	Recomm	andations								· · · · ·	of Fladiese									ndustry Findings (if Spec	offic are explicit her		
Theme	Key Recommendation	Enabling Recommendation	Key Words	Industry has slow adoption	Lack of national coordination	Hinderance of innovation	Lack of Equity & Opportunities	Significant Barriers for Small businesses	Startups that drive new technology	Requires new business models / platforms to scale	Interoperability Challenge	Connectivity Challenges	Lack of Trust	Al critical to unlocking value of IoT	Insufficient people / skills	Business Ecosystem partnerships Needed for solutions	Convergence of Al /loT	Agriculture: slow adoption	Communities/ Infrastructure: limited slow to develop	Transporation: Analytics needed to improve	Healthcare: Challenges to transform	Environmental / Sustainability	Public Safety
LEADERSHIP	Key Recommendation KR1.1: Establish a strategic national approach for taking full advantage of the opportunity presented by the IoT.		Strategic national approach	x	x	x	х		x	х				х	x	x							
LEADERSHIP		Enabling Recommendation ER1.1.1: Strongly consider including IoT in the federal critical and emerging technology list.	emerging technology list (& IoT maturity)			×				x						×							
LEADERSHIP		Enabling Recommendation ER1.1.2: Further improve and elevate inter- agency coordination.	inter-agency coordination		x					х					x								
LEADERSHIP		Enabling Recommendation ER1.1.3: Fully fund existing IoT research, development, deployment and demonstrations.	fully fund research and dev	х		х	х		x							х							
LEADERSHIP		Enabling Recommendation ER1.1.4: Upgrade legacy federally-owned or operated loT infrastructure that is integrated into government facilities, assets, and operations. (Updated)	upgrade legacy infrastructure	x						x									х				
LEADERSHIP		Enabling Recommendation ER1.1.5: Specify and use, for federally-funded projects, IoT technologies and applications that are energy efficient, sustainable, and "smart".	specify and use IoT technologies in federal projects	x		x	x		x				x			x	x						
LEADERSHIP		Enabling Recommendation ER1.1.6: Continue to support and fund technology research, through industry, university and its national labs, to further advance and accelerate the development of loT technologies and its enabling infrastructure.	fund research and develop technologies	x		x		x	х		x			x		x							
LEADERSHIP		Enabling Recommendation ER1.1.7: Lead the way in facilitating IoT adoption promotion by adopting IoT technologies and systems for its own internal operations and needs. (New)	lead way in adoption and promotion of IoT in existing operations	x		x				х				x		x							
LEADERSHIP	Key Recommendation KR1.2: Accelerate IoT technology adoption as well as manufacturing for small businesses and startup organizations. This can be done via policies, procedures, and funding methods that specifically target them.		Acceleration of adoption	х		x		x		х					x	x							
LEADERSHIP		Enabling Recommendation ER1.2.1: Accelerate adoption of IoT technologies manufactured by small business and startup organizations through targeted Federal Government programs, policies, procedures, and funding methods.	policies, procedures, funding to accelerate adoption	x		x		x		x					x	x							
LEADERSHIP		Enabling Recommendation ER1.2.2: Accelerate the adoption of IoT technologies manufactured by small business and startup organizations.	focus on startup organizations					х	x	х					x								
LEADERSHIP	Key Recommendation KR1.3: Promote international collaboration in IoT adoption across global supply chains to share knowledge, best practices, and resources.		supply chain		x	x				x	×		,	,	x	х							
