d=9' 6''
σ=.5''

σ/√n

COLLABORATE FOR AUTOMATED VEHICLE SAFETY

Join MITRE's AV Research Collaborative as we focus on critical workstreams, including:

- **Safety Risk Assessment Framework:** Create a standardized approach to sharing safety performance data by developing a common framework and best practices for collecting evidence and defining metrics.
  Developing benchmarks and best practices for translating a complex, proprietary safety risk assessment into a transparent and explainable evidence-based package for regulators, the public, and other stakeholders.

- **Rules of the Road:** Develop a framework for evaluating an AV against these rules and create an evidence package structure to demonstrate compliance.
  Verification and validation framework for dynamic driving rules including overall approach, metrics, scenarios, and interpretable evidence of compliance provides an avenue for engaging the public sector and fostering confident adoption of AVs.

- **Operations Center Assessment:** Develop an assessment methodology and establish benchmarks for operations centers for the safe operation of autonomous fleets, to include remote assistance capabilities, systems, and procedures.
  Evaluating efficiency and safety in the operation of an autonomous fleet enables operator improvement and enhances the overall safety performance and reliability of the industry.

Automated vehicles are on a path to significantly improve traffic safety, mobility, and efficiency. Greater collaboration across the AV industry will accelerate, inform, and reduce the risks of deploying automated vehicles – and increase the public's trust in AVs as an important component of the nation's transportation system.

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The AV Research Collaborative is established to complement and expand safety advancements by addressing development challenges along the path to full-scale AV deployment. Future research projects will reflect participants' collective priorities identified in partnership with industry leaders.

Why MITRE?

MITRE works in the public interest to tackle challenges affecting the nation's safety, stability, security, and well-being. With decades of expertise in transportation safety and automation, MITRE is a trusted steward of confidential information. We quantify safety through data-driven, evidence-based results and a suite of proven safety assurance capabilities—from process-based measures like safety management systems to performance-based measures derived from simulation that approximates complex and unpredictable real-world situations.

Together, we can help decisionmakers answer the question of when AVs can be acceptably safe—that is, safe enough to operate on public roads without the oversight of a human.

For more information, or to sign up for MITRE's AV Research Collaborative, please contact Michelle Michelini (mmichelini@mitre.org) and Becca Lehner (rlehner@mitre.org).

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

MITRE | SOLVING PROBLEMS FOR A SAFER WORLD®

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