IoT Advisory Board Meeting #1

Target Outcomes

IoT Advisory Board Meeting # 1 Outcomes

- Understanding of advisory board goals, charter, and the operating guidelines
- Know your board members and NIST team
- Consensus on report approach, framework, and outline; content/topic area roles and responsibilities
- Initial identification of potential challenges, gaps, opportunities on the specific topic areas identified in charter
- Report content writing assignments
- Agenda topic items for Meeting 2

IoT Advisory Board Report Outline - Draft

Report may be done in Word format, but using this ppt format just for illustrative purposes showing what content and how it may look in final report

IoTAB and IoT FWG alignment

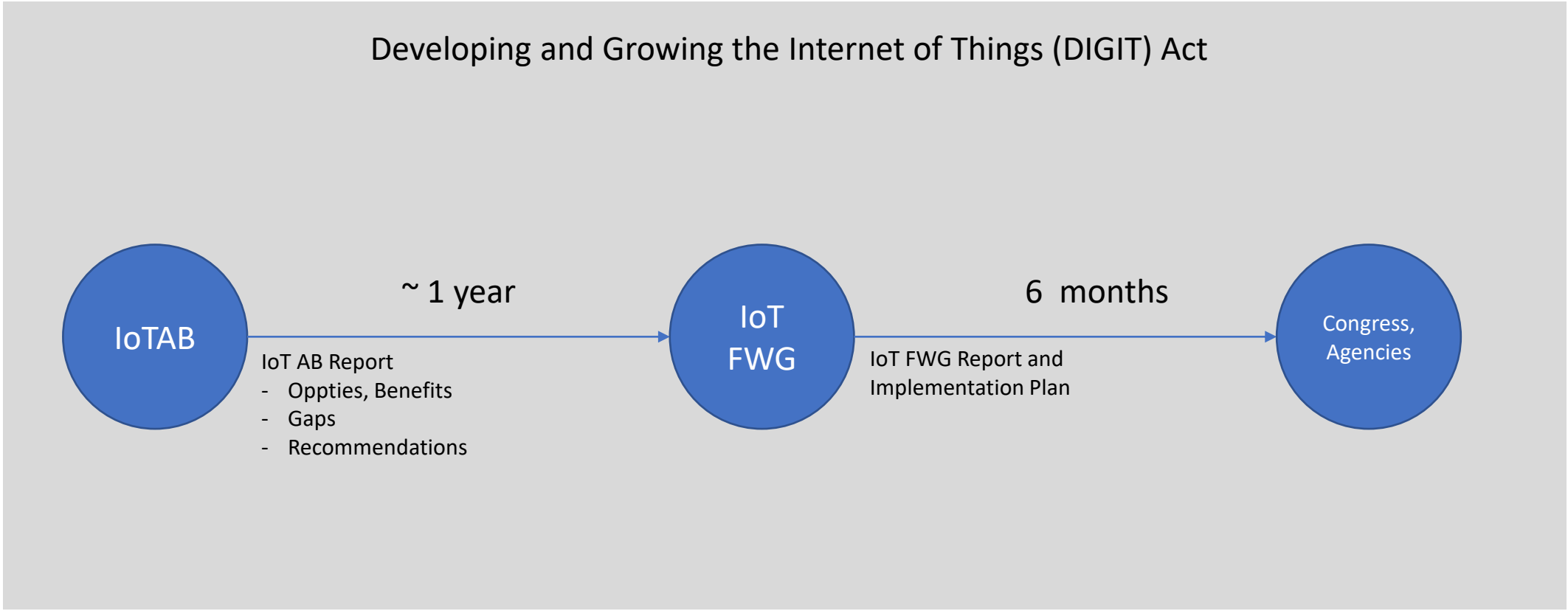
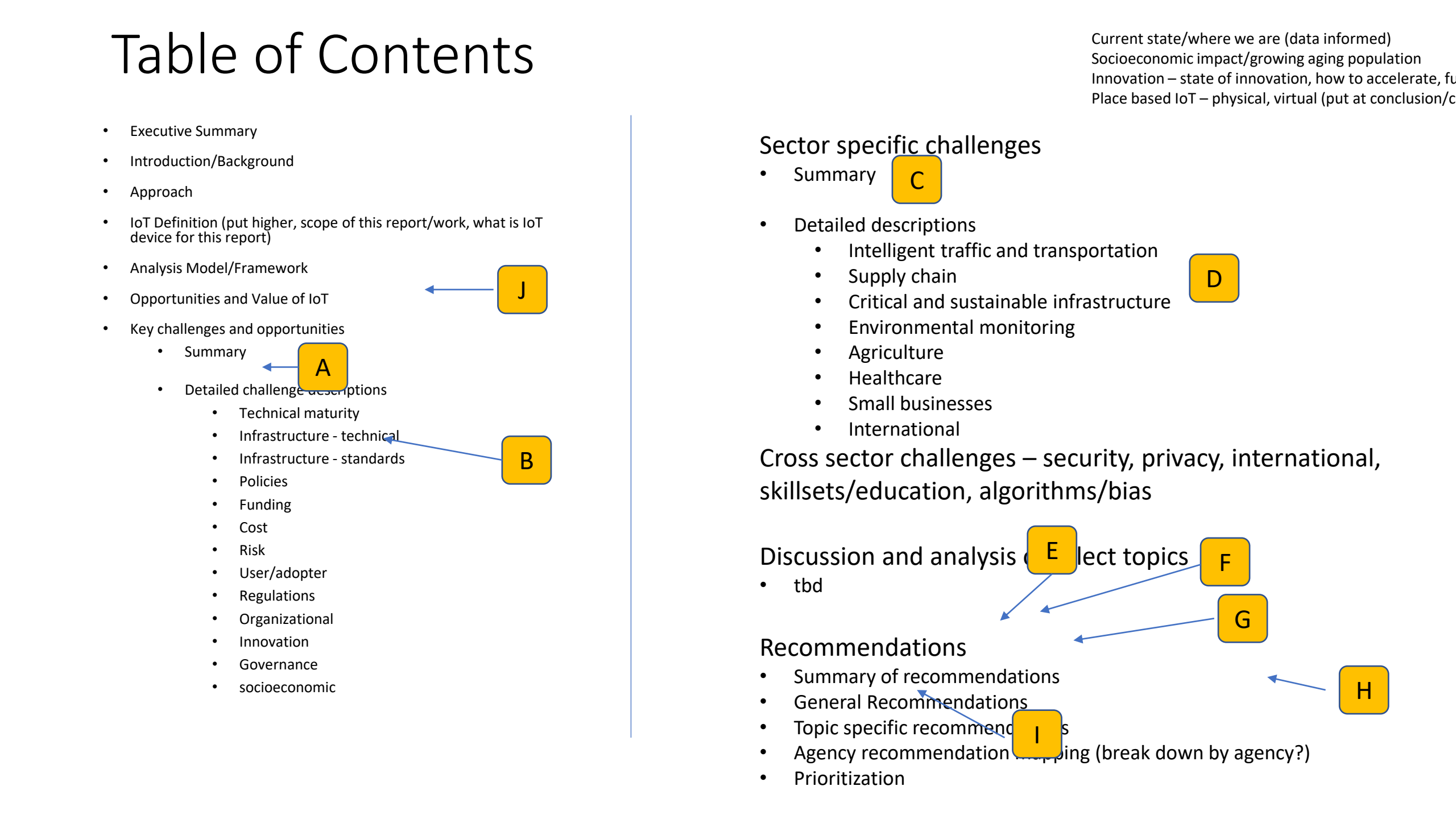