LEADERSHIP		Enabling Recommendation ER1.3.1: Create internationally-compatible data minimization guidance related to loT devices, aligning with the NIST Privacy Framework and NIST Cybersecurity Framework principles.	specific data minimization guidance			x				x	x		x										
MODERNIZE	Key Recommendation KR2.1: Promote collaborative development across industries to adopt existing industry standards and protocols.			x							×		x		x	x							
MODERNIZE		Enabling Recommendation ER2.1.1: Advocate for the implementation and adoption of interoperable data standards for public safety IoT.	Interoperable standard for public safety	x							×												х
MODERNIZE		Enabling Recommendation ER2.1.2: Promote and, if necessary, develop a protocol for data exchange standards for IoMT (Internet of Medical Things) for interoperability, and promote the adoption of these standards.	data exchange interoperability and standards IoMT	х							x										x		
MODERNIZE		Enabling Recommendation ER2.1.3: Promote the development and use of standards for supply chain logistics, traceability, and assurance.	standards for supply chain / logistics	х						х	x				x	х							
MODERNIZE		Enabling Recommendation ER2.1.4: Promote tandards and protocols for IoT technology in supply chain management to provide assurance of interoperability, reliability, and security across various IoT systems and devices.	standards for ict technology in supply chain management	х							х		x		х	х							

	Recomn	nendations		1						General	Findings							1		ndustry Findings (if Spe	cific are explicit her	e)	
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MODERNIZE	Key Recommendation KR2.2: Establish methods to foster interoperability for ioT technology to the greatest extent possible, through the use of consistent models, protocols, application interfaces, and schemas. (Updated)		interoperability		х	x		businesses		scale	х					solutions X			develop				
MODERNIZE		Enabling Recommendation ER2.2.1: Facilitate interoperability through the development of a consistent data taxonomy for the sharing and exchange of data collected from IoT and non-IoT sources.	data taxonomy for exchanging data collected		x	x					x					x							
MODERNIZE		Enabling Recommendation ER2.2.3: Promote and adopt industry led standards, guidelines, and protocols for minimum baseline interoperability for IoT technologies to the greatest extent possible.	minimum baseline interoperability for technologies		х	х					x					x							
MODERNIZE	Key Recommendation KR2.3: Expand and improve programs that ensure sufficient availability, reliability and connectivity for IoT in all areas of the			×	x	x	×	x		x		x		x		x	,						
MODERNIZE	Sound to	Enabling Recommendation ER2.3.1: Promote continued U.S. leadership on spectrum policy by continuing to make licensed and unlicensed spectrum available via spectrum sharing, repurposing underutilized federal spectrum and spectrum auctions.	spectrum policy	х	x	х				x		x				x		x	х				
MODERNIZE		Enabling Recommendation ER2.3.2: Increase funding and accelerate implementation of broadband deployment across rural America. Enabling Recommendation ER2.3.3:	funding of broadband deployment in rural	х		х	х	х				х		х				х	х			х	
MODERNIZE		Actively promote and support the adoption of satellite narrowband IoT systems, with the alm of improving connectivity, data collection, and decision-making in rural and remote areas, resulting in economic growth.	sat narrowband IoT	x		x		x				x		x					x				
TRUST	Key Recommendation KR3.1: Provide specific and consistent cybersecurity guidance for IoT providers and adopters to ensure secure operations	Will the state of		х	x	х		x	x	x		х	х		x	х	,						
TRUST	in a whole-of-covernment approach.	Enabling Recommendation ER3.1.1: Strengthen cybersecurity measures focused on lot across supply chain networks to address concerns around data privacy, security, confidentiality, trust, and potential risks associated with increased connectivity and interdecendence of lot ovstems.	cyber across supply chain concerns	x	x			x				x	x			x							
