

Transforming the I-80 Corridor A New Era of Connected Freight Movement

ITS America AV Freight Working Group Panel Brief

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On October 2, 2024, ITS America's AV Freight Working Group hosted a discussion with Tracy Larkin Thomason, Director of the Nevada Department of Transportation. Tracy discussed one of the AASHTO Moonshot projects announced in 2023, an effort to create a cohesive national transportation vision of the future. Interstate 80: Expanded Coalition/ Next Gen Multi State Operation & Data Sharing Project (I-80 Corridor Project) focuses on supply chain management and creating an interoperable and connected infrastructure across states. The project aims to focus on building a backbone (enabled by broadband connectivity) for data sharing for operations to help improve safety and freight movement along the 2900-mile corridor from California to New Jersey. The discussion was moderated by Zeke Reyna, the Emerging Technology Team Lead at the Texas Department of Transportation (TxDOT) and co-chair of ITS America's AV Freight Working Group.

Tracy discussed the goals of the I-80 corridor which are aimed at creating a more efficient, connected, and interoperable transportation system along the I-80 corridor and include:

1. Improving Situational Awareness: This involves providing real-time information to travelers, including road weather conditions, work zone updates, and truck parking availability.

2. Enhancing Freight Movement: The project aims to improve the efficiency of freight movement along the 2900-mile corridor from California to New Jersey.

3. Creating an Interoperable and Connected Infrastructure: The focus is on ensuring interoperability across state boundaries, which involves data sharing and digital infrastructure.

4. Maintaining Momentum and Collaboration: The project involves regular meetings and updates among the participating states to maintain momentum and ensure collaboration.

5. Expanding to City Levels: The project aims to connect cities like Sacramento, Reno, Salt Lake City, and Omaha, ensuring that the infrastructure remains connected and interoperable across different jurisdictions.

6. Establishing Data Standards: The project seeks to establish basic data standards to ensure compatibility and connectivity across the corridor.

Tracy emphasized the importance of collaboration among states, mentioning that the project started with six states and has expanded to eleven. Each state has sent two representatives to work on the project, ensuring that the momentum is maintained through regular meetings and updates.

The project focuses on next-generation multi-state operations, data sharing, and digital infrastructure. Tracy highlighted the need for connectivity, whether through fiber, cellular, or satellite, and the importance of interoperable platforms across state boundaries.

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Tracy also discussed the involvement of cities and counties, mentioning that the project aims to connect cities like Sacramento, Reno, Salt Lake City, and Omaha. The goal is to ensure that as the project expands, it remains connected and interoperable across different jurisdictions.

The project has three main working groups: data standards and sharing, technology and infrastructure, and governance. Each group meets monthly to discuss progress and maintain momentum. Tracy mentioned that the project has received support from various states and has applied for grants to continue the effort.

Tracy explained that the I-80 corridor project is focusing on establishing specific data standards to ensure compatibility and connectivity across the corridor. Some of the focus includes:

1. Basic Data Standards: The project aims to establish a basic level of data standards that all participating states agree to. This ensures that the platforms used are interoperable and can communicate effectively across state boundaries.

2. Application Programming Interface (API) Data Feeds: The project is inventorying and examining API data feeds across focus areas such as road weather, work zones, and truck parking. This helps identify where the gaps are and assess the feasibility for each state to adopt and maintain these data standards.

3. Data Sharing and Digital Infrastructure: The focus is on next-generation multi-state operations, data sharing, and digital infrastructure. This includes ensuring connectivity through various means such as fiber, cellular, or satellite.

4. Letters of Understanding: The project involves creating letters of understanding that outline the mutual commitment of each state to cooperate and ensure interoperability. These letters are currently under review.

These data standards are crucial for creating a connected and interoperable infrastructure along the I-80 corridor, ensuring that travelers have a consistent experience regardless of the state in which they are traveling.

Tracy discussed some of the challenges the I-80 corridor project faces, which include:

1. Maintaining Connected Infrastructure: One of the primary challenges is ensuring that the infrastructure remains connected across different states. Each state has its own methods of connectivity, such as fiber, cellular, or satellite, and aligning these methods can be complex.

2. Data Standards and Interoperability: Establishing and maintaining data standards that are interoperable across state boundaries is crucial. This involves agreeing on basic data standards and ensuring that the platforms used are compatible.

3. Collaboration and Coordination: The project involves multiple states, cities, and counties, which require significant collaboration and coordination. Keeping all parties aligned and maintaining momentum can be challenging.

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4. Funding and Resources: Securing funding and resources for the project is another challenge. Each state is contributing financially, and the project has also applied for grants to support collaboration and coordination efforts.

5. Political and Policy Differences: Each state has its own policies and political landscape, which can impact the progress and implementation of the project. Ensuring that all states are on the same page and moving forward together requires careful navigation of these differences.

6. Technological Gaps: Identifying and addressing technological gaps in connectivity and infrastructure is essential. This includes inventorying API data feeds and examining the feasibility of adopting and maintaining these standards in each state.

These challenges highlight the complexity of creating a connected and interoperable infrastructure along the I-80 corridor. Despite these obstacles, the project continues to make progress through regular meetings, collaboration, and a unified vision among the participating states.

In conclusion, the I-80 corridor project represents a significant effort to create a seamless and interoperable infrastructure across multiple states. While the challenges of maintaining connected infrastructure, harmonizing data standards, managing collaboration, securing funding, and navigating political differences are significant, they are not insurmountable. Through the dedication and coordinated efforts of the working groups and the commitment of participating states, the project is steadily progressing towards the goal of providing consistent and reliable experience for all travelers, improving situational awareness, and enhancing freight movement along the I-80 corridor.