The recommendations below are based on the presentations made to the IoTAB regarding Data Privacy and IoT:

Andrea Amico, Privacy 4 Cars Topic - Privacy in automobiles IoTAB subgroup - privacy

Jeff Jockisch (Avantis Privacy), Colby Scullion (Avantis Privacy)
Topic - Location data privacy
IoTAB subgroup - privacy

R09 - Include IoT Privacy Information on New Car Automobile "Monroney Stickers"

- Description of recommendation to the US government:
 - a. Include IoT Privacy Information on "Monroney Stickers" for New Car
 Automobiles Sold in the US
- Justification for the recommendation:
 - Monroney Stickers already offer crucial information like fuel efficiency and safety ratings, making them a logical platform for additional disclosures
 - b. Providing IoT privacy information helps consumers make informed decisions regarding their personally identifiable information, including 1) data collection, 2) data retention, and 3) data sale
 - c. Aligns with broader initiatives to enhance consumer protection and data privacy
 - d. Addresses growing public concern about how personal data is used and shared by IoT devices in automobiles
 - e. Additional Statistics From the Racent Mozilla Automoble Privacy Report:

- 100% of the 25 car brands reviewed by The Mozilla Foundation collect personal data
- ii. 84% of car brands share or sell your data
- iii. 92% give drivers little to no control over their personal data
- iv. 68% of the car brands earn the "bad track record" ding for leaks, hacks, and breaches that threatened their drivers' privacy
- v. 0% of car brands that are part of the ALLIANCE FOR AUTOMOTIVE INNOVATION follow voluntary Consumer Protection Principles and pledges to provide consumers with privacy-preserving principles such as "data minimization," "transparency," and "choice.
- Implementation Considerations that the US government needs to consider:
 - a. Standardization Privacy Information: The language used for IoT privacy statements should be clear, concise, and standardized to prevent confusion.
 - Regulatory Alignment: Existing privacy laws must be reviewed to ensure that the sticker amendments align with current legal frameworks.
 - Periodic Updates: As IoT technologies evolve, the criteria for what must be disclosed should also be updated periodically.
- Potential implementation barriers to the US government:
 - Resistance from Automakers: Automakers may resist this change due to the costs of modifying Monroney Stickers.

- b. Consumer Education: There's a possibility that consumers may not fully understand the added IoT information.
- c. Complex Regulatory Environment: The landscape of IoT and privacy is complex, making standardization challenging.
- Possible participating agencies in the US government who could assist or champion this recommendation:
 - a. Federal Trade Commission (FTC)
 - b. National Highway Traffic Safety Administration (NHTSA)
 - c. Federal Communications Commission (FCC)\Department of Transportation (DOT)
 - d. Cybersecurity and Infrastructure Security Agency (CISA)
- Things that the US Federal government should consider when implementing this recommendation:
 - a. Automobile Information Disclosure Act of 1958, 15 U.S.C. §§ 1231–1233
 (Public Law 85-506)

R10 - Mandate NIST Sanitization Standards for Used Automobiles Before Resell

- Description of recommendation to the US government:
 - a. Before reselling, the government should require that car seller organizations adhere to NIST's media sanitization guidelines.
- Justification for the recommendation:

- Aligns with the e-Stewards Standard, supported by the Environmental Protection Agency (EPA) Recycling Program.
- Proper data sanitization can protect consumer privacy and prevent unauthorized access to sensitive information stored in modern vehicle systems.
- Implementation Considerations that the US government needs to consider:
 - a. Cost of implementation for car sellers
 - Training and awareness programs for the car sellers about NIST quidelines
 - c. Technology infrastructure required to support the sanitization processes
 - d. Monitoring and compliance mechanisms
- Potential implementation barriers to the US government:
 - Resistance from car-selling organizations due to increased operational costs
 - b. Potential technological limitations in older vehicle models
 - c. Legal challenges concerning data privacy and compliance
- Possible participating agencies in the US government who could assist or champion this recommendation:
 - a. National Institute of Standards and Technology (NIST)
 - b. Department of Transportation (DOT)
 - c. Federal Trade Commission (FTC)
 - d. Environmental Protection Agency (EPA)

- Things that the US Federal government should consider when implementing this recommendation:
 - a. Use National Cybersecurity Strategy Implementation Plan July 2013 Initiative Number: 1.1.3 Initiative Title: Increase agency use of frameworks
 and international standards to inform regulatory alignment
 - b. Use NIST Cybersecurity Framework PROTECT Secure Data 800-88 Rev.1 Guidelines for Media Sanitization
 - c. Use The EPA's Implementation (Electronics Recycling Standards: R2 and e-Stewards)

R11 - Endorse Universal Opt-Out Signals for IoT Devices and Companion Apps

- Description of recommendation to the US government:
 - a. The government should endorse adopting and recognizing Universal Opt-Out Signals for Internet of Things (IoT) devices and any associated applications.
- Justification for the recommendation:
 - a. The recommendation aims to strengthen user privacy and data protection,
 which are growing concerns in an increasingly interconnected world.