TRUST		Enabling Recommendation ER3.1.2: Consider additional ways to highlight those vulnerabilities most likely to be applicable to IoT product developers.	guidance to IoT product developers		x			х					х		х								
TRUST		Enabling Recommendation ER3.1.3: Accelerate the promotion and adoption of procedures and methods to make the electric grid enabled by IoT more	electric grid more reliabile			х			x			х	х						x				
TRUST		reliable and resilient.  Enabling Recommendation ER3.1.4: Support domestic IoT cybersecurity labeling initiatives by establishing incentives for manufacturers to	incentivize cyber labeling initiatives for manufacturers	х	х			х		х			х										
TRUST		participate.  Enabling Recommendation ER3.1.5:  Congress must ensure adequate and continuing funding for the Cyber Trust Mark consumer education campaign.	funding for CyberTrustMark campaign	х	х			х					х										
TRUST		Enabling Recommendation ER3.1.6: Establish appropriate U.S. representation regarding international harmonization of IoT cybersecurity programs and requirements as such programs are established for domestic	International harmonization of IoT cyber programs & requirements cross sector	x	х	х		x					x	x									
TRUST		market sectors.  Enabling Recommendation  ER3.1.7: Recognize and promote existing standards and conformity assessment schemes that facilitate cybersecurity in industrial ioT applications.	promote existing standards and schemes		х	х		х					х										
TRUST	Key Recommendation KR3.2: Congress should pass comprehensive federal privacy legislation.	Enabling Recommendation ER3.2.1:		х		х		ı		х			x		ı	I							
TRUST	Key Recommendation KR3.3: The	Congress should include toT in proposed comprehensive privacy lesislation.	Include IoT in proposed privacy legislation	х		x				x			х				L						
TRUST	Key Recommendation KR3.3: The White House and Congress should facilitate/support the development of a Data and Privacy Policy Framework.	Enabling Recommendation ER3.3.1:	Data an Privacy Policy Framework	х	х						х	1	х		l	1	ı						
TRUST		Promote "Privacy by Design" in IoT device development, deployment, and implementation. Enabling Recommendation ER3.3.2:	promote privacy by design in IoT lifecycle third party data sharing / device data		х						х		х										
TRUST		Establish clear policies for third-party data sharing and IoT device data use. Enabling Recommendation ER3.3.3:	use	х	х								Х										
TRUST		Encourage the use of plain language in IoT privacy policies. Enabling Recommendation ER3.3.4:	plain language in policies	х	х								х										<u> </u>
TRUST		Develop and implement privacy transparency mechanisms. Enabling Recommendation ER3.3.5:	privacy transparency mechanisms	х	х								х										1
TRUST		Endorse universal opt-out signals for IoT devices and companion apps. Enabling Recommendation ER3.3.6:	universal opt-out signals for IoT devices/apps	х	х								х										
TRUST		Require IoT Privacy information on new car automobile "Monroney Stickers". Enabling Recommendation ER3.3.7:	IoT privacy on automobile stickers	х									х							х			
TRUST		Enabling Recommendation ER3.3.7: Add "Location Tracking Enabled" notice to U.S. E-labeled IoT devices. (Update pending) Enabling Recommendation ER3.3.8:	add "location Enabled" notice to IoT devices	х									х										
TRUST		Promote the use, development, and implementation of Privacy-Enhancing Technologies (PETs) in IoT systems.	Promote use of PETs in IoT systems	х							x		x										

	Perama	nandations									al Findings									ndustry Findings (if Spe	wific are evelicit be	ral .	
