

Federal Automated Vehicle Regulation: Issues and Answers

Michael Krancer, Co-Founder & Principal, Silent Majority Strategies

Dr. Keith Naughton, Co-Founder & Principal, Silent Majority Strategies



Presenters:

Mike Krancer: Co-founder & Principal, Silent Majority Strategies

- ▶ Former Cabinet Secretary , PA Department of Environmental Protection
- ▶ Served as chief Judge and Chairman of the Pennsylvania Environmental Hearing Board
- ▶ Former Assistant General Counsel to Exelon Corporation

Keith Naughton, PhD: Co-founder & Principal, Silent Majority Strategies

- ▶ Over 20 years' experience in political strategy and communications
- ▶ Author of *Washington Gold Rush: The Competition for Congressional Earmarks*
- ▶ Contributor to *The Hill*, *San Francisco Chronicle*, *Washington Examiner*, *Pittsburgh Post-Gazette*, *RealClearPolitics*



US DOT AV Policy: Definitions

- ▶ SAE Levels 0-5: Society of Automated Engineers rating system for automation. Level 0 is no automation; Level 5 is fully automated. AVs are generally considered Level 4 or 5.
- ▶ ADS: Automated Driving System: *The computer system that operates the vehicle*
- ▶ CV: Connected Vehicle: *A vehicle wirelessly connected to a network of other vehicles and/or to remote control system.*
- ▶ V2X: Vehicle-To-X wireless connection: *Denotes wireless connection of vehicle to other vehicles (V2V), infrastructure (V2I), pedestrians (V2P)*

US DOT AV Policy: Definitions (Regulatory)

- ▶ **RFI:** Request for Information, *Federal agency requests the submission of information and suggestions regarding policy and regulation. No obligation to follow recommendations or respond to comments.*
- ▶ **ANPRM:** Advanced Notice of Proposed Rulemaking: *Initial stage in formulating new rules, with multiple questions and broad discussion of the rule/policy considered. Required to respond to salient comments. The ANPRM is an optional stage in rulemaking.*
- ▶ **NPRM:** Notice of Proposed Rulemaking: *Statutorily required step in rulemaking. Formal text of the rule is published. Required response to salient comments.*
- ▶ **SNPRM:** Supplemental Notice of Proposed Rulemaking: *Rarely used step normally taken when agency receives unexpected pushback at the NPRM stage or received significantly new information necessitating rule revision. Required response to salient comments.*
- ▶ **Final Rule:** *Agency publishes rule in final form, with effective date. No comments accepted.*
- ▶ **Petition for Exemption:** *NHTSA accepts petitions for exemption to its rules for experimental vehicles where the petitioner requests the ability to operate on public roads. Comments accepted.*

US DOT AV Policy: History

- ▶ Policy Documents: AV 1.0 (2016); 2.0 (2017); 3.0 (2018)
- ▶ Collecting Information (2018)
- ▶ RFIs: FHWA, FMCSA, FRA, FTA, NHTSA, PHMSA, DOT-OST (V2X), MARAD (2019)
- ▶ Moving to Policy Action (2019)
 - Pilot Test ANPRM (published in late 2018)
 - GM and Nuro Exemption Petitions, NHTSA
 - Removing Regulatory Barriers/Updating FMVSS, NHTSA ANPRM
 - Adopting ADS in CMVs (trucks), FMCSA ANPRM

Critical policy implication: US DOT now required to respond to comments and take policy positions on the record

US DOT AV Policy: Current Positions

- Technology Neutral
- Encourage Innovation and Development
- Reduce Regulation
- Voluntary Use of “Best Practices”
- Promote Safety
- Federal Pre-emption (includes barring additional state and local regulation)

US DOT AV Policy: Safety

Subject	Issue #1	Issue #2	Issue #3
Vehicle Safety	Update FMVSS requirements	Communicate with First Responders	Account for equipment degradation
Verification	Self-certification vs. independent testing	New testing methods: Simulation, Remote operation, etc.	
Reporting	VSSA lack of participation by key players	Differences in disclosure	Lack of robust public data

