

# Workshop 4: Unmanned and Automated Vehicles



- **Lead: Nathaniel Beuse**, Associate Administrator for Vehicle Safety Research, National Highway Transportation Safety Administration
- **Melanie Boteler**, Director, Information Security and Privacy Service, FAA Office of Information and Technology
- **Susan Cabler**, Assistant Manager, Aircraft Certification Design, Manufacturing and Airworthiness Division, FAA Aircraft Certification Service
- **Chan D. Lieu**, Senior Legislative Advisor, Venable LLP



# UAS Symposium

## Unmanned and Automated Vehicles

Nat Beuse

National Highway Traffic  
Safety Administration

# Government Responsibility/Authority



## What:

Generally delegated responsibility and/or authority to issue regulations/standards for safety

## Why:

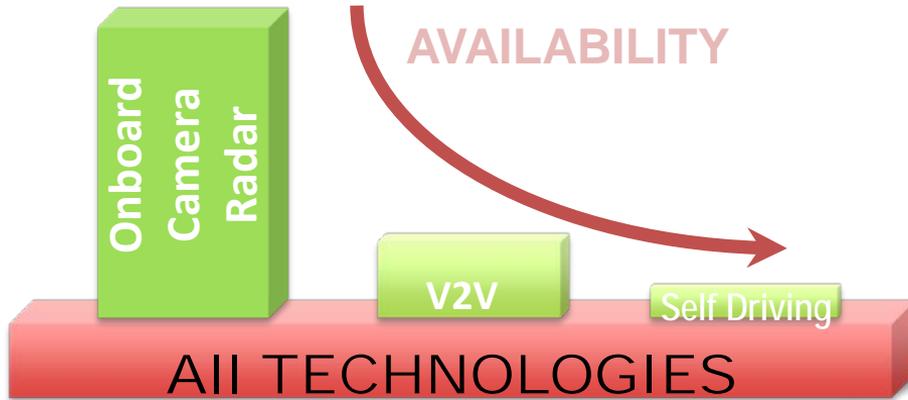
Generally

- market failures to safety
- public expectation for safety

And

for vehicles, human cost of mobility

# Vehicle Technology Roadmap



# Federal Automated Vehicles Policy



- Vehicle Performance Guidance
- Model State Policy
- Current Regulatory Tools
- Modern Regulatory Tools



**Thanks for your attention!**



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# Nathaniel Beuse, Associate Administrator for Vehicle Safety Research, National Highway Transportation Safety Administration



Mr. Nathaniel Beuse works as the Associate Administrator for Vehicle Safety Research at the National Highway Traffic Safety Administration (NHTSA). In this role, he is responsible for NHTSA's vehicle safety research activities which are focused on achieving the agency's mission of reducing fatalities and injuries caused by motor vehicle crashes. This includes developing and conducting research aimed at supporting Federal Motor Vehicle Safety Standards and consumer information programs, spurring voluntary industry actions through guidelines, and advancing the state of the art on wide variety of vehicle programs.

He is responsible for the Vehicle Research and Test Center where a significant amount of laboratory testing and analysis occur. Programs in the research organization include advanced crash avoidance technologies, vehicle-to-vehicle communications, alternative fuel and battery safety, driver information systems, vehicle dynamics, stability control, tires, vehicle braking, vehicle lighting and visibility, rollover, human injury and accommodation of driver and occupants with disabilities and other special needs. Mr. Beuse is also responsible for the establishment and conduct of new research initiatives such as vehicle automation, vehicle electronics and cybersecurity, advanced biomechanics, improved frontal crash protection, and heavy vehicle safety.



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# Melanie Boteler, Director, Information Security and Privacy Service, FAA Office of Information and Technology



Melanie E. Boteler became the Federal Aviation Administration's (FAA) Director of Information Security and Privacy Service in the Office of Finance and Management for Information and Technology Services in 2013. In this position, Ms. Boteler oversees the management of security risk through the development and delivery of end-to-end information technology security services. She brings more than 15 years of FAA experience to the position.

Ms. Boteler began her FAA career in 1997, and has worked as a computer specialist for the Information Resource Management Organization of Airway Facilities. Prior to her current executive leadership role, she also worked in the IT Division in Aviation Safety.

Ms. Boteler holds a Bachelor of Arts in economics and international relations from Bucknell University. She is a Certified Information System Security Professional. Ms. Boteler has won numerous awards including the Department of Transportation's Information Technology Security Excellence Award.



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# Susan J. M. Cabler, Assistant Manager, Aircraft Certification Division, FAA Aircraft Certification Service



Susan Cabler is currently serving as the Acting Manager of the Design, Manufacturing and Airworthiness Division of the Federal Aviation Administration (FAA) Aircraft Certification Service. Ms. Cabler previously served as the Assistant Manager of the Design, Manufacturing and Airworthiness Division and has held this position since 2003.

As the national policy office governing requirements for all aircraft certification programs, the Design, Manufacturing and Airworthiness Division is responsible for: the engineering and design aspects of 14 CFR Part 21, Certification Procedures for Products and Parts; Individual and Organizational Designee and Delegation Programs; development of technical standards, policy, guidance and regulations for NextGen communication, navigation and surveillance technologies; leadership of the Aircraft Certification Safety Management System; and the introduction of risk-based decision tools for the FAA certification workforce.



Prior to joining the FAA, Ms. Cabler had a 14-year career as a pilot in the United States Air Force. The bulk of her time was as an instructor aircraft commander in the Lockheed C 141, flying strategic and tactical airlift mission to over 60 countries. In the early 90s, she flew over 600 hours in direct support of Operations Desert Shield and Desert Storm. She has a degree in aeronautical and astronautical engineering from Purdue University.

# Chan D. Lieu, Senior Legislative Advisor, Venable LLP



Chan Lieu is a member of Venable's Legislative and Government Affairs Group who represents emerging and established automotive and technology firms. A veteran of the Legislative and Executive Branches, Mr. Lieu has significant experience in a broad range of policy and regulatory matters involving the transportation industry, data and cybersecurity, privacy, internet technologies, and other emerging technologies. He advises clients on regulatory and legislative matters associated with the future of the automotive industry, including self-driving and mobility, connectivity, and advanced driver assist systems.

Most recently, Mr. Lieu served as Director of Government Affairs, Policy and Strategic Planning at the National Highway Traffic Safety Administration (NHTSA). In this position, Mr. Lieu led NHTSA's liaison activity with Members of Congress, their staffs and various committees while advising senior leadership on pending legislation. He also managed a NHTSA team responsible for developing the agency's strategic plan and operational goals for the future of auto transportation safety.

Prior to joining NHTSA, Mr. Lieu spent eight years on the staff of the U.S. Senate Committee on Commerce, Science and Transportation as a Senior Professional Staff Member.



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