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TRUST		Enabling Recommendation ER3.3.9: Follow NIST sanitization standards for government automobiles before resale, and encourage NIST sanitization standards for automobiles before resale	santiziation standards for government resale of automobiles	x							x		x							х			
TRUST	Key Recommendation KR3.4: Support trusted IoT architectures and infrastructure that enable supply chain provenance, and traceability of IoT systems starting from chip design and manufacturine. (Updated)			х	x		,	,	,	x	,		х	•	•	х	,						
TRUST		Enabling Recommendation ER3.4.1: Incentivize trusted multi-stakeholder alliances and collaboration networks to speed development and adoption of connected end-to-end IoT solutions. (Updated)	incentivize stakeholders and speed adoption end to end	х	x					x			x			x							
TRUST		Enabling Recommendation ER3.4.2: Promote collaborative IoT platforms that align stakeholder business incentives and encourage businesses to work together, fostering innovation, efficiency, and competitiveness.	promote collaborative IoT platfroms	x	x					х			x			х							
TRUST		(Undated)  Enabling Recommendation ER3.4.3: Encourage trusted digital twins and digital threads for accelerating IoT adoption across supply chains and IoT application markets. (Updated)	digital twins and threads across markets	х	х					х			х			х							
TRUST		Enabling Recommendation ER3.4.4: Facilitate the creation of IoT business ecosystems that enable new business expected and revenue streams. (Updated)	creation of ecosystems to enable models and revenue	х	х					х			x			х							
TRUST		Enabling Recommendation ER3.4.5: Promote consistent levels of IoT device hardware and software identity documentation information included in trusted digital threads for Software IoT supply chains. (Updated)	consistent levels of IoT documentation in digital threads	х	х					х			x			х							
WORKFORCE	Key Recommendation KR4.1: Integrate the needs of the future IoT workforce into existing initiatives and programs with industry, academia and state and local government efforts. (Updated)			x	x		x	x							x								
WORKFORCE		Enabling Recommendation ER4.1.1: Review the National Cyber Workforce and Education Strategy and align and integrate any special or unique needs and considerations of the IoT workforce (Undated)	Align and integrate workforce needs to strategy	х	x		x								x								
WORKFORCE		workforce. (Undated) Enabling Recommendation ER4.1.2: Collaborate with industry, academia, and state and local government to create an IoT trained workforce embedded in target high priority industry sectors. (Updated)	collaborate and create workforce	x	х		×	x							x								
WORKFORCE		Enabling Recommendation ER4.1.3: Collaborate with industry, academia, state and local governments and private investors to create and place workforce in industries and areas of opportunity. (Updated)	collaborate and place workforce in areas of opportunity	x			x	х							x								
WORKFORCE		Enabling Recommendation ER4.1.4: Establish "student loan forgiveness" programs in exchange for providing critical emerging technology (IoT, data science, cybersecurity, etc.) skills to municipalities and agencies.	student loan forgiveness programs				×								x								
ADOPTION	Key Recommendation KR5.1: Consider new financial models for sustaining and supporting programs when considering IoT project feasibility.			x		х	x	х															
ADOPTION		Enabling Recommendation ERS.1.1: Encourage other financial or funding models to help adopting organizations to sustain and support IoT projects. Enabling Recommendation ERS.1.2:	financial for funding models to sustain projects	x		х		х															
ADOPTION	Van Daniel and Albert	Develop programs and grants to help underserved and less developed communities benefit from IoT adoption.	program and grants to underserved	х			х	x															
ADOPTION	Key Recommendation KR5.2: Develop a comprehensive Agricultural IoT Strategy.			х	х	х	,		х	х	х	х				х		х					
ADOPTION		Enabling Recommendation ERS.2.1: The government should consider fully funding the deployment of a "farm of the future" setup in representative universities nationwide. This nationwide test-farm IoT network should span different forms of agriculture, including, but not limited to broadszer, borticulture, livestock, and aquaculture. Enabling Recommendation ERS.2.2:	farm of future	x		x			x	x		x				х		x					
ADOPTION		Support and promote industry and Standards Development Organization (SDO) efforts to address interoperability of agricultural systems	interoperability of agriculture machines			х					×	x						x					
