Digital Corridor Initiative (DCI)

Data Collection, Quality, Validation Working Group

Joint Workshop with AASHTO Anchor States

Meeting Summary

October 9, 2026

The workshop focused on what is needed to make interstate work zone and lane closure data actionable.

Participants prioritized reliable field-status confirmation, use-case-specific timeliness and quality expectations, consistent location references, and confidence indicators. These findings will inform an MVP supporting the April 2027 corridor demonstration.

Purpose and Context

The workshop launched the DCI Coalition's Data Collection, Quality, and Validation Working Group and brought together AASHTO Anchor States, public agencies, private-sector data users and providers, and USDOT observers to identify the data elements, quality expectations, and validation approaches needed to make interstate work zone and lane closure information actionable.

The discussion supports DCI's goal of demonstrating end-to-end work zone and lane closure data exchange on at least one interstate corridor by April 2027. AASHTO is coordinating implementation across 11 interstate corridors, with broader deployment targeted for Spring 2028. The Coalition will build on existing standards and tools while addressing implementation gaps requiring public-private coordination.

Key Themes and Strategic Takeaways

1 **Ground truth drives trust and usability.**
Participants consistently emphasized the gap between planned activity and current field conditions. Active status, worker presence, lane availability, and work zone start and end locations emerged as priority information for confirming what roadway users and operators will encounter.

2 **Timeliness requirements depend on the use case.**
Safety and in-vehicle applications may require low latency, while routing, transit, freight, and planning can operate on longer horizons. Refresh expectations should reflect the decision being supported.

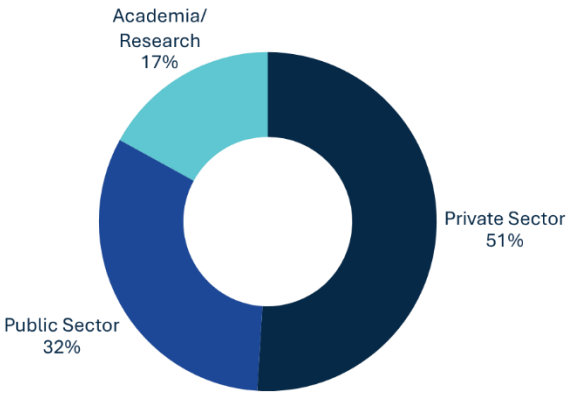
3 **Planned and current conditions require connected information flows.**
Planned information supports advance decisions, while current-status updates support routing, alerts, and operations. Records should reflect when work begins, changes, ends, or becomes inactive.

4	**Existing standards and tools provide the foundation.** Participants favored more consistent implementation of existing standards and data elements, including WZDx, rather than developing a new standard.
5	**Validation must scale across sources.** Participants supported corroborating conditions across multiple sources, including cameras, LiDAR, equipment, vehicles, and field observations, while reducing reliance on manual confirmation.
6	**Confidence indicators can support usability.** Indicators could communicate provenance, recency, corroboration, and validation status so users can determine whether information is appropriate for a specific application.
7	**Location consistency remains a barrier.** Consistent boundaries, start/end points, and geospatial references are needed to determine whether information from multiple sources describes the same roadway event.
8	**Producer-consumer feedback loops can improve data quality.** Downstream providers can help agencies identify missing, inconsistent, or unusable information and improve their data feeds.

Attendance Snapshot

Over 120 individuals across public, private and academic sectors joined the conversation.

Attendance by Sector



Category	Organizations in Attendance
DCI Anchor States	CalTrans, Delaware DOT, Georgia DOT, Iowa DOT, Kansas DOT, Minnesota DOT, Texas DOT, Oklahoma DOT
State/Local Government	Michigan DOT, North Carolina DOT, Pennsylvania DOT, Utah DOT, Washington State DOT, Maricopa Association of Governments, Nashville DOT
Transportation Technology Providers	Google, Causeway Technologies, Cavnue, Consystec, Drivewyze, Flow Labs, Iteris, HAAS Alerts, Inrix, Miovision, Pre
Academic and Research Institutions	Carnegie Mellon University, Florida Institute of Technology, Morgan State University, Texas A&M Transportation Institute, Virginia Transportation Technology Institute, UC Irvine, University of Oklahoma
Consultants, Engineering, Telecommunications,	Cisco, Verizon, WSP, HNTB, AtkinsRealis, Deloitte, Accenture, AECOM, STV, RS&H
Original Equipment Manufacturer	Audi, Honda, Michelin, Toyota, PACCAR Inc.
Nonprofit/Association	PrePass Safety Alliance

Opening Remarks and Context

Laura Chace, President and CEO of ITS America, opened the inaugural CQV Working Group workshop and emphasized the April 2027 objective for interstate work zone and lane closure data sharing.

The workshop was designed to identify intended uses for work zone data, define priority data elements, assess quality and validation expectations, and identify barriers that limit usage today. Participants were encouraged to focus on practical experience and actionable recommendations, emphasizing that the DCI Coalition's work should complement ongoing industry efforts rather than duplicate them and highlighted the connection between this effort and the forthcoming Data Governance and Interoperability Working Group.

AASHTO Anchor State Context

AASHTO provided an overview of the Digital Corridors Initiative (DCI) and the role of the AASHTO Anchor States program. They explained that DCI seeks to advance multi-state transportation data sharing using common standards, interoperable systems, and coordinated governance structures. The presenters described how 11 interstate corridors have been identified, with designated anchor states serving as coordination leaders for corridor implementation efforts. A key focus area of the Anchor States is enabling real-time sharing of interstate work zone and lane closure information across jurisdictions.

