

Session Topic Summary

- *Shared frameworks for testing automated vehicles streamline the process of collecting and processing data*
 - *ADS Data Acquisition & Analytics Platform (US)*
 - *CARMA CDA Simulation Platform (US)*
 - *VOICES for live, virtual, and constructed AV testing (US)*
- *Data is critical and efforts that allow organizations and stakeholders to share data will remove barriers to progress*
 - *ARCADE CSA (EU)*
- *These tools are maturing and combining to enable verification, validation, and safety assurance*
 - *HEADSTART, SUNRISE (EU)*

Key Findings and Lessons Learned

- *Collaboration. It is enabled by shared frameworks. It is necessary to work across borders of nations and companies*
- *Sharing and collaboration requires standardizations. Now there are lots of standards and more on the way. But there's still a lot of work between standards and interoperability.*
- *More harmonization in simulations would go a long way to create consensus among stakeholders*

Outcomes & Research Needs Statements

- *It will take time to assimilate and integrate all the standards and establish a common practice*
 - *Who will review the standards landscape to identify remaining gaps?*
- *Are demonstrations and proofs of concept enough to launch a tool's adoption?*
 - *Need projects with real-world roads and scenarios to further exercise and stretch these new frameworks*
- *How to get to a commonly accepted safety assurance framework?*
 - *What safety metrics and benchmarks should be used?*