ADOPTION		and machinery.  Enabling Recommendation ER5.2.3: Facilitate small farm/ranch adoption of loT technologies.	small farm/ranch adoption of IoT			х	х											х					
ADOPTION		Enabling Recommendation ERS.2.4: Support enactment of federal "right to repair" legislation to address the inability of agricultural producers to service their smart equipment.	federal right to repair legislation to address instability			х				х			x					х					
ADOPTION	Key Recommendation KR5.3: The	Enabling Recommendation ERS.2.3: Provide overarching regulatory guidance for the drone industry. (Updated)	provide overarching drone guidance		х	х					х							х			<u></u>		
ADOPTION	government should implement specific actions to further promote IoT adoption through smart communities.	Enabling Recommendation ERS.3.1:		х	x	x				x	х			l		х	ı		×	ı		I	
ADOPTION		The government should facilitate and support the development and use of smart community and "loT-related sustainable infrastructure" reference models.  Enabling Recommendation ERS.3.2:	smart community infrastructure reference models	х		x				х	х								х				
ADOPTION		Develop Smart Community and Sustainability Extension Partnerships (SCSEP)	partnerships						x	x						x			х				

	Recomm	endations								General	Findings								Ir	dustry Findings (if Spec	ific are explicit here	2)	
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ADOPTION		Enabling Recommendation ERS.3.3: The government should facilitate opportunities for adoption and equity of benefits of IoT and smart technologies for local communities.	faciliate opportunities and equity of benefits for local communities		х		х												х				
ADOPTION		Enabling Recommendation ER5.3.4: Facilitate smart community opportunities and loT adoption for rural communities that have broadband infrastructure, have received broadband infrastructure funding or have completed broadband infrastructure build-outs.	broadband infrastructure buildout	x					x			x							х				
ADOPTION		Enabling Recommendation ERS.3.5: Support and promote industry and SDO efforts to address interoperability of smart communities (including smart buildings, energy and utilities, traffic)	interoperability of smart communities cross sector	х	х						x							х	x	x	х	x	х
ADOPTION		Enabling Recommendation ERS.3.6: Facilitate small to medium city adoption of smart community technologies. Enabling Recommendation ERS.3.7:	small to medium city adoption of smart community	х				х											х				
ADOPTION		Enabling Recommendation ER5.3.7: Facilitate equity in realization of smart community benefits.	equity in community benefits				х	x											x				
ADOPTION	Key Recommendation KR5.4: Promote IoT adoption that will improve public safety.				x		х	х					х										х
ADOPTION		Enabling Recommendation KR5.4.1: Create a stockpile of public safety IoT devices that is available for immediate access. (Revision pending)	stockpile		х																		х
ADOPTION		Enabling Recommendation KR5.4.2: Include privacy and data usage policies in federally-funded public safety and smart community projects that use IoT	privacy and data use policies in fed funded public safety / cmm projects										х						x				x
ADOPTION		technologies.  Enabling Recommendation KRS.4.3: Include IoT considerations (including IoT adoption and utilization plans) in federal procurements that support public safety applications.	iot adoption considerations in procurement	х		х							х										х
ADOPTION		Enabling Recommendation KR5.4.4: Create a program that enables local communities to purchase IoT systems or IoT enabled systems for public	program that enables local communities to purchase IoT systems	х			х	х															х
ADOPTION	Key Recommendation KRS.5: Promote IoT adoption in the health care industry.	safety applications.		x	x	х	х					x	×	×	x	х	1		'		х		
ADOPTION		Enabling Recommendation ERS.5.1: Promote loMT as an enterprise priority, including to healthcare facilities' leadership teams.	Promote IoMT as enterprise prioriity to leadership teams	x												x					×		
ADOPTION		Enabling Recommendation ERS.5.2: Facilitate cybersecurity in IoT in smart medical devices and equipment, including wearables, in-home devices, community IoT-related systems, and a continuum of care.	cyber in IoT in healthcare devices	х	x								x								x		
ADOPTION		Enabling Recommendation ERS.5.3: Facilitate and support the use and adoption of healthcare IoT in rural communities.	use and adoption of healthcare of IoT in rural	х	х		х					х									x		
ADOPTION		Enabling Recommendation ERS.5.4: Facilitate the adoption of Al in IoT in healthcare through improved Al research, development and workforce improvement.	Al in IoT healthcare research and workforce	x										x	x						х		
