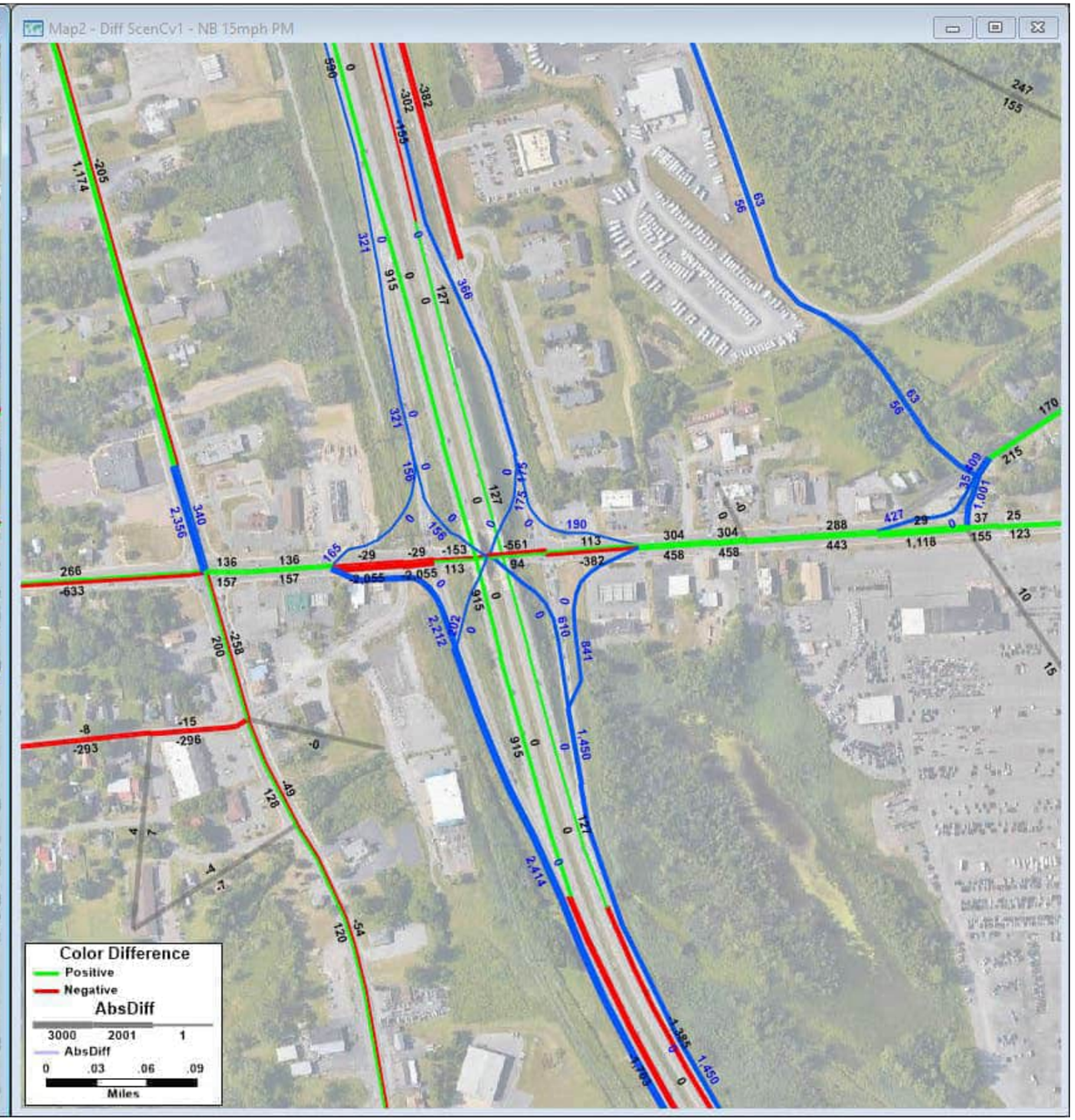


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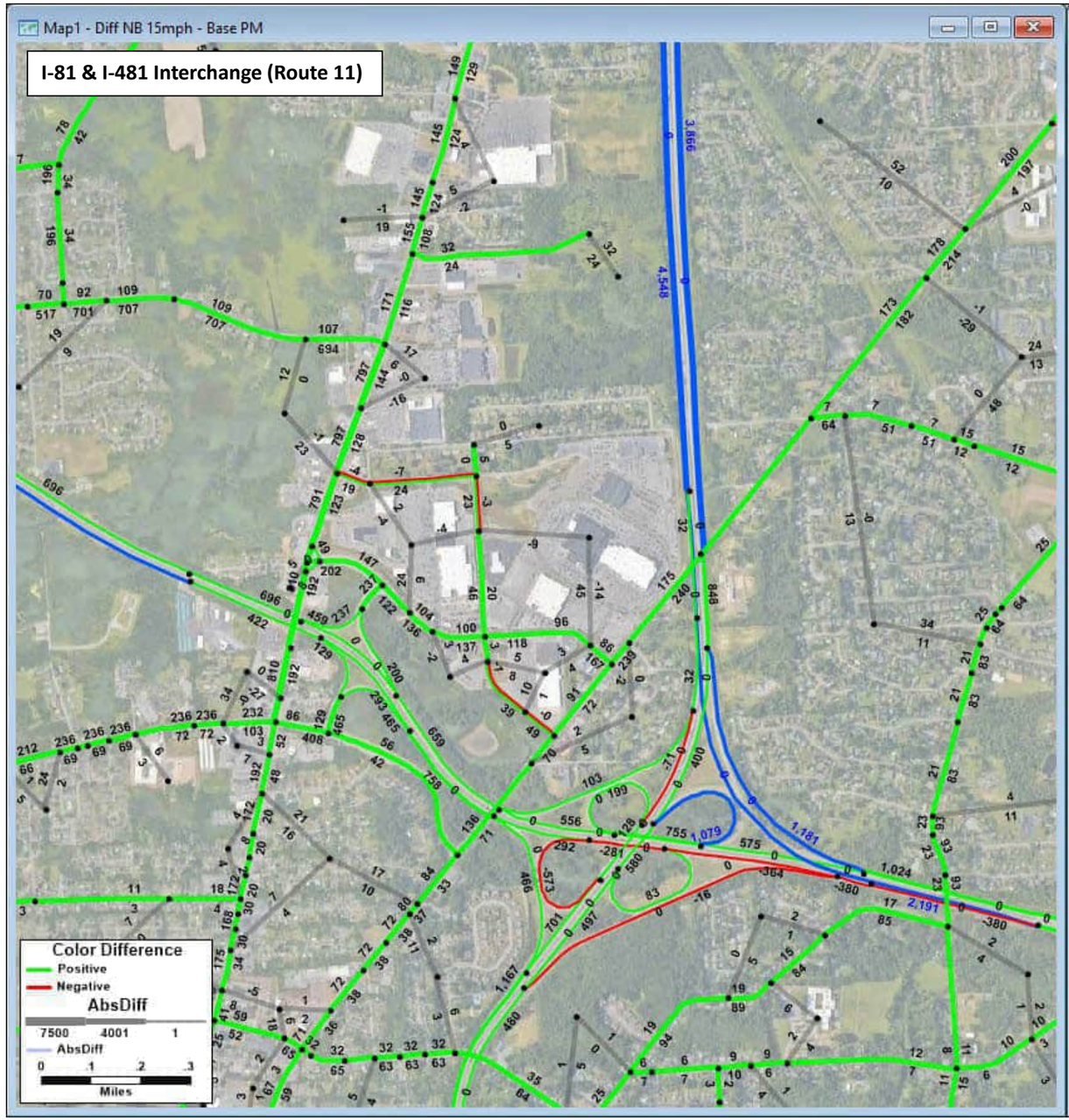




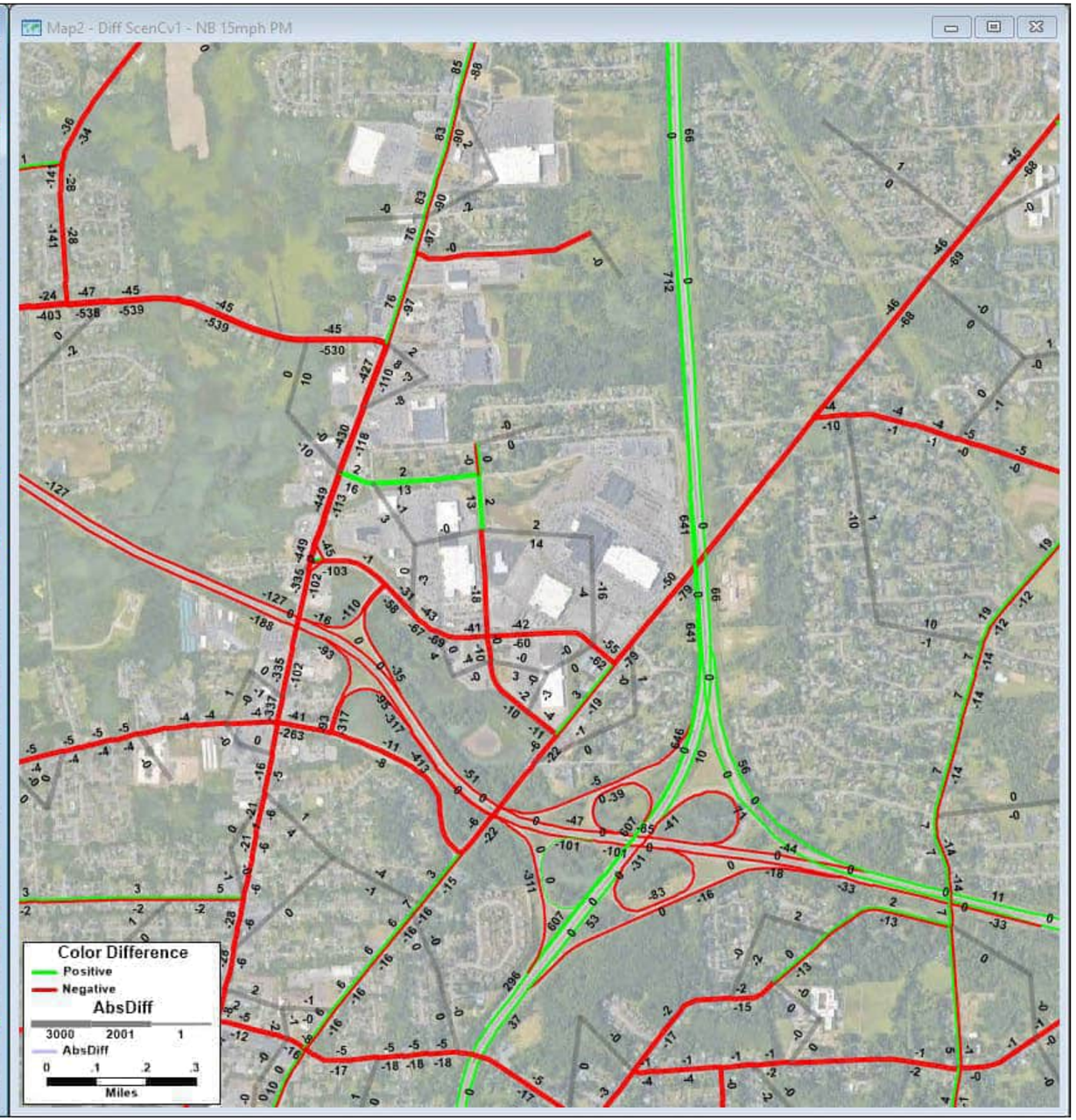
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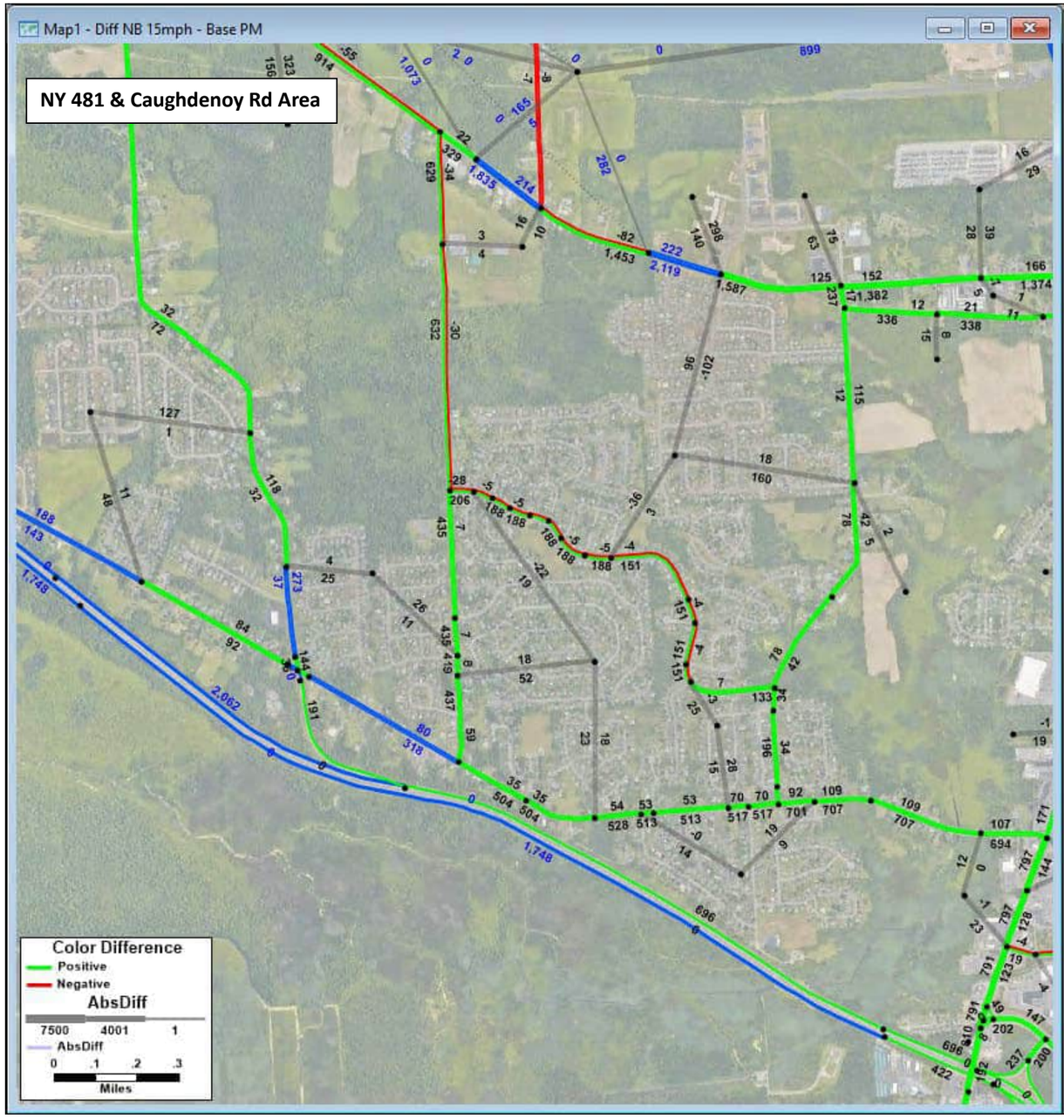


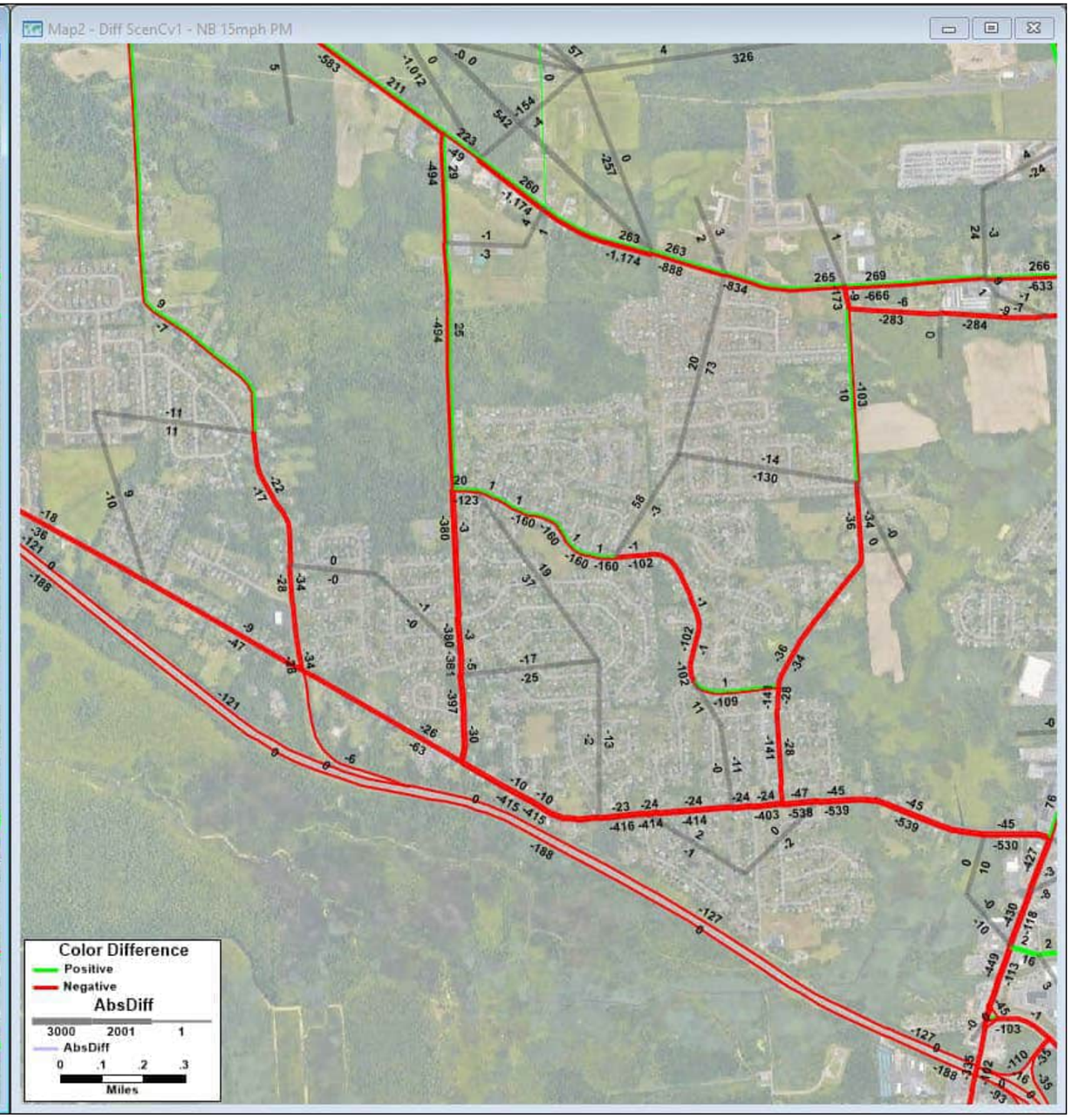
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Source : SMTC Regional Travel Demand Model (1/24/2023)

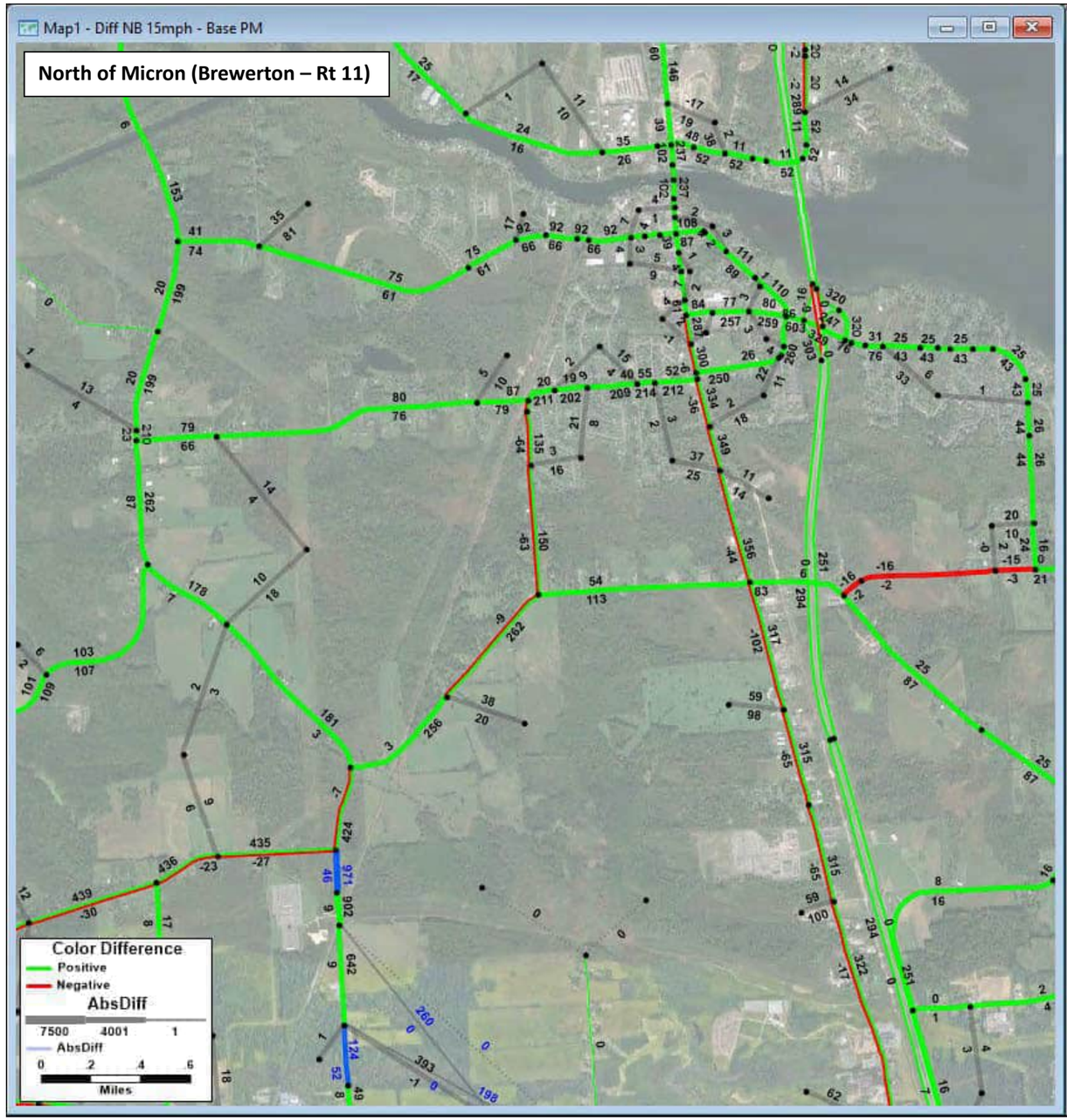


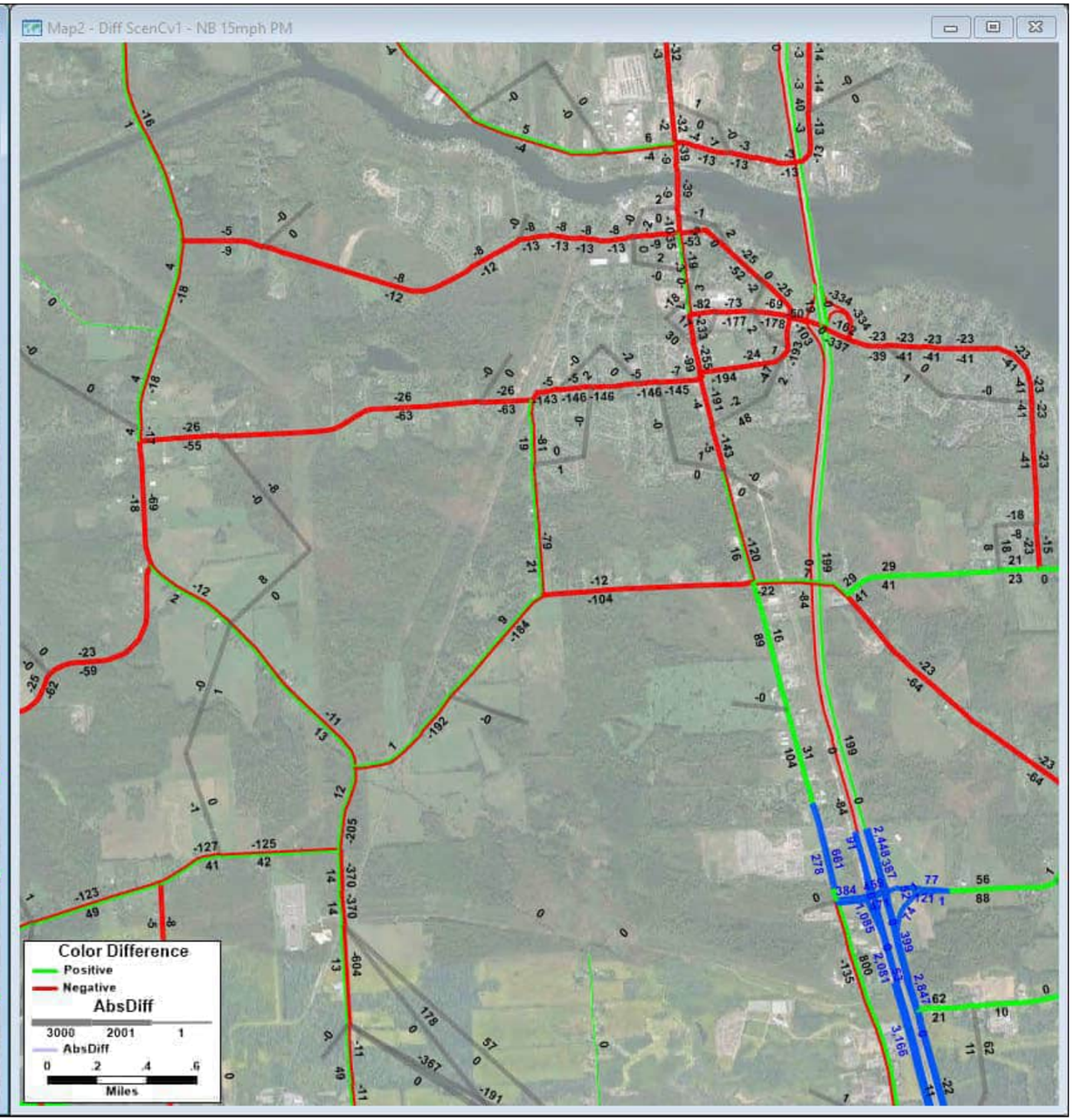


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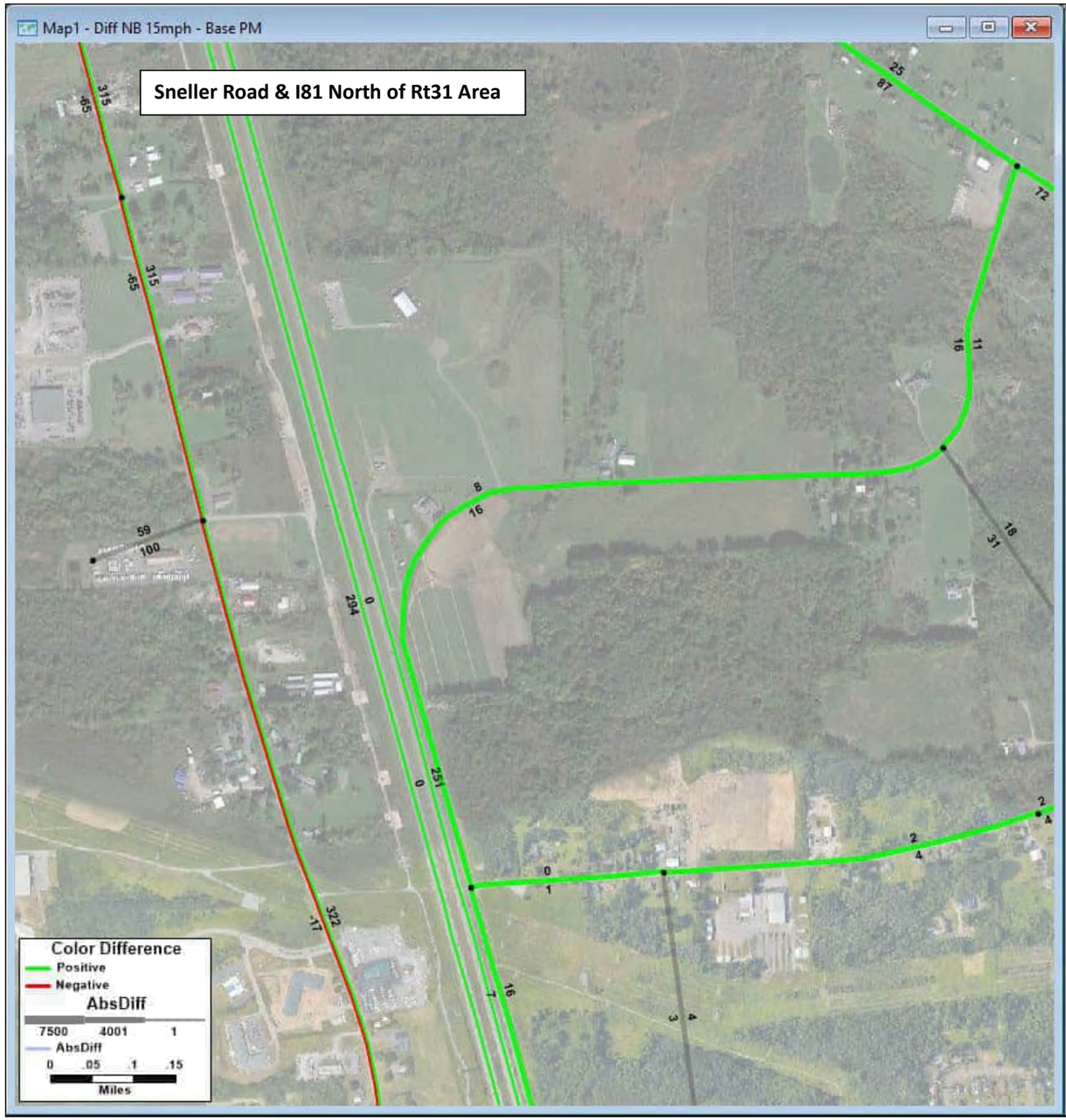


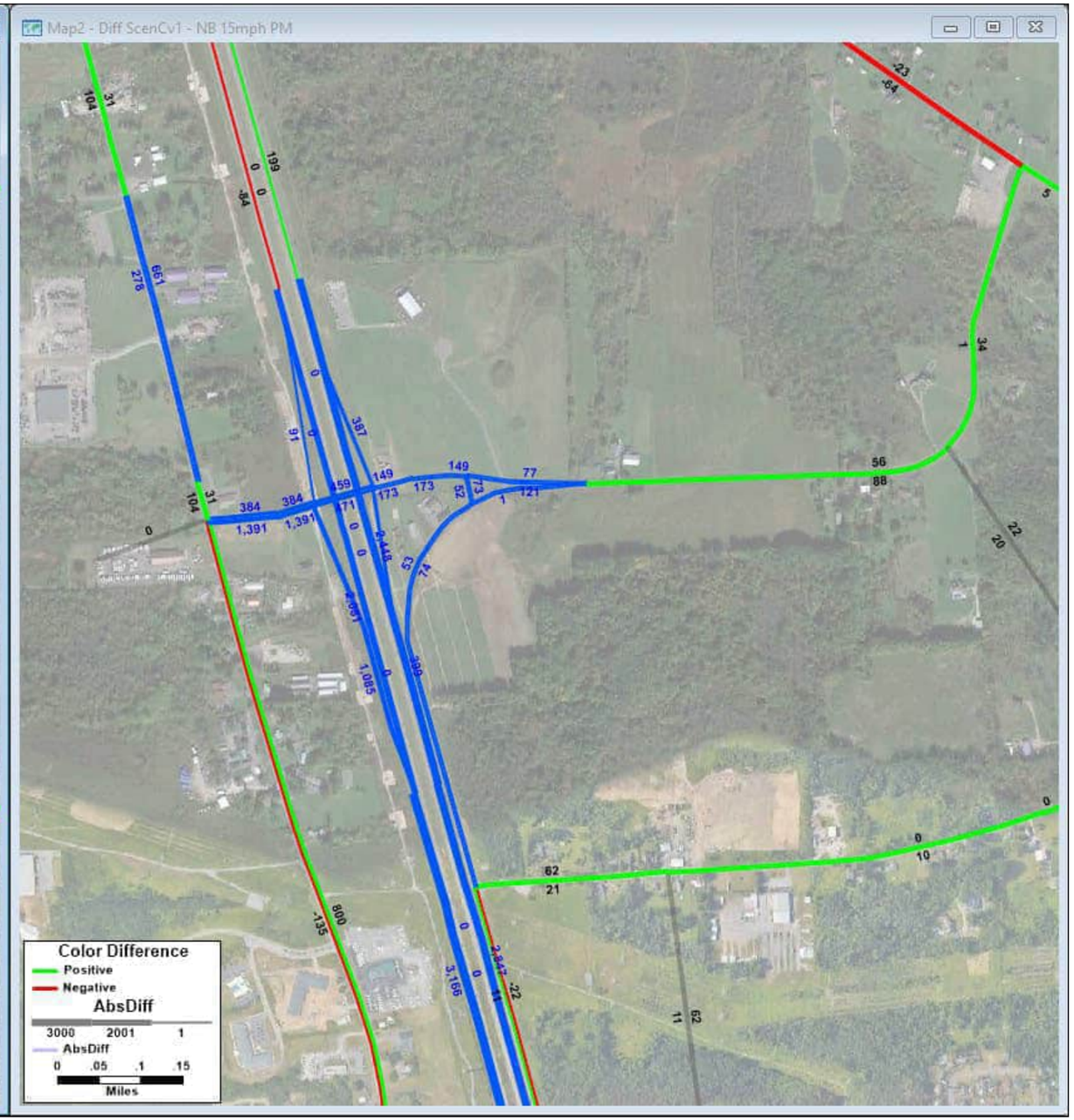


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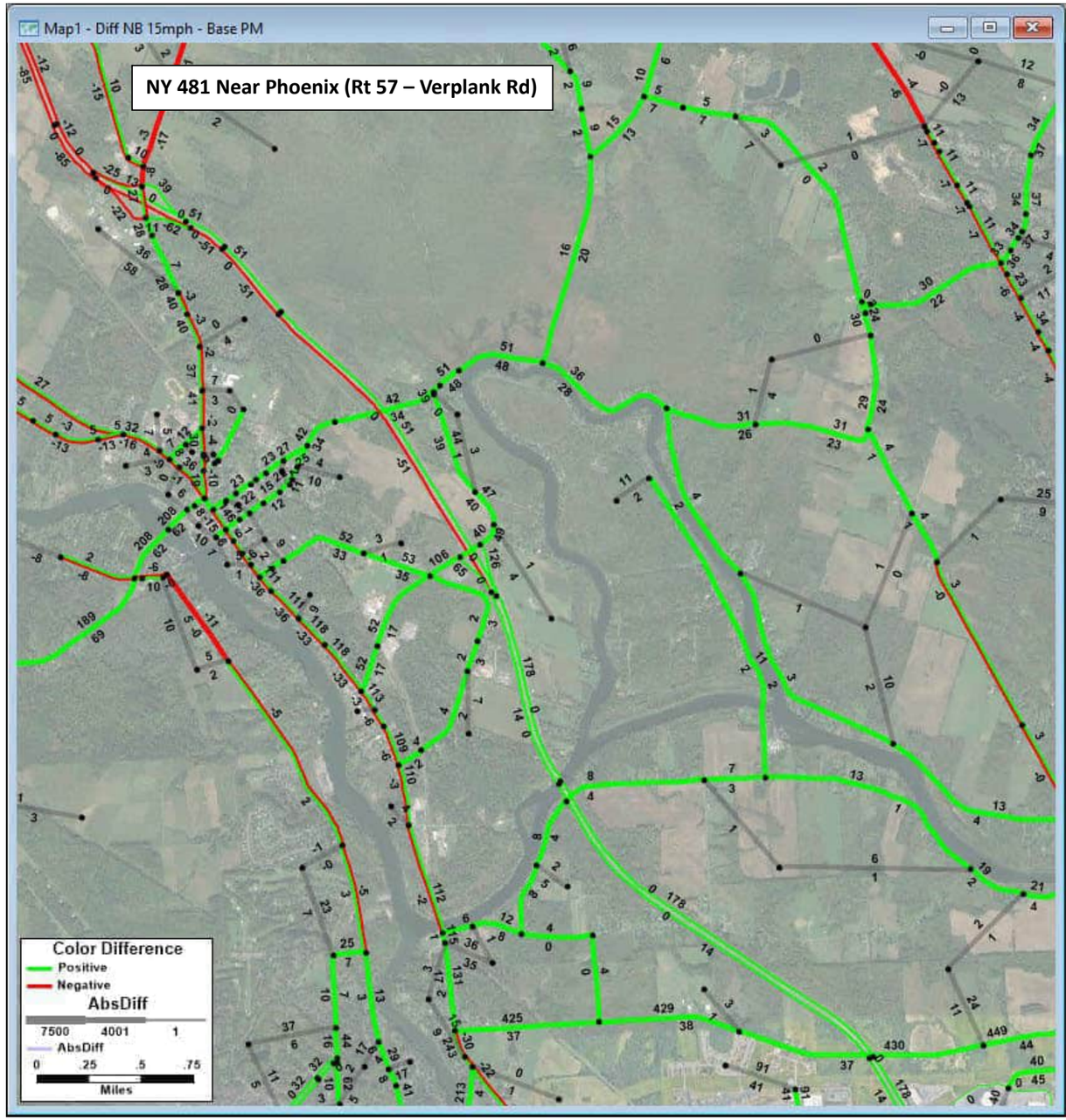


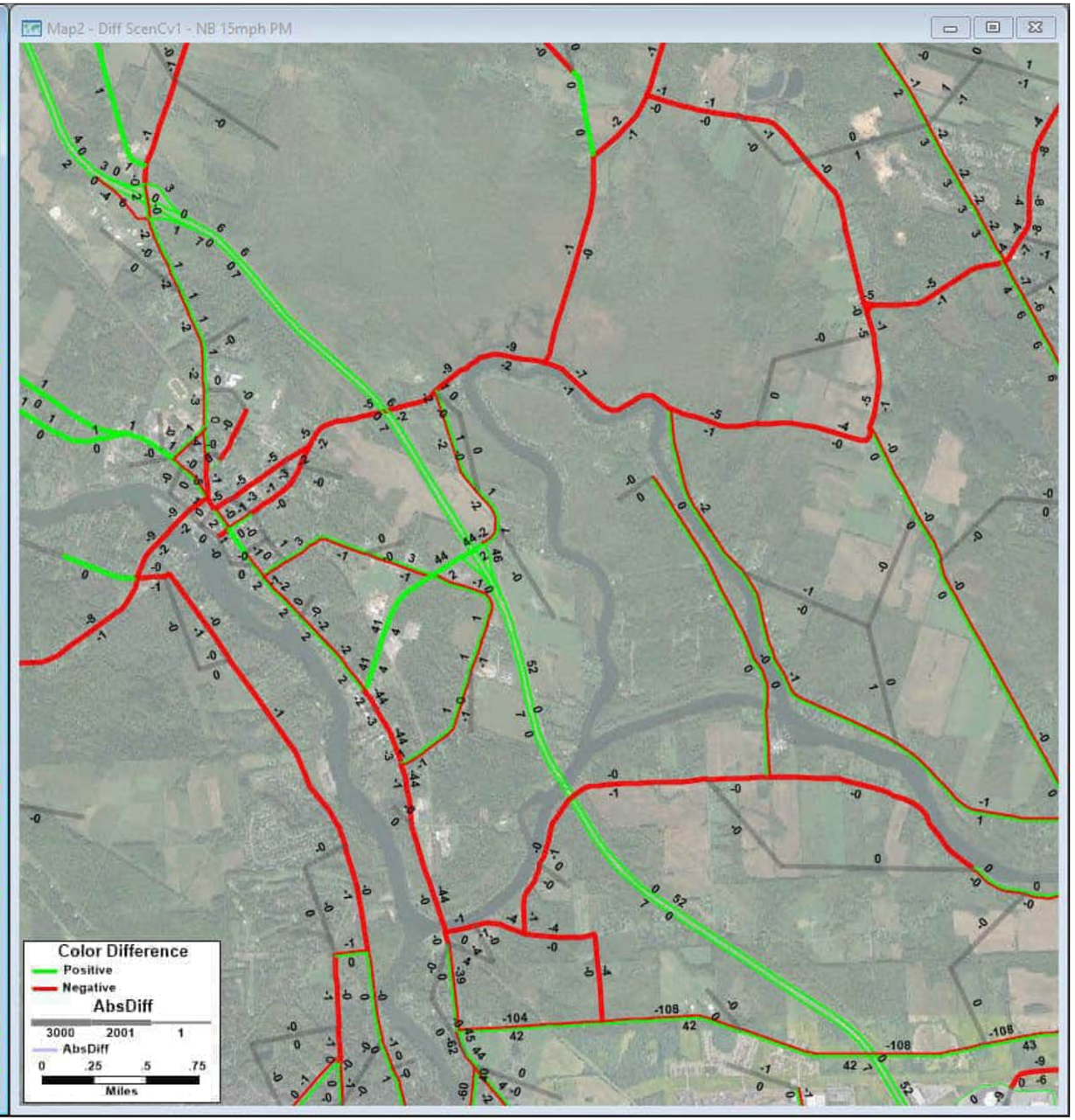


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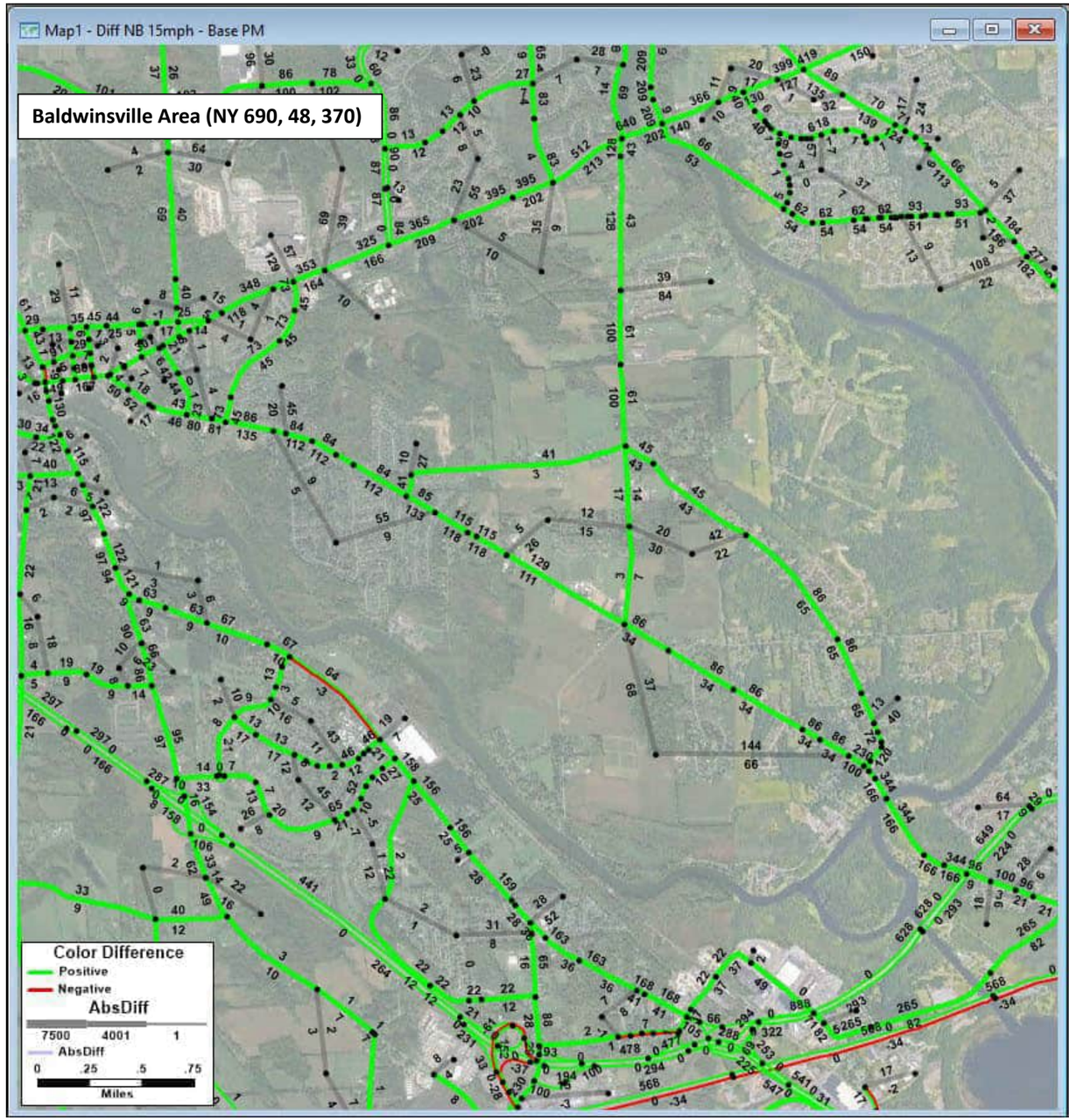




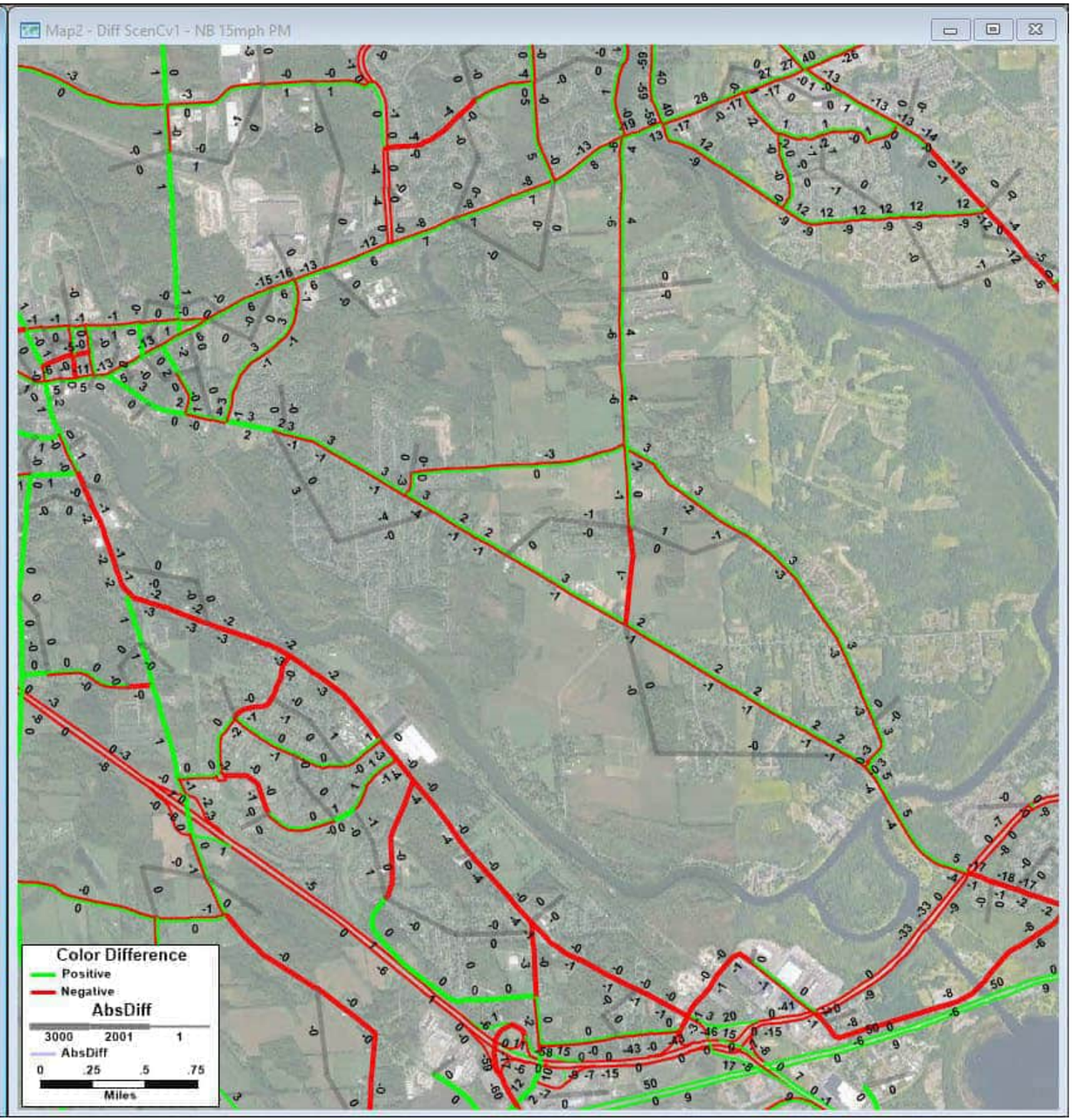
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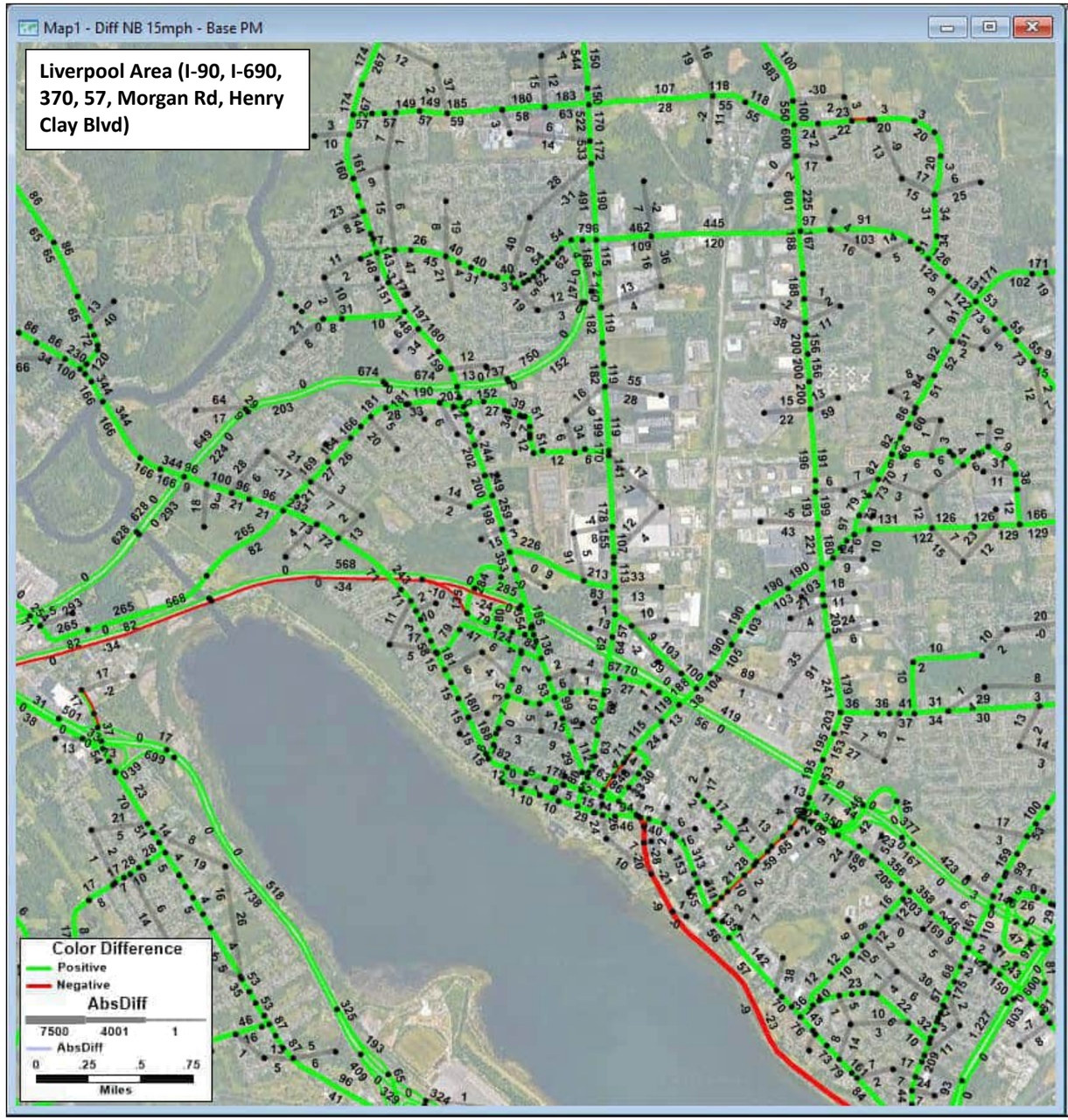


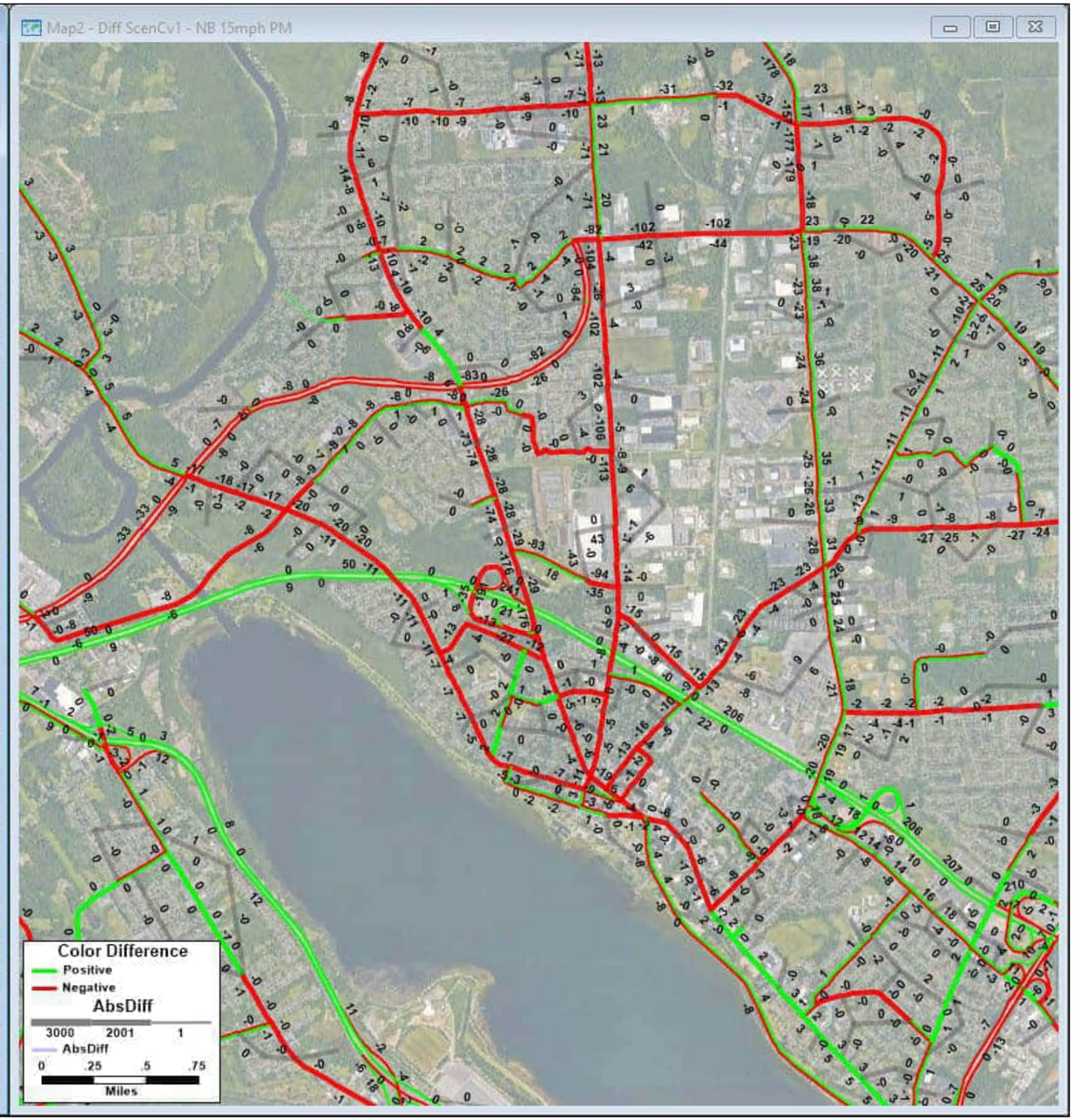
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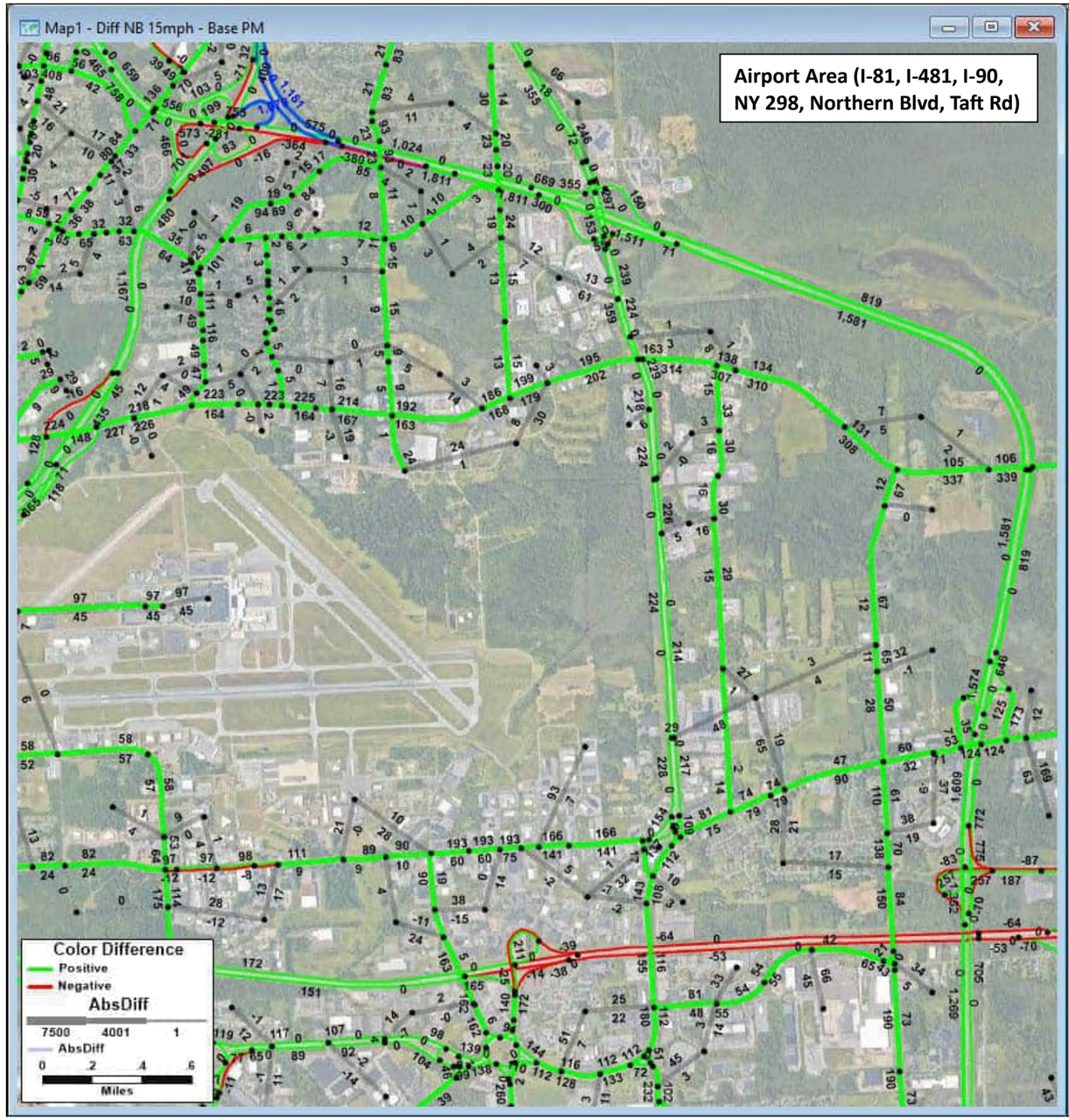




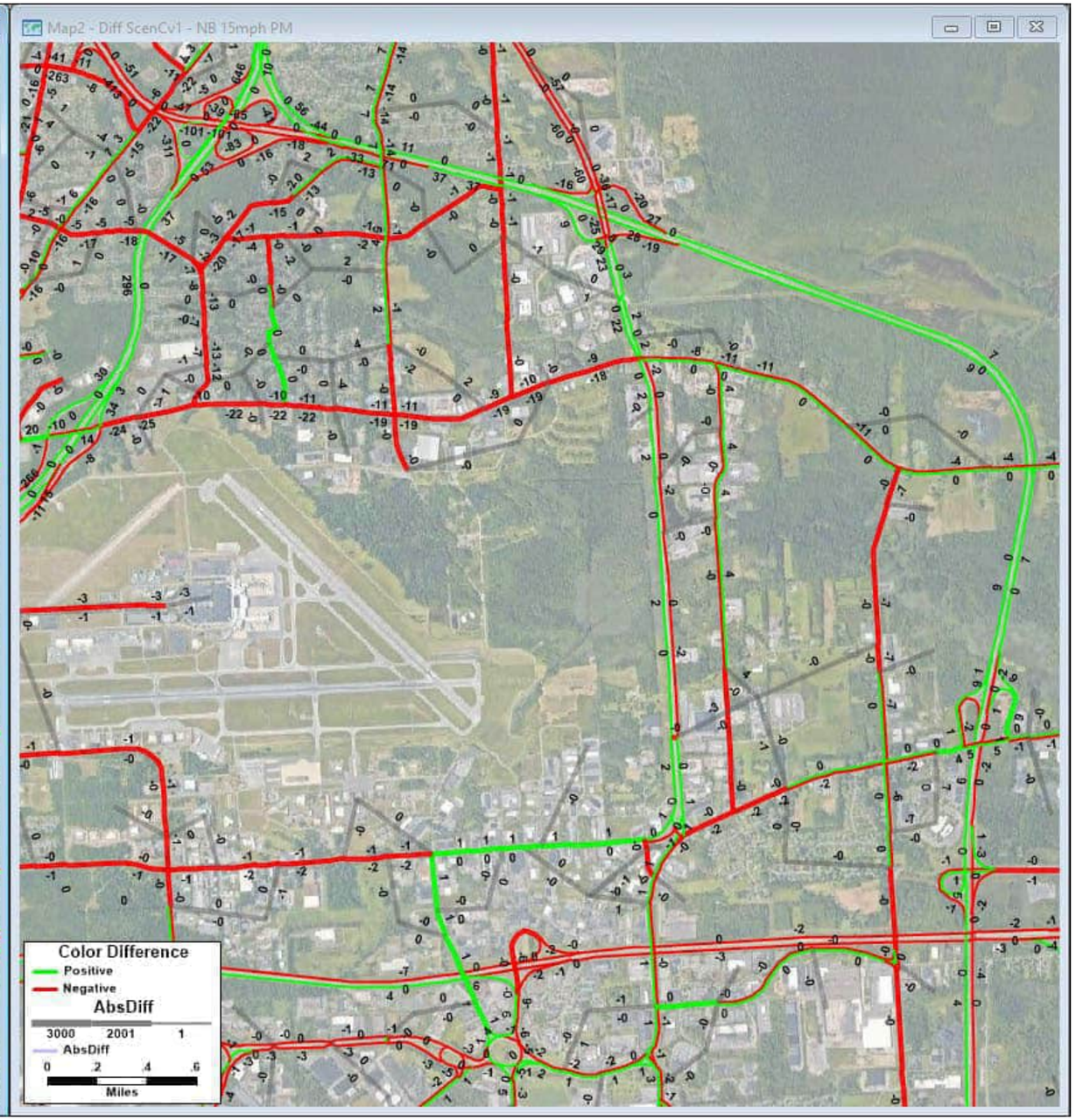
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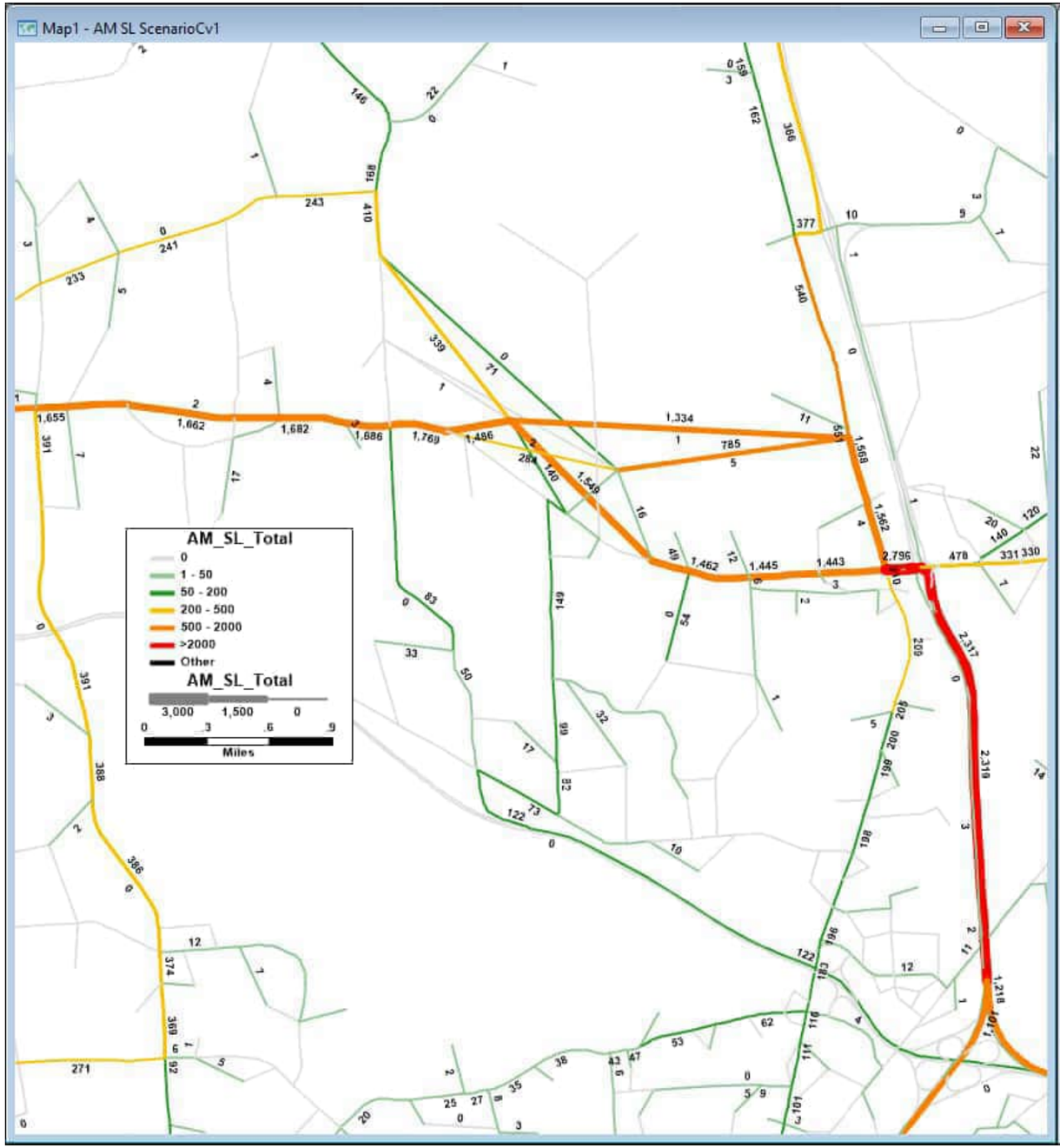
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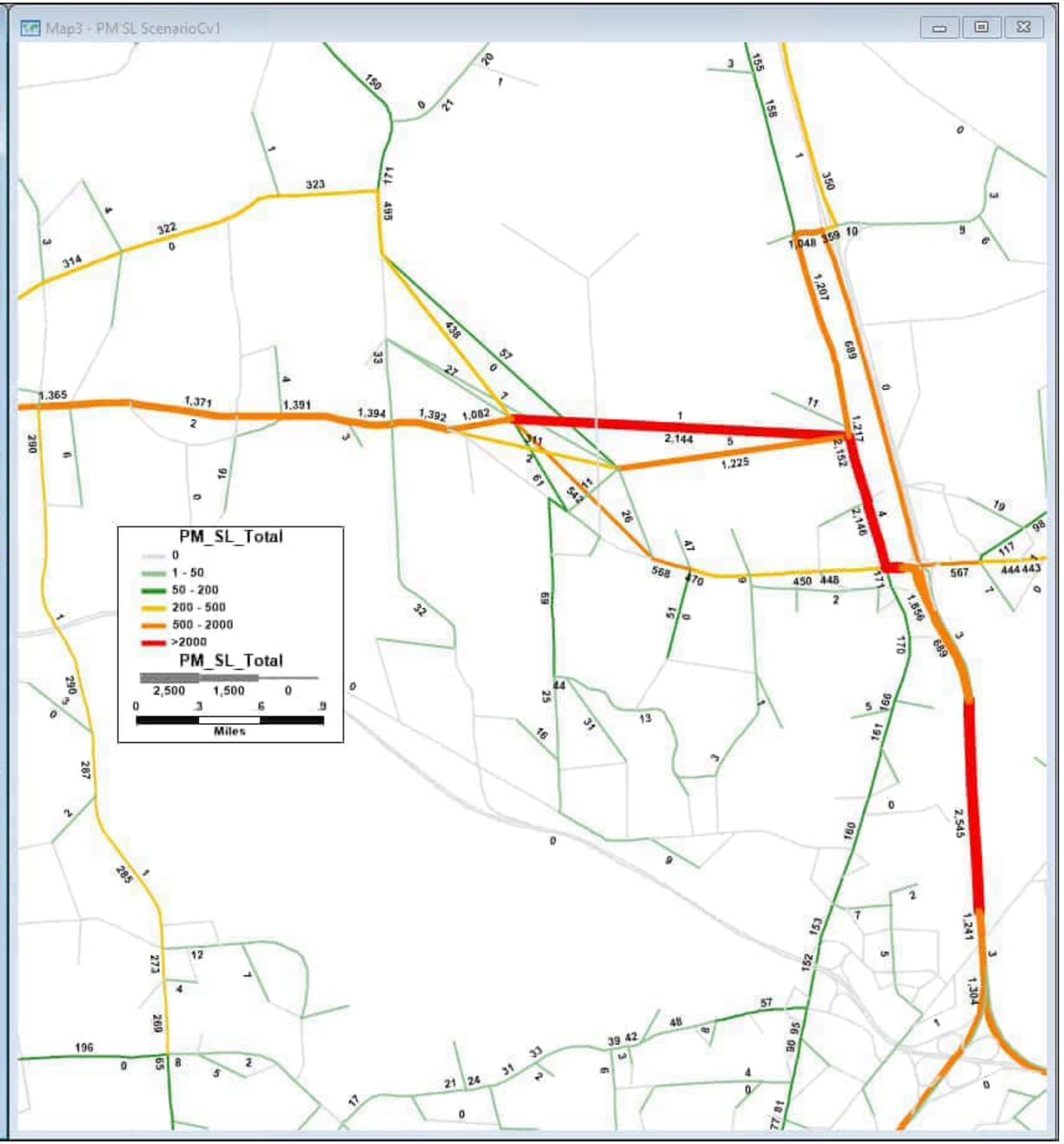
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Source : SMTC Regional Travel Demand Model (1/24/2023)

SMTC Travel Demand Model Results: Scenario C v1 (New I81 Interchange & SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



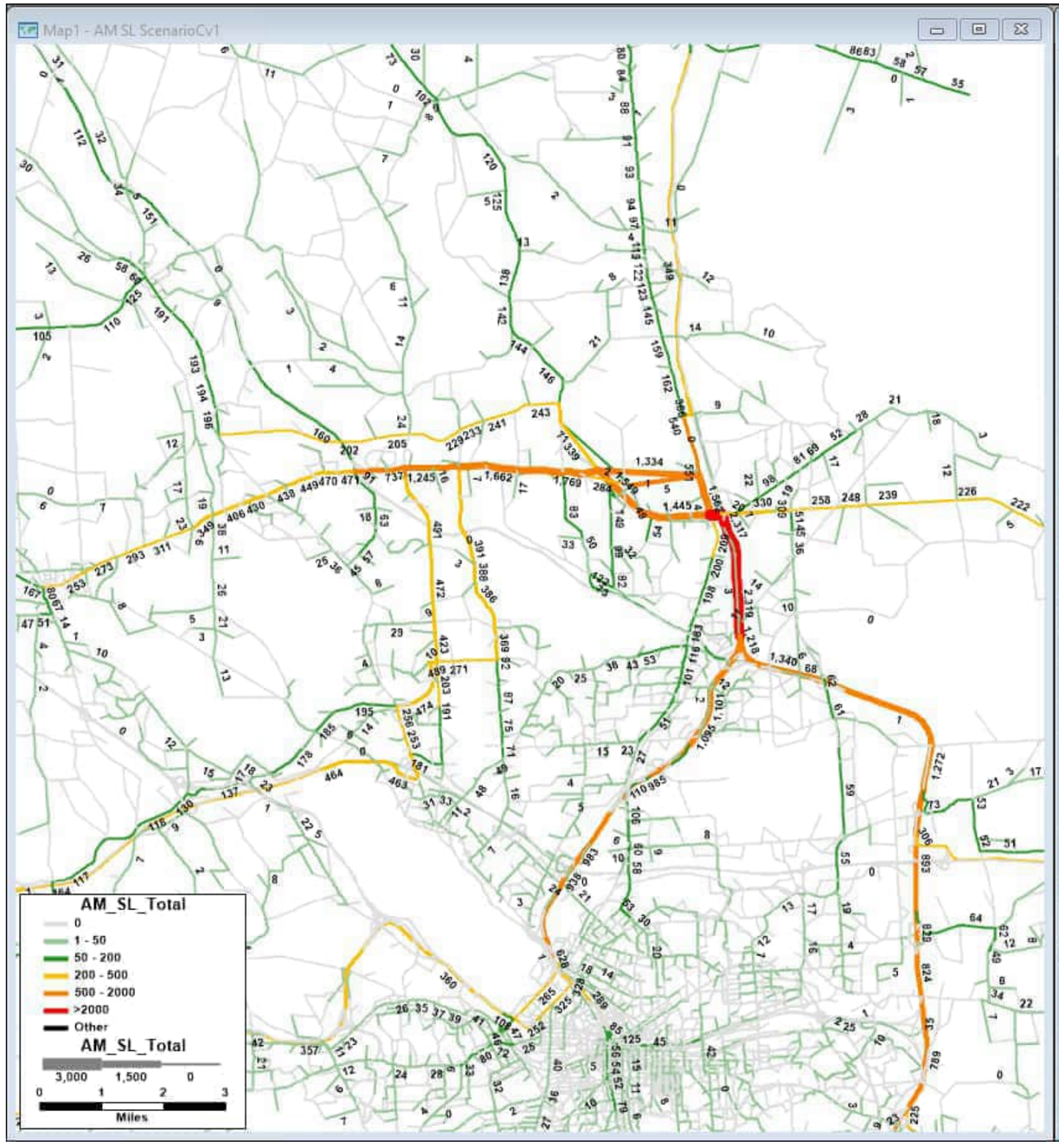
AM Peak Hour



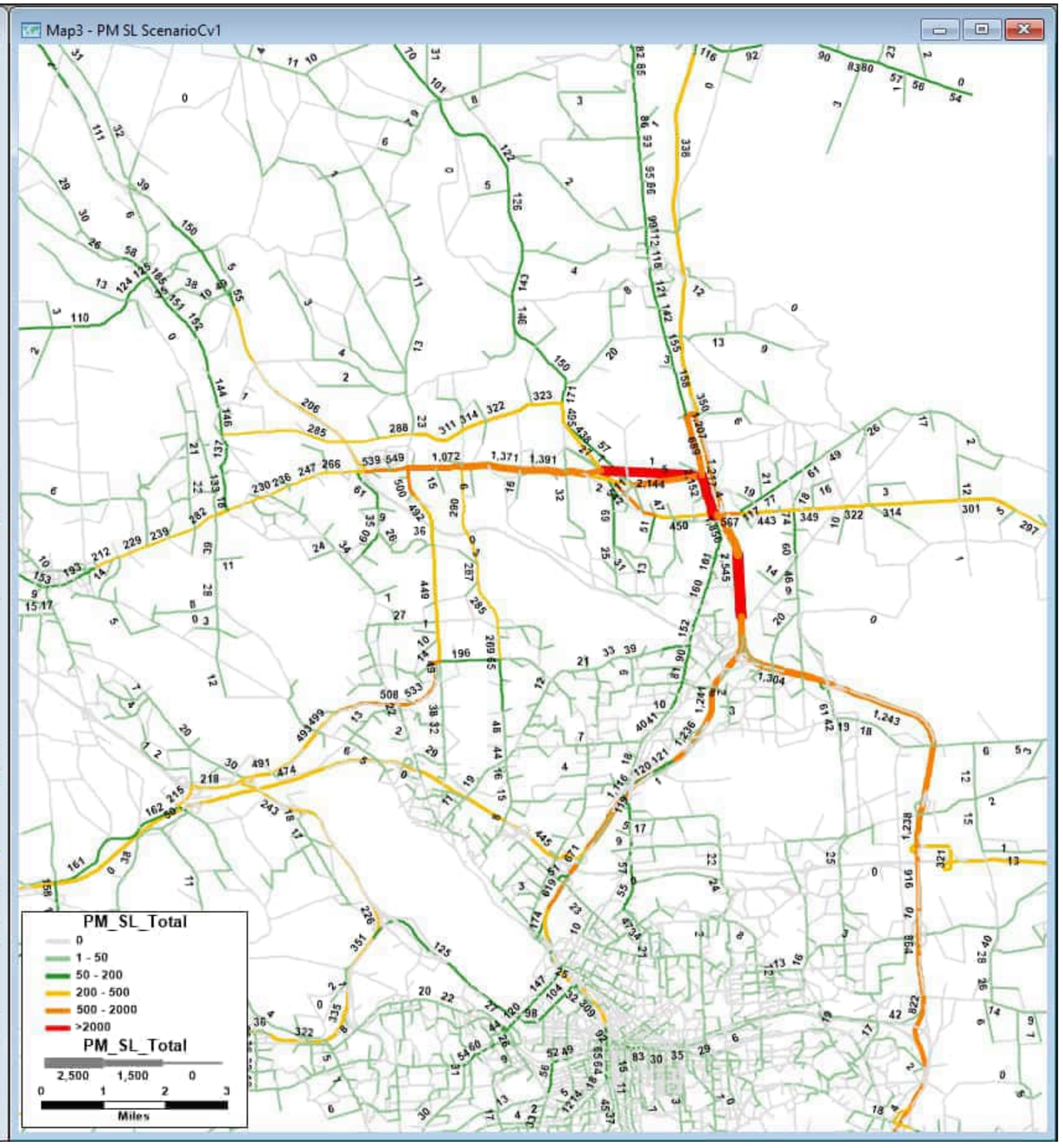
PM Peak Hour

Source : SMTC Regional Travel Demand Model

SMTC Travel Demand Model Results: Scenario C v1 (New I81 Interchange & SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



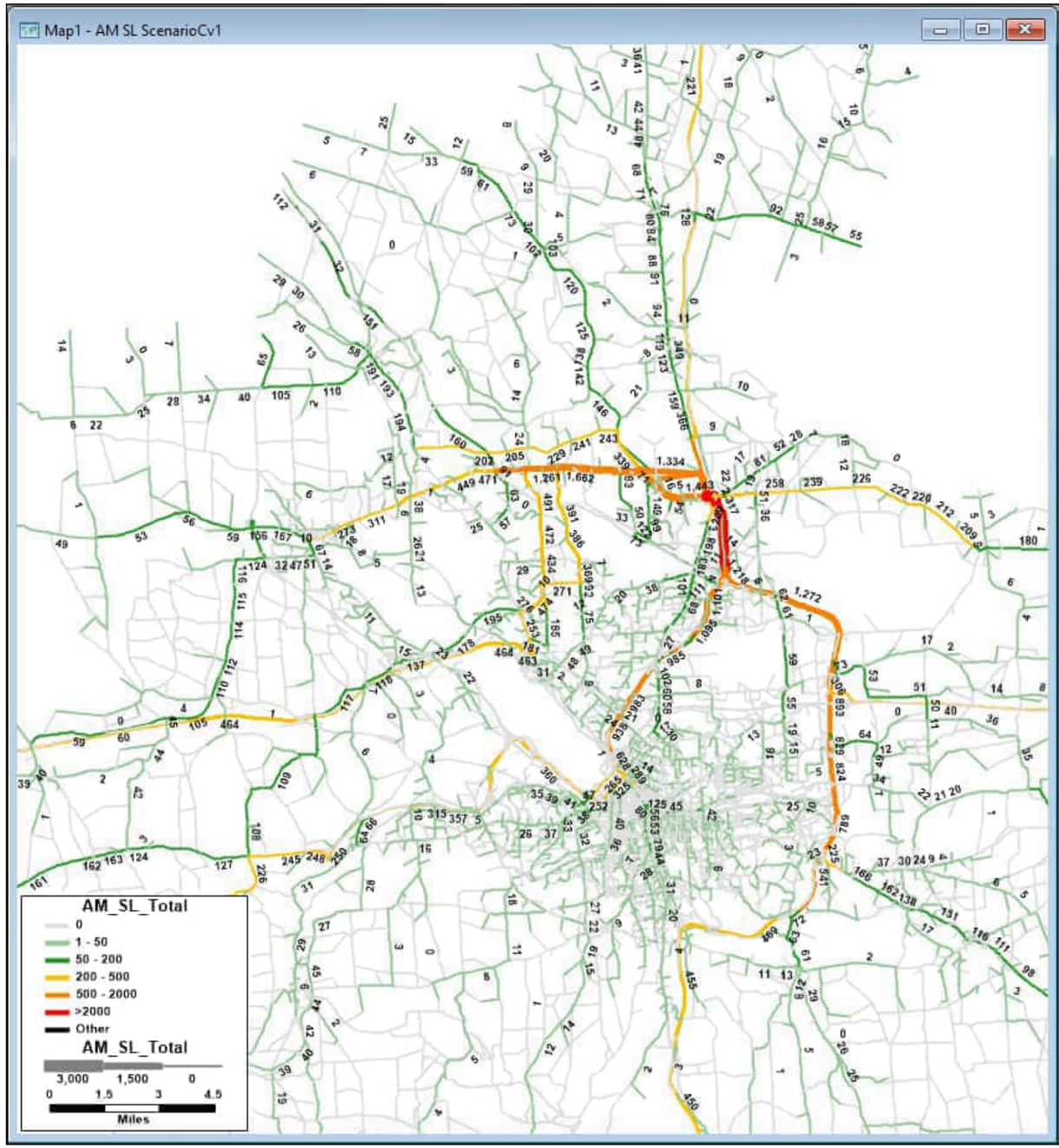
AM Peak Hour



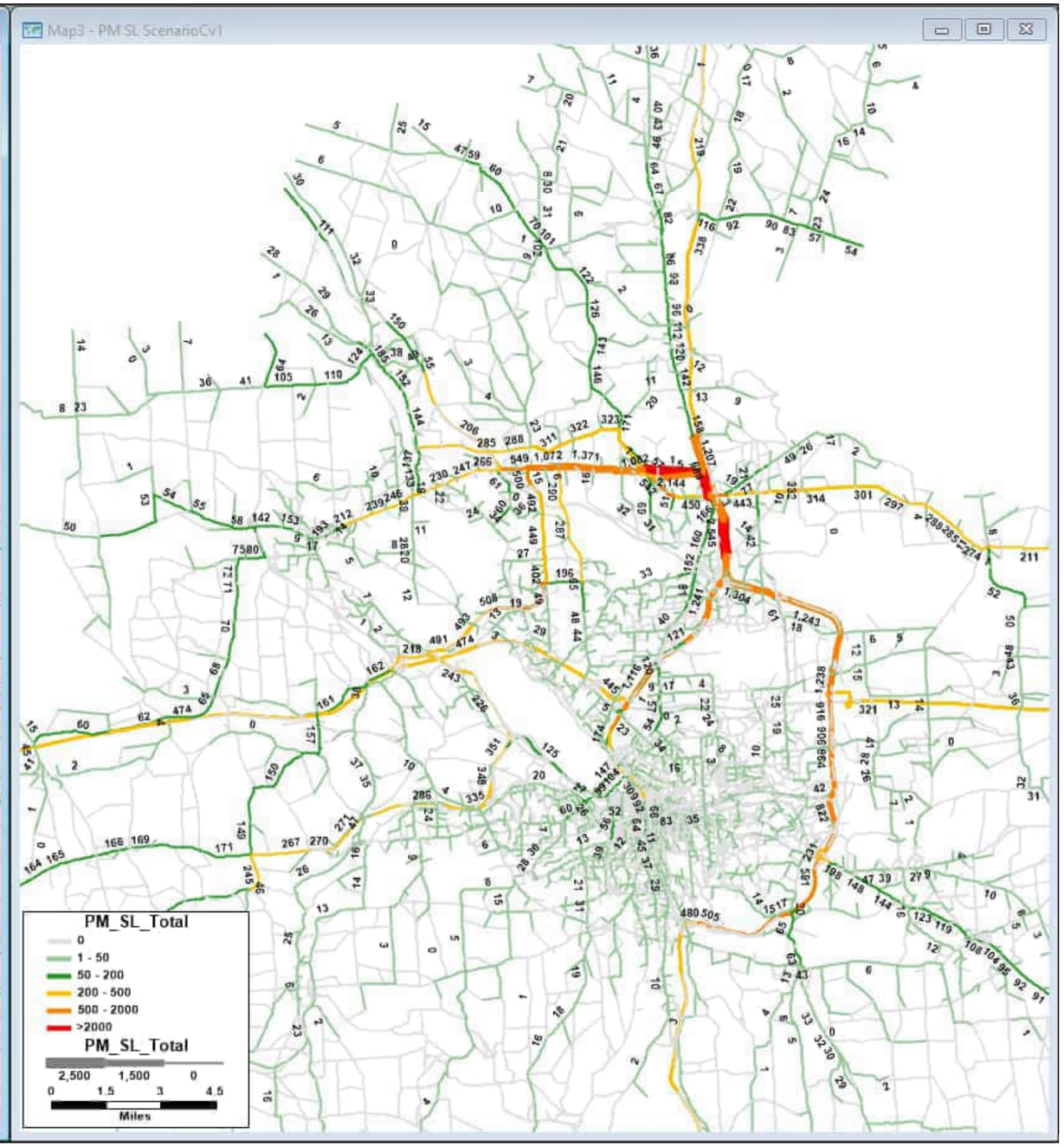
PM Peak Hour

Source : SMTC Regional Travel Demand Model

SMTC Travel Demand Model Results: Scenario C v1 (New I81 Interchange & SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



AM Peak Hour



PM Peak Hour

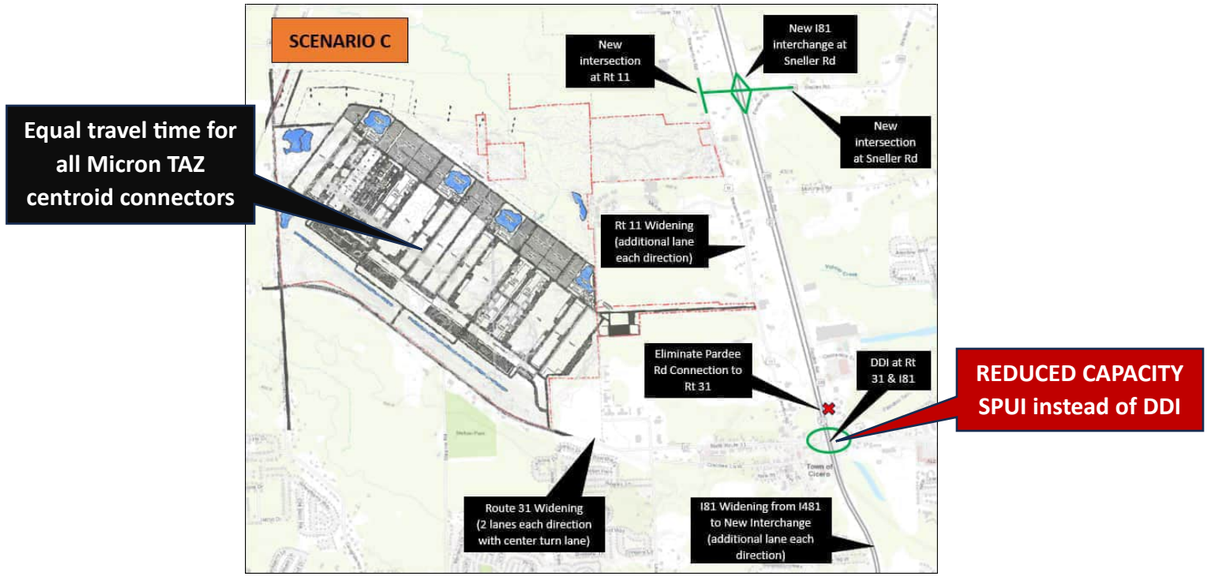
Source : SMTC Regional Travel Demand Model

SMTC Travel Demand Model Results: Scenario C v2 (New I81 Interchange & Reduced Capacity SPUI @ Rt31 & I81) – AM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario C v2** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- RED callouts note the revisions made to Scenario C



The graphic to the right is an example of what is included in this document →

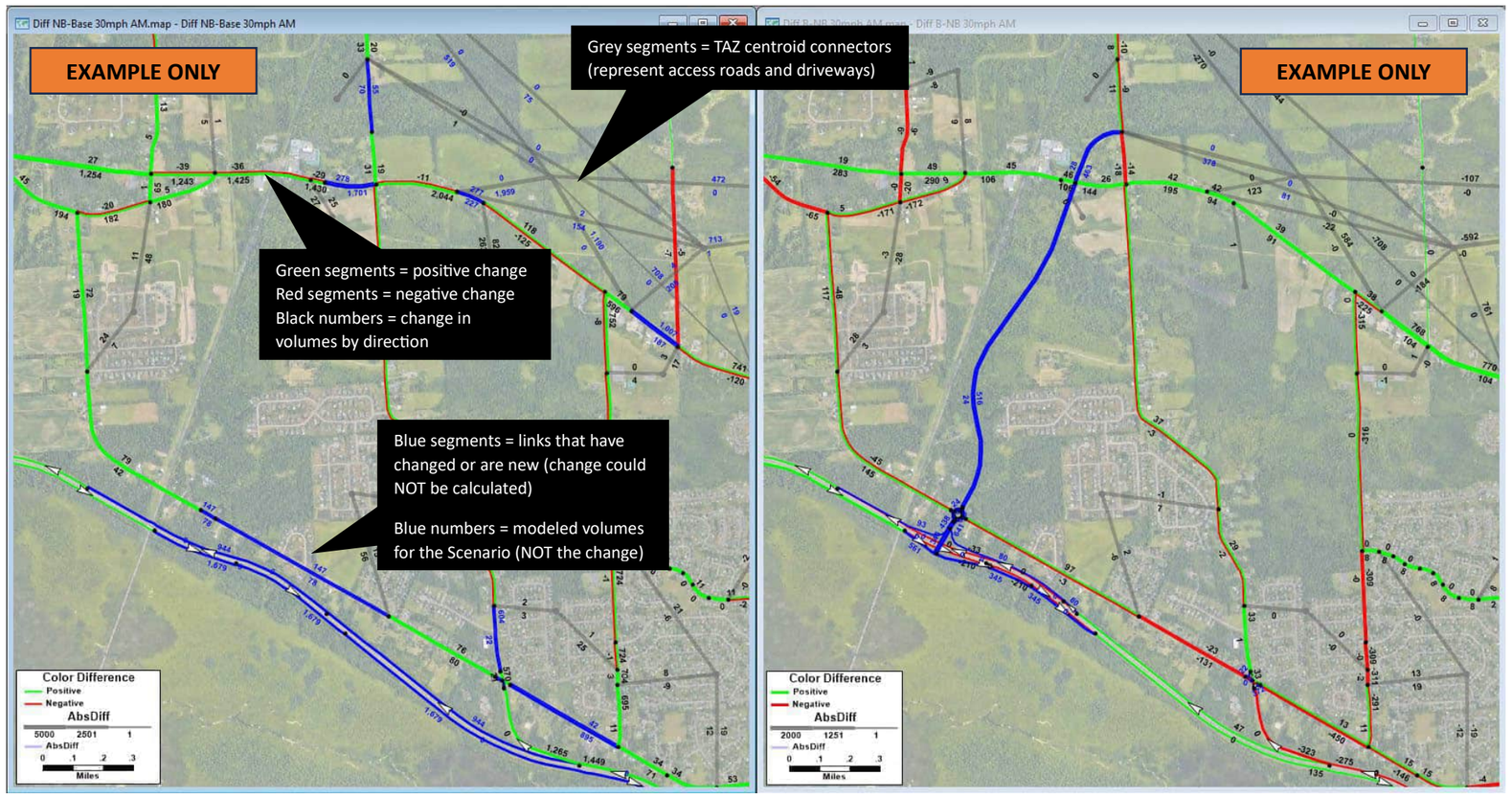
The map on the left displays the change in **AM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB AM Volumes less 2020 AM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **AM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build AM Volumes less 2040 NB AM volumes**).

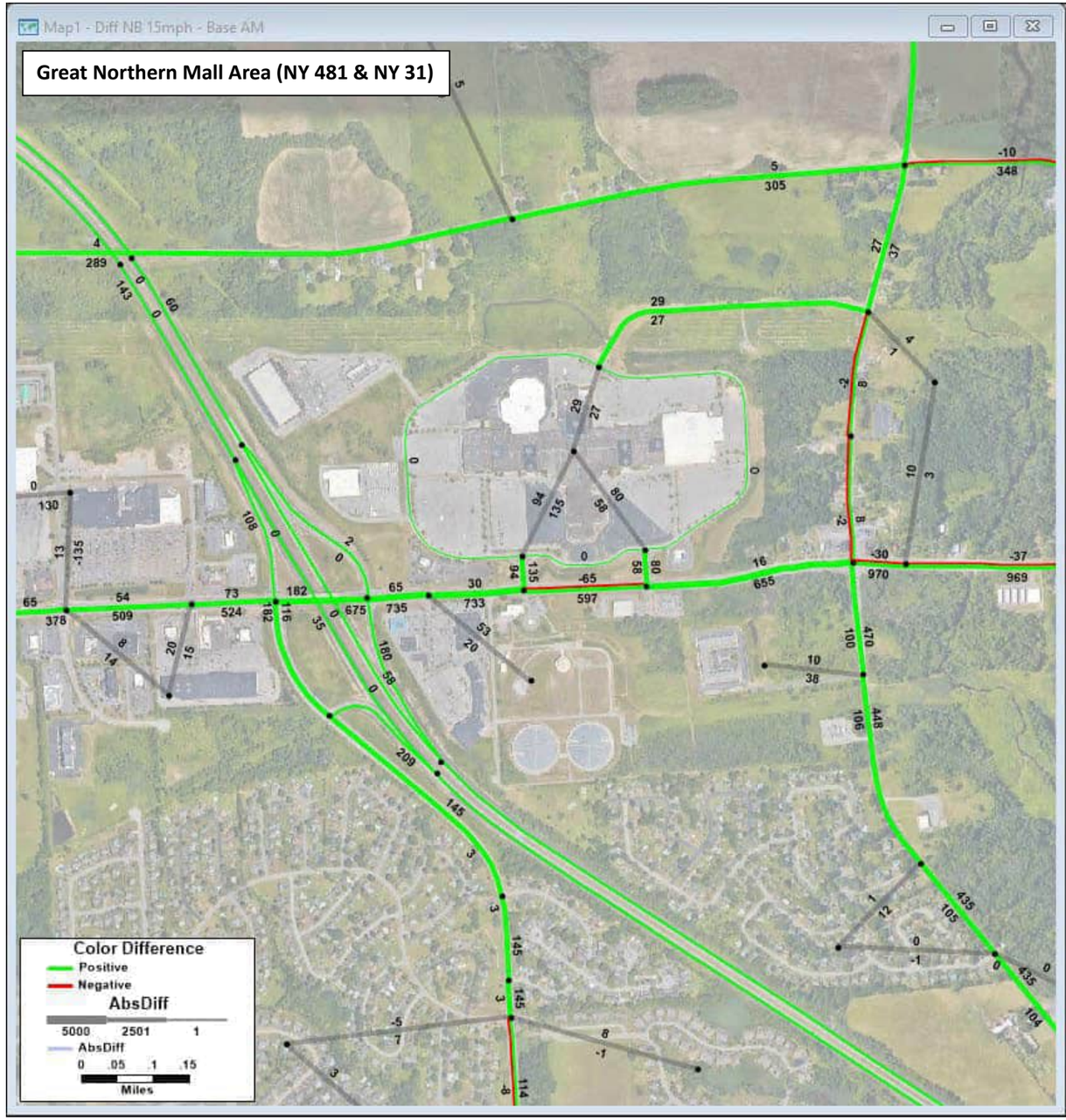
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

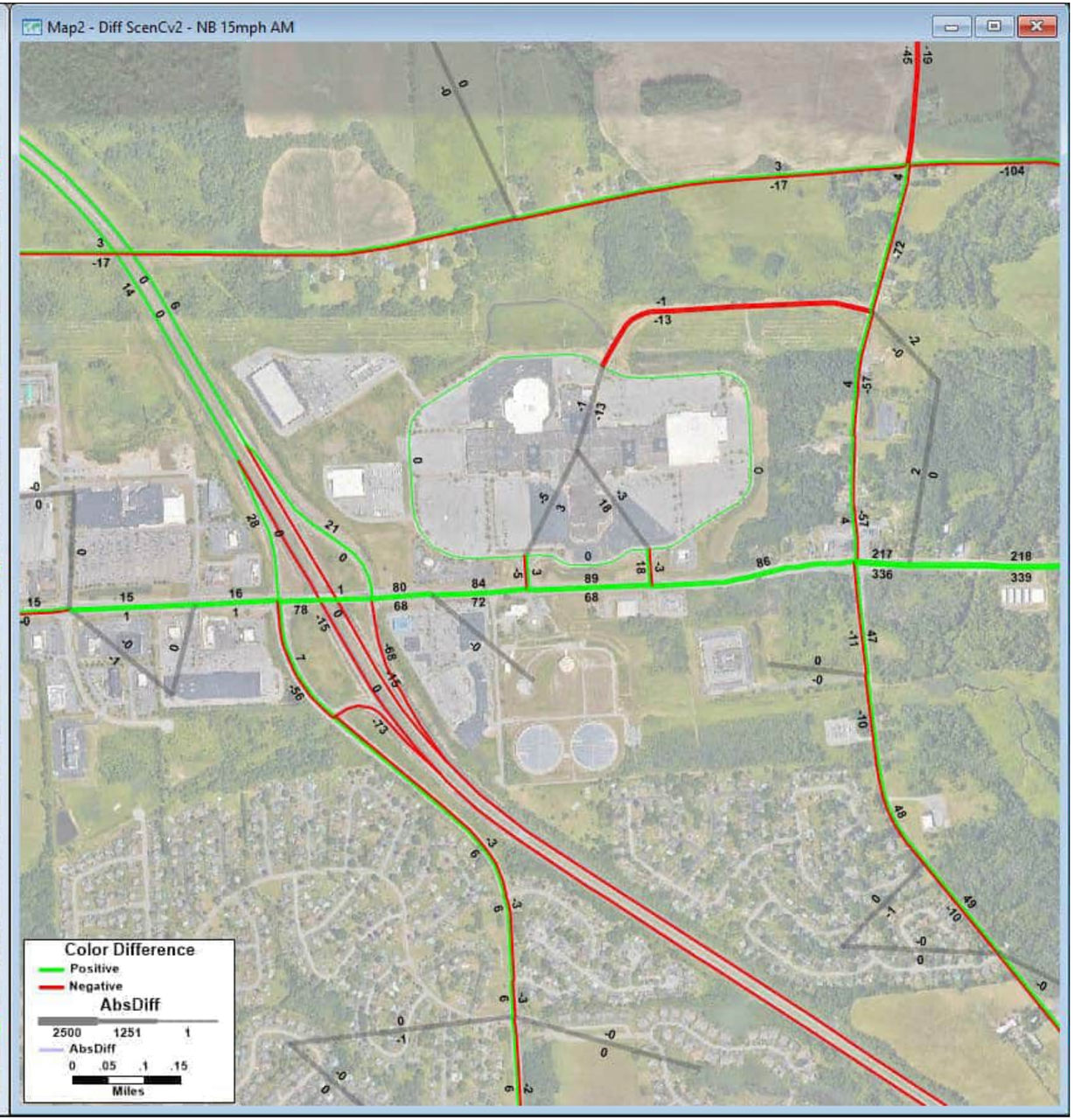
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/24/2023)

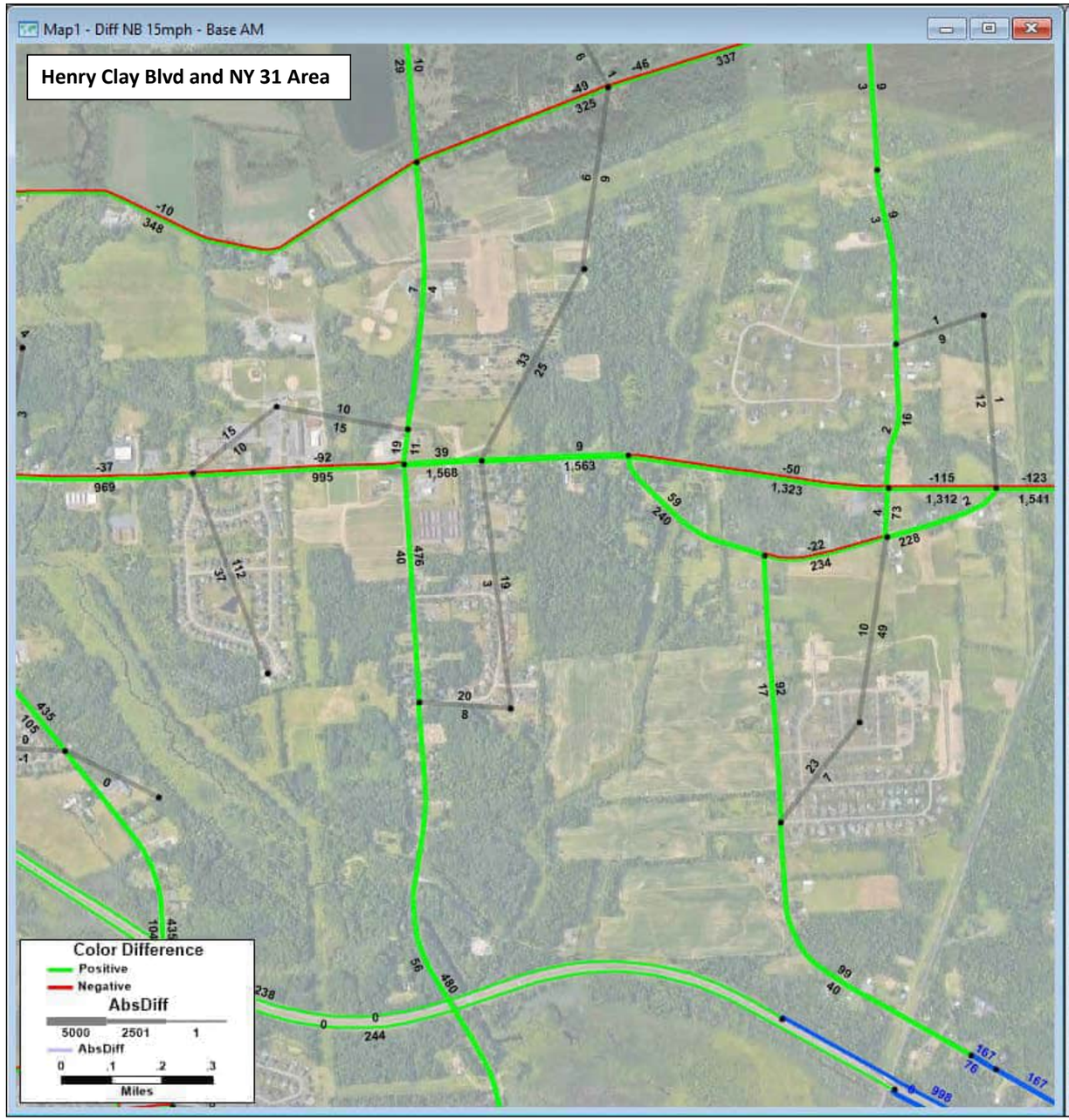


2040 No Build AM Volumes - 2020 Existing Conditions AM Volumes = Change in AM Volumes
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Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

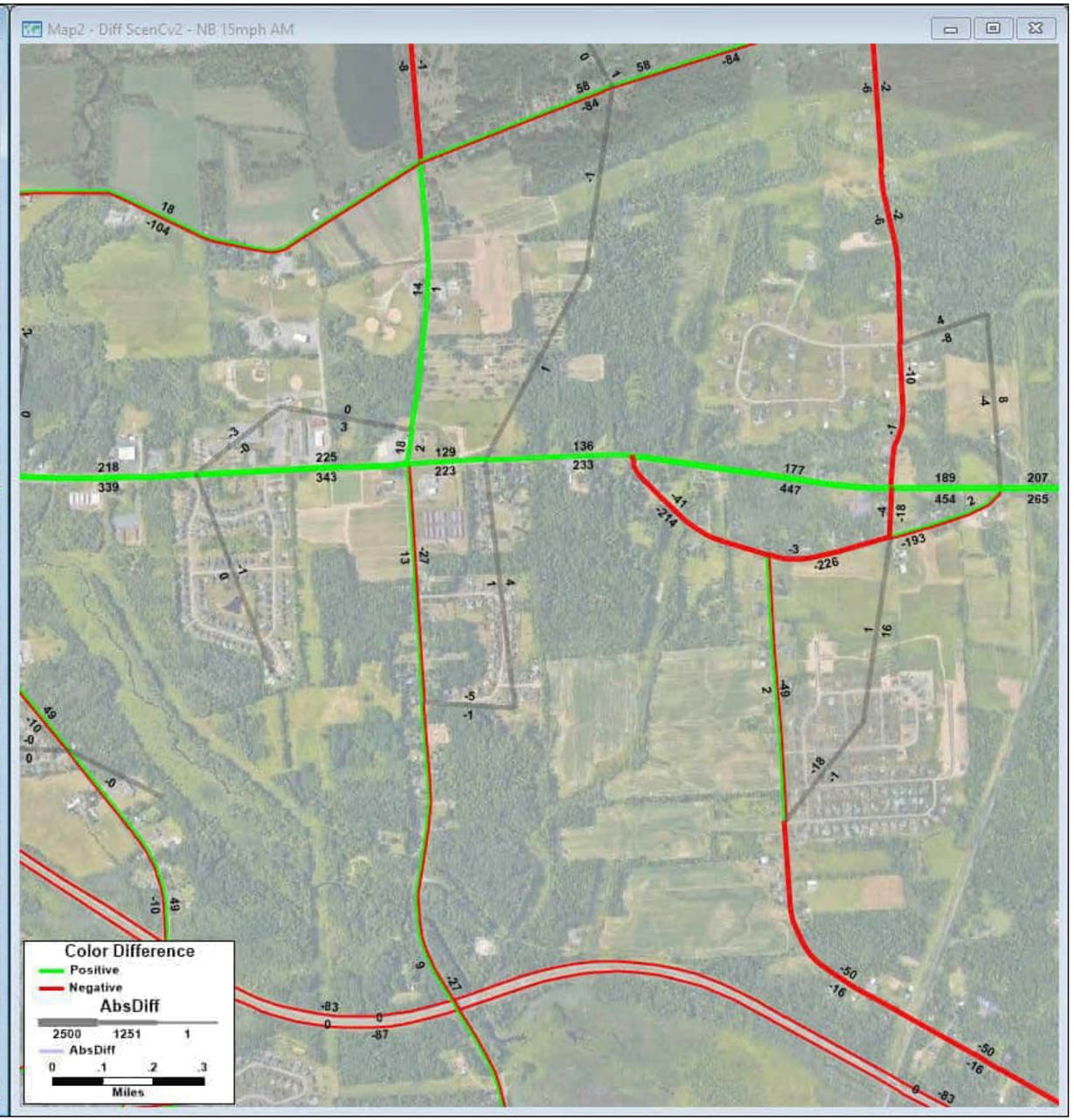


2040 Scenario C v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
Build: All future land use and anticipated transportation projects with Scenario C network changes
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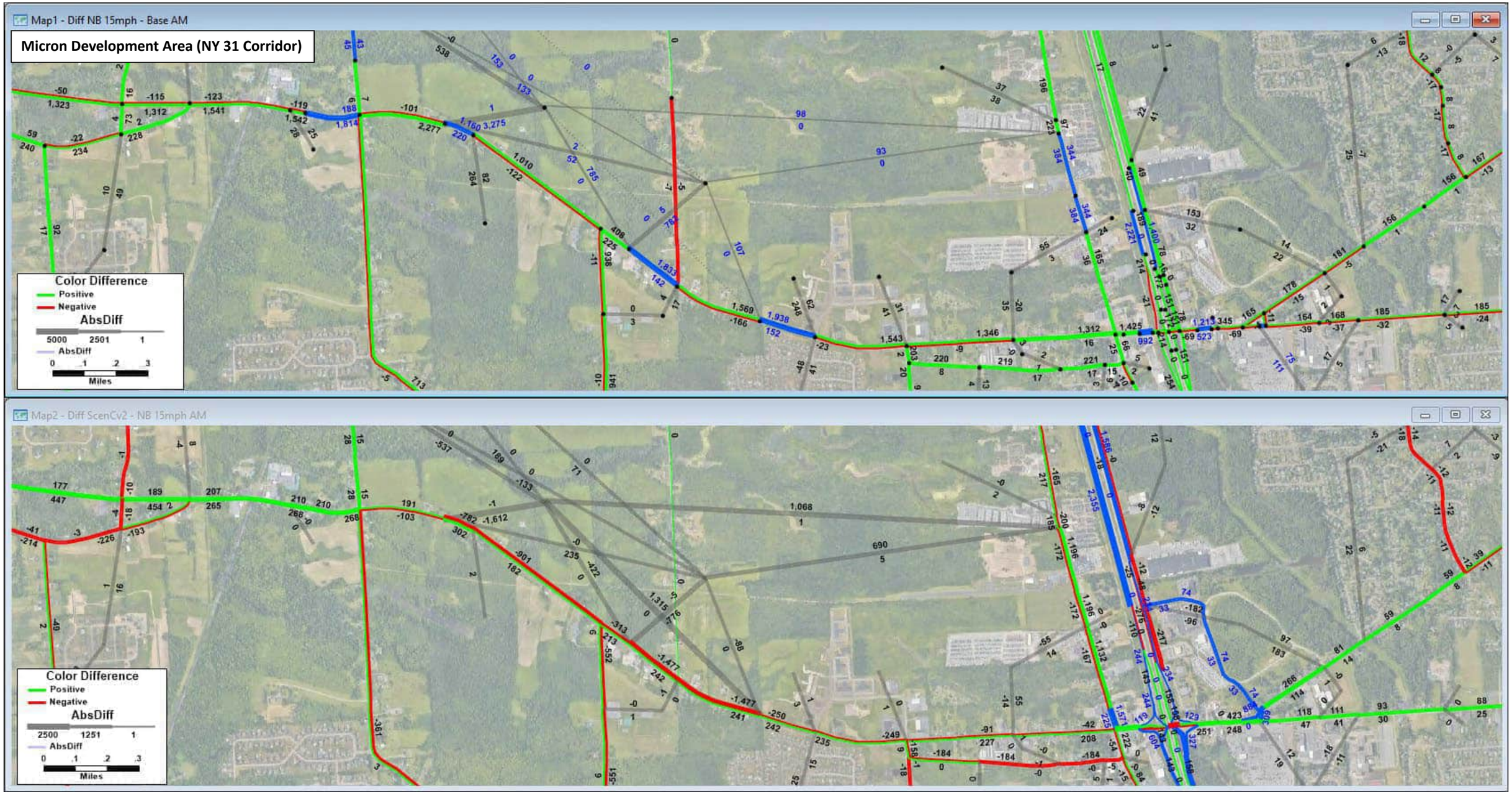


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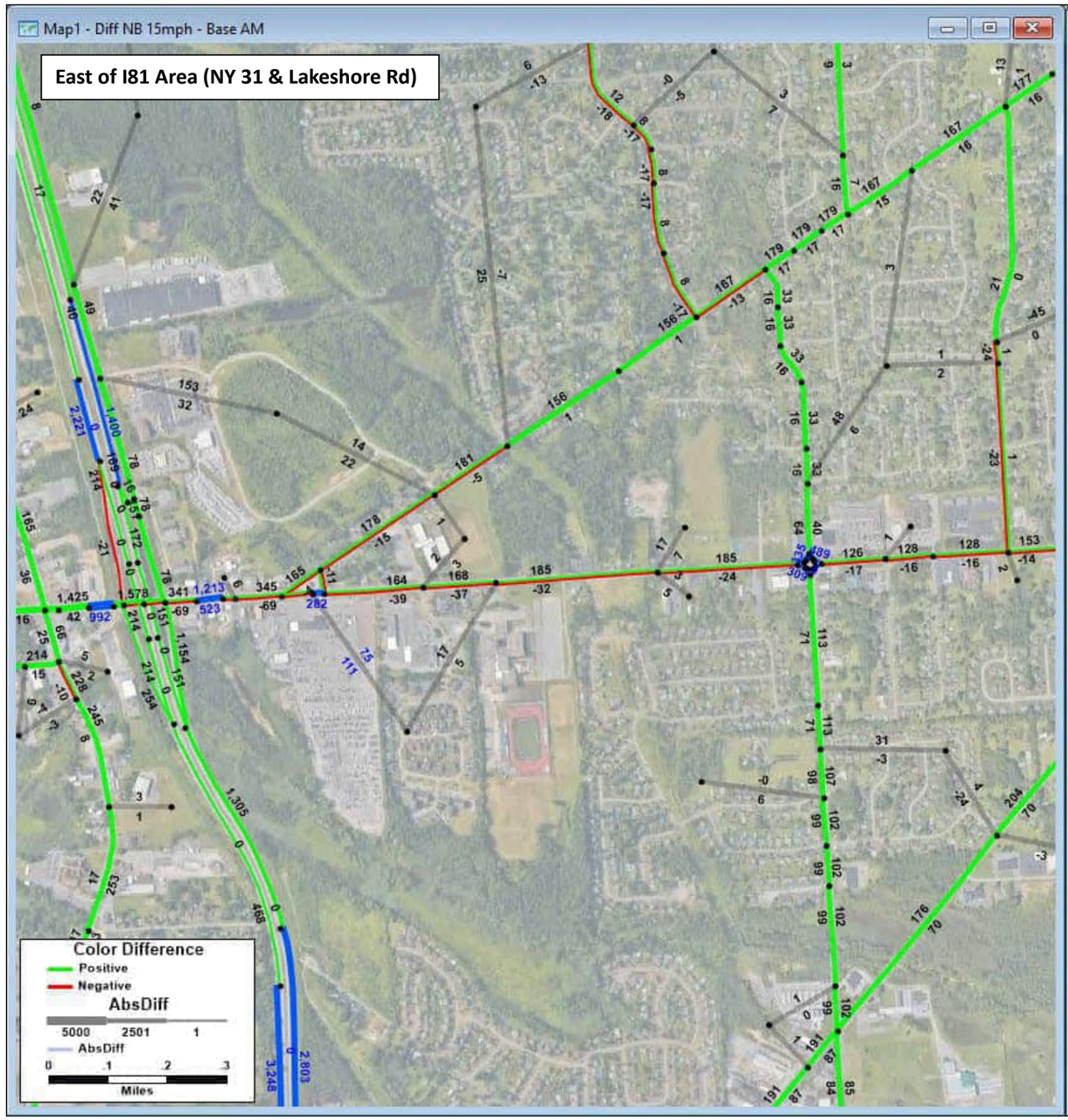
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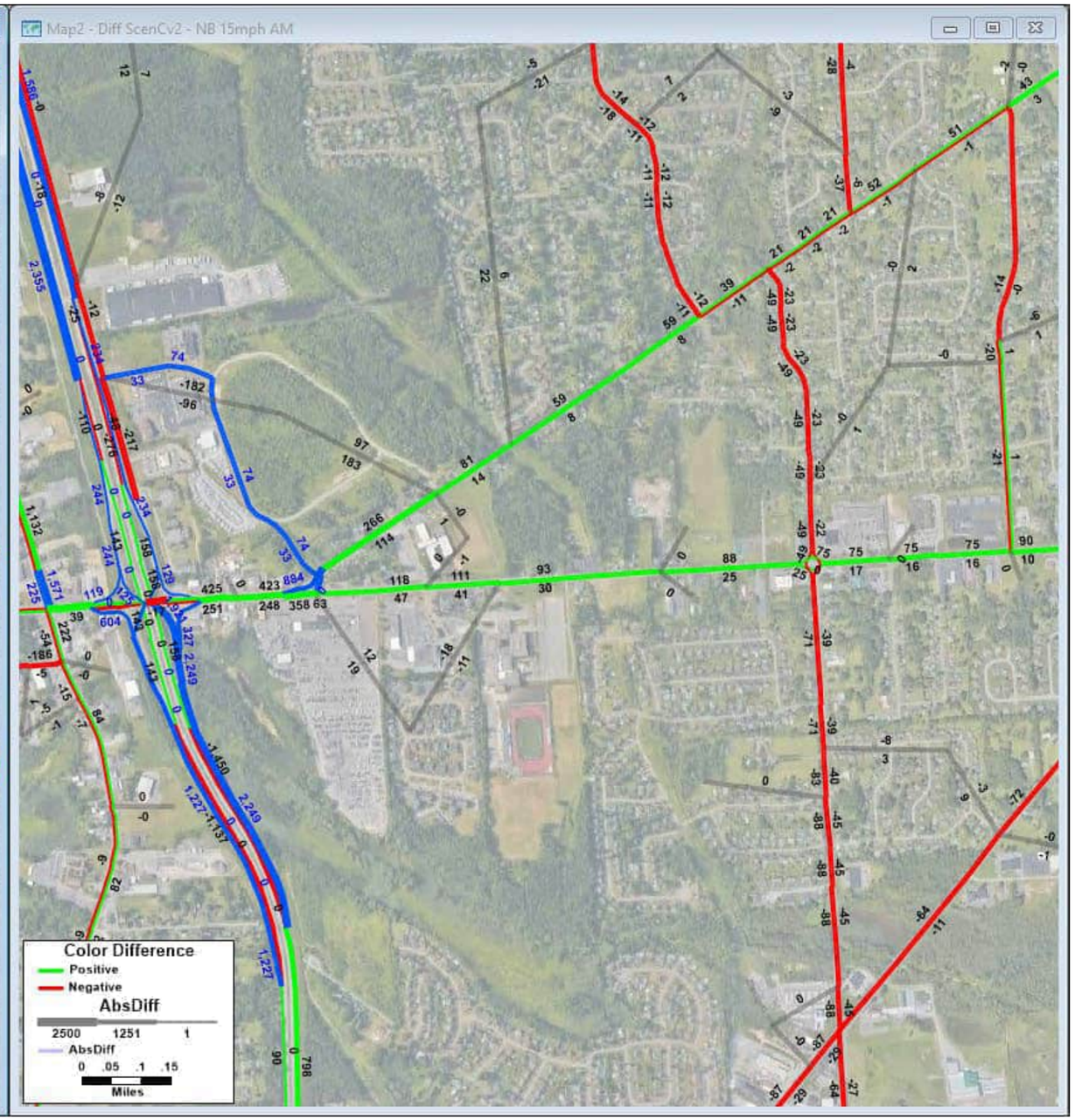


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(Bottom MAP) 2040 Scenario C v2 AM Volumes - 2040 No Build AM Volumes = Change in AM Volumes
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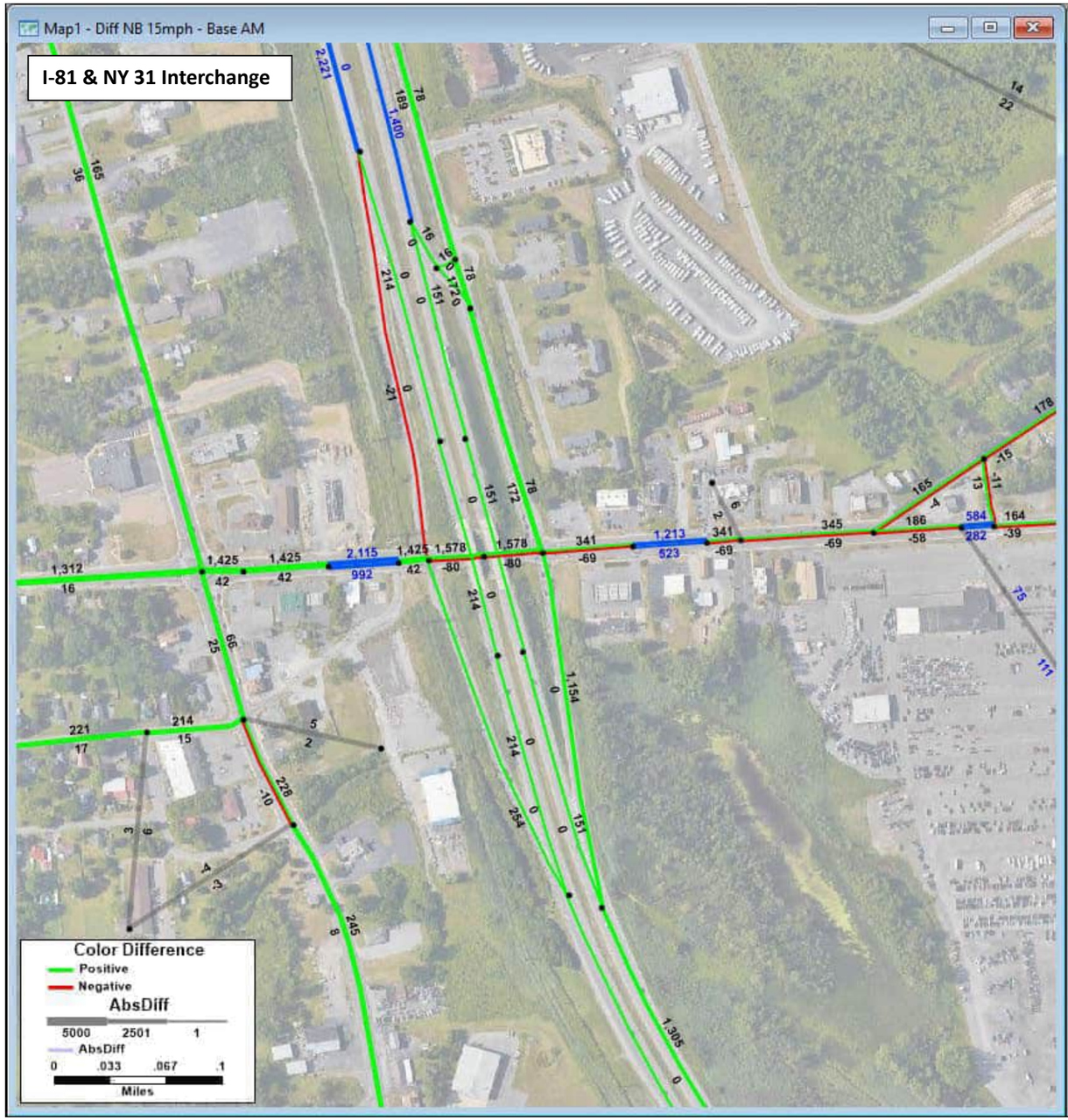


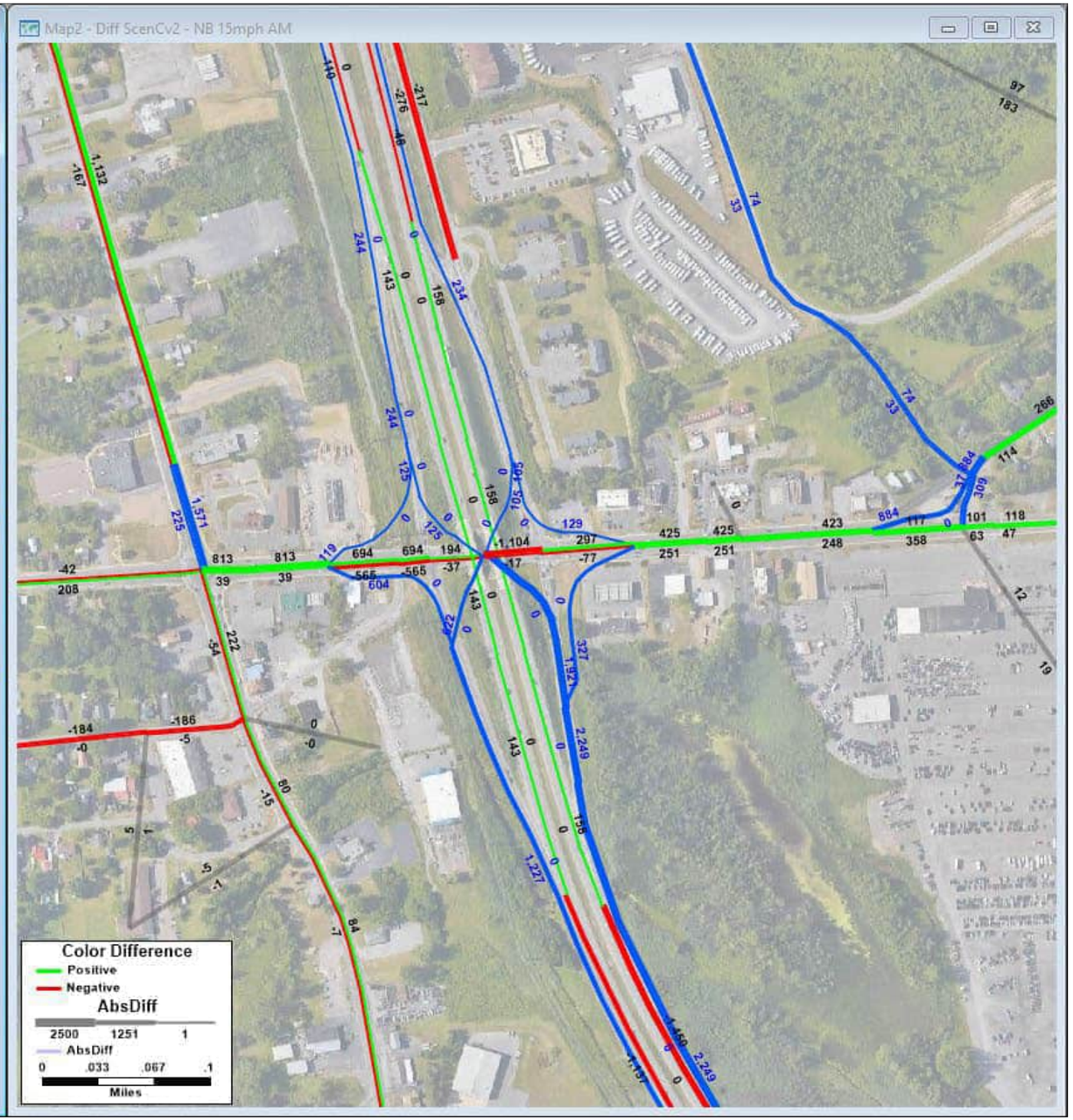


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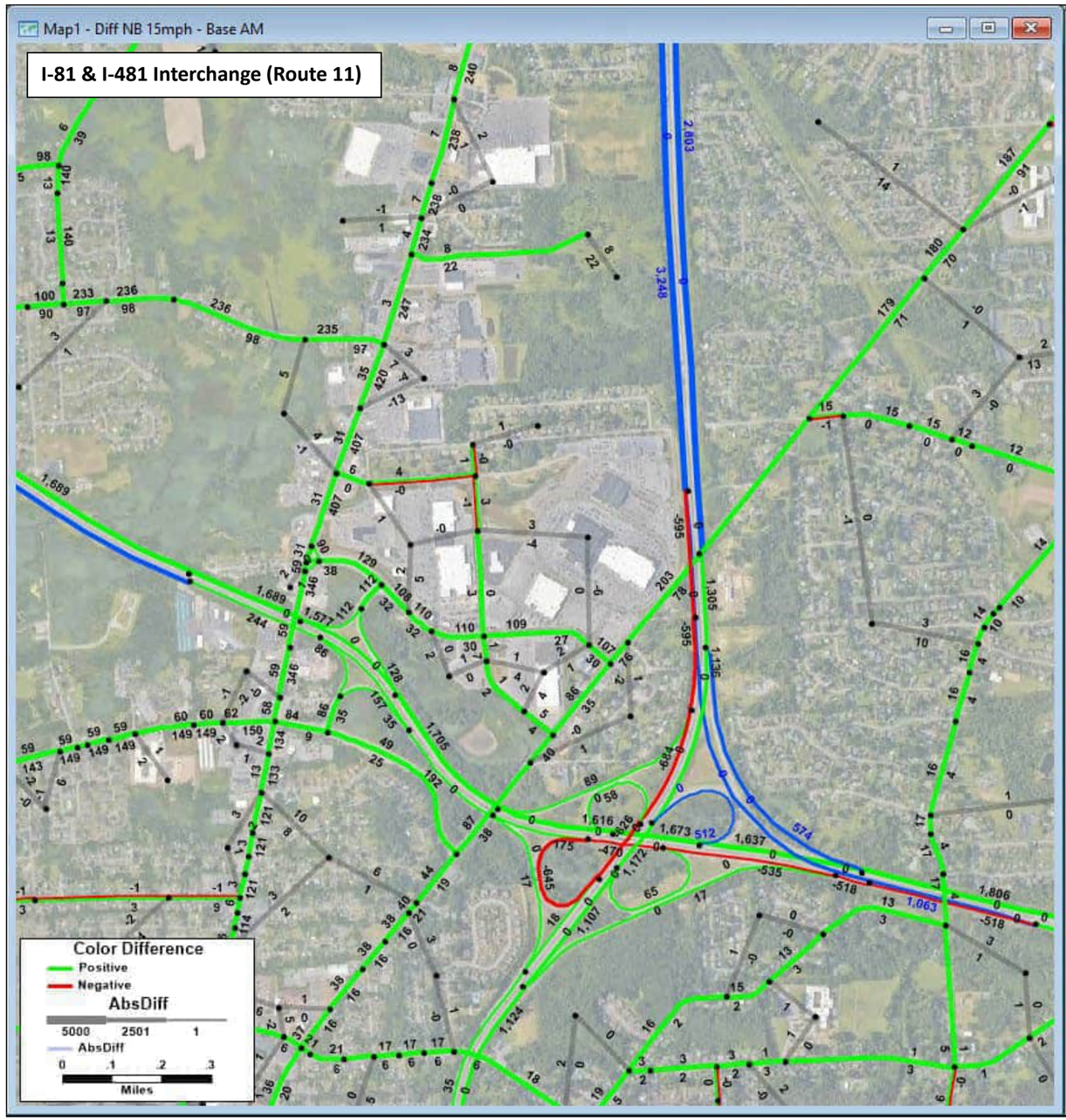




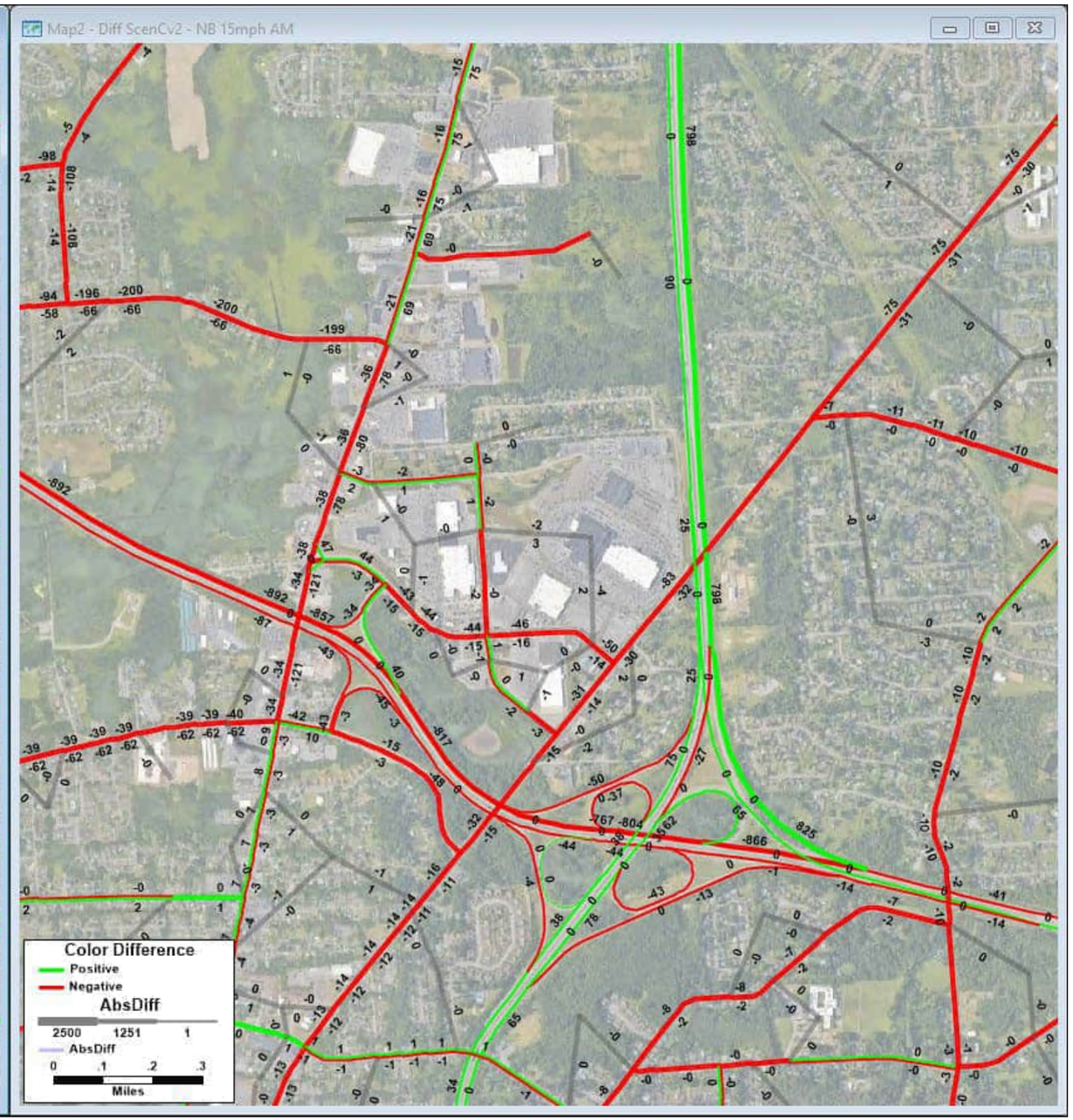
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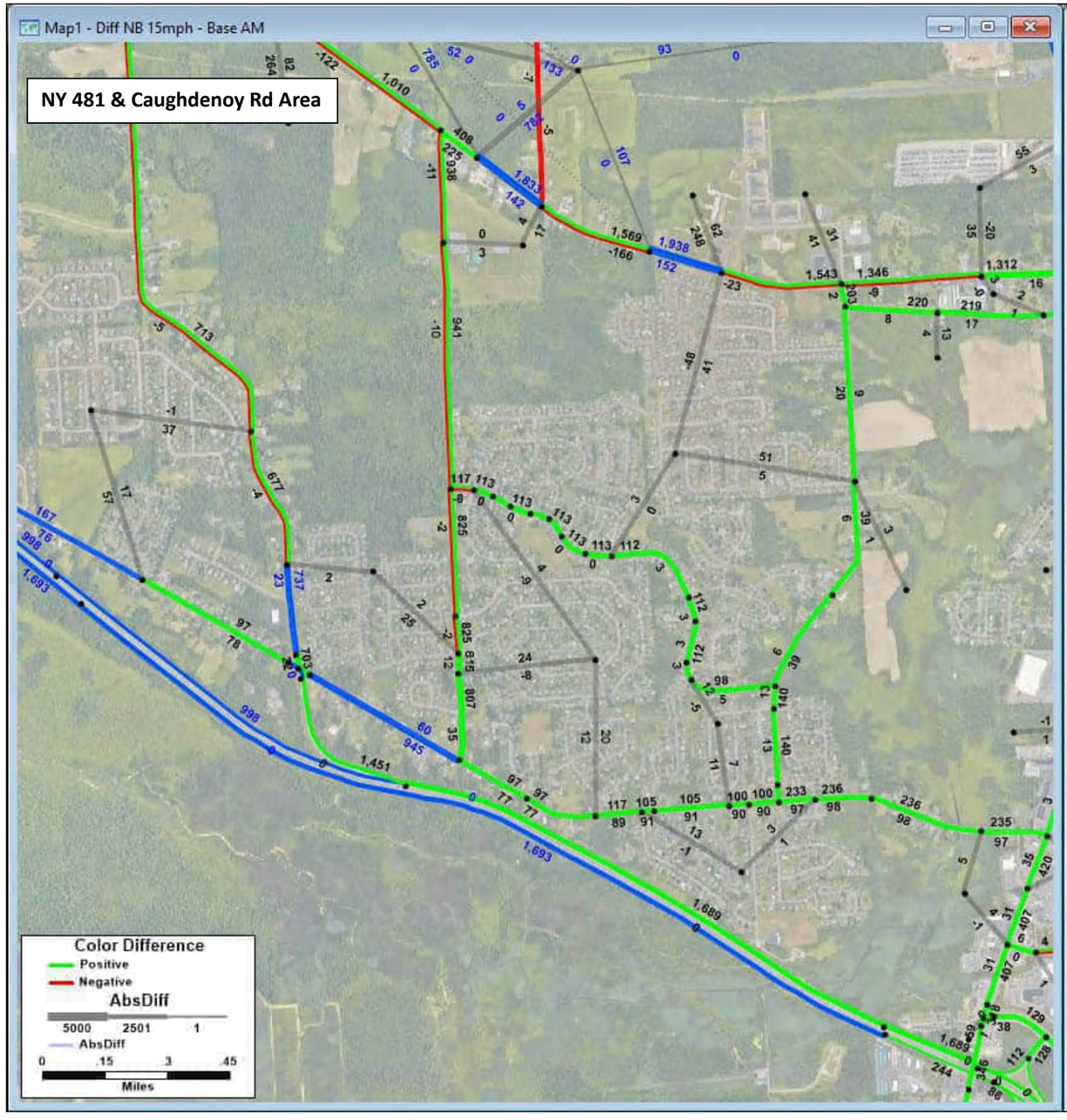


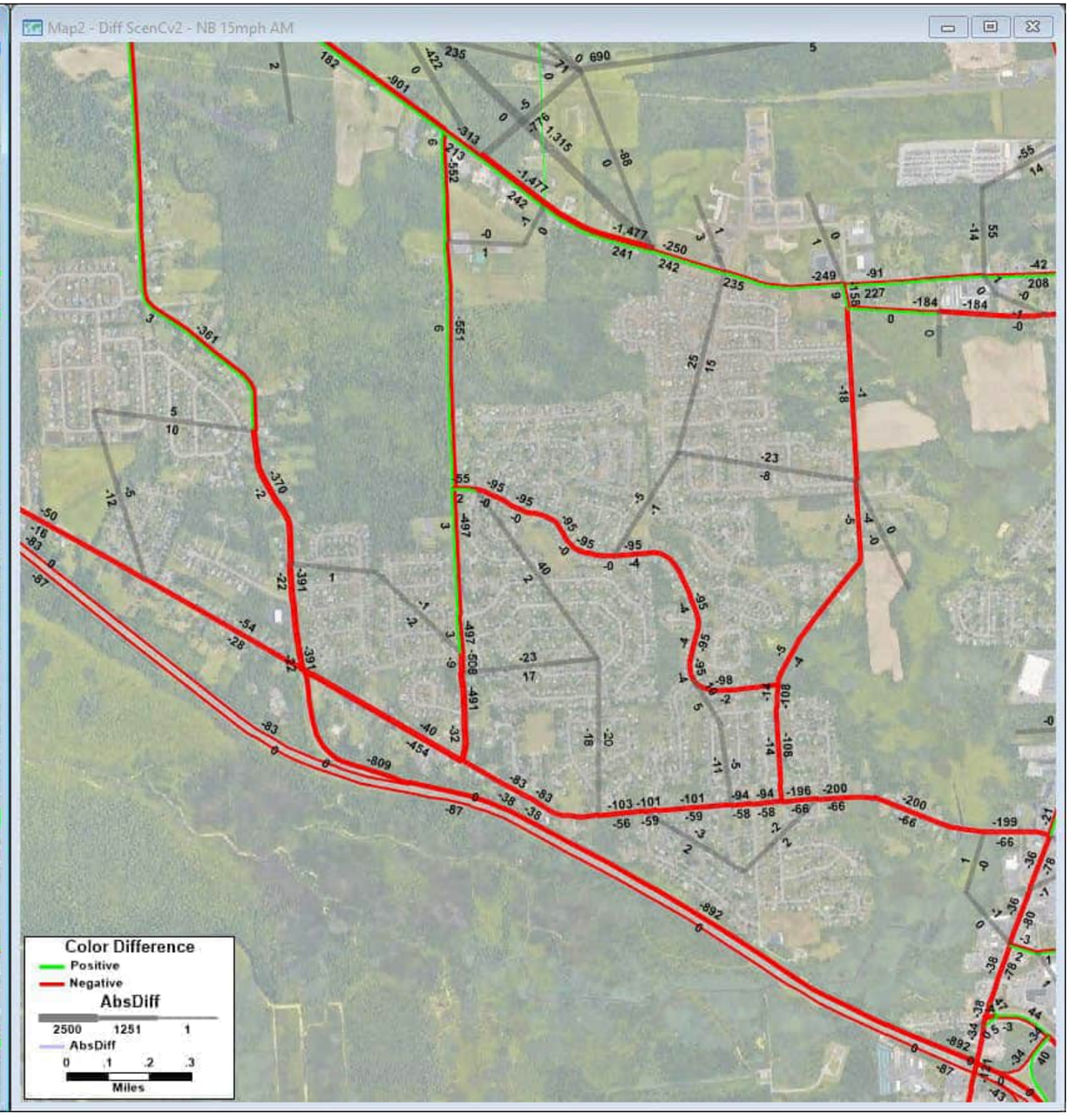
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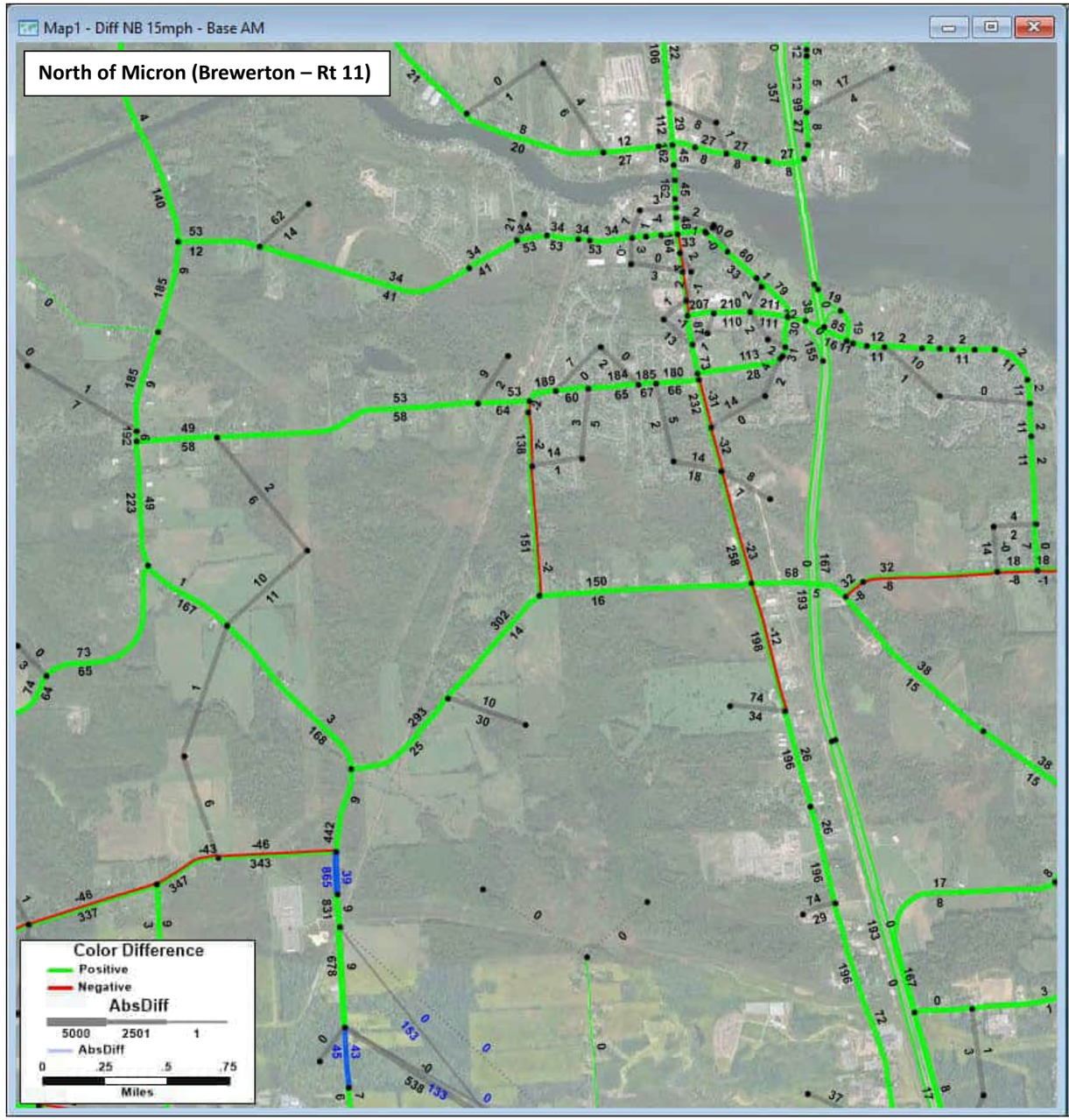




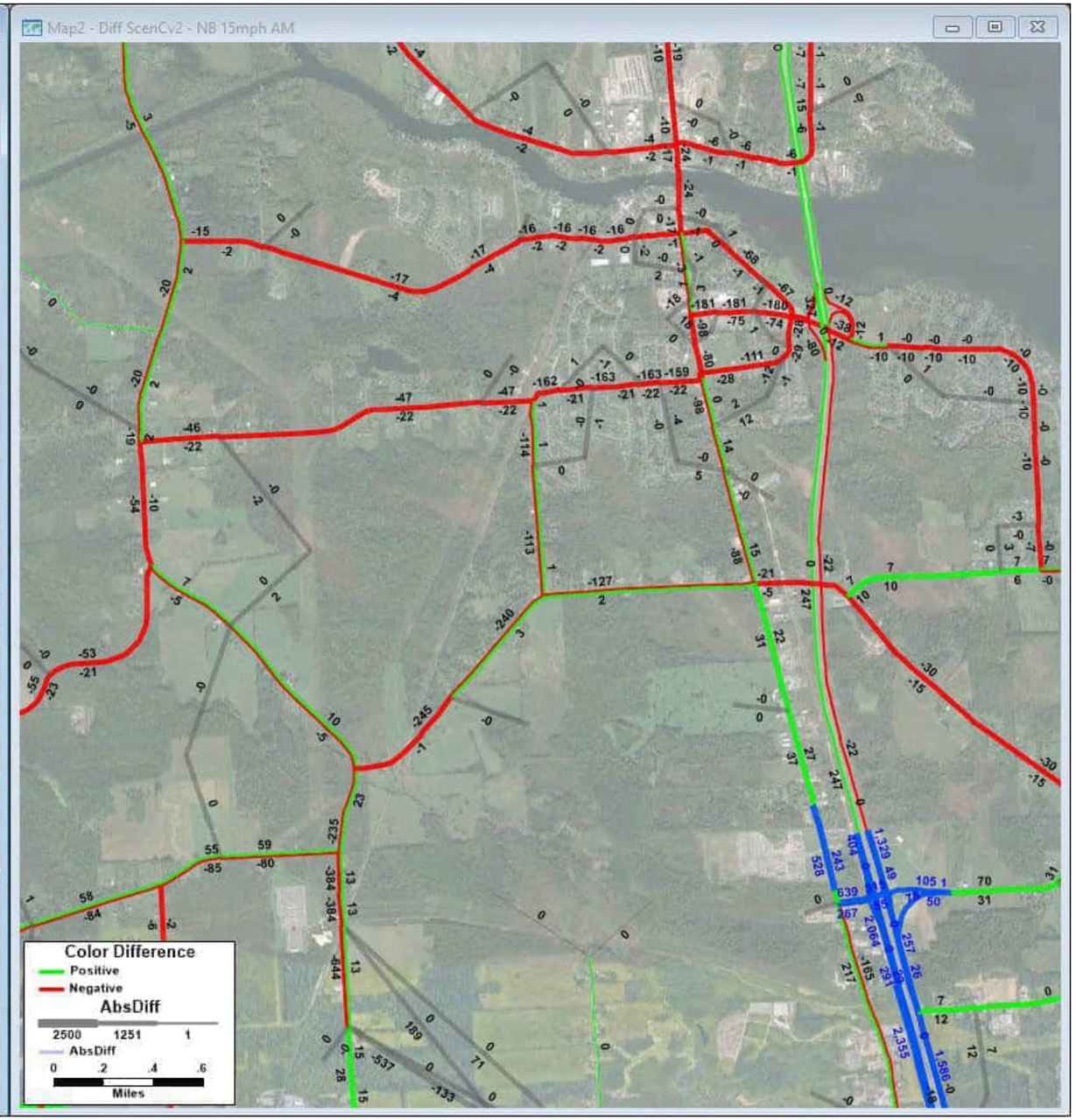
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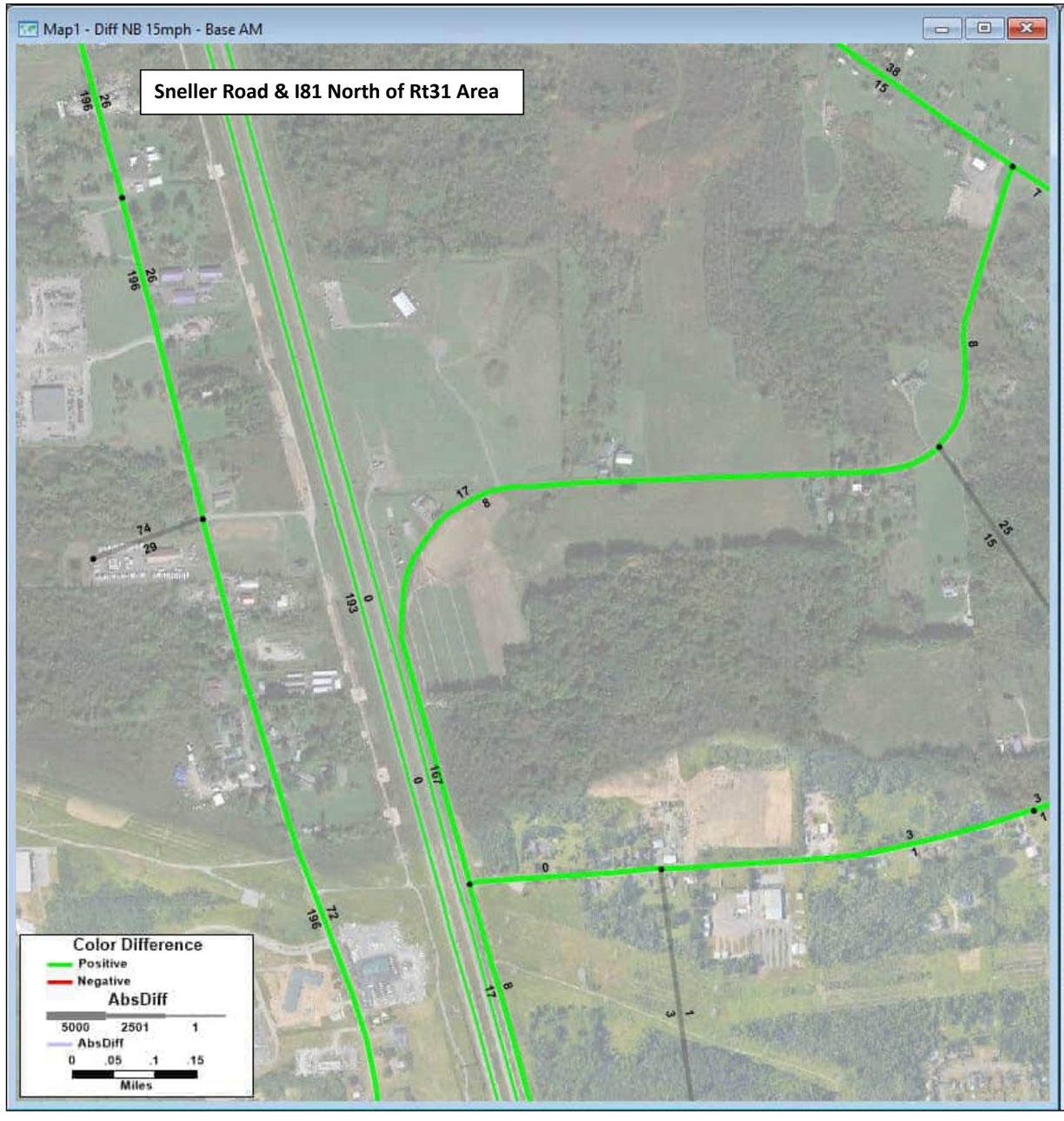


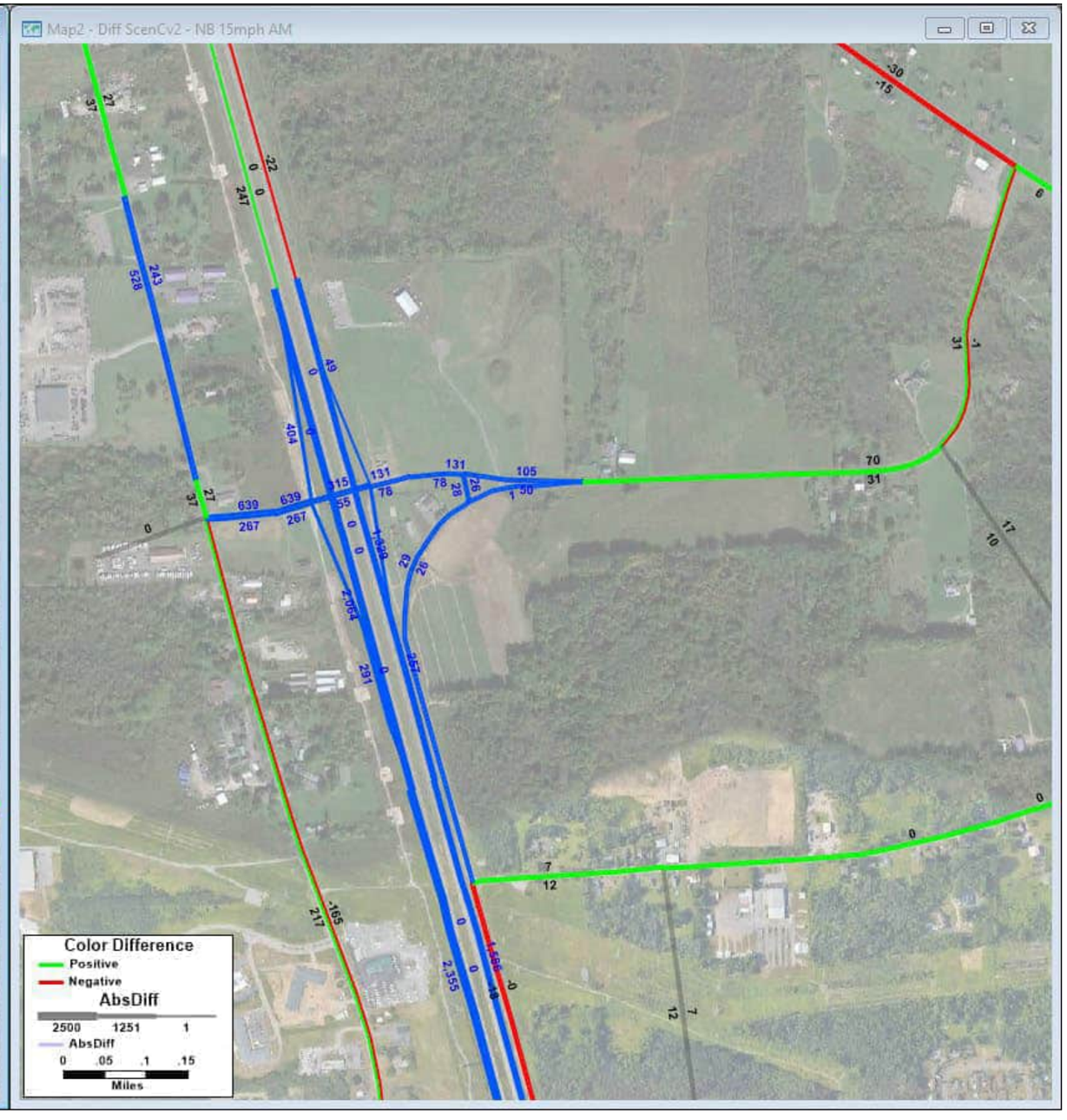
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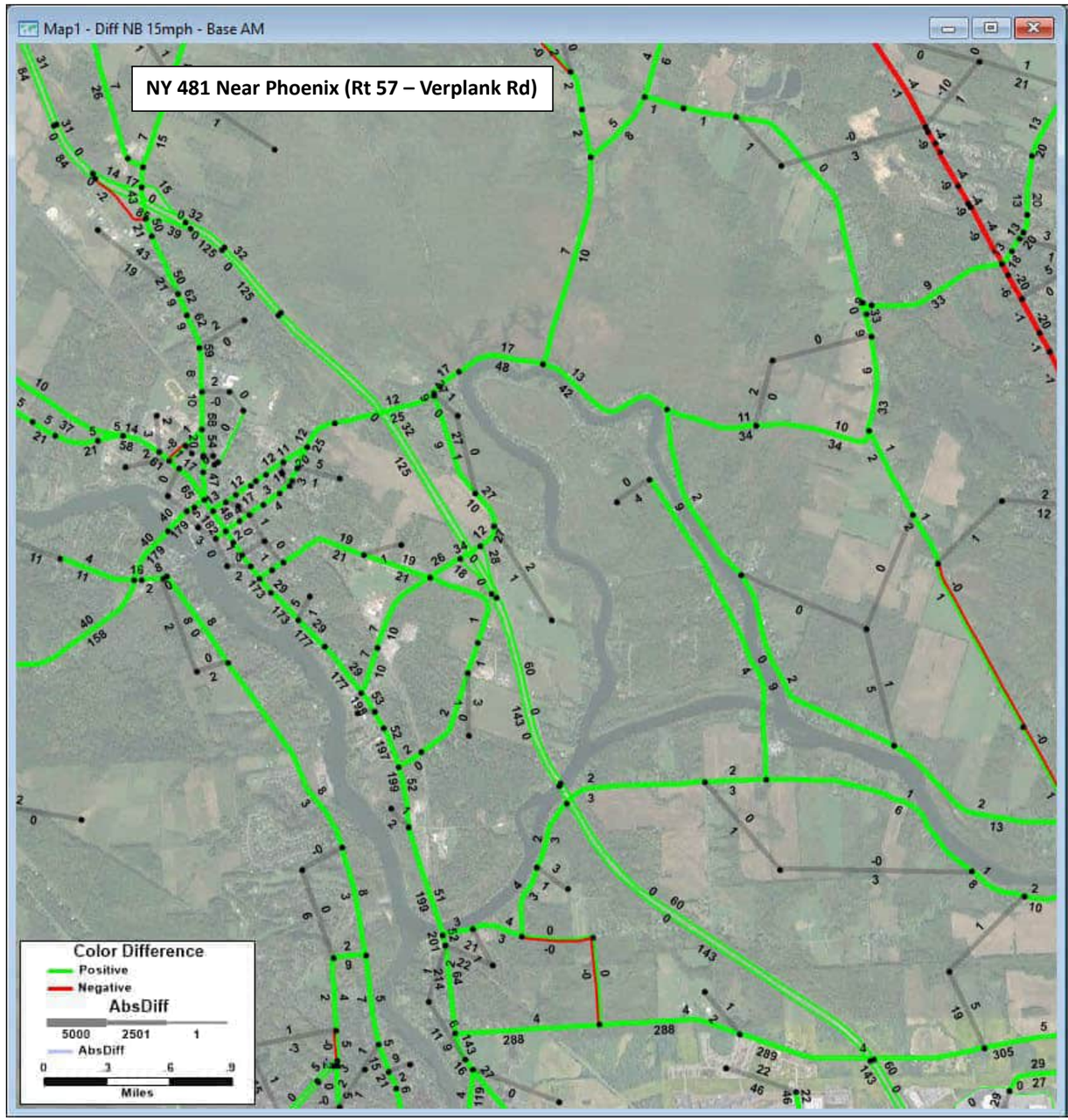


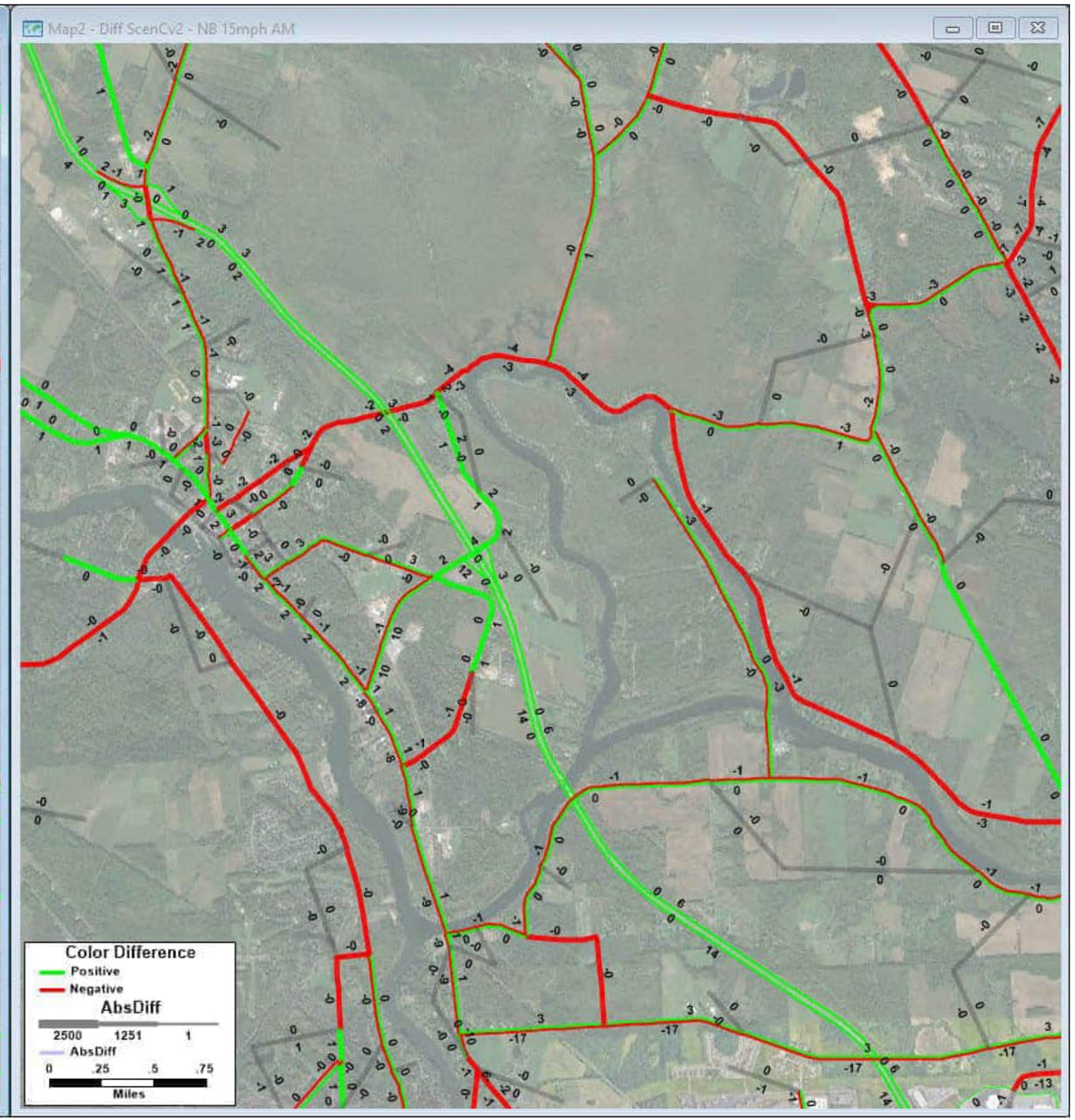


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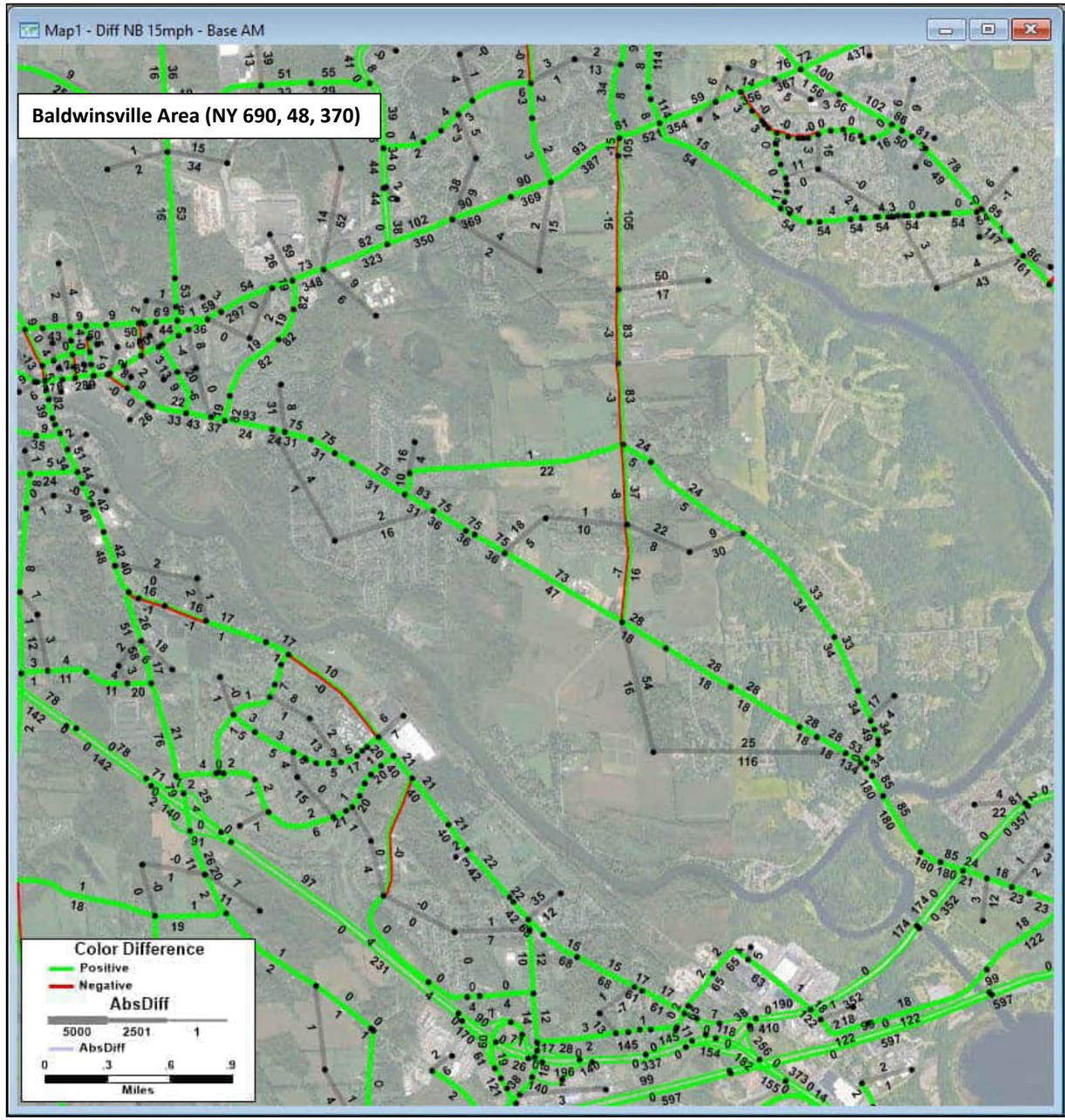


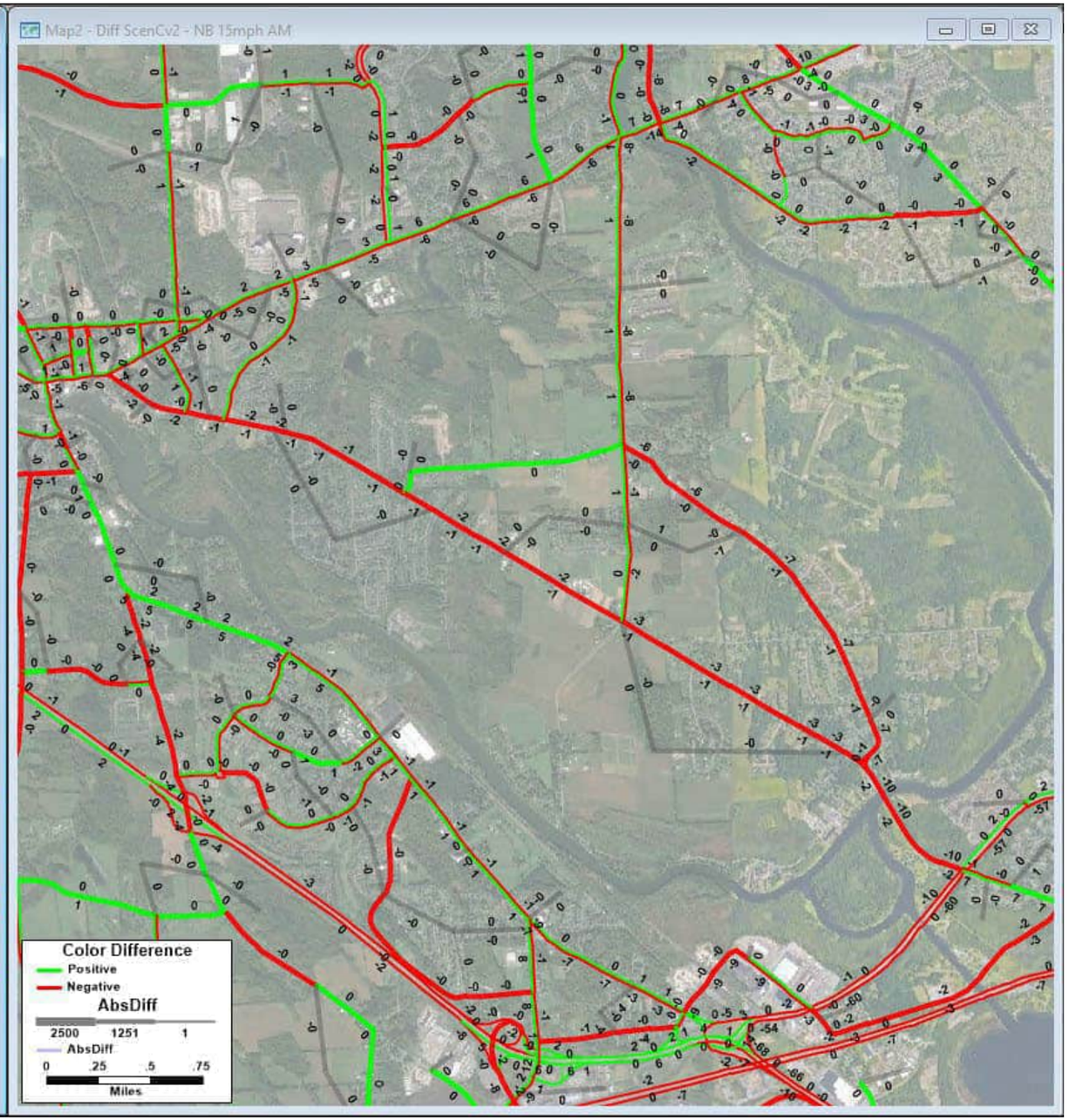


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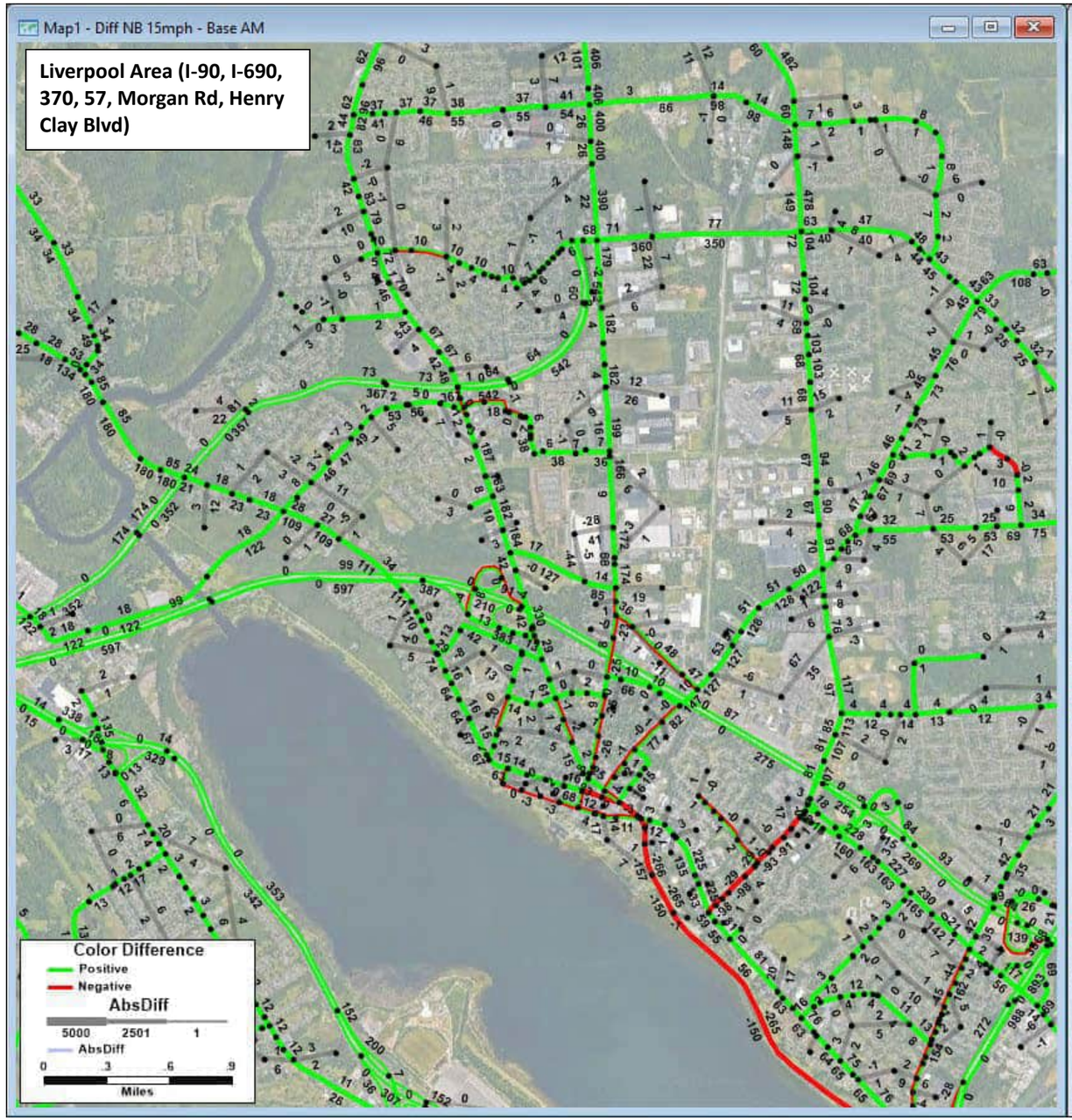


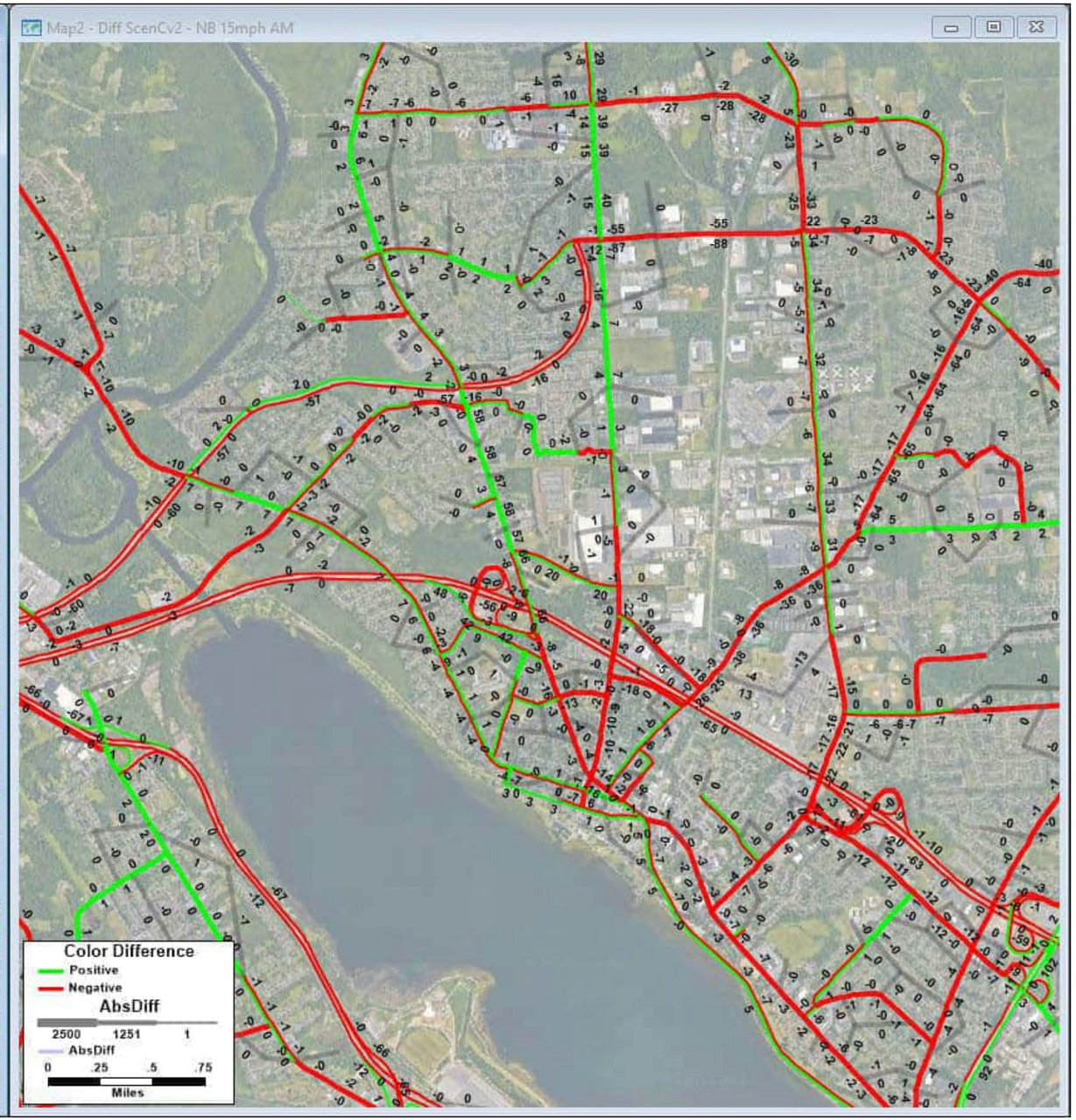


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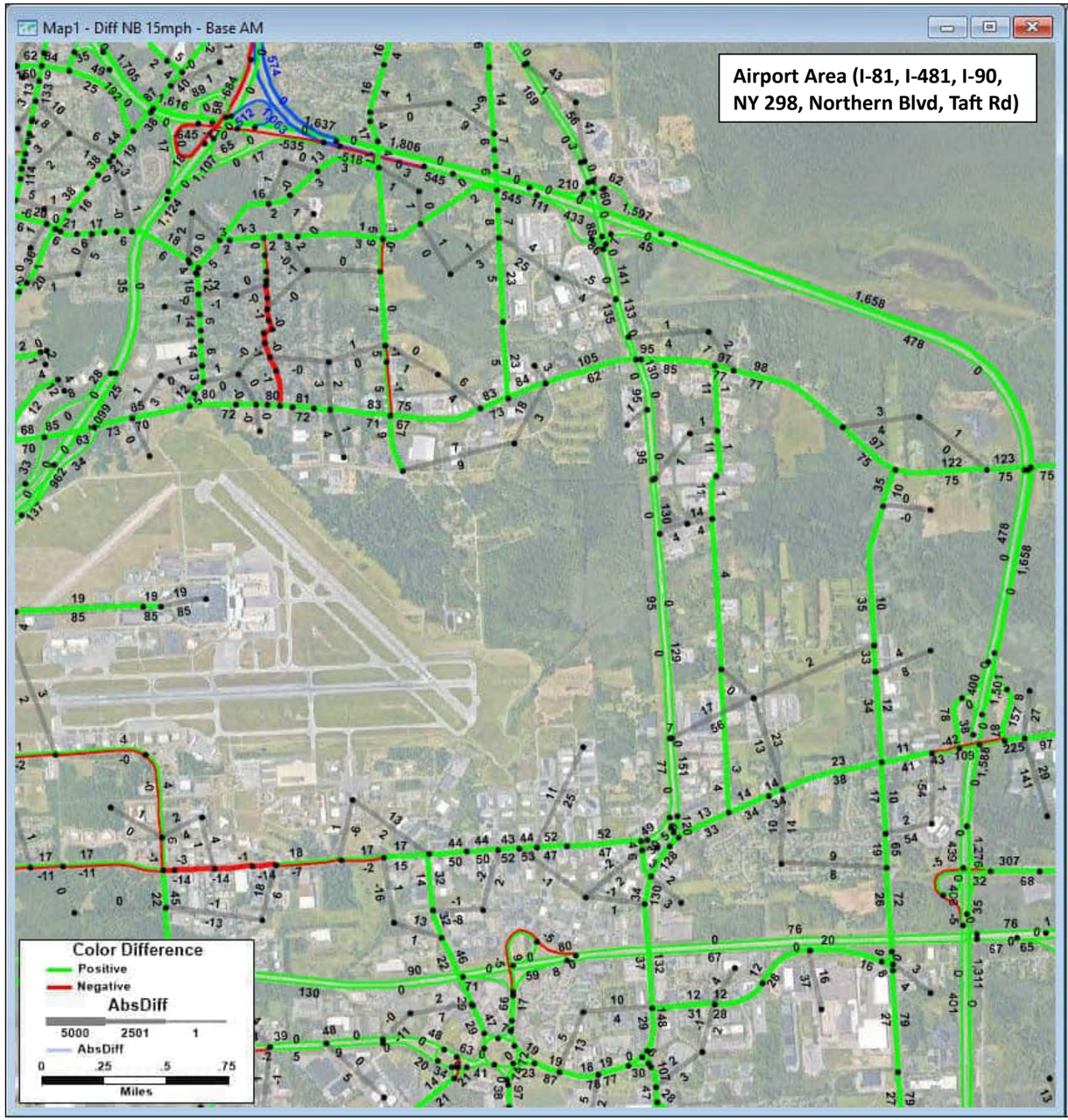




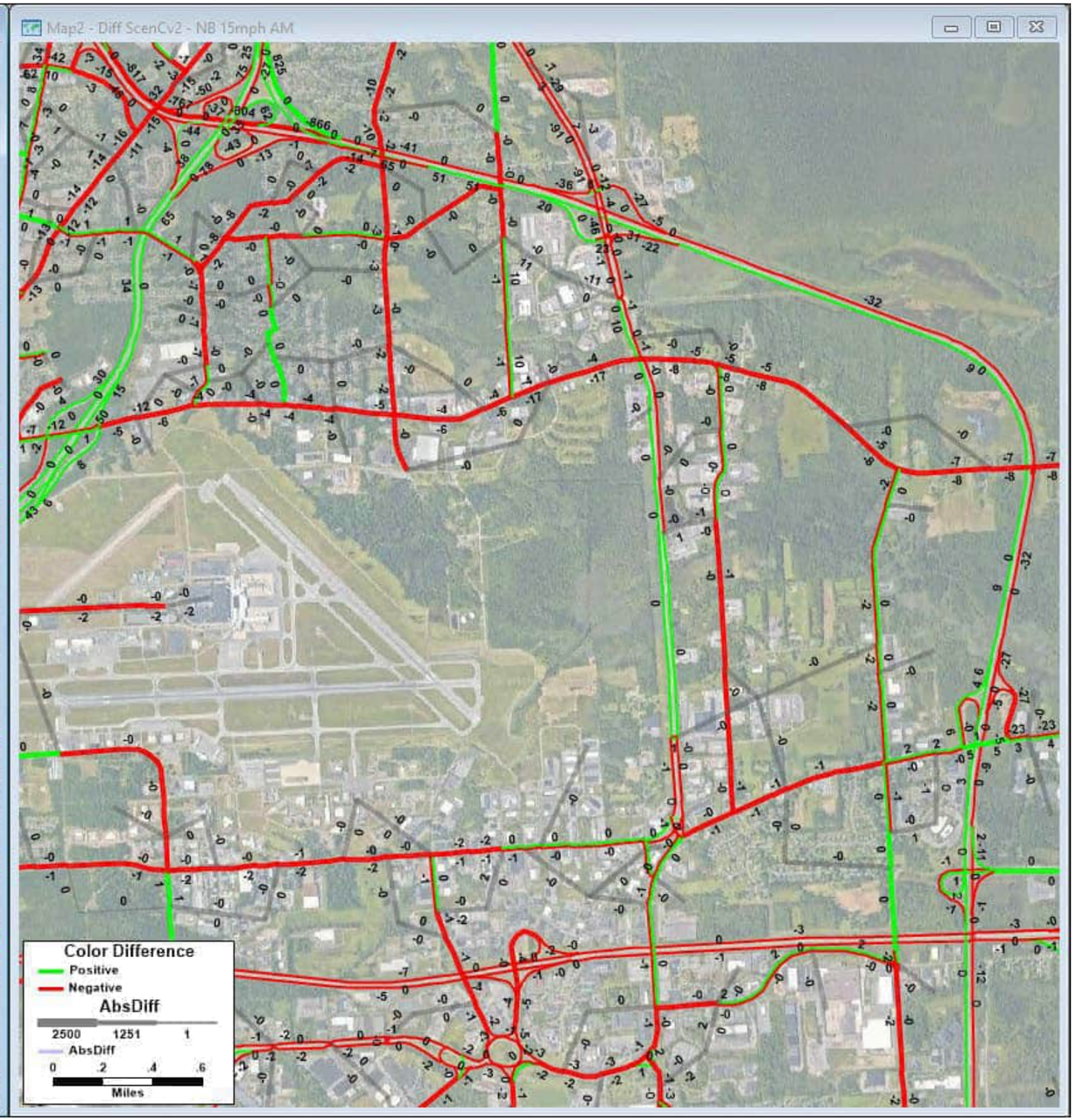
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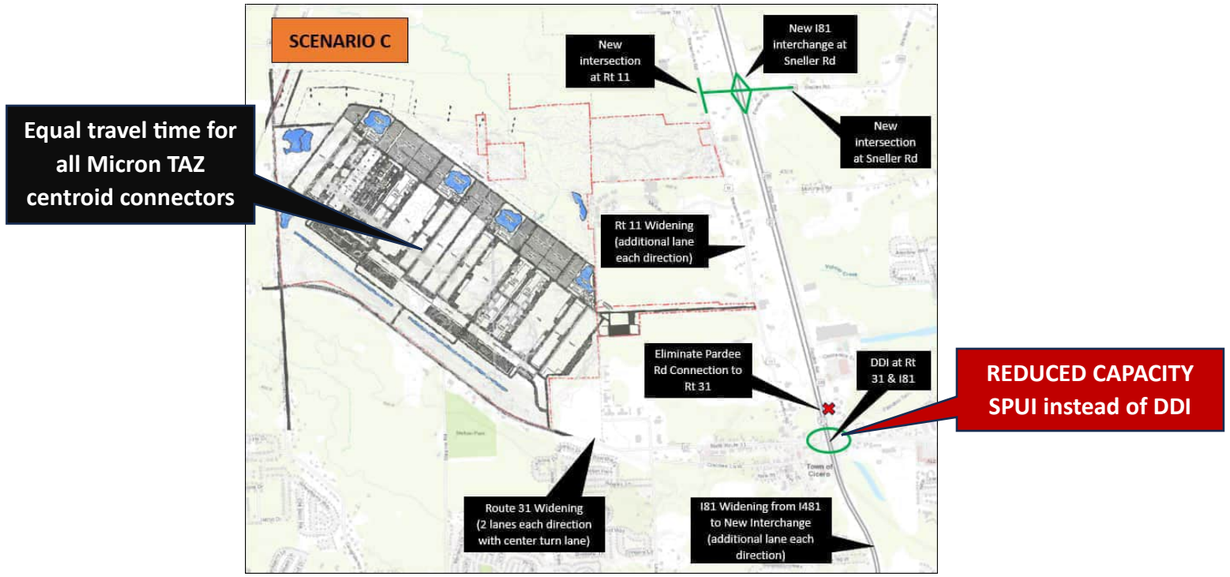
Source : SMTC Regional Travel Demand Model (1/24/2023)

SMTC Travel Demand Model Results: Scenario C v2 (New I81 Interchange & Reduced Capacity SPUI @ Rt31 & I81) – PM PEAK HOUR CHANGE IN VOLUMES

The graphic to the right shows the general assumptions for **Scenario C v2** →

Notes:

- All 2040 scenarios include projected future land use growth (including Micron)
- RED callouts note the revisions made to Scenario C



The graphic to the right is an example of what is included in this document →

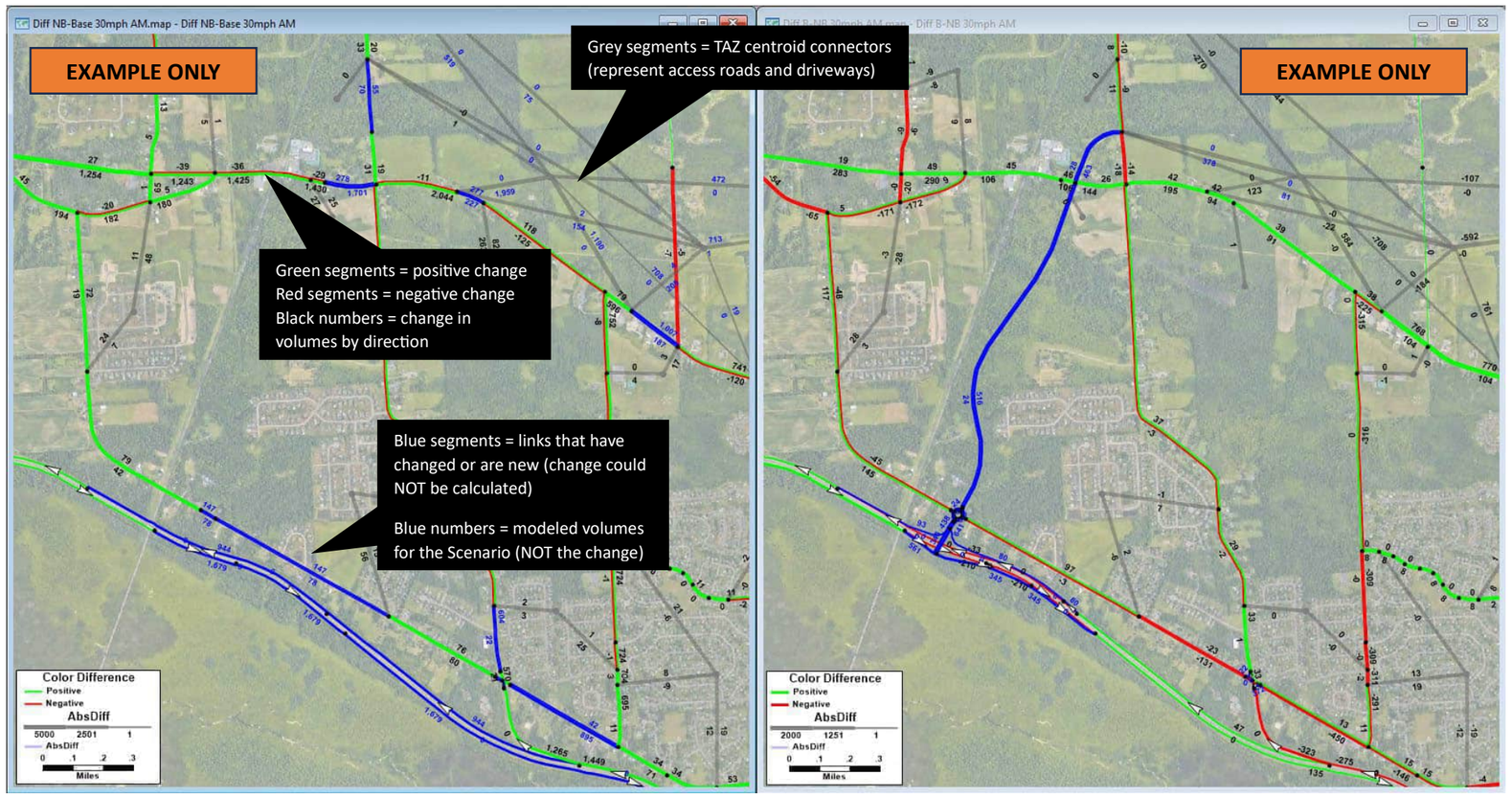
The map on the left displays the change in **PM** volumes between the 2020 existing conditions base model to the 2040 No Build (**2040 NB PM Volumes less 2020 PM volumes**). No Build in this case refers to no network improvements, the build future land use conditions are included (including Micron).

The map on the right displays the change in **PM** volumes between the 2040 No Build to the 2040 Scenario "X" Build (**2040 Scenario "X" Build PM Volumes less 2040 NB PM volumes**).

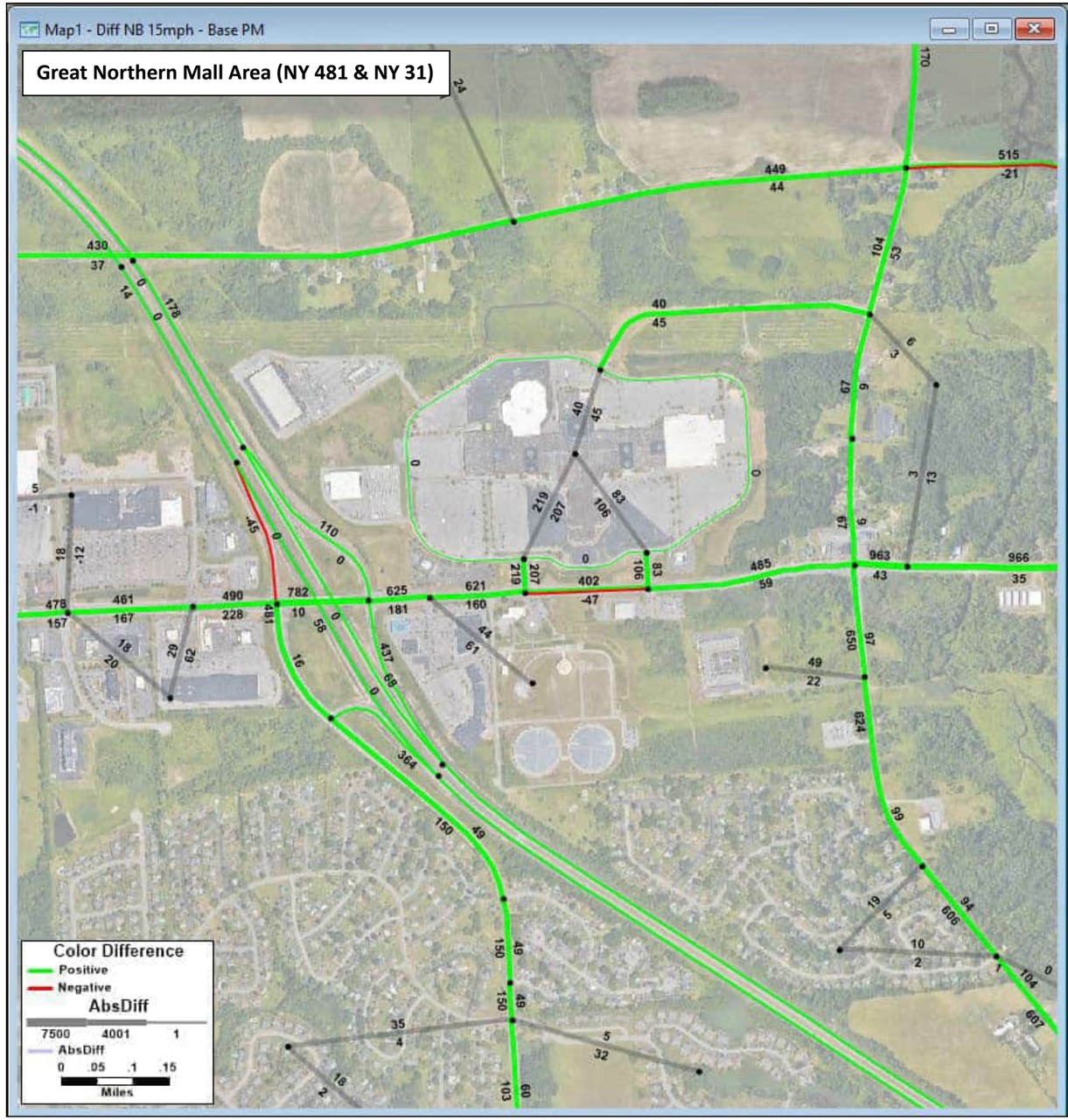
MAP NOTES:

- Green segments = positive change between identified scenarios
- Red segments = negative change between identified scenarios
- **Black numbers** = change in volumes by direction
- Blue segments = links that have changed or are new for that scenario therefore a change can **NOT** be calculated
- **Blue numbers** = modeled volume by direction on that segment for that scenario (change could NOT be calculated for that link)
- Gray segments = TAZ centroid connectors (general representation of access roads and driveways)

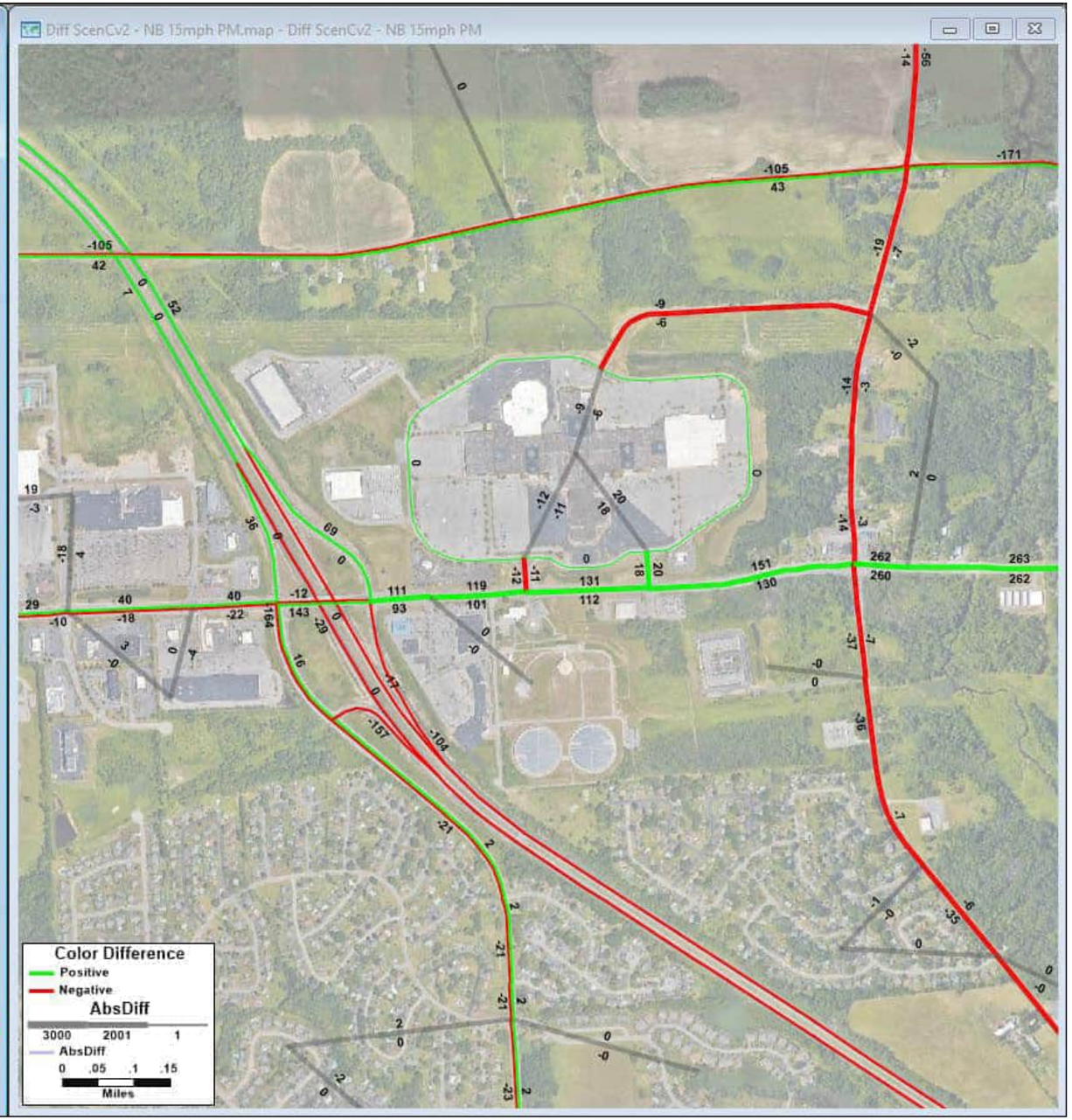
To get total future volume on a segment add up the numbers from both maps and then add that to existing traffic counts.