Table of Contents

Current state/where we are (data informed)
Socioeconomic impact/growing aging population
Innovation – state of innovation, how to accelerate, fu
Place based IoT – physical, virtual (put at conclusion/c



Analysis Model/Framework for capturing and classifying challenges

J

Category	Develop	Adoption/Deployment	Operate/Use
Technical maturity			
Infrastructure - technical			
Infrastructure - standards			
Policies			
Funding			
Cost			
Risk			
User/adopter			
Regulations			
Organizational			
Innovation			
Governance			
Commerce/trade			
Intellectual property			
Safety			
Accessibilty, inclusion, equity			

The gaps and challenges will likely fall into one or more of these categories. There may be other categories, and we can add them as feedback comes in.

Development, Adoption and Operation/Use are parts of the IoT lifecycle.

Foundation means that the gap or challenge is an essential one.

We expect each industry area to have some similar challenges, and some industry specific ones. We will capture them in this framework.

Key challenges – overall

A

- Description
- Summary table

This is a high level table that shows, at a glance, all the key challenges. The more detailed information is shown in the next page for each challenge.

Challenge Category	Challenge	Description	Impact severity	Industries impacted	Timeframe to act
			Hi, med, low	All industries	now
				Mfg, healthcare	5 years

Challenge categories
Technical maturity, Infrastructure – technical, Infrastructure – standards, Policies, Funding, Cost, Risk, User/adopter, Regulations, Organizational, Innovation, Governance

Key challenges - Technical maturity

B

Technical maturity challenge #1

- Description
- Impact
- Industries impacted
- Timeframe to act

We expect that there will be an industry flavor to these challenges. We may potentially create one that is industry specific, as it makes sense.

Sidebar
Real life example showing impact of this challenge

Key challenges – topic specific C

- Description
- Summary table

Challenge Category	Challenge	Description	Impact severity	Industries impacted	Timeframe to act
			Hi, med, low	All industries	now
				Mfg, healthcare	5 years

Topic categories
Intelligent traffic, agriculture, healthcare, environmental monitoring, supply chain, small business, international

Key challenges – topic specific: Healthcare D

Healthcare IoT challenge #1

- Description
- Impact
- Industries impacted
- Timeframe to act

Sidebar
Real life example showing impact of this challenge

Recommendations - summary

E

- Description
- Summary table

Recommendation	Description	Challenge Category and challenges addressed	Industries impacted	Topic areas impacted	Timeframe to act	Agencies impacted

Recommendations – general F

General recommendation #1

- Description of recommendation
- Value/benefits
- Potential issues in implementing recommendation to be aware of
- Challenges and challenge categories addressed
- Industries impacted
- Topic areas impacted
- Timeframe to act
- Agencies impacted

Sidebar
Maybe some discussion, or real life impact if this recommendation were to be implemented

Or maybe some example of what this could look like if implemented

Recommendations – topic specific G

Topic specific recommendation #1 for topic area 1

- Description of recommendation
- Value/benefits
- Potential issues in implementing recommendation to be aware of
- Challenges and challenge categories addressed
- Industries impacted
- Topic areas impacted
- Timeframe to act
- Agencies impacted

Sidebar
Maybe some discussion, or real life impact if this recommendation were to be implemented

Or maybe some example of what this could look like if implemented

Recommendations – agency mapping

H

- Agency #1

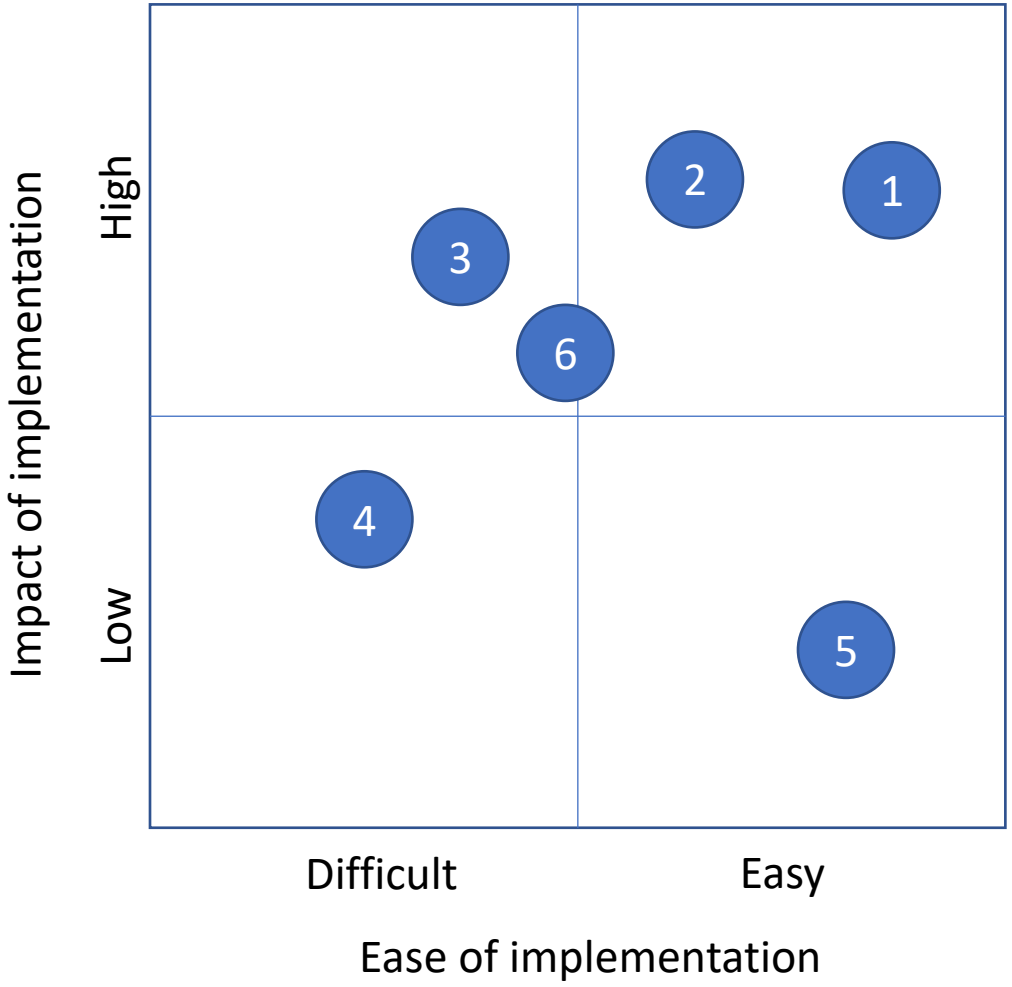
Recommendation	Description	Challenge Category and challenges addressed	Industries impacted	Topic areas impacted	Timeframe to act