ADOPTION		Enabling Recommendation ERS.5.5: Enact HIPAA-like protection for users' medical data in mobile applications and IoT devices.	HIPAA like protection for users' medical data in mobile/IoT devices			х							х								х		
ADOPTION	Key Recommendation KR5.6: Promote IoT adoption that will improve sustainability and environmental monitoring.			х	х	х			x	×				х		x						x	
ADOPTION		Enabling Recommendation ERS.6.1.: Support development of IoT environmental data repositories to better enable open and available data. (Needs discussion) Enabling Recommendation ERS.6.2:	support development of IoT data repositories keeping data open/avail	х		x			x							x						x	
ADOPTION		Facilitate and support the research, development and deployment of low cost Air Quality sensors.	research/dev of low cost air quality sensors	x	x				x	x												x	
ADOPTION		Enabling Recommendation ERS.6.3: Implement a nationwide loT-based Water Monitoring Infrastructure) to expand the nationwide water monitoring system, including water reatment facilities. Enabling Recommendation ERS.6.5:	imp nationwide IoT based water monitoring infrastructure			х								x		х						x	
ADOPTION		Facilitate and promote the use and integration of ioT technologies to complement and support wide area environmental situational awareness capabilities to monitor and inform on a variety of environmental conditions and hazards in environmentally	promote use of IoT technologies to complement wide area situational awareness capabilities for hazards	х	x	x			x					x		x						x	
ADOPTION	Key Recommendation KRS.7: Promote IoT adoption in Smart Transit and Transportation.	sensitive areas.		х	x			х		'			'	'			'		'	х			
ADOPTION		Enabling Recommendation ERS.7.1: Promote development and adoption of policies, procedures and funding methods that can accelerate the adoption of smart, connected, and electrified transportation technologies.	policies for smart transport	x	x			x												x			
ECONOMY	Key Recommendation KR6.1: Monitor and evaluate progress of IoT adoption for supply chain logistics.			х	х				x				'	'		x	'						
ECONOMY		Enabling Recommendation ER6.1.1: Establish and provide financial incentives to encourage businesses to adopt IoT technologies in their supply chain operations by reducing the initial investment costs and perceived risks associated with the implementation of IoT constitute. (Rest posed)	financial incervitives to encourage businesses	x	x				x							x							
ECONOMY		IoT solutions. (Restored)  Enabling Recommendation ER6.1.2: Apply an appropriate mix of policies, incentives, and requirements to support sustainable and scalable growth in the domestic IoT manufacturing supply chain. (Restored)	mix of policies incenvitives and req to support sustainable IoT supply chain	х	х											x							

	Peromm	ondations								General	Fladiese								i.	dustry Findings (if Spec	rific are explicit here		
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ECONOMY	Key Recommendation KR6.2: Facilitate public-private partnerships (PPPs) focused on loT adoption to facilitate collaboration and knowledge sharing between government agencies, businesses, technology providers, and arademia			×				x	x	x						x							
ECONOMY		Enabling Recommendation ER6.2.1 Foster or chestrated Public-Private Partnerships (PPPs) promoting network effects among connected enterprises and across supply chains.	PPPs					×		x						x							
ECONOMY		Enabling Recommendation ER6.2.2: Encourage digital infrastructure initiatives to the digital transformation	digital infrastructure incenvitives	х					х	x						х							
ECONOMY		of enterprise business processes.  Enabling Recommendation ER6.2.3:  Promote the enablement and use of trusted digital threads, trusted digital marketplaces and platform-based business ecosystems.	promote digital threads and marketplaces	x						x						x							
ECONOMY	Key Recommendation KR6.3: The government should actively promote and support the adoption of Al applications to improve decision- making, optimize resource utilization, and enhance productivity. (Updated)			х		х				x				х									
ECONOMY		Enabling Recommendation ER6.3.1: The government should promote trusted Al-10 platforms across circular supply chains and ecosystems to improve transparency and sustainability and drive economic arowth.	promote trusted Al-IoT platforms for sustainability	x		x				x				x								х	
PARKING LOT																							
PARKING LOT	Key Recommendation KR2.1: The government should foster policies that encourage responsible and equitable sharing of IoT data and thereby drive economic growth, societal benefits, and sustainability.																						