Source : SMTC Regional Travel Demand Model (1/24/2023)

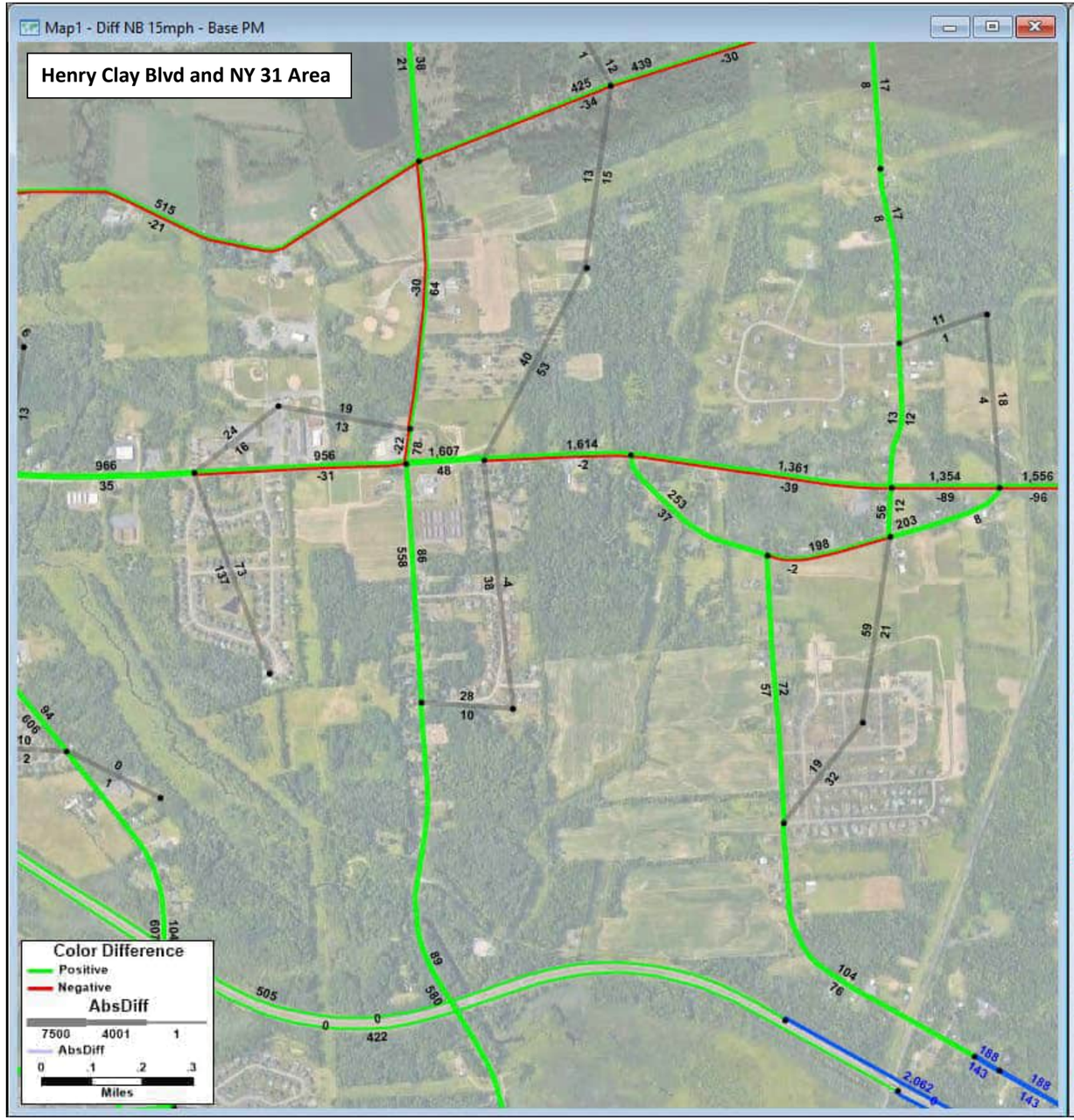


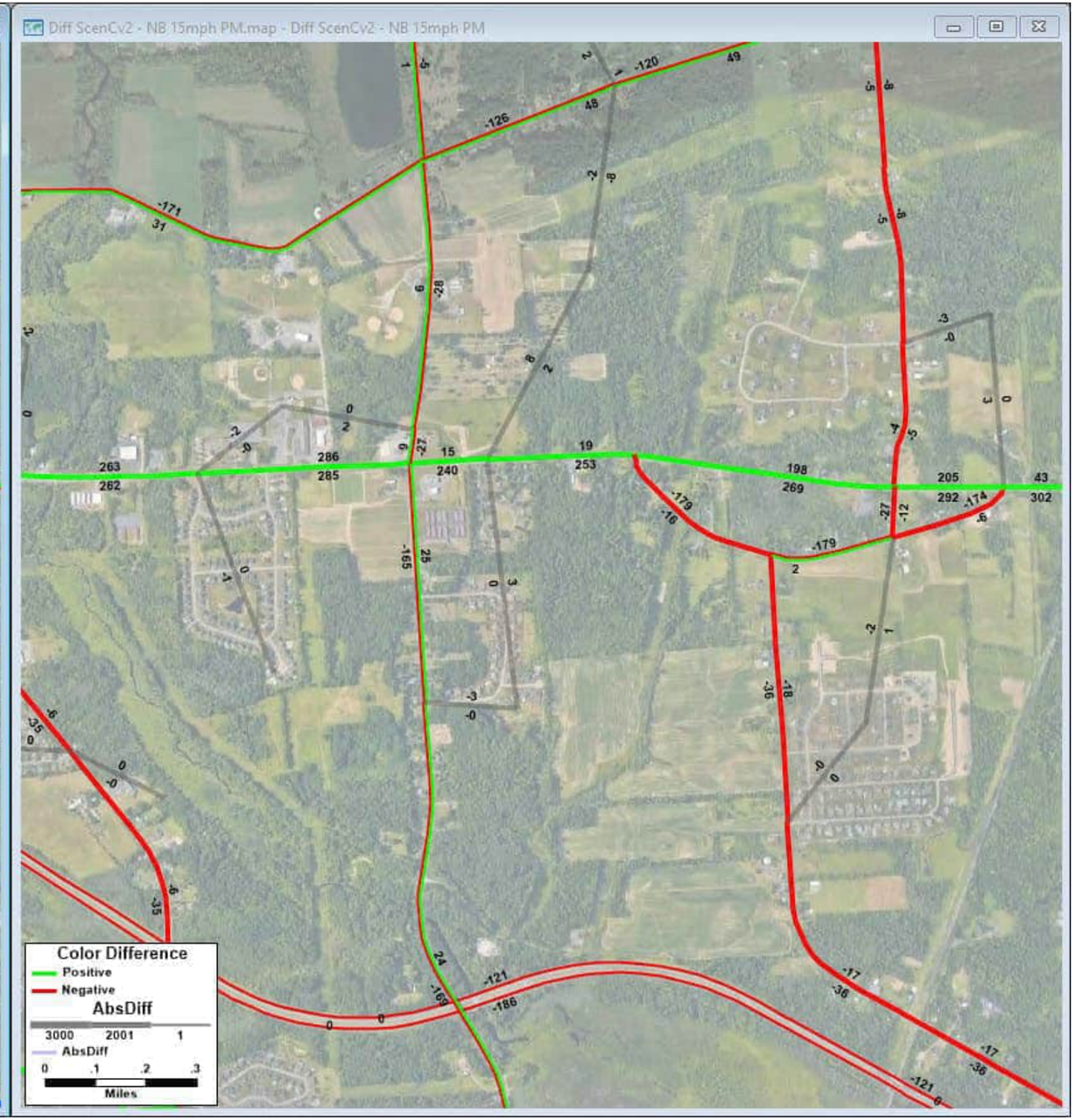
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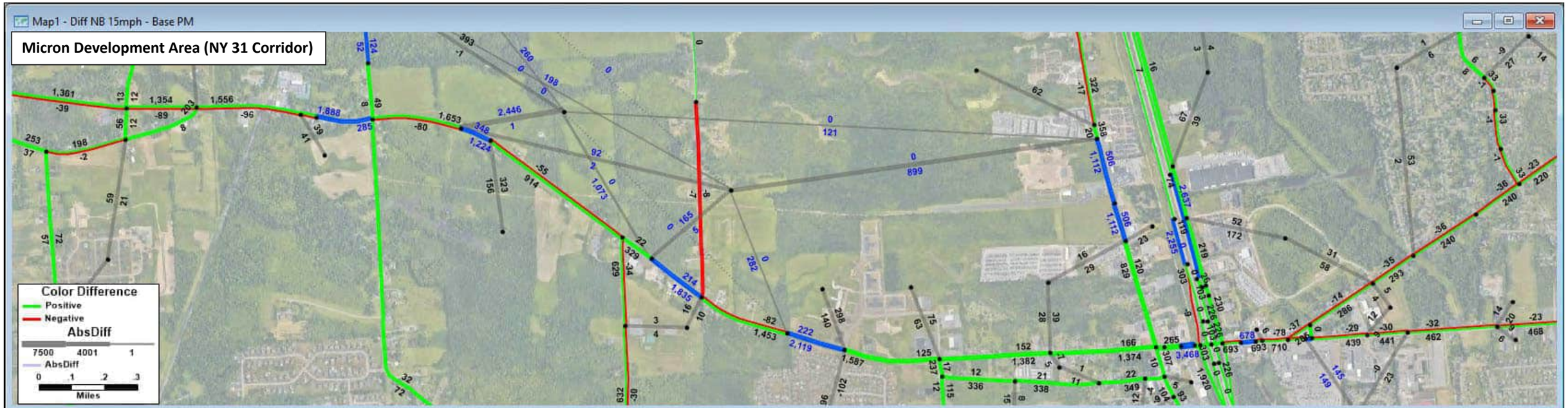


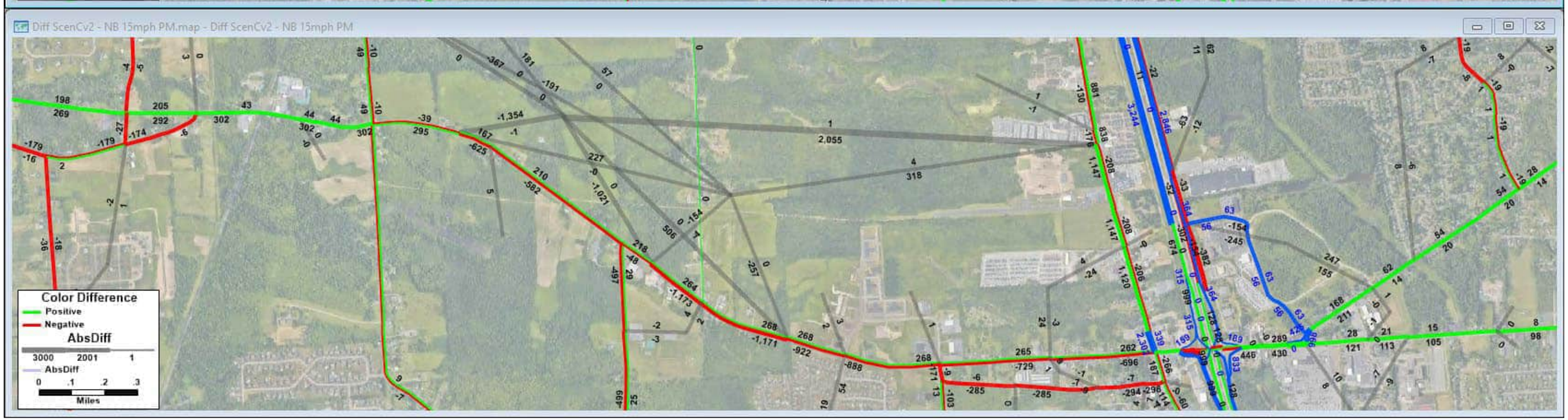


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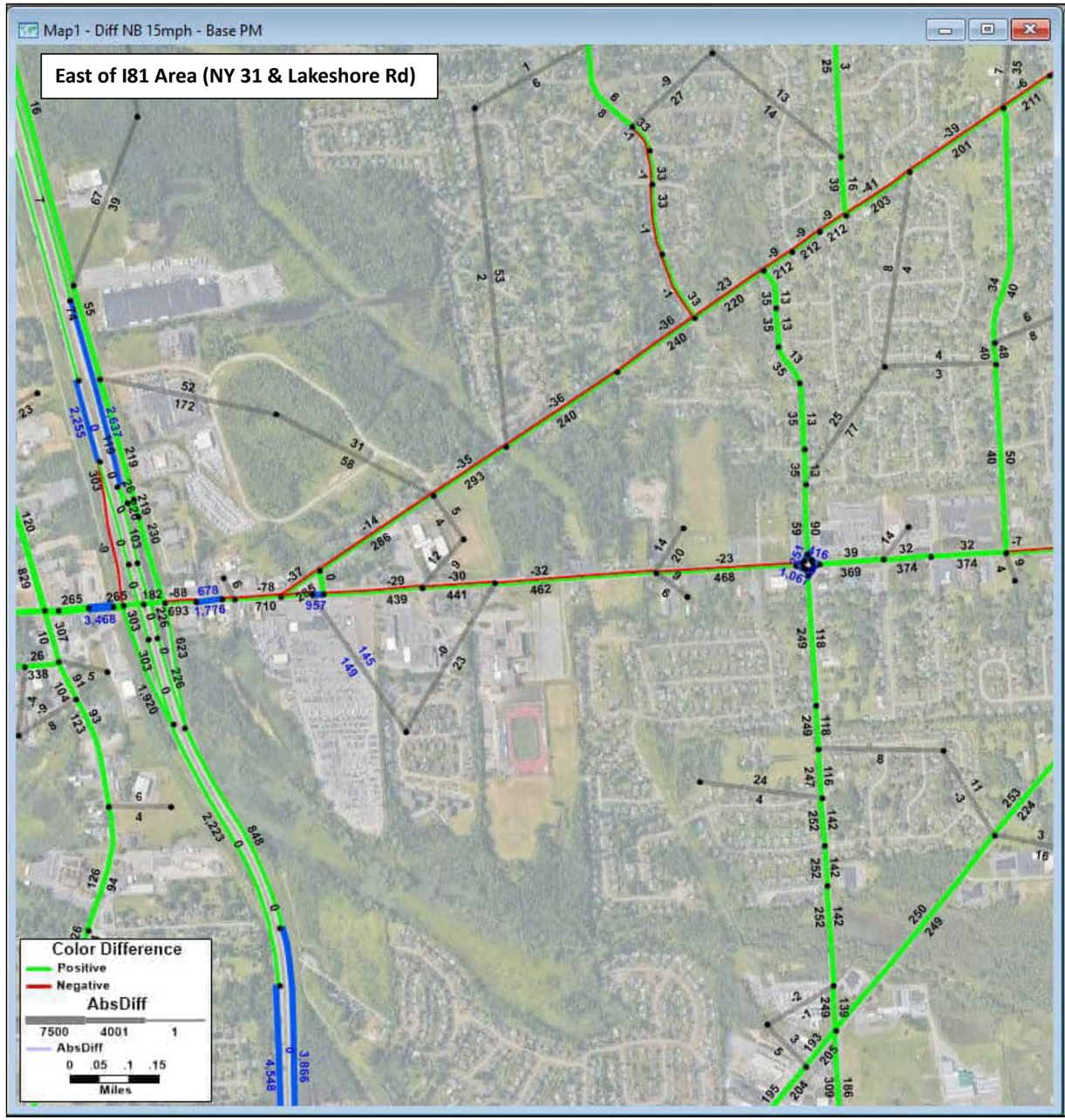


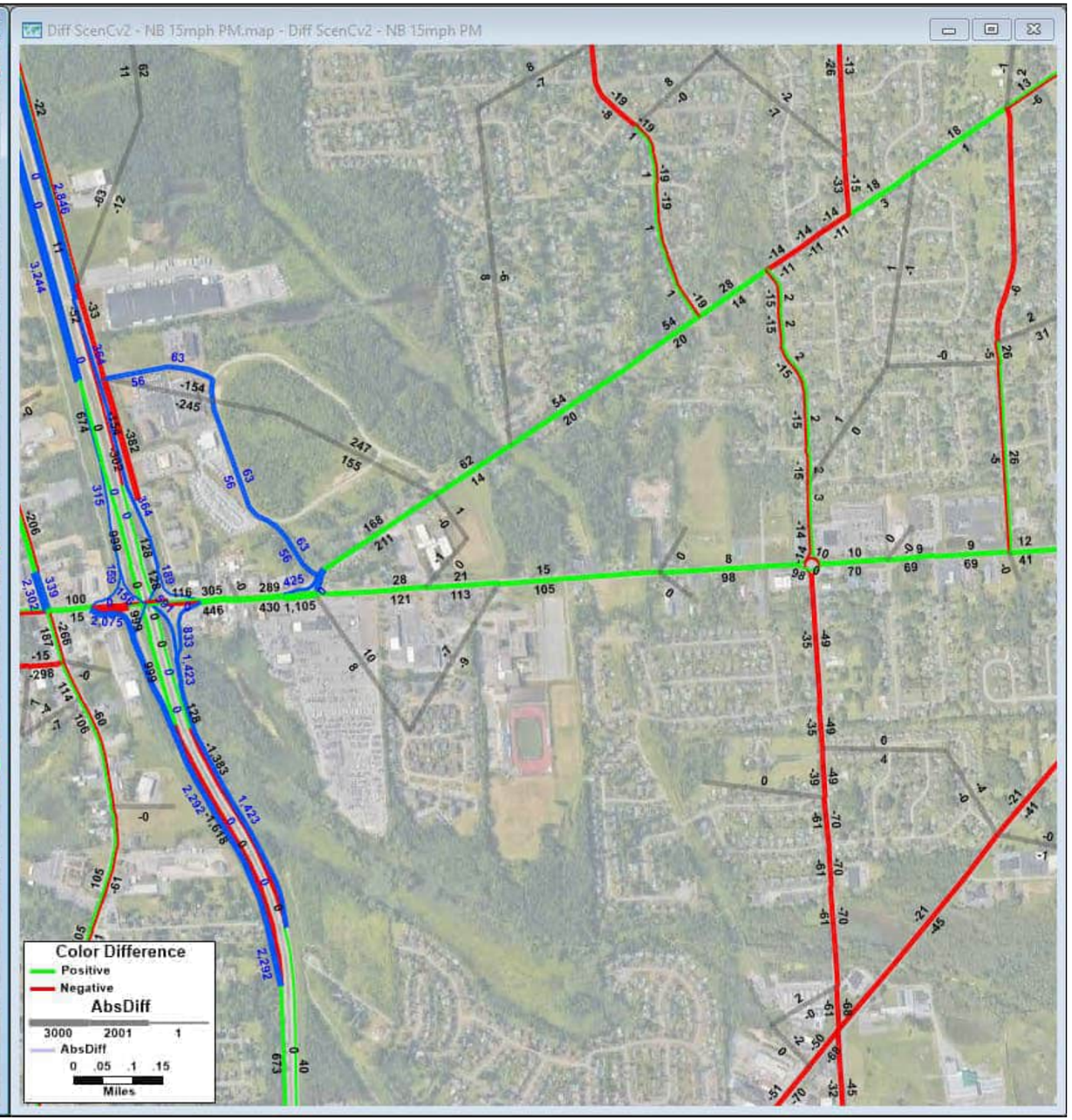


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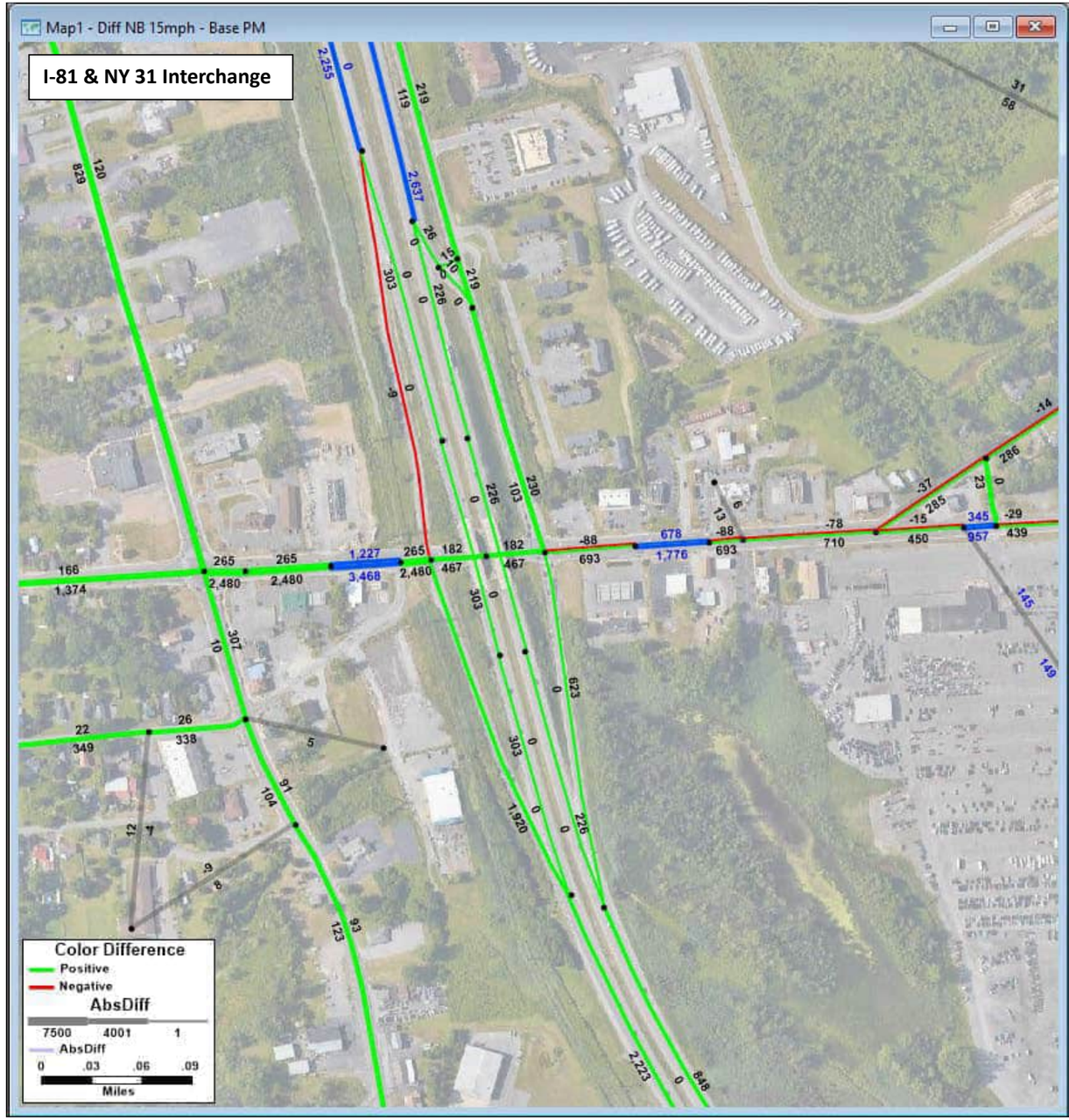


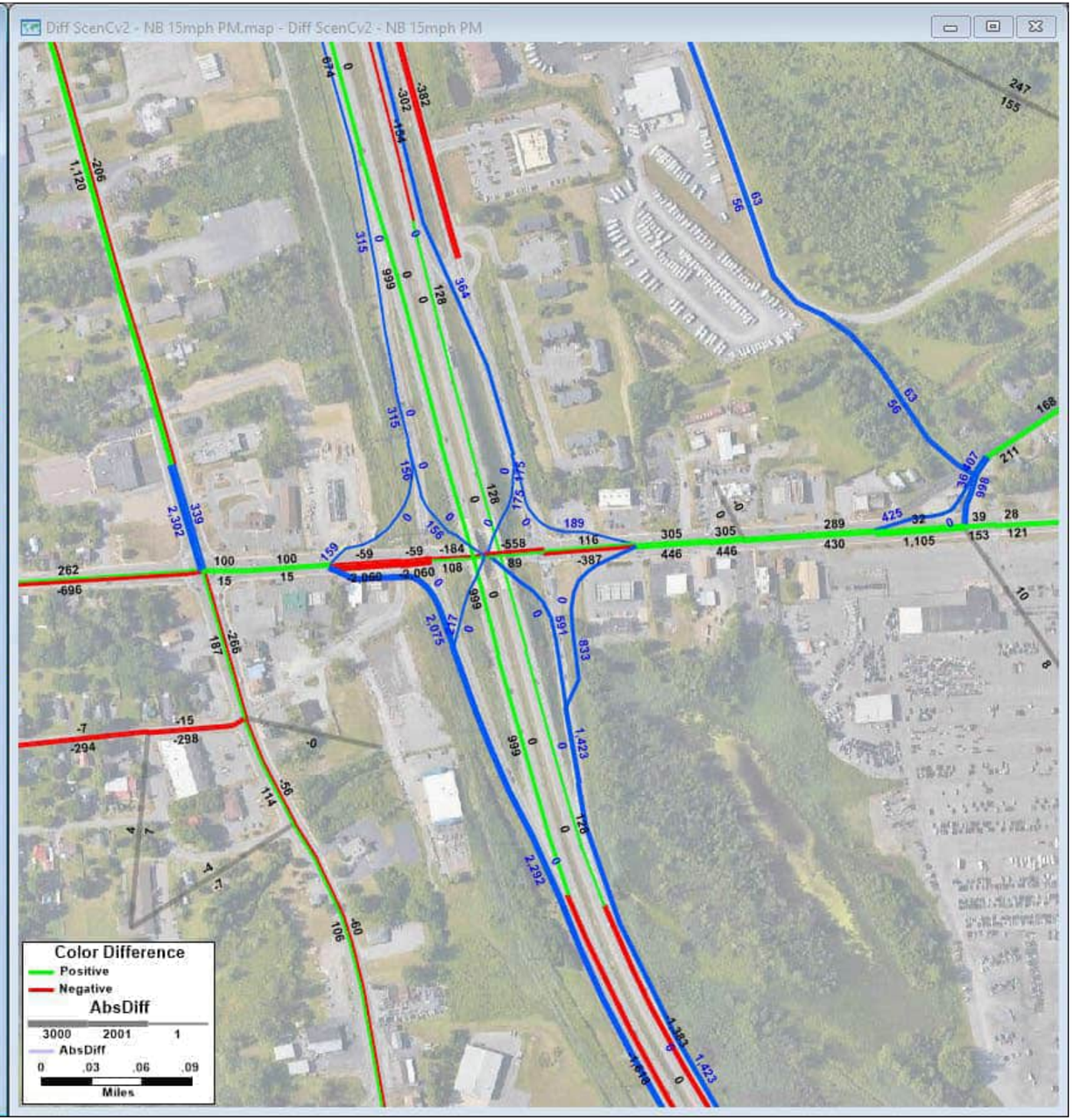


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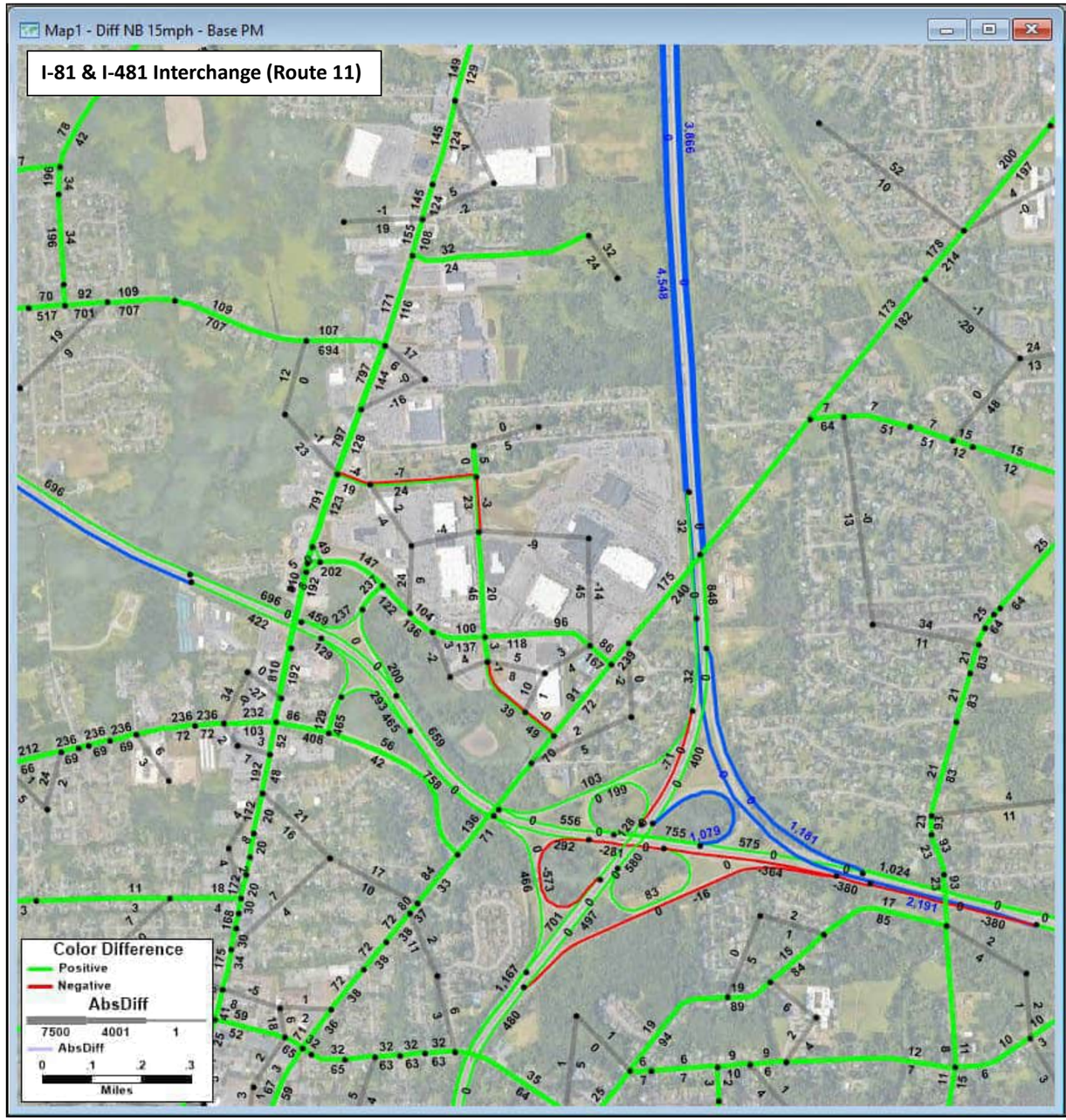




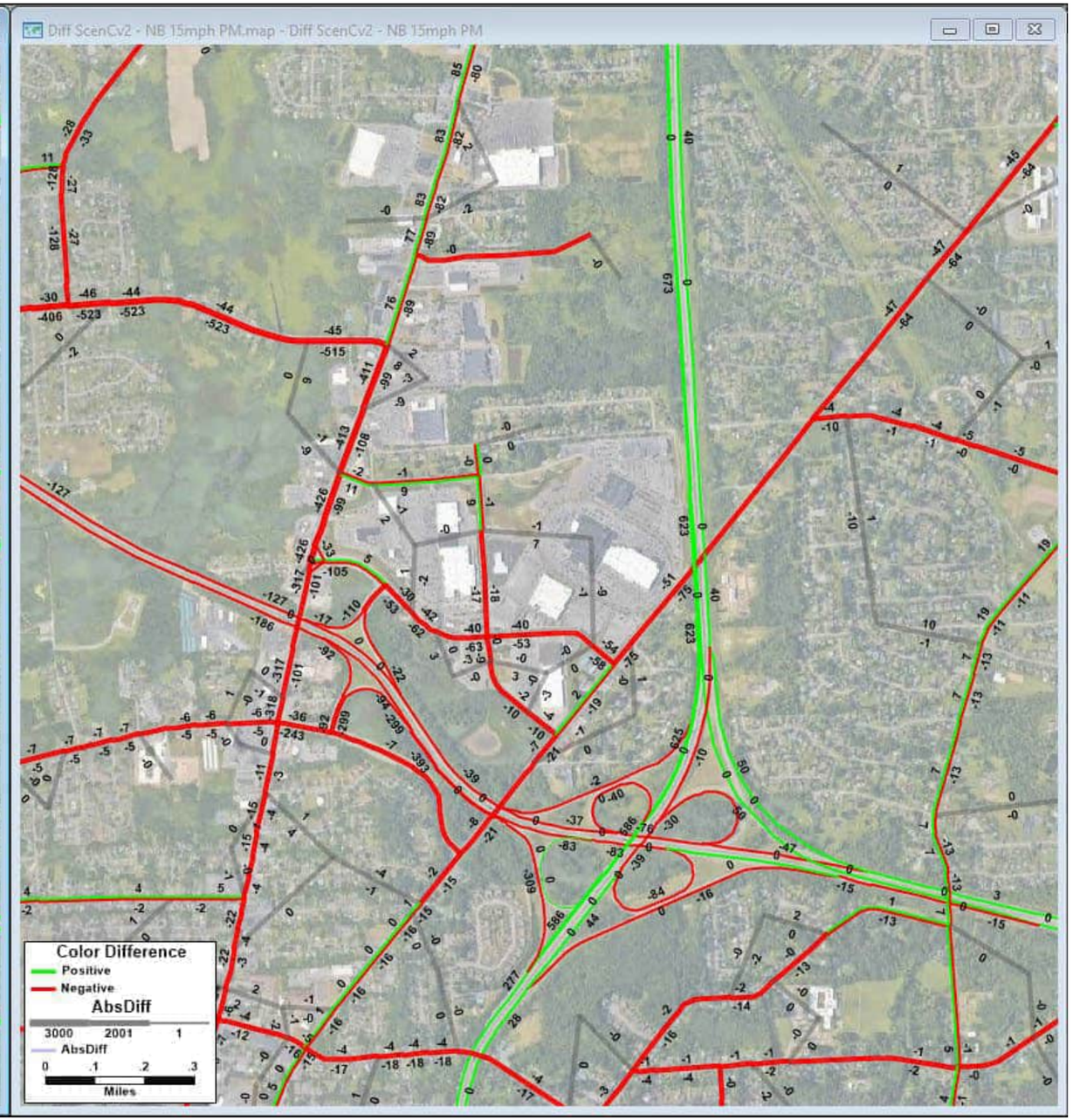
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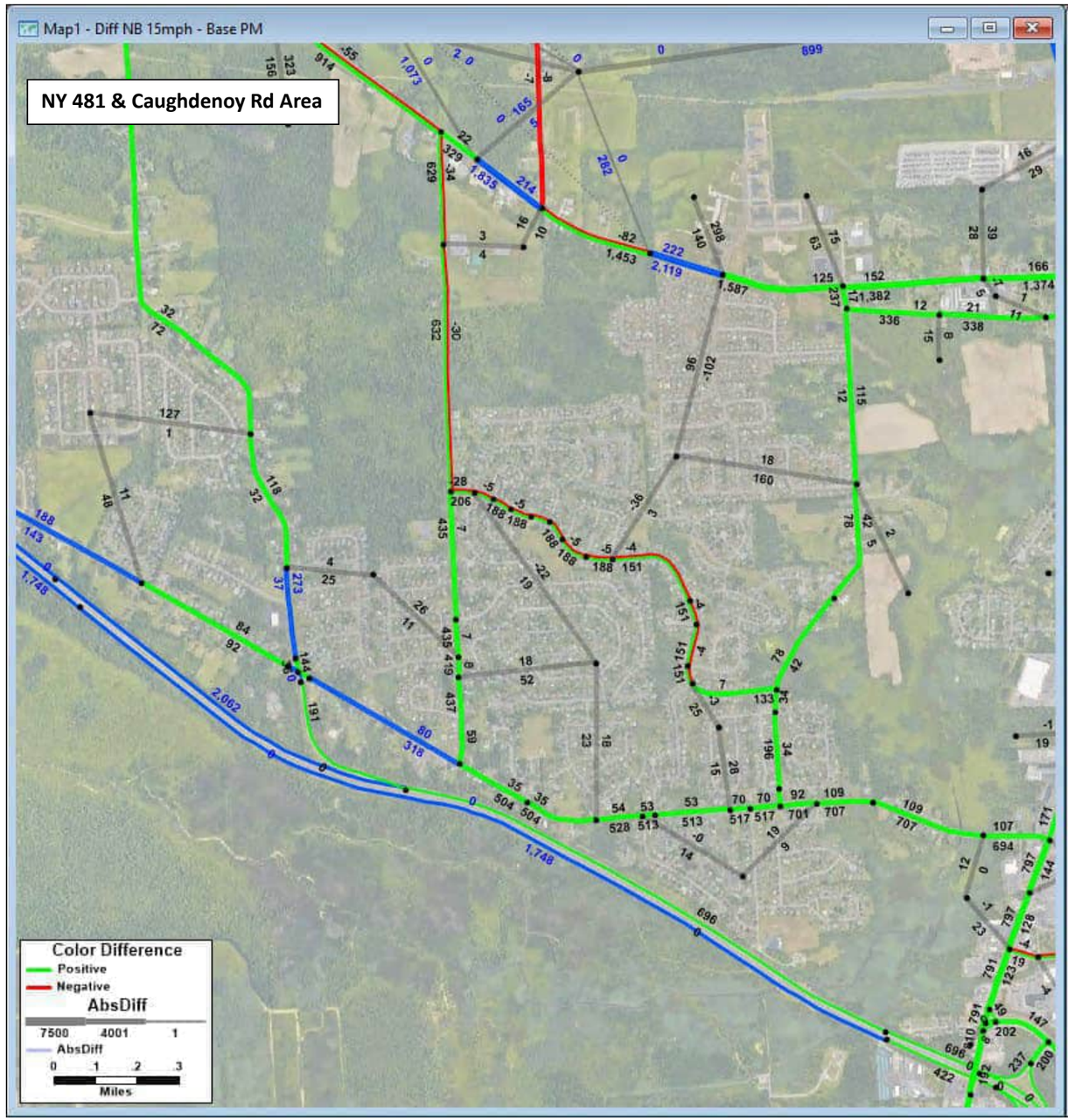


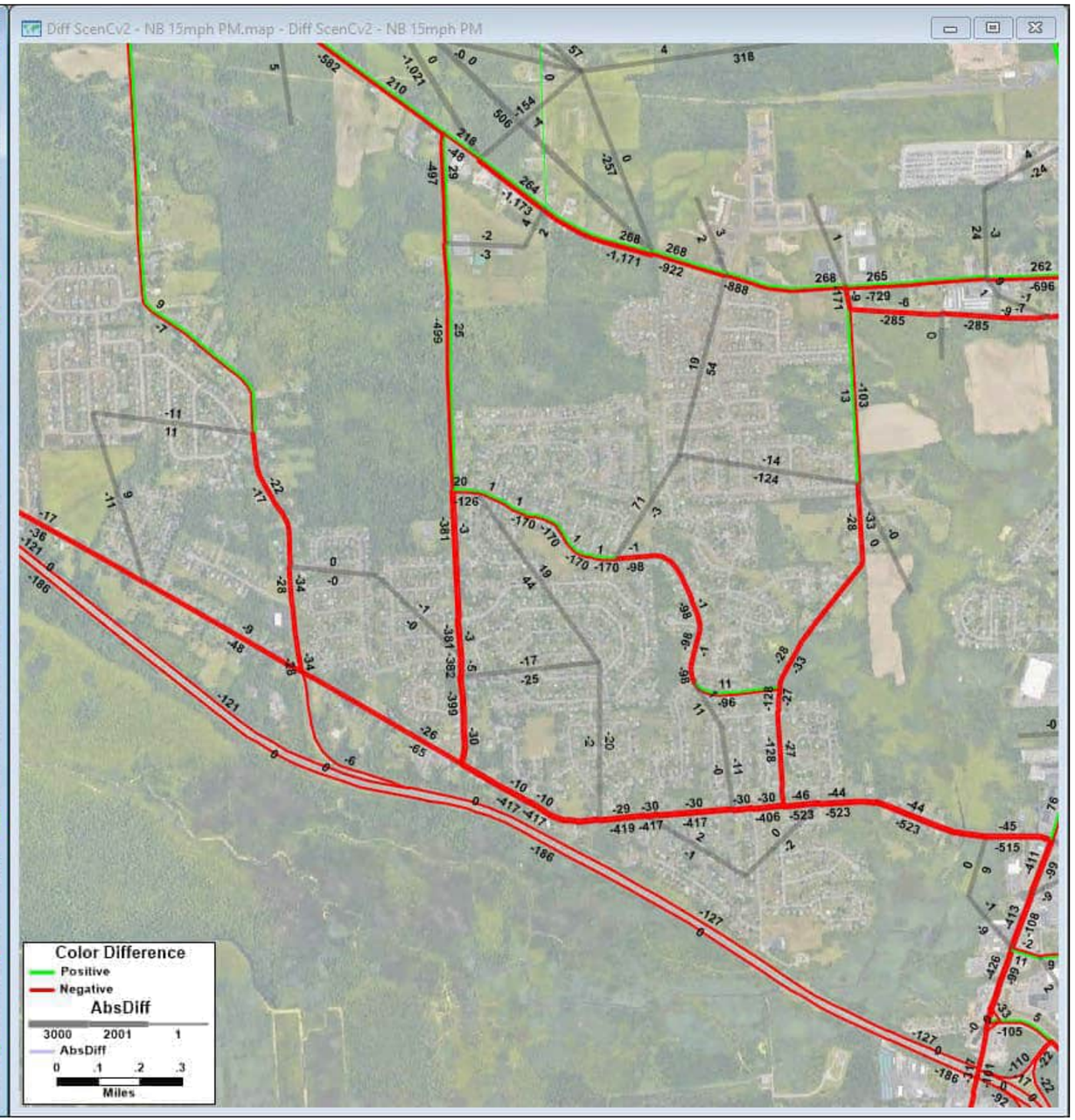
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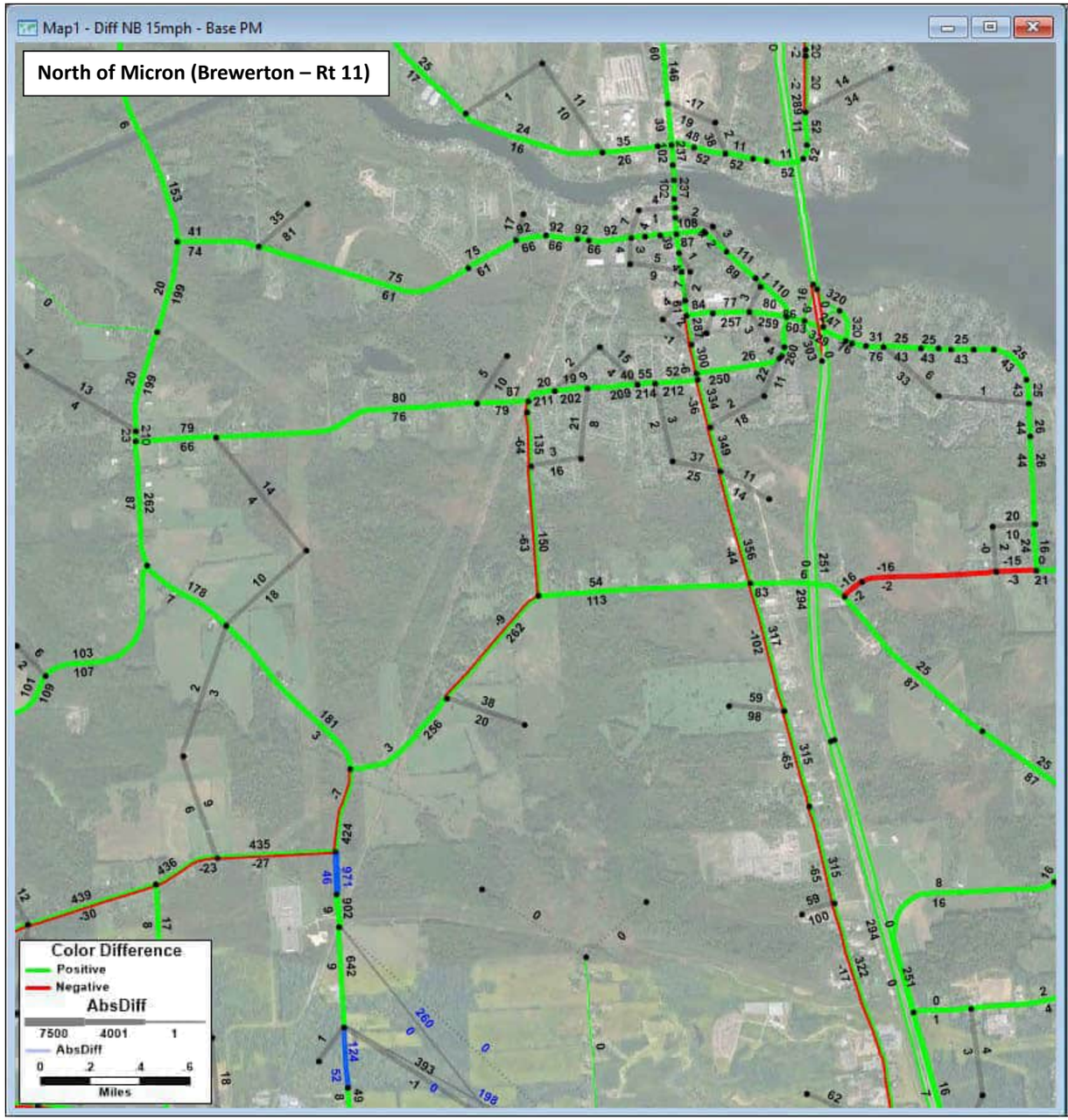


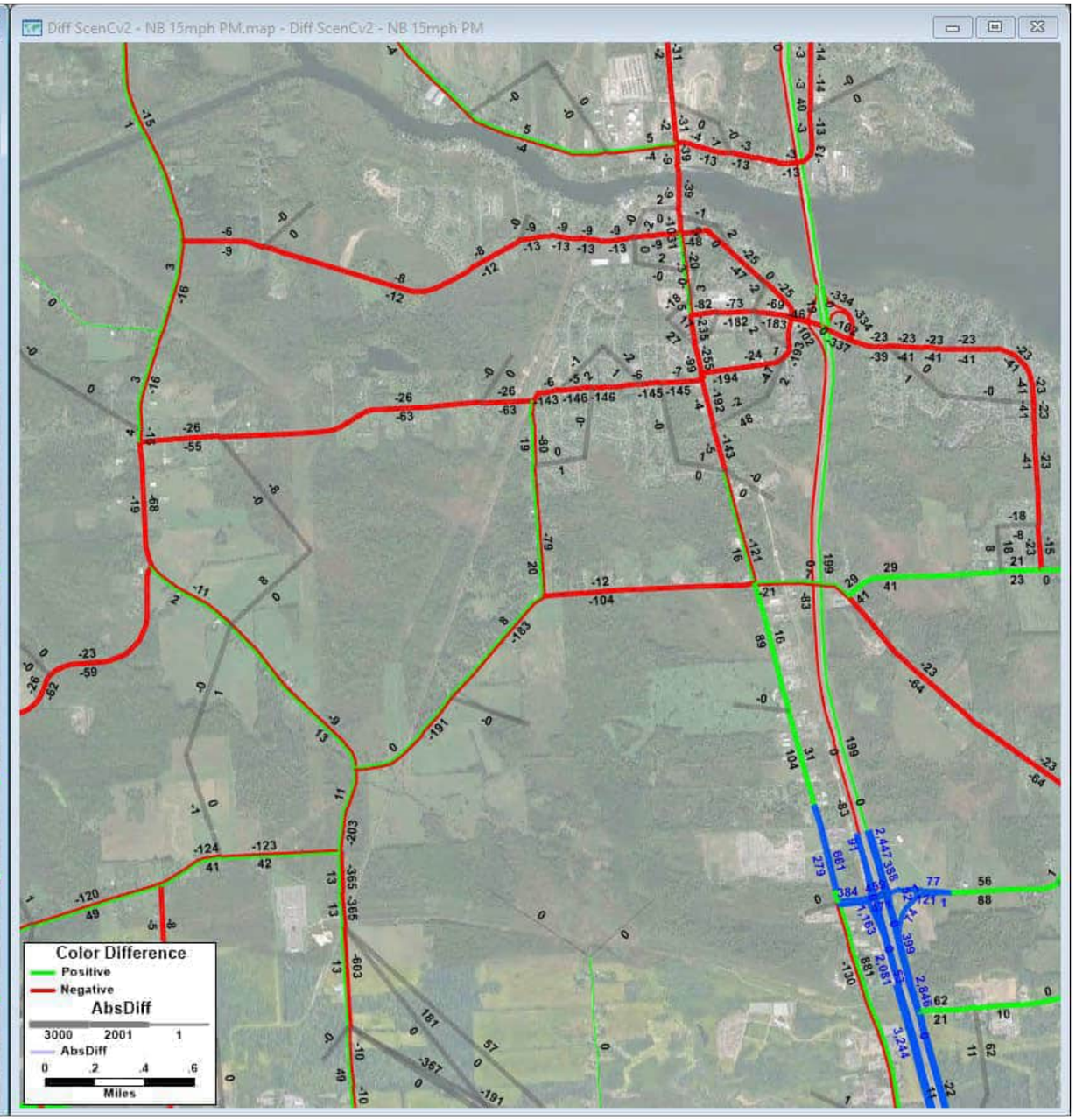


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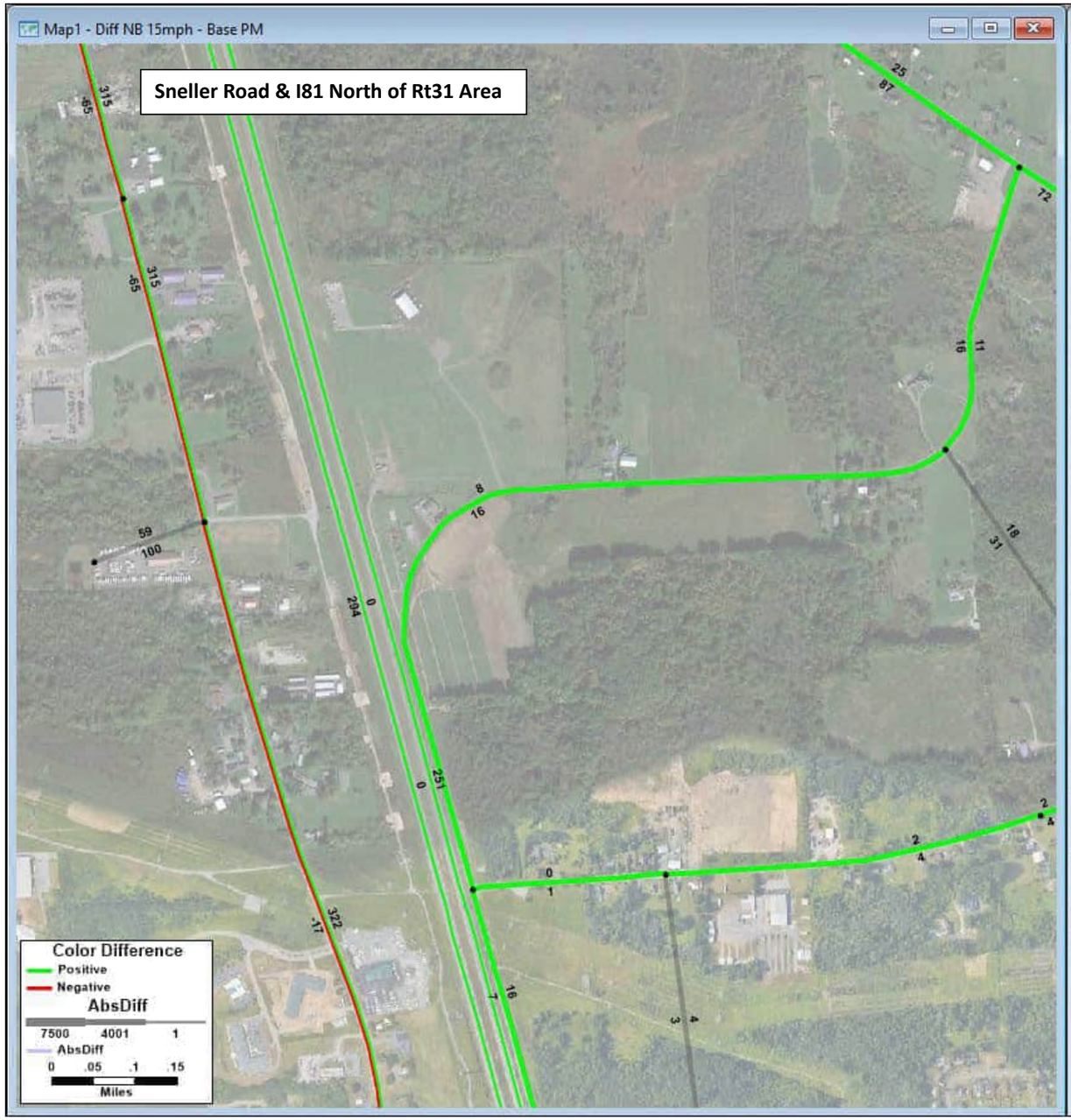


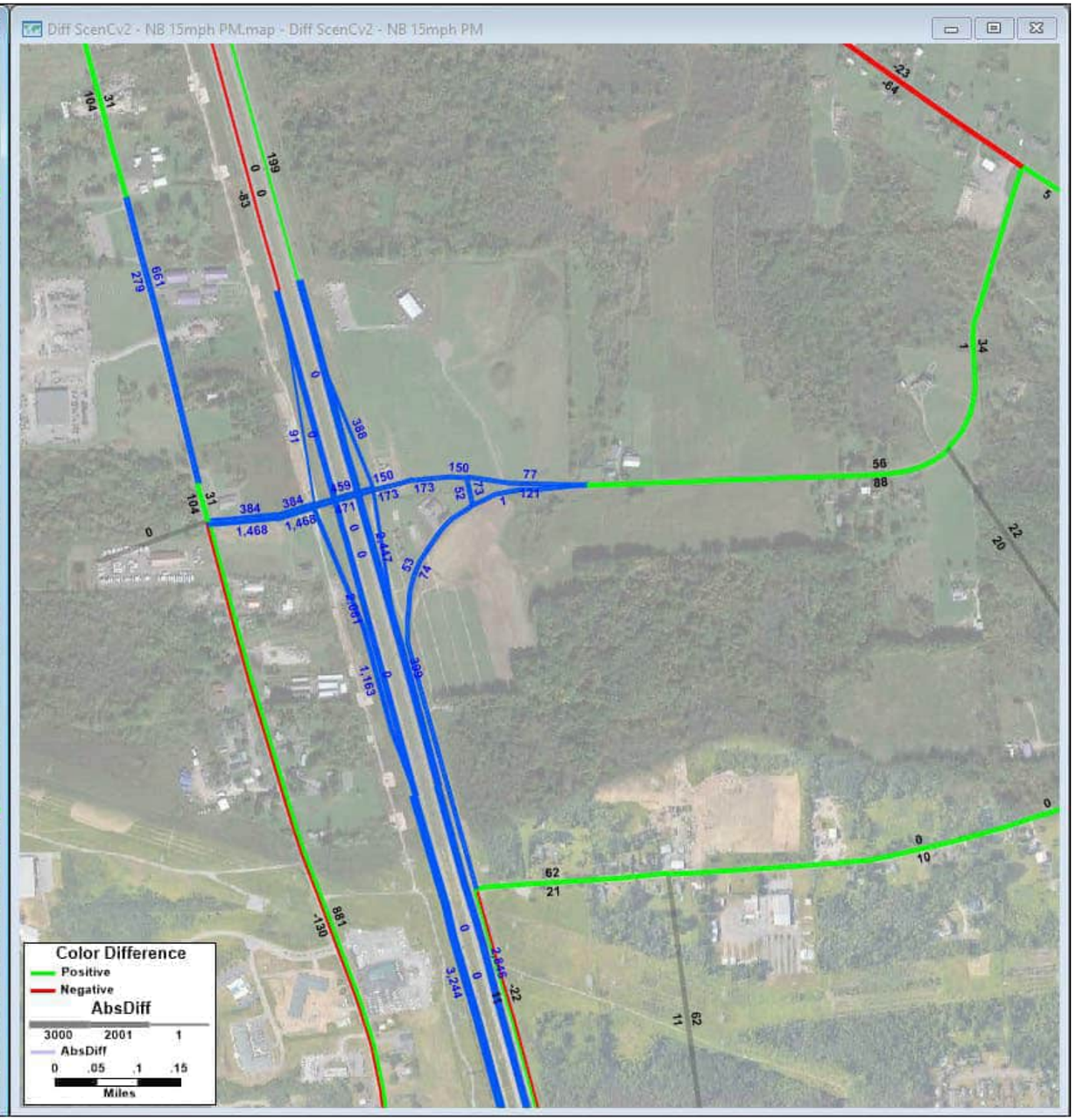


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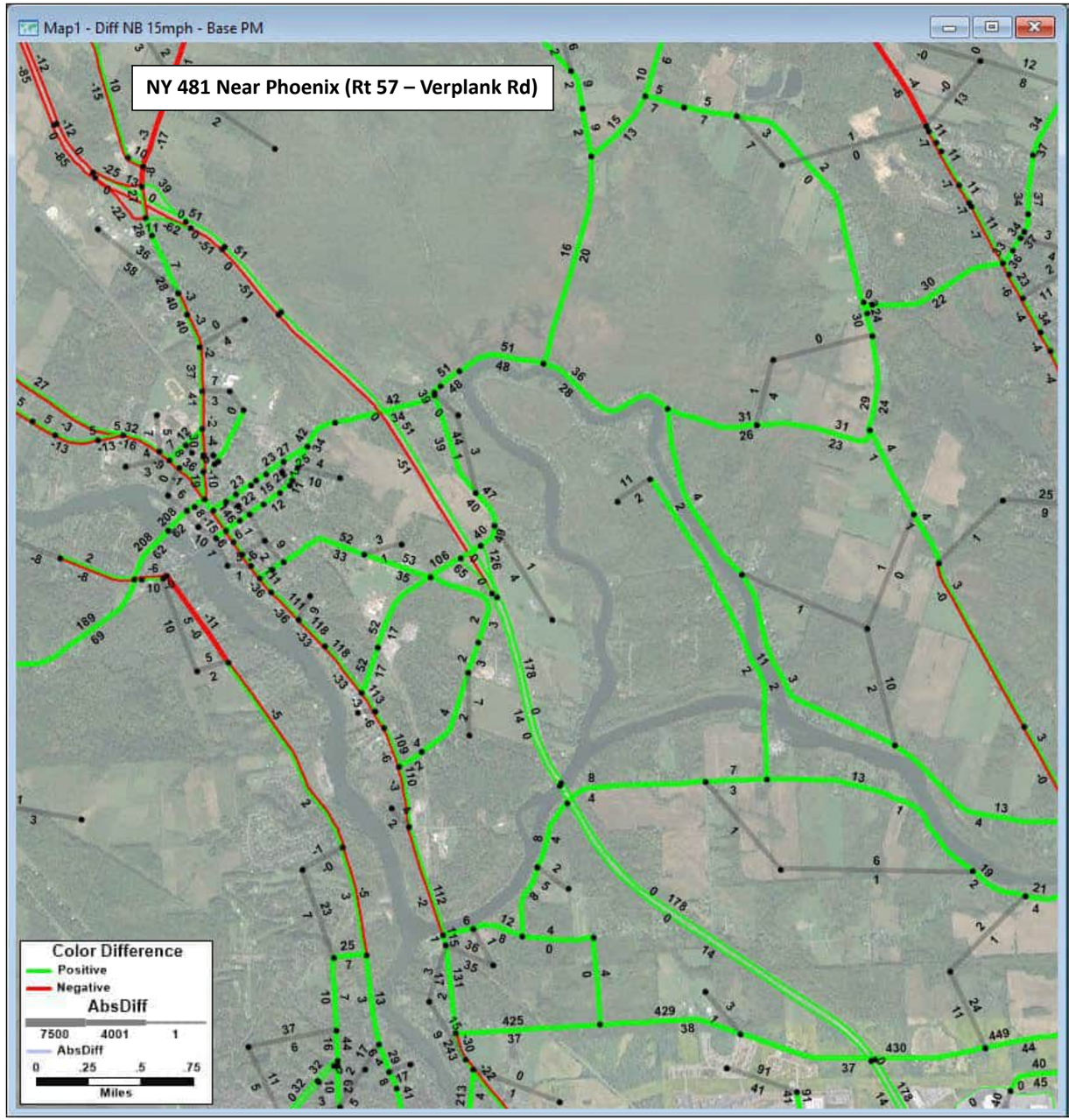




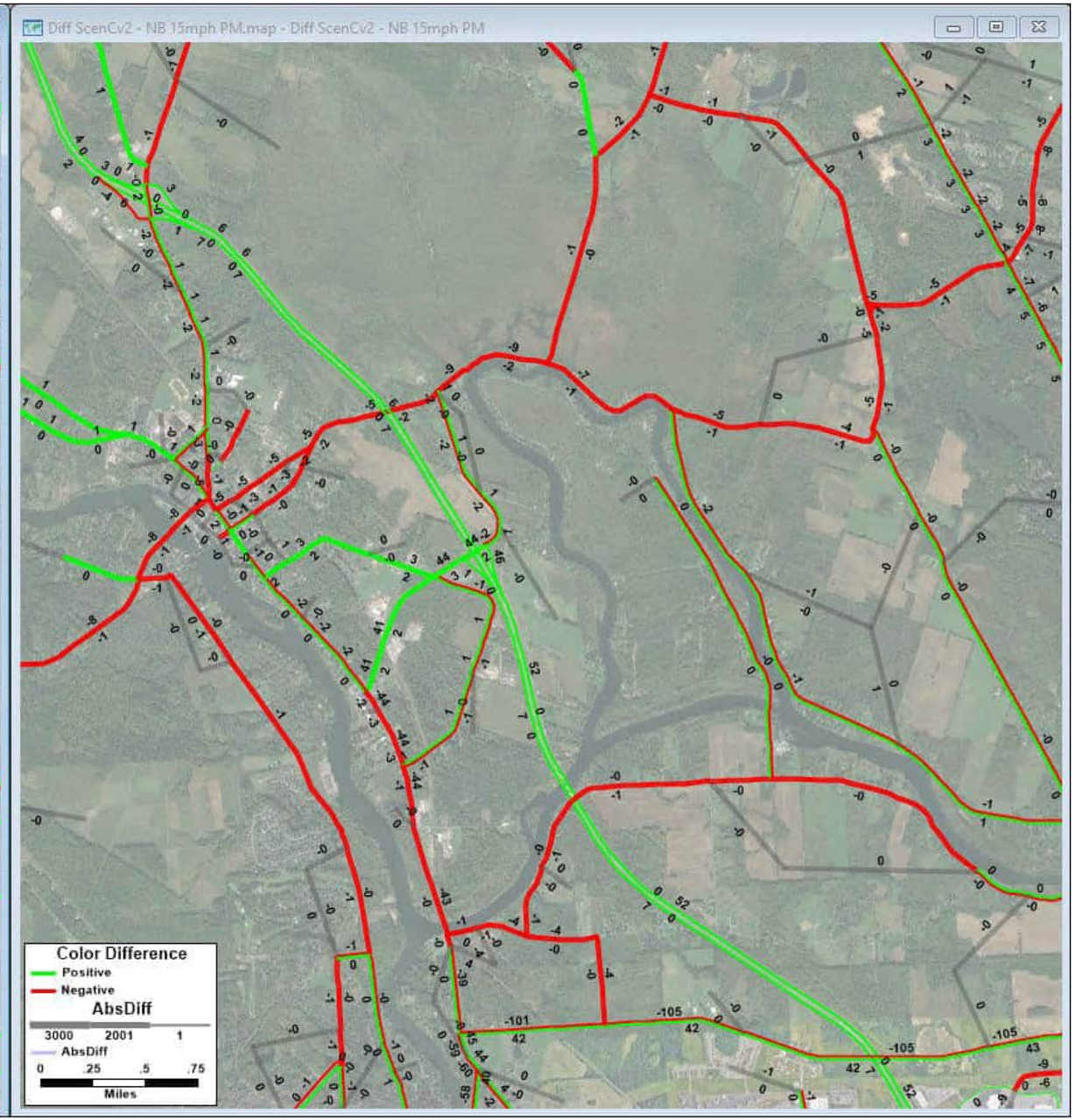
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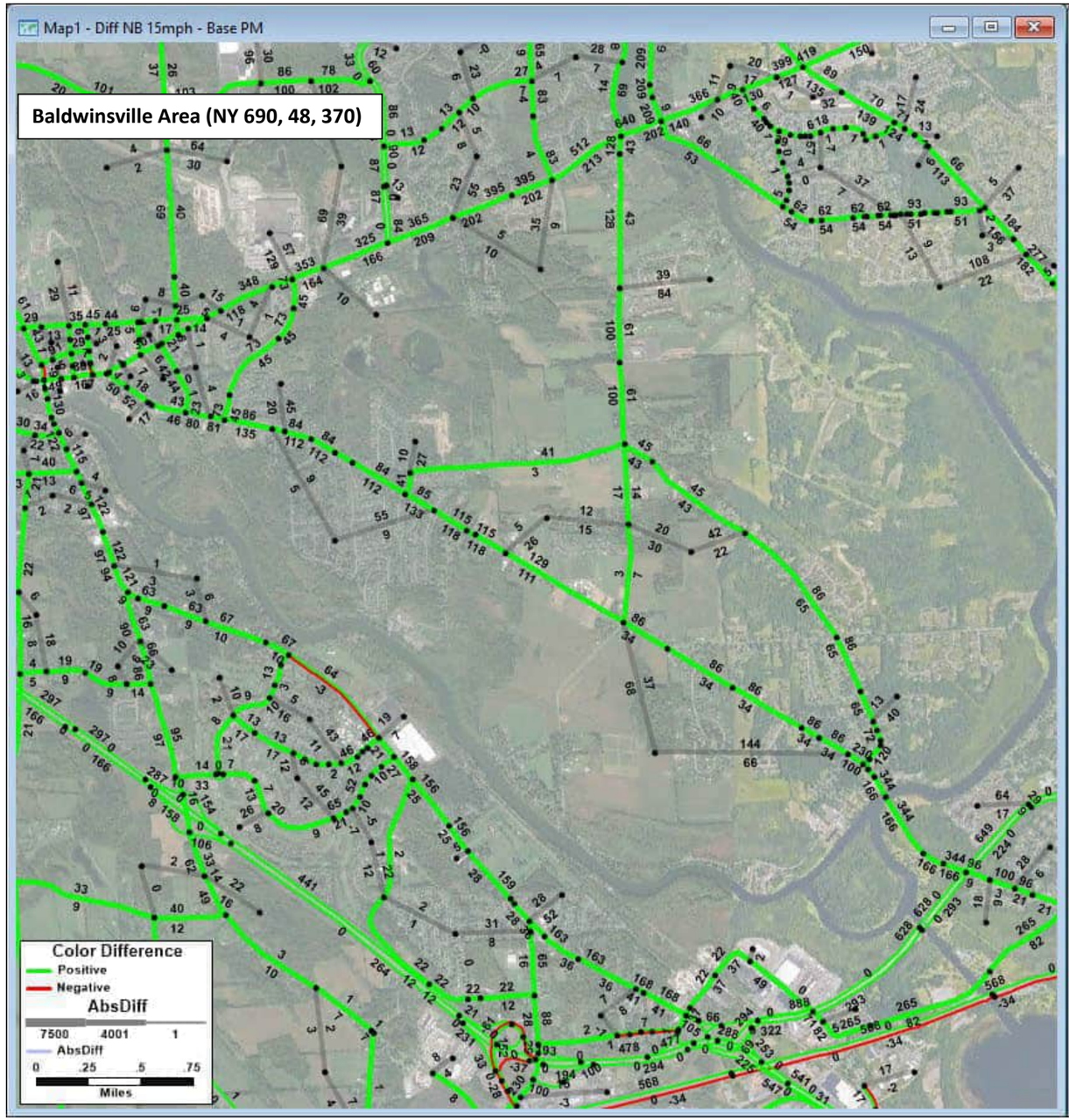


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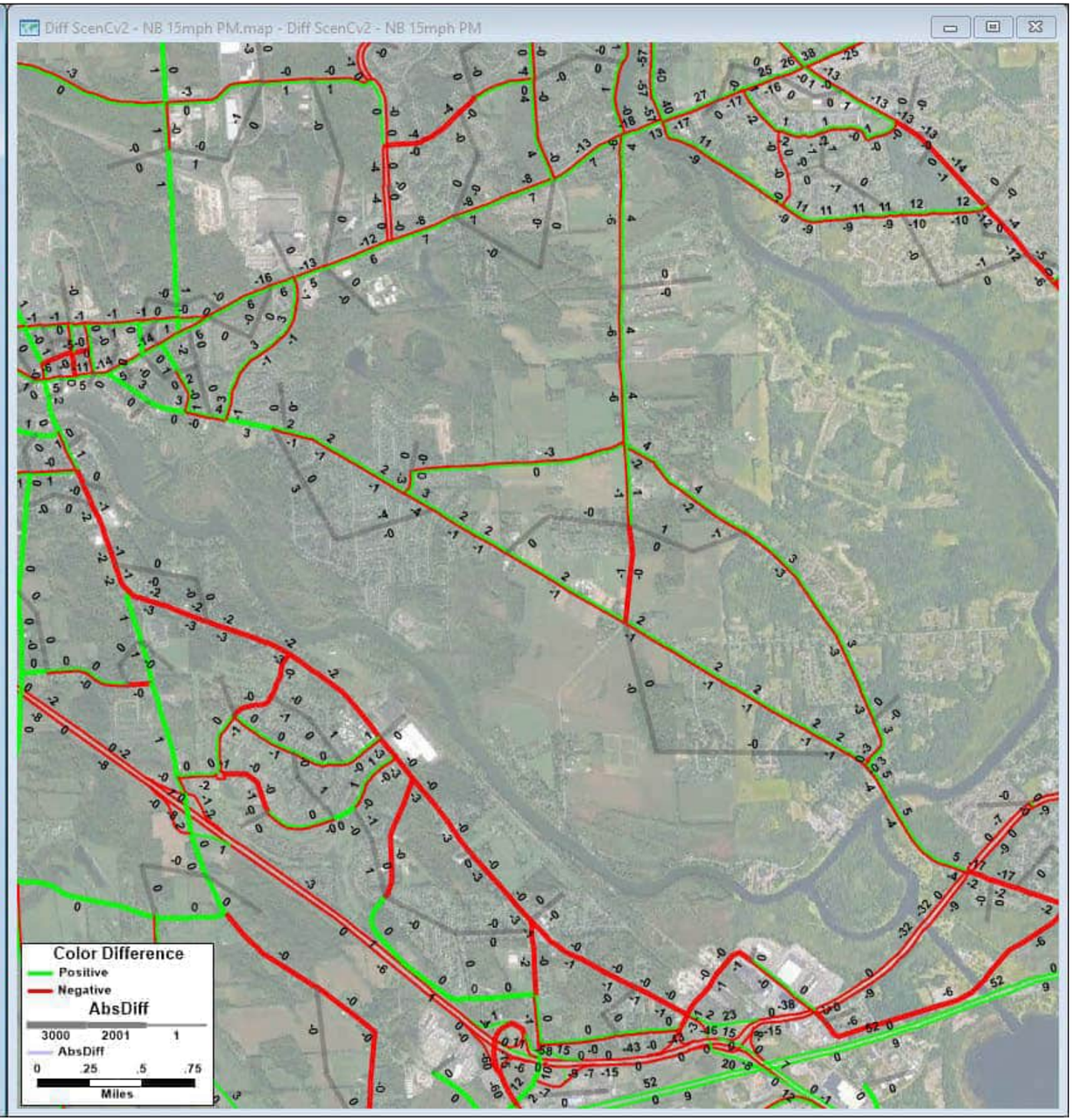


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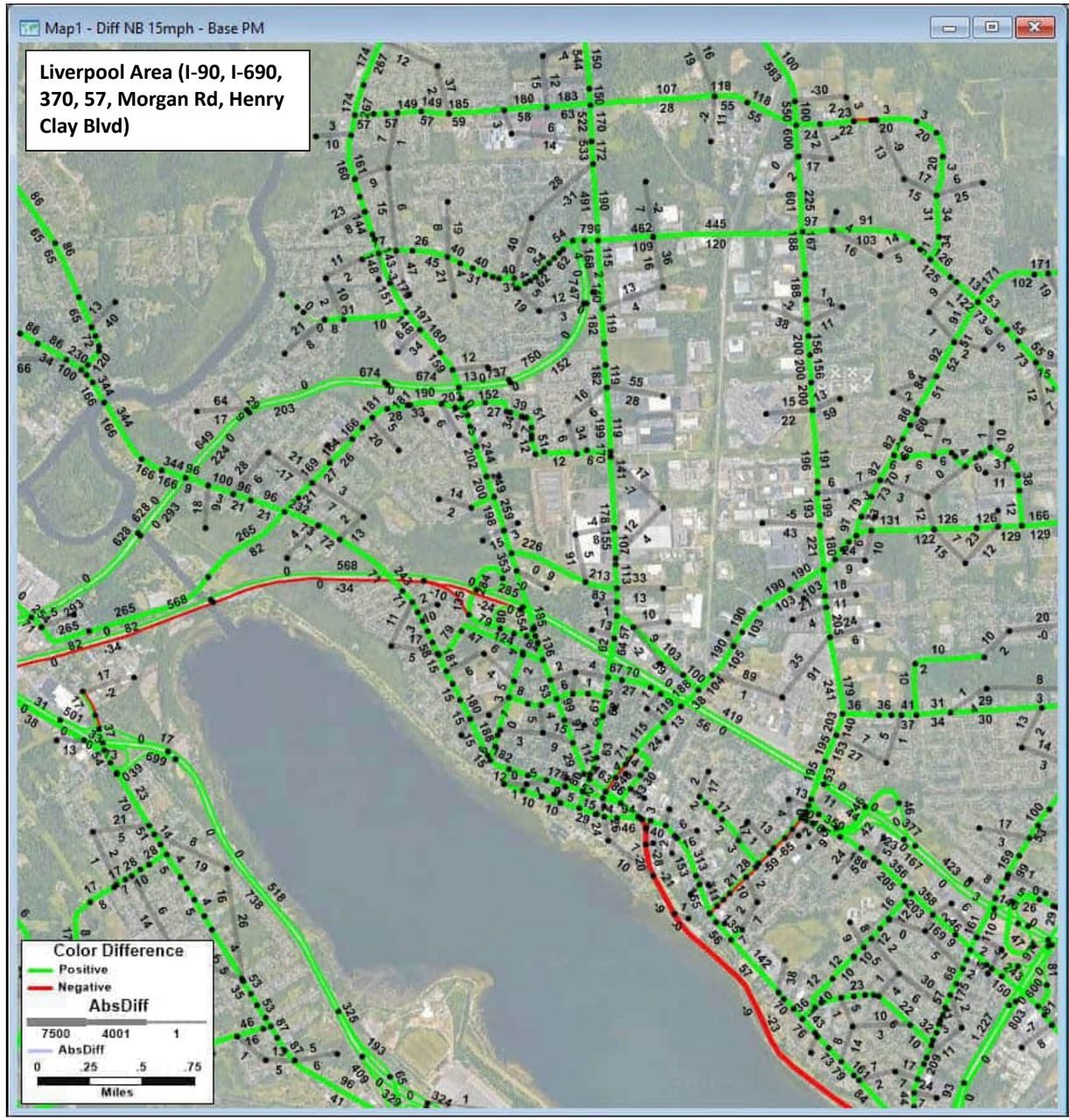


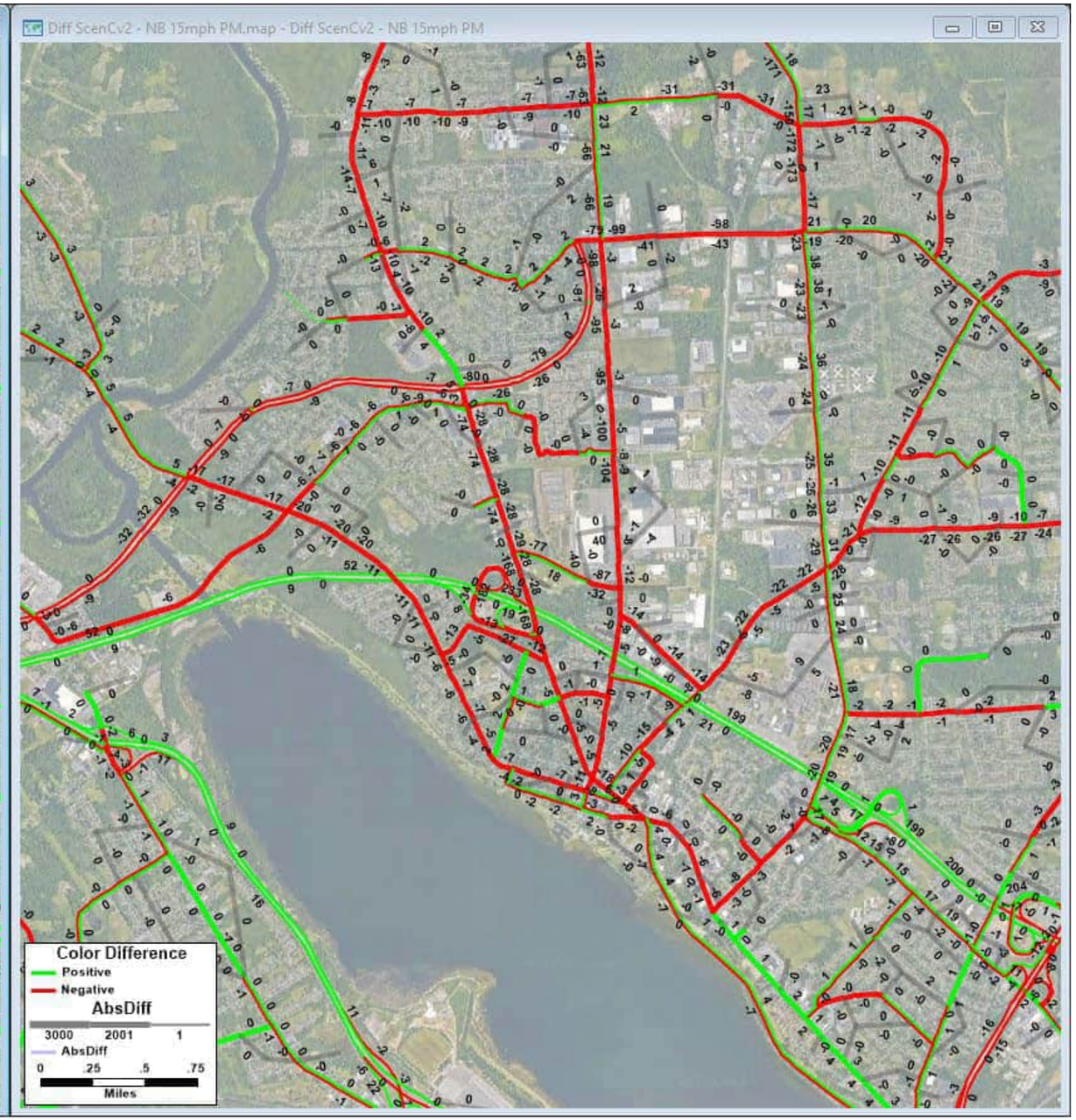
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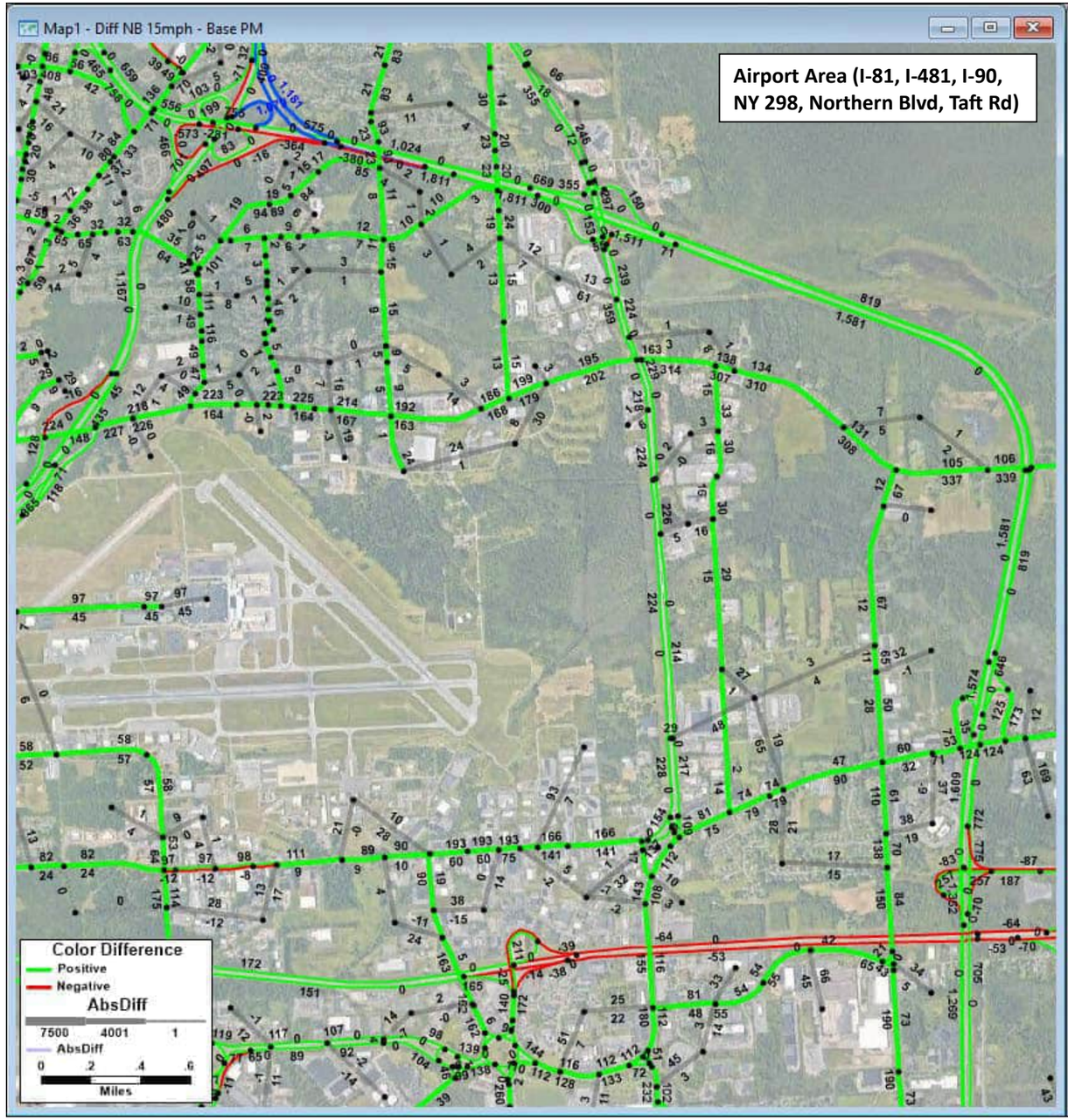


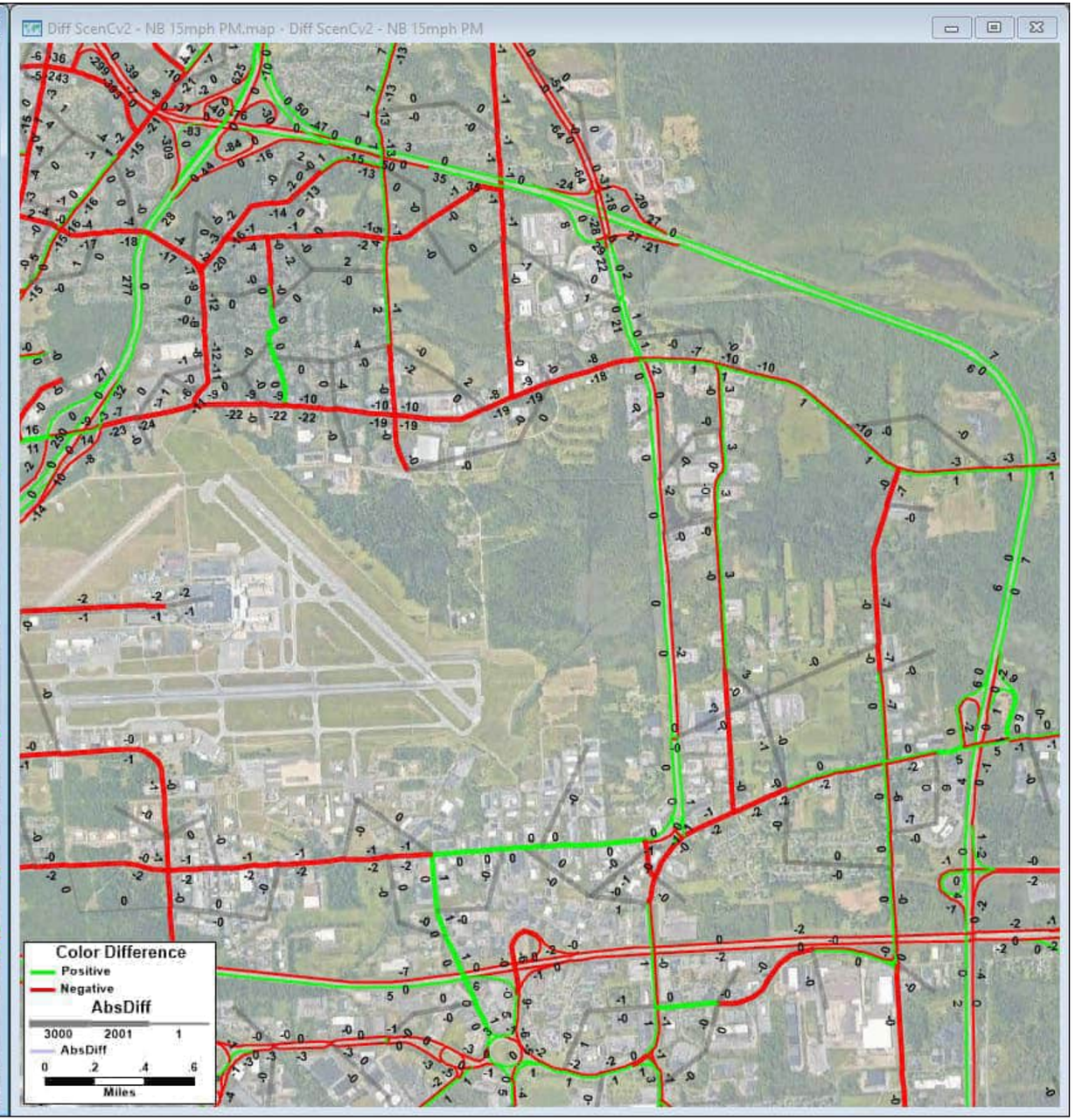


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Build: All future land use and anticipated transportation projects with Scenario C network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/24/2023)



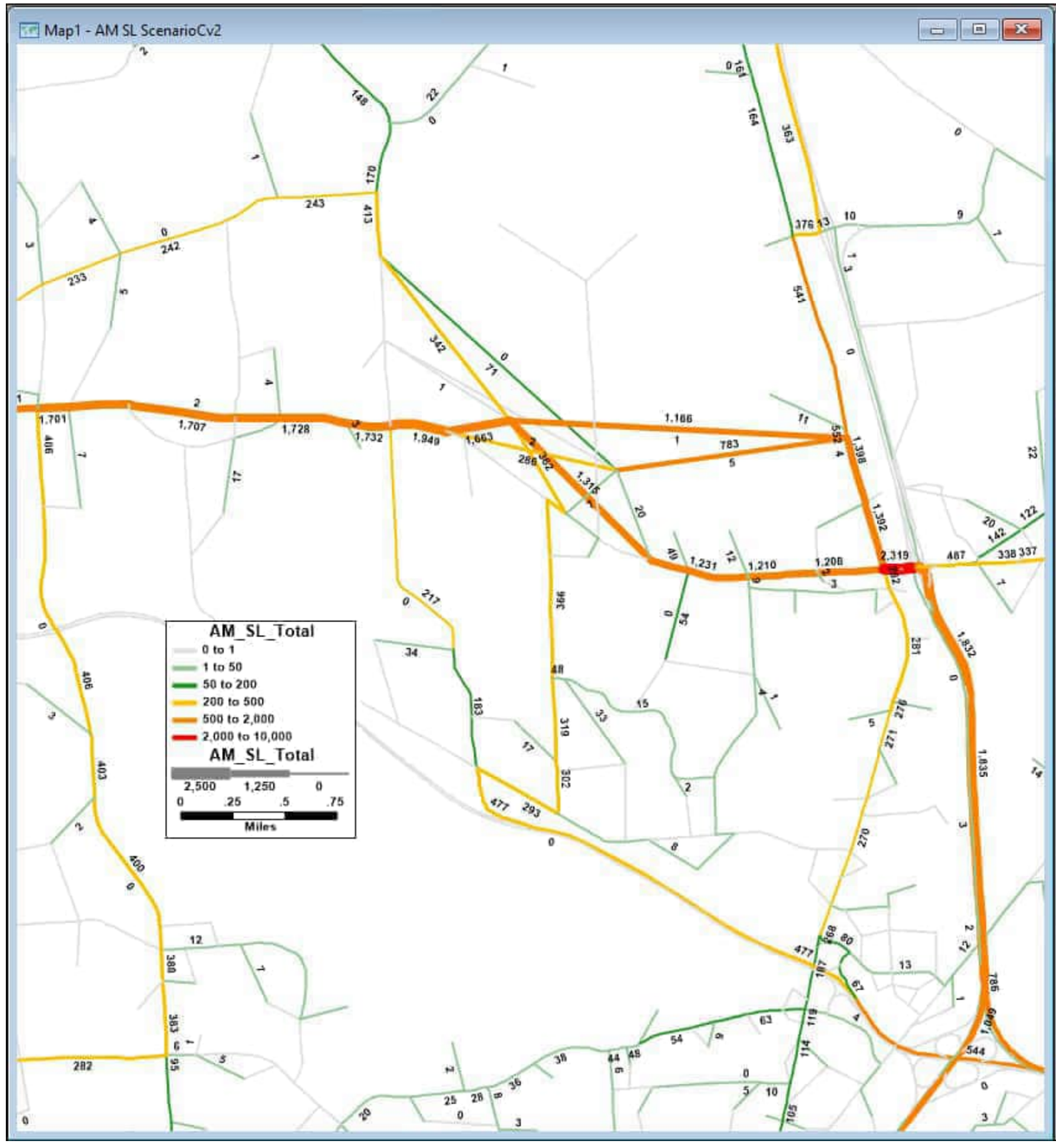


2040 No Build PM Volumes - 2020 Existing Conditions PM Volumes = Change in PM Volumes
No Build: All future land use and anticipated transportation projects but no Scenario C network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

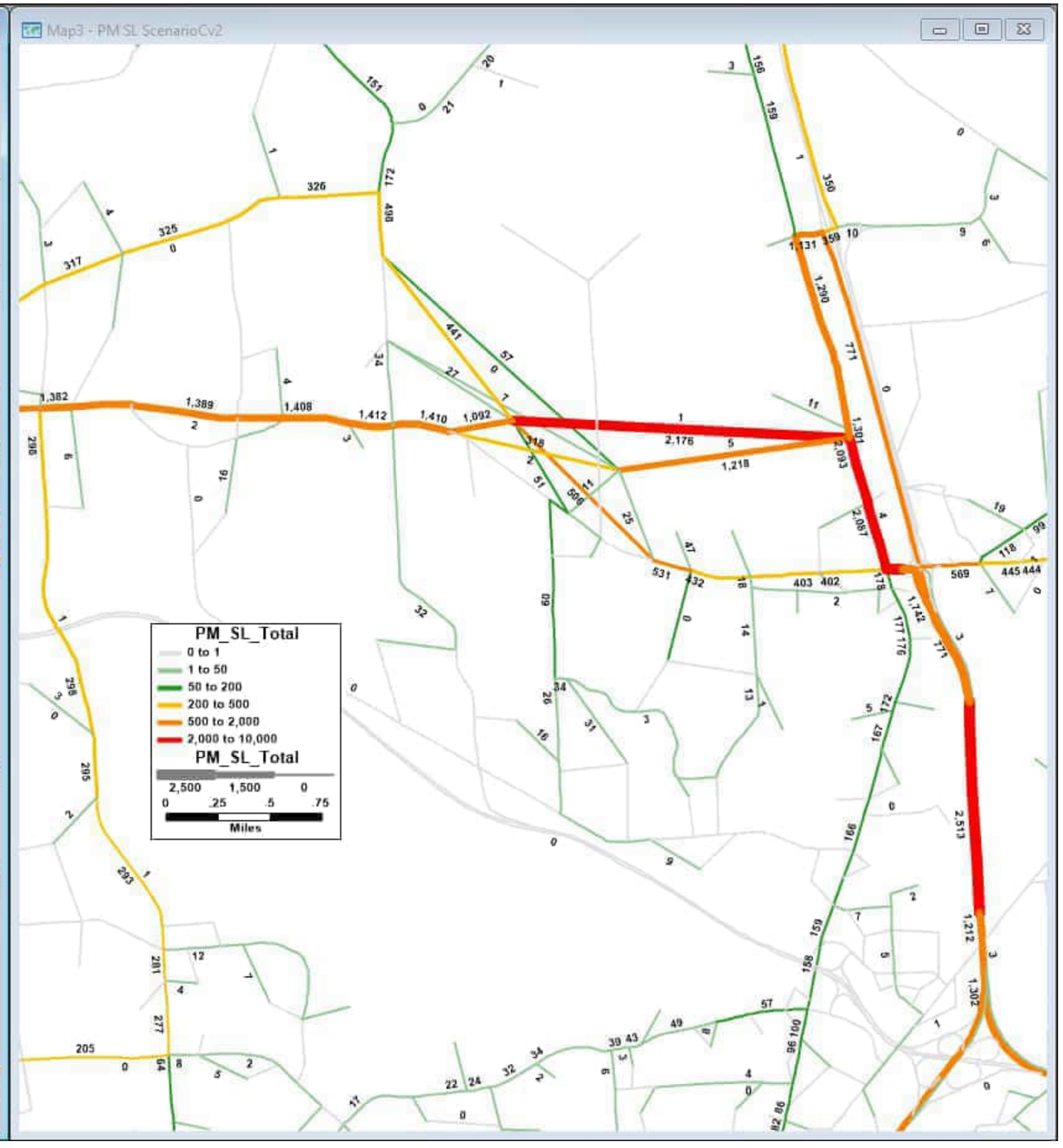
2040 Scenario C v2 PM Volumes - 2040 No Build PM Volumes = Change in PM Volumes
Build: All future land use and anticipated transportation projects with Scenario C network changes
Blue segments: links in the model that changed or are new; Blue numbers: volume for scenario (NOT change)

Source : SMTC Regional Travel Demand Model (1/24/2023)

SMTC Travel Demand Model Results: Scenario C v2 (New I81 Interchange & Reduced Capacity SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



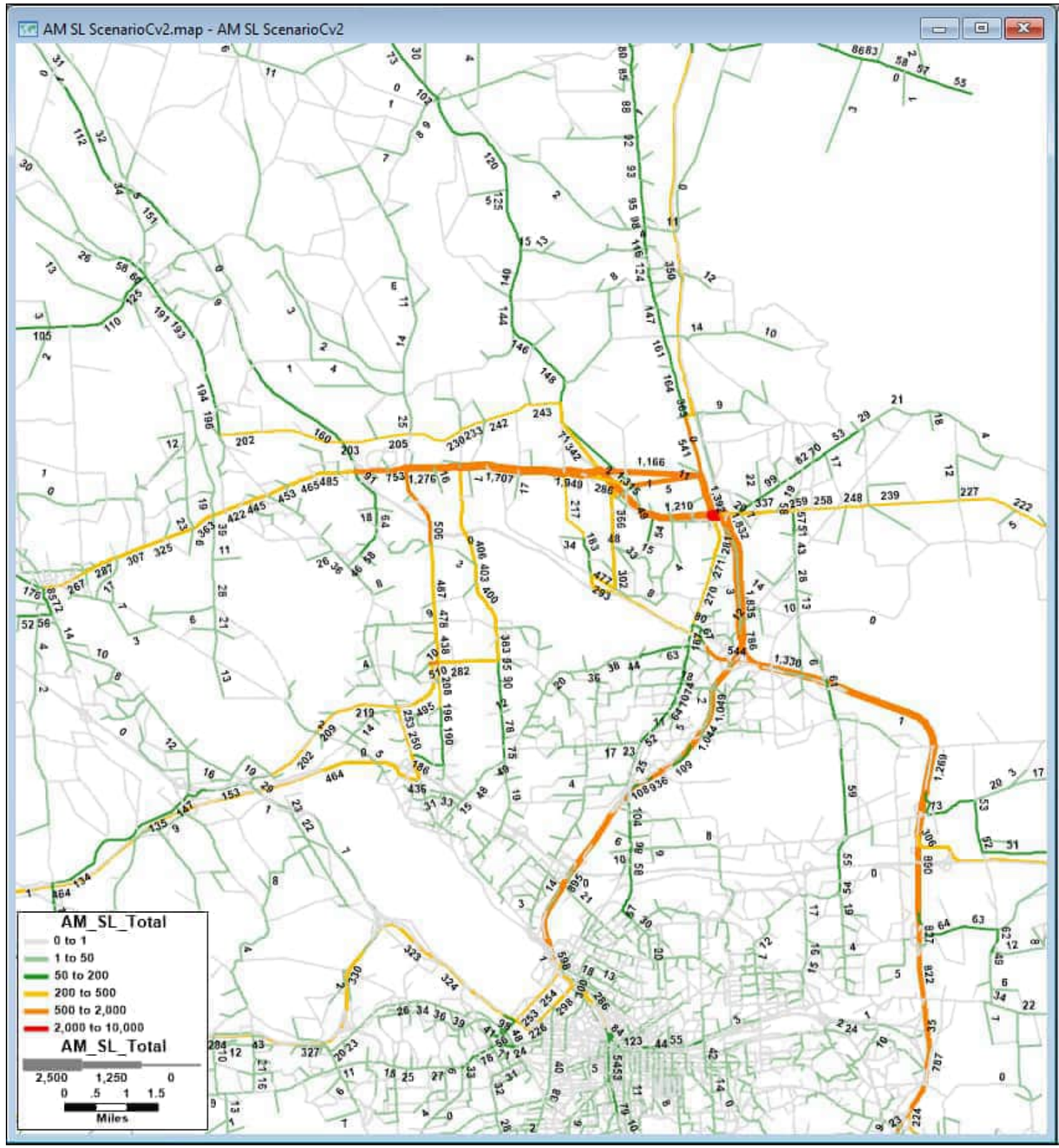
AM Peak Hour



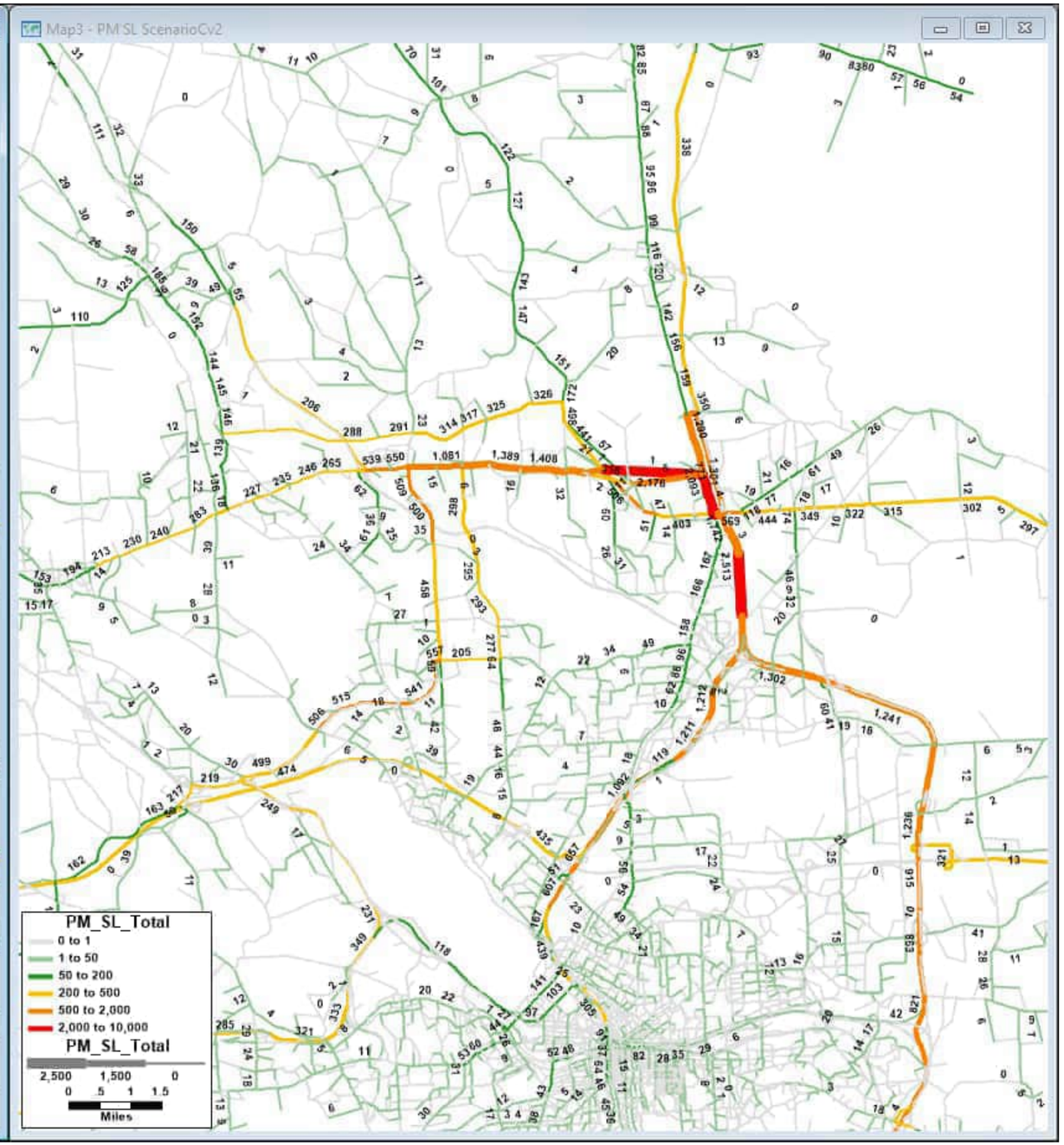
PM Peak Hour

Source : SMTC Regional Travel Demand Model

SMTC Travel Demand Model Results: Scenario C v2 (New I81 Interchange & Reduced Capacity SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



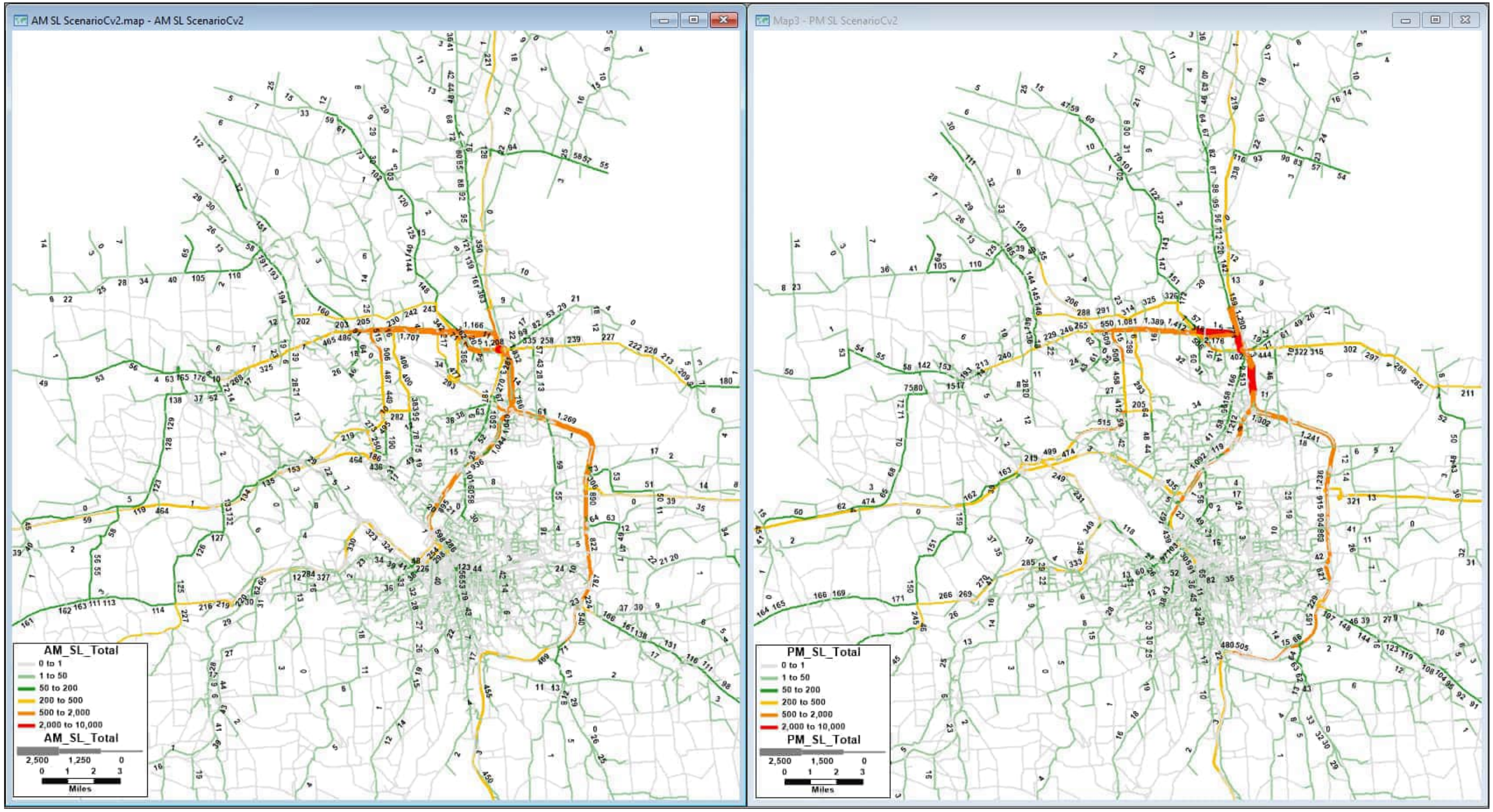
AM Peak Hour



PM Peak Hour

Source : SMTC Regional Travel Demand Model

SMTC Travel Demand Model Results: Scenario C v2 (New I81 Interchange & Reduced Capacity SPUI @ Rt31 & I81) – MICRON CENTROID CONNECTOR AM & PM PEAK HOUR SELECT LINK ANALYSIS



AM Peak Hour

PM Peak Hour

Source : SMTC Regional Travel Demand Model

	TAZ	Town_City	HH	HH_GQ	pop	veh
0	1	Tully	217	0	526	420.9999
1	2	Tully	316	0	720.56022	590.7387076399999
2	3	Tully	133	0	362.00011	266
3	4	Spafford	280	0	685.8422	550.5615
4	5	Tully	303	2	697.05688	559.9352069400001
5	6	Fabius	125	0	308	248
6	7	Fabius	157	0	399.00038	320.0003
7	8	Tully	112	0	310.77461	219.96386719999998
8	9	Fabius	198	0	501.06146	413.17365276000004
9	10	Fabius	248	0	621.99980	508
10	11	Otisco	113	0	277.0958	226.00010170000002
11	12	Otisco	384	0	910.18375	746.2051968000001
12	13	Otisco	148	0	382.4158	305.9326
13	14	Otisco	176	0	467.0005	370.0004
14	15	Otisco	157	0	399.4554	313.9998
15	16	Spafford	232	0	536.3673	448.0368
16	17	Spafford	212	0	498.4255	411.5958
17	18	Lafayette	89	0	201	161
18	19	Lafayette	351	0	845.9997	656.9997993000001
19	20	Lafayette	154	5	413.3919	296.3034
20	21	Lafayette	197	0	482.5505	369.12630720000004
21	22	Pompey	239	0	633.5059	511.3968
22	23	Pompey	245	0	613.99915	488.9994200000001
23	24	Pompey	127	0	325.99979	265.9998997999999
24	25	Skaneatele	400	0	955.3187	834.0422
25	26	Skaneatele	167	4	378.779	340.79654930000004
26	27	Lafayette	120	0	270.2519	216.8066
27	28	Lafayette	55	0	151.0001	108.00012300000002
28	29	Lafayette	251	0	539.148	437.744
29	30	Pompey	120	0	286.61119	242.97493920000002
30	31	Pompey	89	5	227.9685	184.55799170000003
31	32	Pompey	80	0	200.4937	165.9259
32	33	Pompey	150	0	392.00053	313.0004
33	34	Pompey	59	0	140.3794	116.9828
34	35	Pompey	51	0	122.5961	101.99999490000002
35	36	Marcellus	102	0	252.52449	196.07783747999997
36	37	Marcellus	23	0	43.00001	41.000007000000004
37	38	Marcellus	80	0	194.56794	159.0124
38	39	Lafayette	253	0	537.87340	438.2672
39	40	Skaneatele	293	3	636.51256	580.06
40	41	Skaneatele	17	0	37.1875	39.3125
41	42	Skaneatele	212	0	517.28000	445.2
42	43	Onondaga	120	0	290.9998	236.9999

	TAZ	Town_City	HH	HH_GQ	pop	veh
43	44	Onondaga	216	0	564.6144	446.0653
44	45	Lafayette	83	0	204.00003	158
45	46	Lafayette	76	0	193.9999	147.99994519999998
46	47	Pompey	79	0	195.99988	163.99993940000002
47	48	Pompey	272	7	706.01018	566.4225
48	49	Onondaga	72	4	190.07780	145.87006319999998
49	50	Onondaga	92	0	208.9999	178.99993799999996
50	51	Onondaga	225	0	548.0004	448.0002832499999
51	52	Onondaga	6	0	13.714271	12.857129999999998
52	53	Marcellus	111	0	283.4466	222.99118227000002
53	54	Marcellus	183	0	462.5278	361.9783
54	55	Marcellus	83	0	199.5952	160.0714
55	56	Onondaga	306	0	436.00052	436.0008
56	57	Skaneatele	241	0	581.0001	442.99994363999997
57	58	Skaneatele	185	0	439.63508	334.663
58	59	Skaneatele	494	0	953.93124	765.4871749199999
59	60	Onondaga	189	0	442.9997	302.9998
60	61	Lafayette	241	0	552.0001	434.0001
61	62	Marcellus	109	0	270.5183	193.2273
62	63	Onondaga	361	0	900.0001	725
63	64	Skaneatele	150	0	381.54333	286.91257799999994
64	65	Skaneatele	318	0	776.4422	590.8583767800001
65	66	Skaneatele	42	0	116.23253	81.06978
66	67	Onondaga	202	0	502.5119	312.4529
67	68	Pompey	153	0	424.7759	322.10500950000005
68	69	Pompey	237	6	612.1153	496.1875
69	70	Pompey	316	0	953.21437	696.6600716799999
70	71	Lafayette	125	0	310.97546	238.821
71	72	Pompey	127	0	306.9998	256.9999
72	73	Pompey	195	0	596.9382	424.82101349999994
73	74	Marcellus	413	0	821.0125	669.3795794000001
74	75	Onondaga	12	0	20.727263	16.36363
75	76	Onondaga	256	0	632.0615	419.72057087999997
76	77	Onondaga	212	0	492.3218	414.9571
77	78	Marcellus	111	0	317.8638	225.02741400000002
78	79	Marcellus	17	0	40.375	34
79	80	Marcellus	15	0	32.8125	24.375
80	81	Onondaga	425	0	955.24814	666.5687335000001
81	82	Onondaga	286	0	754.4659	535.0968
82	83	Skaneatele	493	0	1186.593	899.1760642200001
83	84	Manlius	16	0	47.999991	30.933318399999997
84	85	Manlius	145	0	424.9304	288.9929
85	86	Manlius	345	0	766.9995	604.9997

	TAZ	Town_City	HH	HH_GQ	pop	veh
86	87	Manlius	215	0	495	367.99995980000006
87	88	Marcellus	200	0	490.0994	350.49531999999994
88	89	Marcellus	207	0	415.0045	333.6113
89	90	Dewitt	373	0	999.84757	696.2668
90	91	Dewitt	50	0	147	99
91	92	Marcellus	142	0	352.00008	250.0001
92	93	Marcellus	156	0	406.99978	283.99983768000004
93	94	Marcellus	133	0	335.0001	237
94	95	Onondaga	630	4	1571.24	1039.6542365999999
95	96	Syracuse	758	0	1652.18	1148.5156572800001
96	97	Manlius	62	0	122.03170	98.41264959999998
97	98	Manlius	619	0	1373.852	1031.6658206999998
98	99	Syracuse	763	0	1277.001	789.0008
99	100	Syracuse	311	7	640.7729	350.24311203999997
100	101	Onondaga	456	7	1261.7383	862.7556
101	102	Syracuse	326	24	768.8773	506.18213318000005
102	103	Marcellus	242	0	610.99979	435.99988079999997
103	104	Marcellus	152	0	395.40518	278.3242
104	105	Manlius	710	1	1590.001	1256.001
105	106	Dewitt	236	6	536.0172	388.41689479999997
106	107	Syracuse	33	0	58.999957	33.999969300000004
107	108	Syracuse	40	0	96	45
108	109	Syracuse	290	0	641	342.00000150000005
109	110	Syracuse	49	0	103.00000	55.99998319999999
110	111	Onondaga	241	1	690.00024	464.0001
111	112	Onondaga	171	0	482.9998	331.9998
112	113	Onondaga	11	0	31.999977	19.99999
113	114	Dewitt	35	0	83.382397	74.11769400000001
114	115	Manlius	791	0	2182.93	1609.3140209999997
115	116	Onondaga	541	10	1502.413	1083.963
116	117	Onondaga	643	0	1781.771	1231.916
117	118	Syracuse	696	0	852.00027	552.0001
118	119	Syracuse	705	0	1428.9995	563.0000279999999
119	120	Manlius	222	0	561.0004	430.0002
120	121	Syracuse	314	0	777.04989	302.07575579999997
121	122	Syracuse	127	0	275.00002	150
122	123	Syracuse	331	0	731.35269	389.84453786000006
123	124	Onondaga	78	0	172.2077	130.6753
124	125	Manlius	390	0	831.62997	675.1530942000002
125	126	Manlius	156	0	309.40007	266.5001
126	127	Manlius	373	0	689.64792	532.6658801799999
127	128	Syracuse	276	7	633.8721	253.97856719999996
128	129	Dewitt	2	0	3	3

	TAZ	Town_City	HH	HH_GQ	pop	veh
129	130	Syracuse	116	0	288.51267	140.7862
130	131	Syracuse	86	0	207.58641	105.7702
131	132	Syracuse	89	0	213.8045	107.4138
132	133	Onondaga	203	14	416.24057	307.3193
133	134	Manlius	266	0	520.9582	402.5131
134	135	Manlius	185	0	446.4128	326.76618449999995
135	136	Manlius	198	0	421.12691	316.59902604000007
136	137	Manlius	196	0	555.3336	398.92946828000004
137	138	Onondaga	383	0	1003.62	751.9628202000001
138	139	Onondaga	119	0	284.9995	228.99967061999993
139	140	Onondaga	0	0	0	0
140	141	Onondaga	79	0	130.99996	112
141	142	Onondaga	451	6	750.1003	631.597
142	143	Syracuse	94	1	250.34709	137.5366
143	144	Syracuse	210	14	498.9777	282.5111
144	145	Syracuse	362	0	944.00072	440.0004
145	146	Syracuse	24	0	45.913051	23.999992800000005
146	147	Syracuse	15	0	38.4375	15.9375
147	148	Syracuse	836	0	1445.2708	882.9434983600001
148	149	Syracuse	291	0	695.0001	405.0001
149	150	Syracuse	487	5	1310.2783	416.57860198000003
150	151	Syracuse	192	6	450.12195	258.90944640000004
151	152	Onondaga	6	0	19.000038	11.000022000000001
152	153	Onondaga	13	0	29.7143	23.214297600000005
153	154	Manlius	82	0	146.79021	133.6297
154	155	Syracuse	295	4	598.09673	479.37440410000005
155	156	Dewitt	445	0	1018.151	656.904
156	157	Syracuse	158	0	427.0001	192.00003579999998
157	158	Syracuse	283	4	748.84103	234.85081016000004
158	159	Dewitt	241	0	603.01339	499.4345
159	160	Dewitt	313	0	781.4967	658.1024
160	161	Dewitt	242	0	543.4384	386.3508704000001
161	162	Dewitt	59	0	139.9998	95.99989710000001
162	163	Onondaga	361	0	713.02469	506.59647674000007
163	164	Onondaga	353	0	945.9997	594.9999
164	165	Onondaga	100	0	250.5049	160.60591999999997
165	166	Manlius	103	0	231.9999	177.99997324000003
166	167	Syracuse	127	0	324.5557	142.1191
167	168	Syracuse	19	0	44.70592	21.2353
168	169	Dewitt	31	0	73.625	49.40625
169	170	Syracuse	177	0	461.3931	208.8201
170	171	Syracuse	700	0	1580.376	794.3685330000001
171	172	Camillus	196	0	532.28428	385.0355

	TAZ	Town_City	HH	HH_GQ	pop	veh
172	173	Syracuse	251	0	599.7794	231.84747010000007
173	174	Syracuse	34	0	97.277753	33.055544600000005
174	175	Manlius	54	0	153.1636	107.0182
175	176	Manlius	126	0	333.648	248.97600000000006
176	177	Syracuse	265	9	603.06574	391.19029965000004
177	178	Manlius	522	0	1212.322	885.6960719399999
178	179	Dewitt	340	4	845.4751	718.1123782000001
179	180	Syracuse	144	0	293.00002	157.99999680000002
180	181	Syracuse	201	0	326.9999	199.99996871999997
181	182	Syracuse	76	0	205.29867	73.03896
182	183	Syracuse	33	0	88.32355	32.02942
183	184	Syracuse	61	1	174.00011	61
184	185	Dewitt	268	9	601.3188	409.7679264000001
185	186	Syracuse	24	0	53.00003	42.00001439999999
186	187	Manlius	646	5	1173.7628	923.2829
187	188	Manlius	113	0	289.5627	219.94654254000002
188	189	Syracuse	218	0	562.0002	385
189	190	Syracuse	101	0	271.31363	116.8431
190	191	Onondaga	373	0	881.3634	591.5863775800001
191	192	Syracuse	379	0	970.99976	677.9996567000001
192	193	Syracuse	143	0	346.4224	250.75343149999998
193	194	Elbridge	135	5	323.56154	253.48947299999992
194	195	Elbridge	217	0	531.55043	406.12845706999997
195	196	Syracuse	194	0	369.00022	305.0001
196	197	Onondaga	1	0	2	2
197	198	Onondaga	24	0	52.17395	36.52175520000001
198	199	Syracuse	95	0	253.33326	112.8125
199	200	Syracuse	167	0	455.72927	200.1989
200	201	Syracuse	217	0	562.59294	261.2039
201	202	Manlius	450	0	880.95744	681.5142
202	203	Syracuse	145	0	328.99999	163
203	204	Syracuse	281	5	720.7185	267.29287619999997
204	205	Syracuse	12	0	30.545443	9.818180400000001
205	206	Syracuse	99	0	262.9999	92.99997
206	207	Syracuse	91	0	225.52182	85.06521660000001
207	208	Dewitt	576	4	1393.352	954.3726
208	209	Onondaga	322	0	590.0003	422.0002
209	210	Onondaga	76	5	180.45676	115.4074
210	211	Syracuse	262	8	557.13639	416.6863064999999
211	212	Syracuse	483	5	1165.583	834.6319
212	213	Camillus	225	0	560.9868	437.8925
213	214	Camillus	294	0	798.4534	610.2088717199999
214	215	Camillus	41	0	56.999975	54.99998

	TAZ	Town_City	HH	HH_GQ	pop	veh
215	216	Onondaga	128	1	283.58461	185.1077
216	217	Syracuse	258	4	540.67939	433.2825
217	218	Syracuse	173	0	343.9995	272.9997
218	219	Dewitt	124	0	337.00009	225
219	220	Dewitt	276	5	598.10633	417.91481160000006
220	221	Syracuse	170	0	421.0002	145.0001
221	222	Syracuse	158	0	443.00049	143.0001
222	223	Syracuse	120	21	306.957	75.7446
223	224	Syracuse	57	0	142.0001	36.00002
224	225	Syracuse	74	0	195.9999	47.99997
225	226	Manlius	466	6	1187.784	888.5591864200001
226	227	Syracuse	68	42	238.58185	49.454539520000004
227	228	Manlius	184	0	409.1295	333.3648
228	229	Onondaga	73	0	147.01388	106.4583
229	230	Onondaga	130	0	255.00005	184
230	231	Syracuse	322	0	835.59588	483.50183377999997
231	232	Syracuse	77	0	184.99987	62.99996
232	233	Syracuse	94	54	256.068	74.17688
233	234	Syracuse	385	0	971.7158	572.3806934999999
234	235	Syracuse	36	0	72	18.514299599999998
235	236	Syracuse	50	0	137.7552	32.65307
236	237	Dewitt	111	0	276.509	231.9107
237	238	Dewitt	154	0	351.0002	317.00022662000003
238	239	Syracuse	534	0	1455.2500	1060.8647774400001
239	240	Geddes	15	7	31.54547	17.72728
240	241	Manlius	324	0	697.1516	572.7678
241	242	Syracuse	60	0	116.0656	30.49182
242	243	Syracuse	38	0	104.00002	19.99999
243	244	Manlius	498	0	1154.981	899.1375408600001
244	245	Syracuse	170	0	427.99970	121.99981999999999
245	246	Syracuse	169	0	395.6591	117.3059
246	247	Syracuse	0	0	0	0
247	248	Syracuse	83	0	291.48828	72.13097
248	249	Syracuse	290	16	644.49184	258.623
249	250	Syracuse	206	0	522.53617	201.98032199999997
250	251	Syracuse	149	0	390.0003	128
251	252	Syracuse	85	0	247.99998	76.99993
252	253	Syracuse	140	6	322.43824	240.68486400000003
253	254	Dewitt	124	9	284.24267	186.9396
254	255	Dewitt	270	4	691.36213	446.0436180000001
255	256	Camillus	1304	4	2806.2974	2190.359
256	257	Camillus	801	0	1959.554	1413.235
257	258	Geddes	452	0	988.8123	735.373

	TAZ	Town_City	HH	HH_GQ	pop	veh
258	259	Geddes	1	0	2	2
259	260	Syracuse	65	5	111.7856	88.21422350000002
260	261	Syracuse	494	0	1095.782	672.6380569999999
261	262	Syracuse	107	0	307.87698	82.77361
262	263	Syracuse	123	10	348.4816	95.25567720000001
263	264	Camillus	159	0	312.9999	198.99982557000004
264	265	Camillus	262	0	568.9999	355.0001
265	266	Camillus	165	7	325.5549	205.0577
266	267	Camillus	582	4	1316.237	959.0567
267	268	Geddes	503	0	1180.0004	841.0003617299999
268	269	Syracuse	1	0	1	0
269	270	Syracuse	0	0	0	0
270	271	Syracuse	417	2	1072.864	410.0333
271	272	Syracuse	206	33	445.8656	120.3109
272	273	Syracuse	4	51	64	2.071429
273	274	Syracuse	295	49	596.12242	87.47098
274	275	Camillus	63	0	136	103.99994639999998
275	276	Syracuse	265	0	602.9992	459.9995345000001
276	277	Syracuse	179	3	352.1966	285.6174
277	278	Syracuse	85	0	173.95329	135.40681899999998
278	279	Syracuse	0	668	668	0
279	280	Syracuse	1	658	660.7246	1.651198
280	281	Syracuse	340	20	789.473	232.6313
281	282	Syracuse	0	0	0	0
282	283	Syracuse	280	31	802.89168	569.4594
283	284	Syracuse	142	700	1016	144
284	285	Syracuse	265	6	701.87026	401.4258
285	286	Syracuse	193	0	438.2707	268.3905
286	287	Elbridge	254	0	639.5177	482.9011
287	288	Elbridge	217	4	522.06324	403.6983
288	289	Elbridge	218	0	535.5439	411.11448468000003
289	290	Syracuse	151	42	468.1204	117.7957
290	291	Geddes	420	8	892.15905	605.4674009999999
291	292	Syracuse	12	0	25.000010	2.9999988000000006
292	293	Syracuse	0	0	0	0
293	294	Syracuse	29	0	61.99996	46.999975199999994
294	295	Syracuse	272	0	552.0295	444.63470079999996
295	296	Syracuse	337	0	812.99982	488.9999
296	297	Geddes	444	0	990.23075	679.5308
297	298	Syracuse	0	428	428	0
298	299	Syracuse	0	59	59	0
299	300	Dewitt	310	0	709.71106	461.5115979000001
300	301	Syracuse	637	1	1006.5620	173.4918

	TAZ	Town_City	HH	HH_GQ	pop	veh
301	302	Syracuse	70	0	229.9999	38.99997499999999
302	303	Syracuse	0	0	0	0
303	304	Syracuse	41	0	69.99992	11.999970200000002
304	305	Syracuse	47	0	101.1522	18.39132
305	306	Syracuse	21	0	56.31824	10.50001
306	307	Syracuse	21	27	54.99999	6.999988799999999
307	308	Syracuse	0	0	0	0
308	309	Syracuse	0	70	70	0
309	310	Syracuse	1	0	1	0
310	311	Syracuse	414	6	941.1876	711.9618
311	312	Syracuse	0	0	0	0
312	313	Syracuse	0	0	0	0
313	314	Syracuse	0	96	96	0
314	315	Syracuse	0	0	0	0
315	316	Syracuse	0	0	0	0
316	317	Syracuse	33	210	276	43.32097
317	318	Syracuse	6	254	266.9961	7.969105
318	319	Syracuse	0	0	0	0
319	320	Syracuse	198	0	520.0003	97.00006
320	321	Syracuse	72	0	181	35.000006400000004
321	322	Syracuse	62	0	172.9999	31.99999
322	323	Syracuse	92	0	246.3227	50.45164
323	324	Manlius	241	0	593.57446	450.75965199999996
324	325	Manlius	136	0	279.94180	230.3068
325	326	Syracuse	1	82	84	1.301204
326	327	Syracuse	65	66	203.939	83.35882
327	328	Syracuse	0	464	464	0
328	329	Syracuse	0	225	225	0
329	330	Syracuse	123	0	298.9998	179
330	331	Syracuse	85	0	204.40484	124.46436100000001
331	332	Dewitt	233	0	514.9998	335.99996602000004
332	333	Dewitt	130	10	244.00007	160.6429
333	334	Camillus	606	4	1223.9343	936.2748
334	335	Syracuse	168	0	400.2352	162.0707
335	336	Syracuse	217	0	538.96750	208.9257
336	337	Syracuse	0	0	0	0
337	338	Syracuse	0	0	0	0
338	339	Syracuse	67	0	67.999968	48.99997
339	340	Syracuse	0	0	0	0
340	341	Syracuse	0	0	0	0
341	342	Syracuse	0	0	0	0
342	343	Syracuse	196	0	219.11797	148.75905099999997
343	344	Syracuse	0	4	4	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
344	345	Syracuse	136	0	273.98552	166.7738
345	346	Syracuse	0	62	62	0
346	347	Syracuse	208	0	453.9998	349.9999
347	348	Syracuse	223	0	368.2095	318.07772249999994
348	349	Geddes	211	0	504.6079	360.29206251999994
349	350	Camillus	501	0	1197.9102	864.2502
350	351	Manlius	380	0	941.47644	715.8832616000001
351	352	Manlius	52	5	126.03445	96.82759
352	353	Syracuse	321	49	657.16467	137.07557070000001
353	354	Syracuse	77	0	194.47434	40.474341599999995
354	355	Syracuse	0	0	0	0
355	356	Syracuse	0	0	0	0
356	357	Geddes	380	0	926.87869	650.4233
357	358	Syracuse	145	9	363.4445	128.8888
358	359	Syracuse	142	0	286.0142	121.85818040000001
359	360	Syracuse	60	0	106.00003	47.00003
360	361	Syracuse	5	0	12	9
361	362	Syracuse	180	1	316.99981	229.99987800000002
362	363	Syracuse	260	1	539	368
363	364	Syracuse	236	0	420.21946	351.51060119999994
364	365	Syracuse	136	19	311.05120	226.66661679999999
365	366	Geddes	225	0	465.06689	329.46420825000007
366	367	Geddes	186	0	444.60941	297.401
367	368	Syracuse	59	0	116.9828	79.34486969999998
368	369	Syracuse	485	0	998.05744	688.4188939999999
369	370	Syracuse	298	0	595.9997	416.397
370	371	Syracuse	0	0	0	0
371	372	Syracuse	840	0	1183.592	590.2975
372	373	Syracuse	0	140	140	0
373	374	Syracuse	0	282	282	0
374	375	Syracuse	0	0	0	0
375	376	Syracuse	0	0	0	0
376	377	Syracuse	81	0	81	81
377	378	Syracuse	0	188	188	0
378	379	Syracuse	0	24	24	0
379	380	Syracuse	0	0	0	0
380	381	Syracuse	0	0	0	0
381	382	Syracuse	0	0	0	0
382	383	Geddes	167	4	372.38246	271.12950164999995
383	384	Syracuse	108	0	280	54.99998
384	385	Syracuse	195	0	475	94.00008
385	386	Dewitt	160	4	397.1707	248.78041280000002
386	387	Dewitt	112	0	243	158.00001056000002

	TAZ	Town_City	HH	HH_GQ	pop	veh
387	388	Syracuse	154	0	274.40004	156.79999719999998
388	389	Syracuse	190	0	466.455	204.074
389	390	Syracuse	146	0	210.44140	143.98619280000003
390	391	Syracuse	201	10	402.47386	206.7156
391	392	Syracuse	39	0	73.125000	39
392	393	Camillus	28	0	50.81478	40.444412400000004
393	394	Camillus	379	3	899.53745	656.0757
394	395	Syracuse	0	0	0	0
395	396	Syracuse	78	0	93.000039	49.000005599999994
396	397	Syracuse	185	0	221.00685	109.26183434999999
397	398	Camillus	1318	4	2825.5771	1993.463
398	399	Syracuse	458	3	1171.793	486.74911800000007
399	400	Syracuse	124	0	225.82114	96.78044256000003
400	401	Syracuse	21	0	48.681851	20.045472300000004
401	402	Camillus	642	4	1437.492	1074.249
402	403	Syracuse	0	0	0	0
403	404	Syracuse	133	0	298.5113	222.65182071999996
404	405	Syracuse	230	0	345	184
405	406	Syracuse	66	0	124.89236	81.23081339999999
406	407	Syracuse	214	2	436.93533	279.38902679999995
407	408	Syracuse	0	0	0	0
408	409	Syracuse	0	0	0	0
409	410	Syracuse	137	0	182.3308	96.70589
410	411	Syracuse	0	0	0	0
411	412	Syracuse	128	94	229.4203	66.78264
412	413	Syracuse	0	0	0	0
413	414	Syracuse	31	0	31.000003	16.00001
414	415	Syracuse	140	0	140.00005	70.99999
415	416	Camillus	335	0	753.99994	517.9998
416	417	Syracuse	27	0	38.999966	19.99998
417	418	Syracuse	0	0	0	0
418	419	Syracuse	0	0	0	0
419	420	Syracuse	0	0	0	0
420	421	Syracuse	389	0	901.68208	528.6411582999999
421	422	Syracuse	0	0	0	0
422	423	Syracuse	0	0	0	0
423	424	Syracuse	0	0	0	0
424	425	Syracuse	34	0	42.00003	32.00001
425	426	Syracuse	0	0	0	0
426	427	Syracuse	4	0	7	4
427	428	Syracuse	28	0	71.448266	29.931028399999995
428	429	Syracuse	192	0	476.48113	190.99457280000001
429	430	Syracuse	137	0	279.82973	131.1701

	TAZ	Town_City	HH	HH_GQ	pop	veh
430	431	Syracuse	0	3	3	0
431	432	Syracuse	35	0	86.52779	35.97223
432	433	Syracuse	15	0	38	14
433	434	Syracuse	196	0	378.00016	172
434	435	Syracuse	5	0	8	5
435	436	Syracuse	0	0	0	0
436	437	Syracuse	0	0	0	0
437	438	Syracuse	0	0	0	0
438	439	Syracuse	82	0	152	99.00003499999998
439	440	Syracuse	207	0	415.00009	266.00013359999997
440	441	Geddes	110	0	159.5495	124.86478730000002
441	442	Syracuse	455	57	1053.201	443.44714050000005
442	443	Syracuse	445	4	1042.671	434.88662739999995
443	444	Camillus	238	0	523.9996	390.99974227999996
444	445	Syracuse	0	0	0	0
445	446	Dewitt	22	0	56.57142	36.66666
446	447	Geddes	200	0	483.417	344.7235
447	448	Geddes	137	7	278.12571	205.97887527999998
448	449	Syracuse	49	0	110.25	42.875
449	450	Manlius	577	0	1397.576	1086.117
450	451	Geddes	834	5	1712.7612	1222.669
451	452	Manlius	673	0	1309.947	1129.679
452	453	Syracuse	2	0	2	1
453	454	Syracuse	104	0	140.00008	64.00001712000001
454	455	Syracuse	6	0	11.142845	5.1428519999999995
455	456	Syracuse	3	0	3	2.000001
456	457	Syracuse	26	0	34.99998	19.999995600000002
457	458	Syracuse	95	0	151.59581	108.13831949999997
458	459	Syracuse	277	0	506.17245	338.7769
459	460	Syracuse	176	0	218.4099	109.20493760000001
460	461	Syracuse	0	0	0	0
461	462	Syracuse	0	0	0	0
462	463	Syracuse	0	0	0	0
463	464	Syracuse	34	0	41.771414	22.342848399999998
464	465	Syracuse	8	0	17.14284	10.285703999999999
465	466	Syracuse	199	0	308.00004	125.99997430000002
466	467	Syracuse	0	0	0	0
467	468	Syracuse	155	0	179.3571	69.74996
468	469	Syracuse	128	0	188.52722	67.47289
469	470	Syracuse	185	8	259.4846	95.3907
470	471	Syracuse	189	0	375.9999	125.99997417000002
471	472	Syracuse	306	0	794.00066	222.00015420000003
472	473	Dewitt	313	152	771.2542	401.3686

	TAZ	Town_City	HH	HH_GQ	pop	veh
473	474	Dewitt	364	0	712.04328	468.7118399600001
474	475	Syracuse	432	1	967.00015	484.99974720000006
475	476	Syracuse	41	0	79.99995	35.99998
476	477	Syracuse	37	0	75.02773	32.88887
477	478	Syracuse	15	0	33.00002	16.000009499999997
478	479	Syracuse	33	0	67.03125	29.90625
479	480	Syracuse	190	12	424.7583	182.51230520000001
480	481	Syracuse	108	0	195	94.99999032000001
481	482	Syracuse	315	0	699.77823	300.0476
482	483	Syracuse	294	0	652.7798	285.0305
483	484	Dewitt	0	0	0	0
484	485	Dewitt	0	0	0	0
485	486	Syracuse	170	0	392.6898	247.5438
486	487	Elbridge	460	0	1046.374	836.0877660000001
487	488	Elbridge	320	4	781.70880	608.2970848000001
488	489	Syracuse	113	0	158.40166	60.53566
489	490	Syracuse	329	0	693.99997	226.00013120999998
490	491	Syracuse	400	25	589.31944	233.803
491	492	Syracuse	331	9	412.80033	174.7213
492	493	Syracuse	0	0	0	0
493	494	Syracuse	150	0	224.5033	201.65577300000004
494	495	Syracuse	29	0	58.90625	38.96875
495	496	Syracuse	287	0	652.72542	275.0416
496	497	Syracuse	144	1	311.8416	142.0139
497	498	Syracuse	223	0	252.99988	115.99987908999998
498	499	Syracuse	176	0	284.38393	113.35579199999997
499	500	Syracuse	582	4	1144.164	737.928
500	501	Syracuse	0	0	0	0
501	502	Geddes	634	0	1423.0007	984.0008
502	503	Syracuse	45	0	63.409067	25.568180999999996
503	504	Syracuse	290	49	769.32109	230.4689
504	505	Geddes	743	1	1605.6809	1112.007
505	506	Camillus	183	0	366.00016	283.00012674000004
506	507	Syracuse	0	0	0	0
507	508	Syracuse	228	0	263.497	245.7485
508	509	Syracuse	40	0	84.102539	63.58970800000001
509	510	Syracuse	339	97	524.63772	181.94043215999997
510	511	Syracuse	111	0	170.99985	69.99994
511	512	Syracuse	365	0	752.00038	506.0003
512	513	Dewitt	14	0	28.00001	16.00001
513	514	Syracuse	568	0	1242.812	648.8579
514	515	Syracuse	103	0	178.99996	77.00003
515	516	Geddes	0	0	0	0

TAZ		Town_City	HH	HH_GQ	pop	veh
516	517	Geddes	481	0	1061.029	674.0063
517	518	Syracuse	0	0	0	0
518	519	Dewitt	85	0	179.1074	112.3216
519	520	Syracuse	398	0	682.2854	506.72671062000006
520	521	Dewitt	0	0	0	0
521	522	Syracuse	307	103	799.5663	236.44255840000002
522	523	Syracuse	334	0	920.48801	207.7557
523	524	Syracuse	608	9	1455.2132	375.81865631999995
524	525	Syracuse	485	0	1058.816	682.5920506499999
1108	1114	Camillus	223	0	584.5302	403.76499527999994
1107	1113	Camillus	160	0	414.4101	290.18637119999994
525	527	Syracuse	395	0	1001.9995	331.0002
526	528	Syracuse	481	0	971.0189	669.3918221900001
527	529	Syracuse	261	0	570.00008	382.0001
528	530	Syracuse	0	0	0	0
529	531	Syracuse	0	1	1	0
530	532	Syracuse	438	0	1003.2910	346.7918
531	533	Manlius	736	5	1784.9097	1293.216
532	534	Syracuse	0	0	0	0
533	535	Syracuse	277	0	578.9099	393.5791
534	536	Dewitt	0	6	6	0
535	537	Syracuse	346	2	764.7952	505.5387315999999
536	538	Syracuse	302	0	715.26332	239.4145
537	539	Syracuse	223	0	606.56024	192.2756
538	540	Syracuse	301	0	691.7023	506.318
539	541	Syracuse	104	0	243.3208	177.5849
540	542	Syracuse	446	0	938.79100	651.0808216199999
541	543	Dewitt	501	0	1067.869	642.7172187000001
542	544	Syracuse	359	4	713.07474	494.8646521299999
543	545	Syracuse	370	0	869.3005	419.7312
544	546	Syracuse	0	0	0	0
545	547	Syracuse	373	0	705.0008	483.0005
546	548	Dewitt	318	0	686.9997	411.99981420000006
547	549	Dewitt	440	2	931.66161	564.1537
548	550	Geddes	110	0	222.97285	178.37828799999997
549	551	Syracuse	201	0	421.90074	151.24755539999998
550	552	Syracuse	309	0	768.9999	341.99990219999995
551	553	Syracuse	330	34	737.51657	475.9616730000001
552	554	Syracuse	440	4	1021.7468	353.7836
553	555	Camillus	350	8	764.5867	575.2995
554	556	Camillus	312	0	801.6515	631.7724
555	557	Camillus	146	0	313.0003	256.00015804000003
556	558	Syracuse	414	0	932.9999	687.0000207600001

	TAZ	Town_City	HH	HH_GQ	pop	veh
557	559	Geddes	0	0	0	0
558	560	Manlius	148	0	341.9997	270.9999
559	561	Syracuse	385	0	937.43470	310.8074
560	562	Manlius	335	0	828.5269	588.2439870000001
561	563	Syracuse	656	0	1481.519	730.2269
562	564	Syracuse	253	0	539.9998	302.9998
563	565	Syracuse	311	0	541.7422	440.41628383000005
564	566	Syracuse	270	0	573.87377	433.39427190000004
565	567	Syracuse	334	0	830.51374	371.8868
566	568	Elbridge	77	0	191.4869	150.9606
567	569	Elbridge	205	0	407.01456	336.3592
568	570	Syracuse	610	0	925.00005	584.0001469000002
569	571	Syracuse	543	0	1117.0570	627.1548404700001
570	572	Syracuse	610	9	1201.3177	458.73594540000005
571	573	Dewitt	307	9	720.15131	492.5597
572	574	Syracuse	412	14	741.28599	433.27671000000004
573	575	Syracuse	397	7	909.3615	501.4212
574	576	Dewitt	333	0	741.9996	524.9998
575	577	Syracuse	126	0	303.1878	177.1876
576	578	Syracuse	107	0	255	147.99999250000002
577	579	Syracuse	511	0	1086.1257	609.1924
578	580	Syracuse	0	0	0	0
579	581	Syracuse	0	2	2	0
580	582	Syracuse	120	0	278.31906	155.29391999999999
581	583	Syracuse	162	0	345.7317	197.56088892000002
582	584	Syracuse	368	78	872.7452	495.6186758399999
583	585	Dewitt	1	0	1	1
584	586	Dewitt	2	0	4	3
585	587	Syracuse	42	4	90.7392	57.521801399999994
586	588	Syracuse	81	0	201.5121	116.5609
587	589	Syracuse	53	0	128.4231	67.2693
588	590	Syracuse	256	3	581.4805	321.4882
589	591	Syracuse	271	0	541.9996	355.99967574000004
590	592	Salina	690	3	1402.913	915.0210267000001
591	593	Dewitt	476	0	771.62057	621.3048167200001
592	594	Dewitt	373	7	857.04715	615.4497911200001
593	595	Manlius	660	0	1380.1821	1052.1884340000001
594	596	Dewitt	197	0	395.99956	285.99967499999997
595	597	Syracuse	94	0	207.78945	119.72628660000001
596	598	Syracuse	101	0	224.22	123.22
597	599	Dewitt	74	0	126.71234	95.28768
598	600	Syracuse	328	0	674.00008	439.00006096000004
599	601	Syracuse	232	6	532.6497	324.9958

	TAZ	Town_City	HH	HH_GQ	pop	veh
600	602	Syracuse	88	0	177.0002	114.00008399999999
601	603	Syracuse	245	8	552.0153	329.8817
602	604	Syracuse	299	10	666.8349	402.2031509599999
603	605	Salina	93	0	192.00007	125.00007240000001
604	606	Salina	572	0	1265.2114	795.39
605	607	Dewitt	52	0	100.0754	75.54712
606	608	Salina	0	0	0	0
607	609	Salina	3	0	3	3
608	610	Dewitt	3	0	3	3
609	611	Dewitt	43	0	107.50006	74.73813
610	612	Camillus	95	6	241.4931	190.0001
611	613	Camillus	55	0	153.5848	116.2264
612	614	Camillus	172	0	404.2555	341.8097
613	615	Camillus	351	0	973.22813	734.9067273600001
614	616	Dewitt	653	0	1516.001	1077
615	617	Van Buren	19	0	48.55559	34.83335
616	618	Van Buren	67	0	170.0001	133.00009870000002
617	619	Salina	59	0	115.9655	75.27588159999999
618	620	Salina	0	0	0	0
619	621	Dewitt	1	0	4	2
620	622	Dewitt	0	0	0	0
621	623	Manlius	494	0	1235.5020	890.8040179999999
622	624	Manlius	61	0	142.3332	105.73325810000001
623	625	Manlius	69	0	159.6856	117.3
624	626	Manlius	290	0	713.53978	547.1135
625	627	Salina	796	0	1459.8331	961.2072528000001
626	628	Salina	394	0	876.22395	550.3970313200001
1097	1103	Salina	0	0	0	0
1096	1102	Salina	0	0	0	0
1098	1104	Salina	290	0	661.9997	398.9998
627	630	Salina	0	0	0	0
628	631	Dewitt	13	0	22.99999	15.99999
629	632	Dewitt	40	0	91.282000	65.64098
630	633	Salina	17	0	38.25	23.375
631	634	Salina	0	0	0	0
632	635	Salina	71	0	169.3858	101.4286
633	636	Van Buren	61	0	165.7168	124.03342890000002
634	637	Salina	474	0	1053.554	645.277
635	638	Dewitt	10	0	27.777749	15.555539999999997
636	639	Geddes	396	0	949.6026	707.2144
637	640	Salina	251	0	506.01600	321.28000000000003
638	641	Sullivan	145	0	306.9999	261.9999
639	642	Geddes	440	1	1008.2899	772.7563799999999

	TAZ	Town_City	HH	HH_GQ	pop	veh
640	643	Sullivan	86	0	214.99987	170.97612700000002
641	644	Dewitt	0	15	15	0
642	645	Salina	78	0	188.0002	110.00007719999999
643	646	Salina	534	0	1194.761	721.6477388399999
644	647	Salina	19	0	48.99999	25.99999
645	648	Salina	236	0	505.00008	311
646	649	Salina	4	0	10	7
647	650	Dewitt	188	0	499.3121	336.58088943999996
648	651	Dewitt	29	0	54.000032	41.00003
649	652	Salina	36	0	84.34297	54.51436439999999
650	653	Van Buren	22	0	55.00005	44.00005
651	654	Salina	490	0	985.9993	707.9994368999999
652	655	Salina	603	0	1394.686	836.6120228699999
653	656	Elbridge	244	0	605.99990	461.0001
654	657	Salina	308	2	528.5811	397.41965647999996
655	658	Salina	419	0	903.15554	666.5908
656	659	Sullivan	70	0	142.99999	120.99999799999999
657	660	Sullivan	168	0	326.00003	292
658	661	Salina	3	0	4.5	4.5
659	662	Salina	54	0	131.0001	91.00008720000001
660	663	Salina	68	0	99.00008	82.00007
661	664	Salina	116	0	236.03479	177.53043680000002
662	665	Salina	154	0	288.0001	231.0001
663	666	Geddes	247	0	598.00004	445.99992190000006
664	667	Salina	518	3	1198.767	810.7404
665	668	Dewitt	17	0	37.1875	25.5
666	669	Van Buren	145	0	369.5483	288.9929
667	670	Van Buren	61	0	159.3869	121.01602120000001
668	671	Sullivan	175	0	453.5917	354.02274600000004
669	672	Dewitt	0	0	0	0
670	673	Dewitt	13	23	46.472212	18.41666
671	674	Manlius	168	0	425.46747	319.10062800000003
672	675	Manlius	225	7	521.00874	408.2975
673	676	Salina	330	6	767.1616	451.7861568000001
674	677	Salina	417	0	855.0003	653.0003368499999
675	678	Van Buren	84	0	203.00002	161.99995560000002
676	679	Salina	1000	0	2291.2893	1667.666
677	680	Salina	180	0	414.9999	296.99991000000006
678	681	Salina	485	0	1155.382	828.7086
679	682	Van Buren	28	0	68.551728	46.344841200000005
680	683	Salina	271	7	634.78426	423.07205650000003
681	684	Salina	103	0	225.99999	177.99998354000002
682	685	Salina	312	7	670.975	502.125

	TAZ	Town_City	HH	HH_GQ	pop	veh
683	686	Dewitt	67	0	135.9999	103.9999
684	687	Salina	285	0	525	395.00005919999995
685	688	Van Buren	181	0	485.3189	364.9837
686	689	Van Buren	0	0	0	0
687	690	Dewitt	13	0	24.99999	17.99999
688	691	Dewitt	2	0	5	3
689	692	Salina	273	19	571.5447	440.35294211999997
690	693	Salina	470	0	773.3544	653.609
691	694	Geddes	11	0	26.4	19.8
692	695	Salina	4	0	9	6
693	696	Van Buren	2	0	4	4
694	697	Salina	200	0	453	356
695	698	Salina	286	0	700.99995	536
696	699	Sullivan	70	0	151.9999	127.99994899999999
697	700	Van Buren	183	0	398.8203	298.3694
698	701	Salina	552	0	1178	884.9997628800002
1101	1107	Clay	10	0	22	14
1102	1108	Clay	50	0	104.08157	71.42853
699	703	Van Buren	103	0	275.00005	205.0001
700	704	Geddes	104	6	258.97277	189.2611
701	705	Salina	546	5	1104.928	730.3125101999999
702	706	Salina	4	0	6	4
703	707	Geddes	0	0	0	0
704	708	Van Buren	471	0	1064.739	776.3514524699999
705	709	Clay	42	0	92.000029	74.00003
706	710	Clay	47	0	67.14286	57.07143260000001
707	711	Salina	30	0	70.34482	53.7931
1099	1105	Salina	0	0	0	0
1100	1106	Salina	4	0	12	8
708	713	Clay	154	0	379.0767	291.8459
709	714	Clay	1	0	4	2
710	715	Clay	224	0	446.00005	359.99999615999997
711	716	Cicero	9	0	14.999984	10.99999
712	717	Van Buren	197	0	467.0003	340.00025514000004
713	718	Van Buren	14	0	37.33336	25.20001
714	719	Cicero	16	0	36.26665	25.59999
715	720	Cicero	29	0	68	47.000001299999994
716	721	Cicero	16	0	46	29
717	722	Van Buren	160	0	355	261
718	723	Salina	652	0	1581.5755	1175.198
719	724	Salina	38	0	106.81070	74.97290179999999
720	725	Clay	368	0	623.30600	508.6177
721	726	Clay	376	0	813.9996	588.9996

	TAZ	Town_City	HH	HH_GQ	pop	veh
722	727	Clay	223	0	513.30200	368.65316359999997
723	728	Cicero	0	0	0	0
724	729	Salina	446	6	853.49889	709.051
725	730	Salina	72	0	154.8493	125.2603
726	731	Clay	273	0	680.493	527.9340884999999
727	732	Clay	8	0	18	9
728	733	Clay	0	0	0	0
729	734	Cicero	1	0	1	1
730	735	Cicero	170	0	354.91245	250.5265
731	736	Clay	550	7	1200.807	828.4565
732	737	Cicero	10	0	15.45453	11.81817
733	738	Lysander	195	0	475.24575	383.6065
734	739	Lysander	99	0	236.3878	192.94899030000002
735	740	Clay	510	0	816	624.9999510000001
736	741	Van Buren	200	0	367	299
737	742	Salina	606	0	989.36681	910.4969
738	743	Cicero	418	0	858.99974	625.9997678000001
739	744	Cicero	28	0	49.777730	40.444404000000006
740	745	Clay	222	0	522.0002	414.0001
741	746	Clay	443	0	1010.2806	713.6111572000001
742	747	Clay	739	0	1259.6590	1057.0636859899998
743	748	Clay	1	0	2	2
744	749	Clay	56	0	105.99994	75.99995200000001
745	750	Clay	1462	8	3113.8712	2073.93
746	751	Cicero	0	0	0	0
747	752	Cicero	315	5	665.5156	466.5938
748	753	Clay	288	0	684.6593	528.5274
749	754	Clay	586	0	1380.3562	931.5901597999998
750	755	Clay	389	0	951.55491	741.0957645000001
751	756	Clay	6	0	11.00001	11.00001
752	757	Van Buren	693	0	1351.298	1057.36
753	758	Cicero	57	0	134.6379	89.43103
754	759	Cicero	146	0	298.0001	216.00005040000002
755	760	Cicero	195	0	429.5942	298.93414199999995
756	761	Clay	536	0	1375.8657	992.2970144000002
757	762	Clay	363	0	922.91553	651.4112
758	763	Salina	205	0	479.3241	373.3577
759	764	Lysander	280	0	694.1883	525.1317680000001
760	765	Cicero	9	0	24.75	16.875
761	766	Cicero	49	0	89.179999	70.55999999999999
762	767	Van Buren	79	0	184.6625	134.29999999999998
763	768	Clay	243	0	597.4591	444.8308184999999
764	769	Cicero	124	0	286.688	210.30399999999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
765	770	Cicero	37	0	83.25007	57.555609000000004
766	771	Van Buren	651	0	1310.9999	994.9999
767	772	Van Buren	179	0	427.61123	350.0444
768	773	Van Buren	111	0	266.598	216.0534
769	774	Clay	464	0	1089	789.9998158400001
770	775	Van Buren	257	0	471.0001	379.00003309999994
771	776	Van Buren	47	0	112.22458	89.20416
772	777	Van Buren	27	0	64.999970	53.999973000000004
773	778	Clay	497	0	1170.645	800.3902704000001
774	779	Clay	134	0	327.9999	216
775	780	Cicero	140	0	334.6097	261.1346
776	781	Clay	215	0	514.6067	389.19
777	782	Clay	473	0	1070.5270	822.4781501200002
778	783	Cicero	25	0	51.923085	36.53846500000001
779	784	Cicero	420	3	852.90544	620.0943
780	785	Clay	549	0	1419.585	1033.883
781	786	Lysander	262	0	787.11022	535.1016
782	787	Lysander	415	0	1006.061	761.8815265000001
783	788	Clay	304	0	731.9999	560.9999
784	789	Clay	88	0	235.32551	175.99980639999998
785	790	Van Buren	123	0	300.98815	185.2234
786	791	Clay	416	0	976.3459	735.768
787	792	Cicero	227	0	621.9999	425.99991320000004
788	793	Clay	3	0	3	3
789	794	Clay	391	0	958.9996	710.9996785000001
790	795	Clay	743	5	2090.163	1524.689
791	796	Van Buren	59	0	133.99984	98.99989
792	797	Van Buren	122	0	319.9622	192.20749859999998
793	798	Van Buren	717	0	1042.534	813.1491407399998
794	799	Clay	5	0	5	5
795	800	Lysander	543	0	1642.1202	1112.241
796	801	Cicero	447	9	1162.3585	843.8966
797	802	Clay	88	0	203.99982	152.9999
798	803	Clay	228	0	505.2158	407.7884
799	804	Cicero	39	0	81.079	70.81583
800	805	Cicero	0	0	0	0
801	806	Cicero	7	0	18.200000	14
802	807	Cicero	510	0	1108.9999	805.0001
803	808	Clay	260	4	665.36841	493.3077760000001
804	809	Van Buren	386	15	904.8116	567.0274
805	810	Van Buren	110	0	243.7837	157.56747159999998
806	811	Van Buren	93	0	234.00019	142.0001
807	812	Van Buren	282	0	760.69852	574.0362

	TAZ	Town_City	HH	HH_GQ	pop	veh
808	813	Clay	1258	3	2999.092	2237.109
809	814	Van Buren	125	0	300	187
810	815	Lysander	215	4	652.08614	441.3157
811	816	Lysander	101	0	285.9778	197.46082769999998
812	817	Cicero	466	0	834.9999	722.9998
813	818	Sullivan	22	0	56	45.00001
814	819	Sullivan	46	0	93.02222	79.73332
815	820	Clay	29	0	70.999960	49.99999
816	821	Lysander	104	0	196.89319	155.4951
817	822	Lysander	85	0	191.25007	139.6428
818	823	Lysander	186	0	416.00004	309
819	824	Lysander	192	0	431.46076	351.6404
820	825	Lysander	134	0	319.61449	227.30347640000002
821	826	Clay	390	0	1030.358	748.0812689999999
822	827	Clay	614	0	1664.9990	1185
823	828	Cicero	603	0	1643.7274	1150.91
824	829	Clay	103	0	221.14705	180.7549
825	830	Cicero	212	0	487.6994	375.23
826	831	Clay	615	0	1605.776	1162.2191095500002
827	832	Clay	1	0	1	1
828	833	Clay	319	0	911.999	639.9993
829	834	Cicero	218	0	443	354
830	835	Lysander	180	0	475.9998	365.9998
831	836	Lysander	305	0	790.30374	593.149
832	837	Clay	528	0	1344.546	889.6845988799998
833	838	Clay	409	0	1115.1547	807.0345054999999
834	839	Lysander	184	0	457.1779	331.8774
835	840	Lysander	60	0	123	95
836	841	Clay	966	0	2668.2387	1862.073
837	842	Lysander	254	0	526.2153	397.6974
838	843	Sullivan	161	0	340.45872	290.21029723000004
839	844	Lysander	308	0	869.99947	577.9998
840	845	Lysander	172	0	508.00016	327.0002
841	846	Lysander	623	4	1599.01	1113.354
842	847	Lysander	155	0	340.1947	258.6687
843	848	Lysander	143	0	364.9998	286.9999
844	849	Cicero	230	0	549.3889	421.83430599999997
845	850	Cicero	504	0	1082.8517	842.3289503999999
846	851	Clay	1079	2	2793.24	2106.145
847	852	Cicero	93	0	252.71757	167.8045
848	853	Cicero	150	0	316.9997	226.99983300000002
849	854	Cicero	31	0	86.79995	57.86664
850	855	Cicero	352	0	1071.955	684.0568

	TAZ	Town_City	HH	HH_GQ	pop	veh
851	856	Cicero	133	0	374.00009	246.00001859999998
852	857	Clay	357	0	699.042	631.2321168300001
853	858	Clay	729	0	1879.158	1422.905
854	859	Clay	1046	0	2343.9994	1695
855	860	Sullivan	120	0	307.05883	241.17642719999998
856	861	Clay	649	0	1937.002	1318.001
857	862	Clay	8	0	18.285695	14.85713
858	863	Clay	228	0	596.0004	448.0003
859	864	Clay	118	0	287.3045	225.7393
860	865	Sullivan	67	0	150.24258	124.86373929999999
861	866	Cicero	422	0	1113	784.0001243999999
862	867	Clay	156	0	365.2678	289.17044519999996
863	868	Clay	99	0	212.85000	178.2
864	869	Lysander	292	0	841.1198	572.0412
865	870	Lysander	601	0	1359.7103	986.7491455000002
866	871	Cicero	16	0	39	29
867	872	Cicero	6	0	13.200000	9.600000000000001
868	873	Cicero	572	0	1613.931	1079.1440660000003
869	874	Cicero	263	0	575.9919	460.79340533999994
870	875	Cicero	450	0	1261.4763	844.1458
871	876	Clay	0	0	0	0
872	877	Clay	0	0	0	0
873	878	Lysander	524	0	897.7126	700.3362
874	879	Clay	99	0	216.81000	178.2
875	880	Clay	2	0	4	4
876	881	Clay	7	0	16.999982	13.999985999999996
877	882	Clay	64	0	151.6307	118.1538
878	883	Lysander	19	0	54.99997	39.99998
879	884	Cicero	924	0	2550.764	1790.94
880	885	Cicero	283	0	793.1976	550.0566289999999
881	886	Cicero	180	0	460.5589	327.8212740000001
882	887	Clay	277	0	415.5	415.5
883	888	Clay	15	0	33.21431	27.857163000000007
884	889	Clay	23	0	61.681860	46.00004
885	890	Lysander	339	0	817.28687	608.3566
886	891	Lysander	266	0	696.2625	528.8204
887	892	Lysander	213	0	558.9993	428.99955120000004
888	893	Clay	26	0	64.000024	52.00001
889	894	Clay	6	0	10.800000	10.8
890	895	Lysander	623	7	1398.0955	1031.907
891	896	Lysander	249	0	664.3365	508.0812
1106	1112	Clay	65	0	149.3617	113.40425200000001
1103	1109	Clay	9	0	19.800000	17.1

	TAZ	Town_City	HH	HH_GQ	pop	veh
1104	1110	Clay	12	0	26.999996	23.999997600000004
1105	1111	Clay	10	0	22.72727	20
892	898	Clay	37	0	91.69565	70.78260949999999
893	899	Clay	12	0	22.909093	22.90909
894	900	Clay	21	0	58.8	44.099999999999994
895	901	Clay	26	0	63.44	52
896	902	Cicero	403	0	1008	733.9999
897	903	Cicero	93	0	181	141.00003420000002
898	904	Cicero	71	0	131.8571	106.49997870000001
899	905	Cicero	138	0	326.27138	241.49995859999999
900	906	Clay	27	0	71.65382	56.076912899999996
901	907	Clay	26	0	60.32	49.92
902	908	Clay	119	0	261.80001	218.33914725000005
903	909	Lysander	390	0	992.72798	704.0263620000001
904	910	Lysander	81	0	181	155
905	911	Schroeppe	61	0	116	103
906	912	Cicero	304	0	671.24847	518.2282832000001
907	913	Cicero	89	0	230.5911	169.9092
908	914	Schroeppe	101	4	229.08576	153.9048
909	915	Lysander	138	0	375.0001	287.0002
910	916	Cicero	493	0	1354.253	936.1015867399999
911	917	Schroeppe	141	0	336.00012	216.00012780000003
912	918	Clay	188	0	462.99997	358.00007159999996
913	919	Clay	165	0	417.2901	314.03212499999995
914	920	Schroeppe	83	0	200.00007	128.0001
915	921	Schroeppe	90	0	205.7141	137.4724
916	922	Clay	119	0	305.3857	229.39773989999998
917	923	Clay	28	0	66.62062	55.034422799999994
918	924	Schroeppe	162	0	378.67499	243
919	925	Schroeppe	77	0	146.90783	101.3157
920	926	Schroeppe	55	0	142.59275	93.70381
921	927	Cicero	282	0	812.45804	555.3039
922	928	Cicero	390	0	783.0004	616.0002849000001
923	929	Cicero	408	0	1116	773.9999577599999
924	930	Schroeppe	83	0	174.89294	119.55954120000001
925	931	Schroeppe	30	0	55.862066	42.413807999999996
926	932	Schroeppe	51	0	132.1836	83.26525
927	933	Cicero	126	0	265	205.99997544000001
928	934	Cicero	136	0	306.00003	229.0001
929	935	Schroeppe	143	0	239.3263	181.7292
930	936	Hastings	74	0	157.5142	138.4857
931	937	Hastings	128	0	270.336	203.77599999999998
932	938	Hastings	161	0	358.9997	302.9998

	TAZ	Town_City	HH	HH_GQ	pop	veh
933	939	Hastings	92	0	210.28560	152.65924320000002
934	940	Hastings	143	0	366.43775	259.18758579999997
935	941	Hastings	224	0	291.99998	246.00003232000003
936	942	Hastings	103	0	235.00001	173
937	943	Hastings	74	0	167.0001	123.00010639999999
938	944	Hastings	172	7	437.96646	292.7866
939	945	Hastings	113	0	212.99987	200.99987548000001
940	946	Hastings	200	0	544.162	366.49713999999994
941	947	Hastings	23	0	52.708327	42.16666
942	948	Hastings	93	0	223.5959	182.0427
943	949	Hastings	22	0	54.52178	44.00003
944	950	Hastings	20	0	64	45
945	951	Hastings	120	0	234.04955	217.19007599999998
946	952	Hastings	22	0	55.523802	42.95237099999999
947	953	Hastings	78	0	206.3545	158.96204219999998
948	954	Hastings	3	0	9.75	6.75
949	955	West Monr	101	0	253.51000	200.99
950	956	Hastings	121	0	328.00016	248.0001
951	957	Sullivan	57	0	140.4643	111.9643
952	958	Sullivan	55	0	123	106
953	959	Sullivan	137	5	342.07880	267.1005
954	960	Sullivan	262	0	596.2758	501.9156
955	961	Sullivan	90	0	220.99988	179.9999
956	962	Sullivan	30	0	70.000019	60.00001
957	963	Sullivan	92	0	181.9555	160.48879279999997
958	964	Sullivan	295	0	703.9308	573.7239502499999
959	965	Sullivan	65	0	145.2344	123.9063
960	966	Sullivan	83	0	213.573	169.0365
961	967	Sullivan	174	0	385.78297	324.1372
962	968	Sullivan	8	0	18.285695	14.85713
963	969	Sullivan	35	0	81.323553	66.91178
964	970	Sullivan	31	0	84.28125	64.90625
965	971	Sullivan	16	0	42	33
966	972	Sullivan	12	0	22.909076	18.545441999999998
967	973	Sullivan	50	0	130.39212	97.05879
968	974	Sullivan	42	0	103.4634	83.99997060000001
969	975	Sullivan	104	0	262.9997	200.9998
970	976	Sullivan	43	0	116.7144	87.02387300000001
971	977	Sullivan	90	0	232.58437	183.0339
972	978	Sullivan	24	0	60.000016	50.00001
973	979	Sullivan	40	0	94.35894	78.97433
974	980	Sullivan	92	0	232.9999	185.9999
975	981	Sullivan	70	0	175.9998	136.99987699999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
976	982	Sullivan	177	0	438.4774	342.9375
977	983	Sullivan	8	0	20	17
978	984	Sullivan	85	0	208.4523	166.96421650000002
979	985	Sullivan	24	0	64.363667	46.90911
980	986	Sullivan	92	0	253.25813	185.0335
981	987	Sullivan	30	0	70.34478	56.89651199999999
982	988	Sullivan	122	0	320.5086	250.2034
983	989	Sullivan	125	0	321.4288	219.24614999999994
984	990	Sullivan	51	0	117.6924	99.05779
985	991	Sullivan	33	0	77.647036	63.08821
986	992	Sullivan	478	0	1131.367	795.6644600000001
987	993	Sullivan	147	0	318.3309	266.6274
988	994	Sullivan	74	0	160	115.99998759999998
989	995	Sullivan	318	7	742.4965	512.1164
990	996	Sullivan	463	0	1115	767.0000587999999
991	997	Sullivan	118	0	258.3793	189.20688642000002
992	998	Sullivan	295	5	793.55815	591.1350419999999
993	999	Sullivan	8	0	22.85712	19.428551999999996
994	1000	Sullivan	32	0	74.32249	57.80638
995	1001	Sullivan	31	0	77.999983	61.999978299999995
996	1002	Sullivan	31	0	78.9999	59.99992029999999
997	1003	Sullivan	63	0	139.2097	119.9032
998	1004	Sullivan	35	0	73.088263	67.9412
999	1005	Sullivan	21	0	50.400000	40.95
1000	1006	Sullivan	99	0	221.23465	162.6428
1001	1007	Sullivan	69	0	147	128.00000250000002
1002	1008	Sullivan	35	0	88.000118	69.0001
1003	1009	Granby	44	0	102	75.99998120000001
1004	1010	Schroeppe	57	0	128.9999	103.9999
1005	1011	Schroeppe	136	0	359.0001	267
1006	1012	Schroeppe	78	0	208.32933	151.0635
1007	1013	Schroeppe	29	0	70.88882	55.851804699999995
1008	1014	Schroeppe	40	0	104	80
1009	1015	Schroeppe	34	0	78.99995	62.99995
1010	1016	Schroeppe	17	0	39.66666	31.166664400000005
1011	1017	Schroeppe	67	0	161.9998	127.99990879999999
1012	1018	Schroeppe	30	0	70.64517	57.09679499999999
1013	1019	Schroeppe	34	0	102	73.3125
1014	1020	Schroeppe	42	0	115.5	86.1
1015	1021	Schroeppe	66	0	170.00006	127.00003800000002
1016	1022	Schroeppe	15	0	31.071426	26.78571
1017	1023	Schroeppe	212	0	561.64933	409.93364524000003
1018	1024	Schroeppe	56	0	131.7037	104.7408

	TAZ	Town_City	HH	HH_GQ	pop	veh
1019	1025	Schroeppe	96	0	237.00004	181.00006080000003
1020	1026	Schroeppe	30	0	76.071486	60.00005
1021	1027	Schroeppe	46	0	119.59994	93.02215679999999
1022	1028	Schroeppe	54	0	120.46160	97.61541119999998
1023	1029	Schroeppe	199	0	424.9998	345.9998
1024	1030	Schroeppe	46	0	99.0001	84.00006
1025	1031	Schroeppe	55	0	138.5184	108.98142750000002
1026	1032	Schroeppe	261	0	666.5535	501.9229
1027	1033	Schroeppe	98	0	274.6044	199.0626
1028	1034	Schroeppe	171	0	395.2455	314.3533
1029	1035	Schroeppe	29	0	65.73334	53.16668
1030	1036	Schroeppe	60	0	149.4915	115.9322
1031	1037	Schroeppe	11	0	21.083331	19.25
1032	1038	Schroeppe	21	0	40.949999	35.7
1033	1039	Schroeppe	39	0	104.35126	79.05399
1034	1040	Hastings	69	0	162.99996	115.99999170000001
1035	1041	Hastings	39	0	97.499984	70.81578
1036	1042	Hastings	184	0	441.39871	322.7539
1037	1043	Hastings	54	0	149.0001	102.00008699999998
1038	1044	Hastings	30	0	77.142873	55.714290000000005
1039	1045	Hastings	12	0	28.363627	23.99999
1040	1046	Hastings	118	0	337.00032	224.00017408000002
1041	1047	Hastings	35	0	87.00008	64.00007
1042	1048	Hastings	18	0	55.058832	39.17647
1043	1049	Hastings	27	0	62.307743	51.92312
1044	1050	Hastings	33	0	83.47055	64.05878
1045	1051	Hastings	71	0	201.9999	146.99992650000002
1046	1052	Hastings	111	0	300.1112	226.1111
1047	1053	Hastings	41	0	91.761903	77.11904
1048	1054	Hastings	96	0	285.0309	202.88658239999998
1049	1055	Hastings	79	0	179.72500	154.05
1050	1056	Hastings	108	0	254.71716	210.90577824000002
1051	1057	Hastings	78	0	194.99999	154
1052	1058	Hastings	104	0	267	206.9999
1053	1059	Hastings	41	0	112.26196	84.92860540000001
1054	1060	Hastings	111	0	314.9998	231.99985680000003
1055	1061	Hastings	64	0	188	134
1056	1062	Hastings	12	0	20.72726	21.81817
1057	1063	Hastings	26	0	75.920000	55.120000000000005
1058	1064	Hastings	24	0	67.826164	50.087023200000004
1059	1065	Hastings	58	0	163.00010	119.00007319999999
1060	1066	Hastings	29	0	81.82143	61.10714
1061	1067	Hastings	89	0	223.96694	177.0219

	TAZ	Town_City	HH	HH_GQ	pop	veh
1062	1068	West Monr	25	0	64.42308	50.000012500000004
1063	1069	West Monr	34	0	82.4242	66.96966
1064	1070	West Monr	33	0	85.41172	65.99997690000001
1065	1071	West Monr	19	0	39.055564	35.88889
1066	1072	West Monr	59	0	129.18959	112.91371029999999
1067	1073	West Monr	25	0	57.692360	50.961557500000005
1068	1074	West Monr	96	0	278.7098	201.29042879999997
1069	1075	West Monr	127	0	319.9996	245.9997
1070	1076	West Monr	37	0	84.57151	69.77148
1071	1077	West Monr	51	0	137.9999	102.9999
1072	1078	West Monr	75	0	176.35130	145.9459
1073	1079	West Monr	106	0	266.48601	206.05614222000003
1074	1080	West Monr	49	0	125.99999	96.00002
1075	1081	West Monr	80	0	186.6666	156.04929600000003
1076	1082	West Monr	66	0	172.00007	134.00007060000002
1077	1083	West Monr	69	0	187.72046	137.9999
1078	1084	West Monr	59	0	148.9999	117.99995280000002
1079	1085	Hastings	37	0	95.99994	73.99995
1080	1086	West Monr	48	0	117.00002	93.00002400000001
1081	1087	West Monr	103	0	238.0001	197.00005158000002
1082	1088	West Monr	82	0	193.35797	158.9382
1083	1089	West Monr	31	0	74.39994	60.966618100000005
1084	1090	Schroeppe	6	0	18.99999	13
1085	1091	Schroeppe	26	0	67.40735	51.99996
1086	1092	Schroeppe	17	0	40.99998	31.999984000000005
1087	1093	Schroeppe	19	0	54.76472	40.2353
1088	1094	Schroeppe	7	0	18.99998	14.999984999999999
1089	1095	Schroeppe	72	0	184.5634	137.9155
1090	1096	West Monr	17	0	37.1875	30.8125
1091	1097	West Monr	36	0	97.999970	70.99999199999999
1092	1098	Hastings	17	0	47.222239	34.94445540000001
1093	1099	Hastings	93	0	258.22341	193.91495099999997
1094	1100	Sullivan	24	0	54.000002	50.00001
1095	1101	Sullivan	21	0	61.894719	44.210510400000004
1109	8001	Geddes	0	0	0	0
1110	8002	Syracuse	0	0	0	0
1111	8003	Onondaga	0	571	571	0
1112	8004	Onondaga	0	0	0	0
1113	8005	Syracuse	0	0	0	0
1114	8006	Syracuse	0	2507	2507	0
1115	8007	Syracuse	0	0	0	0
1116	8008	Syracuse	0	0	0	0
1117	8009	Syracuse	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
1118	8010	Dewitt	5	1284	1289	5
1119	8011	Syracuse	0	0	0	0
1120	8012	Syracuse	0	2766	2766	0
1121	8013	Syracuse	0	0	0	0
1122	8014	Syracuse	0	0	0	0
1123	8015	Syracuse	0	0	0	0
1124	8016	Dewitt	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
0	1	Tully	224	0	542.96778	434.5806
1	2	Tully	327	0	745.643	611.3024
2	3	Tully	138	0	375.60914	276
3	4	Spafford	289	0	707.8871	568.2581
4	5	Tully	304	2	699.3508	561.7831779200001
5	6	Fabius	128	0	315.392	253.952
6	7	Fabius	160	0	406.6246	326.1149
7	8	Tully	119	0	330.19802	233.71160890000004
8	9	Fabius	201	0	508.6533	419.4339
9	10	Fabius	255	0	639.5563	522.3387
10	11	Otisco	116	0	284.4523	232.0001
11	12	Otisco	385	0	912.554	748.1484
12	13	Otisco	151	0	390.16750	312.134
13	14	Otisco	177	0	469.65393	372.1027
14	15	Otisco	158	0	401.99973	315.9998
15	16	Spafford	230	0	531.7434	444.1744
16	17	Spafford	209	0	491.3723	405.77129505000005
17	18	Lafayette	96	0	216.80903	173.66292479999996
18	19	Lafayette	354	0	853.2305	662.6152
19	20	Lafayette	157	5	421.34753	302.07552501000004
20	21	Lafayette	200	0	489.899	374.74752000000007
21	22	Pompey	238	0	630.85527	509.25709659999995
22	23	Pompey	247	0	619.0114	492.99125200000003
23	24	Pompey	128	0	328.5667	268.09438719999997
24	25	Skaneatele	402	0	960.09530	838.2124
25	26	Skaneatele	169	4	383.26740	344.8779450999999
26	27	Lafayette	126	0	283.76445	227.6469
27	28	Lafayette	57	0	156.4911	111.9274
28	29	Lafayette	252	0	541.296	439.48800000000006
29	30	Pompey	125	0	298.55332	253.0989
30	31	Pompey	90	5	230.4738	186.63167700000002
31	32	Pompey	83	0	208.0123	172.14811709999998
32	33	Pompey	157	0	410.2939	327.60706439999996
33	34	Pompey	62	0	147.51733	122.9311
34	35	Pompey	53	0	127.40378	106
35	36	Marcellus	106	0	262.4274	203.7672
36	37	Marcellus	24	0	44.869572	42.782616000000004
37	38	Marcellus	83	0	201.8642	164.97538159999996
38	39	Lafayette	260	0	552.7553	450.3932
39	40	Skaneatele	303	3	658.1342	599.8572
40	41	Skaneatele	17	0	37.1875	39.3125
41	42	Skaneatele	211	0	514.84	443.1
42	43	Onondaga	121	0	293.42477	238.97485358999998

	TAZ	Town_City	HH	HH_GQ	pop	veh
43	44	Onondaga	217	0	567.2284	448.1304
44	45	Lafayette	85	0	208.9157	161.8073
45	46	Lafayette	80	0	204.21043	155.78941600000002
46	47	Pompey	82	0	203.4429	170.22778519999997
47	48	Pompey	279	7	723.9994	580.9995323999999
48	49	Onondaga	73	4	192.66222	147.896
49	50	Onondaga	93	0	211.27161	180.94558949999998
50	51	Onondaga	225	0	548.0004	448.0002832499999
51	52	Onondaga	7	0	15.999984	14.999984999999999
52	53	Marcellus	117	0	298.768	235.04475968999995
53	54	Marcellus	195	0	492.8575	385.7146
54	55	Marcellus	88	0	211.619	169.7142
55	56	Onondaga	306	0	436.00052	436.0008
56	57	Skaneatele	240	0	578.5894	441.16176959999996
57	58	Skaneatele	184	0	437.2587	332.854
58	59	Skaneatele	492	0	950.06917	762.388
59	60	Onondaga	190	0	445.3437	304.603
60	61	Lafayette	270	0	618.4234	486.22420800000003
61	62	Marcellus	116	0	287.891	205.6364
62	63	Onondaga	362	0	902.49316	727.0083
63	64	Skaneatele	149	0	378.99970	284.99982747999996
64	65	Skaneatele	340	0	830.15837	631.7353714000001
65	66	Skaneatele	42	0	116.23253	81.06978
66	67	Onondaga	199	0	495.04884	307.8126
67	68	Pompey	170	0	471.9733	357.8945
68	69	Pompey	265	6	683.72387	554.8087700000001
69	70	Pompey	318	0	959.2474	701.0693
70	71	Lafayette	144	0	358.24372	275.12182655999993
71	72	Pompey	127	0	306.9998	256.9999
72	73	Pompey	214	0	655.1014	466.2138
73	74	Marcellus	419	0	832.94001	679.1042222000001
74	75	Onondaga	12	0	20.727263	16.36363
75	76	Onondaga	253	0	624.6545	414.80197043999993
76	77	Onondaga	213	0	494.64412	416.91440192999994
77	78	Marcellus	125	0	357.95469	253.40925000000004
78	79	Marcellus	17	0	40.375	34
79	80	Marcellus	15	0	32.8125	24.375
80	81	Onondaga	419	0	941.7623	657.1583513800001
81	82	Onondaga	292	0	770.2939	546.3226297199999
82	83	Skaneatele	502	0	1208.2550	915.591
83	84	Manlius	16	0	47.999991	30.933318399999997
84	85	Manlius	148	0	433.722	294.9721
85	86	Manlius	347	0	771.44590	608.5069554500001

	TAZ	Town_City	HH	HH_GQ	pop	veh
86	87	Manlius	218	0	501.9069	373.13484295999996
87	88	Marcellus	200	0	490.0994	350.49531999999994
88	89	Marcellus	207	0	415.0045	333.6113
89	90	Dewitt	407	0	1090.986	759.7334
90	91	Dewitt	57	0	167.58000	112.86
91	92	Marcellus	149	0	369.3522	262.32406579999997
92	93	Marcellus	170	0	443.52540	309.48700260000004
93	94	Marcellus	142	0	357.66925	253.03763840000002
94	95	Onondaga	679	4	1693.136	1120.516
95	96	Syracuse	756	0	1647.8206	1145.4852729600002
96	97	Manlius	69	0	135.80947	109.52375519999997
97	98	Manlius	621	0	1378.2913	1034.999
98	99	Syracuse	761	0	1273.6532	786.9326198299999
99	100	Syracuse	310	8	639.7351	349.1169
100	101	Onondaga	456	7	1261.7383	862.7556
101	102	Syracuse	325	24	766.59243	504.6294
102	103	Marcellus	269	0	679.1692	484.6445
103	104	Marcellus	167	0	434.42543	305.79041010000003
104	105	Manlius	713	1	1596.7154	1261.308
105	106	Dewitt	255	6	578.6881	419.6877
106	107	Syracuse	33	0	58.999957	33.999969300000004
107	108	Syracuse	40	0	96	45
108	109	Syracuse	289	0	638.7896	340.82069114999996
109	110	Syracuse	49	0	103.00000	55.99998319999999
110	111	Onondaga	280	1	801.49820	539.0873
111	112	Onondaga	190	0	536.6665	368.88870499999996
112	113	Onondaga	12	0	34.90907	21.81817
113	114	Dewitt	40	0	95.294168	84.70593600000001
114	115	Manlius	791	0	2182.93	1609.3140209999997
115	116	Onondaga	600	10	1665.1714	1202.177
116	117	Onondaga	650	0	1801.1685	1245.3270634999997
117	118	Syracuse	692	2	849.1037	548.8276911999999
118	119	Syracuse	695	0	1408.73	555.0142
119	120	Manlius	282	0	712.6221	546.2165
120	121	Syracuse	305	0	754.7778	293.4175
121	122	Syracuse	126	0	272.83467	148.81893515999997
122	123	Syracuse	323	0	713.6765	380.42231338000005
123	124	Onondaga	78	0	172.2077	130.6753
124	125	Manlius	388	0	827.3652	671.6908
125	126	Manlius	155	0	307.4167	264.79172815000004
126	127	Manlius	371	0	685.9501	529.8098
127	128	Syracuse	268	7	615.7019	246.61686960000003
128	129	Dewitt	2	0	3	3

	TAZ	Town_City	HH	HH_GQ	pop	veh
129	130	Syracuse	116	0	288.51267	140.7862
130	131	Syracuse	86	0	207.58641	105.7702
131	132	Syracuse	89	0	213.8045	107.4138
132	133	Onondaga	229	14	467.75907	346.68035428999997
133	134	Manlius	266	0	520.9582	402.5131
134	135	Manlius	185	0	446.4128	326.76618449999995
135	136	Manlius	202	0	429.6345	322.995
136	137	Manlius	244	0	691.3336	496.62648092000006
137	138	Onondaga	389	0	1019.3422	763.7429166000001
138	139	Onondaga	120	0	287.3945	230.924
139	140	Onondaga	0	0	0	0
140	141	Onondaga	80	0	132.6582	113.41768000000003
141	142	Onondaga	460	6	764.94927	644.2008911999999
142	143	Syracuse	94	1	250.34709	137.5366
143	144	Syracuse	204	14	485.12119	274.43936399999996
144	145	Syracuse	354	0	923.13882	430.2766
145	146	Syracuse	24	0	45.91305	23.999992800000005
146	147	Syracuse	15	0	38.4375	15.9375
147	148	Syracuse	834	0	1441.8132	880.8312
148	149	Syracuse	285	0	680.6702	396.6496
149	150	Syracuse	477	5	1283.476	408.0246
150	151	Syracuse	191	6	447.8088	257.561
151	152	Onondaga	7	0	22.166711	12.833359000000002
152	153	Onondaga	13	0	29.7143	23.214297600000005
153	154	Manlius	82	0	146.79021	133.6297
154	155	Syracuse	294	4	596.0828	477.7494061199999
155	156	Dewitt	450	0	1029.591	664.285
156	157	Syracuse	157	0	424.29758	190.7848
157	158	Syracuse	275	4	727.7855	228.2119
158	159	Dewitt	241	0	603.01339	499.4345
159	160	Dewitt	316	0	788.987	664.4101
160	161	Dewitt	241	0	541.1928	384.7544
161	162	Dewitt	59	0	139.9998	95.99989710000001
162	163	Onondaga	420	0	829.5578	589.392
163	164	Onondaga	364	0	975.47847	613.5409498399999
164	165	Onondaga	107	0	268.04021	171.8483
165	166	Manlius	104	0	234.25237	179.72812832000002
166	167	Syracuse	126	0	322.00016	141.00001271999997
167	168	Syracuse	19	0	44.70592	21.2353
168	169	Dewitt	31	0	73.625	49.40625
169	170	Syracuse	171	0	445.75269	201.7415
170	171	Syracuse	698	0	1575.8602	792.0989
171	172	Camillus	211	0	573.02032	414.5026

	TAZ	Town_City	HH	HH_GQ	pop	veh
172	173	Syracuse	245	0	585.4421	226.30529950000002
173	174	Syracuse	34	0	97.277753	33.055544600000005
174	175	Manlius	53	0	150.32723	105.03637520000001
175	176	Manlius	154	0	407.792	304.304
176	177	Syracuse	264	9	600.824	389.7141
177	178	Manlius	524	0	1216.967	889.0895
178	179	Dewitt	339	4	843.00019	716.0003
179	180	Syracuse	143	0	290.9653	156.9028
180	181	Syracuse	200	0	325.37306	199.0049
181	182	Syracuse	76	0	205.29867	73.03896
182	183	Syracuse	33	0	88.32355	32.02942
183	184	Syracuse	61	1	174.00011	61
184	185	Dewitt	268	9	601.3188	409.7679264000001
185	186	Syracuse	24	0	53.00003	42.00001439999999
186	187	Manlius	647	5	1175.572	924.7121
187	188	Manlius	112	0	287.0002	218.00011295999997
188	189	Syracuse	217	0	559.42220	383.2339
189	190	Syracuse	101	0	271.31363	116.8431
190	191	Onondaga	375	0	886.08921	594.7584224999999
191	192	Syracuse	378	0	968.4378	676.2107394000001
192	193	Syracuse	142	0	343.99990	248.99991100000003
193	194	Elbridge	137	5	328.28097	257.2449
194	195	Elbridge	221	0	541.34859	413.6147
195	196	Syracuse	193	0	367.09816	303.42791447999997
196	197	Onondaga	1	0	2	2
197	198	Onondaga	35	0	76.087007	53.26089
198	199	Syracuse	95	0	253.33326	112.8125
199	200	Syracuse	166	0	453.00035	199.00015259999998
200	201	Syracuse	211	0	547.0374	253.9817
201	202	Manlius	451	0	882.91512	683.0287
202	203	Syracuse	144	0	326.731	161.87585760000002
203	204	Syracuse	271	5	695.24808	257.78067419999996
204	205	Syracuse	12	0	30.545443	9.818180400000001
205	206	Syracuse	99	0	262.9999	92.99997
206	207	Syracuse	91	0	225.52182	85.06521660000001
207	208	Dewitt	579	4	1400.588	959.3432472000002
208	209	Onondaga	324	0	593.6649	424.6213266000001
209	210	Onondaga	76	5	180.45676	115.4074
210	211	Syracuse	261	8	555.0405	415.0959
211	212	Syracuse	482	5	1163.1799	832.9039048000001
212	213	Camillus	259	0	645.75818	504.06295099999994
213	214	Camillus	385	0	1045.594	799.083
214	215	Camillus	42	0	58.390218	56.341441800000005

	TAZ	Town_City	HH	HH_GQ	pop	veh
215	216	Onondaga	129	1	285.7923	186.55387374000003
216	217	Syracuse	257	4	538.5992	431.60315290000005
217	218	Syracuse	172	0	342.0111	271.4217
218	219	Dewitt	124	0	337.00009	225
219	220	Dewitt	276	5	598.10633	417.91481160000006
220	221	Syracuse	165	0	408.6178	140.7354
221	222	Syracuse	157	0	440.19669	142.095
222	223	Syracuse	119	21	304.574	75.1134
223	224	Syracuse	57	0	142.0001	36.00002
224	225	Syracuse	74	0	195.9999	47.99997
225	226	Manlius	466	6	1187.784	888.5591864200001
226	227	Syracuse	66	43	233.80003	47.99999
227	228	Manlius	183	0	406.90600	331.5530499000001
228	229	Onondaga	73	0	147.01388	106.4583
229	230	Onondaga	130	0	255.00005	184
230	231	Syracuse	316	0	820.02577	474.4924828399999
231	232	Syracuse	77	0	184.99987	62.99996
232	233	Syracuse	91	56	251.61902	71.80953233999999
233	234	Syracuse	384	0	969.1919	570.894
234	235	Syracuse	35	0	70	18.000013499999998
235	236	Syracuse	50	0	137.7552	32.65307
236	237	Dewitt	111	0	276.509	231.9107
237	238	Dewitt	155	0	353.27944	319.05866965000007
238	239	Syracuse	533	0	1452.525	1058.878
239	240	Geddes	15	7	31.54547	17.72728
240	241	Manlius	322	0	692.8482	569.2322
241	242	Syracuse	60	0	116.0656	30.49182
242	243	Syracuse	38	0	104.00002	19.99999
243	244	Manlius	512	0	1187.451	924.4145
244	245	Syracuse	164	0	412.89382	117.69394399999999
245	246	Syracuse	163	0	381.612	113.1412
246	247	Syracuse	0	0	0	0
247	248	Syracuse	83	0	291.48828	72.13097
248	249	Syracuse	283	16	629.32135	252.38034521999998
249	250	Syracuse	205	0	519.9996	200.9998
250	251	Syracuse	148	0	387.38289	127.141
251	252	Syracuse	84	0	245.0823	76.09405
252	253	Syracuse	139	6	320.17797	238.9657
253	254	Dewitt	124	9	284.24267	186.9396
254	255	Dewitt	270	4	691.36213	446.0436180000001
255	256	Camillus	1298	4	2793.403	2180.281
256	257	Camillus	797	0	1949.768	1406.178
257	258	Geddes	454	0	993.18757	738.6268465200001

	TAZ	Town_City	HH	HH_GQ	pop	veh
258	259	Geddes	1	0	2	2
259	260	Syracuse	65	5	111.7856	88.21422350000002
260	261	Syracuse	493	0	1093.5635	671.2764
261	262	Syracuse	107	0	307.87698	82.77361
262	263	Syracuse	122	10	345.7297	94.48124
263	264	Camillus	159	0	312.9999	198.99982557000004
264	265	Camillus	262	0	568.9999	355.0001
265	266	Camillus	165	7	325.5549	205.0577
266	267	Camillus	579	4	1309.4726	954.1130996699999
267	268	Geddes	503	0	1180.0004	841.0003617299999
268	269	Syracuse	1	0	1	0
269	270	Syracuse	0	0	0	0
270	271	Syracuse	408	2	1049.751	401.18368272000004
271	272	Syracuse	196	34	426.82360	114.47060911999998
272	273	Syracuse	4	51	64	2.071429
273	274	Syracuse	287	49	581.2852	85.09889
274	275	Camillus	62	0	133.8412	102.3492
275	276	Syracuse	264	0	600.72376	458.2637
276	277	Syracuse	178	3	350.2458	284.0218
277	278	Syracuse	85	0	173.95329	135.40681899999998
278	279	Syracuse	0	681	681	0
279	280	Syracuse	1	676	678.7246	1.651198
280	281	Syracuse	328	20	762.31517	224.4208
281	282	Syracuse	0	0	0	0
282	283	Syracuse	277	33	796.6214	563.3580572000001
283	284	Syracuse	141	698	1011.775	142.9859
284	285	Syracuse	260	6	688.74063	393.8517231999999
285	286	Syracuse	192	0	435.99985	266.9998
286	287	Elbridge	258	0	649.5888	490.50585899999993
287	288	Elbridge	219	4	526.838	407.419
288	289	Elbridge	221	0	542.9137	416.77202345999996
289	290	Syracuse	149	43	463.4764	116.23552580000002
290	291	Geddes	420	8	892.15905	605.4674009999999
291	292	Syracuse	12	0	25.000010	2.9999988000000006
292	293	Syracuse	0	0	0	0
293	294	Syracuse	29	0	61.99996	46.999975199999994
294	295	Syracuse	271	0	550	443
295	296	Syracuse	336	0	810.58736	487.5489
296	297	Geddes	446	0	994.69125	682.5918
297	298	Syracuse	0	442	442	0
298	299	Syracuse	0	60	60	0
299	300	Dewitt	310	0	709.71106	461.5115979000001
300	301	Syracuse	624	1	986.04040	169.95114239999998

	TAZ	Town_City	HH	HH_GQ	pop	veh
301	302	Syracuse	70	0	229.9999	38.99997499999999
302	303	Syracuse	0	0	0	0
303	304	Syracuse	41	0	69.99992	11.999970200000002
304	305	Syracuse	47	0	101.1522	18.39132
305	306	Syracuse	21	0	56.31824	10.50001
306	307	Syracuse	19	32	57.333323	6.333323
307	308	Syracuse	0	0	0	0
308	309	Syracuse	0	71	71	0
309	310	Syracuse	1	0	1	0
310	311	Syracuse	413	6	938.92867	710.2421297999999
311	312	Syracuse	0	0	0	0
312	313	Syracuse	0	0	0	0
313	314	Syracuse	0	101	101	0
314	315	Syracuse	0	0	0	0
315	316	Syracuse	0	0	0	0
316	317	Syracuse	31	218	280	40.69546
317	318	Syracuse	6	261	273.9961	7.969105
318	319	Syracuse	0	0	0	0
319	320	Syracuse	192	0	504.24268	94.06066560000001
320	321	Syracuse	72	0	181	35.000006400000004
321	322	Syracuse	62	0	172.9999	31.99999
322	323	Syracuse	92	0	246.3227	50.45164
323	324	Manlius	259	0	637.9078	484.42634799999996
324	325	Manlius	154	0	316.9929	260.78852800000004
325	326	Syracuse	0	85	85	0
326	327	Syracuse	63	67	200.6947	80.79393
327	328	Syracuse	0	479	479	0
328	329	Syracuse	0	225	225	0
329	330	Syracuse	122	0	296.5689	177.5447
330	331	Syracuse	85	0	204.40484	124.46436100000001
331	332	Dewitt	233	0	514.9998	335.99996602000004
332	333	Dewitt	130	10	244.00007	160.6429
333	334	Camillus	604	4	1219.908	933.1847897199998
334	335	Syracuse	167	0	397.8529	161.10595210000002
335	336	Syracuse	211	0	524.0652	203.14898540000004
336	337	Syracuse	0	1	1	0
337	338	Syracuse	0	1	1	0
338	339	Syracuse	106	0	107.582	77.52235
339	340	Syracuse	39	0	0	0
340	341	Syracuse	0	0	0	0
341	342	Syracuse	0	0	0	0
342	343	Syracuse	274	0	306.318	207.95908150000002
343	344	Syracuse	0	4	4	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
344	345	Syracuse	135	0	271.9709	165.54755835000003
345	346	Syracuse	0	64	64	0
346	347	Syracuse	207	0	451.81711	348.3172
347	348	Syracuse	222	0	366.5584	316.6514
348	349	Geddes	211	0	504.6079	360.29206251999994
349	350	Camillus	502	0	1200.301	865.9752
350	351	Manlius	400	0	991.0278	753.5613
351	352	Manlius	53	5	128.362	98.68966230000001
352	353	Syracuse	311	50	639.21873	132.8053
353	354	Syracuse	77	0	194.47434	40.474341599999995
354	355	Syracuse	24	0	0	0
355	356	Syracuse	0	0	0	0
356	357	Geddes	381	0	929.3178	652.135
357	358	Syracuse	144	9	361.0001	127.9999
358	359	Syracuse	141	0	284.00000	121.00002420000001
359	360	Syracuse	60	0	106.00003	47.00003
360	361	Syracuse	5	0	12	9
361	362	Syracuse	179	1	315.2443	228.72210090000002
362	363	Syracuse	254	1	526.5846	359.5077
363	364	Syracuse	235	0	418.43887	350.0211
364	365	Syracuse	134	20	307.7563	223.3333
365	366	Geddes	215	0	444.3973	314.82135454999997
366	367	Geddes	186	0	444.60941	297.401
367	368	Syracuse	59	0	116.9828	79.34486969999998
368	369	Syracuse	484	0	995.99959	686.9995
369	370	Syracuse	297	0	593.99967	414.99967409999994
370	371	Syracuse	0	0	0	0
371	372	Syracuse	924	54	1355.9506	649.3272693600001
372	373	Syracuse	0	139	139	0
373	374	Syracuse	0	286	286	0
374	375	Syracuse	0	0	0	0
375	376	Syracuse	11	0	0	0
376	377	Syracuse	88	0	88	88
377	378	Syracuse	0	188	188	0
378	379	Syracuse	0	24	24	0
379	380	Syracuse	0	0	0	0
380	381	Syracuse	0	0	0	0
381	382	Syracuse	0	0	0	0
382	383	Geddes	168	4	374.5883	272.753
383	384	Syracuse	108	0	280	54.99998
384	385	Syracuse	189	0	460.38464	91.10777
385	386	Dewitt	160	4	397.1707	248.78041280000002
386	387	Dewitt	112	0	243	158.00001056000002

	TAZ	Town_City	HH	HH_GQ	pop	veh
387	388	Syracuse	153	0	272.6182	155.7818
388	389	Syracuse	189	0	464	202.99996710000002
389	390	Syracuse	145	0	209.00002	143
390	391	Syracuse	195	10	390.75822	200.5449
391	392	Syracuse	39	0	73.125000	39
392	393	Camillus	28	0	50.81478	40.444412400000004
393	394	Camillus	380	3	901.903	657.8067
394	395	Syracuse	0	0	0	0
395	396	Syracuse	104	0	124.00005	65.33334
396	397	Syracuse	184	0	219.81221	108.6712
397	398	Camillus	1311	4	2810.5914	1982.875
398	399	Syracuse	457	3	1169.241	485.68634699999996
399	400	Syracuse	122	1	223.17887	95.21946768000001
400	401	Syracuse	21	0	48.681851	20.045472300000004
401	402	Camillus	638	4	1428.56	1067.5558874199999
402	403	Syracuse	0	0	0	0
403	404	Syracuse	132	0	296.2668	220.97774687999998
404	405	Syracuse	229	0	343.50000	183.20000000000002
405	406	Syracuse	66	0	124.89236	81.23081339999999
406	407	Syracuse	213	2	434.90292	278.08347060000006
407	408	Syracuse	0	1	1	0
408	409	Syracuse	0	1	1	0
409	410	Syracuse	166	0	220.9264	117.1765
410	411	Syracuse	0	0	0	0
411	412	Syracuse	132	98	237.65215	68.8696
412	413	Syracuse	0	0	0	0
413	414	Syracuse	64	0	64.000006	33.03227
414	415	Syracuse	139	0	139.00005	70.49284920000001
415	416	Camillus	333	0	749.49845	514.9072506599999
416	417	Syracuse	27	0	38.999966	19.99998
417	418	Syracuse	0	0	0	0
418	419	Syracuse	0	0	0	0
419	420	Syracuse	0	0	0	0
420	421	Syracuse	388	0	899.3641	527.2821835999999
421	422	Syracuse	0	0	0	0
422	423	Syracuse	0	0	0	0
423	424	Syracuse	117	0	0	0
424	425	Syracuse	73	0	90.176527	68.70590639999999
425	426	Syracuse	0	0	0	0
426	427	Syracuse	4	0	7	4
427	428	Syracuse	28	0	71.448266	29.931028399999995
428	429	Syracuse	191	0	473.9995	189.99980939999998
429	430	Syracuse	136	0	277.78718	130.2127

	TAZ	Town_City	HH	HH_GQ	pop	veh
430	431	Syracuse	0	3	3	0
431	432	Syracuse	35	0	86.52779	35.97223
432	433	Syracuse	15	0	38	14
433	434	Syracuse	188	0	362.57158	164.97962936000005
434	435	Syracuse	5	0	8	5
435	436	Syracuse	0	0	0	0
436	437	Syracuse	0	0	0	0
437	438	Syracuse	0	0	0	0
438	439	Syracuse	82	0	152	99.00003499999998
439	440	Syracuse	206	0	412.9953	264.7151
440	441	Geddes	110	0	159.5495	124.86478730000002
441	442	Syracuse	440	59	1022.36	428.828
442	443	Syracuse	438	3	1025.3327	428.04571416000005
443	444	Camillus	238	0	523.9996	390.99974227999996
444	445	Syracuse	0	0	0	0
445	446	Dewitt	22	0	56.57142	36.66666
446	447	Geddes	200	0	483.417	344.7235
447	448	Geddes	137	7	278.12571	205.97887527999998
448	449	Syracuse	49	0	110.25	42.875
449	450	Manlius	583	0	1412.1092	1097.411
450	451	Geddes	834	5	1712.7612	1222.669
451	452	Manlius	670	0	1304.1073	1124.643
452	453	Syracuse	2	0	2	1
453	454	Syracuse	116	0	156.15394	71.38463447999999
454	455	Syracuse	6	0	11.142845	5.1428519999999995
455	456	Syracuse	3	0	3	2.000001
456	457	Syracuse	27	0	36.346136	20.76923
457	458	Syracuse	95	0	151.59581	108.13831949999997
458	459	Syracuse	271	0	495.2084	331.4388
459	460	Syracuse	175	0	217.16889	108.58445499999999
460	461	Syracuse	0	0	0	0
461	462	Syracuse	0	0	0	0
462	463	Syracuse	0	0	0	0
463	464	Syracuse	104	0	127.7714	68.34283
464	465	Syracuse	8	0	17.14284	10.285703999999999
465	466	Syracuse	198	0	306.45230	125.3668
466	467	Syracuse	0	0	0	0
467	468	Syracuse	154	0	178.20000	69.29996
468	469	Syracuse	127	0	187.05436	66.94576146000001
469	470	Syracuse	184	8	258.1252	94.87507360000001
470	471	Syracuse	188	0	374.01049	125.3333
471	472	Syracuse	305	0	791.4059	221.2747
472	473	Dewitt	312	152	769.2758	400.0862