Just mapping of recommendations to agencies, so each agency would have a list of the recommendations relevant to them

Recommendations – prioritization

Recommendations

1. Recommendation 1 name
2. Recommendation 2 name
3. Recommendation 3 name
4. Recommendation 4 name
5. Recommendation 5 name
6. Recommendation 6 name



Topic Specific Discussions

Day 2: 11:15 am to 3:15 pm EST

Discussion topics

- Smart traffic and transit technologies [Nicole, Steve, TomK, Benson]
  traffic and traffic management systems and vehicle technologies, including electric and autonomous vehicles (trucks, cars, and others used for transportation
- Augmented logistics and supply chains [Robby, Steve, TomK, Ann]
  those activities involved in supply chain and logistics including freight transport, logistics, warehousing, distribution, etc.
- Sustainable and critical infrastructure [Arman, Benson, Nicole, Steve, TomK]
  refers to infrastructure (roads, rail, transit, buildings, broadband, waterways, energy/grid, etc.) that is used to support the needs of a growing population while being environmentally and financially sustainable, operationally scalable and resilient against a number of future threats like climate change, disasters, economic and others
- Precision agriculture [Arman (energy), TomK, Ranveer]
  crop farming, livestock, greenhouse and indoor farming, aquaculture and associated activities
- Environmental monitoring [Arman, Ranveer]
  Broadly refers to air, water, soil/land, forests, energy, etc.
- Public safety [Nicole]
  refers to the prevention, detection, mitigation, response and recovery to natural and manmade incidents and events, such as fires, disasters, pandemic, etc.
- Health care [Ann]
  refers to patient physical and mental health care related topics, from wellness, prevention to recovery, and other related activities

What are the opportunities for IoT and benefits it brings?

- How do these impact small businesses and international trade?

What are the barriers hindering IoT development, adoption and operation?

- How does this impact small businesses and international trade?

What are some potential recommendations?

Who else should we consult or speak to us?

Who wants to write about this?

Analysis Model/Framework for capturing and classifying challenges

Category	Develop	Adoption/Deployment	Operate/Use
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Organizational			
Innovation			
Governance			
Commerce/trade			
Intellectual property			
Safety			
Accessibilty, inclusion, equity			

Closing and Wrap Up

Day 2: 4:15 pm to 5 pm EST

Key Takeaways – Day 1

- tbd

Key Takeaways – Day 2

- tbd

Actions – Day 1

Action	Who	When

Actions – Day 2

Action	Who	When

Meeting #2 agenda items (proposed)

- tbd