PARKING LOT		Enabling Recommendation ER2.1.1: The government should establish templates or best practices for clear and robust corporate policies regarding data sharing, usage, and licensing among parties in the lot																					
PARKING LOT		Enabling Recommendation ER2.1.2: The government should partner with industry and collaborate with industry and collaborate with international allies to develop and support comprehensive data sharing policies that stimulate economic growth, societal benefits, and sustainability.																					
PARKING LOT		Enabling Recommendation ER2.1.3: The government should establish data repositories for privately collected data.																					
PARKING LOT																							
PARKING LOT	Key Recommendation KR2.2: The government should establish methods to foster interoperability for IoT technology, including through the use of consistent models, protocols, application interfaces, and schemas.																						
PARKING LOT		Enabling Recommendation ER2.2.1: The government should work with various organizations to facilitate interoperability through the development of a consistent data taxonomy for the sharing and exchange of data collected from ioT and non-ioT sources.																					
PARKING LOT		and non-toT sources.  Enabling Recommendation ER2.2.2: The government should support research and industry-led standards in areas such as telematics and sensor technologies for automated vehicles.																					
PARKING LOT		nechologies for automated whites.  (Eabling Recommedation RE2. 22: The government should promote and adopt industry led standards, guidelines, and protocols for minimum baseline intergeneithing for smart transportation technologies and corresponding transportation infrastructure (i.e., sensors in roads, cameras at intersections).																					
PARKING LOT																							
PARKING LOT		Enabling Recommendation ER3.3.7: The government should add "Location Tracking Enabled" notice to U.S. E- labeled IoT devices.																					
PARKING LOT																							
PARKING LOT  PARKING LOT	Key Recommendation: The federal government should integrate the needs of the future loT workforce into existing initiatives and programs with industry, academia and state and local government efforts.																						
PARKING LOT		Enabling Recommendation 1. The government should review the National cyber workforce development strategy and align and integrate any special or unique needs and considerations of the IoT workforce																					

																				data findam life.	-W		
Theme	Recomm Key Recommendation	endations  Enabling Recommendation	Key Words	Industry has slow adoption	Lack of national coordination	Hinderance of Innovation	Lack of Equity & Opportunities	Significant Barriers for Small businesses	Startups that drive new technology	Requires new business models / platforms to scale	Interoperability Challenge	Connectivity Challenges	Lack of Trust	Al critical to unlocking value of IoT	Insufficient people / skills	Business Ecosystem partnerships Needed for solutions	Convergence of Al /loT	Agriculture: slow adoption	Communities/ Infrastructure: limited slow to develop	Transporation: Analytics needed to improve	Healthcare: Challenges to transform	Environmental / Sustainability	Public Safety
PARKING LOT		Enabling Recommendation 2. The federal government should create partnerships with industry, academia, and data and local government to create workfore around certain critical digital and non-digital shifts, including cybersurity, privacy, AJ, data science, and systems integration, etc.																					
PARKING LOT		Cabbing Economendation 1. The Interest genoment build create partnerships with industry, cachemia, cachemia, cachemia, cachemia, cachemia, cachemia, cachemia, cachemia, cachemia, cachemia, modularis set have tradisorally not significant eight latest (betw. cachemia, cachemia, cachemia, partnerships, cachemia, cachemia, generalization, cachemia, generalization, cachemia, generalization, cachemia, partnerships, white latest, etc.)																					
PARKING LOT		Enabing Recommendation ERS.1.2: The government should consider "Student loan forgiveness" programs in exchange for providing critical emerging technology (Ir), data science, cybersecurity, etc.) skills to municipalities and agencies.																					