	TAZ	Town_City	HH	HH_GQ	pop	veh
473	474	Dewitt	363	0	710.0871	467.4242
474	475	Syracuse	431	1	964.76404	483.87706260000004
475	476	Syracuse	41	0	79.99995	35.99998
476	477	Syracuse	37	0	75.02773	32.88887
477	478	Syracuse	15	0	33.00002	16.000009499999997
478	479	Syracuse	33	0	67.03125	29.90625
479	480	Syracuse	183	12	409.55143	175.78816763999998
480	481	Syracuse	103	0	185.9722	90.60184
481	482	Syracuse	309	0	686.44912	294.3324
482	483	Syracuse	288	0	639.4578	279.21357503999997
483	484	Dewitt	0	0	0	0
484	485	Dewitt	0	0	0	0
485	486	Syracuse	169	0	390.37989	246.0876
486	487	Elbridge	472	0	1073.6702	857.8988
487	488	Elbridge	326	4	796.29084	619.7026551399999
488	489	Syracuse	113	0	158.40166	60.53566
489	490	Syracuse	328	0	691.8906	225.3132
490	491	Syracuse	399	26	588.90864	233.2185
491	492	Syracuse	330	9	411.5804	174.19343700000002
492	493	Syracuse	0	0	0	0
493	494	Syracuse	196	0	293.351	263.4969
494	495	Syracuse	43	0	87.34375	57.78125
495	496	Syracuse	286	0	650.4511	274.0833
496	497	Syracuse	143	1	309.683	141.0277
497	498	Syracuse	222	0	251.86535	115.47970026000002
498	499	Syracuse	175	1	283.7681	112.71172500000003
499	500	Syracuse	580	4	1140.245	735.3921499999999
500	501	Syracuse	0	0	0	0
501	502	Geddes	631	0	1416.267	979.3446
502	503	Syracuse	45	0	63.409067	25.568180999999996
503	504	Syracuse	274	50	730.5792	217.75336220000003
504	505	Geddes	736	1	1590.5628	1101.531
505	506	Camillus	187	0	374.00017	289.1859
506	507	Syracuse	0	0	0	0
507	508	Syracuse	251	0	290.0778	270.5389
508	509	Syracuse	59	0	124.05124	93.79482
509	510	Syracuse	338	100	526.3763	181.4037
510	511	Syracuse	111	0	170.99985	69.99994
511	512	Syracuse	364	0	749.94011	504.614
512	513	Dewitt	14	0	28.00001	16.00001
513	514	Syracuse	567	0	1240.6243	647.7155685000001
514	515	Syracuse	103	0	178.99996	77.00003
515	516	Geddes	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
516	517	Geddes	477	0	1052.206	668.4012966599998
517	518	Syracuse	0	0	0	0
518	519	Dewitt	85	0	179.1074	112.3216
519	520	Syracuse	397	0	680.57111	505.45352793000006
520	521	Dewitt	0	0	0	0
521	522	Syracuse	294	103	770.07	226.43033279999997
522	523	Syracuse	333	0	917.73205	207.1337
523	524	Syracuse	599	9	1433.805	370.25555120999996
524	525	Syracuse	484	0	1056.633	681.1846
1108	1114	Camillus	245	0	642.19688	443.5983
1107	1113	Camillus	160	0	414.4101	290.18637119999994
525	527	Syracuse	382	0	969.0223	320.10651876000003
526	528	Syracuse	480	0	969.00010	668.0001551999999
527	529	Syracuse	260	0	567.8162	380.53649920000004
528	530	Syracuse	0	0	0	0
529	531	Syracuse	0	1	1	0
530	532	Syracuse	423	0	968.93179	334.91541060000003
531	533	Manlius	732	5	1775.236	1286.1873180000002
532	534	Syracuse	117	0	0	0
533	535	Syracuse	276	0	576.81992	392.15821008000006
534	536	Dewitt	0	6	6	0
535	537	Syracuse	345	2	762.59055	504.0776369999999
536	538	Syracuse	290	0	686.8423	229.90135700000002
537	539	Syracuse	216	0	587.52023	186.24001248000002
538	540	Syracuse	300	0	689.4043	504.6358409999999
539	541	Syracuse	104	0	243.3208	177.5849
540	542	Syracuse	445	0	936.68608	649.6209991500001
541	543	Dewitt	500	0	1065.7374	641.4344
542	544	Syracuse	358	4	711.09960	493.48619905999993
543	545	Syracuse	361	0	848.15534	409.52147572000007
544	546	Syracuse	0	0	0	0
545	547	Syracuse	372	0	703.11067	481.7055
546	548	Dewitt	318	0	686.9997	411.99981420000006
547	549	Dewitt	439	2	929.54874	562.8715
548	550	Geddes	109	0	220.9458	176.7567
549	551	Syracuse	195	0	409.30669	146.73270300000001
550	552	Syracuse	301	0	749.09048	333.1455
551	553	Syracuse	329	34	735.38470	474.5194
552	554	Syracuse	426	3	988.364	342.5268
553	555	Camillus	403	8	879.15558	662.4162
554	556	Camillus	337	0	865.8864	682.3952
555	557	Camillus	164	0	351.58933	287.5618
556	558	Syracuse	412	0	928.4927	683.6811800799999

	TAZ	Town_City	HH	HH_GQ	pop	veh
557	559	Geddes	0	0	0	0
558	560	Manlius	157	0	362.79702	287.4796
559	561	Syracuse	375	0	913.0857	302.73452249999997
560	562	Manlius	431	0	1065.956	756.8154
561	563	Syracuse	643	0	1452.1591	715.7559579699999
562	564	Syracuse	244	0	520.79029	292.2212
563	565	Syracuse	310	0	540.00029	439.0001543000001
564	566	Syracuse	269	0	571.7483	431.7891
565	567	Syracuse	328	0	815.59433	365.20622080000004
566	568	Elbridge	78	0	193.9737	152.9211
567	569	Elbridge	209	0	414.95631	342.9223
568	570	Syracuse	595	0	902.25415	569.6395
569	571	Syracuse	542	0	1114.9998	625.9998591799999
570	572	Syracuse	596	9	1173.953	448.2076
571	573	Dewitt	305	9	715.5184	489.3508
572	574	Syracuse	410	14	737.7555	431.17342499999995
573	575	Syracuse	387	7	886.632	488.79098459999994
574	576	Dewitt	331	0	737.54317	521.8465997300001
575	577	Syracuse	125	0	300.7815	175.7813
576	578	Syracuse	107	0	255	147.99999250000002
577	579	Syracuse	499	0	1060.62	594.8865
578	580	Syracuse	0	0	0	0
579	581	Syracuse	0	2	2	0
580	582	Syracuse	119	0	275.9997	153.9998
581	583	Syracuse	161	0	343.5976	196.3414
582	584	Syracuse	360	79	856.4681	484.84435680000007
583	585	Dewitt	1	0	1	1
584	586	Dewitt	2	0	4	3
585	587	Syracuse	42	4	90.7392	57.521801399999994
586	588	Syracuse	81	0	201.5121	116.5609
587	589	Syracuse	53	0	128.4231	67.2693
588	590	Syracuse	250	3	567.9223	313.95335000000006
589	591	Syracuse	262	0	523.99957	344.17680827999993
590	592	Salina	690	3	1402.913	915.0210267000001
591	593	Dewitt	476	0	771.62057	621.3048167200001
592	594	Dewitt	373	7	857.04715	615.4497911200001
593	595	Manlius	660	0	1380.1821	1052.1884340000001
594	596	Dewitt	197	0	395.99956	285.99967499999997
595	597	Syracuse	94	0	207.78945	119.72628660000001
596	598	Syracuse	101	0	224.22	123.22
597	599	Dewitt	74	0	126.71234	95.28768
598	600	Syracuse	323	0	663.7257	432.30798685999997
599	601	Syracuse	231	6	530.3797	323.59494551999995

	TAZ	Town_City	HH	HH_GQ	pop	veh
600	602	Syracuse	88	0	177.0002	114.00008399999999
601	603	Syracuse	244	8	549.79481	328.5352493600001
602	604	Syracuse	293	10	653.6543	394.1321847200001
603	605	Salina	91	0	187.871	122.31189880000001
604	606	Salina	572	0	1265.2114	795.39
605	607	Dewitt	52	0	100.0754	75.54712
606	608	Salina	0	0	0	0
607	609	Salina	3	0	3	3
608	610	Dewitt	4	0	4	4
609	611	Dewitt	56	0	140.00008	97.33337600000002
610	612	Camillus	94	6	239.0142	188.0001
611	613	Camillus	61	0	170.3396	128.90560870000002
612	614	Camillus	208	0	488.86714	413.3512
613	615	Camillus	368	0	1020.365	770.5005
614	616	Dewitt	653	0	1516.001	1077
615	617	Van Buren	19	0	48.55559	34.83335
616	618	Van Buren	67	0	170.0001	133.00009870000002
617	619	Salina	59	0	115.9655	75.27588159999999
618	620	Salina	0	0	0	0
619	621	Dewitt	1	0	4	2
620	622	Dewitt	0	0	0	0
621	623	Manlius	492	0	1230.5000	887.1975240000002
622	624	Manlius	63	0	146.99990	109.19992230000001
623	625	Manlius	70	0	161.9999	119
624	626	Manlius	288	0	708.61881	543.3403
625	627	Salina	794	0	1456.165	958.7921592000001
626	628	Salina	394	0	876.22395	550.3970313200001
1097	1103	Salina	0	0	0	0
1096	1102	Salina	0	0	0	0
1098	1104	Salina	290	0	661.9997	398.9998
627	630	Salina	0	0	0	0
628	631	Dewitt	13	0	22.99999	15.99999
629	632	Dewitt	40	0	91.282000	65.64098
630	633	Salina	17	0	38.25	23.375
631	634	Salina	0	0	0	0
632	635	Salina	71	0	169.3858	101.4286
633	636	Van Buren	61	0	165.7168	124.03342890000002
634	637	Salina	473	0	1051.332	643.9156930800001
635	638	Dewitt	9	0	24.999974	13.99999
636	639	Geddes	398	0	954.3985	710.7862
637	640	Salina	250	0	504	320
638	641	Sullivan	155	0	328.17226	280.0689
639	642	Geddes	441	1	1010.579	774.5126

	TAZ	Town_City	HH	HH_GQ	pop	veh
640	643	Sullivan	93	0	232.4999	184.8928
641	644	Dewitt	0	15	15	0
642	645	Salina	78	0	188.0002	110.00007719999999
643	646	Salina	532	0	1190.2865	718.9449383199999
644	647	Salina	18	0	46.42104	24.63157
645	648	Salina	236	0	505.00008	311
646	649	Salina	4	0	10	7
647	650	Dewitt	210	0	557.7423	375.968
648	651	Dewitt	29	0	54.000032	41.00003
649	652	Salina	36	0	84.34297	54.51436439999999
650	653	Van Buren	22	0	55.00005	44.00005
651	654	Salina	491	0	988.0115	709.4443
652	655	Salina	601	0	1390.06	833.8372
653	656	Elbridge	255	0	633.31957	481.7829
654	657	Salina	307	2	526.87146	396.12933291999997
655	658	Salina	417	0	898.84454	663.409
656	659	Sullivan	72	0	147.0857	124.45714080000002
657	660	Sullivan	184	0	357.04765	319.8095
658	661	Salina	1	0	1.5	1.5
659	662	Salina	54	0	131.0001	91.00008720000001
660	663	Salina	67	0	97.544201	80.79418779999999
661	664	Salina	115	0	234.00001	176
662	665	Salina	153	0	286.1299	229.5001
663	666	Geddes	247	0	598.00004	445.99992190000006
664	667	Salina	519	3	1201.0758	812.3055
665	668	Dewitt	17	0	37.1875	25.5
666	669	Van Buren	148	0	377.19416	294.97206600000004
667	670	Van Buren	61	0	159.3869	121.01602120000001
668	671	Sullivan	186	0	482.1032	376.27560431999996
669	672	Dewitt	0	0	0	0
670	673	Dewitt	13	23	46.472212	18.41666
671	674	Manlius	173	0	438.1302	328.59767050000005
672	675	Manlius	233	7	539.2846	422.81477809999996
673	676	Salina	328	6	762.54845	449.0481
674	677	Salina	419	0	859.10104	656.1322329499999
675	678	Van Buren	86	0	207.8334	165.85709740000001
676	679	Salina	1032	0	2364.611	1721.0315493599999
677	680	Salina	179	0	412.69436	295.3499
678	681	Salina	484	0	1152.9999	826.9999584000001
679	682	Van Buren	37	0	90.586212	61.2414
680	683	Salina	271	7	634.78426	423.07205650000003
681	684	Salina	103	0	225.99999	177.99998354000002
682	685	Salina	312	7	670.975	502.125

TAZ		Town_City	HH	HH_GQ	pop	veh
683	686	Dewitt	67	0	135.9999	103.9999
684	687	Salina	285	0	525	395.00005919999995
685	688	Van Buren	182	0	488.0003	367.00017900000006
686	689	Van Buren	0	1	1	0
687	690	Dewitt	13	0	24.99999	17.99999
688	691	Dewitt	2	0	5	3
689	692	Salina	273	19	571.5447	440.35294211999997
690	693	Salina	470	0	773.3544	653.609
691	694	Geddes	11	0	26.4	19.8
692	695	Salina	4	0	9	6
693	696	Van Buren	2	0	4	4
694	697	Salina	200	0	453	356
695	698	Salina	287	0	703.451	537.8741
696	699	Sullivan	75	0	162.85708	137.14280250000002
697	700	Van Buren	183	0	398.8203	298.3694
698	701	Salina	567	0	1210.0103	909.0487
1101	1107	Clay	10	0	22	14
1102	1108	Clay	50	0	104.08157	71.42853
699	703	Van Buren	105	0	280.3399	208.9806
700	704	Geddes	104	6	258.97277	189.2611
701	705	Salina	547	5	1106.942	731.6500788999999
702	706	Salina	4	0	6	4
703	707	Geddes	0	0	0	0
704	708	Van Buren	489	0	1105.43	806.0209
705	709	Clay	52	0	113.90479	91.61908079999999
706	710	Clay	47	0	67.14286	57.07143260000001
707	711	Salina	30	0	70.34482	53.7931
1099	1105	Salina	0	0	0	0
1100	1106	Salina	4	0	12	8
708	713	Clay	157	0	386.4613	297.53121810000005
709	714	Clay	1	0	4	2
710	715	Clay	225	0	447.9911	361.60713899999996
711	716	Cicero	10	0	16.66665	12.22221
712	717	Van Buren	266	0	630.56891	459.08663892000004
713	718	Van Buren	15	0	40.000027	27.000014999999998
714	719	Cicero	16	0	36.26665	25.59999
715	720	Cicero	29	0	68	47.000001299999994
716	721	Cicero	16	0	46	29
717	722	Van Buren	160	0	355	261
718	723	Salina	654	0	1586.427	1178.8033333199999
719	724	Salina	38	0	106.81070	74.97290179999999
720	725	Clay	368	0	623.30600	508.6177
721	726	Clay	376	0	813.9996	588.9996

	TAZ	Town_City	HH	HH_GQ	pop	veh
722	727	Clay	223	0	513.30200	368.65316359999997
723	728	Cicero	0	0	0	0
724	729	Salina	447	6	855.3991	710.6408145600001
725	730	Salina	72	0	154.8493	125.2603
726	731	Clay	277	0	690.46355	535.6694
727	732	Clay	8	0	18	9
728	733	Clay	0	0	0	0
729	734	Cicero	1	0	1	1
730	735	Cicero	172	0	359.0879	253.47385440000002
731	736	Clay	552	7	1205.148	831.4690439999999
732	737	Cicero	12	0	18.545437	14.1818
733	738	Lysander	195	0	475.24575	383.6065
734	739	Lysander	100	0	238.77555	194.89797000000002
735	740	Clay	510	0	816	624.9999510000001
736	741	Van Buren	200	0	367	299
737	742	Salina	611	0	997.52990	918.0092860899999
738	743	Cicero	421	0	865.1648	630.4925890999999
739	744	Cicero	28	0	49.777730	40.444404000000006
740	745	Clay	223	0	524.3516	415.865
741	746	Clay	445	0	1014.842	716.8328779999999
742	747	Clay	738	0	1257.9544	1055.6332885800002
743	748	Clay	1	0	2	2
744	749	Clay	56	0	105.99994	75.99995200000001
745	750	Clay	1461	8	3111.747	2072.5119377100004
746	751	Cicero	0	0	0	0
747	752	Cicero	318	5	671.80624	471.0375
748	753	Clay	288	0	684.6593	528.5274
749	754	Clay	587	0	1382.712	933.1799040999999
750	755	Clay	390	0	954.0011	743.0009
751	756	Clay	6	0	11.00001	11.00001
752	757	Van Buren	692	0	1349.348	1055.834
753	758	Cicero	61	0	144.08616	95.7069
754	759	Cicero	147	0	300.04117	217.47950279999998
755	760	Cicero	195	0	429.5942	298.93414199999995
756	761	Clay	537	0	1378.4326	994.1483
757	762	Clay	366	0	930.5429	656.7947921400001
758	763	Salina	205	0	479.3241	373.3577
759	764	Lysander	440	0	1090.867	825.2070640000001
760	765	Cicero	9	0	24.75	16.875
761	766	Cicero	49	0	89.179999	70.55999999999999
762	767	Van Buren	80	0	187	136
763	768	Clay	244	0	599.9177	446.66139799999996
764	769	Cicero	124	0	286.688	210.30399999999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
765	770	Cicero	76	0	171.0001	118.22233200000002
766	771	Van Buren	656	0	1321.069	1002.6419915200001
767	772	Van Buren	179	0	427.61123	350.0444
768	773	Van Buren	112	0	268.9998	217.9998
769	774	Clay	466	0	1093.6939	793.405
770	775	Van Buren	258	0	472.83275	380.4747
771	776	Van Buren	47	0	112.22458	89.20416
772	777	Van Buren	27	0	64.999970	53.999973000000004
773	778	Clay	500	0	1177.7115	805.2216
774	779	Clay	135	0	330.4477	217.6119
775	780	Cicero	143	0	341.77992	266.7304
776	781	Clay	216	0	517.0002	391.0002
777	782	Clay	473	0	1070.5270	822.4781501200002
778	783	Cicero	25	0	51.923085	36.53846500000001
779	784	Cicero	421	3	854.92903	621.5707150000001
780	785	Clay	551	0	1424.7569	1037.6491508000001
781	786	Lysander	426	0	1279.8051	870.0508
782	787	Lysander	483	0	1170.9096	886.7199
783	788	Clay	303	0	729.59198	559.1545335000001
784	789	Clay	88	0	235.32551	175.99980639999998
785	790	Van Buren	122	0	298.5411	183.7175
786	791	Clay	415	0	973.9989	733.9993365000003
787	792	Cicero	228	0	624.73994	427.87656480000004
788	793	Clay	3	0	3	3
789	794	Clay	391	0	958.9996	710.9996785000001
790	795	Clay	750	5	2109.8082	1539.054
791	796	Van Buren	60	0	136.271	100.6779
792	797	Van Buren	125	0	327.83013	196.9339
793	798	Van Buren	756	0	1099.2408	857.3790103199999
794	799	Clay	5	0	5	5
795	800	Lysander	543	0	1642.1202	1112.241
796	801	Cicero	455	9	1183.0002	858.9999144999999
797	802	Clay	90	0	208.6362	156.47715899999997
798	803	Clay	228	0	505.2158	407.7884
799	804	Cicero	42	0	87.315841	76.26321
800	805	Cicero	0	0	0	0
801	806	Cicero	7	0	18.200000	14
802	807	Cicero	511	0	1111.1744	806.5785
803	808	Clay	262	4	670.4559	497.1024512000001
804	809	Van Buren	384	15	900.20121	564.0895
805	810	Van Buren	110	0	243.7837	157.56747159999998
806	811	Van Buren	93	0	234.00019	142.0001
807	812	Van Buren	301	0	811.95126	612.7124

	TAZ	Town_City	HH	HH_GQ	pop	veh
808	813	Clay	1276	3	3041.962	2269.1180221600002
809	814	Van Buren	171	0	410.4	255.81600000000003
810	815	Lysander	226	4	685.244	463.89468509999995
811	816	Lysander	113	0	319.9554	220.92152009999998
812	817	Cicero	467	0	836.79170	724.5513
813	818	Sullivan	22	0	56	45.00001
814	819	Sullivan	47	0	95.04444	81.46666
815	820	Clay	29	0	70.999960	49.99999
816	821	Lysander	103	0	194.99998	154
817	822	Lysander	112	0	252.0001	184
818	823	Lysander	185	0	413.7635	307.33874249999997
819	824	Lysander	191	0	429.2136	349.80897460000006
820	825	Lysander	134	0	319.61449	227.30347640000002
821	826	Clay	393	0	1038.2833	753.8357
822	827	Clay	619	0	1678.558	1194.6493872999997
823	828	Cicero	611	0	1665.535	1166.1786733999998
824	829	Clay	103	0	221.14705	180.7549
825	830	Cicero	217	0	499.20175	384.0797
826	831	Clay	614	0	1603.165	1160.3293223800001
827	832	Clay	1	0	1	1
828	833	Clay	328	0	937.72933	658.0557
829	834	Cicero	221	0	449.09629	358.8715
830	835	Lysander	181	0	478.6443	368.0332
831	836	Lysander	314	0	813.6242	610.6517
832	837	Clay	533	0	1357.279	898.1096424300001
833	838	Clay	473	0	1289.653	933.3186
834	839	Lysander	193	0	479.53984	348.1104986200001
835	840	Lysander	74	0	151.7	117.16666420000001
836	841	Clay	977	0	2698.622	1883.2769239999998
837	842	Lysander	257	0	532.4305	402.3946
838	843	Sullivan	163	0	344.688	293.81539409000004
839	844	Lysander	307	0	867.1748	576.1231474100001
840	845	Lysander	181	0	534.5816	344.1106
841	846	Lysander	647	4	1660.455	1156.244
842	847	Lysander	154	0	337.99992	256.9999
843	848	Lysander	162	0	413.4963	325.1327
844	849	Cicero	229	0	547.0002	420.00024379999996
845	850	Cicero	503	0	1080.7032	840.6576627999999
846	851	Clay	1196	2	3095.904	2334.522
847	852	Cicero	104	0	282.60890	187.65231680000002
848	853	Cicero	179	0	378.28632	270.8865
849	854	Cicero	31	0	86.79995	57.86664
850	855	Cicero	371	0	1129.816	720.9803494600001

	TAZ	Town_City	HH	HH_GQ	pop	veh
851	856	Cicero	134	0	376.8121	247.84964279999997
852	857	Clay	396	0	775.40798	700.1902472399998
853	858	Clay	728	0	1876.58	1420.9532864799999
854	859	Clay	1074	0	2406.745	1740.3724612199999
855	860	Sullivan	136	0	348	273.3333
856	861	Clay	648	0	1934.017	1315.9701936000001
857	862	Clay	8	0	18.285695	14.85713
858	863	Clay	230	0	601.22850	451.93010499999997
859	864	Clay	127	0	309.2176	242.95665150000002
860	865	Sullivan	69	0	154.72743	128.591
861	866	Cicero	430	0	1134.099	798.8627
862	867	Clay	224	0	524.4871	415.2191
863	868	Clay	146	0	313.90000	262.8
864	869	Lysander	302	0	869.92526	591.6317
865	870	Lysander	600	0	1357.448	985.1072999999999
866	871	Cicero	56	0	136.5	101.5
867	872	Cicero	6	0	13.200000	9.600000000000001
868	873	Cicero	586	0	1653.4331	1105.557
869	874	Cicero	302	0	661.40510	529.1239863599999
870	875	Cicero	460	0	1289.509	862.9046
871	876	Clay	38	0	0	0
872	877	Clay	0	0	0	0
873	878	Lysander	533	0	913.13132	712.3649201499999
874	879	Clay	102	0	223.38000	183.6
875	880	Clay	3	0	6	6
876	881	Clay	8	0	19.42855	15.999983999999998
877	882	Clay	65	0	153.99997	119.99997750000003
878	883	Lysander	24	0	69.47364	50.52629280000001
879	884	Cicero	923	0	2548.0030	1789.002
880	885	Cicero	282	0	790.3948	548.113
881	886	Cicero	180	0	460.5589	327.8212740000001
882	887	Clay	325	0	487.5	487.5
883	888	Clay	15	0	33.21431	27.857163000000007
884	889	Clay	23	0	61.681860	46.00004
885	890	Lysander	350	0	843.80651	628.0967
886	891	Lysander	265	0	693.6449	526.8323755000001
887	892	Lysander	214	0	561.6237	431.01363359999993
888	893	Clay	27	0	66.46156	54.00001
889	894	Clay	6	0	10.800000	10.8
890	895	Lysander	630	7	1413.726	1043.501
891	896	Lysander	253	0	675.0086	516.2431856999999
1106	1112	Clay	122	0	280.34043	212.85105760000002
1103	1109	Clay	9	0	19.800000	17.1

	TAZ	Town_City	HH	HH_GQ	pop	veh
1104	1110	Clay	12	0	26.999996	23.999997600000004
1105	1111	Clay	10	0	22.72727	20
892	898	Clay	51	0	126.39130	97.56522
893	899	Clay	26	0	49.636368	49.636368600000004
894	900	Clay	22	0	61.599999	46.2
895	901	Clay	48	0	117.12	96
896	902	Cicero	434	0	1085.5385	790.4614298000001
897	903	Cicero	112	0	217.97854	169.8065
898	904	Cicero	120	0	222.8571	180
899	905	Cicero	155	0	366.4642	271.24995350000006
900	906	Clay	29	0	76.961513	60.23076
901	907	Clay	55	0	127.59999	105.60000000000001
902	908	Clay	119	0	261.80001	218.33914725000005
903	909	Lysander	395	0	1005.4552	713.0523409999998
904	910	Lysander	86	0	192.1728	164.5679
905	911	Schroeppe	62	0	117.90166	104.68853139999999
906	912	Cicero	303	0	669.04042	516.5235849000001
907	913	Cicero	89	0	230.5911	169.9092
908	914	Schroeppe	103	4	233.54290	156.9524
909	915	Lysander	142	0	385.8697	295.319
910	916	Cicero	500	0	1373.482	949.3931
911	917	Schroeppe	144	0	343.14906	220.59587520000002
912	918	Clay	191	0	470.3883	363.7128
913	919	Clay	190	0	480.51587	361.6128
914	920	Schroeppe	86	0	207.229	132.6266
915	921	Schroeppe	93	0	212.5713	142.0548
916	922	Clay	203	0	520.9521	391.3256
917	923	Clay	37	0	88.034388	72.72406
918	924	Schroeppe	167	0	390.36249	250.5
919	925	Schroeppe	79	0	150.7236	103.9473
920	926	Schroeppe	56	0	145.18534	95.40751920000002
921	927	Cicero	281	0	809.57698	553.3347
922	928	Cicero	399	0	801.06960	630.2156760900001
923	929	Cicero	417	0	1140.617	791.0735
924	930	Schroeppe	85	0	179.1072	122.4405
925	931	Schroeppe	31	0	57.72414	43.8276
926	932	Schroeppe	52	0	134.7754	84.8979
927	933	Cicero	126	0	265	205.99997544000001
928	934	Cicero	137	0	308.25	230.68389073999998
929	935	Schroeppe	146	0	244.3472	185.5417
930	936	Hastings	75	0	159.64279	140.35708499999998
931	937	Hastings	131	0	276.67199	208.552
932	938	Hastings	166	0	370.14877	312.40972912000007

	TAZ	Town_City	HH	HH_GQ	pop	veh
933	939	Hastings	99	0	226.2856	164.27462040000003
934	940	Hastings	144	0	369.0003	261.0001
935	941	Hastings	227	0	295.9107	249.29467560999996
936	942	Hastings	104	0	237.28156	174.6796
937	943	Hastings	81	0	182.7974	134.6353
938	944	Hastings	184	7	468.0339	313.21362095999996
939	945	Hastings	118	0	222.42464	209.89367527999997
940	946	Hastings	211	0	574.0909	386.6544826999999
941	947	Hastings	24	0	54.999993	43.99999
942	948	Hastings	101	0	242.83	197.70227830000002
943	949	Hastings	22	0	54.52178	44.00003
944	950	Hastings	20	0	64	45
945	951	Hastings	130	0	253.55369	235.2892
946	952	Hastings	22	0	55.523802	42.95237099999999
947	953	Hastings	84	0	222.22787	171.18989159999995
948	954	Hastings	3	0	9.75	6.75
949	955	West Monr	104	0	261.04	206.96
950	956	Hastings	125	0	338.8431	256.1985
951	957	Sullivan	58	0	142.92859	113.9286
952	958	Sullivan	56	0	125.2364	107.92728240000002
953	959	Sullivan	138	5	344.5392	269.0502
954	960	Sullivan	268	0	609.93096	513.4099
955	961	Sullivan	91	0	223.4554	181.99992719999997
956	962	Sullivan	30	0	70.000019	60.00001
957	963	Sullivan	93	0	183.93324	162.23323620000002
958	964	Sullivan	300	0	715.8619	583.4481
959	965	Sullivan	66	0	147.4688	125.8125
960	966	Sullivan	83	0	213.573	169.0365
961	967	Sullivan	177	0	392.4344	329.72579343000007
962	968	Sullivan	8	0	18.285695	14.85713
963	969	Sullivan	35	0	81.323553	66.91178
964	970	Sullivan	31	0	84.28125	64.90625
965	971	Sullivan	16	0	42	33
966	972	Sullivan	12	0	22.909076	18.545441999999998
967	973	Sullivan	51	0	133	98.99996
968	974	Sullivan	42	0	103.4634	83.99997060000001
969	975	Sullivan	106	0	268.05738	204.86518240000004
970	976	Sullivan	43	0	116.7144	87.02387300000001
971	977	Sullivan	91	0	235.1686	185.06758270000003
972	978	Sullivan	24	0	60.000016	50.00001
973	979	Sullivan	40	0	94.35894	78.97433
974	980	Sullivan	93	0	235.5326	188.02167120000001
975	981	Sullivan	71	0	178.51408	138.957

	TAZ	Town_City	HH	HH_GQ	pop	veh
976	982	Sullivan	181	0	448.3865	350.6875
977	983	Sullivan	8	0	20	17
978	984	Sullivan	86	0	210.90467	168.92850140000002
979	985	Sullivan	24	0	64.363667	46.90911
980	986	Sullivan	93	0	256.0109	187.0447
981	987	Sullivan	30	0	70.34478	56.89651199999999
982	988	Sullivan	123	0	323.1358	252.2543
983	989	Sullivan	128	0	329.14307	224.50805759999997
984	990	Sullivan	52	0	120.00008	101.00010440000001
985	991	Sullivan	33	0	77.647036	63.08821
986	992	Sullivan	490	0	1159.769	815.6392999999999
987	993	Sullivan	150	0	324.82741	272.0688
988	994	Sullivan	75	0	162.1621	117.56755500000001
989	995	Sullivan	326	7	760.9995	524.9999
990	996	Sullivan	475	0	1143.898	786.8791100000001
991	997	Sullivan	120	0	262.7586	192.4138
992	998	Sullivan	294	5	790.8851	589.1311943999999
993	999	Sullivan	8	0	22.85712	19.428551999999996
994	1000	Sullivan	32	0	74.32249	57.80638
995	1001	Sullivan	31	0	77.999983	61.999978299999995
996	1002	Sullivan	31	0	78.9999	59.99992029999999
997	1003	Sullivan	64	0	141.4193	121.80643199999999
998	1004	Sullivan	35	0	73.088263	67.9412
999	1005	Sullivan	21	0	50.400000	40.95
1000	1006	Sullivan	100	0	223.4694	164.2856
1001	1007	Sullivan	70	0	149.1305	129.8551
1002	1008	Sullivan	35	0	88.000118	69.0001
1003	1009	Granby	45	0	104.31814	77.72725349999999
1004	1010	Schroeppe	58	0	131.26304	105.82446259999998
1005	1011	Schroeppe	139	0	366.9192	272.8897
1006	1012	Schroeppe	79	0	211.00022	153.0002
1007	1013	Schroeppe	29	0	70.88882	55.851804699999995
1008	1014	Schroeppe	40	0	104	80
1009	1015	Schroeppe	34	0	78.99995	62.99995
1010	1016	Schroeppe	17	0	39.66666	31.166664400000005
1011	1017	Schroeppe	68	0	164.41775	129.9104
1012	1018	Schroeppe	30	0	70.64517	57.09679499999999
1013	1019	Schroeppe	34	0	102	73.3125
1014	1020	Schroeppe	42	0	115.5	86.1
1015	1021	Schroeppe	67	0	172.57582	128.92428099999998
1016	1022	Schroeppe	15	0	31.071426	26.78571
1017	1023	Schroeppe	217	0	574.8958	419.6019
1018	1024	Schroeppe	57	0	134.05558	106.6111

	TAZ	Town_City	HH	HH_GQ	pop	veh
1019	1025	Schroeppe	97	0	239.46879	182.88547809999997
1020	1026	Schroeppe	30	0	76.071486	60.00005
1021	1027	Schroeppe	47	0	122.19994	95.04437759999999
1022	1028	Schroeppe	55	0	122.69237	99.4231
1023	1029	Schroeppe	204	0	435.67815	354.6933
1024	1030	Schroeppe	47	0	101.15227	85.82615
1025	1031	Schroeppe	56	0	141.03695	110.96290800000003
1026	1032	Schroeppe	267	0	681.87653	513.4613
1027	1033	Schroeppe	100	0	280.20853	203.1251
1028	1034	Schroeppe	173	0	399.86821	318.02996895999996
1029	1035	Schroeppe	29	0	65.73334	53.16668
1030	1036	Schroeppe	61	0	151.98304	117.8644
1031	1037	Schroeppe	11	0	21.083331	19.25
1032	1038	Schroeppe	21	0	40.949999	35.7
1033	1039	Schroeppe	39	0	104.35126	79.05399
1034	1040	Hastings	70	0	165.3623	117.68115100000003
1035	1041	Hastings	39	0	97.499984	70.81578
1036	1042	Hastings	188	0	450.99433	329.7703
1037	1043	Hastings	55	0	151.75938	103.889
1038	1044	Hastings	30	0	77.142873	55.714290000000005
1039	1045	Hastings	12	0	28.363627	23.99999
1040	1046	Hastings	121	0	345.5681	229.6951
1041	1047	Hastings	35	0	87.00008	64.00007
1042	1048	Hastings	18	0	55.058832	39.17647
1043	1049	Hastings	27	0	62.307743	51.92312
1044	1050	Hastings	33	0	83.47055	64.05878
1045	1051	Hastings	72	0	204.845	149.0703
1046	1052	Hastings	112	0	302.8149	228.1482
1047	1053	Hastings	41	0	91.761903	77.11904
1048	1054	Hastings	98	0	290.96900	207.1134
1049	1055	Hastings	80	0	182	156
1050	1056	Hastings	109	0	257.0757	212.85860952000004
1051	1057	Hastings	79	0	197.49999	155.9744
1052	1058	Hastings	106	0	272.1346	210.98069764000002
1053	1059	Hastings	41	0	112.26196	84.92860540000001
1054	1060	Hastings	113	0	320.67551	236.18
1055	1061	Hastings	65	0	190.9375	136.0938
1056	1062	Hastings	12	0	20.72726	21.81817
1057	1063	Hastings	26	0	75.920000	55.120000000000005
1058	1064	Hastings	24	0	67.826164	50.087023200000004
1059	1065	Hastings	59	0	165.8105	121.0518
1060	1066	Hastings	29	0	81.82143	61.10714
1061	1067	Hastings	91	0	228.99990	180.99991910000003

	TAZ	Town_City	HH	HH_GQ	pop	veh
1062	1068	West Monr	25	0	64.42308	50.000012500000004
1063	1069	West Monr	34	0	82.4242	66.96966
1064	1070	West Monr	33	0	85.41172	65.99997690000001
1065	1071	West Monr	19	0	39.055564	35.88889
1066	1072	West Monr	60	0	131.3792	114.8275
1067	1073	West Monr	25	0	57.692360	50.961557500000005
1068	1074	West Monr	97	0	281.613	203.3872
1069	1075	West Monr	130	0	327.5587	251.81073579999995
1070	1076	West Monr	37	0	84.57151	69.77148
1071	1077	West Monr	52	0	140.7058	105.0195
1072	1078	West Monr	76	0	178.7027	147.8919
1073	1079	West Monr	108	0	271.514	209.944
1074	1080	West Monr	50	0	128.57142	97.95921
1075	1081	West Monr	81	0	188.9999	157.99991219999998
1076	1082	West Monr	67	0	174.6061	136.0304
1077	1083	West Monr	70	0	190.441	139.99990200000002
1078	1084	West Monr	60	0	151.52533	119.99995200000001
1079	1085	Hastings	37	0	95.99994	73.99995
1080	1086	West Monr	49	0	119.43752	94.93752450000001
1081	1087	West Monr	105	0	242.62150	200.8253
1082	1088	West Monr	83	0	195.716	160.8765
1083	1089	West Monr	31	0	74.39994	60.966618100000005
1084	1090	Schroeppe	6	0	18.99999	13
1085	1091	Schroeppe	26	0	67.40735	51.99996
1086	1092	Schroeppe	17	0	40.99998	31.999984000000005
1087	1093	Schroeppe	19	0	54.76472	40.2353
1088	1094	Schroeppe	7	0	18.99998	14.999984999999999
1089	1095	Schroeppe	73	0	187.1268	139.831
1090	1096	West Monr	17	0	37.1875	30.8125
1091	1097	West Monr	36	0	97.999970	70.99999199999999
1092	1098	Hastings	17	0	47.222239	34.94445540000001
1093	1099	Hastings	95	0	263.77661	198.08516499999996
1094	1100	Sullivan	24	0	54.000002	50.00001
1095	1101	Sullivan	21	0	61.894719	44.210510400000004
1109	8001	Geddes	0	0	0	0
1110	8002	Syracuse	0	0	0	0
1111	8003	Onondaga	0	733	733	0
1112	8004	Onondaga	0	0	0	0
1113	8005	Syracuse	0	7	7	0
1114	8006	Syracuse	0	2542	2542	0
1115	8007	Syracuse	0	0	0	0
1116	8008	Syracuse	0	0	0	0
1117	8009	Syracuse	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
1118	8010	Dewitt	5	1282	1287	5
1119	8011	Syracuse	0	29	29	0
1120	8012	Syracuse	0	2879	2879	0
1121	8013	Syracuse	0	0	0	0
1122	8014	Syracuse	0	0	0	0
1123	8015	Syracuse	0	0	0	0
1124	8016	Dewitt	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
0	1	Tully	230	0	557.5116	446.22110710000004
1	2	Tully	336	0	766.16530	628.1272334399999
2	3	Tully	143	0	389.21817	286
3	4	Spafford	296	0	725.03314	582.0222
4	5	Tully	306	2	703.9386	565.4791
5	6	Fabius	131	0	322.784	259.904
6	7	Fabius	163	0	414.24880	332.22959756999995
7	8	Tully	125	0	346.8467	245.49538750000002
8	9	Fabius	204	0	516.2451	425.6941
9	10	Fabius	261	0	654.6046	534.6290539800001
10	11	Otisco	119	0	291.8089	238.00010709999998
11	12	Otisco	387	0	917.29456	752.0349
12	13	Otisco	154	0	397.9192	318.3353
13	14	Otisco	179	0	474.9608	376.30722858000007
14	15	Otisco	160	0	407.08834	319.9998
15	16	Spafford	229	0	529.4315	442.24324050999996
16	17	Spafford	207	0	486.67015	401.8883
17	18	Lafayette	102	0	230.3596	184.5169
18	19	Lafayette	357	0	860.46124	668.2305650999999
19	20	Lafayette	160	5	429.3032	307.8477
20	21	Lafayette	203	0	497.24749	380.3687
21	22	Pompey	238	0	630.85527	509.25709659999995
22	23	Pompey	249	0	624.0236	496.98308399999996
23	24	Pompey	130	0	333.70057	272.28336199999995
24	25	Skaneatele	404	0	964.8719	842.3826219999999
25	26	Skaneatele	171	4	387.7558	348.9593
26	27	Lafayette	131	0	295.025	236.68048506000002
27	28	Lafayette	59	0	161.982	115.85467739999999
28	29	Lafayette	254	0	545.59200	442.976
29	30	Pompey	129	0	308.107	261.1981
30	31	Pompey	92	5	235.4843	190.779
31	32	Pompey	86	0	215.53077	178.3703
32	33	Pompey	162	0	423.36057	338.04041040000004
33	34	Pompey	65	0	154.6553	128.87936099999996
34	35	Pompey	55	0	132.2115	109.99999449999999
35	36	Marcellus	110	0	272.3303	211.4565
36	37	Marcellus	25	0	46.73914	44.56523
37	38	Marcellus	86	0	209.1605	170.9383
38	39	Lafayette	266	0	565.5112	460.7869
39	40	Skaneatele	311	3	675.43143	615.6951
40	41	Skaneatele	17	0	37.1875	39.3125
41	42	Skaneatele	210	0	512.4	441
42	43	Onondaga	123	0	298.27476	242.9249

	TAZ	Town_City	HH	HH_GQ	pop	veh
43	44	Onondaga	219	0	572.4563	452.2606
44	45	Lafayette	87	0	213.83136	165.61449629999998
45	46	Lafayette	84	0	214.42095	163.5789
46	47	Pompey	84	0	208.40494	174.37968239999998
47	48	Pompey	285	7	739.4188	593.4941
48	49	Onondaga	75	4	197.83104	151.94798250000002
49	50	Onondaga	95	0	215.8151	184.8369
50	51	Onondaga	225	0	548.0004	448.0002832499999
51	52	Onondaga	9	0	20.571407	19.2857
52	53	Marcellus	122	0	311.5359	245.08940753999997
53	54	Marcellus	204	0	515.6048	403.51679400000006
54	55	Marcellus	93	0	223.6428	179.35706580000004
55	56	Onondaga	306	0	436.00052	436.0008
56	57	Skaneatele	239	0	576.1786	439.32359555999994
57	58	Skaneatele	183	0	434.8823	331.045
58	59	Skaneatele	490	0	946.20710	759.2889
59	60	Onondaga	191	0	447.68757	306.20616333000004
60	61	Lafayette	293	0	671.10390	527.6433
61	62	Marcellus	122	0	302.782	216.2728
62	63	Onondaga	364	0	907.47931	731.0248945999999
63	64	Skaneatele	149	0	378.99970	284.99982747999996
64	65	Skaneatele	357	0	871.66629	663.3221399700001
65	66	Skaneatele	42	0	116.23253	81.06978
66	67	Onondaga	197	0	490.0735	304.719
67	68	Pompey	184	0	510.8416	387.3681
68	69	Pompey	287	6	739.98774	600.8683660000002
69	70	Pompey	320	0	965.28037	705.4786
70	71	Lafayette	159	0	395.5608	303.78035015999995
71	72	Pompey	127	0	306.9998	256.9999
72	73	Pompey	229	0	701.01970	498.8924
73	74	Marcellus	424	0	842.8796	687.2080911999999
74	75	Onondaga	12	0	20.727263	16.36363
75	76	Onondaga	251	0	619.7165	411.52290347999997
76	77	Onondaga	215	0	499.28866	420.8291
77	78	Marcellus	137	0	392.31834	277.7365
78	79	Marcellus	17	0	40.375	34
79	80	Marcellus	15	0	32.8125	24.375
80	81	Onondaga	415	0	932.77172	650.8848
81	82	Onondaga	297	0	783.4838	555.6775
82	83	Skaneatele	510	0	1227.51	930.1821354000001
83	84	Manlius	16	0	47.999991	30.933318399999997
84	85	Manlius	150	0	439.5831	298.9582
85	86	Manlius	349	0	775.8923	612.0142

	TAZ	Town_City	HH	HH_GQ	pop	veh
86	87	Manlius	220	0	506.5116	376.55809839999995
87	88	Marcellus	201	0	492.5499	352.24779659999996
88	89	Marcellus	207	0	415.0045	333.6113
89	90	Dewitt	433	0	1160.681	808.2668
90	91	Dewitt	63	0	185.22000	124.74000000000001
91	92	Marcellus	155	0	384.2254	272.8875
92	93	Marcellus	181	0	472.22410	329.51263217999997
93	94	Marcellus	149	0	375.3008	265.5113
94	95	Onondaga	717	4	1787.6683	1183.2255359399999
95	96	Syracuse	755	0	1645.641	1143.97
96	97	Manlius	75	0	147.61899	119.04755999999999
97	98	Manlius	623	0	1382.73	1038.332
98	99	Syracuse	760	0	1271.98	785.8985
99	100	Syracuse	310	9	640.7351	349.1169
100	101	Onondaga	456	7	1261.7383	862.7556
101	102	Syracuse	325	25	767.59243	504.6294
102	103	Marcellus	290	0	732.1898	522.4792
103	104	Marcellus	179	0	465.6416	327.7634
104	105	Manlius	716	1	1603.43	1266.615
105	106	Dewitt	270	6	612.3756	444.3753
106	107	Syracuse	33	0	58.999957	33.999969300000004
107	108	Syracuse	40	0	96	45
108	109	Syracuse	289	0	638.7896	340.82069114999996
109	110	Syracuse	49	0	103.00000	55.99998319999999
110	111	Onondaga	310	1	887.2659	596.8466
111	112	Onondaga	205	0	579.0349	398.0115
112	113	Onondaga	13	0	37.81816	23.63635
113	114	Dewitt	44	0	104.8236	93.17653
114	115	Manlius	791	0	2182.93	1609.3140209999997
115	116	Onondaga	645	10	1789.309	1292.34
116	117	Onondaga	656	0	1817.795	1256.822
117	118	Syracuse	689	4	847.4313	546.4484
118	119	Syracuse	687	0	1392.514	548.6256
119	120	Manlius	329	0	831.3924	637.2526
120	121	Syracuse	298	0	737.455	286.6834
121	122	Syracuse	126	0	272.83467	148.81893515999997
122	123	Syracuse	317	0	700.4194	373.35564501999994
123	124	Onondaga	79	0	174.41549	132.3506
124	125	Manlius	387	0	825.23281	669.9596088599999
125	126	Manlius	154	0	305.4334	263.0834
126	127	Manlius	370	0	684.10116	528.3817
127	128	Syracuse	262	7	602.0743	241.09559639999998
128	129	Dewitt	2	0	3	3

	TAZ	Town_City	HH	HH_GQ	pop	veh
129	130	Syracuse	116	0	288.51267	140.7862
130	131	Syracuse	86	0	207.58641	105.7702
131	132	Syracuse	89	0	213.8045	107.4138
132	133	Onondaga	249	14	507.38868	376.95811448999996
133	134	Manlius	266	0	520.9582	402.5131
134	135	Manlius	185	0	446.4128	326.76618449999995
135	136	Manlius	205	0	436.01523	327.79192090000004
136	137	Manlius	281	0	796.16700	571.9345948299999
137	138	Onondaga	394	0	1032.444	773.5596635999999
138	139	Onondaga	122	0	292.1844	234.77277155999994
139	140	Onondaga	0	0	0	0
140	141	Onondaga	81	0	134.3164	114.8354
141	142	Onondaga	468	6	778.14838	655.4043849600001
142	143	Syracuse	94	1	250.34709	137.5366
143	144	Syracuse	200	14	475.8835	269.0582
144	145	Syracuse	348	0	907.4924	422.98376880000006
145	146	Syracuse	24	0	45.91305	23.999992800000005
146	147	Syracuse	15	0	38.4375	15.9375
147	148	Syracuse	833	0	1440.0844	879.775
148	149	Syracuse	280	0	668.72859	389.69084000000004
149	150	Syracuse	470	5	1264.714	402.0368
150	151	Syracuse	190	6	445.4957	256.2125
151	152	Onondaga	8	0	25.333384	14.666696000000002
152	153	Onondaga	14	0	32.00001	25.00001
153	154	Manlius	83	0	148.5803	135.25934809999998
154	155	Syracuse	294	4	596.0828	477.7494061199999
155	156	Dewitt	455	0	1041.031	671.6659039999998
156	157	Syracuse	157	0	424.29758	190.7848
157	158	Syracuse	270	4	714.6257	224.06261039999998
158	159	Dewitt	241	0	603.01339	499.4345
159	160	Dewitt	318	0	793.98062	668.6152
160	161	Dewitt	241	0	541.1928	384.7544
161	162	Dewitt	59	0	139.9998	95.99989710000001
162	163	Onondaga	465	0	918.439	652.5412
163	164	Onondaga	373	0	999.59744	628.7109183800001
164	165	Onondaga	113	0	283.0705	181.4847
165	166	Manlius	105	0	236.5048	181.45628340000002
166	167	Syracuse	126	0	322.00016	141.00001271999997
167	168	Syracuse	19	0	44.70592	21.2353
168	169	Dewitt	32	0	76	51
169	170	Syracuse	167	0	435.3257	197.02237490000002
170	171	Syracuse	697	0	1573.6025	790.9640964299999
171	172	Camillus	223	0	605.6092	438.0762

	TAZ	Town_City	HH	HH_GQ	pop	veh
172	173	Syracuse	240	0	573.4943	221.6868
173	174	Syracuse	34	0	97.277753	33.055544600000005
174	175	Manlius	53	0	150.32723	105.03637520000001
175	176	Manlius	176	0	466.04799	347.77600000000007
176	177	Syracuse	264	9	600.824	389.7141
177	178	Manlius	526	0	1221.6116	892.4830150199999
178	179	Dewitt	339	4	843.00019	716.0003
179	180	Syracuse	143	0	290.9653	156.9028
180	181	Syracuse	200	0	325.37306	199.0049
181	182	Syracuse	76	0	205.29867	73.03896
182	183	Syracuse	33	0	88.32355	32.02942
183	184	Syracuse	61	1	174.00011	61
184	185	Dewitt	268	9	601.3188	409.7679264000001
185	186	Syracuse	24	0	53.00003	42.00001439999999
186	187	Manlius	648	5	1177.381	926.1413445599999
187	188	Manlius	112	0	287.0002	218.00011295999997
188	189	Syracuse	217	0	559.42220	383.2339
189	190	Syracuse	101	0	271.31363	116.8431
190	191	Onondaga	377	0	890.81501	597.9305
191	192	Syracuse	377	0	965.8758	674.4218221000001
192	193	Syracuse	142	0	343.99990	248.99991100000003
193	194	Elbridge	139	5	333.00040	261.0003
194	195	Elbridge	224	0	548.6972	419.2293750399999
195	196	Syracuse	193	0	367.09816	303.42791447999997
196	197	Onondaga	1	0	2	2
197	198	Onondaga	43	0	93.478323	65.43481
198	199	Syracuse	95	0	253.33326	112.8125
199	200	Syracuse	166	0	453.00035	199.00015259999998
200	201	Syracuse	207	0	536.667	249.1669
201	202	Manlius	452	0	884.87281	684.5431745999999
202	203	Syracuse	144	0	326.731	161.87585760000002
203	204	Syracuse	264	5	677.4188	251.12213279999997
204	205	Syracuse	12	0	30.545443	9.818180400000001
205	206	Syracuse	99	0	262.9999	92.99997
206	207	Syracuse	91	0	225.52182	85.06521660000001
207	208	Dewitt	582	4	1407.824	964.3139375999999
208	209	Onondaga	326	0	597.32950	427.24244590000006
209	210	Onondaga	77	5	182.7654	116.9259
210	211	Syracuse	260	9	553.94451	413.5055
211	212	Syracuse	481	5	1160.7771	831.1758884000001
212	213	Camillus	286	0	713.0766	556.6101
213	214	Camillus	456	0	1238.418	946.4464132800001
214	215	Camillus	43	0	59.780461	57.68290470000001

	TAZ	Town_City	HH	HH_GQ	pop	veh
215	216	Onondaga	130	1	288.00000	188.00002780000003
216	217	Syracuse	257	4	538.5992	431.60315290000005
217	218	Syracuse	172	0	342.0111	271.4217
218	219	Dewitt	124	0	337.00009	225
219	220	Dewitt	277	5	600.2553	419.42899570000003
220	221	Syracuse	161	0	398.71195	137.3236
221	222	Syracuse	157	0	440.19669	142.095
222	223	Syracuse	119	21	304.574	75.1134
223	224	Syracuse	57	0	142.0001	36.00002
224	225	Syracuse	74	0	195.9999	47.99997
225	226	Manlius	466	6	1187.784	888.5591864200001
226	227	Syracuse	65	44	231.90912	47.27272
227	228	Manlius	182	0	404.6825	329.74128460000003
228	229	Onondaga	73	0	147.01388	106.4583
229	230	Onondaga	131	0	256.96159	185.4154
230	231	Syracuse	311	0	807.0507	466.98469038999997
231	232	Syracuse	77	0	184.99987	62.99996
232	233	Syracuse	89	58	249.31970	70.2313
233	234	Syracuse	383	0	966.66794	569.4072872999999
234	235	Syracuse	35	0	70	18.000013499999998
235	236	Syracuse	50	0	137.7552	32.65307
236	237	Dewitt	111	0	276.509	231.9107
237	238	Dewitt	156	0	355.55866	321.1171
238	239	Syracuse	532	0	1449.8	1056.892
239	240	Geddes	15	7	31.54547	17.72728
240	241	Manlius	321	0	690.6965	567.4643617500001
241	242	Syracuse	60	0	116.0656	30.49182
242	243	Syracuse	38	0	104.00002	19.99999
243	244	Manlius	524	0	1215.282	946.0805
244	245	Syracuse	159	0	400.3056	114.10571399999998
245	246	Syracuse	158	0	369.9061	109.67061239999998
246	247	Syracuse	0	0	0	0
247	248	Syracuse	83	0	291.48828	72.13097
248	249	Syracuse	278	16	618.4853	247.9213
249	250	Syracuse	205	0	519.9996	200.9998
250	251	Syracuse	148	0	387.38289	127.141
251	252	Syracuse	84	0	245.0823	76.09405
252	253	Syracuse	139	6	320.17797	238.9657
253	254	Dewitt	125	9	286.4624	188.44716250000002
254	255	Dewitt	271	4	693.90792	447.6956
255	256	Camillus	1294	4	2784.8074	2173.562
256	257	Camillus	794	0	1942.4292	1400.8850469000001
257	258	Geddes	456	0	997.5629	741.8807092799999

	TAZ	Town_City	HH	HH_GQ	pop	veh
258	259	Geddes	1	0	2	2
259	260	Syracuse	65	5	111.7856	88.21422350000002
260	261	Syracuse	492	0	1091.345	669.9148
261	262	Syracuse	107	0	307.87698	82.77361
262	263	Syracuse	121	10	342.9778	93.70680440000001
263	264	Camillus	160	0	314.9684	200.25139679999998
264	265	Camillus	263	0	571.1717	356.3551
265	266	Camillus	166	7	327.4855	206.30050889999998
266	267	Camillus	577	4	1304.963	950.8174
267	268	Geddes	503	0	1180.0004	841.0003617299999
268	269	Syracuse	1	0	1	0
269	270	Syracuse	0	0	0	0
270	271	Syracuse	401	2	1031.775	394.30062933999994
271	272	Syracuse	188	36	412.79	109.7983
272	273	Syracuse	4	51	64	2.071429
273	274	Syracuse	281	49	570.1573	83.31981579999999
274	275	Camillus	62	0	133.8412	102.3492
275	276	Syracuse	264	0	600.72376	458.2637
276	277	Syracuse	178	3	350.2458	284.0218
277	278	Syracuse	85	0	173.95329	135.40681899999998
278	279	Syracuse	0	691	691	0
279	280	Syracuse	1	690	692.7246	1.651198
280	281	Syracuse	319	20	741.9468	218.26290705999997
281	282	Syracuse	0	0	0	0
282	283	Syracuse	275	35	793.1079	559.2904900000001
283	284	Syracuse	141	697	1010.775	142.9859
284	285	Syracuse	256	6	678.2369	387.79246592000004
285	286	Syracuse	192	0	435.99985	266.9998
286	287	Elbridge	262	0	659.66	498.1106
287	288	Elbridge	221	4	531.6128	411.1397
288	289	Elbridge	224	0	550.2836	422.4296
289	290	Syracuse	147	44	458.83244	114.67531739999998
290	291	Geddes	420	8	892.15905	605.4674009999999
291	292	Syracuse	12	0	25.000010	2.9999988000000006
292	293	Syracuse	0	0	0	0
293	294	Syracuse	29	0	61.99996	46.999975199999994
294	295	Syracuse	271	0	550	443
295	296	Syracuse	336	0	810.58736	487.5489
296	297	Geddes	448	0	999.15174	685.6527148800002
297	298	Syracuse	0	453	453	0
298	299	Syracuse	0	62	62	0
299	300	Dewitt	310	0	709.71106	461.5115979000001
300	301	Syracuse	614	1	970.2545	167.2276

	TAZ	Town_City	HH	HH_GQ	pop	veh
301	302	Syracuse	70	0	229.9999	38.99997499999999
302	303	Syracuse	0	0	0	0
303	304	Syracuse	41	0	69.99992	11.999970200000002
304	305	Syracuse	47	0	101.1522	18.39132
305	306	Syracuse	21	0	56.31824	10.50001
306	307	Syracuse	18	36	59.99999	5.999990400000001
307	308	Syracuse	0	0	0	0
308	309	Syracuse	0	73	73	0
309	310	Syracuse	1	0	1	0
310	311	Syracuse	412	6	936.66976	708.5224152000001
311	312	Syracuse	0	0	0	0
312	313	Syracuse	0	0	0	0
313	314	Syracuse	0	105	105	0
314	315	Syracuse	0	0	0	0
315	316	Syracuse	0	0	0	0
316	317	Syracuse	30	224	284	39.382701000000004
317	318	Syracuse	6	267	279.9961	7.969105
318	319	Syracuse	0	0	0	0
319	320	Syracuse	188	0	493.7376	92.10107
320	321	Syracuse	72	0	181	35.000006400000004
321	322	Syracuse	62	0	172.9999	31.99999
322	323	Syracuse	92	0	246.3227	50.45164
323	324	Manlius	273	0	672.38933	510.61155600000006
324	325	Manlius	168	0	345.8105	284.49657600000006
325	326	Syracuse	0	88	88	0
326	327	Syracuse	62	68	199.57259	79.51149
327	328	Syracuse	0	491	491	0
328	329	Syracuse	0	225	225	0
329	330	Syracuse	122	0	296.5689	177.5447
330	331	Syracuse	85	0	204.40484	124.46436100000001
331	332	Dewitt	233	0	514.9998	335.99996602000004
332	333	Dewitt	130	10	244.00007	160.6429
333	334	Camillus	603	4	1217.8950	931.6398
334	335	Syracuse	167	0	397.8529	161.10595210000002
335	336	Syracuse	207	0	514.13028	199.29781979999996
336	337	Syracuse	0	3	3	0
337	338	Syracuse	0	2	2	0
338	339	Syracuse	136	0	138.0298	99.46263
339	340	Syracuse	69	0	0	0
340	341	Syracuse	0	0	0	0
341	342	Syracuse	0	0	0	0
342	343	Syracuse	334	0	373.39491	253.49756649999998
343	344	Syracuse	0	4	4	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
344	345	Syracuse	135	0	271.9709	165.54755835000003
345	346	Syracuse	0	66	66	0
346	347	Syracuse	207	1	452.81711	348.3172
347	348	Syracuse	222	0	366.5584	316.6514
348	349	Geddes	211	0	504.6079	360.29206251999994
349	350	Camillus	503	0	1202.6923	867.7003
350	351	Manlius	416	0	1030.669	783.7038
351	352	Manlius	55	5	133.01720	102.4138
352	353	Syracuse	304	51	626.9566	129.8161
353	354	Syracuse	77	0	194.47434	40.474341599999995
354	355	Syracuse	42	0	0	0
355	356	Syracuse	0	0	0	0
356	357	Geddes	383	0	934.19615	655.5582425599999
357	358	Syracuse	143	9	358.55563	127.11102689999997
358	359	Syracuse	141	0	284.00000	121.00002420000001
359	360	Syracuse	60	0	106.00003	47.00003
360	361	Syracuse	5	0	12	9
361	362	Syracuse	178	1	313.4887	227.4443
362	363	Syracuse	250	1	518.30767	353.8461250000001
363	364	Syracuse	234	0	416.6583	348.5316978000001
364	365	Syracuse	133	22	307.60889	221.6666
365	366	Geddes	208	0	429.92850	304.5714
366	367	Geddes	186	0	444.60941	297.401
367	368	Syracuse	59	0	116.9828	79.34486969999998
368	369	Syracuse	483	0	993.9417	685.5801
369	370	Syracuse	297	0	593.99967	414.99967409999994
370	371	Syracuse	0	0	0	0
371	372	Syracuse	989	96	1489.5381	695.0051
372	373	Syracuse	0	139	139	0
373	374	Syracuse	0	290	290	0
374	375	Syracuse	0	0	0	0
375	376	Syracuse	20	0	0	0
376	377	Syracuse	94	0	94	94
377	378	Syracuse	0	189	189	0
378	379	Syracuse	0	24	24	0
379	380	Syracuse	0	0	0	0
380	381	Syracuse	0	0	0	0
381	382	Syracuse	0	0	0	0
382	383	Geddes	169	4	376.79422	274.3766
383	384	Syracuse	108	0	280	54.99998
384	385	Syracuse	185	0	450.64105	89.17956450000001
385	386	Dewitt	160	4	397.1707	248.78041280000002
386	387	Dewitt	112	0	243	158.00001056000002

	TAZ	Town_City	HH	HH_GQ	pop	veh
387	388	Syracuse	153	0	272.6182	155.7818
388	389	Syracuse	189	0	464	202.99996710000002
389	390	Syracuse	145	0	209.00002	143
390	391	Syracuse	191	10	382.94780	196.43119959999999
391	392	Syracuse	39	0	73.125000	39
392	393	Camillus	28	0	50.81478	40.444412400000004
393	394	Camillus	382	3	906.6341	661.2689
394	395	Syracuse	0	0	0	0
395	396	Syracuse	124	0	147.84621	77.89744479999999
396	397	Syracuse	184	0	219.81221	108.6712
397	398	Camillus	1306	4	2799.8874	1975.313
398	399	Syracuse	456	3	1166.689	484.62357599999996
399	400	Syracuse	120	2	220.53659	93.65849279999999
400	401	Syracuse	21	0	48.68185	20.045472300000004
401	402	Camillus	636	4	1424.094	1064.2093172399998
402	403	Syracuse	0	0	0	0
403	404	Syracuse	132	0	296.2668	220.97774687999998
404	405	Syracuse	229	0	343.50000	183.20000000000002
405	406	Syracuse	66	0	124.89236	81.23081339999999
406	407	Syracuse	213	2	434.90292	278.08347060000006
407	408	Syracuse	0	2	2	0
408	409	Syracuse	0	2	2	0
409	410	Syracuse	189	0	251.53667	133.4118
410	411	Syracuse	0	0	0	0
411	412	Syracuse	136	101	244.88403	70.95655839999999
412	413	Syracuse	0	0	0	0
413	414	Syracuse	90	0	90.000008	46.45163
414	415	Syracuse	139	0	139.00005	70.49284920000001
415	416	Camillus	332	0	747.24770	513.361
416	417	Syracuse	27	0	38.999966	19.99998
417	418	Syracuse	0	0	0	0
418	419	Syracuse	0	0	0	0
419	420	Syracuse	0	0	0	0
420	421	Syracuse	387	0	897.0462	525.9232089000001
421	422	Syracuse	0	0	0	0
422	423	Syracuse	0	0	0	0
423	424	Syracuse	208	0	0	0
424	425	Syracuse	103	0	127.23537	96.94121
425	426	Syracuse	0	0	0	0
426	427	Syracuse	4	0	7	4
427	428	Syracuse	28	0	71.448266	29.931028399999995
428	429	Syracuse	191	0	473.9995	189.99980939999998
429	430	Syracuse	136	0	277.78718	130.2127

	TAZ	Town_City	HH	HH_GQ	pop	veh
430	431	Syracuse	0	3	3	0
431	432	Syracuse	35	0	86.52779	35.97223
432	433	Syracuse	15	0	38	14
433	434	Syracuse	182	0	351.0002	159.71432203999996
434	435	Syracuse	5	0	8	5
435	436	Syracuse	0	0	0	0
436	437	Syracuse	0	0	0	0
437	438	Syracuse	0	1	1	0
438	439	Syracuse	82	0	152	99.00003499999998
439	440	Syracuse	206	0	412.9953	264.7151
440	441	Geddes	110	0	159.5495	124.86478730000002
441	442	Syracuse	428	61	998.0862	417.13269479999997
442	443	Syracuse	433	3	1013.6622	423.1593
443	444	Camillus	238	0	523.9996	390.99974227999996
444	445	Syracuse	0	0	0	0
445	446	Dewitt	23	0	59.14284	38.33332
446	447	Geddes	200	0	483.417	344.7235
447	448	Geddes	137	7	278.12571	205.97887527999998
448	449	Syracuse	49	0	110.25	42.875
449	450	Manlius	588	0	1424.2199	1106.8226231999997
450	451	Geddes	834	5	1712.7612	1222.669
451	452	Manlius	668	0	1300.2145	1121.2859624000002
452	453	Syracuse	2	0	2	1
453	454	Syracuse	125	0	168.26933	76.9231
454	455	Syracuse	6	0	11.142845	5.1428519999999995
455	456	Syracuse	3	0	3	2.000001
456	457	Syracuse	28	0	37.692289	21.53846
457	458	Syracuse	95	0	151.59581	108.13831949999997
458	459	Syracuse	266	0	486.0717	325.3237
459	460	Syracuse	175	0	217.16889	108.58445499999999
460	461	Syracuse	0	0	0	0
461	462	Syracuse	0	0	0	0
462	463	Syracuse	0	0	0	0
463	464	Syracuse	158	0	194.1142	103.8285
464	465	Syracuse	8	0	17.14284	10.285703999999999
465	466	Syracuse	198	1	307.45230	125.3668
466	467	Syracuse	0	0	0	0
467	468	Syracuse	154	0	178.20000	69.29996
468	469	Syracuse	127	0	187.05436	66.94576146000001
469	470	Syracuse	184	8	258.1252	94.87507360000001
470	471	Syracuse	188	0	374.01049	125.3333
471	472	Syracuse	305	0	791.4059	221.2747
472	473	Dewitt	311	152	767.2973	398.8039

	TAZ	Town_City	HH	HH_GQ	pop	veh
473	474	Dewitt	363	0	710.0871	467.4242
474	475	Syracuse	430	1	962.52793	482.7544
475	476	Syracuse	41	0	79.99995	35.99998
476	477	Syracuse	37	0	75.02773	32.88887
477	478	Syracuse	15	0	33.00002	16.000009499999997
478	479	Syracuse	33	0	67.03125	29.90625
479	480	Syracuse	178	12	398.68937	170.98521224000004
480	481	Syracuse	99	0	178.75	87.08332
481	482	Syracuse	305	0	677.56305	290.52224169999994
482	483	Syracuse	284	0	630.57642	275.3356087199999
483	484	Dewitt	0	0	0	0
484	485	Dewitt	0	0	0	0
485	486	Syracuse	169	0	390.37989	246.0876
486	487	Elbridge	481	0	1094.143	874.2569900999999
487	488	Elbridge	331	4	808.4425	629.2073
488	489	Syracuse	113	0	158.40166	60.53566
489	490	Syracuse	328	0	691.8906	225.3132
490	491	Syracuse	398	27	588.49785	232.63403276000003
491	492	Syracuse	330	9	411.5804	174.19343700000002
492	493	Syracuse	0	0	0	0
493	494	Syracuse	232	0	347.23182	311.8942622400001
494	495	Syracuse	54	0	109.6875	72.5625
495	496	Syracuse	286	0	650.4511	274.0833
496	497	Syracuse	143	1	309.683	141.0277
497	498	Syracuse	222	0	251.86535	115.47970026000002
498	499	Syracuse	175	3	285.7681	112.71172500000003
499	500	Syracuse	579	4	1138.286	734.1242
500	501	Syracuse	0	0	0	0
501	502	Geddes	629	0	1411.7783	976.2405255899998
502	503	Syracuse	45	0	63.409067	25.568180999999996
503	504	Syracuse	262	51	701.77285	208.2167
504	505	Geddes	731	1	1579.7642	1094.047
505	506	Camillus	191	0	382.0002	295.37171698000003
506	507	Syracuse	0	0	0	0
507	508	Syracuse	269	0	310.8802	289.9401
508	509	Syracuse	74	0	155.58969	117.641
509	510	Syracuse	338	102	528.3763	181.4037
510	511	Syracuse	111	0	170.99985	69.99994
511	512	Syracuse	363	0	747.8798	503.2277
512	513	Dewitt	14	0	28.00001	16.00001
513	514	Syracuse	566	0	1238.4362	646.5732129999999
514	515	Syracuse	103	0	178.99996	77.00003
515	516	Geddes	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
516	517	Geddes	474	0	1045.588	664.1975
517	518	Syracuse	0	0	0	0
518	519	Dewitt	85	0	179.1074	112.3216
519	520	Syracuse	396	0	678.8568	504.18034524000007
520	521	Dewitt	0	0	0	0
521	522	Syracuse	285	103	749.6495	219.49879199999995
522	523	Syracuse	333	0	917.73205	207.1337
523	524	Syracuse	593	9	1419.534	366.54681446999996
524	525	Syracuse	483	0	1054.4497	679.7772
1108	1114	Camillus	262	0	686.75748	474.3786
1107	1113	Camillus	160	0	414.4101	290.18637119999994
525	527	Syracuse	372	0	943.6552	311.72676695999996
526	528	Syracuse	479	0	966.9814	666.6084882099998
527	529	Syracuse	260	0	567.8162	380.53649920000004
528	530	Syracuse	0	0	0	0
529	531	Syracuse	0	1	1	0
530	532	Syracuse	412	0	943.73498	326.2060263999999
531	533	Manlius	730	5	1770.4	1282.6731449999997
532	534	Syracuse	208	0	0	0
533	535	Syracuse	276	0	576.81992	392.15821008000006
534	536	Dewitt	0	6	6	0
535	537	Syracuse	345	2	762.59055	504.0776369999999
536	538	Syracuse	282	0	667.89489	223.55925059999998
537	539	Syracuse	211	0	573.92022	181.9289
538	540	Syracuse	300	0	689.4043	504.6358409999999
539	541	Syracuse	104	0	243.3208	177.5849
540	542	Syracuse	444	0	934.5812	648.1611766799999
541	543	Dewitt	499	0	1063.606	640.1515
542	544	Syracuse	357	4	709.1245	492.10774598999996
543	545	Syracuse	354	0	831.7091	401.58061607999997
544	546	Syracuse	0	0	0	0
545	547	Syracuse	371	0	701.22059	480.4106
546	548	Dewitt	318	0	686.9997	411.99981420000006
547	549	Dewitt	439	2	929.54874	562.8715
548	550	Geddes	108	0	218.9188	175.13504640000002
549	551	Syracuse	190	0	398.81165	142.9703
550	552	Syracuse	295	0	734.1584	326.5048
551	553	Syracuse	328	34	733.25283	473.0771
552	554	Syracuse	416	3	965.23340	334.4863
553	555	Camillus	444	8	967.7843	729.8084
554	556	Camillus	357	0	917.2743	722.8934
555	557	Camillus	179	0	383.7469	313.8632
556	558	Syracuse	411	0	926.2391	682.0217597400001

	TAZ	Town_City	HH	HH_GQ	pop	veh
557	559	Geddes	0	0	0	0
558	560	Manlius	164	0	378.9727	300.2971
559	561	Syracuse	368	0	896.0415	297.08347807999996
560	562	Manlius	505	0	1248.9734	886.7558609999999
561	563	Syracuse	633	0	1429.575	704.6244500699999
562	564	Syracuse	238	0	507.98397	285.0354
563	565	Syracuse	310	0	540.00029	439.0001543000001
564	566	Syracuse	269	0	571.7483	431.7891
565	567	Syracuse	323	0	803.1615	359.6391
566	568	Elbridge	79	0	196.46058	154.8816
567	569	Elbridge	212	0	420.91262	347.84466039999995
568	570	Syracuse	584	0	885.57382	559.1083373600001
569	571	Syracuse	541	0	1112.943	624.8448778900001
570	572	Syracuse	586	10	1155.407	440.68731804000004
571	573	Dewitt	303	9	710.8855	486.14196579000003
572	574	Syracuse	409	14	735.99022	430.12178250000005
573	575	Syracuse	380	7	870.7213	479.94980400000003
574	576	Dewitt	330	0	735.3149	520.2700239000001
575	577	Syracuse	125	0	300.7815	175.7813
576	578	Syracuse	107	0	255	147.99999250000002
577	579	Syracuse	491	0	1043.616	585.3493
578	580	Syracuse	0	0	0	0
579	581	Syracuse	0	2	2	0
580	582	Syracuse	119	0	275.9997	153.9998
581	583	Syracuse	161	0	343.5976	196.3414
582	584	Syracuse	354	80	844.5103	476.7636
583	585	Dewitt	1	0	1	1
584	586	Dewitt	2	0	4	3
585	587	Syracuse	42	4	90.7392	57.521801399999994
586	588	Syracuse	81	0	201.5121	116.5609
587	589	Syracuse	53	0	128.4231	67.2693
588	590	Syracuse	246	3	558.88356	308.9301
589	591	Syracuse	256	0	511.99958	336.29489664000005
590	592	Salina	691	3	1404.9415	916.3471
591	593	Dewitt	476	0	771.62057	621.3048167200001
592	594	Dewitt	373	7	857.04715	615.4497911200001
593	595	Manlius	660	0	1380.1821	1052.1884340000001
594	596	Dewitt	198	0	398.0097	287.45144999999997
595	597	Syracuse	94	0	207.78945	119.72628660000001
596	598	Syracuse	101	0	224.22	123.22
597	599	Dewitt	74	0	126.71234	95.28768
598	600	Syracuse	319	0	655.5062	426.9543
599	601	Syracuse	231	6	530.3797	323.59494551999995

	TAZ	Town_City	HH	HH_GQ	pop	veh
600	602	Syracuse	88	0	177.0002	114.00008399999999
601	603	Syracuse	243	8	547.57434	327.1888
602	604	Syracuse	289	10	644.86718	388.7515
603	605	Salina	89	0	183.74200	119.62372520000001
604	606	Salina	572	0	1265.2114	795.39
605	607	Dewitt	52	0	100.0754	75.54712
606	608	Salina	0	0	0	0
607	609	Salina	4	0	4	4
608	610	Dewitt	5	0	5	5
609	611	Dewitt	67	0	167.5001	116.45243199999999
610	612	Camillus	94	6	239.0142	188.0001
611	613	Camillus	66	0	184.30181	139.47164220000002
612	614	Camillus	236	0	554.6762	468.99464856000003
613	615	Camillus	382	0	1059.1827	799.813
614	616	Dewitt	653	0	1516.001	1077
615	617	Van Buren	19	0	48.55559	34.83335
616	618	Van Buren	68	0	172.5374	134.98517479999998
617	619	Salina	59	0	115.9655	75.27588159999999
618	620	Salina	0	0	0	0
619	621	Dewitt	1	0	4	2
620	622	Dewitt	0	0	0	0
621	623	Manlius	490	0	1225.4980	883.591
622	624	Manlius	65	0	151.6666	112.66658650000001
623	625	Manlius	71	0	164.3142	120.7
624	626	Manlius	287	0	706.1583	541.4537408000001
625	627	Salina	793	0	1454.3312	957.5846124000001
626	628	Salina	395	0	878.44787	551.7939781000001
1097	1103	Salina	0	0	0	0
1096	1102	Salina	0	0	0	0
1098	1104	Salina	290	0	661.9997	398.9998
627	630	Salina	0	0	0	0
628	631	Dewitt	13	0	22.99999	15.99999
629	632	Dewitt	40	0	91.282000	65.64098
630	633	Salina	17	0	38.25	23.375
631	634	Salina	0	0	0	0
632	635	Salina	71	0	169.3858	101.4286
633	636	Van Buren	62	0	168.43350	126.0668
634	637	Salina	473	0	1051.332	643.9156930800001
635	638	Dewitt	9	0	24.999974	13.99999
636	639	Geddes	400	0	959.19450	714.358
637	640	Salina	249	0	501.98400	318.71999999999997
638	641	Sullivan	163	0	345.11018	294.524
639	642	Geddes	442	1	1012.8685	776.2689

	TAZ	Town_City	HH	HH_GQ	pop	veh
640	643	Sullivan	99	0	247.49986	196.8214
641	644	Dewitt	0	15	15	0
642	645	Salina	78	0	188.0002	110.00007719999999
643	646	Salina	531	0	1188.049	717.5935380599999
644	647	Salina	18	0	46.42104	24.63157
645	648	Salina	236	0	505.00008	311
646	649	Salina	4	0	10	7
647	650	Dewitt	228	0	605.5487	408.1938
648	651	Dewitt	29	0	54.000032	41.00003
649	652	Salina	36	0	84.34297	54.51436439999999
650	653	Van Buren	22	0	55.00005	44.00005
651	654	Salina	492	0	990.0238	710.8892
652	655	Salina	600	0	1387.748	832.4497739999999
653	656	Elbridge	263	0	653.1884	496.89765609999995
654	657	Salina	306	2	525.1618	394.839
655	658	Salina	416	0	896.689	661.8180607999999
656	659	Sullivan	74	0	151.1714	127.91428359999998
657	660	Sullivan	197	0	382.2738	342.4048
658	661	Salina	0	1	1	0
659	662	Salina	54	0	131.0001	91.00008720000001
660	663	Salina	67	0	97.544201	80.79418779999999
661	664	Salina	115	0	234.00001	176
662	665	Salina	153	0	286.1299	229.5001
663	666	Geddes	247	0	598.00004	445.99992190000006
664	667	Salina	520	3	1203.3843	813.8706523999999
665	668	Dewitt	17	0	37.1875	25.5
666	669	Van Buren	150	0	382.2914	298.9582
667	670	Van Buren	61	0	159.3869	121.01602120000001
668	671	Sullivan	195	0	505.4307	394.4825
669	672	Dewitt	0	0	0	0
670	673	Dewitt	13	23	46.472212	18.41666
671	674	Manlius	177	0	448.2604	336.1953
672	675	Manlius	240	7	555.276	435.51736800000003
673	676	Salina	327	6	760.24190	447.67900991999994
674	677	Salina	421	0	863.20176	659.2641290500001
675	678	Van Buren	88	0	212.66669	169.7142
676	679	Salina	1057	0	2421.893	1762.7232051100002
677	680	Salina	179	0	412.69436	295.3499
678	681	Salina	483	0	1150.6177	825.2913
679	682	Van Buren	45	0	110.17241	74.48278049999999
680	683	Salina	271	7	634.78426	423.07205650000003
681	684	Salina	103	0	225.99999	177.99998354000002
682	685	Salina	313	7	673.10312	503.7344

	TAZ	Town_City	HH	HH_GQ	pop	veh
683	686	Dewitt	68	0	138.0297	105.5521
684	687	Salina	285	0	525	395.00005919999995
685	688	Van Buren	183	0	490.6816	369.0167
686	689	Van Buren	0	2	2	0
687	690	Dewitt	13	0	24.99999	17.99999
688	691	Dewitt	2	0	5	3
689	692	Salina	273	19	571.5447	440.35294211999997
690	693	Salina	471	0	774.99986	654.9997
691	694	Geddes	11	0	26.4	19.8
692	695	Salina	4	0	9	6
693	696	Van Buren	2	0	4	4
694	697	Salina	201	0	455.265	357.78
695	698	Salina	288	0	705.9021	539.7482
696	699	Sullivan	80	0	173.7142	146.28565599999996
697	700	Van Buren	183	0	398.8203	298.3694
698	701	Salina	579	0	1235.619	928.2878
1101	1107	Clay	10	0	22	14
1102	1108	Clay	50	0	104.08157	71.42853
699	703	Van Buren	107	0	285.6797	212.96122259999999
700	704	Geddes	105	6	261.4052	191.081
701	705	Salina	548	5	1108.957	732.9876
702	706	Salina	4	0	6	4
703	707	Geddes	0	1	1	0
704	708	Van Buren	503	0	1137.0782	829.0972
705	709	Clay	60	0	131.4286	105.71432399999999
706	710	Clay	47	0	67.14286	57.07143260000001
707	711	Salina	30	0	70.34482	53.7931
1099	1105	Salina	0	0	0	0
1100	1106	Salina	4	0	12	8
708	713	Clay	160	0	393.84587	303.2165
709	714	Clay	1	0	4	2
710	715	Clay	226	0	449.98219	363.2143
711	716	Cicero	11	0	18.333314	13.444430999999998
712	717	Van Buren	320	0	758.5791	552.2847
713	718	Van Buren	17	0	45.33336	30.60002
714	719	Cicero	17	0	38.533313	27.19998
715	720	Cicero	30	0	70.344830	48.620690999999994
716	721	Cicero	16	0	46	29
717	722	Van Buren	161	0	357.21875	262.6313
718	723	Salina	656	0	1591.278	1182.4082364800001
719	724	Salina	38	0	106.81070	74.97290179999999
720	725	Clay	368	0	623.30600	508.6177
721	726	Clay	376	0	813.9996	588.9996

	TAZ	Town_City	HH	HH_GQ	pop	veh
722	727	Clay	223	0	513.30200	368.65316359999997
723	728	Cicero	0	0	0	0
724	729	Salina	448	6	857.29933	712.2306150400001
725	730	Salina	72	0	154.8493	125.2603
726	731	Clay	281	0	700.43414	543.4047
727	732	Clay	8	0	18	9
728	733	Clay	0	0	0	0
729	734	Cicero	1	0	1	1
730	735	Cicero	174	0	363.26333	256.4212
731	736	Clay	554	7	1209.489	834.4816129999999
732	737	Cicero	14	0	21.63634	16.54544
733	738	Lysander	195	0	475.24575	383.6065
734	739	Lysander	101	0	241.16331	196.8469
735	740	Clay	511	0	817.59999	626.2254410999999
736	741	Van Buren	200	0	367	299
737	742	Salina	615	0	1004.0603	924.0192
738	743	Cicero	423	0	869.27486	633.4878032999999
739	744	Cicero	28	0	49.777730	40.444404000000006
740	745	Clay	224	0	526.7029	417.72982720000005
741	746	Clay	447	0	1019.4028	720.0545988000001
742	747	Clay	738	0	1257.9544	1055.6332885800002
743	748	Clay	1	0	2	2
744	749	Clay	56	0	105.99994	75.99995200000001
745	750	Clay	1460	8	3109.6224	2071.0933806000003
746	751	Cicero	0	0	0	0
747	752	Cicero	321	5	678.09687	475.48125000000005
748	753	Clay	288	0	684.6593	528.5274
749	754	Clay	589	0	1387.423	936.3593927000001
750	755	Clay	391	0	956.4472	744.906
751	756	Clay	7	0	12.833345	12.833345000000001
752	757	Van Buren	691	0	1347.398	1054.3084243600001
753	758	Cicero	64	0	151.1724	100.4138
754	759	Cicero	148	0	302.08226	218.95895520000002
755	760	Cicero	195	0	429.5942	298.93414199999995
756	761	Clay	539	0	1383.566	997.8509
757	762	Clay	369	0	938.1703	662.1784
758	763	Salina	206	0	481.66225	375.1789
759	764	Lysander	564	0	1398.294	1057.765
760	765	Cicero	9	0	24.75	16.875
761	766	Cicero	49	0	89.179999	70.55999999999999
762	767	Van Buren	81	0	189.3375	137.70000000000002
763	768	Clay	246	0	604.83510	450.32255699999996
764	769	Cicero	124	0	286.688	210.30399999999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
765	770	Cicero	106	0	238.50020	164.88904200000002
766	771	Van Buren	661	0	1331.1382	1010.2840798699998
767	772	Van Buren	180	0	430.0001	351.99997199999996
768	773	Van Buren	113	0	271.40154	219.94624761000003
769	774	Clay	468	0	1098.3879	796.8102
770	775	Van Buren	260	0	476.49812	383.42415800000003
771	776	Van Buren	48	0	114.6123	91.10212
772	777	Van Buren	28	0	67.40738	55.999972000000014
773	778	Clay	503	0	1184.778	810.0529296000002
774	779	Clay	136	0	332.89542	219.22385359999998
775	780	Cicero	146	0	348.95013	272.3261
776	781	Clay	217	0	519.39370	392.81036634000003
777	782	Clay	474	0	1072.7903	824.2170045600001
778	783	Cicero	25	0	51.923085	36.53846500000001
779	784	Cicero	423	3	858.9762	624.5235
780	785	Clay	553	0	1429.9284	1041.4155724000002
781	786	Lysander	553	0	1661.3433	1129.4321031000002
782	787	Lysander	536	0	1299.395	984.0205
783	788	Clay	303	0	729.59198	559.1545335000001
784	789	Clay	88	0	235.32551	175.99980639999998
785	790	Van Buren	122	0	298.5411	183.7175
786	791	Clay	415	0	973.9989	733.9993365000003
787	792	Cicero	229	0	627.48003	429.7532164000001
788	793	Clay	3	0	3	3
789	794	Clay	392	0	961.45228	712.8180920000001
790	795	Clay	755	5	2123.84	1549.3138843499999
791	796	Van Buren	61	0	138.54221	102.3558
792	797	Van Buren	128	0	335.69805	201.6603
793	798	Van Buren	786	0	1142.861	891.4019869200001
794	799	Clay	5	0	5	5
795	800	Lysander	543	0	1642.1202	1112.241
796	801	Cicero	461	9	1198.4816	870.3273859000001
797	802	Clay	92	0	213.2725	159.9544
798	803	Clay	228	0	505.2158	407.7884
799	804	Cicero	44	0	91.47374	79.89478639999999
800	805	Cicero	0	1	1	0
801	806	Cicero	7	0	18.200000	14
802	807	Cicero	512	0	1113.3489	808.1569484800001
803	808	Clay	264	4	675.54331	500.8971
804	809	Van Buren	383	15	897.89600	562.6205
805	810	Van Buren	110	0	243.7837	157.56747159999998
806	811	Van Buren	93	0	234.00019	142.0001
807	812	Van Buren	316	0	852.414	643.2462820000001

	TAZ	Town_City	HH	HH_GQ	pop	veh
808	813	Clay	1290	3	3075.305	2294.014
809	814	Van Buren	207	0	496.8	309.672
810	815	Lysander	235	4	712.37322	482.36836724999995
811	816	Lysander	123	0	348.27	240.47209709999998
812	817	Cicero	469	0	840.37539	727.6543
813	818	Sullivan	22	0	56	45.00001
814	819	Sullivan	48	0	97.066660	83.19999
815	820	Clay	29	0	70.999960	49.99999
816	821	Lysander	103	0	194.99998	154
817	822	Lysander	133	0	299.2501	218.49998100000002
818	823	Lysander	185	0	413.7635	307.33874249999997
819	824	Lysander	190	0	426.96637	347.97751400000004
820	825	Lysander	134	0	319.61449	227.30347640000002
821	826	Clay	395	0	1043.567	757.6720545000001
822	827	Clay	623	0	1689.4046	1202.369
823	828	Cicero	618	0	1684.6161	1179.539
824	829	Clay	103	0	221.14705	180.7549
825	830	Cicero	221	0	508.40363	391.1595466999999
826	831	Clay	614	0	1603.165	1160.3293223800001
827	832	Clay	2	0	2	2
828	833	Clay	336	0	960.60078	674.1058
829	834	Cicero	224	0	455.19262	363.7431
830	835	Lysander	183	0	483.93315	372.0998
831	836	Lysander	321	0	831.76230	624.265
832	837	Clay	537	0	1367.465	904.8497
833	838	Clay	523	0	1425.98	1031.978
834	839	Lysander	201	0	499.4171	362.53994933999996
835	840	Lysander	86	0	176.29999	136.16666379999998
836	841	Clay	985	0	2720.72	1898.6978200000003
837	842	Lysander	260	0	538.6456	407.0918
838	843	Sullivan	165	0	348.9173	297.42049095000004
839	844	Lysander	306	0	864.35012	574.2465247800001
840	845	Lysander	188	0	555.25599	357.41878499999996
841	846	Lysander	666	4	1709.099	1190.1990096000002
842	847	Lysander	154	0	337.99992	256.9999
843	848	Lysander	177	0	451.783	355.2376
844	849	Cicero	229	0	547.0002	420.00024379999996
845	850	Cicero	503	0	1080.7032	840.6576627999999
846	851	Clay	1286	2	3328.7229	2510.1963831999997
847	852	Cicero	113	0	307.0654	203.89145960000002
848	853	Cicero	201	0	424.77962	304.1798
849	854	Cicero	31	0	86.79995	57.86664
850	855	Cicero	386	0	1175.4959	750.1304983599999

	TAZ	Town_City	HH	HH_GQ	pop	veh
851	856	Cicero	136	0	382.4362	251.54889119999999
852	857	Clay	426	0	834.151	753.2349629400001
853	858	Clay	728	0	1876.58	1420.9532864799999
854	859	Clay	1096	0	2456.045	1776.023
855	860	Sullivan	148	0	378.7059	297.4509
856	861	Clay	648	0	1934.017	1315.9701936000001
857	862	Clay	8	0	18.285695	14.85713
858	863	Clay	232	0	606.4566	455.85993199999996
859	864	Clay	134	0	326.26106	256.34796299999994
860	865	Sullivan	71	0	159.2123	132.3183
861	866	Cicero	436	0	1149.9240	810.0096071999999
862	867	Clay	277	0	648.58444	513.4629058999999
863	868	Clay	182	0	391.29999	327.6
864	869	Lysander	310	0	892.96964	607.304
865	870	Lysander	600	0	1357.448	985.1072999999999
866	871	Cicero	87	0	212.0625	157.6875
867	872	Cicero	7	0	15.400000	11.200000000000001
868	873	Cicero	598	0	1687.292	1128.196
869	874	Cicero	332	0	727.10760	581.686
870	875	Cicero	468	0	1311.9354	877.9116
871	876	Clay	67	0	0	0
872	877	Clay	0	0	0	0
873	878	Lysander	540	0	925.12366	721.7206
874	879	Clay	105	0	229.94999	189.00000000000003
875	880	Clay	5	0	10	10
876	881	Clay	10	0	24.28569	19.99998
877	882	Clay	67	0	158.73843	123.6923
878	883	Lysander	28	0	81.05258	58.94734
879	884	Cicero	922	0	2545.2424	1787.0637339999996
880	885	Cicero	282	0	790.3948	548.113
881	886	Cicero	180	0	460.5589	327.8212740000001
882	887	Clay	363	0	544.5	544.5
883	888	Clay	15	0	33.21431	27.857163000000007
884	889	Clay	23	0	61.681860	46.00004
885	890	Lysander	358	0	863.09351	642.4532
886	891	Lysander	265	0	693.6449	526.8323755000001
887	892	Lysander	216	0	566.8726	435.04179839999995
888	893	Clay	28	0	68.923103	56.00001
889	894	Clay	6	0	10.800000	10.8
890	895	Lysander	635	7	1424.89	1051.783
891	896	Lysander	257	0	685.6806	524.4051
1106	1112	Clay	166	0	381.44681	289.617
1103	1109	Clay	9	0	19.800000	17.1

	TAZ	Town_City	HH	HH_GQ	pop	veh
1104	1110	Clay	12	0	26.999996	23.999997600000004
1105	1111	Clay	10	0	22.72727	20
892	898	Clay	62	0	153.6522	118.6087
893	899	Clay	37	0	70.63637	70.63637
894	900	Clay	24	0	67.2	50.400000000000006
895	901	Clay	66	0	161.04000	132
896	902	Cicero	458	0	1145.5682	834.1735825999999
897	903	Cicero	127	0	247.17209	192.5484
898	904	Cicero	158	0	293.42851	236.99995259999997
899	905	Cicero	169	0	399.56423	295.7499
900	906	Clay	31	0	82.269204	64.38460370000001
901	907	Clay	78	0	180.96	149.76
902	908	Clay	119	0	261.80001	218.33914725000005
903	909	Lysander	399	0	1015.6370	720.2731241999999
904	910	Lysander	90	0	201.1111	172.22219099999998
905	911	Schroeppe	63	0	119.8033	106.37705609999998
906	912	Cicero	303	0	669.04042	516.5235849000001
907	913	Cicero	89	0	230.5911	169.9092
908	914	Schroeppe	105	4	238	160.00005314999999
909	915	Lysander	146	0	396.7393	303.6379
910	916	Cicero	506	0	1389.964	960.7858
911	917	Schroeppe	147	0	350.29800	225.19162260000002
912	918	Clay	194	0	477.7766	369.4256
913	919	Clay	210	0	531.09649	399.6773
914	920	Schroeppe	89	0	214.45791	137.25311219999998
915	921	Schroeppe	95	0	217.14267	145.10976399999998
916	922	Clay	268	0	687.75942	516.6268427999998
917	923	Clay	45	0	107.06885	88.44817950000001
918	924	Schroeppe	171	0	399.7125	256.5
919	925	Schroeppe	81	0	154.53941	106.57890090000001
920	926	Schroeppe	57	0	147.77794	97.11122490000001
921	927	Cicero	281	0	809.57698	553.3347
922	928	Cicero	406	0	815.12345	641.2721
923	929	Cicero	424	0	1159.764	804.3529
924	930	Schroeppe	87	0	183.32151	125.3214
925	931	Schroeppe	32	0	59.586204	45.2414
926	932	Schroeppe	53	0	137.3672	86.53055599999999
927	933	Cicero	127	0	267.1031	207.6349
928	934	Cicero	138	0	310.50003	232.36771475999998
929	935	Schroeppe	148	0	247.6944	188.0833
930	936	Hastings	76	0	161.7714	142.2285
931	937	Hastings	133	0	280.896	211.73600000000005
932	938	Hastings	170	0	379.06801	319.9377

	TAZ	Town_City	HH	HH_GQ	pop	veh
933	939	Hastings	105	0	239.99987	174.23065800000003
934	940	Hastings	145	0	371.56275	262.81258699999995
935	941	Hastings	230	0	299.8214	252.58931889999997
936	942	Hastings	106	0	241.84467	178.03886140000003
937	943	Hastings	86	0	194.08123	142.94606960000002
938	944	Hastings	193	7	490.5845	328.5339
939	945	Hastings	123	0	231.84942	218.78747507999998
940	946	Hastings	220	0	598.5782	403.14685399999996
941	947	Hastings	26	0	59.58333	47.66666
942	948	Hastings	107	0	257.2555	209.44696809999996
943	949	Hastings	23	0	57.000044	46.000034500000005
944	950	Hastings	21	0	67.2	47.25
945	951	Hastings	138	0	269.157	249.76858739999997
946	952	Hastings	23	0	58.047611	44.904751499999996
947	953	Hastings	89	0	235.45572	181.3798
948	954	Hastings	3	0	9.75	6.75
949	955	West Monr	107	0	268.57	212.92999999999998
950	956	Hastings	128	0	346.9754	262.3472
951	957	Sullivan	59	0	145.39288	115.8929
952	958	Sullivan	57	0	127.4727	109.8546
953	959	Sullivan	140	5	349.4601	272.9495
954	960	Sullivan	273	0	621.3103	522.9884
955	961	Sullivan	92	0	225.91099	183.99992640000002
956	962	Sullivan	30	0	70.000019	60.00001
957	963	Sullivan	94	0	185.911	163.97767960000002
958	964	Sullivan	304	0	725.4067	591.2274
959	965	Sullivan	67	0	149.7031	127.7188
960	966	Sullivan	84	0	216.14615	171.07305600000004
961	967	Sullivan	180	0	399.08583	335.3144
962	968	Sullivan	8	0	18.285695	14.85713
963	969	Sullivan	36	0	83.64708	68.82354
964	970	Sullivan	32	0	87	67
965	971	Sullivan	16	0	42	33
966	972	Sullivan	12	0	22.909076	18.545441999999998
967	973	Sullivan	52	0	135.6078	100.9411
968	974	Sullivan	43	0	105.92679	85.99997
969	975	Sullivan	108	0	273.1151	208.7306
970	976	Sullivan	44	0	119.4287	89.04768
971	977	Sullivan	92	0	237.7529	187.1013
972	978	Sullivan	24	0	60.000016	50.00001
973	979	Sullivan	41	0	96.717913	80.94869
974	980	Sullivan	95	0	240.59776	192.06514799999997
975	981	Sullivan	72	0	181.02836	140.91415919999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
976	982	Sullivan	184	0	455.8183	356.49998528000003
977	983	Sullivan	8	0	20	17
978	984	Sullivan	87	0	213.3571	170.8928
979	985	Sullivan	24	0	64.363667	46.90911
980	986	Sullivan	94	0	258.7637	189.0559
981	987	Sullivan	31	0	72.68961	58.79306
982	988	Sullivan	124	0	325.7629	254.3051
983	989	Sullivan	130	0	334.28593	228.016
984	990	Sullivan	53	0	122.3078	102.94241410000001
985	991	Sullivan	34	0	79.99998	64.99998
986	992	Sullivan	500	0	1183.438	832.2850000000001
987	993	Sullivan	153	0	331.32396	277.5102
988	994	Sullivan	76	0	164.32429	119.13512240000001
989	995	Sullivan	332	7	774.8768	534.6624280000001
990	996	Sullivan	484	0	1165.572	801.7884
991	997	Sullivan	122	0	267.13790	195.6207
992	998	Sullivan	293	5	788.212	587.1273
993	999	Sullivan	8	0	22.85712	19.428551999999996
994	1000	Sullivan	33	0	76.64506	59.61283
995	1001	Sullivan	32	0	80.51611	63.99997760000001
996	1002	Sullivan	32	0	81.54828	61.9354
997	1003	Sullivan	65	0	143.62902	123.70965749999999
998	1004	Sullivan	36	0	75.1765	69.88238
999	1005	Sullivan	21	0	50.400000	40.95
1000	1006	Sullivan	102	0	227.93873	167.57134259999998
1001	1007	Sullivan	71	0	151.2609	131.71014749999998
1002	1008	Sullivan	36	0	90.51441	70.97153
1003	1009	Granby	46	0	106.63632	79.45453
1004	1010	Schroeppe	59	0	133.5262	107.64902230000001
1005	1011	Schroeppe	142	0	374.8383	278.77941827999996
1006	1012	Schroeppe	81	0	216.342	156.87361529999998
1007	1013	Schroeppe	29	0	70.88882	55.851804699999995
1008	1014	Schroeppe	41	0	106.60000	82
1009	1015	Schroeppe	35	0	81.32347	64.85289
1010	1016	Schroeppe	17	0	39.66666	31.166664400000005
1011	1017	Schroeppe	69	0	166.8357	131.82080159999998
1012	1018	Schroeppe	31	0	73.00001	59.00002149999999
1013	1019	Schroeppe	35	0	105	75.46875
1014	1020	Schroeppe	43	0	118.25	88.15
1015	1021	Schroeppe	68	0	175.1516	130.8485
1016	1022	Schroeppe	15	0	31.071426	26.78571
1017	1023	Schroeppe	221	0	585.4929	427.3365
1018	1024	Schroeppe	58	0	136.4074	108.48149480000001

	TAZ	Town_City	HH	HH_GQ	pop	veh
1019	1025	Schroeppe	98	0	241.9375	184.7709
1020	1026	Schroeppe	31	0	78.607202	62.000046499999996
1021	1027	Schroeppe	48	0	124.7999	97.0666
1022	1028	Schroeppe	56	0	124.9231	101.23079680000001
1023	1029	Schroeppe	208	0	444.2209	361.64802543999997
1024	1030	Schroeppe	48	0	103.3045	87.65224
1025	1031	Schroeppe	57	0	143.55546	112.94438849999999
1026	1032	Schroeppe	272	0	694.6458	523.0767
1027	1033	Schroeppe	102	0	285.81270	207.1876
1028	1034	Schroeppe	175	0	404.491	321.70661599999994
1029	1035	Schroeppe	29	0	65.73334	53.16668
1030	1036	Schroeppe	62	0	154.4746	119.79661700000001
1031	1037	Schroeppe	11	0	21.083331	19.25
1032	1038	Schroeppe	21	0	40.949999	35.7
1033	1039	Schroeppe	40	0	107.02694	81.08101200000002
1034	1040	Hastings	71	0	167.72459	119.36231030000002
1035	1041	Hastings	40	0	99.999984	72.63157
1036	1042	Hastings	192	0	460.59	336.78672767999996
1037	1043	Hastings	56	0	154.5186	105.7779
1038	1044	Hastings	31	0	79.714302	57.57143
1039	1045	Hastings	12	0	28.363627	23.99999
1040	1046	Hastings	123	0	351.28	233.4917
1041	1047	Hastings	36	0	89.485797	65.82863880000001
1042	1048	Hastings	18	0	55.058832	39.17647
1043	1049	Hastings	27	0	62.307743	51.92312
1044	1050	Hastings	34	0	85.99996	65.99996
1045	1051	Hastings	73	0	207.69	151.1408
1046	1052	Hastings	113	0	305.5186	230.1852
1047	1053	Hastings	42	0	94	78.99999
1048	1054	Hastings	100	0	296.9072	211.34018999999998
1049	1055	Hastings	82	0	186.55	159.9
1050	1056	Hastings	111	0	261.7926	216.7643
1051	1057	Hastings	81	0	202.49999	159.92308709999998
1052	1058	Hastings	108	0	277.2692	214.9615
1053	1059	Hastings	42	0	115.00006	87.00003479999998
1054	1060	Hastings	115	0	326.3512	240.36021199999996
1055	1061	Hastings	66	0	193.875	138.1875
1056	1062	Hastings	12	0	20.72726	21.81817
1057	1063	Hastings	26	0	75.920000	55.120000000000005
1058	1064	Hastings	24	0	67.826164	50.087023200000004
1059	1065	Hastings	60	0	168.62080	123.10352400000001
1060	1066	Hastings	29	0	81.82143	61.10714
1061	1067	Hastings	93	0	234.03287	184.9779

	TAZ	Town_City	HH	HH_GQ	pop	veh
1062	1068	West Monr	25	0	64.42308	50.000012500000004
1063	1069	West Monr	35	0	84.84844	68.93936
1064	1070	West Monr	34	0	87.999956	67.99998
1065	1071	West Monr	19	0	39.055564	35.88889
1066	1072	West Monr	61	0	133.5689	116.74129369999999
1067	1073	West Monr	25	0	57.692360	50.961557500000005
1068	1074	West Monr	98	0	284.51627	205.484
1069	1075	West Monr	132	0	332.598	255.6847
1070	1076	West Monr	38	0	86.85723	71.65720040000001
1071	1077	West Monr	53	0	143.41164	107.0391
1072	1078	West Monr	78	0	183.4054	151.78375680000002
1073	1079	West Monr	110	0	276.5421	213.8318
1074	1080	West Monr	51	0	131.1429	99.91838910000001
1075	1081	West Monr	83	0	193.66658	161.9011
1076	1082	West Monr	68	0	177.2122	138.0607
1077	1083	West Monr	71	0	193.16163	141.9999
1078	1084	West Monr	61	0	154.0508	121.99995120000001
1079	1085	Hastings	38	0	98.594534	75.99995
1080	1086	West Monr	50	0	121.87503	96.87503
1081	1087	West Monr	107	0	247.24287	204.6505
1082	1088	West Monr	85	0	200.432	164.753
1083	1089	West Monr	32	0	76.79994	62.93328
1084	1090	Schroeppe	6	0	18.99999	13
1085	1091	Schroeppe	26	0	67.40735	51.99996
1086	1092	Schroeppe	17	0	40.99998	31.999984000000005
1087	1093	Schroeppe	19	0	54.76472	40.2353
1088	1094	Schroeppe	7	0	18.99998	14.999984999999999
1089	1095	Schroeppe	74	0	189.69017	141.74652640000002
1090	1096	West Monr	17	0	37.1875	30.8125
1091	1097	West Monr	37	0	100.7222	72.97221
1092	1098	Hastings	17	0	47.222239	34.94445540000001
1093	1099	Hastings	97	0	269.3298	202.25537899999998
1094	1100	Sullivan	24	0	54.000002	50.00001
1095	1101	Sullivan	21	0	61.894719	44.210510400000004
1109	8001	Geddes	0	0	0	0
1110	8002	Syracuse	0	0	0	0
1111	8003	Onondaga	0	858	858	0
1112	8004	Onondaga	0	0	0	0
1113	8005	Syracuse	0	13	13	0
1114	8006	Syracuse	0	2569	2569	0
1115	8007	Syracuse	0	0	0	0
1116	8008	Syracuse	0	0	0	0
1117	8009	Syracuse	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
1118	8010	Dewitt	5	1281	1286	5
1119	8011	Syracuse	0	51	51	0
1120	8012	Syracuse	0	2966	2966	0
1121	8013	Syracuse	0	0	0	0
1122	8014	Syracuse	0	0	0	0
1123	8015	Syracuse	0	0	0	0
1124	8016	Dewitt	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
0	1	Tully	237	0	574.47931	459.8017494899999
1	2	Tully	346	0	788.96783	646.8215
2	3	Tully	148	0	402.82719	296
3	4	Spafford	304	0	744.62863	597.7524822400002
4	5	Tully	308	2	708.5265	569.1750618399999
5	6	Fabius	135	0	332.64000	267.84000000000003
6	7	Fabius	167	0	424.4144	340.3825
7	8	Tully	132	0	366.27008	259.2431
8	9	Fabius	208	0	526.3676	434.041
9	10	Fabius	268	0	672.1611	548.9677642400001
10	11	Otisco	123	0	301.61756	246.00011070000002
11	12	Otisco	389	0	922.0351	755.9214
12	13	Otisco	158	0	408.2547	326.6038
13	14	Otisco	181	0	480.26758	380.5118
14	15	Otisco	162	0	412.1769	323.9998
15	16	Spafford	229	0	529.4315	442.24324050999996
16	17	Spafford	205	0	481.96802	398.0053372499999
17	18	Lafayette	108	0	243.91016	195.37079040000003
18	19	Lafayette	361	0	870.1023	675.7177
19	20	Lafayette	164	5	439.9108	315.5439
20	21	Lafayette	207	0	507.04547	387.8637
21	22	Pompey	238	0	630.85527	509.25709659999995
22	23	Pompey	252	0	631.542	502.97083200000003
23	24	Pompey	132	0	338.8344	276.47233679999994
24	25	Skaneatele	406	0	969.64849	846.5528
25	26	Skaneatele	174	4	394.48833	355.08143459999997
26	27	Lafayette	136	0	306.2854	245.7141
27	28	Lafayette	62	0	170.21834	121.7456
28	29	Lafayette	256	0	549.88800	446.464
29	30	Pompey	133	0	317.6607	269.2972
30	31	Pompey	94	5	240.49487	194.92641820000003
31	32	Pompey	90	0	225.55546	186.6666
32	33	Pompey	168	0	439.04059	350.56042560000003
33	34	Pompey	69	0	164.1725	136.8104
34	35	Pompey	58	0	139.423	115.99999420000002
35	36	Marcellus	114	0	282.2333	219.14581836000002
36	37	Marcellus	26	0	48.6087	46.34783
37	38	Marcellus	90	0	218.8889	178.889
38	39	Lafayette	273	0	580.393	472.9128
39	40	Skaneatele	320	3	694.8909	633.5125952000001
40	41	Skaneatele	17	0	37.1875	39.3125
41	42	Skaneatele	210	0	512.4	441
42	43	Onondaga	125	0	303.1248	246.87484874999998

	TAZ	Town_City	HH	HH_GQ	pop	veh
43	44	Onondaga	221	0	577.6842	456.3909
44	45	Lafayette	89	0	218.74703	169.4217
45	46	Lafayette	88	0	224.63147	171.3684
46	47	Pompey	87	0	215.848	180.6075
47	48	Pompey	291	7	754.83810	605.9888
48	49	Onondaga	77	4	202.9999	155.9999
49	50	Onondaga	97	0	220.35856	188.72819550000003
50	51	Onondaga	225	0	548.0004	448.0002832499999
51	52	Onondaga	11	0	25.14283	23.57141
52	53	Marcellus	127	0	324.30375	255.1341
53	54	Marcellus	214	0	540.8795	423.297
54	55	Marcellus	98	0	235.66658	188.9999
55	56	Onondaga	306	0	436.00052	436.0008
56	57	Skaneatele	239	0	576.1786	439.32359555999994
57	58	Skaneatele	183	0	434.8823	331.045
58	59	Skaneatele	489	0	944.27606	757.7393
59	60	Onondaga	192	0	450.03148	307.8093
60	61	Lafayette	316	0	723.7844	569.0624
61	62	Marcellus	129	0	320.1547	228.68187716999998
62	63	Onondaga	366	0	912.4655	735.0415
63	64	Skaneatele	149	0	378.99970	284.99982747999996
64	65	Skaneatele	374	0	913.1742	694.9089
65	66	Skaneatele	42	0	116.23253	81.06978
66	67	Onondaga	195	0	485.0981	301.62536429999994
67	68	Pompey	198	0	549.71003	416.8418
68	69	Pompey	310	6	798.8091	649.0215800000001
69	70	Pompey	323	0	974.3299	712.0924
70	71	Lafayette	175	0	435.36564	334.3494
71	72	Pompey	127	0	306.9998	256.9999
72	73	Pompey	244	0	746.93802	531.5709
73	74	Marcellus	429	0	852.81925	695.312
74	75	Onondaga	12	0	20.727263	16.36363
75	76	Onondaga	250	0	617.2476	409.88337000000007
76	77	Onondaga	217	0	503.93321	424.74378036999997
77	78	Marcellus	149	0	426.682	302.06382600000006
78	79	Marcellus	18	0	42.75	36
79	80	Marcellus	16	0	35	26
80	81	Onondaga	412	0	926.02879	646.1796
81	82	Onondaga	302	0	796.67379	565.0323
82	83	Skaneatele	518	0	1246.765	944.7732277199999
83	84	Manlius	16	0	47.99999	30.933318399999997
84	85	Manlius	153	0	448.37478	304.9373
85	86	Manlius	351	0	780.3387	615.5214448499999

	TAZ	Town_City	HH	HH_GQ	pop	veh
86	87	Manlius	223	0	513.4186	381.6929815599999
87	88	Marcellus	202	0	495.00036	354.00027320000004
88	89	Marcellus	208	0	417.0094	335.223
89	90	Dewitt	460	0	1233.056	858.6667739999999
90	91	Dewitt	70	0	205.8	138.60000000000002
91	92	Marcellus	162	0	401.5776	285.2114
92	93	Marcellus	193	0	503.53178	351.3588
93	94	Marcellus	156	0	392.9324	277.98501120000003
94	95	Onondaga	755	4	1882.2	1245.9348390999999
95	96	Syracuse	755	0	1645.641	1143.97
96	97	Manlius	81	0	159.42851	128.5714
97	98	Manlius	625	0	1387.1691	1041.6658125000001
98	99	Syracuse	760	0	1271.98	785.8985
99	100	Syracuse	310	10	641.7351	349.1169
100	101	Onondaga	456	7	1261.7383	862.7556
101	102	Syracuse	325	26	768.59243	504.6294
102	103	Marcellus	312	0	787.7353	562.1155487999999
103	104	Marcellus	192	0	499.45918	351.56741759999994
104	105	Manlius	720	1	1612.382	1273.691
105	106	Dewitt	285	6	646.06314	469.06277549999993
106	107	Syracuse	33	0	58.999957	33.999969300000004
107	108	Syracuse	40	0	96	45
108	109	Syracuse	289	0	638.7896	340.82069114999996
109	110	Syracuse	49	0	103.00000	55.99998319999999
110	111	Onondaga	341	1	975.8925	656.5313
111	112	Onondaga	221	0	624.2278	429.0758
112	113	Onondaga	15	0	43.636333	27.272707500000003
113	114	Dewitt	48	0	114.35300	101.64712320000001
114	115	Manlius	791	0	2182.93	1609.3140209999997
115	116	Onondaga	691	10	1916.206	1384.507
116	117	Onondaga	663	0	1837.192	1270.2336047699998
117	118	Syracuse	687	6	846.98303	544.8621732000001
118	119	Syracuse	680	0	1378.326	543.0355
119	120	Manlius	376	0	950.1628	728.2886579199999
120	121	Syracuse	292	0	722.6069	280.9112
121	122	Syracuse	126	0	272.83467	148.81893515999997
122	123	Syracuse	312	0	689.3717	367.46675472000004
123	124	Onondaga	80	0	176.62328	134.02591200000003
124	125	Manlius	386	0	823.10043	668.2284470800001
125	126	Manlius	154	0	305.4334	263.0834
126	127	Manlius	369	0	682.25224	526.9536455399999
127	128	Syracuse	257	7	590.7179	236.49453540000002
128	129	Dewitt	2	0	3	3

	TAZ	Town_City	HH	HH_GQ	pop	veh
129	130	Syracuse	116	0	288.51267	140.7862
130	131	Syracuse	86	0	207.58641	105.7702
131	132	Syracuse	89	0	213.8045	107.4138
132	133	Onondaga	270	14	548.9998	408.7498
133	134	Manlius	267	0	522.9167	404.0263
134	135	Manlius	186	0	448.82587	328.5325
135	136	Manlius	209	0	444.5229	334.1879
136	137	Manlius	318	0	901.00037	647.2427
137	138	Onondaga	400	0	1048.167	785.3397600000001
138	139	Onondaga	124	0	296.9743	238.62150551999997
139	140	Onondaga	0	0	0	0
140	141	Onondaga	82	0	135.97464	116.25312200000002
141	142	Onondaga	476	6	791.34750	666.6079
142	143	Syracuse	94	1	250.34709	137.5366
143	144	Syracuse	197	14	468.95526	265.0223
144	145	Syracuse	343	0	894.4537	416.9064
145	146	Syracuse	24	0	45.91305	23.999992800000005
146	147	Syracuse	15	0	38.4375	15.9375
147	148	Syracuse	832	0	1438.3556	878.7188883200001
148	149	Syracuse	276	0	659.17532	384.12382799999995
149	150	Syracuse	463	5	1245.952	396.0491
150	151	Syracuse	190	7	446.4957	256.2125
151	152	Onondaga	10	0	31.66673	18.333370000000002
152	153	Onondaga	15	0	34.28573	26.78573
153	154	Manlius	84	0	150.3705	136.88897880000002
154	155	Syracuse	294	5	597.0828	477.7494061199999
155	156	Dewitt	460	0	1052.4707	679.0468
156	157	Syracuse	157	0	424.29758	190.7848
157	158	Syracuse	265	4	701.46598	219.91330279999997
158	159	Dewitt	241	0	603.01339	499.4345
159	160	Dewitt	321	0	801.47100	674.9229
160	161	Dewitt	241	0	541.1928	384.7544
161	162	Dewitt	59	0	139.9998	95.99989710000001
162	163	Onondaga	511	0	1009.2953	717.0936277400001
163	164	Onondaga	383	0	1026.396	645.5664389799999
164	165	Onondaga	120	0	300.6058	192.7271
165	166	Manlius	106	0	238.75722	183.18443847999995
166	167	Syracuse	126	0	322.00016	141.00001271999997
167	168	Syracuse	19	0	44.70592	21.2353
168	169	Dewitt	33	0	78.375	52.59375
169	170	Syracuse	164	0	427.50550	193.4831
170	171	Syracuse	697	0	1573.6025	790.9640964299999
171	172	Camillus	236	0	640.91372	463.6142

	TAZ	Town_City	HH	HH_GQ	pop	veh
172	173	Syracuse	236	0	563.936	217.992
173	174	Syracuse	34	0	97.277753	33.055544600000005
174	175	Manlius	53	0	150.32723	105.03637520000001
175	176	Manlius	199	0	526.952	393.22399999999993
176	177	Syracuse	264	9	600.824	389.7141
177	178	Manlius	529	0	1228.5790	897.5732223300001
178	179	Dewitt	339	4	843.00019	716.0003
179	180	Syracuse	143	0	290.9653	156.9028
180	181	Syracuse	200	0	325.37306	199.0049
181	182	Syracuse	76	0	205.29867	73.03896
182	183	Syracuse	33	0	88.32355	32.02942
183	184	Syracuse	61	1	174.00011	61
184	185	Dewitt	269	9	603.52897	411.29691120000007
185	186	Syracuse	24	0	53.00003	42.00001439999999
186	187	Manlius	649	5	1179.1905	927.5705750300001
187	188	Manlius	112	0	287.0002	218.00011295999997
188	189	Syracuse	217	0	559.42220	383.2339
189	190	Syracuse	101	0	271.31363	116.8431
190	191	Onondaga	380	0	897.90373	602.6885
191	192	Syracuse	377	0	965.8758	674.4218221000001
192	193	Syracuse	142	0	343.99990	248.99991100000003
193	194	Elbridge	142	5	340.07954	266.63337160000003
194	195	Elbridge	228	0	558.49538	426.71561388000003
195	196	Syracuse	193	0	367.09816	303.42791447999997
196	197	Onondaga	1	0	2	2
197	198	Onondaga	52	0	113.04355	79.13046960000001
198	199	Syracuse	95	0	253.33326	112.8125
199	200	Syracuse	166	0	453.00035	199.00015259999998
200	201	Syracuse	204	0	528.88921	245.55573840000002
201	202	Manlius	454	0	888.7882	687.5721266999999
202	203	Syracuse	144	0	326.731	161.87585760000002
203	204	Syracuse	258	6	663.1366	245.4148
204	205	Syracuse	12	0	30.545443	9.818180400000001
205	206	Syracuse	99	0	262.9999	92.99997
206	207	Syracuse	91	0	225.52182	85.06521660000001
207	208	Dewitt	585	4	1415.061	969.2846279999999
208	209	Onondaga	328	0	600.9941	429.8636
209	210	Onondaga	78	5	185.07405	118.4445
210	211	Syracuse	260	10	554.94451	413.5055
211	212	Syracuse	481	5	1160.7771	831.1758884000001
212	213	Camillus	313	0	780.39502	609.1572
213	214	Camillus	527	0	1431.241	1093.81
214	215	Camillus	45	0	62.56095	60.365830499999994

	TAZ	Town_City	HH	HH_GQ	pop	veh
215	216	Onondaga	131	1	290.20769	189.44618185999997
216	217	Syracuse	257	4	538.5992	431.60315290000005
217	218	Syracuse	172	0	342.0111	271.4217
218	219	Dewitt	124	0	337.00009	225
219	220	Dewitt	278	5	602.40420	420.94317980000005
220	221	Syracuse	158	0	391.2825	134.7648
221	222	Syracuse	157	0	440.19669	142.095
222	223	Syracuse	119	21	304.574	75.1134
223	224	Syracuse	57	0	142.0001	36.00002
224	225	Syracuse	74	0	195.9999	47.99997
225	226	Manlius	466	6	1187.784	888.5591864200001
226	227	Syracuse	65	45	232.90912	47.27272
227	228	Manlius	182	0	404.6825	329.74128460000003
228	229	Onondaga	74	0	149.0278	107.9166
229	230	Onondaga	132	0	258.92313	186.83079756000004
230	231	Syracuse	307	0	796.67060	460.9785
231	232	Syracuse	77	0	184.99987	62.99996
232	233	Syracuse	87	61	248.0204	68.65307
233	234	Syracuse	383	0	966.66794	569.4072872999999
234	235	Syracuse	35	1	71	18.000013499999998
235	236	Syracuse	50	0	137.7552	32.65307
236	237	Dewitt	112	0	279	234.00003311999998
237	238	Dewitt	157	0	357.83788	323.1756
238	239	Syracuse	532	0	1449.8	1056.892
239	240	Geddes	15	7	31.54547	17.72728
240	241	Manlius	321	0	690.6965	567.4643617500001
241	242	Syracuse	60	0	116.0656	30.49182
242	243	Syracuse	38	0	104.00002	19.99999
243	244	Manlius	536	0	1243.113	967.7464295200002
244	245	Syracuse	155	0	390.235	111.2351
245	246	Syracuse	154	0	360.54142	106.8941
246	247	Syracuse	0	0	0	0
247	248	Syracuse	83	0	291.48828	72.13097
248	249	Syracuse	273	16	607.6492	243.46231181999997
249	250	Syracuse	205	0	519.9996	200.9998
250	251	Syracuse	148	0	387.38289	127.141
251	252	Syracuse	84	1	246.0823	76.09405
252	253	Syracuse	139	7	321.17797	238.9657
253	254	Dewitt	126	9	288.68207	189.95473979999997
254	255	Dewitt	272	4	696.4537	449.3476
255	256	Camillus	1291	4	2778.36	2168.523
256	257	Camillus	791	0	1935.0900	1395.5920303500002
257	258	Geddes	459	0	1004.1257	746.7615034199999

	TAZ	Town_City	HH	HH_GQ	pop	veh
258	259	Geddes	1	0	2	2
259	260	Syracuse	65	5	111.7856	88.21422350000002
260	261	Syracuse	492	0	1091.345	669.9148
261	262	Syracuse	107	0	307.87698	82.77361
262	263	Syracuse	121	11	343.9778	93.70680440000001
263	264	Camillus	161	0	316.937	201.503
264	265	Camillus	264	0	573.3434	357.71
265	266	Camillus	167	7	329.41614	207.54328304999999
266	267	Camillus	575	4	1300.454	947.5216
267	268	Geddes	503	0	1180.0004	841.0003617299999
268	269	Syracuse	1	0	1	0
269	270	Syracuse	0	0	0	0
270	271	Syracuse	395	2	1016.3672	388.4009
271	272	Syracuse	181	38	400.76057	105.7101
272	273	Syracuse	4	51	64	2.071429
273	274	Syracuse	275	49	559.0294	81.54074499999999
274	275	Camillus	62	0	133.8412	102.3492
275	276	Syracuse	264	0	600.72376	458.2637
276	277	Syracuse	178	4	351.2458	284.0218
277	278	Syracuse	85	0	173.95329	135.40681899999998
278	279	Syracuse	0	701	701	0
279	280	Syracuse	1	705	707.7246	1.651198
280	281	Syracuse	311	20	723.8415	212.78922913999997
281	282	Syracuse	0	0	0	0
282	283	Syracuse	273	37	789.59439	555.2229
283	284	Syracuse	141	697	1010.775	142.9859
284	285	Syracuse	253	6	670.3592	383.24802296000007
285	286	Syracuse	192	0	435.99985	266.9998
286	287	Elbridge	266	0	669.73109	505.71534299999996
287	288	Elbridge	224	4	538.77495	416.72077440000004
288	289	Elbridge	228	0	560.1101	429.97294727999997
289	290	Syracuse	146	46	458.01045	113.89521319999999
290	291	Geddes	420	8	892.15905	605.4674009999999
291	292	Syracuse	12	0	25.000010	2.9999988000000006
292	293	Syracuse	0	0	0	0
293	294	Syracuse	29	0	61.99996	46.999975199999994
294	295	Syracuse	271	0	550	443
295	296	Syracuse	336	0	810.58736	487.5489
296	297	Geddes	450	0	1003.612	688.7137
297	298	Syracuse	0	465	465	0
298	299	Syracuse	0	64	64	0
299	300	Dewitt	310	0	709.71106	461.5115979000001
300	301	Syracuse	605	1	956.0472	164.7763

	TAZ	Town_City	HH	HH_GQ	pop	veh
301	302	Syracuse	70	0	229.9999	38.99997499999999
302	303	Syracuse	0	0	0	0
303	304	Syracuse	41	0	69.99992	11.999970200000002
304	305	Syracuse	47	0	101.1522	18.39132
305	306	Syracuse	21	0	56.31824	10.50001
306	307	Syracuse	18	40	63.99999	5.999990400000001
307	308	Syracuse	0	0	0	0
308	309	Syracuse	0	75	75	0
309	310	Syracuse	1	0	1	0
310	311	Syracuse	412	7	937.66976	708.5224152000001
311	312	Syracuse	0	0	0	0
312	313	Syracuse	0	0	0	0
313	314	Syracuse	0	109	109	0
314	315	Syracuse	0	0	0	0
315	316	Syracuse	0	0	0	0
316	317	Syracuse	30	231	291	39.382701000000004
317	318	Syracuse	6	274	286.9961	7.969105
318	319	Syracuse	0	0	0	0
319	320	Syracuse	185	0	485.85884	90.63137
320	321	Syracuse	72	0	181	35.000006400000004
321	322	Syracuse	62	0	172.9999	31.99999
322	323	Syracuse	92	0	246.3227	50.45164
323	324	Manlius	288	0	709.3338	538.6671359999999
324	325	Manlius	183	0	376.68639	309.8981
325	326	Syracuse	0	91	91	0
326	327	Syracuse	61	70	199.45045	78.22904740000001
327	328	Syracuse	0	503	503	0
328	329	Syracuse	0	226	226	0
329	330	Syracuse	122	0	296.5689	177.5447
330	331	Syracuse	85	0	204.40484	124.46436100000001
331	332	Dewitt	234	0	517.2101	337.442
332	333	Dewitt	130	10	244.00007	160.6429
333	334	Camillus	603	4	1217.8950	931.6398
334	335	Syracuse	167	0	397.8529	161.10595210000002
335	336	Syracuse	203	0	504.19540	195.44665419999995
336	337	Syracuse	0	5	5	0
337	338	Syracuse	0	3	3	0
338	339	Syracuse	166	0	168.47753	121.4029
339	340	Syracuse	100	0	0	0
340	341	Syracuse	0	0	0	0
341	342	Syracuse	0	0	0	0
342	343	Syracuse	394	0	440.47184	299.0361
343	344	Syracuse	0	5	5	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
344	345	Syracuse	135	0	271.9709	165.54755835000003
345	346	Syracuse	0	69	69	0
346	347	Syracuse	207	2	453.81711	348.3172
347	348	Syracuse	222	0	366.5584	316.6514
348	349	Geddes	212	0	506.9994	361.99960783999995
349	350	Camillus	505	0	1207.474	871.1504
350	351	Manlius	433	0	1072.788	815.7301
351	352	Manlius	57	5	137.6724	106.13793869999998
352	353	Syracuse	298	53	617.589	127.25395660000001
353	354	Syracuse	77	0	194.47434	40.474341599999995
354	355	Syracuse	61	0	0	0
355	356	Syracuse	0	0	0	0
356	357	Geddes	385	0	939.07446	658.9815232000001
357	358	Syracuse	143	10	359.55563	127.11102689999997
358	359	Syracuse	141	0	284.00000	121.00002420000001
359	360	Syracuse	60	0	106.00003	47.00003
360	361	Syracuse	5	0	12	9
361	362	Syracuse	178	2	314.4887	227.4443
362	363	Syracuse	247	1	512.09998	349.59997150000004
363	364	Syracuse	234	1	417.6583	348.5316978000001
364	365	Syracuse	133	24	309.60889	221.6666
365	366	Geddes	202	0	417.5267	295.78564474000007
366	367	Geddes	187	0	446.9998	298.9999
367	368	Syracuse	59	0	116.9828	79.34486969999998
368	369	Syracuse	483	0	993.9417	685.5801
369	370	Syracuse	297	0	593.99967	414.99967409999994
370	371	Syracuse	0	0	0	0
371	372	Syracuse	1055	139	1625.5346	741.3855727000001
372	373	Syracuse	0	139	139	0
373	374	Syracuse	0	294	294	0
374	375	Syracuse	0	0	0	0
375	376	Syracuse	29	0	0	0
376	377	Syracuse	101	0	101	101
377	378	Syracuse	0	190	190	0
378	379	Syracuse	0	24	24	0
379	380	Syracuse	0	0	0	0
380	381	Syracuse	0	0	0	0
381	382	Syracuse	0	0	0	0
382	383	Geddes	170	4	379.00011	276.0001
383	384	Syracuse	108	0	280	54.99998
384	385	Syracuse	182	0	443.33336	87.73341
385	386	Dewitt	160	4	397.1707	248.78041280000002
386	387	Dewitt	113	0	245.16967	159.4107

	TAZ	Town_City	HH	HH_GQ	pop	veh
387	388	Syracuse	153	0	272.6182	155.7818
388	389	Syracuse	189	0	464	202.99996710000002
389	390	Syracuse	145	0	209.00002	143
390	391	Syracuse	188	10	377.08998	193.3459
391	392	Syracuse	39	0	73.125000	39
392	393	Camillus	28	0	50.81478	40.444412400000004
393	394	Camillus	384	3	911.36512	664.731
394	395	Syracuse	0	0	0	0
395	396	Syracuse	145	0	172.8847	91.08975
396	397	Syracuse	184	0	219.81221	108.6712
397	398	Camillus	1302	4	2791.3242	1969.2628783799998
398	399	Syracuse	456	3	1166.689	484.62357599999996
399	400	Syracuse	119	4	220.71545	92.87800535999997
400	401	Syracuse	21	0	48.681851	20.045472300000004
401	402	Camillus	634	4	1419.629	1060.863
402	403	Syracuse	0	0	0	0
403	404	Syracuse	132	0	296.2668	220.97774687999998
404	405	Syracuse	229	0	343.50000	183.20000000000002
405	406	Syracuse	66	0	124.89236	81.23081339999999
406	407	Syracuse	213	2	434.90292	278.08347060000006
407	408	Syracuse	0	3	3	0
408	409	Syracuse	0	3	3	0
409	410	Syracuse	212	0	282.147	149.6471
410	411	Syracuse	0	0	0	0
411	412	Syracuse	140	105	253.1159	73.04352
412	413	Syracuse	0	0	0	0
413	414	Syracuse	116	0	116	59.870987199999995
414	415	Syracuse	139	0	139.00005	70.49284920000001
415	416	Camillus	331	0	744.99695	511.8147
416	417	Syracuse	27	0	38.999966	19.99998
417	418	Syracuse	0	0	0	0
418	419	Syracuse	0	0	0	0
419	420	Syracuse	0	0	0	0
420	421	Syracuse	387	1	898.0462	525.9232089000001
421	422	Syracuse	0	1	1	0
422	423	Syracuse	0	0	0	0
423	424	Syracuse	299	0	0	0
424	425	Syracuse	133	0	164.2942	125.17651440000002
425	426	Syracuse	0	0	0	0
426	427	Syracuse	4	0	7	4
427	428	Syracuse	28	0	71.448266	29.931028399999995
428	429	Syracuse	191	0	473.9995	189.99980939999998
429	430	Syracuse	136	0	277.78718	130.2127

	TAZ	Town_City	HH	HH_GQ	pop	veh
430	431	Syracuse	0	3	3	0
431	432	Syracuse	35	0	86.52779	35.97223
432	433	Syracuse	15	0	38	14
433	434	Syracuse	177	0	341.35729	155.3266
434	435	Syracuse	5	0	8	5
435	436	Syracuse	0	0	0	0
436	437	Syracuse	0	0	0	0
437	438	Syracuse	0	2	2	0
438	439	Syracuse	82	0	152	99.00003499999998
439	440	Syracuse	206	0	412.9953	264.7151
440	441	Geddes	110	0	159.5495	124.86478730000002
441	442	Syracuse	417	63	976.0022	406.412
442	443	Syracuse	428	3	1001.9917	418.27298096000004
443	444	Camillus	238	0	523.9996	390.99974227999996
444	445	Syracuse	0	0	0	0
445	446	Dewitt	24	0	61.71427	39.99999
446	447	Geddes	200	0	483.417	344.7235
447	448	Geddes	137	7	278.12571	205.97887527999998
448	449	Syracuse	49	0	110.25	42.875
449	450	Manlius	593	0	1436.3306	1116.234
450	451	Geddes	835	5	1714.809	1224.1352504000001
451	452	Manlius	666	0	1296.3216	1117.929
452	453	Syracuse	2	0	2	1
453	454	Syracuse	135	0	181.7309	83.07695
454	455	Syracuse	6	0	11.142845	5.1428519999999995
455	456	Syracuse	3	0	3	2.000001
456	457	Syracuse	29	0	39.03844	22.30769
457	458	Syracuse	95	0	151.59581	108.13831949999997
458	459	Syracuse	262	0	478.76239	320.43160680000005
459	460	Syracuse	175	0	217.16889	108.58445499999999
460	461	Syracuse	0	0	0	0
461	462	Syracuse	0	0	0	0
462	463	Syracuse	0	0	0	0
463	464	Syracuse	212	0	260.45705	139.3142
464	465	Syracuse	8	0	17.14284	10.285703999999999
465	466	Syracuse	198	2	308.45230	125.3668
466	467	Syracuse	0	0	0	0
467	468	Syracuse	154	0	178.20000	69.29996
468	469	Syracuse	127	0	187.05436	66.94576146000001
469	470	Syracuse	184	8	258.1252	94.87507360000001
470	471	Syracuse	188	0	374.01049	125.3333
471	472	Syracuse	305	0	791.4059	221.2747
472	473	Dewitt	311	152	767.2973	398.8039

	TAZ	Town_City	HH	HH_GQ	pop	veh
473	474	Dewitt	363	0	710.0871	467.4242
474	475	Syracuse	430	2	963.52793	482.7544
475	476	Syracuse	41	0	79.99995	35.99998
476	477	Syracuse	37	0	75.02773	32.88887
477	478	Syracuse	15	0	33.00002	16.000009499999997
478	479	Syracuse	33	0	67.03125	29.90625
479	480	Syracuse	173	12	387.82731	166.1823
480	481	Syracuse	96	0	173.33335	84.44443584000001
481	482	Syracuse	302	0	670.89849	287.66464587999997
482	483	Syracuse	281	0	623.9154	272.4271
483	484	Dewitt	0	1	1	0
484	485	Dewitt	0	0	0	0
485	486	Syracuse	169	0	390.37989	246.0876
486	487	Elbridge	491	0	1116.8900	892.4328
487	488	Elbridge	336	4	820.59424	638.7119390400001
488	489	Syracuse	113	0	158.40166	60.53566
489	490	Syracuse	328	0	691.8906	225.3132
490	491	Syracuse	398	29	590.49785	232.63403276000003
491	492	Syracuse	330	10	412.5804	174.19343700000002
492	493	Syracuse	0	0	0	0
493	494	Syracuse	269	0	402.60931	361.63601958000004
494	495	Syracuse	65	0	132.0313	87.34375
495	496	Syracuse	286	0	650.4511	274.0833
496	497	Syracuse	143	1	309.683	141.0277
497	498	Syracuse	222	0	251.86535	115.47970026000002
498	499	Syracuse	175	5	287.7681	112.71172500000003
499	500	Syracuse	579	4	1138.286	734.1242
500	501	Syracuse	0	0	0	0
501	502	Geddes	627	0	1407.289	973.1364221700001
502	503	Syracuse	45	0	63.409067	25.568180999999996
503	504	Syracuse	250	52	672.96646	198.68007500000002
504	505	Geddes	727	1	1571.125	1088.061
505	506	Camillus	195	0	390.00017	301.55751210000005
506	507	Syracuse	0	0	0	0
507	508	Syracuse	287	0	331.68259	309.34125670000003
508	509	Syracuse	90	0	189.23071	143.0768
509	510	Syracuse	338	105	531.3763	181.4037
510	511	Syracuse	111	0	170.99985	69.99994
511	512	Syracuse	363	0	747.8798	503.2277
512	513	Dewitt	15	0	30.00001	17.142864000000003
513	514	Syracuse	566	0	1238.4362	646.5732129999999
514	515	Syracuse	103	0	178.99996	77.00003
515	516	Geddes	0	0	0	0

TAZ		Town_City	HH	HH_GQ	pop	veh
516	517	Geddes	471	0	1038.971	659.9937331799999
517	518	Syracuse	0	0	0	0
518	519	Dewitt	85	0	179.1074	112.3216
519	520	Syracuse	396	0	678.8568	504.18034524000007
520	521	Dewitt	0	0	0	0
521	522	Syracuse	276	104	730.22901	212.56725119999996
522	523	Syracuse	333	0	917.73205	207.1337
523	524	Syracuse	587	9	1405.262	362.8381
524	525	Syracuse	483	0	1054.4497	679.7772
1108	1114	Camillus	280	0	733.9393	506.96950080000005
1107	1113	Camillus	160	0	414.4101	290.18637119999994
525	527	Syracuse	363	0	920.82487	304.185
526	528	Syracuse	479	0	966.9814	666.6084882099998
527	529	Syracuse	260	0	567.8162	380.53649920000004
528	530	Syracuse	0	0	0	0
529	531	Syracuse	0	1	1	0
530	532	Syracuse	402	0	920.8288	318.2884
531	533	Manlius	728	5	1765.5628	1279.1589719999997
532	534	Syracuse	299	0	0	0
533	535	Syracuse	276	0	576.81992	392.15821008000006
534	536	Dewitt	0	6	6	0
535	537	Syracuse	345	2	762.59055	504.0776369999999
536	538	Syracuse	274	0	648.9475	217.21714419999998
537	539	Syracuse	206	0	560.3202	177.61778968000002
538	540	Syracuse	300	0	689.4043	504.6358409999999
539	541	Syracuse	104	0	243.3208	177.5849
540	542	Syracuse	444	0	934.5812	648.1611766799999
541	543	Dewitt	499	0	1063.606	640.1515
542	544	Syracuse	357	4	709.1245	492.10774598999996
543	545	Syracuse	348	0	817.61235	394.7742
544	546	Syracuse	0	0	0	0
545	547	Syracuse	371	0	701.22059	480.4106
546	548	Dewitt	318	0	686.9997	411.99981420000006
547	549	Dewitt	439	2	929.54874	562.8715
548	550	Geddes	108	0	218.9188	175.13504640000002
549	551	Syracuse	186	0	390.41561	139.9604
550	552	Syracuse	290	0	721.7151	320.9708
551	553	Syracuse	328	35	734.25283	473.0771
552	554	Syracuse	406	3	942.10279	326.44576972000004
553	555	Camillus	485	8	1056.413	797.2006691999999
554	556	Camillus	377	0	968.6622	763.3917
555	557	Camillus	194	0	415.9045	340.1646
556	558	Syracuse	411	1	927.2391	682.0217597400001

	TAZ	Town_City	HH	HH_GQ	pop	veh
557	559	Geddes	0	0	0	0
558	560	Manlius	172	0	397.45916	314.9458
559	561	Syracuse	362	0	881.4321	292.2397
560	562	Manlius	579	0	1431.9913	1016.696
561	563	Syracuse	623	0	1406.9909	693.4929
562	564	Syracuse	232	0	495.17765	277.8497
563	565	Syracuse	310	0	540.00029	439.0001543000001
564	566	Syracuse	269	0	571.7483	431.7891
565	567	Syracuse	319	0	793.21522	355.1853
566	568	Elbridge	81	0	201.4343	158.8027
567	569	Elbridge	216	0	428.85436	354.4077672000001
568	570	Syracuse	574	0	870.4099	549.5345644600002
569	571	Syracuse	541	0	1112.943	624.8448778900001
570	572	Syracuse	576	11	1136.861	433.1671
571	573	Dewitt	302	9	708.56905	484.53753686000005
572	574	Syracuse	409	15	736.99022	430.12178250000005
573	575	Syracuse	373	7	854.81067	471.1086
574	576	Dewitt	329	0	733.0867	518.6934480699999
575	577	Syracuse	125	0	300.7815	175.7813
576	578	Syracuse	107	0	255	147.99999250000002
577	579	Syracuse	483	0	1026.612	575.812
578	580	Syracuse	0	0	0	0
579	581	Syracuse	0	2	2	0
580	582	Syracuse	119	0	275.9997	153.9998
581	583	Syracuse	161	0	343.5976	196.3414
582	584	Syracuse	348	81	832.55248	468.6829
583	585	Dewitt	1	0	1	1
584	586	Dewitt	2	0	4	3
585	587	Syracuse	42	4	90.7392	57.521801399999994
586	588	Syracuse	81	0	201.5121	116.5609
587	589	Syracuse	53	0	128.4231	67.2693
588	590	Syracuse	242	3	549.84480	303.90684280000005
589	591	Syracuse	250	0	499.99959	328.413
590	592	Salina	692	3	1406.97	917.6732615599999
591	593	Dewitt	477	0	773.24162	622.6101
592	594	Dewitt	374	7	859.3261	617.0997905600001
593	595	Manlius	660	0	1380.1821	1052.1884340000001
594	596	Dewitt	199	0	400.01986	288.9032
595	597	Syracuse	94	0	207.78945	119.72628660000001
596	598	Syracuse	101	0	224.22	123.22
597	599	Dewitt	74	0	126.71234	95.28768
598	600	Syracuse	316	0	649.3415	422.9390831200001
599	601	Syracuse	231	6	530.3797	323.59494551999995

	TAZ	Town_City	HH	HH_GQ	pop	veh
600	602	Syracuse	88	0	177.0002	114.00008399999999
601	603	Syracuse	243	9	548.57434	327.1888
602	604	Syracuse	285	11	637.08009	383.3709
603	605	Salina	88	0	181.67748	118.27963840000001
604	606	Salina	573	0	1267.423	796.7805201600002
605	607	Dewitt	52	0	100.0754	75.54712
606	608	Salina	0	0	0	0
607	609	Salina	5	0	5	5
608	610	Dewitt	6	0	6	6
609	611	Dewitt	78	0	195.0001	135.5715
610	612	Camillus	94	6	239.0142	188.0001
611	613	Camillus	71	0	198.2641	150.03767570000002
612	614	Camillus	264	0	620.4852	524.6380814400002
613	615	Camillus	396	0	1098.0009	829.1255
614	616	Dewitt	653	0	1516.001	1077
615	617	Van Buren	20	0	51.11114	36.66668
616	618	Van Buren	69	0	175.0747	136.97025089999997
617	619	Salina	59	0	115.9655	75.27588159999999
618	620	Salina	0	0	0	0
619	621	Dewitt	1	0	4	2
620	622	Dewitt	0	0	0	0
621	623	Manlius	489	0	1222.997	881.7878
622	624	Manlius	67	0	156.33323	116.1333
623	625	Manlius	72	0	166.62849	122.39998560000001
624	626	Manlius	287	0	706.1583	541.4537408000001
625	627	Salina	793	0	1454.3312	957.5846124000001
626	628	Salina	396	0	880.67178	553.1909
1097	1103	Salina	0	0	0	0
1096	1102	Salina	0	0	0	0
1098	1104	Salina	290	0	661.9997	398.9998
627	630	Salina	0	0	0	0
628	631	Dewitt	13	0	22.99999	15.99999
629	632	Dewitt	40	0	91.282000	65.64098
630	633	Salina	17	0	38.25	23.375
631	634	Salina	0	0	0	0
632	635	Salina	72	0	171.77151	102.8572
633	636	Van Buren	63	0	171.15017	128.10009870000002
634	637	Salina	473	0	1051.332	643.9156930800001
635	638	Dewitt	9	0	24.999974	13.99999
636	639	Geddes	403	0	966.38846	719.7157
637	640	Salina	249	0	501.98400	318.71999999999997
638	641	Sullivan	172	0	364.16534	310.7861
639	642	Geddes	443	1	1015.1578	778.0251734999999

	TAZ	Town_City	HH	HH_GQ	pop	veh
640	643	Sullivan	105	0	262.4999	208.7499
641	644	Dewitt	0	15	15	0
642	645	Salina	78	0	188.0002	110.00007719999999
643	646	Salina	531	0	1188.049	717.5935380599999
644	647	Salina	18	0	46.42104	24.63157
645	648	Salina	236	0	505.00008	311
646	649	Salina	4	0	10	7
647	650	Dewitt	246	0	653.35522	440.4197
648	651	Dewitt	29	0	54.000032	41.00003
649	652	Salina	36	0	84.34297	54.51436439999999
650	653	Van Buren	23	0	57.50005	46.00005
651	654	Salina	493	0	992.036	712.3341273299999
652	655	Salina	600	0	1387.748	832.4497739999999
653	656	Elbridge	272	0	675.54087	513.9018
654	657	Salina	306	2	525.1618	394.839
655	658	Salina	416	0	896.689	661.8180607999999
656	659	Sullivan	77	0	157.3	133.1
657	660	Sullivan	210	0	407.5	365
658	661	Salina	0	2	2	0
659	662	Salina	55	0	133.426	92.68527399999999
660	663	Salina	67	0	97.54420	80.79418779999999
661	664	Salina	115	0	234.00001	176
662	665	Salina	153	0	286.1299	229.5001
663	666	Geddes	248	0	600.4211	447.8055895999999
664	667	Salina	521	3	1205.693	815.4357882700001
665	668	Dewitt	17	0	37.1875	25.5
666	669	Van Buren	153	0	389.93720	304.9373
667	670	Van Buren	61	0	159.3869	121.01602120000001
668	671	Sullivan	204	0	528.75830	412.68937248000003
669	672	Dewitt	0	0	0	0
670	673	Dewitt	14	23	48.27777	19.83333
671	674	Manlius	181	0	458.3906	343.7929
672	675	Manlius	247	7	571.26737	448.21995789999994
673	676	Salina	327	6	760.24190	447.67900991999994
674	677	Salina	423	0	867.3025	662.3960251499999
675	678	Van Buren	90	0	217.5	173.57138099999997
676	679	Salina	1083	0	2481.4663	1806.083
677	680	Salina	179	0	412.69436	295.3499
678	681	Salina	483	0	1150.6177	825.2913
679	682	Van Buren	53	0	129.75862	87.72416
680	683	Salina	272	7	637.10081	424.63320799999997
681	684	Salina	103	0	225.99999	177.99998354000002
682	685	Salina	314	7	675.2313	505.3438

	TAZ	Town_City	HH	HH_GQ	pop	veh
683	686	Dewitt	69	0	140.0596	107.1044
684	687	Salina	285	0	525	395.00005919999995
685	688	Van Buren	184	0	493.3629	371.03314800000004
686	689	Van Buren	0	4	4	0
687	690	Dewitt	13	0	24.99999	17.99999
688	691	Dewitt	2	0	5	3
689	692	Salina	274	19	573.56866	441.9659565599999
690	693	Salina	472	0	776.6453	656.3904
691	694	Geddes	12	0	28.800000	21.6
692	695	Salina	5	0	11.25	7.5
693	696	Van Buren	2	0	4	4
694	697	Salina	202	0	457.53000	359.56
695	698	Salina	289	0	708.35310	541.6224
696	699	Sullivan	85	0	184.57136	155.4285
697	700	Van Buren	184	0	400.9996	299.99978975999994
698	701	Salina	591	0	1261.228	947.5269200400002
1101	1107	Clay	10	0	22	14
1102	1108	Clay	50	0	104.08157	71.42853
699	703	Van Buren	110	0	293.6894	218.93209800000002
700	704	Geddes	106	6	263.8376	192.90077159999998
701	705	Salina	549	5	1110.971	734.3252
702	706	Salina	4	0	6	4
703	707	Geddes	0	2	2	0
704	708	Van Buren	517	0	1168.7265	852.1734626900002
705	709	Clay	68	0	148.9524	119.8096
706	710	Clay	47	0	67.14286	57.07143260000001
707	711	Salina	31	0	72.689649	55.5862
1099	1105	Salina	0	0	0	0
1100	1106	Salina	4	0	12	8
708	713	Clay	163	0	401.2305	308.9018
709	714	Clay	1	0	4	2
710	715	Clay	228	0	453.9643	366.42856752000006
711	716	Cicero	13	0	21.66665	15.88887
712	717	Van Buren	374	0	886.5894	645.4827178799999
713	718	Van Buren	19	0	50.666701	34.20002
714	719	Cicero	18	0	40.799978	28.79998
715	720	Cicero	31	0	72.68966	50.24138069999999
716	721	Cicero	17	0	48.875	30.8125
717	722	Van Buren	162	0	359.43749	264.26249999999993
718	723	Salina	658	0	1596.1298	1186.013
719	724	Salina	38	0	106.81070	74.97290179999999
720	725	Clay	369	0	624.9998	509.9998
721	726	Clay	376	0	813.9996	588.9996

	TAZ	Town_City	HH	HH_GQ	pop	veh
722	727	Clay	223	0	513.30200	368.65316359999997
723	728	Cicero	0	0	0	0
724	729	Salina	449	6	859.19956	713.8204
725	730	Salina	73	0	157.00001	126.99999799999999
726	731	Clay	285	0	710.4047	551.14
727	732	Clay	9	0	20.25	10.125
728	733	Clay	0	0	0	0
729	734	Cicero	1	0	1	1
730	735	Cicero	176	0	367.43877	259.3686
731	736	Clay	557	7	1216.0008	839.0004664999999
732	737	Cicero	17	0	26.272702	20.090888999999997
733	738	Lysander	195	0	475.24575	383.6065
734	739	Lysander	103	0	245.9388	200.74490910000003
735	740	Clay	512	0	819.2	627.4509
736	741	Van Buren	201	0	368.835	300.495
737	742	Salina	620	0	1012.2234	931.5315
738	743	Cicero	426	0	875.4399	637.9806245999999
739	744	Cicero	28	0	49.777730	40.444404000000006
740	745	Clay	226	0	531.4056	421.45955779999997
741	746	Clay	449	0	1023.9638	723.2763
742	747	Clay	738	0	1257.9544	1055.6332885800002
743	748	Clay	1	0	2	2
744	749	Clay	57	0	107.8928	77.35709
745	750	Clay	1460	8	3109.6224	2071.0933806000003
746	751	Cicero	0	0	0	0
747	752	Cicero	324	5	684.38749	479.92499999999995
748	753	Clay	288	0	684.6593	528.5274
749	754	Clay	591	0	1392.134	939.5389
750	755	Clay	392	0	958.8934	746.8111560000001
751	756	Clay	8	0	14.666680	14.66668
752	757	Van Buren	691	0	1347.398	1054.3084243600001
753	758	Cicero	68	0	160.62064	106.68965399999999
754	759	Cicero	149	0	304.12336	220.4384
755	760	Cicero	196	0	431.7972	300.4671
756	761	Clay	541	0	1388.7	1001.554
757	762	Clay	372	0	945.7977	667.5619198799999
758	763	Salina	207	0	484.0004	377.00020314000005
759	764	Lysander	688	0	1705.72	1290.3237728000001
760	765	Cicero	9	0	24.75	16.875
761	766	Cicero	49	0	89.179999	70.55999999999999
762	767	Van Buren	82	0	191.67500	139.4
763	768	Clay	248	0	609.7525	453.98371599999996
764	769	Cicero	124	0	286.688	210.30399999999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
765	770	Cicero	137	0	308.25026	213.11130900000006
766	771	Van Buren	666	0	1341.207	1017.926
767	772	Van Buren	181	0	432.38901	353.9555
768	773	Van Buren	115	0	276.20511	223.83910155000004
769	774	Clay	471	0	1105.429	801.9179
770	775	Van Buren	262	0	480.1635	386.37357460000004
771	776	Van Buren	49	0	117.00009	93.00008
772	777	Van Buren	29	0	69.81478	57.999970999999995
773	778	Clay	506	0	1191.844	814.8842592000001
774	779	Clay	137	0	335.3432	220.83579369999998
775	780	Cicero	149	0	356.1203	277.92186260000005
776	781	Clay	218	0	521.7872	394.62055236000003
777	782	Clay	475	0	1075.054	825.9558589999999
778	783	Cicero	26	0	54.000008	38.00000360000001
779	784	Cicero	425	3	863.0234	627.4764
780	785	Clay	556	0	1437.686	1047.0652048000002
781	786	Lysander	680	0	2042.882	1388.8134360000001
782	787	Lysander	589	0	1427.8794	1081.321
783	788	Clay	303	0	729.59198	559.1545335000001
784	789	Clay	88	0	235.32551	175.99980639999998
785	790	Van Buren	122	0	298.5411	183.7175
786	791	Clay	415	0	973.9989	733.9993365000003
787	792	Cicero	231	0	632.9602	433.5065
788	793	Clay	3	0	3	3
789	794	Clay	393	0	963.90496	714.6365055000001
790	795	Clay	761	5	2140.679	1561.6263125700002
791	796	Van Buren	63	0	143.0846	105.71175090000001
792	797	Van Buren	132	0	346.1886	207.96221159999993
793	798	Van Buren	816	0	1186.4821	925.4249635199999
794	799	Clay	5	0	5	5
795	800	Lysander	544	0	1645.1444	1114.29
796	801	Cicero	468	9	1216.543	883.5428
797	802	Clay	95	0	220.2271	165.1703
798	803	Clay	229	0	507.4316	409.577
799	804	Cicero	47	0	97.710584	85.34216
800	805	Cicero	0	2	2	0
801	806	Cicero	7	0	18.200000	14
802	807	Cicero	513	0	1115.5235	809.7353800200001
803	808	Clay	267	4	683.17448	506.5891392000001
804	809	Van Buren	383	15	897.89600	562.6205
805	810	Van Buren	110	0	243.7837	157.56747159999998
806	811	Van Buren	93	0	234.00019	142.0001
807	812	Van Buren	331	0	892.87663	673.7801

	TAZ	Town_City	HH	HH_GQ	pop	veh
808	813	Clay	1305	3	3111.0291	2320.6888863000004
809	814	Van Buren	243	0	583.2	363.528
810	815	Lysander	245	4	742.51676	502.8947
811	816	Lysander	133	0	376.58464	260.0227
812	817	Cicero	471	0	843.9591	730.7573
813	818	Sullivan	23	0	58.54546	47.045460399999996
814	819	Sullivan	50	0	101.11110	86.66666
815	820	Clay	29	0	70.999960	49.99999
816	821	Lysander	103	0	194.99998	154
817	822	Lysander	154	0	346.50013	252.99997800000003
818	823	Lysander	185	0	413.7635	307.33874249999997
819	824	Lysander	190	0	426.96637	347.97751400000004
820	825	Lysander	134	0	319.61449	227.30347640000002
821	826	Clay	398	0	1051.493	763.4265
822	827	Clay	628	0	1702.963	1212.0190875999997
823	828	Cicero	625	0	1703.698	1192.9
824	829	Clay	103	0	221.14705	180.7549
825	830	Cicero	226	0	519.906	400.0093102000001
826	831	Clay	614	0	1603.165	1160.3293223800001
827	832	Clay	3	0	3	3
828	833	Clay	344	0	983.4722	690.156
829	834	Cicero	227	0	461.28895	368.61465369999996
830	835	Lysander	185	0	489.22204	376.16649399999994
831	836	Lysander	329	0	852.49158	639.823
832	837	Clay	542	0	1380.197	913.2747
833	838	Clay	573	0	1562.307	1130.638
834	839	Lysander	209	0	519.29443	376.9694
835	840	Lysander	98	0	200.89999	155.1667
836	841	Clay	994	0	2745.579	1916.0463280000001
837	842	Lysander	263	0	544.8608	411.789
838	843	Sullivan	168	0	355.26128	302.8281
839	844	Lysander	306	0	864.35012	574.2465247800001
840	845	Lysander	196	0	578.8839	372.62809500000003
841	846	Lysander	686	4	1760.3032	1225.941
842	847	Lysander	154	0	337.99992	256.9999
843	848	Lysander	193	0	492.6221	387.34945600000003
844	849	Cicero	229	0	547.0002	420.00024379999996
845	850	Cicero	503	0	1080.7032	840.6576627999999
846	851	Clay	1377	2	3564.129	2687.823
847	852	Cicero	123	0	334.2394	221.935
848	853	Cicero	224	0	473.3862	338.9864
849	854	Cicero	31	0	86.79995	57.86664
850	855	Cicero	401	0	1221.176	779.2806472599999

TAZ		Town_City	HH	HH_GQ	pop	veh
851	856	Cicero	138	0	388.0603	255.2481
852	857	Clay	456	0	892.894	806.2796786399999
853	858	Clay	728	0	1876.58	1420.9532864799999
854	859	Clay	1119	0	2507.5863	1813.293
855	860	Sullivan	161	0	411.97060	323.57837316000007
856	861	Clay	648	0	1934.017	1315.9701936000001
857	862	Clay	8	0	18.285695	14.85713
858	863	Clay	234	0	611.6847	459.7898
859	864	Clay	142	0	345.73934	271.65231900000003
860	865	Sullivan	73	0	163.6971	136.0456
861	866	Cicero	443	0	1168.3861	823.0143486000001
862	867	Clay	330	0	772.6818	611.7067
863	868	Clay	219	0	470.85	394.2
864	869	Lysander	318	0	916.014	622.9764
865	870	Lysander	600	0	1357.448	985.1072999999999
866	871	Cicero	118	0	287.625	213.875
867	872	Cicero	8	0	17.6	12.8
868	873	Cicero	610	0	1721.1505	1150.835
869	874	Cicero	362	0	792.81009	634.2479571599999
870	875	Cicero	476	0	1334.362	892.9186
871	876	Clay	97	0	0	0
872	877	Clay	0	0	0	0
873	878	Lysander	548	0	938.82919	732.4127133999998
874	879	Clay	109	0	238.71000	196.20000000000002
875	880	Clay	7	0	14	14
876	881	Clay	12	0	29.142827	23.999975999999997
877	882	Clay	69	0	163.47689	127.38459150000001
878	883	Lysander	32	0	92.63152	67.36839
879	884	Cicero	922	0	2545.2424	1787.0637339999996
880	885	Cicero	282	0	790.3948	548.113
881	886	Cicero	180	0	460.5589	327.8212740000001
882	887	Clay	401	0	601.5	601.5
883	888	Clay	15	0	33.21431	27.857163000000007
884	889	Clay	23	0	61.681860	46.00004
885	890	Lysander	367	0	884.7914	658.6042907000001
886	891	Lysander	265	0	693.6449	526.8323755000001
887	892	Lysander	218	0	572.1214	439.07
888	893	Clay	30	0	73.84618	60.000012000000005
889	894	Clay	6	0	10.800000	10.8
890	895	Lysander	641	7	1438.288	1061.7211640699998
891	896	Lysander	261	0	696.3527	532.5671
1106	1112	Clay	210	0	482.5532	366.383
1103	1109	Clay	9	0	19.800000	17.1

	TAZ	Town_City	HH	HH_GQ	pop	veh
1104	1110	Clay	12	0	26.999996	23.999997600000004
1105	1111	Clay	10	0	22.72727	20
892	898	Clay	73	0	180.913	139.6522
893	899	Clay	48	0	91.636372	91.63637
894	900	Clay	26	0	72.8	54.599999999999994
895	901	Clay	84	0	204.95999	168
896	902	Cicero	483	0	1208.099	879.7071
897	903	Cicero	143	0	278.3119	216.80650419999998
898	904	Cicero	196	0	363.99993	293.9999
899	905	Cicero	183	0	432.66423	320.2499451000001
900	906	Clay	33	0	87.57689	68.53845
901	907	Clay	101	0	234.32	193.92000000000004
902	908	Clay	119	0	261.80001	218.33914725000005
903	909	Lysander	404	0	1028.3643	729.2991031999999
904	910	Lysander	95	0	212.28394	181.79009050000002
905	911	Schroeppe	65	0	123.6066	109.75410550000001
906	912	Cicero	303	0	669.04042	516.5235849000001
907	913	Cicero	89	0	230.5911	169.9092
908	914	Schroeppe	107	4	242.45719	163.04767320999997
909	915	Lysander	150	0	407.60885	311.9567
910	916	Cicero	512	0	1406.446	972.1785
911	917	Schroeppe	151	0	359.82991	231.31928580000005
912	918	Clay	198	0	487.62762	377.0426
913	919	Clay	230	0	581.6771	437.74174999999997
914	920	Schroeppe	92	0	221.6868	141.8796
915	921	Schroeppe	98	0	223.99981	149.69217760000004
916	922	Clay	333	0	854.56674	641.9281292999999
917	923	Clay	53	0	126.10331	104.1723
918	924	Schroeppe	175	0	409.0625	262.5
919	925	Schroeppe	83	0	158.35520	109.2105
920	926	Schroeppe	59	0	152.96313	100.5186
921	927	Cicero	281	0	809.57698	553.3347
922	928	Cicero	414	0	831.18500	653.908
923	929	Cicero	432	0	1181.6467	819.5293670400001
924	930	Schroeppe	90	0	189.64295	129.6429
925	931	Schroeppe	33	0	61.448273	46.655188800000005
926	932	Schroeppe	55	0	142.5509	89.79586
927	933	Cicero	128	0	269.2063	209.2698
928	934	Cicero	139	0	312.75	234.0515
929	935	Schroeppe	151	0	252.7152	191.8958
930	936	Hastings	78	0	166.02850	145.97136840000002
931	937	Hastings	136	0	287.232	216.51200000000006
932	938	Hastings	175	0	390.21707	329.34760600000004

	TAZ	Town_City	HH	HH_GQ	pop	veh
933	939	Hastings	111	0	253.71415	184.18669560000004
934	940	Hastings	147	0	376.6878	266.4376
935	941	Hastings	233	0	303.7321	255.88396219000006
936	942	Hastings	108	0	246.40778	181.39808520000005
937	943	Hastings	92	0	207.6218	152.9191
938	944	Hastings	203	7	515.64065	345.55633181999997
939	945	Hastings	128	0	241.2742	227.68127488000002
940	946	Hastings	230	0	625.7863	421.4717
941	947	Hastings	28	0	64.16666	51.33332119999999
942	948	Hastings	114	0	274.08533	223.14910619999998
943	949	Hastings	24	0	59.47831	48.00004
944	950	Hastings	22	0	70.4	49.5
945	951	Hastings	146	0	284.76029	264.2479
946	952	Hastings	24	0	60.57142	46.85713200000001
947	953	Hastings	95	0	251.32914	193.6076
948	954	Hastings	4	0	13	9
949	955	West Monr	110	0	276.1	218.9
950	956	Hastings	132	0	357.8184	270.5456
951	957	Sullivan	60	0	147.8572	117.8572
952	958	Sullivan	58	0	129.7091	111.7818
953	959	Sullivan	142	6	355.38095	276.8487
954	960	Sullivan	278	0	632.68958	532.5669
955	961	Sullivan	94	0	230.82210	187.99992480000003
956	962	Sullivan	30	0	70.000019	60.00001
957	963	Sullivan	95	0	187.8888	165.7221
958	964	Sullivan	309	0	737.33771	600.9515275500002
959	965	Sullivan	69	0	154.1719	131.5313
960	966	Sullivan	85	0	218.7193	173.1096
961	967	Sullivan	184	0	407.9544	342.76579655999996
962	968	Sullivan	8	0	18.285695	14.85713
963	969	Sullivan	37	0	85.970613	70.73530500000001
964	970	Sullivan	33	0	89.71875	69.09375
965	971	Sullivan	17	0	44.625	35.0625
966	972	Sullivan	12	0	22.909076	18.545441999999998
967	973	Sullivan	53	0	138.21565	102.8823
968	974	Sullivan	44	0	108.39020	87.99997
969	975	Sullivan	110	0	278.17276	212.59594399999997
970	976	Sullivan	45	0	122.143	91.0715
971	977	Sullivan	93	0	240.3372	189.13500209999998
972	978	Sullivan	25	0	62.500017	52.08334
973	979	Sullivan	42	0	99.07689	82.92304
974	980	Sullivan	97	0	245.66298	196.1086
975	981	Sullivan	73	0	183.54265	142.87130029999997

	TAZ	Town_City	HH	HH_GQ	pop	veh
976	982	Sullivan	188	0	465.72736	364.25
977	983	Sullivan	8	0	20	17
978	984	Sullivan	89	0	218.2618	174.8214
979	985	Sullivan	25	0	67.045487	48.86366
980	986	Sullivan	95	0	261.51655	191.06717300000003
981	987	Sullivan	32	0	75.03443	60.68961
982	988	Sullivan	126	0	331.0171	258.4068
983	989	Sullivan	133	0	342.00022	233.2779
984	990	Sullivan	54	0	124.61547	104.88472379999999
985	991	Sullivan	35	0	82.35292	66.91174
986	992	Sullivan	510	0	1207.107	848.9307
987	993	Sullivan	157	0	339.98602	284.76532829999996
988	994	Sullivan	78	0	168.64862	122.27025720000003
989	995	Sullivan	339	8	792.067	545.9354310000001
990	996	Sullivan	494	0	1189.654	818.3543
991	997	Sullivan	125	0	273.7069	200.43102374999998
992	998	Sullivan	293	6	789.212	587.1273
993	999	Sullivan	8	0	22.85712	19.428551999999996
994	1000	Sullivan	34	0	78.96764	61.419279599999996
995	1001	Sullivan	33	0	83.03224	65.99998
996	1002	Sullivan	33	0	84.09667	63.870882900000005
997	1003	Sullivan	67	0	148.04837	127.51610849999999
998	1004	Sullivan	37	0	77.264735	71.82355640000002
999	1005	Sullivan	22	0	52.8	42.9
1000	1006	Sullivan	104	0	232.4081	170.85705520000002
1001	1007	Sullivan	73	0	155.52176	135.4203
1002	1008	Sullivan	37	0	93.0287	72.94296179999999
1003	1009	Granby	47	0	108.95450	81.18179810000001
1004	1010	Schroeppe	60	0	135.7894	109.4736
1005	1011	Schroeppe	145	0	382.75745	284.6691
1006	1012	Schroeppe	83	0	221.6838	160.747
1007	1013	Schroeppe	30	0	73.33327	57.77772899999999
1008	1014	Schroeppe	42	0	109.2	84
1009	1015	Schroeppe	36	0	83.647000	66.70582920000001
1010	1016	Schroeppe	18	0	41.999990	33
1011	1017	Schroeppe	71	0	171.67147	135.6417
1012	1018	Schroeppe	32	0	75.35485	60.903248000000005
1013	1019	Schroeppe	36	0	108	77.625
1014	1020	Schroeppe	44	0	121	90.2
1015	1021	Schroeppe	70	0	180.3031	134.697
1016	1022	Schroeppe	16	0	33.142854	28.57143
1017	1023	Schroeppe	226	0	598.73938	437.0047
1018	1024	Schroeppe	59	0	138.7593	110.3519

	TAZ	Town_City	HH	HH_GQ	pop	veh
1019	1025	Schroeppe	100	0	246.87505	188.54172999999997
1020	1026	Schroeppe	32	0	81.142918	64.00005
1021	1027	Schroeppe	49	0	127.39994	99.08881919999999
1022	1028	Schroeppe	57	0	127.15391	103.03848960000002
1023	1029	Schroeppe	212	0	452.76357	368.60279515999997
1024	1030	Schroeppe	49	0	105.45662	89.47833
1025	1031	Schroeppe	58	0	146.07398	114.9259
1026	1032	Schroeppe	278	0	709.9688	534.6152
1027	1033	Schroeppe	104	0	291.41687	211.2501
1028	1034	Schroeppe	178	0	411.42509	327.2216
1029	1035	Schroeppe	30	0	68.000007	55.00001099999999
1030	1036	Schroeppe	64	0	159.4576	123.66102400000001
1031	1037	Schroeppe	11	0	21.083331	19.25
1032	1038	Schroeppe	22	0	42.900000	37.400000000000006
1033	1039	Schroeppe	41	0	109.7026	83.10804
1034	1040	Hastings	73	0	172.4492	122.72462890000003
1035	1041	Hastings	41	0	102.5	74.44736
1036	1042	Hastings	196	0	470.1856	343.80311783999997
1037	1043	Hastings	57	0	157.27790	107.66675850000001
1038	1044	Hastings	32	0	82.285731	59.42857599999999
1039	1045	Hastings	12	0	28.363627	23.99999
1040	1046	Hastings	126	0	359.84780	239.18662656000004
1041	1047	Hastings	37	0	91.97151	67.65721210000001
1042	1048	Hastings	19	0	58.11766	41.35293949999999
1043	1049	Hastings	28	0	64.61544	53.84620360000001
1044	1050	Hastings	35	0	88.529371	67.94114
1045	1051	Hastings	75	0	213.38017	155.2816
1046	1052	Hastings	114	0	308.22227	232.22222711999996
1047	1053	Hastings	43	0	96.23809	80.88094
1048	1054	Hastings	102	0	302.84529	215.567
1049	1055	Hastings	84	0	191.10000	163.8
1050	1056	Hastings	113	0	266.5096	220.66993463999995
1051	1057	Hastings	83	0	207.5	163.8718
1052	1058	Hastings	111	0	284.9711	220.93261733999998
1053	1059	Hastings	43	0	117.7382	89.07146420000001
1054	1060	Hastings	118	0	334.86469	246.63047840000002
1055	1061	Hastings	68	0	199.75	142.375
1056	1062	Hastings	12	0	20.72726	21.81817
1057	1063	Hastings	27	0	78.84	57.24
1058	1064	Hastings	25	0	70.65226	52.173982499999994
1059	1065	Hastings	61	0	171.4311	125.1552
1060	1066	Hastings	30	0	84.642861	63.21429
1061	1067	Hastings	95	0	239.06583	188.956

	TAZ	Town_City	HH	HH_GQ	pop	veh
1062	1068	West Monr	26	0	67	52.000012999999996
1063	1069	West Monr	36	0	87.272679	70.90905599999999
1064	1070	West Monr	35	0	90.58819	69.99998
1065	1071	West Monr	20	0	41.11112	37.77778
1066	1072	West Monr	63	0	137.9482	120.5689
1067	1073	West Monr	26	0	60.00005	53.000019800000004
1068	1074	West Monr	100	0	290.3227	209.6775
1069	1075	West Monr	135	0	340.1571	261.4958
1070	1076	West Monr	39	0	89.14295	73.54292
1071	1077	West Monr	54	0	146.1175	109.05874019999997
1072	1078	West Monr	80	0	188.1081	155.67564800000002
1073	1079	West Monr	113	0	284.08414	219.66362331000002
1074	1080	West Monr	52	0	133.7143	101.8776
1075	1081	West Monr	85	0	198.33325	165.80237699999998
1076	1082	West Monr	70	0	182.42431	142.12128700000002
1077	1083	West Monr	73	0	198.6028	145.9999
1078	1084	West Monr	63	0	159.1016	125.99994960000001
1079	1085	Hastings	39	0	101.18912	77.99995
1080	1086	West Monr	51	0	124.31253	98.81253
1081	1087	West Monr	109	0	251.86423	208.4758
1082	1088	West Monr	87	0	205.14809	168.6296
1083	1089	West Monr	33	0	79.199937	64.89995
1084	1090	Schroeppe	6	0	18.99999	13
1085	1091	Schroeppe	27	0	69.99994	53.999959499999996
1086	1092	Schroeppe	18	0	43.41174	33.88234
1087	1093	Schroeppe	20	0	57.64707	42.35295000000001
1088	1094	Schroeppe	7	0	18.99998	14.999984999999999
1089	1095	Schroeppe	76	0	194.8169	145.57751359999997
1090	1096	West Monr	18	0	39.375	32.625
1091	1097	West Monr	38	0	103.44441	74.94443600000001
1092	1098	Hastings	18	0	50.00002	37.00001159999999
1093	1099	Hastings	99	0	274.883	206.4256
1094	1100	Sullivan	25	0	56.250002	52.08334
1095	1101	Sullivan	22	0	64.84209	46.315772800000005
1109	8001	Geddes	0	0	0	0
1110	8002	Syracuse	0	0	0	0
1111	8003	Onondaga	0	984	984	0
1112	8004	Onondaga	0	0	0	0
1113	8005	Syracuse	0	20	20	0
1114	8006	Syracuse	0	2596	2596	0
1115	8007	Syracuse	0	0	0	0
1116	8008	Syracuse	0	0	0	0
1117	8009	Syracuse	0	0	0	0

	TAZ	Town_City	HH	HH_GQ	pop	veh
1118	8010	Dewitt	5	1281	1286	5
1119	8011	Syracuse	0	74	74	0
1120	8012	Syracuse	0	3053	3053	0
1121	8013	Syracuse	0	0	0	0
1122	8014	Syracuse	0	0	0	0
1123	8015	Syracuse	0	0	0	0
1124	8016	Dewitt	0	0	0	0

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
0	1	Tully	217	0	526	542.96778	557.5116	574.4793115799997
1	2	Tully	316	0	720.56022	745.643	766.16530	788.9678390199998
2	3	Tully	133	0	362.0001	375.60914	389.2182	402.82719920000005
3	4	Spafford	280	0	685.84216	707.8871	725.03314	744.6286352000002
4	5	Tully	303	2	697.05688	699.3508	703.9386	708.5265
5	6	Fabius	125	0	308	315.392	322.784	332.6400000000001
6	7	Fabius	157	0	399.0004	406.6246	414.24880	424.4144
7	8	Tully	112	0	310.7746	330.198	346.8467	366.27008219999993
8	9	Fabius	198	0	501.0615	508.6533	516.2451	526.3676
9	10	Fabius	248	0	621.99980	639.55625	654.6046	672.1611
10	11	Otisco	113	0	277.0958	284.45234	291.8089	301.6175680500001
11	12	Otisco	384	0	910.1838	912.55402	917.2946	922.0351
12	13	Otisco	148	0	382.4158	390.1675	397.9192	408.2547
13	14	Otisco	176	0	467.0005	469.65393	474.9608	480.26758286000006
14	15	Otisco	157	0	399.4554	401.9997	407.0883	412.1769
15	16	Spafford	232	0	536.3673	531.74339	529.4315	529.4315
16	17	Spafford	212	0	498.4255	491.3723	486.67015	481.968
17	18	Lafayette	89	0	201.00004	216.809	230.3596	243.9102
18	19	Lafayette	351	0	845.9997	853.23048	860.46124	870.1023
19	20	Lafayette	154	5	413.39185	421.34753	429.3032	439.9108
20	21	Lafayette	197	0	482.5505	489.899	497.2475	507.04547328000007
21	22	Pompey	239	0	633.50592	630.85527	630.85527	630.8552712000002
22	23	Pompey	245	0	613.99915	619.0114	624.02363	631.542
23	24	Pompey	127	0	325.9998	328.56672	333.7006	338.8344
24	25	Skaneatele	400	0	955.31871	960.09530	964.8719	969.6485
25	26	Skaneatele	167	4	378.779	383.2674	387.7558	394.48833789999986
26	27	Lafayette	120	0	270.25186	283.76445	295.025	306.2854
27	28	Lafayette	55	0	151.0001	156.4911	161.98197	170.21834640000003
28	29	Lafayette	251	0	539.148	541.29599	545.59200	549.8880000000001
29	30	Pompey	120	0	286.6112	298.5533	308.107	317.6607
30	31	Pompey	89	5	227.9685	230.4738	235.4843	240.49487240000005
31	32	Pompey	80	0	200.4937	208.0123	215.5308	225.55546200000003
32	33	Pompey	150	0	392.00053	410.29389	423.3606	439.0406
33	34	Pompey	59	0	140.3794	147.51733	154.65527	164.17252109999998
34	35	Pompey	51	0	122.59609	127.4038	132.2115	139.423
35	36	Marcellus	102	0	252.52449	262.4274	272.3303	282.2333
36	37	Marcellus	23	0	43.00001	44.869572	46.73914	48.608703000000006
37	38	Marcellus	80	0	194.5679	201.8642	209.1605	218.8889
38	39	Lafayette	253	0	537.87340	552.7553	565.5112	580.393
39	40	Skaneatele	293	3	636.51256	658.1342	675.43143	694.8908607999999
40	41	Skaneatele	17	0	37.1875	37.1875	37.1875	37.1875
41	42	Skaneatele	212	0	517.28000	514.84	512.4	512.4
42	43	Onondaga	120	0	290.9998	293.4248	298.27476	303.1248

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
43	44	Onondaga	216	0	564.6144	567.2284	572.4563	577.6842
44	45	Lafayette	83	0	204	208.9157	213.8314	218.747
45	46	Lafayette	76	0	193.9999	204.2104	214.421	224.63147519999995
46	47	Pompey	79	0	195.9999	203.44291	208.4049	215.848
47	48	Pompey	272	7	706.01018	723.9994	739.4188	754.8381064000001
48	49	Onondaga	72	4	190.0778	192.6622	197.8311	202.9999
49	50	Onondaga	92	0	208.9999	211.27161	215.81509	220.3586
50	51	Onondaga	225	0	548.0004	548.0004	548.0004	548.0004
51	52	Onondaga	6	0	13.714271	15.99998	20.57141	25.142832000000002
52	53	Marcellus	111	0	283.4466	298.768	311.5359	324.30375575999994
53	54	Marcellus	183	0	462.52779	492.8575	515.6048	540.8795
54	55	Marcellus	83	0	199.59517	211.619	223.64278	235.66658780000003
55	56	Onondaga	306	0	436.00052	436.00052	436.00052	436.00052592000014
56	57	Skaneatele	241	0	581.0001	578.5894	576.1786	576.1786
57	58	Skaneatele	185	0	439.63508	437.2587	434.8823	434.8823
58	59	Skaneatele	494	0	953.9312	950.0692	946.2071	944.2761
59	60	Onondaga	189	0	442.9997	445.3437	447.6876	450.0315
60	61	Lafayette	241	0	552.0001	618.4234	671.10390	723.7844
61	62	Marcellus	109	0	270.5183	287.891	302.782	320.1547
62	63	Onondaga	361	0	900.0001	902.49316	907.4793	912.4655
63	64	Skaneatele	150	0	381.5433	378.9997	378.9997	378.9997
64	65	Skaneatele	318	0	776.4422	830.15837	871.66629	913.1742
65	66	Skaneatele	42	0	116.2325	116.2325	116.2325	116.2325
66	67	Onondaga	202	0	502.5119	495.0488	490.0735	485.0981
67	68	Pompey	153	0	424.77593	471.97326	510.8416	549.7100333999998
68	69	Pompey	237	6	612.1153	683.72387	739.98774	798.8091
69	70	Pompey	316	0	953.2144	959.2474	965.2804	974.3299
70	71	Lafayette	125	0	310.97546	358.2437	395.5608	435.3656
71	72	Pompey	127	0	306.9998	306.9998	306.9998	306.9998
72	73	Pompey	195	0	596.9382	655.1014	701.01970	746.9380216000002
73	74	Marcellus	413	0	821.0125	832.94001	842.8796	852.8192501400001
74	75	Onondaga	12	0	20.72726	20.72726	20.72726	20.72726
75	76	Onondaga	256	0	632.0615	624.6545	619.7165	617.2476
76	77	Onondaga	212	0	492.3218	494.6441	499.2887	503.9332
77	78	Marcellus	111	0	317.8638	357.95469	392.31834	426.682
78	79	Marcellus	17	0	40.375	40.375	40.375	42.75
79	80	Marcellus	15	0	32.8125	32.8125	32.8125	35
80	81	Onondaga	425	0	955.2481	941.76229	932.7717	926.0288
81	82	Onondaga	286	0	754.4659	770.2939	783.4838	796.6737923800001
82	83	Skaneatele	493	0	1186.593	1208.2550	1227.51	1246.765
83	84	Manlius	16	0	47.99999	47.999991	47.999991	47.99999199999999
84	85	Manlius	145	0	424.93035	433.722	439.5831	448.3748
85	86	Manlius	345	0	766.9995	771.44590	775.8923	780.3387

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
86	87	Manlius	215	0	495	501.9069	506.51157	513.4186
87	88	Marcellus	200	0	490.09937	490.09937	492.5499	495.00036571999993
88	89	Marcellus	207	0	415.0045	415.0045	415.0045	417.0094
89	90	Dewitt	373	0	999.84757	1090.986	1160.6809	1233.056
90	91	Dewitt	50	0	147	167.58000	185.22000	205.8
91	92	Marcellus	142	0	352.00008	369.3522	384.2254	401.5776
92	93	Marcellus	156	0	406.99978	443.52540	472.22410	503.5318
93	94	Marcellus	133	0	335.00008	357.66925	375.30084	392.9324
94	95	Onondaga	630	4	1571.2399	1693.136	1787.6683	1882.2002422000003
95	96	Syracuse	758	0	1652.18	1647.8206	1645.641	1645.641
96	97	Manlius	62	0	122.03170	135.80947	147.61899	159.42851729999995
97	98	Manlius	619	0	1373.852	1378.2913	1382.73	1387.169
98	99	Syracuse	763	0	1277.001	1273.6532	1271.98	1271.98
99	100	Syracuse	311	7	640.7729	639.73508	640.73508	641.7350872000001
100	101	Onondaga	456	7	1261.738	1261.738	1261.738	1261.738
101	102	Syracuse	326	24	768.8773	766.59243	767.59243	768.5924382499999
102	103	Marcellus	242	0	610.99979	679.1692	732.1898	787.7353
103	104	Marcellus	152	0	395.40518	434.4254	465.6416	499.4591846400001
104	105	Manlius	710	1	1590.001	1596.7154	1603.43	1612.3816359999998
105	106	Dewitt	236	6	536.0172	578.6881	612.3756	646.0631460000002
106	107	Syracuse	33	0	58.99996	58.99996	58.99996	58.99996
107	108	Syracuse	40	0	96	96	96	96
108	109	Syracuse	290	0	641	638.7896	638.7896	638.7896
109	110	Syracuse	49	0	103.00000	103.00000	103.00000	103.00000409999998
110	111	Onondaga	241	1	690.00024	801.49820	887.26586	975.8925
111	112	Onondaga	171	0	482.9998	536.6665	579.0349	624.2278
112	113	Onondaga	11	0	31.99998	34.90907	37.818155	43.636333500000006
113	114	Dewitt	35	0	83.382397	95.29417	104.8236	114.353
114	115	Manlius	791	0	2182.93	2182.93	2182.93	2182.93
115	116	Onondaga	541	10	1502.413	1665.1714	1789.3093	1916.206
116	117	Onondaga	643	0	1781.771	1801.1685	1817.795	1837.192
117	118	Syracuse	696	0	852.00027	849.1037	847.4313	846.9830327100003
118	119	Syracuse	705	0	1428.9995	1408.73	1392.514	1378.326
119	120	Manlius	222	0	561.0004	712.6221	831.3924	950.1628
120	121	Syracuse	314	0	777.04989	754.7778	737.455	722.6069
121	122	Syracuse	127	0	275	272.83467	272.83467	272.83467455999994
122	123	Syracuse	331	0	731.35269	713.6765	700.4194	689.3717
123	124	Onondaga	78	0	172.2077	172.2077	174.41549	176.62328800000003
124	125	Manlius	390	0	831.62997	827.3652	825.23281	823.1004324400002
125	126	Manlius	156	0	309.40007	307.4167	305.4334	305.4334
126	127	Manlius	373	0	689.64792	685.9501	684.10116	682.2522401399998
127	128	Syracuse	276	7	633.8721	615.70194	602.07428	590.7179062999999
128	129	Dewitt	2	0	3	3	3	3

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
129	130	Syracuse	116	0	288.5127	288.5127	288.5127	288.5127
130	131	Syracuse	86	0	207.5864	207.5864	207.5864	207.5864
131	132	Syracuse	89	0	213.80453	213.80453	213.80453	213.80453980000001
132	133	Onondaga	203	14	416.2406	467.7591	507.38868	548.9998
133	134	Manlius	266	0	520.9582	520.9582	520.9582	522.9167
134	135	Manlius	185	0	446.4128	446.4128	446.4128	448.82587524000013
135	136	Manlius	198	0	421.1269	429.6345	436.01523	444.52285240000003
136	137	Manlius	196	0	555.3336	691.3336	796.16700	901.0004
137	138	Onondaga	383	0	1003.62	1019.342	1032.4443	1048.167
138	139	Onondaga	119	0	284.9995	287.3945	292.1844	296.9743
139	140	Onondaga	0	0	0	0	0	0
140	141	Onondaga	79	0	130.99996	132.65819	134.3164	135.97464680000002
141	142	Onondaga	451	6	750.1003	764.94927	778.14838	791.3475067199997
142	143	Syracuse	94	1	250.3471	250.3471	250.3471	250.3471
143	144	Syracuse	210	14	498.9777	485.12119	475.88352	468.9553
144	145	Syracuse	362	0	944.0007	923.1388	907.49240	894.4537
145	146	Syracuse	24	0	45.91305	45.913051	45.913051	45.91305120000001
146	147	Syracuse	15	0	38.4375	38.4375	38.4375	38.4375
147	148	Syracuse	836	0	1445.2708	1441.8132	1440.0844	1438.3556678400007
148	149	Syracuse	291	0	695.00007	680.6702	668.72859	659.1753263999999
149	150	Syracuse	487	5	1310.2783	1283.476	1264.714	1245.952
150	151	Syracuse	192	6	450.12195	447.8088	445.4957	446.4957
151	152	Onondaga	6	0	19.000038	22.166711	25.33338	31.666729999999998
152	153	Onondaga	13	0	29.7143	29.7143	32.000009	34.28573
153	154	Manlius	82	0	146.79021	146.79021	148.5803	150.3705
154	155	Syracuse	295	4	598.09673	596.0828	596.0828	597.0828
155	156	Dewitt	445	0	1018.1510	1029.591	1041.031	1052.4707079999996
156	157	Syracuse	158	0	427.0001	424.2976	424.2976	424.2976
157	158	Syracuse	283	4	748.84103	727.78545	714.6257	701.4659867999999
158	159	Dewitt	241	0	603.01339	603.01339	603.01339	603.0133974800002
159	160	Dewitt	313	0	781.4967	788.987	793.98062	801.4710088200002
160	161	Dewitt	242	0	543.4384	541.19278	541.19278	541.1927812000001
161	162	Dewitt	59	0	139.99984	139.99984	139.99984	139.99984919999997
162	163	Onondaga	361	0	713.02469	829.5578	918.43901	1009.295
163	164	Onondaga	353	0	945.9997	975.4785	999.5974	1026.396
164	165	Onondaga	100	0	250.5049	268.04021	283.07050	300.6058
165	166	Manlius	103	0	231.9999	234.2524	236.5048	238.75722807999998
166	167	Syracuse	127	0	324.5557	322.00016	322.00016	322.00016057999994
167	168	Syracuse	19	0	44.70592	44.70592	44.70592	44.70592
168	169	Dewitt	31	0	73.625	73.625	76	78.375
169	170	Syracuse	177	0	461.39313	445.7527	435.32573	427.5055
170	171	Syracuse	700	0	1580.376	1575.86	1573.6025	1573.6025487700006
171	172	Camillus	196	0	532.28428	573.02032	605.6092	640.9137290399998

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
172	173	Syracuse	251	0	599.7794	585.4421	573.4943	563.936
173	174	Syracuse	34	0	97.27775	97.27775	97.27775	97.27775
174	175	Manlius	54	0	153.1636	150.32723	150.32723	150.32723900000005
175	176	Manlius	126	0	333.648	407.792	466.048	526.952
176	177	Syracuse	265	9	603.06574	600.824	600.824	600.824
177	178	Manlius	522	0	1212.322	1216.9667	1221.612	1228.5790388500004
178	179	Dewitt	340	4	845.47511	843.00019	843.00019	843.0001919800003
179	180	Syracuse	144	0	293.00002	290.9653	290.9653	290.9653
180	181	Syracuse	201	0	326.9999	325.37306	325.37306	325.37306999999987
181	182	Syracuse	76	0	205.29867	205.29867	205.29867	205.29867840000003
182	183	Syracuse	33	0	88.323549	88.323549	88.323549	88.32354959999999
183	184	Syracuse	61	1	174.00011	174.00011	174.00011	174.00011750000004
184	185	Dewitt	268	9	601.31883	601.31883	601.31883	603.5289780999999
185	186	Syracuse	24	0	53.00003	53.00003	53.00003	53.00003
186	187	Manlius	646	5	1173.7628	1175.572	1177.381	1179.1905880099996
187	188	Manlius	113	0	289.5627	287.0002	287.0002	287.0002
188	189	Syracuse	218	0	562.0002	559.42220	559.42220	559.4222046699998
189	190	Syracuse	101	0	271.31363	271.31363	271.31363	271.3136396599999
190	191	Onondaga	373	0	881.3634	886.08921	890.81501	897.9037327999997
191	192	Syracuse	379	0	970.9998	968.4378	965.8758	965.8758
192	193	Syracuse	143	0	346.4224	343.99990	343.99990	343.9999061000001
193	194	Elbridge	135	5	323.56154	328.28097	333.0004	340.07954988000006
194	195	Elbridge	217	0	531.55043	541.34859	548.6972	558.4953844800001
195	196	Syracuse	194	0	369.0002	367.09816	367.09816	367.0981667199998
196	197	Onondaga	1	0	2	2	2	2
197	198	Onondaga	24	0	52.173947	76.087007	93.47832	113.0436
198	199	Syracuse	95	0	253.3333	253.3333	253.3333	253.3333
199	200	Syracuse	167	0	455.7293	453.0004	453.0004	453.0004
200	201	Syracuse	217	0	562.59294	547.0374	536.667	528.8892167999999
201	202	Manlius	450	0	880.95744	882.91512	884.87281	888.7882
202	203	Syracuse	145	0	328.99999	326.731	326.731	326.731
203	204	Syracuse	281	5	720.7185	695.24808	677.4188	663.1365522000001
204	205	Syracuse	12	0	30.545443	30.545443	30.545443	30.54544320000001
205	206	Syracuse	99	0	262.9999	262.9999	262.9999	262.9999
206	207	Syracuse	91	0	225.52182	225.52182	225.52182	225.52182380000005
207	208	Dewitt	576	4	1393.352	1400.5881	1407.824	1415.061
208	209	Onondaga	322	0	590.0003	593.6649	597.32950	600.9941
209	210	Onondaga	76	5	180.4568	180.4568	182.7654	185.0741
210	211	Syracuse	262	8	557.13639	555.0405	553.94451	554.9445169999998
211	212	Syracuse	483	5	1165.583	1163.18	1160.777	1160.777
212	213	Camillus	225	0	560.9868	645.75818	713.0766	780.3950217899999
213	214	Camillus	294	0	798.4534	1045.594	1238.418	1431.241
214	215	Camillus	41	0	56.99998	58.390218	59.780461	62.56095

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
215	216	Onondaga	128	1	283.58461	285.7923	288.00000	290.2076965400001
216	217	Syracuse	258	4	540.67939	538.59924	538.59924	538.5992438999999
217	218	Syracuse	173	0	343.9995	342.0111	342.0111	342.0111
218	219	Dewitt	124	0	337.00009	337.00009	337.00009	337.0000972800001
219	220	Dewitt	276	5	598.10633	598.10633	600.2553	602.4042079999998
220	221	Syracuse	170	0	421.00020	408.61784	398.71195	391.2825443999999
221	222	Syracuse	158	0	443.0005	440.1967	440.1967	440.1967
222	223	Syracuse	120	21	306.95702	304.574	304.574	304.574
223	224	Syracuse	57	0	142.00005	142.00005	142.00005	142.0000586999999
224	225	Syracuse	74	0	195.9999	195.9999	195.9999	195.9999
225	226	Manlius	466	6	1187.784	1187.784	1187.784	1187.784
226	227	Syracuse	68	42	238.5819	233.8	231.9091	232.9091
227	228	Manlius	184	0	409.12953	406.90600	404.6825	404.6825
228	229	Onondaga	73	0	147.01388	147.01388	147.01388	149.02777859999998
229	230	Onondaga	130	0	255.0001	255.0001	256.96159	258.92313612000004
230	231	Syracuse	322	0	835.59588	820.02577	807.0507	796.6706088899998
231	232	Syracuse	77	0	184.9999	184.9999	184.9999	184.9999
232	233	Syracuse	94	54	256.068	251.61902	249.31970	248.0204
233	234	Syracuse	385	0	971.71582	969.19188	966.6679	966.6679
234	235	Syracuse	36	0	72	70	70	71
235	236	Syracuse	50	0	137.7552	137.7552	137.7552	137.7552
236	237	Dewitt	111	0	276.509	276.509	276.509	279
237	238	Dewitt	154	0	351.0002	353.27944	355.55866	357.83788854000005
238	239	Syracuse	534	0	1455.25	1452.525	1449.8	1449.8
239	240	Geddes	15	7	31.545471	31.545471	31.545471	31.545471999999997
240	241	Manlius	324	0	697.1516	692.8482	690.6965	690.6965
241	242	Syracuse	60	0	116.0656	116.0656	116.0656	116.0656
242	243	Syracuse	38	0	104	104	104	104
243	244	Manlius	498	0	1154.981	1187.451	1215.282	1243.113
244	245	Syracuse	170	0	427.9997	412.89382	400.30560	390.23502149999996
245	246	Syracuse	169	0	395.65909	381.612	369.9061	360.5414
246	247	Syracuse	0	0	0	0	0	0
247	248	Syracuse	83	0	291.4883	291.4883	291.4883	291.4883
248	249	Syracuse	290	16	644.49184	629.32135	618.4853	607.6492
249	250	Syracuse	206	0	522.53617	519.9996	519.9996	519.9996
250	251	Syracuse	149	0	390.0003	387.38289	387.38289	387.3828960000013
251	252	Syracuse	85	0	247.99998	245.08233	245.08233	246.0823395999998
252	253	Syracuse	140	6	322.43824	320.17797	320.17797	321.1779748000013
253	254	Dewitt	124	9	284.2427	284.2427	286.4624	288.6820740000006
254	255	Dewitt	270	4	691.36213	691.36213	693.90792	696.4537
255	256	Camillus	1304	4	2806.2974	2793.403	2784.807	2778.36
256	257	Camillus	801	0	1959.554	1949.768	1942.4292	1935.09
257	258	Geddes	452	0	988.8123	993.1876	997.5629	1004.126

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
258	259	Geddes	1	0	2	2	2	2
259	260	Syracuse	65	5	111.7856	111.7856	111.7856	111.7856
260	261	Syracuse	494	0	1095.782	1093.564	1091.3453	1091.3453964000003
261	262	Syracuse	107	0	307.87698	307.87698	307.87698	307.87698285999994
262	263	Syracuse	123	10	348.4816	345.72970	342.9778	343.9778
263	264	Camillus	159	0	312.9999	312.9999	314.9684	316.937
264	265	Camillus	262	0	568.9999	568.9999	571.1717	573.3434
265	266	Camillus	165	7	325.55487	325.55487	327.48550	329.4161
266	267	Camillus	582	4	1316.237	1309.4726	1304.963	1300.454
267	268	Geddes	503	0	1180.0004	1180.0004	1180.0004	1180.0004409899998
268	269	Syracuse	1	0	1	1	1	1
269	270	Syracuse	0	0	0	0	0	0
270	271	Syracuse	417	2	1072.864	1049.751	1031.775	1016.3672561500003
271	272	Syracuse	206	33	445.8656	426.8236	412.79	400.7606
272	273	Syracuse	4	51	64	64	64	64
273	274	Syracuse	295	49	596.12242	581.2852	570.1573	559.0294
274	275	Camillus	63	0	136	133.8412	133.8412	133.8412
275	276	Syracuse	265	0	602.9992	600.72376	600.72376	600.7237631999999
276	277	Syracuse	179	3	352.1966	350.2458	350.2458	351.2458
277	278	Syracuse	85	0	173.95329	173.95329	173.95329	173.95329049999995
278	279	Syracuse	0	668	668	681	691	701
279	280	Syracuse	1	658	660.7246	678.7246	692.7246	707.7246
280	281	Syracuse	340	20	789.47304	762.31517	741.9468	723.8415
281	282	Syracuse	0	0	0	0	0	0
282	283	Syracuse	280	31	802.89168	796.6214	793.1079	789.5943934600001
283	284	Syracuse	142	700	1016	1011.775	1010.775	1010.775
284	285	Syracuse	265	6	701.87026	688.74063	678.2369	670.3592
285	286	Syracuse	193	0	438.27069	435.99985	435.99985	435.99985920000006
286	287	Elbridge	254	0	639.5177	649.5888	659.66	669.7310946199998
287	288	Elbridge	217	4	522.06324	526.838	531.6128	538.7749590400001
288	289	Elbridge	218	0	535.5439	542.9137	550.2836	560.1101
289	290	Syracuse	151	42	468.1204	463.47642	458.8324	458.0105
290	291	Geddes	420	8	892.15905	892.15905	892.15905	892.1590519999999
291	292	Syracuse	12	0	25.000010	25.000010	25.000010	25.000010400000008
292	293	Syracuse	0	0	0	0	0	0
293	294	Syracuse	29	0	61.99996	61.99996	61.99996	61.99996
294	295	Syracuse	272	0	552.0295	550	550	550
295	296	Syracuse	337	0	812.99982	810.58736	810.58736	810.5873664000002
296	297	Geddes	444	0	990.2308	994.6913	999.1517	1003.612
297	298	Syracuse	0	428	428	442	453	465
298	299	Syracuse	0	59	59	60	62	64
299	300	Dewitt	310	0	709.71106	709.71106	709.71106	709.7110643000002
300	301	Syracuse	637	1	1006.562	986.0404	970.2545	956.0472

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
301	302	Syracuse	70	0	229.9999	229.9999	229.9999	229.9999
302	303	Syracuse	0	0	0	0	0	0
303	304	Syracuse	41	0	69.999923	69.999923	69.999923	69.99992320000001
304	305	Syracuse	47	0	101.15220	101.15220	101.15220	101.15220620000001
305	306	Syracuse	21	0	56.31824	56.31824	56.31824	56.31824
306	307	Syracuse	21	27	54.999988	57.33332	59.99999	63.99999
307	308	Syracuse	0	0	0	0	0	0
308	309	Syracuse	0	70	70	71	73	75
309	310	Syracuse	1	0	1	1	1	1
310	311	Syracuse	414	6	941.1876	938.9287	936.6698	937.6698
311	312	Syracuse	0	0	0	0	0	0
312	313	Syracuse	0	0	0	0	0	0
313	314	Syracuse	0	96	96	101	105	109
314	315	Syracuse	0	0	0	0	0	0
315	316	Syracuse	0	0	0	0	0	0
316	317	Syracuse	33	210	276	280	284	291
317	318	Syracuse	6	254	266.9961	273.9961	279.9961	286.9961
318	319	Syracuse	0	0	0	0	0	0
319	320	Syracuse	198	0	520.0003	504.2427	493.7376	485.8588
320	321	Syracuse	72	0	181	181	181	181
321	322	Syracuse	62	0	172.9999	172.9999	172.9999	172.9999
322	323	Syracuse	92	0	246.3227	246.3227	246.3227	246.3227
323	324	Manlius	241	0	593.57446	637.9078	672.38933	709.3338047999999
324	325	Manlius	136	0	279.9418	316.9929	345.8105	376.68639479999985
325	326	Syracuse	1	82	84	85	88	91
326	327	Syracuse	65	66	203.939	200.69473	199.57259	199.45045460000003
327	328	Syracuse	0	464	464	479	491	503
328	329	Syracuse	0	225	225	225	225	226
329	330	Syracuse	123	0	298.9998	296.5689	296.5689	296.5689
330	331	Syracuse	85	0	204.4048	204.4048	204.4048	204.4048
331	332	Dewitt	233	0	514.9998	514.9998	514.9998	517.2101
332	333	Dewitt	130	10	244.0001	244.0001	244.0001	244.0001
333	334	Camillus	606	4	1223.934	1219.908	1217.8950	1217.8950247300004
334	335	Syracuse	168	0	400.2352	397.8529	397.8529	397.8529
335	336	Syracuse	217	0	538.96750	524.0652	514.13028	504.1954
336	337	Syracuse	0	0	0	1	3	5
337	338	Syracuse	0	0	0	1	2	3
338	339	Syracuse	67	0	67.999968	107.58203	138.0298	168.47753339999997
339	340	Syracuse	0	0	0	0	0	0
340	341	Syracuse	0	0	0	0	0	0
341	342	Syracuse	0	0	0	0	0	0
342	343	Syracuse	196	0	219.11797	306.318	373.39491	440.47184689999983
343	344	Syracuse	0	4	4	4	4	5

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
344	345	Syracuse	136	0	273.98552	271.9709	271.9709	271.9709
345	346	Syracuse	0	62	62	64	66	69
346	347	Syracuse	208	0	453.99981	451.8171	452.8171	453.8171
347	348	Syracuse	223	0	368.2095	366.5584	366.5584	366.5584
348	349	Geddes	211	0	504.6079	504.6079	504.6079	506.9994
349	350	Camillus	501	0	1197.9102	1200.301	1202.6923	1207.474
350	351	Manlius	380	0	941.4764	991.0278	1030.669	1072.788
351	352	Manlius	52	5	126.0345	128.362	133.01720	137.6724
352	353	Syracuse	321	49	657.16467	639.21873	626.95657	617.589
353	354	Syracuse	77	0	194.4743	194.4743	194.4743	194.4743
354	355	Syracuse	0	0	0	0	0	0
355	356	Syracuse	0	0	0	0	0	0
356	357	Geddes	380	0	926.87869	929.3178	934.1962	939.0745
357	358	Syracuse	145	9	363.4445	361.00007	358.55563	359.55563499999994
358	359	Syracuse	142	0	286.0142	284.00000	284.00000	284.0000004000001
359	360	Syracuse	60	0	106	106	106	106
360	361	Syracuse	5	0	12	12	12	12
361	362	Syracuse	180	1	316.99981	315.2443	313.4887	314.4887
362	363	Syracuse	260	1	539	526.5846	518.30767	512.0999829000001
363	364	Syracuse	236	0	420.2195	418.43887	416.6583	417.6583
364	365	Syracuse	136	19	311.05120	307.7563	307.60889	309.60889490000005
365	366	Geddes	225	0	465.0669	444.3973	429.92850	417.5267
366	367	Geddes	186	0	444.60941	444.60941	444.60941	446.99978839999994
367	368	Syracuse	59	0	116.9828	116.9828	116.9828	116.9828
368	369	Syracuse	485	0	998.0574	995.9996	993.9417	993.9417
369	370	Syracuse	298	0	595.9997	593.99967	593.99967	593.9996732999998
370	371	Syracuse	0	0	0	0	0	0
371	372	Syracuse	840	0	1183.5915	1355.9506	1489.5381	1625.5346046999994
372	373	Syracuse	0	140	140	139	139	139
373	374	Syracuse	0	282	282	286	290	294
374	375	Syracuse	0	0	0	0	0	0
375	376	Syracuse	0	0	0	0	0	0
376	377	Syracuse	81	0	81	88	94	101
377	378	Syracuse	0	188	188	188	189	190
378	379	Syracuse	0	24	24	24	24	24
379	380	Syracuse	0	0	0	0	0	0
380	381	Syracuse	0	0	0	0	0	0
381	382	Syracuse	0	0	0	0	0	0
382	383	Geddes	167	4	372.38246	374.5883	376.79422	379.00011000000006
383	384	Syracuse	108	0	280	280	280	280
384	385	Syracuse	195	0	475.00003	460.38464	450.64105	443.33336320000006
385	386	Dewitt	160	4	397.17071	397.17071	397.17071	397.17071360000006
386	387	Dewitt	112	0	243	243	243	245.16967595000008