The near-term objective is to demonstrate successful end-to-end corridor data exchange during Work Zone Safety Week in April 2027, with broader deployment anticipated across multiple corridors in 2028. The presenters stressed the need to translate broader DCI goals into practical implementation priorities that can be achieved within this timeline.

Breakout Group Discussion Summary

Brock Aun from HAAS Alert, as the Data CQV Working Group Chair, grounded the discussion in shared working definitions for work zone data and a minimum viable product (MVP), to ensure alignment throughout the workshop.

Working definition: Work zone data was defined for the discussion as, "Information describing the location, lane configuration, timing, and active status of a work zone or lane closure, from any source, including agency systems, contractors, connected equipment, and vehicles, as published for downstream use."

Breakout groups examined:

- Priority data elements and quality requirements
- Validation approaches
- Barriers to adoption
- Minimum capabilities needed for April 2027

Participants considered these questions through **two scenarios:**

1. **Corridor operations:** determining whether work zone and lane closure data are sufficiently complete, timely, and reliable for operational decisions.
2. **Downstream services:** integrating information from agencies, contractors, connected equipment, and other sources into traveler-facing routing and alerts.

Across both scenarios, the breakout group discussions consistently returned to a common question: **Can a data user determine what is happening in the field, where it is happening, when the information was last confirmed, and how much confidence to place in it?**

Across the breakouts, participants emphasized four related needs: Reliable confirmation of current field conditions; use-case-specific timeliness; scalable multi-source validation; and consistent location references.

Key Breakout Group Takeaways

Collectively, breakout discussions revealed broad agreement that the value of work zone data depends not only on its availability but also on users' confidence in its accuracy and validity. Participants emphasized the need for reliable methods to establish "ground truth," including validation of work zone location, active status, worker presence, lane availability, and queue conditions.

Current field conditions are the foundation for actionable data.

Participants emphasized the need to distinguish planned activity from what is actually occurring in the field. Priority information included active status, location and direction, affected lanes, work zone boundaries, worker presence, timing, and when conditions were last observed or confirmed.

Data quality requirements depend on the use case.

There was no single definition of “real time.” Safety applications may require very low latency, while routing, traveler information, freight, transit, and planning can operate on longer time horizons. Participants emphasized defining timeliness, completeness, and other quality expectations around the decision the data will support.

Planned and current conditions need to remain connected.

Planned information supports advance decisions, while current-status information supports routing, alerts, and operations. Participants highlighted the need to update records as conditions change, including when work begins, changes, ends early, or becomes inactive.

Existing standards provide the foundation, but implementation needs greater consistency.

Many relevant data elements already exist in WZDx and related standards. Participants identified inconsistent population of fields, stale information, optional elements, and inconsistent georeferencing as barriers to reliable downstream use. The emphasis was on improving implementation of existing standards rather than creating a new standard.

Validation needs to be scalable and draw from multiple sources.

Participants discussed corroborating published information using cameras, connected work zone equipment, sensors, vehicles and telematics, field observations, and other independent sources. Because agencies cannot continuously verify every condition manually, validation approaches need to support scalable cross-checking across available sources.

Confidence, provenance, and consistent location references help users determine whether data is fit for purpose.

Participants discussed communicating the source, recency, validation status, and confidence associated with information, including whether it is planned, observed, or predicted. Consistent work zone boundaries and geospatial references are also needed to determine whether information from different sources describes the same roadway event.

Path to the April 2027 MVP

The workshop translated the goal of "better data" into a practical deployment question: What minimum data, quality information, and validation processes will enable producers to publish reliable work zone information and consumers to determine whether it supports their intended use?

- **Corridor operators:** assess whether information is sufficiently complete, current, and reliable for cross-border operational decisions.
- **Data consumers:** receive consistent data and confidence information needed for routing, alerts, traveler information, and vehicle applications.
- **Coalition:** test the approach through a specific use case while developing methods applicable to additional corridors, data types, and applications.

Attendees are encouraged to respond to the below linked follow-up survey. ITS America will synthesize the workshop and survey findings and develop recommendations for the Working Group's future work.

Next Steps

ITS America and AASHTO will use the workshop findings to shape MVP development and upcoming Working Group activities. The meeting established the following immediate next steps:

1. **Synthesize workshop findings:** Identify common requirements, use-case differences, validation expectations, barriers, and unresolved questions.
2. **Gather additional input:** Use follow-up survey to refine priority use cases and data requirements.
3. **Define the MVP:** Translate workshop findings into minimum data elements, quality expectations, validation approaches, and implementation processes for the April 2027 corridor demonstration.
4. **Continue Working Group coordination:** Advance unresolved CQV issues through recurring meetings and coordinate interoperability, governance, responsibilities, and access issues with the Data Governance and Interoperability Working Group.

Future working group meetings will build on the themes identified during the workshop and help shape actionable recommendations that can be advanced through both the CQV Working Group and broader Digital Corridors Initiative Coalition activities.

Questions for Future Working Group Discussions

- Which existing data elements should be prioritized for the MVP, and which should remain use-case-specific?
- How should planned and current conditions be linked and updated?
- What timeliness and quality thresholds are appropriate for priority use cases?
- Which validation approaches provide sufficient reliability and scalability?
- How should confidence, provenance, recency, and validation status be communicated?
- What location and roadway-reference conventions are needed across sources?
- What feedback from downstream providers would most improve data quality and usability?