PARKING LOT																							
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PARKING LOT		Enabling Recommendation ISS. 23: The government should peauside ensure that is sufficient overarching regulators, guidance for the fone industry. The Federal Government should also provide funding for the done industry for additional research in order that existing technical obstacles can be overcome.																					
PARKING LOT																							
PARKING LOT		Enabling Recommendation KRS.4.1: The government should create a stockpile of public safety IoT devices that is available for immediate access.																					
PARKING LOT		Enabling Recommendation ER5.6.1.:																					
PARKING LOT		The government should support development of IoT environmental data repositories to better enable open and available data.																					
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PARKING LOT  PARKING LOT	Key Recommendation KR3.4: The government should support trusted architectures and conduct a limited pilot to assess the value of trusted digital threads for provenance and traceability across the supply chain.																						
PARKING LOT		Enabling Recommendation ER3.4.1: The government should incentivite multi-stakeholder alliances and collaboration for trusted end-to-end solutions across supply chains.																					
PARKING LOT		Enabling Recommendation ER3.4.2: Support collaborative IoT platforms that align stakeholder business incentives.																					
PARKING LOT		Enabling Recommendation ER3.4.3: The government should encourage the use of digital threads for connected supply chains.																					
PARKING LOT		supply chains.  Enabling Recommendation ER3.4.4: The government should facilitate the creation of business ecosystems that enable new business models and revenue streams																					
PARKING LOT		Enabling Recommendation ER3.4.5: The government should promote consistent levels of loT device hardware and software identity documentation information included in trusted digital threads for Software loT supply chains.																					
PARKING LOT		ANNOT STRILLE.																					

	Recomm	endations								Genera	l Findings								le	dustry Findings (if Spec	ific are explicit here	2)	
Theme	Key Recommendation	Enabling Recommendation	Key Words	Industry has slow adoption	Lack of national coordination	Hinderance of innovation	Lack of Equity & Opportunities	Significant Barriers for Small businesses	Startups that drive new technology	Requires new business models / platforms to scale	Interoperability Challenge	Connectivity Challenges	Lack of Trust	Al critical to unlocking value of loT	Insufficient people / skills	Business Ecosystem partnerships Needed for solutions	Convergence of Al /loT	Agriculture: slow adoption	Communities/ Infrastructure: limited slow to develop	Transporation: Analytics needed to improve	Healthcare: Challenges to transform	Environmental / Sustainability	Public Safety
PARKING LOT		Key Recommendation KR6.2: The government should help establish and foster public-private partnerships (PPPs) focused on IoT adoption to facilitate collaboration and knowledge sharing between government agencies, businesses, technology providers, and academia.																					
PARKING LOT		Enabling Recommendation ERG 2.1 The government should foster or chestrated Public-Private Partnerships (PPPs) promoting network effects among connected enterprises and across supply chalins.																					
PARKING LOT		Enabling Recommendation ER6.2.2: The government should subsidize initiatives for digital infrastructure supporting the digital transformation of enterprise business processes including design, production, procurement, distribution.																					
PARKING LOT		Enabling Recommendation ER6.2.3: The government should promote the enablement and use of trusted digital threads, trusted digital marketplaces and platform-based business ecosystems.																					
PARKING LOT																							
PARKING LOT	Key Recommendation KR6.3: The government should actively promote and support the adoption of Al applications to improve decision- making, optimize resource utilization, and enhance productivity.																						
PARKING LOT		Enabling Recommendation ER6.3.1: The government should promote trusted AHoT platforms across circular supply chains and ecosystems to improve transparency and sustainability and drive economic growth.																					
PARKING LOT																							
PARKING LOT		Recommendation 9: The federal government should select the most appropriate mix of policies, incentives, and requirements to support sustainable and scalable growth in the domestic IoT manufacturing supply chain.																					