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
387	388	Syracuse	154	0	274.4	272.61823	272.61823	272.61823050000004
388	389	Syracuse	190	0	466.455	463.99997	463.99997	463.99997069999995
389	390	Syracuse	146	0	210.44140	209.00002	209.00002	209.00002750000004
390	391	Syracuse	201	10	402.4739	390.7582	382.94780	377.08998440000005
391	392	Syracuse	39	0	73.125000	73.125000	73.125000	73.12500000000001
392	393	Camillus	28	0	50.814778	50.814778	50.814778	50.814778000000004
393	394	Camillus	379	3	899.53745	901.90298	906.6341	911.3651212799997
394	395	Syracuse	0	0	0	0	0	0
395	396	Syracuse	78	0	93.00004	124.0001	147.84621	172.88468899999998
396	397	Syracuse	185	0	221.0069	219.8122	219.8122	219.8122
397	398	Camillus	1318	4	2825.5771	2810.5914	2799.887	2791.324
398	399	Syracuse	458	3	1171.7929	1169.241	1166.6890	1166.6890632000002
399	400	Syracuse	124	0	225.8211	223.1789	220.5366	220.7155
400	401	Syracuse	21	0	48.681851	48.681851	48.681851	48.681851400000006
401	402	Camillus	642	4	1437.492	1428.56	1424.094	1419.629
402	403	Syracuse	0	0	0	0	0	0
403	404	Syracuse	133	0	298.5113	296.2668	296.2668	296.2668
404	405	Syracuse	230	0	345	343.50000	343.50000	343.50000000000006
405	406	Syracuse	66	0	124.8924	124.8924	124.8924	124.8924
406	407	Syracuse	214	2	436.93533	434.90292	434.90292	434.90292530000005
407	408	Syracuse	0	0	0	1	2	3
408	409	Syracuse	0	0	0	1	2	3
409	410	Syracuse	137	0	182.33082	220.9264	251.5367	282.147
410	411	Syracuse	0	0	0	0	0	0
411	412	Syracuse	128	94	229.4203	237.6522	244.884	253.1159
412	413	Syracuse	0	0	0	0	0	0
413	414	Syracuse	31	0	31	64.000006	90.000008	116
414	415	Syracuse	140	0	140.00005	139.00005	139.00005	139.00005560000002
415	416	Camillus	335	0	753.99994	749.49845	747.24770	744.9969590999998
416	417	Syracuse	27	0	38.999966	38.999966	38.999966	38.99996640000001
417	418	Syracuse	0	0	0	0	0	0
418	419	Syracuse	0	0	0	0	0	0
419	420	Syracuse	0	0	0	0	0	0
420	421	Syracuse	389	0	901.6821	899.3641	897.04618	898.0461856000001
421	422	Syracuse	0	0	0	0	0	1
422	423	Syracuse	0	0	0	0	0	0
423	424	Syracuse	0	0	0	0	0	0
424	425	Syracuse	34	0	42.00003	90.176527	127.23537	164.2942
425	426	Syracuse	0	0	0	0	0	0
426	427	Syracuse	4	0	7	7	7	7
427	428	Syracuse	28	0	71.448266	71.448266	71.448266	71.44826640000002
428	429	Syracuse	192	0	476.4811	473.9995	473.9995	473.9995
429	430	Syracuse	137	0	279.82973	277.7872	277.7872	277.7872

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
430	431	Syracuse	0	3	3	3	3	3
431	432	Syracuse	35	0	86.52779	86.52779	86.52779	86.52779
432	433	Syracuse	15	0	38	38	38	38
433	434	Syracuse	196	0	378.00016	362.57158	351.0002	341.3572900200001
434	435	Syracuse	5	0	8	8	8	8
435	436	Syracuse	0	0	0	0	0	0
436	437	Syracuse	0	0	0	0	0	0
437	438	Syracuse	0	0	0	0	1	2
438	439	Syracuse	82	0	152	152	152	152
439	440	Syracuse	207	0	415.0001	412.9953	412.9953	412.9953
440	441	Geddes	110	0	159.5495	159.5495	159.5495	159.5495
441	442	Syracuse	455	57	1053.201	1022.3596	998.0862	976.0022
442	443	Syracuse	445	4	1042.6713	1025.333	1013.662	1001.992
443	444	Camillus	238	0	523.9996	523.9996	523.9996	523.9996
444	445	Syracuse	0	0	0	0	0	0
445	446	Dewitt	22	0	56.571416	56.571416	59.14284	61.714271999999994
446	447	Geddes	200	0	483.417	483.417	483.417	483.417
447	448	Geddes	137	7	278.12571	278.12571	278.12571	278.12571670999995
448	449	Syracuse	49	0	110.25	110.25	110.25	110.25
449	450	Manlius	577	0	1397.576	1412.109	1424.2199	1436.3306685400007
450	451	Geddes	834	5	1712.7612	1712.7612	1712.7612	1714.809
451	452	Manlius	673	0	1309.947	1304.1073	1300.215	1296.3216740399996
452	453	Syracuse	2	0	2	2	2	2
453	454	Syracuse	104	0	140.00008	156.15394	168.26933	181.73088180000002
454	455	Syracuse	6	0	11.14285	11.14285	11.14285	11.14285
455	456	Syracuse	3	0	3	3	3	3
456	457	Syracuse	26	0	34.99998	36.346136	37.69229	39.03844
457	458	Syracuse	95	0	151.59581	151.59581	151.59581	151.59581299999996
458	459	Syracuse	277	0	506.17245	495.20843	486.0717	478.76239879999986
459	460	Syracuse	176	0	218.40985	217.16889	217.16889	217.16889250000003
460	461	Syracuse	0	0	0	0	0	0
461	462	Syracuse	0	0	0	0	0	0
462	463	Syracuse	0	0	0	0	0	0
463	464	Syracuse	34	0	41.771414	127.77138	194.1142	260.45705200000003
464	465	Syracuse	8	0	17.14284	17.14284	17.14284	17.14284
465	466	Syracuse	199	0	308.00004	306.45230	307.45230	308.45230220000013
466	467	Syracuse	0	0	0	0	0	0
467	468	Syracuse	155	0	179.35714	178.20000	178.20000	178.20000440000003
468	469	Syracuse	128	0	188.5272	187.0544	187.0544	187.0544
469	470	Syracuse	185	8	259.4846	258.12520	258.12520	258.12520240000003
470	471	Syracuse	189	0	375.9999	374.01049	374.01049	374.01049752000006
471	472	Syracuse	306	0	794.00066	791.4059	791.4059	791.4059
472	473	Dewitt	313	152	771.2542	769.2758	767.2973	767.2973

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
473	474	Dewitt	364	0	712.04328	710.0871	710.0871	710.0871
474	475	Syracuse	432	1	967.0002	964.764	962.5279	963.5279
475	476	Syracuse	41	0	79.999950	79.999950	79.999950	79.99995030000001
476	477	Syracuse	37	0	75.027734	75.027734	75.027734	75.02773420000001
477	478	Syracuse	15	0	33.000021	33.000021	33.000021	33.000021000000004
478	479	Syracuse	33	0	67.03125	67.03125	67.03125	67.03125
479	480	Syracuse	190	12	424.7583	409.5514	398.6894	387.8273
480	481	Syracuse	108	0	195	185.9722	178.75	173.33335872000004
481	482	Syracuse	315	0	699.77823	686.44912	677.56305	670.8984994200001
482	483	Syracuse	294	0	652.7798	639.4578	630.57642	623.9154
483	484	Dewitt	0	0	0	0	0	1
484	485	Dewitt	0	0	0	0	0	0
485	486	Syracuse	170	0	392.68983	390.37989	390.37989	390.3798938000001
486	487	Elbridge	460	0	1046.374	1073.6702	1094.1427	1116.89
487	488	Elbridge	320	4	781.70880	796.29084	808.4425	820.5942400000001
488	489	Syracuse	113	0	158.40166	158.40166	158.40166	158.40166206000004
489	490	Syracuse	329	0	693.99997	691.8906	691.8906	691.8906
490	491	Syracuse	400	25	589.31944	588.90864	588.49785	590.4978507600002
491	492	Syracuse	331	9	412.80033	411.5804	411.5804	412.5804
492	493	Syracuse	0	0	0	0	0	0
493	494	Syracuse	150	0	224.50333	293.351	347.23182	402.6093194800001
494	495	Syracuse	29	0	58.90625	87.34375	109.6875	132.0313
495	496	Syracuse	287	0	652.72542	650.45111	650.45111	650.4511156000001
496	497	Syracuse	144	1	311.8416	309.683	309.683	309.683
497	498	Syracuse	223	0	252.9999	251.8654	251.8654	251.8654
498	499	Syracuse	176	0	284.38393	283.76811	285.76811	287.76811499999997
499	500	Syracuse	582	4	1144.164	1140.2454	1138.286	1138.286
500	501	Syracuse	0	0	0	0	0	0
501	502	Geddes	634	0	1423.0007	1416.267	1411.7783	1407.289
502	503	Syracuse	45	0	63.409067	63.409067	63.409067	63.409067999999984
503	504	Syracuse	290	49	769.32109	730.57924	701.77285	672.9664625000001
504	505	Geddes	743	1	1605.6809	1590.5628	1579.7642	1571.125
505	506	Camillus	183	0	366.00016	374.00017	382.0002	390.0002
506	507	Syracuse	0	0	0	0	0	0
507	508	Syracuse	228	0	263.49697	290.0778	310.8802	331.6825995000001
508	509	Syracuse	40	0	84.102539	124.05124	155.58969	189.23071500000003
509	510	Syracuse	339	97	524.63772	526.3763	528.3763	531.3763
510	511	Syracuse	111	0	170.99985	170.99985	170.99985	170.99985230999994
511	512	Syracuse	365	0	752.00038	749.94011	747.8798	747.8798
512	513	Dewitt	14	0	28.000011	28.000011	28.000011	30.000011999999998
513	514	Syracuse	568	0	1242.812	1240.6243	1238.4362	1238.4362773599996
514	515	Syracuse	103	0	178.99996	178.99996	178.99996	178.99996109999995
515	516	Geddes	0	0	0	0	0	0

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
516	517	Geddes	481	0	1061.029	1052.206	1045.588	1038.971
517	518	Syracuse	0	0	0	0	0	0
518	519	Dewitt	85	0	179.1074	179.1074	179.1074	179.1074
519	520	Syracuse	398	0	682.2854	680.57111	678.8568	678.8568
520	521	Dewitt	0	0	0	0	0	0
521	522	Syracuse	307	103	799.56632	770.07003	749.6495	730.2290131999997
522	523	Syracuse	334	0	920.488	917.7321	917.7321	917.7321
523	524	Syracuse	608	9	1455.213	1433.805	1419.534	1405.262
524	525	Syracuse	485	0	1058.816	1056.633	1054.45	1054.45
525	1114	Camillus	223	0	584.5302	642.19688	686.75748	733.9393
526	1113	Camillus	160	0	414.4101	414.4101	414.4101	414.4101
527	527	Syracuse	395	0	1002	969.0223	943.6552	920.8248733199997
528	528	Syracuse	481	0	971.0189	969.0001	966.9814	966.9814
529	529	Syracuse	261	0	570.00008	567.81617	567.81617	567.8161736000001
530	530	Syracuse	0	0	0	0	0	0
531	531	Syracuse	0	1	1	1	1	1
532	532	Syracuse	438	0	1003.291	968.9318	943.735	920.8288
533	533	Manlius	736	5	1784.9097	1775.236	1770.4	1765.563
534	534	Syracuse	0	0	0	0	0	0
535	535	Syracuse	277	0	578.9099	576.81992	576.81992	576.8199292800001
536	536	Dewitt	0	6	6	6	6	6
537	537	Syracuse	346	2	764.7952	762.59055	762.59055	762.5905534999997
538	538	Syracuse	302	0	715.26332	686.8423	667.89489	648.9475183999999
539	539	Syracuse	223	0	606.56024	587.52023	573.92022	560.3202
540	540	Syracuse	301	0	691.7023	689.4043	689.4043	689.4043
541	541	Syracuse	104	0	243.3208	243.3208	243.3208	243.3208
542	542	Syracuse	446	0	938.79100	936.6861	934.5812	934.5812
543	543	Dewitt	501	0	1067.869	1065.7374	1063.606	1063.606
544	544	Syracuse	359	4	713.07474	711.09960	709.1245	709.1245
545	545	Syracuse	370	0	869.3005	848.15534	831.7091	817.6123514400001
546	546	Syracuse	0	0	0	0	0	0
547	547	Syracuse	373	0	705.0008	703.11067	701.22059	701.2205926599999
548	548	Dewitt	318	0	686.99966	686.99966	686.99966	686.9996633999999
549	549	Dewitt	440	2	931.6616	929.5487	929.5487	929.5487
550	550	Geddes	110	0	222.9729	220.9458	218.91880	218.9188026000000
551	551	Syracuse	201	0	421.9007	409.3067	398.8117	390.4156182000001
552	552	Syracuse	309	0	768.99986	749.09048	734.1584	721.7151
553	553	Syracuse	330	34	737.51657	735.38470	733.25283	734.2528351999998
554	554	Syracuse	440	4	1021.747	988.364	965.2334	942.1028
555	555	Camillus	350	8	764.5867	879.15558	967.7843	1056.413
556	556	Camillus	312	0	801.6515	865.8864	917.2743	968.6622
557	557	Camillus	146	0	313.0003	351.58933	383.7469	415.9045
558	558	Syracuse	414	0	932.9999	928.4927	926.2391	927.2391

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
559	559	Geddes	0	0	0	0	0	0
560	560	Manlius	148	0	341.9997	362.797	378.97269	397.4592
561	561	Syracuse	385	0	937.4347	913.0857	896.0415	881.4321
562	562	Manlius	335	0	828.5269	1065.956	1248.9734	1431.9913344599993
563	563	Syracuse	656	0	1481.519	1452.159	1429.575	1406.9909438900004
564	564	Syracuse	253	0	539.9998	520.79029	507.98397	495.1776564000001
565	565	Syracuse	311	0	541.7422	540.00029	540.00029	540.0002902000001
566	566	Syracuse	270	0	573.87377	571.7483	571.7483	571.7483
567	567	Syracuse	334	0	830.51374	815.59433	803.1615	793.2152239000002
568	568	Elbridge	77	0	191.4869	193.9737	196.4606	201.43427490000002
569	569	Elbridge	205	0	407.0146	414.9563	420.9126	428.8544
570	570	Syracuse	610	0	925.0001	902.2542	885.57382	870.4099
571	571	Syracuse	543	0	1117.057	1114.9998	1112.943	1112.943
572	572	Syracuse	610	9	1201.3177	1173.953	1155.407	1136.861
573	573	Dewitt	307	9	720.15131	715.5184	710.8855	708.5690506200001
574	574	Syracuse	412	14	741.28599	737.7555	735.99022	736.9902275200003
575	575	Syracuse	397	7	909.3615	886.632	870.72132	854.8106707800001
576	576	Dewitt	333	0	741.9996	737.54317	735.3149	733.0867
577	577	Syracuse	126	0	303.1878	300.7815	300.7815	300.7815
578	578	Syracuse	107	0	255	255	255	255
579	579	Syracuse	511	0	1086.1257	1060.62	1043.616	1026.612
580	580	Syracuse	0	0	0	0	0	0
581	581	Syracuse	0	2	2	2	2	2
582	582	Syracuse	120	0	278.31906	275.99973	275.99973	275.99973450000005
583	583	Syracuse	162	0	345.7317	343.5976	343.5976	343.5976
584	584	Syracuse	368	78	872.7452	856.4681	844.5103	832.5524893199997
585	585	Dewitt	1	0	1	1	1	1
586	586	Dewitt	2	0	4	4	4	4
587	587	Syracuse	42	4	90.7392	90.7392	90.7392	90.7392
588	588	Syracuse	81	0	201.51210	201.51210	201.51210	201.51210780000002
589	589	Syracuse	53	0	128.4231	128.4231	128.4231	128.4231
590	590	Syracuse	256	3	581.4805	567.9223	558.88356	549.8448081800002
591	591	Syracuse	271	0	541.9996	523.99957	511.9996	499.9996
592	592	Salina	690	3	1402.913	1402.913	1404.9415	1406.97
593	593	Dewitt	476	0	771.62057	771.62057	771.62057	773.2416227400001
594	594	Dewitt	373	7	857.04715	857.04715	857.04715	859.3261031999999
595	595	Manlius	660	0	1380.1821	1380.1821	1380.1821	1380.1821725999996
596	596	Dewitt	197	0	395.9996	395.9996	398.0097	400.0199
597	597	Syracuse	94	0	207.78945	207.78945	207.78945	207.78945340000004
598	598	Syracuse	101	0	224.22	224.22	224.22	224.22
599	599	Dewitt	74	0	126.7123	126.7123	126.7123	126.7123
600	600	Syracuse	328	0	674.00008	663.7257	655.5062	649.3415
601	601	Syracuse	232	6	532.6497	530.3797	530.3797	530.3797

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
602	602	Syracuse	88	0	177.0002	177.0002	177.0002	177.0002
603	603	Syracuse	245	8	552.0153	549.79481	547.57434	548.5743460799998
604	604	Syracuse	299	10	666.8349	653.6543	644.86718	637.0800940999999
605	605	Salina	93	0	192.00007	187.871	183.74200	181.67748720000003
606	606	Salina	572	0	1265.2114	1265.2114	1265.2114	1267.423
607	607	Dewitt	52	0	100.07540	100.07540	100.07540	100.07540920000001
608	608	Salina	0	0	0	0	0	0
609	609	Salina	3	0	3	3	4	5
610	610	Dewitt	3	0	3	4	5	6
611	611	Dewitt	43	0	107.5001	140.00008	167.5001	195.0001
612	612	Camillus	95	6	241.49309	239.01422	239.01422	239.01422180000003
613	613	Camillus	55	0	153.5848	170.33955	184.30181	198.2641
614	614	Camillus	172	0	404.2555	488.8671	554.6762	620.4852
615	615	Camillus	351	0	973.2281	1020.365	1059.1827	1098.0009730800002
616	616	Dewitt	653	0	1516.001	1516.001	1516.001	1516.001
617	617	Van Buren	19	0	48.555586	48.555586	48.555586	51.11114
618	618	Van Buren	67	0	170.0001	170.0001	172.53739	175.0747
619	619	Salina	59	0	115.96552	115.96552	115.96552	115.96552659999999
620	620	Salina	0	0	0	0	0	0
621	621	Dewitt	1	0	4	4	4	4
622	622	Dewitt	0	0	0	0	0	0
623	623	Manlius	494	0	1235.5020	1230.5	1225.498	1222.997
624	624	Manlius	61	0	142.3332	146.99990	151.6666	156.33323730000004
625	625	Manlius	69	0	159.6856	161.9999	164.31421	166.62849839999996
626	626	Manlius	290	0	713.53978	708.61881	706.1583	706.1583
627	627	Salina	796	0	1459.8331	1456.165	1454.331	1454.331
628	628	Salina	394	0	876.22395	876.22395	878.44787	880.6717893600003
629	1103	Salina	0	0	0	0	0	0
630	1102	Salina	0	0	0	0	0	0
631	1104	Salina	290	0	661.9997	661.9997	661.9997	661.9997
632	630	Salina	0	0	0	0	0	0
633	631	Dewitt	13	0	22.99999	22.99999	22.99999	22.99999
634	632	Dewitt	40	0	91.282	91.282	91.282	91.282
635	633	Salina	17	0	38.25	38.25	38.25	38.25
636	634	Salina	0	0	0	0	0	0
637	635	Salina	71	0	169.3858	169.3858	169.3858	171.77151600000005
638	636	Van Buren	61	0	165.7168	165.7168	168.4335	171.1502
639	637	Salina	474	0	1053.554	1051.332	1051.332	1051.332
640	638	Dewitt	10	0	27.77775	24.99998	24.99998	24.99998
641	639	Geddes	396	0	949.6026	954.3985	959.1945	966.3885
642	640	Salina	251	0	506.01600	504	501.984	501.984
643	641	Sullivan	145	0	306.9999	328.17226	345.11018	364.16534880000006
644	642	Geddes	440	1	1008.29	1010.579	1012.869	1015.158

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
645	643	Sullivan	86	0	214.9999	232.49986	247.4999	262.4999
646	644	Dewitt	0	15	15	15	15	15
647	645	Salina	78	0	188.0002	188.0002	188.0002	188.0002
648	646	Salina	534	0	1194.761	1190.2865	1188.049	1188.049
649	647	Salina	19	0	48.99999	46.42104	46.42104	46.42104
650	648	Salina	236	0	505.00008	505.00008	505.00008	505.00008768000015
651	649	Salina	4	0	10	10	10	10
652	650	Dewitt	188	0	499.3121	557.7423	605.5487	653.3552228399999
653	651	Dewitt	29	0	54.00003	54.00003	54.00003	54.00003
654	652	Salina	36	0	84.34297	84.34297	84.34297	84.34297
655	653	Van Buren	22	0	55.00005	55.00005	55.00005	57.50005060000001
656	654	Salina	490	0	985.99930	988.0115	990.0238	992.036
657	655	Salina	603	0	1394.686	1390.06	1387.748	1387.748
658	656	Elbridge	244	0	605.99990	633.31957	653.1884	675.5408755199999
659	657	Salina	308	2	528.5811	526.87146	525.1618	525.1618
660	658	Salina	419	0	903.1555	898.84454	896.68904	896.6890400000001
661	659	Sullivan	70	0	142.99999	147.0857	151.1714	157.3
662	660	Sullivan	168	0	326	357.0477	382.2738	407.5
663	661	Salina	3	0	4.5	1.5	1	2
664	662	Salina	54	0	131.0001	131.0001	131.0001	133.426
665	663	Salina	68	0	99.00008	97.5442	97.5442	97.5442
666	664	Salina	116	0	236.03479	234.00001	234.00001	234.00001625000004
667	665	Salina	154	0	288.0001	286.12993	286.12993	286.12993589999996
668	666	Geddes	247	0	598.00004	598.00004	598.00004	600.4211
669	667	Salina	518	3	1198.767	1201.0758	1203.3843	1205.693
670	668	Dewitt	17	0	37.1875	37.1875	37.1875	37.1875
671	669	Van Buren	145	0	369.5483	377.1942	382.2914	389.9372
672	670	Van Buren	61	0	159.3869	159.3869	159.3869	159.3869
673	671	Sullivan	175	0	453.5917	482.1032	505.4307	528.7583059200001
674	672	Dewitt	0	0	0	0	0	0
675	673	Dewitt	13	23	46.47221	46.47221	46.47221	48.27777
676	674	Manlius	168	0	425.4675	438.1302	448.26037	458.3906
677	675	Manlius	225	7	521.00874	539.2846	555.276	571.2673750999999
678	676	Salina	330	6	767.1616	762.54845	760.24190	760.2419088600002
679	677	Salina	417	0	855.0003	859.10104	863.20176	867.3025
680	678	Van Buren	84	0	203	207.83336	212.66669	217.50002999999998
681	679	Salina	1000	0	2291.2893	2364.611	2421.893	2481.4663335600007
682	680	Salina	180	0	414.99991	412.69436	412.69436	412.69436289999993
683	681	Salina	485	0	1155.382	1152.9999	1150.618	1150.618
684	682	Van Buren	28	0	68.551728	90.586212	110.1724	129.75862800000002
685	683	Salina	271	7	634.78426	634.78426	634.78426	637.1008112000002
686	684	Salina	103	0	226	226	226	226
687	685	Salina	312	7	670.975	670.975	673.10312	675.2313

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
688	686	Dewitt	67	0	135.9999	135.9999	138.0297	140.0596
689	687	Salina	285	0	525	525	525	525
690	688	Van Buren	181	0	485.3189	488.00025	490.68157	493.3629
691	689	Van Buren	0	0	0	1	2	4
692	690	Dewitt	13	0	24.999991	24.999991	24.999991	24.999991899999998
693	691	Dewitt	2	0	5	5	5	5
694	692	Salina	273	19	571.5447	571.5447	571.5447	573.5686622799999
695	693	Salina	470	0	773.35442	773.35442	774.99986	776.6453
696	694	Geddes	11	0	26.4	26.4	26.4	28.800000000000004
697	695	Salina	4	0	9	9	9	11.25
698	696	Van Buren	2	0	4	4	4	4
699	697	Salina	200	0	453	453	455.265	457.53
700	698	Salina	286	0	700.99995	703.451	705.9021	708.3531060900001
701	699	Sullivan	70	0	151.9999	162.85708	173.7142	184.5714
702	700	Van Buren	183	0	398.8203	398.8203	398.8203	400.9996
703	701	Salina	552	0	1178	1210.0103	1235.619	1261.228
704	1107	Clay	10	0	22	22	22	22
705	1108	Clay	50	0	104.08157	104.08157	104.08157	104.08157999999996
706	703	Van Buren	103	0	275.00005	280.3399	285.6797	293.68937400000004
707	704	Geddes	104	6	258.9728	258.9728	261.4052	263.8376
708	705	Salina	546	5	1104.928	1106.9422	1108.9567	1110.9713152999998
709	706	Salina	4	0	6	6	6	6
710	707	Geddes	0	0	0	0	1	2
711	708	Van Buren	471	0	1064.739	1105.43	1137.0782	1168.7265551500002
712	709	Clay	42	0	92.000029	113.90479	131.42861	148.95242919999998
713	710	Clay	47	0	67.142855	67.142855	67.142855	67.14285579999999
714	711	Salina	30	0	70.34482	70.34482	70.34482	72.68964940000002
715	1105	Salina	0	0	0	0	0	0
716	1106	Salina	4	0	12	12	12	12
717	713	Clay	154	0	379.0767	386.4613	393.8459	401.2305
718	714	Clay	1	0	4	4	4	4
719	715	Clay	224	0	446.0001	447.9911	449.9822	453.9643
720	716	Cicero	9	0	14.99999	16.66665	18.333314	21.666645000000003
721	717	Van Buren	197	0	467.0003	630.56891	758.57914	886.5894
722	718	Van Buren	14	0	37.33336	40.00003	45.33336	50.6667
723	719	Cicero	16	0	36.266647	36.266647	38.533313	40.79997899999999
724	720	Cicero	29	0	68.000003	68.000003	70.344830	72.68965870000001
725	721	Cicero	16	0	46	46	46	48.875
726	722	Van Buren	160	0	355	355	357.21875	359.43749999999994
727	723	Salina	652	0	1581.5755	1586.427	1591.278	1596.13
728	724	Salina	38	0	106.8107	106.8107	106.8107	106.8107
729	725	Clay	368	0	623.30600	623.30600	623.30600	624.9998
730	726	Clay	376	0	813.9996	813.9996	813.9996	813.9996

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
731	727	Clay	223	0	513.30200	513.30200	513.30200	513.3020021000002
732	728	Cicero	0	0	0	0	0	0
733	729	Salina	446	6	853.49889	855.3991	857.29933	859.1995612600001
734	730	Salina	72	0	154.8493	154.8493	154.8493	157.00001959999997
735	731	Clay	273	0	680.49295	690.46355	700.43414	710.4047
736	732	Clay	8	0	18	18	18	20.25
737	733	Clay	0	0	0	0	0	0
738	734	Cicero	1	0	1	1	1	1
739	735	Cicero	170	0	354.91245	359.08789	363.2633	367.4388
740	736	Clay	550	7	1200.807	1205.1480	1209.4891	1216.001
741	737	Cicero	10	0	15.45453	18.54544	21.636343	26.2727
742	738	Lysander	195	0	475.2458	475.2458	475.2458	475.2458
743	739	Lysander	99	0	236.38780	238.7756	241.16331	245.93882680000002
744	740	Clay	510	0	816	816	817.59999	819.2
745	741	Van Buren	200	0	367	367	367	368.835
746	742	Salina	606	0	989.3668	997.52990	1004.0603	1012.223
747	743	Cicero	418	0	858.99974	865.1648	869.27486	875.4399
748	744	Cicero	28	0	49.777730	49.777730	49.777730	49.77773080000001
749	745	Clay	222	0	522.00021	524.3516	526.7029	531.4056
750	746	Clay	443	0	1010.281	1014.842	1019.403	1023.964
751	747	Clay	739	0	1259.6590	1257.9544	1257.9544	1257.9544904400002
752	748	Clay	1	0	2	2	2	2
753	749	Clay	56	0	105.9999	105.9999	105.9999	107.8928
754	750	Clay	1462	8	3113.8712	3111.747	3109.6224	3109.6224523999995
755	751	Cicero	0	0	0	0	0	0
756	752	Cicero	315	5	665.5156	671.80624	678.09687	684.3874999999998
757	753	Clay	288	0	684.6593	684.6593	684.6593	684.6593
758	754	Clay	586	0	1380.3562	1382.7117	1387.423	1392.1340097000002
759	755	Clay	389	0	951.5549	954.0011	956.4472	958.8933872000001
760	756	Clay	6	0	11.000010	11.000010	12.83335	14.66668
761	757	Van Buren	693	0	1351.298	1349.348	1347.398	1347.398
762	758	Cicero	57	0	134.63789	144.08616	151.1724	160.62064439999997
763	759	Cicero	146	0	298.0001	300.04117	302.08226	304.12336360000006
764	760	Cicero	195	0	429.59416	429.59416	429.59416	431.7972
765	761	Clay	536	0	1375.8657	1378.4326	1383.566	1388.7003117000002
766	762	Clay	363	0	922.9155	930.54294	938.1703	945.7977426000001
767	763	Salina	205	0	479.3241	479.3241	481.66225	484.0004
768	764	Lysander	280	0	694.18830	1090.867	1398.294	1705.72
769	765	Cicero	9	0	24.75	24.75	24.75	24.75
770	766	Cicero	49	0	89.179999	89.179999	89.179999	89.17999999999998
771	767	Van Buren	79	0	184.6625	187	189.3375	191.67500000000004
772	768	Clay	243	0	597.4591	599.9177	604.83510	609.7525
773	769	Cicero	124	0	286.688	286.688	286.688	286.688

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
774	770	Cicero	37	0	83.25007	171.0001	238.50020	308.2502603000001
775	771	Van Buren	651	0	1310.9999	1321.069	1331.1382	1341.207
776	772	Van Buren	179	0	427.61123	427.61123	430.0001	432.3890176000001
777	773	Van Buren	111	0	266.598	268.9998	271.40154	276.20511170000003
778	774	Clay	464	0	1089	1093.694	1098.3879	1105.429
779	775	Van Buren	257	0	471.00007	472.83275	476.49812	480.16349620000005
780	776	Van Buren	47	0	112.22458	112.22458	114.6123	117.0001
781	777	Van Buren	27	0	64.999970	64.999970	67.40738	69.81478270000001
782	778	Clay	497	0	1170.6453	1177.712	1184.7778	1191.8441392000002
783	779	Clay	134	0	327.9999	330.44766	332.89542	335.3432
784	780	Cicero	140	0	334.6097	341.77992	348.95013	356.1203
785	781	Clay	215	0	514.6067	517.0002	519.39370	521.7872
786	782	Clay	473	0	1070.527	1070.527	1072.79	1075.054
787	783	Cicero	25	0	51.923085	51.923085	51.923085	54.00000840000001
788	784	Cicero	420	3	852.90544	854.92903	858.9762	863.0233699999999
789	785	Clay	549	0	1419.585	1424.7569	1429.9284	1437.686
790	786	Lysander	262	0	787.11022	1279.8051	1661.3433	2042.882
791	787	Lysander	415	0	1006.061	1170.91	1299.395	1427.8794921800004
792	788	Clay	304	0	731.9999	729.59198	729.59198	729.5919880499998
793	789	Clay	88	0	235.3255	235.3255	235.3255	235.3255
794	790	Van Buren	123	0	300.9882	298.54110	298.54110	298.54110039999995
795	791	Clay	416	0	976.34588	973.99889	973.99889	973.9988994999999
796	792	Cicero	227	0	621.9999	624.73994	627.48003	632.9602
797	793	Clay	3	0	3	3	3	3
798	794	Clay	391	0	958.99960	958.99960	961.4523	963.905
799	795	Clay	743	5	2090.163	2109.808	2123.84	2140.679
800	796	Van Buren	59	0	133.99984	136.271	138.54221	143.0846
801	797	Van Buren	122	0	319.9622	327.83013	335.6981	346.1886
802	798	Van Buren	717	0	1042.534	1099.2408	1142.861	1186.482
803	799	Clay	5	0	5	5	5	5
804	800	Lysander	543	0	1642.1202	1642.1202	1642.1202	1645.1444489599994
805	801	Cicero	447	9	1162.3585	1183.0002	1198.4816	1216.543
806	802	Clay	88	0	203.99982	208.63618	213.27254	220.2271
807	803	Clay	228	0	505.2158	505.2158	505.2158	507.4316
808	804	Cicero	39	0	81.079	87.315841	91.47374	97.71058419999996
809	805	Cicero	0	0	0	0	1	2
810	806	Cicero	7	0	18.200000	18.200000	18.200000	18.200000000000006
811	807	Cicero	510	0	1108.9999	1111.1744	1113.349	1115.5235068799998
812	808	Clay	260	4	665.36841	670.4559	675.54331	683.1744895600001
813	809	Van Buren	386	15	904.8116	900.20121	897.89600	897.8960044999997
814	810	Van Buren	110	0	243.78365	243.78365	243.78365	243.78365330000003
815	811	Van Buren	93	0	234.0002	234.0002	234.0002	234.0002
816	812	Van Buren	282	0	760.69852	811.95126	852.414	892.8766375000001

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
817	813	Clay	1258	3	2999.092	3041.962	3075.3046	3111.029
818	814	Van Buren	125	0	300	410.4	496.8	583.2
819	815	Lysander	215	4	652.08614	685.244	712.37322	742.5167667499999
820	816	Lysander	101	0	285.97781	319.9554	348.27	376.5846
821	817	Cicero	466	0	834.9999	836.79170	840.37539	843.9591
822	818	Sullivan	22	0	56	56	56	58.54546
823	819	Sullivan	46	0	93.02222	95.04444	97.06666	101.11110499999998
824	820	Clay	29	0	70.999960	70.999960	70.999960	70.99996049999999
825	821	Lysander	104	0	196.8932	195	195	195
826	822	Lysander	85	0	191.2501	252.00010	299.25011	346.5001
827	823	Lysander	186	0	416	413.7635	413.7635	413.7635
828	824	Lysander	192	0	431.46076	429.2136	426.96637	426.96637740000006
829	825	Lysander	134	0	319.61449	319.61449	319.61449	319.61449520000014
830	826	Clay	390	0	1030.358	1038.283	1043.567	1051.493
831	827	Clay	614	0	1664.9990	1678.558	1689.405	1702.963
832	828	Cicero	603	0	1643.7274	1665.535	1684.6161	1703.698
833	829	Clay	103	0	221.1471	221.1471	221.1471	221.1471
834	830	Cicero	212	0	487.6994	499.2018	508.40363	519.906
835	831	Clay	615	0	1605.776	1603.165	1603.165	1603.165
836	832	Clay	1	0	1	1	2	3
837	833	Clay	319	0	911.99895	937.7293	960.60078	983.4722
838	834	Cicero	218	0	443	449.09629	455.1926	461.28895183999987
839	835	Lysander	180	0	475.99982	478.6443	483.9332	489.22204380000005
840	836	Lysander	305	0	790.30374	813.6242	831.76230	852.4915807799998
841	837	Clay	528	0	1344.546	1357.279	1367.465	1380.197
842	838	Clay	409	0	1115.1547	1289.653	1425.98	1562.3073054000001
843	839	Lysander	184	0	457.1779	479.5398	499.4171	519.2944395100002
844	840	Lysander	60	0	123	151.7	176.29999	200.9
845	841	Clay	966	0	2668.239	2698.622	2720.72	2745.579
846	842	Lysander	254	0	526.2153	532.4305	538.6456	544.8608
847	843	Sullivan	161	0	340.45872	344.688	348.9173	355.26128064000005
848	844	Lysander	308	0	869.99947	867.1748	864.35012	864.3501246599999
849	845	Lysander	172	0	508.0002	534.5816	555.25599	578.8839
850	846	Lysander	623	4	1599.01	1660.4550	1709.099	1760.303
851	847	Lysander	155	0	340.1947	337.99992	337.99992	337.9999299600001
852	848	Lysander	143	0	364.9998	413.4963	451.783	492.6221
853	849	Cicero	230	0	549.38888	547.0002	547.0002	547.0002
854	850	Cicero	504	0	1082.852	1080.703	1080.703	1080.703
855	851	Clay	1079	2	2793.24	3095.9040	3328.723	3564.129
856	852	Cicero	93	0	252.7176	282.60890	307.06544	334.23937589999997
857	853	Cicero	150	0	316.9997	378.2863	424.7796	473.3862
858	854	Cicero	31	0	86.799950	86.799950	86.799950	86.79995040000001
859	855	Cicero	352	0	1071.955	1129.816	1175.496	1221.176

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
860	856	Cicero	133	0	374.0001	376.81212	382.4362	388.0603
861	857	Clay	357	0	699.042	775.40798	834.151	892.894
862	858	Clay	729	0	1879.158	1876.58	1876.58	1876.58
863	859	Clay	1046	0	2343.999	2406.745	2456.045	2507.586380370001
864	860	Sullivan	120	0	307.0588	348	378.7059	411.9706
865	861	Clay	649	0	1937.002	1934.017	1934.017	1934.017
866	862	Clay	8	0	18.2857	18.2857	18.2857	18.2857
867	863	Clay	228	0	596.0004	601.22850	606.4566	611.6847
868	864	Clay	118	0	287.30452	309.2176	326.26106	345.73934220000007
869	865	Sullivan	67	0	150.24258	154.72743	159.2123	163.6971
870	866	Cicero	422	0	1113	1134.0993	1149.924	1168.3861016299998
871	867	Clay	156	0	365.2678	524.4871	648.58444	772.6818
872	868	Clay	99	0	212.85	313.90000	391.3	470.85
873	869	Lysander	292	0	841.1198	869.92526	892.96964	916.014
874	870	Lysander	601	0	1359.7103	1357.4478	1357.4478	1357.4478900000001
875	871	Cicero	16	0	39	136.5	212.0625	287.625
876	872	Cicero	6	0	13.200000	13.200000	15.400000	17.6
877	873	Cicero	572	0	1613.931	1653.4331	1687.292	1721.1505263999998
878	874	Cicero	263	0	575.9919	661.40510	727.10760	792.8100966800001
879	875	Cicero	450	0	1261.476	1289.509	1311.935	1334.362
880	876	Clay	0	0	0	0	0	0
881	877	Clay	0	0	0	0	0	0
882	878	Lysander	524	0	897.7126	913.1313	925.1237	938.8292
883	879	Clay	99	0	216.81000	223.38000	229.95	238.71000000000004
884	880	Clay	2	0	4	6	10	14
885	881	Clay	7	0	16.999982	19.42855	24.28569	29.142827999999994
886	882	Clay	64	0	151.6307	153.99997	158.73843	163.47689760000003
887	883	Lysander	19	0	54.99997	69.47364	81.05258	92.63152
888	884	Cicero	924	0	2550.764	2548.0030	2545.242	2545.242
889	885	Cicero	283	0	793.19760	790.39478	790.39478	790.3947887999999
890	886	Cicero	180	0	460.5589	460.5589	460.5589	460.5589
891	887	Clay	277	0	415.5	487.5	544.5	601.5
892	888	Clay	15	0	33.21431	33.21431	33.21431	33.21431
893	889	Clay	23	0	61.681860	61.681860	61.681860	61.68186000000001
894	890	Lysander	339	0	817.28687	843.80651	863.09351	884.7914
895	891	Lysander	266	0	696.2625	693.6449	693.6449	693.6449
896	892	Lysander	213	0	558.9993	561.6237	566.8726	572.1214
897	893	Clay	26	0	64.000024	66.46156	68.923103	73.84618
898	894	Clay	6	0	10.800000	10.800000	10.800000	10.800000000000002
899	895	Lysander	623	7	1398.096	1413.726	1424.89	1438.288
900	896	Lysander	249	0	664.3365	675.0086	685.6806	696.3527
901	1112	Clay	65	0	149.3617	280.34043	381.4468	482.5532
902	1109	Clay	9	0	19.800000	19.800000	19.800000	19.800000000000004

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
903	1110	Clay	12	0	26.999996	26.999996	26.999996	26.99999640000001
904	1111	Clay	10	0	22.72727	22.72727	22.72727	22.72727
905	898	Clay	37	0	91.695653	126.3913	153.6522	180.913
906	899	Clay	12	0	22.90909	49.636368	70.63637	91.63637
907	900	Clay	21	0	58.8	61.6	67.2	72.8
908	901	Clay	26	0	63.44	117.12	161.04000	204.96
909	902	Cicero	403	0	1008.0000	1085.539	1145.5682	1208.0993064000002
910	903	Cicero	93	0	181.00004	217.9785	247.1721	278.3119
911	904	Cicero	71	0	131.85711	222.8571	293.42851	363.99993000000006
912	905	Cicero	138	0	326.2714	366.4642	399.5642	432.6642
913	906	Clay	27	0	71.65382	76.961513	82.269204	87.57689
914	907	Clay	26	0	60.32	127.59999	180.96	234.32
915	908	Clay	119	0	261.80001	261.80001	261.80001	261.8000119000001
916	909	Lysander	390	0	992.728	1005.4552	1015.637	1028.3643694399998
917	910	Lysander	81	0	181	192.1728	201.1111	212.2839
918	911	Schroeppe	61	0	116.00002	117.9017	119.8033	123.60658049999999
919	912	Cicero	304	0	671.24847	669.04042	669.04042	669.0404225999998
920	913	Cicero	89	0	230.5911	230.5911	230.5911	230.5911
921	914	Schroeppe	101	4	229.0858	233.54290	238.00004	242.4572
922	915	Lysander	138	0	375.0001	385.8697	396.7393	407.6089
923	916	Cicero	493	0	1354.253	1373.482	1389.9640	1406.446
924	917	Schroeppe	141	0	336.00012	343.14906	350.29800	359.8299196000001
925	918	Clay	188	0	462.99997	470.38826	477.7766	487.62762840000005
926	919	Clay	165	0	417.2901	480.5159	531.09649	581.6771
927	920	Schroeppe	83	0	200.00007	207.229	214.4579	221.68683399999998
928	921	Schroeppe	90	0	205.7141	212.57125	217.14267	223.99981520000003
929	922	Clay	119	0	305.38571	520.9521	687.75942	854.5667445000001
930	923	Clay	28	0	66.62062	88.034388	107.0689	126.10331340000002
931	924	Schroeppe	162	0	378.675	390.3625	399.7125	409.0625
932	925	Schroeppe	77	0	146.90783	150.7236	154.53941	158.35520200000005
933	926	Schroeppe	55	0	142.59275	145.18534	147.77794	152.96313450000005
934	927	Cicero	282	0	812.45804	809.57698	809.57698	809.5769832799998
935	928	Cicero	390	0	783.0004	801.06960	815.12345	831.1850013599999
936	929	Cicero	408	0	1116	1140.617	1159.764	1181.6467401599998
937	930	Schroeppe	83	0	174.89294	179.10723	183.3215	189.64295100000004
938	931	Schroeppe	30	0	55.86207	57.724135	59.5862	61.44827
939	932	Schroeppe	51	0	132.1836	134.7754	137.3672	142.55091399999998
940	933	Cicero	126	0	265	265	267.1031	269.2063
941	934	Cicero	136	0	306.00003	308.25	310.5	312.75
942	935	Schroeppe	143	0	239.3263	244.3472	247.6944	252.7152
943	936	Hastings	74	0	157.5142	159.64279	161.7714	166.02850680000003
944	937	Hastings	128	0	270.336	276.672	280.89599	287.232
945	938	Hastings	161	0	358.9997	370.1488	379.068	390.2171

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
946	939	Hastings	92	0	210.2856	226.2856	239.9999	253.71415410000003
947	940	Hastings	143	0	366.4378	369.0003	371.5628	376.6878
948	941	Hastings	224	0	291.99998	295.9107	299.8214	303.7321
949	942	Hastings	103	0	235	237.2816	241.8447	246.4078
950	943	Hastings	74	0	167.0001	182.7974	194.08123	207.6218
951	944	Hastings	172	7	437.9665	468.0339	490.5845	515.6406529399999
952	945	Hastings	113	0	212.99987	222.4246	231.8494	241.2742
953	946	Hastings	200	0	544.162	574.0909	598.5782	625.7863
954	947	Hastings	23	0	52.708327	54.99999	59.58333	64.16665920000001
955	948	Hastings	93	0	223.5959	242.82998	257.2555	274.08533220000004
956	949	Hastings	22	0	54.52178	54.52178	57.000044	59.47831
957	950	Hastings	20	0	64	64	67.2	70.4
958	951	Hastings	120	0	234.0496	253.5537	269.157	284.7602980000001
959	952	Hastings	22	0	55.5238	55.5238	58.04761	60.57142
960	953	Hastings	78	0	206.35446	222.2279	235.4557	251.3292
961	954	Hastings	3	0	9.75	9.75	9.75	13
962	955	West Monr	101	0	253.51	261.04	268.57	276.1
963	956	Hastings	121	0	328.00016	338.8431	346.9754	357.8184
964	957	Sullivan	57	0	140.4643	142.92859	145.39288	147.8572
965	958	Sullivan	55	0	123	125.23637	127.4727	129.70910619999998
966	959	Sullivan	137	5	342.07880	344.5392	349.46009	355.3809520800001
967	960	Sullivan	262	0	596.2758	609.93096	621.3103	632.6895859599998
968	961	Sullivan	90	0	220.99988	223.45544	225.91099	230.8221
969	962	Sullivan	30	0	70.000019	70.000019	70.000019	70.00001999999999
970	963	Sullivan	92	0	181.9555	183.9332	185.91101	187.88879599999999
971	964	Sullivan	295	0	703.9308	715.8619	725.4067	737.3377127100001
972	965	Sullivan	65	0	145.2344	147.4688	149.7031	154.1719
973	966	Sullivan	83	0	213.573	213.573	216.1462	218.7193
974	967	Sullivan	174	0	385.783	392.4344	399.08583	407.9544
975	968	Sullivan	8	0	18.2857	18.2857	18.2857	18.2857
976	969	Sullivan	35	0	81.323553	81.323553	83.647083	85.97061370000002
977	970	Sullivan	31	0	84.28125	84.28125	87	89.71875
978	971	Sullivan	16	0	42	42	42	44.625
979	972	Sullivan	12	0	22.909076	22.909076	22.909076	22.909076400000004
980	973	Sullivan	50	0	130.39212	133	135.6078	138.21565250000003
981	974	Sullivan	42	0	103.4634	103.4634	105.92679	108.3902
982	975	Sullivan	104	0	262.9997	268.05738	273.1151	278.17276080000005
983	976	Sullivan	43	0	116.7144	116.7144	119.4287	122.143
984	977	Sullivan	90	0	232.58437	235.16864	237.7529	240.3372
985	978	Sullivan	24	0	60.00002	60.00002	60.00002	62.50001749999999
986	979	Sullivan	40	0	94.35894	94.35894	96.71791	99.07689
987	980	Sullivan	92	0	232.9999	235.53255	240.59776	245.663
988	981	Sullivan	70	0	175.9998	178.51408	181.0284	183.5427

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
989	982	Sullivan	177	0	438.4774	448.3865	455.8183	465.7274
990	983	Sullivan	8	0	20	20	20	20
991	984	Sullivan	85	0	208.4523	210.9047	213.35705	218.26181110000002
992	985	Sullivan	24	0	64.363667	64.363667	64.363667	67.04548750000001
993	986	Sullivan	92	0	253.25813	256.0109	258.7637	261.51655100000005
994	987	Sullivan	30	0	70.34478	70.34478	72.689606	75.03443
995	988	Sullivan	122	0	320.5086	323.1358	325.7629	331.0171
996	989	Sullivan	125	0	321.4288	329.14307	334.28593	342.0002
997	990	Sullivan	51	0	117.6924	120.0001	122.3078	124.61547599999996
998	991	Sullivan	33	0	77.647036	77.647036	79.99998	82.35292
999	992	Sullivan	478	0	1131.367	1159.769	1183.438	1207.107
1000	993	Sullivan	147	0	318.3309	324.82741	331.32396	339.986
1001	994	Sullivan	74	0	159.99997	162.1621	164.32429	168.64862040000003
1002	995	Sullivan	318	7	742.4965	760.9995	774.8768	792.067
1003	996	Sullivan	463	0	1115	1143.8981	1165.572	1189.654
1004	997	Sullivan	118	0	258.3793	262.7586	267.1379	273.7069
1005	998	Sullivan	295	5	793.55815	790.8851	788.212	789.212
1006	999	Sullivan	8	0	22.857120	22.857120	22.857120	22.857120000000002
1007	1000	Sullivan	32	0	74.32249	74.32249	76.64506	78.96764
1008	1001	Sullivan	31	0	77.999983	77.999983	80.516111	83.03224
1009	1002	Sullivan	31	0	78.999900	78.999900	81.54828	84.09666870000001
1010	1003	Sullivan	63	0	139.2097	141.41934	143.629	148.04837909999995
1011	1004	Sullivan	35	0	73.088263	73.088263	75.1765	77.26473569999997
1012	1005	Sullivan	21	0	50.400000	50.400000	50.400000	52.8
1013	1006	Sullivan	99	0	221.23465	223.4694	227.93873	232.40812400000002
1014	1007	Sullivan	69	0	147.00002	149.1305	151.26089	155.52176960000003
1015	1008	Sullivan	35	0	88.000118	88.000118	90.514407	93.02869670000001
1016	1009	Granby	44	0	102	104.3181	106.63632	108.95450700000002
1017	1010	Schroeppe	57	0	128.9999	131.26304	133.5262	135.78936000000002
1018	1011	Schroeppe	136	0	359.0001	366.9192	374.8383	382.75745120000005
1019	1012	Schroeppe	78	0	208.3293	211.0002	216.34200	221.6838
1020	1013	Schroeppe	29	0	70.88882	70.88882	70.88882	73.33326600000001
1021	1014	Schroeppe	40	0	104	104	106.6	109.2
1022	1015	Schroeppe	34	0	78.99995	78.99995	81.323472	83.64700080000001
1023	1016	Schroeppe	17	0	39.66666	39.66666	39.66666	41.99999
1024	1017	Schroeppe	67	0	161.9998	164.41775	166.83565	171.67147509999995
1025	1018	Schroeppe	30	0	70.64517	70.64517	73.000012	75.35485
1026	1019	Schroeppe	34	0	102	102	105	108
1027	1020	Schroeppe	42	0	115.5	115.5	118.25	121
1028	1021	Schroeppe	66	0	170.00006	172.57582	175.15158	180.3031
1029	1022	Schroeppe	15	0	31.07143	31.07143	31.07143	33.142854400000004
1030	1023	Schroeppe	212	0	561.64933	574.8958	585.4929	598.7393885800002
1031	1024	Schroeppe	56	0	131.7037	134.05558	136.4074	138.7593

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
1032	1025	Schroeppe	96	0	237.00004	239.4688	241.93754	246.8751
1033	1026	Schroeppe	30	0	76.071486	76.071486	78.607202	81.14291840000001
1034	1027	Schroeppe	46	0	119.5999	122.1999	124.7999	127.3999
1035	1028	Schroeppe	54	0	120.4616	122.6924	124.9231	127.1539
1036	1029	Schroeppe	199	0	424.9998	435.67815	444.2209	452.7636
1037	1030	Schroeppe	46	0	99.0001	101.15227	103.30445	105.4566
1038	1031	Schroeppe	55	0	138.5184	141.037	143.55546	146.07398600000005
1039	1032	Schroeppe	261	0	666.5535	681.87653	694.6458	709.9688
1040	1033	Schroeppe	98	0	274.60435	280.20853	285.8127	291.41687119999995
1041	1034	Schroeppe	171	0	395.2455	399.86821	404.491	411.4251
1042	1035	Schroeppe	29	0	65.73334	65.73334	65.73334	68.00000700000001
1043	1036	Schroeppe	60	0	149.49151	151.98304	154.4746	159.45761919999998
1044	1037	Schroeppe	11	0	21.083331	21.083331	21.083331	21.083331500000003
1045	1038	Schroeppe	21	0	40.95	40.95	40.95	42.90000000000001
1046	1039	Schroeppe	39	0	104.3513	104.3513	107.0269	109.7026
1047	1040	Hastings	69	0	162.99996	165.3623	167.72459	172.44923590000002
1048	1041	Hastings	39	0	97.499984	97.499984	99.99998	102.5
1049	1042	Hastings	184	0	441.3987	450.99433	460.59	470.1856
1050	1043	Hastings	54	0	149.0001	151.75938	154.5186	157.27790549999997
1051	1044	Hastings	30	0	77.142873	77.142873	79.714302	82.28573119999999
1052	1045	Hastings	12	0	28.363627	28.363627	28.363627	28.363627200000003
1053	1046	Hastings	118	0	337.0003	345.5681	351.28	359.8478074800001
1054	1047	Hastings	35	0	87.000081	87.000081	89.485797	91.97151420000002
1055	1048	Hastings	18	0	55.058832	55.058832	55.058832	58.117656000000004
1056	1049	Hastings	27	0	62.307743	62.307743	62.307743	64.61544
1057	1050	Hastings	33	0	83.47055	83.47055	85.99996	88.52937100000003
1058	1051	Hastings	71	0	201.9999	204.845	207.69003	213.3802
1059	1052	Hastings	111	0	300.1112	302.8149	305.5186	308.2222765200001
1060	1053	Hastings	41	0	91.7619	91.7619	93.999998	96.23809
1061	1054	Hastings	96	0	285.0309	290.96900	296.9072	302.8453
1062	1055	Hastings	79	0	179.72500	182	186.55	191.1
1063	1056	Hastings	108	0	254.7172	257.0757	261.7926	266.5096
1064	1057	Hastings	78	0	195	197.5	202.5	207.5
1065	1058	Hastings	104	0	267	272.1346	277.2692	284.9711
1066	1059	Hastings	41	0	112.26196	112.26196	115.0001	117.7382
1067	1060	Hastings	111	0	314.9998	320.67551	326.3512	334.8647
1068	1061	Hastings	64	0	188	190.9375	193.875	199.75
1069	1062	Hastings	12	0	20.72726	20.72726	20.72726	20.72726
1070	1063	Hastings	26	0	75.920000	75.920000	75.920000	78.84
1071	1064	Hastings	24	0	67.826164	67.826164	67.826164	70.65225500000001
1072	1065	Hastings	58	0	163.00010	165.8105	168.62080	171.4311
1073	1066	Hastings	29	0	81.82143	81.82143	81.82143	84.64286100000002
1074	1067	Hastings	89	0	223.9669	228.99990	234.0329	239.06583750000004

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
1075	1068	West Monr	25	0	64.42308	64.42308	64.42308	67
1076	1069	West Monr	34	0	82.424197	82.424197	84.84844	87.27267959999998
1077	1070	West Monr	33	0	85.41172	85.41172	87.999956	90.58819
1078	1071	West Monr	19	0	39.05556	39.05556	39.05556	41.11112
1079	1072	West Monr	59	0	129.18959	131.3792	133.56890	137.9482
1080	1073	West Monr	25	0	57.692360	57.692360	57.692360	60.000054399999996
1081	1074	West Monr	96	0	278.7098	281.613	284.51627	290.3227
1082	1075	West Monr	127	0	319.9996	327.5587	332.598	340.1571
1083	1076	West Monr	37	0	84.57151	84.57151	86.85723	89.14294740000001
1084	1077	West Monr	51	0	137.99988	140.7058	143.41164	146.11751999999998
1085	1078	West Monr	75	0	176.35130	178.7027	183.40535	188.1081
1086	1079	West Monr	106	0	266.48601	271.514	276.5421	284.08414474000006
1087	1080	West Monr	49	0	125.99999	128.57142	131.1429	133.7143
1088	1081	West Monr	80	0	186.66659	188.9999	193.6666	198.3333
1089	1082	West Monr	66	0	172.00007	174.6061	177.2122	182.42431900000003
1090	1083	West Monr	69	0	187.7205	190.441	193.16163	198.6028
1091	1084	West Monr	59	0	148.9999	151.52533	154.0508	159.10159860000002
1092	1085	Hastings	37	0	95.99994	95.99994	98.59453	101.18912699999998
1093	1086	West Monr	48	0	117.00002	119.43752	121.875	124.31253060000002
1094	1087	West Monr	103	0	238.0001	242.6215	247.24287	251.86423336000004
1095	1088	West Monr	82	0	193.358	195.716	200.432	205.1481
1096	1089	West Monr	31	0	74.399941	74.399941	76.79994	79.19993729999999
1097	1090	Schroeppe	6	0	18.99999	18.99999	18.99999	18.99999
1098	1091	Schroeppe	26	0	67.40735	67.40735	67.40735	69.99994
1099	1092	Schroeppe	17	0	40.999979	40.999979	40.999979	43.41174
1100	1093	Schroeppe	19	0	54.764716	54.764716	54.764716	57.64706999999999
1101	1094	Schroeppe	7	0	18.99998	18.99998	18.99998	18.99998
1102	1095	Schroeppe	72	0	184.5634	187.1268	189.6902	194.8169
1103	1096	West Monr	17	0	37.1875	37.1875	37.1875	39.375
1104	1097	West Monr	36	0	97.999970	97.999970	100.72219	103.4444
1105	1098	Hastings	17	0	47.222239	47.222239	47.222239	50.00002
1106	1099	Hastings	93	0	258.2234	263.77661	269.3298	274.883
1107	1100	Sullivan	24	0	54.000002	54.000002	54.000002	56.25
1108	1101	Sullivan	21	0	61.894719	61.894719	61.894719	64.84209
1109	8001	Geddes	0	0	0	0	0	0
1110	8002	Syracuse	0	0	0	0	0	0
1111	8003	Onondaga	0	571	571	733	858	984
1112	8004	Onondaga	0	0	0	0	0	0
1113	8005	Syracuse	0	0	0	7	13	20
1114	8006	Syracuse	0	2507	2507	2542	2569	2596
1115	8007	Syracuse	0	0	0	0	0	0
1116	8008	Syracuse	0	0	0	0	0	0
1117	8009	Syracuse	0	0	0	0	0	0

	TAZ	Town_City	HH17	HH_GQ	pop17	pop30	pop40	pop50
1118	8010	Dewitt	5	1284	1289	1287	1286	1286
1119	8011	Syracuse	0	0	0	29	51	74
1120	8012	Syracuse	0	2766	2766	2879	2966	3053
1121	8013	Syracuse	0	0	0	0	0	0
1122	8014	Syracuse	0	0	0	0	0	0
1123	8015	Syracuse	0	0	0	0	0	0
1124	8016	Dewitt	0	0	0	0	0	0

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Town_City	pop17	pop30	pop40	pop50
Camillus	23304.372	24048.203	24658.964	25285.15
Cicero	30440.041	31360.938	32118.243	32921.7
Clay	57527.51	59385.635	60897.73	62468.68
Dewitt	24453.864	24713.78	24950.51	25220.578866570006
Elbridge	5584.8204	5701.1808	5796.4009	5910.505
Fabius	1830.0616	1870.226	1907.883	1955.5831032400001
Geddes	16586.096	16553.29	16541.327	16551.85
Granby	102	104.3181	106.63632	108.95450700000002
Hastings	9487.7639	9754.1466	10017.07	10340.646692220003
Lafayette	4702.1911	4905.3861	5080.3986	5270.282
Lysander	22226.548	23763.446	24985.608	26243.061837200003
Manlius	31392.21	32247.331	32939.201	33672.599730719994
Marcellus	5923.753	6253.6243	6527.3171	6825.232650789999
Onondaga	21517.91	22446.22	23208.508	24012.11966344001
Onondaga	436.00052	436.00052	436.00052	436.00052592000014
Otisco	2436.151	2458.828	2489.072	2524.3519391100003
Pompey	6739.6081	7005.1758	7229.8819	7475.052
Salina	32130.37	32216.11	32317.21	32460.87
Schroeppe	8011.094	8157.1718	8310.5241	8518.396390320004
Skaneatele	6960.4554	7053.0872	7129.323	7219.124
Spafford	1720.6348	1731.0027	1741.1347	1756.0281314400002
Sullivan	14825.292	15172.01	15503.534	15904.532189170004
Syracuse	136128.26	135666.8	135505.74	135572.4
Tully	2616.3918	2693.769	2763.68	2841.0708987999997
Van Buren	13124.144	13610.74	14023.77	14463.63
West Monr	3555.1572	3607.5981	3676.9825	3773.473184900001

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

DAVID P. SMITH, P.E.
Regional Director

January 13, 2023

Mr. Gordon Stansbury P.E., PTOE
GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037

Dear Mr. Stansbury:

RE: PROPOSED LAKESHORE VILLAGE
DEVELOPMENT TRAFFIC IMPACT STUDY
TOWN OF CICERO, ONONDAGA COUNTY

The New York State Department of Transportation (NYSDOT) has completed its review of the July 2022 Traffic Impact Study (TIS) prepared by GTS Consulting for the subject project. Please see our responses to the proposed mitigation below.

Route 31 @ I-81 NB/Pardee Road

Proposed mitigation:

- Restripe the northbound through lane to allow shared through and right turn movements.
    - ***Disagree:*** This could create a safety concern by giving motorists the chance to turn right on red from the middle lane, or it may show false capacity improvement as motorist would still utilize the right most lane and avoid being in the middle lane because they can't attempt to turn on red from the middle lane.

Recommendation:

- Extend the northbound right turn only lane to 350'.
- Widening to a point 400' from the stop bar to allow for the opening to two lanes (thru and left) in advance, to reduce the chance of blocking a lane by queues on another lane on this approach.

Route 31 @ Lakeshore Road and Lakeshore Road Spur

Proposed mitigation:

- Install a 2-phase traffic signal with protected permitted eastbound left turn phasing and overlap southbound right turn phasing.
- Restrict the Lakeshore Road approach to NYS Route 31 to right turn only movements.

Disagree: After including the existing signal at Route 31 @ Lakeshore Road Spur, the traffic simulation results show significant queue lengths and delays. The results shown from Synchro analysis under the TIS alternative can be deceiving as each intersection is evaluated independently.

Recommendation:

- Install a new traffic signal at Route 31 @ Lakeshore Road and replace the existing signal at Lakeshore Road Spur. Both signals to be controlled by one controller.
- Convert the Lakeshore Road southbound approach to a one-way, two-lane segment between Route 31 and the spur to be dual right.
- Physically restrict turning left from Route 31 into Lakeshore Road by a narrow island that extends from the easterly edge of Sapori Restaurant driveway to the Lakeshore Spur intersection.
- Convert the Two-Way-Left-Turn-Lane (TWLTL) on Route 31 between Lakeshore Road and Lakeshore Road Spur to an exclusive left turn lane in the EB direction, to add storage to the existing EB left turn lane at the Lakeshore Road intersection.
- Widen the Lakeshore Road Spur NB Lane to become a free right turn lane and a short, left turn storage (stop controlled).
- Widen Route 31 WB between Lakeshore Road and to a point approximately 275' east of the Lakeshore Road Spur to add an additional lane for added capacity.
- Construct a short south-westbound left turn bay for traffic turning left into the spur.

Route 31 @ South Bay Road

Proposed Mitigation:

- Construct a 150-foot exclusive northbound right turn lane on South Bay Road.
- Optimize the signal operations periodically.
    - ***Agree***

Additional Comments

- NYSDOT will optimize the traffic signal timing for the network based on field condition post build.
- The required mitigation must be completed in the initial development phase.
- Any property acquisition required to mitigate the proposed development is the sole responsibility of the developer.
- Future roadway improvements by others, i.e. Micron, may overlap or conflict with the recommended mitigation.

Any work within the state Right-of-Way (ROW) will require coordination with the NYSDOT to obtain a highway work permit. The developer should continue to coordinate with the regional Highway Work Permit Group. Any questions regarding the permit process or TIS review can be directed to Jeff Deep, Acting Regional Permit Engineer, at Jeffrey.Deep@dot.ny.gov or (315) 428-3233.

Very truly yours,

Scott R. Bates, P.E., PTOE
Regional Traffic Engineer

File: 31.18-31
Onondaga County
Town of Cicero
O:\Traffic\TRAFFIC\TESCommon\WPDOCS\PERMITS\HWP-Projects\3-3 Onondaga East\Lakeshore Villages\TIS\Lakeshore Villages TIS Response Letter

January 13, 2023

Mr. Gordon Stansbury P.E., PTOE
GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037

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Proposed Mitigation:

- Construct a 150-foot exclusive northbound right turn lane on South Bay Road.
- Optimize the signal operations periodically.
    - ***Agree***

Additional Comments

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Very truly yours,

Original signed by
Scott R. Bates, P.E, PTOE

Scott R. Bates, P.E., PTOE
Regional Traffic Engineer

SRB:JAD:lmn

bc: M. Tompkins, Onondaga East Residency
J. Deep, Traffic Safety & Mobility Group

Proposed Lakeshore Village Development
Lakeshore Road, Cicero, NY

The site is located at 6777 Lakeshore Road in Cicero NY and includes the property associated with the existing Lakeshore Yacht & Country Club on both the north and south sides of Lakeshore Road. The following provides a breakdown of the anticipated land uses within the development:

North Side Development		*South Side Development*
266 Apartments	36,000 SF Clubhouse	123 Apartments
20,000 SF Office Space	120 Room Hotel	163 Single Family Homes
20,000 SF Retail Space	500 person Conference Center	20 Townhouses
26,000 SF – Restaurant Space	116 Berth Marina	
30 Condominiums		

Access to the development will be to/from Lakeshore Road, to the east of South Bay Road.

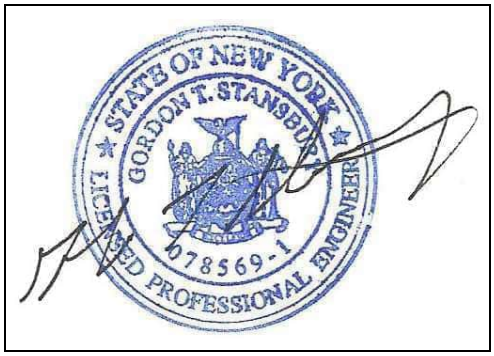
TRAFFIC IMPACT STUDY

Prepared in Accordance With
Chapter 5 of the NYSDOT Highway Design Manual (HDM)

Prepared By:

GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037

July 2022



Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

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1.0 Summary of Traffic Impacts

A. A capacity analysis was performed per the NYSDOT Highway Design Manual Chapter 5. (Refer to Section 3 of this report):

The capacity analysis of the build condition with the recommended mitigation and traffic signal/timing optimization indicates that the proposed development will have no significant impacts on traffic operations in the study area.

The following mitigation measures are recommended:

- Lakeshore Road @ Site Access
  - Install a two way center left turn lane between the middle and eastern full access driveways to provide 100 foot eastbound and westbound left turn lane at both locations.
  - Review traffic operations periodically as the development is completed to determine if a traffic signal is warranted at the eastern access location.
- NYS Route 31 @ South Bay Road
  - Construct a 150 foot northbound right turn lane on South Bay Road.
  - Optimize the signal operations periodically.
- NYS Route 31 @ Lakeshore Road
  - Install a 2-phase traffic signal with protected permitted eastbound left turn phasing and overlap southbound right turn phasing.
  - Restrict the Lakeshore Road approach to NYS Route 31 to right turn only movements.
- NYS Route 31 @ I-81 Northbound Offramp
  - Restripe the northbound through lane to allow shared through and right turn movements.
- NYS Route 31 @ Route 11, I-81 and Lakeshore Road
  - Optimize traffic signal operations and coordination parameters periodically.

With the proposed improvements noted above, traffic movements are generally projected to operate at levels consistent with the background condition at both the signalized and unsignalized intersections in the study area.

There is notable existing traffic congestion along NYS Route 31 between Lakeshore Road and NYS Route 11 under the existing conditions, with limited options to improve operations outside of major reconstruction of the I-81 interchange. The proposed mitigation, along with signal timing optimization, will offset the additional traffic generated by the proposed development without any significant impacts to existing traffic operations.

There are some potentially longer delays exiting the proposed development onto Lakeshore Road under the full build condition, even with the recommended widening to include a center left turn lane. Given that the proposed development will be completed over a number of years, it is recommended that operations be reviewed periodically at the site access to determine if a traffic signal or other mitigation is necessary to accommodate the site generated traffic.

B. A crash analysis was performed per Highway Design Manual Chapter 5 on NYS Route 31 from NYS Route 11 to Lakeshore Road (east), on Lakeshore Road between both ends at NYS Route 31, and on South Bay Road between Thompson Road and Lakeshore Road. Refer to Section 4 of this report.

2.0 Operational Data – Existing Conditions

2.1 Travel Speeds

The posted speed limit on Lakeshore Road in the study area is 35 mph passing the site. 50 spot speed measurements were collected in each direction passing the site to determine the average and 85th percentile operating speeds. The posted speed limits and 85th percentile speeds, determined based on NYSDOT Highway Design Manual Chapter 5, Section 5.2, are shown in the table below.

Exhibit 1
Speed Data

Street Name	***Location***	***Posted Speed***	***Operating Speed Spot Speeds***
Lakeshore Road	*Passing Site*	*35 mph*	*EB – 44 mph* *WB – 46 mph*

2.2 Traffic Gap

Gap data was collected to assess the ability for vehicles to turn in and out of the proposed driveways on Lakeshore Road. In order for a vehicle to turn right out of the northern driveways, or left into the northern driveways, the vehicle only requires a gap in the westbound direction on Lakeshore Road. In order for a vehicle to turn right out of the southern driveways, or left into the southern driveways, the vehicle only requires a gap in the eastbound direction on Lakeshore Road. A vehicle requires a gap in traffic in both directions at the same time to turn left out of the northern and southern driveways onto Lakeshore Road. These gaps in traffic were observed and timed on Lakeshore Road during the weekday morning, weekday evening, and Saturday traffic count periods. The gaps were then converted to a number of vehicles that could turn left or right out of the site driveways during each gap and then totaled for the peak hour. For example, one vehicle can turn from a driveway with a 6-9 second gap in traffic, two can turn with a 10-13 second gap, 3 with a 14-17 second gap, 4 with an 18-19 second gap, etc.

Based on the gap data collected, there are sufficient gaps in traffic to accommodate approximately 600 vehicles turning right out of both the northern and southern driveways during the peak hours. There are sufficient gaps on Lakeshore Road to accommodate approximately 500-600 vehicles turning left out of the driveways during each peak hour. There are no concerns with existing available gaps in traffic.

2.3 Driveway Sight Distance

Sight lines looking east/west along Lakeshore Road from each of the proposed site driveways were collected for comparison to design standards in order to confirm that adequate sight lines are available for safe ingress and egress from the site.

The following table provides a summary of the recommended sight distances along Lakeshore Road from the AASHTO A Policy on Design of Highways and Streets as well as the available sight distances based on field measurements. Operating speeds of 45 mph on Lakeshore Road were used in the review.

Sight Distance Summary				
Location	**Operating Speed**	**Direction**	**AASHTO Recommended Sight Distance**	**Available Sight Distance**
Lakeshore Road @ Western Site Access (N. Side) Turning Right Out	45 mph	Looking Left	430 feet	1,300 feet
Lakeshore Road @ Western Site Access (N. Side) Turning Left Out	45 mph	Looking Left Looking Right	500 feet 500 feet	1,300 feet 525 feet
Lakeshore Road @ Middle Site Access (N. Side) Turning Right Out	45 mph	Looking Left	430 feet	850 feet
Lakeshore Road @ Middle Site Access (N. Side) Turning Left Out	45 mph	Looking Left Looking Right	500 feet 500 feet	850 feet 660 feet
Lakeshore Road @ Middle Site Access (S. Side) Turning Right Out	45 mph	Looking Left	430 feet	860 feet
Lakeshore Road @ Middle Site Access (S. Side) Turning Left Out	45 mph	Looking Left Looking Right	500 feet 500 feet	860 feet 870 feet
Lakeshore Road @ Eastern Site Access (N. Side) Turning Right Out	45 mph	Looking Left	430 feet	700 feet
Lakeshore Road @ Eastern Site Access (N. Side) Turning Left Out	45 mph	Looking Left Looking Right	500 feet 500 feet	700 feet 110 feet
Lakeshore Road @ Eastern Site Access (S. Side) Turning Right Out	45 mph	Looking Left	430 feet	1,100 feet
Lakeshore Road @ Eastern Site Access (N. Side) Turning Left Out	45 mph	Looking Left Looking Right	500 feet 500 feet	1,100 feet 500 feet

There is more than adequate sight distance looking east/west along Lakeshore Road from each of the proposed driveway locations. There are no concerns with sight distances associated with safety for ingress and egress from the site driveway.

3.0 Capacity Analysis

Capacity Analysis Overview

Capacity analyses performed in this report are consistent with the most recent version of the Highway Capacity Manual (HCM). The software used to perform this analysis is Synchro10.

The HCM quantifies the quality of traffic flow in terms of levels of service (LOS). There are six levels of service, with LOS A indicating very low levels of delays and LOS F indicating high levels of delays associated with congestion. These represent a qualitative measure of operational conditions within a traffic stream, and the perception of conditions by motorists and/or passengers. Levels of service and capacity for signalized intersections are calculated for each lane group (a lane group may be one or more movements), each intersection approach, and the intersection as a whole. The intersection level of service is merely a weighted average of the individual approaches and may not be considered a valid

measure of the quality or acceptability of an intersection design since it can conceal poor operating conditions on individual approaches.

Levels of service at unsignalized intersections are only calculated for minor movements since the through movement on the major street is not affected by intersection traffic control. The level of service for signalized intersections and unsignalized intersections can be compared.

The corresponding level of service represents the congestion of the roadway.

LOS for Signalized Intersection

	LOS by Volume-to-Capacity Ratio (v/c)	
Control Delay (s/veh)	v/c ≤1.0	v/c >1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

HCM 2010, Exhibit 18-4, p. 18-6

LOS for Non-Signalized Intersections

	LOS by Volume-to-Capacity Ratio (v/c)[a, b]	
Control Delay (s/veh)	v/c ≤1.0	v/c >1.0
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

NOTE: [a, b] For approaches and intersection-wide assessment, LOS is defined solely by control delay.

2-way stop control - HCM 2010, Exhibit 19-1, p. 19-2

3.1 Existing Volumes

2019 AADT traffic volumes on Route 31, Lakeshore Road and South Bay Road were obtained from the NYSDOT Traffic Data Viewer. New traffic turning movement counts were collected at the following 11 study area intersections on two weekdays and one Saturday between May 11th and May 21st, 2022.

- NYS Route 31 @ NYS Route 11
- NYS Route 31 @ I-81 SB Ramps
- NYS Route 31 @ I-81 NB Offramp / Pardee Road
- NYS Route 31 @ Lakeshore Road (West)
- NYS Route 31 @ South Bay Road
- NYS Route 31 @ Cicero Center Road
- NYS Route 31 @ Lakeshore Road (East)
- Lake Shore Road @ Mudd Mill Road
- Lake Shore Road @ South Bay Road
- Lake Shore Road @ Cicero Center Road / Van Antwerp Drive
- South Bay Road @ Thompson Road

The traffic counts were collected during the weekday morning (7-9am), weekday evening (4-6pm) peak travel periods on two separate days, and during the Saturday midday (11am-1pm) peak travel period on one Saturday to ensure that actual peak hours of the adjacent streets were captured. The traffic counts included separate heavy vehicle counts per direction and pedestrians. There was minor pedestrian

activity during the traffic count periods. Based on the traffic counts collected, the peak hours were identified as follows:

- Morning peak hour - 7:15-8:15am
- Evening peak hour - 4:30-5:30pm
- Saturday peak hour – 11:00am-12:00pm

The two weekday counts at each study area intersection were averaged. The count averages and traffic count data has been attached.

The 2022 existing traffic volumes collected in May were compared to historical counts taken from the NYSDOT Traffic Data Viewer Website to identify any adjustments to account for seasonal variations or any lingering impacts from the Covid pandemic. Specifically, the evening peak hour traffic volumes on the following roadway segments were compared to the AADT design hour and directional design traffic volumes:

- NYS Route 31 – NYS Route 11 to I-81
- NYS Route 31 – South Bay Road to Lakeshore Road (East)
- South Bay Road – Thompson Road to NYS Route 31
- I-81 Northbound Offramp at NYS Route 31
- I-81 Southbound Offramp at NYS Route 31
- I-81 SB Onramp at NYS Route 31

Based on the comparison of the total 2022 traffic volumes at these six locations to the total historical traffic volumes at these six locations, the 2022 traffic volumes were found to be 15% lower during the evening peak hour. In order to account for any reductions in traffic due to seasonal variations or the COVID pandemic, all of the 2022 traffic counts were multiplied by a factor of 1.15 for the weekday morning, weekday evening and Saturday midday peak hours.

AADT traffic volumes on the study area roadways based on the Traffic Data Viewer and a conservatively high 0.5% annual growth rate compared to actual historic growth trends are shown in the table below.

Existing Traffic Volumes for Study Area (No Build)								
STREET NAME	***EXISTING (2022)***		***ETC (2032)***		***ETC+20 (2052)***		***ETC+30 (2062)***	
	AADT	*DHV*	*AADT*	*DHV*	*AADT*	*DHV*	*AADT*	*DHV*
Route 31 Between Route 11 & I-81	*34,901*	*2,999*	*36,620*	*3,147*	*40,058*	*3,443*	*41,778*	*3,590*
Route 31 Between I-81 and South Bay	*12,971*	*1,122*	*13,610*	*1,177*	*14,887*	*1,287*	*15,526*	*1,343*
Route 31 Between South Bay & Lakeshore	*8,848*	*809*	*9,283*	*849*	*10,155*	*929*	*10,591*	*968*
Lakeshore Road Between Weaver & Maple	*4,320*	*431*	*4,533*	*453*	*4,958*	*495*	*5,171*	*516*
South Bay Road Between Thompson & Rte 31	*6,939*	*754*	*7,280*	*791*	*7,964*	*866*	*8,306*	*903*

Lakeshore Road carries approximately 170 vehicles eastbound/153 vehicles westbound passing the site during the morning peak hour, 284 vehicles eastbound/212 vehicles westbound passing the site during the evening peak hour, and 259 vehicles eastbound/219 vehicles westbound passing the site during the Saturday peak hour.

The 2022 existing May traffic volumes are shown in Figures 1-3 for the three peak hours. The adjusted existing 2022 traffic volumes are shown in Figures 4-6.

3.2 Growth Rates

The proposed development is assumed to be completed over approximately 10 years, therefore 2032 was used as the design year for this study. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project opening must first be completed.

Historical traffic volumes along NYS Route 31 between the I-81 interchange and South Bay Road, along Lakeshore Road between Weaver Road and Maple Road, and along South Bay Road between Thompson Road and NYS Route 31, were taken from the NYSDOT Traffic Data Viewer website and reviewed in order to understand historical growth trends in the area. Long term growth rates in the area have been -0.2% per year on NYS Route 31 between 2009 and 2019, +3.7% per year on Lakeshore Road between 2010 and 2019, and -0.9% per year on South Bay Road between 2010 and 2019. It is noted that there was a significant jump in traffic on Lakeshore Road between 2010 and 2016 with negative growth between 2016 and 2019.

A positive value of +0.5% per year was chosen to grow the existing traffic volumes to the 2032 design year to maintain a conservative analysis of traffic operations in the area. The 2032 base traffic volumes with 0.5% growth per year (5% total) are shown in Figures 7-9.

In additional to unknown growth, specific approved trips were also included in the background traffic volumes. The Town of Cicero was contacted and indicated that the Lakeshore Marina Apartments, the Horner Farm Subdivision and the Lyons Runne Section 3 developments needed to be included in the background projections. Approved trips generated during the morning and the evening peak hours were taken from the Lakeshore Marina traffic impact study (GTS Consulting, March 2018), The Horner Farm traffic impact study and updated traffic review (GTS Consulting, January 2021 and September 2021) and the Lyons Runne traffic impact study (GTS Consulting, January 2017). The trips generated during the Saturday peak hour for each development were estimated using the ITE Trip Generation, 11th Edition. All trips generated were extrapolated through the study area based on existing traffic distributions during each peak hour. The approved trips generated by the Lakeshore Marina development are shown in Figure 10-12, the approved trips generated by the Horner Farm development are shown in Figures 13-15, and the approved trips generated by the Lyons Runne Section 3 development are shown in Figures 16-18.

The Town of Cicero also noted two minor approved developments, the Royal Car Wash on NYS Route 31 at NYS Route 11, and an auto repair shop on Route 31 @ Lakeshore Road. Given the minor trip generation characteristics for these two developments, additional traffic generated is assumed to be captured within the general background growth that was applied to the existing traffic volumes.

The 2032 background traffic volumes with 5% growth and the approved developments are shown in Figures 19-21.

3.3 Projected Trip Generation & Distribution

The proposed development includes:

North Side Development

- 266 Apartments (160 units in Mixed Use Buildings A-E, 106 unit in Residential Buildings D-E)
- 20,000 SF Office Space (Mixed Use Buildings A-E)
- 20,000 SF Retail Space (Mixed Use Buildings A-E)

- 26,000 SF – Restaurant Space (20,000 SF in Mixed Use Buildings A-E, 6,000 in Restaurant E)
- 30 Condominiums in the Main Building
- 36,000 SF Clubhouse in the Main Building
- 120 Room Hotel with 500 person Conference Center – Main Building
- 116 Berth Marina

South Side Development

- 123 Apartments (Residential Buildings A-C)
- 163 Single Family Homes
- 20 Townhouses

Trips generated by the proposed development were estimated using the ITE Trip Generation, 11th Edition, which is the industry accepted standard for estimating traffic generated by new developments.

The following Land Uses were used:

- Land Use 221 – Multifamily Housing (Mid-Rise) – Used for apartments and condominiums
- Land Use 710 – General Office Building – Used for office space
- Land Use 822 – Strip Retail Plaza (<40,000 SF) – Used for retail space
- Land Use 932 – High-Turnover (Sit-Down) Restaurant – Used for restaurant space
- Land Use 310 – Hotel – Used for Hotel & Conference Center
- Land Use 420 – Marina – Used for marina
- Land Use 210 – Single Family Detached Housing – Used for single family and estate lots
- Land Use 215 – Single Family Attached Housing – Used for townhouses

Individual trips were not estimated for the conference center as this use is specifically included within the hotel land use. Individual trips were also not estimated for the club house as this is an amenity for the residential land uses and not an independent traffic generator.

A portion of the traffic generation within the north side development will be internal trips that do not generate new vehicles on the adjacent roadways. For example, residents or people at the hotel/conference center will visit the retail or restaurant uses on the site. Likewise people that live on the site may work in the office spaces, or use the marina. A 15% multi-use reduction was applied to the north side trip generation estimate to account for these internal capture trips.

A portion of the retail and restaurant traffic generated by the development will be drawn from traffic already passing the site on Lakeshore Road and is referred to as pass-by trips. Pass-by trips are vehicles that are already traveling through the study area but will now stop at the development on their way to anther destination, such as stopping on their way to or from work. Based on data from the ITE Trip Generation, the average pass-by trip percentage for Land Use 932 is 43% during the evening peak hour, and for land use 820 is 34% during the evening peak hour and 26% during the Saturday peak hour. A 10% pass-by trip percentage was assumed for the morning peak hour and a 30% pass-by trip percentage was assumed for evening/Saturday peak hours for the retail/restaurant uses. The credit was applied after the multi-use credit to avoid compounding credits.

The following tables summarize the trip generation estimate for the proposed Lakeshore Village development on Lakeshore Road in the Town of Cicero.

Trip Generation Summary – North Side Development

	Morning Peak Hour		Evening Peak Hour		Saturday Peak Hour	
	Entering	**Exiting**	**Entering**	**Exiting**	**Entering**	**Exiting**
Apartments / Condominiums – 306 units	25	85	70	45	58	57
Office – 20,000 SF	26	4	5	24	6	5
Retail – 20,000 SF	28	19	66	66	67	64
Restaurants – 26,000 SF	137	112	143	92	148	143
Hotel – 120 rooms	31	24	36	35	48	38
Marina – 116 berths	3	5	14	10	11	15
Total Individual Trips Generated	**250**	**249**	**334**	**272**	**338**	**322**
Multi-Use Credit – 15%	*-38*	*-37*	*-50*	*-41*	*-51*	*-48*
Total Trips Generated	**212**	**212**	**284**	**231**	**287**	**274**
Commercial Pass-by Trips AM 10%, PM/Sat – 30%	***-12***	***-12***	***-47***	***-47***	***-54***	***-54***
Total New Trips Generated	**200**	**200**	**237**	**184**	**233**	**221**

Trip Generation Summary – South Side Development

	Morning Peak Hour		Evening Peak Hour		Saturday Peak Hour	
	Entering	**Exiting**	**Entering**	**Exiting**	**Entering**	**Exiting**
Apartments – 123 Units	10	36	29	19	24	24
Single Family Homes – 163 Units	30	84	96	57	81	69
Townhouses – 20 Units	3	7	6	5	5	6
Total Trips Generated	**43**	**127**	**131**	**81**	**110**	**99**

Many people expect that residential land uses will generate an average of 2 trips per unit during peak hours. The trip generation rates for standard residential land uses are generally less than 1 trip per unit for a number of reasons. The primary reason is that people work different times, some may leave for work at 6:30 in the morning while others may leave at 7:30 or 8:30. Subsequently, the arrival patterns home in the evening will also be staggered over multiple hours. Some people work evenings while others may stay at home or work from home. The rates contained in the ITE Trip Generation have been verified and provide an accurate representation of what may be expected for this development during the peak hours of the adjacent streets.

Overall, the entire development is expected to generate approximately 255 trips entering/349 trips exiting during the morning peak hour, 415 trips entering/312 trips exiting during the evening peak hour, and 397 trips entering/373 trips exiting during the Saturday peak hour.

The Syracuse Metropolitan Transportation Council (SMTC) completed travel demand modeling and provided projected traffic volumes increases on select roadway links within a 6 mile radius of the proposed development. These volume increases were reviewed to develop overall distribution percentages traveling to/from the proposed development. The following provides a summary of the projected trip distribution based on the results of the SMTC modeling:

- 32% to/from I-81 south of Route 31
- 25% to/from Thompson Road via South Bay Road
- 15% to/from South Bay Road south of Thompson Road
- 9% to/from the east on Lakeshore Road
- 7% to/from the west on Route 31
- 5% to/from the north on Mudd Mill Road

- 3% to/from the south on Route 11 via Route 31
- 2% to/from I-81 north of Route 31
- 2% to/from the southeast on Cicero Center Road

Overall, 89% of the traffic generated is projected to travel to/from the west of the site on Lakeshore Road or South Bay Road, and 11% is projected to travel to/from the east of the site on Lakeshore Road or Cicero Center Road. It is noted that the SMTC demand model projected that nearly all of the traffic traveling to/from I-81 or points west would use Lakeshore Road to access Route 31 verses using South Bay Road. Given the existing delays at the Lakeshore Road/Route 31 intersection, this distribution was adjusted to assume that one third of this traffic would use South Bay Road and two thirds would use Lakeshore Road.

The proposed arrival/departure trip distributions for the north and south side portions of the development are shown in Figures 22 and 23 respectively. The trips generated were assigned to the study area intersections based on proposed distributions as shown in Figures 24-25 for the morning peak hour, Figures 26-27 for the evening peak hour, and Figures 28-29 for the Saturday peak hour. The resultant full build traffic volumes expected when the development is complete are shown in Figures 30-32.

3.4 Internal Circulation, Parking, Deliveries

Traffic will circulate throughout the southern portion of the development via new roadways through the site. Each northern driveway will access a certain portion of the northern development with the eastern access serving the bulk of the northern development. There is no parking allowed on study area roadways and no on-street parking planned within the development.

3.5 Traffic Control Device Data

The signalized intersections of NYS Route 31 with NYS Route 11 (NYSDOT #3007), the I-81 southbound ramps (NYSDOT #3181) and the I-81 northbound ramp / Pardee Road (NYSDOT #3182) are part of a coordinated signal system with full actuation at each of the signalized intersections. The overall system operates at a 110 signal cycle length during the three peak hours, although the intersection of Route 11 with Route 31 operates at different cycle length during the evening and Saturday peak hours.

The signalized intersections of NYS Route 31 with South Bay Road (NYSDOT #3043), NYS Route 31 with Cicero Center Road (NYSDOT #3285) and South Bay Road with Thompson Road (OCDOT #33) are all fully actuated, uncoordinated intersections.

The unsignalized intersections in the study area (NYS Route 31 @ Lakeshore Road east and west, Lakeshore Road at Mudd Mill Road, and Lakeshore Road at Cicero Center Road / Van Antwerp Drive) are all side street stop sign controlled with free flow traffic operations on the main roadways.

3.6 Capacity Analysis for Existing No-Build Condition

Capacity analysis of the existing traffic operations was completed using Synchro10.

There is notable existing traffic congestion along NYS Route 31 between Lakeshore Road and NYS Route 11 under the existing conditions during all three peak hours reviewed. The following signalized traffic movements in the study area are noted to be operating at Levels of Service E or F:

- NYS Route 31 @ NYS Route 11
  - EB Through/Right – PM & Sat LOS E
  - WB Left – PM LOS E, Sat LOS F
  - NB Through – AM, PM & Sat – LOS E
- NYS Route 31 @ I-81 SB Ramps
  - EB Through/Right – AM LOS E

  - WB Left – AM LOS F, PM LOS E
  - SB Left/Through – AM & Sat LOS E, PM LOS F
- NYS Route 31 @ I-81 NB Offramp / Pardee Road
  - Overall Intersection – PM LOS E
  - WB Through/Right – PM LOS F
  - NB Right – PM LOS F
- NYS Route 31 @ South Bay Road
  - Overall Intersection – PM LOS E
  - WB Left/Through/Right – Sat LOS F
  - NB Left/Through/Right – PM LOS F
- South Bay Road @ Thompson Road
  - EB Left – PM LOS E

The unsignalized intersections all have acceptable delays with Levels of Service C or better for all movements, with the exception of the Lakeshore Road westbound approach to NYS Route 31 which has failing level delays during all three peak hours.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.7 Capacity Analysis for Background No-Build Condition

Capacity analysis of the background traffic operations was completed using Synchro10. Planned NYSDOT improvements at the NYS Route 31 / South Bay Road intersection, including left turn lanes on all four approaches with protected/permitted left turn signal phasing was included in the background conditions analysis.

The results of the analysis with the approved developments shows moderate increases in delay primarily at the signalized intersections in the study area. The following drops in Level of Service are noted:

- NYS Route 31 @ NYS Route 11
  - Overall Intersection – Sat LOS D to E
  - WB Left – PM LOS E to F
- NYS Route 31 @ I-81 SB Ramps
  - Overall Intersection – AM LOS D to E, PM LOS C to D
  - EB Through/Right – AM LOS E to F, PM LOS C to E, Sat LOS D to E
  - WB Left – PM LOS E to F
  - SB Left/Through – AM LOS E to F
- NYS Route 31 @ I-81 NB Offramp / Pardee Road
  - Overall Intersection – PM LOS E to F
  - EB Through – PM LOS D to E
- South Bay Road @ Thompson Road
  - EB Left – PM LOS E to F

All unsignalized movements continue to operate at acceptable Levels of Service with the exception of the Lakeshore westbound approach to NYS Route 31 during all three peak hours.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.8 Capacity Analysis for Proposed Build Condition

Capacity analysis of the build traffic operations with no improvements was completed using Synchro10.

The following drops in Level of Service are noted at the signalized study area intersections:

- NYS Route 31 @ I-81 SB Ramps
  - Overall Intersection – PM & Sat LOS D to E
  - EB Through/Right – PM & Sat LOS E to F
  - WB Left – Sat LOS D to F
- NYS Route 31 @ I-81 NB Offramp / Pardee Road
  - Overall Intersection – Sat LOS C to E
  - EB Through – PM LOS E to F, Sat LOS C to D
  - WB Through/Right – AM LOS C to D, Sat LOS D to F
  - NB Right – AM LOS D to E
- NYS Route 31 @ South Bay Road
  - Overall Intersection – AM LOS C to D, PM & Sat LOS D to E
  - EB Through/Right – PM LOS D to E
  - WB Through/Right – Sat LOS C to D
  - NB Through/Right – PM LOS E to F
  - SB Through/Right – AM LOS D to F
- South Bay Road @ Thompson Road
  - EB Left – Sat LOS B to C
  - EB Through/Right – Sat LOS C to D
  - WB Left – AM LOS C to E, PM LOS B to C
  - WB Through/Right – AM LOS C to D
  - NB Left/Through – Sat LOS B to C
  - SB Left/Through – Sat LOS B to C

The following drops in Level of Service are noted at the unsignalized study area intersections:

- NYS Route 31 @ Lakeshore Road
  - EB Left – Sat LOS C to D
- Mudd Mill Road @ Lakeshore Road
  - SB Approach – AM LOS B to C, PM LOS C to E, Sat LOS C to D
- South Bay Road @ Lakeshore Road
  - NB Approach – AM LOS A to B, PM LOS B to D, Sat LOS B to C
- Cicero Center Road @ Lakeshore Road
  - NB Approach – Sat LOS B to C

The eastern site access on Lakeshore Road, northbound approach, is projected to operate at LOS E during the morning peak hour and LOS F during the evening and Saturday peak hours. The middle site access on Lakeshore Road, northbound approach, is projected to operate at LOS E during the evening and Saturday peak hours. The western driveway is projected to operate at LOS C or better during all three peak hours.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.9 Mitigation Measures

The following mitigation measures are recommended:

- Lakeshore Road @ Site Access
  - Install a two way center left turn lane between the middle and eastern full access driveways to provide 100 foot eastbound and westbound left turn lane at both locations.
  - Review traffic operations periodically as the development is completed to determine if a traffic signal is warranted at the eastern access location.

- NYS Route 31 @ South Bay Road
  - Construct a 150 foot northbound right turn lane on South Bay Road.
  - Optimize the signal operations periodically.

- NYS Route 31 @ Lakeshore Road
  - Install a 2-phase traffic signal with protected permitted eastbound left turn phasing and overlap southbound right turn phasing.
  - Restrict the Lakeshore Road approach to NYS Route 31 to right turn only movements.

- NYS Route 31 @ I-81 Northbound Offramp
  - Restripe the northbound through lane to allow shared through and right turn movements.

- NYS Route 31 @ Route 11, I-81 and Lakeshore Road
  - Optimize traffic signal operations and coordination parameters periodically.

With the proposed improvements noted above, traffic movements are generally projected to operate at levels consistent with the background condition at both the signalized and unsignalized intersections in the study area.

There is notable existing traffic congestion along NYS Route 31 between Lakeshore Road and NYS Route 11 under the existing conditions, with limited options to improve operations outside of major reconstruction of the I-81 interchange. The proposed mitigation, along with signal timing optimization, will offset the additional traffic generated by the proposed development without any significant impacts to existing traffic operations.

There are some potentially longer delays exiting the proposed development onto Lakeshore Road under the full build condition, even with the recommended widening to include a center left turn lane. Given that the proposed development will be completed over a number of years, it is recommended that operations be reviewed periodically at the site access to determine if a traffic signal or other mitigation is necessary to accommodate the site generated traffic.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

4.0 Crash Analysis

The purpose of this crash analysis is to identify safety problems by studying and quantifying accidents within and immediately adjacent to the driveway, and identifying abnormal patterns and clusters. An accident cluster is defined as an abnormal occurrence of similar accident types occurring at approximately the same location or involving the same geometric features. The severity of the accidents should also be considered. A history of accidents is an indication that further analysis is required to determine the cause(s) of the accident(s) and to identify what actions, if any, could be taken to mitigate the accidents.

A crash analysis was performed per Highway Design Manual Chapter 5 on NYS Route 31 from NYS Route 11 to Lakeshore Road (east), on Lakeshore Road between both ends at NYS Route 31, and on

South Bay Road between Thompson Road and Lakeshore Road.

Existing Crash Data

An accident analysis was completed for the study area using history reports obtained for a three year period from January 2019 through December 2021. Over the three year period, there were 629 total accidents in the study area.

Fifty-Three (53) accidents occurred at the Route 11 / Caughdenoy Road intersection including 36 rearend accidents, 7 right angle accidents, 3 overtaking accidents, 2 backing accidents, 1 bicyclist accident, 1 right turn accident, 1 left turn accident, 1 head on accident, and 1 fixed object accident. The predominant accident type are rearend accidents which are indicative of the congestion at the intersection. The intersection accident rate is above the statewide average rate for similar facilities. The future cross connection between the site and the Wegmans property will reduce traffic queues and congestion on Route 11 at Caughdenoy Road, which should provide some reduction in accident frequency.

Seventy-seven (77) accidents occurred at the NYS Route 31 / NYS Route 11 intersection including 33 rearend accidents, 13 overtaking accidents, 12 left turn accidents, 10 right angle accidents, 4 sideswipe accidents, 2 right turn accidents, 1 head on accident, 1 backing accident and 1 pedestrian accident. The accident rate is above the statewide average for similar facilities.

Fifty-three (53) accidents occurred at the NYS Route 31 / I-81 northbound ramps / Pardee Road intersection including 21 rearend accidents, 12 right angle accidents, 9 overtaking accidents, 4 left turn accidents, 2 backing accidents, 1 sideswipe accident, 1 right turn accident, 1 bicyclist accident, 1 non-collision accident and 1 fixed object accident. The accident rate is above the statewide average for similar facilities.

Twenty-seven (27) accidents occurred at the NYS Route 31 / I-81 southbound ramps intersection including 12 rearend accidents, 7 right angle accidents, 5 left turn accidents, and 3 overtaking accidents. The accident rate is above the statewide average for similar facilities.

Thirty-two (32) accidents occurred at the NYS Route 31 / Lakeshore Road west intersection including 22 rearend accidents, 4 right angle accidents, 2 fixed object accidents, 1 left turn accident, 1 overtaking accident, 1 non-collision accident and 1 animal related accident. The accident rate is above the statewide average for similar facilities.

Thirty-five (35) accidents occurred at the NYS Route 31 / South Bay Road intersection including 19 rearend accidents, 6 right angle accidents, 3 left turn accidents, 2 fixed object accidents, 2 overtaking accidents, 1 sideswipe accident, 1 bicyclist accident and 1 animal related accident. The accident rate is above the statewide average for similar facilities.

Seven (7) accidents occurred at the NYS Route 31 / Cicero Center Road intersection including 4 rearend accidents, 1 overtaking accident, 1 sideswipe accident and 1 bicyclist. The accident rate is below the statewide average for similar facilities.

Other intersection accidents along Route 31 at intersections not included in the study were as follows:

- NYS Route 31 @ Thompson Road – 33 accidents
- NYS Route 31 @ New Country Road – 11 accidents
- NYS Route 31 @ Crabtree Lane – 12 accidents
- NYS Route 31 @ Lakeshore Spur Road – 10 accidents
- NYS Route 31 @ Button Road – 7 accidents
- NYS Route 31 @ Whiting Road – 2 accidents
- NYS Route 31 @ Eastwood Road – 2 accidents

- NYS Route 31 @ Doreen Avenue – 2 accidents
- NYS Route 31 @ Boyko Farm Road – 2 accidents

Along NYS Route 31, there were 172 total midblock accidents including 51 rearend accidents, 30 fixed object accidents, 28 right angle accidents, 26 overtaking accidents, 15 animal related accidents, 11 left turn accidents, 2 right turn accidents, 2 backing accidents, 2 other accidents, 1 pedestrian accident, 1 sideswipe accident, 1 head on accidents and 1 fire accident. The overall accident rate for NYS Route 31 is just slightly above the statewide average rate for similar facilities.

Three (3) accidents occurred at the Lakeshore Road / South Bay Road intersection including 2 fixed object accidents and 1 right angle accident. The accident rate is above the statewide average for similar facilities.

Two (2) fixed object accidents occurred at the Lakeshore Road / Mudd Mill Road intersection. The accident rate is above the statewide average for similar facilities.

Two (2) accidents occurred at the Lakeshore Road / Cicero Center Road intersection including 1 fixed object accident and 1 rearend accident. The accident rate is above the statewide average for similar facilities.

Other intersection accidents along Lakeshore Road at intersections not included in the study were as follows:

- Lakeshore Road @ Snowshoe – 5 accidents
- Lakeshore Road @ Belnor – 2 accidents
- Lakeshore Road @ Backstretch – 2 accidents
- Lakeshore Road @ Eldan – 2 accidents
- Lakeshore Road @ Button – 1 accident
- Lakeshore Road @ Whiting – 2 accidents
- Lakeshore Road @ Carmenica – 1 accident
- Lakeshore Road @ McDonnells – 1 accident

Along Lakeshore Road, there were 31 total midblock accidents including 12 fixed object accidents, 6 animal related accidents, 5 overtaking accidents, 3 rearend accidents, 2 right angle accidents, 1 bicycle accident, 1 pedestrian accident and 1 sideswipe accident. The overall accident rate for Lakeshore Road is below the statewide average rate for similar facilities.

Twenty-three (23) accidents occurred at the South Bay Thompson Road intersection including 14 rearend accidents, 3 left turn accidents, 2 head on accidents, 2 backing accidents, 1 right angle accident and 1 sideswipe accident. The accident rate is above the statewide average for similar facilities.

Other intersection accidents along South Bay Road at intersections not included in the study were as follows:

- South Bay Road @ Whiting – 8 accidents
- South Bay Road @ Daedalus – 1 accident
- South Bay Road @ Henryk – 1 accident
- South Bay Road @ Owasco – 1 accident
- South Bay Road @ Cicero – 1 accident

Along South Bay Road, there were 15 total midblock accidents including 6 fixed object accidents, 4 animal related accidents, 3 rearend accidents, 1 overtaking accident, and 1 pedestrian accident. The overall accident rate for South Bay Road is slightly below the statewide average rate for similar facilities.

There were 31 accidents in area parking lots and 3 accidents on roadways outside the study area included in the data.

Of the accidents, 500 (79%) were non-reportable or property damage only accidents. There were 129 injury accidents with no fatalities.

4.2 Compare Rates to Accepted Values

The following table provides a comparison of the existing accident rates to the statewide average rate for similar facilities:

Intersection and Link Accident Rates		
Intersection / Link	**Calculated Intersection Accident Rate**	**Statewide Accident Rate for Similar Facilities**
Route 31 @ Route 11	1.93 acc/mev	0.52 acc/mev
Route 31 @ I-81 NB / Pardee	1.26 acc/mev	0.52 acc/mev
Route 31 @ I-81 SB	0.76 acc/mev	0.52 acc/mev
Route 31 @ Lakeshore	1.01 acc/mev	0.18 acc/mev
Route 31 @ South Bay	1.55 acc/mev	0.52 acc/mev
Route 31 @ Cicero Center	0.55 acc/mev	0.52 acc/mev
Lakeshore @ South Bay	0.47 acc/mev	0.18 acc/mev
Lakeshore @ Mudd Mill	0.28 acc/mev	0.18 acc/mev
Lakeshore @ Cicero Center	0.31 acc/mev	0.29 acc/mev
South Bay @ Thompson	0.96 acc/mev	0.52 acc/mev
Route 31	2.25 acc/mvm	2.23 acc/mvm
Lakeshore Road	1.70 acc/mvm	2.23 acc/mvm
South Bay Road	2.22 acc/mvm	2.23 acc/mvm

Acc/mev = Accidents per million entering vehicles
Acc/mvm = Accidents per million vehicle-miles

APPENDIX A

Concept Plan



File: V:\PROJECTS\ANYK5\058436.000\CADD_ACAD\CIVIL\MODEL FILES\WATERFRONT HOMES\MCOLOR\058436-C-103-LAYT-RESID_COLOR.DWG
Saved: 5/13/2021 3:43:08 PM Plotted: 12/4/2020 1:47:44 PM Current User: Franco, Amy Lastsaveby: 2473

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HART·LYMAN COMPANIES

0 150 300
Scale in feet

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PROPOSED LAKESHORE VILLAGE

LAKESHORE ROAD
CICERO, NY 13039

No.	Submittal / Revision	App'd	By	Date

RESIDENTIAL AREA CONCEPT PLAN

Designed By:	Drawn By:	Checked By:
BB/AMV	AMV	BFB
Issue Date:	Project No:	Scale:
-	58436	AS SHOWN

Drawing No.:

C-103

APPENDIX B

Gap Data & Speed Data

Intersection Gap Study

Project: Proposed Lakeshore Village Development - Lakeshore Road - Cicero, NY
Date: 5/11/22 & 5/14/2022

Intersection: Site Driveways @ Lakeshore Road
Movement: Southbound Right Turns Exiting / Eastbound Left Turns Entering

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak Hour											
7:15-7:30am	# of Gaps	0	0	0	0	2	0	6	18		
	# of Vehicles	**0**	**0**	**0**	**0**	**10**	**0**	**42**	**144**	**196**	
7:30-7:45am	# of Gaps	3	2	2	2	2	0	0	18		
	# of Vehicles	**3**	**4**	**6**	**8**	**10**	**0**	**0**	**144**	**175**	
7:45-8:00am	# of Gaps	2	2	3	0	2	1	3	13		
	# of Vehicles	**2**	**4**	**9**	**0**	**10**	**6**	**21**	**104**	**156**	
8:00-8:15am	# of Gaps	2	1	2	0	3	0	5	15		
	# of Vehicles	**2**	**2**	**6**	**0**	**15**	**0**	**35**	**120**	**180**	**707**
Evening Peak Hour											
4:30-4:45pm	# of Gaps	4	2	3	1	1	0	4	15		
	# of Vehicles	**4**	**4**	**9**	**4**	**5**	**0**	**28**	**120**	**174**	
4:45-5:00pm	# of Gaps	3	0	2	0	1	1	0	12		
	# of Vehicles	**3**	**0**	**6**	**0**	**5**	**6**	**0**	**96**	**116**	
5:00-5:15pm	# of Gaps	3	4	5	1	2	1	2	13		
	# of Vehicles	**3**	**8**	**15**	**4**	**10**	**6**	**14**	**104**	**164**	
5:15-5:30pm	# of Gaps	3	6	4	2	4	1	2	11		
	# of Vehicles	**3**	**12**	**12**	**8**	**20**	**6**	**14**	**88**	**163**	**617**
Saturday Peak Hour											
11:00-11:15pm	# of Gaps	2	4	6	1	1	0	3	11		
	# of Vehicles	**2**	**8**	**18**	**4**	**5**	**0**	**21**	**88**	**146**	
11:15-11:30am	# of Gaps	2	4	0	2	1	1	0	14		
	# of Vehicles	**2**	**8**	**0**	**8**	**5**	**6**	**0**	**112**	**141**	
11:30-11:45am	# of Gaps	3	2	1	1	4	1	2	12		
	# of Vehicles	**3**	**4**	**3**	**4**	**20**	**6**	**14**	**96**	**150**	
11:45am-12:00pm	# of Gaps	2	3	0	2	2	0	2	13		
	# of Vehicles	**2**	**6**	**0**	**8**	**10**	**0**	**14**	**104**	**144**	**581**

Intersection Gap Study

Project: Proposed Lakeshore Village Development - Lakeshore Road - Cicero, NY
Date: 5/11/22 & 5/14/2022

Intersection: Site Driveways @ Lakeshore Road
Movement: Northbound Right Turns Exiting / Westbound Left Turns Entering

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak Hour											
7:15-7:30am	# of Gaps	2	1	1	0	0	1	3	15		
	# of Vehicles	**2**	**2**	**3**	**0**	**0**	**6**	**21**	**120**	**154**	
7:30-7:45am	# of Gaps	1	1	1	0	0	0	1	18		
	# of Vehicles	**1**	**2**	**3**	**0**	**0**	**0**	**7**	**144**	**157**	
7:45-8:00am	# of Gaps	4	3	1	4	1	2	4	12		
	# of Vehicles	**4**	**6**	**3**	**16**	**5**	**12**	**28**	**96**	**170**	
8:00-8:15am	# of Gaps	1	1	1	0	2	0	5	16		
	# of Vehicles	**1**	**2**	**3**	**0**	**10**	**0**	**35**	**128**	**179**	**660**
Evening Peak Hour											
4:30-4:45pm	# of Gaps	1	3	5	1	2	1	2	12		
	# of Vehicles	**1**	**6**	**15**	**4**	**10**	**6**	**14**	**96**	**152**	
4:45-5:00pm	# of Gaps	3	7	5	3	2	1	3	9		
	# of Vehicles	**3**	**14**	**15**	**12**	**10**	**6**	**21**	**72**	**153**	
5:00-5:15pm	# of Gaps	4	7	5	3	1	2	2	12		
	# of Vehicles	**4**	**14**	**15**	**12**	**5**	**12**	**14**	**96**	**172**	
5:15-5:30pm	# of Gaps	4	3	6	1	2	2	2	12		
	# of Vehicles	**4**	**6**	**18**	**4**	**10**	**12**	**14**	**96**	**164**	**641**
Saturday Peak Hour											
11:00-11:15pm	# of Gaps	1	1	0	3	1	0	2	12		
	# of Vehicles	**1**	**2**	**0**	**12**	**5**	**0**	**14**	**96**	**130**	
11:15-11:30am	# of Gaps	4	3	1	2	2	0	6	14		
	# of Vehicles	**4**	**6**	**3**	**8**	**10**	**0**	**42**	**112**	**185**	
11:30-11:45am	# of Gaps	1	7	2	0	2	1	1	14		
	# of Vehicles	**1**	**14**	**6**	**0**	**10**	**6**	**7**	**112**	**156**	
11:45am-12:00pm	# of Gaps	2	5	4	1	0	2	2	12		
	# of Vehicles	**2**	**10**	**12**	**4**	**0**	**12**	**14**	**96**	**150**	**621**

Intersection Gap Study

Project: Proposed Lakeshore Village Development - Lakeshore Road - Cicero, NY
Date: 5/11/22 & 5/14/2022

Intersection: Site Driveways @ Lakeshore Road
Movement: Left Turns Exiting

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak Hour											
7:15-7:30am	# of Gaps	0	3	2	1	2	2	8	10		
	# of Vehicles	**0**	**6**	**6**	**4**	**10**	**12**	**56**	**80**	**174**	
7:30-7:45am	# of Gaps	4	5	3	2	2	0	0	10		
	# of Vehicles	**4**	**10**	**9**	**8**	**10**	**0**	**0**	**80**	**121**	
7:45-8:00am	# of Gaps	9	6	4	3	2	1	4	9		
	# of Vehicles	**9**	**12**	**12**	**12**	**10**	**6**	**28**	**72**	**161**	
8:00-8:15am	# of Gaps	3	2	3	0	4	0	7	11		
	# of Vehicles	**3**	**4**	**9**	**0**	**20**	**0**	**49**	**88**	**173**	**629**
Evening Peak Hour											
4:30-4:45pm	# of Gaps	7	6	9	0	1	0	3	5		
	# of Vehicles	**7**	**12**	**27**	**0**	**5**	**0**	**21**	**40**	**112**	
4:45-5:00pm	# of Gaps	7	5	9	3	5	0	3	6		
	# of Vehicles	**7**	**10**	**27**	**12**	**25**	**0**	**21**	**48**	**150**	
5:00-5:15pm	# of Gaps	8	10	7	3	2	2	4	6		
	# of Vehicles	**8**	**20**	**21**	**12**	**10**	**12**	**28**	**48**	**159**	
5:15-5:30pm	# of Gaps	14	11	7	3	3	2	3	4		
	# of Vehicles	**14**	**22**	**21**	**12**	**15**	**12**	**21**	**32**	**149**	**570**
Saturday Peak Hour											
11:00-11:15pm	# of Gaps	4	2	6	2	1	0	6	5		
	# of Vehicles	**4**	**4**	**18**	**8**	**5**	**0**	**42**	**40**	**121**	
11:15-11:30am	# of Gaps	7	5	3	5	3	2	6	4		
	# of Vehicles	**7**	**10**	**9**	**20**	**15**	**12**	**42**	**32**	**147**	
11:30-11:45am	# of Gaps	6	8	2	1	4	0	3	6		
	# of Vehicles	**6**	**16**	**6**	**4**	**20**	**0**	**21**	**48**	**121**	
11:45am-12:00pm	# of Gaps	5	9	3	2	1	1	3	5		
	# of Vehicles	**5**	**18**	**9**	**8**	**5**	**6**	**21**	**40**	**112**	**501**

Proposed Lakeshore Village Development - Lakeshore Road, Town of Cicero, NY

Speed Study Measurements - Lakeshore Road Passing Site

5/12/2022

Distance Travelled (ft) = 175 50 Speed Measurements per Direction Speed Limit 35 mph

EB Time Seconds	Calculated Speed	EB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed
3.03	39	2.87	42	3.22	37	2.75	43
3.57	33	2.85	42	3.22	37	2.74	44
3.41	35	2.84	42	3.18	38	2.72	44
3.40	35	2.84	42	3.03	39	2.72	44
3.34	36	2.84	42	3.03	39	2.72	44
3.34	36	2.84	42	3.03	39	2.72	44
3.31	36	2.82	42	3.03	39	2.72	44
3.31	36	2.81	42	3.02	40	2.71	44
3.28	36	2.81	42	2.97	40	2.69	44
3.22	37	2.81	42	2.96	40	2.69	44
3.22	37	2.81	42	2.95	40	2.68	45
3.16	38	2.79	43	2.93	41	2.66	45
3.12	38	2.79	43	2.93	41	2.65	45
3.10	38	2.78	43	2.9	41	2.64	45
3.06	39	2.78	43	2.87	42	2.63	45
3.03	39	2.78	43	2.87	42	2.63	45
3.03	39	2.74	44	2.87	42	2.62	46
2.99	40	2.74	44	2.87	42	2.6	46
2.97	40	2.73	44	2.86	42	2.59	46
2.97	40	2.73	44	2.85	42	2.59	46
2.96	40	2.69	44	2.84	42	2.56	47
2.94	41	2.68	45	2.84	42	2.53	47
2.9	41	2.67	45	2.84	42	2.48	48
2.88	41	2.63	45	2.82	42	2.47	48
2.88	41	2.59	46	2.78	43	2.47	48

Eastb ound

Average Speed = 41 mph

85th Percentile Speed = 44 mph

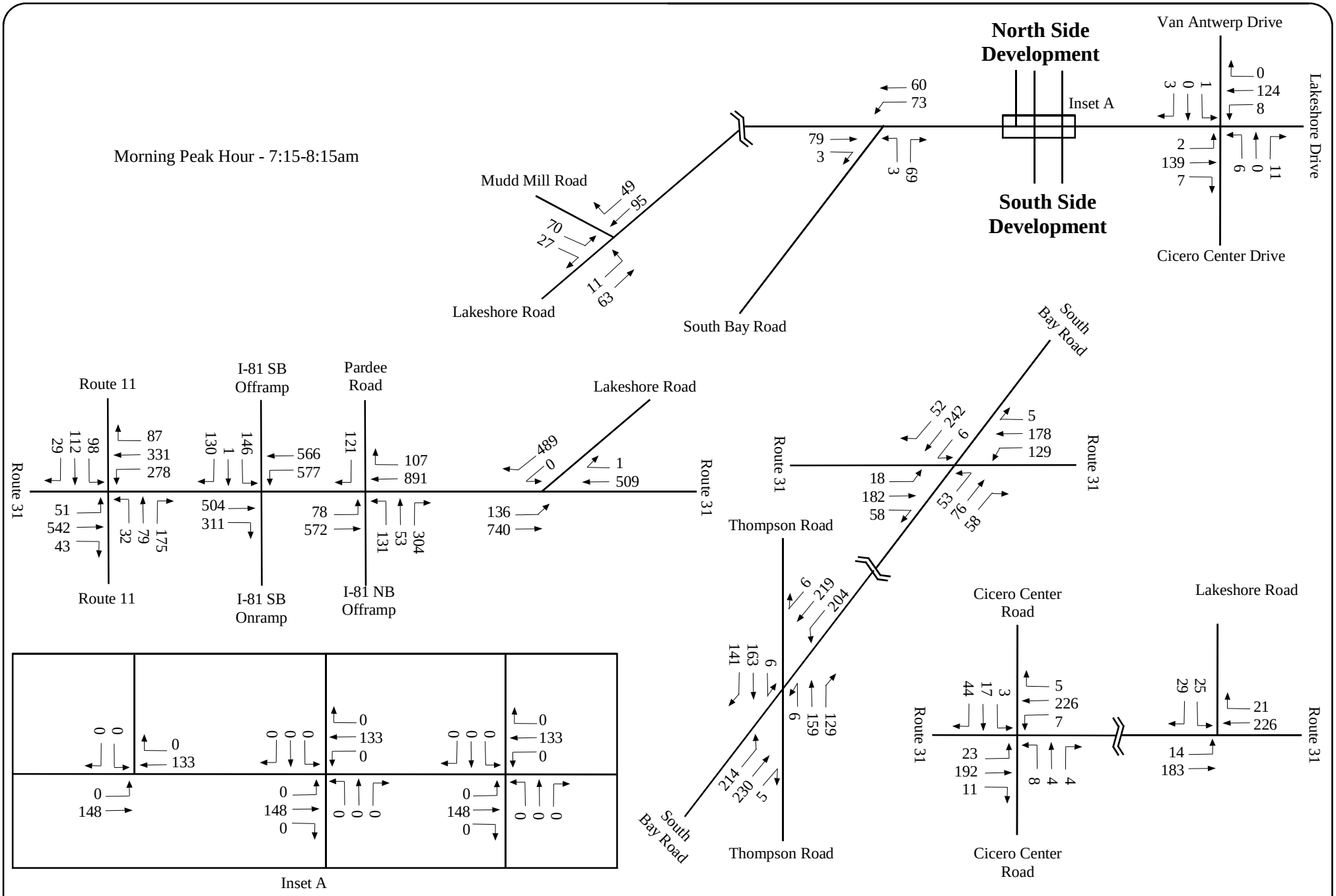
Westbound

Average Speed = 43 mph

85th Percentile Speed = 46 mph

APPENDIX C

Traffic Volume Figures 1-32



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

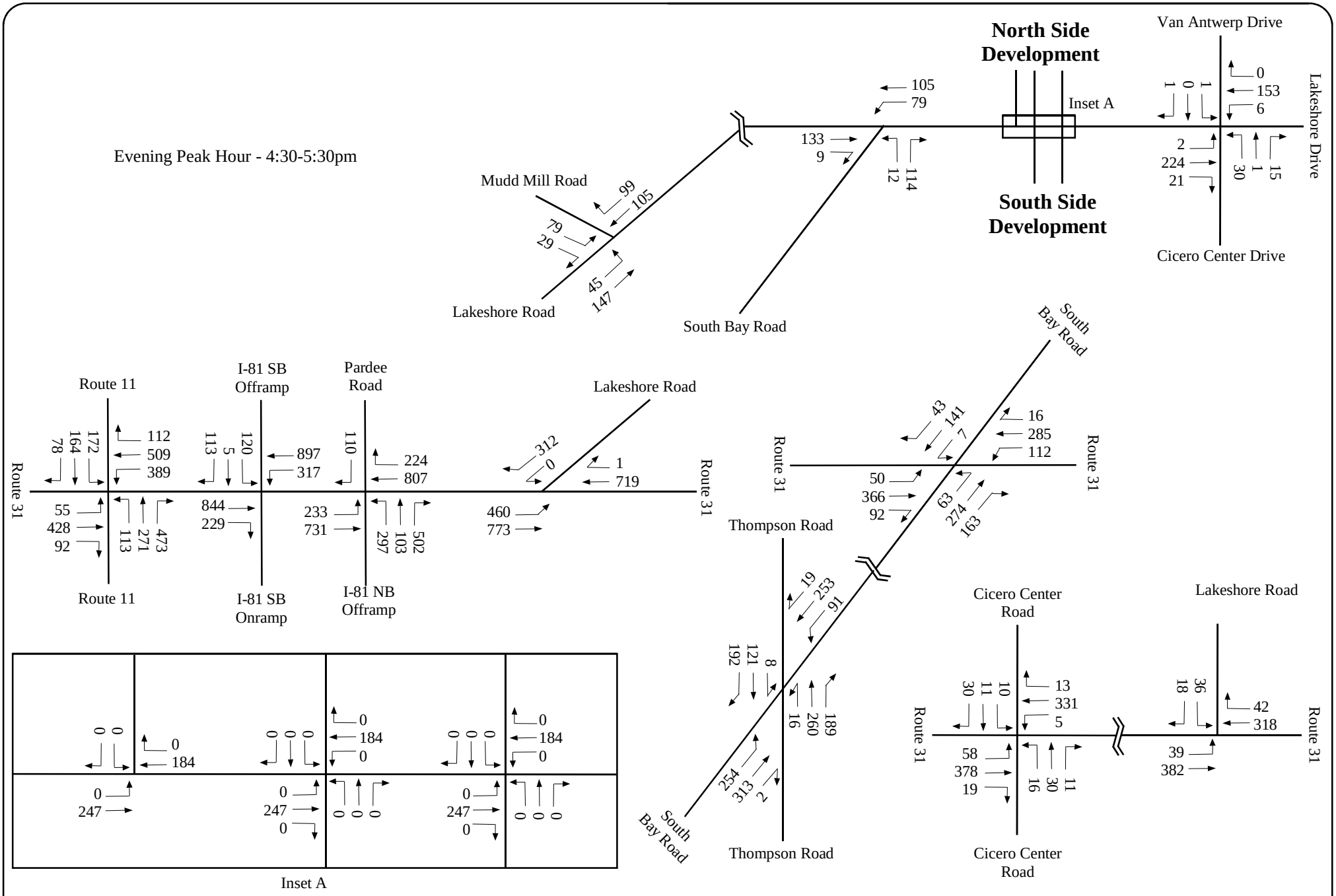
2022 Existing Traffic Volumes - Collected May 2022

Morning Peak Hour

Figure 1

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

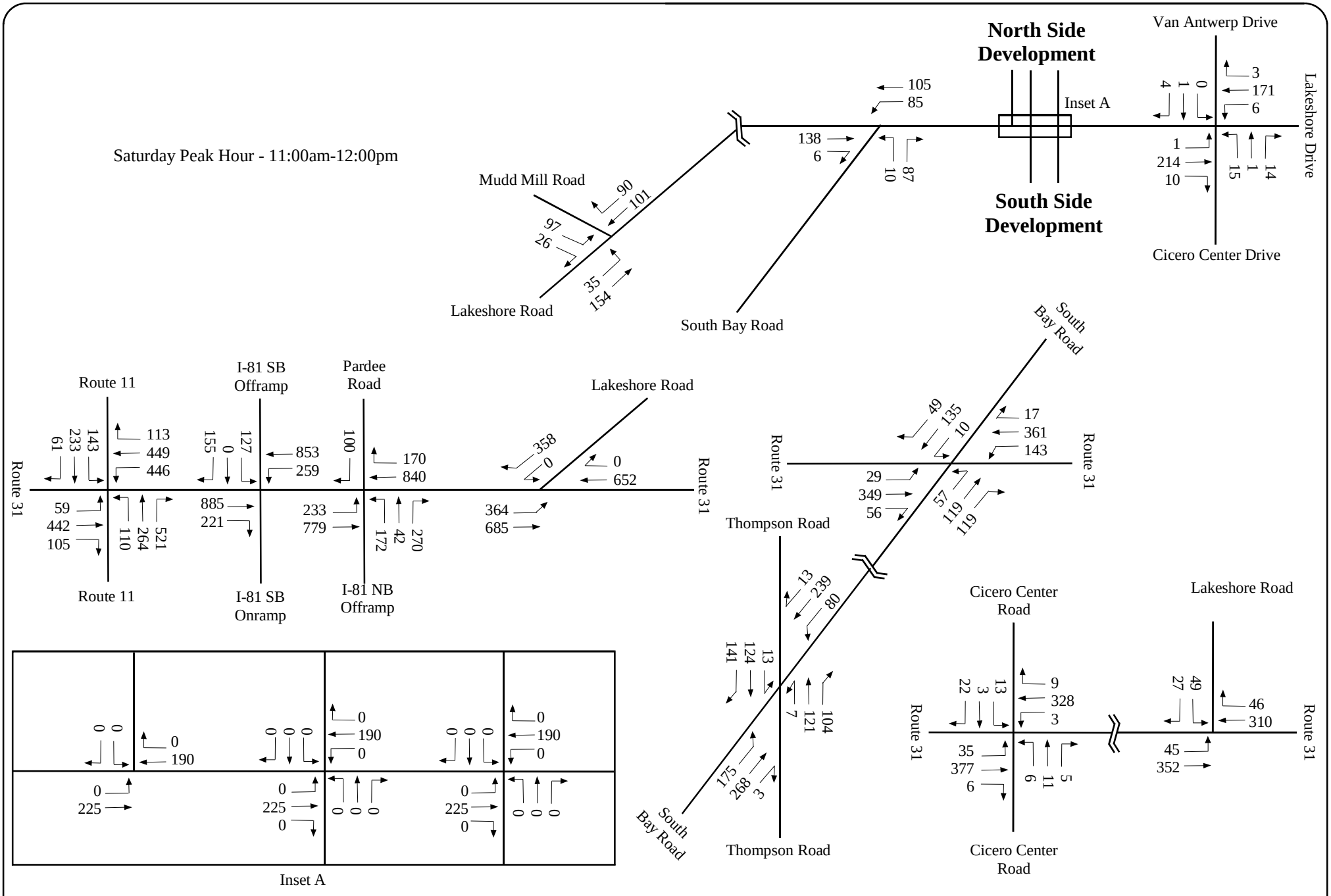
2022 Existing Traffic Volumes - Collected May 2022

Evening Peak Hour

Figure 2

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

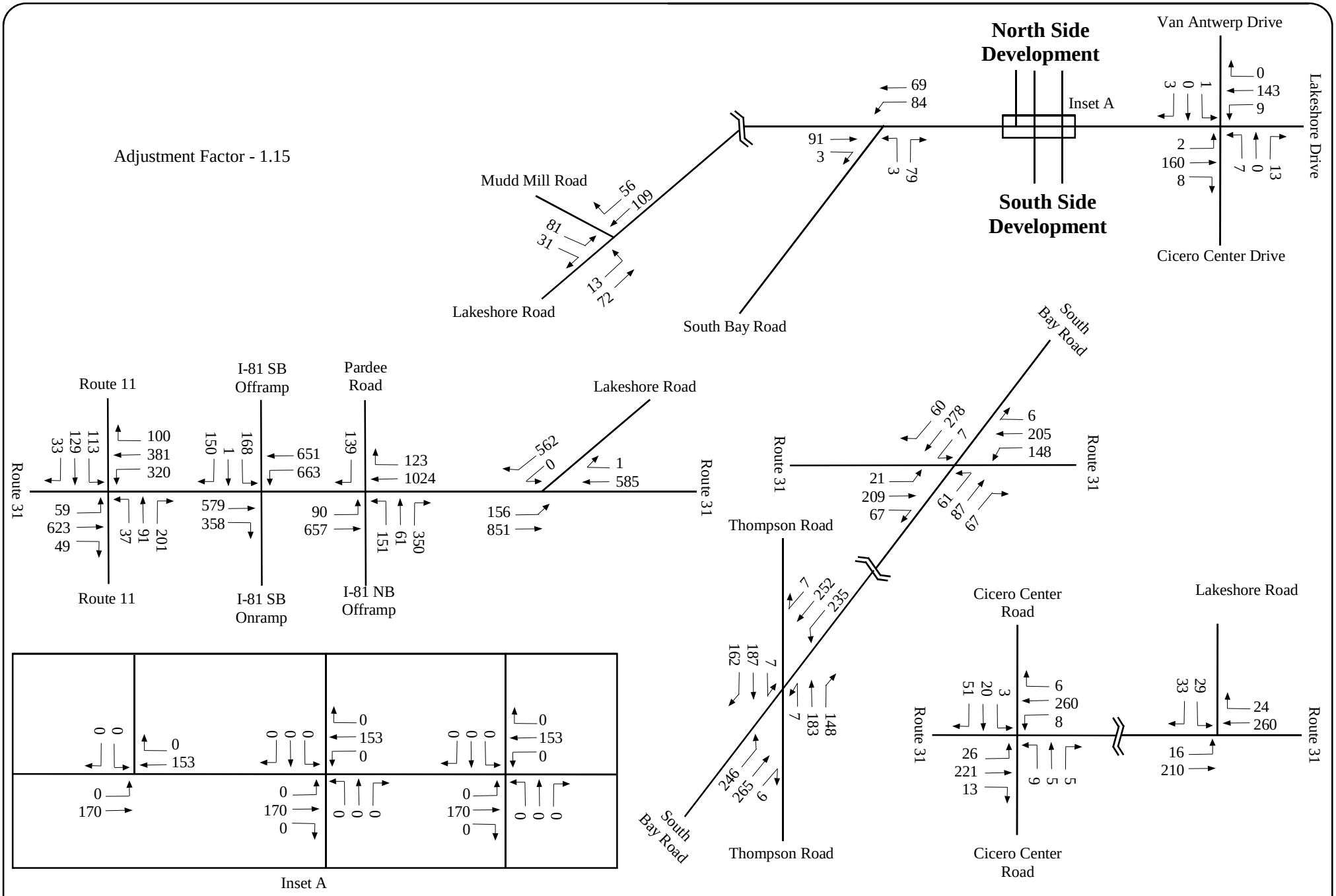
2022 Existing Traffic Volumes - Collected May 2022

Saturday Peak Hour

Figure 3

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

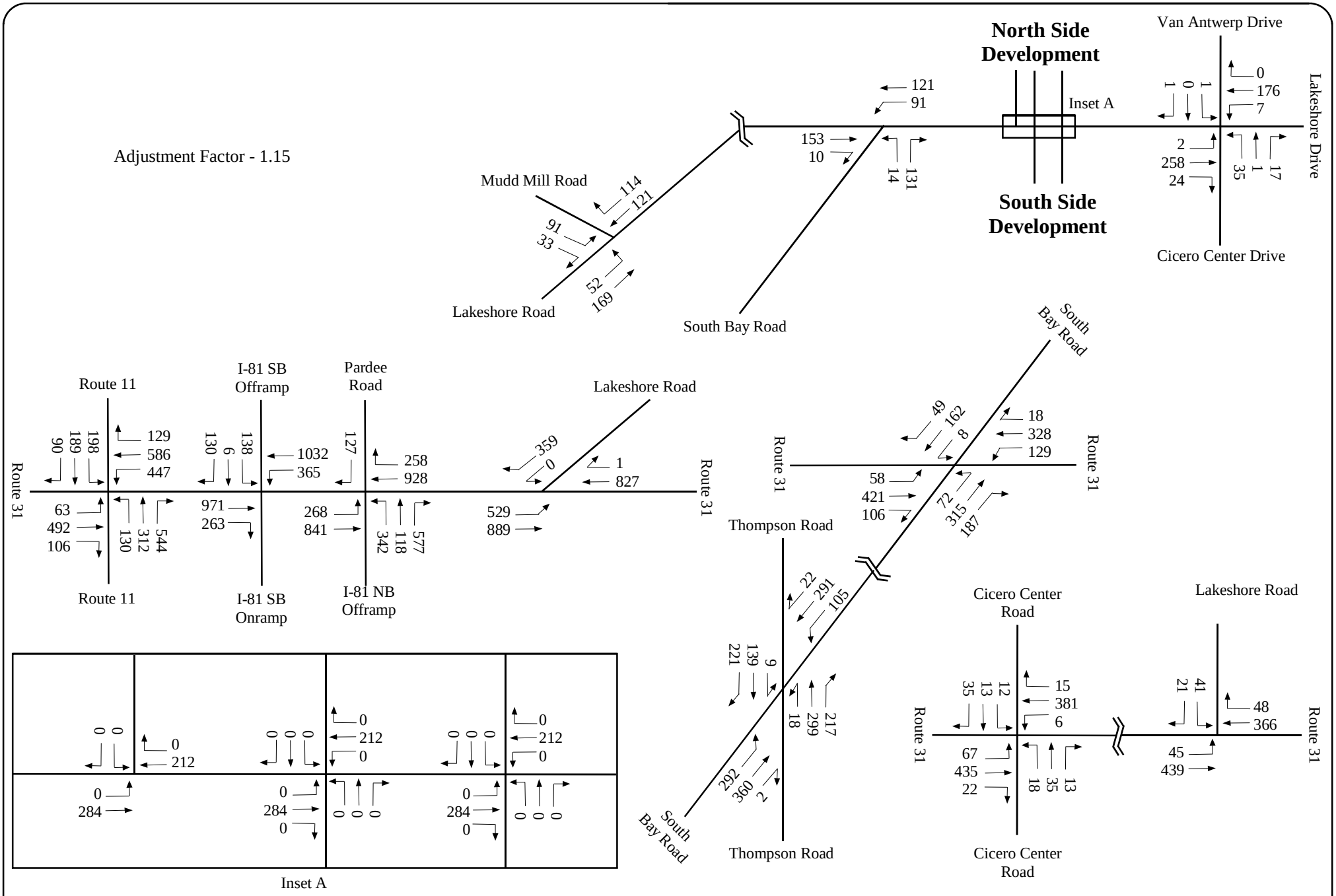
2022 Existing Traffic Volumes - With Seasonal/Covid Adjustment

Morning Peak Hour

Figure 4

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

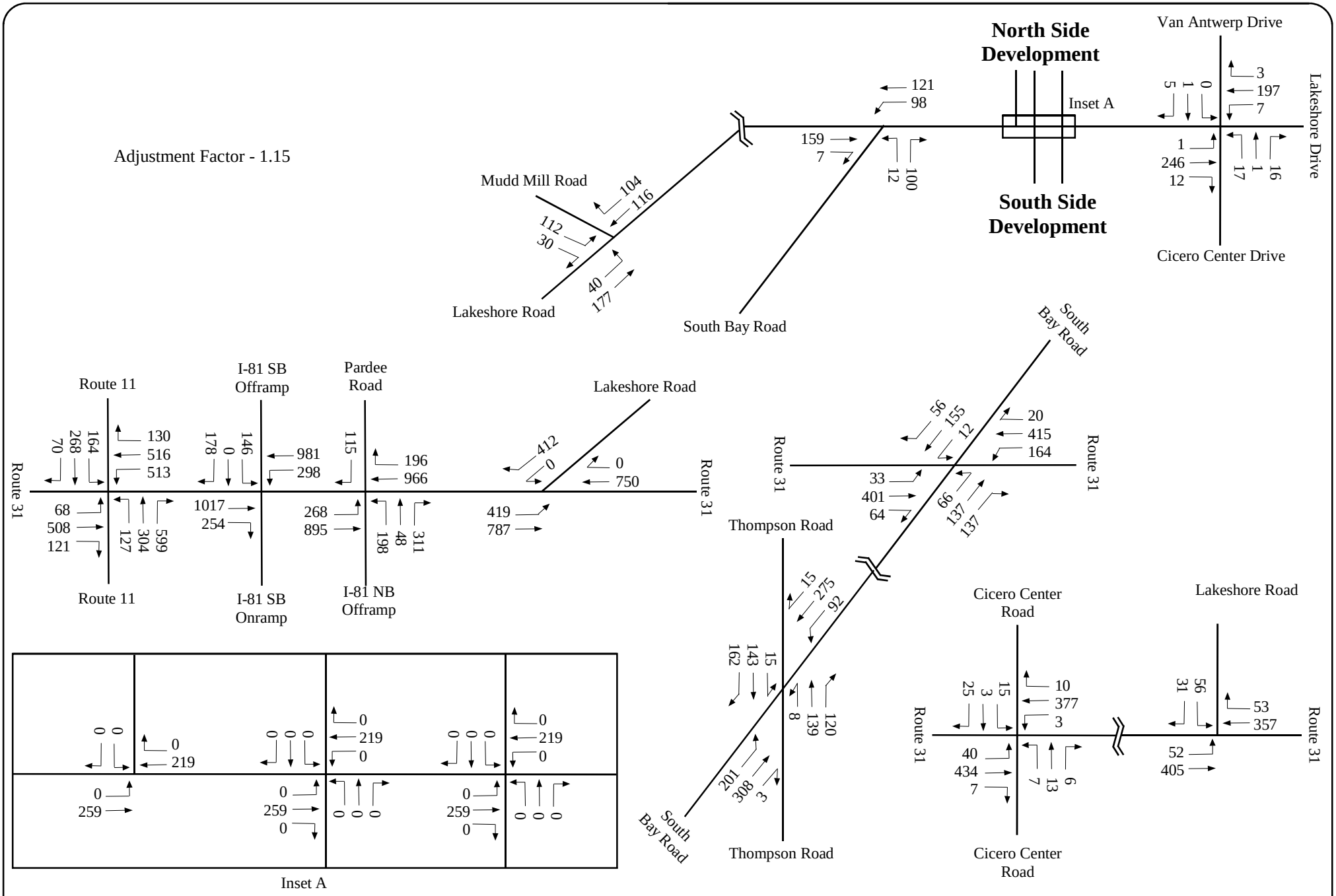
2022 Existing Traffic Volumes - With Seasonal/Covid Adjustment

Evening Peak Hour

Figure 5

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

2022 Existing Traffic Volumes - With Seasonal/Covid Adjustment

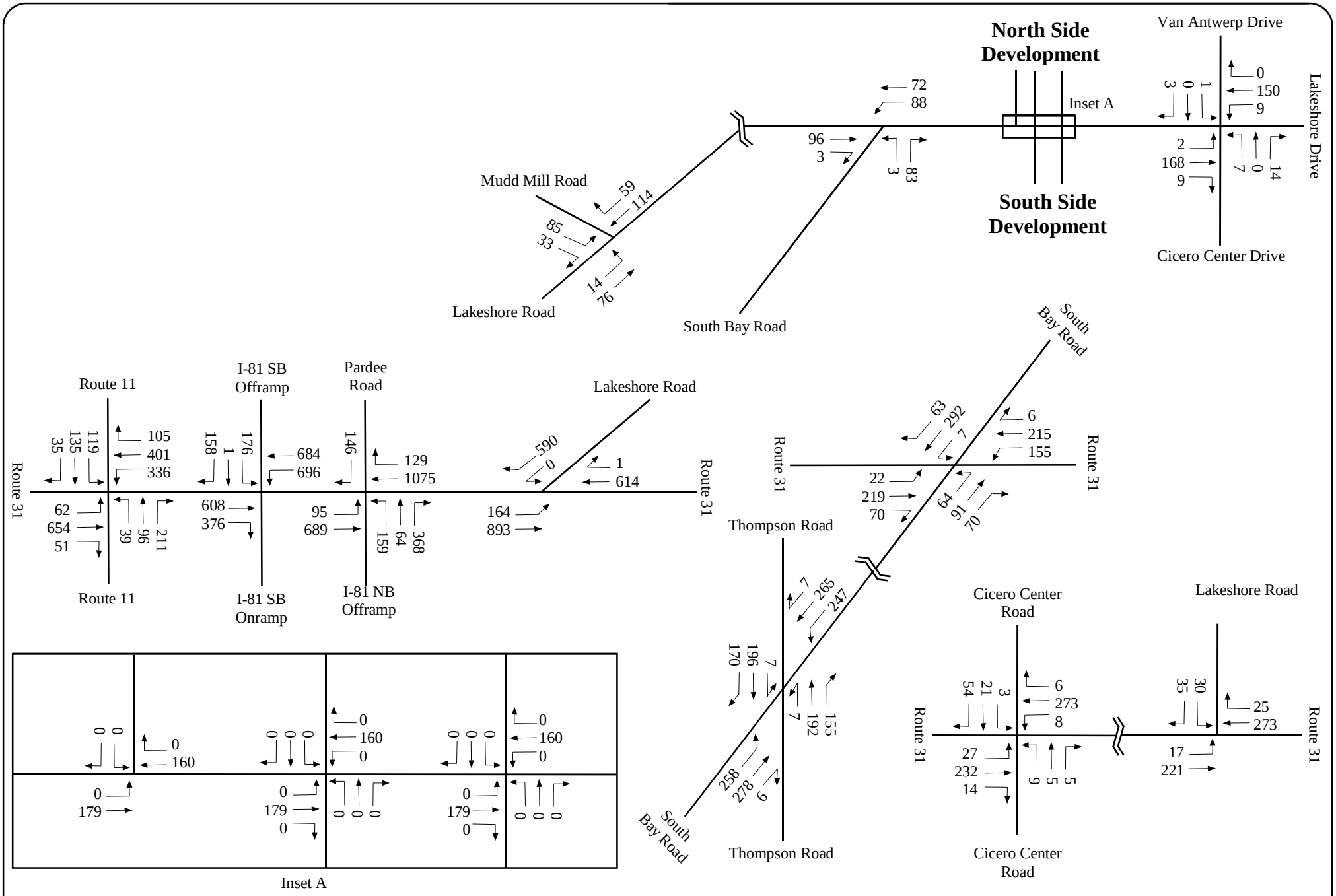
Saturday Peak Hour

Figure 6

N

W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

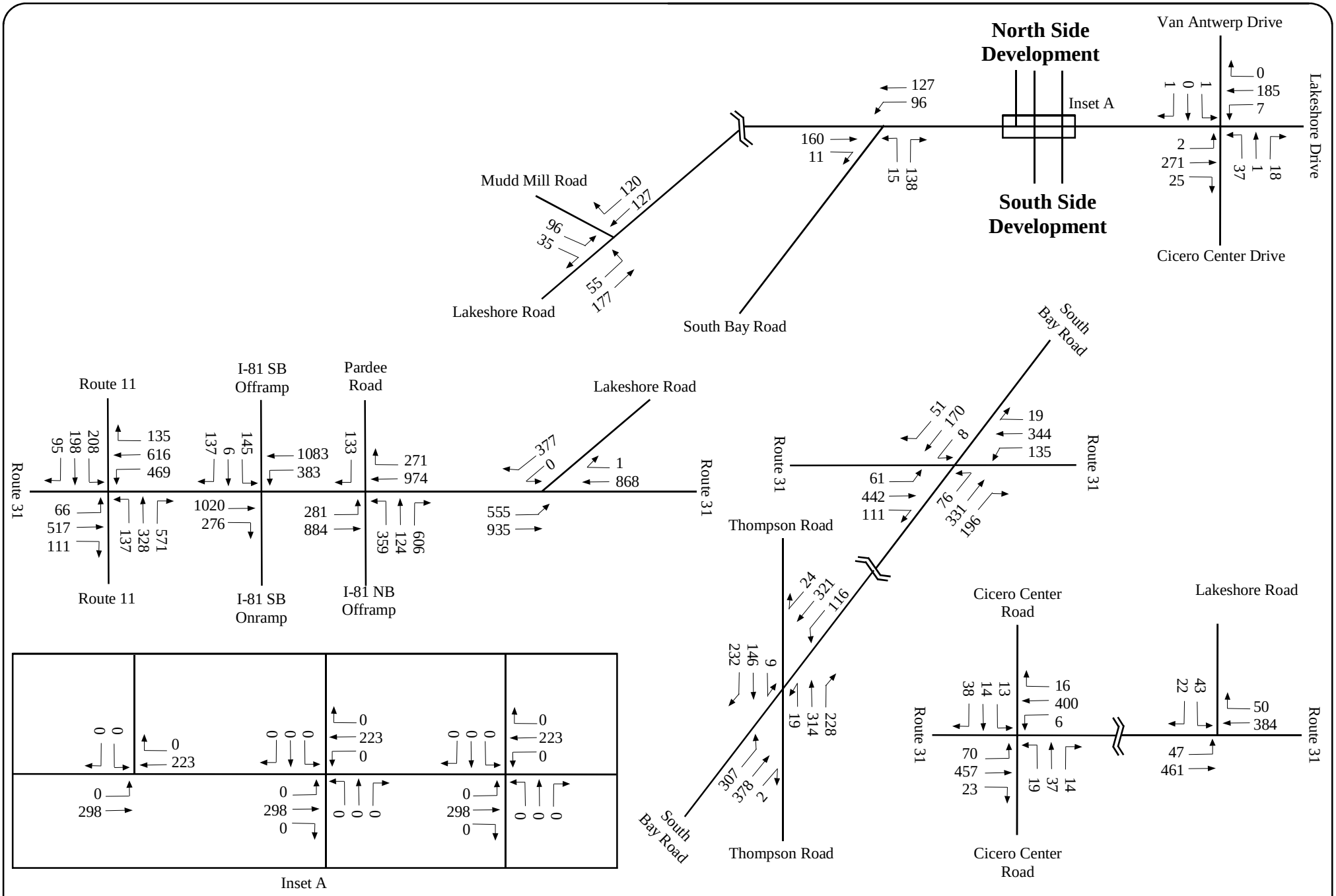
2032 Base Traffic Volumes - With 0.5% Growth per Year (5% Total)

Morning Peak Hour

Figure 7

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

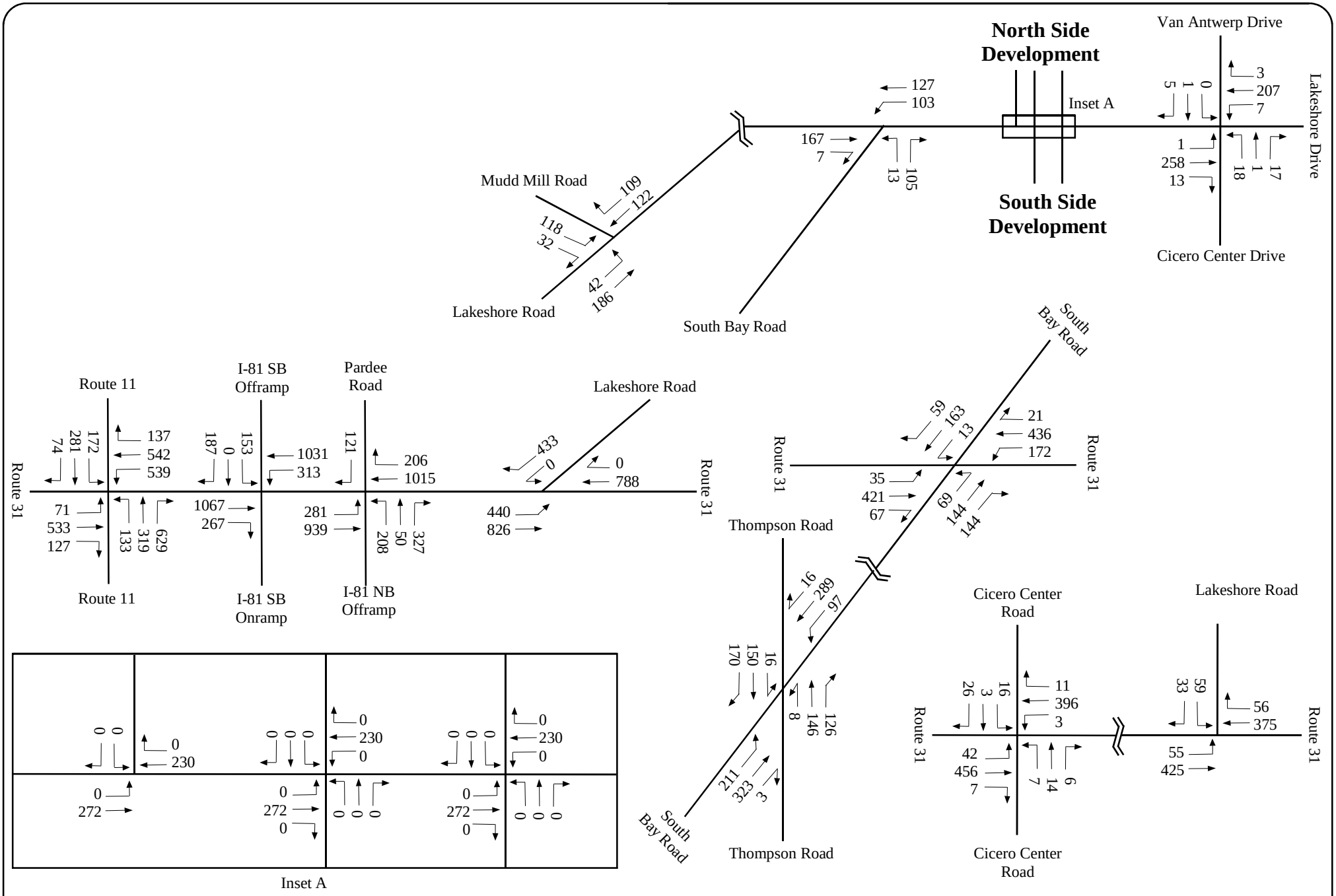
2032 Base Traffic Volumes - With 0.5% Growth per Year (5% Total)

Evening Peak Hour

Figure 8

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

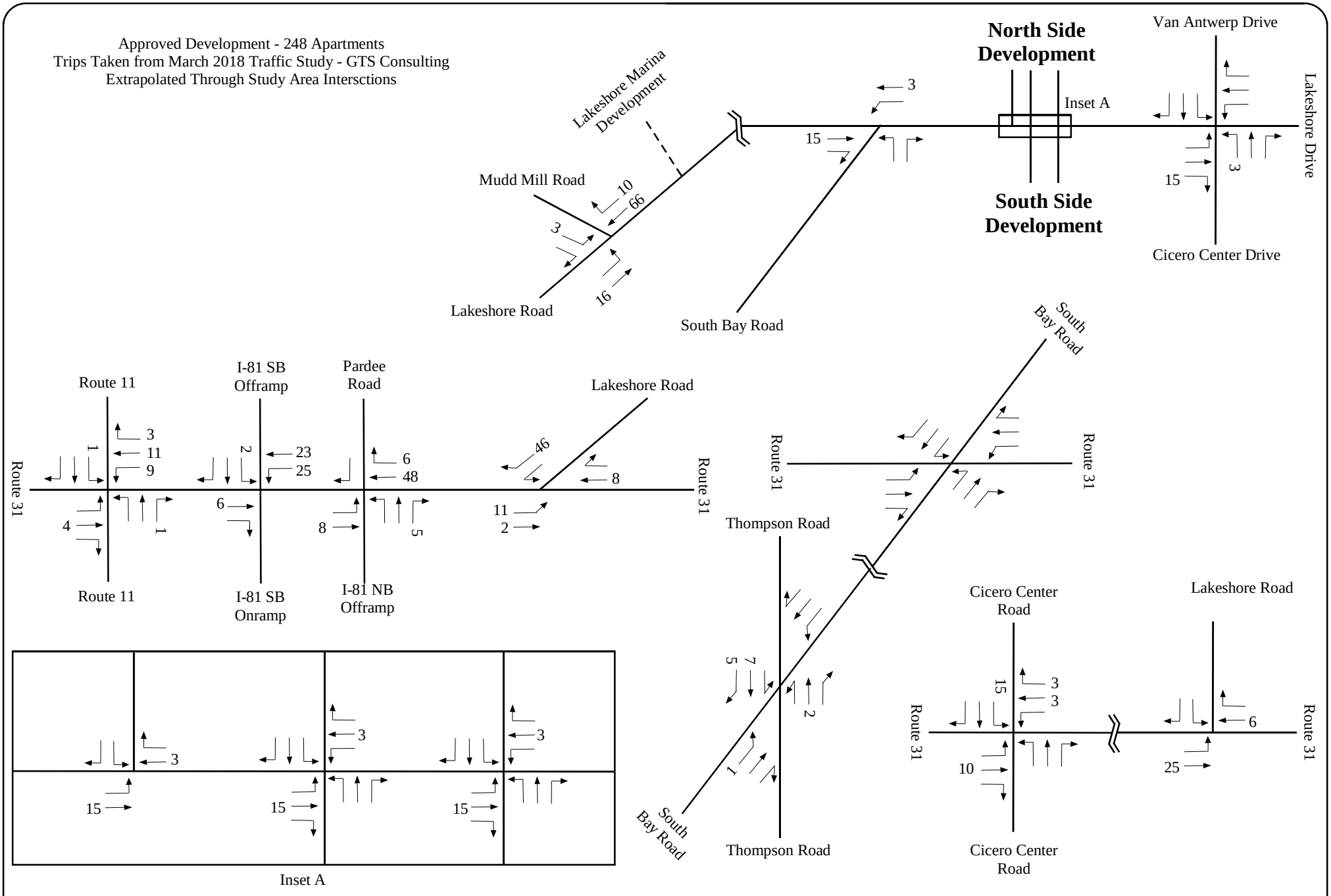
2032 Base Traffic Volumes - With 0.5% Growth per Year (5% Total)

Saturday Peak Hour

Figure 9

N
W E

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Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

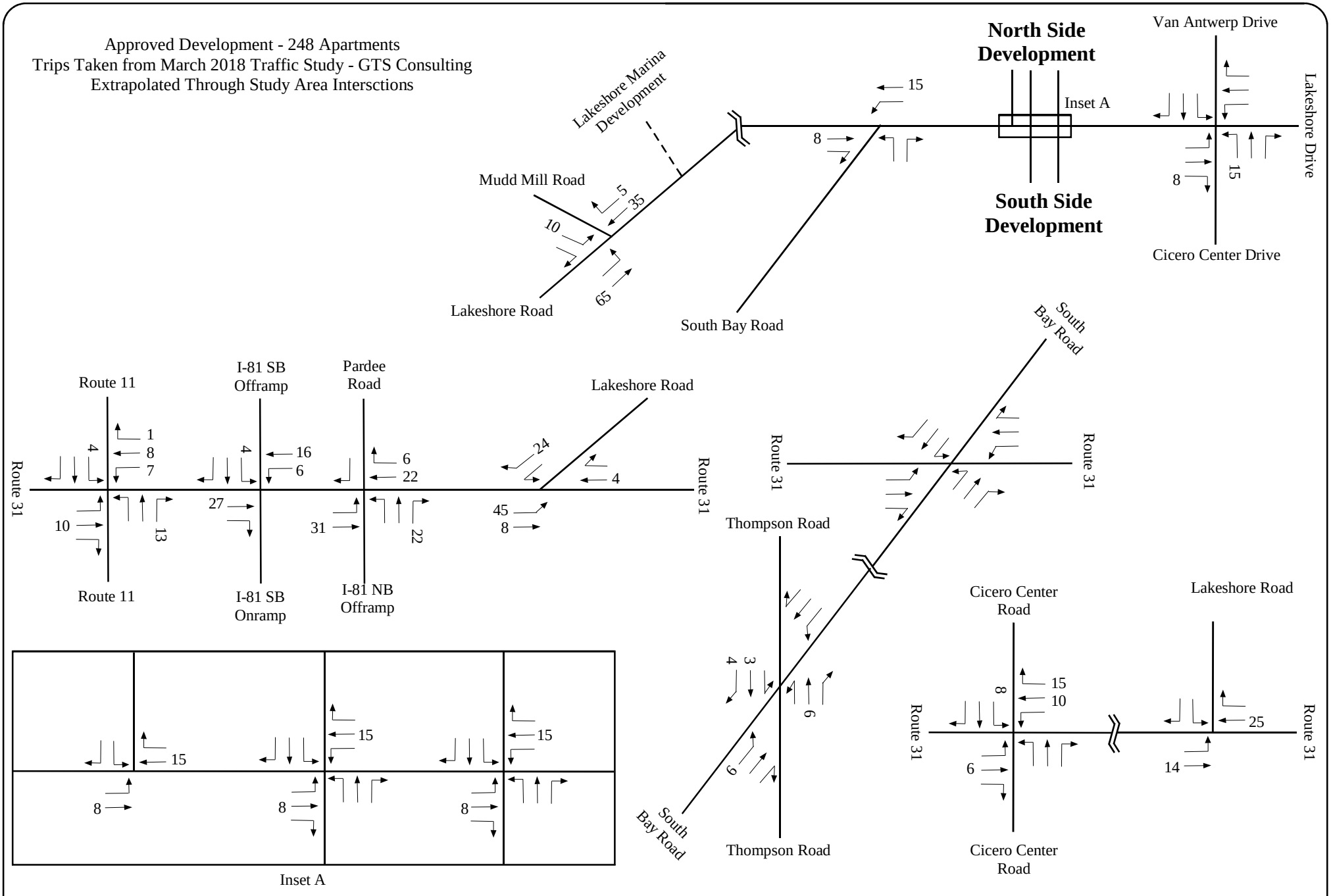
Approved Development Trips - Lakeshore Marina Apartments

Morning Peak Hour

Figure 10

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

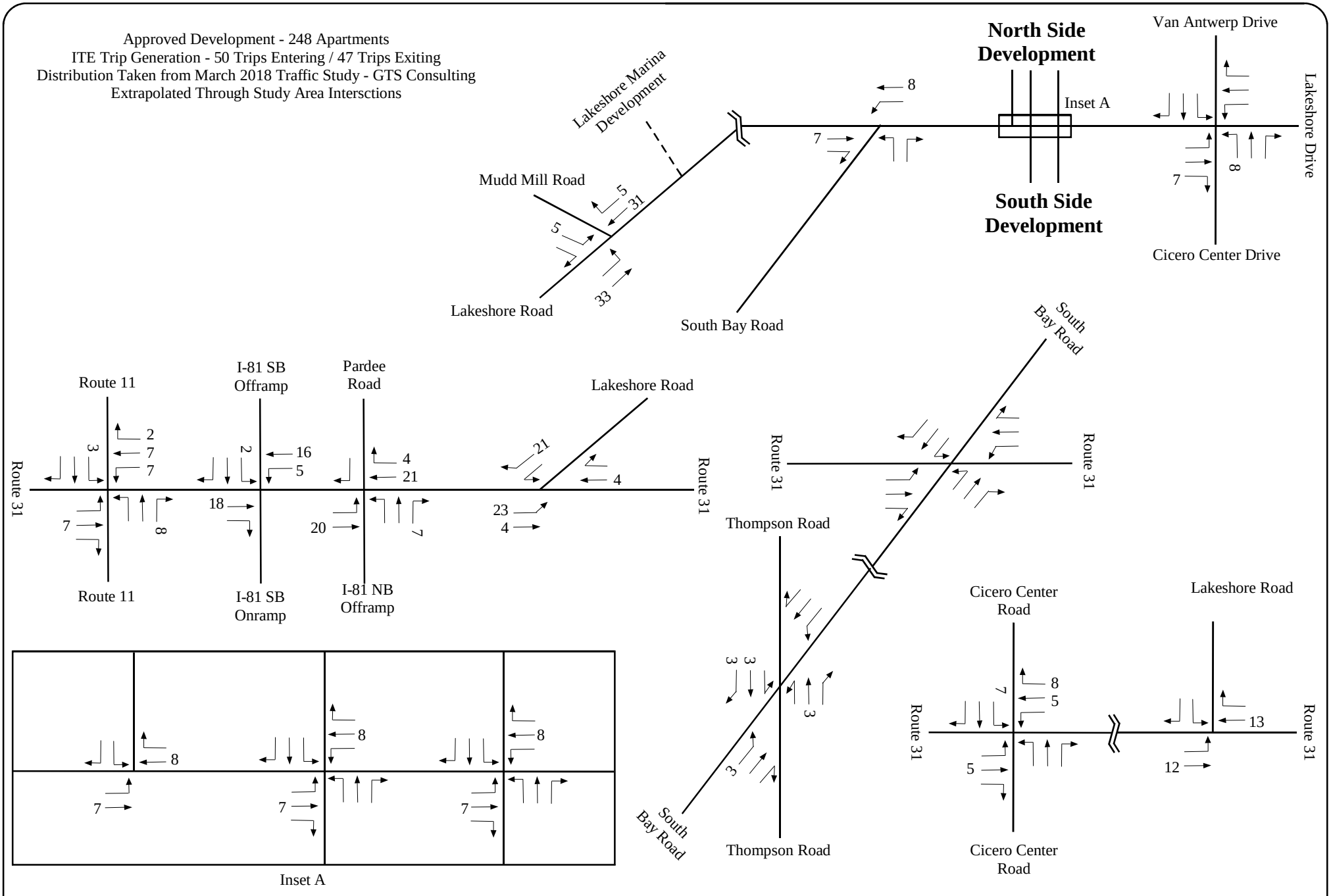
Approved Development Trips - Lakeshore Marina Apartments

Evening Peak Hour

Figure 11

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

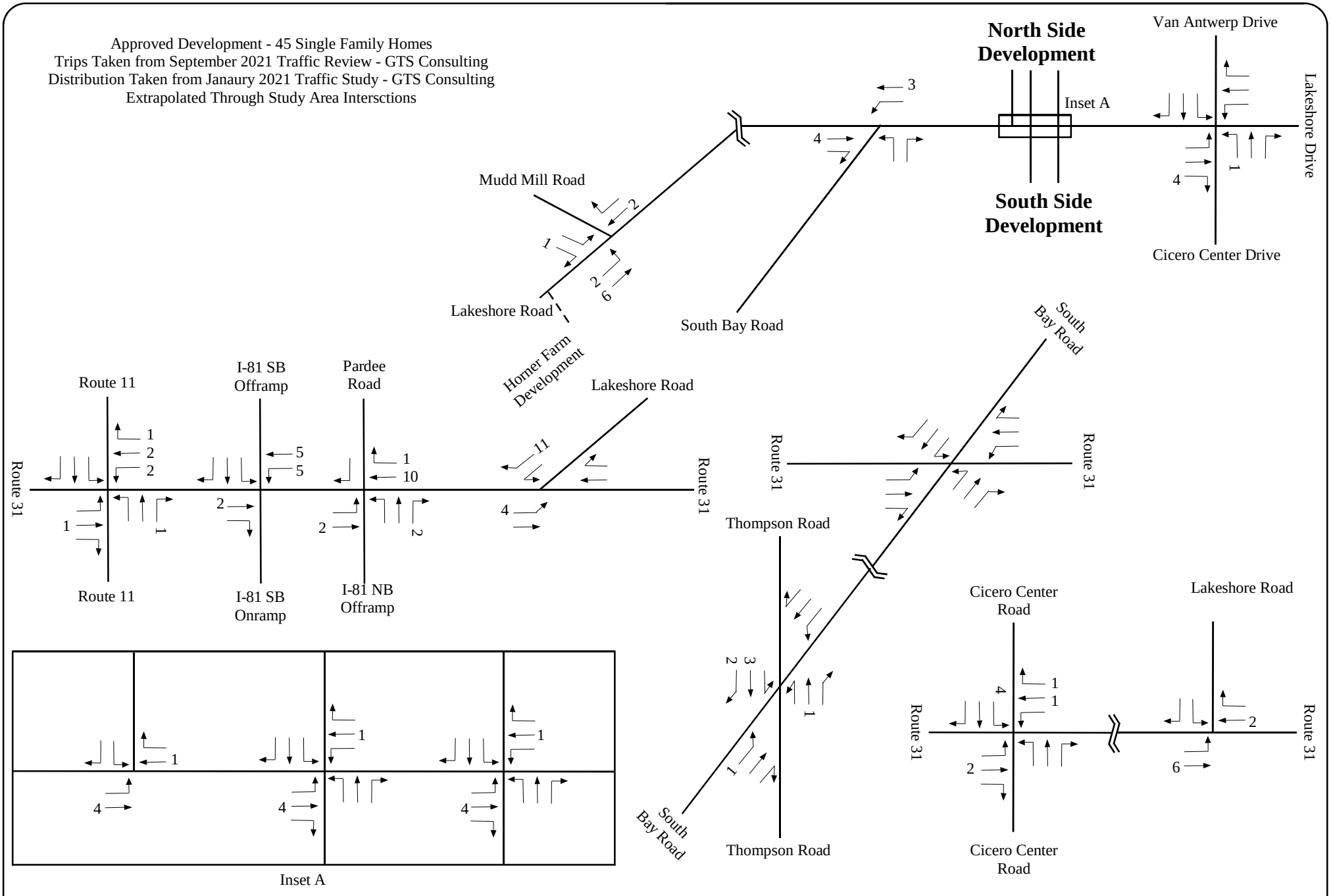
Approved Development Trips - Lakeshore Marina Apartments

Saturday Peak Hour

Figure 12

N W E

GTS Consulting



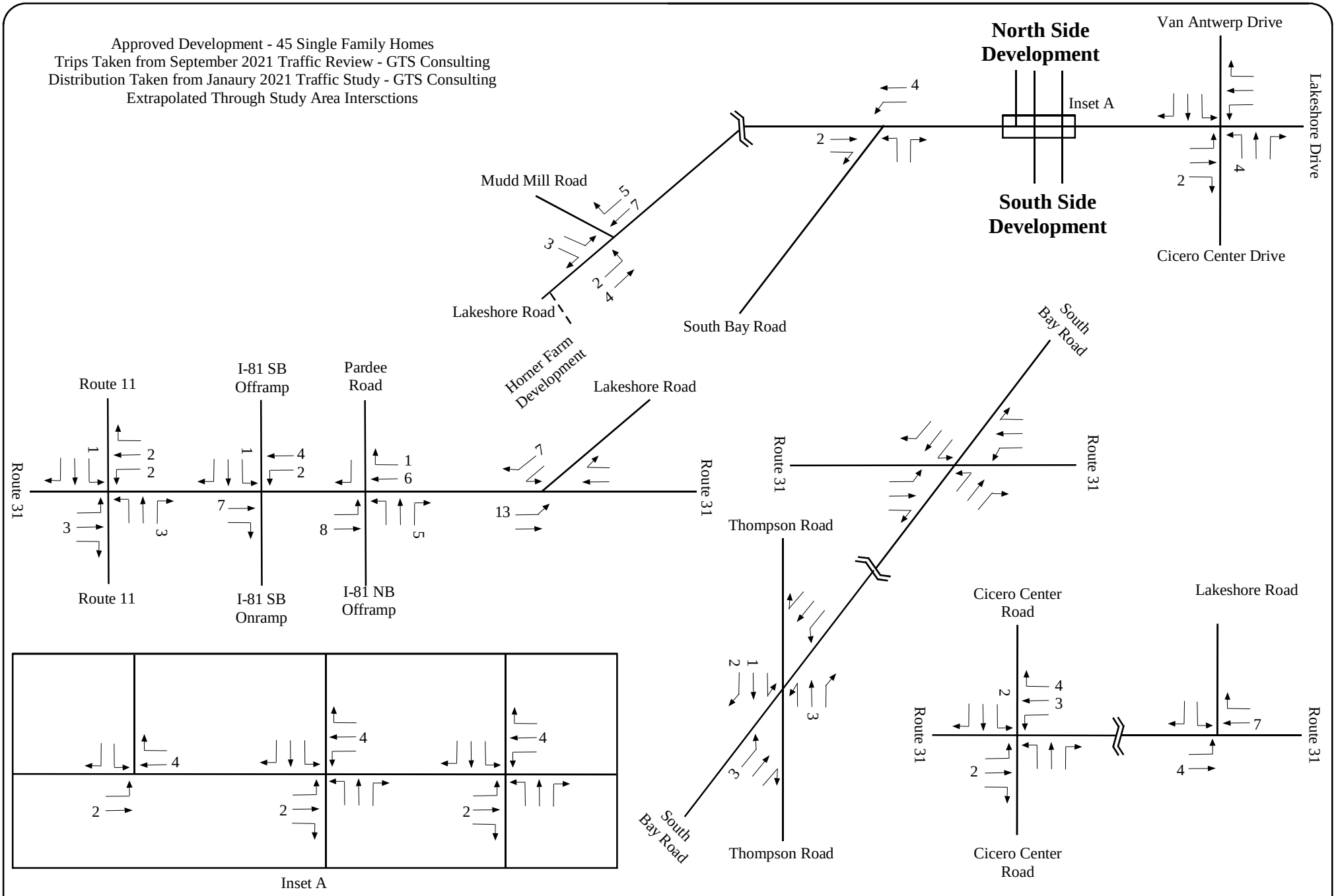
Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

Approved Development Trips - Horner Farm Subdivision
Morning Peak Hour

Figure 13

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

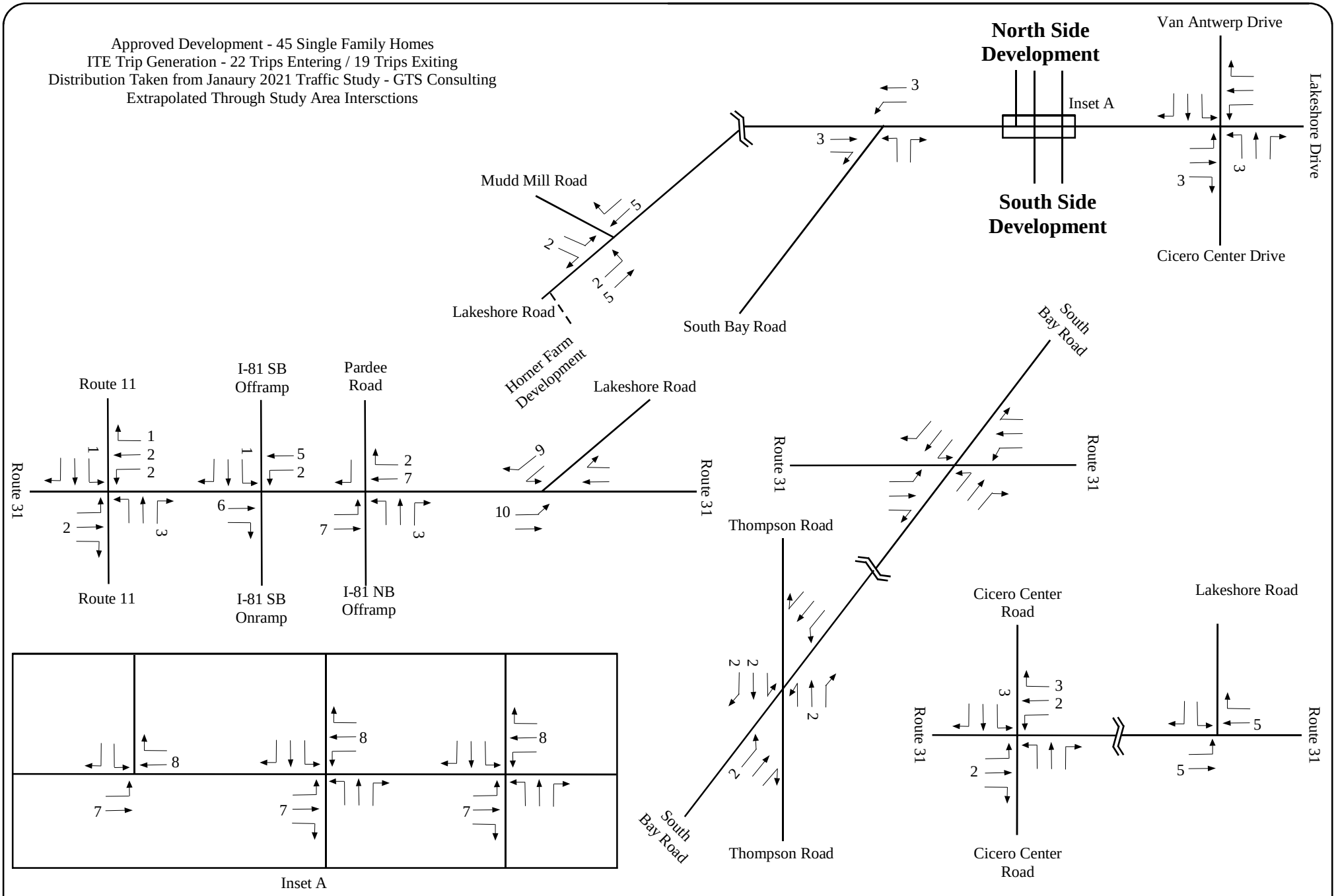
Approved Development Trips - Horner Farm Subdivision

Evening Peak Hour

Figure 14

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

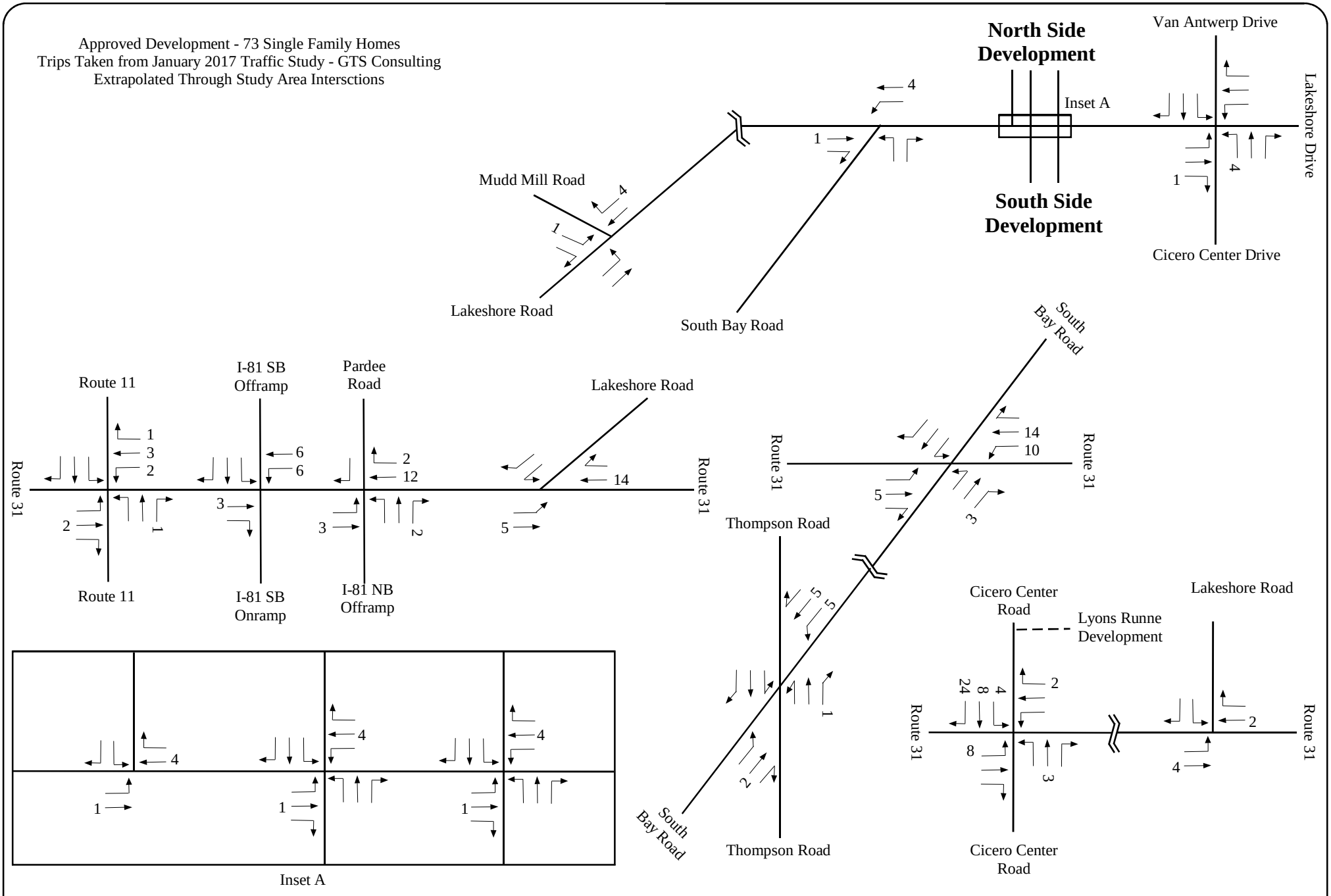
Approved Development Trips - Horner Farm Subdivision

Saturday Peak Hour

Figure 15

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

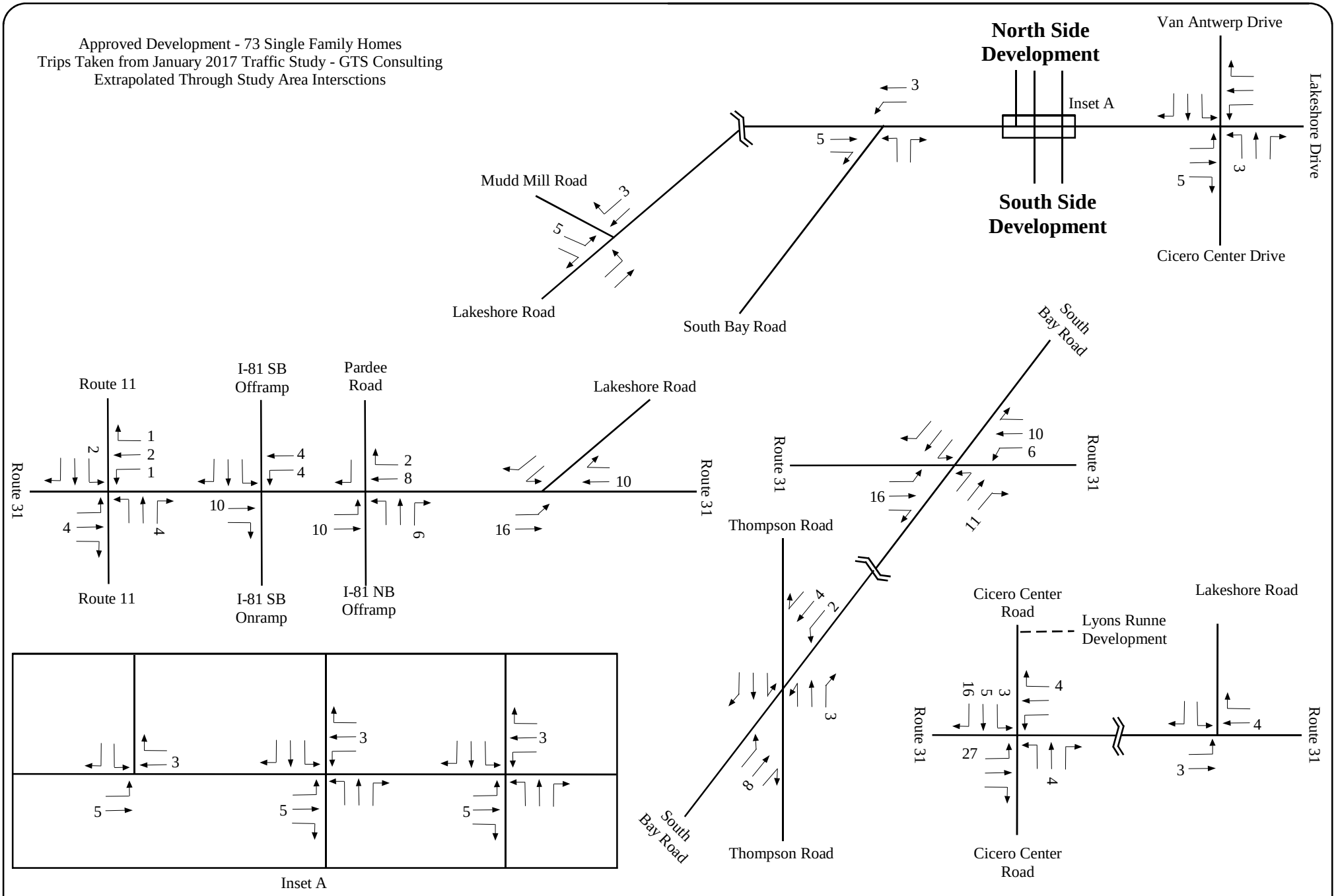
Approved Development Trips - Lyons Runne - Section 3

Morning Peak Hour

Figure 16

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

Approved Development Trips - Lyons Runne - Section 3

Evening Peak Hour

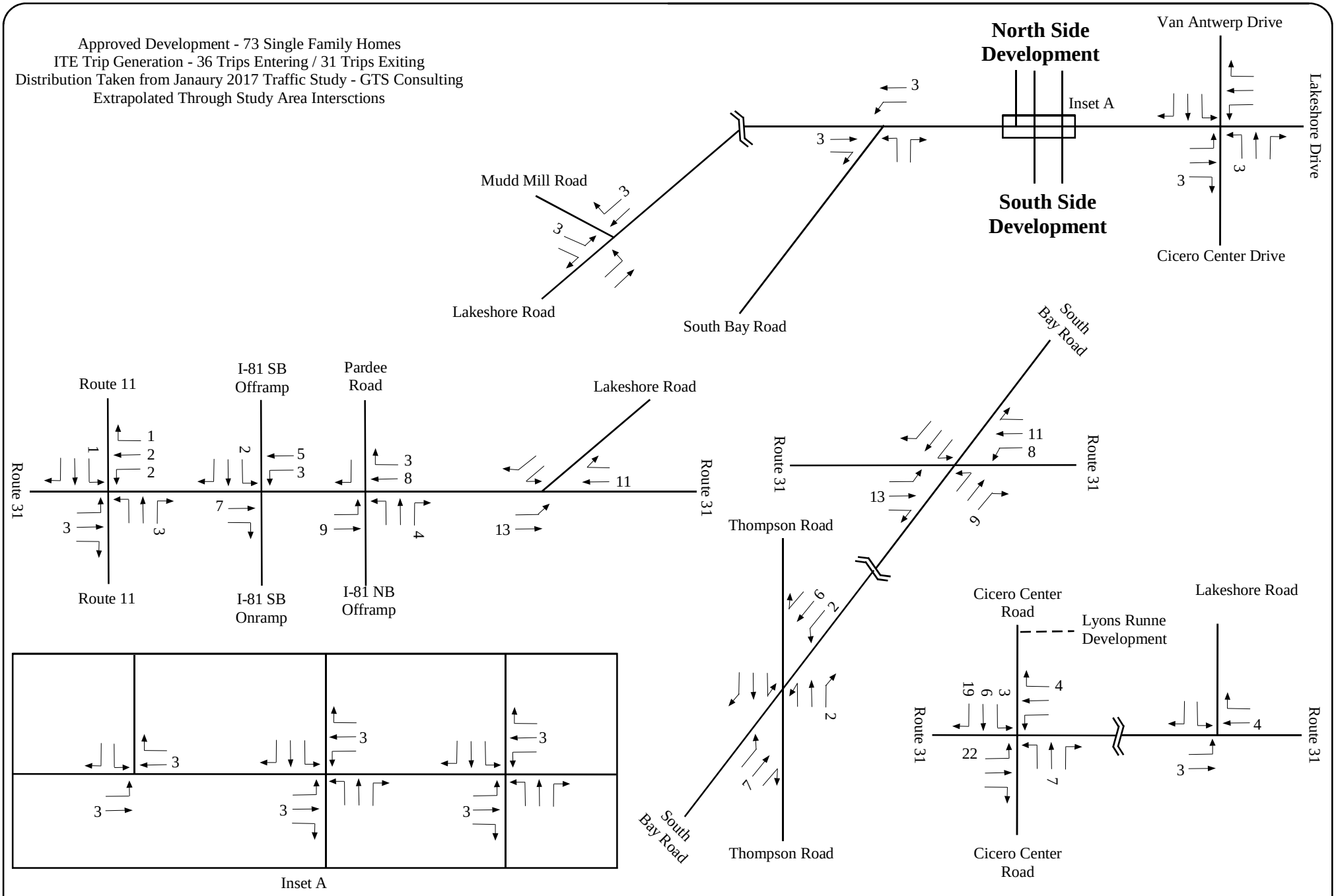
Figure 17

N

W E

GTS Consulting

Approved Development - 73 Single Family Homes
ITE Trip Generation - 36 Trips Entering / 31 Trips Exiting
Distribution Taken from Janaury 2017 Traffic Study - GTS Consulting
Extrapolated Through Study Area Intersctions



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

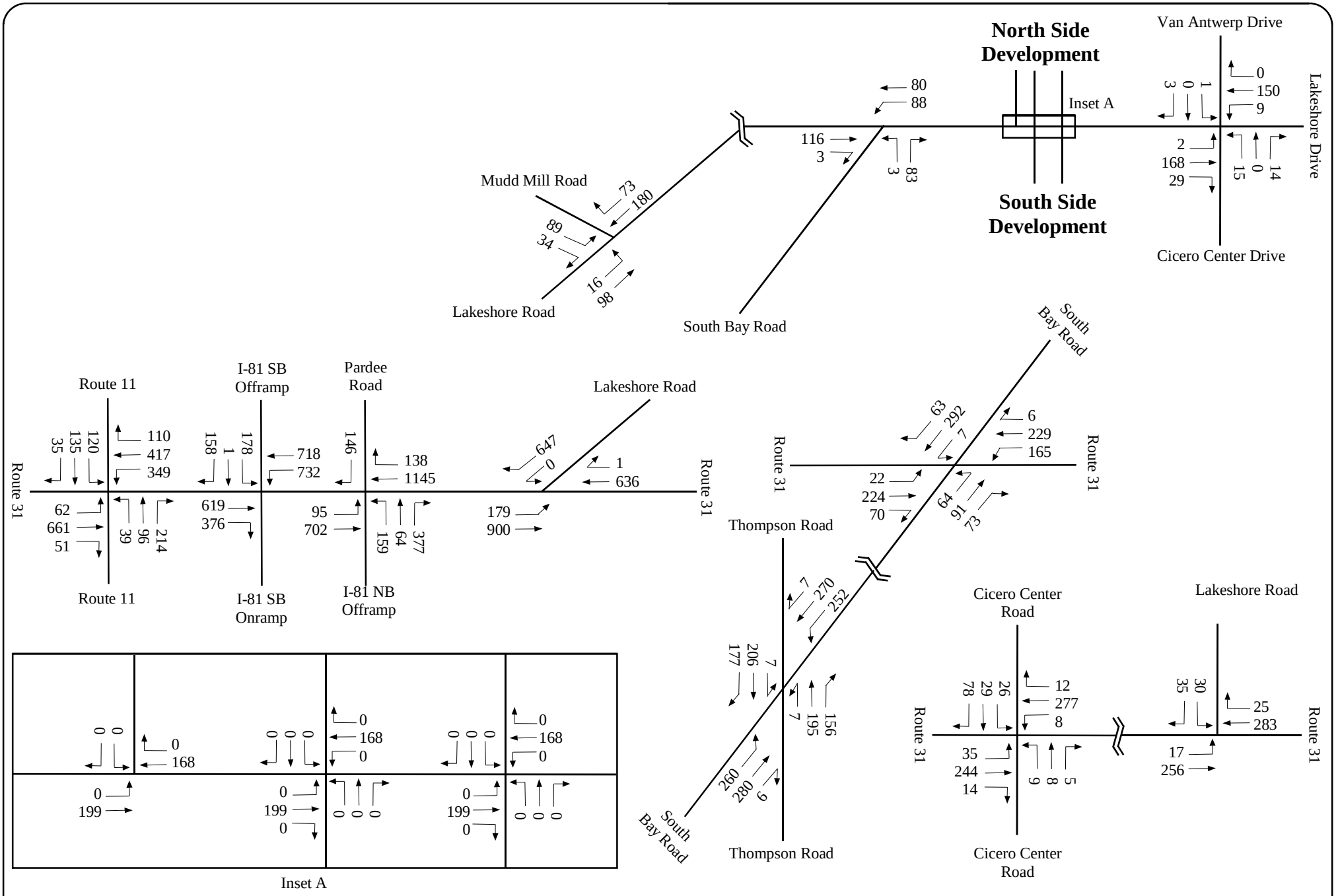
Approved Development Trips - Lyons Runne - Section 3

Saturday Peak Hour

Figure 18

N
W E

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Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

2032 Background Traffic Volumes - With Growth and Approved Developments

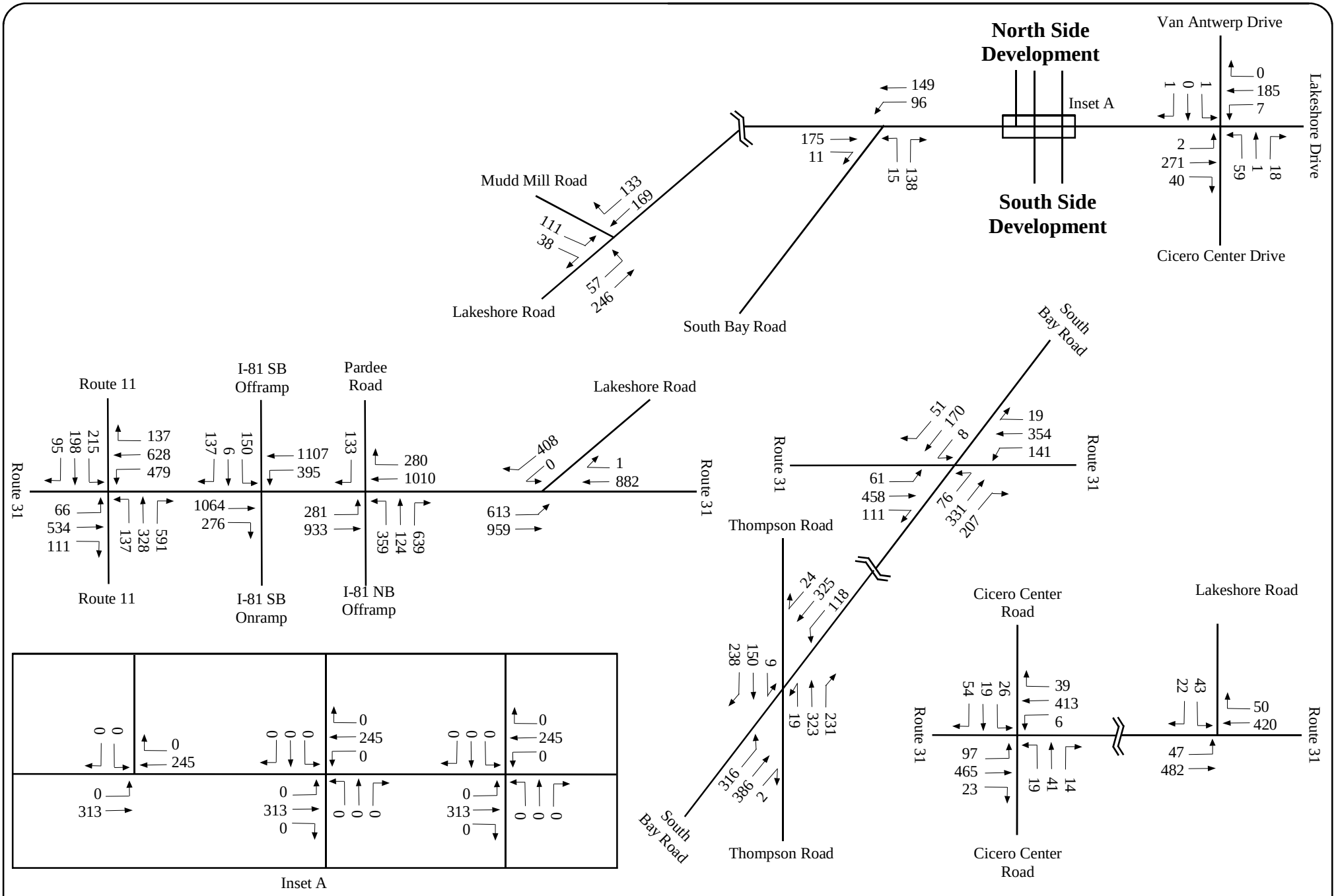
Morning Peak Hour

Figure 19

N

W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

2032 Background Traffic Volumes - With Growth and Approved Developments

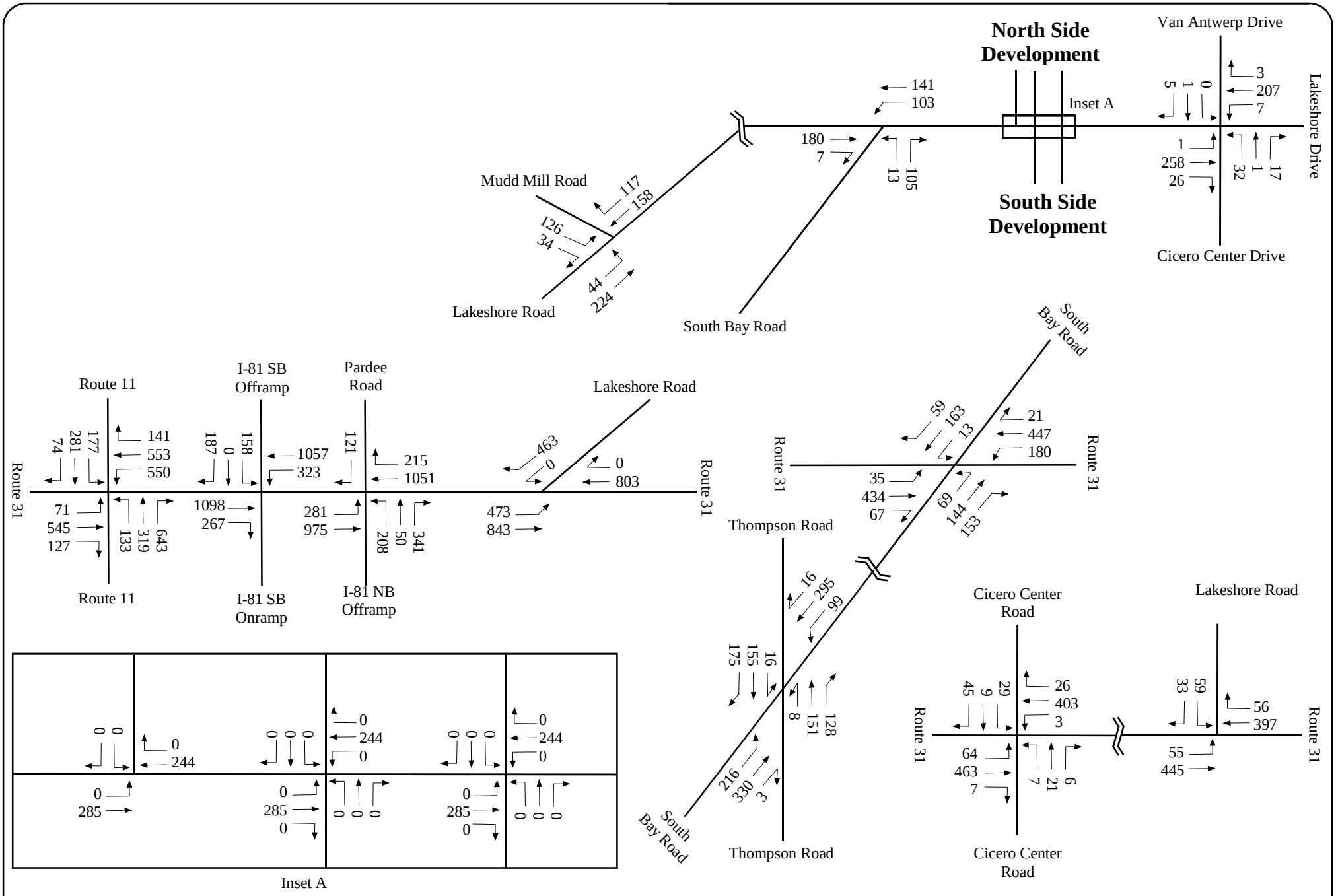
Evening Peak Hour

Figure 20

N

W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

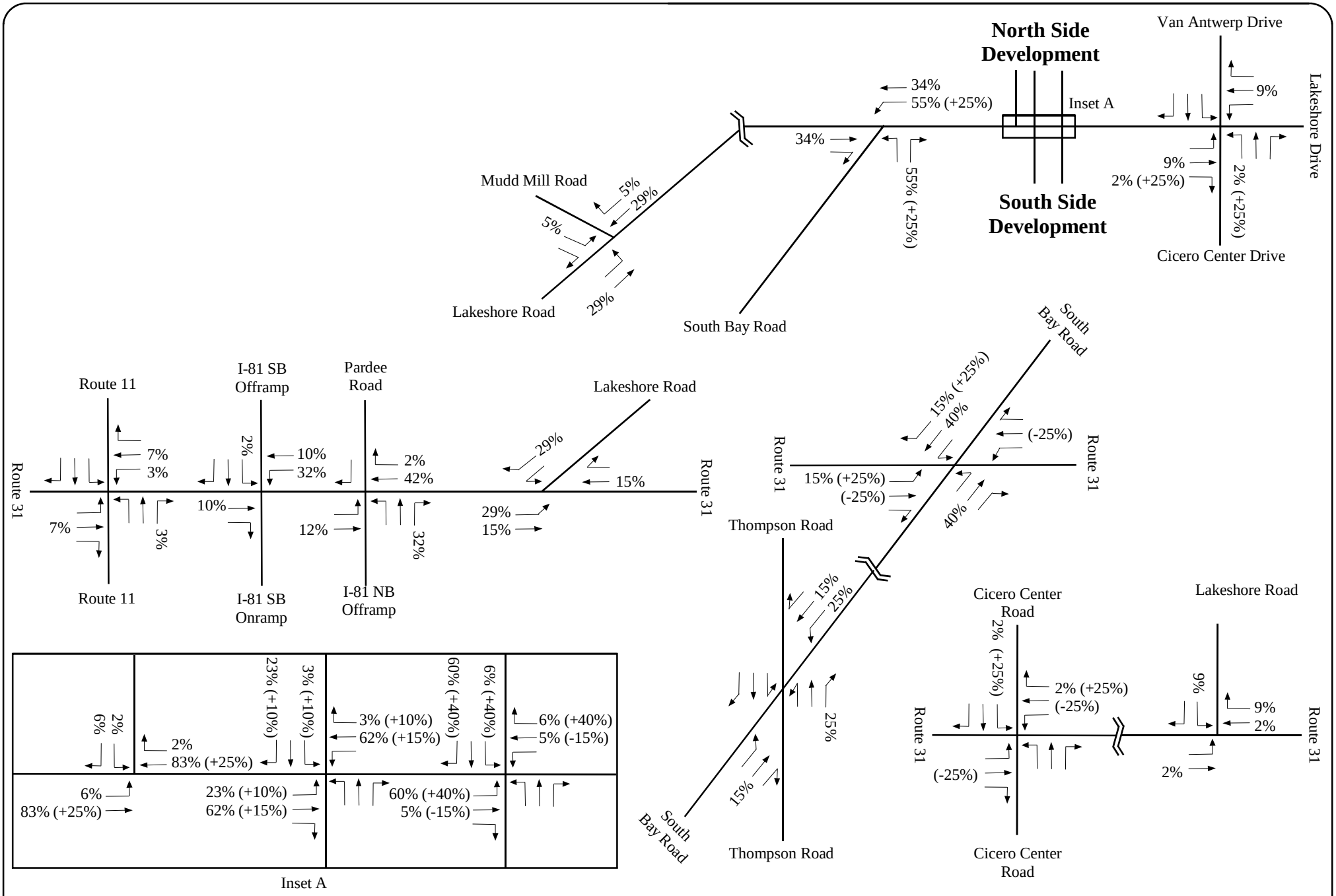
2032 Background Traffic Volumes - With Growth and Approved Developments

Saturday Peak Hour

Figure 21

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

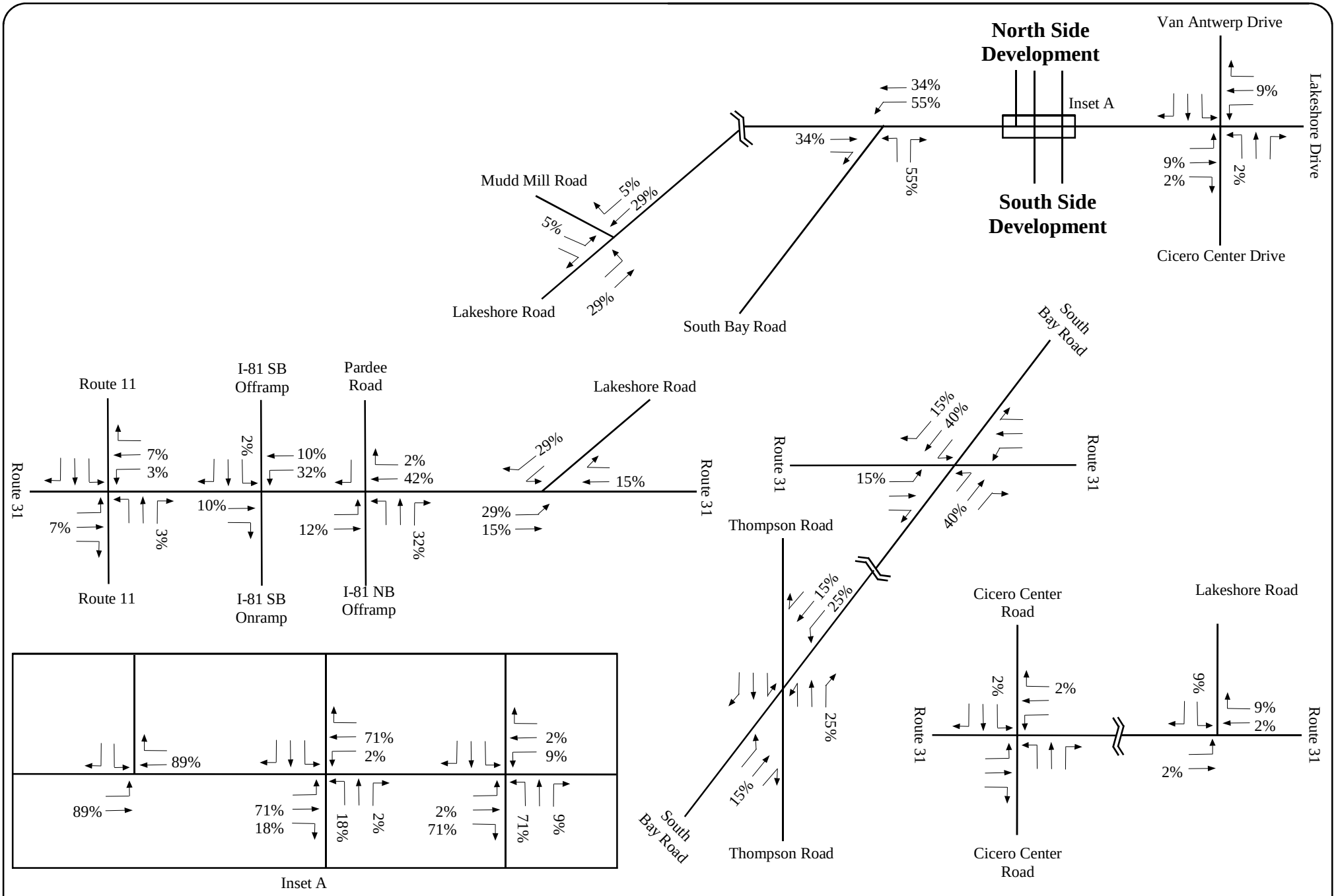
Arrival / Departure Distribution - North Side Development