US DOT AV Policy: Data Ownership and Privacy

Subject	Factor 1	Factor 2	Factor 3
Retention	Data Preservation	Event Data Recorder Requirements	Central Data Repository
Access	Who has the right to access data?	Which data may be accessed?	Readable Data
Protections	Cybersecurity	Anonymization/De-identification	Proprietary or Open Source
Reporting	Incidents or Disengagements	Cyber/Data breaches	Definitions and/or thresholds for reporting

US DOT AV Policy: Cybersecurity

- ▶ Comments across the entire spectrum of interests: Governments, Insurers, Public Safety Advocates, RAND, Public Interest Groups, Companies
- ▶ Technology-specific: OTA updates, wireless encryption, attack surface (multiple devices and entry points), data-at-rest, remote control testing methods open to cyberattack
- ▶ Commenters: Significant risk for consumers and operators
- ▶ Commenters: Important to “design-in” cybersecurity
- ▶ Current status: No reporting requirements from US DOT
- ▶ Current status: Lack of US DOT guidance, deferring to NIST and DHS (last formal guidance: 2016)

US DOT AV Policy: Liability

- US DOT affirms delegation of liability and tort issues to the states in AV 3.0 (2018).
- Importantly, decisions by US DOT will greatly affect liability.
 - Definitions
 - Data collection and access
 - Safety certification and testing
 - Cybersecurity requirements (or lack of requirements)
 - Regulatory assumptions, i.e. superiority of technology: Is this assumption empirically proven?

US DOT AV Policy: Other Issues

- ▶ New FMVSS classes of vehicles: AV (human passengers) and/or AV (no human occupants/delivery)
- ▶ Infrastructure development: DSRC vs. C-V2X, new street and highway construction requirements, new *Manual on Uniform Traffic Control Devices*
- ▶ ADA and Title VI compliance (HMI compatibility for the disabled)
- ▶ Improved mobility and access for underserved individuals and communities
- ▶ Facilitate transition to ZEVs

US DOT AV Policy: Actions for 2020 and Beyond

- ▶ New AV 4.0 policy document
- ▶ FMVSS updating/modernization process begins
- ▶ Approval of GM and Nuro petitions with restrictions
- ▶ Update *Manual on Uniform Traffic Control Devices*
- ▶ States (and local governments) move to regulate where gaps are in federal policy
- ▶ *Continued problem of information deficit and need for objective information and analysis*

US DOT AV Policy: The Regulator's Perspective

- The Regulatory Future Is Undecided: In the world of AV, unique opportunity to influence the evolution of regulation and policy.
- Importance of precedent and early advocacy on the docket
- Regulators' Information Gap: A challenge that will never disappear.
- Regulators value credible facts and analysis.
- All regulation is political (not partisan political)
- Help me solve my problems!

US DOT AV Policy: Levelling the Playing Field

- Formal Regulatory and Commenting process is non-discriminatory: All voices are heard, and salient comments must be answered.
- Quality of arguments/evidence and credentials matter
- For Private Sector: Important partner to political lobbying
- For Public Sector: E.g. **Commissioner Jessica K. Altman, Pennsylvania Dept. of Insurance** Comments 12/2018 Re Pre-emption:
 - PADOI challenges Fed's assertion of total pre-emption and says states can go beyond Federal MVSS standards---Pre-emption turns on "normal preemption principles" and case law
 - This then raises the question: how will states deal with liability in tort action?
 - Problem of inconsistent rulings "threatens to muddy the already opaque legal landscape". Makes it difficult if not impossible to understand, quantify and insure liability risk exposure. This would retard or even choke off the industry's development
 - This problem needs to be raised in prominence in the regulatory process and solved

Silent Majority Strategies ®

Michael Krancer, Principal

mkrancer@silentmajoritystrategies.com

cell: 215-880-5644

Keith Naughton, Ph.D., Principal

knaughton@silentmajoritystrategies.com

cell: 818-288-1360