- Universal Opt-Out Signals would streamline the user experience, making it easier for consumers to manage their privacy settings across multiple IoT devices and companion apps.
- Implementation Considerations that the US government needs to consider:
 - a. The technical feasibility of implementing Universal Opt-Out Signals across a wide range of IoT devices and companion apps.
 - Costs associated with setting up the infrastructure to recognize and enforce these Opt-Out Signals.
 - Developing standardized guidelines or legislation to mandate the adoption of Universal Opt-Out Signals.
- Potential implementation barriers to the US government:
 - Resistance from IoT manufacturers and app developers who may not want to incur the cost or complexity of implementing Universal Opt-Out Signals.
 - Technological constraints in harmonizing Opt-Out Signals across diverse platforms and devices.
 - Potential legislative hurdles if this conflicts with existing data protection or privacy laws.
- Possible participating agencies in the US government who could assist or champion this recommendation:
 - a. Federal Trade Commission (FTC)
 - b. National Institute of Standards and Technology (NIST)

- c. Federal Communications Commission (FCC)
- d. Department of Commerce
- Things that the US Federal government should consider when implementing this recommendation:
 - a. Use National Cybersecurity Strategy Implementation Plan July 2013
 Initiative Number: 3.2.2 Initiative Title: Initiate a U.S. Government IoT security labeling program (Cyber Trustmark)
 - b. UOO The California Consumer Privacy Act (CCPA), as amended by the California Privacy Rights Act (CPRA) - Law Passed: January 1, 2023 -Provision Enforcement starts: June 2024
 - c. UOO Colorado Privacy Act (CPA) Law Passed: July 1, 2023 Provision Enforcement starts: July 1, 2024
 - d. UOO Connecticut Data Privacy Act (CTDPA) Law Passed: July 1, 2023 ProvisionEnforcement starts: July 1, 2024

R12 - Add "Location Tracking Enabled" notice to U.S. Cyber Trust Mark IoT devices

- Description of recommendation to the U.S. government:
 - a. Include as part of the proposed privacy transparency system for IoT devices, using the "U.S. Cyber Trust Mark", the following statement regarding the privacy of location data, if applicable: Proposed Statement for Inclusion: "Notice: Precise location tracking is enabled by default on this device."

- Justification for the recommendation:
 - a. Transparency: Consumers have a right to know if their location data is being collected and shared. This statement provides immediate and clear information regarding this aspect.
 - Informed Consent: For ethical data collection and use, consumers should be aware of what data is being collected without needing to delve into complex privacy policies.
 - c. Regulatory Alignment: This recommendation aligns with various data protection regulations advocating transparency and informed consent.
- Implementation Considerations that the US government needs to consider:
 - Standardization: The statement's wording, visibility, and placement should be standardized across all IoT devices that receive the U.S. Cyber Trust Mark.
 - b. Technical Feasibility: How will the notice be displayed? Will it be part of the physical label, on a website, or listed in an app for user awareness?
 - c. Audits and Compliance: Systems need to be in place to verify that the companies adhere to the notification requirement.
- Potential implementation barriers to the US government:
 - Industry Resistance: Manufacturers may resist the implementation due to perceived negative impacts on sales or added complexity.
 - b. Consumer Education: There is the risk that consumers may fail to understand the importance of the notice.

- c. Legal Challenges: Companies may argue that this constitutes an unfair labeling or notice burden.
- Possible participating agencies in the US government who could assist or champion this recommendation:
 - a. Federal Trade Commission (FTC)
 - b. National Institute of Standards and Technology (NIST)
 - c. Federal Communications Commission (FCC)
- Things that the US Federal government should consider when implementing this recommendation:
 - a. Use National Cybersecurity Strategy Implementation Plan July 2013 Initiative Number: 4.6.1 Initiative Title: Publish a National Cyber Workforce
 and Education Strategy