New (Pass-by) Trip Percentage

Figure 22

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

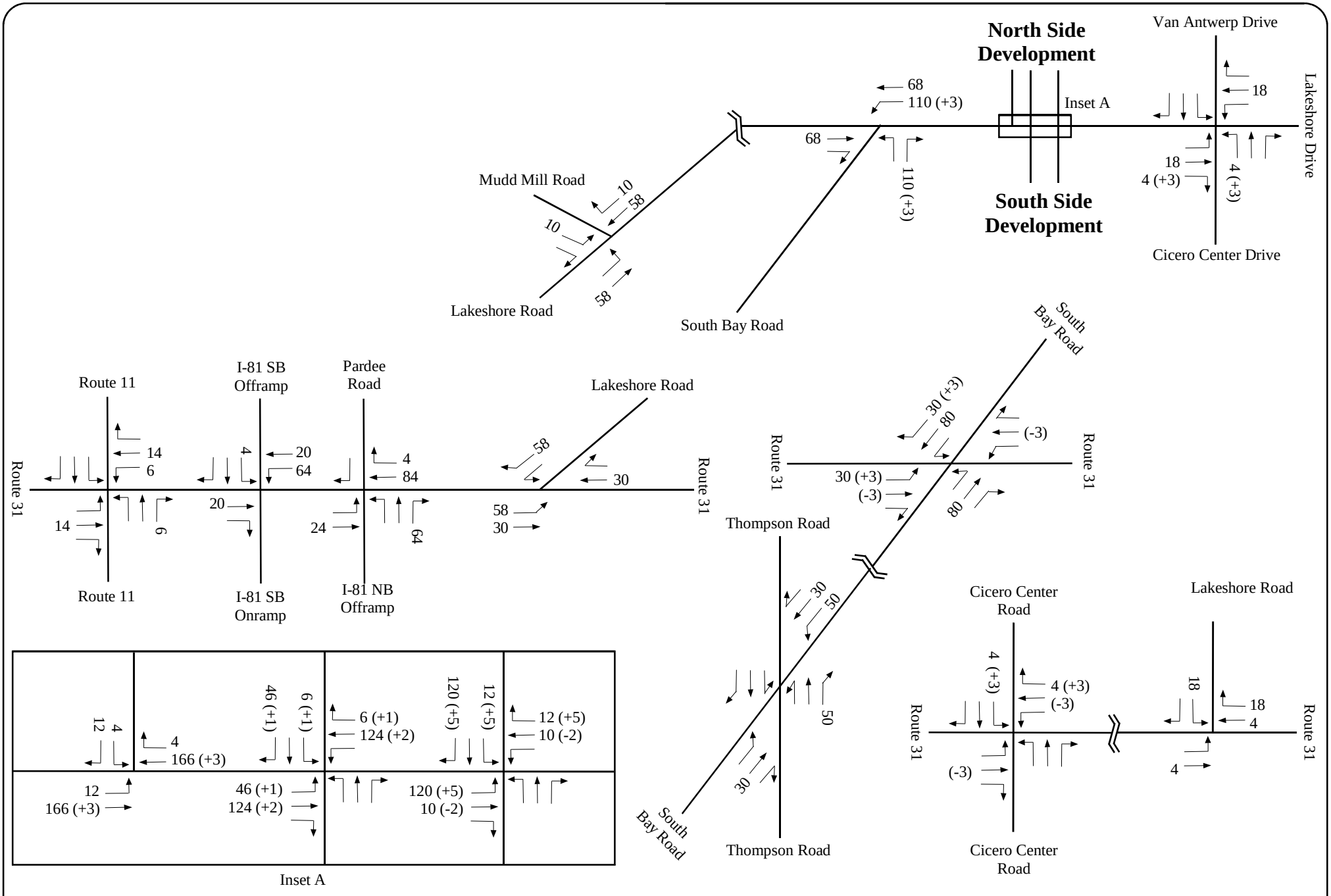
Arrival / Departure Distribution - South Side Development

New (Pass-by) Trip Percentage

Figure 23

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

Trips Generated - North Side Development - Weekday Morning Peak Hour

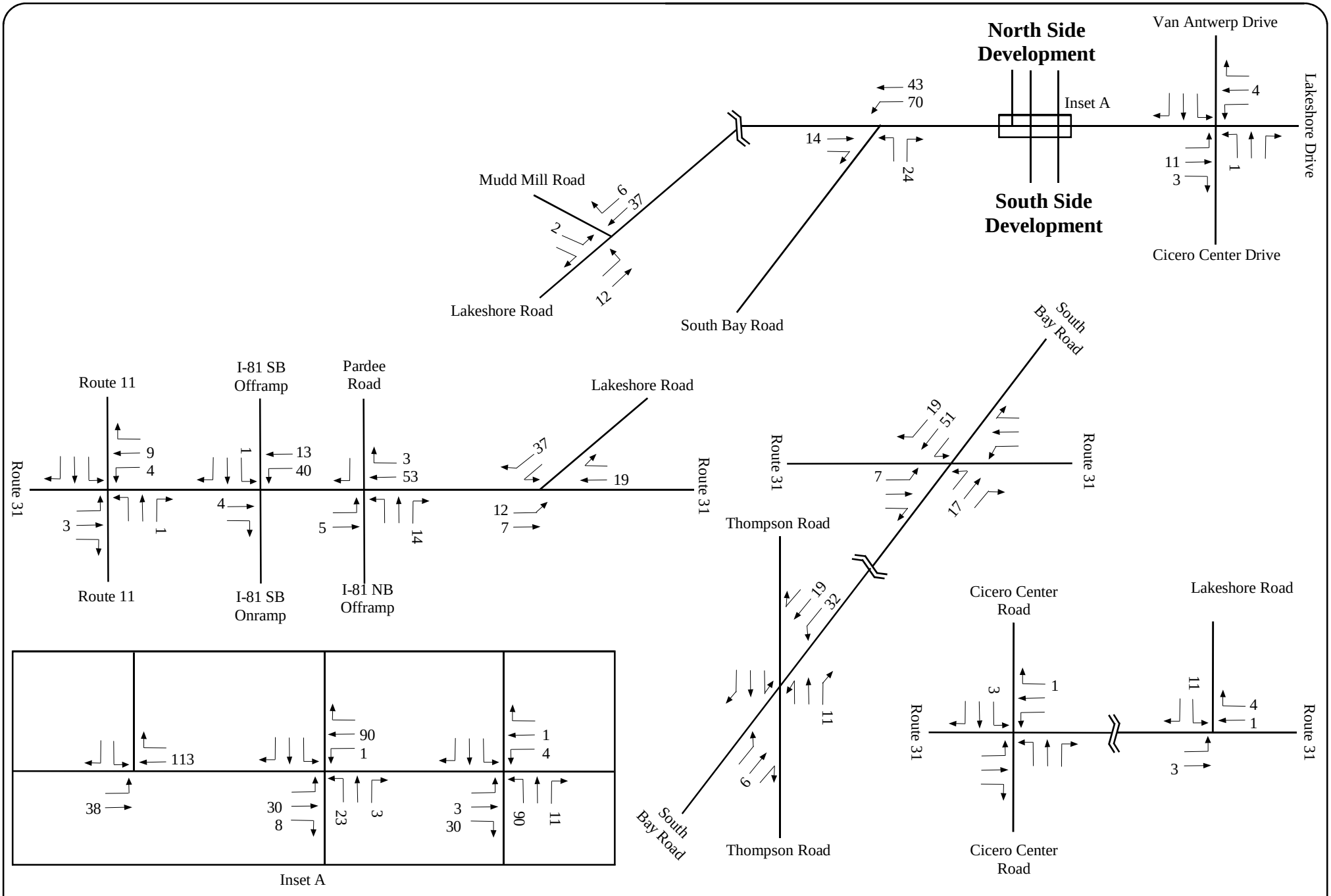
New (Pass-by) Trips

Figure 24

N

W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

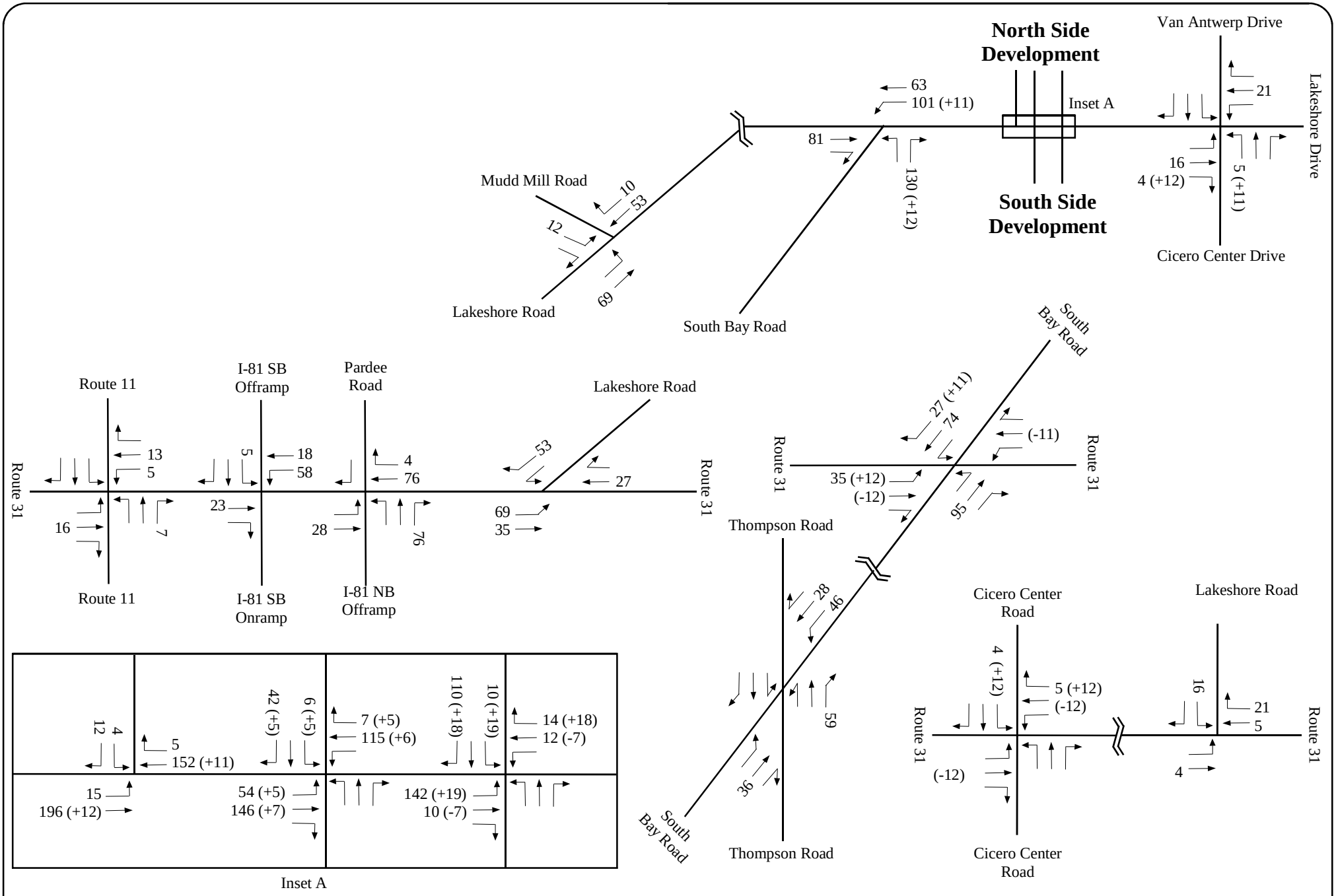
Trips Generated - South Side Development - Weekday Morning Peak Hour

New (Pass-by) Trips

Figure 25

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

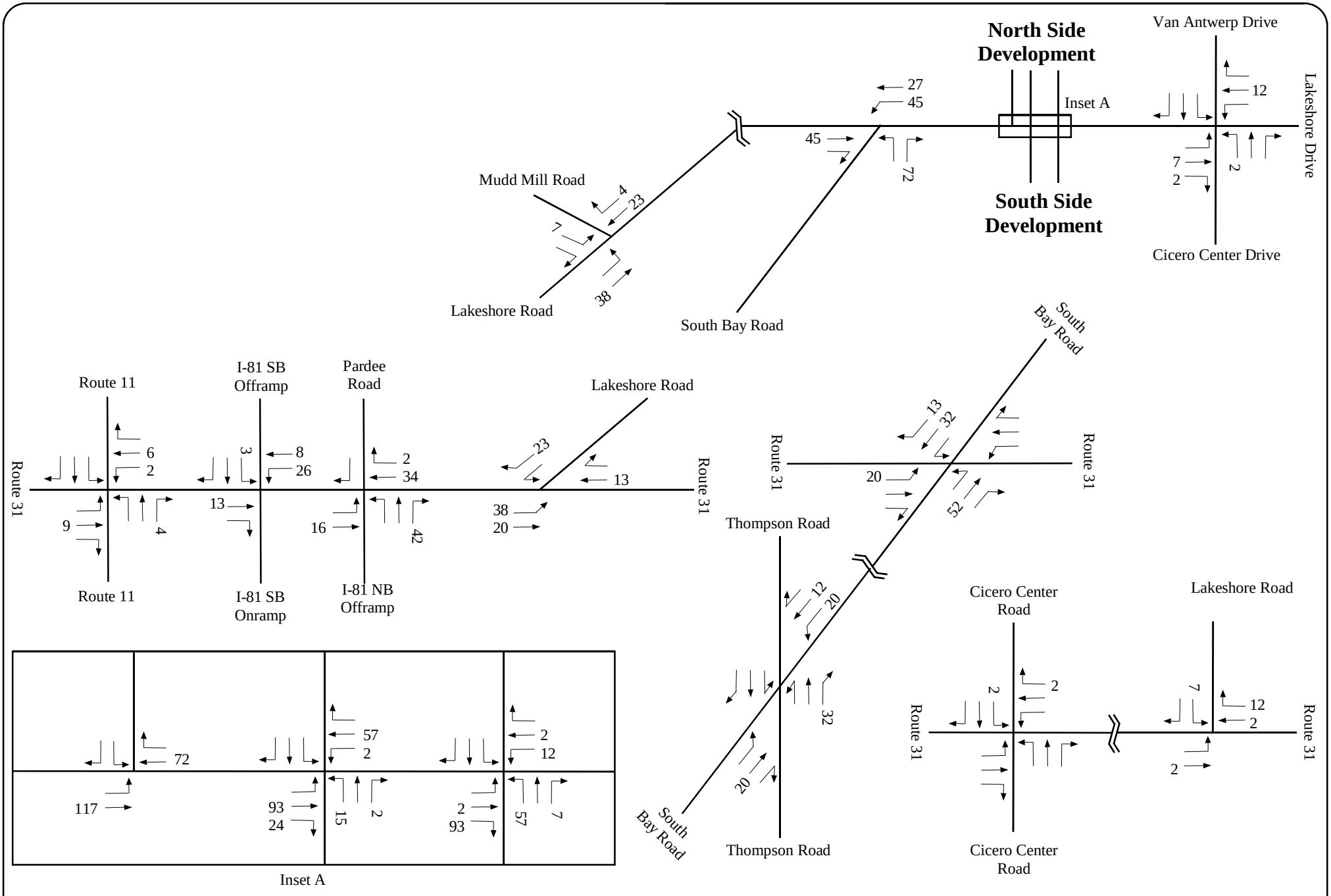
Trips Generated - North Side Development - Weekday Evening Peak Hour

New (Pass-by) Trips

Figure 26

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

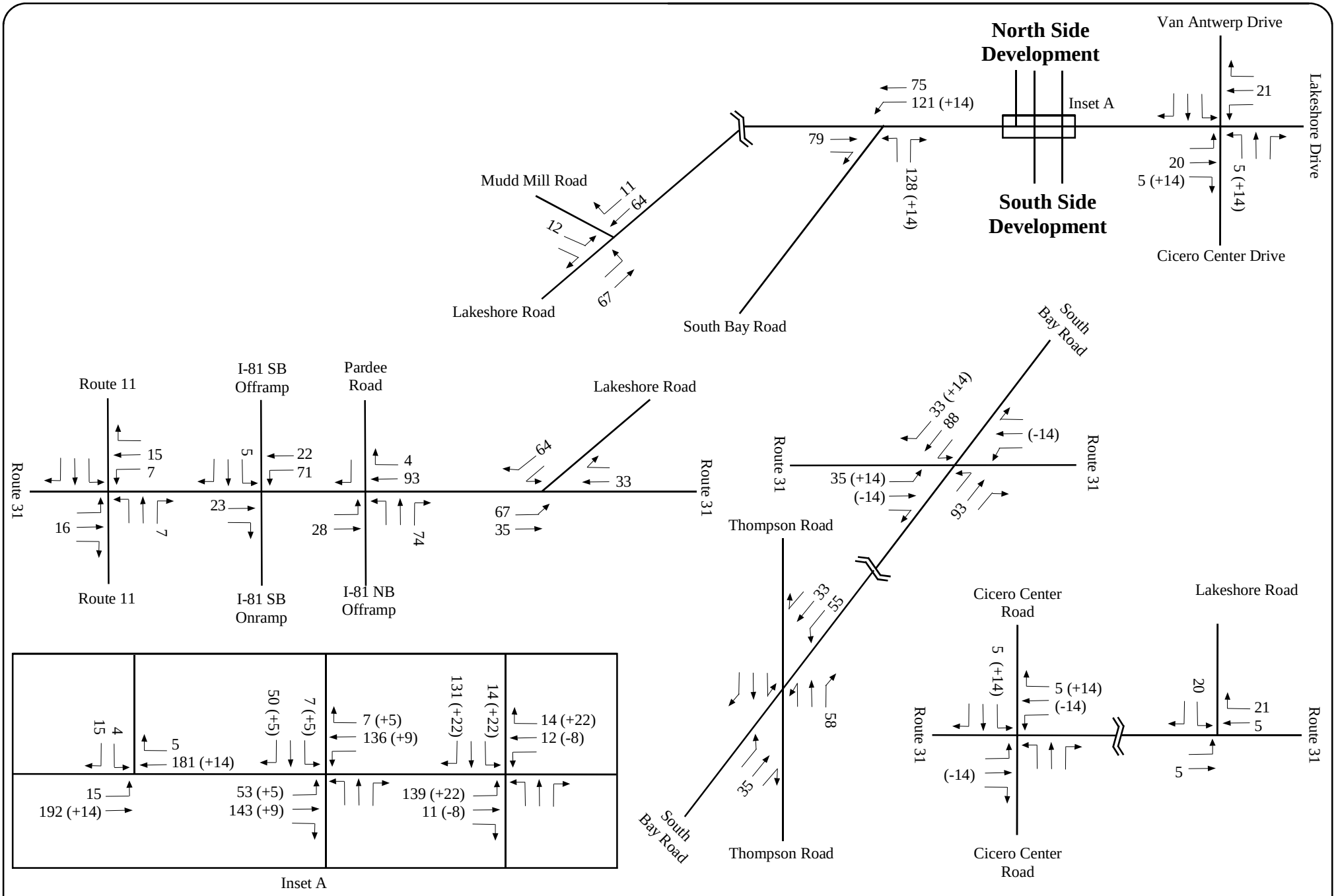
Trips Generated - South Side Development - Weekday Evening Peak Hour

New (Pass-by) Trips

Figure 27

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

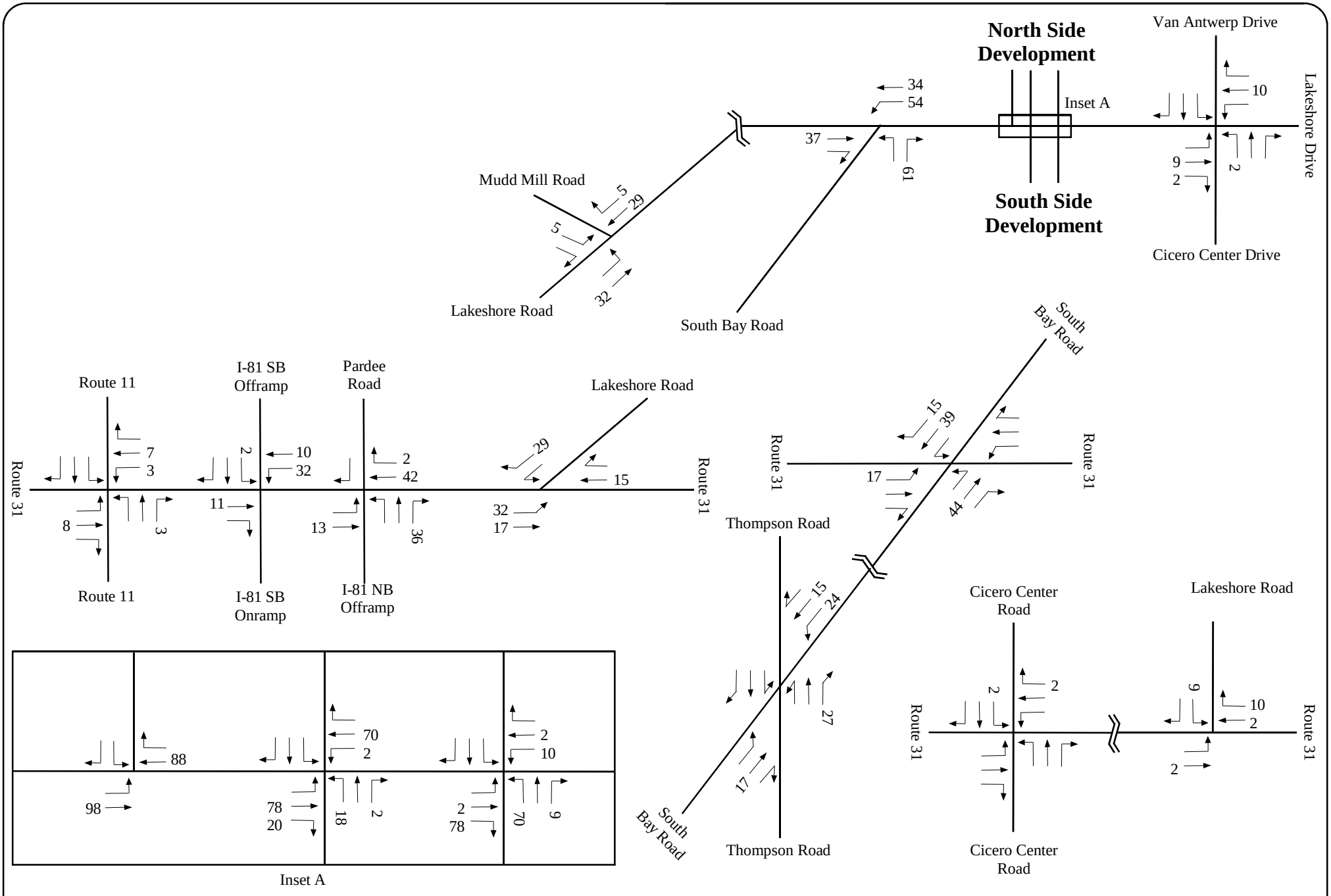
Trips Generated - North Side Development - Saturday Midday Peak Hour

New (Pass-by) Trips

Figure 28

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

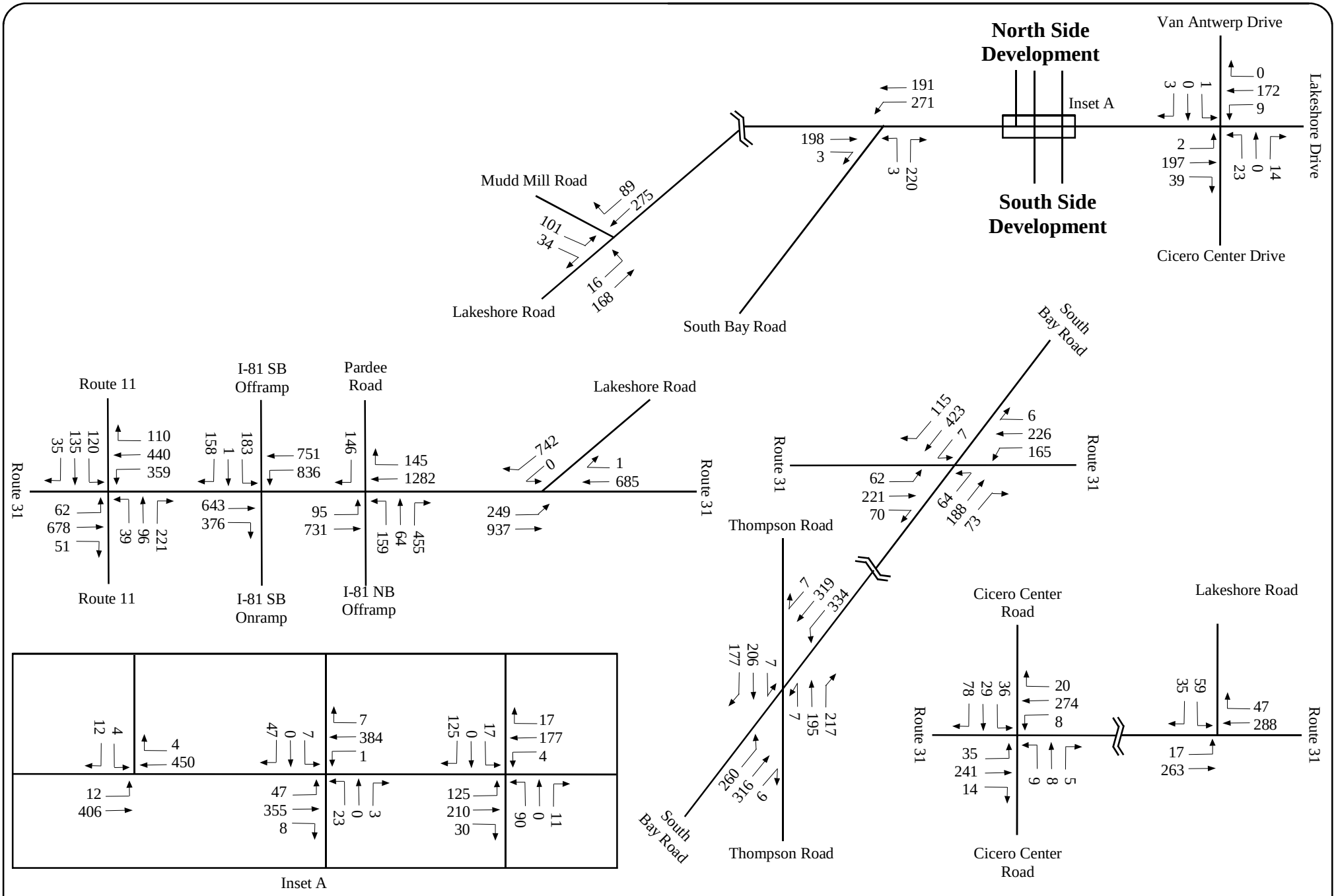
Trips Generated - South Side Development - Saturday Midday Peak Hour

New (Pass-by) Trips

Figure 29

N
W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

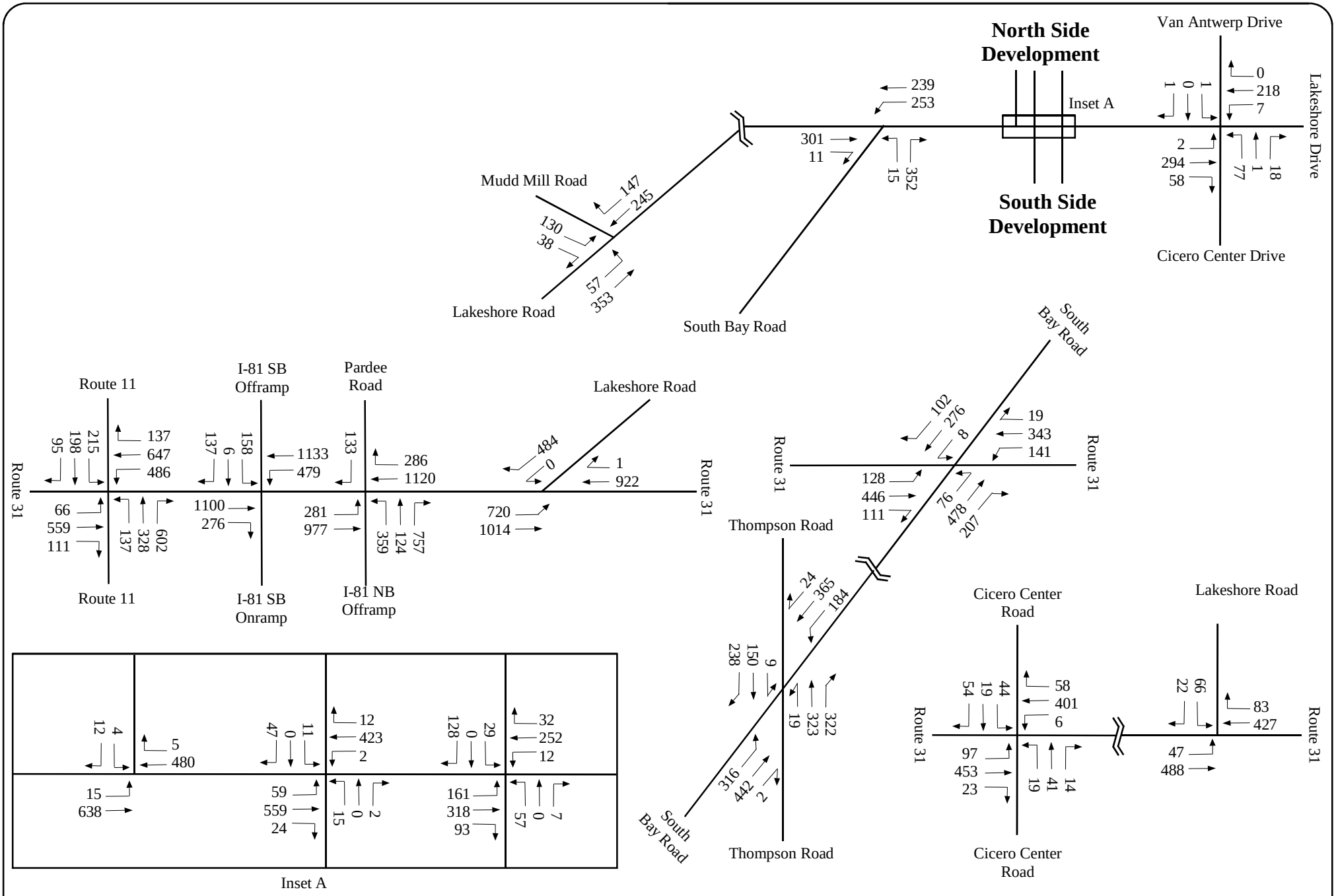
2032 Build Traffic Volumes

Morning Peak Hour

Figure 30

N W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

2032 Build Traffic Volumes

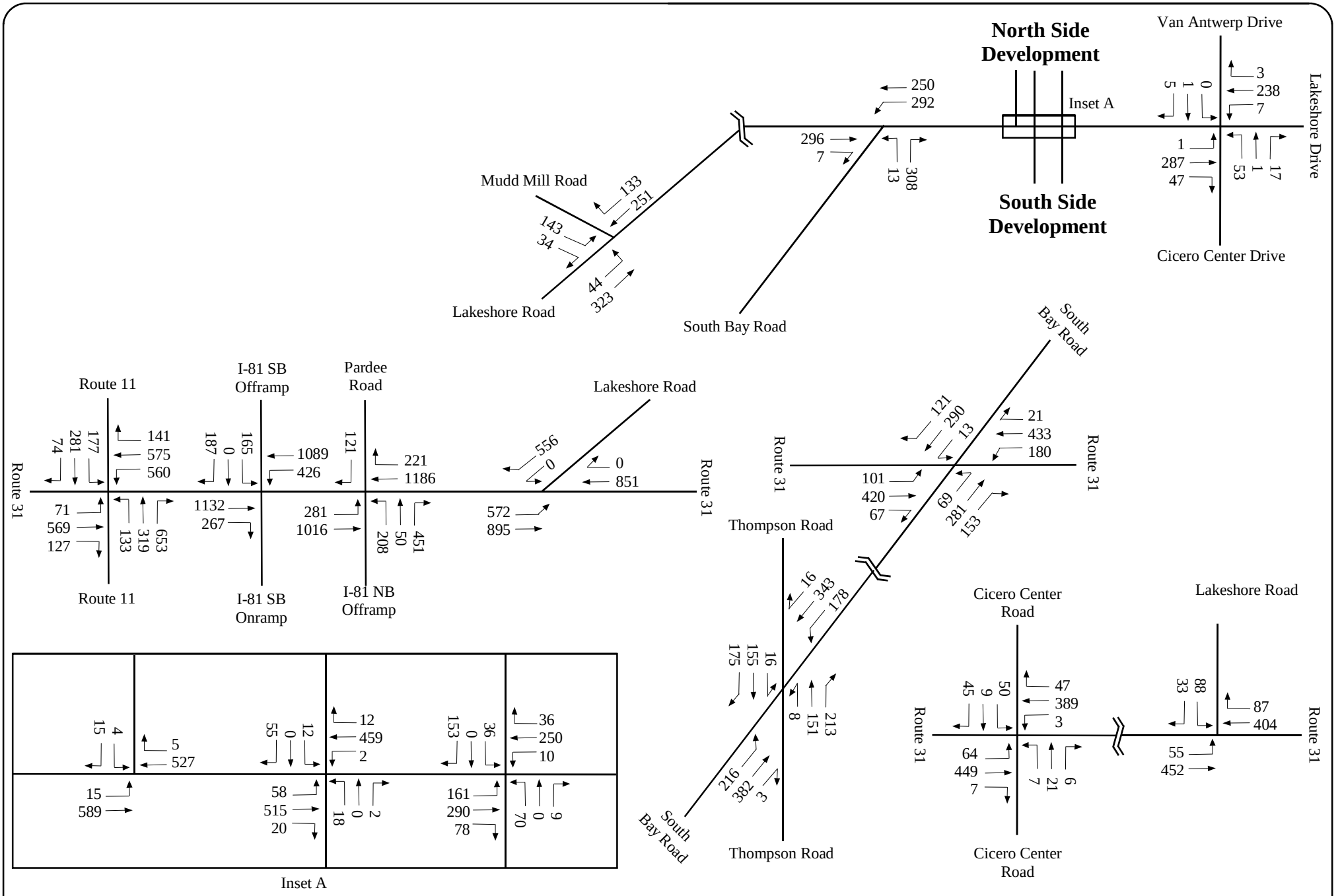
Evening Peak Hour

Figure 31

N

W E

GTS Consulting



Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero, NY

2032 Build Traffic Volumes

Saturday Peak Hour

Figure 32

N W E

GTS Consulting

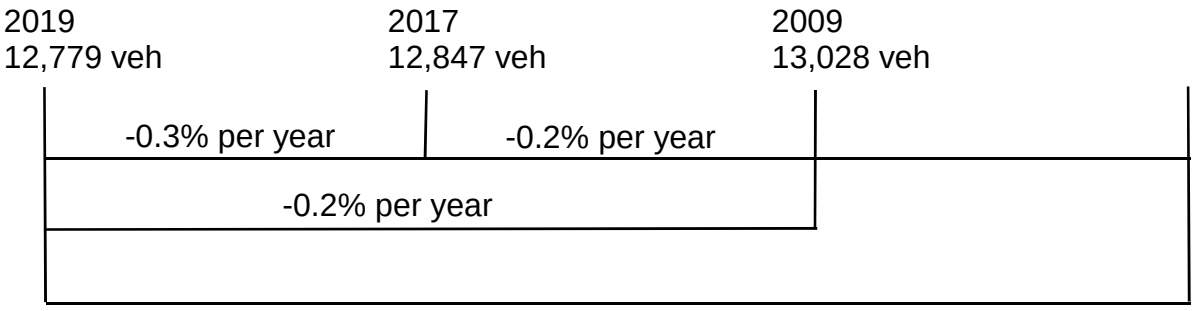
APPENDIX D

Growth Calculations

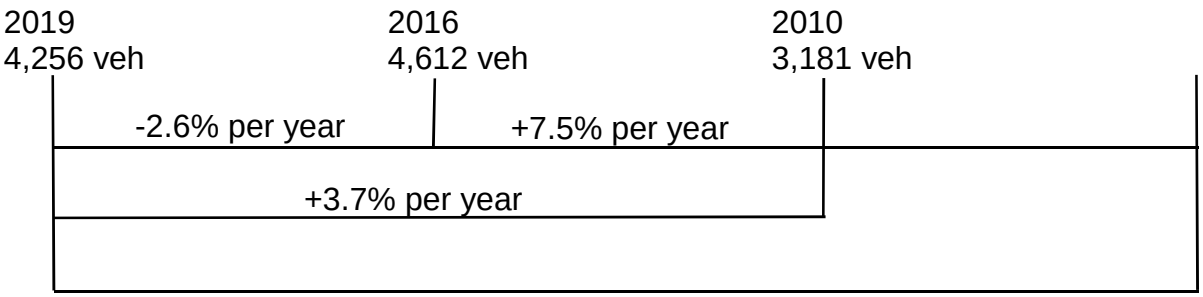
Historical Traffic Growth Calculations
Proposed Lakeshore Village Development, Lakeshore Road, Cicero, NY

Historical Traffic Counts Taken from the NYSDOT Traffic Data Viewer Website

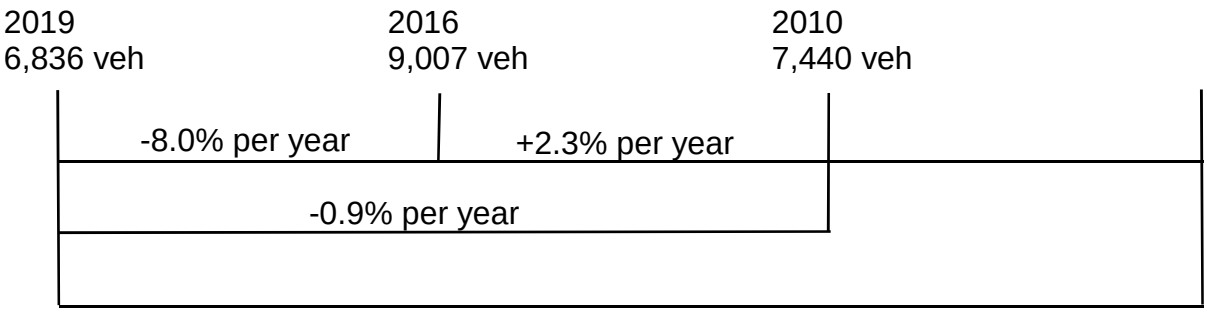
NYS Route 30 - Betwen I-81 Interchange and South Bay Road



Lakeshore Road - Between Weaver Road and Maple Road



South Bay Road - Between Thompson Road and Route 31



Use +0.5% Annual Growth for Longer Term Projections

APPENDIX E

Trip Generation Calculations

Proposed Lakeshore Village Development
Lakeshore Road, Town of Cicero
Trip Generation Estimate

				Jobs	
Proposed Development	North Side Development	160	Units - Apartments - Mixed Use Buildings A-E	0	
		20,000	SF - Office - Mixed Use Buildings A-E		
		20,000	SF - Retail - Mixed Use Buildings A-E	100	20/building
		20,000	SF - High Turnover Site Down Restaurant - Mixed Use Buildings A-E		
		6,000	SF - High Turnover Site Down Restaurant - Restaurant E	10	
		106	Units - Apartments - Residential Buildings D-E	0	
		30	Units - Condominiums - Main Building	5	
		36,000	SF - Club House - Main Building	10	
		500	Person - Conference Center - Main Building	30	
		120	Room - Hotel - Main Building	20	
		116	Berths - Marina	0	
	South Side Development	123	Units - Apartments - Residential Buildings A-C	0	
		163	Units - Single Family Homes (Single Family & Estate Lots)	0	
		20	Units - Townhouses	0	
			Total Jobs	**175**	

ITE Trip Generation - 11th Edition

Land Use 221 - Multifamily Housing (Mid-Rise) - Use for Apartments and Condominiums

Morning Peak Hour	0.37 Trips/Unit	23% Enter	77% Exit
Evening Peak Hour	0.39 Trips/Unit	61% Enter	39% Exit
Saturday Peak Hour	0.39 Trips/Unit	51% Enter	49% Exit

Land Use 710 - General Office Building - Use for Office Space

Morning Peak Hour	1.52 Trips/1,000 SF	88% Enter	12% Exit
Evening Peak Hour	1.44 Trips/1,000 SF	17% Enter	83% Exit
Saturday Peak Hour	0.53 Trips/1,000 SF	54% Enter	46% Exit

Land Use 822 - Strip Retail Plaza (<40K) - Use for Retail Space

Morning Peak Hour	2.36 Trips/1,000 SF	60% Enter	40% Exit
Evening Peak Hour	6.59 Trips/1,000 SF	50% Enter	50% Exit
Saturday Peak Hour	6.57 Trips/1,000 SF	51% Enter	49% Exit

Land Use 932 - High-Turnover (Sit-Down) Restaurant - Use for Restaurant Space

Morning Peak Hour	9.57 Trips/1,000 SF	55% Enter	45% Exit
Evening Peak Hour	9.05 Trips/1,000 SF	61% Enter	39% Exit
Saturday Peak Hour	11.19 Trips/1,000 SF	51% Enter	49% Exit

Land Use 310 - Hotel - Use For Hotel (Includes Conference Facilities)

Morning Peak Hour	0.46 Trips/Room	56% Enter	44% Exit
Evening Peak Hour	0.59 Trips/Room	51% Enter	49% Exit
Saturday Peak Hour	0.72 Trips/Room	56% Enter	44% Exit

Land Use 420 - Marina - Use For Marina

Morning Peak Hour	0.07 Trips/Berth	33% Enter	67% Exit
Evening Peak Hour	0.21 Trips/Berth	60% Enter	40% Exit
Saturday Peak Hour	0.22 Trips/Berth	44% Enter	56% Exit

Land Use 210 - Single-Family Detached Housing - Use for Single Family Homes

Morning Peak Hour	0.70 Trips/Home	26% Enter	74% Exit
Evening Peak Hour	0.94 Trips/Home	63% Enter	37% Exit
Saturday Peak Hour	0.92 Trips/Home	54% Enter	46% Exit

Land Use 215 - Single-Family Attached Housing - Use for Townhouses

Morning Peak Hour	0.48 Trips/Home	31% Enter	69% Exit
Evening Peak Hour	0.57 Trips/Home	57% Enter	43% Exit
Saturday Peak Hour	0.57 Trips/Home	48% Enter	52% Exit

The Club House is an ammenity for the residential uses, not an independent traffic generator.

Assume 15% multi-use credit for north side development

Pass-by Credits - ITE Trip Generation Handbook, 3rd Edition
Land Use 820 - PM - 34%, Sat - 26%
Land Use 932 - PM - 43%
Assume 10% Pass-by AM, 30% Pass-by PM/Sat for Retail/Retaurant Uses, taken after Multi-use credit to avoid compounding credits

Trip Generation Estimate - North Side Development

		Morning Peak Hour			Evening Peak Hour			Saturday Peak Hour		
Development	**Size**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**
Apartments/Condominiums	306 Units	110	25	85	115	70	45	115	58	57
Office	20,000 SF	30	26	4	29	5	24	11	6	5
Retail	20,000 SF	47	28	19	132	66	66	131	67	64
Restaurants	26,000 SF	249	137	112	235	143	92	291	148	143
Hotel	120 Rooms	55	31	24	71	36	35	86	48	38
Marina	116 Berths	8	3	5	24	14	10	26	11	15
Total Individual Trips Generated		**499**	**250**	**249**	**606**	**334**	**272**	**660**	**338**	**322**
Multi-Use Credit - 15%		*-75*	*-38*	*-37*	*-91*	*-50*	*-41*	*-99*	*-51*	*-48*
Total Trips Generated		**424**	**212**	**212**	**515**	**284**	**231**	**561**	**287**	**274**
Commercial Passby - AM 10%, PM/Sat - 30%		***-24***	***-12***	***-12***	***-94***	***-47***	***-47***	***-108***	***-54***	***-54***
Total New Trips Generated		**400**	**200**	**200**	**421**	**237**	**184**	**454**	**233**	**221**

Trip Generation Estimate - South Side Development

		Morning Peak Hour			Evening Peak Hour			Saturday Peak Hour		
Development	**Size**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**
Apartments	123 Units	46	10	36	48	29	19	48	24	24
Single Family Homes	163 Units	114	30	84	153	96	57	150	81	69
Townhouses	20 Units	10	3	7	11	6	5	11	5	6
Total New Trips Generated		**170**	**43**	**127**	**212**	**131**	**81**	**209**	**110**	**99**

APPENDIX F

Level of Service & Queue Summary

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Morning Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11	**C(24)**	**C(26)**	**C(27)**	**C(30)**
EB Left	B(12)	B(12)	B(12)	B(12)
EB Through/Right	C(29)	C(31)	C(32)	C(33)
WB Left	C(21)	C(27)	C(33)	D(36)
WB Through/Right	A(7)	A(7)	A(7)	B(17)
NB Left	C(32)	C(33)	C(33)	C(32)
NB Through	E(59)	E(60)	E(60)	D(53)
NB Right	B(15)	B(17)	B(17)	B(16)
SB Left	D(38)	D(40)	D(40)	D(44)
SB Through/Right	D(38)	D(41)	D(41)	D(42)
NYS Route 31 @ I-81 SB Ramps	**D(54)**	**E(68)**	**E(72)**	**E(64)**
EB Through/Right	E(65)	F(99)	F(111)	F(85)
WB Left	F(90)	F(92)	F(93)	F(99)
WB Through	A(5)	A(4)	A(3)	A(3)
SB Left/Through	E(76)	F(85)	F(87)	F(87)
SB Right	B(12)	B(12)	B(12)	B(12)
NYS Route 31 @ I-81 NB Ramps / Pardee Rd	**C(22)**	**C(25)**	**C(35)**	**B(20)**
EB Left	B(17)	C(22)	C(27)	C(25)
EB Through	B(15)	B(14)	B(16)	A(5)
WB Through/Right	B(19)	C(24)	D(38)	B(16)
NB Left	D(46)	D(43)	D(38)	D(52)
NB Through	D(36)	C(34)	C(32)	D(40)
NB Right	D(38)	D(45)	E(61)	C(23)
SB Right	B(11)	B(15)	B(15)	D(46)
NYS Route 31 @ Lakeshore Road				**C(32)**
EB Left	b(11)	b(11)	b(12)	B(11)
EB Through	a(0)	a(0)	a(0)	A(1)
WB Through/Right	a(0)	a(0)	a(0)	D(49)
SB Left/Right	f(214)	f(365)	f(550)	E(70)
NYS Route 31 @ South Bay Road	**C(21)**	**C(30)**	**D(47)**	**C(33)**
EB Left	-	B(15)	B(16)	C(21)
EB (Left)/Through/Right	B(14)	D(36)	D(38)	D(45)
WB Left	-	B(18)	B(20)	C(28)
WB (Left)/Through/Right	B(20)	C(24)	C(30)	C(34)
NB Left	-	B(19)	C(21)	B(18)
NB (Left)/Through/(Right)	C(23)	B(19)	C(24)	B(19)
NB Right	-	-	-	A(1)
SB Left	-	B(17)	B(17)	B(13)
SB (Left)/Through/Right	C(25)	D(42)	F(87)	D(41)
NYS Route 31 @ Cicero Center Road	**A(6)**	**A(8)**	**A(8)**	**A(8)**
EB Left/Through/Right	A(4)	A(6)	A(6)	A(6)
WB Left/Through/Right	A(5)	A(6)	A(6)	A(6)
NB Left/Through/Right	B(14)	B(13)	B(13)	B(13)
SB Left/Through/Right	A(10)	B(12)	B(13)	B(13)
NYS Route 31 @ Lakeshore Road				
EB Left/Through	a(1)	a(1)	a(1)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	b(12)	b(13)	b(15)	b(15)

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Morning Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road	**C(21)**	**C(23)**	**C(32)**	**C(22)**
EB Left	C(23)	C(27)	C(33)	B(15)
EB Through/Right	C(34)	C(34)	C(35)	C(34)
WB Left	C(23)	C(27)	E(75)	C(23)
WB Through/Right	C(33)	C(34)	D(37)	C(34)
NB Left/Through	B(20)	C(21)	C(22)	C(28)
NB Right	A(2)	A(2)	A(3)	A(3)
SB Left/Through	B(19)	C(21)	C(21)	C(28)
SB Right	A(2)	A(2)	A(2)	A(2)
Lakeshore Road @ Mudd Mill Road				
EB Left/Through	a(1)	a(1)	a(1)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	b(11)	b(12)	c(16)	c(16)
Lakeshore Road @ South Bay Road				
EB Through/Right	a(0)	a(0)	a(0)	a(0)
WB Left/Through	a(1)	a(4)	a(5)	a(5)
NB Left/Right	a(9)	a(10)	b(12)	b(12)
Lake Shore Road @ Cicero Center Road / Van Antwerp				
EB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
WB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
NB Left/Through/Right	b(11)	b(11)	b(13)	b(13)
SB Left/Through/Right	a(10)	b(11)	b(11)	b(11)
Lake Shore Road @ East Site Access				
EB Left	-	-	-	a(8_
EB (Left)/Through/Right	-	-	a(3)	a(0)
WB Left	-	-	-	a(8)
WB (Left)/Through/Right	-	-	a(1)	a(0)
NB Left/Through/Right	-	-	e(42)	e(40)
SB Left/Through/Right	-	-	b(12)	b(12)
Lake Shore Road @ Middle Site Access				
EB Left	-	-	-	a(9)
EB (Left)/Through/Right	-	-	a(1)	a(0)
WB Left	-	-	-	a(8)
WB (Left)/Through/Right	-	-	a(0)	a(0)
NB Left/Through/Right	-	-	d(28)	d(27)
SB Left/Through/Right	-	-	b(14)	b(14)
Lakeshore Road @ West Site Access				
EB Left/Through	-	-	a(1)	a(1)
WB Through/Right	-	-	a(0)	a(0)
SB Left/Right	-	-	b(14)	b(14)

A(9) – Signalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Evening Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11	**D(42)**	**D(49)**	**D(51)**	**D(47)**
EB Left	C(22)	C(22)	C(22)	C(21)
EB Through/Right	E(56)	E(58)	E(59)	E(75)
WB Left	E(57)	F(85)	F(95)	E(69)
WB Through/Right	C(28)	C(29)	C(29)	C(21)
NB Left	C(31)	C(32)	C(32)	C(29)
NB Through	E(67)	E(69)	E(70)	E(77)
NB Right	C(24)	C(29)	C(31)	C(26)
SB Left	D(53)	E(68)	E(69)	E(68)
SB Through/Right	D(37)	D(38)	D(38)	C(31)
NYS Route 31 @ I-81 SB Ramps	**C(29)**	**D(50)**	**E(57)**	**C(35)**
EB Through/Right	C(24)	E(72)	F(91)	D(43)
WB Left	E(62)	F(86)	F(88)	E(72)
WB Through	A(2)	A(2)	A(3)	A(4)
SB Left/Through	F(92)	F(130)	F(85)	F(85)
SB Right	B(12)	B(13)	B(15)	B(15)
NYS Route 31 @ I-81 NB Ramps / Pardee Rd	**E(72)**	**F(108)**	**F(147)**	**E(56)**
EB Left	D(49)	D(47)	D(45)	F(150)
EB Through	D(42)	E(73)	F(81)	A(5)
WB Through/Right	F(106)	F(156)	F(203)	E(58)
NB Left	D(38)	D(39)	D(41)	E(61)
NB Through	C(27)	C(27)	C(27)	E(78)
NB Right	F(110)	F(172)	F(273)	E(79)
SB Right	B(14)	B(16)	B(17)	D(39)
NYS Route 31 @ Lakeshore Road				**D(39)**
EB Left	c(23)	e(40)	e(40)	E(77)
EB Through	a(0)	a(0)	a(0)	A(1)
WB Through/Right	a(0)	a(0)	a(0)	D(53)
SB Left/Right	f(133)	f(240)	f(400)	D(36)
NYS Route 31 @ South Bay Road	**E(63)**	**D(46)**	**E(65)**	**D(39)**
EB Left	-	B(14)	B(20)	B(17)
EB (Left)/Through/Right	C(28)	D(54)	E(65)	D(52)
WB Left	-	D(38)	D(44)	D(39)
WB (Left)/Through/Right	D(45)	C(30)	C(35)	C(32)
NB Left	-	C(21)	C(21)	C(24)
NB (Left)/Through/(Right)	F(127)	E(64)	F(109)	D(43)
NB Right	-	-	-	B(13)
SB Left	-	B(19)	B(18)	B(20)
SB (Left)/Through/Right	B(19)	C(34)	D(42)	D(49)
NYS Route 31 @ Cicero Center Road	**A(7)**	**B(11)**	**B(11)**	**B(11)**
EB Left/Through/Right	A(7)	B(12)	B(12)	B(12)
WB Left/Through/Right	A(5)	A(7)	A(7)	A(7)
NB Left/Through/Right	B(15)	B(16)	B(16)	B(16)
SB Left/Through/Right	B(11)	B(12)	B(14)	B(14)
NYS Route 31 @ Lakeshore Road				
EB Left/Through	a(1)	a(1)	a(1)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	c(21)	d(25)	d(34)	d(34)

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Evening Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road	**C(29)**	**D(37)**	**D(45)**	**C(30)**
EB Left	E(56)	F(102)	F(132)	D(40)
EB Through/Right	D(40)	D(43)	D(53)	C(33)
WB Left	B(14)	B(16)	C(35)	B(18)
WB Through/Right	D(36)	D(39)	D(42)	D(46)
NB Left/Through	C(25)	C(27)	C(28)	D(41)
NB Right	A(4)	A(5)	A(9)	A(9)
SB Left/Through	C(21)	C(21)	C(22)	C(27)
SB Right	A(3)	A(5)	A(6)	A(6)
Lakeshore Road @ Mudd Mill Road				
EB Left/Through	a(2)	a(2)	a(2)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	b(14)	c(20)	e(37)	e(37)
Lakeshore Road @ South Bay Road				
EB Through/Right	a(0)	a(0)	a(0)	a(0)
WB Left/Through	a(3)	a(3)	a(5)	a(5)
NB Left/Right	b(11)	b(12)	d(32)	d(32)
Lake Shore Road @ Cicero Center Road / Van Antwerp				
EB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
WB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
NB Left/Through/Right	c(16)	c(17)	c(21)	c(21)
SB Left/Through/Right	b(15)	b(13)	b(14)	b(14)
Lake Shore Road @ East Site Access				
EB Left	-	-	-	a(9)
EB (Left)/Through/Right	-	-	a(2)	a(0)
WB Left	-	-	-	a(8)
WB (Left)/Through/Right	-	-	a(1)	a(0)
NB Left/Through/Right	-	-	f(106)	f(92)
SB Left/Through/Right	-	-	c(23)	c(22)
Lake Shore Road @ Middle Site Access				
EB Left	-	-	-	a(9)
EB (Left)/Through/Right	-	-	a(1)	a(0)
WB Left	-	-	-	a(9)
WB (Left)/Through/Right	-	-	a(0)	a(0)
NB Left/Through/Right	-	-	e(50)	e(47)
SB Left/Through/Right	-	-	c(20)	c(20)
Lakeshore Road @ West Site Access				
EB Left/Through	-	-	a(1)	a(1)
WB Through/Right	-	-	a(0)	a(0)
SB Left/Right	-	-	c(18)	c(18)

A(9) – Signalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Saturday Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11	**D(48)**	**E(56)**	**E(58)**	**D(51)**
EB Left	C(21)	C(22)	C(22)	B(19)
EB Through/Right	E(59)	E(62)	E(64)	E(65)
WB Left	F(86)	F(121)	F(132)	F(92)
WB Through/Right	C(26)	C(28)	C(28)	B(20)
NB Left	C(33)	C(34)	C(34)	C(35)
NB Through	E(68)	E(70)	E(71)	E(80)
NB Right	C(25)	C(30)	C(30)	C(26)
SB Left	D(43)	D(49)	D(50)	E(70)
SB Through/Right	D(45)	D(45)	D(46)	D(42)
NYS Route 31 @ I-81 SB Ramps	**C(26)**	**D(43)**	**E(59)**	**C(35)**
EB Through/Right	D(35)	E(71)	F(91)	D(41)
WB Left	D(36)	D(53)	F(94)	E(77)
WB Through	A(5)	A(6)	A(6)	A(4)
SB Left/Through	E(59)	E(62)	E(77)	E(80)
SB Right	B(16)	C(23)	C(28)	C(29)
NYS Route 31 @ I-81 NB Ramps / Pardee Rd	**C(28)**	**C(33)**	**E(64)**	**C(24)**
EB Left	D(36)	D(42)	D(36)	D(54)
EB Through	C(21)	C(26)	D(39)	A(3)
WB Through/Right	C(28)	D(37)	F(104)	C(24)
NB Left	D(43)	D(39)	C(32)	E(79)
NB Through	C(32)	C(30)	C(26)	C(33)
NB Right	D(42)	D(44)	D(51)	C(33)
SB Right	A(1)	A(2)	A(2)	C(22)
NYS Route 31 @ Lakeshore Road				**C(31)**
EB Left	c(16)	c(20)	d(34)	D(47)
EB Through	a(0)	a(0)	a(0)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	C(34)
SB Left/Right	f(163)	f(278)	f(473)	E(59)
NYS Route 31 @ South Bay Road	**D(47)**	**D(35)**	**E(58)**	**D(44)**
EB Left	-	B(14)	B(18)	C(26)
EB (Left)/Through/Right	C(21)	D(45)	D(49)	D(54)
WB Left	-	C(22)	C(28)	D(52)
WB (Left)/Through/Right	F(89)	C(31)	D(44)	D(49)
NB Left	-	C(23)	C(26)	C(25)
NB (Left)/Through/(Right)	C(31)	C(32)	C(44)	C(29)
NB Right	-	-	-	A(5)
SB Left	-	C(21)	C(21)	B(18)
SB (Left)/Through/Right	C(21)	D(44)	F(115)	D(53)
NYS Route 31 @ Cicero Center Road	**A(5)**	**A(7)**	**A(9)**	**A(9)**
EB Left/Through/Right	A(4)	A(7)	A(8)	A(8)
WB Left/Through/Right	A(4)	A(6)	A(7)	A(7)
NB Left/Through/Right	B(13)	B(14)	B(14)	B(14)
SB Left/Through/Right	B(11)	B(12)	B(14)	B(14)
NYS Route 31 @ Lakeshore Road				
EB Left/Through	a(1)	a(1)	a(1)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	c(20)	c(23)	d(31)	d(31)

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Intersection Level of Service Summary
Weekday Saturday Peak Hour

Intersection	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road	**C(21)**	**C(22)**	**C(24)**	**C(22)**
EB Left	B(18)	B(20)	C(22)	B(14)
EB Through/Right	C(33)	C(35)	D(39)	C(24)
WB Left	B(13)	B(13)	B(19)	B(13)
WB Through/Right	C(34)	D(35)	D(38)	C(35)
NB Left/Through	B(19)	B(20)	C(21)	C(24)
NB Right	A(2)	A(2)	A(4)	A(3)
SB Left/Through	B(19)	B(20)	C(21)	C(24)
SB Right	A(2)	A(2)	A(2)	A(3)
Lakeshore Road @ Mudd Mill Road				
EB Left/Through	a(1)	a(1)	a(1)	a(1)
WB Through/Right	a(0)	a(0)	a(0)	a(0)
SB Left/Right	b(14)	c(17)	d(28)	d(28)
Lakeshore Road @ South Bay Road				
EB Through/Right	a(0)	a(0)	a(0)	a(0)
WB Left/Through	a(4)	a(3)	a(5)	a(5)
NB Left/Right	b(11)	b(11)	c(19)	c(19)
Lake Shore Road @ Cicero Center Road / Van Antwerp				
EB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
WB Left/Through/Right	a(1)	a(1)	a(1)	a(1)
NB Left/Through/Right	b(12)	b(14)	c(17)	c(17)
SB Left/Through/Right	b(11)	b(11)	b(11)	b(11)
Lake Shore Road @ East Site Access				
EB Left	-	-	-	a(8)
EB (Left)/Through/Right	-	-	a(3)	a(0)
WB Left	-	-	-	a(8)
WB (Left)/Through/Right	-	-	a(1)	a(0)
NB Left/Through/Right	-	-	f(69)	f(65)
SB Left/Through/Right	-	-	c(19)	c(19)
Lake Shore Road @ Middle Site Access				
EB Left	-	-	-	a(9)
EB (Left)/Through/Right	-	-	a(1)	a(0)
WB Left	-	-	-	a(9)
WB (Left)/Through/Right	-	-	a(0)	a(0)
NB Left/Through/Right	-	-	e(37)	e(36)
SB Left/Through/Right	-	-	c(17)	c(17)
Lakeshore Road @ West Site Access				
EB Left/Through	-	-	a(1)	a(1)
WB Through/Right	-	-	a(0)	a(0)
SB Left/Right	-	-	c(15)	c(15)

A(9) – Signalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Morning Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11					
EB Left	200	33	34	34	37
EB Through/Right	-	307	331	340	355
WB Left	495	102	138	148	299
WB Through/Right	700	98	104	108	177
NB Left	175	50	52	52	50
NB Through	-	122	128	128	120
NB Right	-	102	119	125	114
SB Left	350	117	123	123	118
SB Through/Right	-	84	88	88	87
NYS Route 31 @ I-81 SB Ramps					
EB Through/Right	700	507	564	593	552
WB Left	150	550	726	883	953
WB Through	360	20	21	17	29
SB Left/Through	-	130	270	278	278
SB Right	125	0	62	62	62
NYS Route 31 @ I-81 NB Ramps / Pardee Rd					
EB Left	85	40	46	49	32
EB Through	360	136	135	138	18
WB Through/Right	1085	466	564	734	404
NB Left	310	160	168	168	177
NB Through	-	74	76	76	211
NB Right	100	227	308	465	150
SB Right	-	26	42	44	102
NYS Route 31 @ Lakeshore Road					
EB Left	225	10	28	48	68
EB Through	1085	0	0	0	0
WB Through/Right	-	0	0	0	698
SB Left/Right	-	725	1073	1463	802
NYS Route 31 @ South Bay Road					
EB Left	225	-	22	48	58
EB (Left)/Through/Right	-	141	267	263	297
WB Left	225	-	110	110	134
WB (Left)/Through/Right	-	210	203	208	228
NB Left	280	-	57	57	48
NB (Left)/Through/(Right)	-	135	138	241	156
NB Right	150	-	-	-	4
SB Left	225	-	12	12	11
SB (Left)/Through/Right	-	217	405	727	560
NYS Route 31 @ Cicero Center Road					
EB Left/Through/Right	-	59	81	83	83
WB Left/Through/Right	-	64	83	87	87
NB Left/Through/Right	-	16	17	17	17
SB Left/Through/Right	-	24	37	41	41
NYS Route 31 @ Lakeshore Road					
EB Left/Through	-	0	0	0	0
WB Through/Right	-	0	0	0	0
SB Left/Right	-	13	13	25	25

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Morning Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road					
EB Left	300	116	126	141	99
EB Through/Right	-	187	199	227	222
WB Left	250	110	118	241	147
WB Through/Right	-	177	190	227	227
NB Left/Through	-	126	136	136	153
NB Right	210	20	20	30	26
SB Left/Through	-	132	146	146	165
SB Right	600	26	28	28	28
Lakeshore Road @ Mudd Mill Road					
EB Left/Through	-	0	0	3	3
WB Through/Right	-	0	0	0	0
SB Left/Right	-	15	20	33	33
Lakeshore Road @ South Bay Road					
EB Through/Right	-	0	0	0	0
WB Left/Through	300	5	5	25	25
NB Left/Right	-	8	10	35	35
Lake Shore Road @ Cicero Center Road / Van Antwerp					
EB Left/Through/Right	-	0	0	0	0
WB Left/Through/Right	-	0	0	0	0
NB Left/Through/Right	-	5	8	10	10
SB Left/Through/Right	-	0	0	0	0
Lake Shore Road @ East Site Access					
EB Left	100	-	-	-	10
EB (Left)/Through/Right	480	-	-	10	0
WB Left	100	-	-	-	0
WB (Left)/Through/Right	-	-	-	0	0
NB Left/Through/Right	-	-	-	73	70
SB Left/Through/Right	-	-	-	25	25
Lake Shore Road @ Middle Site Access					
EB Left	100	-	-	-	5
EB (Left)/Through/Right	360	-	-	5	0
WB Left	100	-	-	-	0
WB (Left)/Through/Right	480	-	-	0	0
NB Left/Through/Right	-	-	-	13	13
SB Left/Through/Right	-	-	-	10	10
Lakeshore Road @ West Site Access					
EB Left/Through	300	-	-	0	0
WB Through/Right	480	-	-	0	0
SB Left/Right	-	-	-	3	3

Available Storage and Maximum Queue Lengths in Feet - 95th Percentile Queue Lengths from Synchro Analysis

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Evening Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11					
EB Left	200	54	55	55	45
EB Through/Right	-	344	374	392	386
WB Left	495	582	679	706	536
WB Through/Right	700	341	372	383	295
NB Left	175	134	139	139	118
NB Through	-	388	411	411	412
NB Right	-	438	520	538	424
SB Left	350	233	295	296	255
SB Through/Right	-	146	153	153	122
NYS Route 31 @ I-81 SB Ramps					
EB Through/Right	700	607	698	731	672
WB Left	150	201	205	242	260
WB Through	360	21	23	21	79
SB Left/Through	-	188	224	239	239
SB Right	125	48	54	59	59
NYS Route 31 @ I-81 NB Ramps / Pardee Rd					
EB Left	85	235	224	209	270
EB Through	360	314	337	332	80
WB Through/Right	1085	770	861	962	667
NB Left	310	322	341	341	367
NB Through	-	109	115	115	532
NB Right	100	667	800	1004	515
SB Right	-	48	60	60	101
NYS Route 31 @ Lakeshore Road					
EB Left	225	175	313	578	675
EB Through	1085	0	0	0	0
WB Through/Right	-	0	0	0	971
SB Left/Right	-	400	593	875	462
NYS Route 31 @ South Bay Road					
EB Left	225	-	50	94	87
EB (Left)/Through/Right	-	415	679	665	614
WB Left	225	-	162	159	143
WB (Left)/Through/Right	-	393	346	338	318
NB Left	280	-	63	63	67
NB (Left)/Through/(Right)	-	505	645	905	588
NB Right	150	-	-	-	116
SB Left	225	-	12	12	13
SB (Left)/Through/Right	-	128	199	364	417
NYS Route 31 @ Cicero Center Road					
EB Left/Through/Right	-	164	277	284	284
WB Left/Through/Right	-	101	121	133	133
NB Left/Through/Right	-	34	37	36	36
SB Left/Through/Right	-	27	37	45	45
NYS Route 31 @ Lakeshore Road					
EB Left/Through	-	3	5	5	5
WB Through/Right	-	0	0	0	0
SB Left/Right	-	25	33	60	60

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Evening Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road					
EB Left	300	184	251	277	226
EB Through/Right	-	256	302	371	300
WB Left	250	51	57	117	71
WB Through/Right	-	213	240	285	285
NB Left/Through	-	213	232	232	296
NB Right	210	47	59	115	111
SB Left/Through	-	102	109	109	122
SB Right	600	34	51	62	62
Lakeshore Road @ Mudd Mill Road					
EB Left/Through	-	5	5	5	5
WB Through/Right	-	0	0	0	0
SB Left/Right	-	30	53	110	110
Lakeshore Road @ South Bay Road					
EB Through/Right	-	0	0	0	0
WB Left/Through	300	8	8	30	30
NB Left/Right	-	27	25	190	190
Lake Shore Road @ Cicero Center Road / Van Antwerp					
EB Left/Through/Right	-	0	0	0	0
WB Left/Through/Right	-	0	0	0	0
NB Left/Through/Right	-	5	23	38	38
SB Left/Through/Right	-	0	0	0	0
Lake Shore Road @ East Site Access					
EB Left	100	-	-	-	15
EB (Left)/Through/Right	480	-	-	15	0
WB Left	100	-	-	-	0
WB (Left)/Through/Right	-	-	-	0	0
NB Left/Through/Right	-	-	-	95	88
SB Left/Through/Right	-	-	-	60	58
Lake Shore Road @ Middle Site Access					
EB Left	100	-	-	-	5
EB (Left)/Through/Right	360	-	-	5	-
WB Left	100	-	-	-	0
WB (Left)/Through/Right	480	-	-	0	0
NB Left/Through/Right	-	-	-	18	18
SB Left/Through/Right	-	-	-	20	20
Lakeshore Road @ West Site Access					
EB Left/Through	300	-	-	3	3
WB Through/Right	480	-	-	0	0
SB Left/Right	-	-	-	5	5

Available Storage and Maximum Queue Lengths in Feet - 95th Percentile Queue Lengths from Synchro Analysis

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Saturday Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
NYS Route 31 @ NYS Route 11					
EB Left	200	59	61	61	45
EB Through/Right	-	384	434	462	387
WB Left	495	770	857	882	666
WB Through/Right	700	302	333	347	241
NB Left	175	131	136	136	122
NB Through	-	378	399	399	410
NB Right	-	511	598	617	505
SB Left	350	171	188	189	214
SB Through/Right	-	195	204	204	175
NYS Route 31 @ I-81 SB Ramps					
EB Through/Right	700	638	718	748	681
WB Left	150	222	230	247	382
WB Through	360	10	20	7	124
SB Left/Through	-	175	217	238	214
SB Right	125	68	100	108	112
NYS Route 31 @ I-81 NB Ramps / Pardee Rd					
EB Left	85	218	211	191	205
EB Through	360	329	327	318	70
WB Through/Right	1085	692	825	947	500
NB Left	310	187	187	185	269
NB Through	-	56	55	54	192
NB Right	100	235	270	439	201
SB Right	-	0	0	0	86
NYS Route 31 @ Lakeshore Road					
EB Left	225	93	138	260	599
EB Through	1085	0	0	0	0
WB Through/Right	-	0	0	0	837
SB Left/Right	-	485	698	1050	584
NYS Route 31 @ South Bay Road					
EB Left	225	-	31	72	84
EB (Left)/Through/Right	-	285	566	541	585
WB Left	225	-	110	120	191
WB (Left)/Through/Right	-	496	453	456	492
NB Left	280	-	61	61	60
NB (Left)/Through/(Right)	-	261	275	526	273
NB Right	150	-	-	-	44
SB Left	225	-	18	18	17
SB (Left)/Through/Right	-	124	212	498	403
NYS Route 31 @ Cicero Center Road					
EB Left/Through/Right	-	115	156	166	166
WB Left/Through/Right	-	89	113	126	126
NB Left/Through/Right	-	17	2	20	20
SB Left/Through/Right	-	22	33	41	41
NYS Route 31 @ Lakeshore Road					
EB Left/Through	-	3	3	3	3
WB Through/Right	-	0	0	0	0
SB Left/Right	-	30	40	70	70

Proposed Lakeshore Village Development – Lakeshore Road, Town of Cicero, NY
Maximum Queue Summary
Weekday Saturday Peak Hour

Intersection	Available Storage	2022 Existing	2032 Background	2032 Build	2032 Build w/ Mitigation
South Bay Road @ Thompson Road					
EB Left	300	92	99	100	83
EB Through/Right	-	210	227	272	256
WB Left	250	47	50	84	71
WB Through/Right	-	201	216	255	244
NB Left/Through	-	102	110	110	122
NB Right	210	22	23	43	38
SB Left/Through	-	108	116	116	129
SB Right	600	27	29	29	30
Lakeshore Road @ Mudd Mill Road					
EB Left/Through	-	3	3	3	3
WB Through/Right	-	0	0	0	0
SB Left/Right	-	29	45	88	88
Lakeshore Road @ South Bay Road					
EB Through/Right	-	0	0	0	0
WB Left/Through	300	8	8	28	28
NB Left/Right	-	13	15	93	93
Lake Shore Road @ Cicero Center Road / Van Antwerp					
EB Left/Through/Right	-	0	0	0	0
WB Left/Through/Right	-	0	0	0	0
NB Left/Through/Right	-	8	10	28	28
SB Left/Through/Right	-	3	3	3	3
Lake Shore Road @ East Site Access					
EB Left	100	-	-	-	13
EB (Left)/Through/Right	480	-	-	13	0
WB Left	100	-	-	-	0
WB (Left)/Through/Right	-	-	-	0	0
NB Left/Through/Right	-	-	-	85	83
SB Left/Through/Right	-	-	-	58	55
Lake Shore Road @ Middle Site Access					
EB Left	100	-	-	-	5
EB (Left)/Through/Right	360	-	-	5	0
WB Left	100	-	-	-	0
WB (Left)/Through/Right	480	-	-	0	0
NB Left/Through/Right	-	-	-	15	15
SB Left/Through/Right	-	-	-	18	18
Lakeshore Road @ West Site Access					
EB Left/Through	300	-	-	3	3
WB Through/Right	480	-	-	0	0
SB Left/Right	-	-	-	5	5

Available Storage and Maximum Queue Lengths in Feet - 95th Percentile Queue Lengths from Synchro Analysis

APPENDIX G

Accident Analysis

Proposed Lakeshore Village Development - Lakeshore Road - Town of Cicero NY
Accident History Summaries - Janaury 1, 2019 Through December 31, 2021

Accident #	Date	Location / Mile Marker	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
1	1/2/2019	31 @ New Country	Right Angle	2	PDO	NB Left / EB	Dry	Traffic Control Disregarded
2	1/3/2019	31 @ Doreen	Right Angle	2	INJ	NB Left / EB	Wet	Failure to Yield ROW
3	1/4/2019	31 @ Route 11	Right Angle	2	INJ	WB Left / NB	Dry	Failure to Yield ROW
4	1/12/2019	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
5	1/14/2019	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
6	1/14/2019	31 @ Crabtree	Right Angle	2	PDO	WB / NB Left	Dry	Failure to Yield ROW
7	1/4/2019	31 @ South Bay	Rearend	2	INJ	EB / EB Stopped	Dry	Following Too Closely
8	1/16/2019	31 - 53m E of Doreen	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
9	1/16/2019	31 - 14m W of Crabtree	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
10	1/26/2019	31 @ South Bay	Right Angle	2	PDO	EB / SB	Dry	Traffic Control Disregarded
11	1/30/2019	31 @ Pardee	Rearend	3	PDO	WB / WB Stopped (2)	Wet	Following Too Closely
12	2/1/2019	31 @ Lakeshore	Rearend	2	PDO	SB / SB Stopped	Dry	Following Too Closely
13	1/31/2019	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
14	2/2/2019	31 @ Route 11	Rearend	2	INJ	EB / EB	Dry	Following Too Closely
15	2/2/2019	31 @ Route 11	Overtaking	2	PDO	SB Changing Lanes / SB	Dry	Unsafe Lane Change
16	2/5/2019	31 - 91m W of Crabtree	Rearend	2	PDO	EB / EB Stopped	Wet	Driver Inattention
17	2/8/2019	31 - 36m E of Route 11	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
18	1/28/2019	Parking Lot	Backing	2	PDO	NB Backing / SB Parked	Wet	Backing Unsafely
19	2/11/2019	31 @ Thompson	Rearend	2	INJ	WB / WB Stopped	Dry	Passing Improperly
20	1/20/2019	31 - 101m E of New Country	Right Turn	2	INJ	EB Right / EB	Snow / Ice	Passing Improperly
21	1/25/2019	31 @ Thompson	Rearend	2	PDO	WB / WB	Wet	Pavement Slippery
22	2/17/2019	31 - MM 31 33091250	Rearend	2	PDO	EB / EB Stopped	Wet	Following Too Closely
23	2/19/2019	31 @ Thompson	Sideswipe	2	INJ	SB / NB Left	Dry	Failure to Yield ROW
24	2/24/2019	31 @ Lakeshore Spur	Animal	1	PDO	WB / Animal	Snow / Ice	Animal's Action
25	2/21/2019	31 - 150m W of Pardee	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
26	2/25/2019	31 @ Button	Fixed Object	2	PDO	EB / EB	Snow / Ice	Pavement Slippery
27	3/5/2019	31 @ Pardee	Left Turn	3	INJ	EB Left / WB / SB Stopped	Dry	Failure to Yield ROW
28	3/10/2019	31 - 61m E of Route 11	Overtaking	2	PDO	WB Changing Lanes / WB	Wet	Unsafe Lane Change
29	3/12/2019	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Snow / Ice	Pavement Slippery
30	3/14/2019	Parking Lot	Left Turn	2	PDO	SB Left / SB Parked	Dry	Driver Inattention
31	3/17/2019	31 - 91m E of Route 11	Left Turn	2	PDO	WB Left / EB	Dry	Failure to Yield ROW
32	3/19/2019	31 @ New Country	Rear end	2	INJ	EB / EB Stopped	Dry	Following Too Closely
33	3/19/2019	31 @ Lakeshore	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
34	3/22/2019	31 @ Eastwood	Animal	2	INJ	EB / WB	Wet	Animal's Action
35	3/22/2019	31 @ South Bay	Left Turn	2	PDO	WB Left / NB	Wet	Improper Turn
36	3/23/2019	31 @ Lakeshore Spur	Rearend	2	INJ	WB / WB Stopped	Snow / Ice	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
37	3/22/2019	31 - 15m E of Whiting	Fixed Object	1	PDO	EB / Utility Pole	Snow / Ice	Pavement Slippery
38	3/26/2019	31 @ Crabtree	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
39	4/1/2019	31 @ Thompson	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
40	4/1/2019	31 @ Lakeshore	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
41	4/2/2019	31 - 132m W of Lakeshore	Animal	1	PDO	WB / Deer	Dry	Animal's Action
42	4/3/2019	31 @ Thompson	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
43	4/10/2019	31 - 91m E of Pardee	Left Turn	3	INJ	EB Left / WB / SB Stopped	Dry	Failure to Yield ROW
44	4/8/2019	31 - 151m W of Lakeshore	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
45	4/13/2019	31 @ Pardee	Backing	2	PDO	SB Backing / NB Stopped	Dry	Backing Unsafely
46	4/11/2019	31 @ New Country	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
47	4/16/2019	31 @ Thompson	Rearend	2	PDO	WB / WB Left	Dry	Following Too Closely
48	4/17/2019	31 - 152m E of Pardee	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
49	4/16/2019	31 @ Route 11	Left Turn	2	INJ	WB Left / EB	Dry	Failure to Yield ROW
50	4/9/2019	31 - 151m W of Lakeshore	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
51	4/23/2019	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	dry	Following Too Closely
52	4/26/2019	31 @ Route 11	Rearend	4	PDO	EB / EB Stopped (3)	Wet	Following Too Closely
53	5/2/2019	31 @ Lakeshore	Rearend	2	PDO	SB / SB	Wet	Following Too Closely
54	4/15/2019	Parking Lot	Backing	2	PDO	NB Backing / NB Parked	Dry	Backing Unsafely
55	4/27/2019	31 @ South Bay	Rearend	2	PDO	SB / SB	Dry	Following Too Closely
56	5/7/2019	31 - 76m E of Pardee	Right Angle	2	INJ	SB Left / WB	Wet	Failure to Yield ROW
57	5/6/2019	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
58	5/7/2019	31 - 246m E of New Country	Rearend	2	PDO	NB / NB Stopped	Wet	Following Too Closely
59	4/6/2019	31 @ Pardee	Backing	2	PDO	SB Backing / NB Stopped	Dry	Backing Unsafely
60	5/8/2019	31 - 91m E of Pardee	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
61	5/14/2019	31 @ Pardee	Right Angle	2	INJ	NB Left / EB	Wet	Failure to Yield ROW
62	5/17/2019	31 @ Route 11	Rearend	2	PDO	NB / NB Stopped	Dry	Following Too Closely
63	5/17/2019	31 @ Crabtree	Right Angle	2	INJ	WB / NB Left	Dry	Failure to Yield ROW
64	5/11/2019	31 - 49m E of Pardee	Right Angle	2	INJ	NB Left / EB	Dry	Failure to Yield ROW
65	5/19/2019	31 @ Route 11	Left Turn	2	PDO	WB Left / EB	Dry	Failure to Yield ROW
66	5/6/2019	31 @ Lakeshore	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
67	5/22/2019	31 @ Thompson	Rearend	2	INJ	EB / EB Stopped	Dry	Following Too Closely
68	5/21/2019	31 @ Route 11	Right Angle	2	PDO	EB / NB Left	Dry	Failure to Yield ROW
69	5/25/2019	31 @ I-81 SB	Left Turn	2	PDO	SB Left / EB	Dry	Failure to Yield ROW
70	1/18/2019	31 - 191m E of New Country	Rearend	2	PDO	WB / WB	Wet	Following Too Closely
71	5/29/2019	31 @ Route 11	Rearend	3	INJ	NB / NB Stopped (2)	Dry	Speed Unsafe
72	5/30/2019	31 - 30m W of Route 11	Left Turn	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
73	6/1/2019	31 @ Route 11	Rearend	2	PDO	NB / NB	Dry	Following Too Closely
74	5/31/2019	31 @ I-81 SB	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
75	6/3/2019	31 @ Button	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
76	5/27/2019	Parking Lot	Backing	2	PDO	SB Backing / EB Parked	Dry	Backing Unsafely
77	6/1/2019	31 @ I-81 SB	Left Turn	2	PDO	WB Left / EB	Dry	Driver Inattention
78	6/7/2019	31 - 152m E of Pardee	Right Angle	2	PDO	WB / NB Left	Dry	Failure to Yield ROW
79	6/7/2019	31 - 152m E of Pardee	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
80	6/7/2019	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Speed Unsafe
81	6/8/2019	31 @ South Bay	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
82	6/6/2019	31 - 14m W of Lakeshore	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
83	6/6/2019	31 @ South Bay	Fixed Object	1	INJ	WB / Ditch	Dry	Defective Brakes
84	5/16/2019	31 @ Lakeshore Spur	Rearend	2	PDO	Unknown / Unknown	Unknown	Not Entered
85	6/1/2019	31 @ Whiting	Animal	1	PDO	WB / Animal	Dry	Animal's Action
86	6/14/2019	31 @ Pardee	Fixed Object	1	PDO	NB / Ditch	Dry	Passenger Distraction
87	6/20/2019	31 - 46m E of Pardee	Right Angle	2	PDO	EB / NB Left	Wet	Failure to Yield ROW
88	6/18/2019	31 - 56m W of Crabtree	Rearend	2	PDO	EB / EB Stopped	Dry	Driver Inattention
89	6/20/2019	31 @ I-81 SB	Rearend	2	PDO	EB / EB Stopped	Wet	Following Too Closely
90	6/28/2018	31 @ I-81 SB	Rearend	2	PDO	SB / SB	Dry	Driver Inattention
91	7/3/2019	31 - MM 31 33091257	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
92	7/2/2019	31 @ Lakeshore	Rearend	2	PDO	SW / SW	Dry	Driver Inattention
93	7/1/2019	31 - 15m W of Crabtree	Overtaking	2	PDO	WB Changing Lanes / WB	dry	Unsafe Lane Change
94	7/8/2019	31 - 81m W of Boyko Farm	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
95	7/10/2019	31 @ I-81 SB	Rearend	3	PDO	EB / EB Stopped (2)	Dry	Following Too Closely
96	7/8/2019	Parking Lot	Backing	2	PDO	Backing / NB Parked	Dry	Backing Unsafely
97	7/10/2019	31 - 89m W of Pardee	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
98	6/13/2019	Parking Lot	Rearend	2	PDO	NB / NB	Dry	Not Entered
99	7/17/2019	31 @ Route 11	Rearend	2	INJ	WB / WB	Wet	Following Too Closely
100	7/4/2019	31 @ South Bay	Rearend	2	PDO	SB / SB	Dry	Following Too Closely
101	7/22/2019	31 @ Route 11	Left Turn	2	PDO	WB Left / EB	Wet	Traffic Control Disregarded
102	6/29/2019	31 @ South Bay	Animal	1	PDO	WB / Deer	Dry	Animal's Action
103	7/22/2019	31 @ Route 11	Rearend	2	PDO	EB / EB	Wet	Following Too Closely
104	7/25/2019	31 - 18m E of Button	Head On	2	INJ	WB / EB	Dry	Fell Asleep
105	7/26/2019	31 @ Route 11	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
106	7/25/2019	31 @ Lakeshore	Rearend	2	INJ	SW / SW Stopped	Dry	Following Too Closely
107	7/29/2019	31 @ Elta	Bicyclist	1	PDO	NB / WB Bicycle	Dry	Failure to Yield ROW
108	7/30/2019	31 @ Lakeshore	Rearend	2	PDO	SW / SW Stopped	Dry	Following Too Closely
109	7/29/2019	31 @ Thompson	Rearend	3	INJ	EB / EB Stopped (2)	Dry	Following Too Closely
110	7/25/2019	31 @ Route 11	Left Turn	2	PDO	SB Left / NB Right	Wet	Failure to Yield ROW
111	7/17/2019	31 @ South Bay	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
112	7/31/2019	31 - 90m W of Crabtree	Right Angle	2	PDO	WB / NB Left	Dry	Failure to Yield ROW
113	7/3/2019	31 @ Route 11	Rearend	2	INJ	SB / SB Stopped	Dry	Driver Inattention
114	7/24/2019	31 @ Lakeshore	Rearend	2	PDO	WB / WB Stopped	Dry	Driver Inattention

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
115	8/2/2019	31 @ Route 11	Right Turn	2	PDO	EB Right / EB Left	Dry	Failure to Keep Right
116	8/10/2019	31 @ South Bay	Rearend	2	PDO	NB / NB	Dry	Driver Inattention
117	8/8/2019	31 - 24m E of Eastwood	Rearend	2	PDO	WB / WB Stopped	Dry	Speed Unsafe
118	8/16/2019	31 @ Pardee	Right Angle	2	INJ	NB Left / WB	Wet	Failure to Yield ROW
119	7/20/2019	31 @ Route 11	Backing	2	PDO	WB Backing / SB Right	Dry	Not Entered
120	8/13/2019	31 @ Thompson	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
121	8/16/2019	31 @ Pardee	Overtaking	3	INJ	EB Changing Lanes / EB (2)	Wet	Outside Car Distraction
122	8/19/2019	31 @ I-81 SB	Right Angle	2	PDO	EB / SB left	Dry	Failure to Yield ROW
123	8/20/2019	31 - 61m E of Pardee	Right Angle	2	PDO	WB / NB Left	Dry	Failure to Yield ROW
124	8/20/2019	31 - 139m E of Pardee	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
125	8/16/2019	31 - 17m E of Whiting	Fixed Object	1	INJ	NB Right / Sign Post	Dry	Illegal Drugs
126	8/25/2019	31 - 15m E of Doreen	Rearend	2	PDO	WB Left / WB	Dry	Following Too Closely
127	8/25/2019	31 @ Pardee	Right Angle	4	INJ	NB Left / WB / SB Stopped (2)	Dry	Failure to Yield ROW
128	8/28/2019	31 @ Lakeshore	Rearend	2	INJ	SW / SW Stopped	Wet	Following Too Closely
129	8/30/2019	31 @ I-81 SB	Left Turn	2	PDO	WB / WB Left	Dry	Unsafe Lane Change
130	8/30/2019	Parking Lot	Backing	2	PDO	SB Backing / NB Parked	Dry	Backing Unsafely
131	8/28/2019	31 - 66m E of Route 11	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
132	9/3/2019	31 @ Lakeshore	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
133	9/4/2019	31 @ Lakeshore	Rearend	2	PDO	SB / SB Stopped	Dry	Driver Inattention
134	9/9/2019	31 @ I-81 SB	Rearend	2	PDO	SB / SB Stopped	Dry	Improper Lane Usage
135	8/24/2019	31 @ Route 11	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
136	9/5/2019	31 - 18m W of Damon	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
137	9/6/2019	31 @ South Bay	Rearend	4	PDO	WB / WB Stopped (3)	Dry	Following Too Closely
138	9/13/2019	31 - 15m E of Lakeshore	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
139	8/17/2019	31 - 16m E of I-81	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
140	9/17/2019	31 @ Thompson	Right Angle	2	PDO	NB / WB Right	Dry	Failure to Yield ROW
141	9/20/2019	31 @ Route 11	Right Angle	2	PDO	EB / SB left	Dry	Failure to Yield ROW
142	9/3/2019	31 @ Pardee	Rearend	2	INJ	EB / EB Stopped	Dry	Not Entered
143	9/25/2019	Parking Lot	Fixed Object	1	PDO	WB Backing / Utility Pole	Dry	Driver Inattention
144	9/26/2019	31 - 30m W of Lakeshore	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
145	9/28/2019	31 @ Lakeshore	Overtaking	2	PDO	WB Right / WB	Wet	Failure to Yield ROW
146	9/27/2019	31 - 99m E of New Country	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
147	10/5/2019	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
148	9/25/2019	31 @ Pardee	Non Collision	1	PDO	WB	Dry	Defective Pavement
149	10/12/2019	31 - 76m W of New Country	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
150	10/7/2019	31 @ Route 11	Overtaking	2	PDO	WB / WB Stopped	Wet	Pavement Slippery
151	10/15/2019	31 @ Route 11	Right Turn	2	PDO	WB Right / WB Right	Dry	Failure to Yield ROW
152	10/17/2019	31 @ Button	Fixed Object	1	PDO	NB Right / Utility Pole	Wet	Pavement Slippery

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
153	10/23/2019	31 @ Pardee	Rearend	2	PDO	NB / NB Stopped	Dry	Following Too Closely
154	10/8/2019	31 @ Pardee	Rearend	2	PDO	WB / WB	Dry	View Obstructed
155	10/31/2019	31 @ Route 11	Overtaking	2	PDO	NB Changing Lanes / NB	Wet	Unsafe Lane Change
156	10/30/2019	31 @ I-81 SB	Right Angle	2	PDO	SB Left / WB	Dry	Failure to Yield ROW
157	11/2/2019	31 - 33m W of Fergerson	Animal	2	PDO	WB / WB / Deer	Dry	Animal's Action
158	7/31/2019	31 @ Lakeshore	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
159	11/6/2019	31 @ Lakeshore	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
160	11/2/2019	31 - 749m E of Whiting	Animal	1	PDO	WB / Deer	Dry	Animal's Action
161	11/9/2019	31 @ Thompson	Rearend	2	PDO	WB / WB Left	Dry	Following Too Closely
162	11/6/2019	31 - 52M E of Doreen	Left Turn	2	PDO	SB Left / WB	Dry	Failure to Yield ROW
163	11/11/2019	31 - 457m W of Cic Center	Animal	1	PDO	WB / Deer	Wet	Animal's Action
164	11/8/2019	31 - 91m E of Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Speed Unsafe
165	11/12/2019	31 - 24m E of Elta	Rearend	2	PDO	EB / EB Stopped	Snow / Ice	Pavement Slippery
166	11/15/2019	31 @ Pardee	Right Angle	3	PDO	NB Left / WB (2)	Dry	Failure to Yield ROW
167	11/15/2019	31 @ Pardee	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
168	11/15/2019	31 @ Route 11	Left Turn	2	PDO	NB Left / WB Left	Dry	Traffic Control Disregarded
169	11/15/2019	31 @ Route 11	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
170	11/12/2019	31 - 76m E of Pardee	Fixed Object	1	PDO	EB Right / Sign Post	Wet	Pavement Slippery
171	11/18/2019	31 - 57m W of Boyko Farm	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
172	11/18/2019	31 - 49m W of Sandra	Animal	1	PDO	WB / Deer	Dry	Animal's Action
173	11/19/2019	31 @ Route 11	Sideswipe	2	PDO	WB / EB	Dry	Driver Inattention
174	11/20/2019	31 @ Bokyo Farm	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
175	11/21/2019	Parking Lot	Rearend	2	INJ	WB / WB Parked	Dry	Driver Inattention
176	11/15/2019	31 @ Route 11	Overtaking	2	PDO	NB / NB Changing Lanes	Dry	Unsafe Lane Change
177	11/23/2019	31 @ Route 11	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
178	11/19/2019	31 @ South Bay	Rearend	2	PDO	NB / NB	Dry	Following Too Closely
179	11/26/2019	31 @ Route 11	Right Angle	2	PDO	SB / WB Left	Dry	Improper Turn
180	11/29/2019	31 - 91m E of Pardee	Left Turn	2	PDO	NB Left / WB	Wet	Failure to Yield ROW
181	11/29/2019	31 - 30m E of Thompson	Fixed Object	1	PDO	EB / Culvert	Wet	Fell Asleep
182	11/22/2019	31 - 30m W of Route 11	Overtaking	2	PDO	WB / WB	Wet	Fatigue
183	11/30/2019	31 - 30m E of Pardee	Overtaking	2	PDO	EB Right / EB	Dry	Improper Turn
184	12/4/2019	Parking Lot	Sideswipe	2	PDO	WB / EB Parked	Wet	Driver Inexperience
185	12/3/2019	31 - 91m W of Damon	Rearend	2	PDO	EB / EB	wet	Following Too Closely
186	12/6/2019	31 - 868m W of Eastwood	Animal	1	INJ	WB / Deer	Wet	Animal's Action
187	12/6/2019	31 - 118m E of Lakeshore	Fire	1	PDO	EB	Wet	Other
188	12/9/2019	31 - 61m E of Route 11	Rearend	2	PDO	EB / EB	Wet	Following Too Closely
189	11/19/2019	31 @ Pardee	Left Turn	2	PDO	EB Left / WB	Dry	Failure to Yield ROW
190	12/10/2019	31 @ Thompson	Rearend	3	INJ	WB / WB Stopped (2)	Wet	Following Too Closely
191	11/24/2019	31 @ Route 11	Left Turn	2	PDO	EB / WB Left	Dry	Failure to Yield ROW

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
192	12/14/2019	Parking Lot	Backing	2	PDO	SB Backing / WB Parked	Snow / Ice	Backing Unsafely
193	12/18/2019	31 @ Button	Fixed Object	1	PDO	WB / Culvert	Snow / Ice	Reaction to Another Vehicle
194	12/19/2019	31 @ Lakeshore	Fixed Object	1	PDO	SB Left / Fence	Wet	Traffic Control Disregarded
195	12/19/2019	31 @ Thompson	Right Angle	2	PDO	NB Left / WB	Snow / Ice	Improper Passing
196	12/18/2019	31 - 26m E of South Bay	Fixed Object	1	PDO	WB Left / Sign Post	Snow / Ice	Pavement Slippery
197	12/23/2019	31 @ South Bay	Rearend	3	INJ	SB / SB Stopped (2)	Dry	Glare
198	12/14/2019	31 @ Doreen	Pedestrian	1	PDO	WB Left / Pedestrian	Wet	Failure to Yield ROW
199	12/27/2019	Cicero Center N of 31	Animal	1	PDO	SB / Deer	Wet	Animal's Action
200	1/1/2020	31 @ Lakeshore	Animal	1	PDO	EB / Deer	Dry	Animal's Action
201	11/11/2019	31 @ I-81 SB	Rearend	2	PDO	Unknown / Unknown	Unknown	Not Entered
202	1/9/2020	31 @ Crabtree	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
203	1/2/2020	31 @ Route 11	Overtaking	2	PDO	WB / WB	Dry	Passing Improperly
204	1/10/2019	31 @ Thompson	Rearend	2	PDO	EB / EB Stopped	Wet	Following Too Closely
205	1/8/2020	31 @ Pardee	Sideswipe	2	PDO	WB / NB Left	Snow / Ice	Improper Turn
206	1/12/202	31 @ Crabtree	Right Angle	2	PDO	NE Right / EB Stopped	Dry	Cell Phone
207	1/13/2020	31 - 51m W of Sandra	Fixed Object	1	PDO	WB / Ditch	Dry	Alcohol Involvement
208	1/16/2020	31 - 749m E of Whiting	Fixed Object	1	PDO	EB / Guide Rail	Snow / Ice	Reaction to Another Vehicle
209	1/15/2020	31 - 15m W of Sandra	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
210	1/18/2019	31 - 33m E of Pardee	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
211	1/25/2020	274m E of Whiting	Other	1	PDO	WB	Wet	Driver Inattention
212	1/21/2020	31 @ Route 11	Head On	3	PDO	WB / EB Stopped (2)	Dry	Failure to Keep Right
213	1/28/2020	31 - 78m E of Pardee	Pedestrian	1	INJ	NB Right / Pedestrian	Wet	Driver Inattention
214	1/31/2020	31 @ Pardee	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
215	1/29/2020	31 @ New Country	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
216	1/29/2020	Parking Lot	Pedestrian	1	INJ	NB Backing / Pedestrian	Dry	Backing Unsafely
217	2/6/2020	31 @ Crabtree	Overtaking	2	PDO	EB Changing Lanes / EB	Wet	Unsafe Lane Change
218	2/7/2020	31 - 30m W of Lakeshore	Right Turn	2	PDO	WB / WB Right	Snow / Ice	Passing Improperly
219	2/8/2020	31 @ Pardee	Overtaking	2	PDO	NB Left / NB Left	Wet	Improper Turn
220	2/4/2020	Midblock Route 31	Sideswipe	2	PDO	EB Right / NB	Wet	Failure to Yield ROW
221	2/10/2020	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
222	2/9/2020	31 @ Thompson	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
223	2/10/2020	31 - MM 31 33091257	Fixed Object	1	PDO	WB / Fence	Snow / Ice	Driver Inattention
224	2/12/2020	31 - 30m E of Pardee	Other	1	PDO	SB	Dry	Driver Inexperience
225	2/12/2020	31 - 126m W of Lakeshore	Right Angle	2	INJ	SB Left / WB	Dry	Failure to Yield ROW
226	2/12/2020	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
227	2/13/2020	31 @ New Country	Rearend	3	PDO	WB / WB Stopped (2)	Wet	Following Too Closely
228	2/7/2020	31 @ Thompson	Rearend	2	PDO	WB / WB	Snow / Ice	Pavement Slippery
229	2/17/2020	31 @ CNS Driveway	Rearend	2	PDO	EB / EB Stopped	Dry	Driver Inattention
230	2/18/2020	31 - 17m E of Pardee	Rearend	3	INJ	EB / EB / EB Stopped	Snow / Ice	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
231	2/19/2020	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
232	3/1/2020	31 @ Whiting	Non Collision	1	PDO	EB	Dry	Tire Failure
233	3/1/2020	31 - 91m E of South Bay	Rearend	2	INJ	WB Left / WB	Snow / Ice	Following Too Closely
234	2/27/2020	31 - 136m W of New Country	Rearend	3	PDO	WB /WB Stopped (2)	Wet	Following Too Closely
235	3/4/2020	31 - 15m E of Pardee	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
236	3/13/2020	31 - 46m E of Cic Center	Animal	1	PDO	WB / Animal	Wet	Animal's Action
237	3/20/2020	31 - 868m E of Cic Center	Fixed Object	1	PDO	Eb / Ditch	Dry	Alcohol Involvement
238	3/19/2020	31 @ Route 11	Rearend	2	INJ	NB / NB Stopped	Dry	Following Too Closely
239	3/20/2020	31 @ Thompson	Overtaking	2	PDO	WB / WB	Wet	Passing Improperly
240	3/23/2020	31 - 185m E of Elta	Rearend	2	PDO	EB / EB right	Snow / Ice	Following Too Closely
241	3/23/2020	31 - 15m W of South Bay	Fixed Object	1	PDO	EB / Snow Embankment	Snow / Ice	Pavement Slippery
242	3/12/2020	31 @ Pardee	Rearend	2	PDO	NB / NB	Dry	Following Too Closely
243	3/21/2020	31 @ Lakeshore	Rearend	2	Non Rep	SW / SW Stopped	Other	Driver Inattention
244	3/9/2020	31 @ Pardee	Rearend	2	PDO	SB / SB Stopped	Dry	Following Too Closely
245	4/5/2020	31 @ Cicero Center	Bicyclist	1	INJ	SB Right / Bike EB Left	Dry	Failure to Yield ROW
246	4/19/2020	31 @ Route 11	Left Turn	2	PDO	WB Left / EB	Wet	Failure to Yield ROW
247	4/22/2020	31 - 61m E of Route 11	Right Angle	2	PDO	SB Left / WB	Dry	Failure to Yield ROW
248	4/25/2020	31 @ South Bay	Rearend	2	PDO	WB / WB Left	Dry	Following Too Closely
249	4/28/2020	31 @ Route 11	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
250	4/24/2020	31 @ South Bay	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
251	5/3/2020	31 - 70m E of Pardee	Left Turn	2	PDO	WB left / WB	Dry	Failure to Yield ROW
252	5/2/2020	Midblock Route 31	Fixed object	1	PDO	WB	Dry	Alcohol Involvement
253	5/20/2020	31 @ Lakeshore	Right Angle	2	INJ	SB Right / WB	Dry	Failure to Yield ROW
254	6/1/2020	31 - 196m E of Whiting	Animal	1	PDO	WB / Deer	Dry	Animal's Action
255	5/28/2020	31 @ Route 11	Sideswipe	2	PDO	EB Left / WB	Dry	Traffic Signal Malfunction
256	6/10/2020	31 @ Cicero Center	Overtaking	2	PDO	WB / WB Right	Dry	Passing Improperly
257	6/12/2020	31 @ South Bay	Left Turn	2	INJ	NB Left / SB	Dry	Failure to Yield ROW
258	6/14/2020	31 @ Thompson	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
259	6/12/2020	31 - 55m E of Route 11	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
260	6/16/2020	31 @ Pardee	Rearend	2	INJ	WB / WB Stopped	Dry	Driver Inattention
261	6/20/2020	31 - 33m E of Route 11	Right Angle	2	PDO	NB / WB	Dry	Driver Inattention
262	6/21/2020	31 @ Crabtree	Backing	2	PDO	SB Backing / NB Stopped	Dry	Backing Unsafely
263	6/7/2020	31 @ Eastwood	Fixed Object	1	PDO	Unknown / Sign Post	unknown	Not Entered
264	6/23/2020	31 @ I-81 SB	Rearend	2	PDO	SB / SB	Dry	Following Too Closely
265	7/1/2020	31 @ Lakeshore	Right Angle	2	PDO	SW Left / WB	Dry	Failure to Yield ROW
266	7/5/2020	31 - 65m E of South Bay	Rearend	2	PDO	WB / WB left	Dry	Following Too Closely
267	7/2/2020	31 - 74m W of Crabtree	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
268	7/9/2022	31 @ South Bay	Right Angle	2	INJ	EB / SW	Dry	Traffic Control Disregarded
269	7/13/2020	31 @ I-81 SB	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
270	7/2/2020	31 - 30m E of Pardee	Overturned	1	INJ	WB	Dry	Reaction to Another Vehicle
271	7/18/2020	31 @ Route 11	Rearend	2	PDO	NB / NB Stopped	Dry	Following Too Closely
272	7/22/2020	31 - 152m E of Whiting	Fixed Object	1	PDO	WB / Utility Pole	Dry	Fell Asleep
273	7/29/2020	31 @ Lakeshore	Left Turn	2	INJ	EB Left / SB Right	Wet	Improper Turn
274	7/31/2020	31 @ Ferguson	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
275	7/27/2020	Parking Lot	Backing	2	PDO	WB Backing / SB Parked	Dry	Backing Unsafely
276	7/31/2020	31 @ I-81 SB	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
277	8/3/2020	31 - 61m E of Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
278	7/31/2020	31 - 110m W of Lakeshore	Right Angle	2	PDO	NB Left / WB	Dry	Improper Turn
279	8/9/2020	31 @ Lakeshore	Rearend	2	PDO	SW / SW	Dry	Following Too Closely
280	8/12/2020	31 @ Crabtree	Left Turn	2	PDO	WB Left / EB	Dry	Failure to Yield ROW
281	8/15/2020	31 @ Pardee	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
282	8/19/2020	31 @ South Bay	Sideswipe	2	PDO	SB Left / NB	Dry	Driver Inexperience
283	8/19/2020	Parking Lot	Backing	2	PDO	NB Backing / NB Parked	Dry	Backing Unsafely
284	8/20/2020	31 @ Route 11	Left Turn	2	PDO	SE Left / NB Right	dry	Failure to Yield ROW
285	8/2/2020	31 - 54m E of Pardee	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
286	8/22/2020	31 @ Pardee	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
287	8/15/2020	31 - 653m E of Whiting	Fixed Object	1	INJ	EB / Curb	Dry	Driver Inexperience
288	8/24/2020	31 - 96m W of Fergerson	Fixed Object	1	INJ	EB / Building	Dry	Unsafe Lane Change
289	8/19/2020	Parking Lot	Unknown	2	PDO	Unknown / NB Parked	Dry	Unknown
290	8/28/2020	Midblock Route 31	Fixed Object	1	PDO	SB / Guide Rail	Dry	Improper Lane Usage
291	9/3/2020	31 @ Pardee	Left Turn	2	PDO	NB Left / SB	Dry	Failure to Yield ROW
292	8/27/2020	31 @ Pardee	Rearend	2	INJ	EB / EB	Wet	Following Too Closely
293	9/3/2020	31 - 71m E of Route 11	Right Angle	2	PDO	SB Left / EB	Dry	Failure to Yield ROW
294	9/4/2020	31 - 18m W of Damon	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
295	9/4/2020	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
296	9/9/2020	31 @ Thompson	Right Angle	3	INJ	SB / EB / NB Stopped	Dry	Traffic Control Disregarded
297	9/9/2020	31 @ Pardee	Bicyclist	1	INJ	EB Bike / NB	Dry	Traffic Control Disregarded
298	9/15/2020	31 @ South Bay	Overtaking	2	PDO	EB / EB	Dry	Fail to Yeild / Unsafe lane usage
299	9/25/2020	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
300	9/23/2020	31 @ New Country	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
301	9/24/2020	31 @ I-81 SB	Rearend	3	PDO	EB / EB Stopped (2)	Dry	Following Too Closely
302	9/25/2020	31 - 99m E of Lakeshore	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
303	9/27/2020	31 @ Route 11	Rearend	2	PDO	NB / NB Stopped	Dry	Following Too Closely
304	10/1/2020	31 @ Lakeshore	Right Angle	2	INJ	WB / SE Left	Dry	Failure to Yield ROW
305	9/9/2020	31 @ Route 11	Pedestrian	1	INJ	NB Left / Pedestrian	Dry	Failure to Yield ROW
306	10/3/2020	31 @ South Bay	Bicyclist	1	INJ	Bike SB Left / EB	Dry	Failure to Yield ROW
307	10/8/2020	31 @ I-81 SB	Rearend	2	INJ	EB / EB	Dry	Following Too Closely
308	10/10/2020	31 - 749m E of Cic Center	Left Turn	2	INJ	WB / W Left	Dry	Improper Lane Usage

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
309	10/9/2020	31 @ Pardee	Overtaking	2	PDO	EB Changing Lanes (2)	Dry	Unsafe Lane Change
310	10/9/2020	31 @ Pardee	Right Angle	2	INJ	WB / NB	Dry	Traffic Control Disregarded
311	10/12/2020	31 @ South Bay	Right Angle	2	PDO	WB / SB	Dry	Traffic Control Disregarded
312	10/13/2020	31 @ Pardee	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
313	10/10/2020	31 @ Pardee	Right Angle	2	PDO	NB Right / EB	Dry	Traffic Control Disregarded
314	10/14/2020	Midblock Route 31	Fixed Object	1	PDO	EB / Ditch	Dry	Other Vehicle
315	10/16/2020	31 @ Route 11	Overtaking	2	PDO	SB / SB Stopped	Dry	Unsafe Lane Change
316	10/25/2020	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
317	10/29/2020	31 - Near Damon	Fixed Object	1	PDO	WB / Ditch	Wet	Following Too Closely
318	10/24/2020	31 - 66m W of Crabtree	Right Angle	2	INJ	SB Left / EB	Dry	Failure to Yield ROW
319	11/3/2020	31 - 805m E of Whiting	Animal	1	PDO	WB / Deer	Wet	Animal's Action
320	11/4/2020	31 - 30m E of Pardee	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
321	11/6/2020	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
322	11/6/2020	31 - 40m E of Pardee	Right Angle	2	INJ	NB Left / WB	Dry	Failure to Yield ROW
323	11/7/2020	31 - 152m E of Elta	Fixed Object	1	PDO	WB / Utility Pole	Dry	Eating or Drinking
324	11/3/2020	Parking Lot	Head On	2	PDO	SB / NB Parked	Dry	Illegal Drugs
325	11/10/2020	31 - 30m E of Route 11	Rearend	3	PDO	EB / EB / EB	Dry	Following Too Closely
326	11/11/2020	31 @ Route 11	Rearend	2	PDO	WB / WB	Wet	Following Too Closely
327	11/9/2020	31 - 860m E of Cic Center	Animal	1	PDO	WB / Deer	Dry	Animal's Action
328	11/13/2020	31 - 36m W of Crabtree	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
329	11/12/2020	Parking Lot	Backing	2	PDO	SB Backing / WB	Dry	Backing Unsafely
330	11/13/2020	Parking Lot	Backing	2	PDO	SB Backing / SB Parked	Dry	Backing Unsafely
331	11/15/2020	31 - 805m E of Whiting	Animal	1	PDO	WB / Deer	Wet	Animal's Action
332	11/15/2020	31 - 61m E of Pardee	Overtaking	2	INJ	WB Changing Lanes / WB	Wet	Unsafe Lane Change
333	10/29/2020	31 @ New Country	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
334	11/17/2020	31 @ Thompson	Rearend	2	INJ	WB / WB	Wet	Unsafe Speed
335	12/4/2020	31 - 87m E of Route 11	Overtaking	2	INJ	WB Changing Lanes / WB	Wet	Unsafe Lane Change
336	1/8/2021	31 @ Route 11	Right Angle	2	PDO	WB Right / SB Stopped	Dry	Unsafe Speed
337	12/16/2020	31 - 57m W of Crabtree	Overtaking	2	PDO	EB Changing Lanes / EB	Snow / Ice	Unsafe Lane Change
338	11/27/2020	31 @ Route 11	Overtaking	2	PDO	EB Changing Lanes / EB	Wet	Unsafe Lane change
339	12/26/2020	31 - 23m W of Crabtree	Right Angle	2	PDO	SB Left / EB	Dry	Failure to Yield ROW
340	12/23/2020	31 @ I-81 SB	Left Turn	2	PDO	WB Left / EB	Dry	Failure to Yield ROW
341	12/21/2020	31 / 23m W of Lakeshore	Right Turn	2	PDO	EB / EB Right	Wet	Passing Improperly
342	1/2/2021	31 @ Thompson	Rearend	3	PDO	SB / SB Stopped (2)	Dry	Brakes Defective
343	1/12/2021	31 @ Lakeshore	Rearend	2	PDO	SW / SW Stopped	Dry	Failure to Yield ROW
344	11/10/2020	Midblock Route 31	Fixed object	1	PDO	NW / Fixed Object	Dry	Driver Inattention
345	11/25/2020	Parking Lot	Backing	2	PDO	NB Backing / SB Parked	Dry	Backing Unsafely
346	11/27/2020	31 @ Route 11	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
347	11/30/2020	31 - 70m W of Crabtree	Rearend	3	PDO	EB / EB / EB Stopped	Wet	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
348	12/1/2020	31 @ New Country	Rearend	3	PDO	EB / EB Stopped (2)	Wet	Following Too Closely
349	12/3/2020	31 - 30m W of Carbtree	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
350	12/3/2020	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	dry	Following Too Closely
351	2/16/2021	31 @ Route 11	Sideswipe	2	PDO	WB / W Left	Snow / Ice	Driver Inattention
352	2/12/2021	31 - 483m E of Whiting	Animal	1	PDO	WB / Deer	Dry	Animal's Action
353	1/30/2021	31 @ Pardee	Rearend	3	PDO	EB / EB Stopped (2)	Dry	Following Too Closely
354	1/27/2021	31 @ South Bay	Right Angle	2	PDO	SB Left / EB	Wet	Failure to Yield ROW
355	1/25/2021	31 - 61m W of Thompson	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
356	1/22/2021	31 - 106m E of New Country	Fixed Object	1	PDO	EB / Ditch	Snow / Ice	Pavement Slippery
357	1/22/2021	31 @ Route 11	Rearend	2	PDO	EB / EB Stopped	Snow / Ice	Following Too Closely
358	1/22/2021	31 @ South Bay	Rearend	2	PDO	EB / EB Stopped	Snow / Ice	Following Too Closely
359	1/22/2021	31 @ Lakeshore	Rearend	3	PDO	EB / EB Stopped (2)	Snow / Ice	Following Too Closely
360	1/10/2021	31 - 17m W of Lakeshore	Fixed Object	1	PDO	WB / Sign Post	Dry	Alcohol Involvement
361	1/8/2021	31 - 19m W of Crabtree	Left Turn	2	PDO	SB Left / WB	Dry	Unsafe Lane Change
362	11/30/2020	31 @ Route 11	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
363	12/12/2020	31 - 39m W of Crabtree	Left Turn	2	PDO	SB Left / EB	Wet	Failure to Yield ROW
364	12/17/2020	31 - 100 M E of South Bay	Overtaking	2	PDO	WB / WB	Snow / Ice	Unsafe Speed
365	12/17/2020	31 @ South Bay	Rearend	2	PDO	WB / WB Stopped	Wet	Unsafe Speed
366	12/15/2020	31 @ Pardee	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
367	2/26/2021	31 @ South Bay	Left Turn	2	INJ	WB Left / EB	Dry	Failure to Yield ROW
368	2/23/2021	31 @ Pardee	Rearend	2	INJ	WB / WB Stopped	Wet	Driver Inattention
369	2/17/2021	31 - 30m W of Cic Center	Overtaking	2	PDO	WB / W Left	Dry	Improper Lane Usage
370	3/9/2021	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
371	3/19/2021	31 @ Crabtree	Overtaking	2	PDO	EB Changing Lanes / EB Right	Dry	Not entered
372	3/23/2021	31 @ Thompson	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
373	4/3/2021	31 @ Lakeshore	Rearend	2	PDO	WB / WB	Dry	Road Rage
374	3/16/2021	31 @ Route 11	Overtaking	2	PDO	WB / WB	Dry	Not entered
375	4/8/2021	31 @ Pardee	Overtaking	2	PDO	WB Changing Lanes - WB	Dry	Unsafe Lane Change
376	1/30/2021	31 @ Pardee	Rearend	2	INJ	WB / WB Stopped	Wet	Following Too Closely
377	3/31/2021	Midblock Route 31	Overtaking	2	PDO	WB / W Uturn	Wet	Unsafe Lane Change
378	4/12/2021	31 @ Route 11	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
379	4/13/2021	31 @ Thompson	Right Turn	2	PDO	WB Right / NB	Dry	Failure to Yield ROW
380	4/14/2021	31 - 30m E of Route 11	Overtaking	3	PDO	EB Changing Lanes / EB Stopped (2)	Dry	Unsafe Lane Change
381	4/12/2021	31 @ South Bay	Rearend	2	PDO	EB / EB	Wet	Following Too Closely
382	4/17/2021	31 @ Pardee	Rearend	2	INJ	EB / EB	Dry	Driver Inexperience
383	4/19/2021	31 @ Thompson	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
384	4/19/2021	31 - 61m E of Route 11	Left Turn	2	PDO	WB Left / EB	Dry	Failure to Yield ROW
385	4/26/2021	31 - MM 33091258	Rearend	3	PDO	NB / NB / NB Stopped	Dry	Following Too Closely
386	4/28/2021	31 @ Crabtree	Left Turn	2	PDO	NB Left / WB	Dry	Failure to Yield ROW

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
387	4/17/2021	31 @ Route 11	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane Change
388	5/1/2021	31 @ I-81 SB	Right Angle	2	INJ	SB / EB	Dry	Traffic Control Disregarded
389	5/1/2021	31 @ Route 11	Rearend	2	PDO	NB / NB	Dry	Following Too Closely
390	4/30/2021	31 @ Route 11	Right Angle	2	PDO	WB / NB	Wet	Driver Inattention
391	5/6/2021	Parking Lot	Unknown	2	PDO	Unknown / EB Parked	Dry	Driver Inattention
392	5/8/2021	31 @ Lakeshore	Fixed Object	1	INJ	SB / Sign Post	Wet	Traffic Control Disregarded
393	5/8/2021	31 @ Pardee	Rearend	2	PDO	EB Left / EB Left	Wet	Following Too Closely
394	5/10/2021	Parking Lot	Right Turn	2	PDO	SB Right / WB Parked	Dry	Improper Turn
395	5/3/2021	31 @ Thompson	Rearend	2	INJ	NB / NB	Dry	Defective Brakes
396	5/10/2021	Parking Lot	Overtaking	2	PDO	SB / S	Dry	Driver Inattention
397	5/18/2021	31 @ Pardee	Overtaking	2	Non Rep	NB / NB	Dry	Fail to keep right
398	5/20/2021	31 - 30m E of Lakeshore	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
399	5/20/2021	31 @ I-81 SB	Overtaking	2	INJ	SB / SB	Dry	Aggression / Following too close
400	5/18/2021	31 @ Lakeshore Spur	Rearend	2	PDO	WB / WB	Dry	Unsafe Speed
401	5/25/2021	31 - 64m E of Pardee	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
402	5/28/2021	31 @ Route 11	Left Turn	2	INJ	WB Left / EB	Wet	Failure to Yield ROW
403	6/3/2021	31 @ Route 11	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
404	6/7/2021	31 @ Route 11	Right Angle	2	PDO	NB Left / EB	Wet	Failure to Yield ROW
405	6/9/2021	31 - 42m E of Pardee	Rearend	2	PDO	EB / EB Stopped	Dry	Unsafe Speed
406	6/11/2021	31 @ I-81 SB	Right Angle	2	PDO	SB Left / WB	Dry	Traffic Control Disregarded
407	6/7/2021	31 @ South Bay	Rearend	2	PDO	SB / SB	Dry	Following too close / reaction
408	6/11/2021	31 @ Cicero Center	Rear end	2	PDO	EB / EB	Dry	Following Too Closely
409	6/7/2021	31 @ Route 11	Left Turn	2	INJ	WB Left / EB	Dry	Failure to Yield ROW
410	6/11/2021	31 @ South Bay	Rearend	2	INJ	WB / WB Stopped	Dry	Following Too Closely
411	6/18/2021	31 - 136m W of Lakeshore	Left Turn	2	PDO	SB Left / WB	Dry	Failure to Yield ROW
412	6/19/2021	Parking Lot	Overtaking	2	PDO	SB Parking / SB Parked	Wet	View Obstructed
413	6/19/2021	31 - 53m W of Crabtree	Right Angle	2	PDO	SB Left / EB	Dry	Failure to Yield ROW
414	6/23/2021	31 - 15m E of Route 11	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane change
415	6/24/2021	31 @ Thompson	Rearend	2	PDO	SB / SB Stopped	Dry	Following Too Closely
416	6/25/2021	31 @ I-81 SB	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
417	6/25/2021	31 - 30 W of New Country	Rearend	2	PDO	WB / WB Stopped	Dry	Driver Inattention
418	6/19/2021	31 @ Cicero Center	Rearend	2	PDO	WB / WB	Wet	Following Too Closely
419	6/29/2019	31 @ Route 11	Overtaking	2	PDO	NB / NB Stopped	Wet	Driver Inattention
420	6/30/2021	31 @ Thompson	Overtaking	2	PDO	WB / WB	Wet	Improper Passing
421	6/30/2021	31 - 36m W of Crabtree	Fixed Object	1	PDO	EB / Sign Post	Wet	Fell Asleep
422	7/5/2021	31 @ Cicero Center	Sideswipe	2	PDO	SB Right / EB Left	Dry	Improper Turn
423	7/8/2021	31 @ South Bay	Fixed object	1	PDO	EB	Dry	Improper Lane Usage
424	7/7/2021	31 @ Cicero Center	Rearend	2	PDO	SW / SW	Dry	Driver Inattention
425	7/9/2021	31 @ Lakeshore	Right Angle	2	PDO	EB / SE L	Dry	Failure to Yield ROW

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
426	7/18/2021	Midblock Route 31	Fixed Object	1	PDO	EB / Ditch	Wet	Unsafe Speed
427	7/11/2021	31 @ Pardee	Left Turn	2	PDO	EB Left / EB Left	Dry	Failure to Yield ROW
428	7/15/2021	31 - 19m E of I-81	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
429	7/21/2021	31 Near Damon	Fixed Object	1	INJ	WB / Culvert	Dry	RX Medication
430	7/21/2021	31 - 57m W of Doreen	Animal	1	PDO	EB / Deer	Dry	Animal's Action
431	7/27/2021	Midblock Route 31	Fixed Object	1	PDO	SB Right / Ditch	Dry	Improper Turn
432	7/29/2021	31 - 63m E of Pardee	Right Angle	2	PDO	NB Changing Lanes / WB	Wet	Improper Lane Usage
433	8/2/2021	31 @ Bokyo Farm	Rearend	3	PDO	WB / WB Stopped (2)	Dry	Following Too Closely
434	8/4/2021	31 @ Route 11	Right Angle	2	PDO	SB Left / EB	Dry	Failure to Yield ROW
435	8/6/2021	31 @ Crabtree	Right Turn	2	PDO	NB Right / EB	Dry	Failure to Yield ROW
436	8/10/2021	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Failure to Yield ROW
437	7/28/2021	31 @ Pardee	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
438	6/30/2021	31 @ Route 11	Rearend	2	INJ	NB / NB Stopped	Dry	Following Too Closely
439	8/16/2021	31 - 136m E of Pardee	Overtaking	2	PDO	WB / WB Left	Dry	Driver Inattention
440	8/9/2021	Parking Lot	Backing	2	PDO	NB Backing / WB	Dry	Backing Unsafely
441	8/17/2021	31 @ Pardee	Overtaking	2	PDO	WB / WB	Wet	Driver Inattention
442	8/18/2021	31 @ I-81 SB	Left Turn	2	PDO	WB Left / EB	Wet	Traffic Control Disregarded
443	8/19/2021	31 @ I-81 SB	Right Angle	2	PDO	SB Left / WB	Dry	Traffic Control Disregarded
444	8/18/2021	Route 11 N or 31	Fixed Object	1	PDO	NB / Guide Rail	Wet	Pavement Slippery
445	8/21/2021	31 @ Lakeshore	Non Collision	1	PDO	EB	Dry	Tire Failure
446	8/24/2021	31 @ New Country	Rearend	2	PDO	EB / EB Stopped	Dry	Driver Inattention
447	8/24/2021	31 @ Route 11	Rearend	2	PDO	NB / NB Stopped	Dry	Driver Inattention
448	8/26/2021	31 @ Pardee	Right Turn	2	PDO	NB / NB Right	Dry	Improper Turn
449	8/27/2021	31 @ Route 11	Rearend	3	PDO	WB / WB Stopped (2)	Dry	Driver Inattention
450	8/1/2021	31 - 98m E of Pardee	Backing	2	PDO	NB Backing / NB Stopped	Wet	Backing Unsafely
451	9/6/2021	31 @ Thompson	Right Angle	2	PDO	WB Right / SB Stopped	Dry	Improper Lane Usage
452	9/11/2021	31 @ Thompson	Fixed Object	1	PDO	SB Right / Utility Pole	Dry	Improper Turn
453	9/15/2021	31 - 45m W of New Country	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
454	9/15/2021	31 @ Lakeshore Spur	Rearend	3	INJ	WB / WB / WB	Wet	Following Too Closely
455	9/17/2021	31 Near Doreen	Rearend	3	PDO	WB / WB / WB	Dry	Following Too Closely
456	9/18/2021	31 - 61m W of Thompson	Fixed Object	1	PDO	WB / Ditch	Dry	Glare
457	9/22/2021	31 @ South Bay	Overtaking	2	PDO	WB / WB	Wet	Improper Lane Usage
458	9/17/2021	31 @ Cicero Center	Rear end	2	PDO	WB / WB Stopped	Dry	Following Too Closely
459	9/22/2021	31 - 805m E of Cic Center	Fixed object	1	PDO	Unknown	Wet	Illegal Drugs
460	9/23/2021	31 @ South Bay	Right Angle	2	PDO	NB / EB	Wet	Failure to Yield ROW
461	9/27/2021	31 - 322m E of Damon	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
462	9/28/2021	31 - 68m E of Doreen	Rearend	3	PDO	WB / WB / WB	Dry	Glare
463	9/29/2021	31 - 35m W of Crabtree	Overtaking	2	PDO	EB Changing Lanes / EB	Dry	Unsafe Lane Change
464	9/29/2021	31 @ I-81 SB	Right Angle	2	INJ	SB Left / WB	Dry	Traffic Control Disregarded

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
465	10/1/2021	31 - 18m W of Damon	Animal	1	PDO	WB / Deer	Dry	Animal's Action
466	10/1/2021	31 - 61m W of Lakeshore	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
467	10/2/2021	31 - 403m W of Damon	Animal	1	PDO	EB / Deer	Dry	Animal's Action
468	9/26/2021	31 @ Route 11	Sideswipe	2	PDO	W Left / EB	Dry	Improper Turn
469	10/4/2021	31 @ Thompson	Right Angle	2	PDO	WB Left / NB	Wet	Driver Inattention
470	10/4/2021	31 - 42m E of Thompson	Backing	2	PDO	NB Backing / SB Parked	Wet	Backing Unsafely
471	10/6/2021	31 @ Route 11	Rearend	2	PDO	EB / EB Stopped	Dry	Driver Inattention
472	10/6/2021	31 - 63m W of Button	Rearend	2	PDO	WB / WB Stopped	Dry	Traffic Control Disregarded
473	10/7/2021	31 - 152m E of Pardee	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
474	10/7/2021	31 @ Lakeshore	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
475	9/29/2021	31 @ New Country	Pedestrian	1	INJ	NB Right / Pedestrian	Dry	Driver Inattention
476	10/7/2021	31 @ Button	Overtaking	2	INJ	EB / EB Stopped	Dry	Following Too Closely
477	10/13/2021	31 - 213m E of Eastwood	Fixed Object	1	PDO	WB / Guide Rail	Dry	Fell Asleep
478	10/19/2021	31 @ Lakeshore	Rearend	2	PDO	SW / SW Stopped	Dry	Following Too Closely
479	10/24/2021	31 @ Button	Left Turn	2	PDO	EB Left / SB	Wet	Improper Lane Usage
480	10/23/2021	31 @ Pardee	Right Angle	3	INJ	N Left / WB / WB	Wet	Failure to Yield ROW
481	10/25/2021	31 - 81m W of Lakeshore	Overtaking	2	PDO	WB Changin Lanes / WB	Dry	Unsafe Lane change
482	10/28/2021	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Dry	Driver Inattention
483	10/29/2021	31 @ South Bay	Rearend	2	INJ	WB / WB Stopped	Wet	Following Too Closely
484	10/28/2021	31 - 79m E of Route 11	Right Angle	2	INJ	SB Left / WB	Dry	Failure to Yield ROW
485	10/29/2021	31 @ Lakeshore	Rearend	2	PDO	WB / WB Stopped	Wet	Following Too Closely
486	10/29/2021	31 @ South Bay	Rearend	2	PDO	WB / WB Stopped	Dry	Following Too Closely
487	10/29/2021	31 @ Route 11	Left Turn	2	PDO	NB Left / SB	Dry	Failure to Yield ROW
488	10/29/2021	31 - 30m E of Pardee	Overtaking	2	INJ	WB Changing Lanes / WB	Dry	Unsafe Lane change
489	10/25/2021	31 - MM 31 33091250	Overtaking	2	PDO	WB Changing Lanes / WB	Dry	Unsafe Lane change
490	11/2/2021	31 @ Thompson	Rearend	3	PDO	SB / SB Stopped (2)	Dry	Driver Inattention
491	10/31/2021	31 @ New Country	Right Turn	2	PDO	NB Right / EB	Wet	Failure to Yield ROW
492	11/5/2021	31 @ Pardee	Right Angle	2	PDO	WB / WB Left	Dry	Traffic Control Disregarded
493	11/5/2021	31 @ Pardee	Right Angle	2	PDO	EB / NB	Dry	Driver Inattention
494	11/12/2021	31 - 14m W of Lakeshore	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
495	11/12/2021	31 - 21m W of New Country	Overtaking	2	PDO	EB / EB Right	Dry	Improper Turn
496	11/11/2021	Parking Lot	Right Turn	2	PDO	WB Right / WB Parked	Dry	Improper Turn
497	10/19/2021	31 @ I-81 SB	Right Angle	2	INJ	SB Left / EB	Dry	Failure to Yield ROW
498	11/17/2021	31 @ Crabtree	Left Turn	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
499	11/18/2021	31 @ Route 11	Left Turn	2	PDO	EB Left / WB	Wet	Failure to Yield ROW
500	11/25/021	31 Near Damon	Fixed Object	1	INJ	WB / Ditch	Dry	Reaction to Another Vehicle
501	11/22/2021	31 - 132m E of Pardee	Right Angle	2	PDO	WB Right / WB	Snow / Ice	Failure to Yield ROW
502	12/2/2021	31 @ Route 11	Right Angle	2	PDO	WB Left / SB	Wet	Failure to Yield ROW
503	12/1/2021	31 @ Thompson	Left Turn	2	PDO	EB Left / WB	Wet	Failure to Yield ROW

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
504	12/1/2021	31 @ I-81 SB	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
505	12/1/2021	Parking Lot	Fixed object	1	PDO	EB Backing / Fixed Object	Dry	Backing Unsafely
506	11/27/2021	31 Near Eastwood	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
507	12/4/2021	31 @ I-81 SB	Overtaking	2	PDO	WB / WB	Dry	Improper Passing
508	11/19/2021	31 - 49m W of Lakeshore	Fixed object	1	PDO	EB / Fixed Object	Dry	Lost consciousness
509	12/7/2021	31 @ Pardee	Rearend	2	PDO	WB / WB Stopped	Wet	Driver Inattention
510	12/13/2021	31 @ Button	Left Turn	2	INJ	EB Left / WB	Dry	Failure to Yield ROW
511	12/21/2021	31 @ Route 11	Rearend	3	PDO	WB / WB / WB	Dry	Following Too Closely
512	12/21/2021	31 @ Route 11	Overtaking	2	PDO	NB / NB Stopped	Dry	Driver Inattention
513	12/22/2021	31 - 18m W of Damon	Rearend	4	INJ	EB / EB Stopped (3)	Snow / Ice	Following Too Closely
514	12/29/2021	31 @ Thompson	Right Angle	2	PDO	NB Left / WB	Wet	Failure to Yield ROW
515	12/23/2021	31 @ Route 11	Right Angle	2	PDO	NB Left / WB	Dry	Failure to Yield ROW
516	2/25/2019	Parking Lot	Head On	2	PDO	WB / Parked	Snow / Ice	Pavement Slippery
517	5/4/2019	Lakeshore @ Button	Rearend	2	PDO	NB / NB Right	Dry	Following Too Closely
518	5/27/2019	South Bay @ Lakeshore	Fixed Object	1	INJ	NB / Ditch	Dry	Alcohol Involvement
519	6/13/2019	LS - 48m N of Route 31	Bicyclist	1	INJ	NB / NB	Wet	Alcohol Involvement
520	6/29/2019	LS - 134m E of Eden	Overtaking	2	PDO	EB / EB	Dry	Failure to Keep Right
521	7/12/2019	Lakeshore @ Belnor	Left Turn	2	PDO	EB / EB Left	Dry	Failure to Yield ROW
522	7/13/2019	South Bay @ Lakeshore	Right Angle	2	INJ	NB / WB	Wet	Alcohol Involvement
523	9/16/2019	LS - 152m S of Murray	Animal	1	PDO	SB / Deer	Dry	Animal's Action
524	9/17/2019	LS - 152m W of Carmenica	Right Angle	2	PDO	NE Right / EB	Dry	View obstruction
525	10/10/2019	LS - 22m E of Belnor	Animal	1	PDO	WB / Deer	Dry	Animal's Action
526	10/11/2019	Lakeshore @ Snowshoe	Right Angle	2	PDO	WB Backing / SB	Dry	Backing Unsafely
527	11/4/2019	Lakeshore @ Belnor	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
528	11/24/2019	Lakeshore @ Snowshoe	Rearend	2	PDO	EB / EB Stopped	Dry	Following Too Closely
529	12/3/2019	LS - 30m W of Carmenica	Sideswipe	2	INJ	EB / WB	Wet	Tow Hitch Defective
530	11/29/2019	Lakeshore @ Backstretch	Fixed Object	1	PDO	EB / Sign Post	Snow / Ice	Pavement Slippery
531	12/7/2019	Lakeshore @ Backstretch	Sideswipe	2	PDO	NB Left / SB Stopped	Wet	Failure to Yield ROW
532	12/19/2021	Lakeshore @ Snowshoe	Fixed Object	1	PDO	SB / Ditch	Dry	Reaction to Another Vehicle
533	12/18/2019	Lakeshore @ Whiting	Right Angle	2	PDO	NB / WB Left	Snow / Ice	Pavement Slippery
534	12/18/2019	LS - 7m W of Seneca	Fixed Object	1	PDO	WB / Tree	Snow / Ice	Pavement Slippery
535	12/22/2019	LS - 30m E of Snowshoe	Overtaking	2	PDO	EB / EB Parked	Wet	View Obstructed
536	1/10/2020	LS - 61m East of Mudd Mill	Fixed Object	1	PDO	EB Right / Ditch	Wet	Improper Turn
537	1/31/2020	Lakeshore Midblock	Fixed Object	1	PDO	WB / Fire Hydrant	Dry	Passing Improperly
538	2/12/202	LS - 152m W of Mudd Mill	Fixed Object	1	PDO	WB / Ditch	Dry	Failure to Keep Right
539	2/14/2020	Lakeshore @ Mud Mill	Fixed Object	1	PDO	EB / Snow Embankment	Wet	Glare
540	2/14/2020	Lakeshore @ Cicero Center	Rearend	2	PDO	EB / EB Stopped	Wet	Following Too Closely
541	2/13/2020	Parking Lot	Backing	2	PDO	EB Backing / EB Parked	Dry	Backing Unsafely
542	2/20/2020	LS - 15m W of Mudd Mill	Fixed Object	1	PDO	WB / Sign Post	Wet	Driver Inattention

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
543	4/18/2020	Lakeshore @ Eldan	Fixed Object	1	PDO	WB / Unknown	Unknown	Driver Inattention
544	4/23/2020	Lakeshore @ Mud Mill	Fixed Object	2	PDO	EB / Ditch	Dry	Alcohol Involvement
545	4/23/2020	LS near Snowshoe	Overtaking	2	INJ	EB / EB	Dry	Following Too Closely
546	5/23/2020	LS near Snowshoe	Fixed Object	1	PDO	WB / Utility Pole	Dry	Reaction to Another Vehicle
547	6/17/2020	LS - 114m E of Cic Center	Rearend	4	INJ	WB / WB Parked (3)	Dry	View obstruction
548	6/21/2020	Midblock Lakeshore	Fixed Object	1	PDO	WB / Fixed Object	Dry	Improper Lane Usage
549	6/20/2020	Lakeshore @ Snowshoe	Left Turn	2	INJ	EB / WB Left	Dry	Failure to Yield ROW
550	8/4/2020	LS - 22m W of Osborne	Fixed Object	1	PDO	WB / Fixed Object	Wet	Failure to Keep Right
551	8/14/2020	LS - 30m W of Belnor	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
552	9/5/2020	LS near Mapleview	Overtaking	2	PDO	WB from Parking / WB	Dry	Failure to Yield ROW
553	9/21/2020	LS 122m W of Eldan	Fixed Object	1	PDO	EB / Fixed Object	Dry	Cellphone
554	9/17/2020	Midblock Lakeshore	Right Angle	2	PDO	WB Backing / SB	Dry	Backing Unsafely
555	10/14/2020	LS 97m W of Belnor	Fixed Object	1	PDO	EB / Utility Pole	Dry	Driver Inattention
556	10/17/2020	LS - 64m S of Murray	Animal	1	PDO	NB / Deer	Dry	Animal's Action
557	11/12/2020	LS near Murray	Fixed Object	1	INJ	EB / Fixed Object	Dry	Alcohol Involvement
558	11/25/2020	LS - 87m W of Persian Ter	Animal	1	PDO	EB / Deer	Wet	Animal's Action
559	2/11/2021	Lakeshore @ Mcdonnells	Fixed Object	1	PDO	SB / Sign Post	Snow / Ice	Lost Consciousness
560	2/3/2021	LS - 30m E of Persian Ter	Animal	2	PDO	EB / Deer	Dry	Animal's Action
561	3/21/2021	Lakeshore @ Eldan	Backing	2	PDO	NB Backing / NB	d	Backing Unsafely
562	4/17/2021	Lakeshore @ Snowshoe	Left Turn	2	PDO	W Left / EB	Dry	Failure to Yield ROW
563	4/27/2021	Lakeshore @ Cicero Center	Fixed Object	1	PDO	NB / Fixed Object	Dry	Unknown
564	6/4/2021	LS - 152m West of Belnor	Rearend	2	PDO	EB / EB Right	Wet	Following Too Closely
565	6/19/2021	Lakeshore @ Whiting	Right Angle	2	PDO	EB / NB Right	Dry	Failure to Yield ROW
567	8/23/2021	Lakeshore @ Carmenica	Rearend	2	PDO	EB / EB	Dry	Driver Inattention
568	9/19/2021	LS - 68m E of Snowshoe	Animal	1	PDO	EB / Deer	Dry	Animal's Action
569	10/13/2021	LS - 91m E of Bayview	Pedestrian	1	INJ	EB / Pedestrian	Dry	Failure to Yield ROW
570	10/12/2021	LS - 344m W of Bayview	Overtaking	2	PDO	EB / EB	Dry	Unsafe Speed
571	11/16/2021	LS - 12m W of Backstretch	Fixed Object	1	PDO	EB / Tree	Wet	Alcohol Involvement
572	1/17/2019	South Bay @ Thompson	Rearend	2	PDO	NEB / NEB	Dry	Following too close
573	2/18/2019	South Bay @ Thompson	Rearend	2	PDO	SWB / SWB Stopped	Snow / Ice	Driver Inattention
574	3/26/2019	South Bay @ Thompson	Backing	2	PDO	SW Backing / NE Stopped	Dry	Backing Unsafely
575	4/5/2019	South Bay @ Thompson	Backing	2	PDO	SB Backing / SB Stopped	Wet	Backing Unsafely
576	4/17/2019	SB - 61m N of Henryk	Rearend	2	INJ	NB / NB	Dry	Following Too Closely
577	4/27/2020	South Bay @ 31	Rearend	2	PDO	SB / SB	Dry	Following Too Closely
578	5/21/2020	South Bay @ Thompson	Rearend	3	PDO	NE / NE Stopped (2)	Dry	Following Too Closely
579	5/27/2020	South Bay @ Lakeshore	Fixed Object	1	INJ	NB / Ditch	Dry	Traffic Control Disregarded
580	6/7/2019	South Bay @ Whiting	Right Angle	2	INJ	SE / SW	Dry	Failure to Yield ROW
581	7/18/2019	South Bay @ Thompson	Head On	2	PDO	NB / unknown	Dry	Avoiding Object in Road
582	8/13/2019	South Bay @ Whiting	Right Angle	2	INJ	SB / WB	Dry	Failure to Yield ROW

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
583	8/17/2019	South Bay @ Whiting	Left Turn	2	PDO	SB Left / NB	Wet	Failure to Yield ROW
584	8/25/2019	South Bay @ Thompson	Rearend	2	PDO	NB / NB Stopped	Dry	Following Too Closely
585	8/29/2019	South Bay @ Thompson	Rearend	2	INJ	SB / SB Stopped	Dry	Driver Inattention
586	9/6/2019	South Bay @ Daedalus	Bicyclist	1	INJ	WB Left / NB Bike	Dry	Failure to Yield ROW
587	9/28/2019	Midblock South Bay	Fixed Object	1	PDO	NB / Fixed Object	Dry	Alcohol Involvement
588	10/12/2019	SB - 629m S of Owasco	Animal	1	PDO	SB / Animal	Wet	Animal's Action
589	11/4/2019	South Bay @ Thompson	Left Turn	2	INJ	WB Left / NB	Dry	Traffic Control Disregarded
590	11/14/2019	SB - 208m N of Wayfarer	Animal	1	PDO	SB / Deer	Dry	Animal's Action
591	12/6/2019	South Bay @ Whiting	Right Angle	2	INJ	EB / SB	Snow / Ice	Failure to Yield ROW
592	1/9/2020	SB - 30m S of Thompson	Rearend	2	INJ	SB / SB	Wet	Following Too Closely
593	1/8/2020	South Bay @ Thompson	Rearend	2	PDO	NB / NB Stopped	Snow / Ice	Pavement Slippery
594	2/3/2019	Parking Lot	Backing	2	PDO	EB Backing / WB Stopped	Wet	Backing Unsafely
595	1/22/2020	SB - 110m N of Wayfarer	Animal	1	PDO	SB / Deer	Dry	Animal's Action
596	2/27/2020	South Bay @ Thompson	Rearend	2	PDO	SB - SB Stopped	Dry	Following Too Closely
597	2/29/2020	Parking Lot	Overtaking	2	PDO	EB Backing / EB Parked	Wet	Backing Unsafely
598	4/12/2020	SB - 166m S of Owasco	Fixed Object	1	PDO	SW / Tree	Dry	Alcohol Involvement
599	5/29/2020	Thompson N of SB	Right Angle	2	PDO	NB / NB Right	Dry	Improper Lane Usage
600	6/15/2020	South Bay @ Whiting	Right Angle	2	INJ	WB / NB	Dry	Failure to Yield ROW
601	6/20/2020	South Bay	Fixed Object	1	PDO	NB / Fixed Object	Dry	Animal's Action
602	7/9/2020	31 @ South Bay	Right Angle	2	INJ	EB / SW	Dry	Traffic Control Disregarded
603	7/17/2020	SB - 81m N of Matilida	Rearend	3	PDO	NB / NB / NB	Dry	Following Too Closely
604	7/27/2020	South Bay @ Whiting	Bicyclist	1	INJ	NB Right / NB Bike	Dry	Traffic Control Disregarded
605	7/21/2020	South Bay @ Thompson	Rearend	2	PDO	NW / NW Right	Dr	Not entered
606	8/17/2020	South Bay @ Thompson	Rearend	2	PDO	SB / SB Stopped	Wet	Following Too Closely
607	9/10/2020	South Bay @ Thompson	Rearend	2	PDO	NE / NE Right	Dry	Following Too Closely
608	9/28/2020	South Bay @ Whiting	Right Angle	2	PDO	SB / EB	Dry	Failure to Yield ROW
609	10/6/2020	South Bay @ Thompson	Left Turn	2	PDO	NB Left / SB	Dry	Failure to Yield ROW
610	10/5/2020	South Bay @ Thompson	Rear end	2	PDO	SB / SB Stopped	Dry	Following Too Closely
611	10/29/2020	South Bay @ Thompson	Head On	2	INJ	SB / NB	Wet	Passenger Distraction
612	11/11/2020	South Bay @ Cicero	Fixed Object	1	PDO	NW / Fixed Object	Wet	Pavement Slippery
613	11/12/2020	Midblock South Bay	Animal	1	PDO	NE / Deer	Dry	Animal's Action
614	11/13/2020	South Bay @ Thompson	Rearend	2	PDO	SE / SE Right	Dry	Following Too Closely
615	12/3/2020	South Bay @ Owasco	Fixed Object	1	PDO	SW Right / Ditch	Dry	Driver Inattention
616	2/24/2021	Midblock South Bay	Fixed Object	1	PDO	SB / Snow Embankment	Dry	Illegal Drugs
617	4/28/2021	South Bay @ Thompson	Left Turn	2	PDO	NB Left / SB	Wet	Failure to Yield ROW
618	5/20/2021	South Bay @ Whiting	Right Angle	2	PDO	NB / NE	Dry	Failure to Yield ROW
619	5/26/2020	SB - 313m N of Gillette	Overtaking	2	PDO	SB / SB	Dry	Unsafe Lane Change
620	6/2/20201	South Bay @ Thompson	Rearend	2	PDO	NB / NB	Dry	Following Too Closely
621	6/11/2021	South Bay @ Thompson	Rearend	2	PDO	NE / NE Stopped	Dry	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
622	7/1/2021	SB - 61m S of Bradford	Fixed Object	1	INJ	NB / Ditch	Dry	Illness
623	7/5/2021	Parking Lot	Right Angle	2	PDO	NB / WB Parked	Dry	Driver Inattention
624	7/16/2021	SB - 331m S of Lakeshore	Pedestrian	1	INJ	SB / Pedestrian	Dry	Improper Lane Usage
625	8/16/2021	SB - 30m N of Cic Stage	Fixed Object	1	INJ	NB /Ditch	Dry	Fell Asleep
626	8/31/2021	South Bay @ Henryk	Rearend	2	PDO	NB / NB Stopped	Dry	Following too close
627	10/18/2021	South Bay @ Thompson	Right Angle	2	PDO	NW Left / NB	Wet	Traffic Control Disregarded
628	10/29/2020	31 @ South Bay	Rear end	2	PDO	WB / WB Stopped	Dry	Cellphone
629	12/8/2021	South Bay @ Thompson	Sideswipe	2	PDO	SB / EB Left	Snow / Ice	

Route 31 @ Route 11 - 77 Accidents
33 - Rearend Accidents
13 - Overtaking Accidents
12 - Left Turn Accidents
10 - Right Angle Accidents
2 - Right Turn Accidents
4 - Sideswipe Accidents
1 - Head On Accident
1 - Backing Accident
1 - Pedestrian Accident

Route 31 @ Lakeshore - 32 Accidents
22 - Rearend Accidents
4 - Right Angle Accidents
2 - Fixed Object Accidents
1 - Left Turn Accident
1 - Overtaking Accident
1 - Non-Collision Accident
1 - Animal Accident

Route 31 @ Thompson - 33 Accidents
21 - Rearend Accidents
6 - Right Angle Accidents
2 - Overtaking Accidents
1 - Right Turn Accident
1 - Sideswipe Accident
1 - Left Turn Accident
1- Fixed Object Accident

Route 31 @ Crabtree Lane - 12 Accidents
3 - Right Angle Accidents
3 - Overtaking Accidents
3 - Left Turn Accidents
1 - Right Turn Accident
1 - Rearend Accident
1 - Backing Accident

Route 31 @ Boyko Farm - 2 Rearend Accidents

Route 31 @ I-81 NB Ramp/Pardee Road - 53 Accidents
21 - Rearend Accidents
12 - Right Angle Accidents
9 - Overtaking Accidents
4 - Left Turn Accidents
2 - Backing Accidents
1 - Bicyclist Accident
1 - Right Turn Accident
1 - Sideswipe Accident
1 - Non-Collision Accident
1- Fixed Object Accident

Route 31 @ South Bay - 35 Accidents
19 - Rearend Accidents
6 - Right Angle Accidents
3 - Left Turn Accidents
2 - Fixed Object Accidents
2 - Overtaking Accidents
1 - Sideswipe Accident
1 - Bicycle Accident
1 - Animal Accident

Route 31 @ Button Road - 7 Accidents
3 - Fixed Object Accidents
2 - Left Turn Accidents
1 - Rearend Accident
1 - Overtaking Accident

Route 31 @ Cicero Center - 7 Accidents
4 - Rearend Accidents
1 - Overtaking Accident
1 - Sideswipe Accident
1 - Bicycle Accident

Route 31 @ Doreen - 2 Accidents
1 - Right Angle Accident
1 - Pedestrian Accident

Route 31 @ I-81 SB Ramps - 27 Accidents
12 - Rearend Accidents
7 - Right Angle Accidents
5 - Left Turn Accidents
3 - Overtaking Accidents

Route 31 Midblock - 172 Accidents
51 - Rearend Accidents
30 - Fixed Object Accidents
28 - Right Angle Accidents
26 - Overtaking Accidents
15 - Animal Accidents
11 - Left Turn Accidents
3 - Right Turn Accidents
2 - Backing Accidents
2 - Other Accidents
1 - Pedestrian Accident
1 - Sideswipe Accident
1 - Head On Accident
1 - Fire Accident

Route 31 @ New Country Road - 11 Accidents
8 - Rearend Accidents
1 - Right Angle Accident
1 - Pedestrian Accident
1 - Right Turn Accident

Route 31 @ Lakeshore Spur - 10 Accidents
9 - Rearend Accidents
1 - Animal Accident

Route 31 @ Whiting Road - 2 Accidents
1 - Animal Accident
1 - Non-Collision Accident

Route 31 @ Eastwood Road - 2 Accidents
1 - Animal Accident
1- Fixed Object Accident

Lakeshore Road Midblock - 31 Accidents
12 - Fixed Object Accidents
6 - Animal Accidents
5 - Overtaking Accidents
3 - Rearend Accidents
2 - Right Angle Accidents
1 - Bicycle Accident
1 - Pedestrian Accident
1 - Sideswipe Accident

Lakeshore @ Backstretch - 2 Accidents
1 - Sideswipe Accident
1- Fixed Object Accident

Lakeshore @ Mcdonnells - 1 Fixed Object Accident

South Bay Road Midblock - 15 Accidents
6 - Fixed Object Accidents
4 - Animal Accidents
3 - Rearend Accidents
1 - Overtaking Accident
1 - Pedestrian Accident

South B ay @ Daedalus - 1 Bicycle Accident

South Bay @ Henryk - 1 Rearend Accident

Lakeshore @ South Bay - 3 Accidents
2 - Fixed Object Accident
1 - Right Angle Accident

Lakeshore @ Snowshoe - 5 Accidents
2 - Left Turn Accidents
1 - Right Angle Accident
1 - Rearend Accident
1- Fixed Object Accident

Lakeshore @ Eldan - 2 Accidents
1 - Backing Accident
1- Fixed Object Accident

South Bay @ Thompson - 23 Accidents
14 - Rearend Accidents
3 - Left Turn Accidents
2 - Head On Accident
2 - Backing Accidents
1 - Right Angle Accident
1 - Sideswipe Accident

South Bay @ Owasco - 1 Fixed Object Accident

Lakeshore @ Mudd Mill - 2 Fixed Object Accidents

Lakeshore @ Cicero Center - 2 Accidents
1 - Rearend Accident
1- Fixed Object Accident

Lakeshore @ Belnor - 2 Accidents
1 - Rearend Accident
1 - Left Turn Accident

Lakeshore @ Button - 1 Rearend Accident

Lakeshore @ Whiting - 2 Right Angle Accidents

Lakeshore @ Carmenica - 1 Rearend Accident

South Bay @ Whiting - 8 Accidents
6 - Right Angle Accidents
1 - Left Turn Accident
1 - Bicycle Accident

South Bay @ Cicero - 1 Fixed Object Accident

31 - Area Parking Lot Accidents
1 Accident on Cicero Center north of Route 31 included in data
1 Accident on Route 11 north of Route 31 included in data
1 Accident on Thompson north of South Bay included in the data

Route 31 @ Route 11 Intersection - Evening Peak Hour - 3,286 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 36,511 Vehicles
Route 31 @ I-81 NB / Pardee Road Intersection - Evening Peak Hour - 3,459 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 38,433 Vehicles
Route 31 @ I-81 SB Ramps Intersection - Evening Peak Hour - 2,905 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 32,278 Vehicles
Route 31 @ Lakeshore Road Intersection - Evening Peak Hour - 2,604 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 28,933 Vehicles
Route 31 @ South Bay Road Intersection - Evening Peak Hour - 1,853 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 20,589 Vehicles
Route 31 @ Cicero Center Road Intersection - Evening Peak Hour - 1,0526 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 11,689 Vehicles
Lakeshore Road @ South Bay Intersection - Evening Peak Hour - 520 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 5,778 Vehicles
Lakeshore Road @ Mudd Mill Road Intersection - Evening Peak Hour -580 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 6,444 Vehicles
Lakeshore Road @ Cicero Center Road Intersection - Evening Peak Hour - 522 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 5,800 Vehicles
South Bay Road @ Thompson Road Intersection - Evening Peak Hour - 1,971 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 21,900 Vehicles

NYS Route 31 - NYSDOT Traffic Data Viewer - AADT = 34,385 Vehicles
Lakeshore Road - NYSDOT Traffic Data Viewer - AADT = 4,256 Vehicles
South Bay Road - NYSDOT Traffic Data Viewer - AADT = 6,836 Vehicles

Intersection Accident Rates $\frac{\text{\# Accidents X 1,000,000}}{\text{AADT X \# Years X 365 Days}}$ Time Period = 3 years

Route 31 @ Route 11 - 77 Accidents
Accident Rate = 1.93 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Route 31 @ I-81 NB Ramp/Pardee Road - 53 Accidents
Accident Rate = 1.26 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Route 31 @ I-81 SB Ramps - 27 Accidents
Accident Rate = 0.76 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Route 31 @ Lakeshore - 32 Accidents
Accident Rate = 1.01 accidents per million entering vehicles
Statewide average for similar facilities = 0.18 accidents per million entering vehicles (Urban Sign - 3 Legged Intersection - 1-3 Lanes)
Intersection Accident History is Above the Statewide Average

Route 31 @ South Bay - 35 Accidents
Accident Rate = 1.55 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Route 31 @ Cicero Center - 7 Accidents
Accident Rate = 0.55 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Lakeshore @ South Bay - 3 Accidents
Accident Rate = 0.47 accidents per million entering vehicles
Statewide average for similar facilities = 0.18 accidents per million entering vehicles (Urban Sign - 3 Legged Intersection - 1-3 Lanes)
Intersection Accident History is Above the Statewide Average

Lakeshore @ Mudd Mill - 2 Fixed Object Accidents
Accident Rate = 0.28 accidents per million entering vehicles
Statewide average for similar facilities = 0.18 accidents per million entering vehicles (Urban Sign - 3 Legged Intersection - 1-3 Lanes)
Intersection Accident History is Above the Statewide Average

Lakeshore @ Cicero Center - 2 Accidents
Accident Rate = 0.31 accidents per million entering vehicles
Statewide average for similar facilities = 0.29 accidents per million entering vehicles (Urban Sign - 4 Legged Intersection - 1-3 Lanes)
Intersection Accident History is Above the Statewide Average

South Bay @ Thompson - 23 Accidents
Accident Rate = 0.96 accidents per million entering vehicles
Statewide average for similar facilities = 0.52 accidents per million entering vehicles (Urban Signal - 4 Legged Intersection - 1-4 Lanes)
Intersection Accident History is Above the Statewide Average

Link Accident Rates

$$\frac{\text{\# Accidents X 1,000,000}}{\text{Link Length X AADT X \# Years X 365 Days}}$$

Time Period = 3 years
Route 31 Link Length = 5.71 Miles
Lakeshore Road Link Length = 6.80 Miles
Route 31 Link Length = 3.01 Miles

Route 31 - 484 Accidents
Accident Rate = 2.25 accidents per million vehicle miles
Statewide average for similar facilities = 2.23 accidents per million vehicle miles (Urban - Free Access - 2 Lanes - Undivided - All Accidents)
Intersection Accident History is Equal to the Statewide Average

Lakeshore Road - 54 Accidents
Accident Rate = 1.70 accidents per million vehicle miles
Statewide average for similar facilities = 2.23 accidents per million vehicle miles (Urban - Free Access - 2 Lanes - Undivided - All Accidents)
Intersection Accident History is Below the Statewide Average

South Bay Road Midblock - 50 Accidents
Accident Rate = 2.22 accidents per million vehicle miles
Statewide average for similar facilities = 2.23 accidents per million vehicle miles (Urban - Free Access - 2 Lanes - Undivided - All Accidents)
Intersection Accident History is Equal to the Statewide Average

APPENDIX H

Traffic Count Data

Proposed Lakeshore Village Development

Traffic Count Data - Lakeshore Road @ Cicero Center Road

Peaks: AM - 5/11/221 - 8:00-9:00, 5/12/22 - 8:00-9:00
PM - 5/11/22 - 4:00-5:00, 5/12/22 - 4:00-5:00

	5/11/2022		5/12/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	3	2	0	1	**2**	**2**
Eastbound Through	118	114	117	129	**118**	**122**
Eastbound Right	7	25	6	16	**7**	**21**
EB PHF	0.806	0.701	0.851	0.899	**0.83**	**0.80**
% HV	2.0	2.0	2.0	2.0	**2**	**2**
Peds	1	2	3	5	**2**	**4**
Westbound Left	10	8	5	3	**8**	**6**
Westbound Through	80	120	74	124	**77**	**122**
Westbound Right	0	0	0	0	**0**	**0**
WB PHF	0.833	0.667	0.75	0.632	**0.79**	**0.65**
% HV	2.0	2.0	2.0	2.0	**2**	**2**
Peds	0	0	2	2	**1**	**1**
Northbound Left	5	30	6	30	**6**	**30**
Northbound Through	0	1	0	1	**0**	**1**
Northbound Right	12	11	10	19	**11**	**15**
NB PHF	0.531	0.75	0.571	0.85	**1**	**1**
% HV	2	2	2	2	**2**	**2**
Peds	0	0	0	1	**0**	**1**
Southbound Left	0	2	1	0	**1**	**1**
Southbound Through	0	0	0	0	**0**	**0**
Southbound Right	2	1	3	1	**3**	**1**
SB PHF	0.75	0.75	0.5	0.250	**0.63**	**0.50**
% HV	2	2	2	2.0	**2**	**2**
Peds	1	0	0	0	**1**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Lakeshore Road @ South Bay Road

Peaks: AM - 5/11/221 - 7:45-8:45, 5/12/22 - 8:00-9:00
PM - 5/11/22 - 4:00-5:00, 5/12/22 - 4:00-5:00

	5/11/2022		5/12/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	1	0	0	0	**1**	**0**
Eastbound Through	70	133	87	132	**79**	**133**
Eastbound Right	2	10	4	7	**3**	**9**
EB PHF	0.792	0.73	0.774	0.89	**0.78**	**0.81**
% HV	3.9	2.1	5.2	4.8	**5**	**3**
Peds	0	0	0	0	**0**	**0**
Westbound Left	84	69	61	89	**73**	**79**
Westbound Through	64	97	56	112	**60**	**105**
Westbound Right	1	0	0	0	**1**	**0**
WB PHF	0.886	0.704	0.803	0.831	**0.84**	**0.77**
% HV	4.5	1.8	4.1	2.4	**4**	**2**
Peds	0	0	0	0	**0**	**0**
Northbound Left	3	12	3	11	**3**	**12**
Northbound Through	0	1	2	2	**1**	**2**
Northbound Right	73	111	64	116	**69**	**114**
NB PHF	0.87	0.822	0.961	0.84	**1**	**1**
% HV	5	0.8	5.5	1.5	**5**	**1**
Peds	0	0	1	0	**1**	**0**
Southbound Left	2	1	1	1	**2**	**1**
Southbound Through	0	1	0	1	**0**	**1**
Southbound Right	0	1	1	2	**1**	**2**
SB PHF	0.25	0.75	0.5	0.417	**0.38**	**0.58**
% HV	0	0	0	20.0	**0**	**10**
Peds	0	0	2	0	**1**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Lakeshore Road @ Mudd Mill Road

Peaks: AM - 5/11/221 - 7:45-8:45, 5/18/22 - 7:15-8:15
PM - 5/11/22 - 4:00-5:00, 5/18/22 - 4:00-5:00

	5/11/2022		5/18/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	9	52	12	38	**11**	**45**
Eastbound Through	71	152	55	142	**63**	**147**
Eastbound Right	0	0	0	0	**0**	**0**
EB PHF	0.902	0.827	0.833	0.826	**0.87**	**0.83**
% HV	3.6	0.5	4.3	2.7	**4**	**2**
Peds	0	0	0	0	**0**	**0**
Westbound Left	0	0	0	0	**0**	**0**
Westbound Through	88	85	102	124	**95**	**105**
Westbound Right	44	102	53	96	**49**	**99**
WB PHF	0.953	0.851	0.755	0.854	**0.85**	**0.85**
% HV	6.4	3.6	4.9	3.9	**6**	**4**
Peds	0	0	0	0	**0**	**0**
Northbound Left	0	0	0	0	**0**	**0**
Northbound Through	0	0	0	0	**0**	**0**
Northbound Right	0	0	0	0	**0**	**0**
NB PHF	0	0	0	0	**0**	**0**
% HV	0	0	0	0	**0**	**0**
Peds	0	0	0	0	**0**	**0**
Southbound Left	67	85	73	73	**70**	**79**
Southbound Through	0	0	0	0	**0**	**0**
Southbound Right	25	24	29	33	**27**	**29**
SB PHF	0.884	0.895	0.938	0.737	**0.91**	**0.82**
% HV	7.1	1.8	2.9	5.4	**5**	**4**
Peds	0	1	0	0	**0**	**1**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ Lakeshore Road East

Peaks: AM - 5/11/221 - 7:00-8:00, 5/12/22 - 7:15-8:15
PM - 5/11/22 - 4:00-5:00, 5/12/22 - 4:30-5:30

	5/11/2022		5/18/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	14	37	13	40	**14**	**39**
Eastbound Through	183	388	183	375	**183**	**382**
Eastbound Right	0	0	0	0	**0**	**0**
EB PHF	0.905	0.878	0.864	0.861	**0.88**	**0.87**
% HV	1.0	1.0	0.5	0.0	**1**	**1**
Peds	2	0	1	0	**2**	**0**
Westbound Left	0	0	0	0	**0**	**0**
Westbound Through	229	317	223	318	**226**	**318**
Westbound Right	17	43	25	41	**21**	**42**
WB PHF	0.895	0.891	0.899	0.889	**0.90**	**0.89**
% HV	0.4	0.0	0.0	0.0	**0**	**0**
Peds	0	0	0	0	**0**	**0**
Northbound Left	0	0	0	0	**0**	**0**
Northbound Through	0	0	0	0	**0**	**0**
Northbound Right	0	0	0	0	**0**	**0**
NB PHF	0	0	0	0	**0**	**0**
% HV	0	0	0	0	**0**	**0**
Peds	0	0	0	0	**0**	**0**
Southbound Left	24	35	26	36	**25**	**36**
Southbound Through	0	0	0	0	**0**	**0**
Southbound Right	32	23	25	12	**29**	**18**
SB PHF	0.838	0.763	0.75	0.857	**0.79**	**0.81**
% HV	1.8	0	0	0.0	**1**	**0**
Peds	0	0	0	0	**0**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ Cicero Center Road

Peaks: AM - 5/12/221 - 7:15-8:15, 5/19/22 - 7:15-8:15
PM - 5/12/22 - 4:00-5:00, 5/19/22 - 4:30-5:30

	5/12/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	22	55	24	61	**23**	**58**
Eastbound Through	190	382	193	374	**192**	**378**
Eastbound Right	8	20	13	18	**11**	**19**
EB PHF	0.953	0.859	0.898	0.906	**0.93**	**0.88**
% HV	2.2	0.0	1.3	0.0	**2**	**0**
Peds	0	0	0	0	**0**	**0**
Westbound Left	7	4	7	6	**7**	**5**
Westbound Through	232	316	219	346	**226**	**331**
Westbound Right	3	13	6	12	**5**	**13**
WB PHF	0.914	0.908	0.892	0.948	**0.90**	**0.93**
% HV	1.2	0.3	3.4	1.6	**2**	**1**
Peds	0	1	0	0	**0**	**1**
Northbound Left	6	16	10	15	**8**	**16**
Northbound Through	5	32	2	27	**4**	**30**
Northbound Right	4	5	3	16	**4**	**11**
NB PHF	0.75	0.828	0.536	0.625	**1**	**1**
% HV	0	0	0	0	**0**	**0**
Peds	0	0	0	0	**0**	**0**
Southbound Left	2	9	3	11	**3**	**10**
Southbound Through	17	12	16	10	**17**	**11**
Southbound Right	42	26	46	34	**44**	**30**
SB PHF	0.726	0.839	0.707	0.809	**0.72**	**0.82**
% HV	0	0	0	0.0	**0**	**0**
Peds	0	0	0	0	**0**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ South Bay Road

Peaks: AM - 5/11/221 - 7:00-8:00, 5/19/22 - 7:15-8:15
PM - 5/11/22 - 4:45-5:45, 5/19/22 - 4:30-5:30

	5/11/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	15	50	20	50	**18**	**50**
Eastbound Through	181	375	183	357	**182**	**366**
Eastbound Right	50	86	66	98	**58**	**92**
EB PHF	0.89	0.946	0.921	0.902	**0.91**	**0.92**
% HV	5.4	0.0	3.9	3.4	**5**	**2**
Peds	0	1	0	0	**0**	**1**
Westbound Left	142	96	116	128	**129**	**112**
Westbound Through	166	278	189	291	**178**	**285**
Westbound Right	3	18	7	14	**5**	**16**
WB PHF	0.943	0.975	0.899	0.877	**0.92**	**0.93**
% HV	1.9	0.5	2.5	5.0	**2**	**3**
Peds	0	0	0	0	**0**	**0**
Northbound Left	52	55	53	70	**53**	**63**
Northbound Through	82	300	69	247	**76**	**274**
Northbound Right	42	154	73	171	**58**	**163**
NB PHF	0.797	0.892	0.884	0.837	**1**	**1**
% HV	4.9	0.2	4.9	2.8	**5**	**2**
Peds	0	0	0	0	**0**	**0**
Southbound Left	7	9	5	4	**6**	**7**
Southbound Through	241	154	243	128	**242**	**141**
Southbound Right	57	44	47	42	**52**	**43**
SB PHF	0.905	0.95	0.884	0.746	**0.89**	**0.85**
% HV	3.2	1	0.7	2.8	**2**	**2**
Peds	0	0	0	0	**0**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ Lakeshore Road West

Peaks: AM - 5/12/221 - 7:00-8:00, 5/18/22 - 7:15-8:15
PM - 5/12/22 - 4:30-5:30, 5/18/22 - 4:00-5:00

	5/12/2022		5/18/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	123	446	148	474	**136**	**460**
Eastbound Through	816	781	717	723	**767**	**752**
Eastbound Right	0	0	1	0	**1**	**0**
EB PHF	0.804	0.907	0.775	0.941	**0.79**	**0.92**
% HV	1.4	0.8	3.5	0.7	**2**	**1**
Peds	0	0	0	0	**0**	**0**
Westbound Left	0	0	0	0	**0**	**0**
Westbound Through	547	717	511	721	**529**	**719**
Westbound Right	0	0	1	1	**1**	**1**
WB PHF	0.79	0.9	0.876	0.957	**0.83**	**0.93**
% HV	1.1	1.9	5.7	1.8	**3**	**2**
Peds	1	0	1	0	**1**	**0**
Northbound Left	0	0	0	0	**0**	**0**
Northbound Through	0	0	0	0	**0**	**0**
Northbound Right	0	0	0	0	**0**	**0**
NB PHF	0	0	0	0	**0**	**0**
% HV	0	0	0	0	**0**	**0**
Peds	2	0	0	0	**1**	**0**
Southbound Left	0	0	0	0	**0**	**0**
Southbound Through	0	0	0	0	**0**	**0**
Southbound Right	496	289	482	335	**489**	**312**
SB PHF	0.909	0.873	0.947	0.951	**0.93**	**0.91**
% HV	0.4	0.3	0.6	3.2	**1**	**2**
Peds	0	0	1	0	**1**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ I-81 NB Ramp / Pardee Road

Peaks: AM - 5/18/221 - 7:15-8:15, 5/19/22 - 7:15-8:15
PM - 5/18/22 - 4:30-5:30, 5/19/22 - 4:45-5:45

	5/18/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	85	206	71	259	**78**	**233**
Eastbound Through	583	705	560	716	**572**	**711**
Eastbound Right	0	0	0	0	**0**	**0**
EB PHF	0.85	0.75	0.805	0.925	**0.83**	**0.84**
% HV	3.7	2.3	3.5	2.4	**4**	**2**
Peds	0	0	1	0	**1**	**0**
Westbound Left	1	0	0	0	**1**	**0**
Westbound Through	942	804	839	834	**891**	**819**
Westbound Right	114	241	99	207	**107**	**224**
WB PHF	0.91	0.949	0.898	0.9	**0.90**	**0.92**
% HV	2.2	2.4	2.9	2.3	**3**	**2**
Peds	0	0	1	0	**1**	**0**
Northbound Left	144	314	117	280	**131**	**297**
Northbound Through	52	106	54	100	**53**	**103**
Northbound Right	314	515	293	488	**304**	**502**
NB PHF	0.877	0.834	0.9	0.836	**1**	**1**
% HV	5	4.4	5.9	2.5	**5**	**3**
Peds	0	2	1	1	**1**	**2**
Southbound Left	0	0	0	0	**0**	**0**
Southbound Through	0	0	0	0	**0**	**0**
Southbound Right	110	114	131	105	**121**	**110**
SB PHF	0.897	0.599	0.784	0.895	**0.84**	**0.75**
% HV	9.8	0.9	5.1	5.4	**7**	**3**
Peds	0	1	1	1	**1**	**1**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ I-81 SB Ramps

Peaks: AM - 5/11/221 - 7:00-8:00, 5/19/22 - 7:15-8:15
PM - 5/11/22 - 4:45-5:45, 5/19/22 - 4:15-5:15

	5/11/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	0	0	0	259	**0**	**130**
Eastbound Through	521	917	495	876	**508**	**897**
Eastbound Right	319	217	303	240	**311**	**229**
EB PHF	0.856	0.937	0.903	0.915	**0.88**	**0.93**
% HV	1.5	0.4	1.4	2.6	**1**	**2**
Peds	0	0	0	0	**0**	**0**
Westbound Left	588	325	526	309	**557**	**317**
Westbound Through	525	888	529	947	**527**	**918**
Westbound Right	12	0	0	0	**6**	**0**
WB PHF	0.955	0.951	0.925	0.962	**0.94**	**0.96**
% HV	0.8	0.5	2.0	1.4	**1**	**1**
Peds	0	0	0	0	**0**	**0**
Northbound Left	0	0	0	0	**0**	**0**
Northbound Through	0	0	0	0	**0**	**0**
Northbound Right	0	0	0	0	**0**	**0**
NB PHF	0	0	0	0	**0**	**0**
% HV	0	0	0	0	**0**	**0**
Peds	0	0	1	1	**1**	**1**
Southbound Left	156	121	135	118	**146**	**120**
Southbound Through	2	9	0	1	**1**	**5**
Southbound Right	117	93	142	133	**130**	**113**
SB PHF	0.918	0.792	0.894	0.885	**0.91**	**0.84**
% HV	1.4	2.2	3.1	3.8	**2**	**3**
Peds	0	0	0	2	**0**	**1**

Proposed Lakeshore Village Development

Traffic Count Data - Route 31 @ Route 11

Peaks: AM - 5/12/221 - 7:15-8:15, 5/19/22 - 7:15-8:15
PM - 5/12/22 - 4:30-5:30, 5/19/22 - 4:30-5:30

	5/12/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	51	56	50	54	**51**	**55**
Eastbound Through	529	396	517	399	**523**	**398**
Eastbound Right	43	97	42	86	**43**	**92**
EB PHF	0.915	0.93	0.844	0.967	**0.88**	**0.95**
% HV	3.3	0.9	3.0	1.8	**3**	**1**
Peds	0	0	0	0	**0**	**0**
Westbound Left	275	375	281	402	**278**	**389**
Westbound Through	350	507	310	521	**330**	**514**
Westbound Right	71	94	102	130	**87**	**112**
WB PHF	0.91	0.809	0.958	0.9	**0.93**	**0.85**
% HV	4.4	1.1	4.3	1.5	**4**	**1**
Peds	0	0	0	1	**0**	**1**
Northbound Left	39	119	25	106	**32**	**113**
Northbound Through	65	258	93	284	**79**	**271**
Northbound Right	181	478	168	467	**175**	**473**
NB PHF	0.839	0.995	0.896	0.901	**1**	**1**
% HV	2.4	0.1	2.7	0.5	**3**	**0**
Peds	0	0	0	0	**0**	**0**
Southbound Left	95	166	101	178	**98**	**172**
Southbound Through	109	145	115	182	**112**	**164**
Southbound Right	24	72	33	84	**29**	**78**
SB PHF	0.715	0.835	0.774	0.878	**0.74**	**0.86**
% HV	6.2	2.8	4.2	2.0	**5**	**2**
Peds	0	0	0	0	**0**	**0**

Proposed Lakeshore Village Development

Traffic Count Data - South Bay Road @ Thompson Road

Peaks: AM - 5/18/221 - 7:15-8:15, 5/19/22 - 7:15-8:15
PM - 5/18/22 - 4:30-5:30, 5/19/22 - 4:00-5:00

	5/18/2022		5/19/2022		**Average Weekday**	
	AM	PM	AM	PM	**AM**	**PM**
Eastbound Left	251	222	177	285	**214**	**254**
Eastbound Through	314	297	145	328	**230**	**313**
Eastbound Right	5	2	4	1	**5**	**2**
EB PHF	0.878	0.939	0.897	0.745	**0.89**	**0.84**
% HV	1.0	0.2	1.2	0.0	**1**	**0**
Peds	0	0	0	0	**0**	**0**
Westbound Left	175	91	232	91	**204**	**91**
Westbound Through	148	263	290	243	**219**	**253**
Westbound Right	2	25	9	13	**6**	**19**
WB PHF	0.863	0.88	0.854	0.729	**0.86**	**0.80**
% HV	0.9	0.3	0.9	0.9	**1**	**1**
Peds	0	0	0	0	**0**	**0**
Northbound Left	8	16	3	16	**6**	**16**
Northbound Through	212	272	106	248	**159**	**260**
Northbound Right	196	217	61	161	**129**	**189**
NB PHF	0.768	0.956	0.833	0.928	**1**	**1**
% HV	1.2	3.2	5.6	0.5	**3**	**2**
Peds	0	0	0	0	**0**	**0**
Southbound Left	7	7	4	9	**6**	**8**
Southbound Through	107	122	219	120	**163**	**121**
Southbound Right	58	213	223	171	**141**	**192**
SB PHF	0.885	0.905	0.88	0.781	**0.88**	**0.84**
% HV	2.8	0.6	0.2	1.0	**2**	**1**
Peds	1	0	0	0	**1**	**0**

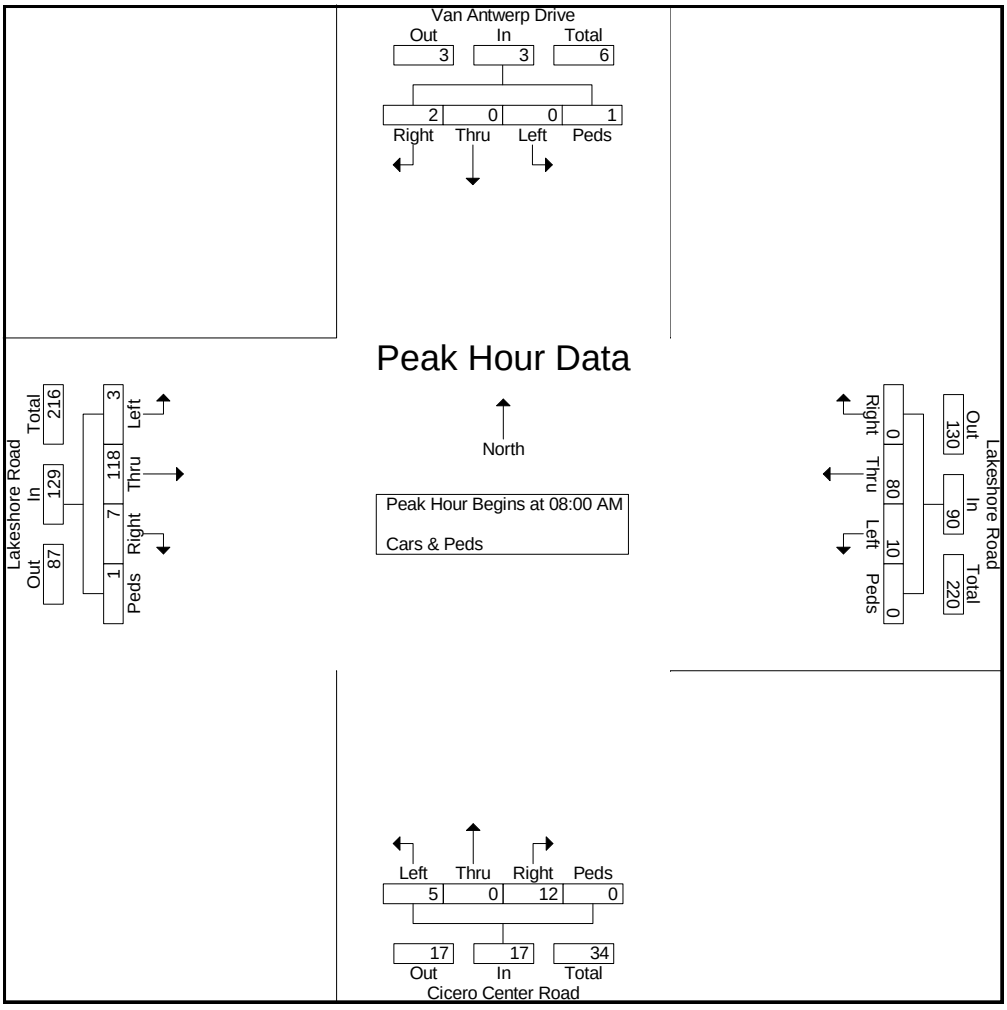
File Name : 1 - Lakeshore @ Cicero Center - 5-11-22
Site Code : 00000001
Start Date : 5/11/2022
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Groups Printed- Cars & Peds

	Van Antwerp Drive Southbound				Lakeshore Road Westbound				Cicero Center Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	24	2	0	1	0	3	0	3	9	0	0	42
07:15 AM	0	0	0	0	0	21	1	0	0	1	0	0	3	11	0	0	37
07:30 AM	0	0	0	0	0	23	4	0	1	0	4	0	2	16	0	0	50
07:45 AM	0	0	0	0	0	24	0	0	1	0	3	0	3	29	0	0	60
Total	0	0	0	0	0	92	7	0	3	1	10	0	11	65	0	0	189
08:00 AM	0	0	0	0	0	21	1	0	0	0	1	0	1	16	1	0	41
08:15 AM	1	0	0	0	0	16	4	0	1	0	0	0	3	35	0	0	60
08:30 AM	0	0	0	1	0	20	1	0	5	0	3	0	3	27	2	1	63
08:45 AM	1	0	0	0	0	23	4	0	6	0	1	0	0	40	0	0	75
Total	2	0	0	1	0	80	10	0	12	0	5	0	7	118	3	1	239
04:00 PM	0	0	1	0	0	47	1	0	4	1	9	0	5	27	0	0	95
04:15 PM	1	0	0	0	0	33	3	0	2	0	6	0	6	18	1	0	70
04:30 PM	0	0	0	0	0	25	3	0	3	0	9	0	5	29	1	0	75
04:45 PM	0	0	1	0	0	15	1	0	2	0	6	0	9	40	0	2	76
Total	1	0	2	0	0	120	8	0	11	1	30	0	25	114	2	2	316
05:00 PM	1	0	0	0	0	20	1	0	1	0	3	0	5	34	0	2	67
05:15 PM	1	0	0	0	0	25	2	0	3	0	6	0	4	31	2	0	74
05:30 PM	1	0	1	0	0	20	4	0	4	0	9	0	5	28	1	0	73
05:45 PM	0	0	0	1	0	21	3	1	4	0	5	0	4	31	0	0	70
Total	3	0	1	1	0	86	10	1	12	0	23	0	18	124	3	2	284
Grand Total	6	0	3	2	0	378	35	1	38	2	68	0	61	421	8	5	1028
Apprch %	54.5	0	27.3	18.2	0	91.3	8.5	0.2	35.2	1.9	63	0	12.3	85.1	1.6	1	
Total %	0.6	0	0.3	0.2	0	36.8	3.4	0.1	3.7	0.2	6.6	0	5.9	41	0.8	0.5	

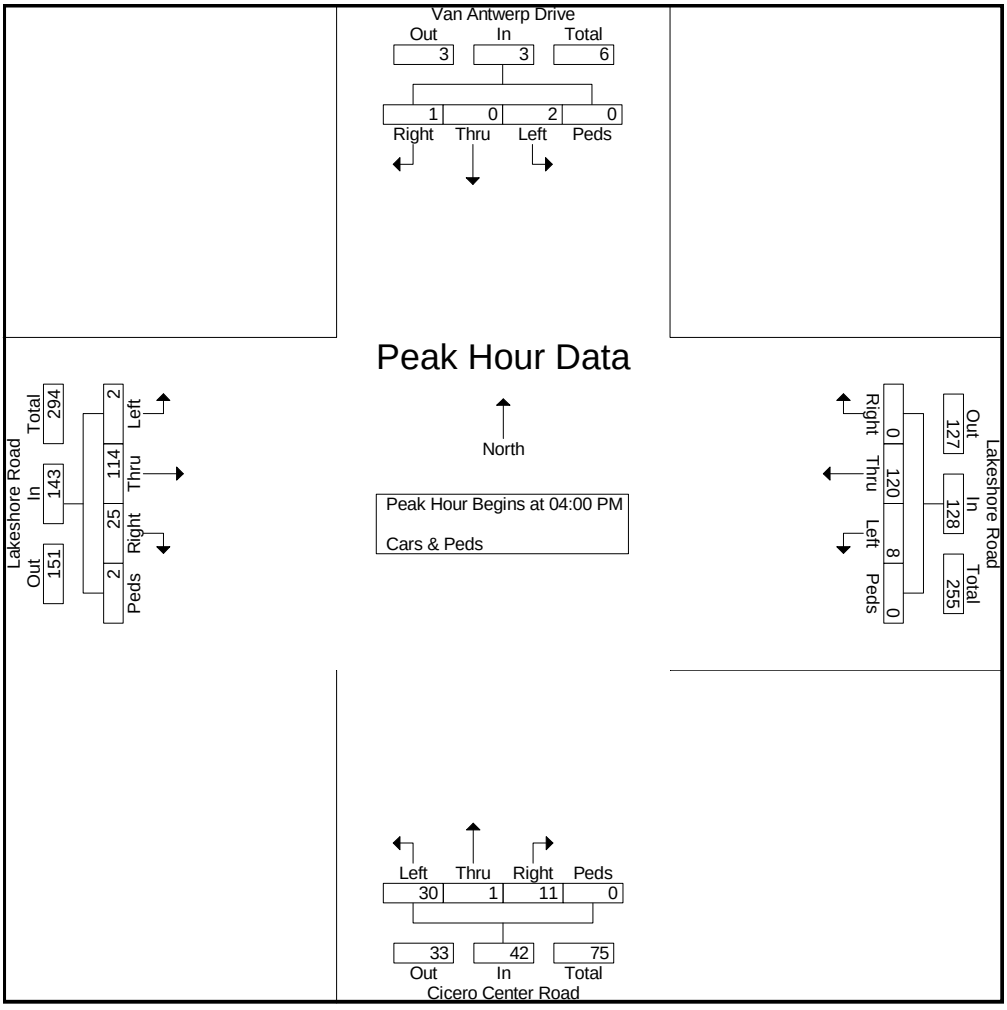
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	Van Antwerp Drive Southbound					Lakeshore Road Westbound					Cicero Center Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	21	1	0	22	0	0	1	0	1	1	16	1	0	18	41
08:15 AM	1	0	0	0	1	0	16	4	0	20	1	0	0	0	1	3	35	0	0	38	60
08:30 AM	0	0	0	1	1	0	20	1	0	21	5	0	3	0	8	3	27	2	1	33	63
08:45 AM	1	0	0	0	1	0	23	4	0	27	6	0	1	0	7	0	40	0	0	40	75
Total Volume	2	0	0	1	3	0	80	10	0	90	12	0	5	0	17	7	118	3	1	129	239
% App. Total	66.7	0	0	33.3		0	88.9	11.1	0		70.6	0	29.4	0		5.4	91.5	2.3	0.8		
PHF	.500	.000	.000	.250	.750	.000	.870	.625	.000	.833	.500	.000	.417	.000	.531	.583	.738	.375	.250	.806	.797



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Start Time	Van Antwerp Drive Southbound					Lakeshore Road Westbound					Cicero Center Road Northbound					Lakeshore Road Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	1	0	1	0	47	1	0	48	4	1	9	0	14	5	27	0	0	32	95
04:15 PM	1	0	0	0	1	0	33	3	0	36	2	0	6	0	8	6	18	1	0	25	70
04:30 PM	0	0	0	0	0	0	25	3	0	28	3	0	9	0	12	5	29	1	0	35	75
04:45 PM	0	0	1	0	1	0	15	1	0	16	2	0	6	0	8	9	40	0	2	51	76
Total Volume	1	0	2	0	3	0	120	8	0	128	11	1	30	0	42	25	114	2	2	143	316
% App. Total	33.3	0	66.7	0		0	93.8	6.2	0		26.2	2.4	71.4	0		17.5	79.7	1.4	1.4		
PHF	.250	.000	.500	.000	.750	.000	.638	.667	.000	.667	.688	.250	.833	.000	.750	.694	.713	.500	.250	.701	.832



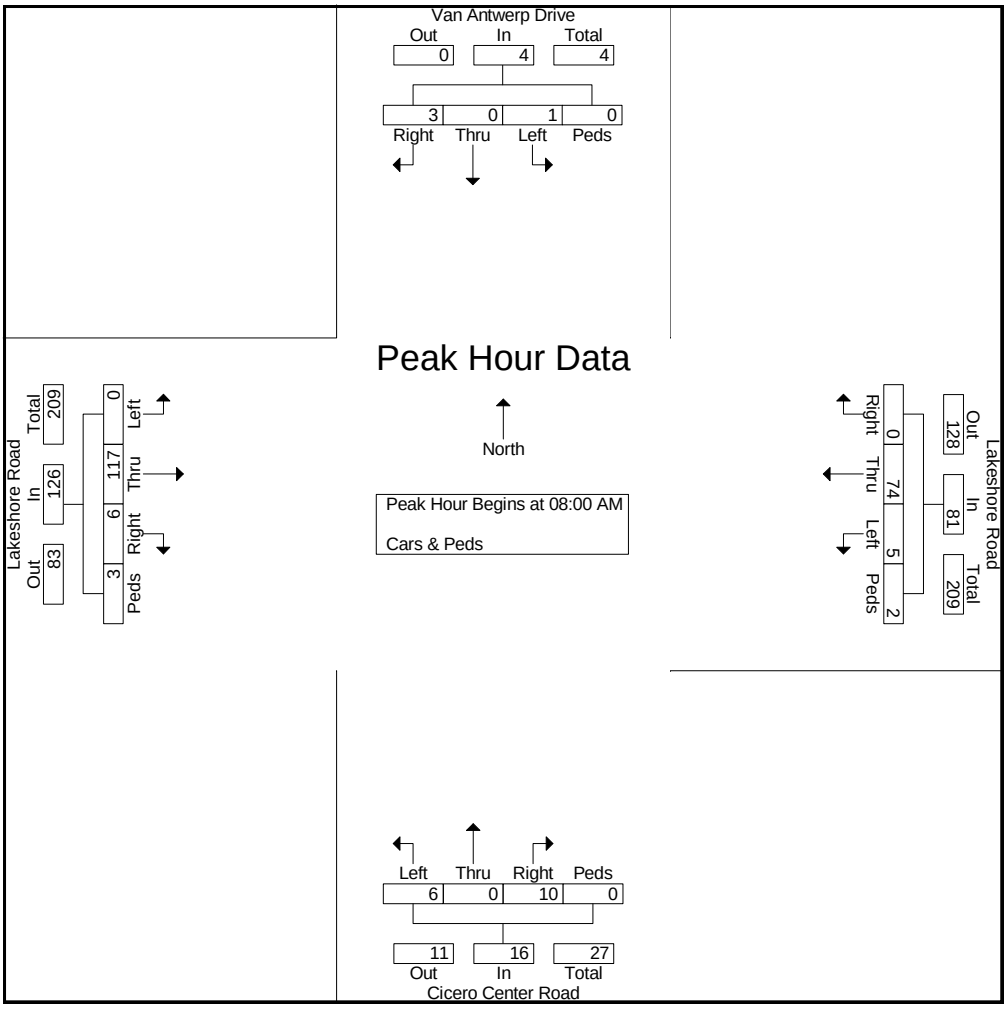
File Name : 1 - Lakeshore @ Cicero Center - 5-12-22
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Groups Printed- Cars & Peds

	Van Antwerp Drive Southbound				Lakeshore Road Westbound				Cicero Center Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	1	0	0	0	23	0	0	0	0	3	0	4	13	0	0	44
07:15 AM	2	0	0	0	0	23	1	0	0	0	3	0	4	7	0	0	40
07:30 AM	0	0	0	0	0	25	1	1	2	0	3	0	1	14	0	0	47
07:45 AM	0	0	0	0	0	25	1	0	2	0	3	0	2	19	1	0	53
Total	2	1	0	0	0	96	3	1	4	0	12	0	11	53	1	0	184
08:00 AM	1	0	1	0	0	25	1	1	0	0	0	0	2	23	0	0	54
08:15 AM	1	0	0	0	0	16	1	0	0	0	3	0	2	24	0	2	49
08:30 AM	0	0	0	0	0	16	1	1	4	0	3	0	0	37	0	0	62
08:45 AM	1	0	0	0	0	17	2	0	6	0	0	0	2	33	0	1	62
Total	3	0	1	0	0	74	5	2	10	0	6	0	6	117	0	3	227
04:00 PM	0	0	0	0	0	50	0	1	5	0	10	0	5	33	0	1	105
04:15 PM	1	0	0	0	0	31	3	0	3	1	9	1	4	28	0	2	83
04:30 PM	0	0	0	0	0	19	0	0	7	0	8	0	3	37	1	1	76
04:45 PM	0	0	0	0	0	24	0	1	4	0	3	0	4	31	0	1	68
Total	1	0	0	0	0	124	3	2	19	1	30	1	16	129	1	5	332
05:00 PM	0	0	0	0	0	23	2	0	4	0	5	1	1	26	1	1	64
05:15 PM	3	0	0	0	0	25	3	0	8	0	9	0	6	23	2	0	79
05:30 PM	1	0	0	0	0	25	2	0	5	0	6	0	8	26	0	2	75
05:45 PM	2	0	0	0	1	19	1	0	4	0	5	0	3	23	0	0	58
Total	6	0	0	0	1	92	8	0	21	0	25	1	18	98	3	3	276
Grand Total	12	1	1	0	1	386	19	5	54	1	73	2	51	397	5	11	1019
Apprch %	85.7	7.1	7.1	0	0.2	93.9	4.6	1.2	41.5	0.8	56.2	1.5	11	85.6	1.1	2.4	
Total %	1.2	0.1	0.1	0	0.1	37.9	1.9	0.5	5.3	0.1	7.2	0.2	5	39	0.5	1.1	

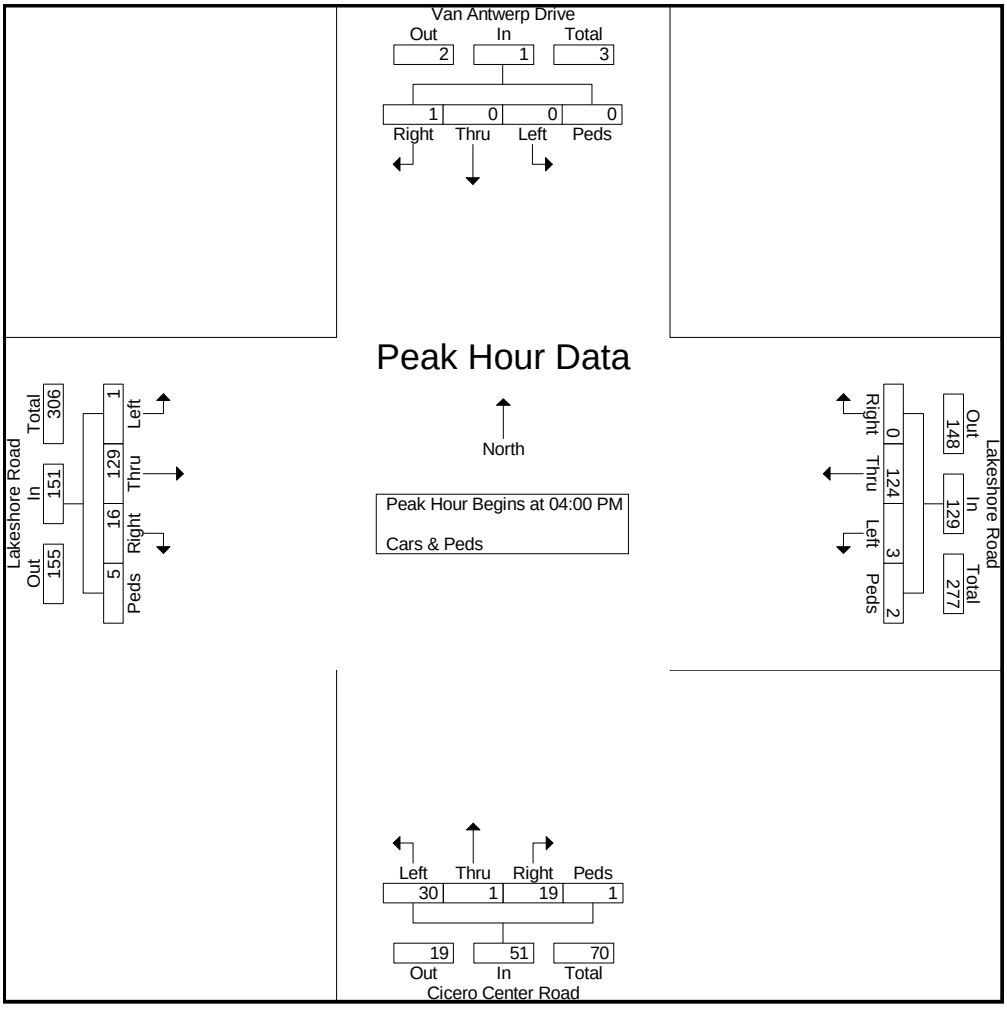
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	Van Antwerp Drive Southbound					Lakeshore Road Westbound					Cicero Center Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	1	0	1	0	2	0	25	1	1	27	0	0	0	0	0	2	23	0	0	25	54
08:15 AM	1	0	0	0	1	0	16	1	0	17	0	0	3	0	3	2	24	0	2	28	49
08:30 AM	0	0	0	0	0	0	16	1	1	18	4	0	3	0	7	0	37	0	0	37	62
08:45 AM	1	0	0	0	1	0	17	2	0	19	6	0	0	0	6	2	33	0	1	36	62
Total Volume	3	0	1	0	4	0	74	5	2	81	10	0	6	0	16	6	117	0	3	126	227
% App. Total	75	0	25	0		0	91.4	6.2	2.5		62.5	0	37.5	0		4.8	92.9	0	2.4		
PHF	.750	.000	.250	.000	.500	.000	.740	.625	.500	.750	.417	.000	.500	.000	.571	.750	.791	.000	.375	.851	.915



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	Van Antwerp Drive Southbound					Lakeshore Road Westbound					Cicero Center Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	50	0	1	51	5	0	10	0	15	5	33	0	1	39	105
04:15 PM	1	0	0	0	1	0	31	3	0	34	3	1	9	1	14	4	28	0	2	34	83
04:30 PM	0	0	0	0	0	0	19	0	0	19	7	0	8	0	15	3	37	1	1	42	76
04:45 PM	0	0	0	0	0	0	24	0	1	25	4	0	3	0	7	4	31	0	1	36	68
Total Volume	1	0	0	0	1	0	124	3	2	129	19	1	30	1	51	16	129	1	5	151	332
% App. Total	100	0	0	0		0	96.1	2.3	1.6		37.3	2	58.8	2		10.6	85.4	0.7	3.3		
PHF	.250	.000	.000	.000	.250	.000	.620	.250	.500	.632	.679	.250	.750	.250	.850	.800	.872	.250	.625	.899	.790



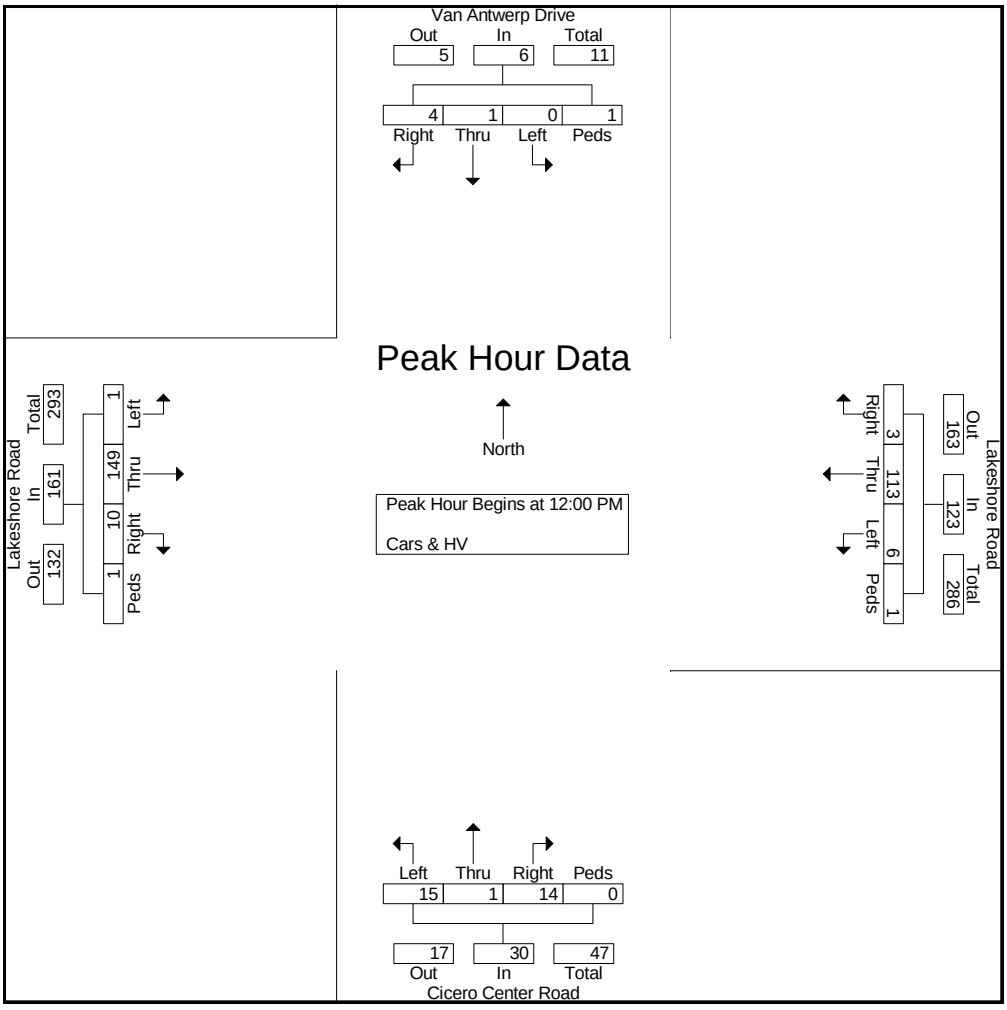
File Name : 1 - Lakeshore @ Cicero Center - 5-14-22
Site Code : 00000001
Start Date : 5/14/2022
Page No : 1

Groups Printed- Cars & HV

	Van Antwerp Drive Southbound				Lakeshore Road Westbound				Cicero Center Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	1	0	0	0	0	23	1	0	3	0	5	0	6	18	0	1	58
11:15 AM	0	0	0	0	0	15	1	0	1	1	3	0	0	30	1	0	52
11:30 AM	0	1	0	0	1	27	0	0	6	0	5	0	6	28	1	0	75
11:45 AM	1	0	0	0	0	24	1	0	3	0	0	0	4	27	2	0	62
Total	2	1	0	0	1	89	3	0	13	1	13	0	16	103	4	1	247
12:00 PM	3	0	0	0	2	22	0	0	3	0	4	0	3	37	0	0	74
12:15 PM	1	1	0	0	0	28	4	1	2	1	2	0	2	36	0	0	78
12:30 PM	0	0	0	1	0	30	0	0	5	0	7	0	3	40	1	1	88
12:45 PM	0	0	0	0	1	33	2	0	4	0	2	0	2	36	0	0	80
Total	4	1	0	1	3	113	6	1	14	1	15	0	10	149	1	1	320
Grand Total	6	2	0	1	4	202	9	1	27	2	28	0	26	252	5	2	567
Apprch %	66.7	22.2	0	11.1	1.9	93.5	4.2	0.5	47.4	3.5	49.1	0	9.1	88.4	1.8	0.7	
Total %	1.1	0.4	0	0.2	0.7	35.6	1.6	0.2	4.8	0.4	4.9	0	4.6	44.4	0.9	0.4	

File Name : 1 - Lakeshore @ Cicero Center - 5-14-22
Site Code : 00000001
Start Date : 5/14/2022
Page No : 2

	Van Antwerp Drive Southbound					Lakeshore Road Westbound					Cicero Center Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	3	0	0	0	3	2	22	0	0	24	3	0	4	0	7	3	37	0	0	40	74
12:15 PM	1	1	0	0	2	0	28	4	1	33	2	1	2	0	5	2	36	0	0	38	78
12:30 PM	0	0	0	1	1	0	30	0	0	30	5	0	7	0	12	3	40	1	1	45	88
12:45 PM	0	0	0	0	0	1	33	2	0	36	4	0	2	0	6	2	36	0	0	38	80
Total Volume	4	1	0	1	6	3	113	6	1	123	14	1	15	0	30	10	149	1	1	161	320
% App. Total	66.7	16.7	0	16.7		2.4	91.9	4.9	0.8		46.7	3.3	50	0		6.2	92.5	0.6	0.6		
PHF	.333	.250	.000	.250	.500	.375	.856	.375	.250	.854	.700	.250	.536	.000	.625	.833	.931	.250	.250	.894	.909



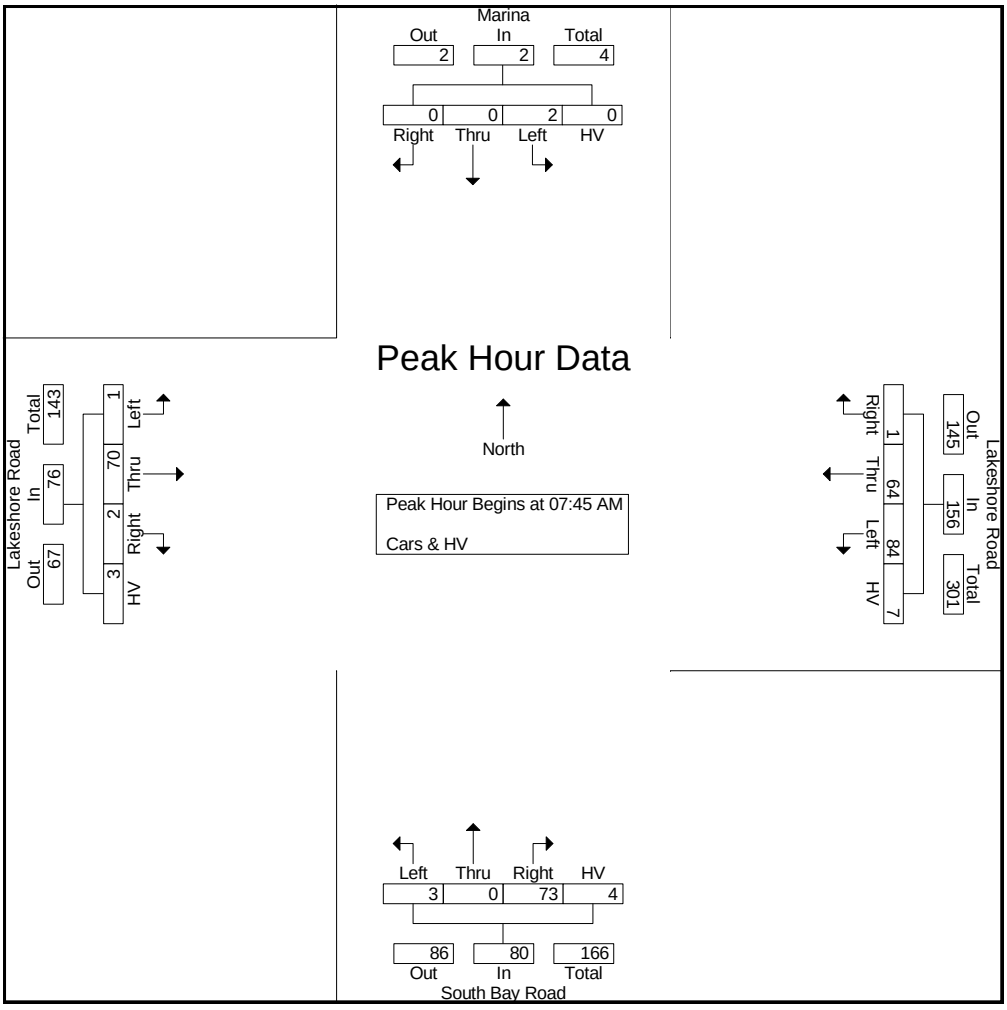
File Name : 2 - Lakeshore @ South Bay - 5-11-22
Site Code : 00000002
Start Date : 5/11/2022
Page No : 1

Groups Printed- Cars & HV

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	0	0	0	0	0	16	33	1	0	0	0	0	0	8	0	0	58
07:15 AM	0	0	0	0	0	16	29	0	8	0	2	0	0	10	0	1	66
07:30 AM	0	0	0	0	0	18	20	0	13	0	0	0	3	8	0	1	63
07:45 AM	0	0	2	0	1	17	19	0	17	0	1	2	0	21	1	2	83
Total	0	0	2	0	1	67	101	1	38	0	3	2	3	47	1	4	270
08:00 AM	0	0	0	0	0	15	24	5	13	0	1	1	0	9	0	0	68
08:15 AM	0	0	0	0	0	16	19	2	21	0	1	1	0	23	0	0	83
08:30 AM	0	0	0	0	0	16	22	0	22	0	0	0	2	17	0	1	80
08:45 AM	1	0	0	0	1	7	18	1	14	1	2	0	0	26	0	1	72
Total	1	0	0	0	1	54	83	8	70	1	4	2	2	75	0	2	303
04:00 PM	0	1	0	0	0	31	28	1	29	1	5	0	1	32	0	0	129
04:15 PM	0	0	0	0	0	28	21	1	25	0	2	1	4	21	0	1	104
04:30 PM	0	0	1	0	0	24	12	1	23	0	1	0	0	36	0	1	99
04:45 PM	1	0	0	0	0	14	8	0	34	0	4	0	5	44	0	1	111
Total	1	1	1	0	0	97	69	3	111	1	12	1	10	133	0	3	443
05:00 PM	0	0	0	0	0	14	17	0	32	0	3	1	0	21	0	3	91
05:15 PM	0	1	1	0	0	25	19	1	24	1	3	0	2	32	0	0	109
05:30 PM	0	0	0	0	0	21	19	0	25	1	0	2	1	22	0	1	92
05:45 PM	0	1	2	1	2	26	16	2	24	1	1	0	3	31	0	1	111
Total	0	2	3	1	2	86	71	3	105	3	7	3	6	106	0	5	403
Grand Total	2	3	6	1	4	304	324	15	324	5	26	8	21	361	1	14	1419
Apprch %	16.7	25	50	8.3	0.6	47	50.1	2.3	89.3	1.4	7.2	2.2	5.3	90.9	0.3	3.5	
Total %	0.1	0.2	0.4	0.1	0.3	21.4	22.8	1.1	22.8	0.4	1.8	0.6	1.5	25.4	0.1	1	

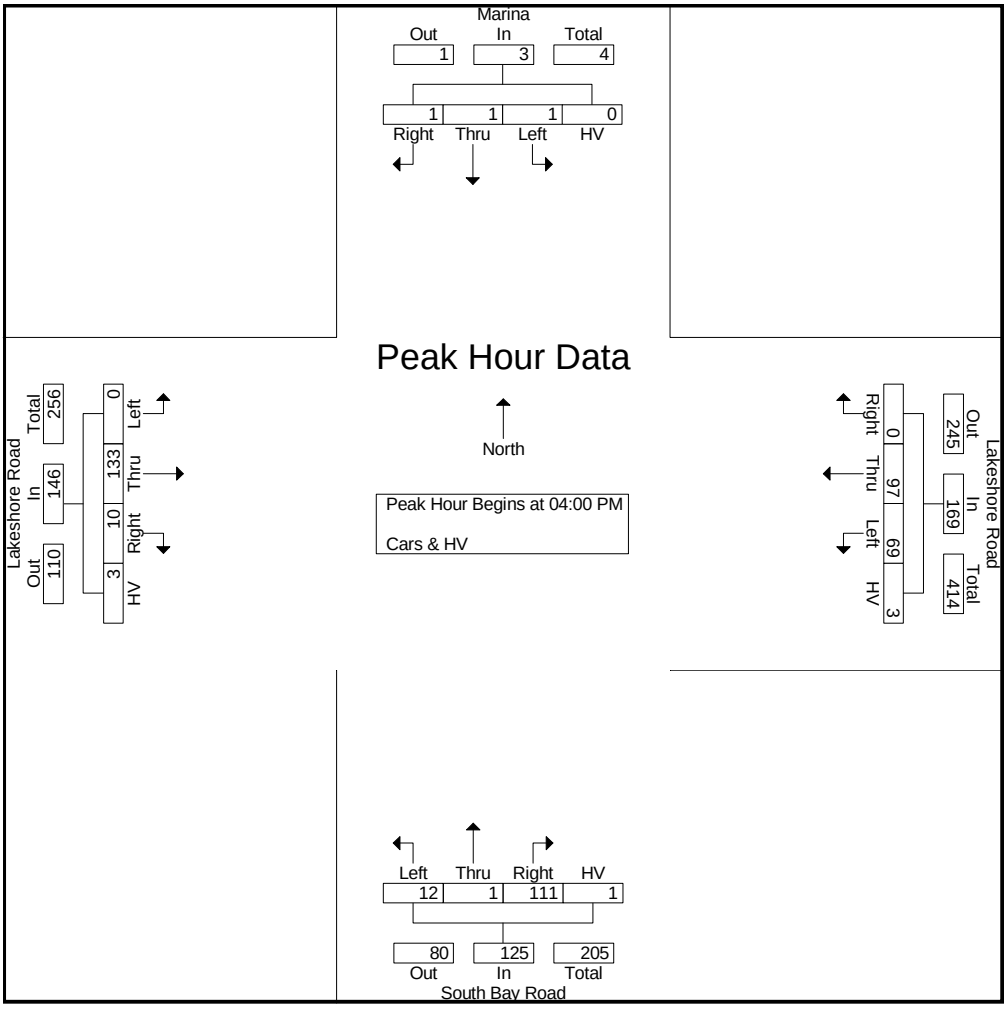
File Name : 2 - Lakeshore @ South Bay - 5-11-22
Site Code : 00000002
Start Date : 5/11/2022
Page No : 2

	Marina Southbound					Lakeshore Road Westbound					South Bay Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	2	0	2	1	17	19	0	37	17	0	1	2	20	0	21	1	2	24	83
08:00 AM	0	0	0	0	0	0	15	24	5	44	13	0	1	1	15	0	9	0	0	9	68
08:15 AM	0	0	0	0	0	0	16	19	2	37	21	0	1	1	23	0	23	0	0	23	83
08:30 AM	0	0	0	0	0	0	16	22	0	38	22	0	0	0	22	2	17	0	1	20	80
Total Volume	0	0	2	0	2	1	64	84	7	156	73	0	3	4	80	2	70	1	3	76	314
% App. Total	0	0	100	0		0.6	41	53.8	4.5		91.2	0	3.8	5		2.6	92.1	1.3	3.9		
PHF	.000	.000	.250	.000	.250	.250	.941	.875	.350	.886	.830	.000	.750	.500	.870	.250	.761	.250	.375	.792	.946



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	Marina Southbound					Lakeshore Road Westbound					South Bay Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	1	0	0	1	0	31	28	1	60	29	1	5	0	35	1	32	0	0	33	129
04:15 PM	0	0	0	0	0	0	28	21	1	50	25	0	2	1	28	4	21	0	1	26	104
04:30 PM	0	0	1	0	1	0	24	12	1	37	23	0	1	0	24	0	36	0	1	37	99
04:45 PM	1	0	0	0	1	0	14	8	0	22	34	0	4	0	38	5	44	0	1	50	111
Total Volume	1	1	1	0	3	0	97	69	3	169	111	1	12	1	125	10	133	0	3	146	443
% App. Total	33.3	33.3	33.3	0		0	57.4	40.8	1.8		88.8	0.8	9.6	0.8		6.8	91.1	0	2.1		
PHF	.250	.250	.250	.000	.750	.000	.782	.616	.750	.704	.816	.250	.600	.250	.822	.500	.756	.000	.750	.730	.859



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Groups Printed- Peds

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

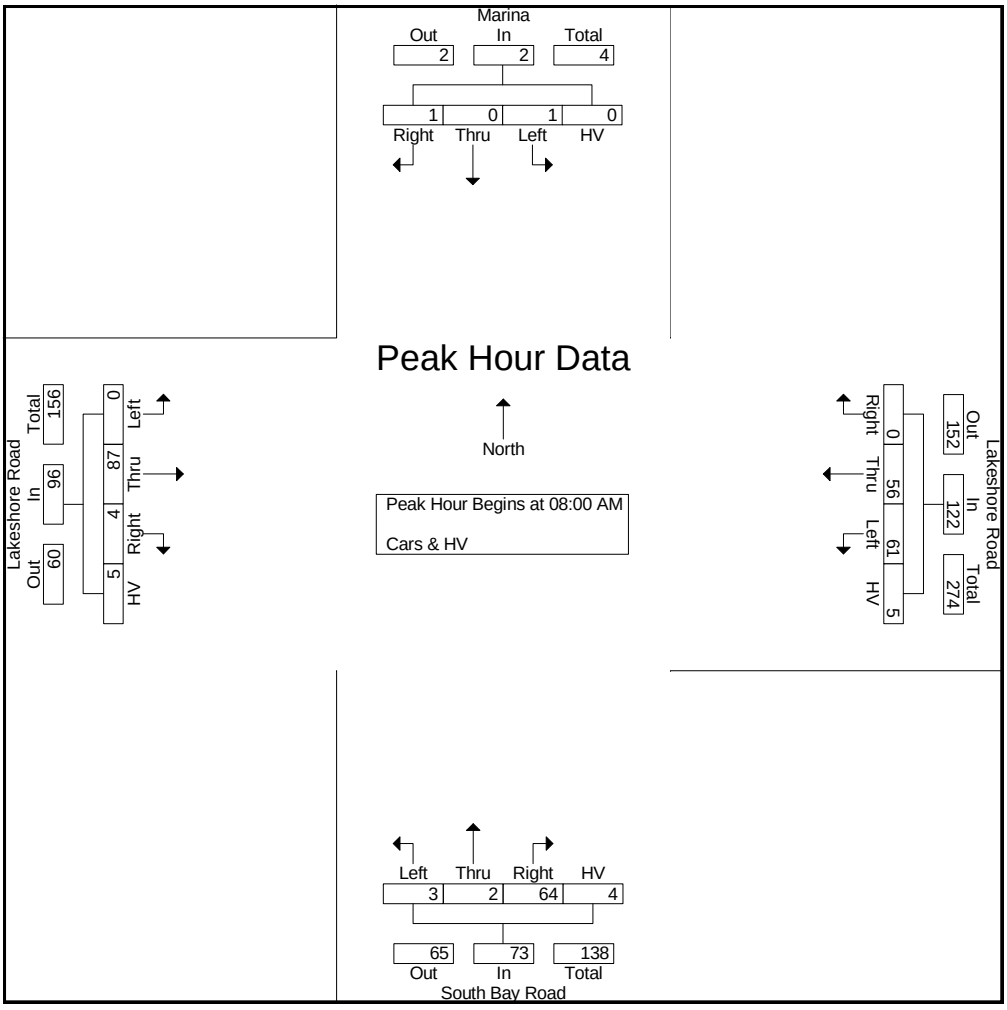
File Name : 2 - Lakeshore @ South Bay - 5-12-22
Site Code : 00000002
Start Date : 5/12/2022
Page No : 1

Groups Printed- Cars & HV

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	0	0	0	0	0	19	31	1	3	0	0	0	0	12	0	0	66
07:15 AM	0	0	0	0	0	19	24	0	8	0	0	0	1	7	0	0	59
07:30 AM	0	0	0	0	0	15	26	1	7	0	2	1	4	8	0	0	64
07:45 AM	0	0	0	0	0	18	20	0	9	0	2	0	1	15	0	2	67
Total	0	0	0	0	0	71	101	2	27	0	4	1	6	42	0	2	256
08:00 AM	0	0	0	0	0	17	17	1	17	0	0	1	1	13	0	2	69
08:15 AM	0	0	0	0	0	17	20	1	16	0	2	1	0	18	0	1	76
08:30 AM	0	0	1	0	0	9	16	1	15	1	1	0	2	27	0	1	74
08:45 AM	1	0	0	0	0	13	8	2	16	1	0	2	1	29	0	1	74
Total	1	0	1	0	0	56	61	5	64	2	3	4	4	87	0	5	293
04:00 PM	1	0	0	0	0	28	33	1	29	0	1	0	4	29	0	1	127
04:15 PM	1	0	0	0	0	22	26	2	24	1	0	0	2	27	0	2	107
04:30 PM	0	1	1	1	0	33	11	1	32	1	5	1	0	37	0	3	127
04:45 PM	0	0	0	0	0	29	19	1	31	0	5	1	1	39	0	1	127
Total	2	1	1	1	0	112	89	5	116	2	11	2	7	132	0	7	488
05:00 PM	0	0	0	0	0	21	23	4	26	2	2	3	1	22	1	1	106
05:15 PM	0	2	0	0	0	27	29	0	25	1	3	0	3	30	0	0	120
05:30 PM	0	0	0	0	2	29	20	0	24	0	4	1	1	32	0	3	116
05:45 PM	1	0	0	0	0	20	17	0	22	0	1	0	2	25	0	1	89
Total	1	2	0	0	2	97	89	4	97	3	10	4	7	109	1	5	431
Grand Total	4	3	2	1	2	336	340	16	304	7	28	11	24	370	1	19	1468
Apprch %	40	30	20	10	0.3	48.4	49	2.3	86.9	2	8	3.1	5.8	89.4	0.2	4.6	
Total %	0.3	0.2	0.1	0.1	0.1	22.9	23.2	1.1	20.7	0.5	1.9	0.7	1.6	25.2	0.1	1.3	

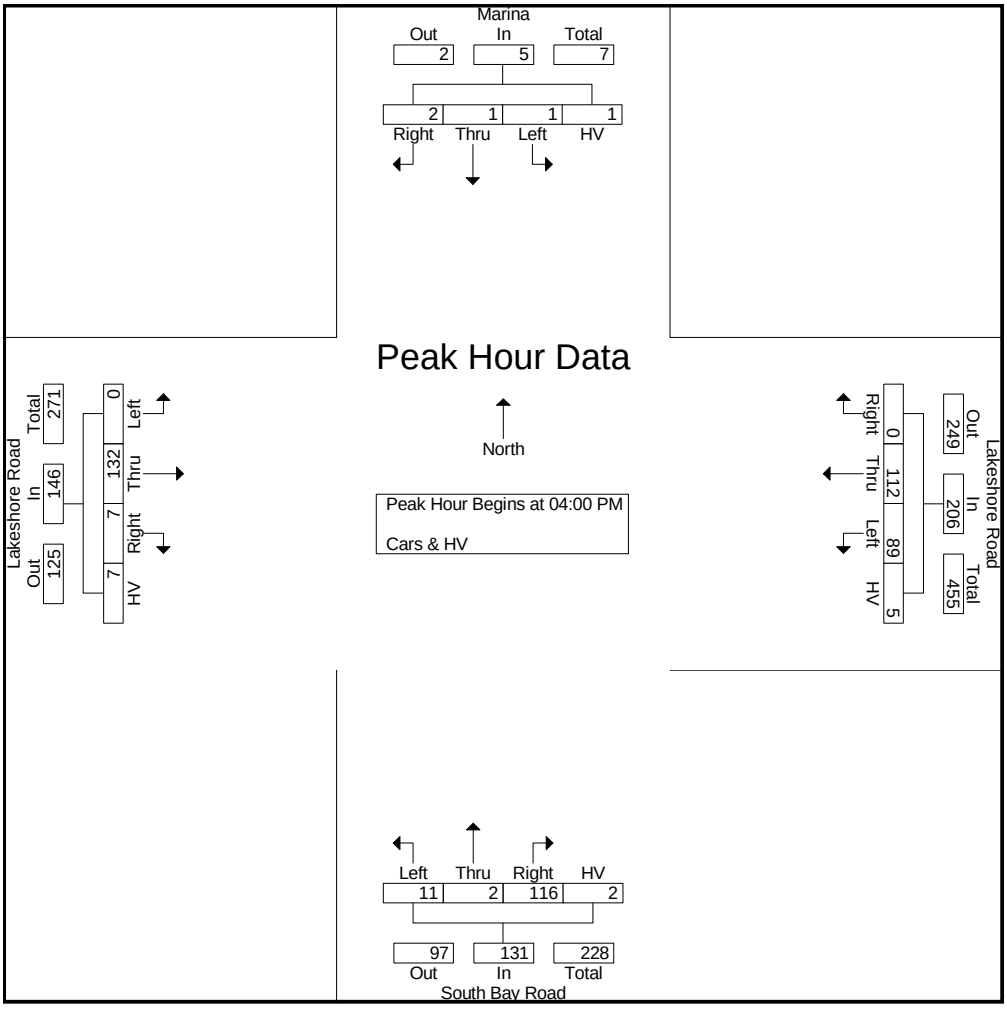
File Name : 2 - Lakeshore @ South Bay - 5-12-22
Site Code : 00000002
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	Marina Southbound					Lakeshore Road Westbound					South Bay Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	17	17	1	35	17	0	0	1	18	1	13	0	2	16	69
08:15 AM	0	0	0	0	0	0	17	20	1	38	16	0	2	1	19	0	18	0	1	19	76
08:30 AM	0	0	1	0	1	0	9	16	1	26	15	1	1	0	17	2	27	0	1	30	74
08:45 AM	1	0	0	0	1	0	13	8	2	23	16	1	0	2	19	1	29	0	1	31	74
Total Volume	1	0	1	0	2	0	56	61	5	122	64	2	3	4	73	4	87	0	5	96	293
% App. Total	50	0	50	0		0	45.9	50	4.1		87.7	2.7	4.1	5.5		4.2	90.6	0	5.2		
PHF	.250	.000	.250	.000	.500	.000	.824	.763	.625	.803	.941	.500	.375	.500	.961	.500	.750	.000	.625	.774	.964



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	Marina Southbound					Lakeshore Road Westbound					South Bay Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	0	0	0	1	0	28	33	1	62	29	0	1	0	30	4	29	0	1	34	127
04:15 PM	1	0	0	0	1	0	22	26	2	50	24	1	0	0	25	2	27	0	2	31	107
04:30 PM	0	1	1	1	3	0	33	11	1	45	32	1	5	1	39	0	37	0	3	40	127
04:45 PM	0	0	0	0	0	0	29	19	1	49	31	0	5	1	37	1	39	0	1	41	127
Total Volume	2	1	1	1	5	0	112	89	5	206	116	2	11	2	131	7	132	0	7	146	488
% App. Total	40	20	20	20		0	54.4	43.2	2.4		88.5	1.5	8.4	1.5		4.8	90.4	0	4.8		
PHF	.500	.250	.250	.250	.417	.000	.848	.674	.625	.831	.906	.500	.550	.500	.840	.438	.846	.000	.583	.890	.961



File Name : 2 - Lakeshore @ South Bay - 5-12-22
Site Code : 00000002
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Groups Printed- Peds

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
Total	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
Grand Total	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	0	6
Apprch %	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	
Total %	0	0	0	33.3	0	0	0	33.3	0	0	0	33.3	0	0	0	0	

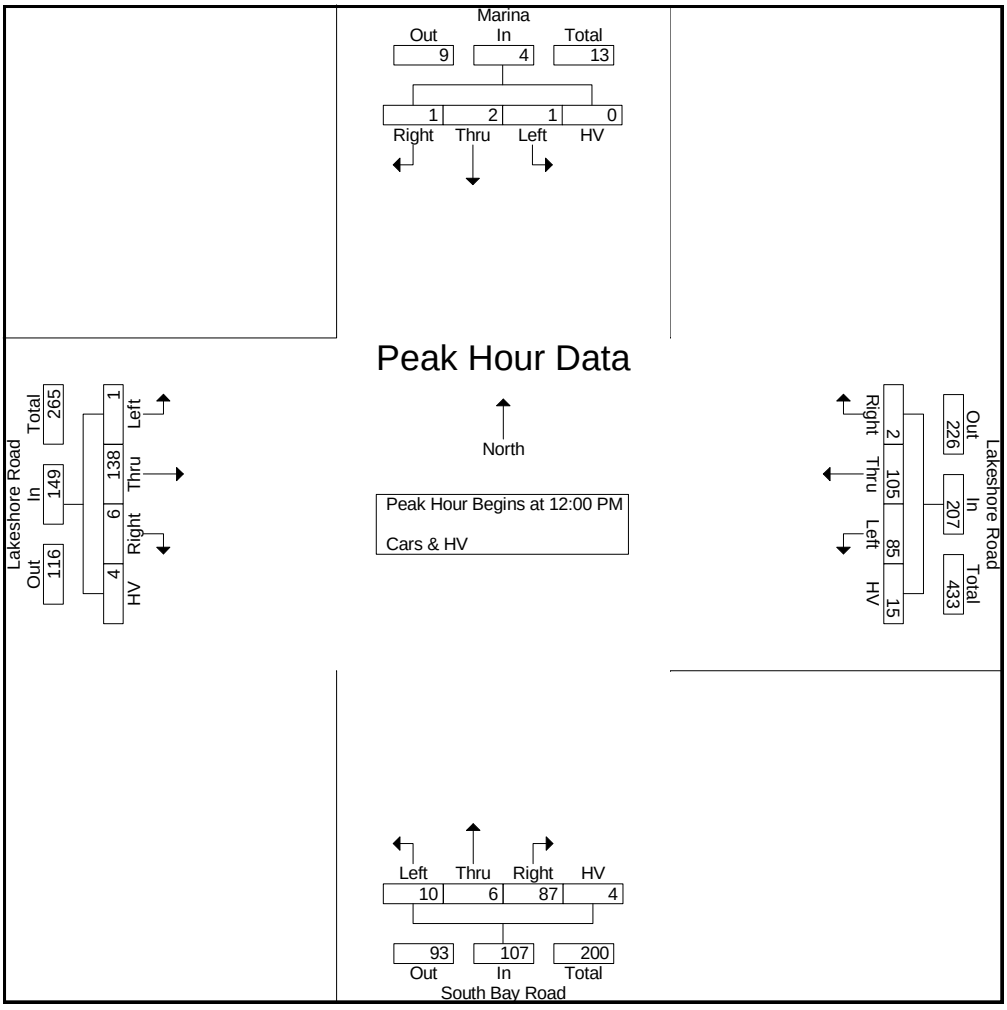
File Name : 2 - Lakeshore @ South Bay - 5-14-22
Site Code : 00000002
Start Date : 5/14/2022
Page No : 1

Groups Printed- Cars & HV

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	0	0	0	0	0	25	22	4	16	2	4	0	1	23	0	1	98
11:15 AM	1	0	0	0	0	14	12	0	23	1	1	0	3	24	0	0	79
11:30 AM	1	1	0	0	0	24	15	1	12	1	2	1	2	30	1	2	93
11:45 AM	2	0	2	0	1	13	18	2	18	2	1	1	3	26	2	5	96
Total	4	1	2	0	1	76	67	7	69	6	8	2	9	103	3	8	366
12:00 PM	1	0	1	0	0	31	22	5	22	3	2	0	3	35	0	2	127
12:15 PM	0	1	0	0	0	24	24	3	18	1	6	4	0	36	0	0	117
12:30 PM	0	0	0	0	0	27	19	4	24	1	1	0	2	31	0	1	110
12:45 PM	0	1	0	0	2	23	20	3	23	1	1	0	1	36	1	1	113
Total	1	2	1	0	2	105	85	15	87	6	10	4	6	138	1	4	467
Grand Total	5	3	3	0	3	181	152	22	156	12	18	6	15	241	4	12	833
Apprch %	45.5	27.3	27.3	0	0.8	50.6	42.5	6.1	81.2	6.2	9.4	3.1	5.5	88.6	1.5	4.4	
Total %	0.6	0.4	0.4	0	0.4	21.7	18.2	2.6	18.7	1.4	2.2	0.7	1.8	28.9	0.5	1.4	

File Name : 2 - Lakeshore @ South Bay - 5-14-22
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	Marina Southbound					Lakeshore Road Westbound					South Bay Road Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	1	0	1	0	2	0	31	22	5	58	22	3	2	0	27	3	35	0	2	40	127
12:15 PM	0	1	0	0	1	0	24	24	3	51	18	1	6	4	29	0	36	0	0	36	117
12:30 PM	0	0	0	0	0	0	27	19	4	50	24	1	1	0	26	2	31	0	1	34	110
12:45 PM	0	1	0	0	1	2	23	20	3	48	23	1	1	0	25	1	36	1	1	39	113
Total Volume	1	2	1	0	4	2	105	85	15	207	87	6	10	4	107	6	138	1	4	149	467
% App. Total	25	50	25	0		1	50.7	41.1	7.2		81.3	5.6	9.3	3.7		4	92.6	0.7	2.7		
PHF	.250	.500	.250	.000	.500	.250	.847	.885	.750	.892	.906	.500	.417	.250	.922	.500	.958	.250	.500	.931	.919



File Name : 2 - Lakeshore @ South Bay - 5-14-22
Site Code : 00000002
Start Date : 5/14/2022
Page No : 1

Groups Printed- Peds

	Marina Southbound				Lakeshore Road Westbound				South Bay Road Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	
Total %	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	

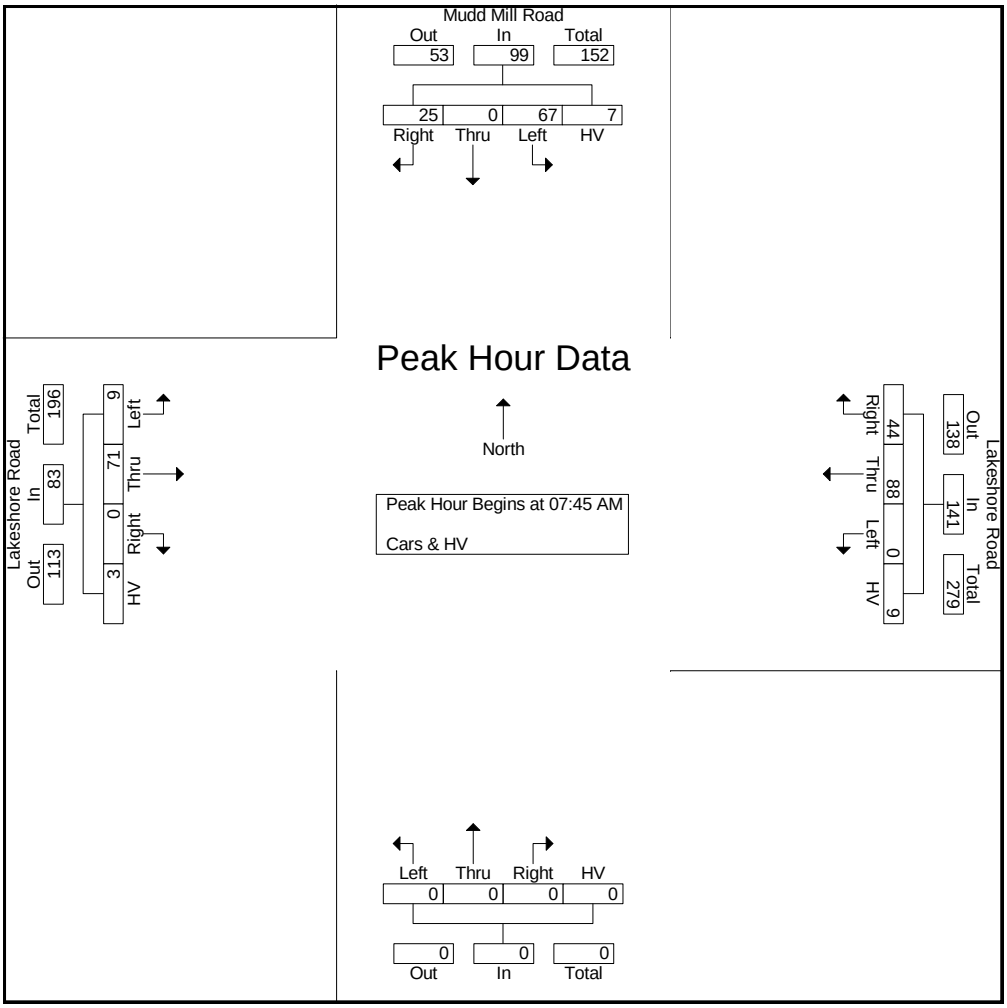
File Name : 3 - Lakeshore @ Mudd Mill - 5-11-22
Site Code : 00000003
Start Date : 5/11/2022
Page No : 1

Groups Printed- Cars & HV

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	5	0	17	3	12	22	0	3	0	0	0	0	0	5	2	0	69
07:15 AM	7	0	15	1	12	32	0	0	0	0	0	0	0	8	1	0	76
07:30 AM	8	0	17	2	17	21	0	1	0	0	0	0	0	7	1	0	74
07:45 AM	7	0	18	3	9	27	0	1	0	0	0	0	0	20	3	0	88
Total	27	0	67	9	50	102	0	5	0	0	0	0	0	40	7	0	307
08:00 AM	8	0	19	1	14	18	0	3	0	0	0	0	0	14	2	0	79
08:15 AM	4	0	16	1	11	20	0	4	0	0	0	0	0	19	1	2	78
08:30 AM	6	0	14	2	10	23	0	1	0	0	0	0	0	18	3	1	78
08:45 AM	5	0	7	0	7	17	0	3	0	0	0	0	0	27	2	1	69
Total	23	0	56	4	42	78	0	11	0	0	0	0	0	78	8	4	304
04:00 PM	5	0	25	1	33	22	0	2	0	0	0	0	0	37	7	0	132
04:15 PM	10	0	19	0	23	18	0	2	0	0	0	0	0	35	18	0	125
04:30 PM	2	0	22	0	25	22	0	1	0	0	0	0	0	36	10	0	118
04:45 PM	7	0	19	1	21	23	0	2	0	0	0	0	0	44	17	1	135
Total	24	0	85	2	102	85	0	7	0	0	0	0	0	152	52	1	510
05:00 PM	7	0	23	3	18	22	0	2	0	0	0	0	0	31	8	0	114
05:15 PM	4	0	27	0	28	23	0	0	0	0	0	0	0	35	7	0	124
05:30 PM	8	0	18	0	24	22	0	1	0	0	0	0	0	29	12	0	114
Grand Total	93	0	276	18	264	332	0	26	0	0	0	0	0	365	94	5	1473
Apprch %	24	0	71.3	4.7	42.4	53.4	0	4.2	0	0	0	0	0	78.7	20.3	1.1	
Total %	6.3	0	18.7	1.2	17.9	22.5	0	1.8	0	0	0	0	0	24.8	6.4	0.3	

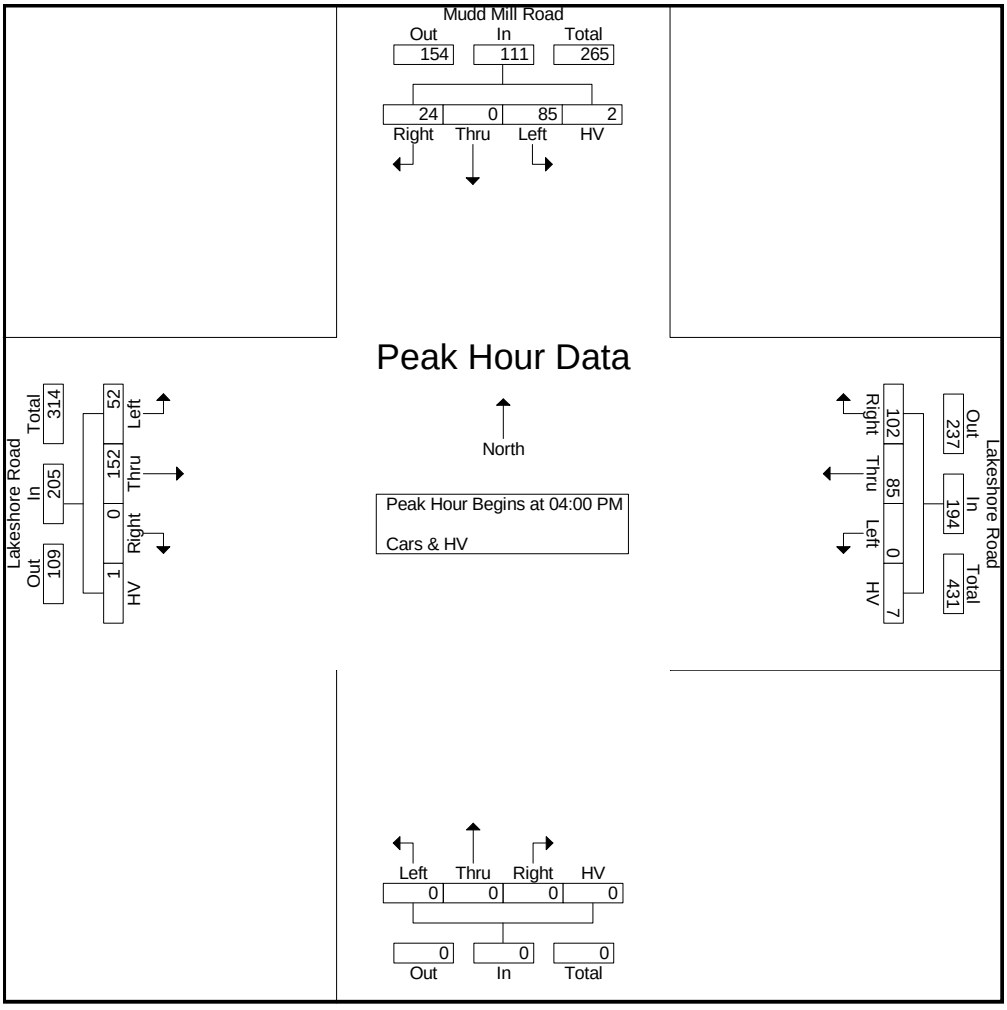
File Name : 3 - Lakeshore @ Mudd Mill - 5-11-22
Site Code : 00000003
Start Date : 5/11/2022
Page No : 2

	Mudd Mill Road Southbound					Lakeshore Road Westbound					Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	7	0	18	3	28	9	27	0	1	37	0	0	0	0	0	0	20	3	0	23	88
08:00 AM	8	0	19	1	28	14	18	0	3	35	0	0	0	0	0	0	14	2	0	16	79
08:15 AM	4	0	16	1	21	11	20	0	4	35	0	0	0	0	0	0	19	1	2	22	78
08:30 AM	6	0	14	2	22	10	23	0	1	34	0	0	0	0	0	0	18	3	1	22	78
Total Volume	25	0	67	7	99	44	88	0	9	141	0	0	0	0	0	0	71	9	3	83	323
% App. Total	25.3	0	67.7	7.1		31.2	62.4	0	6.4		0	0	0	0		0	85.5	10.8	3.6		
PHF	.781	.000	.882	.583	.884	.786	.815	.000	.563	.953	.000	.000	.000	.000	.000	.000	.888	.750	.375	.902	.918



File Name : 3 - Lakeshore @ Mudd Mill - 5-11-22
Site Code : 00000003
Start Date : 5/11/2022
Page No : 3

	Mudd Mill Road Southbound					Lakeshore Road Westbound					Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	5	0	25	1	31	33	22	0	2	57	0	0	0	0	0	0	37	7	0	44	132
04:15 PM	10	0	19	0	29	23	18	0	2	43	0	0	0	0	0	0	35	18	0	53	125
04:30 PM	2	0	22	0	24	25	22	0	1	48	0	0	0	0	0	0	36	10	0	46	118
04:45 PM	7	0	19	1	27	21	23	0	2	46	0	0	0	0	0	0	44	17	1	62	135
Total Volume	24	0	85	2	111	102	85	0	7	194	0	0	0	0	0	0	152	52	1	205	510
% App. Total	21.6	0	76.6	1.8		52.6	43.8	0	3.6		0	0	0	0		0	74.1	25.4	0.5		
PHF	.600	.000	.850	.500	.895	.773	.924	.000	.875	.851	.000	.000	.000	.000	.000	.000	.864	.722	.250	.827	.944



File Name : 3 - Lakeshore @ Mudd Mill - 5-11-22
Site Code : 00000003
Start Date : 5/11/2022
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Groups Printed- Peds

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	
Total %	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

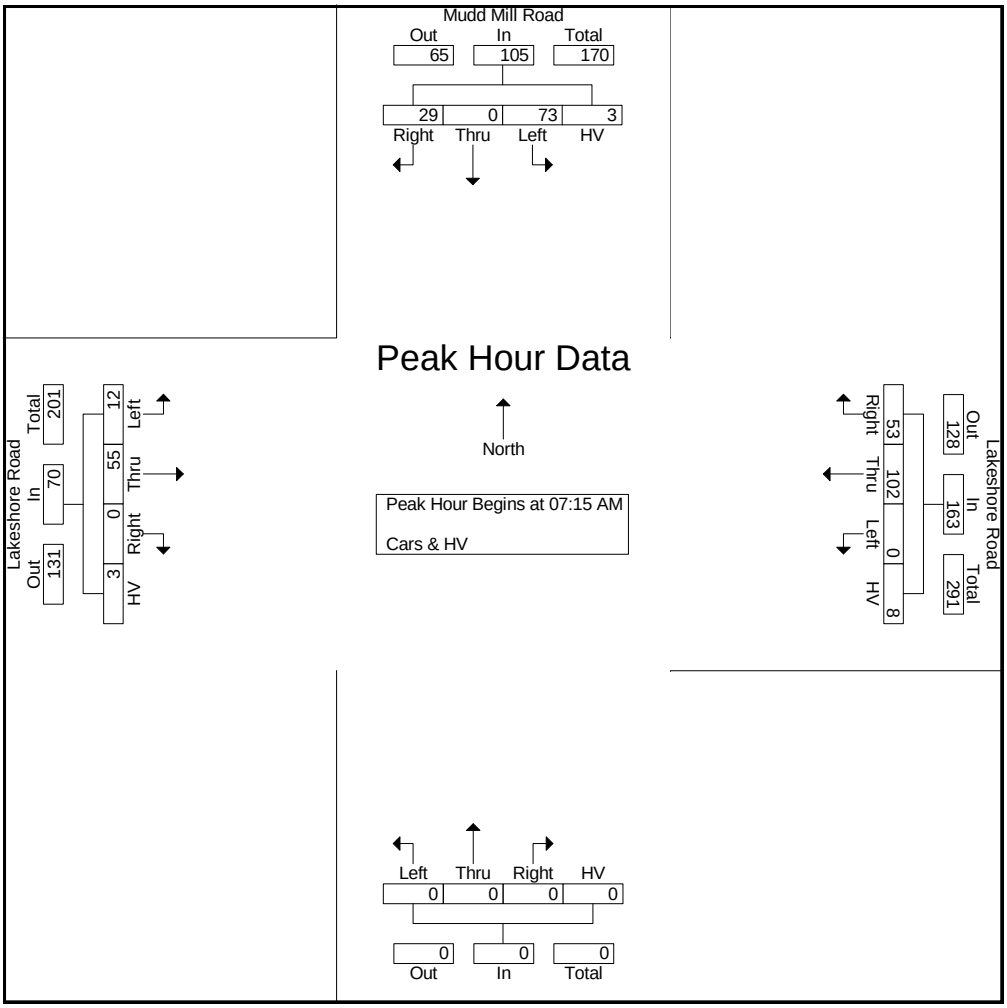
File Name : 3 - Lakeshore @ Mudd Mill - 5-18-22
Site Code : 00000003
Start Date : 5/18/2022
Page No : 1

Groups Printed- Cars & HV

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	11	0	14	3	6	26	0	1	0	0	0	0	0	4	2	0	67
07:15 AM	7	0	20	0	19	32	0	3	0	0	0	0	0	9	4	0	94
07:30 AM	7	0	18	0	13	29	0	1	0	0	0	0	0	15	4	2	89
07:45 AM	8	0	19	1	11	23	0	3	0	0	0	0	0	13	4	1	83
Total	33	0	71	4	49	110	0	8	0	0	0	0	0	41	14	3	333
08:00 AM	7	0	16	2	10	18	0	1	0	0	0	0	0	18	0	0	72
08:15 AM	9	0	18	2	8	19	0	0	0	0	0	0	0	20	3	3	82
08:30 AM	6	0	10	1	2	25	0	0	0	0	0	0	0	21	3	1	69
08:45 AM	8	0	5	1	1	18	0	0	0	0	0	0	0	29	2	5	69
Total	30	0	49	6	21	80	0	1	0	0	0	0	0	88	8	9	292
04:00 PM	9	0	27	2	21	32	0	3	0	0	0	0	0	44	9	3	150
04:15 PM	7	0	20	2	23	32	0	3	0	0	0	0	0	31	10	2	130
04:30 PM	7	0	12	2	25	39	0	3	0	0	0	0	0	30	8	0	126
04:45 PM	10	0	14	0	27	21	0	0	0	0	0	0	0	37	11	0	120
Total	33	0	73	6	96	124	0	9	0	0	0	0	0	142	38	5	526
05:00 PM	6	0	25	1	24	31	0	3	0	0	0	0	0	32	16	2	140
05:15 PM	8	0	17	0	21	22	0	0	0	0	0	0	0	27	8	0	103
05:30 PM	5	0	22	1	16	21	0	1	0	0	0	0	0	34	12	0	112
05:45 PM	9	0	23	1	14	21	0	0	0	0	0	0	0	20	9	1	98
Total	28	0	87	3	75	95	0	4	0	0	0	0	0	113	45	3	453
Grand Total	124	0	280	19	241	409	0	22	0	0	0	0	0	384	105	20	1604
Apprch %	29.3	0	66.2	4.5	35.9	60.9	0	3.3	0	0	0	0	0	75.4	20.6	3.9	
Total %	7.7	0	17.5	1.2	15	25.5	0	1.4	0	0	0	0	0	23.9	6.5	1.2	

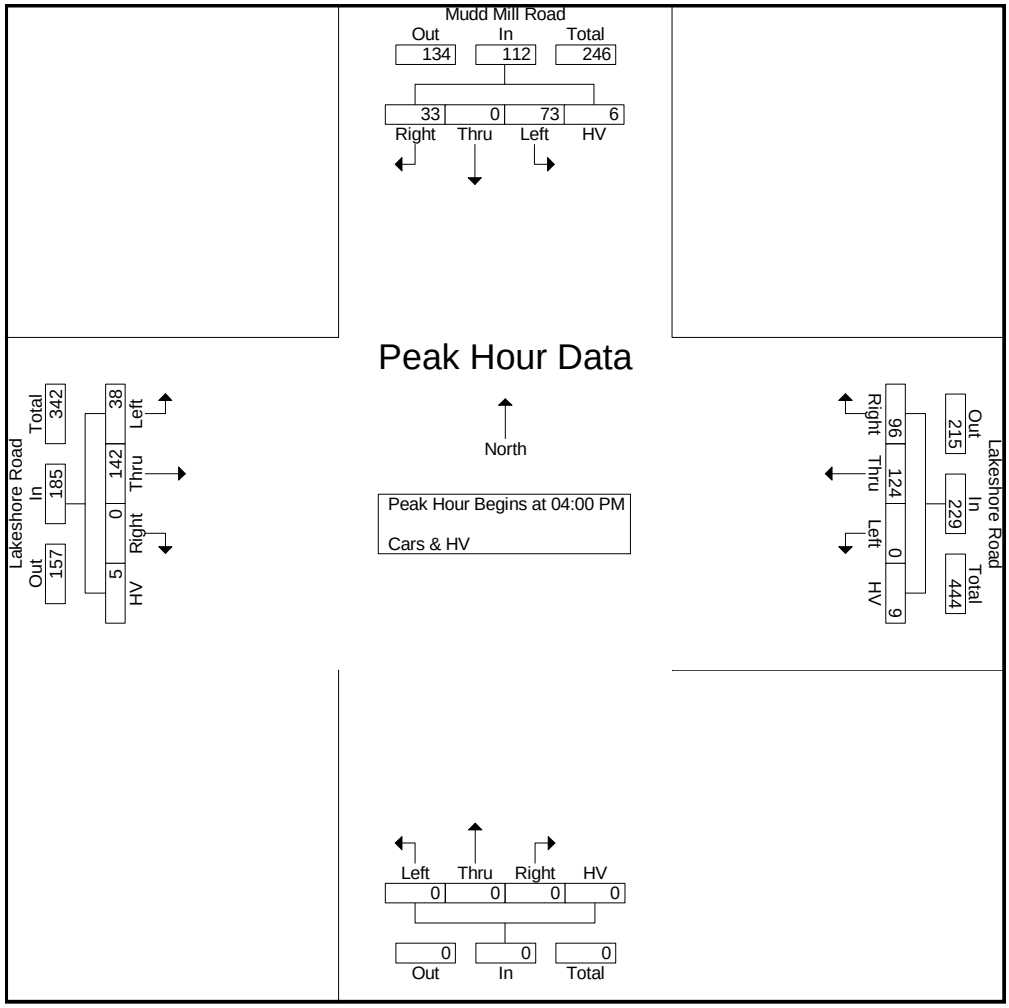
File Name : 3 - Lakeshore @ Mudd Mill - 5-18-22
Site Code : 00000003
Start Date : 5/18/2022
Page No : 2

	Mudd Mill Road Southbound					Lakeshore Road Westbound					Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	0	20	0	27	19	32	0	3	54	0	0	0	0	0	0	9	4	0	13	94
07:30 AM	7	0	18	0	25	13	29	0	1	43	0	0	0	0	0	0	15	4	2	21	89
07:45 AM	8	0	19	1	28	11	23	0	3	37	0	0	0	0	0	0	13	4	1	18	83
08:00 AM	7	0	16	2	25	10	18	0	1	29	0	0	0	0	0	0	18	0	0	18	72
Total Volume	29	0	73	3	105	53	102	0	8	163	0	0	0	0	0	0	55	12	3	70	338
% App. Total	27.6	0	69.5	2.9		32.5	62.6	0	4.9		0	0	0	0		0	78.6	17.1	4.3		
PHF	.906	.000	.913	.375	.938	.697	.797	.000	.667	.755	.000	.000	.000	.000	.000	.000	.764	.750	.375	.833	.899



File Name : 3 - Lakeshore @ Mudd Mill - 5-18-22
Site Code : 00000003
Start Date : 5/18/2022
Page No : 3

Start Time	Mudd Mill Road Southbound					Lakeshore Road Westbound					Northbound					Lakeshore Road Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	9	0	27	2	38	21	32	0	3	56	0	0	0	0	0	0	44	9	3	56	150
04:15 PM	7	0	20	2	29	23	32	0	3	58	0	0	0	0	0	0	31	10	2	43	130
04:30 PM	7	0	12	2	21	25	39	0	3	67	0	0	0	0	0	0	30	8	0	38	126
04:45 PM	10	0	14	0	24	27	21	0	0	48	0	0	0	0	0	0	37	11	0	48	120
Total Volume	33	0	73	6	112	96	124	0	9	229	0	0	0	0	0	0	142	38	5	185	526
% App. Total	29.5	0	65.2	5.4		41.9	54.1	0	3.9		0	0	0	0		0	76.8	20.5	2.7		
PHF	.825	.000	.676	.750	.737	.889	.795	.000	.750	.854	.000	.000	.000	.000	.000	.000	.807	.864	.417	.826	.877



File Name : 3 - Lakeshore @ Mudd Mill - 5-18-22
Site Code : 00000003
Start Date : 5/18/2022
Page No : 1

Groups Printed- Peds

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

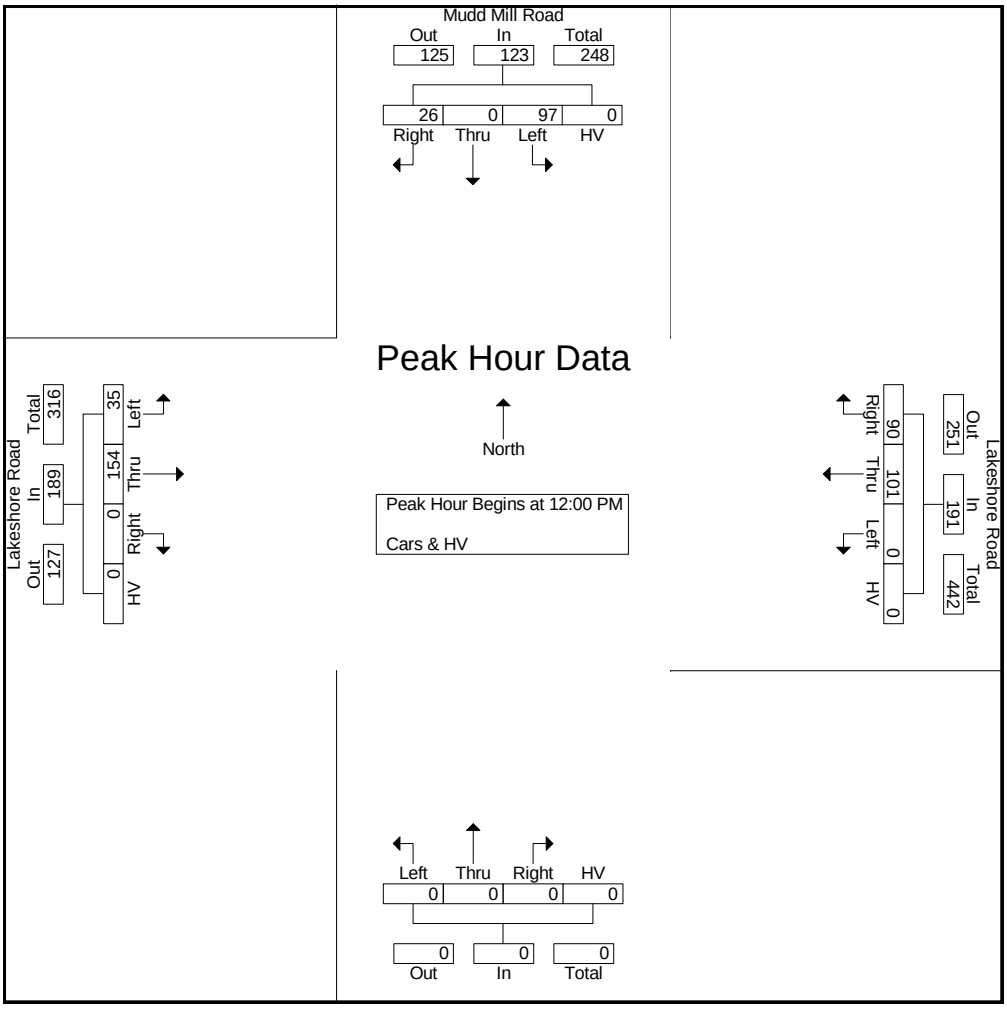
File Name : 3 - Lakeshore @ Mudd Mill - 5-14-22
Site Code : 00000003
Start Date : 5/14/2022
Page No : 1

Groups Printed- Cars & HV

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	9	0	20	0	11	27	0	0	0	0	0	0	0	30	11	0	108
11:15 AM	13	0	22	0	13	20	0	0	0	0	0	0	0	23	9	0	100
11:30 AM	10	0	24	0	12	27	0	0	0	0	0	0	0	22	8	0	103
11:45 AM	10	0	18	0	13	19	0	0	0	0	0	0	0	28	9	0	97
Total	42	0	84	0	49	93	0	0	0	0	0	0	0	103	37	0	408
12:00 PM	5	0	16	0	25	22	0	0	0	0	0	0	0	47	11	0	126
12:15 PM	7	0	27	0	23	23	0	0	0	0	0	0	0	33	11	0	124
12:30 PM	8	0	28	0	20	29	0	0	0	0	0	0	0	38	6	0	129
12:45 PM	6	0	26	0	22	27	0	0	0	0	0	0	0	36	7	0	124
Total	26	0	97	0	90	101	0	0	0	0	0	0	0	154	35	0	503
Grand Total	68	0	181	0	139	194	0	0	0	0	0	0	0	257	72	0	911
Apprch %	27.3	0	72.7	0	41.7	58.3	0	0	0	0	0	0	0	78.1	21.9	0	
Total %	7.5	0	19.9	0	15.3	21.3	0	0	0	0	0	0	0	28.2	7.9	0	

File Name : 3 - Lakeshore @ Mudd Mill - 5-14-22
Site Code : 00000003
Start Date : 5/14/2022
Page No : 2

	Mudd Mill Road Southbound					Lakeshore Road Westbound					Northbound					Lakeshore Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	5	0	16	0	21	25	22	0	0	47	0	0	0	0	0	0	47	11	0	58	126
12:15 PM	7	0	27	0	34	23	23	0	0	46	0	0	0	0	0	0	33	11	0	44	124
12:30 PM	8	0	28	0	36	20	29	0	0	49	0	0	0	0	0	0	38	6	0	44	129
12:45 PM	6	0	26	0	32	22	27	0	0	49	0	0	0	0	0	0	36	7	0	43	124
Total Volume	26	0	97	0	123	90	101	0	0	191	0	0	0	0	0	0	154	35	0	189	503
% App. Total	21.1	0	78.9	0		47.1	52.9	0	0		0	0	0	0		0	81.5	18.5	0		
PHF	.813	.000	.866	.000	.854	.900	.871	.000	.000	.974	.000	.000	.000	.000	.000	.000	.819	.795	.000	.815	.975



File Name : 3 - Lakeshore @ Mudd Mill - 5-14-22
Site Code : 00000003
Start Date : 5/14/2022
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Groups Printed- Peds

	Mudd Mill Road Southbound				Lakeshore Road Westbound				Northbound				Lakeshore Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

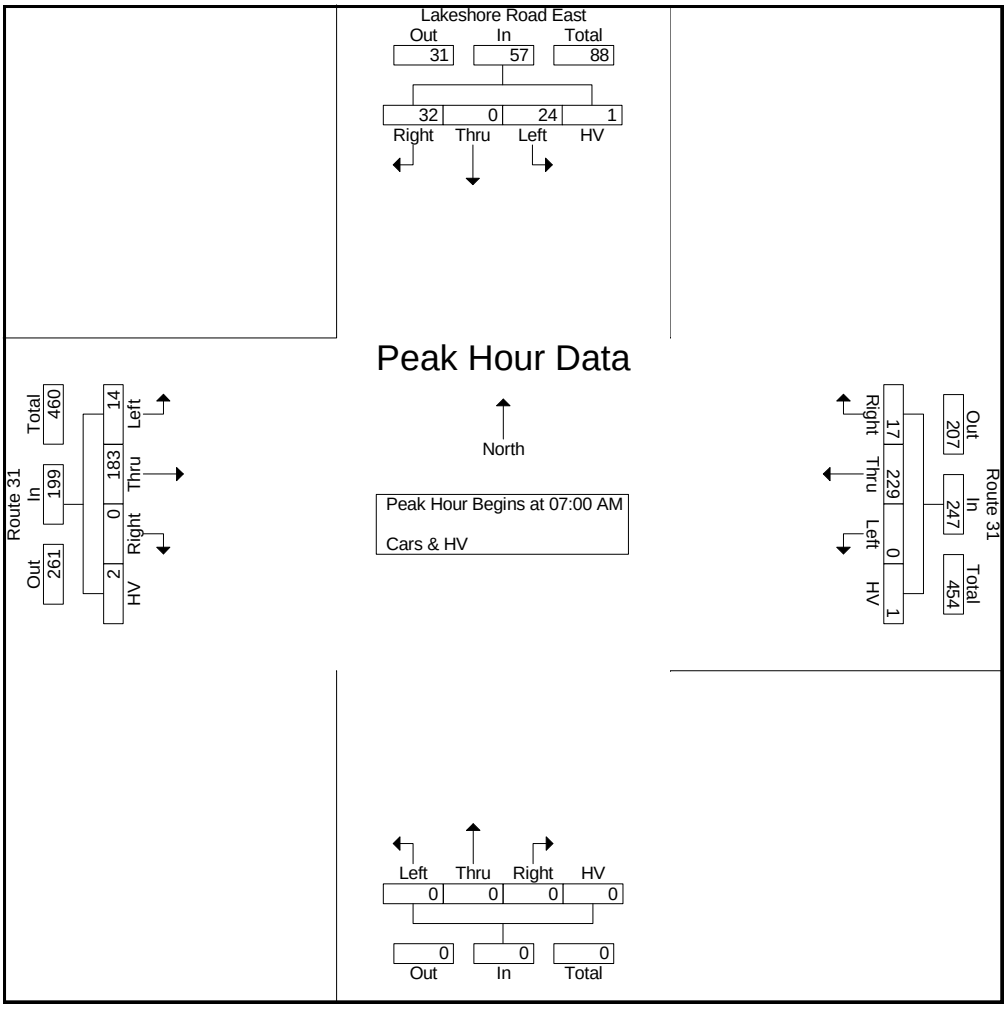
File Name : 4 - Route 31 @ Lakeshore East - 5-11-22
Site Code : 00000004
Start Date : 5/11/2022
Page No : 1

Groups Printed- Cars & HV

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	12	0	4	1	2	59	0	0	0	0	0	0	0	42	4	1	125
07:15 AM	7	0	6	0	3	50	0	0	0	0	0	0	0	42	4	0	112
07:30 AM	7	0	9	0	6	62	0	1	0	0	0	0	0	45	6	0	136
07:45 AM	6	0	5	0	6	58	0	0	0	0	0	0	0	54	0	1	130
Total	32	0	24	1	17	229	0	1	0	0	0	0	0	183	14	2	503
08:00 AM	7	0	9	0	3	44	0	0	0	0	0	0	0	40	7	2	112
08:15 AM	5	0	4	0	9	34	0	0	0	0	0	0	0	52	2	0	106
08:30 AM	4	0	5	0	7	55	0	0	0	0	0	0	0	51	2	0	124
08:45 AM	8	0	10	0	9	58	0	0	0	0	0	0	0	33	3	0	121
Total	24	0	28	0	28	191	0	0	0	0	0	0	0	176	14	2	463
04:00 PM	3	0	8	0	10	86	0	0	0	0	0	0	0	76	7	0	190
04:15 PM	7	0	7	0	11	82	0	0	0	0	0	0	0	105	5	0	217
04:30 PM	6	0	8	0	12	89	0	0	0	0	0	0	0	102	9	0	226
04:45 PM	7	0	12	0	10	60	0	0	0	0	0	0	0	105	16	0	210
Total	23	0	35	0	43	317	0	0	0	0	0	0	0	388	37	0	843
05:00 PM	6	0	7	0	5	76	0	0	0	0	0	0	0	71	14	0	179
05:15 PM	4	0	8	0	11	90	0	0	0	0	0	0	3	96	8	1	221
05:30 PM	4	0	4	0	8	60	0	0	0	0	0	0	0	82	11	0	169
05:45 PM	3	0	10	0	9	77	0	0	0	0	0	0	0	81	5	0	185
Total	17	0	29	0	33	303	0	0	0	0	0	0	3	330	38	1	754
Grand Total	96	0	116	1	121	1040	0	1	0	0	0	0	3	1077	103	5	2563
Apprch %	45.1	0	54.5	0.5	10.4	89.5	0	0.1	0	0	0	0	0.3	90.7	8.7	0.4	
Total %	3.7	0	4.5	0	4.7	40.6	0	0	0	0	0	0	0.1	42	4	0.2	

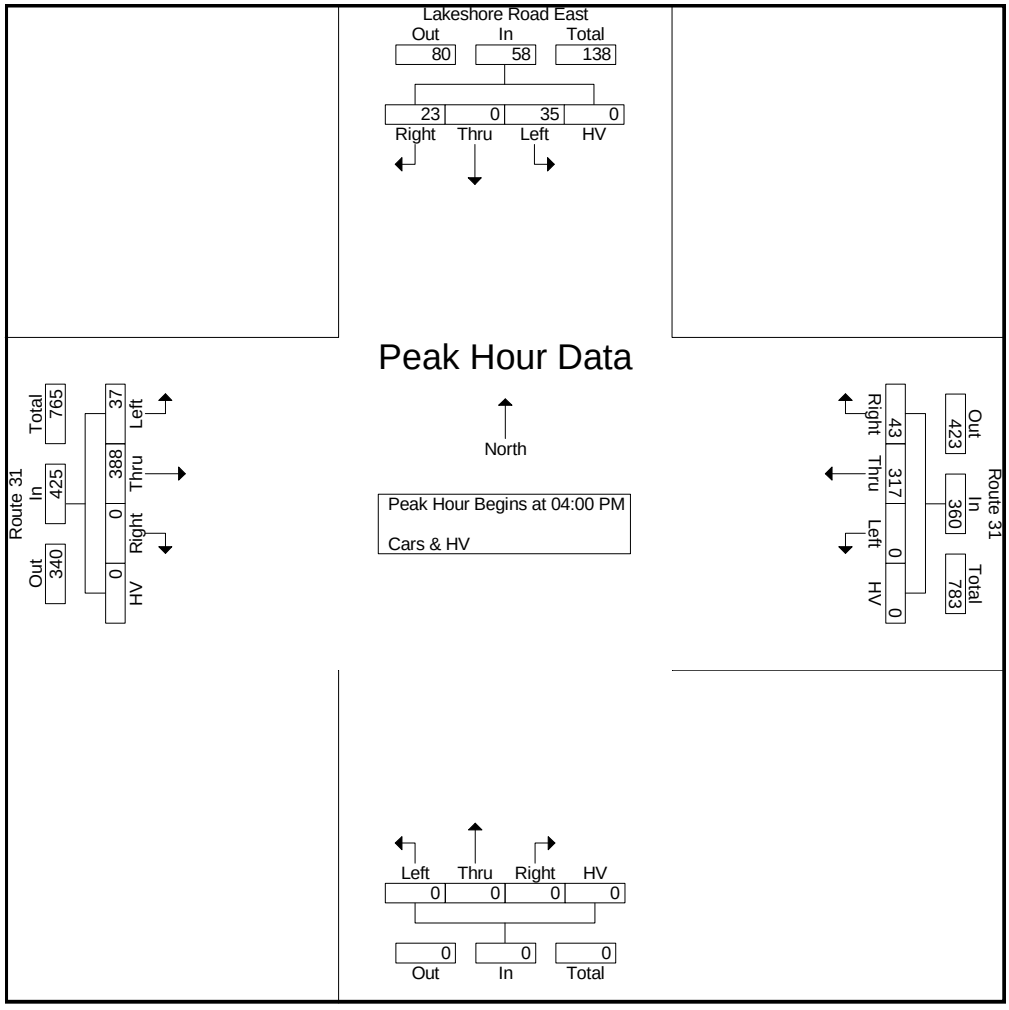
File Name : 4 - Route 31 @ Lakeshore East - 5-11-22
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	Lakeshore Road East Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	12	0	4	1	17	2	59	0	0	61	0	0	0	0	0	0	42	4	1	47	125
07:15 AM	7	0	6	0	13	3	50	0	0	53	0	0	0	0	0	0	42	4	0	46	112
07:30 AM	7	0	9	0	16	6	62	0	1	69	0	0	0	0	0	0	45	6	0	51	136
07:45 AM	6	0	5	0	11	6	58	0	0	64	0	0	0	0	0	0	54	0	1	55	130
Total Volume	32	0	24	1	57	17	229	0	1	247	0	0	0	0	0	0	183	14	2	199	503
% App. Total	56.1	0	42.1	1.8		6.9	92.7	0	0.4		0	0	0	0		0	92	7	1		
PHF	.667	.000	.667	.250	.838	.708	.923	.000	.250	.895	.000	.000	.000	.000	.000	.000	.847	.583	.500	.905	.925



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	Lakeshore Road East Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	3	0	8	0	11	10	86	0	0	96	0	0	0	0	0	0	76	7	0	83	190
04:15 PM	7	0	7	0	14	11	82	0	0	93	0	0	0	0	0	0	105	5	0	110	217
04:30 PM	6	0	8	0	14	12	89	0	0	101	0	0	0	0	0	0	102	9	0	111	226
04:45 PM	7	0	12	0	19	10	60	0	0	70	0	0	0	0	0	0	105	16	0	121	210
Total Volume	23	0	35	0	58	43	317	0	0	360	0	0	0	0	0	0	388	37	0	425	843
% App. Total	39.7	0	60.3	0		11.9	88.1	0	0		0	0	0	0		0	91.3	8.7	0		
PHF	.821	.000	.729	.000	.763	.896	.890	.000	.000	.891	.000	.000	.000	.000	.000	.000	.924	.578	.000	.878	.933



File Name : 4 - Route 31 @ Lakeshore East - 5-11-22
Site Code : 00000004
Start Date : 5/11/2022
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Groups Printed- Peds

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	

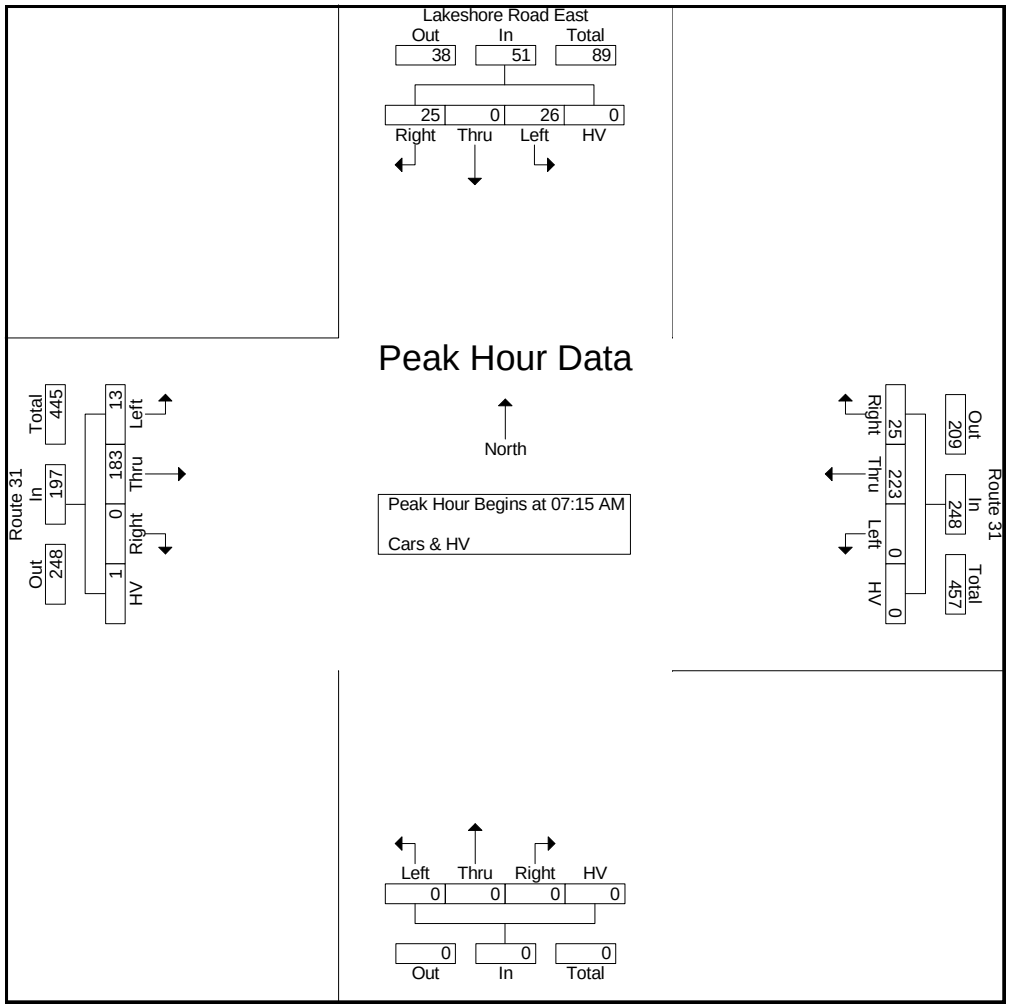
File Name : 4 - Route 31 @ Lakeshore East - 5-12-22
Site Code : 00000004
Start Date : 5/12/2022
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Groups Printed- Cars & HV

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	7	0	5	0	3	47	0	1	0	0	0	0	0	33	1	1	98
07:15 AM	11	0	6	0	3	66	0	0	0	0	0	0	0	49	1	0	136
07:30 AM	4	0	6	0	3	55	0	0	0	0	0	0	0	41	6	0	115
07:45 AM	4	0	6	0	5	47	0	0	0	0	0	0	0	55	2	0	119
Total	26	0	23	0	14	215	0	1	0	0	0	0	0	178	10	1	468
08:00 AM	6	0	8	0	14	55	0	0	0	0	0	0	0	38	4	1	126
08:15 AM	7	0	3	0	7	43	0	0	0	0	0	0	0	41	1	0	102
08:30 AM	4	0	9	0	7	50	0	0	0	0	0	0	0	45	1	0	116
08:45 AM	5	0	7	0	11	50	0	0	0	0	0	0	0	32	1	0	106
Total	22	0	27	0	39	198	0	0	0	0	0	0	0	156	7	1	450
04:00 PM	11	0	16	0	4	82	0	0	0	0	0	0	0	77	7	0	197
04:15 PM	3	0	11	0	7	71	0	0	0	0	0	0	0	86	7	0	185
04:30 PM	3	0	10	0	10	82	0	0	0	0	0	0	5	99	9	0	218
04:45 PM	6	0	8	0	9	72	0	0	0	0	0	0	0	113	9	0	217
Total	23	0	45	0	30	307	0	0	0	0	0	0	5	375	32	0	817
05:00 PM	0	0	9	0	10	75	0	0	0	0	0	0	0	88	14	0	196
05:15 PM	3	0	9	0	12	89	0	0	0	0	0	0	0	75	8	0	196
05:30 PM	6	0	8	0	8	78	1	0	0	0	0	0	0	85	16	0	202
05:45 PM	5	0	7	0	11	70	0	0	0	0	0	0	0	66	10	0	169
Total	14	0	33	0	41	312	1	0	0	0	0	0	0	314	48	0	763
Grand Total	85	0	128	0	124	1032	1	1	0	0	0	0	5	1023	97	2	2498
Apprch %	39.9	0	60.1	0	10.7	89.1	0.1	0.1	0	0	0	0	0.4	90.8	8.6	0.2	
Total %	3.4	0	5.1	0	5	41.3	0	0	0	0	0	0	0.2	41	3.9	0.1	

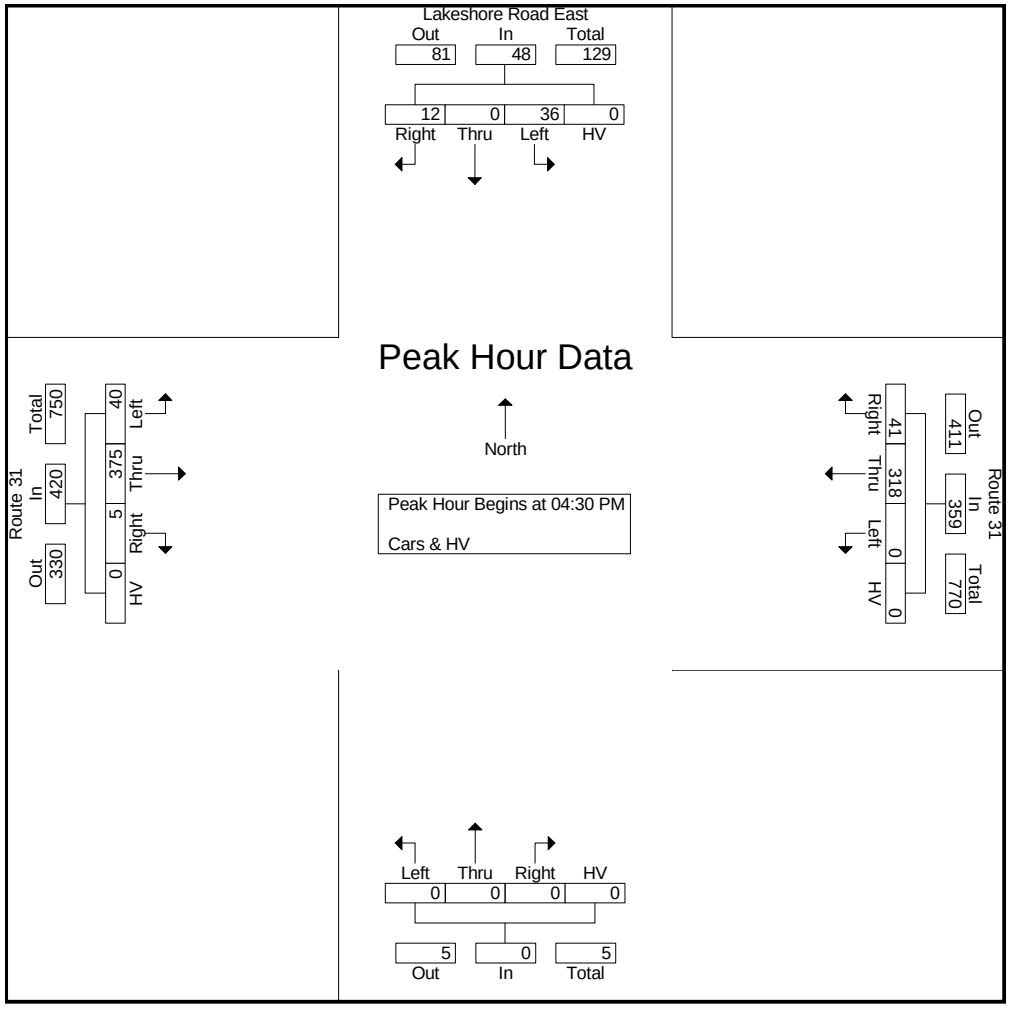
File Name : 4 - Route 31 @ Lakeshore East - 5-12-22
Site Code : 00000004
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	Lakeshore Road East Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	11	0	6	0	17	3	66	0	0	69	0	0	0	0	0	0	49	1	0	50	136
07:30 AM	4	0	6	0	10	3	55	0	0	58	0	0	0	0	0	0	41	6	0	47	115
07:45 AM	4	0	6	0	10	5	47	0	0	52	0	0	0	0	0	0	55	2	0	57	119
08:00 AM	6	0	8	0	14	14	55	0	0	69	0	0	0	0	0	0	38	4	1	43	126
Total Volume	25	0	26	0	51	25	223	0	0	248	0	0	0	0	0	0	183	13	1	197	496
% App. Total	49	0	51	0		10.1	89.9	0	0		0	0	0	0		0	92.9	6.6	0.5		
PHF	.568	.000	.813	.000	.750	.446	.845	.000	.000	.899	.000	.000	.000	.000	.000	.000	.832	.542	.250	.864	.912



File Name : 4 - Route 31 @ Lakeshore East - 5-12-22
Site Code : 00000004
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	Lakeshore Road East Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	3	0	10	0	13	10	82	0	0	92	0	0	0	0	0	5	99	9	0	113	218
04:45 PM	6	0	8	0	14	9	72	0	0	81	0	0	0	0	0	0	113	9	0	122	217
05:00 PM	0	0	9	0	9	10	75	0	0	85	0	0	0	0	0	0	88	14	0	102	196
05:15 PM	3	0	9	0	12	12	89	0	0	101	0	0	0	0	0	0	75	8	0	83	196
Total Volume	12	0	36	0	48	41	318	0	0	359	0	0	0	0	0	5	375	40	0	420	827
% App. Total	25	0	75	0		11.4	88.6	0	0		0	0	0	0		1.2	89.3	9.5	0		
PHF	.500	.000	.900	.000	.857	.854	.893	.000	.000	.889	.000	.000	.000	.000	.000	.250	.830	.714	.000	.861	.948



File Name : 4 - Route 31 @ Lakeshore East - 5-12-22
Site Code : 00000004
Start Date : 5/12/2022
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Groups Printed- Peds

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	

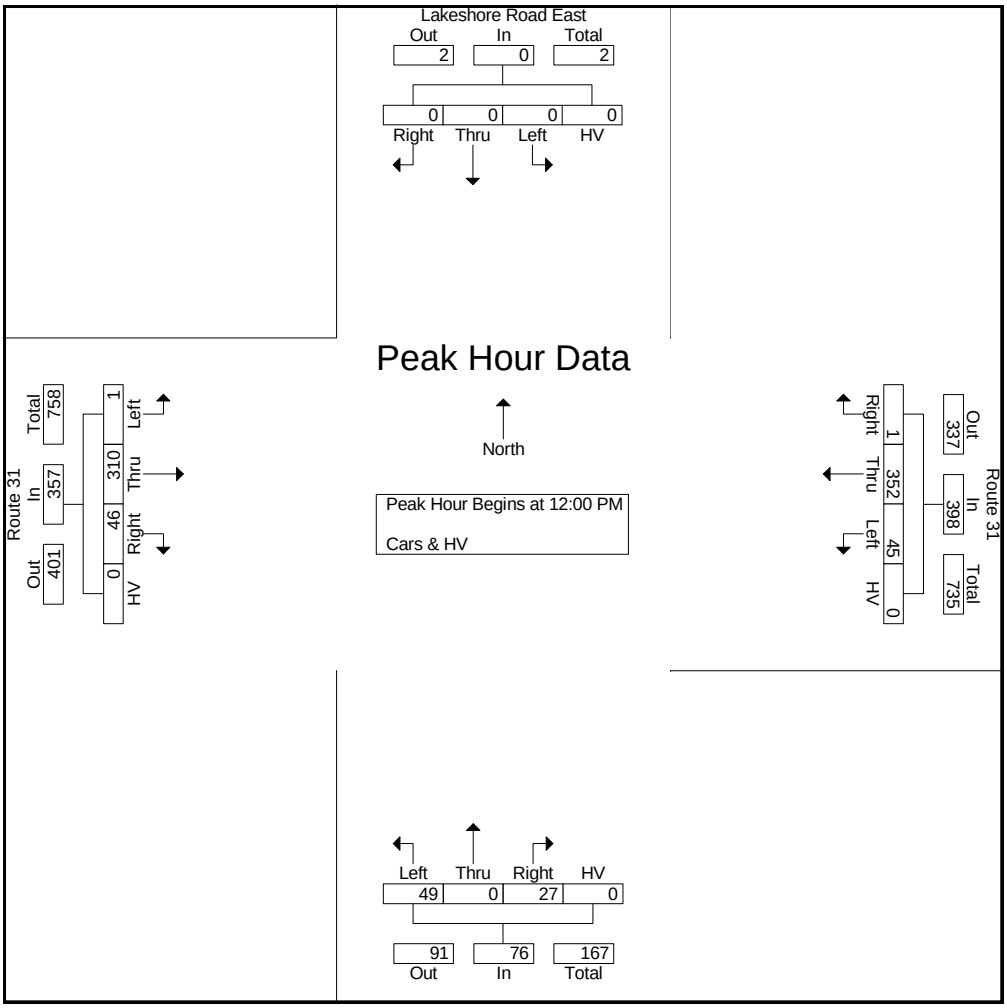
File Name : 4 - Route 31 @ Lakeshore East - 5-14-22
Site Code : 00000004
Start Date : 5/14/2022
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Groups Printed- Cars & HV

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	0	0	0	0	0	85	9	2	5	0	12	0	9	65	0	1	188
11:15 AM	0	0	0	0	0	76	7	2	11	0	12	0	15	88	0	0	211
11:30 AM	0	0	0	0	0	94	8	0	5	0	9	0	10	71	0	0	197
11:45 AM	0	0	0	0	0	90	16	0	6	0	19	0	15	65	0	0	211
Total	0	0	0	0	0	345	40	4	27	0	52	0	49	289	0	1	807
12:00 PM	0	0	0	0	1	81	6	0	7	0	12	0	9	60	1	0	177
12:15 PM	0	0	0	0	0	84	16	0	5	0	13	0	11	90	0	0	219
12:30 PM	0	0	0	0	0	86	12	0	8	0	8	0	10	84	0	0	208
12:45 PM	0	0	0	0	0	101	11	0	7	0	16	0	16	76	0	0	227
Total	0	0	0	0	1	352	45	0	27	0	49	0	46	310	1	0	831
Grand Total	0	0	0	0	1	697	85	4	54	0	101	0	95	599	1	1	1638
Apprch %	0	0	0	0	0.1	88.6	10.8	0.5	34.8	0	65.2	0	13.6	86.1	0.1	0.1	
Total %	0	0	0	0	0.1	42.6	5.2	0.2	3.3	0	6.2	0	5.8	36.6	0.1	0.1	

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	Lakeshore Road East Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	1	81	6	0	88	7	0	12	0	19	9	60	1	0	70	177
12:15 PM	0	0	0	0	0	0	84	16	0	100	5	0	13	0	18	11	90	0	0	101	219
12:30 PM	0	0	0	0	0	0	86	12	0	98	8	0	8	0	16	10	84	0	0	94	208
12:45 PM	0	0	0	0	0	0	101	11	0	112	7	0	16	0	23	16	76	0	0	92	227
Total Volume	0	0	0	0	0	1	352	45	0	398	27	0	49	0	76	46	310	1	0	357	831
% App. Total	0	0	0	0		0.3	88.4	11.3	0		35.5	0	64.5	0		12.9	86.8	0.3	0		
PHF	.000	.000	.000	.000	.000	.250	.871	.703	.000	.888	.844	.000	.766	.000	.826	.719	.861	.250	.000	.884	.915



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Groups Printed- Peds

	Lakeshore Road East Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

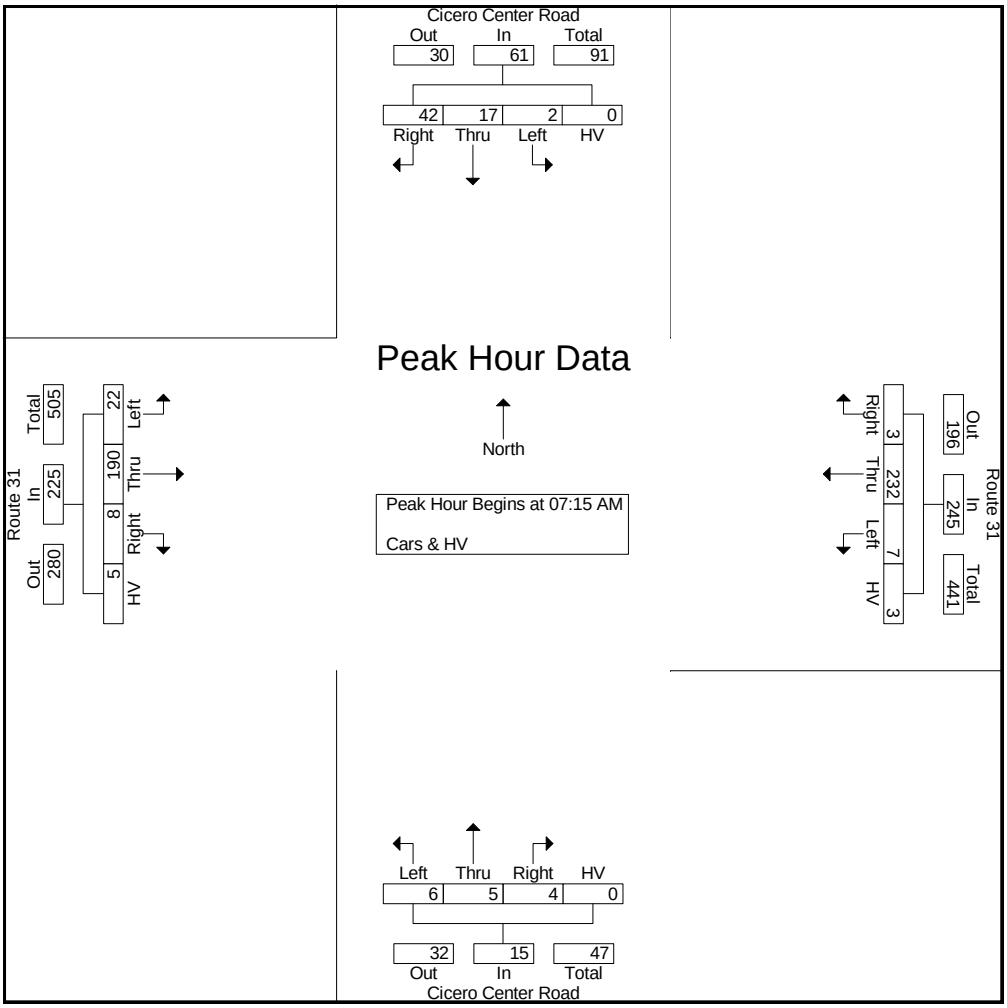
File Name : 5 - Route 31 @ Cicero Center - 5-12-22
Site Code : 00000005
Start Date : 5/12/2022
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Groups Printed- Cars & HV

	Cicero Center Road Southbound				Route 31 Westbound				Cicero Center Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	11	2	4	0	1	49	2	0	0	0	0	0	2	31	1	0	103
07:15 AM	15	5	1	0	0	67	0	0	2	2	0	0	2	48	4	1	147
07:30 AM	9	1	0	0	1	58	2	0	0	1	4	0	3	46	6	0	131
07:45 AM	10	7	1	0	2	58	4	1	2	1	2	0	2	53	2	2	147
Total	45	15	6	0	4	232	8	1	4	4	6	0	9	178	13	3	528
08:00 AM	8	4	0	0	0	49	1	2	0	1	0	0	1	43	10	2	121
08:15 AM	9	2	0	0	3	44	0	0	2	1	2	0	1	38	6	1	109
08:30 AM	6	1	0	0	1	57	1	0	0	1	3	0	3	47	8	0	128
08:45 AM	6	3	0	0	0	56	3	0	0	2	2	0	3	32	7	1	115
Total	29	10	0	0	4	206	5	2	2	5	7	0	8	160	31	4	473
03:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00 PM	8	4	2	0	5	86	1	0	2	5	4	0	5	76	11	0	209
04:15 PM	2	5	3	0	4	80	1	1	1	7	5	0	4	86	16	0	215
04:30 PM	10	0	1	0	4	71	1	0	0	9	4	0	6	107	13	0	226
04:45 PM	6	3	3	0	0	79	1	0	2	11	3	0	5	113	15	0	241
Total	26	12	9	0	13	316	4	1	5	32	16	0	20	382	55	0	891
05:00 PM	9	2	3	0	0	67	0	0	1	10	4	0	5	85	12	1	199
05:15 PM	4	2	2	0	6	89	3	0	2	7	5	0	6	78	11	0	215
05:30 PM	12	4	2	1	4	80	0	0	3	4	3	0	4	88	8	0	213
05:45 PM	4	1	4	0	4	71	1	0	4	4	4	0	2	71	11	0	181
Total	29	9	11	1	14	307	4	0	10	25	16	0	17	322	42	1	808
Grand Total	129	46	26	1	35	1061	22	4	21	66	45	0	54	1042	141	8	2701
Apprch %	63.9	22.8	12.9	0.5	3.1	94.6	2	0.4	15.9	50	34.1	0	4.3	83.7	11.3	0.6	
Total %	4.8	1.7	1	0	1.3	39.3	0.8	0.1	0.8	2.4	1.7	0	2	38.6	5.2	0.3	

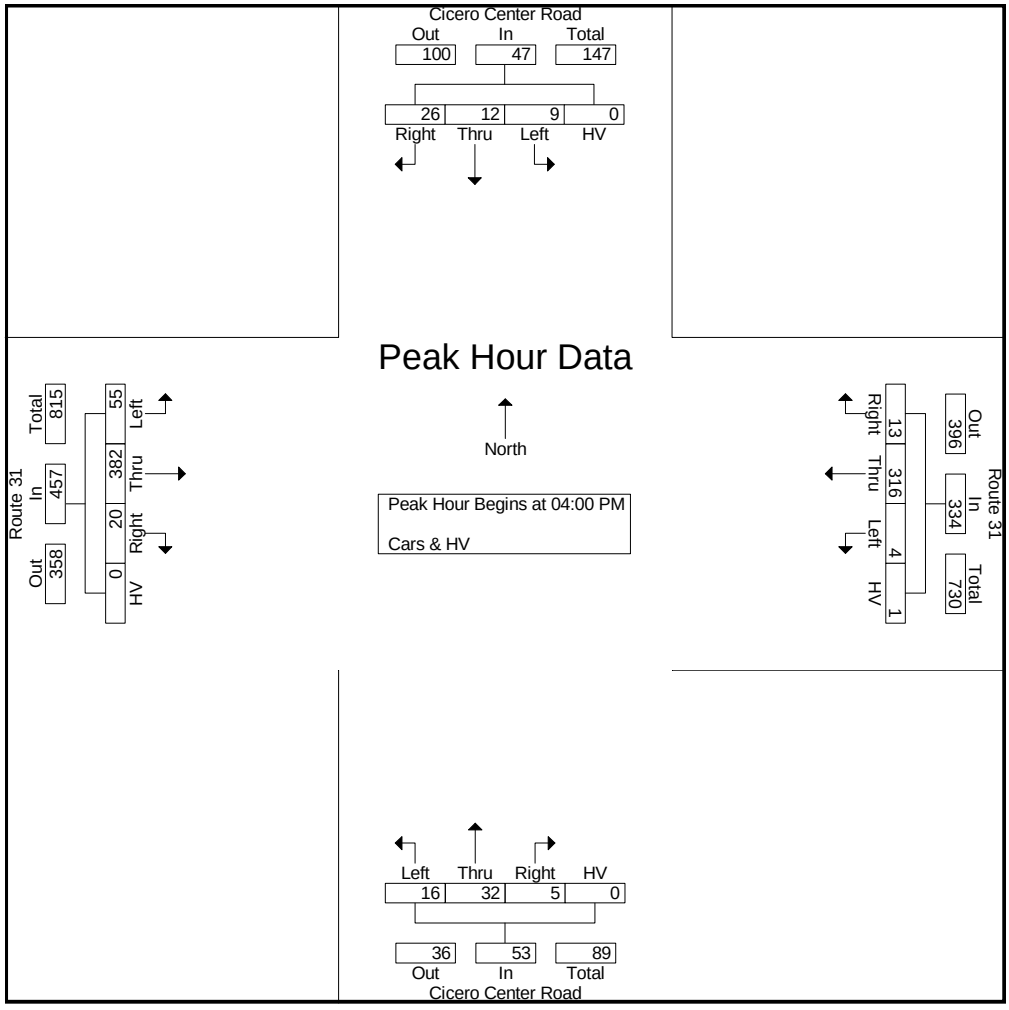
File Name : 5 - Route 31 @ Cicero Center - 5-12-22
Site Code : 00000005
Start Date : 5/12/2022
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	Cicero Center Road Southbound					Route 31 Westbound					Cicero Center Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	15	5	1	0	21	0	67	0	0	67	2	2	0	0	4	2	48	4	1	55	147
07:30 AM	9	1	0	0	10	1	58	2	0	61	0	1	4	0	5	3	46	6	0	55	131
07:45 AM	10	7	1	0	18	2	58	4	1	65	2	1	2	0	5	2	53	2	2	59	147
08:00 AM	8	4	0	0	12	0	49	1	2	52	0	1	0	0	1	1	43	10	2	56	121
Total Volume	42	17	2	0	61	3	232	7	3	245	4	5	6	0	15	8	190	22	5	225	546
% App. Total	68.9	27.9	3.3	0		1.2	94.7	2.9	1.2		26.7	33.3	40	0		3.6	84.4	9.8	2.2		
PHF	.700	.607	.500	.000	.726	.375	.866	.438	.375	.914	.500	.625	.375	.000	.750	.667	.896	.550	.625	.953	.929



File Name : 5 - Route 31 @ Cicero Center - 5-12-22
Site Code : 00000005
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	Cicero Center Road Southbound					Route 31 Westbound					Cicero Center Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	8	4	2	0	14	5	86	1	0	92	2	5	4	0	11	5	76	11	0	92	209
04:15 PM	2	5	3	0	10	4	80	1	1	86	1	7	5	0	13	4	86	16	0	106	215
04:30 PM	10	0	1	0	11	4	71	1	0	76	0	9	4	0	13	6	107	13	0	126	226
04:45 PM	6	3	3	0	12	0	79	1	0	80	2	11	3	0	16	5	113	15	0	133	241
Total Volume	26	12	9	0	47	13	316	4	1	334	5	32	16	0	53	20	382	55	0	457	891
% App. Total	55.3	25.5	19.1	0		3.9	94.6	1.2	0.3		9.4	60.4	30.2	0		4.4	83.6	12	0		
PHF	.650	.600	.750	.000	.839	.650	.919	1.00	.250	.908	.625	.727	.800	.000	.828	.833	.845	.859	.000	.859	.924



File Name : 5 - Route 31 @ Cicero Center - 5-12-22
Site Code : 00000005
Start Date : 5/12/2022
Page No : 1

Groups Printed- Peds

	Cicero Center Road Southbound				Route 31 Westbound				Cicero Center Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
08:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	
Total %	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	

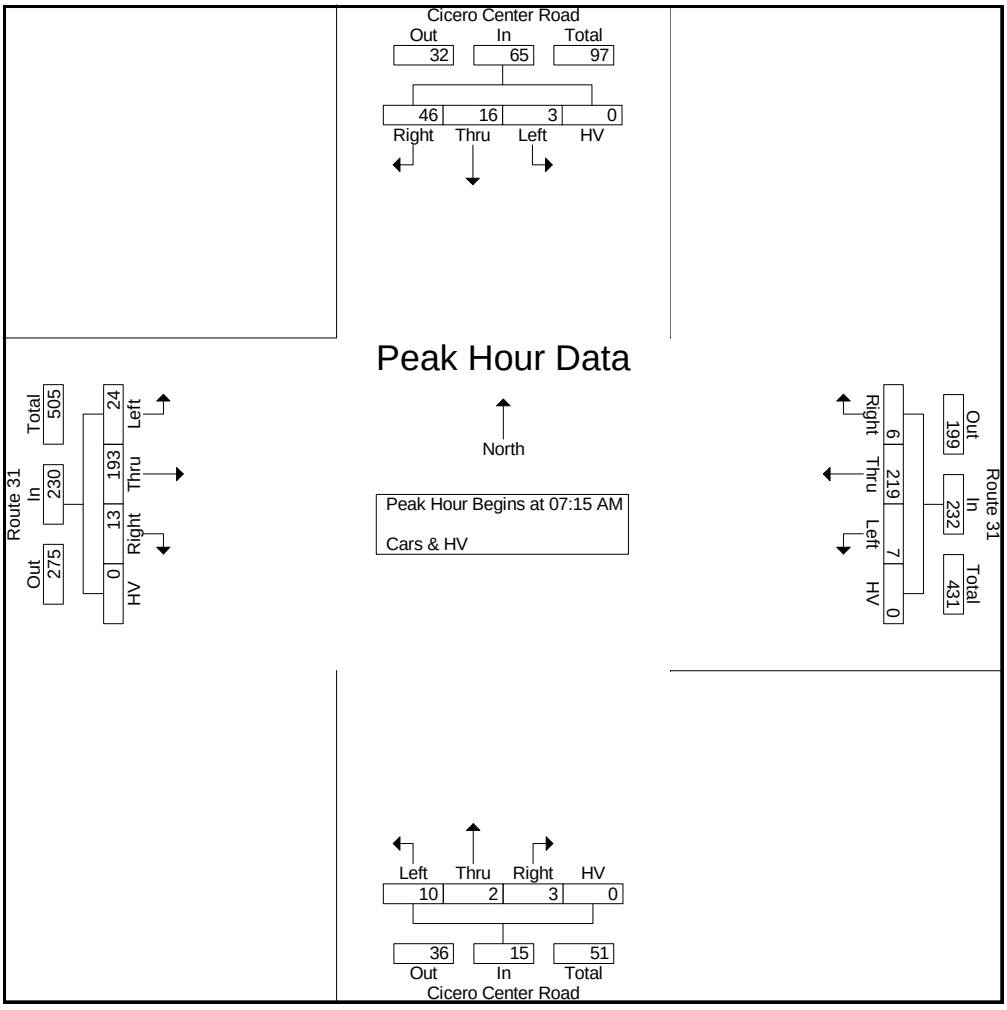
File Name : 5 - Route 31 @ Cicero Center - 5-19-22
Site Code : 00000005
Start Date : 5/19/2022
Page No : 1

Groups Printed- Cars & HV

	Cicero Center Road Southbound				Route 31 Westbound				Cicero Center Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	12	4	3	0	3	44	3	0	0	1	0	0	2	35	3	0	110
07:15 AM	15	1	3	0	1	58	3	0	0	0	0	0	1	49	6	0	137
07:30 AM	13	10	0	0	1	63	1	0	2	1	4	0	4	41	4	0	144
07:45 AM	10	2	0	0	3	54	3	0	1	1	4	0	5	52	4	0	139
Total	50	17	6	0	8	219	10	0	3	3	8	0	12	177	17	0	530
08:00 AM	8	3	0	0	1	44	0	0	0	0	2	0	3	51	10	0	122
08:15 AM	3	3	2	0	0	37	0	0	1	3	0	0	3	36	6	0	94
08:30 AM	6	5	0	0	1	40	0	0	0	3	3	0	2	45	12	0	117
08:45 AM	6	4	2	0	0	61	5	0	1	3	3	0	6	48	2	0	141
Total	23	15	4	0	2	182	5	0	2	9	8	0	14	180	30	0	474
04:00 PM	8	4	2	0	3	86	3	0	2	3	2	0	6	75	10	0	204
04:15 PM	4	6	3	0	2	61	1	0	4	7	4	0	7	87	16	0	202
04:30 PM	7	6	4	0	2	87	1	0	4	6	6	0	5	99	17	0	244
04:45 PM	9	1	3	0	1	90	2	0	0	4	2	0	3	99	12	0	226
Total	28	17	12	0	8	324	7	0	10	20	14	0	21	360	55	0	876
05:00 PM	10	1	1	0	4	80	1	0	3	12	5	0	4	75	14	0	210
05:15 PM	8	2	3	0	5	89	2	0	1	5	2	0	6	101	18	0	242
05:30 PM	7	3	1	0	5	67	0	0	0	4	5	0	1	92	16	0	201
05:45 PM	6	2	1	0	3	68	0	0	0	2	4	0	8	84	13	0	191
Total	31	8	6	0	17	304	3	0	4	23	16	0	19	352	61	0	844
Grand Total	132	57	28	0	35	1029	25	0	19	55	46	0	66	1069	163	0	2724
Apprch %	60.8	26.3	12.9	0	3.2	94.5	2.3	0	15.8	45.8	38.3	0	5.1	82.4	12.6	0	
Total %	4.8	2.1	1	0	1.3	37.8	0.9	0	0.7	2	1.7	0	2.4	39.2	6	0	

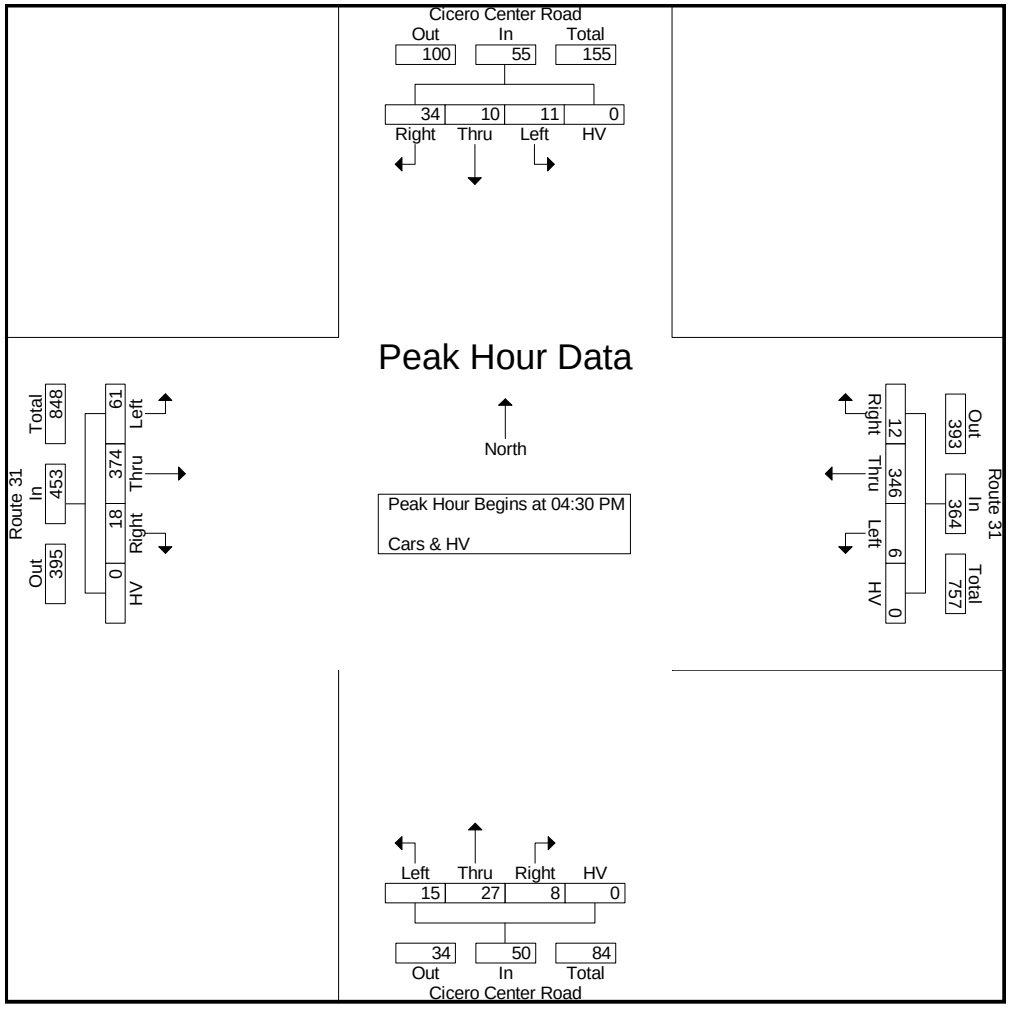
File Name : 5 - Route 31 @ Cicero Center - 5-19-22
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	Cicero Center Road Southbound					Route 31 Westbound					Cicero Center Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	15	1	3	0	19	1	58	3	0	62	0	0	0	0	0	1	49	6	0	56	137
07:30 AM	13	10	0	0	23	1	63	1	0	65	2	1	4	0	7	4	41	4	0	49	144
07:45 AM	10	2	0	0	12	3	54	3	0	60	1	1	4	0	6	5	52	4	0	61	139
08:00 AM	8	3	0	0	11	1	44	0	0	45	0	0	2	0	2	3	51	10	0	64	122
Total Volume	46	16	3	0	65	6	219	7	0	232	3	2	10	0	15	13	193	24	0	230	542
% App. Total	70.8	24.6	4.6	0		2.6	94.4	3	0		20	13.3	66.7	0		5.7	83.9	10.4	0		
PHF	.767	.400	.250	.000	.707	.500	.869	.583	.000	.892	.375	.500	.625	.000	.536	.650	.928	.600	.000	.898	.941



File Name : 5 - Route 31 @ Cicero Center - 5-19-22
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	Cicero Center Road Southbound					Route 31 Westbound					Cicero Center Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	7	6	4	0	17	2	87	1	0	90	4	6	6	0	16	5	99	17	0	121	244
04:45 PM	9	1	3	0	13	1	90	2	0	93	0	4	2	0	6	3	99	12	0	114	226
05:00 PM	10	1	1	0	12	4	80	1	0	85	3	12	5	0	20	4	75	14	0	93	210
05:15 PM	8	2	3	0	13	5	89	2	0	96	1	5	2	0	8	6	101	18	0	125	242
Total Volume	34	10	11	0	55	12	346	6	0	364	8	27	15	0	50	18	374	61	0	453	922
% App. Total	61.8	18.2	20	0		3.3	95.1	1.6	0		16	54	30	0		4	82.6	13.5	0		
PHF	.850	.417	.688	.000	.809	.600	.961	.750	.000	.948	.500	.563	.625	.000	.625	.750	.926	.847	.000	.906	.945



File Name : 5 - Route 31 @ Cicero Center - 5-19-22
Site Code : 00000005
Start Date : 5/19/2022
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Groups Printed- Peds

	Cicero Center Road Southbound				Route 31 Westbound				Cicero Center Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
07:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3
Total	0	0	0	0	0	1	0	0	0	0	0	0	0	8	0	0	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
08:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	4
08:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3
08:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	5	0	0	0	0	0	0	0	6	0	0	11
04:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	4
04:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	0	0	0	0	0	0	0	1	1	0	6
05:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Grand Total	0	0	0	0	0	15	0	0	0	0	0	0	0	15	1	0	31
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	93.8	6.2	0	
Total %	0	0	0	0	0	48.4	0	0	0	0	0	0	0	48.4	3.2	0	

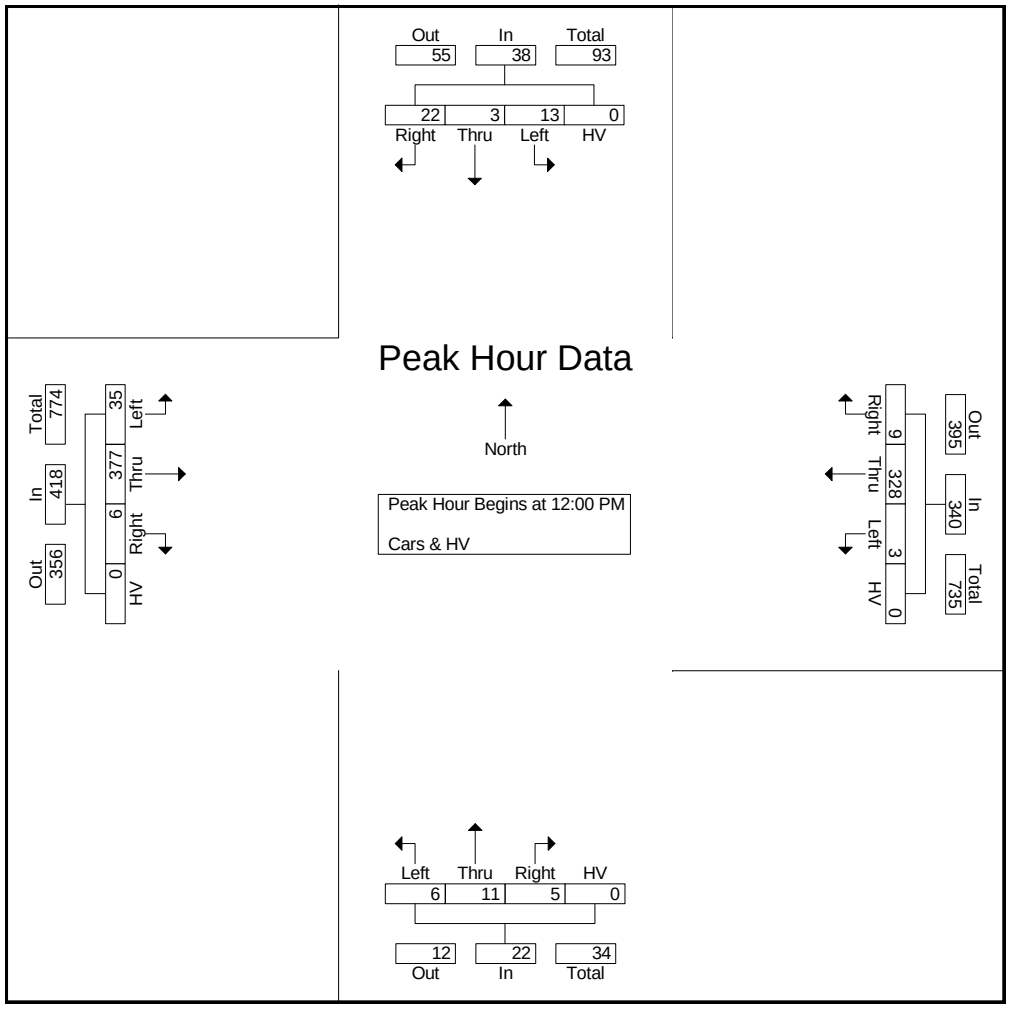
File Name : 5 - Route 31 @ Cicero Center - 5-21-22
Site Code : 00000005
Start Date : 5/21/2022
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Groups Printed- Cars & HV

	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	8	3	3	0	2	60	2	0	0	1	4	0	3	82	6	0	174
11:15 AM	11	2	2	0	1	72	1	0	0	3	2	0	1	84	5	0	184
11:30 AM	13	0	1	0	2	68	0	0	1	5	0	0	3	93	9	0	195
11:45 AM	7	0	4	0	0	84	0	0	1	0	2	0	3	84	13	0	198
Total	39	5	10	0	5	284	3	0	2	9	8	0	10	343	33	0	751
12:00 PM	4	0	3	0	2	95	1	0	1	2	2	0	2	97	11	0	220
12:15 PM	6	1	2	0	1	69	1	0	2	3	2	0	1	101	8	0	197
12:30 PM	5	1	4	0	0	80	1	0	1	1	0	0	2	85	11	0	191
12:45 PM	7	1	4	0	6	84	0	0	1	5	2	0	1	94	5	0	210
Total	22	3	13	0	9	328	3	0	5	11	6	0	6	377	35	0	818
Grand Total	61	8	23	0	14	612	6	0	7	20	14	0	16	720	68	0	1569
Apprch %	66.3	8.7	25	0	2.2	96.8	0.9	0	17.1	48.8	34.1	0	2	89.6	8.5	0	
Total %	3.9	0.5	1.5	0	0.9	39	0.4	0	0.4	1.3	0.9	0	1	45.9	4.3	0	

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	Southbound					Westbound					Northbound					Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	4	0	3	0	7	2	95	1	0	98	1	2	2	0	5	2	97	11	0	110	220
12:15 PM	6	1	2	0	9	1	69	1	0	71	2	3	2	0	7	1	101	8	0	110	197
12:30 PM	5	1	4	0	10	0	80	1	0	81	1	1	0	0	2	2	85	11	0	98	191
12:45 PM	7	1	4	0	12	6	84	0	0	90	1	5	2	0	8	1	94	5	0	100	210
Total Volume	22	3	13	0	38	9	328	3	0	340	5	11	6	0	22	6	377	35	0	418	818
% App. Total	57.9	7.9	34.2	0		2.6	96.5	0.9	0		22.7	50	27.3	0		1.4	90.2	8.4	0		
PHF	.786	.750	.813	.000	.792	.375	.863	.750	.000	.867	.625	.550	.750	.000	.688	.750	.933	.795	.000	.950	.930



File Name : 5 - Route 31 @ Cicero Center - 5-21-22
Site Code : 00000005
Start Date : 5/21/2022
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Groups Printed- Peds

	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Grand Total	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Apprch %	0	0	100	0	0	0	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	50	0	0	0	0	0	0	0	0	0	0	50	0	0	

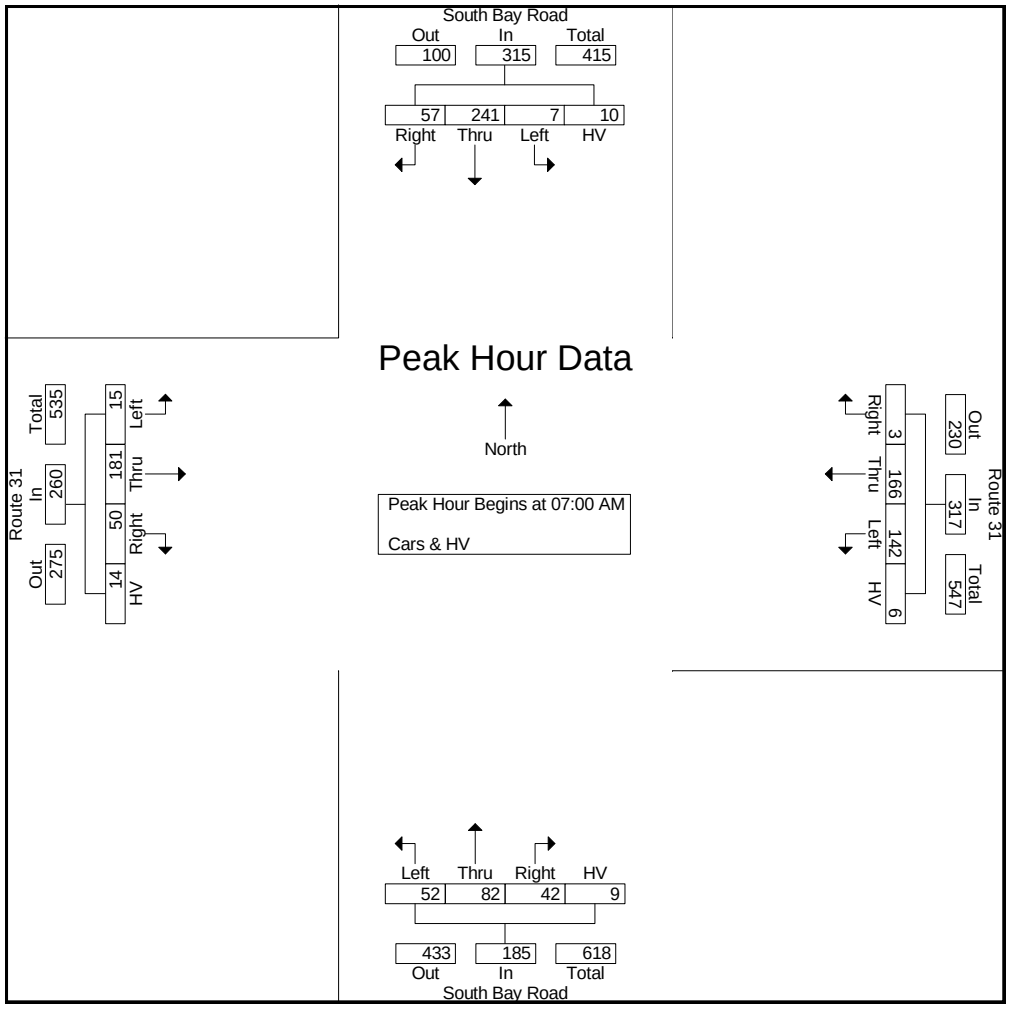
File Name : 6 - Route 31 @ South Bay - 5-11-22
Site Code : 00000006
Start Date : 5/11/2022
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Groups Printed- Cars & HV

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	16	61	3	2	0	53	27	3	4	12	4	1	6	46	1	5	244
07:15 AM	16	69	2	0	0	41	37	0	9	17	27	5	17	46	5	5	296
07:30 AM	15	48	1	0	1	29	41	1	14	22	14	1	18	46	6	2	259
07:45 AM	10	63	1	8	2	43	37	2	15	31	7	2	9	43	3	2	278
Total	57	241	7	10	3	166	142	6	42	82	52	9	50	181	15	14	1077
08:00 AM	6	58	2	1	0	33	19	2	24	24	7	5	10	39	4	3	237
08:15 AM	6	41	2	1	1	40	22	1	20	31	13	5	8	51	6	4	252
08:30 AM	11	45	1	2	2	46	19	5	25	21	5	5	5	41	8	1	242
08:45 AM	5	38	4	0	2	54	21	0	10	22	13	5	8	43	4	3	232
Total	28	182	9	4	5	173	81	8	79	98	38	20	31	174	22	11	963
04:00 PM	13	42	2	3	1	63	28	3	37	48	16	0	20	85	14	3	378
04:15 PM	9	44	5	2	4	79	30	2	38	51	12	1	9	82	8	3	379
04:30 PM	7	42	2	2	0	84	23	2	36	55	12	0	21	96	8	0	390
04:45 PM	9	40	2	0	6	67	20	1	36	76	11	0	23	78	21	0	390
Total	38	168	11	7	11	293	101	8	147	230	51	1	73	341	51	6	1537
05:00 PM	9	37	2	1	4	69	27	1	35	65	15	0	25	100	10	0	400
05:15 PM	13	39	3	0	2	72	27	0	41	84	17	1	17	99	9	0	424
05:30 PM	13	38	2	1	6	70	22	0	42	75	12	0	21	98	10	0	410
05:45 PM	9	35	2	1	1	70	22	0	28	42	14	0	16	111	12	0	363
Total	44	149	9	3	13	281	98	1	146	266	58	1	79	408	41	0	1597
Grand Total	167	740	36	24	32	913	422	23	414	676	199	31	233	1104	129	31	5174
Apprch %	17.3	76.5	3.7	2.5	2.3	65.7	30.4	1.7	31.4	51.2	15.1	2.3	15.6	73.7	8.6	2.1	
Total %	3.2	14.3	0.7	0.5	0.6	17.6	8.2	0.4	8	13.1	3.8	0.6	4.5	21.3	2.5	0.6	

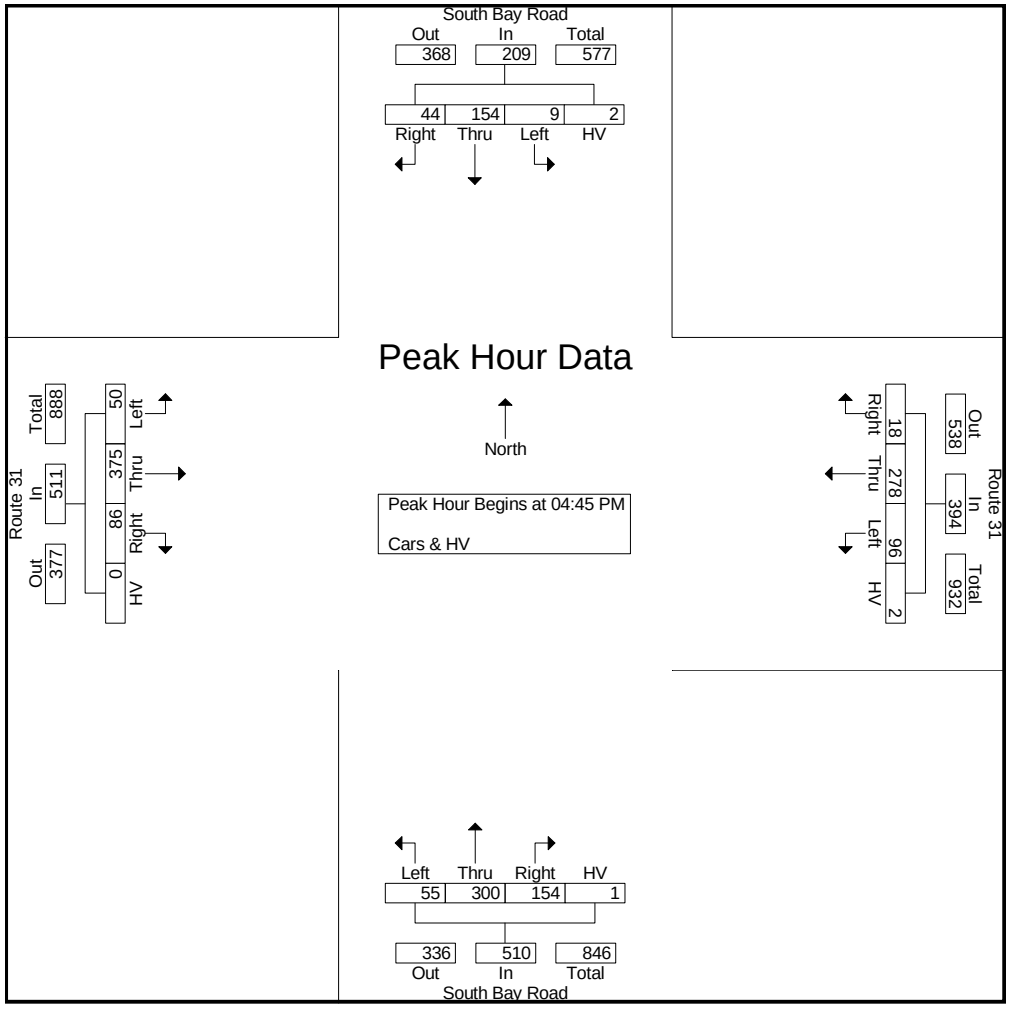
File Name : 6 - Route 31 @ South Bay - 5-11-22
Site Code : 00000006
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	South Bay Road Southbound					Route 31 Westbound					South Bay Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	16	61	3	2	82	0	53	27	3	83	4	12	4	1	21	6	46	1	5	58	244
07:15 AM	16	69	2	0	87	0	41	37	0	78	9	17	27	5	58	17	46	5	5	73	296
07:30 AM	15	48	1	0	64	1	29	41	1	72	14	22	14	1	51	18	46	6	2	72	259
07:45 AM	10	63	1	8	82	2	43	37	2	84	15	31	7	2	55	9	43	3	2	57	278
Total Volume	57	241	7	10	315	3	166	142	6	317	42	82	52	9	185	50	181	15	14	260	1077
% App. Total	18.1	76.5	2.2	3.2		0.9	52.4	44.8	1.9		22.7	44.3	28.1	4.9		19.2	69.6	5.8	5.4		
PHF	.891	.873	.583	.313	.905	.375	.783	.866	.500	.943	.700	.661	.481	.450	.797	.694	.984	.625	.700	.890	.910



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	South Bay Road Southbound					Route 31 Westbound					South Bay Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	9	40	2	0	51	6	67	20	1	94	36	76	11	0	123	23	78	21	0	122	390
05:00 PM	9	37	2	1	49	4	69	27	1	101	35	65	15	0	115	25	100	10	0	135	400
05:15 PM	13	39	3	0	55	2	72	27	0	101	41	84	17	1	143	17	99	9	0	125	424
05:30 PM	13	38	2	1	54	6	70	22	0	98	42	75	12	0	129	21	98	10	0	129	410
Total Volume	44	154	9	2	209	18	278	96	2	394	154	300	55	1	510	86	375	50	0	511	1624
% App. Total	21.1	73.7	4.3	1		4.6	70.6	24.4	0.5		30.2	58.8	10.8	0.2		16.8	73.4	9.8	0		
PHF	.846	.963	.750	.500	.950	.750	.965	.889	.500	.975	.917	.893	.809	.250	.892	.860	.938	.595	.000	.946	.958



File Name : 6 - Route 31 @ South Bay - 5-11-22
Site Code : 00000006
Start Date : 5/11/2022
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Groups Printed- Peds

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	100	
Total %	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	50	

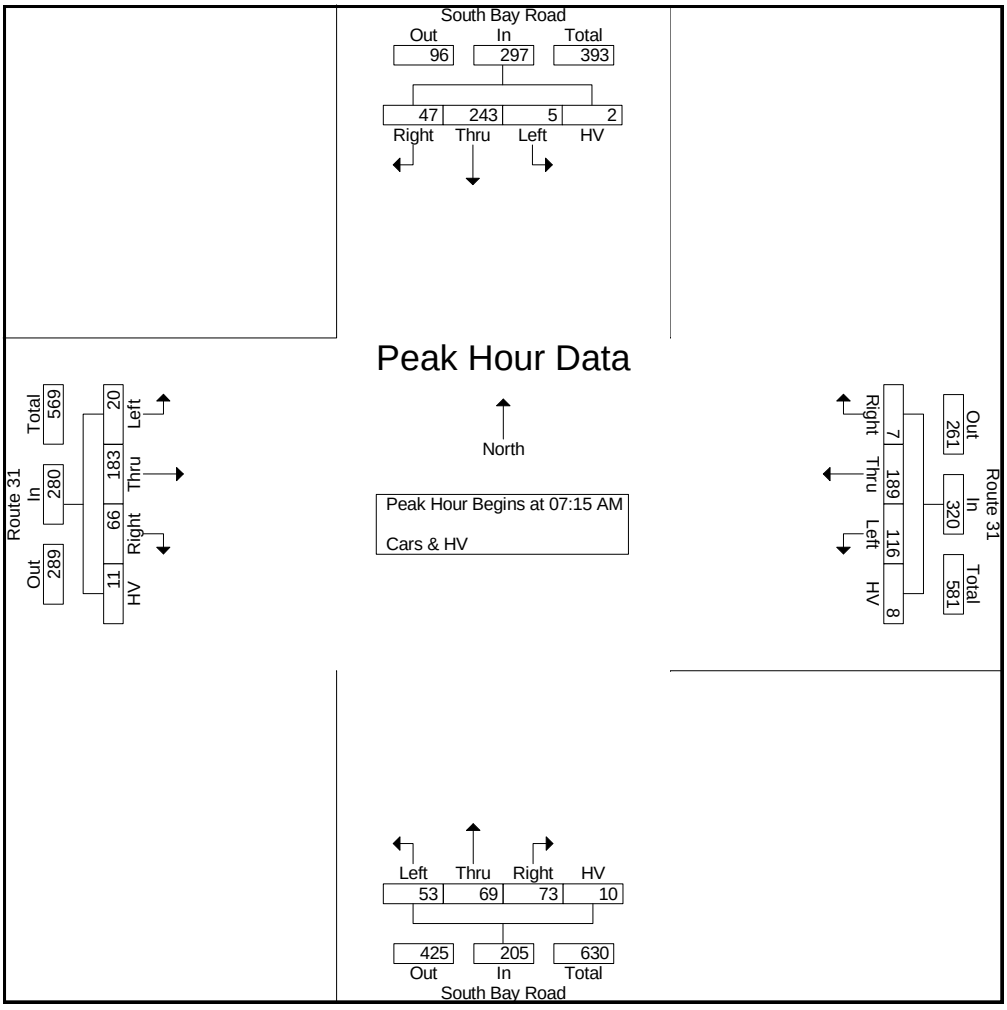
File Name : 6 - Route 31 @ South Bay - 5-19-22
Site Code : 00000006
Start Date : 5/19/2022
Page No : 1

Groups Printed- Cars & HV

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	13	51	2	0	1	42	23	0	8	8	10	4	9	39	3	2	215
07:15 AM	13	55	0	1	2	55	27	2	10	10	19	3	21	48	1	0	267
07:30 AM	18	63	0	0	0	54	32	3	24	14	16	4	20	45	5	2	300
07:45 AM	6	74	4	0	3	34	35	1	19	20	7	2	19	46	7	4	281
Total	50	243	6	1	6	185	117	6	61	52	52	13	69	178	16	8	1063
08:00 AM	10	51	1	1	2	46	22	2	20	25	11	1	6	44	7	5	254
08:15 AM	9	45	2	1	0	21	19	6	22	29	10	1	13	26	5	5	214
08:30 AM	5	37	4	0	0	29	26	2	14	24	7	5	8	48	3	4	216
08:45 AM	8	24	1	0	1	50	21	1	14	23	8	2	3	41	10	2	209
Total	32	157	8	2	3	146	88	11	70	101	36	9	30	159	25	16	893
04:00 PM	10	49	1	6	3	74	25	2	37	49	15	1	30	74	14	8	398
04:15 PM	11	31	3	1	2	59	25	9	46	49	15	6	13	99	14	6	389
04:30 PM	9	31	2	1	4	76	26	5	49	54	16	3	20	97	20	6	419
04:45 PM	7	23	0	1	3	84	35	8	29	64	14	3	24	69	10	4	378
Total	37	134	6	9	12	293	111	24	161	216	60	13	87	339	58	24	1584
05:00 PM	13	44	1	2	3	57	29	6	39	59	18	4	24	88	10	6	403
05:15 PM	13	30	1	1	4	74	38	4	54	70	22	4	30	103	10	2	460
05:30 PM	13	36	5	6	4	67	19	4	51	56	17	0	17	91	14	1	401
05:45 PM	8	36	2	1	1	53	28	2	43	48	10	3	13	98	8	1	355
Total	47	146	9	10	12	251	114	16	187	233	67	11	84	380	42	10	1619
Grand Total	166	680	29	22	33	875	430	57	479	602	215	46	270	1056	141	58	5159
Apprch %	18.5	75.8	3.2	2.5	2.4	62.7	30.8	4.1	35.7	44.9	16	3.4	17.7	69.2	9.2	3.8	
Total %	3.2	13.2	0.6	0.4	0.6	17	8.3	1.1	9.3	11.7	4.2	0.9	5.2	20.5	2.7	1.1	

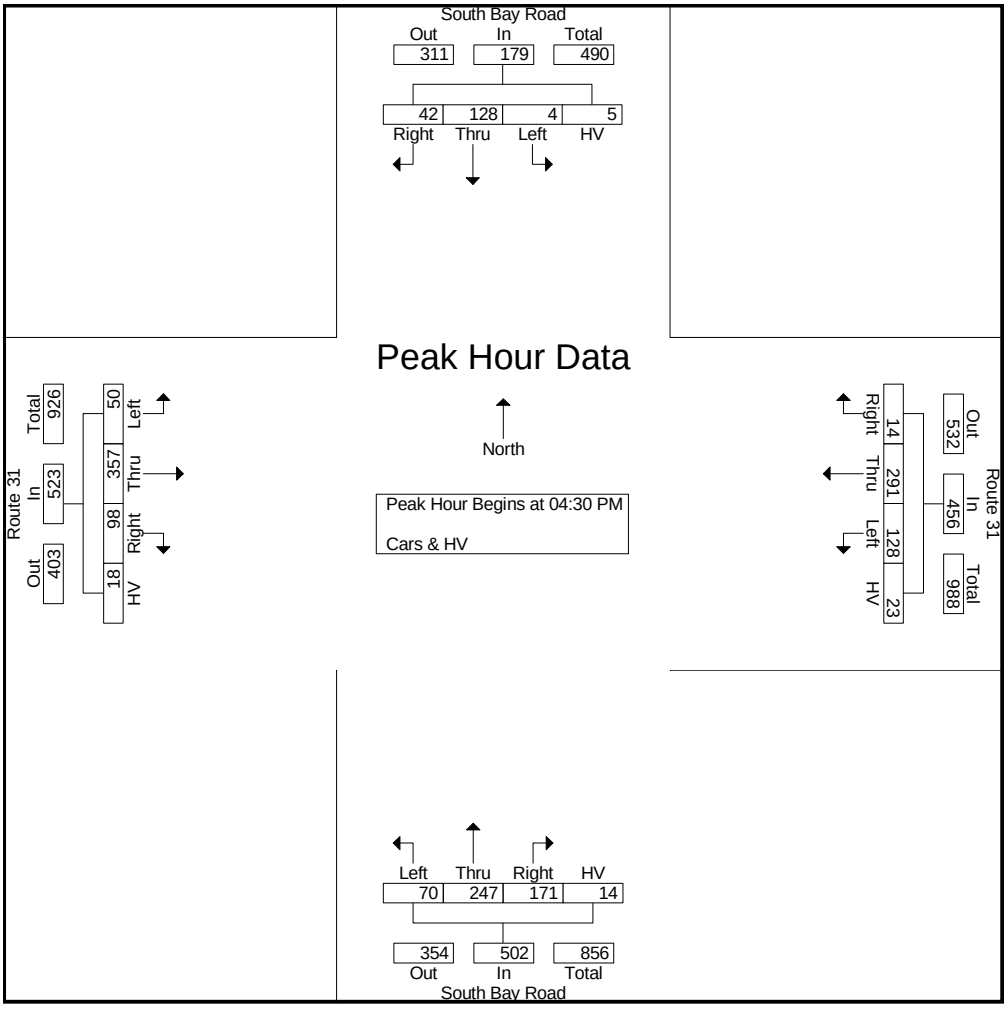
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	South Bay Road Southbound					Route 31 Westbound					South Bay Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	13	55	0	1	69	2	55	27	2	86	10	10	19	3	42	21	48	1	0	70	267
07:30 AM	18	63	0	0	81	0	54	32	3	89	24	14	16	4	58	20	45	5	2	72	300
07:45 AM	6	74	4	0	84	3	34	35	1	73	19	20	7	2	48	19	46	7	4	76	281
08:00 AM	10	51	1	1	63	2	46	22	2	72	20	25	11	1	57	6	44	7	5	62	254
Total Volume	47	243	5	2	297	7	189	116	8	320	73	69	53	10	205	66	183	20	11	280	1102
% App. Total	15.8	81.8	1.7	0.7		2.2	59.1	36.2	2.5		35.6	33.7	25.9	4.9		23.6	65.4	7.1	3.9		
PHF	.653	.821	.313	.500	.884	.583	.859	.829	.667	.899	.760	.690	.697	.625	.884	.786	.953	.714	.550	.921	.918



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Start Time	South Bay Road Southbound					Route 31 Westbound					South Bay Road Northbound					Route 31 Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	9	31	2	1	43	4	76	26	5	111	49	54	16	3	122	20	97	20	6	143	419
04:45 PM	7	23	0	1	31	3	84	35	8	130	29	64	14	3	110	24	69	10	4	107	378
05:00 PM	13	44	1	2	60	3	57	29	6	95	39	59	18	4	120	24	88	10	6	128	403
05:15 PM	13	30	1	1	45	4	74	38	4	120	54	70	22	4	150	30	103	10	2	145	460
Total Volume	42	128	4	5	179	14	291	128	23	456	171	247	70	14	502	98	357	50	18	523	1660
% App. Total	23.5	71.5	2.2	2.8		3.1	63.8	28.1	5		34.1	49.2	13.9	2.8		18.7	68.3	9.6	3.4		
PHF	.808	.727	.500	.625	.746	.875	.866	.842	.719	.877	.792	.882	.795	.875	.837	.817	.867	.625	.750	.902	.902



File Name : 6 - Route 31 @ South Bay - 5-19-22
Site Code : 00000006
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Groups Printed- Peds

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

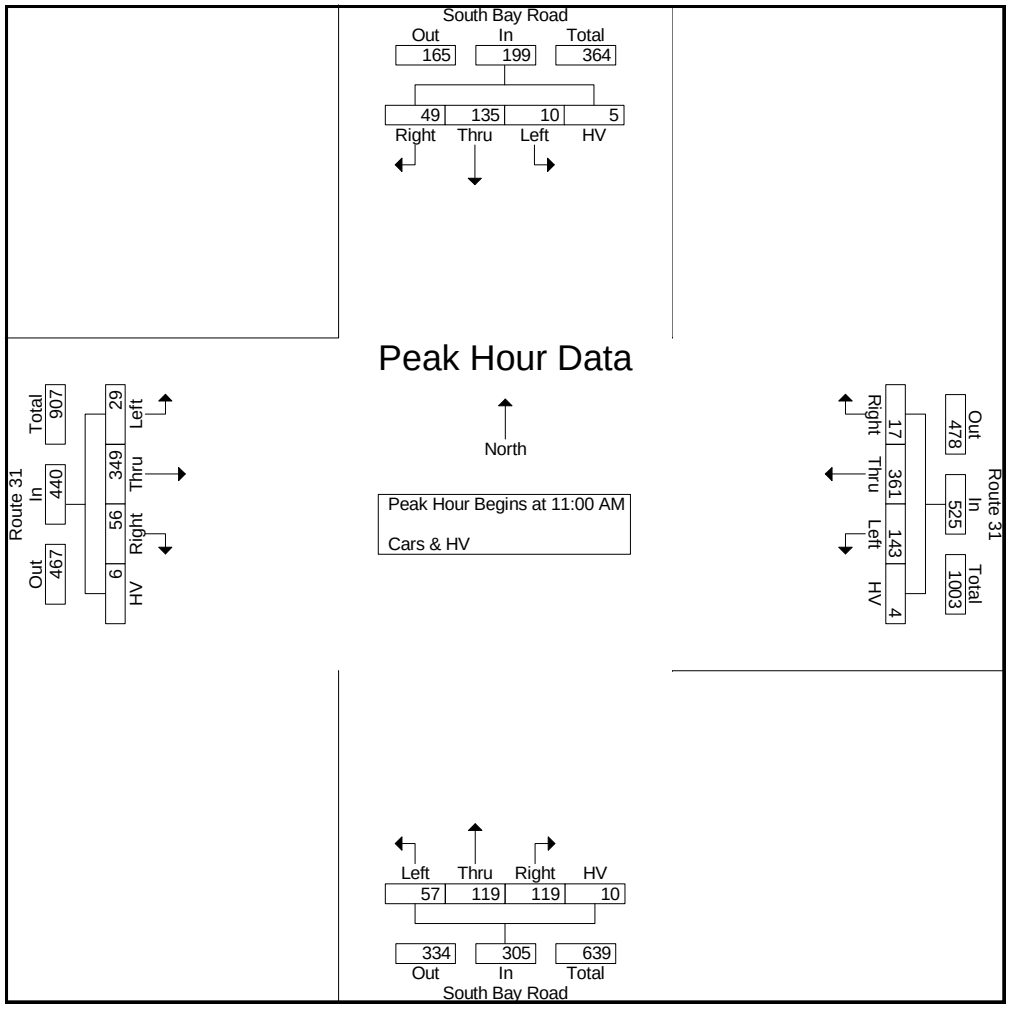
File Name : 6 - Route 31 @ South Bay - 5-14-22
Site Code : 00000006
Start Date : 5/14/2022
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Groups Printed- Cars & HV

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	9	36	2	0	1	101	26	0	22	31	17	2	14	100	9	1	371
11:15 AM	13	31	2	1	3	103	47	0	34	32	16	5	21	73	7	3	391
11:30 AM	5	26	3	3	0	96	44	3	28	25	11	2	12	100	6	2	366
11:45 AM	22	42	3	1	13	61	26	1	35	31	13	1	9	76	7	0	341
Total	49	135	10	5	17	361	143	4	119	119	57	10	56	349	29	6	1469
12:00 PM	10	37	4	1	2	75	28	1	26	34	6	0	13	81	8	0	326
12:15 PM	13	30	5	2	1	72	27	0	29	37	7	1	13	91	3	0	331
12:30 PM	15	28	3	2	1	89	33	3	35	41	14	1	13	88	11	0	377
12:45 PM	6	35	2	1	0	71	33	0	27	32	16	1	18	113	9	0	364
Total	44	130	14	6	4	307	121	4	117	144	43	3	57	373	31	0	1398
Grand Total	93	265	24	11	21	668	264	8	236	263	100	13	113	722	60	6	2867
Apprch %	23.7	67.4	6.1	2.8	2.2	69.5	27.5	0.8	38.6	43	16.3	2.1	12.5	80.1	6.7	0.7	
Total %	3.2	9.2	0.8	0.4	0.7	23.3	9.2	0.3	8.2	9.2	3.5	0.5	3.9	25.2	2.1	0.2	

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	South Bay Road Southbound					Route 31 Westbound					South Bay Road Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	9	36	2	0	47	1	101	26	0	128	22	31	17	2	72	14	100	9	1	124	371
11:15 AM	13	31	2	1	47	3	103	47	0	153	34	32	16	5	87	21	73	7	3	104	391
11:30 AM	5	26	3	3	37	0	96	44	3	143	28	25	11	2	66	12	100	6	2	120	366
11:45 AM	22	42	3	1	68	13	61	26	1	101	35	31	13	1	80	9	76	7	0	92	341
Total Volume	49	135	10	5	199	17	361	143	4	525	119	119	57	10	305	56	349	29	6	440	1469
% App. Total	24.6	67.8	5	2.5		3.2	68.8	27.2	0.8		39	39	18.7	3.3		12.7	79.3	6.6	1.4		
PHF	.557	.804	.833	.417	.732	.327	.876	.761	.333	.858	.850	.930	.838	.500	.876	.667	.873	.806	.500	.887	.939



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Groups Printed- Peds

	South Bay Road Southbound				Route 31 Westbound				South Bay Road Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
12:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	3
Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	5
Grand Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	6
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	100	
Total %	0	0	0	0	0	0	0	33.3	0	0	0	0	0	0	0	66.7	

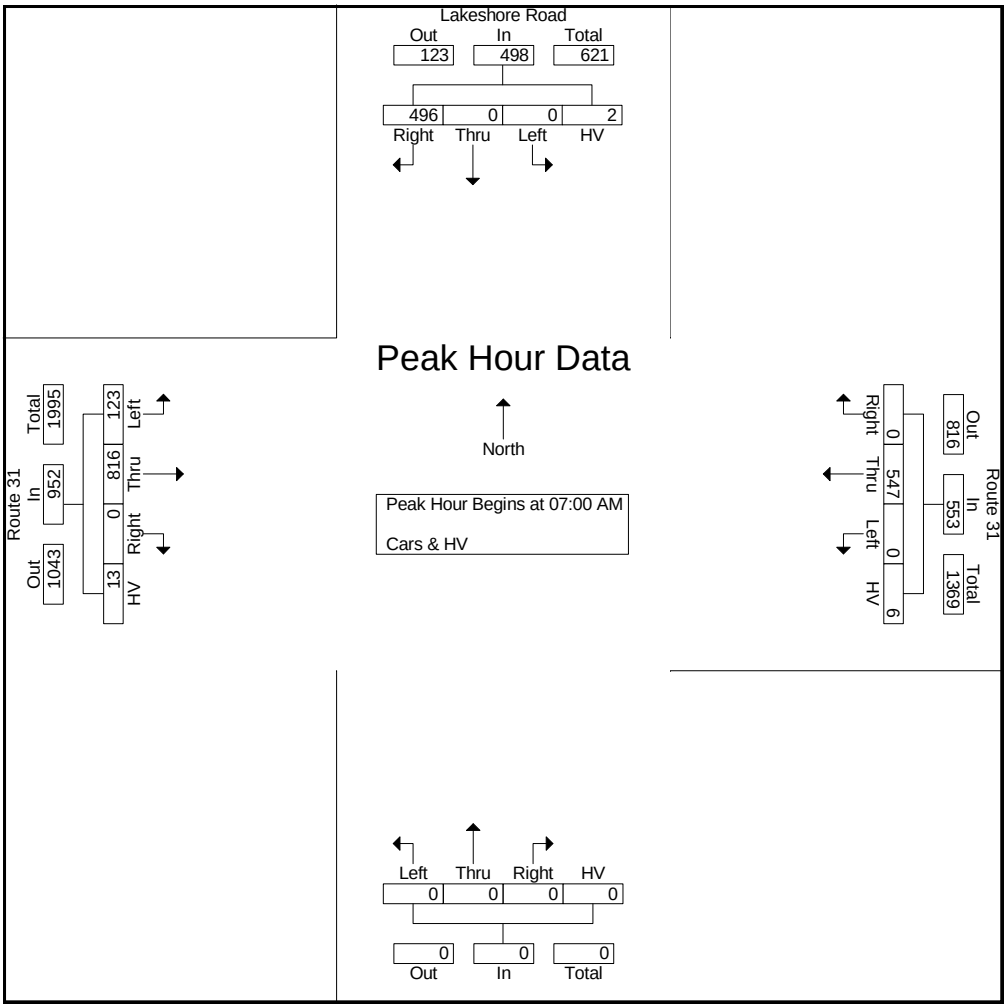
File Name : 7 - Route 31 @ Lakeshore West
Site Code : 00000007
Start Date : 5/12/2022
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Groups Printed- Cars & HV

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	111	0	0	0	0	98	0	1	0	0	0	0	0	165	19	1	395
07:15 AM	121	0	0	1	0	156	0	1	0	0	0	0	0	258	34	4	575
07:30 AM	137	0	0	0	0	173	0	2	0	0	0	0	0	199	31	1	543
07:45 AM	127	0	0	1	0	120	0	2	0	0	0	0	0	194	39	7	490
Total	496	0	0	2	0	547	0	6	0	0	0	0	0	816	123	13	2003
08:00 AM	113	0	0	0	0	112	0	4	0	0	0	0	0	105	39	2	375
08:15 AM	86	0	0	1	0	118	0	2	0	0	0	0	0	102	48	5	362
08:30 AM	96	0	0	1	0	122	0	2	0	0	0	0	0	79	52	1	353
08:45 AM	91	0	1	1	0	110	0	2	0	0	0	0	0	131	62	3	401
Total	386	0	1	3	0	462	0	10	0	0	0	0	0	417	201	11	1491
04:00 PM	86	0	0	0	0	149	0	0	0	0	0	0	0	169	100	1	505
04:15 PM	70	0	1	0	0	162	0	1	0	0	0	0	0	205	108	3	550
04:30 PM	59	0	0	0	0	182	0	4	0	0	0	0	0	218	120	3	586
04:45 PM	70	0	0	0	0	169	0	1	0	0	0	0	0	213	112	4	569
Total	285	0	1	0	0	662	0	6	0	0	0	0	0	805	440	11	2210
05:00 PM	77	0	0	1	0	197	0	6	0	0	0	0	0	146	108	1	536
05:15 PM	83	0	0	0	0	169	0	3	0	0	0	0	0	204	106	2	567
05:30 PM	89	0	0	0	0	156	0	2	0	0	0	0	0	165	105	4	521
05:45 PM	60	0	0	0	0	139	0	1	0	0	0	0	0	163	99	0	462
Total	309	0	0	1	0	661	0	12	0	0	0	0	0	678	418	7	2086
Grand Total	1476	0	2	6	0	2332	0	34	0	0	0	0	0	2716	1182	42	7790
Apprch %	99.5	0	0.1	0.4	0	98.6	0	1.4	0	0	0	0	0	68.9	30	1.1	
Total %	18.9	0	0	0.1	0	29.9	0	0.4	0	0	0	0	0	34.9	15.2	0.5	

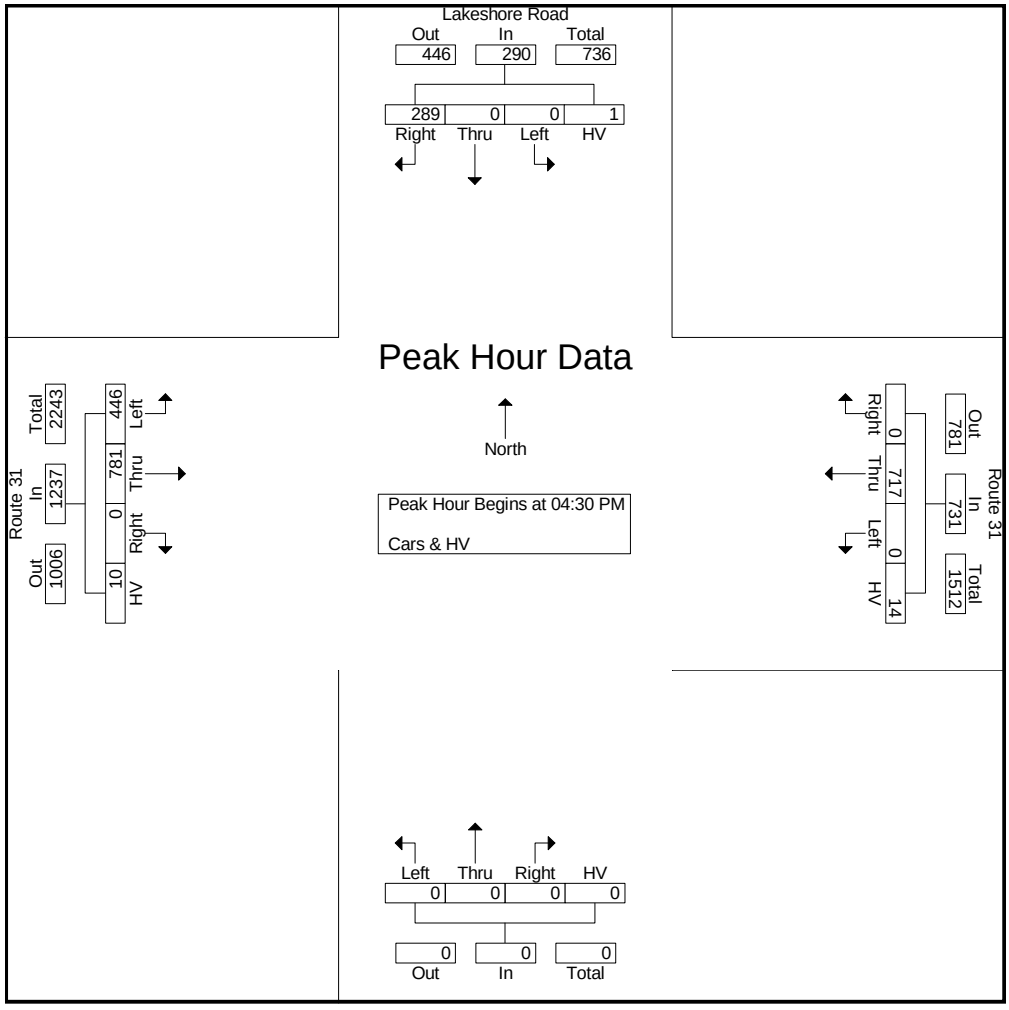
File Name : 7 - Route 31 @ Lakeshore West
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	Lakeshore Road Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	111	0	0	0	111	0	98	0	1	99	0	0	0	0	0	0	165	19	1	185	395
07:15 AM	121	0	0	1	122	0	156	0	1	157	0	0	0	0	0	0	258	34	4	296	575
07:30 AM	137	0	0	0	137	0	173	0	2	175	0	0	0	0	0	0	199	31	1	231	543
07:45 AM	127	0	0	1	128	0	120	0	2	122	0	0	0	0	0	0	194	39	7	240	490
Total Volume	496	0	0	2	498	0	547	0	6	553	0	0	0	0	0	0	816	123	13	952	2003
% App. Total	99.6	0	0	0.4		0	98.9	0	1.1		0	0	0	0		0	85.7	12.9	1.4		
PHF	.905	.000	.000	.500	.909	.000	.790	.000	.750	.790	.000	.000	.000	.000	.000	.000	.791	.788	.464	.804	.871



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	Lakeshore Road Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	59	0	0	0	59	0	182	0	4	186	0	0	0	0	0	0	218	120	3	341	586
04:45 PM	70	0	0	0	70	0	169	0	1	170	0	0	0	0	0	0	213	112	4	329	569
05:00 PM	77	0	0	1	78	0	197	0	6	203	0	0	0	0	0	0	146	108	1	255	536
05:15 PM	83	0	0	0	83	0	169	0	3	172	0	0	0	0	0	0	204	106	2	312	567
Total Volume	289	0	0	1	290	0	717	0	14	731	0	0	0	0	0	0	781	446	10	1237	2258
% App. Total	99.7	0	0	0.3		0	98.1	0	1.9		0	0	0	0		0	63.1	36.1	0.8		
PHF	.870	.000	.000	.250	.873	.000	.910	.000	.583	.900	.000	.000	.000	.000	.000	.000	.896	.929	.625	.907	.963



File Name : 7 - Route 31 @ Lakeshore West
Site Code : 00000007
Start Date : 5/12/2022
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Groups Printed- Peds

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	4
Apprch %	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	0	0	0	25	0	0	0	75	0	0	0	0	

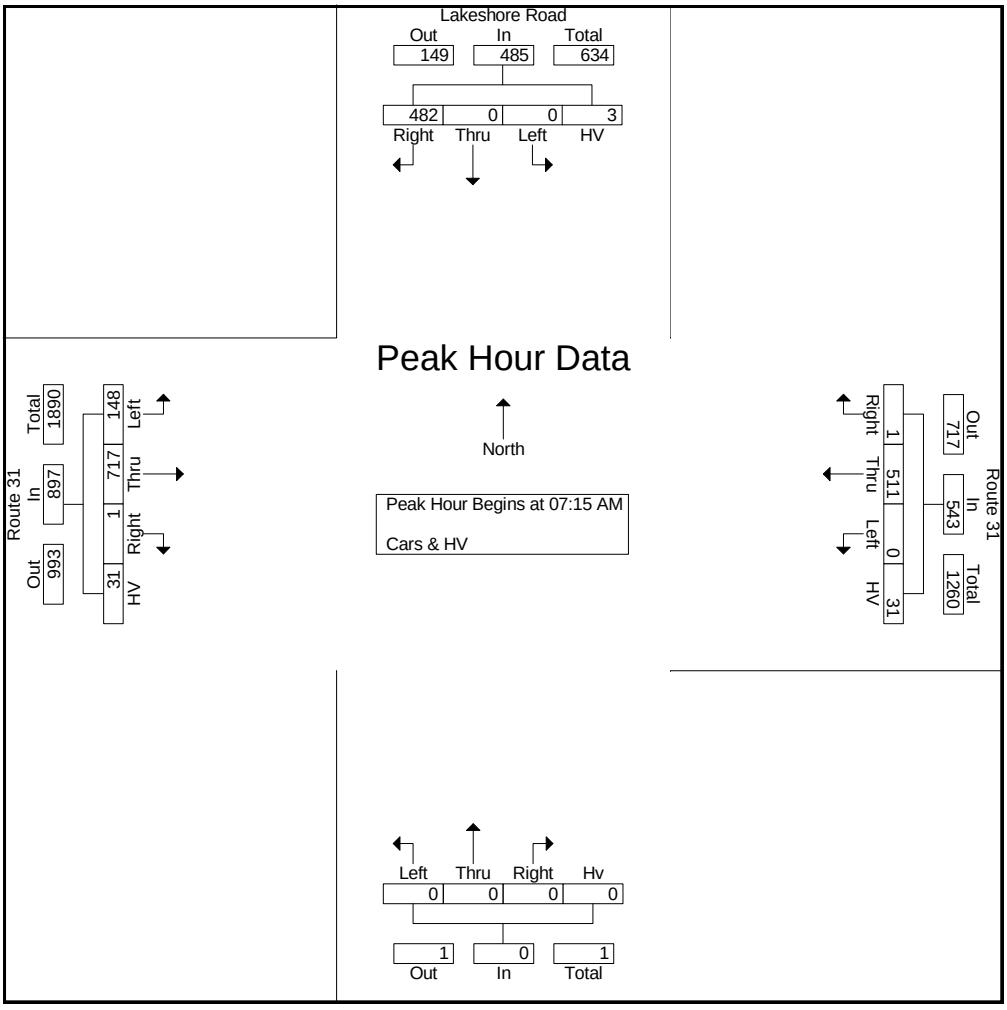
File Name : 7 - Route 31 @ Lakeshore West - 5-18-22
Site Code : 00000007
Start Date : 5/18/2022
Page No : 1

Groups Printed- Cars & HV

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	Hv	Right	Thru	Left	HV	Int. Total
07:00 AM	111	0	0	1	0	100	0	7	0	0	0	0	0	149	14	17	399
07:15 AM	118	0	0	1	1	139	0	15	0	0	0	0	0	259	37	6	576
07:30 AM	128	0	0	0	0	151	0	1	0	0	0	0	1	176	25	7	489
07:45 AM	110	0	0	1	0	119	0	7	0	0	0	0	0	152	41	10	440
Total	467	0	0	3	1	509	0	30	0	0	0	0	1	736	117	40	1904
08:00 AM	126	0	0	1	0	102	0	8	0	0	0	0	0	130	45	8	420
08:15 AM	90	0	0	1	4	106	0	6	0	0	0	0	0	128	45	5	385
08:30 AM	115	0	1	6	0	103	0	1	0	0	0	0	0	108	43	4	381
08:45 AM	86	0	0	0	0	110	0	1	0	0	0	0	0	134	63	13	407
Total	417	0	1	8	4	421	0	16	0	0	0	0	0	500	196	30	1593
04:00 PM	82	0	0	6	0	180	0	3	0	0	0	0	0	200	118	2	591
04:15 PM	88	0	0	3	1	182	0	9	0	0	0	0	0	181	115	2	581
04:30 PM	82	0	0	2	0	173	0	1	0	0	0	0	0	152	114	2	526
04:45 PM	83	0	0	0	0	186	0	0	0	0	0	0	0	190	127	2	588
Total	335	0	0	11	1	721	0	13	0	0	0	0	0	723	474	8	2286
05:00 PM	85	0	0	1	0	177	0	2	0	0	0	0	0	207	102	3	577
05:15 PM	75	0	0	0	0	185	0	0	0	0	0	0	0	198	120	0	578
05:30 PM	70	0	0	1	0	153	0	0	0	0	0	0	0	193	117	0	534
05:45 PM	74	0	0	0	0	147	0	0	0	0	0	0	0	193	96	2	512
Total	304	0	0	2	0	662	0	2	0	0	0	0	0	791	435	5	2201
Grand Total	1523	0	1	24	6	2313	0	61	0	0	0	0	1	2750	1222	83	7984
Apprch %	98.4	0	0.1	1.6	0.3	97.2	0	2.6	0	0	0	0	0	67.8	30.1	2	
Total %	19.1	0	0	0.3	0.1	29	0	0.8	0	0	0	0	0	34.4	15.3	1	

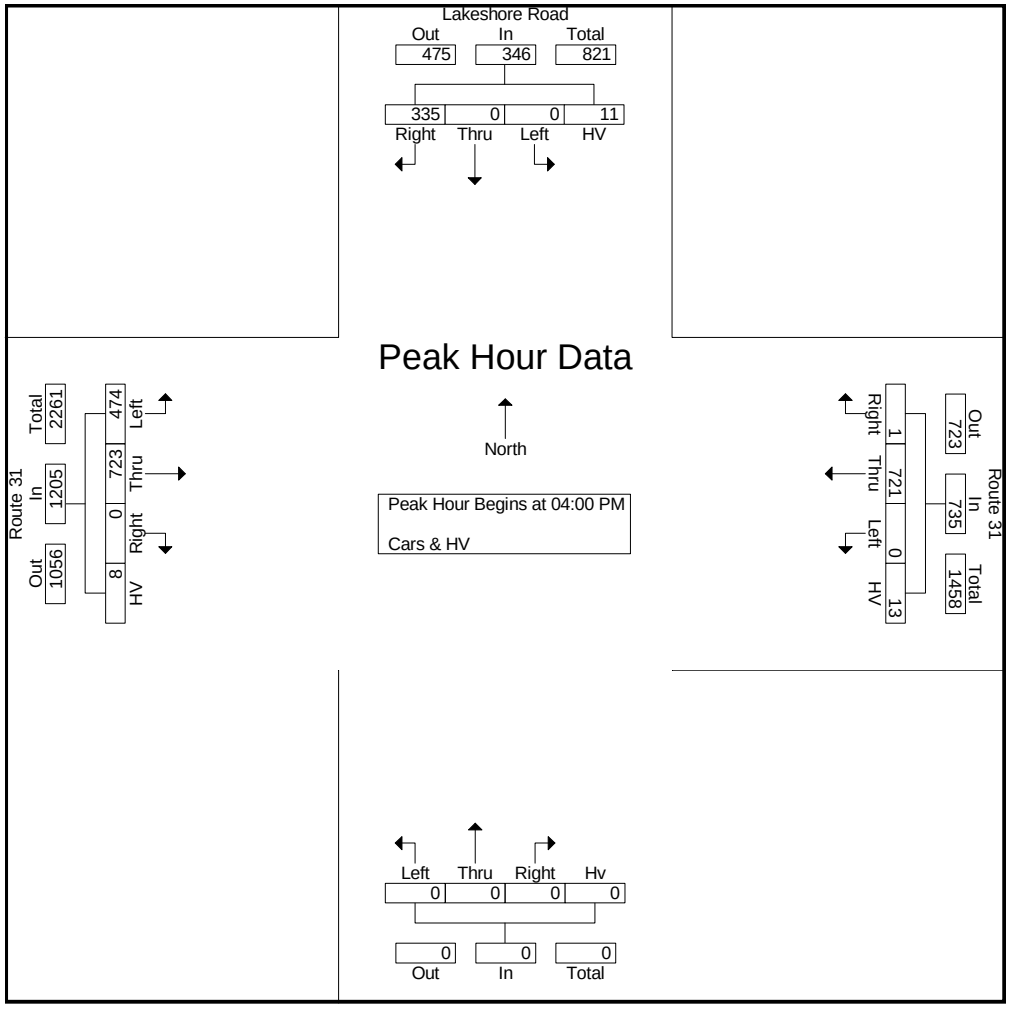
File Name : 7 - Route 31 @ Lakeshore West - 5-18-22
Site Code : 00000007
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	Lakeshore Road Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	Hv	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	118	0	0	1	119	1	139	0	15	155	0	0	0	0	0	0	259	37	6	302	576
07:30 AM	128	0	0	0	128	0	151	0	1	152	0	0	0	0	0	1	176	25	7	209	489
07:45 AM	110	0	0	1	111	0	119	0	7	126	0	0	0	0	0	0	152	41	10	203	440
08:00 AM	126	0	0	1	127	0	102	0	8	110	0	0	0	0	0	0	130	45	8	183	420
Total Volume	482	0	0	3	485	1	511	0	31	543	0	0	0	0	0	1	717	148	31	897	1925
% App. Total	99.4	0	0	0.6		0.2	94.1	0	5.7		0	0	0	0		0.1	79.9	16.5	3.5		
PHF	.941	.000	.000	.750	.947	.250	.846	.000	.517	.876	.000	.000	.000	.000	.000	.250	.692	.822	.775	.743	.836



File Name : 7 - Route 31 @ Lakeshore West - 5-18-22
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	Lakeshore Road Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	Hv	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	82	0	0	6	88	0	180	0	3	183	0	0	0	0	0	0	200	118	2	320	591
04:15 PM	88	0	0	3	91	1	182	0	9	192	0	0	0	0	0	0	181	115	2	298	581
04:30 PM	82	0	0	2	84	0	173	0	1	174	0	0	0	0	0	0	152	114	2	268	526
04:45 PM	83	0	0	0	83	0	186	0	0	186	0	0	0	0	0	0	190	127	2	319	588
Total Volume	335	0	0	11	346	1	721	0	13	735	0	0	0	0	0	0	723	474	8	1205	2286
% App. Total	96.8	0	0	3.2		0.1	98.1	0	1.8		0	0	0	0		0	60	39.3	0.7		
PHF	.952	.000	.000	.458	.951	.250	.969	.000	.361	.957	.000	.000	.000	.000	.000	.000	.904	.933	1.00	.941	.967



File Name : 7 - Route 31 @ Lakeshore West - 5-18-22
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Groups Printed- Peds

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	
Total %	0	0	0	50	0	0	0	50	0	0	0	0	0	0	0	0	

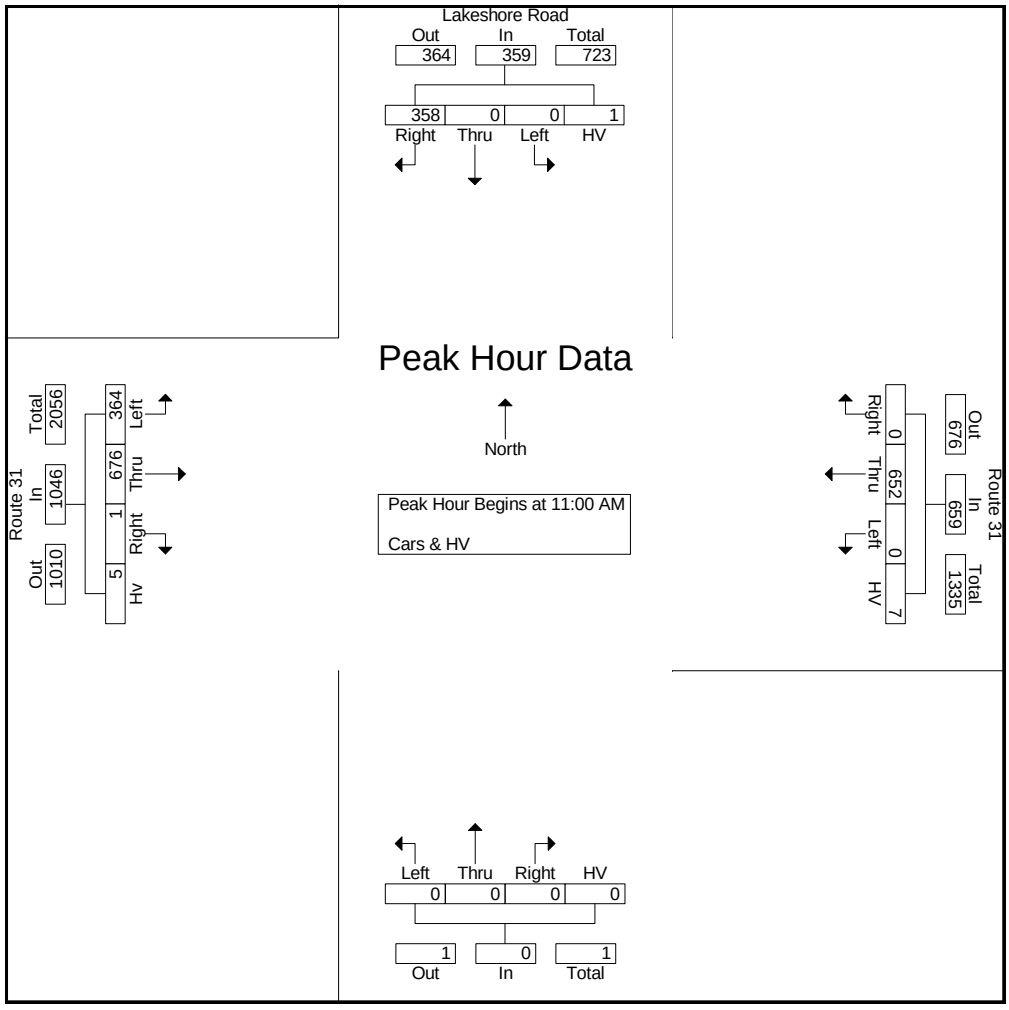
File Name : 7 - Route 31 @ Lakeshore West - 5-14-22
Site Code : 00000007
Start Date : 5/14/2022
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Groups Printed- Cars & HV

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	Hv	Int. Total
11:00 AM	97	0	0	0	0	155	0	2	0	0	0	0	0	147	90	1	492
11:15 AM	86	0	0	0	0	189	0	0	0	0	0	0	0	164	94	2	535
11:30 AM	83	0	0	0	0	149	0	4	0	0	0	0	1	195	85	1	518
11:45 AM	92	0	0	1	0	159	0	1	0	0	0	0	0	170	95	1	519
Total	358	0	0	1	0	652	0	7	0	0	0	0	1	676	364	5	2064
12:00 PM	70	0	1	0	1	170	0	1	0	0	0	0	0	156	86	0	485
12:15 PM	89	0	0	0	0	126	0	0	0	0	0	0	0	182	77	2	476
12:30 PM	81	0	0	1	0	179	0	3	0	0	0	0	0	183	82	0	529
12:45 PM	90	0	0	0	0	167	0	0	0	0	0	0	0	193	87	1	538
Total	330	0	1	1	1	642	0	4	0	0	0	0	0	714	332	3	2028
Grand Total	688	0	1	2	1	1294	0	11	0	0	0	0	1	1390	696	8	4092
Apprch %	99.6	0	0.1	0.3	0.1	99.1	0	0.8	0	0	0	0	0	66.3	33.2	0.4	
Total %	16.8	0	0	0	0	31.6	0	0.3	0	0	0	0	0	34	17	0.2	

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	Lakeshore Road Southbound					Route 31 Westbound					Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	Hv	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	97	0	0	0	97	0	155	0	2	157	0	0	0	0	0	0	147	90	1	238	492
11:15 AM	86	0	0	0	86	0	189	0	0	189	0	0	0	0	0	0	164	94	2	260	535
11:30 AM	83	0	0	0	83	0	149	0	4	153	0	0	0	0	0	1	195	85	1	282	518
11:45 AM	92	0	0	1	93	0	159	0	1	160	0	0	0	0	0	0	170	95	1	266	519
Total Volume	358	0	0	1	359	0	652	0	7	659	0	0	0	0	0	1	676	364	5	1046	2064
% App. Total	99.7	0	0	0.3		0	98.9	0	1.1		0	0	0	0		0.1	64.6	34.8	0.5		
PHF	.923	.000	.000	.250	.925	.000	.862	.000	.438	.872	.000	.000	.000	.000	.000	.250	.867	.958	.625	.927	.964



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Groups Printed- Peds

	Lakeshore Road Southbound				Route 31 Westbound				Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

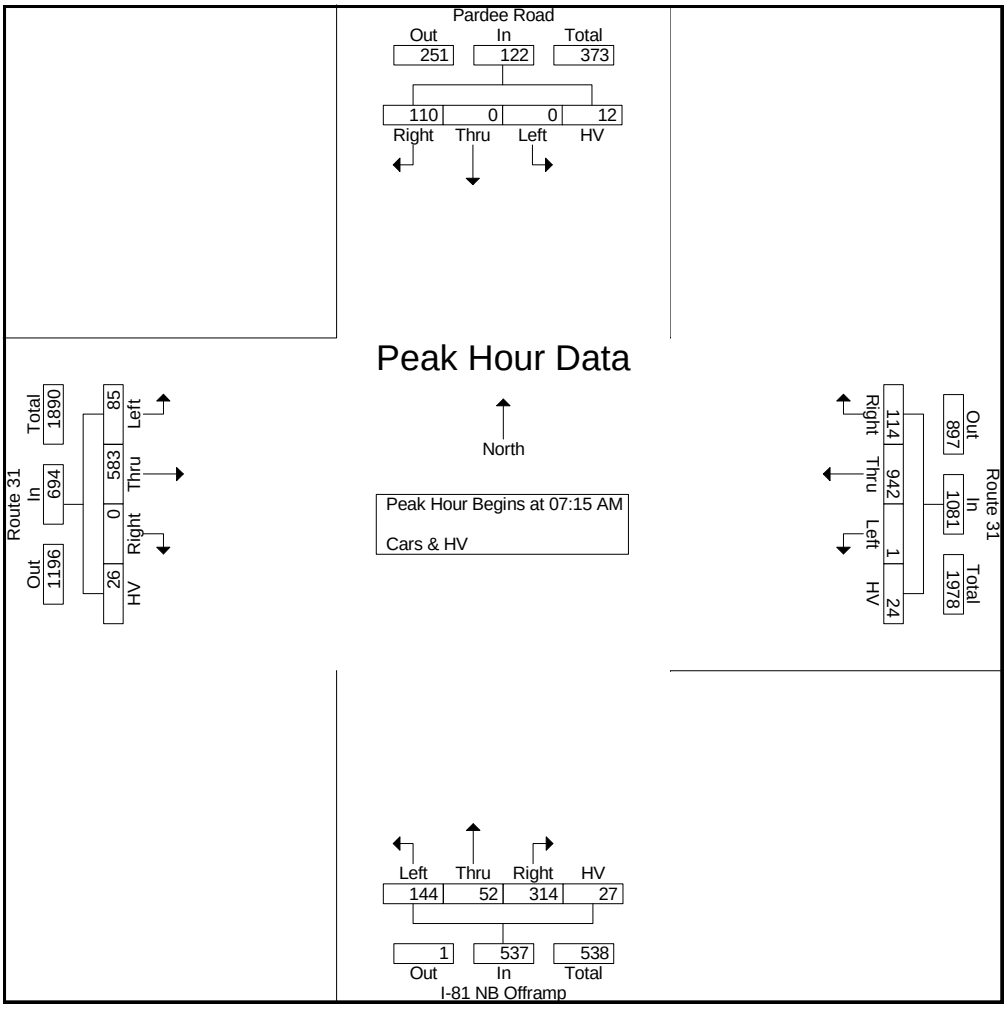
File Name : 8 - Route 31 @ I-81 NB - Pardee Road - 5-18-22
Site Code : 00000008
Start Date : 5/18/2022
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Groups Printed- Cars & HV

	Pardee Road Southbound				Route 31 Westbound				I-81 NB Offramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	51	0	0	9	24	191	0	2	64	7	28	2	0	116	15	6	515
07:15 AM	31	0	0	3	25	229	0	5	107	11	34	1	0	182	16	6	650
07:30 AM	30	0	0	2	35	253	1	8	69	9	28	5	0	151	25	5	621
07:45 AM	22	0	0	3	34	246	0	9	71	14	45	9	0	132	25	7	617
Total	134	0	0	17	118	919	1	24	311	41	135	17	0	581	81	24	2403
08:00 AM	27	0	0	4	20	214	0	2	67	18	37	12	0	118	19	8	546
08:15 AM	18	0	0	3	21	200	0	10	61	11	27	11	0	119	30	8	519
08:30 AM	13	0	1	1	19	189	0	9	44	9	23	5	0	112	23	5	453
08:45 AM	25	0	0	2	33	192	0	7	54	13	38	10	0	164	21	10	569
Total	83	0	1	10	93	795	0	28	226	51	125	38	0	513	93	31	2087
04:00 PM	25	0	0	0	38	222	0	7	110	18	74	5	0	215	47	6	767
04:15 PM	26	0	0	3	54	207	0	14	111	15	73	9	1	142	50	7	712
04:30 PM	21	0	0	0	42	213	0	18	123	21	82	16	0	160	47	5	748
04:45 PM	18	0	0	0	66	206	0	2	164	31	91	7	0	172	50	5	812
Total	90	0	0	3	200	848	0	41	508	85	320	37	1	689	194	23	3039
05:00 PM	47	0	0	1	85	193	0	4	100	30	61	11	0	189	53	7	781
05:15 PM	28	0	0	0	48	192	0	2	128	24	80	9	0	184	56	4	755
05:30 PM	17	0	0	0	40	195	0	3	95	23	60	4	0	198	49	3	687
05:45 PM	22	0	0	1	34	190	0	2	92	10	61	4	0	191	50	6	663
Total	114	0	0	2	207	770	0	11	415	87	262	28	0	762	208	20	2886
Grand Total	421	0	1	32	618	3332	1	104	1460	264	842	120	1	2545	576	98	10415
Apprch %	92.7	0	0.2	7	15.2	82.2	0	2.6	54.4	9.8	31.3	4.5	0	79	17.9	3	
Total %	4	0	0	0.3	5.9	32	0	1	14	2.5	8.1	1.2	0	24.4	5.5	0.9	

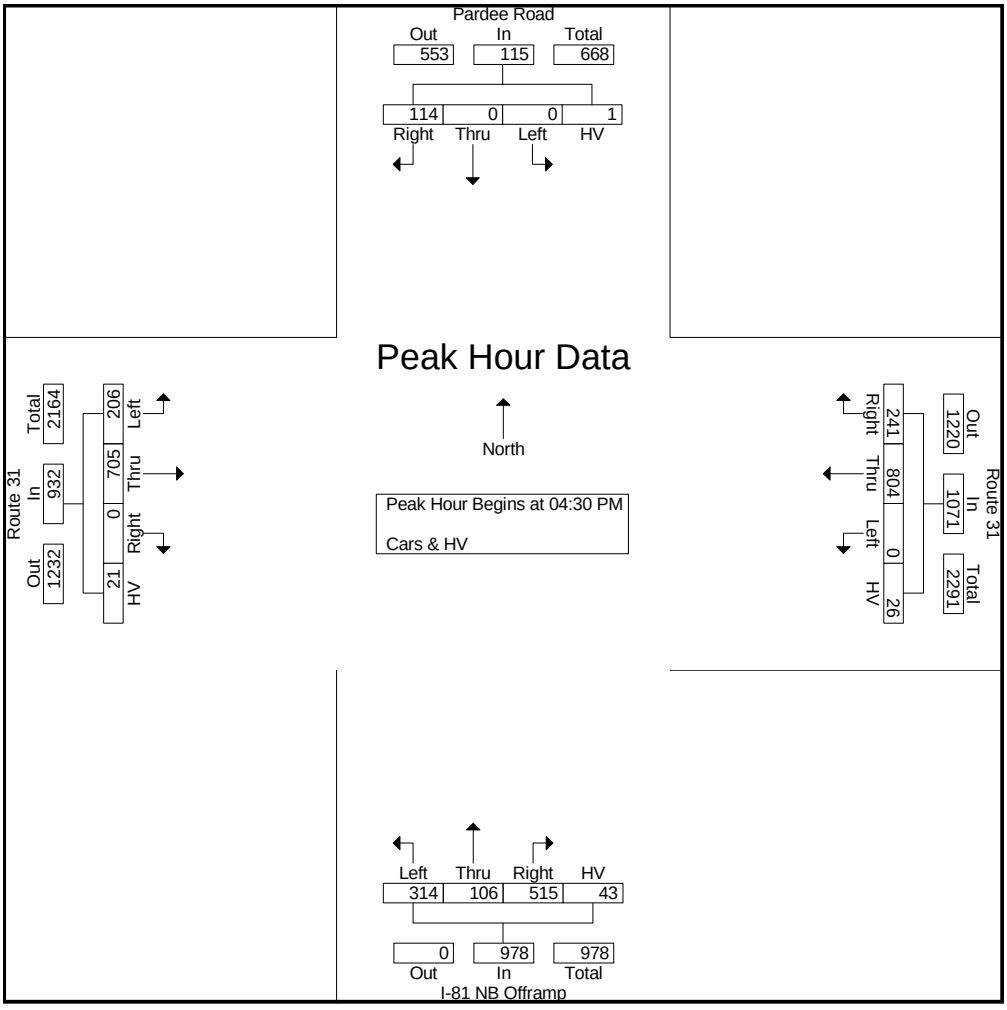
File Name : 8 - Route 31 @ I-81 NB - Pardee Road - 5-18-22
Site Code : 00000008
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	Pardee Road Southbound					Route 31 Westbound					I-81 NB Offramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	31	0	0	3	34	25	229	0	5	259	107	11	34	1	153	0	182	16	6	204	650
07:30 AM	30	0	0	2	32	35	253	1	8	297	69	9	28	5	111	0	151	25	5	181	621
07:45 AM	22	0	0	3	25	34	246	0	9	289	71	14	45	9	139	0	132	25	7	164	617
08:00 AM	27	0	0	4	31	20	214	0	2	236	67	18	37	12	134	0	118	19	8	145	546
Total Volume	110	0	0	12	122	114	942	1	24	1081	314	52	144	27	537	0	583	85	26	694	2434
% App. Total	90.2	0	0	9.8		10.5	87.1	0.1	2.2		58.5	9.7	26.8	5		0	84	12.2	3.7		
PHF	.887	.000	.000	.750	.897	.814	.931	.250	.667	.910	.734	.722	.800	.563	.877	.000	.801	.850	.813	.850	.936



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	Pardee Road Southbound					Route 31 Westbound					I-81 NB Offramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	21	0	0	0	21	42	213	0	18	273	123	21	82	16	242	0	160	47	5	212	748
04:45 PM	18	0	0	0	18	66	206	0	2	274	164	31	91	7	293	0	172	50	5	227	812
05:00 PM	47	0	0	1	48	85	193	0	4	282	100	30	61	11	202	0	189	53	7	249	781
05:15 PM	28	0	0	0	28	48	192	0	2	242	128	24	80	9	241	0	184	56	4	244	755
Total Volume	114	0	0	1	115	241	804	0	26	1071	515	106	314	43	978	0	705	206	21	932	3096
% App. Total	99.1	0	0	0.9		22.5	75.1	0	2.4		52.7	10.8	32.1	4.4		0	75.6	22.1	2.3		
PHF	.606	.000	.000	.250	.599	.709	.944	.000	.361	.949	.785	.855	.863	.672	.834	.000	.933	.920	.750	.936	.953



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Groups Printed- Peds

	Pardee Road Southbound				Route 31 Westbound				I-81 NB Offramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:30 PM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3
Total	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3
Grand Total	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3
Apprch %	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	
Total %	0	0	0	33.3	0	0	0	0	0	0	0	66.7	0	0	0	0	

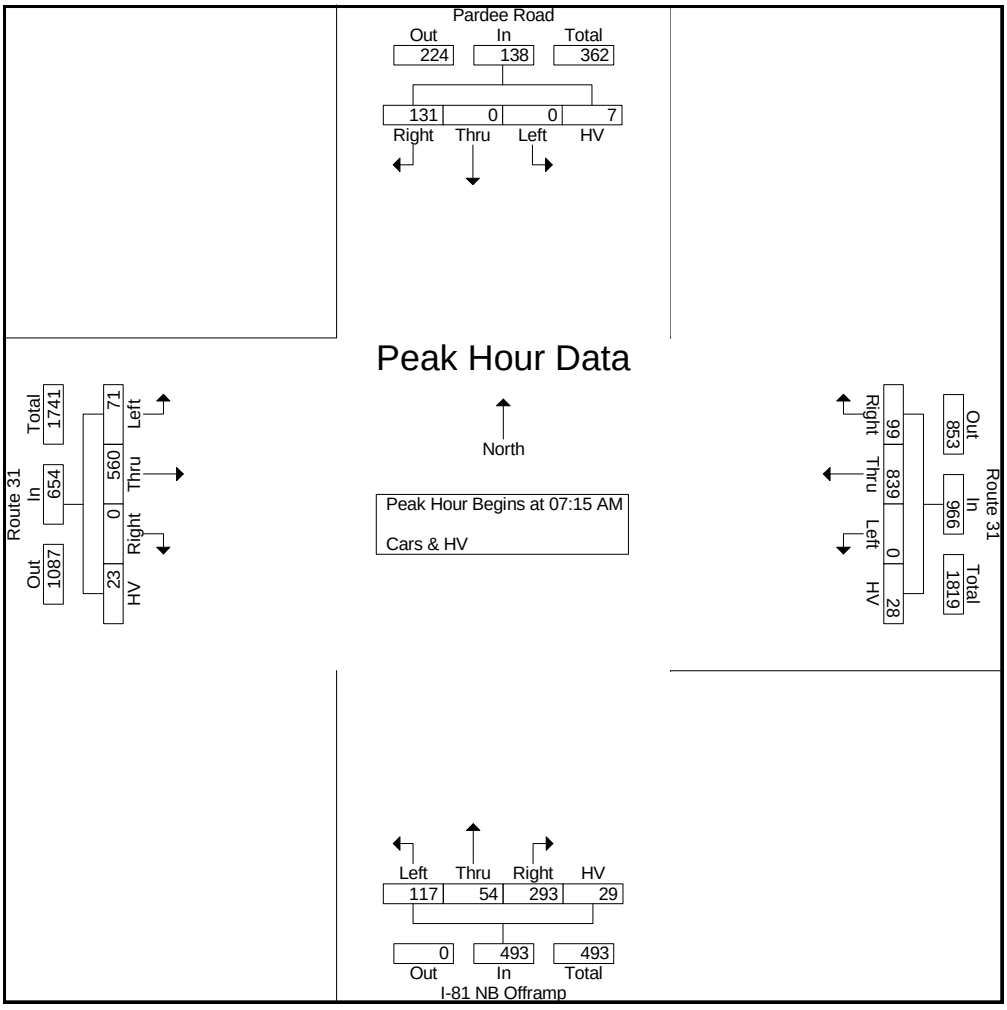
File Name : 8 - Route 31 @ I-81 NB - Pardee Road - 5-19-22
Site Code : 00000008
Start Date : 5/19/2022
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Groups Printed- Cars & HV

	Pardee Road Southbound				Route 31 Westbound				I-81 NB Offramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	43	0	0	1	23	172	0	1	53	6	18	1	0	115	19	4	456
07:15 AM	31	0	0	1	24	224	0	5	93	13	26	5	0	186	13	4	625
07:30 AM	35	0	0	3	29	230	0	10	74	14	23	5	0	148	15	4	590
07:45 AM	42	0	0	2	20	202	0	5	67	15	32	5	0	113	17	1	521
Total	151	0	0	7	96	828	0	21	287	48	99	16	0	562	64	13	2192
08:00 AM	23	0	0	1	26	183	0	8	59	12	36	14	0	113	26	14	515
08:15 AM	31	0	0	5	25	196	0	11	56	18	36	17	1	90	25	6	517
08:30 AM	23	0	0	4	22	166	0	12	50	15	35	9	0	105	30	9	480
08:45 AM	17	0	0	4	21	175	0	8	44	8	48	8	0	152	34	9	528
Total	94	0	0	14	94	720	0	39	209	53	155	48	1	460	115	38	2040
04:00 PM	31	0	0	3	48	181	0	5	82	22	77	27	0	188	63	6	733
04:15 PM	12	0	0	5	54	213	0	8	99	20	65	7	1	167	67	10	728
04:30 PM	37	0	0	3	57	193	0	5	107	24	81	13	0	152	54	5	731
04:45 PM	29	0	0	2	47	163	0	7	151	19	90	6	0	193	67	10	784
Total	109	0	0	13	206	750	0	25	439	85	313	53	1	700	251	31	2976
05:00 PM	25	0	0	0	51	202	0	4	106	28	67	5	0	168	78	10	744
05:15 PM	22	0	0	2	50	238	0	8	136	28	76	4	0	176	55	3	798
05:30 PM	29	0	0	2	59	231	0	6	95	25	47	7	0	179	59	1	740
05:45 PM	27	0	0	1	36	182	0	1	92	23	53	5	0	183	79	6	688
Total	103	0	0	5	196	853	0	19	429	104	243	21	0	706	271	20	2970
Grand Total	457	0	0	39	592	3151	0	104	1364	290	810	138	2	2428	701	102	10178
Apprch %	92.1	0	0	7.9	15.4	81.9	0	2.7	52.4	11.1	31.1	5.3	0.1	75.1	21.7	3.2	
Total %	4.5	0	0	0.4	5.8	31	0	1	13.4	2.8	8	1.4	0	23.9	6.9	1	

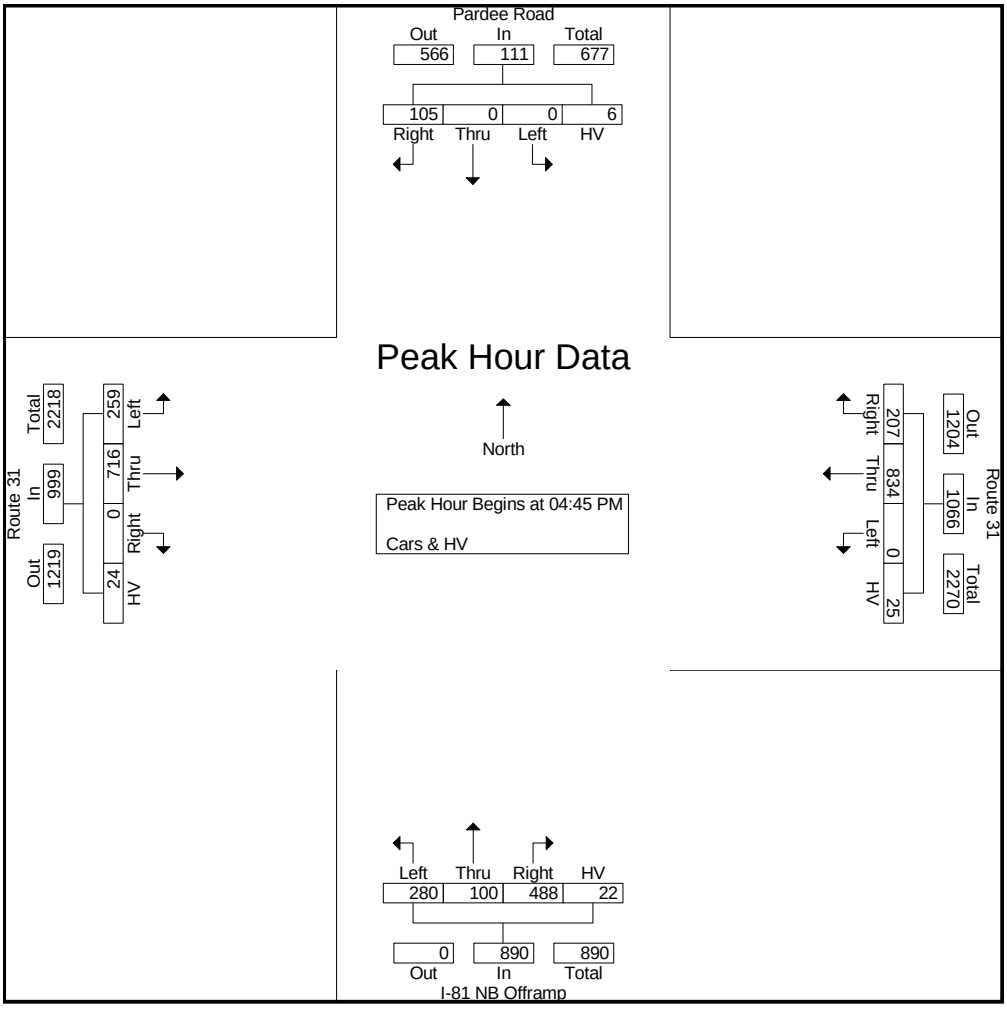
File Name : 8 - Route 31 @ I-81 NB - Pardee Road - 5-19-22
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	Pardee Road Southbound					Route 31 Westbound					I-81 NB Offramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	31	0	0	1	32	24	224	0	5	253	93	13	26	5	137	0	186	13	4	203	625
07:30 AM	35	0	0	3	38	29	230	0	10	269	74	14	23	5	116	0	148	15	4	167	590
07:45 AM	42	0	0	2	44	20	202	0	5	227	67	15	32	5	119	0	113	17	1	131	521
08:00 AM	23	0	0	1	24	26	183	0	8	217	59	12	36	14	121	0	113	26	14	153	515
Total Volume	131	0	0	7	138	99	839	0	28	966	293	54	117	29	493	0	560	71	23	654	2251
% App. Total	94.9	0	0	5.1		10.2	86.9	0	2.9		59.4	11	23.7	5.9		0	85.6	10.9	3.5		
PHF	.780	.000	.000	.583	.784	.853	.912	.000	.700	.898	.788	.900	.813	.518	.900	.000	.753	.683	.411	.805	.900



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Start Date : 5/19/2022
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	Pardee Road Southbound					Route 31 Westbound					I-81 NB Offramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	29	0	0	2	31	47	163	0	7	217	151	19	90	6	266	0	193	67	10	270	784
05:00 PM	25	0	0	0	25	51	202	0	4	257	106	28	67	5	206	0	168	78	10	256	744
05:15 PM	22	0	0	2	24	50	238	0	8	296	136	28	76	4	244	0	176	55	3	234	798
05:30 PM	29	0	0	2	31	59	231	0	6	296	95	25	47	7	174	0	179	59	1	239	740
Total Volume	105	0	0	6	111	207	834	0	25	1066	488	100	280	22	890	0	716	259	24	999	3066
% App. Total	94.6	0	0	5.4		19.4	78.2	0	2.3		54.8	11.2	31.5	2.5		0	71.7	25.9	2.4		
PHF	.905	.000	.000	.750	.895	.877	.876	.000	.781	.900	.808	.893	.778	.786	.836	.000	.927	.830	.600	.925	.961



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Groups Printed- Peds

	Pardee Road Southbound				Route 31 Westbound				I-81 NB Offramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
04:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	5
05:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	5	0	0	0	1	0	0	0	4	0	0	0	1	11
Apprch %	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	
Total %	0	0	0	45.5	0	0	0	9.1	0	0	0	36.4	0	0	0	9.1	

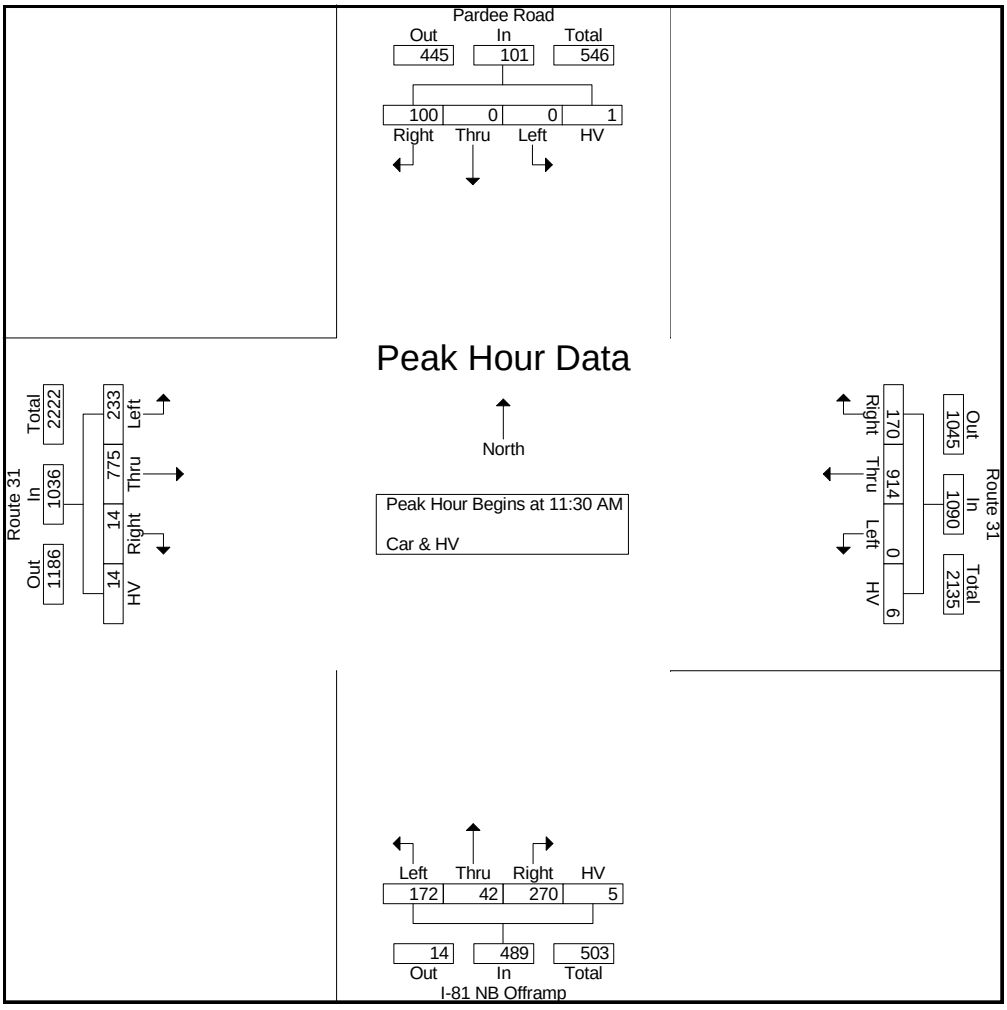
File Name : 8 - Route 31 @ I-81 NB - Pardee Road - 5-21-22
Site Code : 00000008
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Groups Printed- Car & HV

	Pardee Road Southbound				Route 31 Westbound				I-81 NB Offramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	23	0	0	0	46	202	0	4	49	9	35	1	0	200	59	1	629
11:15 AM	30	0	0	1	39	205	0	2	59	7	36	4	4	190	45	2	624
11:30 AM	20	0	0	0	45	246	0	2	61	9	36	1	0	194	52	1	667
11:45 AM	25	0	0	1	45	203	0	1	68	14	48	1	14	201	51	5	677
Total	98	0	0	2	175	856	0	9	237	39	155	7	18	785	207	9	2597
12:00 PM	26	0	0	0	47	242	0	2	67	9	47	1	0	170	58	6	675
12:15 PM	29	0	0	0	33	223	0	1	74	10	41	2	0	210	72	2	697
12:30 PM	19	0	0	0	40	193	0	1	59	19	44	0	0	207	60	2	644
12:45 PM	16	0	0	0	45	189	0	1	69	23	47	2	0	174	58	2	626
Total	90	0	0	0	165	847	0	5	269	61	179	5	0	761	248	12	2642
Grand Total	188	0	0	2	340	1703	0	14	506	100	334	12	18	1546	455	21	5239
Apprch %	98.9	0	0	1.1	16.5	82.8	0	0.7	53.2	10.5	35.1	1.3	0.9	75.8	22.3	1	
Total %	3.6	0	0	0	6.5	32.5	0	0.3	9.7	1.9	6.4	0.2	0.3	29.5	8.7	0.4	

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	Pardee Road Southbound					Route 31 Westbound					I-81 NB Offramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	20	0	0	0	20	45	246	0	2	293	61	9	36	1	107	0	194	52	1	247	667
11:45 AM	25	0	0	1	26	45	203	0	1	249	68	14	48	1	131	14	201	51	5	271	677
12:00 PM	26	0	0	0	26	47	242	0	2	291	67	9	47	1	124	0	170	58	6	234	675
12:15 PM	29	0	0	0	29	33	223	0	1	257	74	10	41	2	127	0	210	72	2	284	697
Total Volume	100	0	0	1	101	170	914	0	6	1090	270	42	172	5	489	14	775	233	14	1036	2716
% App. Total	99	0	0	1		15.6	83.9	0	0.6		55.2	8.6	35.2	1		1.4	74.8	22.5	1.4		
PHF	.862	.000	.000	.250	.871	.904	.929	.000	.750	.930	.912	.750	.896	.625	.933	.250	.923	.809	.583	.912	.974



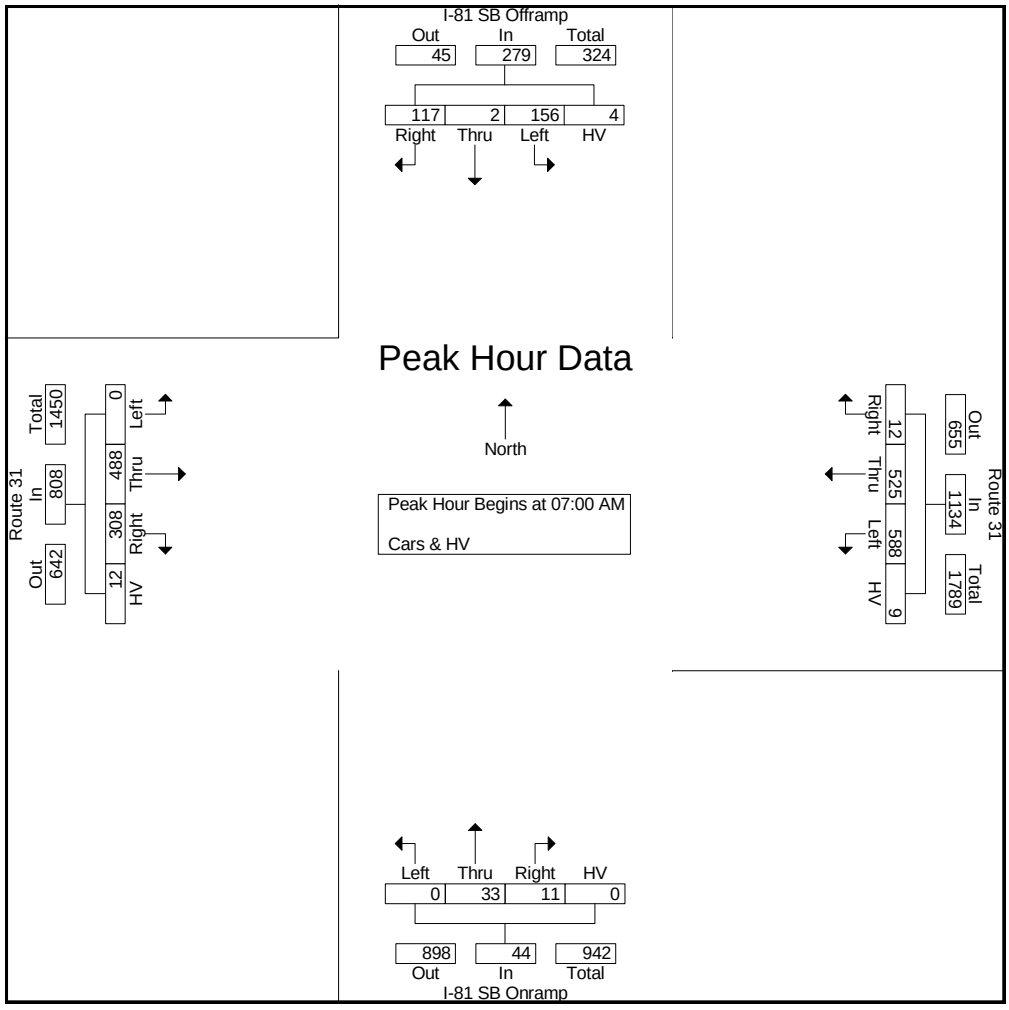
File Name : 9 - Route 31 @ I-81 SB Ramps - 5-11-22
Site Code : 00000009
Start Date : 5/11/2022
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Groups Printed- Cars & HV

	I-81 SB Offramp Southbound				Route 31 Westbound				I-81 SB Onramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	20	0	41	1	6	124	143	5	11	33	0	0	48	96	0	2	530
07:15 AM	32	2	39	1	0	119	177	1	0	0	0	0	80	122	0	4	577
07:30 AM	26	0	40	1	0	135	127	0	0	0	0	0	78	136	0	6	549
07:45 AM	39	0	36	1	6	147	141	3	0	0	0	0	102	134	0	0	609
Total	117	2	156	4	12	525	588	9	11	33	0	0	308	488	0	12	2265
08:00 AM	25	1	33	2	0	143	94	0	0	0	0	0	69	111	0	3	481
08:15 AM	29	0	22	2	0	109	87	4	0	0	0	0	54	104	0	5	416
08:30 AM	27	2	20	0	0	132	100	5	0	0	0	0	50	108	0	2	446
08:45 AM	21	0	23	1	3	146	67	6	0	0	0	0	50	131	0	7	455
Total	102	3	98	5	3	530	348	15	0	0	0	0	223	454	0	17	1798
04:00 PM	32	0	34	1	0	226	97	4	2	0	0	0	42	225	0	4	667
04:15 PM	16	1	40	0	0	200	63	2	1	2	0	0	41	237	0	1	604
04:30 PM	27	1	28	1	0	228	62	4	0	0	0	0	59	211	0	1	622
04:45 PM	22	1	32	0	0	219	87	1	0	0	0	0	52	203	0	1	618
Total	97	3	134	2	0	873	309	11	3	2	0	0	194	876	0	7	2511
05:00 PM	31	8	31	2	2	216	88	1	0	0	0	0	59	231	0	2	671
05:15 PM	18	0	27	1	0	243	76	2	0	0	0	0	48	239	0	0	654
05:30 PM	22	0	31	2	0	210	74	2	0	0	0	0	58	244	0	2	645
Grand Total	387	16	477	16	17	2597	1483	40	14	35	0	0	890	2532	0	40	8544
Apprch %	43.2	1.8	53.2	1.8	0.4	62.8	35.8	1	28.6	71.4	0	0	25.7	73.1	0	1.2	
Total %	4.5	0.2	5.6	0.2	0.2	30.4	17.4	0.5	0.2	0.4	0	0	10.4	29.6	0	0.5	

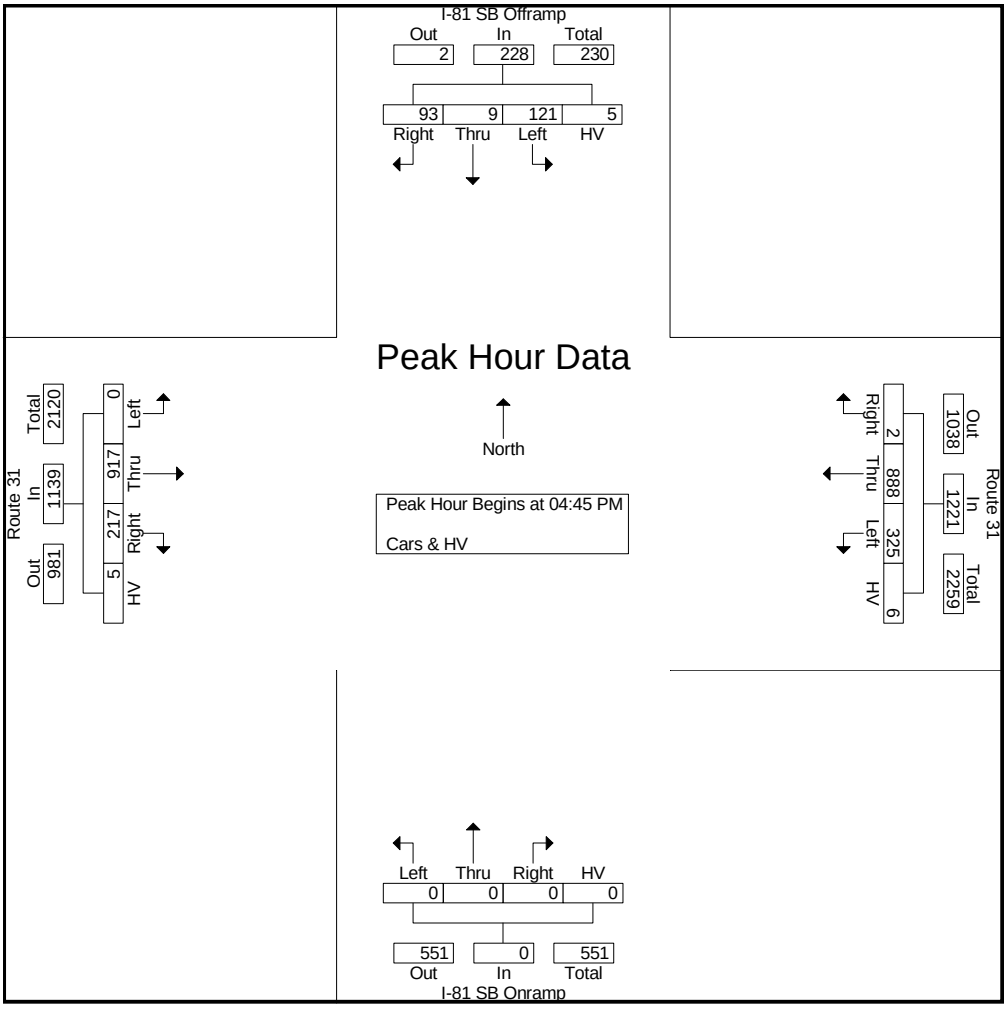
File Name : 9 - Route 31 @ I-81 SB Ramps - 5-11-22
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	I-81 SB Offramp Southbound					Route 31 Westbound					I-81 SB Onramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	20	0	41	1	62	6	124	143	5	278	11	33	0	0	44	48	96	0	2	146	530
07:15 AM	32	2	39	1	74	0	119	177	1	297	0	0	0	0	0	80	122	0	4	206	577
07:30 AM	26	0	40	1	67	0	135	127	0	262	0	0	0	0	0	78	136	0	6	220	549
07:45 AM	39	0	36	1	76	6	147	141	3	297	0	0	0	0	0	102	134	0	0	236	609
Total Volume	117	2	156	4	279	12	525	588	9	1134	11	33	0	0	44	308	488	0	12	808	2265
% App. Total	41.9	0.7	55.9	1.4		1.1	46.3	51.9	0.8		25	75	0	0		38.1	60.4	0	1.5		
PHF	.750	.250	.951	1.00	.918	.500	.893	.831	.450	.955	.250	.250	.000	.000	.250	.755	.897	.000	.500	.856	.930



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	I-81 SB Offramp Southbound					Route 31 Westbound					I-81 SB Onramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	22	1	32	0	55	0	219	87	1	307	0	0	0	0	0	52	203	0	1	256	618
05:00 PM	31	8	31	2	72	2	216	88	1	307	0	0	0	0	0	59	231	0	2	292	671
05:15 PM	18	0	27	1	46	0	243	76	2	321	0	0	0	0	0	48	239	0	0	287	654
05:30 PM	22	0	31	2	55	0	210	74	2	286	0	0	0	0	0	58	244	0	2	304	645
Total Volume	93	9	121	5	228	2	888	325	6	1221	0	0	0	0	0	217	917	0	5	1139	2588
% App. Total	40.8	3.9	53.1	2.2		0.2	72.7	26.6	0.5		0	0	0	0		19.1	80.5	0	0.4		
PHF	.750	.281	.945	.625	.792	.250	.914	.923	.750	.951	.000	.000	.000	.000	.000	.919	.940	.000	.625	.937	.964



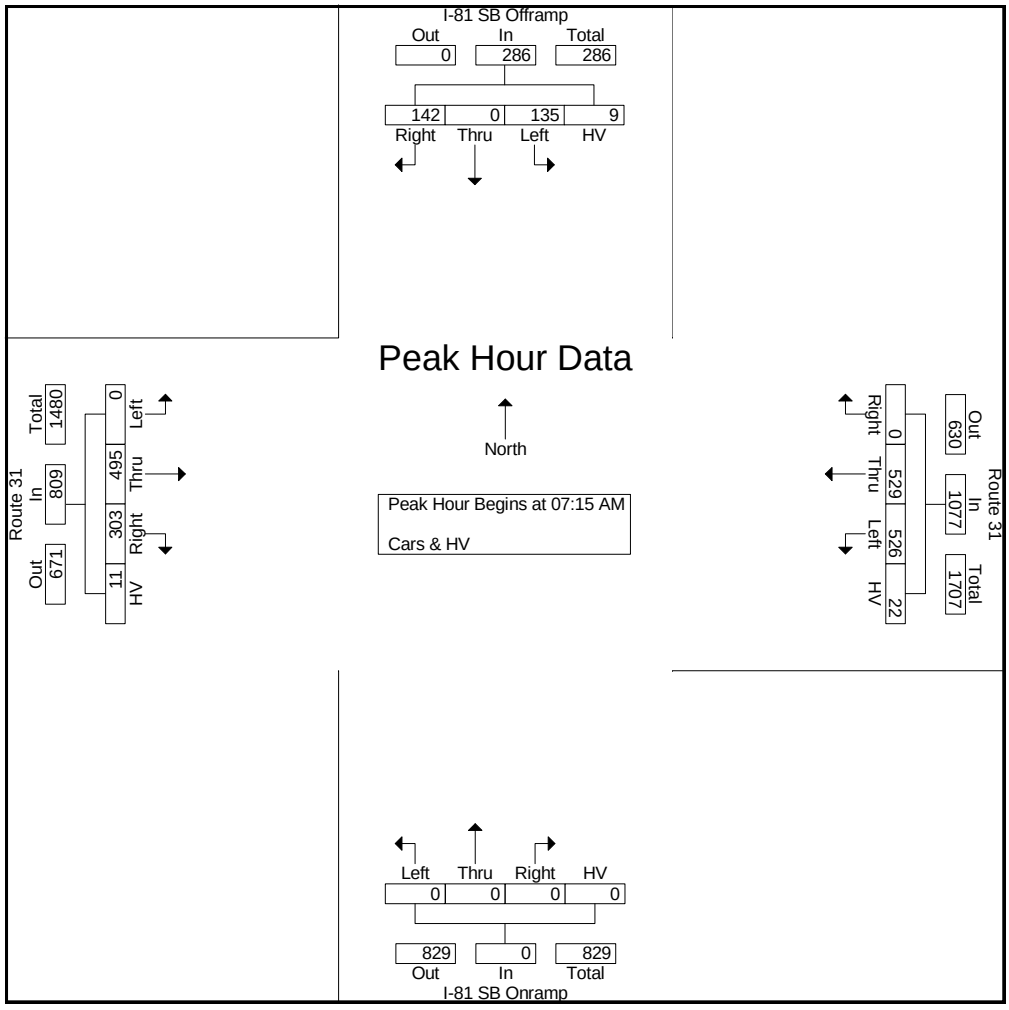
File Name : 9 - Route 31 @ I-81 SB Ramps - 5-19-22
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Groups Printed- Cars & HV

	I-81 SB Offramp Southbound				Route 31 Westbound				I-81 SB Onramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	28	0	20	2	0	91	145	4	0	0	0	0	65	125	0	1	481
07:15 AM	28	0	32	0	0	120	138	4	0	0	0	0	50	167	0	3	542
07:30 AM	43	0	34	3	0	136	148	7	0	0	0	0	98	123	0	3	595
07:45 AM	36	0	35	2	0	140	139	4	0	0	0	0	78	102	0	1	537
Total	135	0	121	7	0	487	570	19	0	0	0	0	291	517	0	8	2155
08:00 AM	35	0	34	4	0	133	101	7	0	0	0	0	77	103	0	4	498
08:15 AM	19	0	18	2	0	128	136	16	0	0	0	0	65	95	0	9	488
08:30 AM	38	0	16	1	0	121	83	10	0	0	0	0	54	123	0	5	451
08:45 AM	35	0	24	3	0	158	77	14	0	0	0	0	42	156	0	5	514
Total	127	0	92	10	0	540	397	47	0	0	0	0	238	477	0	23	1951
04:00 PM	23	0	34	4	0	241	65	8	0	0	0	0	55	232	0	8	670
04:15 PM	34	0	36	2	0	242	86	3	0	0	0	0	56	221	0	8	688
04:30 PM	29	0	33	1	0	232	74	8	0	0	0	0	62	181	0	6	626
04:45 PM	34	0	34	6	0	231	75	4	0	0	0	0	66	240	0	7	697
Total	120	0	137	13	0	946	300	23	0	0	0	0	239	874	0	29	2681
05:00 PM	36	1	15	1	0	242	74	3	0	0	0	0	56	234	0	9	671
05:15 PM	41	0	27	0	0	233	79	6	0	0	0	0	52	218	0	3	659
05:30 PM	27	0	21	1	0	204	67	11	1	0	0	0	44	204	0	2	582
05:45 PM	30	1	31	2	0	148	49	2	0	0	0	0	31	171	0	1	466
Total	134	2	94	4	0	827	269	22	1	0	0	0	183	827	0	15	2378
Grand Total	516	2	444	34	0	2800	1536	111	1	0	0	0	951	2695	0	75	9165
Apprch %	51.8	0.2	44.6	3.4	0	63	34.5	2.5	100	0	0	0	25.6	72.4	0	2	
Total %	5.6	0	4.8	0.4	0	30.6	16.8	1.2	0	0	0	0	10.4	29.4	0	0.8	

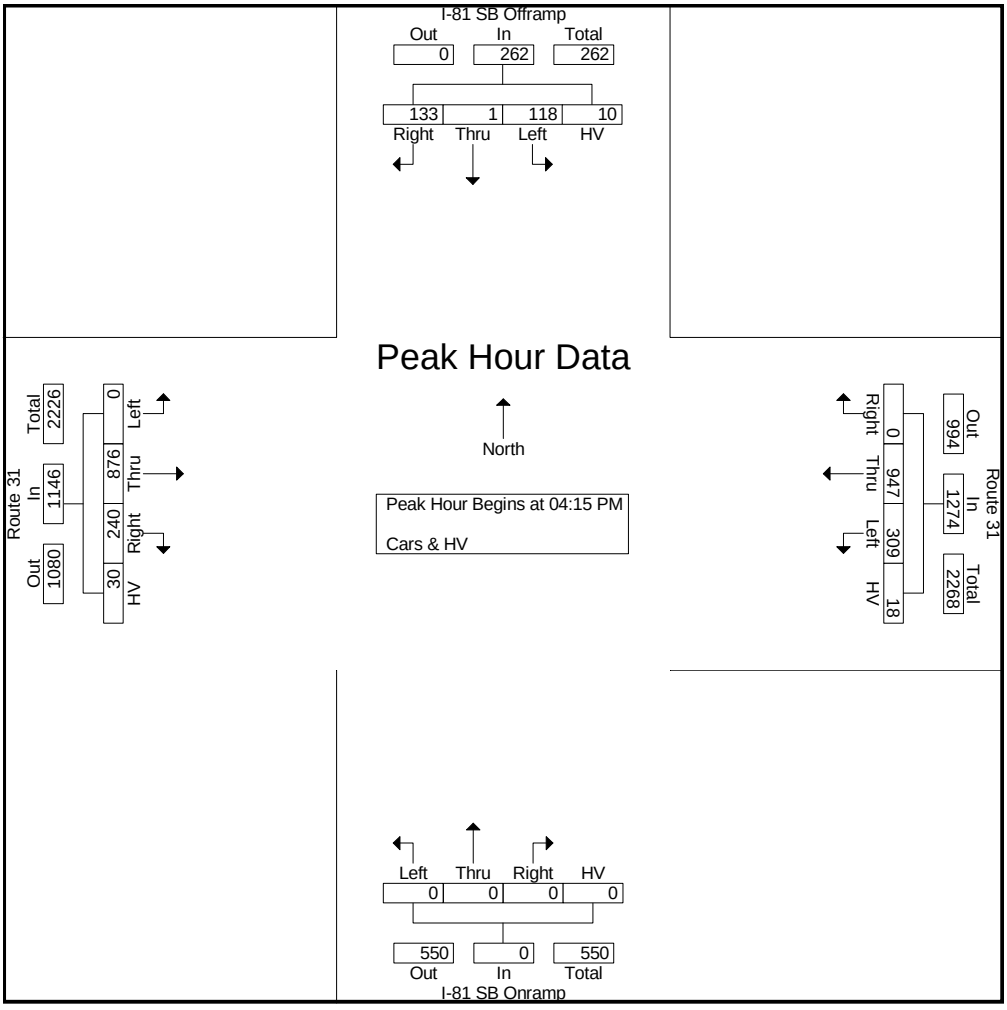
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	I-81 SB Offramp Southbound					Route 31 Westbound					I-81 SB Onramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	28	0	32	0	60	0	120	138	4	262	0	0	0	0	0	50	167	0	3	220	542
07:30 AM	43	0	34	3	80	0	136	148	7	291	0	0	0	0	0	98	123	0	3	224	595
07:45 AM	36	0	35	2	73	0	140	139	4	283	0	0	0	0	0	78	102	0	1	181	537
08:00 AM	35	0	34	4	73	0	133	101	7	241	0	0	0	0	0	77	103	0	4	184	498
Total Volume	142	0	135	9	286	0	529	526	22	1077	0	0	0	0	0	303	495	0	11	809	2172
% App. Total	49.7	0	47.2	3.1		0	49.1	48.8	2		0	0	0	0		37.5	61.2	0	1.4		
PHF	.826	.000	.964	.563	.894	.000	.945	.889	.786	.925	.000	.000	.000	.000	.000	.773	.741	.000	.688	.903	.913



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Site Code : 00000009
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	I-81 SB Offramp Southbound					Route 31 Westbound					I-81 SB Onramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	34	0	36	2	72	0	242	86	3	331	0	0	0	0	0	56	221	0	8	285	688
04:30 PM	29	0	33	1	63	0	232	74	8	314	0	0	0	0	0	62	181	0	6	249	626
04:45 PM	34	0	34	6	74	0	231	75	4	310	0	0	0	0	0	66	240	0	7	313	697
05:00 PM	36	1	15	1	53	0	242	74	3	319	0	0	0	0	0	56	234	0	9	299	671
Total Volume	133	1	118	10	262	0	947	309	18	1274	0	0	0	0	0	240	876	0	30	1146	2682
% App. Total	50.8	0.4	45	3.8		0	74.3	24.3	1.4		0	0	0	0		20.9	76.4	0	2.6		
PHF	.924	.250	.819	.417	.885	.000	.978	.898	.563	.962	.000	.000	.000	.000	.000	.909	.913	.000	.833	.915	.962



File Name : 9 - Route 31 @ I-81 SB Ramps - 5-19-22
Site Code : 00000009
Start Date : 5/19/2022
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Groups Printed- Peds

	I-81 SB Offramp Southbound				Route 31 Westbound				I-81 SB Onramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
04:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	4
05:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0	7
Apprch %	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	
Total %	0	0	0	57.1	0	0	0	0	0	0	0	42.9	0	0	0	0	

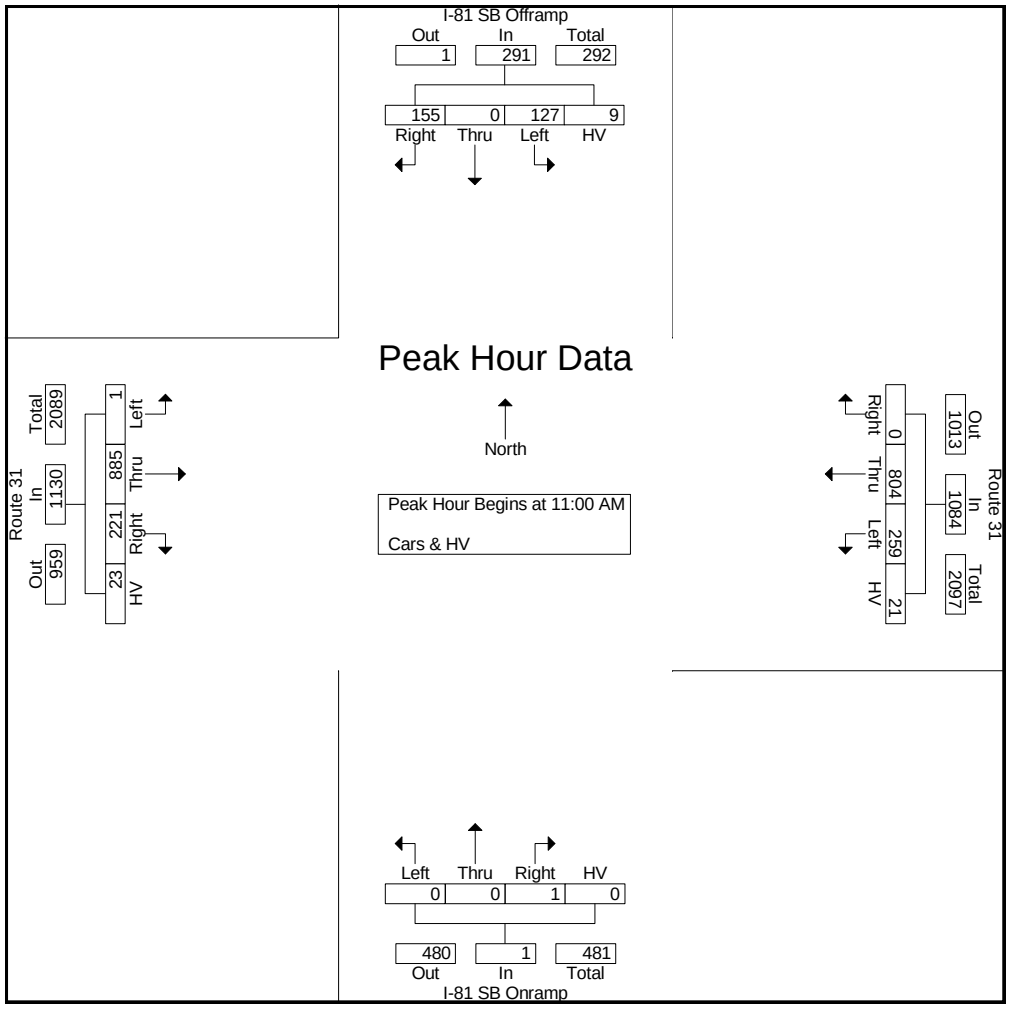
File Name : 9 - Route 31 @ I-81 SB Ramps - 5-21-22
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Groups Printed- Cars & HV

	I-81 SB Offramp Southbound				Route 31 Westbound				I-81 SB Onramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	41	0	22	2	0	201	55	9	0	0	0	0	66	231	0	8	635
11:15 AM	23	0	24	2	0	178	55	4	1	0	0	0	54	219	0	5	565
11:30 AM	55	0	34	3	0	220	69	3	0	0	0	0	50	213	0	4	651
11:45 AM	36	0	47	2	0	205	80	5	0	0	0	0	51	222	1	6	655
Total	155	0	127	9	0	804	259	21	1	0	0	0	221	885	1	23	2506
12:00 PM	25	1	30	0	0	212	71	5	0	0	0	0	53	200	0	11	608
12:15 PM	27	1	22	1	0	189	58	6	0	0	0	0	51	209	0	5	569
12:30 PM	35	0	21	2	0	155	58	3	0	0	0	0	54	234	0	5	567
12:45 PM	24	0	26	2	0	170	64	1	0	0	0	0	41	182	0	8	518
Total	111	2	99	5	0	726	251	15	0	0	0	0	199	825	0	29	2262
Grand Total	266	2	226	14	0	1530	510	36	1	0	0	0	420	1710	1	52	4768
Apprch %	52.4	0.4	44.5	2.8	0	73.7	24.6	1.7	100	0	0	0	19.2	78.3	0	2.4	
Total %	5.6	0	4.7	0.3	0	32.1	10.7	0.8	0	0	0	0	8.8	35.9	0	1.1	

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	I-81 SB Offramp Southbound					Route 31 Westbound					I-81 SB Onramp Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	41	0	22	2	65	0	201	55	9	265	0	0	0	0	0	66	231	0	8	305	635
11:15 AM	23	0	24	2	49	0	178	55	4	237	1	0	0	0	1	54	219	0	5	278	565
11:30 AM	55	0	34	3	92	0	220	69	3	292	0	0	0	0	0	50	213	0	4	267	651
11:45 AM	36	0	47	2	85	0	205	80	5	290	0	0	0	0	0	51	222	1	6	280	655
Total Volume	155	0	127	9	291	0	804	259	21	1084	1	0	0	0	1	221	885	1	23	1130	2506
% App. Total	53.3	0	43.6	3.1		0	74.2	23.9	1.9		100	0	0	0		19.6	78.3	0.1	2		
PHF	.705	.000	.676	.750	.791	.000	.914	.809	.583	.928	.250	.000	.000	.000	.250	.837	.958	.250	.719	.926	.956



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Groups Printed- Peds

	I-81 SB Offramp Southbound				Route 31 Westbound				I-81 SB Onramp Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
11:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	4
12:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	5
Apprch %	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	100	
Total %	0	0	0	60	0	0	0	0	0	0	0	20	0	0	0	20	

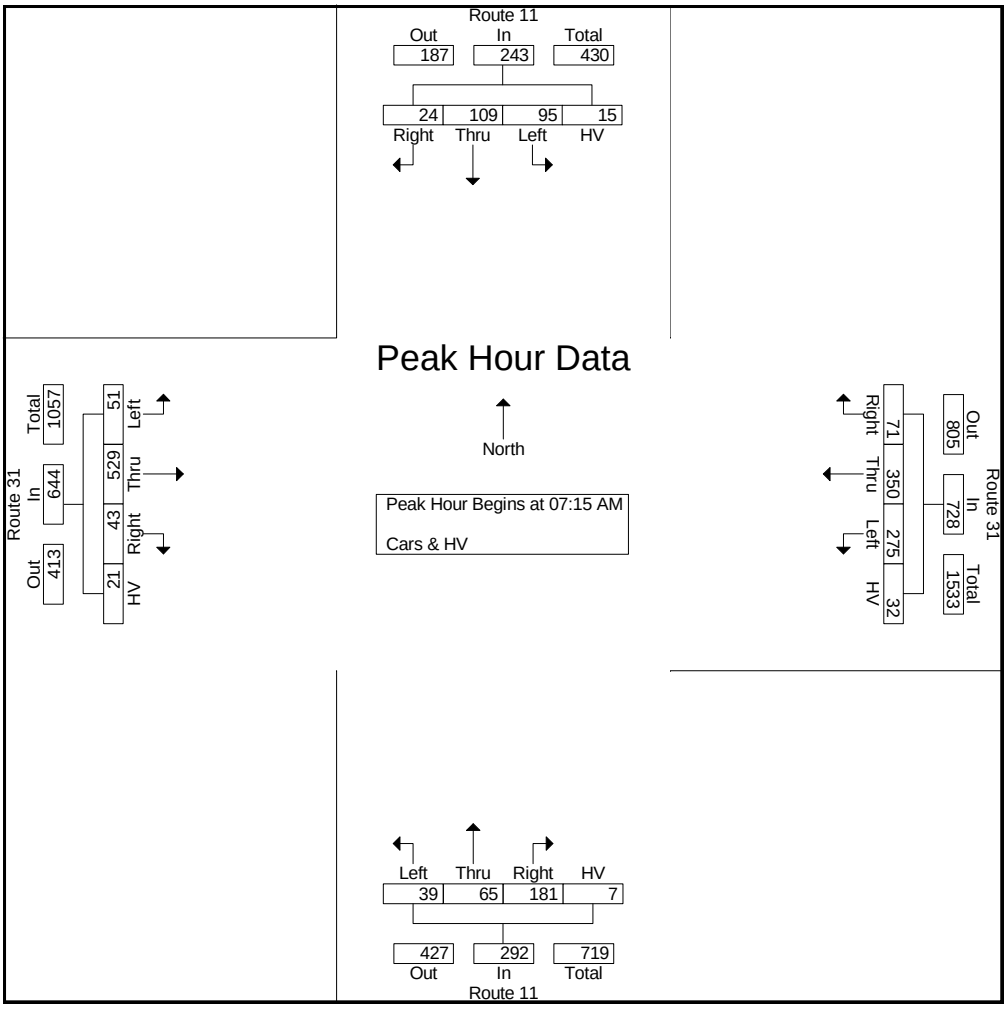
File Name : 10 - Route 31 @ Route 11 - 5-12-22
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Groups Printed- Cars & HV

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	7	16	21	3	23	53	38	3	34	20	9	3	6	142	15	6	399
07:15 AM	7	10	17	2	23	86	66	9	54	11	7	1	7	154	11	4	469
07:30 AM	5	34	28	3	7	94	78	3	43	19	1	1	8	141	18	7	490
07:45 AM	5	46	28	6	22	97	72	9	45	12	9	2	13	137	12	6	521
Total	24	106	94	14	75	330	254	24	176	62	26	7	34	574	56	23	1879
08:00 AM	7	19	22	4	19	73	59	11	39	23	22	3	15	97	10	4	427
08:15 AM	8	35	23	1	17	80	64	8	38	31	10	2	7	98	12	7	441
08:30 AM	6	23	28	6	17	80	81	6	63	29	18	1	21	100	20	7	506
08:45 AM	2	30	18	0	22	57	82	3	55	26	12	3	15	116	9	11	461
Total	23	107	91	11	75	290	286	28	195	109	62	9	58	411	51	29	1835
04:00 PM	19	53	49	2	25	103	105	1	143	65	20	3	20	94	13	8	723
04:15 PM	14	46	33	1	13	128	87	2	87	53	27	0	15	115	7	4	632
04:30 PM	19	47	48	4	28	96	95	2	120	65	25	0	21	108	14	2	694
04:45 PM	13	45	32	3	33	105	90	4	124	61	31	0	15	95	18	2	671
Total	65	191	162	10	99	432	377	9	474	244	103	3	71	412	52	16	2720
05:00 PM	23	28	49	2	14	131	81	3	116	67	41	0	25	96	9	0	685
05:15 PM	17	25	37	2	19	175	109	2	118	65	22	1	36	97	15	1	741
05:30 PM	9	30	21	0	24	125	103	2	114	57	27	0	23	109	11	0	655
05:45 PM	23	19	30	3	24	102	84	4	120	59	30	0	14	108	12	0	632
Total	72	102	137	7	81	533	377	11	468	248	120	1	98	410	47	1	2713
Grand Total	184	506	484	42	330	1585	1294	72	1313	663	311	20	261	1807	206	69	9147
Apprch %	15.1	41.6	39.8	3.5	10.1	48.3	39.4	2.2	56.9	28.7	13.5	0.9	11.1	77.1	8.8	2.9	
Total %	2	5.5	5.3	0.5	3.6	17.3	14.1	0.8	14.4	7.2	3.4	0.2	2.9	19.8	2.3	0.8	

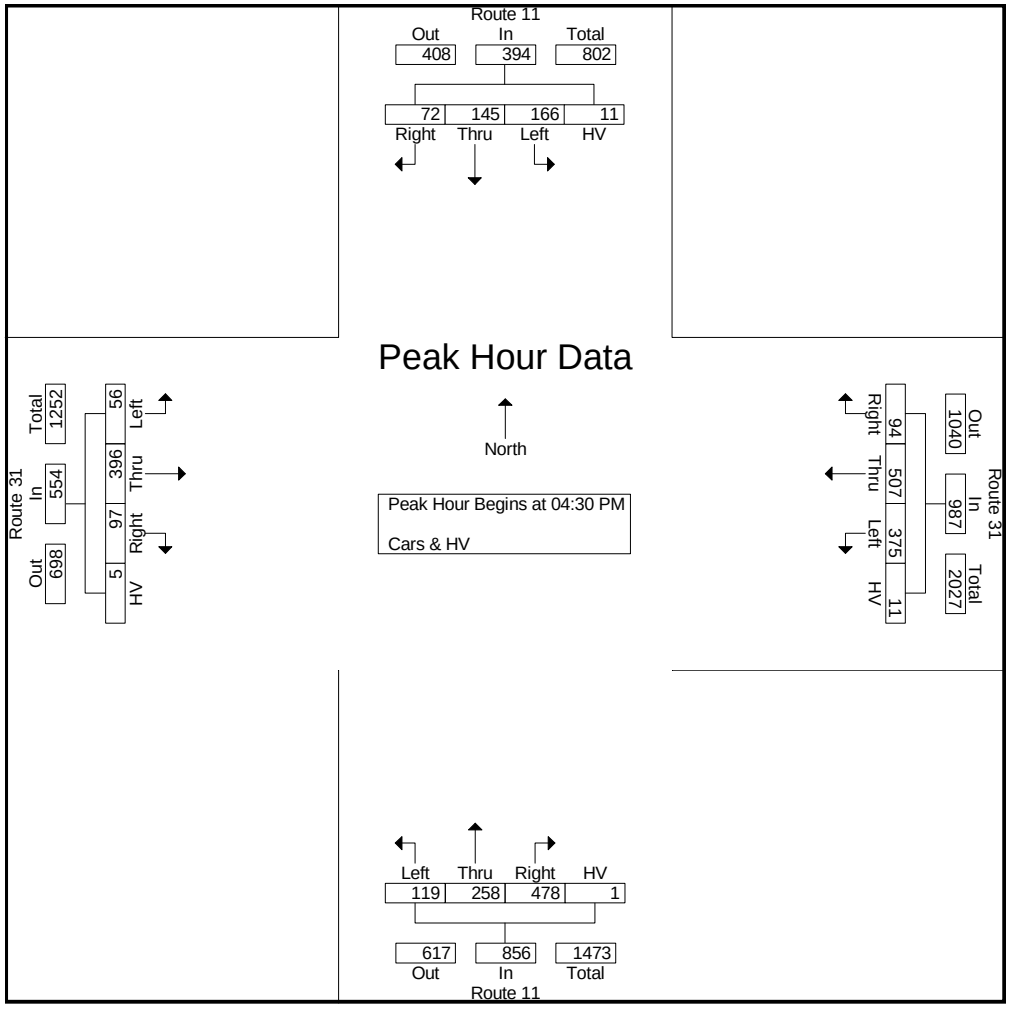
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	Route 11 Southbound					Route 31 Westbound					Route 11 Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	10	17	2	36	23	86	66	9	184	54	11	7	1	73	7	154	11	4	176	469
07:30 AM	5	34	28	3	70	7	94	78	3	182	43	19	1	1	64	8	141	18	7	174	490
07:45 AM	5	46	28	6	85	22	97	72	9	200	45	12	9	2	68	13	137	12	6	168	521
08:00 AM	7	19	22	4	52	19	73	59	11	162	39	23	22	3	87	15	97	10	4	126	427
Total Volume	24	109	95	15	243	71	350	275	32	728	181	65	39	7	292	43	529	51	21	644	1907
% App. Total	9.9	44.9	39.1	6.2		9.8	48.1	37.8	4.4		62	22.3	13.4	2.4		6.7	82.1	7.9	3.3		
PHF	.857	.592	.848	.625	.715	.772	.902	.881	.727	.910	.838	.707	.443	.583	.839	.717	.859	.708	.750	.915	.915



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	Route 11 Southbound					Route 31 Westbound					Route 11 Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	19	47	48	4	118	28	96	95	2	221	120	65	25	0	210	21	108	14	2	145	694
04:45 PM	13	45	32	3	93	33	105	90	4	232	124	61	31	0	216	15	95	18	2	130	671
05:00 PM	23	28	49	2	102	14	131	81	3	229	116	67	41	0	224	25	96	9	0	130	685
05:15 PM	17	25	37	2	81	19	175	109	2	305	118	65	22	1	206	36	97	15	1	149	741
Total Volume	72	145	166	11	394	94	507	375	11	987	478	258	119	1	856	97	396	56	5	554	2791
% App. Total	18.3	36.8	42.1	2.8		9.5	51.4	38	1.1		55.8	30.1	13.9	0.1		17.5	71.5	10.1	0.9		
PHF	.783	.771	.847	.688	.835	.712	.724	.860	.688	.809	.964	.963	.726	.250	.955	.674	.917	.778	.625	.930	.942



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Groups Printed- Peds

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

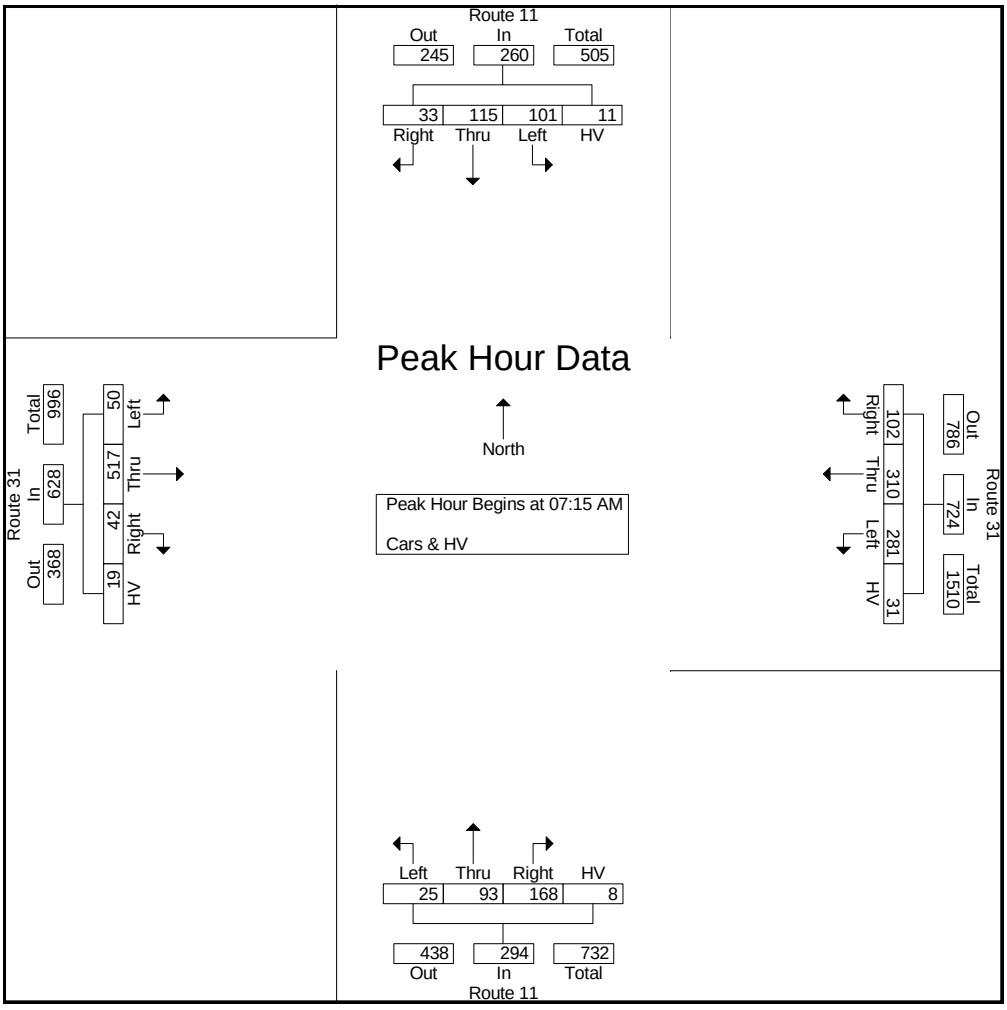
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Groups Printed- Cars & HV

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	6	16	22	3	16	69	25	4	34	17	8	4	9	135	11	9	388
07:15 AM	7	21	25	1	21	81	55	12	55	17	6	1	6	165	13	2	488
07:30 AM	9	26	24	5	18	86	84	1	32	19	5	1	7	129	12	7	465
07:45 AM	8	39	34	3	31	73	76	5	39	27	5	5	11	121	15	5	497
Total	30	102	105	12	86	309	240	22	160	80	24	11	33	550	51	23	1838
08:00 AM	9	29	18	2	32	70	66	13	42	30	9	1	18	102	10	5	456
08:15 AM	5	29	21	6	23	83	58	14	57	30	14	3	8	75	12	3	441
08:30 AM	4	21	23	2	30	75	66	9	54	32	11	4	11	106	13	10	471
Total	18	79	62	10	85	228	190	36	153	92	34	8	37	283	35	18	1368
04:00 PM	26	29	61	4	34	118	82	5	119	61	21	3	11	93	13	11	691
04:15 PM	17	32	28	2	23	134	97	5	131	64	17	0	21	104	15	1	691
04:30 PM	16	58	42	3	28	117	108	4	112	64	17	1	24	98	15	5	712
04:45 PM	18	42	42	3	32	121	92	3	128	82	27	2	19	109	9	1	730
Total	77	161	173	12	117	490	379	17	490	271	82	6	75	404	52	18	2824
05:00 PM	35	43	49	2	27	146	90	4	125	70	32	1	17	95	18	3	757
05:15 PM	15	39	45	1	43	137	112	5	102	68	30	0	26	97	12	1	733
05:30 PM	17	36	28	1	20	123	102	4	145	62	23	1	23	88	20	0	693
05:45 PM	11	28	25	0	31	117	80	1	126	81	20	0	17	101	13	0	651
Total	78	146	147	4	121	523	384	14	498	281	105	2	83	381	63	4	2834
Grand Total	203	488	487	38	409	1550	1193	89	1301	724	245	27	228	1618	201	63	8864
Apprch %	16.7	40.1	40	3.1	12.6	47.8	36.8	2.7	56.6	31.5	10.7	1.2	10.8	76.7	9.5	3	
Total %	2.3	5.5	5.5	0.4	4.6	17.5	13.5	1	14.7	8.2	2.8	0.3	2.6	18.3	2.3	0.7	

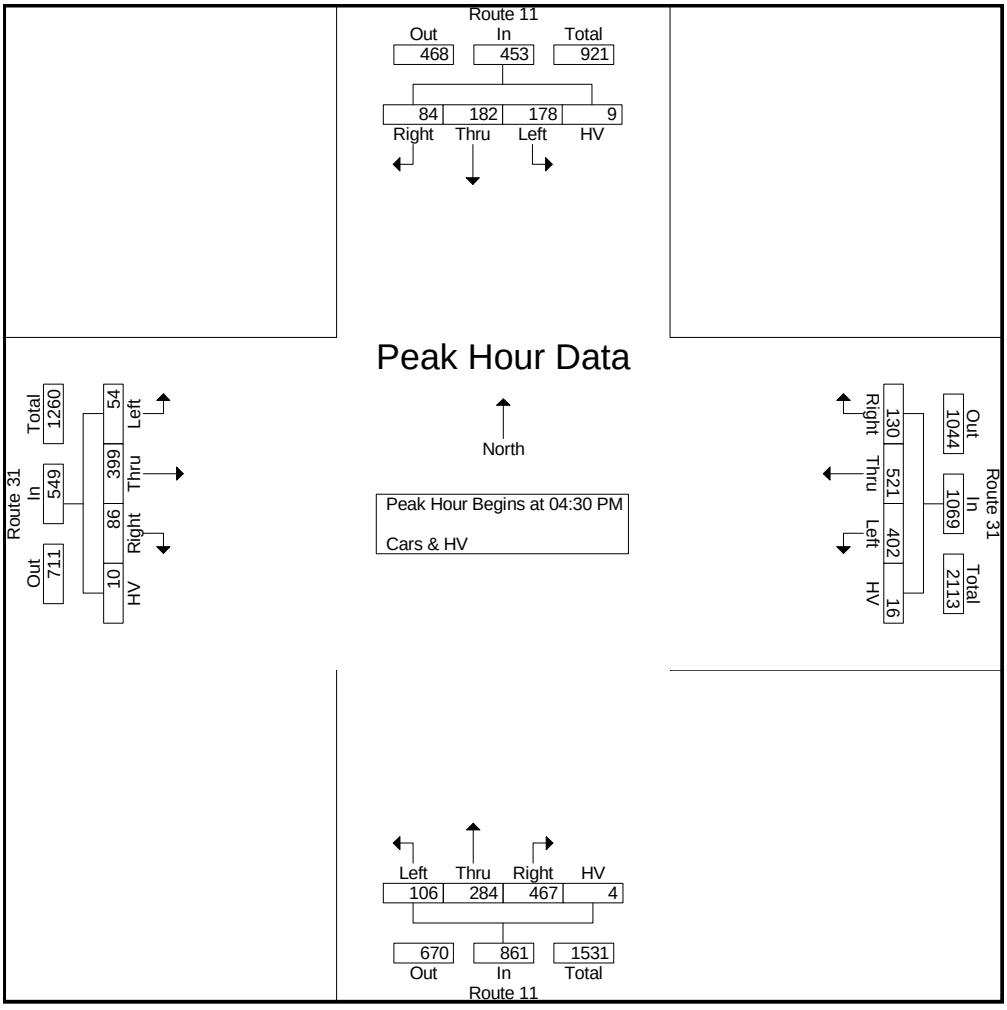
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	Route 11 Southbound					Route 31 Westbound					Route 11 Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	21	25	1	54	21	81	55	12	169	55	17	6	1	79	6	165	13	2	186	488
07:30 AM	9	26	24	5	64	18	86	84	1	189	32	19	5	1	57	7	129	12	7	155	465
07:45 AM	8	39	34	3	84	31	73	76	5	185	39	27	5	5	76	11	121	15	5	152	497
08:00 AM	9	29	18	2	58	32	70	66	13	181	42	30	9	1	82	18	102	10	5	135	456
Total Volume	33	115	101	11	260	102	310	281	31	724	168	93	25	8	294	42	517	50	19	628	1906
% App. Total	12.7	44.2	38.8	4.2		14.1	42.8	38.8	4.3		57.1	31.6	8.5	2.7		6.7	82.3	8	3		
PHF	.917	.737	.743	.550	.774	.797	.901	.836	.596	.958	.764	.775	.694	.400	.896	.583	.783	.833	.679	.844	.959



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Start Time	Route 11 Southbound					Route 31 Westbound					Route 11 Northbound					Route 31 Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	16	58	42	3	119	28	117	108	4	257	112	64	17	1	194	24	98	15	5	142	712
04:45 PM	18	42	42	3	105	32	121	92	3	248	128	82	27	2	239	19	109	9	1	138	730
05:00 PM	35	43	49	2	129	27	146	90	4	267	125	70	32	1	228	17	95	18	3	133	757
05:15 PM	15	39	45	1	100	43	137	112	5	297	102	68	30	0	200	26	97	12	1	136	733
Total Volume	84	182	178	9	453	130	521	402	16	1069	467	284	106	4	861	86	399	54	10	549	2932
% App. Total	18.5	40.2	39.3	2		12.2	48.7	37.6	1.5		54.2	33	12.3	0.5		15.7	72.7	9.8	1.8		
PHF	.600	.784	.908	.750	.878	.756	.892	.897	.800	.900	.912	.866	.828	.500	.901	.827	.915	.750	.500	.967	.968



File Name : 10 - Route 31 @ Route 11 - 5-19-22
Site Code : 00000010
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Groups Printed- Peds

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4
Apprch %	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	0	0	0	75	0	0	0	25	0	0	0	0	

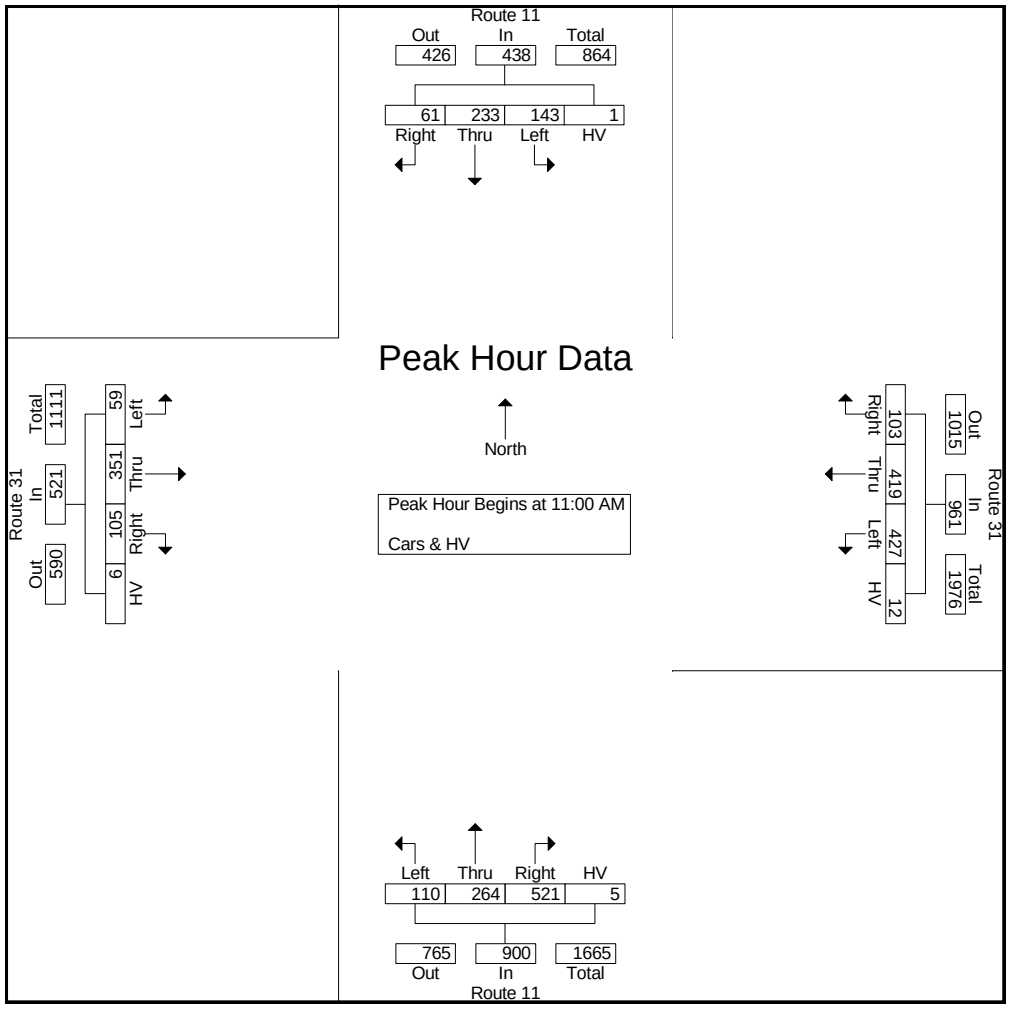
File Name : 10 - Route 31 @ Route 11 - 5-21-22
Site Code : 00000010
Start Date : 5/21/2022
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Groups Printed- Cars & HV

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	16	53	44	0	27	120	114	4	145	62	29	1	20	93	14	1	743
11:15 AM	15	52	34	0	24	88	103	2	136	75	18	0	29	73	20	3	672
11:30 AM	16	71	36	1	17	105	99	2	111	57	29	1	31	103	15	2	696
11:45 AM	14	57	29	0	35	106	111	4	129	70	34	3	25	82	10	0	709
Total	61	233	143	1	103	419	427	12	521	264	110	5	105	351	59	6	2820
12:00 PM	9	60	47	0	20	98	98	1	105	45	29	1	11	93	12	1	630
12:15 PM	16	45	39	1	13	97	110	0	154	77	29	0	18	74	8	0	681
12:30 PM	10	38	35	1	20	88	102	1	119	63	20	0	24	111	10	1	643
12:45 PM	9	35	31	0	19	76	112	0	126	73	33	1	16	80	18	0	629
Total	44	178	152	2	72	359	422	2	504	258	111	2	69	358	48	2	2583
Grand Total	105	411	295	3	175	778	849	14	1025	522	221	7	174	709	107	8	5403
Apprch %	12.9	50.5	36.2	0.4	9.6	42.8	46.8	0.8	57.7	29.4	12.5	0.4	17.4	71	10.7	0.8	
Total %	1.9	7.6	5.5	0.1	3.2	14.4	15.7	0.3	19	9.7	4.1	0.1	3.2	13.1	2	0.1	

File Name : 10 - Route 31 @ Route 11 - 5-21-22
Site Code : 00000010
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	Route 11 Southbound					Route 31 Westbound					Route 11 Northbound					Route 31 Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	16	53	44	0	113	27	120	114	4	265	145	62	29	1	237	20	93	14	1	128	743
11:15 AM	15	52	34	0	101	24	88	103	2	217	136	75	18	0	229	29	73	20	3	125	672
11:30 AM	16	71	36	1	124	17	105	99	2	223	111	57	29	1	198	31	103	15	2	151	696
11:45 AM	14	57	29	0	100	35	106	111	4	256	129	70	34	3	236	25	82	10	0	117	709
Total Volume	61	233	143	1	438	103	419	427	12	961	521	264	110	5	900	105	351	59	6	521	2820
% App. Total	13.9	53.2	32.6	0.2		10.7	43.6	44.4	1.2		57.9	29.3	12.2	0.6		20.2	67.4	11.3	1.2		
PHF	.953	.820	.813	.250	.883	.736	.873	.936	.750	.907	.898	.880	.809	.417	.949	.847	.852	.738	.500	.863	.949



File Name : 10 - Route 31 @ Route 11 - 5-21-22
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Groups Printed- Peds

	Route 11 Southbound				Route 31 Westbound				Route 11 Northbound				Route 31 Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

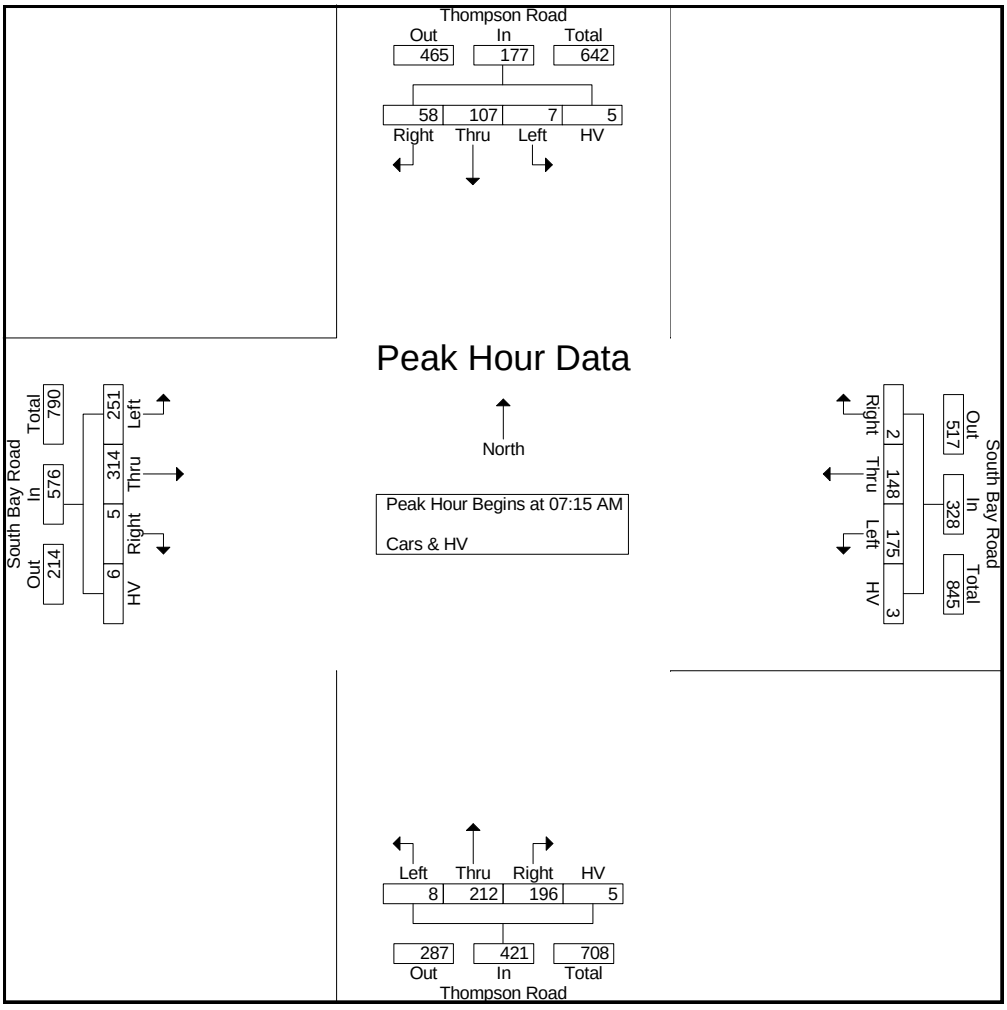
File Name : 11 - South Bay @ Thompson Road - 5-18-22
Site Code : 00000011
Start Date : 5/18/2022
Page No : 1

Groups Printed- Cars & HV

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	11	28	1	3	0	17	31	1	29	51	3	0	2	79	35	1	292
07:15 AM	11	37	1	1	1	25	51	3	35	51	1	4	1	70	64	1	357
07:30 AM	14	24	2	2	1	33	26	0	62	73	2	0	1	88	73	2	403
07:45 AM	19	24	4	0	0	39	56	0	47	50	5	1	3	91	62	2	403
Total	55	113	8	6	2	114	164	4	173	225	11	5	7	328	234	6	1455
08:00 AM	14	22	0	2	0	51	42	0	52	38	0	0	0	65	52	1	339
08:15 AM	23	26	4	1	0	39	26	1	37	35	2	0	2	39	31	1	267
08:30 AM	8	24	0	1	0	30	31	0	23	42	1	2	2	60	40	3	267
08:45 AM	14	25	3	2	3	36	28	0	19	33	5	0	5	44	19	4	240
Total	59	97	7	6	3	156	127	1	131	148	8	2	9	208	142	9	1113
04:00 PM	41	42	3	0	4	88	28	0	39	60	4	0	0	60	53	2	424
04:15 PM	47	27	7	1	3	48	28	0	55	58	2	0	1	71	64	0	412
04:30 PM	42	33	2	1	7	44	24	0	60	61	6	0	1	72	55	0	408
04:45 PM	59	34	2	0	15	60	21	1	48	65	4	0	1	70	59	0	439
Total	189	136	14	2	29	240	101	1	202	244	16	0	3	273	231	2	1683
05:00 PM	67	23	2	1	1	87	20	0	60	68	4	0	0	76	49	0	458
05:15 PM	45	32	1	0	2	72	26	0	49	78	2	0	0	79	59	1	446
05:30 PM	49	31	8	0	0	55	20	0	43	52	1	1	0	68	47	0	375
05:45 PM	48	38	1	0	4	59	27	1	31	47	1	2	0	75	49	0	383
Total	209	124	12	1	7	273	93	1	183	245	8	3	0	298	204	1	1662
Grand Total	512	470	41	15	41	783	485	7	689	862	43	10	19	1107	811	18	5913
Apprch %	49.3	45.3	3.9	1.4	3.1	59.5	36.9	0.5	43	53.7	2.7	0.6	1	56.6	41.5	0.9	
Total %	8.7	7.9	0.7	0.3	0.7	13.2	8.2	0.1	11.7	14.6	0.7	0.2	0.3	18.7	13.7	0.3	

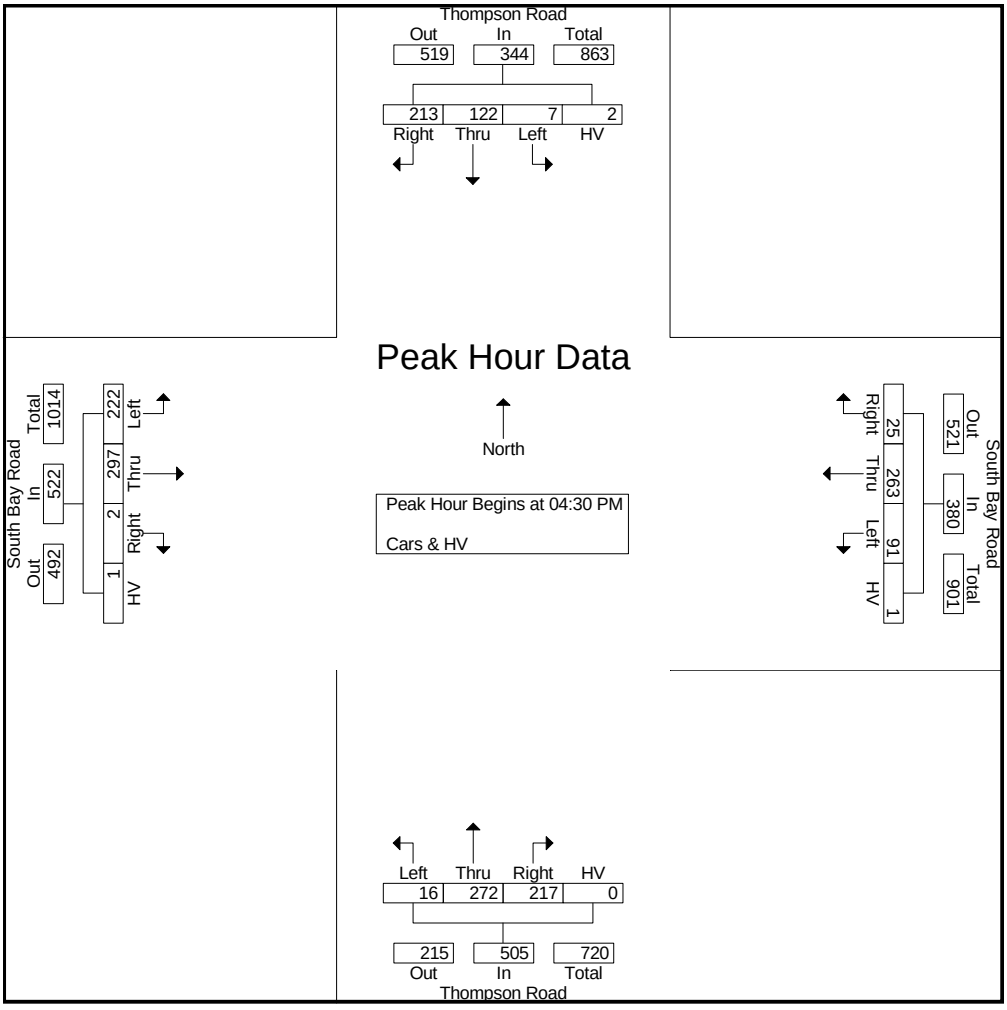
File Name : 11 - South Bay @ Thompson Road - 5-18-22
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	Thompson Road Southbound					South Bay Road Westbound					Thompson Road Northbound					South Bay Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	11	37	1	1	50	1	25	51	3	80	35	51	1	4	91	1	70	64	1	136	357
07:30 AM	14	24	2	2	42	1	33	26	0	60	62	73	2	0	137	1	88	73	2	164	403
07:45 AM	19	24	4	0	47	0	39	56	0	95	47	50	5	1	103	3	91	62	2	158	403
08:00 AM	14	22	0	2	38	0	51	42	0	93	52	38	0	0	90	0	65	52	1	118	339
Total Volume	58	107	7	5	177	2	148	175	3	328	196	212	8	5	421	5	314	251	6	576	1502
% App. Total	32.8	60.5	4	2.8		0.6	45.1	53.4	0.9		46.6	50.4	1.9	1.2		0.9	54.5	43.6	1		
PHF	.763	.723	.438	.625	.885	.500	.725	.781	.250	.863	.790	.726	.400	.313	.768	.417	.863	.860	.750	.878	.932



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Start Time	Thompson Road Southbound					South Bay Road Westbound					Thompson Road Northbound					South Bay Road Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	42	33	2	1	78	7	44	24	0	75	60	61	6	0	127	1	72	55	0	128	408
04:45 PM	59	34	2	0	95	15	60	21	1	97	48	65	4	0	117	1	70	59	0	130	439
05:00 PM	67	23	2	1	93	1	87	20	0	108	60	68	4	0	132	0	76	49	0	125	458
05:15 PM	45	32	1	0	78	2	72	26	0	100	49	78	2	0	129	0	79	59	1	139	446
Total Volume	213	122	7	2	344	25	263	91	1	380	217	272	16	0	505	2	297	222	1	522	1751
% App. Total	61.9	35.5	2	0.6		6.6	69.2	23.9	0.3		43	53.9	3.2	0		0.4	56.9	42.5	0.2		
PHF	.795	.897	.875	.500	.905	.417	.756	.875	.250	.880	.904	.872	.667	.000	.956	.500	.940	.941	.250	.939	.956



File Name : 11 - South Bay @ Thompson Road - 5-18-22
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Groups Printed- Peds

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	50	50	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	50	50	0	0	

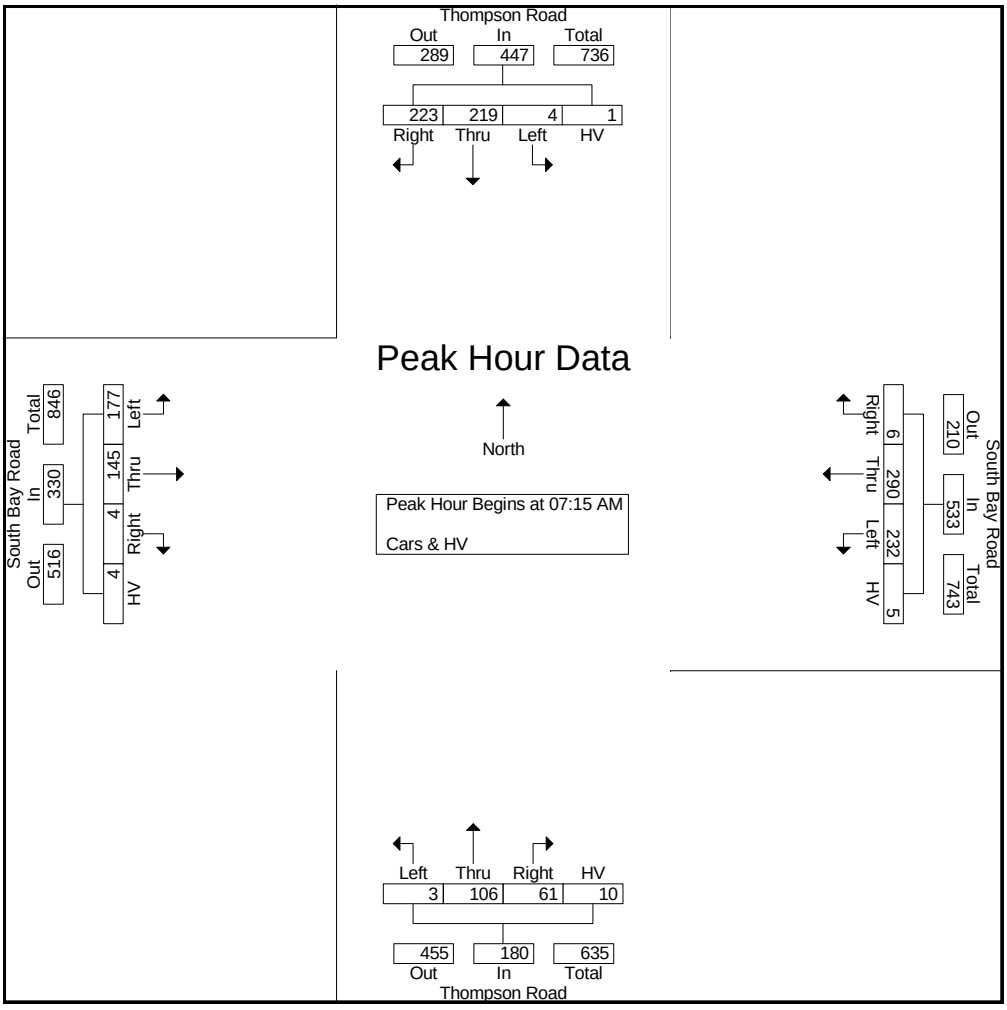
File Name : 11 - South Bay @ Thompson Road - 5-19-22
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Groups Printed- Cars & HV

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:15 AM	38	58	1	0	2	70	66	0	10	40	1	3	0	29	50	1	369
07:30 AM	64	58	1	0	0	89	65	2	16	29	0	4	0	39	32	0	399
07:45 AM	73	53	1	0	0	81	52	1	15	17	2	1	2	37	47	1	383
Total	175	169	3	0	2	240	183	3	41	86	3	8	2	105	129	2	1151
08:00 AM	48	50	1	1	4	50	49	2	20	20	0	2	2	40	48	2	339
08:15 AM	34	41	0	0	3	48	41	3	23	18	0	1	1	37	35	0	285
08:30 AM	26	44	0	1	0	77	34	1	16	9	1	3	2	32	21	1	268
08:45 AM	22	30	2	1	2	41	17	1	9	24	3	3	4	19	32	1	211
Total	130	165	3	3	9	216	141	7	68	71	4	9	9	128	136	4	1103
04:00 PM	66	30	1	0	4	89	26	1	38	52	1	0	0	89	59	0	456
04:15 PM	31	27	5	2	2	53	15	1	42	68	4	1	1	100	105	0	457
04:30 PM	40	33	2	0	7	41	30	1	38	72	4	0	0	75	65	0	408
04:45 PM	34	30	1	1	0	60	20	0	43	56	7	1	0	64	56	0	373
Total	171	120	9	3	13	243	91	3	161	248	16	2	1	328	285	0	1694
05:00 PM	52	39	2	2	5	50	34	1	57	71	2	0	0	79	62	0	456
05:15 PM	40	44	1	0	0	60	35	1	47	69	2	0	1	83	55	0	438
05:30 PM	51	29	1	0	1	54	24	0	34	44	1	0	1	63	53	0	356
05:45 PM	21	42	1	0	1	52	16	0	31	56	0	0	0	78	40	0	338
Total	164	154	5	2	7	216	109	2	169	240	5	0	2	303	210	0	1588
Grand Total	640	608	20	8	31	915	524	15	439	645	28	19	14	864	760	6	5536
Apprch %	50.2	47.6	1.6	0.6	2.1	61.6	35.3	1	38.8	57	2.5	1.7	0.9	52.6	46.2	0.4	
Total %	11.6	11	0.4	0.1	0.6	16.5	9.5	0.3	7.9	11.7	0.5	0.3	0.3	15.6	13.7	0.1	

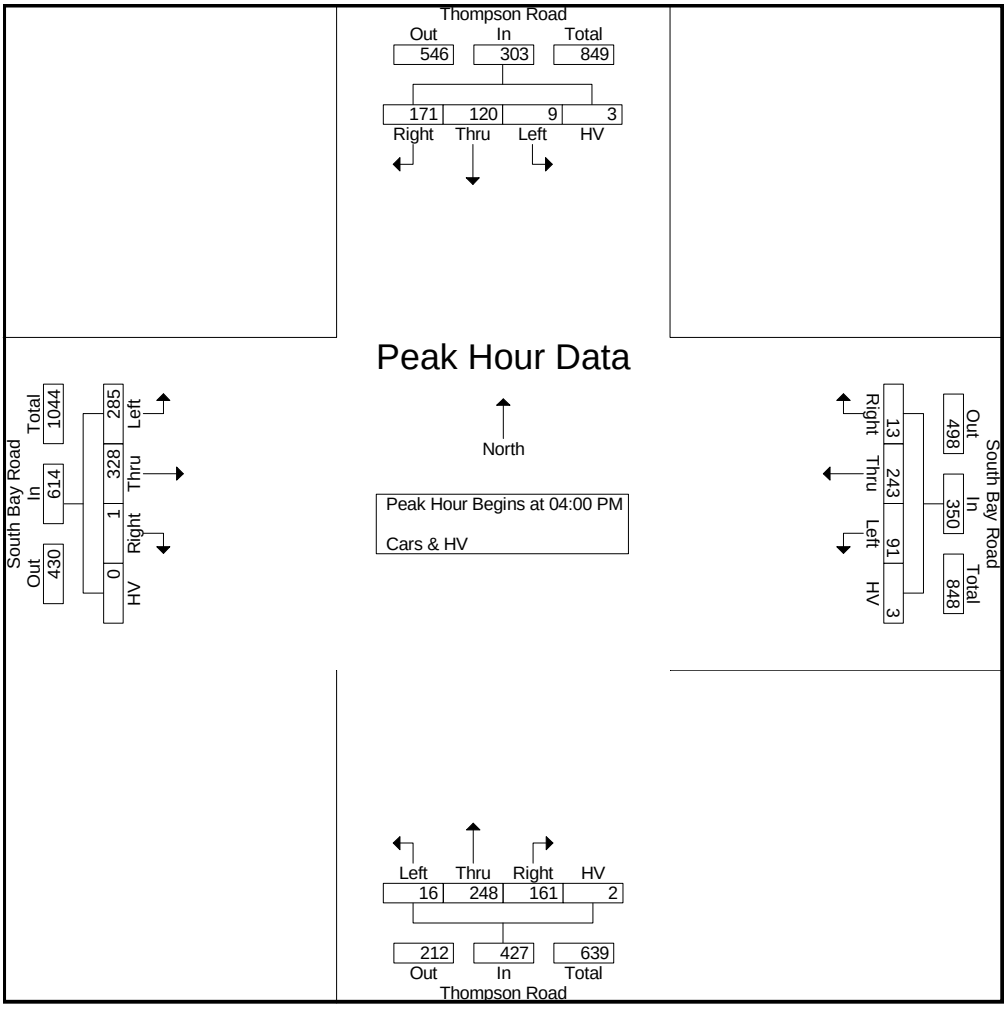
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	Thompson Road Southbound					South Bay Road Westbound					Thompson Road Northbound					South Bay Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	38	58	1	0	97	2	70	66	0	138	10	40	1	3	54	0	29	50	1	80	369
07:30 AM	64	58	1	0	123	0	89	65	2	156	16	29	0	4	49	0	39	32	0	71	399
07:45 AM	73	53	1	0	127	0	81	52	1	134	15	17	2	1	35	2	37	47	1	87	383
08:00 AM	48	50	1	1	100	4	50	49	2	105	20	20	0	2	42	2	40	48	2	92	339
Total Volume	223	219	4	1	447	6	290	232	5	533	61	106	3	10	180	4	145	177	4	330	1490
% App. Total	49.9	49	0.9	0.2		1.1	54.4	43.5	0.9		33.9	58.9	1.7	5.6		1.2	43.9	53.6	1.2		
PHF	.764	.944	1.00	.250	.880	.375	.815	.879	.625	.854	.763	.663	.375	.625	.833	.500	.906	.885	.500	.897	.934



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Start Time	Thompson Road Southbound					South Bay Road Westbound					Thompson Road Northbound					South Bay Road Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	66	30	1	0	97	4	89	26	1	120	38	52	1	0	91	0	89	59	0	148	456
04:15 PM	31	27	5	2	65	2	53	15	1	71	42	68	4	1	115	1	100	105	0	206	457
04:30 PM	40	33	2	0	75	7	41	30	1	79	38	72	4	0	114	0	75	65	0	140	408
04:45 PM	34	30	1	1	66	0	60	20	0	80	43	56	7	1	107	0	64	56	0	120	373
Total Volume	171	120	9	3	303	13	243	91	3	350	161	248	16	2	427	1	328	285	0	614	1694
% App. Total	56.4	39.6	3	1		3.7	69.4	26	0.9		37.7	58.1	3.7	0.5		0.2	53.4	46.4	0		
PHF	.648	.909	.450	.375	.781	.464	.683	.758	.750	.729	.936	.861	.571	.500	.928	.250	.820	.679	.000	.745	.927



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Groups Printed- Peds

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

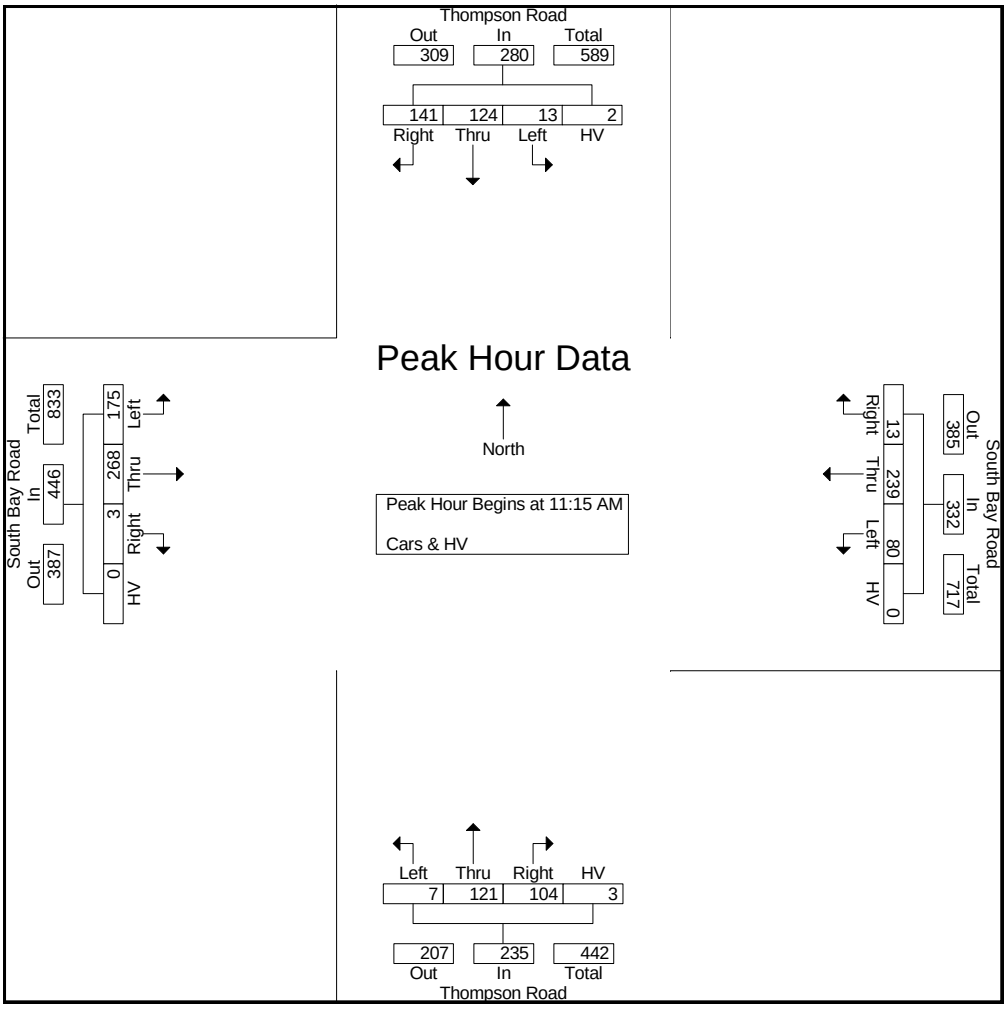
File Name : 11 - South Bay @ Thompson Road - 5-21-22
Site Code : 00000011
Start Date : 5/21/2022
Page No : 1

Groups Printed- Cars & HV

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
11:00 AM	41	28	3	0	2	68	20	1	21	26	1	0	1	60	38	1	311
11:15 AM	25	38	5	1	3	58	25	0	24	28	1	0	0	64	46	0	318
11:30 AM	40	23	2	0	3	71	19	0	20	28	0	0	1	60	41	0	308
11:45 AM	32	40	3	1	4	48	20	0	23	40	4	1	0	78	36	0	330
Total	138	129	13	2	12	245	84	1	88	122	6	1	2	262	161	1	1267
12:00 PM	44	23	3	0	3	62	16	0	37	25	2	2	2	66	52	0	337
12:15 PM	35	25	4	3	5	53	21	2	19	27	1	0	2	57	57	0	311
12:30 PM	32	24	5	1	10	60	20	1	22	28	1	1	1	58	50	0	314
12:45 PM	41	24	1	0	2	62	29	0	27	31	0	3	0	51	47	1	319
Total	152	96	13	4	20	237	86	3	105	111	4	6	5	232	206	1	1281
Grand Total	290	225	26	6	32	482	170	4	193	233	10	7	7	494	367	2	2548
Apprch %	53	41.1	4.8	1.1	4.7	70.1	24.7	0.6	43.6	52.6	2.3	1.6	0.8	56.8	42.2	0.2	
Total %	11.4	8.8	1	0.2	1.3	18.9	6.7	0.2	7.6	9.1	0.4	0.3	0.3	19.4	14.4	0.1	

File Name : 11 - South Bay @ Thompson Road - 5-21-22
Site Code : 00000011
Start Date : 5/21/2022
Page No : 2

	Thompson Road Southbound					South Bay Road Westbound					Thompson Road Northbound					South Bay Road Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15 AM																					
11:15 AM	25	38	5	1	69	3	58	25	0	86	24	28	1	0	53	0	64	46	0	110	318
11:30 AM	40	23	2	0	65	3	71	19	0	93	20	28	0	0	48	1	60	41	0	102	308
11:45 AM	32	40	3	1	76	4	48	20	0	72	23	40	4	1	68	0	78	36	0	114	330
12:00 PM	44	23	3	0	70	3	62	16	0	81	37	25	2	2	66	2	66	52	0	120	337
Total Volume	141	124	13	2	280	13	239	80	0	332	104	121	7	3	235	3	268	175	0	446	1293
% App. Total	50.4	44.3	4.6	0.7		3.9	72	24.1	0		44.3	51.5	3	1.3		0.7	60.1	39.2	0		
PHF	.801	.775	.650	.500	.921	.813	.842	.800	.000	.892	.703	.756	.438	.375	.864	.375	.859	.841	.000	.929	.959



File Name : 11 - South Bay @ Thompson Road - 5-21-22
Site Code : 00000011
Start Date : 5/21/2022
Page No : 1

Groups Printed- Peds

	Thompson Road Southbound				South Bay Road Westbound				Thompson Road Northbound				South Bay Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

APPENDIX I

Capacity Analysis Printouts

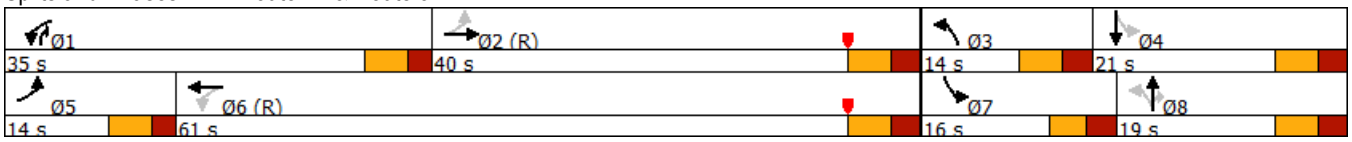
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	623	49	320	381	100	37	91	201	113	129	33
Future Volume (vph)	59	623	49	320	381	100	37	91	201	113	129	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1752	3466	0	1736	3364	0	1752	1845	1568	1719	3332	0
Flt Permitted	0.461			0.212			0.615			0.489		
Satd. Flow (perm)	850	3466	0	387	3364	0	1134	1845	1568	885	3332	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			43				105		24	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.74	0.74	0.74
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	3%	3%	3%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	764	0	344	518	0	43	105	231	153	219	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	14.0	40.0		35.0	61.0		14.0	19.0	35.0	16.0	21.0	
Total Split (%)	12.7%	36.4%		31.8%	55.5%		12.7%	17.3%	31.8%	14.5%	19.1%	
Maximum Green (s)	8.5	34.0		29.5	55.0		8.0	13.0	29.5	10.5	15.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	51.2	43.5		69.9	58.9		18.3	11.0	37.4	28.3	20.2	
Actuated g/C Ratio	0.47	0.40		0.64	0.54		0.17	0.10	0.34	0.26	0.18	
v/c Ratio	0.15	0.56		0.69	0.28		0.19	0.57	0.38	0.48	0.35	
Control Delay	11.5	29.2		20.9	7.3		32.4	59.1	14.9	37.9	37.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	11.5	29.2		20.9	7.3		32.4	59.1	14.9	37.9	37.7	
LOS	B	C		C	A		C	E	B	D	D	
Approach Delay		27.7			12.7			29.1			37.8	
Approach LOS		C			B			C			D	
Queue Length 50th (ft)	18	221		81	27		22	72	63	85	65	
Queue Length 95th (ft)	33	307		102	98		50	122	102	117	84	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	475	1374		607	1841		242	218	724	320	632	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.14	0.56		0.57	0.28		0.18	0.48	0.32	0.48	0.35	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 11 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 68.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	579	358	663	651	0	0	0	0	168	1	150
Future Volume (vph)	0	579	358	663	651	0	0	0	0	168	1	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3343	0	1787	3574	0	0	0	0	0	1775	1583
Flt Permitted				0.095							0.953	
Satd. Flow (perm)	0	3343	0	179	3574	0	0	0	0	0	1775	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		120										165
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1065	0	705	693	0	0	0	0	0	186	165
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		36.0			91.0					19.0	19.0	19.0
Total Split (%)		32.7%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		31.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		32.4		86.0	86.0						14.0	14.0
Actuated g/C Ratio		0.29		0.78	0.78						0.13	0.13
v/c Ratio		1.00		0.91	0.25						0.83	0.48

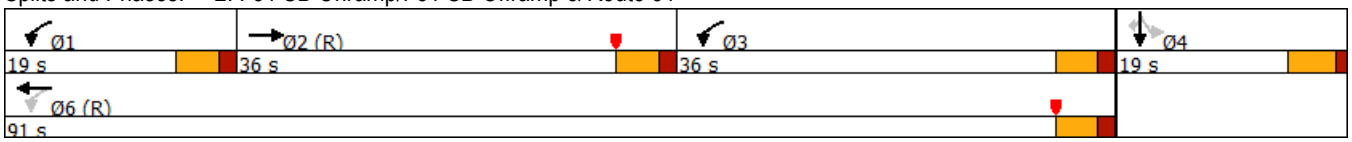
Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	19.0	36.0
Total Split (%)	17%	33%
Maximum Green (s)	14.0	31.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		64.9		38.9	4.4						76.0	11.9
Queue Delay		0.0		51.5	0.5						0.0	0.0
Total Delay		64.9		90.3	4.9						76.0	11.9
LOS		E		F	A						E	B
Approach Delay		64.9			48.0						45.8	
Approach LOS		E			D						D	
Queue Length 50th (ft)		~260		380	154						130	0
Queue Length 95th (ft)		#507		#550	20						#250	61
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1070		823	2806						231	349
Starvation Cap Reductn		0		346	1561						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.00		1.48	0.56						0.81	0.47

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 97 (88%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 54.1 Intersection LOS: D
Intersection Capacity Utilization 86.1% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

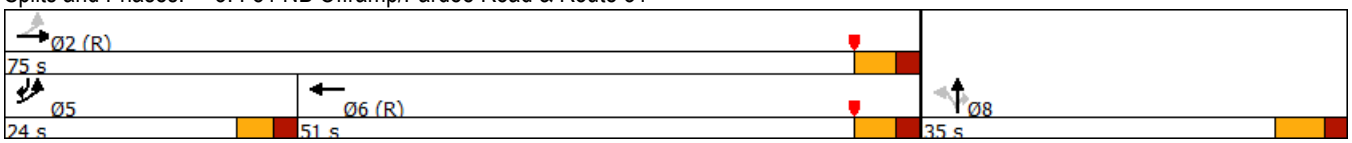
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	657	0	0	1024	123	151	61	350	0	0	139
Future Volume (vph)	90	657	0	0	1024	123	151	61	350	0	0	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1736	3471	0	0	3441	0	1719	1810	1538	0	0	1536
Flt Permitted	0.135						0.950					
Satd. Flow (perm)	247	3471	0	0	3441	0	1717	1810	1518	0	0	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14				211			201
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89	0.84	0.84	0.84
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	792	0	0	1275	0	170	69	393	0	0	165
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	24.0	75.0			51.0		35.0	35.0	35.0			24.0
Total Split (%)	21.8%	68.2%			46.4%		31.8%	31.8%	31.8%			21.8%
Maximum Green (s)	19.0	69.5			45.5		29.0	29.0	29.0			19.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	78.4	77.9			64.5		20.6	20.6	20.6			8.3
Actuated g/C Ratio	0.71	0.71			0.59		0.19	0.19	0.19			0.08
v/c Ratio	0.38	0.32			0.63		0.53	0.20	0.86			0.55

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	17.1	13.9			18.3		44.7	36.3	37.9			10.3
Queue Delay	0.0	0.7			0.3		1.0	0.0	0.0			0.2
Total Delay	17.1	14.6			18.6		45.7	36.3	37.9			10.5
LOS	B	B			B		D	D	D			B
Approach Delay		14.9			18.6			39.8			10.5	
Approach LOS		B			B			D			B	
Queue Length 50th (ft)	43	171			292		108	41	129			0
Queue Length 95th (ft)	m40	m136			466		160	74	227			26
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	433	2457			2024		452	477	555			431
Starvation Cap Reductn	0	1248			0		0	0	0			0
Spillback Cap Reductn	0	0			240		121	0	0			28
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.25	0.66			0.71		0.51	0.14	0.71			0.41

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 21.6 Intersection LOS: C
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	156	851	585	1	0	562
Future Volume (vph)	156	851	585	1	0	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1770	3539	1845	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	1845	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Confl. Peds. (#/hr)	1			1		1
Peak Hour Factor	0.79	0.79	0.83	0.83	0.93	0.93
Heavy Vehicles (%)	2%	2%	3%	3%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	197	1077	706	0	604	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	50.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	156	851	585	1	0	562
Future Vol, veh/h	156	851	585	1	0	562
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	83	83	93	93
Heavy Vehicles, %	2	2	3	3	1	1
Mvmt Flow	197	1077	705	1	0	604

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	707	0	-	0	1640	708
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	933	-
Critical Hdwy	4.13	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.219	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	889	-	-	-	101	~ 436
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	346	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	888	-	-	-	78	~ 435
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	346	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	214.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	888	-	-	-	435
HCM Lane V/C Ratio	0.222	-	-	-	1.389
HCM Control Delay (s)	10.2	-	-	-	214.2
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	29

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

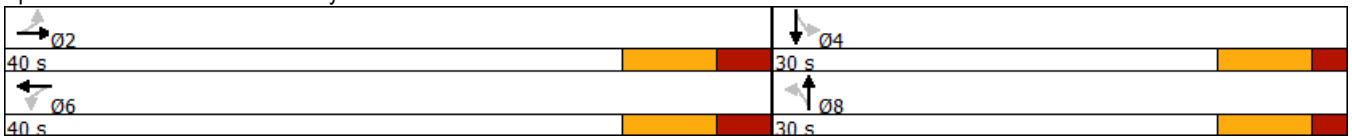
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	209	67	148	205	6	61	87	67	7	278	60
Future Volume (vph)	21	209	67	148	205	6	61	87	67	7	278	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1746	0	0	1822	0	0	1709	0	0	1818	0
Flt Permitted		0.955			0.735			0.726			0.991	
Satd. Flow (perm)	0	1675	0	0	1366	0	0	1259	0	0	1804	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			2			35			16	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	327	0	0	391	0	0	257	0	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.8	22.8		22.8	22.8		16.8	16.8		16.8	16.8	
Total Split (s)	40.0	40.0		40.0	40.0		30.0	30.0		30.0	30.0	
Total Split (%)	57.1%	57.1%		57.1%	57.1%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	32.2	32.2		32.2	32.2		23.2	23.2		23.2	23.2	
Yellow Time (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
All-Red Time (s)	2.9	2.9		2.9	2.9		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.8			7.8			6.8			6.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Time Before Reduce (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Time To Reduce (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Recall Mode	Max	Max		Max	Max		Max	Max		Max	Max	
Act Effct Green (s)		32.2			32.2			23.2			23.2	
Actuated g/C Ratio		0.46			0.46			0.33			0.33	
v/c Ratio		0.42			0.62			0.58			0.64	
Control Delay		13.5			19.6			23.0			24.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.5			19.6			23.0			24.7	
LOS		B			B			C			C	
Approach Delay		13.5			19.6			23.0			24.7	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)		81			120			77			133	
Queue Length 95th (ft)		141			210			135			217	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)												
Base Capacity (vph)		785			629			440			608	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.42			0.62			0.58			0.64	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Natural Cycle: 55
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 20.2 Intersection LOS: C
Intersection Capacity Utilization 90.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 5: South Bay Road & Route 31



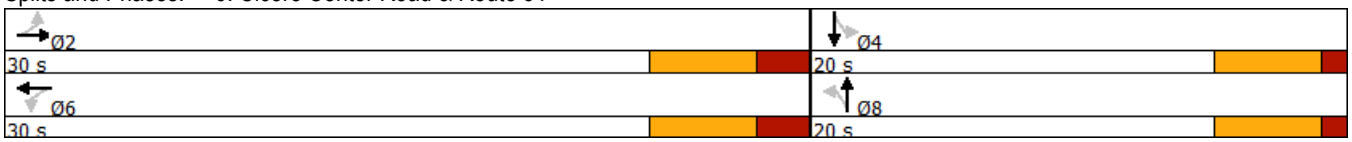
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	221	13	8	260	6	9	5	5	3	20	51
Future Volume (vph)	26	221	13	8	260	6	9	5	5	3	20	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1855	0	0	1772	0	0	1703	0
Flt Permitted		0.954			0.990			0.871			0.984	
Satd. Flow (perm)	0	1765	0	0	1839	0	0	1578	0	0	1679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			3			6			71	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	280	0	0	305	0	0	22	0	0	103	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		32.1			32.1			7.2			7.2	
Actuated g/C Ratio		0.74			0.74			0.17			0.17	
v/c Ratio		0.21			0.22			0.08			0.30	
Control Delay		4.4			4.5			13.6			10.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.4			4.5			13.6			10.0	
LOS		A			A			B			A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		4.4			4.5			13.6			10.0	
Approach LOS		A			A			B			A	
Queue Length 50th (ft)		27			30			3			7	
Queue Length 95th (ft)		59			64			16			24	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1307			1361			549			627	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.21			0.22			0.04			0.16	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.4
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.30
Intersection Signal Delay: 5.5 Intersection LOS: A
Intersection Capacity Utilization 39.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	210	260	24	29	33
Future Volume (vph)	16	210	260	24	29	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1859	0	1706	0
Flt Permitted		0.997			0.977	
Satd. Flow (perm)	0	1876	1859	0	1706	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.88	0.88	0.90	0.90	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	257	316	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.3% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	210	260	24	29	33
Future Vol, veh/h	16	210	260	24	29	33
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	90	90	79	79
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	18	239	289	27	37	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	578	305
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1250	-	-	-	479	737
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	774	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1250	-	-	-	471	736
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	774	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1250	-	-	-	583
HCM Lane V/C Ratio	0.015	-	-	-	0.135
HCM Control Delay (s)	7.9	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

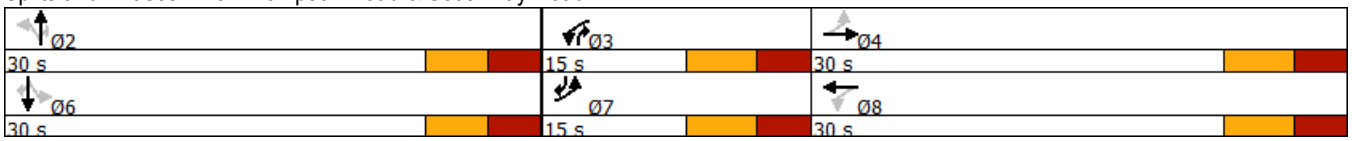
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	265	6	235	252	7	7	183	148	7	187	162
Future Volume (vph)	246	265	6	235	252	7	7	183	148	7	187	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1876	0	1787	1873	0	0	1841	1568	0	1859	1583
Flt Permitted	0.447			0.439				0.986			0.986	
Satd. Flow (perm)	840	1876	0	826	1873	0	0	1819	1568	0	1837	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2				185			184
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	276	305	0	273	301	0	0	238	185	0	221	184
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	23.4	15.4		23.4	15.4			23.6	38.1		23.6	38.1
Actuated g/C Ratio	0.35	0.23		0.35	0.23			0.35	0.56		0.35	0.56
v/c Ratio	0.68	0.71		0.68	0.70			0.38	0.19		0.34	0.19

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	22.7	33.5		22.6	33.1			19.8	2.2		19.3	2.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	22.7	33.5		22.6	33.1			19.8	2.2		19.3	2.1
LOS	C	C		C	C			B	A		B	A
Approach Delay		28.4			28.1			12.1			11.5	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	70	116		69	114			72	0		66	0
Queue Length 95th (ft)	116	187		110	177			126	20		132	26
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	403	642		400	641			634	965		641	973
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.68	0.48		0.68	0.47			0.38	0.19		0.34	0.19

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 67.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 21.4 Intersection LOS: C
Intersection Capacity Utilization 59.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	72	109	56	81	31
Future Volume (vph)	13	72	109	56	81	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1812	1710	0	1682	0
Flt Permitted		0.992			0.965	
Satd. Flow (perm)	0	1812	1710	0	1682	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.87	0.87	0.85	0.85	0.91	0.91
Heavy Vehicles (%)	4%	4%	6%	6%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	98	194	0	123	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.9% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	72	109	56	81	31
Future Vol, veh/h	13	72	109	56	81	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	85	85	91	91
Heavy Vehicles, %	4	4	6	6	5	5
Mvmt Flow	15	83	128	66	89	34

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	194	0	-	0	274	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	4.14	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.236	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1367	-	-	-	709	876
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1367	-	-	-	700	876
Mov Cap-2 Maneuver	-	-	-	-	700	-
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	904	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1367	-	-	-	741
HCM Lane V/C Ratio	0.011	-	-	-	0.166
HCM Control Delay (s)	7.7	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.6

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	91	3	84	69	3	79
Future Volume (vph)	91	3	84	69	3	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1802	0	0	1778	1571	0
Flt Permitted				0.973	0.998	
Satd. Flow (perm)	1802	0	0	1778	1571	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.78	0.78	0.84	0.84	0.92	0.92
Heavy Vehicles (%)	5%	5%	4%	4%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	121	0	0	182	89	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.7% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	91	3	84	69	3	79
Future Vol, veh/h	91	3	84	69	3	79
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	84	84	92	92
Heavy Vehicles, %	5	5	4	4	5	5
Mvmt Flow	117	4	100	82	3	86

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	402	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	282	-
Critical Hdwy	-	-	4.14	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.236	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1453	-	598	923
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1452	-	554	922
Mov Cap-2 Maneuver	-	-	-	-	554	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	1452	-
HCM Lane V/C Ratio	0.099	-	-	0.069	-
HCM Control Delay (s)	9.4	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	160	8	9	143	0	7	0	13	1	0	3
Future Volume (vph)	2	160	8	9	143	0	7	0	13	1	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1850	0	0	1857	0	0	1670	0	0	1660	0
Flt Permitted					0.997			0.983			0.986	
Satd. Flow (perm)	0	1850	0	0	1857	0	0	1670	0	0	1660	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	2		1	1		2
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.55	0.55	0.55	0.63	0.63	0.63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	205	0	0	192	0	0	37	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 23.7% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	160	8	9	143	0	7	0	13	1	0	3
Future Vol, veh/h	2	160	8	9	143	0	7	0	13	1	0	3
Conflicting Peds, #/hr	1	0	0	0	0	1	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	55	55	55	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	193	10	11	181	0	13	0	24	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	182	0	0	203	0	0	410	406	199	419	411	184
Stage 1	-	-	-	-	-	-	202	202	-	204	204	-
Stage 2	-	-	-	-	-	-	208	204	-	215	207	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1393	-	-	1369	-	-	552	534	842	544	531	858
Stage 1	-	-	-	-	-	-	800	734	-	798	733	-
Stage 2	-	-	-	-	-	-	794	733	-	787	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1392	-	-	1369	-	-	543	528	841	523	525	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	543	528	-	523	525	-
Stage 1	-	-	-	-	-	-	798	733	-	796	726	-
Stage 2	-	-	-	-	-	-	781	726	-	763	730	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	10.4	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	705	1392	-	-	1369	-	-	738
HCM Lane V/C Ratio	0.052	0.002	-	-	0.008	-	-	0.009
HCM Control Delay (s)	10.4	7.6	0	-	7.7	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

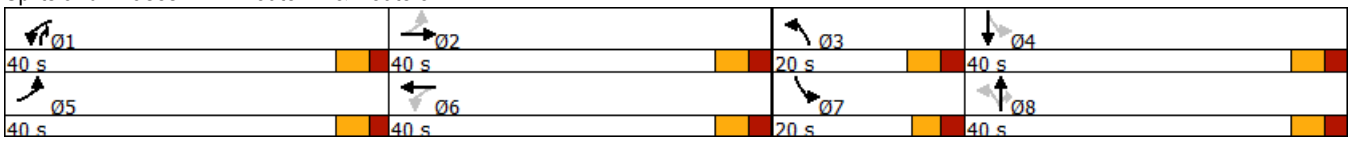
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	492	106	447	586	129	130	312	544	198	189	90
Future Volume (vph)	63	492	106	447	586	129	130	312	544	198	189	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3478	0	1787	3478	0	1787	1881	1599	1770	3369	0
Flt Permitted	0.336			0.151			0.508			0.197		
Satd. Flow (perm)	632	3478	0	284	3478	0	956	1881	1579	367	3369	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			18				89		54	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	630	0	526	841	0	137	328	573	230	325	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	36.1	27.5		68.3	56.9		38.2	26.5	61.7	43.4	28.6	
Actuated g/C Ratio	0.29	0.22		0.54	0.45		0.30	0.21	0.49	0.34	0.23	
v/c Ratio	0.26	0.82		0.93	0.53		0.38	0.83	0.70	0.81	0.40	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	21.8	55.5		56.6	27.7		31.3	66.8	23.9	52.7	36.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.8	55.5		56.6	27.7		31.3	66.8	23.9	52.7	36.6	
LOS	C	E		E	C		C	E	C	D	D	
Approach Delay		52.3			38.8			38.4			43.3	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	25	255		357	265		77	262	279	136	101	
Queue Length 95th (ft)	54	344		#582	341		134	388	438	#233	146	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	633	958		568	1578		400	511	824	289	955	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.66		0.93	0.53		0.34	0.64	0.70	0.80	0.34	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 126.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 42.0 Intersection LOS: D
Intersection Capacity Utilization 88.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	971	263	365	1032	0	0	0	0	138	0	130
Future Volume (vph)	0	971	263	365	1032	0	0	0	0	138	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3410	0	1787	3574	0	0	0	0	0	1752	1568
Flt Permitted				0.074							0.950	
Satd. Flow (perm)	0	3410	0	139	3574	0	0	0	0	0	1752	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38										155
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1327	0	380	1075	0	0	0	0	0	164	155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		49.6		85.7	85.7						14.3	14.3
Actuated g/C Ratio		0.45		0.78	0.78						0.13	0.13
v/c Ratio		0.85		0.76	0.39						0.72	0.46

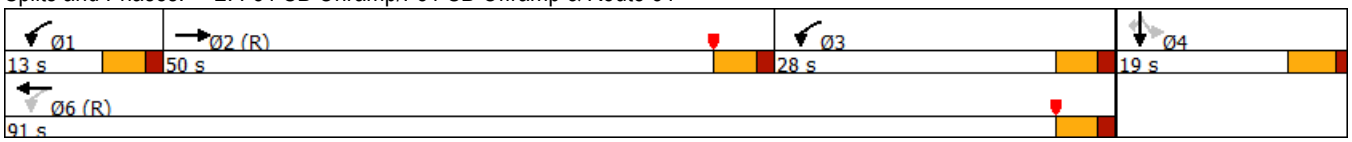
Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		34.0		30.8	1.0						64.0	11.6
Queue Delay		0.8		31.3	0.8						27.8	0.0
Total Delay		34.8		62.0	1.8						91.9	11.6
LOS		C		E	A						F	B
Approach Delay		34.8			17.5						52.9	
Approach LOS		C			B						D	
Queue Length 50th (ft)		450		166	17						110	0
Queue Length 95th (ft)		#607		m201	m21						#188	48
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1557		606	2817						239	348
Starvation Cap Reductn		0		236	1327						0	0
Spillback Cap Reductn		64		0	0						71	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.89		1.03	0.72						0.98	0.45

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 28.6 Intersection LOS: C
Intersection Capacity Utilization 75.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	841	0	0	928	258	342	118	577	0	0	127
Future Volume (vph)	268	841	0	0	928	258	342	118	577	0	0	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	3539	0	0	3406	0	1752	1845	1568	0	0	1596
Flt Permitted	0.097						0.950					
Satd. Flow (perm)	181	3539	0	0	3406	0	1752	1845	1568	0	0	1596
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31				97			134
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	1001	0	0	1289	0	407	140	687	0	0	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	61.0	60.5			36.1		38.0	38.0	38.0			19.4
Actuated g/C Ratio	0.55	0.55			0.33		0.35	0.35	0.35			0.18
v/c Ratio	0.84	0.51			1.13		0.67	0.22	1.14			0.43

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	48.1	26.2			105.7		37.3	26.7	110.0			13.5
Queue Delay	1.1	15.5			0.0		0.2	0.0	0.0			0.0
Total Delay	49.2	41.7			105.7		37.5	26.7	110.0			13.5
LOS	D	D			F		D	C	F			B
Approach Delay		43.5			105.7			76.7			13.5	
Approach LOS		D			F			E			B	
Queue Length 50th (ft)	193	292			~554		243	69	~520			21
Queue Length 95th (ft)	m235	314			#770		322	109	#667			48
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	475	1946			1138		605	637	605			479
Starvation Cap Reductn	42	946			0		0	0	0			0
Spillback Cap Reductn	0	0			0		16	0	0			6
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.74	1.00			1.13		0.69	0.22	1.14			0.36

Intersection Summary

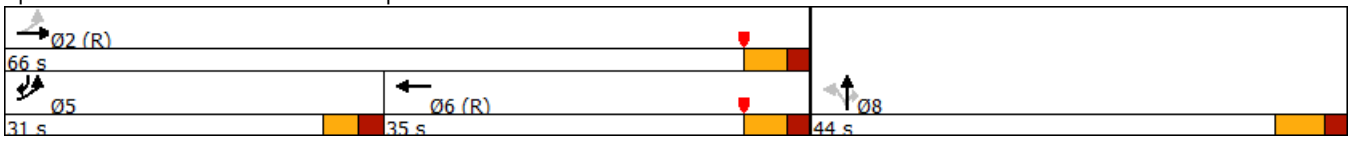
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 72.4 Intersection LOS: E
Intersection Capacity Utilization 81.5% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	529	889	827	1	0	359
Future Volume (vph)	529	889	827	1	0	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1863	0	1611	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1863	0	1611	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.91	0.91
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	575	966	890	0	395	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 105.1% ICU Level of Service G
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	23.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	529	889	827	1	0	359
Future Vol, veh/h	529	889	827	1	0	359
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	91	91
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	575	966	889	1	0	395

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	890	0	-	0	2523	890
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	1633	-
Critical Hdwy	4.115	-	-	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	2.2095	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	765	-	-	-	26	~ 341
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	145	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	765	-	-	-	6	~ 341
Mov Cap-2 Maneuver	-	-	-	-	6	-
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	145	-

Approach	EB	WB	SB
HCM Control Delay, s	8.4	0	133
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	765	-	-	-	341
HCM Lane V/C Ratio	0.752	-	-	-	1.157
HCM Control Delay (s)	22.5	-	-	-	133
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	7	-	-	-	16

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	421	106	129	328	18	72	315	187	8	162	49
Future Volume (vph)	58	421	106	129	328	18	72	315	187	8	162	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1809	0	0	1812	0	0	1770	0	0	1795	0
Flt Permitted		0.907			0.650			0.908			0.972	
Satd. Flow (perm)	0	1649	0	0	1193	0	0	1617	0	0	1748	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			4			37			22	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.86	0.86	0.86	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	636	0	0	511	0	0	667	0	0	258	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.8	22.8		22.8	22.8		16.8	16.8		16.8	16.8	
Total Split (s)	40.0	40.0		40.0	40.0		30.0	30.0		30.0	30.0	
Total Split (%)	57.1%	57.1%		57.1%	57.1%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	32.2	32.2		32.2	32.2		23.2	23.2		23.2	23.2	
Yellow Time (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
All-Red Time (s)	2.9	2.9		2.9	2.9		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.8			7.8			6.8			6.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Time Before Reduce (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Time To Reduce (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Recall Mode	Max	Max		Max	Max		Max	Max		Max	Max	
Act Effct Green (s)		32.2			32.2			23.2			23.2	
Actuated g/C Ratio		0.46			0.46			0.33			0.33	
v/c Ratio		0.83			0.93			1.19			0.43	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		27.5			45.2			127.2			19.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		27.5			45.2			127.2			19.4	
LOS		C			D			F			B	
Approach Delay		27.5			45.2			127.2			19.4	
Approach LOS		C			D			F			B	
Queue Length 50th (ft)		220			196			~346			78	
Queue Length 95th (ft)		#415			#393			#505			128	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)												
Base Capacity (vph)		769			550			560			594	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.83			0.93			1.19			0.43	

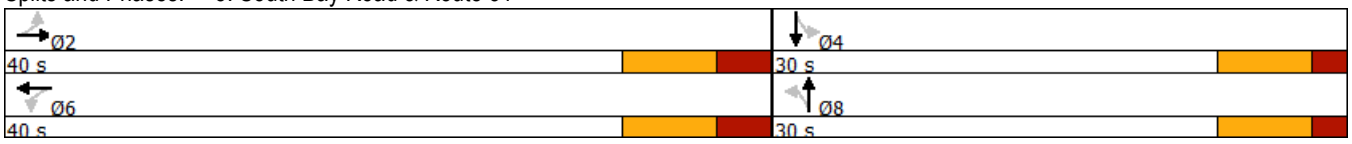
Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 62.9 Intersection LOS: E
Intersection Capacity Utilization 114.3% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



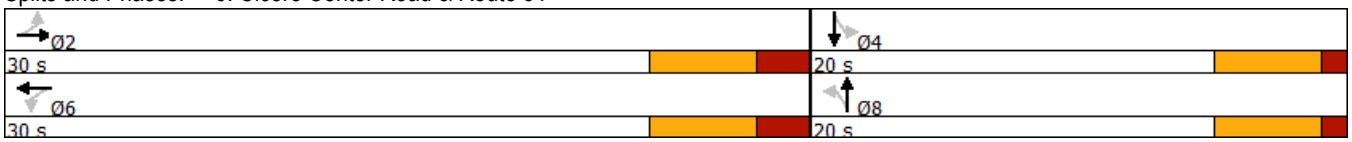
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	435	22	6	381	15	18	35	13	12	13	35
Future Volume (vph)	67	435	22	6	381	15	18	35	13	12	13	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1859	0	0	1870	0	0	1805	0	0	1717	0
Flt Permitted		0.901			0.992			0.882			0.905	
Satd. Flow (perm)	0	1685	0	0	1857	0	0	1614	0	0	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			5			18			43	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.82	0.82	0.82
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	595	0	0	432	0	0	91	0	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		30.6			30.6			7.5			7.5	
Actuated g/C Ratio		0.74			0.74			0.18			0.18	
v/c Ratio		0.48			0.32			0.30			0.23	
Control Delay		6.9			5.2			15.4			10.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		6.9			5.2			15.4			10.7	
LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		6.9			5.2			15.4			10.7	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		76			46			15			6	
Queue Length 95th (ft)		164			101			34			27	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1242			1368			598			598	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.48			0.32			0.15			0.12	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 41.6
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 7.2 Intersection LOS: A
Intersection Capacity Utilization 69.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	45	439	366	48	41	21
Future Volume (vph)	45	439	366	48	41	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1872	1851	0	1737	0
Flt Permitted		0.995			0.968	
Satd. Flow (perm)	0	1872	1851	0	1737	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.87	0.87	0.89	0.89	0.81	0.81
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	557	465	0	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 61.3% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	439	366	48	41	21
Future Vol, veh/h	45	439	366	48	41	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	89	89	81	81
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	52	505	411	54	51	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	465	0	-	0	1047	438
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	609	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1102	-	-	-	254	621
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	545	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1102	-	-	-	237	621
Mov Cap-2 Maneuver	-	-	-	-	237	-
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	545	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	21.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1102	-	-	-	300
HCM Lane V/C Ratio	0.047	-	-	-	0.255
HCM Control Delay (s)	8.4	0	-	-	21.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1

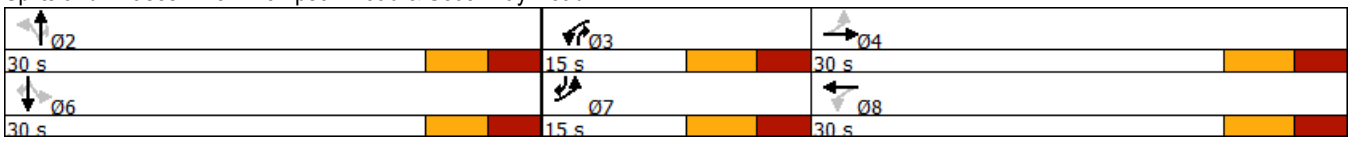
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	360	2	105	291	22	18	299	217	9	139	221
Future Volume (vph)	292	360	2	105	291	22	18	299	217	9	139	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1860	0	0	1857	1583	0	1876	1599
Flt Permitted	0.315			0.274				0.977			0.969	
Satd. Flow (perm)	593	1879	0	515	1860	0	0	1820	1583	0	1823	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				174			231
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	348	431	0	131	392	0	0	337	231	0	176	263
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	27.6	19.5		26.6	19.1			23.6	37.7		23.6	38.2
Actuated g/C Ratio	0.39	0.27		0.37	0.27			0.33	0.53		0.33	0.54
v/c Ratio	0.96	0.84		0.40	0.78			0.56	0.25		0.29	0.27
Control Delay	56.3	40.2		14.4	35.6			24.9	3.9		20.4	3.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	56.3	40.2		14.4	35.6			24.9	3.9		20.4	3.0
LOS	E	D		B	D			C	A		C	A
Approach Delay		47.4			30.3			16.3			10.0	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	93	179		30	157			126	12		59	7
Queue Length 95th (ft)	#184	256		51	213			213	47		102	34
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	363	608		338	605			602	928		603	963
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.96	0.71		0.39	0.65			0.56	0.25		0.29	0.27

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 71.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 28.8 Intersection LOS: C
Intersection Capacity Utilization 80.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	52	169	121	114	91	33
Future Volume (vph)	52	169	121	114	91	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	1706	0	1700	0
Flt Permitted		0.988			0.965	
Satd. Flow (perm)	0	1840	1706	0	1700	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.83	0.83	0.85	0.85	0.82	0.82
Heavy Vehicles (%)	2%	2%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	267	276	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 42.2% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	52	169	121	114	91	33
Future Vol, veh/h	52	169	121	114	91	33
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	85	85	82	82
Heavy Vehicles, %	2	2	4	4	4	4
Mvmt Flow	63	204	142	134	111	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	277	0	-	0	540	210
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	330	-
Critical Hdwy	4.12	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.218	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1286	-	-	-	499	825
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	724	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1285	-	-	-	471	824
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	723	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1285	-	-	-	532
HCM Lane V/C Ratio	0.049	-	-	-	0.284
HCM Control Delay (s)	7.9	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	153	10	91	121	14	131
Future Volume (vph)	153	10	91	121	14	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1830	0	0	1824	1643	0
Flt Permitted				0.979	0.995	
Satd. Flow (perm)	1830	0	0	1824	1643	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.83	0.83
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	201	0	0	275	175	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.9% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	10	91	121	14	131
Future Vol, veh/h	153	10	91	121	14	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	77	77	83	83
Heavy Vehicles, %	3	3	2	2	1	1
Mvmt Flow	189	12	118	157	17	158

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	201	0	588	195
Stage 1	-	-	-	-	195	-
Stage 2	-	-	-	-	393	-
Critical Hdwy	-	-	4.12	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.218	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1371	-	473	849
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	684	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1371	-	429	849
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	620	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	776	-	-	1371	-
HCM Lane V/C Ratio	0.225	-	-	0.086	-
HCM Control Delay (s)	11	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	258	24	7	176	35	1	17	1	0	1	0
Future Volume (vph)	2	258	24	7	176	35	1	17	1	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1842	0	0	1818	0	0	1848	0	0	1863	0
Flt Permitted					0.998			0.998				
Satd. Flow (perm)	0	1842	0	0	1818	0	0	1848	0	0	1863	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)			1	1			4		1	1		4
Peak Hour Factor	0.80	0.80	0.80	0.65	0.65	0.65	0.80	0.80	0.80	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	356	0	0	336	0	0	23	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.4% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	258	24	7	176	35	1	17	1	0	1	0
Future Vol, veh/h	2	258	24	7	176	35	1	17	1	0	1	0
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	65	65	65	80	80	80	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	323	30	11	271	54	1	21	1	0	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	325	0	0	354	0	0	670	692	340	676	680	302
Stage 1	-	-	-	-	-	-	345	345	-	320	320	-
Stage 2	-	-	-	-	-	-	325	347	-	356	360	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1235	-	-	1205	-	-	371	367	702	367	373	738
Stage 1	-	-	-	-	-	-	671	636	-	692	652	-
Stage 2	-	-	-	-	-	-	687	635	-	661	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1235	-	-	1204	-	-	364	361	701	346	367	735
Mov Cap-2 Maneuver	-	-	-	-	-	-	364	361	-	346	367	-
Stage 1	-	-	-	-	-	-	668	633	-	690	645	-
Stage 2	-	-	-	-	-	-	675	628	-	635	623	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	15.4	14.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	371	1235	-	-	1204	-	-	367
HCM Lane V/C Ratio	0.064	0.002	-	-	0.009	-	-	0.005
HCM Control Delay (s)	15.4	7.9	0	-	8	0	-	14.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	508	121	513	516	130	127	304	599	164	268	70
Future Volume (vph)	68	508	121	513	516	130	127	304	599	164	268	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3471	0	1787	3467	0	1787	1881	1599	1787	3463	0
Flt Permitted	0.382			0.112			0.412			0.207		
Satd. Flow (perm)	719	3471	0	211	3467	0	775	1881	1599	389	3463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			21				97		22	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	732	0	564	710	0	134	320	631	186	385	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	39.6	30.6		71.5	59.7		38.2	26.5	67.3	41.9	27.8	
Actuated g/C Ratio	0.31	0.24		0.56	0.46		0.30	0.21	0.52	0.33	0.22	
v/c Ratio	0.27	0.87		1.04	0.44		0.42	0.83	0.72	0.68	0.50	
Control Delay	21.1	58.5		86.0	25.5		33.4	67.8	25.4	43.1	44.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.1	58.5		86.0	25.5		33.4	67.8	25.4	43.1	44.5	
LOS	C	E		F	C		C	E	C	D	D	
Approach Delay		54.9			52.3			38.9			44.1	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	31	308		~486	213		80	268	357	115	146	
Queue Length 95th (ft)	59	384		#770	302		131	378	511	171	195	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	657	940		543	1620		355	501	882	288	939	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.12	0.78		1.04	0.44		0.38	0.64	0.72	0.65	0.41	

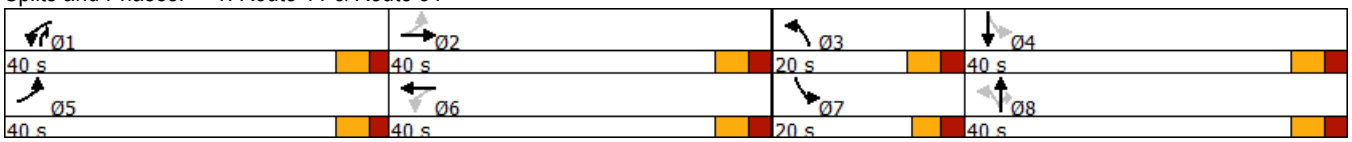
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 128.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 47.7 Intersection LOS: D
Intersection Capacity Utilization 90.6% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1017	254	298	981	0	0	0	0	146	0	178
Future Volume (vph)	0	1017	254	298	981	0	0	0	0	146	0	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3433	0	1770	3539	0	0	0	0	0	1752	1568
Flt Permitted				0.067							0.950	
Satd. Flow (perm)	0	3433	0	125	3539	0	0	0	0	0	1752	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34										185
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.90	0.90	0.90	0.79	0.79	0.79
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1367	0	320	1055	0	0	0	0	0	185	225
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		50.2		83.4	83.4						16.6	16.6
Actuated g/C Ratio		0.46		0.76	0.76						0.15	0.15
v/c Ratio		0.86		0.72	0.39						0.70	0.57

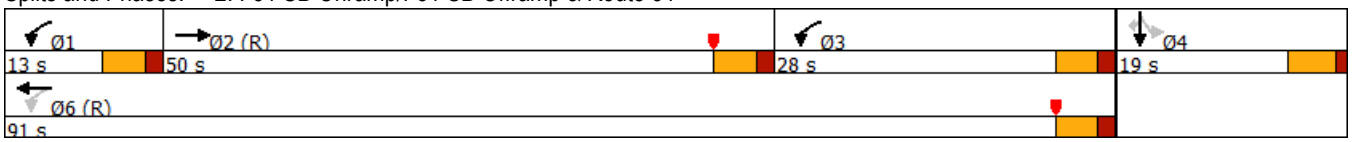
Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		34.4		27.2	4.7						59.2	16.3
Queue Delay		1.0		9.1	0.7						0.0	0.0
Total Delay		35.4		36.3	5.4						59.2	16.3
LOS		D		D	A						E	B
Approach Delay		35.4			12.6						35.6	
Approach LOS		D			B						D	
Queue Length 50th (ft)		462		74	224						123	24
Queue Length 95th (ft)		#638		222	10						175	68
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1585		592	2778						269	397
Starvation Cap Reductn		0		233	1247						0	0
Spillback Cap Reductn		69		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.90		0.89	0.69						0.69	0.57

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 25.5 Intersection LOS: C
Intersection Capacity Utilization 73.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

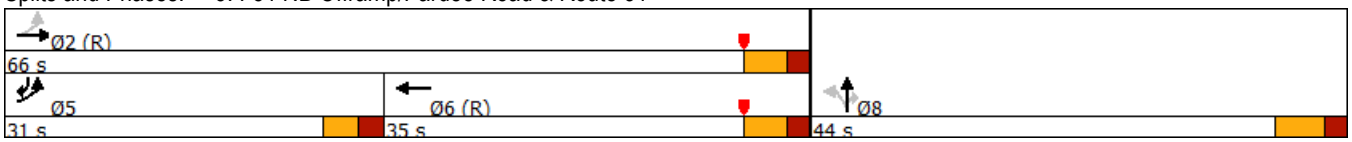
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	895	0	0	966	196	198	48	311	0	0	115
Future Volume (vph)	268	895	0	0	966	196	198	48	311	0	0	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3574	0	0	3485	0	1787	1881	1599	0	0	1627
Flt Permitted	0.102						0.950					
Satd. Flow (perm)	192	3574	0	0	3485	0	1787	1881	1599	0	0	1627
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					21				102			280
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	295	984	0	0	1250	0	213	52	334	0	0	132
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	75.7	75.2			53.8		23.3	23.3	23.3			16.4
Actuated g/C Ratio	0.69	0.68			0.49		0.21	0.21	0.21			0.15
v/c Ratio	0.80	0.40			0.73		0.56	0.13	0.80			0.28
Control Delay	34.8	18.6			28.2		43.2	32.4	41.7			1.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.8	1.8			0.0		0.0	0.0	0.0			0.0
Total Delay	35.6	20.4			28.2		43.2	32.4	41.7			1.4
LOS	D	C			C		D	C	D			A
Approach Delay		23.9			28.2			41.4			1.4	
Approach LOS		C			C			D			A	
Queue Length 50th (ft)	178	267			348		135	30	158			0
Queue Length 95th (ft)	m218	m329			#692		187	56	235			0
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	510	2444			1716		617	649	619			599
Starvation Cap Reductn	59	1234			0		0	0	0			0
Spillback Cap Reductn	0	0			0		0	0	0			0
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.65	0.81			0.73		0.35	0.08	0.54			0.22

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 27.9 Intersection LOS: C
Intersection Capacity Utilization 72.5% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	419	787	750	0	0	412
Future Volume (vph)	419	787	750	0	0	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1881	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1881	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.93	0.93	0.87	0.87	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	846	862	0	443	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 98.2% ICU Level of Service F
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	30.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	419	787	750	0	0	412
Future Vol, veh/h	419	787	750	0	0	412
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	87	87	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	451	846	862	0	0	443

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	862	0	-	0	2187	862
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	1325	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	783	-	-	-	45	~ 356
Stage 1	-	-	-	-	415	-
Stage 2	-	-	-	-	215	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	783	-	-	-	19	~ 356
Mov Cap-2 Maneuver	-	-	-	-	19	-
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	215	-

Approach	EB	WB	SB
HCM Control Delay, s	5.4	0	163.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	783	-	-	-	356
HCM Lane V/C Ratio	0.575	-	-	-	1.244
HCM Control Delay (s)	15.6	-	-	-	163.3
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	3.7	-	-	-	19.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	401	64	164	415	20	66	137	137	12	155	56
Future Volume (vph)	33	401	64	164	415	20	66	137	137	12	155	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1844	0	0	1849	0	0	1714	0	0	1766	0
Flt Permitted		0.931			0.706			0.826			0.966	
Satd. Flow (perm)	0	1722	0	0	1321	0	0	1429	0	0	1711	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			3			50			26	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							3		2	2		3
Peak Hour Factor	0.89	0.89	0.89	1.00	0.86	0.86	0.80	0.88	0.88	0.73	0.73	0.73
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	560	0	0	670	0	0	395	0	0	305	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.8	22.8		22.8	22.8		16.8	16.8		16.8	16.8	
Total Split (s)	40.0	40.0		40.0	40.0		30.0	30.0		30.0	30.0	
Total Split (%)	57.1%	57.1%		57.1%	57.1%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	32.2	32.2		32.2	32.2		23.2	23.2		23.2	23.2	
Yellow Time (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
All-Red Time (s)	2.9	2.9		2.9	2.9		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.8			7.8			6.8			6.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Time Before Reduce (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Time To Reduce (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Recall Mode	Max	Max		Max	Max		Max	Max		Max	Max	
Act Effct Green (s)		32.2			32.2			23.2			23.2	
Actuated g/C Ratio		0.46			0.46			0.33			0.33	
v/c Ratio		0.70			1.10			0.78			0.52	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		20.5			89.2			31.3			21.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.5			89.2			31.3			21.1	
LOS		C			F			C			C	
Approach Delay		20.5			89.2			31.3			21.1	
Approach LOS		C			F			C			C	
Queue Length 50th (ft)		178			~336			132			95	
Queue Length 95th (ft)		285			#496			#261			124	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)												
Base Capacity (vph)		799			609			507			584	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			1.10			0.78			0.52	

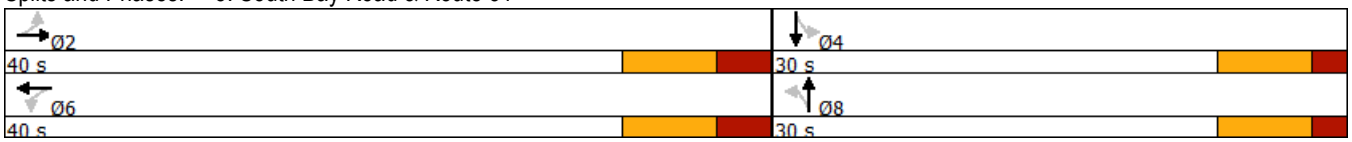
Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Natural Cycle: 75
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 46.7 Intersection LOS: D
Intersection Capacity Utilization 114.9% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



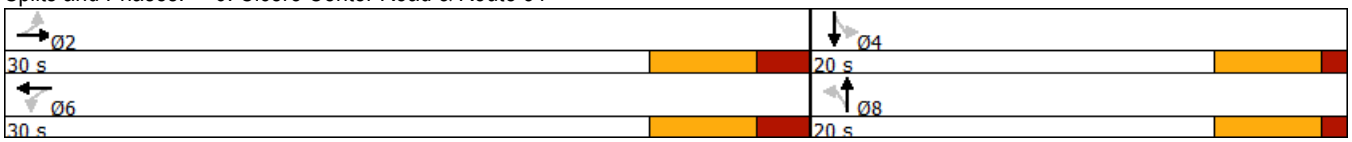
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	434	7	3	377	10	7	13	6	15	3	25
Future Volume (vph)	40	434	7	3	377	10	7	13	6	15	3	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1870	0	0	1876	0	0	1797	0	0	1682	0
Flt Permitted		0.944			0.997			0.902			0.961	
Satd. Flow (perm)	0	1772	0	0	1870	0	0	1642	0	0	1644	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			3			9			32	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.69	0.69	0.69	0.79	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	0	0	447	0	0	38	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		34.2			34.2			7.2			7.2	
Actuated g/C Ratio		0.83			0.83			0.17			0.17	
v/c Ratio		0.35			0.29			0.13			0.18	
Control Delay		4.2			3.8			13.1			10.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.2			3.8			13.1			10.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			A			B			B	
Approach Delay		4.2			3.8			13.1			10.4	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			4			3	
Queue Length 95th (ft)		115			89			17			22	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1466			1548			612			627	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.35			0.29			0.06			0.09	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 41.3
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.35
Intersection Signal Delay: 4.7 Intersection LOS: A
Intersection Capacity Utilization 65.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	52	405	357	53	56	31
Future Volume (vph)	52	405	357	53	56	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1849	0	1735	0
Flt Permitted		0.997			0.969	
Satd. Flow (perm)	0	1876	1849	0	1735	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.89	0.89	0.88	0.88	0.83	0.83
Growth Factor	50%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	484	466	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 54.3% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	52	405	357	53	56	31
Future Vol, veh/h	52	405	357	53	56	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	88	88	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	29	455	406	60	67	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	466	0	-	0	949	436
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	513	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1101	-	-	-	290	622
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1101	-	-	-	280	622
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	603	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	19.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1101	-	-	-	348
HCM Lane V/C Ratio	0.027	-	-	-	0.301
HCM Control Delay (s)	8.4	0	-	-	19.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2

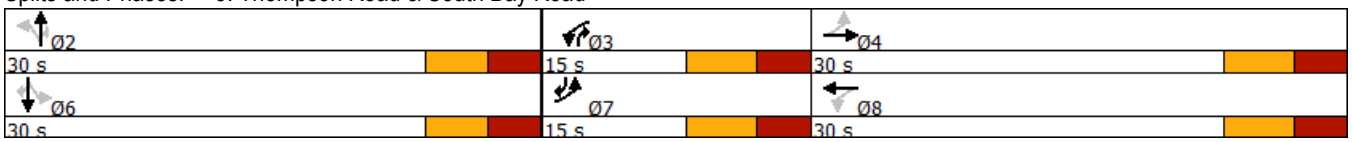
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	308	3	92	275	15	8	139	120	15	143	162
Future Volume (vph)	201	308	3	92	275	15	8	139	120	15	143	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1866	0	0	1876	1599	0	1872	1599
Flt Permitted	0.395			0.413				0.983			0.965	
Satd. Flow (perm)	743	1879	0	777	1866	0	0	1849	1599	0	1815	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			4				140			176
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.86	0.86	0.86	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	334	0	103	326	0	0	171	140	0	171	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	24.7	16.7		23.5	16.1			23.6	37.5		23.6	38.1
Actuated g/C Ratio	0.36	0.24		0.34	0.24			0.35	0.55		0.35	0.56
v/c Ratio	0.56	0.73		0.27	0.74			0.27	0.15		0.27	0.18
Control Delay	17.7	33.4		12.7	34.1			18.9	2.4		19.0	2.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	17.7	33.4		12.7	34.1			18.9	2.4		19.0	2.2
LOS	B	C		B	C			B	A		B	A
Approach Delay		27.2			28.9			11.4			10.5	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	53	129		24	124			51	0		51	0
Queue Length 95th (ft)	92	210		47	201			102	22		108	27
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	392	636		393	634			639	955		627	971
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.55	0.53		0.26	0.51			0.27	0.15		0.27	0.18

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 68.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 21.1 Intersection LOS: C
Intersection Capacity Utilization 63.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	177	116	104	112	30
Future Volume (vph)	40	177	116	104	112	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1864	1761	0	1759	0
Flt Permitted		0.991			0.962	
Satd. Flow (perm)	0	1864	1761	0	1759	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.82	0.82	0.97	0.97	0.85	0.85
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	265	227	0	167	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 42.0% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	177	116	104	112	30
Future Vol, veh/h	40	177	116	104	112	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	97	97	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	49	216	120	107	132	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	227	0	-	0	488	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	314	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1347	-	-	-	541	872
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	743	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1347	-	-	-	519	872
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1347	-	-	-	568
HCM Lane V/C Ratio	0.036	-	-	-	0.294
HCM Control Delay (s)	7.8	0	-	-	14
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	159	7	98	121	12	100
Future Volume (vph)	159	7	98	121	12	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1834	0	0	1737	1598	0
Flt Permitted				0.978	0.995	
Satd. Flow (perm)	1834	0	0	1737	1598	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.93	0.93	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	179	0	0	246	122	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.0% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	159	7	98	121	12	100
Future Vol, veh/h	159	7	98	121	12	100
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	89	89	92	92
Heavy Vehicles, %	3	3	7	7	4	4
Mvmt Flow	171	8	110	136	13	109

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	179	0	531	177
Stage 1	-	-	-	-	175	-
Stage 2	-	-	-	-	356	-
Critical Hdwy	-	-	4.17	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.263	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	1367	-	505	861
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1367	-	461	859
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	643	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	786	-	-	1367	-
HCM Lane V/C Ratio	0.155	-	-	0.081	-
HCM Control Delay (s)	10.4	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	1	246	12	7	197	3	17	1	16	0	1	5
Future Volume (vph)	1	246	12	7	197	3	17	1	16	0	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1852	0	0	1855	0	0	1704	0	0	1652	0
Flt Permitted					0.998			0.976				
Satd. Flow (perm)	0	1852	0	0	1855	0	0	1704	0	0	1652	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	1		1	1		1
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.63	0.63	0.63	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	290	0	0	244	0	0	54	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 31.2% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	246	12	7	197	3	17	1	16	0	1	5
Future Vol, veh/h	1	246	12	7	197	3	17	1	16	0	1	5
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	85	85	85	63	63	63	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	276	13	8	232	4	27	2	25	0	2	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	237	0	0	289	0	0	542	538	284	550	542	236
Stage 1	-	-	-	-	-	-	285	285	-	251	251	-
Stage 2	-	-	-	-	-	-	257	253	-	299	291	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1330	-	-	1273	-	-	451	450	755	446	447	803
Stage 1	-	-	-	-	-	-	722	676	-	753	699	-
Stage 2	-	-	-	-	-	-	748	698	-	710	672	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1329	-	-	1273	-	-	441	446	754	426	443	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	441	446	-	426	443	-
Stage 1	-	-	-	-	-	-	721	675	-	751	693	-
Stage 2	-	-	-	-	-	-	731	692	-	683	671	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	12.3	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	548	1329	-	-	1273	-	-	706
HCM Lane V/C Ratio	0.098	0.001	-	-	0.006	-	-	0.017
HCM Control Delay (s)	12.3	7.7	0	-	7.8	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

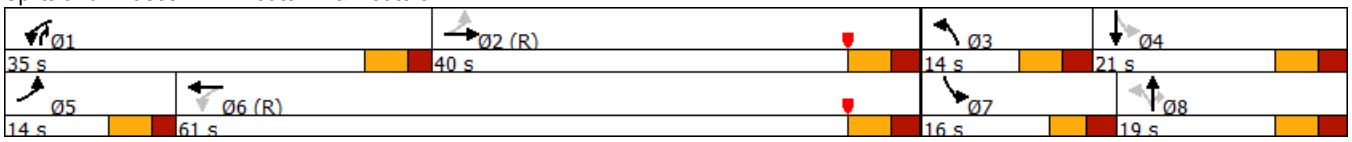
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	661	51	349	417	110	39	96	214	120	135	35
Future Volume (vph)	62	661	51	349	417	110	39	96	214	120	135	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1752	3466	0	1736	3364	0	1752	1845	1568	1719	3332	0
Flt Permitted	0.439			0.188			0.609			0.478		
Satd. Flow (perm)	810	3466	0	343	3364	0	1123	1845	1568	865	3332	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			43				92		24	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.74	0.74	0.74
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	3%	3%	3%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	809	0	375	566	0	45	110	246	162	229	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	14.0	40.0		35.0	61.0		14.0	19.0	35.0	16.0	21.0	
Total Split (%)	12.7%	36.4%		31.8%	55.5%		12.7%	17.3%	31.8%	14.5%	19.1%	
Maximum Green (s)	8.5	34.0		29.5	55.0		8.0	13.0	29.5	10.5	15.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	49.5	41.7		70.2	59.2		18.5	11.2	39.7	27.3	17.3	
Actuated g/C Ratio	0.45	0.38		0.64	0.54		0.17	0.10	0.36	0.25	0.16	
v/c Ratio	0.16	0.61		0.75	0.31		0.19	0.59	0.39	0.53	0.42	
Control Delay	11.7	31.4		27.4	7.1		32.9	60.0	16.5	40.0	40.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	11.7	31.4		27.4	7.1		32.9	60.0	16.5	40.0	40.8	
LOS	B	C		C	A		C	E	B	D	D	
Approach Delay		29.8			15.2			30.3			40.5	
Approach LOS		C			B			C			D	
Queue Length 50th (ft)	19	251		66	33		23	75	76	89	68	
Queue Length 95th (ft)	34	331		138	104		52	128	119	123	88	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	446	1318		592	1840		243	218	717	306	543	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.16	0.61		0.63	0.31		0.19	0.50	0.34	0.53	0.42	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 11 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 26.2 Intersection LOS: C
Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	619	376	732	718	0	0	0	0	178	1	158
Future Volume (vph)	0	619	376	732	718	0	0	0	0	178	1	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3343	0	1787	3574	0	0	0	0	0	1775	1583
Flt Permitted				0.098							0.953	
Satd. Flow (perm)	0	3343	0	184	3574	0	0	0	0	0	1775	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		116										174
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1130	0	779	764	0	0	0	0	0	197	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		36.0			91.0					19.0	19.0	19.0
Total Split (%)		32.7%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		31.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		31.0		86.2	86.2						13.8	13.8
Actuated g/C Ratio		0.28		0.78	0.78						0.13	0.13
v/c Ratio		1.10		0.97	0.27						0.88	0.50

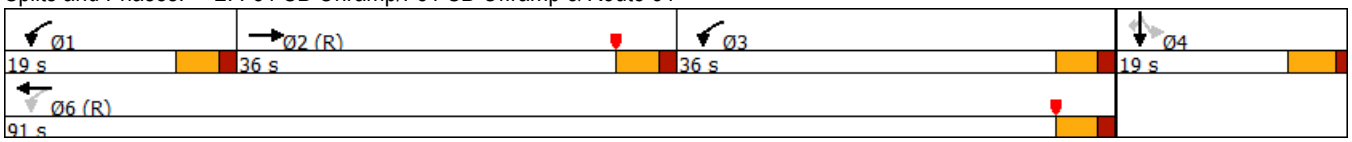
Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	19.0	36.0
Total Split (%)	17%	33%
Maximum Green (s)	14.0	31.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		99.2		48.7	3.3						84.7	11.9
Queue Delay		0.0		43.4	0.6						0.0	0.0
Total Delay		99.2		92.1	3.9						84.7	11.9
LOS		F		F	A						F	B
Approach Delay		99.2			48.4						50.6	
Approach LOS		F			D						D	
Queue Length 50th (ft)		~417		409	65						139	0
Queue Length 95th (ft)		#564		#726	21						#270	62
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1025		802	2799						225	353
Starvation Cap Reductn		0		331	1527						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.10		1.65	0.60						0.88	0.49

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 97 (88%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 67.5 Intersection LOS: E
Intersection Capacity Utilization 92.2% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

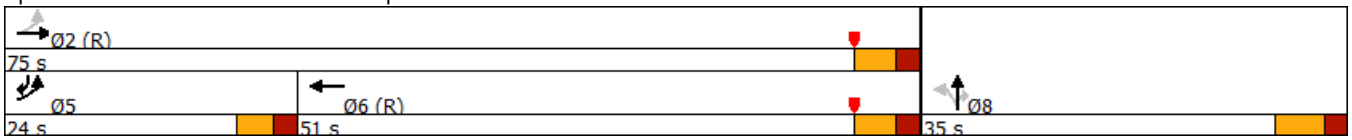
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	702	0	0	1145	138	159	64	377	0	0	146
Future Volume (vph)	95	702	0	0	1145	138	159	64	377	0	0	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1736	3471	0	0	3441	0	1719	1810	1538	0	0	1536
Flt Permitted	0.090						0.950					
Satd. Flow (perm)	164	3471	0	0	3441	0	1717	1810	1518	0	0	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14				188			187
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89	0.84	0.84	0.84
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	846	0	0	1425	0	179	72	424	0	0	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	24.0	75.0			51.0		35.0	35.0	35.0			24.0
Total Split (%)	21.8%	68.2%			46.4%		31.8%	31.8%	31.8%			21.8%
Maximum Green (s)	19.0	69.5			45.5		29.0	29.0	29.0			19.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	75.4	74.9			61.1		23.6	23.6	23.6			8.7
Actuated g/C Ratio	0.69	0.68			0.56		0.21	0.21	0.21			0.08
v/c Ratio	0.48	0.36			0.74		0.49	0.19	0.90			0.59

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	22.3	13.4			23.1		41.2	34.2	44.9			14.4
Queue Delay	0.0	0.8			0.4		1.6	0.0	0.0			0.2
Total Delay	22.3	14.2			23.5		42.8	34.2	44.9			14.6
LOS	C	B			C		D	C	D			B
Approach Delay		15.1			23.5			43.2			14.6	
Approach LOS		B			C			D			B	
Queue Length 50th (ft)	46	140			396		108	40	166			0
Queue Length 95th (ft)	m46	m135			564		168	76	#308			42
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	383	2362			1918		452	477	538			420
Starvation Cap Reductn	0	1107			0		0	0	0			0
Spillback Cap Reductn	0	0			143		145	0	0			26
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.30	0.67			0.80		0.58	0.15	0.79			0.44

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 24.7 Intersection LOS: C
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	179	900	636	1	0	647
Future Volume (vph)	179	900	636	1	0	647
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1770	3539	1845	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	1845	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Confl. Peds. (#/hr)	1			1		1
Peak Hour Factor	0.79	0.79	0.83	0.83	0.93	0.93
Heavy Vehicles (%)	2%	2%	3%	3%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	227	1139	767	0	696	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 93.6% ICU Level of Service F
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	90.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	179	900	636	1	0	647
Future Vol, veh/h	179	900	636	1	0	647
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	83	83	93	93
Heavy Vehicles, %	2	2	3	3	1	1
Mvmt Flow	227	1139	766	1	0	696

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	768	0	-	0	1792	769
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	1024	-
Critical Hdwy	4.13	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.219	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	844	-	-	-	81	~ 402
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	310	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	843	-	-	-	59	~ 401
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	310	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	$ 364.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	843	-	-	-	401
HCM Lane V/C Ratio	0.269	-	-	-	1.735
HCM Control Delay (s)	10.8	-	-	-	$ 364.7
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	42.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

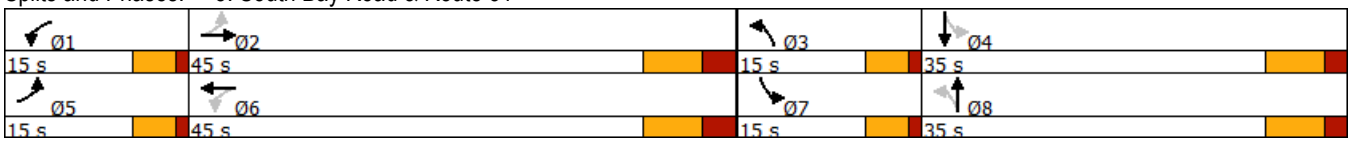
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	224	70	165	229	6	64	91	73	7	292	63
Future Volume (vph)	22	224	70	165	229	6	64	91	73	7	292	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1719	1744	0	1770	1855	0	1719	1688	0	1770	1812	0
Flt Permitted	0.601			0.361			0.253			0.635		
Satd. Flow (perm)	1088	1744	0	672	1855	0	458	1688	0	1183	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			1			35			10	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	323	0	179	256	0	76	195	0	8	399	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	15.0	45.0		15.0	45.0		15.0	35.0		15.0	35.0	
Total Split (%)	13.6%	40.9%		13.6%	40.9%		13.6%	31.8%		13.6%	31.8%	
Maximum Green (s)	10.5	37.2		10.5	37.2		10.5	28.2		10.5	28.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	34.5	24.3		41.9	34.8		37.3	33.2		32.3	25.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.39	0.27		0.47	0.39		0.42	0.37		0.36	0.28	
v/c Ratio	0.05	0.67		0.41	0.35		0.25	0.30		0.02	0.77	
Control Delay	14.8	36.2		18.2	24.1		18.8	19.3		17.1	41.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.8	36.2		18.2	24.1		18.8	19.3		17.1	41.9	
LOS	B	D		B	C		B	B		B	D	
Approach Delay		34.7			21.7			19.2			41.4	
Approach LOS		C			C			B			D	
Queue Length 50th (ft)	8	168		64	101		25	59		3	208	
Queue Length 95th (ft)	22	267		110	203		57	138		12	#405	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	549	769		450	820		346	712		543	606	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.42		0.40	0.31		0.22	0.27		0.01	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 89.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 29.8 Intersection LOS: C
Intersection Capacity Utilization 69.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



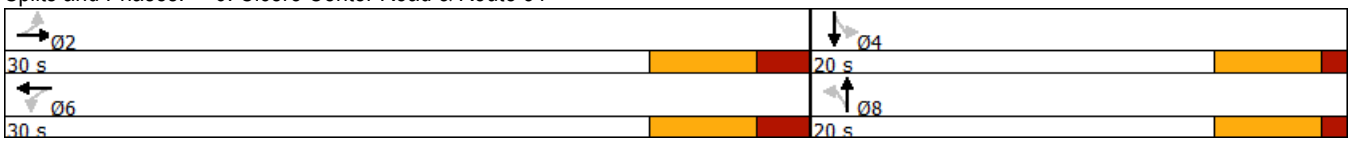
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	244	14	8	277	12	9	8	5	26	29	78
Future Volume (vph)	35	244	14	8	277	12	9	8	5	26	29	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1852	0	0	1785	0	0	1715	0
Flt Permitted		0.935			0.990			0.848			0.925	
Satd. Flow (perm)	0	1731	0	0	1835	0	0	1544	0	0	1603	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			6			6			108	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	0	0	330	0	0	25	0	0	184	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			8.1			8.1	
Actuated g/C Ratio		0.64			0.64			0.19			0.19	
v/c Ratio		0.28			0.28			0.09			0.48	
Control Delay		6.0			5.9			13.1			12.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		6.0			5.9			13.1			12.0	
LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		6.0			5.9			13.1			12.0	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		31			33			4			16	
Queue Length 95th (ft)		81			83			17			37	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1116			1183			534			621	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.28			0.05			0.30	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.7
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 7.5 Intersection LOS: A
Intersection Capacity Utilization 48.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	256	283	25	30	35
Future Volume (vph)	17	256	283	25	30	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1860	0	1706	0
Flt Permitted		0.997			0.977	
Satd. Flow (perm)	0	1876	1860	0	1706	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.88	0.88	0.90	0.90	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	310	342	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.6% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	256	283	25	30	35
Future Vol, veh/h	17	256	283	25	30	35
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	90	90	79	79
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	291	314	28	38	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	342	0	-	0	657	330
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1223	-	-	-	431	714
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1223	-	-	-	423	713
Mov Cap-2 Maneuver	-	-	-	-	423	-
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1223	-	-	-	542
HCM Lane V/C Ratio	0.016	-	-	-	0.152
HCM Control Delay (s)	8	0	-	-	12.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

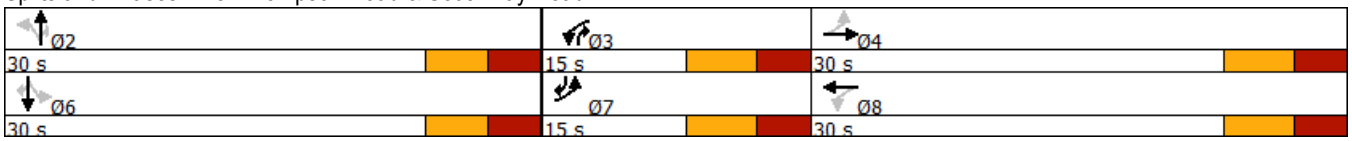
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	280	6	252	270	7	7	195	156	7	206	177
Future Volume (vph)	260	280	6	252	270	7	7	195	156	7	206	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1876	0	1787	1873	0	0	1841	1568	0	1859	1583
Flt Permitted	0.412			0.412				0.986			0.987	
Satd. Flow (perm)	774	1876	0	775	1873	0	0	1819	1568	0	1839	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2				195			201
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	322	0	293	322	0	0	253	195	0	242	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	24.0	16.0		24.0	16.0			23.6	38.2		23.6	38.2
Actuated g/C Ratio	0.35	0.23		0.35	0.23			0.35	0.56		0.35	0.56
v/c Ratio	0.75	0.73		0.75	0.73			0.40	0.20		0.38	0.21

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	26.6	34.2		26.7	34.2			20.5	2.2		20.1	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	26.6	34.2		26.7	34.2			20.5	2.2		20.1	2.2
LOS	C	C		C	C			C	A		C	A
Approach Delay		30.6			30.7			12.5			12.0	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	75	124		75	124			78	0		74	0
Queue Length 95th (ft)	#126	199		118	190			136	20		146	28
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	391	636		392	635			629	963		636	974
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.75	0.51		0.75	0.51			0.40	0.20		0.38	0.21

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 68.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 22.9 Intersection LOS: C
Intersection Capacity Utilization 62.6% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	98	180	73	89	34
Future Volume (vph)	16	98	180	73	89	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1814	1723	0	1682	0
Flt Permitted		0.993			0.965	
Satd. Flow (perm)	0	1814	1723	0	1682	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.87	0.87	0.85	0.85	0.91	0.91
Heavy Vehicles (%)	4%	4%	6%	6%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	131	298	0	135	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 32.4% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	98	180	73	89	34
Future Vol, veh/h	16	98	180	73	89	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	85	85	91	91
Heavy Vehicles, %	4	4	6	6	5	5
Mvmt Flow	18	113	212	86	98	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	404	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	4.14	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.236	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1252	-	-	-	597	776
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1252	-	-	-	588	776
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1252	-	-	-	630
HCM Lane V/C Ratio	0.015	-	-	-	0.215
HCM Control Delay (s)	7.9	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	116	3	88	80	3	83
Future Volume (vph)	116	3	88	80	3	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1802	0	0	1779	1569	0
Flt Permitted				0.974	0.998	
Satd. Flow (perm)	1802	0	0	1779	1569	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.78	0.78	0.84	0.84	0.92	0.92
Heavy Vehicles (%)	5%	5%	4%	4%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	153	0	0	200	93	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.7% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	116	3	88	80	3	83
Future Vol, veh/h	116	3	88	80	3	83
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	84	84	92	92
Heavy Vehicles, %	5	5	4	4	5	5
Mvmt Flow	149	4	105	95	3	90

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	154	0	457	152
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	-	-	4.14	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.236	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1414	-	556	886
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1413	-	512	885
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	863	-	-	1413	-
HCM Lane V/C Ratio	0.108	-	-	0.074	-
HCM Control Delay (s)	9.7	-	-	7.8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	168	29	9	150	0	15	0	14	1	0	3
Future Volume (vph)	2	168	29	9	150	0	15	0	14	1	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1825	0	0	1857	0	0	1698	0	0	1660	0
Flt Permitted					0.997			0.975			0.986	
Satd. Flow (perm)	0	1825	0	0	1857	0	0	1698	0	0	1660	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	2		1	1		2
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.55	0.55	0.55	0.63	0.63	0.63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	239	0	0	201	0	0	52	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 24.3% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	168	29	9	150	0	15	0	14	1	0	3
Future Vol, veh/h	2	168	29	9	150	0	15	0	14	1	0	3
Conflicting Peds, #/hr	1	0	0	0	0	1	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	55	55	55	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	202	35	11	190	0	27	0	25	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	237	0	0	441	437	221	450	454	193
Stage 1	-	-	-	-	-	-	224	224	-	213	213	-
Stage 2	-	-	-	-	-	-	217	213	-	237	241	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1383	-	-	1330	-	-	527	513	819	519	502	849
Stage 1	-	-	-	-	-	-	779	718	-	789	726	-
Stage 2	-	-	-	-	-	-	785	726	-	766	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1382	-	-	1330	-	-	519	507	818	498	496	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	519	507	-	498	496	-
Stage 1	-	-	-	-	-	-	777	717	-	787	719	-
Stage 2	-	-	-	-	-	-	772	719	-	740	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	11.2	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	630	1382	-	-	1330	-	-	721
HCM Lane V/C Ratio	0.084	0.002	-	-	0.009	-	-	0.009
HCM Control Delay (s)	11.2	7.6	0	-	7.7	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	534	111	479	628	137	137	328	591	215	198	95
Future Volume (vph)	66	534	111	479	628	137	137	328	591	215	198	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3481	0	1787	3478	0	1787	1881	1599	1770	3366	0
Flt Permitted	0.316			0.129			0.488			0.176		
Satd. Flow (perm)	594	3481	0	243	3478	0	918	1881	1579	328	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			17				70		54	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	679	0	564	900	0	144	345	622	250	340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	38.1	29.4		70.2	58.6		40.0	28.0	63.3	45.2	30.1	
Actuated g/C Ratio	0.29	0.23		0.54	0.45		0.31	0.22	0.49	0.35	0.23	
v/c Ratio	0.28	0.85		1.04	0.57		0.40	0.85	0.77	0.91	0.41	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	22.3	58.3		84.8	29.2		32.1	69.2	29.2	67.6	37.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.3	58.3		84.8	29.2		32.1	69.2	29.2	67.6	37.6	
LOS	C	E		F	C		C	E	C	E	D	
Approach Delay		55.0			50.6			42.0			50.3	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	28	287		~472	301		84	286	352	155	110	
Queue Length 95th (ft)	55	374		#679	372		139	411	520	#295	153	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	614	929		543	1577		391	495	810	276	926	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.73		1.04	0.57		0.37	0.70	0.77	0.91	0.37	

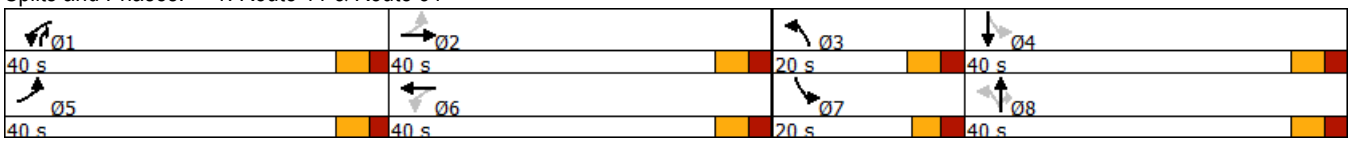
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 129.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 49.0 Intersection LOS: D
Intersection Capacity Utilization 93.2% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1064	276	395	1107	0	0	0	0	150	6	137
Future Volume (vph)	0	1064	276	395	1107	0	0	0	0	150	6	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3415	0	1787	3574	0	0	0	0	0	1760	1568
Flt Permitted				0.069							0.954	
Satd. Flow (perm)	0	3415	0	130	3574	0	0	0	0	0	1760	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36										156
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1441	0	411	1153	0	0	0	0	0	186	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		47.9		84.9	84.9						15.1	15.1
Actuated g/C Ratio		0.44		0.77	0.77						0.14	0.14
v/c Ratio		0.96		0.81	0.42						0.77	0.47

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		45.4		29.8	0.9						67.5	12.7
Queue Delay		26.1		56.2	1.1						62.2	0.0
Total Delay		71.5		86.0	2.0						129.7	12.7
LOS		E		F	A						F	B
Approach Delay		71.5			24.1						75.1	
Approach LOS		E			C						E	
Queue Length 50th (ft)		~538		189	23						124	4
Queue Length 95th (ft)		#698		m205	m23						#224	54
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1508		596	2806						247	354
Starvation Cap Reductn		0		246	1319						0	0
Spillback Cap Reductn		146		0	0						81	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.06		1.17	0.78						1.12	0.46

Intersection Summary

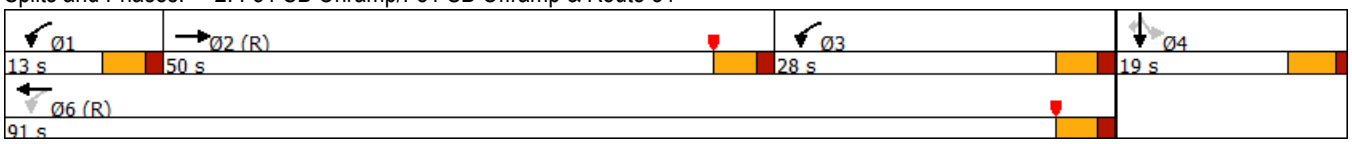
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 49.8 Intersection LOS: D
Intersection Capacity Utilization 81.3% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	933	0	0	1010	280	359	124	639	0	0	133
Future Volume (vph)	281	933	0	0	1010	280	359	124	639	0	0	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	3539	0	0	3406	0	1752	1845	1568	0	0	1596
Flt Permitted	0.099						0.950					
Satd. Flow (perm)	184	3539	0	0	3406	0	1752	1845	1568	0	0	1596
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31				74			124
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	335	1111	0	0	1402	0	427	148	761	0	0	177
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	61.0	60.5			35.3		38.0	38.0	38.0			20.2
Actuated g/C Ratio	0.55	0.55			0.32		0.35	0.35	0.35			0.18
v/c Ratio	0.85	0.57			1.26		0.71	0.23	1.29			0.45

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	46.0	29.0			156.1		38.7	26.9	172.2			16.3
Queue Delay	1.3	44.1			0.0		0.6	0.0	0.0			0.0
Total Delay	47.3	73.2			156.1		39.4	26.9	172.2			16.3
LOS	D	E			F		D	C	F			B
Approach Delay		67.2			156.1			113.7			16.3	
Approach LOS		E			F			F			B	
Queue Length 50th (ft)	204	349			~656		259	74	~654			32
Queue Length 95th (ft)	m224	m337			#861		341	115	#800			60
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	476	1946			1115		605	637	590			471
Starvation Cap Reductn	40	923			0		0	0	0			0
Spillback Cap Reductn	0	0			0		34	0	0			7
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.77	1.09			1.26		0.75	0.23	1.29			0.38

Intersection Summary

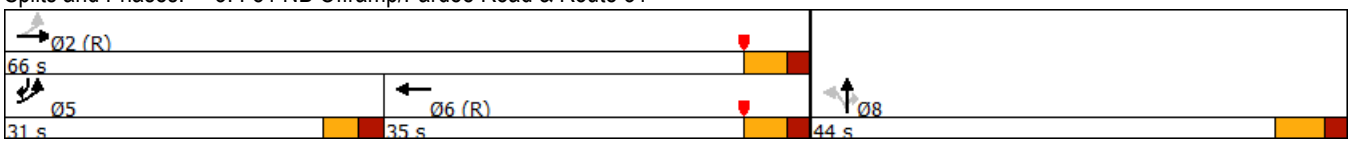
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 107.9 Intersection LOS: F
Intersection Capacity Utilization 86.1% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	613	959	882	1	0	408
Future Volume (vph)	613	959	882	1	0	408
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1863	0	1611	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1863	0	1611	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.91	0.91
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	666	1042	949	0	448	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 115.7% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	43.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	613	959	882	1	0	408
Future Vol, veh/h	613	959	882	1	0	408
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	91	91
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	666	1042	948	1	0	448

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	949	0	-	0	2802	949
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	1853	-
Critical Hdwy	4.115	-	-	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	2.2095	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	727	-	-	-	17	~ 315
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	110	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	727	-	-	-	1	~ 315
Mov Cap-2 Maneuver	-	-	-	-	1	-
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	110	-

Approach	EB	WB	SB
HCM Control Delay, s	15.6	0	239.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	727	-	-	-	315
HCM Lane V/C Ratio	0.917	-	-	-	1.423
HCM Control Delay (s)	40.1	-	-	-	239.7
HCM Lane LOS	E	-	-	-	F
HCM 95th %tile Q(veh)	12.5	-	-	-	23.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

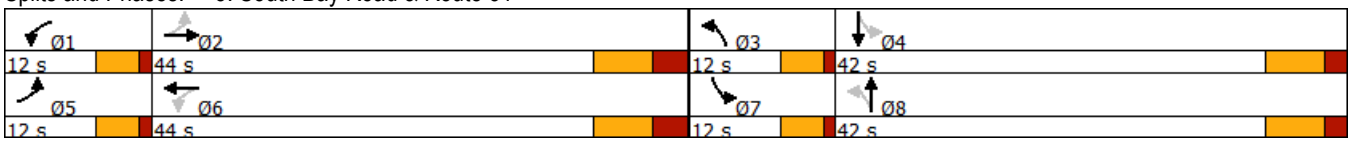
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	458	111	141	354	19	76	331	207	8	170	51
Future Volume (vph)	61	458	111	141	354	19	76	331	207	8	170	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	1809	0	1752	1832	0	1770	1755	0	1770	1789	0
Flt Permitted	0.393			0.105			0.424			0.131		
Satd. Flow (perm)	732	1809	0	194	1832	0	789	1755	0	244	1789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			3			30			14	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.86	0.86	0.86	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	619	0	152	401	0	88	626	0	9	260	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	12.0	44.0		12.0	44.0		12.0	42.0		12.0	42.0	
Total Split (%)	10.9%	40.0%		10.9%	40.0%		10.9%	38.2%		10.9%	38.2%	
Maximum Green (s)	7.5	36.2		7.5	36.2		7.5	35.2		7.5	35.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	46.7	36.3		48.2	38.9		39.1	35.4		35.2	27.9	
Actuated g/C Ratio	0.47	0.36		0.48	0.39		0.39	0.35		0.35	0.28	
v/c Ratio	0.16	0.94		0.73	0.56		0.23	0.98		0.05	0.51	
Control Delay	14.4	54.4		38.4	29.5		20.6	63.7		18.5	33.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.4	54.4		38.4	29.5		20.6	63.7		18.5	33.7	
LOS	B	D		D	C		C	E		B	C	
Approach Delay		50.6			31.9			58.4			33.2	
Approach LOS		D			C			E			C	
Queue Length 50th (ft)	19	357		47	197		35	364		3	137	
Queue Length 95th (ft)	50	#679		#162	346		63	#645		12	199	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	421	661		209	711		380	637		202	637	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.16	0.94		0.73	0.56		0.23	0.98		0.04	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 100.4
Natural Cycle: 120
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 46.3 Intersection LOS: D
Intersection Capacity Utilization 93.4% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



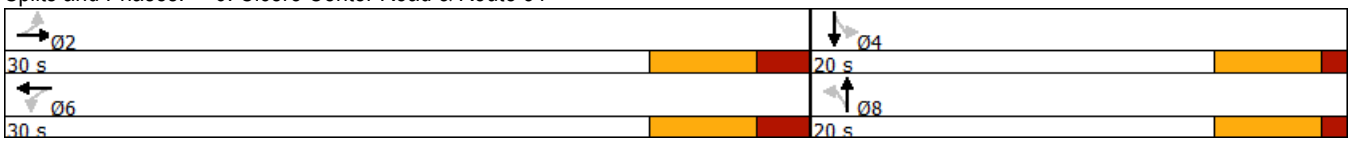
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	465	23	6	413	39	19	41	14	26	16	54
Future Volume (vph)	97	465	23	6	413	39	19	41	14	26	16	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1857	0	0	1857	0	0	1810	0	0	1716	0
Flt Permitted		0.848			0.992			0.905			0.874	
Satd. Flow (perm)	0	1587	0	0	1844	0	0	1660	0	0	1519	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			13			19			66	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.82	0.82	0.82
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	664	0	0	492	0	0	101	0	0	118	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			7.7			7.7	
Actuated g/C Ratio		0.65			0.65			0.18			0.18	
v/c Ratio		0.64			0.41			0.33			0.37	
Control Delay		11.7			6.6			16.0			11.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.7			6.6			16.0			11.8	
LOS		B			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		11.7			6.6			16.0			11.8	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		94			54			17			11	
Queue Length 95th (ft)		#277			121			37			37	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1031			1200			588			570	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.64			0.41			0.17			0.21	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.3
Natural Cycle: 45
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.2 Intersection LOS: B
Intersection Capacity Utilization 77.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	482	420	50	43	22
Future Volume (vph)	47	482	420	50	43	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1874	1855	0	1737	0
Flt Permitted		0.996			0.968	
Satd. Flow (perm)	0	1874	1855	0	1737	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.87	0.87	0.89	0.89	0.81	0.81
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	608	528	0	80	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 66.8% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	482	420	50	43	22
Future Vol, veh/h	47	482	420	50	43	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	89	89	81	81
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	554	472	56	53	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	528	0	-	0	1162	500
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	662	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1044	-	-	-	217	573
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1044	-	-	-	201	573
Mov Cap-2 Maneuver	-	-	-	-	201	-
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	515	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	25.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	-	258
HCM Lane V/C Ratio	0.052	-	-	-	0.311
HCM Control Delay (s)	8.6	0	-	-	25.1
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	1.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	386	2	118	325	24	19	323	231	9	150	238
Future Volume (vph)	316	386	2	118	325	24	19	323	231	9	150	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1862	0	0	1857	1583	0	1876	1599
Flt Permitted	0.263			0.238				0.976			0.969	
Satd. Flow (perm)	495	1879	0	448	1862	0	0	1818	1583	0	1823	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				151			193
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	462	0	148	436	0	0	364	246	0	190	283
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	28.6	20.6		27.9	20.3			23.6	37.8		23.6	38.1
Actuated g/C Ratio	0.40	0.28		0.39	0.28			0.33	0.52		0.33	0.53
v/c Ratio	1.11	0.86		0.47	0.83			0.62	0.27		0.32	0.30
Control Delay	101.9	42.6		15.9	39.3			26.8	5.1		21.1	4.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	101.9	42.6		15.9	39.3			26.8	5.1		21.1	4.6
LOS	F	D		B	D			C	A		C	A
Approach Delay		69.2			33.3			18.0			11.2	
Approach LOS		E			C			B			B	
Queue Length 50th (ft)	~123	196		35	180			144	22		67	21
Queue Length 95th (ft)	#251	#302		57	240			232	59		109	51
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	338	598		323	596			591	904		593	933
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	1.11	0.77		0.46	0.73			0.62	0.27		0.32	0.30

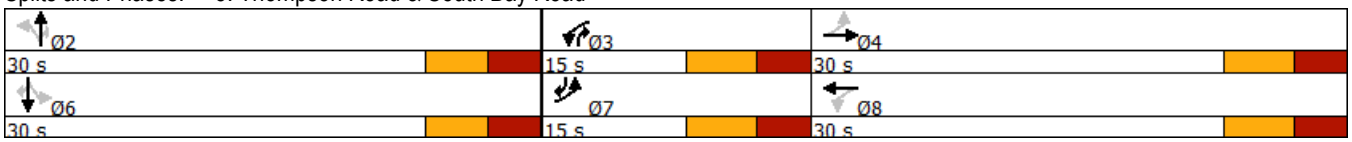
Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 72.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.11
Intersection Signal Delay: 37.4 Intersection LOS: D
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	57	246	169	133	111	38
Future Volume (vph)	57	246	169	133	111	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1846	1719	0	1701	0
Flt Permitted		0.991			0.964	
Satd. Flow (perm)	0	1846	1719	0	1701	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.83	0.83	0.85	0.85	0.82	0.82
Heavy Vehicles (%)	2%	2%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	365	355	0	181	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 51.6% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	246	169	133	111	38
Future Vol, veh/h	57	246	169	133	111	38
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	85	85	82	82
Heavy Vehicles, %	2	2	4	4	4	4
Mvmt Flow	69	296	199	156	135	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	356	0	-	0	712	278
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	4.12	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.218	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1203	-	-	-	396	756
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1202	-	-	-	368	755
Mov Cap-2 Maneuver	-	-	-	-	368	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	19.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1202	-	-	-	423
HCM Lane V/C Ratio	0.057	-	-	-	0.43
HCM Control Delay (s)	8.2	0	-	-	19.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	2.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	175	11	96	149	15	138
Future Volume (vph)	175	11	96	149	15	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1830	0	0	1827	1643	0
Flt Permitted				0.981	0.995	
Satd. Flow (perm)	1830	0	0	1827	1643	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.83	0.83
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	230	0	0	319	184	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 42.4% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	175	11	96	149	15	138
Future Vol, veh/h	175	11	96	149	15	138
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	77	77	83	83
Heavy Vehicles, %	3	3	2	2	1	1
Mvmt Flow	216	14	125	194	18	166

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	230	0	667	223
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	-	-	4.12	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.218	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1338	-	425	819
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1338	-	380	819
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	581	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	736	-	-	1338	-
HCM Lane V/C Ratio	0.25	-	-	0.093	-
HCM Control Delay (s)	11.5	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	271	40	7	185	0	59	1	18	1	0	1
Future Volume (vph)	2	271	40	7	185	0	59	1	18	1	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1831	0	0	1859	0	0	1738	0	0	1694	0
Flt Permitted					0.998			0.964			0.976	
Satd. Flow (perm)	0	1831	0	0	1859	0	0	1738	0	0	1694	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)			1	1			4		1	1		4
Peak Hour Factor	0.80	0.80	0.80	0.65	0.65	0.65	0.80	0.80	0.80	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	0	0	296	0	0	98	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 31.1% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	271	40	7	185	0	59	1	18	1	0	1
Future Vol, veh/h	2	271	40	7	185	0	59	1	18	1	0	1
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	65	65	65	80	80	80	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	339	50	11	285	0	74	1	23	2	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	285	0	0	390	0	0	683	678	366	690	703	289
Stage 1	-	-	-	-	-	-	371	371	-	307	307	-
Stage 2	-	-	-	-	-	-	312	307	-	383	396	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1277	-	-	1169	-	-	363	374	679	359	362	750
Stage 1	-	-	-	-	-	-	649	620	-	703	661	-
Stage 2	-	-	-	-	-	-	699	661	-	640	604	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1277	-	-	1168	-	-	356	368	678	342	357	747
Mov Cap-2 Maneuver	-	-	-	-	-	-	356	368	-	342	357	-
Stage 1	-	-	-	-	-	-	646	618	-	701	654	-
Stage 2	-	-	-	-	-	-	687	654	-	615	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	16.9	12.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	400	1277	-	-	1168	-	-	469
HCM Lane V/C Ratio	0.244	0.002	-	-	0.009	-	-	0.009
HCM Control Delay (s)	16.9	7.8	0	-	8.1	0	-	12.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	545	127	550	553	141	133	319	643	177	281	74
Future Volume (vph)	71	545	127	550	553	141	133	319	643	177	281	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3474	0	1787	3467	0	1787	1881	1599	1787	3463	0
Flt Permitted	0.362			0.106			0.398			0.189		
Satd. Flow (perm)	681	3474	0	199	3467	0	749	1881	1599	356	3463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			21				79		22	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	782	0	604	763	0	140	336	677	201	403	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	41.7	32.3		73.1	58.2		39.8	27.7	68.5	43.5	29.1	
Actuated g/C Ratio	0.32	0.25		0.55	0.44		0.30	0.21	0.52	0.33	0.22	
v/c Ratio	0.29	0.90		1.14	0.49		0.44	0.85	0.78	0.75	0.52	
Control Delay	21.5	62.1		121.2	28.0		34.1	70.4	30.1	48.9	45.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.5	62.1		121.2	28.0		34.1	70.4	30.1	48.9	45.3	
LOS	C	E		F	C		C	E	C	D	D	
Approach Delay		58.3			69.2			42.3			46.5	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	33	341		~577	240		84	284	423	125	155	
Queue Length 95th (ft)	61	#434		#857	333		136	399	598	#188	204	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	640	915		528	1542		348	487	868	277	914	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.13	0.85		1.14	0.49		0.40	0.69	0.78	0.73	0.44	

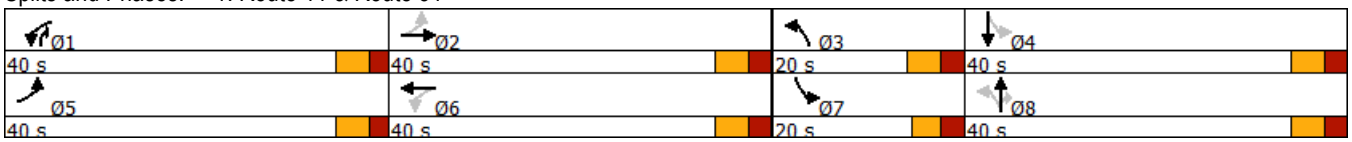
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 131.8
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 55.6 Intersection LOS: E
Intersection Capacity Utilization 95.4% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1098	267	323	1057	0	0	0	0	158	0	187
Future Volume (vph)	0	1098	267	323	1057	0	0	0	0	158	0	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3437	0	1770	3539	0	0	0	0	0	1752	1568
Flt Permitted				0.069							0.950	
Satd. Flow (perm)	0	3437	0	129	3539	0	0	0	0	0	1752	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33										161
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.90	0.90	0.90	0.79	0.79	0.79
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1468	0	347	1137	0	0	0	0	0	200	237
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		48.4		82.9	82.9						17.1	17.1
Actuated g/C Ratio		0.44		0.75	0.75						0.16	0.16
v/c Ratio		0.96		0.75	0.43						0.74	0.63

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		45.8		29.7	4.9						61.7	23.0
Queue Delay		25.0		23.8	0.9						0.2	0.0
Total Delay		70.8		53.4	5.8						61.8	23.0
LOS		E		D	A						E	C
Approach Delay		70.8			17.0						40.8	
Approach LOS		E			B						D	
Queue Length 50th (ft)		~578		97	167						132	47
Queue Length 95th (ft)		#718		m230	20						#217	100
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1531		590	2766						271	379
Starvation Cap Reductn		0		241	1242						0	0
Spillback Cap Reductn		141		0	0						2	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.06		0.99	0.75						0.74	0.63

Intersection Summary

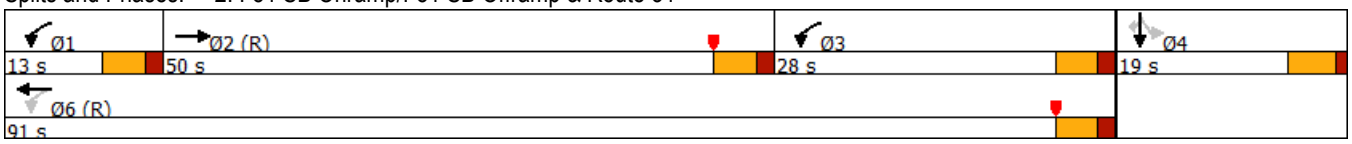
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 43.3 Intersection LOS: D
Intersection Capacity Utilization 78.0% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

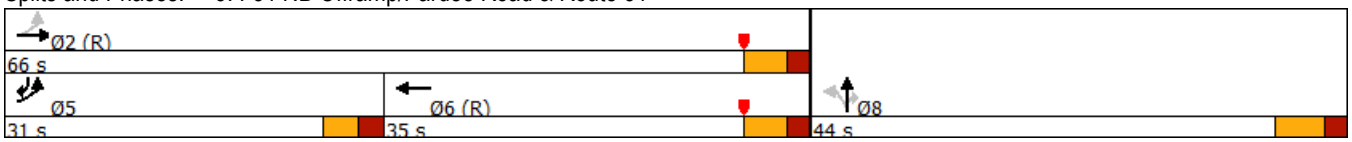
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	975	0	0	1051	215	208	50	341	0	0	121
Future Volume (vph)	281	975	0	0	1051	215	208	50	341	0	0	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3574	0	0	3485	0	1787	1881	1599	0	0	1627
Flt Permitted	0.074						0.950					
Satd. Flow (perm)	139	3574	0	0	3485	0	1787	1881	1599	0	0	1627
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					21				82			268
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	309	1071	0	0	1361	0	224	54	367	0	0	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	72.3	71.8			49.4		26.7	26.7	26.7			17.4
Actuated g/C Ratio	0.66	0.65			0.45		0.24	0.24	0.24			0.16
v/c Ratio	0.88	0.46			0.86		0.52	0.12	0.82			0.29
Control Delay	41.5	22.4			36.6		38.9	29.7	44.1			1.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.9	3.3			0.2		0.0	0.0	0.0			0.0
Total Delay	42.4	25.7			36.8		38.9	29.7	44.1			1.5
LOS	D	C			D		D	C	D			A
Approach Delay		29.4			36.8			41.1			1.5	
Approach LOS		C			D			D			A	
Queue Length 50th (ft)	192	308			440		137	30	193			0
Queue Length 95th (ft)	m211	m327			#825		187	55	270			0
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	483	2331			1575		617	649	606			591
Starvation Cap Reductn	44	1133			0		0	0	0			0
Spillback Cap Reductn	0	0			18		5	0	0			1
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.70	0.89			0.87		0.37	0.08	0.61			0.24

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 33.3 Intersection LOS: C
Intersection Capacity Utilization 76.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	473	843	803	0	0	463
Future Volume (vph)	473	843	803	0	0	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1881	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1881	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.93	0.93	0.87	0.87	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	509	906	923	0	498	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 107.1% ICU Level of Service G
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	52.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	473	843	803	0	0	463
Future Vol, veh/h	473	843	803	0	0	463
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	87	87	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	509	906	923	0	0	498

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	923	0	-	0	2394	923
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	1471	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	743	-	-	-	33	~ 328
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	179	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	743	-	-	-	10	~ 328
Mov Cap-2 Maneuver	-	-	-	-	10	-
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	179	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	277.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	743	-	-	-	328
HCM Lane V/C Ratio	0.685	-	-	-	1.518
HCM Control Delay (s)	19.7	-	-	-	277.6
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	5.5	-	-	-	27.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

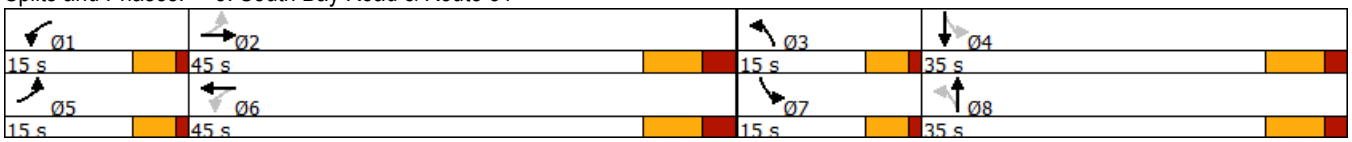
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	434	67	180	447	21	69	144	153	13	163	59
Future Volume (vph)	35	434	67	180	447	21	69	144	153	13	163	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1844	0	1787	1868	0	1752	1682	0	1752	1759	0
Flt Permitted	0.305			0.163			0.316			0.433		
Satd. Flow (perm)	574	1844	0	307	1868	0	581	1682	0	798	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			2			47			16	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							3		2	2		3
Peak Hour Factor	0.89	0.89	0.89	1.00	0.86	0.86	0.80	0.88	0.88	0.73	0.73	0.73
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	563	0	180	544	0	86	338	0	18	304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	15.0	45.0		15.0	45.0		15.0	35.0		15.0	35.0	
Total Split (%)	13.6%	40.9%		13.6%	40.9%		13.6%	31.8%		13.6%	31.8%	
Maximum Green (s)	10.5	37.2		10.5	37.2		10.5	28.2		10.5	28.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	45.0	34.4		51.4	42.3		35.4	29.3		30.6	23.3	
Actuated g/C Ratio	0.46	0.35		0.53	0.43		0.36	0.30		0.31	0.24	
v/c Ratio	0.11	0.86		0.58	0.67		0.27	0.63		0.06	0.70	
Control Delay	14.2	45.3		21.6	31.1		22.7	32.3		20.2	43.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.2	45.3		21.6	31.1		22.7	32.3		20.2	43.5	
LOS	B	D		C	C		C	C		C	D	
Approach Delay		43.3			28.8			30.3			42.2	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	12	342		60	309		37	151		7	179	
Queue Length 95th (ft)	31	#566		110	453		61	275		18	212	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	423	736		327	822		342	606		380	540	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.76		0.55	0.66		0.25	0.56		0.05	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 97.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 35.4 Intersection LOS: D
Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



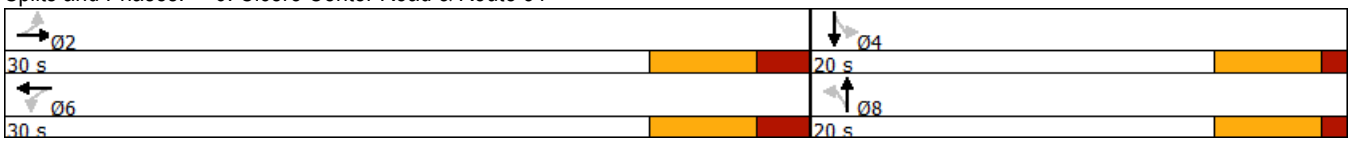
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	463	7	3	403	26	7	21	6	29	9	45
Future Volume (vph)	64	463	7	3	403	26	7	21	6	29	9	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1866	0	0	1866	0	0	1816	0	0	1694	0
Flt Permitted		0.901			0.997			0.923			0.863	
Satd. Flow (perm)	0	1692	0	0	1861	0	0	1692	0	0	1487	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			9			9			57	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.69	0.69	0.69	0.79	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	561	0	0	496	0	0	49	0	0	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		31.1			31.1			7.5			7.5	
Actuated g/C Ratio		0.74			0.74			0.18			0.18	
v/c Ratio		0.45			0.36			0.16			0.34	
Control Delay		6.6			5.5			14.1			12.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		6.6			5.5			14.1			12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			A			B			B	
Approach Delay		6.6			5.5			14.1			12.0	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		70			55			8			10	
Queue Length 95th (ft)		156			113			21			33	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1247			1373			610			567	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.45			0.36			0.08			0.19	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 42.2
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 6.9 Intersection LOS: A
Intersection Capacity Utilization 73.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	445	397	56	59	33
Future Volume (vph)	55	445	397	56	59	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1849	0	1734	0
Flt Permitted		0.997			0.969	
Satd. Flow (perm)	0	1876	1849	0	1734	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.89	0.89	0.88	0.88	0.83	0.83
Growth Factor	50%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	531	515	0	111	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 57.9% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	445	397	56	59	33
Future Vol, veh/h	55	445	397	56	59	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	88	88	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	31	500	451	64	71	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	515	0	-	0	1045	483
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	562	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1056	-	-	-	254	586
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1056	-	-	-	244	586
Mov Cap-2 Maneuver	-	-	-	-	244	-
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	573	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	23
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1056	-	-	-	309
HCM Lane V/C Ratio	0.029	-	-	-	0.359
HCM Control Delay (s)	8.5	0	-	-	23
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.6

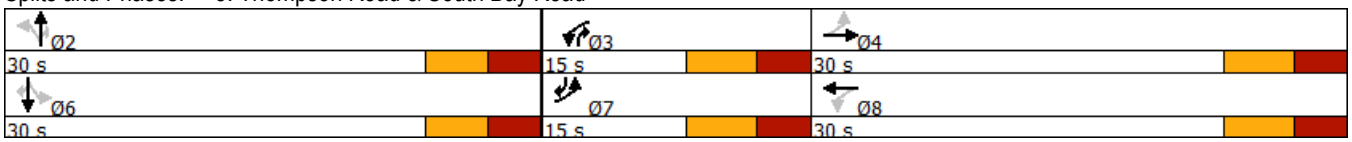
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	330	3	99	295	16	8	151	128	16	155	175
Future Volume (vph)	216	330	3	99	295	16	8	151	128	16	155	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1866	0	0	1877	1599	0	1872	1599
Flt Permitted	0.358			0.379				0.983			0.964	
Satd. Flow (perm)	673	1879	0	713	1866	0	0	1849	1599	0	1813	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			4				149			190
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.86	0.86	0.86	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	358	0	111	349	0	0	185	149	0	185	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	25.5	17.5		24.3	16.9			23.6	37.6		23.6	38.1
Actuated g/C Ratio	0.37	0.25		0.35	0.24			0.34	0.54		0.34	0.55
v/c Ratio	0.62	0.75		0.30	0.76			0.29	0.16		0.30	0.20
Control Delay	19.8	34.5		13.0	35.2			19.5	2.3		19.6	2.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	19.8	34.5		13.0	35.2			19.5	2.3		19.6	2.2
LOS	B	C		B	D			B	A		B	A
Approach Delay		28.7			29.8			11.8			10.8	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	58	141		26	135			57	0		57	0
Queue Length 95th (ft)	99	227		50	216			110	23		116	29
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	378	628		382	626			631	949		619	968
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.61	0.57		0.29	0.56			0.29	0.16		0.30	0.20

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 69.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 67.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	224	158	117	126	34
Future Volume (vph)	44	224	158	117	126	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1866	1772	0	1757	0
Flt Permitted		0.992			0.962	
Satd. Flow (perm)	0	1866	1772	0	1757	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.82	0.82	0.97	0.97	0.85	0.85
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	327	284	0	188	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 48.7% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	224	158	117	126	34
Future Vol, veh/h	44	224	158	117	126	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	97	97	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	273	163	121	148	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	284	0	-	0	605	224
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	381	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1284	-	-	-	462	818
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1284	-	-	-	439	818
Mov Cap-2 Maneuver	-	-	-	-	439	-
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	693	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	17
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1284	-	-	-	487
HCM Lane V/C Ratio	0.042	-	-	-	0.387
HCM Control Delay (s)	7.9	0	-	-	17
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	180	7	103	141	13	105
Future Volume (vph)	180	7	103	141	13	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1835	0	0	1738	1600	0
Flt Permitted				0.979	0.995	
Satd. Flow (perm)	1835	0	0	1738	1600	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.93	0.93	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	0	0	274	128	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 40.8% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	180	7	103	141	13	105
Future Vol, veh/h	180	7	103	141	13	105
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	89	89	92	92
Heavy Vehicles, %	3	3	7	7	4	4
Mvmt Flow	194	8	116	158	14	114

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	202	0	588	200
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	390	-
Critical Hdwy	-	-	4.17	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.263	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	1341	-	468	836
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	680	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1341	-	424	834
Mov Cap-2 Maneuver	-	-	-	-	424	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	615	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	754	-	-	1341	-
HCM Lane V/C Ratio	0.17	-	-	0.086	-
HCM Control Delay (s)	10.8	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	1	258	26	7	207	3	32	1	17	0	1	5
Future Volume (vph)	1	258	26	7	207	3	32	1	17	0	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1855	0	0	1722	0	0	1652	0
Flt Permitted					0.998			0.969				
Satd. Flow (perm)	0	1840	0	0	1855	0	0	1722	0	0	1652	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	1		1	1		1
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.63	0.63	0.63	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	320	0	0	256	0	0	80	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 32.6% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	258	26	7	207	3	32	1	17	0	1	5
Future Vol, veh/h	1	258	26	7	207	3	32	1	17	0	1	5
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	85	85	85	63	63	63	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	290	29	8	244	4	51	2	27	0	2	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	249	0	0	319	0	0	576	572	306	585	584	248
Stage 1	-	-	-	-	-	-	307	307	-	263	263	-
Stage 2	-	-	-	-	-	-	269	265	-	322	321	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1317	-	-	1241	-	-	428	430	734	422	423	791
Stage 1	-	-	-	-	-	-	703	661	-	742	691	-
Stage 2	-	-	-	-	-	-	737	689	-	690	652	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1316	-	-	1241	-	-	418	426	733	402	419	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	426	-	402	419	-
Stage 1	-	-	-	-	-	-	702	660	-	741	685	-
Stage 2	-	-	-	-	-	-	720	683	-	662	651	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	13.8	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	490	1316	-	-	1241	-	-	688
HCM Lane V/C Ratio	0.162	0.001	-	-	0.007	-	-	0.017
HCM Control Delay (s)	13.8	7.7	0	-	7.9	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

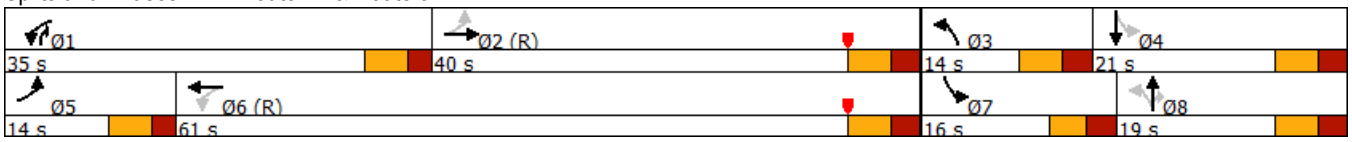
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	678	51	359	440	110	39	96	221	120	135	35
Future Volume (vph)	62	678	51	359	440	110	39	96	221	120	135	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1752	3466	0	1736	3367	0	1752	1845	1568	1719	3332	0
Flt Permitted	0.429			0.175			0.609			0.478		
Satd. Flow (perm)	791	3466	0	320	3367	0	1123	1845	1568	865	3332	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			40				89		24	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.74	0.74	0.74
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	3%	3%	3%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	828	0	386	591	0	45	110	254	162	229	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	14.0	40.0		35.0	61.0		14.0	19.0	35.0	16.0	21.0	
Total Split (%)	12.7%	36.4%		31.8%	55.5%		12.7%	17.3%	31.8%	14.5%	19.1%	
Maximum Green (s)	8.5	34.0		29.5	55.0		8.0	13.0	29.5	10.5	15.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	48.8	41.0		70.3	59.3		18.4	11.2	40.5	27.2	17.3	
Actuated g/C Ratio	0.44	0.37		0.64	0.54		0.17	0.10	0.37	0.25	0.16	
v/c Ratio	0.17	0.64		0.77	0.32		0.20	0.59	0.40	0.53	0.42	
Control Delay	11.9	32.4		32.9	6.7		33.1	60.0	16.9	40.3	40.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	11.9	32.4		32.9	6.7		33.1	60.0	16.9	40.3	40.8	
LOS	B	C		C	A		C	E	B	D	D	
Approach Delay		30.8			17.0			30.3			40.6	
Approach LOS		C			B			C			D	
Queue Length 50th (ft)	19	264		94	31		23	75	81	89	68	
Queue Length 95th (ft)	34	340		148	108		52	128	125	123	88	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	433	1295		584	1843		241	218	716	304	543	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.16	0.64		0.66	0.32		0.19	0.50	0.35	0.53	0.42	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 11 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 27.1 Intersection LOS: C
Intersection Capacity Utilization 72.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	643	376	836	751	0	0	0	0	183	1	158
Future Volume (vph)	0	643	376	836	751	0	0	0	0	183	1	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3351	0	1787	3574	0	0	0	0	0	1775	1583
Flt Permitted				0.098							0.953	
Satd. Flow (perm)	0	3351	0	184	3574	0	0	0	0	0	1775	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		107										174
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1158	0	889	799	0	0	0	0	0	202	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		36.0			91.0					19.0	19.0	19.0
Total Split (%)		32.7%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		31.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		31.0		86.0	86.0						14.0	14.0
Actuated g/C Ratio		0.28		0.78	0.78						0.13	0.13
v/c Ratio		1.13		1.11	0.29						0.90	0.49

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	19.0	36.0
Total Split (%)	17%	33%
Maximum Green (s)	14.0	31.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		111.2		88.9	1.9						86.7	11.8
Queue Delay		0.0		3.8	0.7						0.0	0.0
Total Delay		111.2		92.6	2.6						86.7	11.8
LOS		F		F	A						F	B
Approach Delay		111.2			50.0						52.1	
Approach LOS		F			D						D	
Queue Length 50th (ft)		~453		~652	35						142	0
Queue Length 95th (ft)		#593		m#883	m17						#278	62
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1021		799	2794						225	353
Starvation Cap Reductn		0		329	1554						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.13		1.89	0.64						0.90	0.49

Intersection Summary

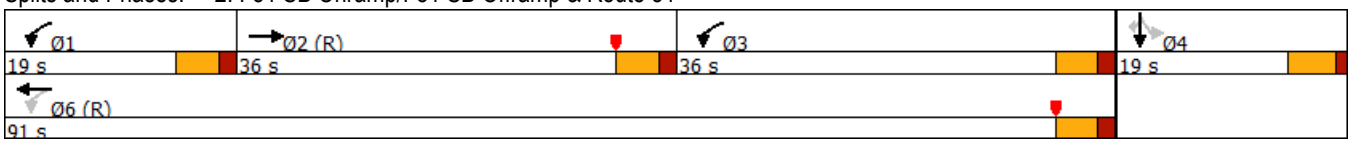
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 97 (88%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 72.2 Intersection LOS: E
Intersection Capacity Utilization 98.9% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

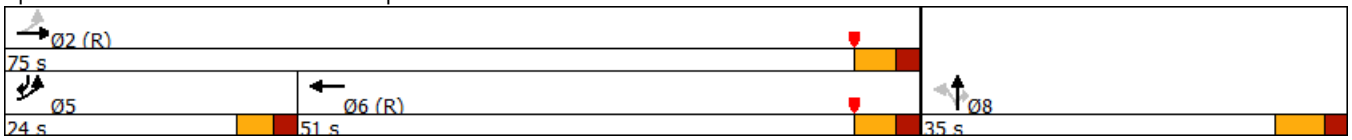
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	731	0	0	1282	145	159	64	455	0	0	146
Future Volume (vph)	95	731	0	0	1282	145	159	64	455	0	0	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1736	3471	0	0	3445	0	1719	1810	1538	0	0	1536
Flt Permitted	0.066						0.950					
Satd. Flow (perm)	121	3471	0	0	3445	0	1717	1810	1518	0	0	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					13				174			183
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89	0.84	0.84	0.84
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	881	0	0	1585	0	179	72	511	0	0	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	24.0	75.0			51.0		35.0	35.0	35.0			24.0
Total Split (%)	21.8%	68.2%			46.4%		31.8%	31.8%	31.8%			21.8%
Maximum Green (s)	19.0	69.5			45.5		29.0	29.0	29.0			19.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	70.3	69.8			55.9		28.7	28.7	28.7			8.9
Actuated g/C Ratio	0.64	0.63			0.51		0.26	0.26	0.26			0.08
v/c Ratio	0.55	0.40			0.90		0.40	0.15	0.98			0.60

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	26.5	14.9			33.4		36.7	32.2	61.2			15.0
Queue Delay	0.0	1.5			4.9		1.1	0.0	0.0			0.1
Total Delay	26.5	16.4			38.3		37.7	32.2	61.2			15.1
LOS	C	B			D		D	C	E			B
Approach Delay		17.5			38.3			52.9			15.1	
Approach LOS		B			D			D			B	
Queue Length 50th (ft)	51	148			511		104	39	254			0
Queue Length 95th (ft)	m49	m138			#734		168	76	#465			44
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	355	2204			1757		452	477	528			416
Starvation Cap Reductn	0	1073			0		0	0	0			0
Spillback Cap Reductn	0	0			130		118	0	0			19
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.32	0.78			0.97		0.54	0.15	0.97			0.44

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 34.5 Intersection LOS: C
Intersection Capacity Utilization 71.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	249	937	685	1	0	742
Future Volume (vph)	249	937	685	1	0	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1770	3539	1845	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	1845	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Confl. Peds. (#/hr)	1			1		1
Peak Hour Factor	0.79	0.79	0.83	0.83	0.93	0.93
Heavy Vehicles (%)	2%	2%	3%	3%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	315	1186	826	0	798	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 106.0% ICU Level of Service G
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	141.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	249	937	685	1	0	742
Future Vol, veh/h	249	937	685	1	0	742
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	83	83	93	93
Heavy Vehicles, %	2	2	3	3	1	1
Mvmt Flow	315	1186	825	1	0	798

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	827	0	-	0	2050	828
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	1223	-
Critical Hdwy	4.13	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.219	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	802	-	-	-	55	~ 372
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	244	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	801	-	-	-	33	~ 371
Mov Cap-2 Maneuver	-	-	-	-	33	-
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	244	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	$ 550
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	801	-	-	-	371
HCM Lane V/C Ratio	0.393	-	-	-	2.151
HCM Control Delay (s)	12.4	-	-	-	$ 550
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1.9	-	-	-	58.5

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	221	70	165	226	6	64	188	73	7	423	115
Future Volume (vph)	62	221	70	165	226	6	64	188	73	7	423	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1719	1744	0	1770	1855	0	1719	1734	0	1770	1803	0
Flt Permitted	0.602			0.347			0.111			0.566		
Satd. Flow (perm)	1089	1744	0	646	1855	0	201	1734	0	1054	1803	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			1			17			12	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	320	0	179	253	0	76	311	0	8	604	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	15.0	45.0		15.0	45.0		15.0	35.0		15.0	35.0	
Total Split (%)	13.6%	40.9%		13.6%	40.9%		13.6%	31.8%		13.6%	31.8%	
Maximum Green (s)	10.5	37.2		10.5	37.2		10.5	28.2		10.5	28.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	35.2	23.9		39.9	28.7		41.0	36.8		35.9	28.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.38	0.26		0.43	0.31		0.45	0.40		0.39	0.31	
v/c Ratio	0.14	0.69		0.45	0.44		0.34	0.44		0.02	1.06	
Control Delay	15.8	37.9		19.5	30.0		20.8	23.8		17.0	87.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.8	37.9		19.5	30.0		20.8	23.8		17.0	87.0	
LOS	B	D		B	C		C	C		B	F	
Approach Delay		34.0			25.6			23.2			86.1	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)	23	166		64	125		25	117		3	~410	
Queue Length 95th (ft)	48	263		110	208		57	241		12	#727	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	523	729		411	766		266	704		531	572	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.44		0.44	0.33		0.29	0.44		0.02	1.06	

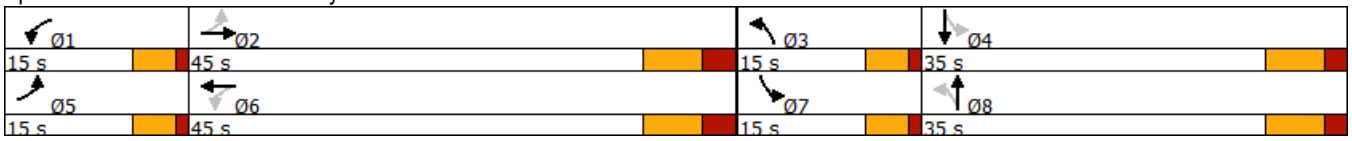
Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 92
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 47.2 Intersection LOS: D
Intersection Capacity Utilization 79.0% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



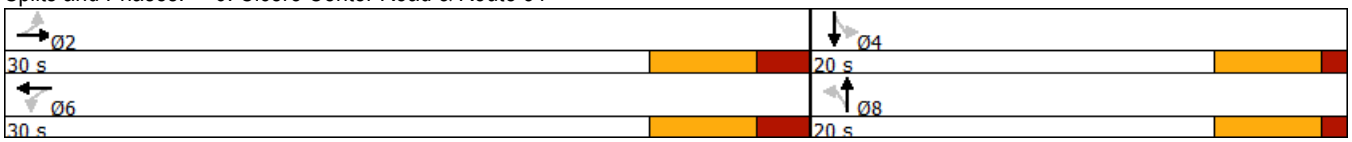
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	241	14	8	274	20	9	8	5	36	29	78
Future Volume (vph)	35	241	14	8	274	20	9	8	5	36	29	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1844	0	0	1785	0	0	1721	0
Flt Permitted		0.934			0.990			0.840			0.906	
Satd. Flow (perm)	0	1729	0	0	1828	0	0	1530	0	0	1578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			10			6			108	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	312	0	0	335	0	0	25	0	0	198	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.2			28.2			8.3			8.3	
Actuated g/C Ratio		0.64			0.64			0.19			0.19	
v/c Ratio		0.28			0.29			0.09			0.51	
Control Delay		6.2			6.1			12.9			13.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		6.2			6.1			12.9			13.0	
LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		6.2			6.1			12.9			13.0	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		31			33			4			19	
Queue Length 95th (ft)		83			87			17			41	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1109			1173			527			610	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.29			0.05			0.32	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 44
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 7.9 Intersection LOS: A
Intersection Capacity Utilization 49.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	263	288	47	59	35
Future Volume (vph)	17	263	288	47	59	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1845	0	1732	0
Flt Permitted		0.997			0.969	
Satd. Flow (perm)	0	1876	1845	0	1732	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.88	0.88	0.90	0.90	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	318	372	0	119	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 40.4% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	263	288	47	59	35
Future Vol, veh/h	17	263	288	47	59	35
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	90	90	79	79
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	299	320	52	75	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	372	0	-	0	683	348
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	337	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1192	-	-	-	416	697
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	725	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1192	-	-	-	408	696
Mov Cap-2 Maneuver	-	-	-	-	408	-
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1192	-	-	-	482
HCM Lane V/C Ratio	0.016	-	-	-	0.247
HCM Control Delay (s)	8.1	0	-	-	14.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	316	6	334	319	7	7	195	217	7	206	177
Future Volume (vph)	260	316	6	334	319	7	7	195	217	7	206	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1876	0	1787	1875	0	0	1841	1568	0	1859	1583
Flt Permitted	0.329			0.358				0.986			0.987	
Satd. Flow (perm)	619	1876	0	673	1875	0	0	1819	1568	0	1839	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1				241			201
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	362	0	388	379	0	0	253	271	0	242	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	25.8	17.8		25.8	17.8			23.6	38.2		23.6	38.2
Actuated g/C Ratio	0.37	0.25		0.37	0.25			0.34	0.55		0.34	0.55
v/c Ratio	0.81	0.76		1.03	0.80			0.41	0.28		0.39	0.21

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	32.7	34.9		75.0	37.3			21.5	2.9		21.1	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	32.7	34.9		75.0	37.3			21.5	2.9		21.1	2.2
LOS	C	C		E	D			C	A		C	A
Approach Delay		33.9			56.4			11.9			12.6	
Approach LOS		C			E			B			B	
Queue Length 50th (ft)	75	143		~112	151			83	6		79	0
Queue Length 95th (ft)	#141	227		#241	227			136	30		146	28
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	362	619		375	619			613	964		620	954
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.81	0.58		1.03	0.61			0.41	0.28		0.39	0.21

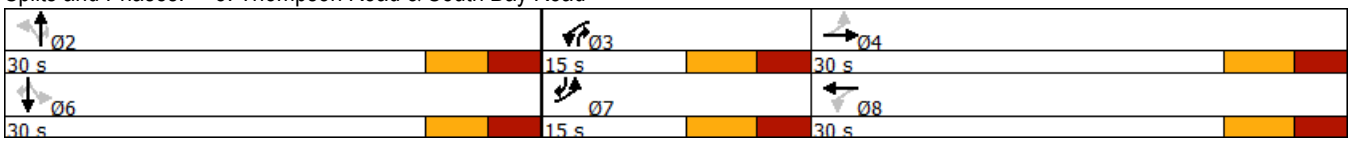
Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 70
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 32.3 Intersection LOS: C
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	168	275	89	101	34
Future Volume (vph)	16	168	275	89	101	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1820	1733	0	1685	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1820	1733	0	1685	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.87	0.87	0.85	0.85	0.91	0.91
Heavy Vehicles (%)	4%	4%	6%	6%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	211	429	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 36.5% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	168	275	89	101	34
Future Vol, veh/h	16	168	275	89	101	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	85	85	91	91
Heavy Vehicles, %	4	4	6	6	5	5
Mvmt Flow	18	193	324	105	111	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	429	0	-	0	606	377
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.14	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.236	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1120	-	-	-	455	663
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	802	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1120	-	-	-	447	663
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	802	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1120	-	-	-	487
HCM Lane V/C Ratio	0.016	-	-	-	0.305
HCM Control Delay (s)	8.3	0	-	-	15.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	198	3	271	191	3	220
Future Volume (vph)	198	3	271	191	3	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1806	0	0	1774	1567	0
Flt Permitted				0.971	0.999	
Satd. Flow (perm)	1806	0	0	1774	1567	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.78	0.78	0.84	0.84	0.92	0.92
Heavy Vehicles (%)	5%	5%	4%	4%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	258	0	0	550	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	198	3	271	191	3	220
Future Vol, veh/h	198	3	271	191	3	220
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	84	84	92	92
Heavy Vehicles, %	5	5	4	4	5	5
Mvmt Flow	254	4	323	227	3	239

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	259	0	1130	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	873	-
Critical Hdwy	-	-	4.14	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.236	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1294	-	222	774
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	404	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1293	-	158	773
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	288	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	735	-	-	1293	-
HCM Lane V/C Ratio	0.33	-	-	0.25	-
HCM Control Delay (s)	12.3	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	197	39	9	172	0	23	0	14	1	0	3
Future Volume (vph)	2	197	39	9	172	0	23	0	14	1	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1822	0	0	1859	0	0	1717	0	0	1660	0
Flt Permitted					0.998			0.970			0.986	
Satd. Flow (perm)	0	1822	0	0	1859	0	0	1717	0	0	1660	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	2		1	1		2
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.55	0.55	0.55	0.63	0.63	0.63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	286	0	0	229	0	0	67	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.6% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	197	39	9	172	0	23	0	14	1	0	3
Future Vol, veh/h	2	197	39	9	172	0	23	0	14	1	0	3
Conflicting Peds, #/hr	1	0	0	0	0	1	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	55	55	55	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	237	47	11	218	0	42	0	25	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	219	0	0	284	0	0	510	506	262	519	529	221
Stage 1	-	-	-	-	-	-	265	265	-	241	241	-
Stage 2	-	-	-	-	-	-	245	241	-	278	288	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1350	-	-	1278	-	-	474	469	777	467	455	819
Stage 1	-	-	-	-	-	-	740	689	-	762	706	-
Stage 2	-	-	-	-	-	-	759	706	-	728	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1278	-	-	466	463	776	447	449	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	463	-	447	449	-
Stage 1	-	-	-	-	-	-	739	688	-	760	698	-
Stage 2	-	-	-	-	-	-	746	698	-	702	673	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	12.5	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	549	1349	-	-	1278	-	-	677
HCM Lane V/C Ratio	0.123	0.002	-	-	0.009	-	-	0.009
HCM Control Delay (s)	12.5	7.7	0	-	7.8	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	406	450	4	4	12
Future Volume (vph)	12	406	450	4	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1810	1826	0	1667	0
Flt Permitted		0.999			0.988	
Satd. Flow (perm)	0	1810	1826	0	1667	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.78	0.78	0.84	0.84	0.90	0.90
Heavy Vehicles (%)	1%	5%	4%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	536	541	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 41.0% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	406	450	4	4	12
Future Vol, veh/h	12	406	450	4	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	84	84	90	90
Heavy Vehicles, %	1	5	4	1	1	1
Mvmt Flow	15	521	536	5	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	541	0	-	0	1090	539
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1033	-	-	-	239	544
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1033	-	-	-	234	544
Mov Cap-2 Maneuver	-	-	-	-	234	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1033	-	-	-	409
HCM Lane V/C Ratio	0.015	-	-	-	0.043
HCM Control Delay (s)	8.5	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	355	8	1	384	7	23	0	3	7	0	47
Future Volume (vph)	47	355	8	1	384	7	23	0	3	7	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1802	0	0	1824	0	0	1775	0	0	1649	0
Flt Permitted		0.994						0.957			0.993	
Satd. Flow (perm)	0	1802	0	0	1824	0	0	1775	0	0	1649	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	5%	1%	1%	4%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	525	0	0	466	0	0	29	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.1% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	47	355	8	1	384	7	23	0	3	7	0	47
Future Vol, veh/h	47	355	8	1	384	7	23	0	3	7	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	84	84	84	90	90	90	90	90	90
Heavy Vehicles, %	1	5	1	1	4	1	1	1	1	1	1	1
Mvmt Flow	60	455	10	1	457	8	26	0	3	8	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	465	0	0	465	0	0	1069	1047	460	1045	1048	461
Stage 1	-	-	-	-	-	-	580	580	-	463	463	-
Stage 2	-	-	-	-	-	-	489	467	-	582	585	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1102	-	-	1102	-	-	200	229	603	208	229	603
Stage 1	-	-	-	-	-	-	502	502	-	581	566	-
Stage 2	-	-	-	-	-	-	562	563	-	501	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1102	-	-	1102	-	-	172	212	603	195	212	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	212	-	195	212	-
Stage 1	-	-	-	-	-	-	465	465	-	538	565	-
Stage 2	-	-	-	-	-	-	513	562	-	461	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	27.7	13.7
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	1102	-	-	1102	-	-	474
HCM Lane V/C Ratio	0.154	0.055	-	-	0.001	-	-	0.127
HCM Control Delay (s)	27.7	8.5	0	-	8.3	0	-	13.7
HCM Lane LOS	D	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	125	210	30	4	177	17	90	0	11	17	0	125
Future Volume (vph)	125	210	30	4	177	17	90	0	11	17	0	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1788	0	0	1811	0	0	1775	0	0	1647	0
Flt Permitted		0.983			0.999			0.957			0.994	
Satd. Flow (perm)	0	1788	0	0	1811	0	0	1775	0	0	1647	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	5%	1%	1%	4%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	467	0	0	236	0	0	112	0	0	158	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 58.0% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	125	210	30	4	177	17	90	0	11	17	0	125
Future Vol, veh/h	125	210	30	4	177	17	90	0	11	17	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	84	84	84	90	90	90	90	90	90
Heavy Vehicles, %	1	5	1	1	4	1	1	1	1	1	1	1
Mvmt Flow	160	269	38	5	211	20	100	0	12	19	0	139

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	231	0	0	307	0	0	909	849	288	845	858	221
Stage 1	-	-	-	-	-	-	608	608	-	231	231	-
Stage 2	-	-	-	-	-	-	301	241	-	614	627	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1343	-	-	1259	-	-	257	299	753	284	295	821
Stage 1	-	-	-	-	-	-	485	487	-	774	715	-
Stage 2	-	-	-	-	-	-	710	708	-	481	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1343	-	-	1259	-	-	189	255	753	248	251	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	255	-	248	251	-
Stage 1	-	-	-	-	-	-	415	417	-	663	711	-
Stage 2	-	-	-	-	-	-	587	704	-	405	409	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	0.2	41.6	12.4
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	206	1343	-	-	1259	-	-	643
HCM Lane V/C Ratio	0.545	0.119	-	-	0.004	-	-	0.245
HCM Control Delay (s)	41.6	8	0	-	7.9	0	-	12.4
HCM Lane LOS	E	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	2.9	0.4	-	-	0	-	-	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	559	111	486	647	137	137	328	602	215	198	95
Future Volume (vph)	66	559	111	486	647	137	137	328	602	215	198	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3485	0	1787	3481	0	1787	1881	1599	1770	3366	0
Flt Permitted	0.310			0.118			0.487			0.175		
Satd. Flow (perm)	583	3485	0	222	3481	0	916	1881	1579	326	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			17				70		54	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	705	0	572	922	0	144	345	634	250	340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	38.9	30.2		70.9	59.4		40.2	28.2	63.4	45.3	30.2	
Actuated g/C Ratio	0.30	0.23		0.54	0.45		0.31	0.22	0.48	0.35	0.23	
v/c Ratio	0.28	0.86		1.07	0.58		0.40	0.85	0.79	0.91	0.42	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	22.3	59.4		95.0	29.4		32.4	69.8	30.7	69.3	37.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.3	59.4		95.0	29.4		32.4	69.8	30.7	69.3	37.9	
LOS	C	E		F	C		C	E	C	E	D	
Approach Delay		56.1			54.5			42.9			51.2	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	28	302		~508	313		86	290	374	158	112	
Queue Length 95th (ft)	55	392		#706	383		139	411	538	#296	153	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	611	923		535	1588		389	491	806	274	920	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.76		1.07	0.58		0.37	0.70	0.79	0.91	0.37	

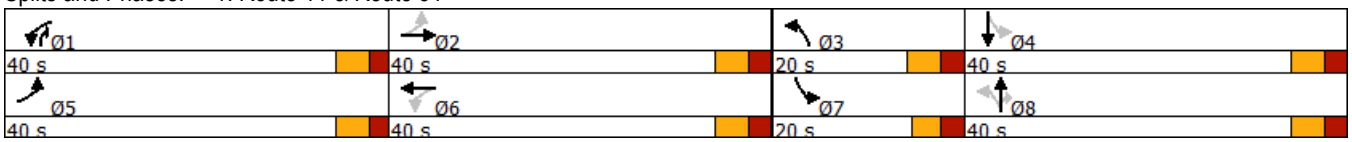
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 130.8
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 51.1 Intersection LOS: D
Intersection Capacity Utilization 94.3% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1100	276	479	1133	0	0	0	0	158	6	137
Future Volume (vph)	0	1100	276	479	1133	0	0	0	0	158	6	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3418	0	1787	3574	0	0	0	0	0	1760	1568
Flt Permitted				0.072							0.954	
Satd. Flow (perm)	0	3418	0	135	3574	0	0	0	0	0	1760	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34										149
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1480	0	499	1180	0	0	0	0	0	195	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		45.6		85.8	85.8						14.2	14.2
Actuated g/C Ratio		0.41		0.78	0.78						0.13	0.13
v/c Ratio		1.03		0.89	0.42						0.86	0.49

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		64.0		32.7	0.8						79.8	14.6
Queue Delay		27.3		55.6	2.4						5.5	0.0
Total Delay		91.3		88.3	3.2						85.3	14.6
LOS		F		F	A						F	B
Approach Delay		91.3			28.5						53.1	
Approach LOS		F			C						D	
Queue Length 50th (ft)		~590		243	12						137	9
Queue Length 95th (ft)		#731		m242	m21						#239	59
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1435		588	2800						230	334
Starvation Cap Reductn		0		301	1443						0	0
Spillback Cap Reductn		190		0	0						14	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.19		1.74	0.87						0.90	0.49

Intersection Summary

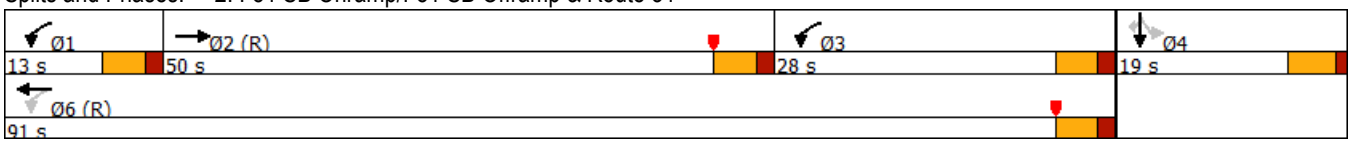
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 57.4 Intersection LOS: E
Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	977	0	0	1120	286	359	124	757	0	0	133
Future Volume (vph)	281	977	0	0	1120	286	359	124	757	0	0	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	3539	0	0	3414	0	1752	1845	1568	0	0	1596
Flt Permitted	0.099						0.950					
Satd. Flow (perm)	184	3539	0	0	3414	0	1752	1845	1568	0	0	1596
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28				74			123
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	335	1163	0	0	1528	0	427	148	901	0	0	177
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	61.0	60.5			35.3		38.0	38.0	38.0			20.2
Actuated g/C Ratio	0.55	0.55			0.32		0.35	0.35	0.35			0.18
v/c Ratio	0.85	0.60			1.37		0.71	0.23	1.53			0.45

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	43.6	31.0			203.2		38.7	26.9	272.8			16.5
Queue Delay	1.2	49.7			0.0		2.6	0.0	0.0			0.0
Total Delay	44.8	80.7			203.2		41.4	26.9	272.8			16.5
LOS	D	F			F		D	C	F			B
Approach Delay		72.7			203.2			181.2			16.5	
Approach LOS		E			F			F			B	
Queue Length 50th (ft)	204	335			~756		259	74	~864			32
Queue Length 95th (ft)	m209	m332			#962		341	115	#1004			60
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	476	1946			1116		605	637	590			471
Starvation Cap Reductn	38	900			0		0	0	0			0
Spillback Cap Reductn	0	0			1		89	0	0			11
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.76	1.11			1.37		0.83	0.23	1.53			0.38

Intersection Summary

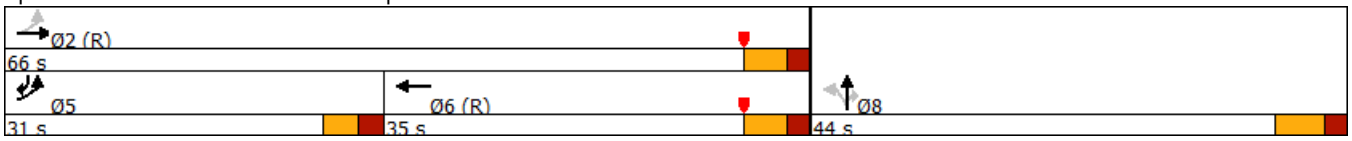
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.53
Intersection Signal Delay: 147.4 Intersection LOS: F
Intersection Capacity Utilization 89.3% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	720	1014	922	1	0	484
Future Volume (vph)	720	1014	922	1	0	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1863	0	1611	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1863	0	1611	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.91	0.91
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	783	1102	992	0	532	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 128.4% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	83.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	720	1014	922	1	0	484
Future Vol, veh/h	720	1014	922	1	0	484
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	91	91
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	783	1102	991	1	0	532

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	992	0	-	0	3109	992
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	2117	-
Critical Hdwy	4.115	-	-	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	2.2095	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	~ 700	-	-	-	11	~ 297
Stage 1	-	-	-	-	358	-
Stage 2	-	-	-	-	79	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	~ 700	-	-	-	0	~ 297
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	79	-

Approach	EB	WB	SB
HCM Control Delay, s	39.1	0	$ 398.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	~ 700	-	-	-	297
HCM Lane V/C Ratio	1.118	-	-	-	1.791
HCM Control Delay (s)	94.1	-	-	-	$ 398.6
HCM Lane LOS	F	-	-	-	F
HCM 95th %tile Q(veh)	23.1	-	-	-	35

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	446	111	141	343	19	76	478	207	8	276	102
Future Volume (vph)	128	446	111	141	343	19	76	478	207	8	276	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	1807	0	1752	1830	0	1770	1779	0	1770	1778	0
Flt Permitted	0.351			0.110			0.237			0.110		
Satd. Flow (perm)	654	1807	0	203	1830	0	441	1779	0	205	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			3			21			18	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.86	0.86	0.86	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	606	0	152	389	0	88	797	0	9	445	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	12.0	44.0		12.0	44.0		12.0	42.0		12.0	42.0	
Total Split (%)	10.9%	40.0%		10.9%	40.0%		10.9%	38.2%		10.9%	38.2%	
Maximum Green (s)	7.5	36.2		7.5	36.2		7.5	35.2		7.5	35.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	47.0	36.3		47.2	36.4		44.9	41.1		41.1	33.8	
Actuated g/C Ratio	0.44	0.34		0.44	0.34		0.42	0.39		0.39	0.32	
v/c Ratio	0.38	0.97		0.76	0.62		0.32	1.14		0.05	0.77	
Control Delay	19.6	64.9		44.2	35.0		21.0	109.2		17.6	42.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.6	64.9		44.2	35.0		21.0	109.2		17.6	42.2	
LOS	B	E		D	C		C	F		B	D	
Approach Delay		56.4			37.5			100.4			41.7	
Approach LOS		E			D			F			D	
Queue Length 50th (ft)	54	416		60	228		35	~595		3	271	
Queue Length 95th (ft)	94	#665		#159	338		63	#905		12	364	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	369	625		199	628		280	701		191	602	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.38	0.97		0.76	0.62		0.31	1.14		0.05	0.74	

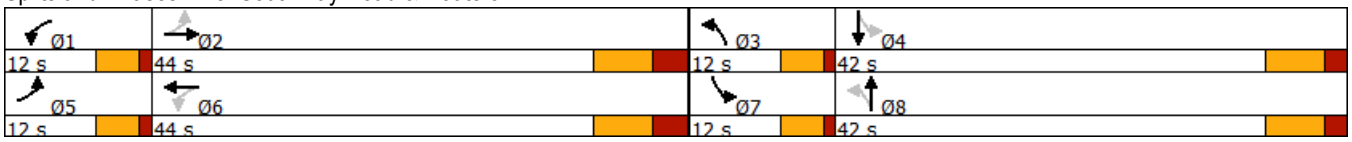
Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 106.2
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 64.8 Intersection LOS: E
Intersection Capacity Utilization 100.5% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



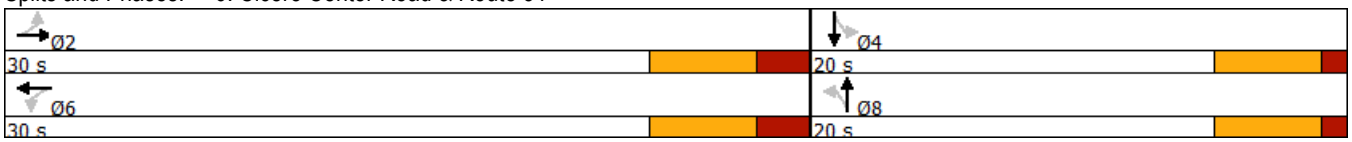
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	453	23	6	401	58	19	41	14	44	19	54
Future Volume (vph)	97	453	23	6	401	58	19	41	14	44	19	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1857	0	0	1847	0	0	1810	0	0	1731	0
Flt Permitted		0.843			0.993			0.909			0.833	
Satd. Flow (perm)	0	1578	0	0	1836	0	0	1667	0	0	1470	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			20			19			66	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.82	0.82	0.82
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	651	0	0	499	0	0	101	0	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			8.0			8.0	
Actuated g/C Ratio		0.64			0.64			0.18			0.18	
v/c Ratio		0.64			0.42			0.31			0.44	
Control Delay		12.1			6.9			15.5			14.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.1			6.9			15.5			14.0	
LOS		B			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		12.1			6.9			15.5			14.0	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		91			54			17			16	
Queue Length 95th (ft)		#284			133			36			45	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1018			1189			586			549	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.64			0.42			0.17			0.26	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.6
Natural Cycle: 50
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 80.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	488	427	83	66	22
Future Volume (vph)	47	488	427	83	66	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1874	1840	0	1752	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1874	1840	0	1752	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.87	0.87	0.89	0.89	0.81	0.81
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	615	573	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.8% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	488	427	83	66	22
Future Vol, veh/h	47	488	427	83	66	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	89	89	81	81
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	561	480	93	81	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	573	0	-	0	1196	527
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	669	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1005	-	-	-	207	553
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	511	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1005	-	-	-	191	553
Mov Cap-2 Maneuver	-	-	-	-	191	-
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	511	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	34.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1005	-	-	-	228
HCM Lane V/C Ratio	0.054	-	-	-	0.476
HCM Control Delay (s)	8.8	0	-	-	34.4
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	2.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	442	2	184	365	24	19	323	322	9	150	238
Future Volume (vph)	316	442	2	184	365	24	19	323	322	9	150	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1864	0	0	1857	1583	0	1876	1599
Flt Permitted	0.220			0.179				0.976			0.969	
Satd. Flow (perm)	414	1879	0	337	1864	0	0	1818	1583	0	1823	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				113			154
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	528	0	230	486	0	0	364	343	0	190	283
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	30.3	22.3		30.3	22.3			23.5	38.0		23.5	38.0
Actuated g/C Ratio	0.41	0.30		0.41	0.30			0.32	0.51		0.32	0.51
v/c Ratio	1.19	0.94		0.78	0.86			0.63	0.40		0.33	0.32
Control Delay	131.8	52.7		34.8	42.0			27.9	8.9		21.6	5.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	131.8	52.7		34.8	42.0			27.9	8.9		21.6	5.9
LOS	F	D		C	D			C	A		C	A
Approach Delay		85.6			39.7			18.7			12.3	
Approach LOS		F			D			B			B	
Queue Length 50th (ft)	~146	235		57	208			144	58		67	30
Queue Length 95th (ft)	#277	#371		#117	#285			232	115		109	62
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	316	582		293	581			575	864		577	893
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	1.19	0.91		0.78	0.84			0.63	0.40		0.33	0.32

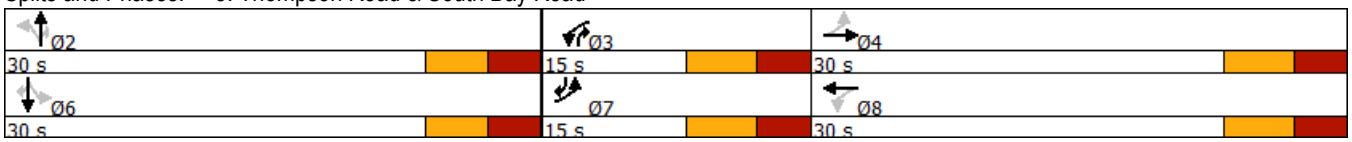
Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 74.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 44.6 Intersection LOS: D
Intersection Capacity Utilization 87.1% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	57	353	245	147	130	38
Future Volume (vph)	57	353	245	147	130	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1850	1734	0	1707	0
Flt Permitted		0.993			0.963	
Satd. Flow (perm)	0	1850	1734	0	1707	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.83	0.83	0.85	0.85	0.82	0.82
Heavy Vehicles (%)	2%	2%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	494	461	0	205	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 63.2% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	353	245	147	130	38
Future Vol, veh/h	57	353	245	147	130	38
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	85	85	82	82
Heavy Vehicles, %	2	2	4	4	4	4
Mvmt Flow	69	425	288	173	159	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	462	0	-	0	939	376
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	563	-
Critical Hdwy	4.12	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.218	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1099	-	-	-	291	666
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	566	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1098	-	-	-	267	665
Mov Cap-2 Maneuver	-	-	-	-	267	-
Stage 1	-	-	-	-	633	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	36.9
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1098	-	-	-	309
HCM Lane V/C Ratio	0.063	-	-	-	0.663
HCM Control Delay (s)	8.5	0	-	-	36.9
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.2	-	-	-	4.4

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	301	11	253	239	15	352
Future Volume (vph)	301	11	253	239	15	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1835	0	0	1816	1633	0
Flt Permitted				0.975	0.998	
Satd. Flow (perm)	1835	0	0	1816	1633	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.83	0.83
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	386	0	0	639	442	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	11.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	301	11	253	239	15	352
Future Vol, veh/h	301	11	253	239	15	352
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	77	77	83	83
Heavy Vehicles, %	3	3	2	2	1	1
Mvmt Flow	372	14	329	310	18	424

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	386	0	1347	379
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	968	-
Critical Hdwy	-	-	4.12	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.218	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1172	-	167	670
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	370	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1172	-	110	670
Mov Cap-2 Maneuver	-	-	-	-	110	-
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	245	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	32.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	555	-	-	1172	-
HCM Lane V/C Ratio	0.797	-	-	0.28	-
HCM Control Delay (s)	32.2	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	7.6	-	-	1.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	294	58	7	218	0	77	1	18	1	0	1
Future Volume (vph)	2	294	58	7	218	0	77	1	18	1	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1822	0	0	1859	0	0	1745	0	0	1694	0
Flt Permitted					0.998			0.962			0.976	
Satd. Flow (perm)	0	1822	0	0	1859	0	0	1745	0	0	1694	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)			1	1			4		1	1		4
Peak Hour Factor	0.80	0.80	0.80	0.65	0.65	0.65	0.80	0.80	0.80	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	444	0	0	346	0	0	120	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.1% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	294	58	7	218	0	77	1	18	1	0	1
Future Vol, veh/h	2	294	58	7	218	0	77	1	18	1	0	1
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	65	65	65	80	80	80	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	368	73	11	335	0	96	1	23	2	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	442	0	0	774	769	407	781	805	339
Stage 1	-	-	-	-	-	-	412	412	-	357	357	-
Stage 2	-	-	-	-	-	-	362	357	-	424	448	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1224	-	-	1118	-	-	316	332	644	312	316	703
Stage 1	-	-	-	-	-	-	617	594	-	661	628	-
Stage 2	-	-	-	-	-	-	657	628	-	608	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1224	-	-	1117	-	-	310	327	643	296	311	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	327	-	296	311	-
Stage 1	-	-	-	-	-	-	615	592	-	659	620	-
Stage 2	-	-	-	-	-	-	645	620	-	583	571	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	21	13.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	344	1224	-	-	1117	-	-	416
HCM Lane V/C Ratio	0.349	0.002	-	-	0.01	-	-	0.01
HCM Control Delay (s)	21	7.9	0	-	8.3	0	-	13.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.5	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	638	480	5	4	12
Future Volume (vph)	15	638	480	5	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1844	1861	0	1667	0
Flt Permitted		0.999			0.988	
Satd. Flow (perm)	0	1844	1861	0	1667	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.90	0.90
Heavy Vehicles (%)	1%	3%	2%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	807	629	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	638	480	5	4	12
Future Vol, veh/h	15	638	480	5	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	77	77	90	90
Heavy Vehicles, %	1	3	2	1	1	1
Mvmt Flow	19	788	623	6	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	629	0	-	0	1452	626
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	826	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	958	-	-	-	145	486
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	432	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	140	486
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	432	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	300
HCM Lane V/C Ratio	0.019	-	-	-	0.059
HCM Control Delay (s)	8.8	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	559	24	2	423	12	15	0	2	11	0	47
Future Volume (vph)	59	559	24	2	423	12	15	0	2	11	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1831	0	0	1856	0	0	1775	0	0	1659	0
Flt Permitted		0.995						0.957			0.991	
Satd. Flow (perm)	0	1831	0	0	1856	0	0	1775	0	0	1659	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.81	0.81	0.81	0.77	0.77	0.77	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	793	0	0	568	0	0	19	0	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.6% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	59	559	24	2	423	12	15	0	2	11	0	47
Future Vol, veh/h	59	559	24	2	423	12	15	0	2	11	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	77	77	77	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	2	1	1	1	1	1	1	1
Mvmt Flow	73	690	30	3	549	16	17	0	2	12	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	565	0	0	720	0	0	1440	1422	705	1415	1429	557
Stage 1	-	-	-	-	-	-	851	851	-	563	563	-
Stage 2	-	-	-	-	-	-	589	571	-	852	866	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1012	-	-	886	-	-	111	137	438	116	135	532
Stage 1	-	-	-	-	-	-	356	378	-	513	511	-
Stage 2	-	-	-	-	-	-	496	506	-	356	372	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1012	-	-	886	-	-	90	120	438	104	118	532
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	120	-	104	118	-
Stage 1	-	-	-	-	-	-	313	332	-	451	508	-
Stage 2	-	-	-	-	-	-	445	503	-	311	327	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	49.7	20.3
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	99	1012	-	-	886	-	-	299
HCM Lane V/C Ratio	0.191	0.072	-	-	0.003	-	-	0.216
HCM Control Delay (s)	49.7	8.8	0	-	9.1	0	-	20.3
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0	-	-	0.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	161	318	93	12	252	32	57	0	7	29	0	128
Future Volume (vph)	161	318	93	12	252	32	57	0	7	29	0	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1794	0	0	1834	0	0	1775	0	0	1659	0
Flt Permitted		0.986			0.998			0.958			0.991	
Satd. Flow (perm)	0	1794	0	0	1834	0	0	1775	0	0	1659	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.81	0.81	0.81	0.77	0.77	0.77	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	707	0	0	385	0	0	71	0	0	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.1% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	161	318	93	12	252	32	57	0	7	29	0	128
Future Vol, veh/h	161	318	93	12	252	32	57	0	7	29	0	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	77	77	77	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	2	1	1	1	1	1	1	1
Mvmt Flow	199	393	115	16	327	42	63	0	8	32	0	142

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	508	0	0	1300	1250	451	1233	1286	348
Stage 1	-	-	-	-	-	-	849	849	-	380	380	-
Stage 2	-	-	-	-	-	-	451	401	-	853	906	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1195	-	-	1062	-	-	139	174	610	154	165	697
Stage 1	-	-	-	-	-	-	357	379	-	644	616	-
Stage 2	-	-	-	-	-	-	590	603	-	355	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1195	-	-	1062	-	-	89	130	610	123	124	697
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	130	-	123	124	-
Stage 1	-	-	-	-	-	-	273	290	-	492	604	-
Stage 2	-	-	-	-	-	-	461	592	-	268	272	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.3	105.7	22.8
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	98	1195	-	-	1062	-	-	374
HCM Lane V/C Ratio	0.726	0.166	-	-	0.015	-	-	0.466
HCM Control Delay (s)	105.7	8.6	0	-	8.4	0	-	22.8
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.8	0.6	-	-	0	-	-	2.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	569	127	560	575	141	133	319	653	177	281	74
Future Volume (vph)	71	569	127	560	575	141	133	319	653	177	281	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3478	0	1787	3467	0	1787	1881	1599	1787	3463	0
Flt Permitted	0.354			0.104			0.395			0.188		
Satd. Flow (perm)	666	3478	0	196	3467	0	743	1881	1599	354	3463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			20				76		22	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	810	0	615	787	0	140	336	687	201	403	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	40.0	40.0	20.0	40.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		14.3%	28.6%	28.6%	14.3%	28.6%	
Maximum Green (s)	34.5	34.0		34.5	34.0		14.0	34.0	34.5	14.5	34.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	42.3	33.0		73.6	58.7		39.9	27.8	68.5	43.5	29.1	
Actuated g/C Ratio	0.32	0.25		0.56	0.44		0.30	0.21	0.52	0.33	0.22	
v/c Ratio	0.29	0.92		1.17	0.51		0.44	0.85	0.80	0.76	0.52	
Control Delay	21.5	64.4		131.9	28.3		34.3	70.8	31.4	49.5	45.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.5	64.4		131.9	28.3		34.3	70.8	31.4	49.5	45.5	
LOS	C	E		F	C		C	E	C	D	D	
Approach Delay		60.4			73.7			43.2			46.9	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	33	357		~599	250		84	284	437	125	155	
Queue Length 95th (ft)	61	#462		#882	347		136	399	617	#189	204	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	635	910		525	1549		345	484	863	275	909	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.13	0.89		1.17	0.51		0.41	0.69	0.80	0.73	0.44	

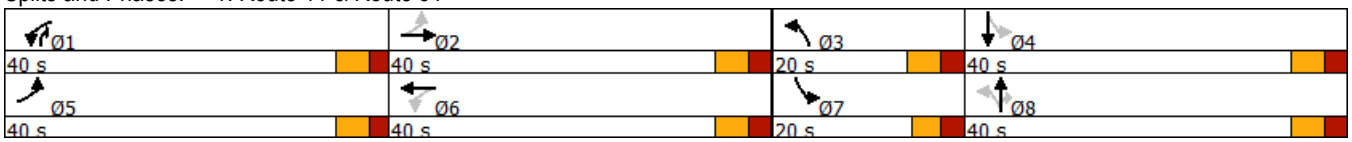
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 132.4
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 58.0 Intersection LOS: E
Intersection Capacity Utilization 96.6% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1132	267	426	1089	0	0	0	0	165	0	187
Future Volume (vph)	0	1132	267	426	1089	0	0	0	0	165	0	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3437	0	1770	3539	0	0	0	0	0	1752	1568
Flt Permitted				0.072							0.950	
Satd. Flow (perm)	0	3437	0	134	3539	0	0	0	0	0	1752	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31										152
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.90	0.90	0.90	0.79	0.79	0.79
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1504	0	458	1171	0	0	0	0	0	209	237
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		45.9		84.4	84.4						15.6	15.6
Actuated g/C Ratio		0.42		0.77	0.77						0.14	0.14
v/c Ratio		1.04		0.87	0.43						0.85	0.67

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	13.0	28.0
Total Split (%)	12%	25%
Maximum Green (s)	8.0	23.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		65.5		36.4	3.1						75.9	27.6
Queue Delay		25.5		57.5	2.5						1.4	0.0
Total Delay		91.1		94.0	5.6						77.3	27.6
LOS		F		F	A						E	C
Approach Delay		91.1			30.4						50.8	
Approach LOS		F			C						D	
Queue Length 50th (ft)		~607		176	8						146	55
Queue Length 95th (ft)		#748		m247	m7						#238	108
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1451		579	2766						247	352
Starvation Cap Reductn		0		304	1424						0	0
Spillback Cap Reductn		185		0	0						5	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.19		1.67	0.87						0.86	0.67

Intersection Summary

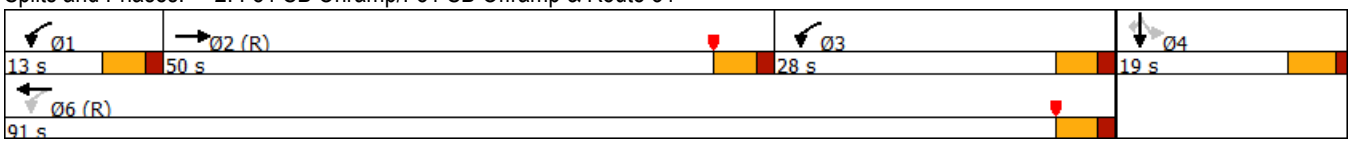
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 58.5 Intersection LOS: E
Intersection Capacity Utilization 85.1% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

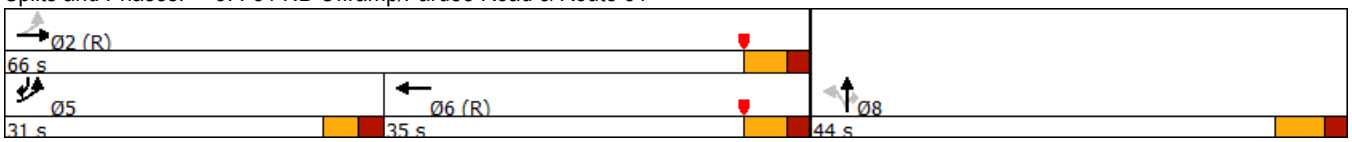
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	1016	0	0	1186	221	208	50	451	0	0	121
Future Volume (vph)	281	1016	0	0	1186	221	208	50	451	0	0	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3574	0	0	3488	0	1787	1881	1599	0	0	1627
Flt Permitted	0.086						0.950					
Satd. Flow (perm)	162	3574	0	0	3488	0	1787	1881	1599	0	0	1627
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					19				74			267
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	309	1116	0	0	1513	0	224	54	485	0	0	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	31.0	66.0			35.0		44.0	44.0	44.0			31.0
Total Split (%)	28.2%	60.0%			31.8%		40.0%	40.0%	40.0%			28.2%
Maximum Green (s)	26.0	60.5			29.5		38.0	38.0	38.0			26.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	65.2	64.7			41.6		33.8	33.8	33.8			18.1
Actuated g/C Ratio	0.59	0.59			0.38		0.31	0.31	0.31			0.16
v/c Ratio	0.85	0.53			1.14		0.41	0.09	0.90			0.28
Control Delay	36.0	28.3			104.3		31.7	25.6	50.6			1.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.9	10.6			0.0		0.1	0.0	0.0			0.0
Total Delay	36.9	38.9			104.3		31.8	25.6	50.6			1.5
LOS	D	D			F		C	C	D			A
Approach Delay		38.5			104.3			43.3			1.5	
Approach LOS		D			F			D			A	
Queue Length 50th (ft)	191	321			~691		120	26	273			0
Queue Length 95th (ft)	m191	m318			#947		185	54	#439			0
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	479	2103			1331		617	649	600			588
Starvation Cap Reductn	42	966			0		0	0	0			0
Spillback Cap Reductn	0	0			12		45	0	0			10
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.71	0.98			1.15		0.39	0.08	0.81			0.24

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 64.0 Intersection LOS: E
Intersection Capacity Utilization 80.7% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	572	895	851	0	0	556
Future Volume (vph)	572	895	851	0	0	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1881	0	1627	0
Flt Permitted	0.950					
Satd. Flow (perm)	1787	3574	1881	0	1627	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.93	0.93	0.87	0.87	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	962	978	0	598	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 120.9% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	96.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	572	895	851	0	0	556
Future Vol, veh/h	572	895	851	0	0	556
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	225	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	87	87	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	615	962	978	0	0	598

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	978	0	-	0	2689	978
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	1711	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	709	-	-	-	21	~ 305
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	133	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	709	-	-	-	3	~ 305
Mov Cap-2 Maneuver	-	-	-	-	3	-
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	133	-

Approach	EB	WB	SB
HCM Control Delay, s	13.2	0	$ 471.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	709	-	-	-	305
HCM Lane V/C Ratio	0.867	-	-	-	1.96
HCM Control Delay (s)	33.8	-	-	-	$ 471.8
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	10.4	-	-	-	42

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	420	67	180	433	21	69	281	153	13	290	121
Future Volume (vph)	101	420	67	180	433	21	69	281	153	13	290	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1842	0	1787	1868	0	1752	1732	0	1752	1750	0
Flt Permitted	0.193			0.147			0.115			0.238		
Satd. Flow (perm)	363	1842	0	277	1868	0	212	1732	0	439	1750	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			2			24			18	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							3		2	2		3
Peak Hour Factor	0.89	0.89	0.89	1.00	0.86	0.86	0.80	0.88	0.88	0.73	0.73	0.73
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	113	547	0	180	527	0	86	493	0	18	563	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8		10.5	16.8	
Total Split (s)	15.0	45.0		15.0	45.0		15.0	35.0		15.0	35.0	
Total Split (%)	13.6%	40.9%		13.6%	40.9%		13.6%	31.8%		13.6%	31.8%	
Maximum Green (s)	10.5	37.2		10.5	37.2		10.5	28.2		10.5	28.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9		3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9		1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8		4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0		3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0		0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0		0.0	15.0	
Recall Mode	None	Min		None	Min		None	None		None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	46.7	34.5		48.5	35.3		41.0	34.8		36.0	28.6	
Actuated g/C Ratio	0.45	0.34		0.47	0.34		0.40	0.34		0.35	0.28	
v/c Ratio	0.39	0.88		0.66	0.82		0.40	0.82		0.08	1.13	
Control Delay	18.4	49.4		27.9	43.5		25.8	44.4		20.2	115.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.4	49.4		27.9	43.5		25.8	44.4		20.2	115.3	
LOS	B	D		C	D		C	D		C	F	
Approach Delay		44.1			39.5			41.7			112.4	
Approach LOS		D			D			D			F	
Queue Length 50th (ft)	39	347		65	325		37	275		7	~470	
Queue Length 95th (ft)	72	#541		#120	#456		61	#526		18	#498	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280			225		
Base Capacity (vph)	318	682		289	696		244	601		302	500	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.80		0.62	0.76		0.35	0.82		0.06	1.13	

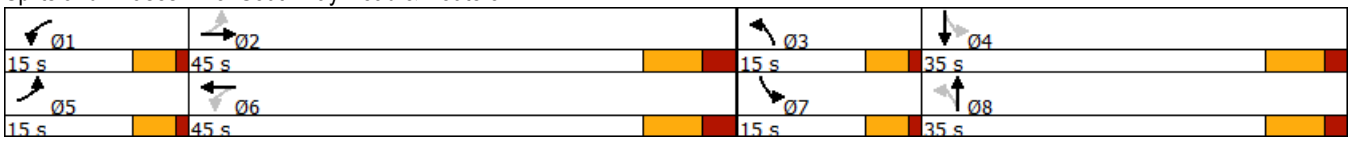
Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 102.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 58.0 Intersection LOS: E
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



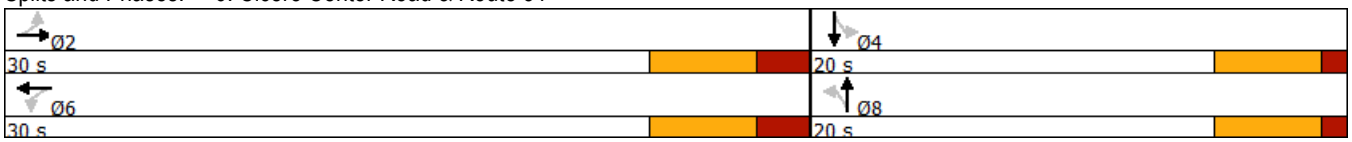
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	449	7	3	389	47	7	21	6	50	9	45
Future Volume (vph)	64	449	7	3	389	47	7	21	6	50	9	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1866	0	0	1855	0	0	1816	0	0	1713	0
Flt Permitted		0.895			0.997			0.925			0.822	
Satd. Flow (perm)	0	1680	0	0	1849	0	0	1696	0	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			17			9			57	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.69	0.69	0.69	0.79	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	504	0	0	49	0	0	131	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			8.0			8.0	
Actuated g/C Ratio		0.64			0.64			0.18			0.18	
v/c Ratio		0.51			0.42			0.15			0.42	
Control Delay		8.3			6.9			13.7			14.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		8.3			6.9			13.7			14.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			A			B			B	
Approach Delay		8.3			6.9			13.7			14.3	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		68			55			8			16	
Queue Length 95th (ft)		166			126			20			41	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1083			1197			590			533	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.51			0.42			0.08			0.25	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.6
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 8.6 Intersection LOS: A
Intersection Capacity Utilization 77.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	452	404	87	88	33
Future Volume (vph)	55	452	404	87	88	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1836	0	1748	0
Flt Permitted		0.997			0.965	
Satd. Flow (perm)	0	1876	1836	0	1748	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.89	0.89	0.88	0.88	0.83	0.83
Growth Factor	50%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	539	558	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.9% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	452	404	87	88	33
Future Vol, veh/h	55	452	404	87	88	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	88	88	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	31	508	459	99	106	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	558	0	-	0	1079	509
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	570	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1018	-	-	-	243	566
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	568	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1018	-	-	-	233	566
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	568	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	31.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1018	-	-	-	278
HCM Lane V/C Ratio	0.03	-	-	-	0.524
HCM Control Delay (s)	8.6	0	-	-	31.4
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	2.8

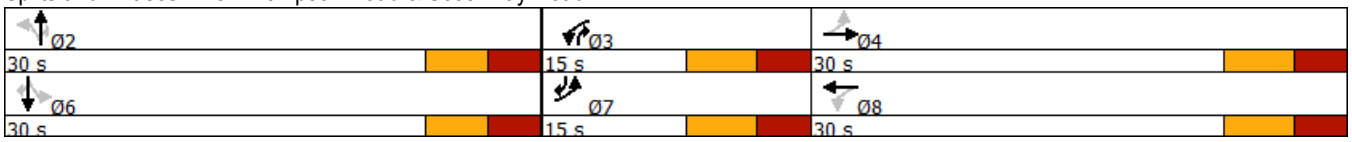
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	382	3	178	343	16	8	151	213	16	155	175
Future Volume (vph)	216	382	3	178	343	16	8	151	213	16	155	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1868	0	0	1877	1599	0	1872	1599
Flt Permitted	0.300			0.288				0.983			0.964	
Satd. Flow (perm)	564	1879	0	542	1868	0	0	1849	1599	0	1813	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			3				188			190
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.86	0.86	0.86	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	414	0	200	403	0	0	185	248	0	185	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	15.0	30.0		15.0	30.0		30.0	30.0	15.0	30.0	30.0	15.0
Total Split (%)	20.0%	40.0%		20.0%	40.0%		40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
Maximum Green (s)	8.0	23.0		8.0	23.0		23.5	23.5	8.0	23.5	23.5	8.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	27.0	19.0		26.7	18.9			23.6	38.0		23.6	38.1
Actuated g/C Ratio	0.38	0.27		0.38	0.27			0.33	0.54		0.33	0.54
v/c Ratio	0.66	0.82		0.59	0.81			0.30	0.26		0.31	0.20
Control Delay	21.9	38.9		18.8	37.7			20.4	3.8		20.5	2.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	21.9	38.9		18.8	37.7			20.4	3.8		20.5	2.3
LOS	C	D		B	D			C	A		C	A
Approach Delay		32.8			31.4			10.9			11.3	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	58	169		49	163			61	12		61	0
Queue Length 95th (ft)	#100	#272		84	255			110	43		116	29
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	352	611		345	609			613	945		602	946
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.66	0.68		0.58	0.66			0.30	0.26		0.31	0.20

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 71
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 23.9 Intersection LOS: C
Intersection Capacity Utilization 69.5% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	323	251	133	143	34
Future Volume (vph)	44	323	251	133	143	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1870	1793	0	1761	0
Flt Permitted		0.994			0.961	
Satd. Flow (perm)	0	1870	1793	0	1761	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.82	0.82	0.97	0.97	0.85	0.85
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	396	0	208	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 60.7% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	323	251	133	143	34
Future Vol, veh/h	44	323	251	133	143	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	97	97	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	394	259	137	168	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	396	0	-	0	830	328
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	502	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1168	-	-	-	341	716
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	610	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1168	-	-	-	321	716
Mov Cap-2 Maneuver	-	-	-	-	321	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	610	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	28
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1168	-	-	-	359
HCM Lane V/C Ratio	0.046	-	-	-	0.58
HCM Control Delay (s)	8.2	0	-	-	28
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	3.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	296	7	292	250	13	308
Future Volume (vph)	296	7	292	250	13	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1839	0	0	1730	1586	0
Flt Permitted				0.974	0.998	
Satd. Flow (perm)	1839	0	0	1730	1586	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.93	0.93	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	326	0	0	609	349	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 75.3% ICU Level of Service D
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	296	7	292	250	13	308
Future Vol, veh/h	296	7	292	250	13	308
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	89	89	92	92
Heavy Vehicles, %	3	3	7	7	4	4
Mvmt Flow	318	8	328	281	14	335

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	326	0	1259	324
Stage 1	-	-	-	-	322	-
Stage 2	-	-	-	-	937	-
Critical Hdwy	-	-	4.17	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.263	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	1206	-	187	712
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	378	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1206	-	127	711
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	256	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.9	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	599	-	-	1206	-
HCM Lane V/C Ratio	0.582	-	-	0.272	-
HCM Control Delay (s)	19.1	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	3.7	-	-	1.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	1	287	47	7	238	3	53	1	17	0	1	5
Future Volume (vph)	1	287	47	7	238	3	53	1	17	0	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1827	0	0	1857	0	0	1738	0	0	1652	0
Flt Permitted					0.999			0.964				
Satd. Flow (perm)	0	1827	0	0	1857	0	0	1738	0	0	1652	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	1		1	1		1
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.63	0.63	0.63	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	376	0	0	292	0	0	113	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.9% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	287	47	7	238	3	53	1	17	0	1	5
Future Vol, veh/h	1	287	47	7	238	3	53	1	17	0	1	5
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	85	85	85	63	63	63	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	322	53	8	280	4	84	2	27	0	2	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	285	0	0	375	0	0	656	652	350	665	676	284
Stage 1	-	-	-	-	-	-	351	351	-	299	299	-
Stage 2	-	-	-	-	-	-	305	301	-	366	377	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1277	-	-	1183	-	-	379	387	693	374	375	755
Stage 1	-	-	-	-	-	-	666	632	-	710	666	-
Stage 2	-	-	-	-	-	-	705	665	-	653	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1276	-	-	1183	-	-	370	383	692	355	371	754
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	383	-	355	371	-
Stage 1	-	-	-	-	-	-	665	631	-	709	660	-
Stage 2	-	-	-	-	-	-	687	659	-	625	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	16.8	10.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	417	1276	-	-	1183	-	-	643
HCM Lane V/C Ratio	0.27	0.001	-	-	0.007	-	-	0.019
HCM Control Delay (s)	16.8	7.8	0	-	8.1	0	-	10.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	589	527	5	4	15
Future Volume (vph)	15	589	527	5	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1844	1775	0	1648	0
Flt Permitted		0.999			0.991	
Satd. Flow (perm)	0	1844	1775	0	1648	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.93	0.93	0.89	0.89	0.90	0.90
Heavy Vehicles (%)	1%	3%	7%	1%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	649	598	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 53.1% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	589	527	5	4	15
Future Vol, veh/h	15	589	527	5	4	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	89	89	90	90
Heavy Vehicles, %	1	3	7	1	1	2
Mvmt Flow	16	633	592	6	4	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	598	0	-	0	1260	595
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	665	-
Critical Hdwy	4.11	-	-	-	6.41	6.22
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.318
Pot Cap-1 Maneuver	984	-	-	-	189	504
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	513	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	984	-	-	-	184	504
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	513	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	984	-	-	-	369
HCM Lane V/C Ratio	0.016	-	-	-	0.057
HCM Control Delay (s)	8.7	0	-	-	15.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	515	20	2	459	12	18	0	2	12	0	55
Future Volume (vph)	58	515	20	2	459	12	18	0	2	12	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1831	0	0	1773	0	0	1779	0	0	1657	0
Flt Permitted		0.995						0.957			0.991	
Satd. Flow (perm)	0	1831	0	0	1773	0	0	1779	0	0	1657	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	7%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	638	0	0	531	0	0	22	0	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.7% ICU Level of Service C
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	58	515	20	2	459	12	18	0	2	12	0	55
Future Vol, veh/h	58	515	20	2	459	12	18	0	2	12	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	89	89	89	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	7	1	1	1	1	1	1	1
Mvmt Flow	62	554	22	2	516	13	20	0	2	13	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	529	0	0	576	0	0	1246	1222	565	1217	1227	523
Stage 1	-	-	-	-	-	-	689	689	-	527	527	-
Stage 2	-	-	-	-	-	-	557	533	-	690	700	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1043	-	-	1002	-	-	151	180	526	158	179	556
Stage 1	-	-	-	-	-	-	437	448	-	536	530	-
Stage 2	-	-	-	-	-	-	517	527	-	437	443	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1043	-	-	1002	-	-	125	164	526	146	163	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	164	-	146	163	-
Stage 1	-	-	-	-	-	-	399	409	-	489	528	-
Stage 2	-	-	-	-	-	-	459	525	-	397	404	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	36.9	17.2
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	135	1043	-	-	1002	-	-	370
HCM Lane V/C Ratio	0.165	0.06	-	-	0.002	-	-	0.201
HCM Control Delay (s)	36.9	8.7	0	-	8.6	0	-	17.2
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	161	290	78	10	250	36	70	0	9	36	0	153
Future Volume (vph)	161	290	78	10	250	36	70	0	9	36	0	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1796	0	0	1759	0	0	1775	0	0	1661	0
Flt Permitted		0.985			0.998			0.958			0.991	
Satd. Flow (perm)	0	1796	0	0	1759	0	0	1775	0	0	1661	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	7%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	569	0	0	332	0	0	88	0	0	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.4% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	161	290	78	10	250	36	70	0	9	36	0	153
Future Vol, veh/h	161	290	78	10	250	36	70	0	9	36	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	89	89	89	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	7	1	1	1	1	1	1	1
Mvmt Flow	173	312	84	11	281	40	78	0	10	40	0	170

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	396	0	0	1108	1043	354	1028	1065	301
Stage 1	-	-	-	-	-	-	700	700	-	323	323	-
Stage 2	-	-	-	-	-	-	408	343	-	705	742	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1245	-	-	1168	-	-	188	230	692	213	223	741
Stage 1	-	-	-	-	-	-	431	443	-	691	652	-
Stage 2	-	-	-	-	-	-	622	639	-	429	424	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1245	-	-	1168	-	-	124	186	692	179	181	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	186	-	179	181	-
Stage 1	-	-	-	-	-	-	353	363	-	567	644	-
Stage 2	-	-	-	-	-	-	474	631	-	347	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	0.3	69.2	19
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	137	1245	-	-	1168	-	-	464
HCM Lane V/C Ratio	0.641	0.139	-	-	0.01	-	-	0.453
HCM Control Delay (s)	69.2	8.4	0	-	8.1	0	-	19
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.4	0.5	-	-	0	-	-	2.3

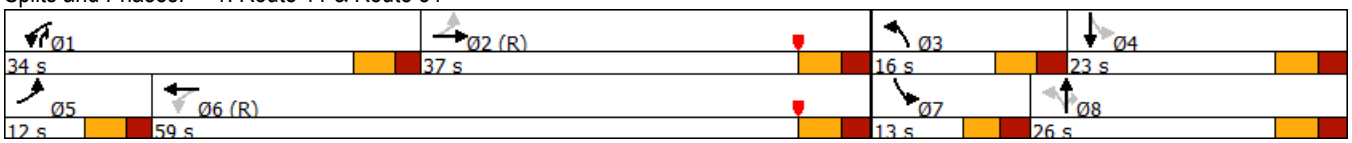
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	678	51	359	440	110	39	96	221	120	135	35
Future Volume (vph)	62	678	51	359	440	110	39	96	221	120	135	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1752	3466	0	1736	3367	0	1752	1845	1568	1719	3332	0
Flt Permitted	0.429			0.174			0.609			0.591		
Satd. Flow (perm)	791	3466	0	318	3367	0	1123	1845	1568	1069	3332	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			39				84		25	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.74	0.74	0.74
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	3%	3%	3%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	828	0	386	591	0	45	110	254	162	229	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	12.0	37.0		34.0	59.0		16.0	26.0	34.0	13.0	23.0	
Total Split (%)	10.9%	33.6%		30.9%	53.6%		14.5%	23.6%	30.9%	11.8%	20.9%	
Maximum Green (s)	6.5	31.0		28.5	53.0		10.0	20.0	28.5	7.5	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	48.3	40.8		71.0	60.2		20.7	12.9	43.1	23.7	16.1	
Actuated g/C Ratio	0.44	0.37		0.65	0.55		0.19	0.12	0.39	0.22	0.15	
v/c Ratio	0.17	0.64		0.75	0.32		0.18	0.51	0.38	0.57	0.45	
Control Delay	12.2	32.9		36.3	17.0		32.4	52.9	15.7	43.6	42.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	12.2	32.9		36.3	17.0		32.4	52.9	15.7	43.6	42.1	
LOS	B	C		D	B		C	D	B	D	D	
Approach Delay		31.3			24.6			27.6			42.7	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	16	245		205	106		25	75	82	96	73	
Queue Length 95th (ft)	37	355		299	177		50	120	114	118	87	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	411	1289		576	1859		290	335	727	284	574	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.17	0.64		0.67	0.32		0.16	0.33	0.35	0.57	0.40	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 15 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 30.0 Intersection LOS: C
Intersection Capacity Utilization 72.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	643	376	836	751	0	0	0	0	183	1	158
Future Volume (vph)	0	643	376	836	751	0	0	0	0	183	1	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3351	0	1787	3574	0	0	0	0	0	1775	1583
Flt Permitted				0.095							0.953	
Satd. Flow (perm)	0	3351	0	179	3574	0	0	0	0	0	1775	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		108										174
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1158	0	889	799	0	0	0	0	0	202	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		37.0			91.0					19.0	19.0	19.0
Total Split (%)		33.6%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		32.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		32.0		86.0	86.0						14.0	14.0
Actuated g/C Ratio		0.29		0.78	0.78						0.13	0.13
v/c Ratio		1.10		1.14	0.29						0.90	0.49

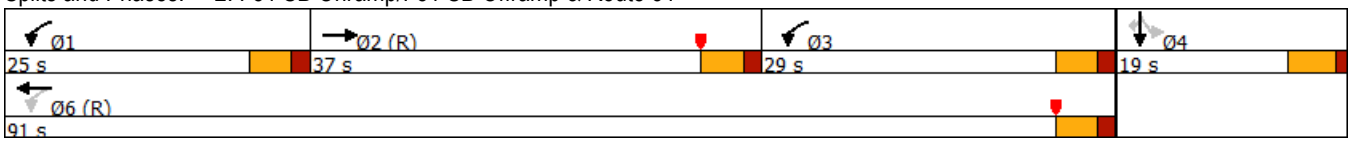
Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	25.0	29.0
Total Split (%)	23%	26%
Maximum Green (s)	20.0	24.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		84.5		96.9	2.6						86.7	11.8
Queue Delay		0.0		1.8	0.4						0.0	0.0
Total Delay		84.5		98.7	3.0						86.7	11.8
LOS		F		F	A						F	B
Approach Delay		84.5			53.4						52.1	
Approach LOS		F			D						D	
Queue Length 50th (ft)		~429		~456	12						142	0
Queue Length 95th (ft)		#552		#953	29						#278	62
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1051		783	2794						225	353
Starvation Cap Reductn		0		191	1357						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		1.10		1.50	0.56						0.90	0.49

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 64.4 Intersection LOS: E
Intersection Capacity Utilization 98.9% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

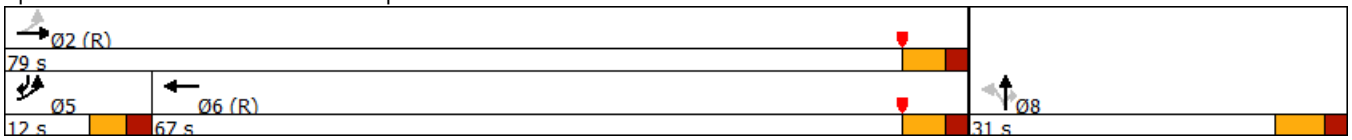
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	731	0	0	1282	145	159	64	455	0	0	146
Future Volume (vph)	95	731	0	0	1282	145	159	64	455	0	0	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1736	3471	0	0	3445	0	1719	1508	1461	0	0	1536
Flt Permitted	0.078						0.950					
Satd. Flow (perm)	142	3471	0	0	3445	0	1717	1508	1442	0	0	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					18			132	193			139
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89	0.84	0.84	0.84
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)									44%			
Lane Group Flow (vph)	114	881	0	0	1585	0	179	297	286	0	0	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	12.0	79.0			67.0		31.0	31.0	31.0			12.0
Total Split (%)	10.9%	71.8%			60.9%		28.2%	28.2%	28.2%			10.9%
Maximum Green (s)	7.0	73.5			61.5		25.0	25.0	25.0			7.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	80.1	79.6			67.0		18.9	18.9	18.9			7.5
Actuated g/C Ratio	0.73	0.72			0.61		0.17	0.17	0.17			0.07
v/c Ratio	0.54	0.35			0.75		0.61	0.81	0.70			0.74

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	24.7	4.6			14.9		49.9	40.3	23.4			33.5
Queue Delay	0.0	0.7			1.4		2.1	0.0	0.0			12.6
Total Delay	24.7	5.2			16.2		52.0	40.3	23.4			46.1
LOS	C	A			B		D	D	C			D
Approach Delay		7.5			16.2			36.7			46.1	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	37	52			344		117	120	61			24
Queue Length 95th (ft)	m32	m18			m404		177	211	150			#102
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	214	2510			2106		390	444	476			235
Starvation Cap Reductn	0	1185			0		0	0	0			0
Spillback Cap Reductn	0	0			308		108	0	0			43
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.53	0.66			0.88		0.63	0.67	0.60			0.91

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 38 (35%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 19.7 Intersection LOS: B
Intersection Capacity Utilization 71.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



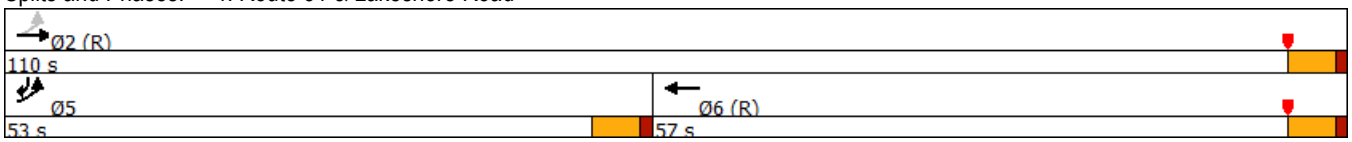
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	249	937	685	1	0	742
Future Volume (vph)	249	937	685	1	0	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	75				75	
Satd. Flow (prot)	1770	3539	1845	0	0	1627
Flt Permitted	0.070					
Satd. Flow (perm)	130	3539	1845	0	0	1627
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						108
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Confl. Peds. (#/hr)	1			1		1
Peak Hour Factor	0.79	0.79	0.83	0.83	0.93	0.93
Heavy Vehicles (%)	2%	2%	3%	3%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	315	1186	826	0	0	798
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA			Over
Protected Phases	5	2	6			5
Permitted Phases	2					
Detector Phase	5	2	6			5
Switch Phase						
Minimum Initial (s)	6.0	10.0	10.0			6.0
Minimum Split (s)	11.0	15.0	15.0			11.0
Total Split (s)	53.0	110.0	57.0			53.0
Total Split (%)	48.2%	100.0%	51.8%			48.2%
Maximum Green (s)	48.0	105.0	52.0			48.0
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0	5.0			5.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	None	C-Max	C-Max			None
Act Effct Green (s)	105.0	110.0	52.0			48.0
Actuated g/C Ratio	0.95	1.00	0.47			0.44
v/c Ratio	0.38	0.34	0.95			1.04

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	10.6	0.2	48.8			69.8
Queue Delay	0.0	0.0	0.0			0.0
Total Delay	10.6	0.2	48.8			69.8
LOS	B	A	D			E
Approach Delay		2.4	48.8		69.8	
Approach LOS		A	D		E	
Queue Length 50th (ft)	44	0	541			~562
Queue Length 95th (ft)	68	0	#698			#802
Internal Link Dist (ft)		1002	879		882	
Turn Bay Length (ft)	225					
Base Capacity (vph)	839	3539	872			770
Starvation Cap Reductn	0	0	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.38	0.34	0.95			1.04

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 19 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 31.9 Intersection LOS: C
Intersection Capacity Utilization 90.5% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Route 31 & Lakeshore Road



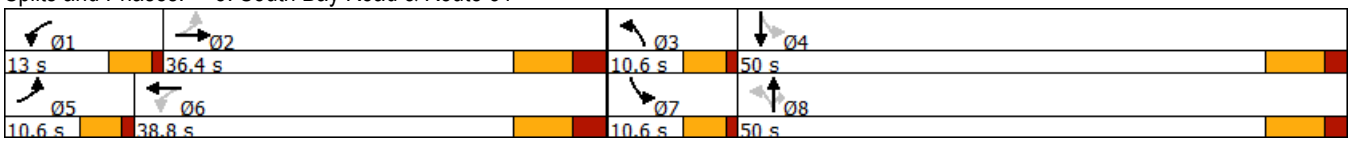
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	221	70	165	226	6	64	188	73	7	423	115
Future Volume (vph)	62	221	70	165	226	6	64	188	73	7	423	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		150	225		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1719	1744	0	1770	1855	0	1719	1810	1538	1770	1803	0
Flt Permitted	0.601			0.315			0.160			0.619		
Satd. Flow (perm)	1088	1744	0	587	1855	0	290	1810	1538	1153	1803	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			1				137		15	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	320	0	179	253	0	76	224	87	8	604	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0	10.0	6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8	16.8	10.5	16.8	
Total Split (s)	10.6	36.4		13.0	38.8		10.6	50.0	50.0	10.6	50.0	
Total Split (%)	9.6%	33.1%		11.8%	35.3%		9.6%	45.5%	45.5%	9.6%	45.5%	
Maximum Green (s)	6.1	28.6		8.5	31.0		6.1	43.2	43.2	6.1	43.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9	4.9	3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9	1.9	1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8	6.8	4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0	10.0	0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0	15.0	0.0	15.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Act Effct Green (s)	33.7	23.9		39.0	29.3		47.5	44.0	44.0	44.9	38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.34	0.24		0.40	0.30		0.48	0.45	0.45	0.46	0.39	
v/c Ratio	0.16	0.74		0.53	0.46		0.33	0.28	0.11	0.01	0.85	
Control Delay	21.4	45.2		27.7	34.4		17.5	19.2	1.2	13.3	41.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.4	45.2		27.7	34.4		17.5	19.2	1.2	13.3	41.2	
LOS	C	D		C	C		B	B	A	B	D	
Approach Delay		41.0			31.6			14.8			40.9	
Approach LOS		D			C			B			D	
Queue Length 50th (ft)	29	196		82	148		25	85	0	3	360	
Queue Length 95th (ft)	58	297		134	228		48	156	4	11	#560	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280		150	225		
Base Capacity (vph)	413	535		339	607		232	909	841	567	830	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.16	0.60		0.53	0.42		0.33	0.25	0.10	0.01	0.73	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 98.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 33.2 Intersection LOS: C
Intersection Capacity Utilization 79.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



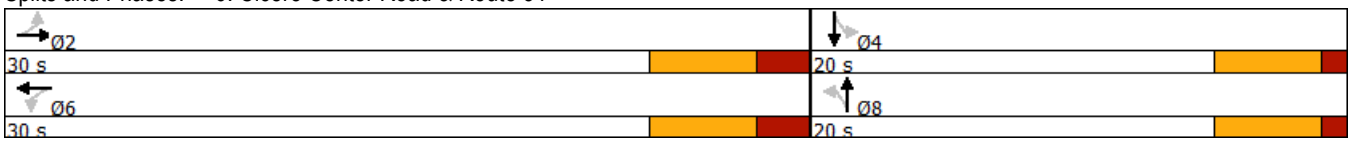
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	241	14	8	274	20	9	8	5	36	29	78
Future Volume (vph)	35	241	14	8	274	20	9	8	5	36	29	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1844	0	0	1785	0	0	1721	0
Flt Permitted		0.934			0.990			0.840			0.906	
Satd. Flow (perm)	0	1729	0	0	1828	0	0	1530	0	0	1578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			10			6			108	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.72	0.72	0.72
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	312	0	0	335	0	0	25	0	0	198	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.2			28.2			8.3			8.3	
Actuated g/C Ratio		0.64			0.64			0.19			0.19	
v/c Ratio		0.28			0.29			0.09			0.51	
Control Delay		6.2			6.1			12.9			13.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		6.2			6.1			12.9			13.0	
LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		6.2			6.1			12.9			13.0	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		31			33			4			19	
Queue Length 95th (ft)		83			87			17			41	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1109			1173			527			610	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.29			0.05			0.32	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 44
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 7.9 Intersection LOS: A
Intersection Capacity Utilization 49.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	263	288	47	59	35
Future Volume (vph)	17	263	288	47	59	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1845	0	1732	0
Flt Permitted		0.997			0.969	
Satd. Flow (perm)	0	1876	1845	0	1732	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.88	0.88	0.90	0.90	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	318	372	0	119	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 40.4% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	263	288	47	59	35
Future Vol, veh/h	17	263	288	47	59	35
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	90	90	79	79
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	299	320	52	75	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	372	0	-	0	683	348
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	337	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1192	-	-	-	416	697
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	725	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1192	-	-	-	408	696
Mov Cap-2 Maneuver	-	-	-	-	408	-
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1192	-	-	-	482
HCM Lane V/C Ratio	0.016	-	-	-	0.247
HCM Control Delay (s)	8.1	0	-	-	14.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1

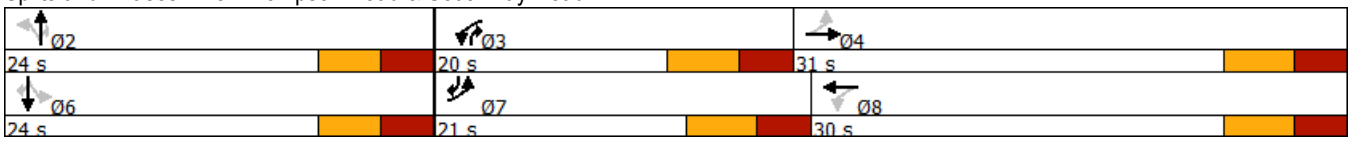
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	316	6	334	319	7	7	195	217	7	206	177
Future Volume (vph)	260	316	6	334	319	7	7	195	217	7	206	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1876	0	1787	1875	0	0	1841	1568	0	1859	1583
Flt Permitted	0.370			0.352				0.984			0.985	
Satd. Flow (perm)	696	1876	0	662	1875	0	0	1815	1568	0	1835	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1				257			201
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	362	0	388	379	0	0	253	271	0	242	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	21.0	31.0		20.0	30.0		24.0	24.0	20.0	24.0	24.0	21.0
Total Split (%)	28.0%	41.3%		26.7%	40.0%		32.0%	32.0%	26.7%	32.0%	32.0%	28.0%
Maximum Green (s)	14.0	24.0		13.0	23.0		17.5	17.5	13.0	17.5	17.5	14.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	29.0	17.5		30.5	18.2			17.7	36.5		17.7	35.8
Actuated g/C Ratio	0.43	0.26		0.45	0.27			0.26	0.54		0.26	0.53
v/c Ratio	0.61	0.75		0.78	0.75			0.54	0.28		0.51	0.22

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	14.7	33.6		22.9	33.5			28.3	2.7		27.6	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	14.7	33.6		22.9	33.5			28.3	2.7		27.6	2.3
LOS	B	C		C	C			C	A		C	A
Approach Delay		25.1			28.1			15.1			16.1	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	61	140		86	144			92	2		87	0
Queue Length 95th (ft)	99	222		#147	227			153	26		165	28
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	549	667		521	639			470	975		475	979
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.53	0.54		0.74	0.59			0.54	0.28		0.51	0.21

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 68.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 22.2 Intersection LOS: C
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	168	275	89	101	34
Future Volume (vph)	16	168	275	89	101	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1820	1733	0	1685	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1820	1733	0	1685	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.87	0.87	0.85	0.85	0.91	0.91
Heavy Vehicles (%)	4%	4%	6%	6%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	211	429	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 36.5% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	168	275	89	101	34
Future Vol, veh/h	16	168	275	89	101	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	85	85	91	91
Heavy Vehicles, %	4	4	6	6	5	5
Mvmt Flow	18	193	324	105	111	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	429	0	-	0	606	377
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.14	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.236	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1120	-	-	-	455	663
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	802	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1120	-	-	-	447	663
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	802	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1120	-	-	-	487
HCM Lane V/C Ratio	0.016	-	-	-	0.305
HCM Control Delay (s)	8.3	0	-	-	15.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	198	3	271	191	3	220
Future Volume (vph)	198	3	271	191	3	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1806	0	0	1774	1567	0
Flt Permitted				0.971	0.999	
Satd. Flow (perm)	1806	0	0	1774	1567	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.78	0.78	0.84	0.84	0.92	0.92
Heavy Vehicles (%)	5%	5%	4%	4%	5%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	258	0	0	550	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	198	3	271	191	3	220
Future Vol, veh/h	198	3	271	191	3	220
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	84	84	92	92
Heavy Vehicles, %	5	5	4	4	5	5
Mvmt Flow	254	4	323	227	3	239

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	259	0	1130	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	873	-
Critical Hdwy	-	-	4.14	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.236	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1294	-	222	774
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	404	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1293	-	158	773
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	288	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	735	-	-	1293	-
HCM Lane V/C Ratio	0.33	-	-	0.25	-
HCM Control Delay (s)	12.3	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	2	197	39	9	172	0	23	0	14	1	0	3
Future Volume (vph)	2	197	39	9	172	0	23	0	14	1	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1822	0	0	1859	0	0	1717	0	0	1660	0
Flt Permitted					0.998			0.970			0.986	
Satd. Flow (perm)	0	1822	0	0	1859	0	0	1717	0	0	1660	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	2		1	1		2
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.55	0.55	0.55	0.63	0.63	0.63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	286	0	0	229	0	0	67	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.6% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	197	39	9	172	0	23	0	14	1	0	3
Future Vol, veh/h	2	197	39	9	172	0	23	0	14	1	0	3
Conflicting Peds, #/hr	1	0	0	0	0	1	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	79	79	79	55	55	55	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	237	47	11	218	0	42	0	25	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	219	0	0	284	0	0	510	506	262	519	529	221
Stage 1	-	-	-	-	-	-	265	265	-	241	241	-
Stage 2	-	-	-	-	-	-	245	241	-	278	288	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1350	-	-	1278	-	-	474	469	777	467	455	819
Stage 1	-	-	-	-	-	-	740	689	-	762	706	-
Stage 2	-	-	-	-	-	-	759	706	-	728	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1278	-	-	466	463	776	447	449	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	463	-	447	449	-
Stage 1	-	-	-	-	-	-	739	688	-	760	698	-
Stage 2	-	-	-	-	-	-	746	698	-	702	673	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	12.5	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	549	1349	-	-	1278	-	-	677
HCM Lane V/C Ratio	0.123	0.002	-	-	0.009	-	-	0.009
HCM Control Delay (s)	12.5	7.7	0	-	7.8	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	406	450	4	4	12
Future Volume (vph)	12	406	450	4	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1810	1826	0	1667	0
Flt Permitted		0.999			0.988	
Satd. Flow (perm)	0	1810	1826	0	1667	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.78	0.78	0.84	0.84	0.90	0.90
Heavy Vehicles (%)	1%	5%	4%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	536	541	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 41.0% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	406	450	4	4	12
Future Vol, veh/h	12	406	450	4	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	84	84	90	90
Heavy Vehicles, %	1	5	4	1	1	1
Mvmt Flow	15	521	536	5	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	541	0	-	0	1090	539
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1033	-	-	-	239	544
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1033	-	-	-	234	544
Mov Cap-2 Maneuver	-	-	-	-	234	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1033	-	-	-	409
HCM Lane V/C Ratio	0.015	-	-	-	0.043
HCM Control Delay (s)	8.5	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	355	8	1	384	7	23	0	3	7	0	47
Future Volume (vph)	47	355	8	1	384	7	23	0	3	7	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1806	0	1787	1822	0	0	1775	0	0	1649	0
Flt Permitted	0.950			0.950				0.957			0.993	
Satd. Flow (perm)	1787	1806	0	1787	1822	0	0	1775	0	0	1649	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	5%	1%	1%	4%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	465	0	1	465	0	0	29	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 40.7% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	355	8	1	384	7	23	0	3	7	0	47
Future Vol, veh/h	47	355	8	1	384	7	23	0	3	7	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	84	84	84	90	90	90	90	90	90
Heavy Vehicles, %	1	5	1	1	4	1	1	1	1	1	1	1
Mvmt Flow	60	455	10	1	457	8	26	0	3	8	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	465	0	0	465	0	0	1069	1047	460	1045	1048	461
Stage 1	-	-	-	-	-	-	580	580	-	463	463	-
Stage 2	-	-	-	-	-	-	489	467	-	582	585	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1102	-	-	1102	-	-	200	229	603	208	229	603
Stage 1	-	-	-	-	-	-	502	502	-	581	566	-
Stage 2	-	-	-	-	-	-	562	563	-	501	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1102	-	-	1102	-	-	175	216	603	198	216	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	216	-	198	216	-
Stage 1	-	-	-	-	-	-	475	475	-	550	565	-
Stage 2	-	-	-	-	-	-	513	562	-	471	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	27.2	13.6
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	191	1102	-	-	1102	-	-	477
HCM Lane V/C Ratio	0.151	0.055	-	-	0.001	-	-	0.126
HCM Control Delay (s)	27.2	8.5	-	-	8.3	-	-	13.6
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	210	30	4	177	17	90	0	11	17	0	125
Future Volume (vph)	125	210	30	4	177	17	90	0	11	17	0	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1784	0	1787	1808	0	0	1775	0	0	1647	0
Flt Permitted	0.950			0.950				0.957			0.994	
Satd. Flow (perm)	1787	1784	0	1787	1808	0	0	1775	0	0	1647	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	5%	1%	1%	4%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	307	0	5	231	0	0	112	0	0	158	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 44.9% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	210	30	4	177	17	90	0	11	17	0	125
Future Vol, veh/h	125	210	30	4	177	17	90	0	11	17	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	84	84	84	90	90	90	90	90	90
Heavy Vehicles, %	1	5	1	1	4	1	1	1	1	1	1	1
Mvmt Flow	160	269	38	5	211	20	100	0	12	19	0	139

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	231	0	0	307	0	0	909	849	288	845	858	221
Stage 1	-	-	-	-	-	-	608	608	-	231	231	-
Stage 2	-	-	-	-	-	-	301	241	-	614	627	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1343	-	-	1259	-	-	257	299	753	284	295	821
Stage 1	-	-	-	-	-	-	485	487	-	774	715	-
Stage 2	-	-	-	-	-	-	710	708	-	481	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1343	-	-	1259	-	-	194	262	753	253	259	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	262	-	253	259	-
Stage 1	-	-	-	-	-	-	427	429	-	682	712	-
Stage 2	-	-	-	-	-	-	588	705	-	417	421	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	0.2	39.9	12.3
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	1343	-	-	1259	-	-	647
HCM Lane V/C Ratio	0.532	0.119	-	-	0.004	-	-	0.244
HCM Control Delay (s)	39.9	8	-	-	7.9	-	-	12.3
HCM Lane LOS	E	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.8	0.4	-	-	0	-	-	1

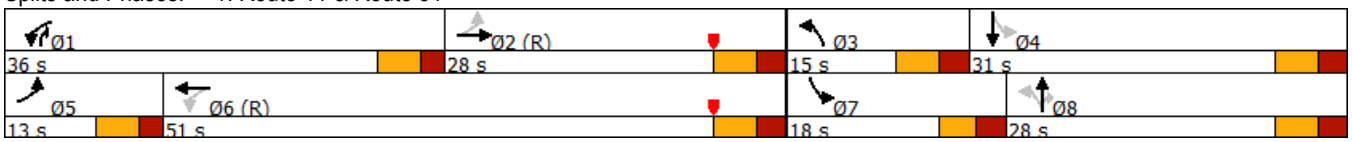
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	559	111	486	647	137	137	328	602	215	198	95
Future Volume (vph)	66	559	111	486	647	137	137	328	602	215	198	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3485	0	1787	3481	0	1787	1881	1599	1770	3366	0
Flt Permitted	0.310			0.145			0.542			0.161		
Satd. Flow (perm)	583	3485	0	273	3481	0	1020	1881	1579	300	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			28				89		68	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	705	0	572	922	0	144	345	634	250	340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	13.0	28.0		36.0	51.0		15.0	28.0	36.0	18.0	31.0	
Total Split (%)	11.8%	25.5%		32.7%	46.4%		13.6%	25.5%	32.7%	16.4%	28.2%	
Maximum Green (s)	7.5	22.0		30.5	45.0		9.0	22.0	30.5	12.5	25.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	29.6	22.0		58.8	48.0		30.5	21.7	53.0	37.9	24.9	
Actuated g/C Ratio	0.27	0.20		0.53	0.44		0.28	0.20	0.48	0.34	0.23	
v/c Ratio	0.29	0.99		1.00	0.60		0.42	0.93	0.78	0.93	0.42	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	20.3	74.7		68.6	21.4		29.2	76.6	25.8	68.0	30.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.3	74.7		68.6	21.4		29.2	76.6	25.8	68.0	30.6	
LOS	C	E		E	C		C	E	C	E	C	
Approach Delay		69.9			39.5			41.9			46.4	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	23	257		~399	258		70	241	280	128	85	
Queue Length 95th (ft)	45	#386		#536	295		118	#412	424	#255	122	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	241	712		570	1536		347	376	812	270	817	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.29	0.99		1.00	0.60		0.41	0.92	0.78	0.93	0.42	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 102 (93%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 47.1 Intersection LOS: D
Intersection Capacity Utilization 94.3% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1100	276	479	1133	0	0	0	0	158	6	137
Future Volume (vph)	0	1100	276	479	1133	0	0	0	0	158	6	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3418	0	1787	3574	0	0	0	0	0	1760	1568
Flt Permitted				0.070							0.954	
Satd. Flow (perm)	0	3418	0	132	3574	0	0	0	0	0	1760	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34										149
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1480	0	499	1180	0	0	0	0	0	195	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		50.0			91.0					19.0	19.0	19.0
Total Split (%)		45.5%			82.7%					17.3%	17.3%	17.3%
Maximum Green (s)		45.0			86.0					14.0	14.0	14.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		47.3		86.2	86.2						13.8	13.8
Actuated g/C Ratio		0.43		0.78	0.78						0.13	0.13
v/c Ratio		0.99		0.93	0.42						0.88	0.50

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	29.0	12.0
Total Split (%)	26%	11%
Maximum Green (s)	24.0	7.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		43.0		40.5	2.9						84.5	14.9
Queue Delay		0.0		31.1	0.8						0.0	0.0
Total Delay		43.0		71.6	3.7						84.5	14.9
LOS		D		E	A						F	B
Approach Delay		43.0			23.9						52.8	
Approach LOS		D			C						D	
Queue Length 50th (ft)		~585		236	96						137	9
Queue Length 95th (ft)		m#672		m260	m79						#239	59
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1490		569	2800						224	329
Starvation Cap Reductn		0		94	1214						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.99		1.05	0.74						0.87	0.50

Intersection Summary

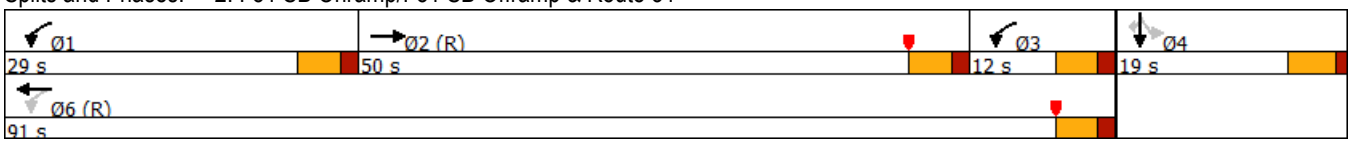
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 39 (35%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 34.9 Intersection LOS: C
Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	977	0	0	1120	286	359	124	757	0	0	133
Future Volume (vph)	281	977	0	0	1120	286	359	124	757	0	0	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	3539	0	0	3415	0	1752	1561	1490	0	0	1596
Flt Permitted	0.076						0.950					
Satd. Flow (perm)	142	3539	0	0	3415	0	1752	1561	1490	0	0	1596
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					36			80	80			84
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Confl. Peds. (#/hr)	1		2	2		1						
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)									43%			
Lane Group Flow (vph)	335	1163	0	0	1528	0	427	535	514	0	0	177
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Prot			Over
Protected Phases	5	2			6			8	8			5
Permitted Phases	2						8					
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	18.0	71.0			53.0		39.0	39.0	39.0			18.0
Total Split (%)	16.4%	64.5%			48.2%		35.5%	35.5%	35.5%			16.4%
Maximum Green (s)	13.0	65.5			47.5		33.0	33.0	33.0			13.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	66.0	65.5			47.5		33.0	33.0	33.0			13.0
Actuated g/C Ratio	0.60	0.60			0.43		0.30	0.30	0.30			0.12
v/c Ratio	1.21	0.55			1.02		0.81	1.02	1.02			0.68

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	150.4	4.8			47.9		49.5	78.1	78.9			38.2
Queue Delay	0.0	0.6			9.9		11.6	0.0	0.0			0.4
Total Delay	150.4	5.4			57.8		61.2	78.1	78.9			38.6
LOS	F	A			E		E	E	E			D
Approach Delay		37.8			57.8			73.5			38.6	
Approach LOS		D			E			E			D	
Queue Length 50th (ft)	~246	78			~614		279	~377	~362			62
Queue Length 95th (ft)	m#270	m80			m#667		367	#532	#515			101
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	277	2107			1495		525	524	503			262
Starvation Cap Reductn	0	527			0		0	0	0			0
Spillback Cap Reductn	0	0			40		81	0	0			6
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	1.21	0.74			1.05		0.96	1.02	1.02			0.69

Intersection Summary

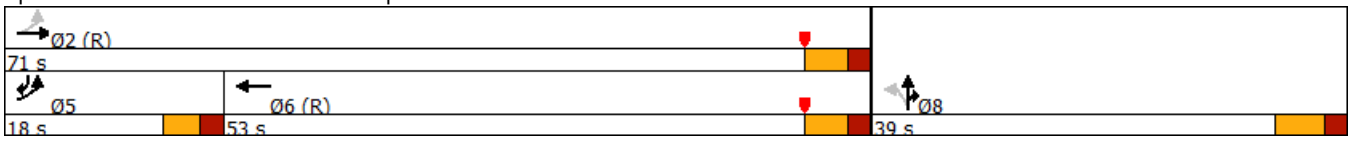
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 47 (43%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.21
Intersection Signal Delay: 55.6 Intersection LOS: E
Intersection Capacity Utilization 91.5% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



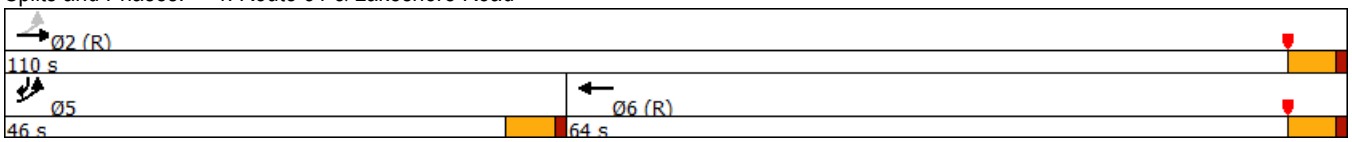
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	720	1014	922	1	0	484
Future Volume (vph)	720	1014	922	1	0	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1863	0	0	1611
Flt Permitted	0.062					
Satd. Flow (perm)	117	3574	1863	0	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						94
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.91	0.91
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	783	1102	992	0	0	532
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA			Over
Protected Phases	5	2	6			5
Permitted Phases	2					
Detector Phase	5	2	6			5
Switch Phase						
Minimum Initial (s)	6.0	10.0	10.0			6.0
Minimum Split (s)	11.0	15.0	15.0			11.0
Total Split (s)	46.0	110.0	64.0			46.0
Total Split (%)	41.8%	100.0%	58.2%			41.8%
Maximum Green (s)	41.0	105.0	59.0			41.0
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0	5.0			5.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	None	C-Max	C-Max			None
Act Effct Green (s)	105.0	110.0	59.0			41.0
Actuated g/C Ratio	0.95	1.00	0.54			0.37
v/c Ratio	1.07	0.31	0.99			0.81
Control Delay	76.5	0.1	53.1			36.3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay	0.0	0.0	0.0			0.0
Total Delay	76.5	0.1	53.1			36.3
LOS	E	A	D			D
Approach Delay		31.9	53.1		36.3	
Approach LOS		C	D		D	
Queue Length 50th (ft)	~570	0	663			281
Queue Length 95th (ft)	m#675	m0	#971			#462
Internal Link Dist (ft)		1002	879		882	
Turn Bay Length (ft)	225					
Base Capacity (vph)	734	3574	999			659
Starvation Cap Reductn	0	0	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	1.07	0.31	0.99			0.81

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 23 (21%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 38.7 Intersection LOS: D
Intersection Capacity Utilization 96.8% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 31 & Lakeshore Road



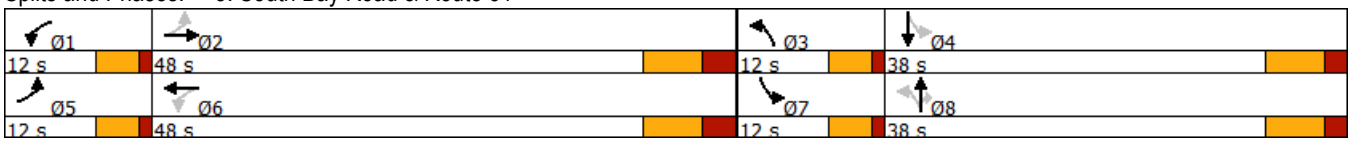
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	446	111	141	343	19	76	478	207	8	276	102
Future Volume (vph)	128	446	111	141	343	19	76	478	207	8	276	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		150	225		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1770	1807	0	1752	1830	0	1770	1863	1583	1770	1778	0
Flt Permitted	0.370			0.114			0.211			0.183		
Satd. Flow (perm)	689	1807	0	210	1830	0	393	1863	1583	341	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			3				139		17	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.86	0.86	0.86	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	606	0	152	389	0	88	556	241	9	445	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0	10.0	6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8	16.8	10.5	16.8	
Total Split (s)	12.0	48.0		12.0	48.0		12.0	38.0	38.0	12.0	38.0	
Total Split (%)	10.9%	43.6%		10.9%	43.6%		10.9%	34.5%	34.5%	10.9%	34.5%	
Maximum Green (s)	7.5	40.2		7.5	40.2		7.5	31.2	31.2	7.5	31.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9	4.9	3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9	1.9	1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8	6.8	4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0	10.0	0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0	15.0	0.0	15.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	49.0	38.3		49.2	38.3		42.2	38.5	38.5	38.6	31.4	
Actuated g/C Ratio	0.46	0.36		0.47	0.36		0.40	0.36	0.36	0.37	0.30	
v/c Ratio	0.35	0.92		0.73	0.58		0.35	0.82	0.36	0.04	0.82	
Control Delay	17.3	52.4		38.5	31.7		24.0	43.1	13.1	19.6	48.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	17.3	52.4		38.5	31.7		24.0	43.1	13.1	19.6	48.8	
LOS	B	D		D	C		C	D	B	B	D	
Approach Delay		45.8			33.6			33.0			48.3	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	51	395		56	217		38	335	46	4	288	
Queue Length 95th (ft)	87	#614		#143	318		67	#588	116	13	#417	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280		150	225		
Base Capacity (vph)	397	700		208	702		255	678	664	229	540	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.35	0.87		0.73	0.55		0.35	0.82	0.36	0.04	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 105.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 39.4 Intersection LOS: D
Intersection Capacity Utilization 87.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



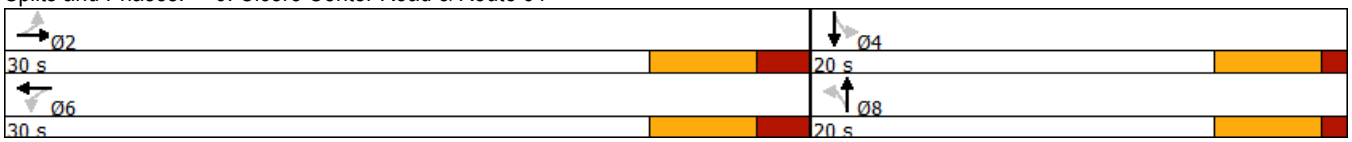
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	453	23	6	401	58	19	41	14	44	19	54
Future Volume (vph)	97	453	23	6	401	58	19	41	14	44	19	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1857	0	0	1847	0	0	1810	0	0	1731	0
Flt Permitted		0.843			0.993			0.909			0.833	
Satd. Flow (perm)	0	1578	0	0	1836	0	0	1667	0	0	1470	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			20			19			66	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.73	0.73	0.73	0.82	0.82	0.82
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	651	0	0	499	0	0	101	0	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			8.0			8.0	
Actuated g/C Ratio		0.64			0.64			0.18			0.18	
v/c Ratio		0.64			0.42			0.31			0.44	
Control Delay		12.1			6.9			15.5			14.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.1			6.9			15.5			14.0	
LOS		B			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		12.1			6.9			15.5			14.0	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		91			54			17			16	
Queue Length 95th (ft)		#284			133			36			45	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1018			1189			586			549	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.64			0.42			0.17			0.26	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.6
Natural Cycle: 50
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 80.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	488	427	83	66	22
Future Volume (vph)	47	488	427	83	66	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1874	1840	0	1752	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1874	1840	0	1752	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.87	0.87	0.89	0.89	0.81	0.81
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	615	573	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 70.8% ICU Level of Service C
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	488	427	83	66	22
Future Vol, veh/h	47	488	427	83	66	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	89	89	81	81
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	561	480	93	81	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	573	0	-	0	1196	527
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	669	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1005	-	-	-	207	553
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	511	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1005	-	-	-	191	553
Mov Cap-2 Maneuver	-	-	-	-	191	-
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	511	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	34.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1005	-	-	-	228
HCM Lane V/C Ratio	0.054	-	-	-	0.476
HCM Control Delay (s)	8.8	0	-	-	34.4
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	2.4

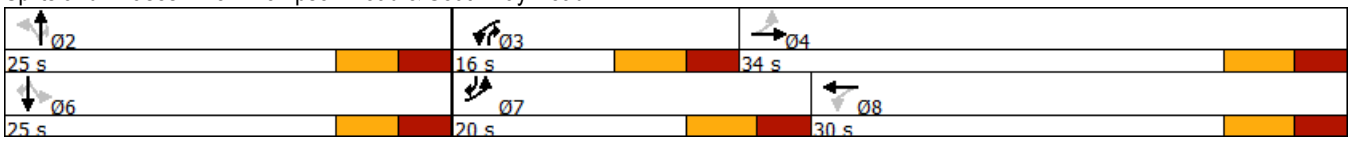
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	442	2	184	365	24	19	323	322	9	150	238
Future Volume (vph)	316	442	2	184	365	24	19	323	322	9	150	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1864	0	0	1857	1583	0	1876	1599
Flt Permitted	0.171			0.277				0.973			0.935	
Satd. Flow (perm)	322	1879	0	521	1864	0	0	1812	1583	0	1759	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				160			154
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	528	0	230	486	0	0	364	343	0	190	283
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	20.0	34.0		16.0	30.0		25.0	25.0	16.0	25.0	25.0	20.0
Total Split (%)	26.7%	45.3%		21.3%	40.0%		33.3%	33.3%	21.3%	33.3%	33.3%	26.7%
Maximum Green (s)	13.0	27.0		9.0	23.0		18.5	18.5	9.0	18.5	18.5	13.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	38.2	25.3		29.8	21.1			18.5	33.7		18.5	37.9
Actuated g/C Ratio	0.52	0.35		0.41	0.29			0.25	0.46		0.25	0.52
v/c Ratio	0.88	0.81		0.64	0.90			0.79	0.42		0.43	0.31
Control Delay	40.2	33.4		18.4	46.1			41.0	8.8		27.1	5.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	40.2	33.4		18.4	46.1			41.0	8.8		27.1	5.9
LOS	D	C		B	D			D	A		C	A
Approach Delay		36.2			37.2			25.4			14.4	
Approach LOS		D			D			C			B	
Queue Length 50th (ft)	109	214		48	208			160	50		75	30
Queue Length 95th (ft)	#226	300		71	#285			#296	111		122	62
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	430	695		371	591			459	823		445	907
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.87	0.76		0.62	0.82			0.79	0.42		0.43	0.31

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 73.1
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 30.0 Intersection LOS: C
Intersection Capacity Utilization 87.1% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	57	353	245	147	130	38
Future Volume (vph)	57	353	245	147	130	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1850	1734	0	1707	0
Flt Permitted		0.993			0.963	
Satd. Flow (perm)	0	1850	1734	0	1707	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.83	0.83	0.85	0.85	0.82	0.82
Heavy Vehicles (%)	2%	2%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	494	461	0	205	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 63.2% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	353	245	147	130	38
Future Vol, veh/h	57	353	245	147	130	38
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	85	85	82	82
Heavy Vehicles, %	2	2	4	4	4	4
Mvmt Flow	69	425	288	173	159	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	462	0	-	0	939	376
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	563	-
Critical Hdwy	4.12	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.218	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1099	-	-	-	291	666
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	566	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1098	-	-	-	267	665
Mov Cap-2 Maneuver	-	-	-	-	267	-
Stage 1	-	-	-	-	633	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	36.9
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1098	-	-	-	309
HCM Lane V/C Ratio	0.063	-	-	-	0.663
HCM Control Delay (s)	8.5	0	-	-	36.9
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.2	-	-	-	4.4

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	301	11	253	239	15	352
Future Volume (vph)	301	11	253	239	15	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1835	0	0	1816	1633	0
Flt Permitted				0.975	0.998	
Satd. Flow (perm)	1835	0	0	1816	1633	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.83	0.83
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	386	0	0	639	442	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	11.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	301	11	253	239	15	352
Future Vol, veh/h	301	11	253	239	15	352
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	77	77	83	83
Heavy Vehicles, %	3	3	2	2	1	1
Mvmt Flow	372	14	329	310	18	424

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	386	0	1347	379
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	968	-
Critical Hdwy	-	-	4.12	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.218	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1172	-	167	670
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	370	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1172	-	110	670
Mov Cap-2 Maneuver	-	-	-	-	110	-
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	245	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	32.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	555	-	-	1172	-
HCM Lane V/C Ratio	0.797	-	-	0.28	-
HCM Control Delay (s)	32.2	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	7.6	-	-	1.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	2	294	58	7	218	0	77	1	18	1	0	1
Future Volume (vph)	2	294	58	7	218	0	77	1	18	1	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1822	0	0	1859	0	0	1745	0	0	1694	0
Flt Permitted					0.998			0.962			0.976	
Satd. Flow (perm)	0	1822	0	0	1859	0	0	1745	0	0	1694	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)			1	1			4		1	1		4
Peak Hour Factor	0.80	0.80	0.80	0.65	0.65	0.65	0.80	0.80	0.80	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	444	0	0	346	0	0	120	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.1% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	294	58	7	218	0	77	1	18	1	0	1
Future Vol, veh/h	2	294	58	7	218	0	77	1	18	1	0	1
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	65	65	65	80	80	80	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	368	73	11	335	0	96	1	23	2	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	442	0	0	774	769	407	781	805	339
Stage 1	-	-	-	-	-	-	412	412	-	357	357	-
Stage 2	-	-	-	-	-	-	362	357	-	424	448	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1224	-	-	1118	-	-	316	332	644	312	316	703
Stage 1	-	-	-	-	-	-	617	594	-	661	628	-
Stage 2	-	-	-	-	-	-	657	628	-	608	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1224	-	-	1117	-	-	310	327	643	296	311	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	327	-	296	311	-
Stage 1	-	-	-	-	-	-	615	592	-	659	620	-
Stage 2	-	-	-	-	-	-	645	620	-	583	571	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	21	13.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	344	1224	-	-	1117	-	-	416
HCM Lane V/C Ratio	0.349	0.002	-	-	0.01	-	-	0.01
HCM Control Delay (s)	21	7.9	0	-	8.3	0	-	13.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.5	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	638	480	5	4	12
Future Volume (vph)	15	638	480	5	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1844	1861	0	1667	0
Flt Permitted		0.999			0.988	
Satd. Flow (perm)	0	1844	1861	0	1667	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.81	0.81	0.77	0.77	0.90	0.90
Heavy Vehicles (%)	1%	3%	2%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	807	629	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	638	480	5	4	12
Future Vol, veh/h	15	638	480	5	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	77	77	90	90
Heavy Vehicles, %	1	3	2	1	1	1
Mvmt Flow	19	788	623	6	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	629	0	-	0	1452	626
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	826	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	958	-	-	-	145	486
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	432	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	140	486
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	432	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	300
HCM Lane V/C Ratio	0.019	-	-	-	0.059
HCM Control Delay (s)	8.8	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	559	24	2	423	12	15	0	2	11	0	47
Future Volume (vph)	59	559	24	2	423	12	15	0	2	11	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1835	0	1787	1856	0	0	1775	0	0	1659	0
Flt Permitted	0.950			0.950				0.957			0.991	
Satd. Flow (perm)	1787	1835	0	1787	1856	0	0	1775	0	0	1659	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.81	0.81	0.81	0.77	0.77	0.77	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	720	0	3	565	0	0	19	0	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 47.6% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	559	24	2	423	12	15	0	2	11	0	47
Future Vol, veh/h	59	559	24	2	423	12	15	0	2	11	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	77	77	77	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	2	1	1	1	1	1	1	1
Mvmt Flow	73	690	30	3	549	16	17	0	2	12	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	565	0	0	720	0	0	1440	1422	705	1415	1429	557
Stage 1	-	-	-	-	-	-	851	851	-	563	563	-
Stage 2	-	-	-	-	-	-	589	571	-	852	866	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1012	-	-	886	-	-	111	137	438	116	135	532
Stage 1	-	-	-	-	-	-	356	378	-	513	511	-
Stage 2	-	-	-	-	-	-	496	506	-	356	372	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1012	-	-	886	-	-	94	127	438	109	125	532
Mov Cap-2 Maneuver	-	-	-	-	-	-	94	127	-	109	125	-
Stage 1	-	-	-	-	-	-	330	351	-	476	509	-
Stage 2	-	-	-	-	-	-	446	504	-	329	345	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	47.1	19.9
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	104	1012	-	-	886	-	-	306
HCM Lane V/C Ratio	0.182	0.072	-	-	0.003	-	-	0.211
HCM Control Delay (s)	47.1	8.8	-	-	9.1	-	-	19.9
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-	-	0.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	318	93	12	252	32	57	0	7	29	0	128
Future Volume (vph)	161	318	93	12	252	32	57	0	7	29	0	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1790	0	1787	1833	0	0	1775	0	0	1659	0
Flt Permitted	0.950			0.950				0.958			0.991	
Satd. Flow (perm)	1787	1790	0	1787	1833	0	0	1775	0	0	1659	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.81	0.81	0.81	0.77	0.77	0.77	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	199	508	0	16	369	0	0	71	0	0	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 48.7% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	9.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	161	318	93	12	252	32	57	0	7	29	0	128
Future Vol, veh/h	161	318	93	12	252	32	57	0	7	29	0	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	77	77	77	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	2	1	1	1	1	1	1	1
Mvmt Flow	199	393	115	16	327	42	63	0	8	32	0	142

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	508	0	0	1300	1250	451	1233	1286	348
Stage 1	-	-	-	-	-	-	849	849	-	380	380	-
Stage 2	-	-	-	-	-	-	451	401	-	853	906	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1195	-	-	1062	-	-	139	174	610	154	165	697
Stage 1	-	-	-	-	-	-	357	379	-	644	616	-
Stage 2	-	-	-	-	-	-	590	603	-	355	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1195	-	-	1062	-	-	95	143	610	131	135	697
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	143	-	131	135	-
Stage 1	-	-	-	-	-	-	297	316	-	536	607	-
Stage 2	-	-	-	-	-	-	463	594	-	292	297	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.3	92.1	21.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	105	1195	-	-	1062	-	-	388
HCM Lane V/C Ratio	0.677	0.166	-	-	0.015	-	-	0.45
HCM Control Delay (s)	92.1	8.6	-	-	8.4	-	-	21.6
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.5	0.6	-	-	0	-	-	2.3

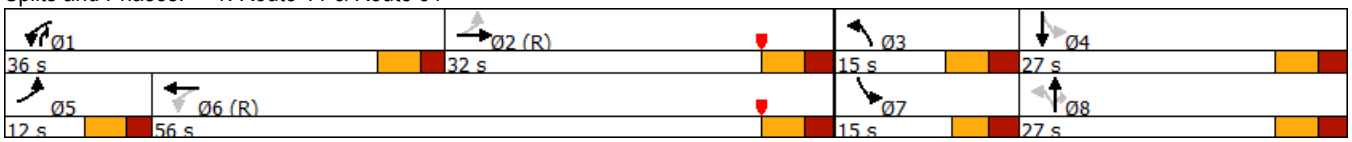
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	569	127	560	575	141	133	319	653	177	281	74
Future Volume (vph)	71	569	127	560	575	141	133	319	653	177	281	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		310	495		0	175		0	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3478	0	1787	3467	0	1787	1881	1599	1787	3463	0
Flt Permitted	0.354			0.127			0.375			0.190		
Satd. Flow (perm)	666	3478	0	239	3467	0	705	1881	1599	357	3463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			36				89		27	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		385			703			612			561	
Travel Time (s)		7.5			13.7			11.9			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	810	0	615	787	0	140	336	687	201	403	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	4.0	12.0		8.0	12.0		4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	9.5	18.0		13.5	18.0		10.0	14.0	13.5	9.5	14.0	
Total Split (s)	12.0	32.0		36.0	56.0		15.0	27.0	36.0	15.0	27.0	
Total Split (%)	10.9%	29.1%		32.7%	50.9%		13.6%	24.5%	32.7%	13.6%	24.5%	
Maximum Green (s)	6.5	26.0		30.5	50.0		9.0	21.0	30.5	9.5	21.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	2.0	2.5		2.0	2.5		2.5	2.5	2.0	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	6.0		5.5	6.0		6.0	6.0	5.5	5.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	
Act Effct Green (s)	32.9	26.0		62.6	52.5		29.7	20.9	57.5	31.1	21.1	
Actuated g/C Ratio	0.30	0.24		0.57	0.48		0.27	0.19	0.52	0.28	0.19	
v/c Ratio	0.31	0.97		1.08	0.47		0.51	0.94	0.78	0.90	0.59	
Control Delay	18.7	64.7		91.9	20.0		34.6	79.6	25.9	69.8	41.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	18.7	64.7		91.9	20.0		34.6	79.6	25.9	69.8	41.7	
LOS	B	E		F	B		C	E	C	E	D	
Approach Delay		60.4			51.5			42.5			51.0	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	25	291		~436	212		72	236	332	106	128	
Queue Length 95th (ft)	45	#387		#666	241		122	#410	505	#214	175	
Internal Link Dist (ft)		305			623			532			481	
Turn Bay Length (ft)	200			495			175			350		
Base Capacity (vph)	266	839		567	1673		279	359	878	224	686	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.31	0.97		1.08	0.47		0.50	0.94	0.78	0.90	0.59	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 93 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 50.8 Intersection LOS: D
Intersection Capacity Utilization 96.6% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 11 & Route 31



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1132	267	426	1089	0	0	0	0	165	0	187
Future Volume (vph)	0	1132	267	426	1089	0	0	0	0	165	0	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		125
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	0	3437	0	1770	3539	0	0	0	0	0	1752	1568
Flt Permitted				0.068							0.950	
Satd. Flow (perm)	0	3437	0	127	3539	0	0	0	0	0	1752	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32										144
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		703			360			622			505	
Travel Time (s)		13.7			7.0			10.6			8.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.90	0.90	0.90	0.79	0.79	0.79
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1504	0	458	1171	0	0	0	0	0	209	237
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1 3	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1 3	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0			12.0					4.0	4.0	4.0
Minimum Split (s)		17.0			17.0					9.0	9.0	9.0
Total Split (s)		52.0			89.0					21.0	21.0	21.0
Total Split (%)		47.3%			80.9%					19.1%	19.1%	19.1%
Maximum Green (s)		47.0			84.0					16.0	16.0	16.0
Yellow Time (s)		3.5			3.5					4.0	4.0	4.0
All-Red Time (s)		1.5			1.5					1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0						0.0	0.0
Total Lost Time (s)		5.0			5.0						5.0	5.0
Lead/Lag		Lag										
Lead-Lag Optimize?		Yes										
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Recall Mode		C-Min			C-Min					None	None	None
Act Effct Green (s)		48.6		84.6	84.6						15.4	15.4
Actuated g/C Ratio		0.44		0.77	0.77						0.14	0.14
v/c Ratio		0.98		0.94	0.43						0.85	0.69

Lane Group	Ø1	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	4.0
Minimum Split (s)	9.0	9.0
Total Split (s)	26.0	11.0
Total Split (%)	24%	10%
Maximum Green (s)	21.0	6.0
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		41.0		56.9	3.2						76.2	29.2
Queue Delay		0.1		19.8	0.4						3.6	0.0
Total Delay		41.1		76.7	3.6						79.8	29.2
LOS		D		E	A						E	C
Approach Delay		41.1			24.2						52.9	
Approach LOS		D			C						D	
Queue Length 50th (ft)		~547		241	96						145	60
Queue Length 95th (ft)		m#681		m#382	124						#214	112
Internal Link Dist (ft)		623			280			542			425	
Turn Bay Length (ft)				150								125
Base Capacity (vph)		1536		501	2720						254	351
Starvation Cap Reductn		0		53	954						0	0
Spillback Cap Reductn		1		0	0						14	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.98		1.02	0.66						0.87	0.68

Intersection Summary

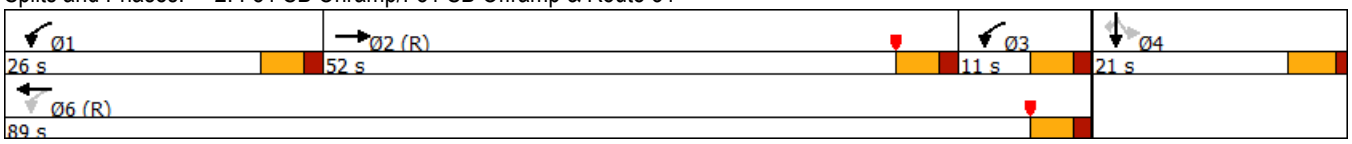
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 26 (24%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 34.9 Intersection LOS: C
Intersection Capacity Utilization 85.1% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-81 SB Onramp/I-81 SB Offramp & Route 31



Lane Group	Ø1	Ø3
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

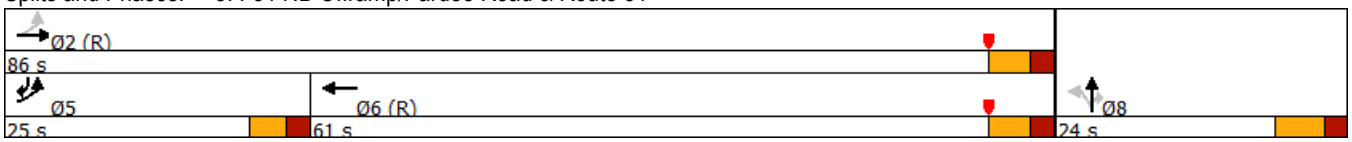
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	1016	0	0	1186	221	208	50	451	0	0	121
Future Volume (vph)	281	1016	0	0	1186	221	208	50	451	0	0	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	310		100	0		0
Storage Lanes	1		0	0		0	1		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	3574	0	0	3488	0	1787	1573	1519	0	0	1627
Flt Permitted	0.063						0.950					
Satd. Flow (perm)	119	3574	0	0	3488	0	1787	1573	1519	0	0	1627
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28			147	147			84
Link Speed (mph)		35			35			40			55	
Link Distance (ft)		360			1082			639			500	
Travel Time (s)		7.0			21.1			10.9			6.2	
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)									45%			
Lane Group Flow (vph)	309	1116	0	0	1513	0	224	272	267	0	0	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			Over
Protected Phases	5	2			6			8				5
Permitted Phases	2						8		8			
Detector Phase	5	2			6		8	8	8			5
Switch Phase												
Minimum Initial (s)	4.0	12.0			12.0		6.0	6.0	6.0			4.0
Minimum Split (s)	9.0	17.5			17.5		12.0	12.0	12.0			9.0
Total Split (s)	25.0	86.0			61.0		24.0	24.0	24.0			25.0
Total Split (%)	22.7%	78.2%			55.5%		21.8%	21.8%	21.8%			22.7%
Maximum Green (s)	20.0	80.5			55.5		18.0	18.0	18.0			20.0
Yellow Time (s)	3.0	3.5			3.5		4.0	4.0	4.0			3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0	2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.5			5.5		6.0	6.0	6.0			5.0
Lead/Lag	Lead				Lag							Lead
Lead-Lag Optimize?	Yes				Yes							Yes
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			3.0
Recall Mode	None	C-Min			C-Min		None	None	None			None
Act Effct Green (s)	82.0	81.5			58.7		17.0	17.0	17.0			17.8
Actuated g/C Ratio	0.75	0.74			0.53		0.15	0.15	0.15			0.16
v/c Ratio	0.86	0.42			0.81		0.81	0.74	0.74			0.42
Control Delay	53.0	2.1			23.5		67.8	33.0	33.1			21.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.9	0.5			0.2		11.2	0.0	0.0			0.3
Total Delay	54.0	2.6			23.7		79.0	33.0	33.1			21.6
LOS	D	A			C		E	C	C			C
Approach Delay		13.7			23.7			46.5			21.6	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	194	67			383		153	87	84			33
Queue Length 95th (ft)	m205	m70			m500		#269	#192	#201			86
Internal Link Dist (ft)		280			1002			559			420	
Turn Bay Length (ft)	85						310		100			
Base Capacity (vph)	391	2647			1874		292	380	371			364
Starvation Cap Reductn	12	954			0		0	0	0			0
Spillback Cap Reductn	0	0			47		48	0	0			36
Storage Cap Reductn	0	0			0		0	0	0			0
Reduced v/c Ratio	0.82	0.66			0.83		0.92	0.72	0.72			0.42

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 36 (33%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 24.4 Intersection LOS: C
Intersection Capacity Utilization 81.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-81 NB Offramp/Pardee Road & Route 31



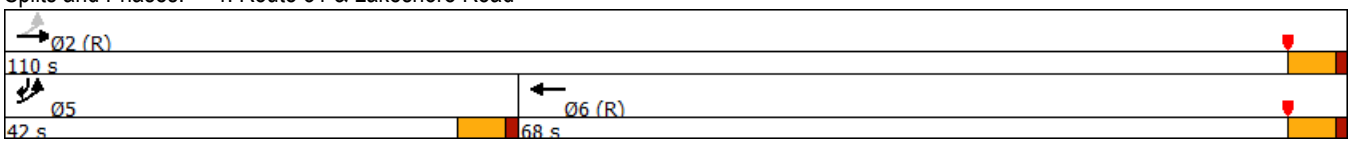
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	572	895	851	0	0	556
Future Volume (vph)	572	895	851	0	0	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	75				75	
Satd. Flow (prot)	1787	3574	1881	0	0	1627
Flt Permitted	0.059					
Satd. Flow (perm)	111	3574	1881	0	0	1627
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						114
Link Speed (mph)		35	35		35	
Link Distance (ft)		1082	959		962	
Travel Time (s)		21.1	18.7		18.7	
Peak Hour Factor	0.93	0.93	0.87	0.87	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	962	978	0	0	598
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA			Over
Protected Phases	5	2	6			5
Permitted Phases	2					
Detector Phase	5	2	6			5
Switch Phase						
Minimum Initial (s)	6.0	10.0	10.0			6.0
Minimum Split (s)	11.0	15.0	15.0			11.0
Total Split (s)	42.0	110.0	68.0			42.0
Total Split (%)	38.2%	100.0%	61.8%			38.2%
Maximum Green (s)	37.0	105.0	63.0			37.0
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0	5.0			5.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	None	C-Max	C-Max			None
Act Effct Green (s)	105.0	110.0	63.3			36.7
Actuated g/C Ratio	0.95	1.00	0.58			0.33
v/c Ratio	0.93	0.27	0.90			0.97
Control Delay	47.4	0.2	34.0			59.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay	0.0	0.0	0.0			0.0
Total Delay	47.4	0.2	34.0			59.2
LOS	D	A	C			E
Approach Delay		18.6	34.0		59.2	
Approach LOS		B	C		E	
Queue Length 50th (ft)	408	0	581			349
Queue Length 95th (ft)	#599	0	#837			#584
Internal Link Dist (ft)		1002	879		882	
Turn Bay Length (ft)	225					
Base Capacity (vph)	669	3574	1082			622
Starvation Cap Reductn	0	0	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.92	0.27	0.90			0.96

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 44.5 (40%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 31.1 Intersection LOS: C
Intersection Capacity Utilization 87.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Route 31 & Lakeshore Road



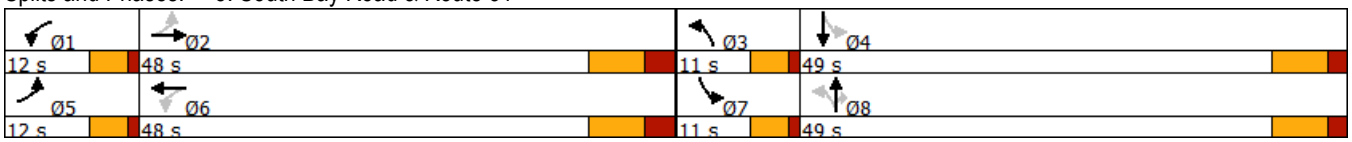
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	420	67	180	433	21	69	281	153	13	290	121
Future Volume (vph)	101	420	67	180	433	21	69	281	153	13	290	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	225		0	280		150	225		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1842	0	1787	1868	0	1752	1845	1568	1752	1751	0
Flt Permitted	0.170			0.141			0.148			0.484		
Satd. Flow (perm)	320	1842	0	265	1868	0	273	1845	1532	892	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2				174		19	
Link Speed (mph)		45			55			45			45	
Link Distance (ft)		788			825			794			652	
Travel Time (s)		11.9			10.2			12.0			9.9	
Confl. Peds. (#/hr)							3		2	2		3
Peak Hour Factor	0.89	0.89	0.89	1.00	0.86	0.86	0.80	0.88	0.88	0.73	0.73	0.73
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	113	547	0	180	527	0	86	319	174	18	563	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		6.0	15.0		6.0	10.0	10.0	6.0	10.0	
Minimum Split (s)	10.5	22.8		10.5	22.8		10.5	16.8	16.8	10.5	16.8	
Total Split (s)	12.0	48.0		12.0	48.0		11.0	49.0	49.0	11.0	49.0	
Total Split (%)	10.0%	40.0%		10.0%	40.0%		9.2%	40.8%	40.8%	9.2%	40.8%	
Maximum Green (s)	7.5	40.2		7.5	40.2		6.5	42.2	42.2	6.5	42.2	
Yellow Time (s)	3.5	4.9		3.5	4.9		3.5	4.9	4.9	3.5	4.9	
All-Red Time (s)	1.0	2.9		1.0	2.9		1.0	1.9	1.9	1.0	1.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	7.8		4.5	7.8		4.5	6.8	6.8	4.5	6.8	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Minimum Gap (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	
Time Before Reduce (s)	0.0	10.0		0.0	10.0		0.0	10.0	10.0	0.0	10.0	
Time To Reduce (s)	0.0	15.0		0.0	15.0		0.0	15.0	15.0	0.0	15.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	48.3	37.5		48.8	37.7		48.3	43.5	43.5	46.5	39.4	
Actuated g/C Ratio	0.43	0.33		0.43	0.34		0.43	0.39	0.39	0.41	0.35	
v/c Ratio	0.48	0.89		0.83	0.84		0.42	0.45	0.25	0.04	0.90	
Control Delay	25.6	53.5		52.1	49.0		24.9	29.2	5.0	18.0	53.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	25.6	53.5		52.1	49.0		24.9	29.2	5.0	18.0	53.3	
LOS	C	D		D	D		C	C	A	B	D	
Approach Delay		48.7			49.8			21.3			52.2	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)	49	393		81	375		37	163	0	7	399	
Queue Length 95th (ft)	84	#585		#191	#492		60	273	44	17	403	
Internal Link Dist (ft)		708			745			714			572	
Turn Bay Length (ft)	225			225			280		150	225		
Base Capacity (vph)	238	678		218	685		205	776	746	421	685	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.47	0.81		0.83	0.77		0.42	0.41	0.23	0.04	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 112.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 43.5 Intersection LOS: D
Intersection Capacity Utilization 83.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: South Bay Road & Route 31



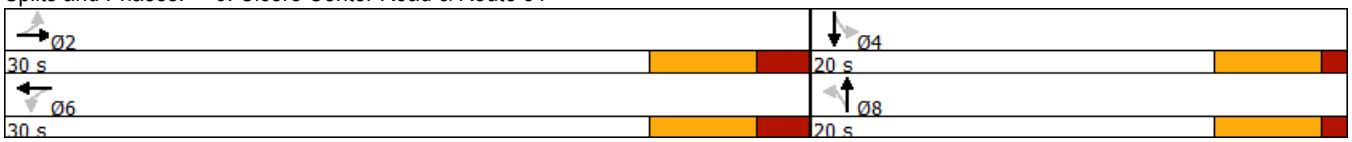
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	449	7	3	389	47	7	21	6	50	9	45
Future Volume (vph)	64	449	7	3	389	47	7	21	6	50	9	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1866	0	0	1855	0	0	1816	0	0	1713	0
Flt Permitted		0.895			0.997			0.925			0.822	
Satd. Flow (perm)	0	1680	0	0	1849	0	0	1696	0	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			17			9			57	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		583			608			500			505	
Travel Time (s)		7.2			7.5			6.2			6.3	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.69	0.69	0.69	0.79	0.79	0.79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	504	0	0	49	0	0	131	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		12.0	12.0		12.0	12.0	
Total Split (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	5.0	5.0		5.0	5.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Act Effct Green (s)		28.1			28.1			8.0			8.0	
Actuated g/C Ratio		0.64			0.64			0.18			0.18	
v/c Ratio		0.51			0.42			0.15			0.42	
Control Delay		8.3			6.9			13.7			14.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		8.3			6.9			13.7			14.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			A			B			B	
Approach Delay		8.3			6.9			13.7			14.3	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		68			55			8			16	
Queue Length 95th (ft)		166			126			20			41	
Internal Link Dist (ft)		503			528			420			425	
Turn Bay Length (ft)												
Base Capacity (vph)		1083			1197			590			533	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.51			0.42			0.08			0.25	

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 43.6
Natural Cycle: 40
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 8.6 Intersection LOS: A
Intersection Capacity Utilization 77.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 6: Cicero Center Road & Route 31



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	452	404	87	88	33
Future Volume (vph)	55	452	404	87	88	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1876	1836	0	1748	0
Flt Permitted		0.997			0.965	
Satd. Flow (perm)	0	1876	1836	0	1748	0
Link Speed (mph)		55	55		35	
Link Distance (ft)		516	592		420	
Travel Time (s)		6.4	7.3		8.2	
Peak Hour Factor	0.89	0.89	0.88	0.88	0.83	0.83
Growth Factor	50%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	539	558	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.9% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	452	404	87	88	33
Future Vol, veh/h	55	452	404	87	88	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	88	88	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	31	508	459	99	106	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	558	0	-	0	1079	509
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	570	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1018	-	-	-	243	566
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	568	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1018	-	-	-	233	566
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	568	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	31.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1018	-	-	-	278
HCM Lane V/C Ratio	0.03	-	-	-	0.524
HCM Control Delay (s)	8.6	0	-	-	31.4
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	2.8

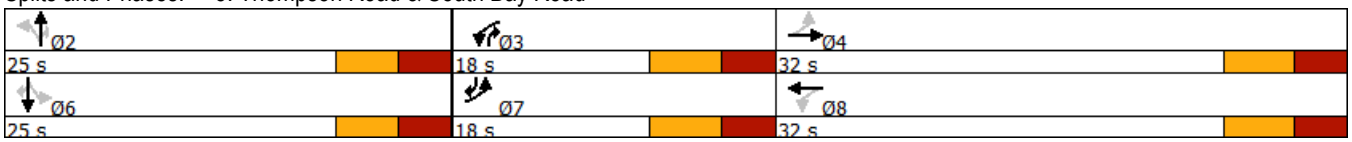
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	382	3	178	343	16	8	151	213	16	155	175
Future Volume (vph)	216	382	3	178	343	16	8	151	213	16	155	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	250		0	0		210	0		600
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1879	0	1787	1868	0	0	1877	1599	0	1872	1599
Flt Permitted	0.315			0.319				0.981			0.960	
Satd. Flow (perm)	593	1879	0	600	1868	0	0	1845	1599	0	1806	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			3				218			190
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1324			1155			1095			1033	
Travel Time (s)		20.1			17.5			16.6			15.7	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.86	0.86	0.86	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	414	0	200	403	0	0	185	248	0	185	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8			2	3		6	7
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		2	2	3	6	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	12.0	17.0		12.0	12.0		16.5	16.5	12.0	16.5	16.5	12.0
Total Split (s)	18.0	32.0		18.0	32.0		25.0	25.0	18.0	25.0	25.0	18.0
Total Split (%)	24.0%	42.7%		24.0%	42.7%		33.3%	33.3%	24.0%	33.3%	33.3%	24.0%
Maximum Green (s)	11.0	25.0		11.0	25.0		18.5	18.5	11.0	18.5	18.5	11.0
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0			6.5	7.0		6.5	7.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	2.0		3.0	2.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min		None	Min		Max	Max	None	Max	Max	None
Act Effct Green (s)	28.6	18.8		27.7	18.4			18.7	34.6		18.7	35.0
Actuated g/C Ratio	0.42	0.28		0.41	0.27			0.28	0.51		0.28	0.52
v/c Ratio	0.55	0.79		0.49	0.79			0.36	0.27		0.37	0.21
Control Delay	14.3	34.3		13.2	34.6			24.0	3.3		24.2	2.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	14.3	34.3		13.2	34.6			24.0	3.3		24.2	2.5
LOS	B	C		B	C			C	A		C	A
Approach Delay		27.1			27.5			12.1			13.2	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	48	157		41	154			62	6		63	0
Queue Length 95th (ft)	83	256		71	244			122	38		129	30
Internal Link Dist (ft)		1244			1075			1015			953	
Turn Bay Length (ft)	300			250					210			600
Base Capacity (vph)	458	702		457	699			510	960		499	947
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.51	0.59		0.44	0.58			0.36	0.26		0.37	0.20

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 67.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 21.5 Intersection LOS: C
Intersection Capacity Utilization 69.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Thompson Road & South Bay Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	323	251	133	143	34
Future Volume (vph)	44	323	251	133	143	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1870	1793	0	1761	0
Flt Permitted		0.994			0.961	
Satd. Flow (perm)	0	1870	1793	0	1761	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		753	701		545	
Travel Time (s)		14.7	13.7		10.6	
Peak Hour Factor	0.82	0.82	0.97	0.97	0.85	0.85
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	396	0	208	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 60.7% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	323	251	133	143	34
Future Vol, veh/h	44	323	251	133	143	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	97	97	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	54	394	259	137	168	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	396	0	-	0	830	328
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	502	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1168	-	-	-	341	716
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	610	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1168	-	-	-	321	716
Mov Cap-2 Maneuver	-	-	-	-	321	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	610	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	28
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1168	-	-	-	359
HCM Lane V/C Ratio	0.046	-	-	-	0.58
HCM Control Delay (s)	8.2	0	-	-	28
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	3.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	296	7	292	250	13	308
Future Volume (vph)	296	7	292	250	13	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1839	0	0	1730	1586	0
Flt Permitted				0.974	0.998	
Satd. Flow (perm)	1839	0	0	1730	1586	0
Link Speed (mph)	35			35	45	
Link Distance (ft)	538			300	501	
Travel Time (s)	10.5			5.8	7.6	
Confl. Peds. (#/hr)						2
Peak Hour Factor	0.93	0.93	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	3%	3%	7%	7%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	326	0	0	609	349	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 75.3% ICU Level of Service D
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	296	7	292	250	13	308
Future Vol, veh/h	296	7	292	250	13	308
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	89	89	92	92
Heavy Vehicles, %	3	3	7	7	4	4
Mvmt Flow	318	8	328	281	14	335

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	326	0	1259	324
Stage 1	-	-	-	-	322	-
Stage 2	-	-	-	-	937	-
Critical Hdwy	-	-	4.17	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.263	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	1206	-	187	712
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	378	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1206	-	127	711
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	256	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.9	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	599	-	-	1206	-
HCM Lane V/C Ratio	0.582	-	-	0.272	-
HCM Control Delay (s)	19.1	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	3.7	-	-	1.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (vph)	1	287	47	7	238	3	53	1	17	0	1	5
Future Volume (vph)	1	287	47	7	238	3	53	1	17	0	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1827	0	0	1857	0	0	1738	0	0	1652	0
Flt Permitted					0.999			0.964				
Satd. Flow (perm)	0	1827	0	0	1857	0	0	1738	0	0	1652	0
Link Speed (mph)		35			35			55			30	
Link Distance (ft)		557			543			388			295	
Travel Time (s)		10.9			10.6			4.8			6.7	
Confl. Peds. (#/hr)	1					1	1		1	1		1
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.63	0.63	0.63	0.50	0.50	0.50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	376	0	0	292	0	0	113	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.9% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	287	47	7	238	3	53	1	17	0	1	5
Future Vol, veh/h	1	287	47	7	238	3	53	1	17	0	1	5
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	85	85	85	63	63	63	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	322	53	8	280	4	84	2	27	0	2	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	285	0	0	375	0	0	656	652	350	665	676	284
Stage 1	-	-	-	-	-	-	351	351	-	299	299	-
Stage 2	-	-	-	-	-	-	305	301	-	366	377	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1277	-	-	1183	-	-	379	387	693	374	375	755
Stage 1	-	-	-	-	-	-	666	632	-	710	666	-
Stage 2	-	-	-	-	-	-	705	665	-	653	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1276	-	-	1183	-	-	370	383	692	355	371	754
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	383	-	355	371	-
Stage 1	-	-	-	-	-	-	665	631	-	709	660	-
Stage 2	-	-	-	-	-	-	687	659	-	625	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	16.8	10.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	417	1276	-	-	1183	-	-	643
HCM Lane V/C Ratio	0.27	0.001	-	-	0.007	-	-	0.019
HCM Control Delay (s)	16.8	7.8	0	-	8.1	0	-	10.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	589	527	5	4	15
Future Volume (vph)	15	589	527	5	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1844	1775	0	1648	0
Flt Permitted		0.999			0.991	
Satd. Flow (perm)	0	1844	1775	0	1648	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		300	359		354	
Travel Time (s)		5.8	7.0		8.0	
Peak Hour Factor	0.93	0.93	0.89	0.89	0.90	0.90
Heavy Vehicles (%)	1%	3%	7%	1%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	649	598	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 53.1% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	589	527	5	4	15
Future Vol, veh/h	15	589	527	5	4	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	89	89	90	90
Heavy Vehicles, %	1	3	7	1	1	2
Mvmt Flow	16	633	592	6	4	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	598	0	-	0	1260	595
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	665	-
Critical Hdwy	4.11	-	-	-	6.41	6.22
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.318
Pot Cap-1 Maneuver	984	-	-	-	189	504
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	513	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	984	-	-	-	184	504
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	513	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	984	-	-	-	369
HCM Lane V/C Ratio	0.016	-	-	-	0.057
HCM Control Delay (s)	8.7	0	-	-	15.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	515	20	2	459	12	18	0	2	12	0	55
Future Volume (vph)	58	515	20	2	459	12	18	0	2	12	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1835	0	1787	1771	0	0	1779	0	0	1657	0
Flt Permitted	0.950			0.950				0.957			0.991	
Satd. Flow (perm)	1787	1835	0	1787	1771	0	0	1779	0	0	1657	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		359			475			333			341	
Travel Time (s)		7.0			9.3			7.6			7.8	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	7%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	576	0	2	529	0	0	22	0	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 45.8% ICU Level of Service A
Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	515	20	2	459	12	18	0	2	12	0	55
Future Vol, veh/h	58	515	20	2	459	12	18	0	2	12	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	89	89	89	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	7	1	1	1	1	1	1	1
Mvmt Flow	62	554	22	2	516	13	20	0	2	13	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	529	0	0	576	0	0	1246	1222	565	1217	1227	523
Stage 1	-	-	-	-	-	-	689	689	-	527	527	-
Stage 2	-	-	-	-	-	-	557	533	-	690	700	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1043	-	-	1002	-	-	151	180	526	158	179	556
Stage 1	-	-	-	-	-	-	437	448	-	536	530	-
Stage 2	-	-	-	-	-	-	517	527	-	437	443	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1043	-	-	1002	-	-	128	169	526	150	168	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	169	-	150	168	-
Stage 1	-	-	-	-	-	-	411	422	-	504	529	-
Stage 2	-	-	-	-	-	-	459	526	-	409	417	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	36	17
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	138	1043	-	-	1002	-	-	374
HCM Lane V/C Ratio	0.161	0.06	-	-	0.002	-	-	0.199
HCM Control Delay (s)	36	8.7	-	-	8.6	-	-	17
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	290	78	10	250	36	70	0	9	36	0	153
Future Volume (vph)	161	290	78	10	250	36	70	0	9	36	0	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			75			75		
Satd. Flow (prot)	1787	1793	0	1787	1754	0	0	1775	0	0	1661	0
Flt Permitted	0.950			0.950				0.958			0.991	
Satd. Flow (perm)	1787	1793	0	1787	1754	0	0	1775	0	0	1661	0
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		475			621			334			326	
Travel Time (s)		9.3			12.1			7.6			7.4	
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	1%	1%	7%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	396	0	11	321	0	0	88	0	0	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 49.8% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	161	290	78	10	250	36	70	0	9	36	0	153
Future Vol, veh/h	161	290	78	10	250	36	70	0	9	36	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	89	89	89	90	90	90	90	90	90
Heavy Vehicles, %	1	3	1	1	7	1	1	1	1	1	1	1
Mvmt Flow	173	312	84	11	281	40	78	0	10	40	0	170

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	396	0	0	1108	1043	354	1028	1065	301
Stage 1	-	-	-	-	-	-	700	700	-	323	323	-
Stage 2	-	-	-	-	-	-	408	343	-	705	742	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	1245	-	-	1168	-	-	188	230	692	213	223	741
Stage 1	-	-	-	-	-	-	431	443	-	691	652	-
Stage 2	-	-	-	-	-	-	622	639	-	429	424	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1245	-	-	1168	-	-	129	196	692	186	190	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	196	-	186	190	-
Stage 1	-	-	-	-	-	-	371	381	-	595	646	-
Stage 2	-	-	-	-	-	-	475	633	-	364	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	0.3	64.6	18.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	142	1245	-	-	1168	-	-	472
HCM Lane V/C Ratio	0.618	0.139	-	-	0.01	-	-	0.445
HCM Control Delay (s)	64.6	8.4	-	-	8.1	-	-	18.6
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.3	0.5	-	-	0	-	-	2.2

Great Northern Mall Redevelopment
Town of Clay, NY

The proposed development site is the former Great Northern Mall with additional properties to the east and north in the Town of Clay, NY. The overall project site is significantly vacant with the exception of BJ's Wholesale Club, Central NY Gym, Dunk & Bright Furniture Store, Wilkins RV of Clay, Olive Garden, IHOP and a self-storage facility on the Great Northern site, and a number of single family residential homes on Route 31/Morgan Road. The proposed redevelopment will be a mixed use development with commercial, medical, residential and entertainment space.

TRAFFIC IMPACT STUDY

Prepared in Accordance With
Chapter 5 of the NYSDOT Highway Design Manual (HDM)

Prepared By:

GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037

July 2024

Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

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1.0 Summary of Traffic Impacts

The following provides an overall breakdown of anticipated uses in the proposed redevelopment:

- General Retail – 523,360 SF
- Medical Office – 605,850 SF
- Ambulatory Care Facility – 150,000 SF
- Restaurants – 20,770 SF
- Grocery Store – 12,011 SF
- Community Center – 30,000 SF
- Apartments – 1,436 Units
- Hotels – 875 Rooms
- Senior Assisted Living – 200 Units
- Recreation / Entertainment – 67,890 SF

The existing access to the site includes two signalized driveways to NYS Route 31 and one unsignalized driveway to Morgan Road.

The proposed access to the development is as follows:

- Existing full access to NYS Route 31 opposite the Onondaga County Health Department
- Existing full access to Route 31 opposite Dunkin'/Lazy Boy
- Proposed full access to NYS Route 31 located 500 feet west of Morgan Road
- Proposed full access to Morgan Road located 750 feet north of NYS Route 31
- Existing full access to Morgan Road located 1,860 feet north of NYS Route 31 to remain
- Proposed full access to Verplank Road located 1,300 feet west of Morgan Road
- Proposed full access to Verplank Road located 1,800 feet west of Morgan Road
- Proposed full access to Verplank Road located 2,200 feet west of Morgan Road
- Proposed full access to Verplank Road located 2,500 feet west of Morgan Road

The proposed development includes a potential new interchange to NYS Route 481 at Verplank Road. It is noted that the attached concept plan (Appendix A) shows a traditional diamond interchange at Verplank Road, however, all ramps will need to be located on the north side of Verplank Road to optimze spacing from the NYS Route 31 interchange. Additionally, it is noted that the direct connection from the Great Northern Mall property to Route 481 northbound will not be allowed.

The traffic study evaluates the following six scenarios for the weekday morning, Friday evening, and Saturday midday peak travel hours.

- 2024 Existing Conditions
- 2034 Background Conditions – With Growth and Approved Developments
  - Include 300 Apts North of Kohls, Clay Marketplace, Delta Sonic, and Micron.
- 2034 Build Conditions
- 2034 Build Conditions with Verplank Road Interchange
- 2034 Build Conditions with Mitigation
- 2034 Build Conditions with Verplank Road Interchange – With Mitigation

A. A capacity analysis was performed per the NYSDOT Highway Design Manual Chapter 5. (Refer to Section 3 of this report):

The identified capacity deficiencies in the study area under the build conditions are notably the result of the combination of the projected Micron traffic and the Great Northern Mall redevelopment traffic.

To the west of the Route 481 interchange on NYS Route 31, the primary noted deficiency is a lack of capacity for the westbound through movement during the evening peak hour. The intersection of NYS Route 31 with Oswego Road is at or over capacity under the background conditions and is significantly impacted by the additional traffic generated by the proposed development. Some level of the recommended mitigation in this area should be contributed to by both developments.

The NYS Route 31/Route 481 interchange is at or over capacity under the background condition and is significantly impacted by the additional traffic generated by the Great Northern Mall redevelopment.

To the east of the site, there are significant failing operations at the Morgan Road intersections with NYS Route 31 and Verplank Road under the background conditions associated with the Micron development which continue to worsen with the additional site generated traffic. Some level of the recommended mitigation in this area should be contributed to both developments.

The following mitigation measures have been identified in the overall study area:

- NYS Route 31 @ Route 481 Interchange
  - Reconstruct the interchange as a diverging diamond interchange (DDI) with signalized east/west crossings at the northbound and southbound ramps and signalized control at the left and right offramp movements both northbound and southbound.
    - Provide 3 through lanes eastbound from the Raymour & Flanigan intersection through the DDI, terminating the inside lane as the outside left turn lane into the Great Northern Mall west driveway.
    - Remove the existing eastbound right turn only lane at Marketfair North.
    - Provide 3 through lanes westbound from the Great Northern Mall east driveway through the DDI, terminating the third lane after the Delta Sonic/Texas Roadhouse signalized intersection.
    - Maintain the auxiliary westbound right turn lanes at Great North Mall West, Wegmans, Carling Road, Dell Center Drive, and Home Depot.
  - Extend Pepperidge Way (Carling Road) to Soule Road opposite the Route 481 southbound onramp.
    - Convert Soule Road to southbound only between NYS Route 31 and the Route 481 southbound onramp.
    - Convert the existing northbound lane on Soule Road at the Route 481 southbound onramp to left turn only movements onto the roadway extension.
    - Construct a 200 foot northbound right lane on Soule Road at the Route 481 onramp with channelization and yield control.
    - Restrict the eastbound Pepperidge Way extension to right turn only movements onto Soule Road southbound.
    - Update the traffic signal at the Soule Road/Route 481 southbound onramp as necessary to accommodate the revised layout.

- NYS Route 31 @ Caughdenoy Road
  - Add protected/permitted eastbound left turn phasing.

- Construct a 200 foot southbound right turn lane.

- NYS Route 31 @ Henry Clay Boulevard
  - Construct a 2nd northbound left turn lane.

- NYS Route 31 @ Morgan Road
  - Construct second northbound and southbound through lanes through the intersection.
  - Construct a 2nd northbound left turn lane.
  - Construct a 250 foot southbound right turn lane.
  - Construct a 250 foot westbound right turn lane.

- NYS Route 31 @ Proposed Access
  - Restrict left turns exiting the site.

- NYS Route 31 @ Great Northern Mall East Access
  - Construct a 300 westbound right turn lane.
  - Construct a 2nd southbound left turn lane.

- NYS Route 31 @ Carling Road
  - Construct a 250 foot northbound right turn lane.

- NYS Route 31 @ Oswego Road
  - Construct a 250 foot eastbound right turn lane.
  - Construct a 250 foot westbound right turn lane.
  - Construct a 2nd northbound right turn lane.

- Verplank Road @ Caughdenoy Road
  - Construct a 200 foot northbound left turn lane.
  - Install a two phase traffic signal.

- Verplank Road @ Henry Clay Boulevard
  - Install a two phase traffic signal.

- Verplank Road @ Morgan Road
  - Construct a 200 foot northbound right turn lane.
  - Construct a 200 foot westbound right turn lane.
  - Install a two phase traffic signal.

- Morgan Road @ Existing Site Access
  - Construct a 200 foot eastbound right turn lane.
  - Install a two phase traffic signal.

- Verplank Road @ Route 481 Northbound Ramps (Verplank Interchange Only)
  - Construct a 200 westbound right turn lane.

With the proposed modifications noted above, all traffic movements are generally projected to operate consistent with background traffic operations at both the signalized and unsignalized intersections in the study area. The Verplank interchange is a critical feature in the mitigation as it is projected to draw 400-500 vehicles away from the NYS Route 31 corridor during the peak hours.

B. A crash analysis was performed per Highway Design Manual Chapter 5 on the following roadway segments in the study area:

- NYS Route 31 from Oswego Road to Caughdenoy Road
- Verplank Road from Oswego Road to Caughdenoy Road
- Oswego Road from Verplank Road to Soule Road
- Soule Road from Oswego Road to NYS Route 31
- Morgan Road from NYS Route 31 to Verplank Road
- Henry Clay Boulevard from NYS Route 31 to Verplank Road
- Caughdenoy Road from NYS Route 31 to Verplank Road

Refer to Section 4.0 of this report.

2.0 Operational Data – Existing Conditions

2.1 Travel Speeds

The posted speed limits in the study area around the site are 40 mph along NYS Route 31, 35 mph along Verplank Road, and 45 mph on Morgan Road. Existing average and 85th percentile operating speeds on Morgan Road and Verplank Road were collected using ATR counters. Average and 85th percentile speeds on NYS Route 31 were reviewed and calculated based on 50 spot speed measurements that were collected passing the proposed site driveway location under off-peak, free flow conditions. The posted speed limits and the off-peak 85th percentile speeds, determined based on NYSDOT Highway Design Manual Chapter 5, Section 5.2, are shown in the table below.

Exhibit 1
Speed Data

Street Name	***Location***	***Posted Speed***	***Operating Speed Spot Speeds***
NYS Route 31	*West of Morgan Road*	*40 mph*	*EB – 40.5 mph* *WB – 49.5 mph*
Morgan Road	*North of NYS Route 31*	*45 mph*	*NB – 49 mph* *SB – 49 mph*
Verplank Road	*West of Morgan Road*	*35 mph*	*EB – 50 mph* *WB – 49 mph*

2.2 Driveway Sight Distance

Sight lines looking east/west along NYS Route 31, north/south along Morgan Road, and east/west along Verplank Road from the existing and proposed unsignalized driveways were collected for comparison to design standards in order to confirm that adequate sight lines are available for safe ingress and egress from the site.

The following table provides a summary of the recommended sight distances along NYS Route 31, Morgan Road, and Verplank Road from the AASHTO A Policy on Design of Highways and Streets as well as the available sight distances based on field measurements. Operating speeds of 50 mph were used on all three roadways in the review. Recommended sight distance for left turn movements were adjusted to account for the two additional lanes to be crossed when turning out onto NYS Route 31, and the one additional lane to be crossed when turning left out onto Morgan Road.

Sight Distance Summary				
Location	**Operating Speed**	**Direction**	**AASHTO Recommended Sight Distance**	**Available Sight Distance**
Proposed Driveway @ NYS Route 31 - Turning Left Out	50 mph	Looking Left Looking Right	625 feet 625 feet	900+ feet 900+ feet
Proposed Driveway @ NYS Route 31 - Turning Right Out	50 mph	Looking Left	480 feet	900+ feet
Proposed Driveway @ Morgan Road - Turning Left Out	50 mph	Looking Left Looking Right	600 feet 600 feet	800+ feet 750+ feet
Proposed Driveway @ Morgan Road - Turning Right Out	50 mph	Looking Left	480 feet	800+ feet
Existing Driveway @ Morgan Road - Turning Left Out	50 mph	Looking Left Looking Right	600 feet 600 feet	1,100+ feet 850+ feet
Existing Driveway @ Morgan Road - Turning Right Out	50 mph	Looking Left	480 feet	1,100+ feet
Proposed Driveway #4 @ Verplank Road - Turning Left Out	50 mph	Looking Left Looking Right	555 feet 555 feet	625 feet 1,300+ feet
Proposed Driveway #4 @ Verplank Road - Turning Right Out	50 mph	Looking Left	480 feet	625 feet
Proposed Driveway #3 @ Verplank Road - Turning Left Out	50 mph	Looking Left Looking Right	555 feet 555 feet	1,000+ feet 900+ feet
Proposed Driveway #3 @ Verplank Road - Turning Right Out	50 mph	Looking Left	480 feet	1,000+ feet
Proposed Driveway #2 @ Verplank Road - Turning Left Out	50 mph	Looking Left Looking Right	555 feet 555 feet	1,000+ feet 650+ feet
Proposed Driveway #2 @ Verplank Road - Turning Right Out	50 mph	Looking Left	480 feet	1,000+ feet
Proposed Driveway #1 @ Verplank Road - Turning Left Out	50 mph	Looking Left Looking Right	555 feet 555 feet	1,000+ feet 1,000+ feet
Proposed Driveway #1 @ Verplank Road - Turning Right Out	50 mph	Looking Left	480 feet	1,000+ feet

There are more than adequate sight distances looking along NYS Route 31, Morgan Road, and Verplank Road from all of the existing and proposed site driveways. There are no concerns with sight distances associated with safety for ingress and egress from the site driveways.

3.0 Capacity Analysis

Capacity Analysis Overview

Capacity analyses performed in this report are consistent with the most recent version of the Highway Capacity Manual (HCM). The software used to perform this analysis is Synchro11.

The HCM quantifies the quality of traffic flow in terms of levels of service (LOS). There are six levels of service, with LOS A indicating very low levels of delays and LOS F indicating high levels of delays associated with congestion. These represent a qualitative measure of operational conditions within a traffic stream, and the perception of conditions by motorists and/or passengers. Levels of service and capacity for signalized intersections are calculated for each lane group (a lane group may be one or more movements), each intersection approach, and the intersection as a whole. The intersection level of service is merely a weighted average of the individual approaches and may not be considered a valid measure of the quality or acceptability of an intersection design since it can conceal poor operating conditions on individual approaches.

Levels of service at unsignalized intersections are only calculated for minor movements since the through movement on the major street is not affected by intersection traffic control. The level of service for signalized intersections and unsignalized intersections can be compared.

The corresponding level of service represents the congestion of the roadway.

LOS for Signalized Intersection

	LOS by Volume-to-Capacity Ratio (v/c)	
Control Delay (s/veh)	v/c ≤1.0	v/c >1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

LOS for Non-Signalized Intersections

	LOS by Volume-to-Capacity Ratio (v/c)	
Control Delay (s/veh)	v/c ≤1.0	v/c >1.0
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

3.1 Existing Volumes

AADT traffic volumes on NYS Route 31, Morgan Road, and Verplank Road (2022) were obtained from the NYSDOT Traffic Data Viewer. New traffic turning movement counts were collected at the following 21 study area intersections on Thursday May 9th/16th, 2024 during the weekday morning peak travel period, Friday May 10th/17th, 2024 during the weekday evening peak travel period and Saturday May 11th/18th, 2024 during the midday peak travel periods.

- NYS Route 31 @ Caughdenoy Road
- NYS Route 31 @ Henry Clay Boulevard
- NYS Route 31 @ Morgan Road
- NYS Route 31 @ Site Access & Dunkin'/Lazy Boy Access
- NYS Route 31 @ Site Access & Onondaga County Health Department Access
- NYS Route 31 @ Marketfair North Access
- NYS Route 31 @ NYS Route 481 NB Ramps

- NYS Route 31 @ Soule Road/NYS Route 481 SB Offramp
- NYS Route 31 @ Raymour & Flanigan Access / Dicks Access
- NYS Route 31 @ Carling Road
- NYS Route 31 @ Dell Center Drive / Willow Field Elementary Access
- NYS Route 31 @ Lowes Access / Home Depot Access
- NYS Route 31 @ Davidson Ford Access
- NYS Route 31 @ Oswego Road
- Verplank Road @ Caughdenoy Road
- Verplank Road @ Henry Clay Road
- Verplank Road @ Morgan Road
- Verplank Road @ Oswego Road
- Soule Road @ I-481 SB Onramp
- Soule Road @ Oswego Road
- Morgan Road @ Existing Site Access

The traffic counts were collected during the weekday morning (7-9am), weekday evening (4-6pm), and Saturday midday (11am-1pm) peak travel periods to ensure that actual peak hours of the adjacent streets were captured. The traffic counts included separate heavy vehicle counts per direction and pedestrians. There was minor pedestrian activity during all of the traffic count periods. Based on the traffic counts collected, the peak hours were as follows:

- Morning peak hour - 7:15-8:15am
- Evening peak hour - 4:30-5:30pm
- Saturday peak hour – 12:00-1:00pm

The 2024 existing traffic volumes collected in May were compared to average historical counts taken from the NYSDOT Traffic Data Viewer Website. Specifically, the traffic volumes were compared to the following three NYSDOT counts:

- NYS Route 31 – East of the Great Northern Mall Driveways – October 25th & 26th, 2023
- Morgan Road – Between Morgan /Road and Verplank Road – August 16th, 17th & 18th, 2022
- Verplank Road – Between Gaskin Road to Morgan Road – July 14th & 15th, 2020

The comparison of the 2023 morning and evening peak hour volumes on NYS Route 31 to the historical 2023 count showed that the 2024 counts were 6% higher eastbound/7% higher westbound during the morning peak hour and 3% higher eastbound/3% higher westbound during the evening peak hour.

The comparison of the 2024 morning and evening peak hour volumes on Morgan Road to the historical 2022 count showed that the 2024 counts were 26% higher northbound/12% higher southbound during the morning peak hour and 6% higher northbound/1% higher southbound during the evening peak hour.

The comparison of the 2024 morning and evening peak hour volumes on Verplank Road to the historical 2020 count showed that the 2024 counts were 51% higher eastbound/34% higher westbound during the morning peak hour and 2% lower eastbound/4% higher westbound during the evening peak hour.

Given the 2024 traffic counts are all consistent with or higher than historical traffic volumes passing the site, there were no seasonal adjustments applied to the existing traffic volumes.

AADT traffic volumes on NYS Route 31, Morgan Road, and Verplank Road passing the site based on the Traffic Data Viewer and a 0.5% annual growth rate are shown in the table below.

Existing Traffic Volumes for Study Area (No Build)								
STREET NAME	***EXISTING (2024)***		***ETC (2034)***		***ETC+20 (2054)***		***ETC+30 (2064)***	
	AADT	*DHV*	*AADT*	*DHV*	*AADT*	*DHV*	*AADT*	*DHV*
NYS Route 31 passing site	*19,159*	*1,979*	*20,107*	*2,077*	*22,004*	*2,272*	*22,952*	*2,370*
Morgan Road passing site	*7,812*	*849*	*8,199*	*891*	*8,973*	*976*	*9,359*	*1,018*
Verplank Road passing site	*1,428*	*171*	*1,499*	*180*	*1,640*	*197*	*1,711*	*205*

NYS Route 31 carries approximately 600 vehicles eastbound/650 vehicles westbound passing the site during the morning peak hour, 1,050 vehicles eastbound/1,000 vehicles westbound passing the site during the evening peak hour, and 950 vehicles eastbound/1,000 vehicles westbound passing the site during the Saturday peak hour. Morgan Road carries approximately 130 vehicles northbound/420 vehicles southbound passing the site during the morning peak hour, 520 vehicles northbound/275 vehicles southbound passing the site during the evening peak hour, and 340 vehicles northbound/330 vehicles southbound passing the site during the Saturday peak hour. Verplank Road carries approximately 55 vehicles eastbound/55 vehicles westbound passing the site during the morning peak hour, 70 vehicles eastbound/100 vehicles westbound passing the site during the evening peak hour, and 70 vehicles eastbound/45 vehicles westbound passing the site during the Saturday peak hour.

The 2022 existing traffic volumes are shown in Figures 1-9 for the weekday morning, weekday evening, and Saturday peak hours respectively.

3.2 Growth and Approved Development Projections

The proposed development is assumed to be completed by 2034, therefore 2034 was used as the design year for this study. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project completion must first be reviewed.

As requested by NYSDOT, growth projections in the area were developed to mimic growth assumed in the Micron studies currently being completed. The Syracuse Metropolitan Council (SMTC) provided regional modeling link volumes for the study area for the following scenarios during the weekday morning and evening peak hours:

- 2020 Existing Traffic Volumes
- 2040 Future Base Conditions – With Micron and Future Interchange Improvements in Cicero
- 2040 Select Link Analysis - Micron Trips Generated
- 2040 Future Conditions – With Micron and Great Northern Mall Redevelopment
- 2040 Select Link Analysis – Great Northern Mall Redevelopment Trips Generated
- 2040 Future Conditions – With Micron/Great Northern Mall, With Verplank Interchange

Based on a review of the various model results, it was determined that the background growth on study area roadways generally ranged between 4%-9% over the 20 year projections. Therefore a positive value of +0.5% per year was chosen to grow the 2024 existing traffic volumes to the 2034 design year to maintain a conservative analysis of traffic operations in the area. The 2034 base traffic volumes with 10% total growth in traffic are shown in Figures 10-18 for the weekday morning, weekday evening, and Saturday midday peak hours.

In additional to unknown growth, specific approved trips are also included in the background traffic volume projections. The Town of Clay Planning Department was contacted and indicated that trips associated with a future 300 unit apartment development behind Kohls, the Clay Marketplace

development, the Delta Sonic development, and Micron development needed to be included in the projections.

Trips generated by the 300 unit apartment development were estimated using the ITE Trip Generation, 11th Edition, using Land Use 221 – Mid Rise Apartments. Traffic was assumed to 50% use the Home Depot access to NYS Route 31 and 50% use the Dell Center Drive access to NYS Route 31, and was then distributed through the study based on existing traffic patterns during each peak hour. The trips generated by the apartment development are shown in Figures 19-27 for the weekday morning, weekday evening, and Saturday midday peak hours.

Trips generated by the Clay Marketplace development were taken from the February 10th, 2021 traffic study completed by GTS Consulting and distributed through the study area based on existing traffic patterns during each peak hour. The trips generated by the Clay Marketplace development are shown in Figures 28-36 for the weekday morning, weekday evening, and Saturday midday peak hours.

Trips generated by the Delta Sonic development were taken from the August 17th, 2022 traffic study completed by SRF Associates and distributed through the study area based on existing traffic patterns during each peak hour. The trips generated by the Delta Sonic development are shown in Figures 37-45 for the weekday morning, weekday evening, and Saturday midday peak hours.

Trips generated by the Micron development during each peak hour were estimated using the SMTC 2040 select link volumes as well as data provided by Micron's consultants. Based on trip generation data provided by the consultants, the total employment headcount at Micron is estimated to be 9,768 people in 2034 and 9,774 people in 2040. Since the total employment is nearly identical between 2034 and 2040, the SMTC select link volumes for the weekday morning and weekday evening peak hour were used to distribute trips through the study area. While there was no specific data available for weekend operations, Micron personnel indicated that the Saturday operation would be similar to a typical weekday. Looking at hourly employment projections entering and exiting the Micron development, there are approximately 6,028 people entering/16 exiting during the morning peak hour, 16 people entering/6,028 people exiting during the evening peak hour, and 459 people entering/459 people exiting during the midday peak hour (12pm-1pm). Therefore 7.6% of the morning entering volumes and 7.6% of the evening exiting volumes were assumed during the Saturday midday peak hour. The trips generated by the Micron development are shown in Figures 46-54 for the weekday morning, weekday evening, and Saturday midday peak hours.

The trips generated by the apartments, the Clay Marketplace development, the Delta Sonic development, and Micron development were added to the 2034 base traffic volumes for the resultant 2034 background traffic volumes as shown in Figures 55-63.

3.3 Projected Trip Generation & Distribution

The proposed development includes:

- General Retail – 523,360 SF
- Medical Office – 605,850 SF
- Ambulatory Care Facility – 150,000 SF
- Restaurants – 20,770 SF
- Grocery Store – 12,011 SF
- Community Center – 30,000 SF
- Apartments – 1,436 Units
- Hotels – 875 Rooms
- Senior Assisted Living – 200 Units
- Recreation / Entertainment – 67,890 SF

Trips generated by the proposed development were estimated using the ITE Trip Generation, 11th Edition, which is the industry accepted standard for estimating traffic generated by new developments. The following land uses were used in the estimate:

- Land Use 820 – Shopping Center (>150K) – Used for general retail
- Land Use 720 – Medical-Dental Office Building – Used for medical office
- Land Use 630 – Clinic – Used for Ambulatory Care Facility
- Land Use 932 – High-Turnover (Sit-Down) Restaurant – Used for restaurants
- Land Use 850 – Supermarket – used for supermarket
- Land Use 495 – Recreational Community Center – Used for Community Center
- Land Use 221 - Multifamily Housing (Mid-Rise) – Used for apartments
- Land Use 310 – Hotel – used for hotels
- Land Use 254 – Assisted Living – Used for senior assisted living

Trips generated by the recreation/entertainment space was estimate using historical data for 3 Top Golf sites as well as distribution data for ITE Land Use 432 – Golf Driving Range.

A portion of the trips generated will be internal trips, such as residents visiting the retail areas or entertainment venues, or employees dining at on-site food establishments. These multi-use trips will not create additional trips on the adjacent roadways. There will also be transit users that either live, work or shop on the site. A 15% credit was applied to the total trip generation estimate to account for potential internal capture trips (multi-use) and a 5% credit was applied to account for potential transit trips.

A significant portion of the commercial traffic generated by the retail, restaurant, and supermarket uses will be drawn from traffic already passing the site and is referred to as pass-by trips. Pass-by trips are vehicles that are already traveling through the study area but will now stop at the development on their way to anther destination, such as stopping on their way to or from work. Based on data from the ITE Trip Generation, the average pass-by trip percentage for Land Use 820 is 19% during the evening peak hour and for Land Use 821 is 31% during the Saturday peak hour. The average pass-by rate for a supermarket is 24% during the evening peak hour and 19% during the Saturday peak hour. The average pass-by rate for high-turnover restaurants is 43% during the evening peak hour. A 10% pass-by credit for the commercial uses was assumed during the morning peak hour, a 20% pass-by rate was assumed during the evening peak hour, and a 25% pass-by rate was assumed during the Saturday peak hour. The pass-by credits were applied after the multi-use/transit credits to avoid compounding credits. All trips associated with the medical office, ambulatory care, community center, apartments, and hotels were assumed to be new trips.

The following table summarizes the trip generation estimate for the proposed Great Northern Mall redevelopment in the Town of Clay, NY

Trip Generation Summary						
	Morning Peak		Evening Peak		Saturday Peak	
	Entering	Exiting	Entering	Exiting	Entering	Exiting
Retail – 523,360 SF	273	167	854	925	1198	1105
Medical Office – 605,850 SF	1484	394	714	1667	1043	787
Ambulatory Care – 150,000 SF	335	78	166	388	243	183
Restaurants – 20,770 SF	110	89	115	73	118	114
Supermarket – 12,011 SF	20	14	54	53	61	60
Community Center – 30,000 SF	38	19	35	40	17	15
Apartments – 1,436 SF	122	409	342	218	286	274
Hotels – 875 rooms	226	177	263	253	353	277
Senior Assisted Living – 200 Units	22	14	19	29	25	29
Recreation/Entertainment – 100 Tee Pos.	36	23	83	101	82	82

Total Trips Generated	**2666**	**1384**	**2645**	**3747**	**3426**	**2926**
Multi-Use Credit – 15%	*-400*	*-208*	*-397*	*-562*	*-514*	*-439*
Transit Credit – 5%	*-134*	*-69*	*-132*	*-188*	*-172*	*-146*
Total Credits	***-534***	***-277***	***-529***	***-780***	***-686***	***-585***
Total Vehicular Trips Generated	**2132**	**1107**	**2116**	**2997**	**2740**	**2341**
Commercial Pass-by Trips						
AM – 10%	***-27***	***-27***				
PM – 20%			***-166***	***-166***		
Sat – 25%					***-265***	***-265***
Total New Trips Generated	**2105**	**1080**	**1950**	**2831**	**2475**	**2076**

Many people expect that residential land uses will generate an average of 2 trips per unit during peak hours. The trip generation rates for standard residential land uses are generally less than 1 trip per unit for a number of reasons. The primary reason is that people work different times, some may leave for work at 6:30 in the morning while others may leave at 7:30 or 8:30. Subsequently, the arrival patterns home in the evening will also be staggered over multiple hours. Some people work evenings while others may stay at home or work from home. The rates contained in the ITE Trip Generation have been verified and provide an accurate representation of what may be expected for this development during the peak hours of the adjacent streets.

The detailed trip generation estimate is attached.

Based on SMTC regional models and existing traffic patterns/access to the adjacent expressways, the following distribution of new trips is expected:

- 20% will travel to/from the south on Route 481
- 16% will travel to/from the south on Morgan Road
- 15% will travel to/from the west on NYS Route 31
- 9% will travel to/from the east on NYS Route 31
- 8% will travel to/from the north on Morgan Road
- 6% will travel to/from the south on Soule Road
- 5% will travel to/from the north on Route 481
- 5% will travel to/from the south on Henry Clay Boulevard
- 5% will travel to/from the north on Caughdenoy Road
- 4% will travel to/from the north on Oswego Road
- 3% will travel to/from the north on Henry Clay Boulevard
- 2% will travel to/from the south on Oswego Road
- 2% will travel to/from the northwest via the Home Depot and Dell Center driveways
- 1% will travel to/from the south on Caughdenoy Road

Separate pass-by trip distributions were developed for each peak hour based on existing traffic patterns passing the site on NYS Route 31 and Morgan Road. The anticipated arrival/departure distributions are shown in Figures 64-72 for the weekday morning, weekday evening, and Saturday midday peak hours. The trips generated during each peak hour are shown in Figures 73-81, and the resultant full build traffic volumes expected when the development is complete are shown in Figures 82-90.

Based on the regional modeling completed by SMTC with and without the proposed interchange at Verplank Road, the 2034 build traffic volumes were redistributed with the potential interchange. The redistributed build traffic volumes with the Verplank Road interchange are shown in Figures 91-99.

3.4 Internal Circulation, Parking, Deliveries

Traffic will circulate throughout the development via the existing mall ring road and internal roadways connecting the various parking lots. There is no on-street parking planned within the development and there is no parking allowed on the adjacent streets in the study area.

3.5 Traffic Control Device Data

All of the study area intersections along NYS Route 31 are signalized, as well as the intersections of Oswego Road with Soule Road and Soule Road with the Route 481 southbound onramp.

The three Route 31 intersections with Caughdenoy Road (#3226), Henry Clay Boulevard (#3121), and Morgan Road (#3034) are all controlled by fully actuated, uncoordinated signals under NYSDOT jurisdiction.

The nine Route 31 intersections with the Great Northern Mall/Lazy Boy (#3238), Great Northern Mall/OC Health (#3237), Marketfair Plaza (#3252), Route 481 NB Ramps (#3236), Route 481 SB Ramp/Soule Road (#3235), Wegmans/Raymour & Flanigan (#3269), Carling Road (#3249), Dell Center Drive/Willowbrook Elementary (#3262), and Home Depot/Lowes(#3289) are all controlled by fully actuated coordinated traffic signals under NYSDOT jurisdiction.

The Route 31/Davidson driveway intersection (#3313) is controlled by a fully actuated uncoordinated traffic signal under NYSDOT jurisdiction.

The Route 31/Oswego Road intersection (#3032) is controlled by a fully actuated traffic signal which is coordinated with signals to the west under the jurisdiction of NYSDOT.

The Oswego Road/Soule Road intersection is controlled by a fully actuated uncoordinated traffic signal under the jurisdiction of Onondaga County.

The Soule Road/Route 481 Southbound Onramp intersection is controlled by a fully actuated uncoordinated signal under NYSDOT jurisdiction.

3.6 Capacity Analysis for Existing No-Build Condition

Capacity analysis of the existing traffic operations was completed using Synchro11.

The results of the capacity analysis indicate that all of the signalized intersections in the study area are operating at acceptable overall Levels of Service D or better during the morning, evening and Saturday peak hours with the exception of the NYS Route 31/Oswego Road intersection during the evening and Saturday peak hours (LOS E). All individual movements are operating at acceptable Level of Service D or better during the three peak hours with the following exceptions:

NYS Route 31 @ Henry Clay Boulevard
- NB Left/Through/Right – LOS E – morning peak (57 sec), LOS F – evening peak (81 sec)

NYS Route 31 @ Morgan Road
- WB Left – LOS E – evening peak (59 sec), LOS E – Saturday peak (58 sec)
- SB Through/Right – morning peak – LOS F (91 sec)

NYS Route 31 @ Marketfair North Plaza
- NB Left – LOS E – evening peak (59 sec)

NYS Route 31 @ Route 481 NB Ramps
- NB Left – LOS E – evening peak (66 sec)
- NB Through/Right – LOS E – evening peak (66 sec)

NYS Route 31 @ Route 481 SB Ramps
- NB Left – LOS E – evening peak (56 sec)

NYS Route 31 @ Wegmans/Raymour & Flanigan
- EB Left – LOS E – Saturday peak (56 sec)
- WB Left – LOS E – evening peak (64 sec), LOS E – Saturday peak (63 sec)
- NB Left – LOS E – Saturday peak (59 sec)

NYS Route 31 @ Carling Road
- EB Left – LOS E – evening peak (66 sec), LOS E – Saturday peak (63 sec)
- WB Left – LOS E – evening peak (67 sec), LOS E – Saturday peak (66 sec)
- NB Left – LOS E – evening peak (62 sec), LOS E – Saturday peak (59 sec)
- SB Left – LOS E – evening peak (58 sec), LOS E – Saturday peak (57 sec)

NYS Route 31 @ Dell Center Drive/Willowfield Elementary Road
- EB Left – LOS E – evening peak (67 sec), LOS E – Saturday peak (73 sec)
- NB Left – LOS E – Saturday peak (63 sec)
- SB Left – LOS E – evening peak (58 sec)

NYS Route 31 @ Home Depot/Lowes
- EB Left – LOS E – morning peak – (75 sec), LOS F – evening peak (81 sec), LOS F – Saturday peak (81 sec)
- WB Left – LOS E – morning peak – (67 sec), LOS F – evening peak (91 sec), LOS F – Saturday peak (131 sec)
- NB Left – LOS F – morning peak – (86 sec), LOS F – evening peak (103 sec), LOS F – Saturday peak (107 sec)
- NB Through – LOS E – Saturday peak (55 sec)
- SB Left – LOS E – evening peak (72 sec), LOS E – Saturday peak (75 sec)
- SB Left/Through – LOS E – evening peak (72 sec), LOS E – Saturday peak (74 sec)

NYS Route 31 @ Oswego Road
- Overall Intersection – LOS E – evening peak (63 sec), LOS E – Saturday peak (66 sec)
- EB Left – LOS E – evening peak (61 sec)
- EB Through/Right – LOS F – evening peak (107 sec), LOS F – Saturday peak (102 sec)
- WB Left – LOS E – evening peak (71 sec), LOS F – Saturday peak (124 sec)
- SB Left – LOS E – morning peak (69 sec), LOS F – Saturday peak (92 sec)

Soule Road @ Oswego Road
- EB Left – LOS E – evening peak (56 sec)
- NB Left – LOS E – evening peak (56 sec)
- SB Left – LOS E – evening peak (58 sec)

All unsignalized traffic movements in the study area are all operating at acceptable Levels of Service D or better during the three peak hours.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.7 Capacity Analysis for Background No-Build Condition

Capacity analysis of the background traffic operations was completed using Synchro11.

Both NYSDOT and OCDOT confirmed that there are no planned highway improvements in the study area over the next ten years.

The following intersection/roadway improvements were included in the analysis associated with the approved background developments in the area:

Clay Market Place
- Added 250 foot northbound left turn lane and 150 southbound left turn lane on Henry Clay at NYS Route 31.
- Added protect/permitted north/south left turn phasing

Delta Sonic
- Added 200 foot eastbound left turn lane and 200 westbound left turn lane on NYS Route 31 at site access.
- Added traffic signal with signal coordination at site access/Texas Roadhouse driveway
- Added Home Depot/Lowes intersection to coordinated signal system.

Micron
- Widened NYS Route 31 to 5 lanes from Morgan Road through Caughdenoy Road
- Added 200 foot eastbound left turn lane and 200 foot westbound left turn lane at NYS Route 31/Caughdenoy Road.
- Added 200 foot eastbound right turn lane and 200 foot northbound right turn lane at NYS Route 31/Henry Clay Boulevard.

The results of the analysis show notable increases in delay throughout the study area primarily associated with the additional traffic from the Micron development. The following movements are noted to be operate at Levels of Service E or F under the background condition:

NYS Route 31 @ Henry Clay Boulevard
- NB Left/Through/Right – LOS E – morning peak (57 sec), LOS F – evening peak (81 sec)

NYS Route 31 @ Morgan Road
- Overall Intersection – LOS E – morning peak (64 sec), LOS F – evening peak (108 sec)
- EB Left – LOS F – morning peak (149 sec)
- EB Through – LOS E – morning peak (63 sec), LOS E – Saturday peak (58 sec)
- WB Left – LOS F – morning peak (103 sec), LOS F – evening peak (292 sec)
  LOS E Saturday peak (58 sec)
- NB Left – LOS F – morning peak (120 sec), LOS F – evening peak (194 sec)
- NB Right – LOS E – morning peak (58 sec)
- SB Through/Right – morning peak – LOS F (127 sec), evening peak – LOS F (200 sec)

NYS Route 31 @ Marketfair North Plaza
- WB Through – LOS E – evening peak (65 sec)
- NB Left – LOS E – evening peak (59 sec)

NYS Route 31 @ Route 481 NB Ramps
- EB Left – LOS E – evening peak (68 sec)
- WB Through – LOS F – evening peak (103 sec)
- NB Left – LOS E – Saturday peak (66 sec)
- NB Through/Right – LOS E – Saturday peak (66 sec)

NYS Route 31 @ Route 481 SB Ramps
- NB Left – LOS E – evening peak (70 sec)

NYS Route 31 @ Wegmans/Raymour & Flanigan
- EB Left – LOS E – evening peak (56 sec)
- WB Left – LOS E – evening peak (61 sec), LOS E – Saturday peak (62 sec)
- NB Left – LOS E – evening peak (59 sec), LOS E – Saturday peak (59 sec)

NYS Route 31 @ Carling Road
- EB Left – LOS E – evening peak (60 sec), LOS E – Saturday peak (66 sec)
- WB Left – LOS E – evening peak (60 sec), LOS E – Saturday peak (63 sec)
- NB Left – LOS E – evening peak (63 sec), LOS E – Saturday peak (60 sec)
- SB Left – LOS E – evening peak (59 sec), LOS E – Saturday peak (58 sec)

NYS Route 31 @ Dell Center Drive/Willowfield Elementary Road
- EB Left – LOS E – evening peak (63 sec), LOS E – Saturday peak (62 sec)
- NB Left – LOS E – Saturday peak (63 sec)
- SB Left – LOS E – evening peak (56 sec)

NYS Route 31 @ Home Depot/Lowes
- EB Left – LOS E – evening peak (67 sec)
- WB Left – LOS E – evening peak (56 sec),
- NB Left – LOS E – evening peak (73 sec), LOS E – Saturday peak (79 sec)
- SB Left – LOS E – Saturday peak (59 sec)
- SB Left/Through – LOS E – Saturday peak (59 sec)

NYS Route 31 @ Oswego Road
- Overall Intersection – LOS E – Saturday peak (63 sec)
- EB Through/Right – LOS E – Saturday peak (66 sec)
- WB Left – LOS F – Saturday peak (96 sec)
- NB Right – LOS E – evening peak (72 sec), LOS F – Saturday peak (111 sec)
- SB Left – LOS F – Saturday peak (115 sec)

Verplank Road @ Caughdenoy Road
- EB Left/Right – LOS F – evening peak (213 sec)

Verplank Road @ Morgan Road
- EB Left/Through/Right – LOS F – morning peak (68 sec), LOS F – evening peak (err)
- WB Left/Through/Right – LOS F – morning peak (60 sec), LOS F – evening peak (err), LOS E – Saturday peak (43)

Soule Road @ Oswego Road
- EB Left – LOS E – evening peak (59 sec)
- NB Left – LOS E – evening peak (60 sec)
- SB Left – LOS E – evening peak (61 sec)

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.8 Capacity Analysis for Proposed Build Condition

Capacity analysis of the build traffic operations without and the Verplank Road interchange were completed with no improvements, other than the restriping NYS Route 31 and Morgan Road to include 150 left turn lanes at the proposed site driveways.

The following drops in Level of Service from the background conditions without the Verplank interchange and *with the Verplank interchange* are noted:

<u>Build Conditions without/*with* Verplank Road Interchange</u>

NYS Route 31 @ Caughdenoy Road

- EB Left – LOS D to F/*LOS D to F* – evening peak (+315 sec/+*317 sec)*)
- NB Left/Through/Right – LOS D to E/*LOS D to E* – morning peak (+18 sec/+*13 sec*),
  LOS D to E/*LOS D to E* – evening peak (+32 sec/+*27 sec* sec)

NYS Route 31 @ Henry Clay Boulevard

- Overall Intersection – LOS D to E – morning peak (+19 sec)
  LOS D to E/*LOS D to E* – evening peak (+35 sec/+*21 sec)*
- EB Through/Right – LOS D to F/*LOS D to E* – morning peak (+32/+*12sec)*
- WB Left – LOS C to E/*LOS C to E* – evening peak (+31 sec/+*31 sec*)
- WB Through/Right – LOS D to F/*LOS D to E* – evening peak (+51 sec/+*20 sec*)
- NB Left – LOS D to F/*LOS D to F* – morning peak (+71 sec/+*71 sec*),
  LOS D to F/*LOS D to F* – evening peak (+88 sec/+*88 sec*)

NYS Route 31 @ Morgan Road

- Overall Intersection – LOS E to F/*LOS E to F* – morning peak (+48 sec/+*41 sec*)
  LOS F to F/*LOS F to F* – evening peak (+149 sec/+*141 sec)*
  LOS D to F/*LOS D to F* – Saturday peak (+105 sec/+*105 sec)*
- EB Left – LOS D to E/*LOS D to E* – Saturday peak (+1 sec/+*1 sec*)
- EB Through – LOS E to F – morning peak (+36 sec)
  LOS D to F/*LOS D to F* – evening peak (+85 sec/+*85 sec)*
  LOS D to E/*LOS D to E* – Saturday peak (+30 sec/+*30 sec)*
- WB Through – LOS D to F/*LOS D to F* – evening peak (+95 sec/+*55 sec*)
  LOS D to F/*LOS D to F* – Saturday peak (+179 sec/+*173 sec)*
- NB Left – LOS F to F/*LOS F to F* – morning peak (+300 sec/+*300 sec*)
  LOS F to F/*LOS F to F* – evening peak (+167 sec/+*167 sec)*
  LOS D to F/*LOS D to F* – Saturday peak (+237 sec/+*237 sec)*
- NB Through – LOS D to F/*LOS D to F* – evening peak (+315 sec/+*315 sec*)
  LOS C to F/*LOS C to F* – Saturday peak (+57 sec/+*57 sec)*
- SB Left – LOS C to F/*LOS C to F* – evening peak (+84 sec/+*84 sec*)
- SB Through/Right – LOS F to F/*LOS F to F* – morning peak (+128 sec/+*128 sec*)
  LOS F to F/*LOS F to F* – evening peak (+731 sec/+*731 sec)*
  LOS D to F/*LOS D to F* – Saturday peak (+200 sec/+*200 sec)*

NYS Route 31 @ Great Northern Mall East / Lazy Boy

- Overall Intersection – LOS A to F/*LOS A to F* – evening peak (+132 sec/+*108 sec)*
  LOS A to F/*LOS A to F* – Saturday peak (+100 sec/+*92 sec)*
- WB Through – LOS C to F/*LOS C to F* – evening peak (+499 sec/+*255 sec*)
  LOS B to F/*LOS B to F* – Saturday peak (+446 sec/+*253 sec)*
- SB Left/Through – LOS D to F/*LOS D to F* – evening peak (+44 sec/+*44 sec)*
  LOS B to F/*LOS B to F* – Saturday peak (+59 sec/+*59 sec)*
- SB Right – LOS A to E/*LOS A to E* – evening peak (+64 sec/+*63 sec*)

NYS Route 31 @ Great Northern Mall West / OC Health

- Overall Intersection – LOS B to F/*LOS B to F* – evening peak (+185 sec/+*102 sec)*
  LOS B to F/*LOS B to F* – Saturday peak (+122 sec/+*74 sec)*
  EB Left – LOS A to F/*LOS A to E* – morning peak (+126 sec/+*65 sec)*
  LOS A to F/*LOS A to F* – evening peak (+132 sec/+*108 sec)*
  LOS A to F/*LOS A to F* – Saturday peak (+100 sec/+*92 sec)*
- WB Through/Right – LOS A to F/*LOS A to F* – morning peak (+204 sec/+*157 sec*)
  LOS A to F/*LOS A to F* – Saturday peak (+113 sec/+*111 sec)*
- SB Left/Through – LOS C to E/*LOS C to E* – morning peak (+31 sec/+*31 sec*)
  LOS D to F/*LOS D to F* – evening peak (+147 sec/+*147 sec)*
  LOS D to F/*LOS D to F* – Saturday peak (+256 sec/+*256 sec)*

NYS Route 31 @ Marketfair North Plaza

- Overall Intersection – LOS D to E – evening peak (+21 sec*)*
  LOS B to E – Saturday peak (+43 sec*)*
- WB Through – LOS E to F – evening peak (+35 sec)
  LOS A to E/*LOS A to E* – Saturday peak (+61 sec/+*56 sec)*
- NB Left – LOS D to E/*LOS D to E* – Saturday peak (+38 sec/+*38 sec*)

NYS Route 31 @ Route 481 NB Ramps

- Overall Intersection – LOS B to F – morning peak (+68 sec*)*
  LOS D to F/*LOS D to F* – evening peak (+205 sec/+*154 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+71 sec/+*52 sec)*
- EB Through – LOS A to E/*LOS A to E* – morning peak (+205 sec/+*154 sec)*
- WB Through – LOS F to F/*LOS F to F* – evening peak (+479 sec/+*344 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+175 sec/+*142 sec)*
- NB Left – LOS D to F/*LOS D to F* – evening peak (+44 sec/+*51 sec*)
- NB Left/Through – LOS D to F/*LOS D to F* – evening peak (+44 sec/+*51 sec*)
- NB Right – LOS B to F/*LOS B to F* – morning peak (+228 sec/+*120 sec*)
  LOS B to E – evening peak (+48 sec)
  LOS B to F/*LOS B to F* – Saturday peak (+198 sec/+*109 sec*)

NYS Route 31 @ Route 481 SB Ramps

- Overall Intersection – LOS C to F/*LOS C to F* – morning peak (+91 sec/+*74 sec)*
  LOS C to F/*LOS C to F* – evening peak (+114 sec/+*89 sec)*
  LOS C to F/*LOS C to E* – Saturday peak (+71 sec/+*55 sec)*
- EB Through – LOS D to F/*LOS D to F* – morning peak (+185 sec/+*180 sec)*
  LOS D to F/*LOS D to F* – evening peak (+112 sec/+*105 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+100 sec/+*94 sec)*
- WB Left – LOS D to F/*LOS D to F* – morning peak (+254 sec/+*179 sec)*
  LOS D to F/*LOS D to F* – evening peak (+390 sec/+*292 sec)*
  LOS D to F/*LOS D to F* – Saturday peak (+300 sec/+*208 sec)*
- WB Through – LOS C to F/*LOS C to E* – evening peak (+59 sec/+*52 sec)*
- SB Left – LOS D to F – morning peak (+54 sec)

NYS Route 31 @ Wegmans/Raymour & Flanigan

- Overall Intersection – LOS C to F/*LOS C to E* – evening peak (+50 sec/+*44 sec)*
  LOS C to E – Saturday peak (+26 sec*)*
- WB Through – LOS D to F/*LOS D to F* – evening peak (+117 sec/+*106 sec)*
  LOS C to F/*LOS C to E* – Saturday peak (+55 sec/+*45 sec)*

NYS Route 31 @ Carling Road

- Overall Intersection – LOS D to F/*LOS D to F* – evening peak (+58 sec/+*53 sec)*
- WB Through – LOS D to F/*LOS D to F* – evening peak (+140 sec/+*128 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+74 sec/+*61 sec)*

NYS Route 31 @ Dell Center Drive/Willowfield Elementary Road

- Overall Intersection – LOS C to E – Saturday peak (+33 sec*)*
- WB Through – LOS B to F/*LOS B to F* – evening peak (+77 sec/+*67 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+85 sec/+*73 sec)*

NYS Route 31 @ Home Depot/Lowes

- Overall Intersection – LOS D to F/*LOS D to E* – evening peak (+48 sec/+*43 sec)*

LOS D to E/*LOS D to E* – Saturday peak (+24 sec/*+19 sec)*
- WB Through – LOS D to F/*LOS D to F* – evening peak (+134 sec/*+121 sec)*
  LOS C to F/*LOS C to F* – Saturday peak (+89 sec/*+74 sec)*
- SB Left – LOS D to E/*LOS D to E* – evening peak (+2 sec/*+2 sec)*
- SB Left/Through – LOS D to E/*LOS D to E* – evening peak (+2 sec/*+2 sec)*

NYS Route 31 @ Taxes Roadhouse/Delta Sonic
- WB Through – LOS B to F/*LOS B to F* – evening peak (+72 sec/*+63 sec)*

NYS Route 31 @ Oswego Road
- Overall Intersection – LOS D to F/*LOS D to F* – morning peak (+45 sec/*+46 sec)*
  LOS D to F/*LOS D to F* – evening peak (+66 sec/*+64 sec)*
  LOS E to F/*LOS E to F* – Saturday peak (+49 sec/*+46 sec)*

- EB Through/Right – LOS D to F/*LOS D to F* – morning peak (+86 sec/*+86 sec)*
  LOS D to F/*LOS D to F* – evening peak (+90 sec/*+90 sec)*
  LOS E to F/*LOS E to F* – Saturday peak (+123 sec/*+123 sec)*
- WB Left – LOS D to E/*LOS D to E* – evening peak (+5 sec/*+5 sec)*
- WB Through/Right – LOS D to F/*LOS D to F* – evening peak (+102 sec/*+96 sec)*
- NB Right – LOS E to F/*LOS E to F* – evening peak (+9 sec/*+9 sec)*

Verplank Road @ Caughdenoy Road
- EB Left/Right – *LOS B to E* – morning peak (*+22 sec)*
  LOS F to F/*LOS F to F* – evening peak (+568 sec/*+1860 sec)*

Verplank Road @ Morgan Road
- EB Left/Through/Right – LOS F to F/*LOS F to F* – morning peak (+363 sec/*+549 sec)*
  LOS F to F/*LOS F to F* – evening peak (err/*err)*
  LOS D to F/*LOS D to F* – Saturday peak (err/*err)*
- WB Left/Through/Right – LOS F to F/*LOS F to F* – morning peak (err/*err)*
  LOS F to F/*LOS F to F* – evening peak (err/*err)*
  LOS E to F/*LOS E to F* – Saturday peak (err/*err)*

Verplank Road @ Oswego Road
- EB Left/Through/Right – LOS C to E/*LOS C to E* – Saturday peak (+19 sec/*+24 sec)*

Soule Road @ 481 SB Onramp
- Overall Intersection – LOS C to F/*LOS C to F* – morning peak (+89 sec/*+53 sec)*
  LOS B to F/*LOS B to F* – evening peak (+139 sec/*+86 sec)*
  LOS A to F – Saturday peak (+74 sec)
- NB Through/Right – LOS D to F/*LOS D to F* – morning peak (+88 sec/*+79 sec)*
  LOS C to E/*LOS C to E* – evening peak (+48 sec/*+43 sec)*
- SB Left – LOS C to F/*LOS C to F* – morning peak (+101 sec/*+52 sec)*
  LOS C to F/*LOS C to F* – evening peak (+314 sec/*+202 sec)*
  LOS A to F/*LOS A to F* – Saturday peak (+175 sec/*+100 sec)*

Morgan Road @ Existing Mall Access
- EB Left/Right – LOS B to E/*LOS B to E* – morning peak (+29 sec/*+29 sec)*
  LOS C to F/*LOS C to F* – evening peak (+621 sec/*+621 sec)*
  LOS A to F/*LOS A to F* – Saturday peak (+566 sec/*+566 sec)*

NYS Route 31 @ Proposed Mall Access
- SB Left/Right – LOS F/*LOS F* – evening peak (2506 sec/*1928 sec)*
  LOS F/*LOS F* – Saturday peak (536 sec/*536 sec)*

Verplank Road @ Route 481 NB Ramps
- SB Left/Right – *LOS F* – Saturday peak (*65 sec)*

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

3.9 Mitigation Measures

The identified capacity deficiencies in the study area under the build conditions are notably the result of the combination of the projected Micron traffic and the Great Northern Mall redevelopment traffic.

To the west of the Route 481 interchange on NYS Route 31, the primary deficiency is a lack of capacity for the westbound through movement during the evening peak hour. The intersection of NYS Route 31 with Oswego Road is at or over capacity under the background conditions and is significantly impacted by the additional traffic generated by the proposed development. Some level of the recommended mitigation in this area should be contributed to by both developments.

The NYS Route 31/Route 481 interchange is at or over capacity under the background condition and is significantly impacted by the additional traffic generated by the Great Northern Mall redevelopment.

To the east of the site, there are significant failing operations at the Morgan Road intersections with NYS Route 31 and Verplank Road under the background conditions associated with the Micron development which continue to worsen with the additional site generated traffic. Some level of the recommended mitigation in this area should be contributed to both developments.

The following mitigation measures have been identified in the overall study area:

- NYS Route 31 @ Route 481 Interchange
    - Reconstruct the interchange as a diverging diamond interchange (DDI) with signalized east/west crossings at the northbound and southbound ramps and signalized control at the left and right offramp movements both northbound and southbound.
        - Provide 3 through lanes eastbound from the Raymour & Flanigan intersection through the DDI, terminating the third inside lane as the outside left turn lane into the Great Northern Mall west driveway.
            - Remove the existing eastbound right turn only lane at Marketfair North.
        - Provide 3 through lanes westbound from the Great Northern Mall east driveway through the DDI, terminating the third lane after the Delta Sonic/Texas Roadhouse signalized intersection.
            - Maintain the auxiliary westbound right turn lanes at Great North Mall West, Wegmans, Carling Road, Dell Center Drive, and Home Depot.
    - Extend Pepperidge Way (Carling Road) to Soule Road opposite the Route 481 southbound onramp.
        - Convert Soule Road to southbound only between NYS Route 31 and the Route 481 southbound onramp.
        - Convert the existing northbound lane on Soule Road at the Route 481 southbound onramp to left turn only movements onto the roadway extension.
        - Construct a 200 foot northbound right lane on Soule Road at the Route 481 onramp with channelization and yield control.
        - Restrict the eastbound Pepperidge Way extension to right turn only movements onto Soule Road southbound.
        - Update the traffic signal at the Soule Road/Route 481 southbound onramp as necessary to accommodate the revised layout.

- NYS Route 31 @ Caughdenoy Road

  - Add protected/permitted eastbound left turn phasing.
  - Construct a 200 foot southbound right turn lane.

- NYS Route 31 @ Henry Clay Boulevard
  - Construct a 2nd northbound left turn lane.

- NYS Route 31 @ Morgan Road
  - Construct second northbound and southbound through lanes through the intersection.
  - Construct a 2nd northbound left turn lane.
  - Construct a 250 foot southbound right turn lane.
  - Construct a 250 foot westbound right turn lane.

- NYS Route 31 @ Proposed Access
  - Restrict left turns exiting the site.

- NYS Route 31 @ Great Northern Mall East Access
  - Construct a 300 westbound right turn lane.
  - Construct a 2nd southbound left turn lane.

- NYS Route 31 @ Carling Road
  - Construct a 250 foot northbound right turn lane.

- NYS Route 31 @ Oswego Road
  - Construct a 250 foot eastbound right turn lane.
  - Construct a 250 foot westbound right turn lane.
  - Construct a 2nd northbound right turn lane.

- Verplank Road @ Caughdenoy Road
  - Construct a 200 foot northbound left turn lane.
  - Install a two phase traffic signal.

- Verplank Road @ Henry Clay Boulevard
  - Install a two phase traffic signal.

- Verplank Road @ Morgan Road
  - Construct a 200 foot northbound right turn lane.
  - Construct a 200 foot westbound right turn lane.
  - Install a two phase traffic signal.

- Morgan Road @ Existing Site Access
  - Construct a 200 foot eastbound right turn lane.
  - Install a two phase traffic signal.

- Verplank Road @ Route 481 Northbound Ramps (Verplank Interchange Alternative Only)
  - Construct a 200 westbound right turn lane.

With the proposed modifications noted above, all traffic movements are generally projected to operate consistent with background traffic operations at both the signalized and unsignalized intersections in the study area. The Verplank interchange is a critical feature in the mitigation as it is projected to draw 400-500 vehicles away from the NYS Route 31 corridor during the peak hours.

The following provides a brief discussion on the projected impacts at each study area intersection:

NYS Route 31 @ Caughdenoy Road – Without the Verplank Road interchange, the intersection will potentially have failing levels of delay on the westbound approach during the evening peak hour. There will also be some longer delays on the northbound approach at LOS E regardless of whether the Verplank Interchange is constructed or not. Additional improvements should be considered at this location associated with the Micron development.

NYS Route 31 @ Henry Clay Boulevard – The intersection is projected to operate at an overall Level of Service D or better with all movements operating at Level of Service E or better with the proposed mitigation and the Verplank Road interchange. The proposed interchange will draw some Micron traffic away from NYS Route 31 which will reduce westbound delays during the evening peak hour.

NYS Route 31 @ Morgan Road – The intersection is projected to have multiple failing level delays during the morning and evening peak hours associated with the Micron development traffic. While the intersection will continue to have long delays during the morning and evening peak hours, the proposed mitigation will substantially offset the projected impacts from the Great Northern Mall redevelopment traffic. Additional improvements should be considered at this intersection associated with the Micron development.

NYS Route 31 @ Great North Mall East – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service during the three peak hours. Without the interchange, there are longer delays for the westbound through and eastbound left turn movements expected, particularly during the evening peak hour.

NYS Route 31 @ Great North Mall West – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service during the three peak hours. Without the interchange, there are longer delays for the westbound through and eastbound left turn movements expected, particularly during the evening and Saturday peak hours.

NYS Route 31 @ Marketfair North – The proposed mitigation along will result in acceptable Levels of Service during the three peak hours with or without the Verplank Road interchange. There may be some longer delays for the eastbound through movement during the Saturday peak hour which can likely be addressed through signal coordination adjustments as development is completed.

NYS Route 31 @ Route 481 Interchange – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service during the three peak hours.

NYS Route 31 @ Wegmans/Raymour & Flanigan – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours.

NYS Route 31 @ Carling Road – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours.

NYS Route 31 @ Dell Center Drive/Willowfield Elementary – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours.

NYS Route 31 @ Home Depot/Lowes – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours.

NYS Route 31 @ Texas Roadhouse/Delta Sonic – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours.

NYS Route 31 @ Oswego Road – The proposed mitigation along with the proposed Verplank Road interchange will result in acceptable Levels of Service consistent with the background condition during the three peak hours. Without the Verplank Road interchange, there may be longer delays on the southbound left turn movement, primarily during the evening and Saturday peak hours.

Verplank Road @ Caughdenoy Road – The proposed mitigation will result in acceptable Levels of Service with or without the proposed Verplank Road interchange. It is noted that there are failing operations at this intersection under the background condition with just the Micron development.

Verplank Road @ Henry Clay Boulevard – The proposed mitigation will result in acceptable Levels of Service with or without the proposed Verplank Road interchange.

Verplank Road @ Morgan Road – The proposed mitigation will result in acceptable Levels of Service with or without the proposed Verplank Road interchange. It is noted that there are failing operations at this intersection under the background condition with just the Micron development.

Verplank Road @ Oswego Road – There acceptable Levels of Service without mitigation at this intersection.

Soule Road @ Oswego Road – There are no notable impacts projected at this intersection.

Morgan Road @ Existing Mall Access – The proposed mitigation will result in acceptable Levels of Service with or without the proposed Verplank Road interchange.

Proposed Site Driveways – All movements are projected to operate within acceptable ranges with or without the proposed Verplank Road interchange.

Verplank Road Interchange – All movements are projected to operate within acceptable ranges during the three peak hour with the proposed mitigation. Projected traffic volumes do not warrant signalization.

The detailed Level of Service & queue summary, and capacity analysis printouts, have been attached.

4.0 Crash Analysis

The purpose of this crash analysis is to identify safety problems by studying and quantifying accidents within and immediately adjacent to the driveway, and identifying abnormal patterns and clusters. An accident cluster is defined as an abnormal occurrence of similar accident types occurring at approximately the same location or involving the same geometric features. The severity of the accidents should also be considered. A history of accidents is an indication that further analysis is required to determine the cause(s) of the accident(s) and to identify what actions, if any, could be taken to mitigate the accidents.

A crash analysis was performed per Highway Design Manual Chapter 5 on NYS Route 31, Verplank Road, Oswego Road, Soule Road, Morgan Road, Henry Clay Boulevard, and Caughdenoy Road in the study area.

Existing Crash Data

An accident analysis was completed for NYS Route 31, Verplank Road, Oswego Road, Soule Road, Morgan Road, Henry Clay Boulevard, and Caughdenoy Road within the study area using history reports obtained for a three year period from January 2021 through December 2023. Over the three year period, there were 688 total accidents in the study area.

Forty-Four (44) accidents occurred at the NYS Route 31/Oswego Road intersection including 37 rearend accidents, 2 right angle accidents 2 left turn accidents, 2 sideswipe accidents and 1 fixed object accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Two (2) rearend accidents occurred at the NYS Route 31/Davidson intersection. The intersection accident rate is below the statewide average rate for similar facilities.

Thirty-Two (32) accidents occurred at the NYS Route 31/Home Depot/Lowes intersection including 25 rearend accidents, 3 right turn accidents, 2 left turn accidents, 1 right angle accident and 1 sideswipe accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Twenty-Six (26) accidents occurred at the NYS Route 31/Dell Center Drive intersection including 14 rearend accidents, 7 right angle accidents, 2 sideswipe accidents, 2 left turn accidents and 1 fixed object accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Fifty (50) accidents occurred at the NYS Route 31/Carling Road intersection including 36 rearend accidents, 3 right angle accidents, 3 right turn accidents, 5 left turn accidents, 2 sideswipe accidents, and 1 backing accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Six (6) accidents occurred at the NYS Route 31/Wegmans/Raymour & Flanigan intersection including 3 rearend accidents, 1 right angle accident, 1 sideswipe accident, and 1 backing accident. The intersection accident rate is below the statewide average rate for similar facilities.

Fifty-One (51) accidents occurred at the NYS Route 31/Route 481 Southbound Ramp/Soule Road intersection including 40 rearend accidents, 5 sideswipe accidents, 3 right angle accidents, 2 fixed object accidents and 1 left turn accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Forty-Two (42) accidents occurred at the NYS Route 31/Route 481 Northbound Ramps intersection including 28 rearend accidents, 5 left turn accidents, 4 sideswipe accidents, 3 right angle accidents, 1 backing accident, and 1 fixed object accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Fifteen (15) accidents occurred at the NYS Route 31/Marketfair Plaza intersection including 8 rearend accidents, 4 right angle accidents, 2 left turn accidents, a 1 right turn accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Seven (7) accidents occurred at the NYS Route 31/Great Northern Mall East/Lazy Boy intersection including 4 rearend accidents and 3 left turn accidents. The intersection accident rate is below the statewide average rate for similar facilities.

Forty-Three (43) accidents occurred at the NYS Route 31/Morgan Road intersection including 24 rearend accidents, 15 left turn accidents, 2 right angle accidents, 1 right turn accidents, and 1 sideswipe accident. The predominant accident types are rearend accidents which are most common at a signalized

intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Twenty-Two (22) accidents occurred at the NYS Route 31/Henry Clay Boulevard intersection including 10 rearend accidents, 5 left turn accidents, 3 sideswipe accidents, 2 right turn accidents, 1 animal related accident, and 1 fixed object accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Seventeen (17) accidents occurred at the NYS Route 31/Caughdenoy Road intersection including 8 rearend accidents, 4 left turn accidents, 3 right angle accidents, 1 right turn accident, and 1 fixed object accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Three (3) accidents occurred at the Verplank Road/Oswego Road intersection including 1 right angle accidents, 1 left turn accident, and 1 fixed object accident. The intersection accident rate is above the statewide average rate for similar facilities.

Nine (9) accidents occurred at the Verplank Road/Morgan Road intersection including 6 right angle accidents 3 rearend accidents. The intersection accident rate is above the statewide average rate for similar facilities.

One (1) right angle accident occurred at the Verplank Road/Henry Clay Boulevard intersection. The intersection accident rate is below the statewide average rate for similar facilities.

Ten (10) accidents occurred at the Soule Road/Route 481 Southbound Ramp intersection including 5 rearend accidents, 2 left turn accidents, 1 sideswipe accident, 1 fixed object accident, and 1 right turn accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Nineteen (19) accidents occurred at the Oswego Road/Soule Road intersection including 14 rearend accidents, 3 right turn accidents, 1 right angle accident, and 1 sideswipe accident. The predominant accident types are rearend accidents which are most common at a signalized intersection. The intersection accident rate is above the statewide average rate for similar facilities.

Along NYS Route 31, there were 113 total midblock accidents including 44 rearend accidents, 35 sideswipe accidents, 13 animal related accidents, 10 fixed object accidents, 4 left turn accidents, 3 non-collision accidents, 1 right angle accident, 1 right turn accident, and 1 head on accident. The link accident rate is below the statewide average rate for similar facilities.

Along Verplank Road, there were 20 total midblock accidents including 11 fixed object accidents, 5 animal related accidents, 3 sideswipe accidents, and 1 rearend accident. The link accident rate is below the statewide average rate for similar facilities.

Along Oswego Road, there were 44 total midblock accidents including 12 animal related accidents, 9 sideswipe accidents 9 left turn accidents, , 6 rearend accidents, 4 fixed object accidents, 2 right angle accidents, 1 right turn accident, and 1 head on accident. The link accident rate is below the statewide average rate for similar facilities.

Along Soule Road, there were 26 total midblock accidents including 12 rearend accidents, 4 sideswipe accidents, 5 fixed object accidents, 4 left turn accidents, and 1 animal related accident. The link accident rate is below the statewide average rate for similar facilities.

Along Morgan Road, there were 10 total midblock accidents including 5 animal related accidents, 2 backing accidents, 1 left turn accident, 1 fixed object accident, and 1 sideswipe accident. The link accident rate is below the statewide average rate for similar facilities.

Along Henry Clay Boulevard, there was 1 animal related accident. The link accident rate is below the statewide average rate for similar facilities.

Along Caughdenoy Road, there were 7 total midblock accidents including 4 animal related accidents, 2 fixed object accidents, and 1 left turn accident. The link accident rate is above the statewide average rate for similar facilities.

There were 2 accidents along Dell Center Drive, 1 accident along Carling Road, 1 accident along the Route 481 Northbound Ramp, 1 accident on McNamara Drive, 1 accident on mainline Route 481, and 62 accidents in area parking lots included in the data.

Of the accidents, 588 (85%) were non-reportable or property damage only accidents. There were 100 injury accidents with no fatalities.

4.2 Compare Rates to Accepted Values

The following table provides a comparison of the existing accident rates to the statewide average rate for similar facilities:

Intersection and Link Accident Rates		
Intersection / Link	**Calculated Intersection Accident Rate**	**Statewide Accident Rate for Similar Facilities**
NYS Route 31 @ Oswego Road	0.98 acc/mev	0.53 acc/mev
NYS Route 31 @ Davidson	0.06 acc/mev	0.31 acc/mev
NYS Route 31 @ Home Depot/Lowes	0.71 acc/mev	0.53 acc/mev
NYS Route 31 @ Dell Center Drive	0.67 acc/mev	0.53 acc/mev
NYS Route 31 @ Carling Road	1.17 acc/mev	0.53 acc/mev
NYS Route 31 @ Wegmans	0.14 acc/mev	0.53 acc/mev
NYS Route 31 @ Route 481 SB	0.98 acc/mev	0.53 acc/mev
NYS Route 31 @ Route 481 NB	0.98 acc/mev	0.53 acc/mev
NYS Route 31 @ Marketfair Plaza	0.49 acc/mev	0.31 acc/mev
NYS Route 31 @ GNM East/Lazy Boy	0.28 acc/mev	0.53 acc/mev
NYS Route 31 @ Morgan Road	1.32 acc/mev	0.53 acc/mev
NYS Route 31 @ Henry Clay Blvd	0.98 acc/mev	0.53 acc/mev
NYS Route 31 @ Caughdenoy	1.01 acc/mev	0.53 acc/mev
Verplank Road @ Oswego Road	0.34 acc/mev	0.28 acc/mev
Verplank Road @ Morgan Road	0.72 acc/mev	0.28 acc/mev
Verplank Road @ Henry Clay	0.18 acc/mev	0.28 acc/mev
Soule Road @ Route 481 SB Ramp	0.47 acc/mev	0.31 acc/mev
Soule Road @ Oswego Road	0.57 acc/mev	0.53 acc/mev
NYS Route 31 Midblock	1.09 acc/mvm	3.46 acc/mvm
Verplank Road Midblock	2.27 acc/mvm	2.27 acc/mvm
Oswego Road Midblock	1.10 acc/mvm	3.46 acc/mvm
Soule Road Midblock	1.38 acc/mvm	2.32 acc/mvm
Morgan Road Midblock	2.11 acc/mvm	2.32 acc/mvm
Henry Clay Boulevard Midblock	0.63 acc/mvm	2.32 acc/mvm

Caughdenoy Road Midblock	3.14 acc/mvm	2.32 acc/mvm

Acc/mev = Accidents per million entering vehicles
Acc/mvm = Accidents per million vehicle-miles