

2024 TLA Annual Conference & CTLA Mid-Year Meeting

May 1 – 4, 2024

Wyndham Grand Rio Mar Puerto Rico
Golf and Beach Resort
Rio Grande, Puerto Rico



Transportation Lawyers
Association

CTLA



DRIVING INTO THE FUTURE

How Technology is Reshaping the Transportation Industry



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The Roadmap

1. **Rearview Mirror Reflections: The Evolutionary Road of Trucking**
2. **Navigating Now: The Technological Transformation of Modern Trucking**
3. **Future Fleet: Charting the Course of Tomorrow's Innovations**

Today's objective is to deliver a concise overview of our journey through the realms of engineering, visibility, technology, and legal frameworks. We aim to illuminate how far we've come from the past, highlight the pivotal moments of our present, and forecast the transformative trends shaping our future.



REARVIEW MIRROR REFLECTIONS

The Evolutionary Road of Trucking

30 Years Ago . . . Lots of Questions

1. From Analog to Digital in Accident Reconstruction

- Manual measurements and witness accounts
- Introduction of GPS, drone imagery, and simulations

2. Regulatory Shifts: Impact on Safety and Legal Tactics

- Absence of HOS regulations and ELDs

3. Safety Innovations: Before and After

- Non-existence of ABS, ESC, and collision avoidance

4. The Early Days of Data Collection and Privacy

- Limited electronic data collection

5. Legal Landscape Transformation

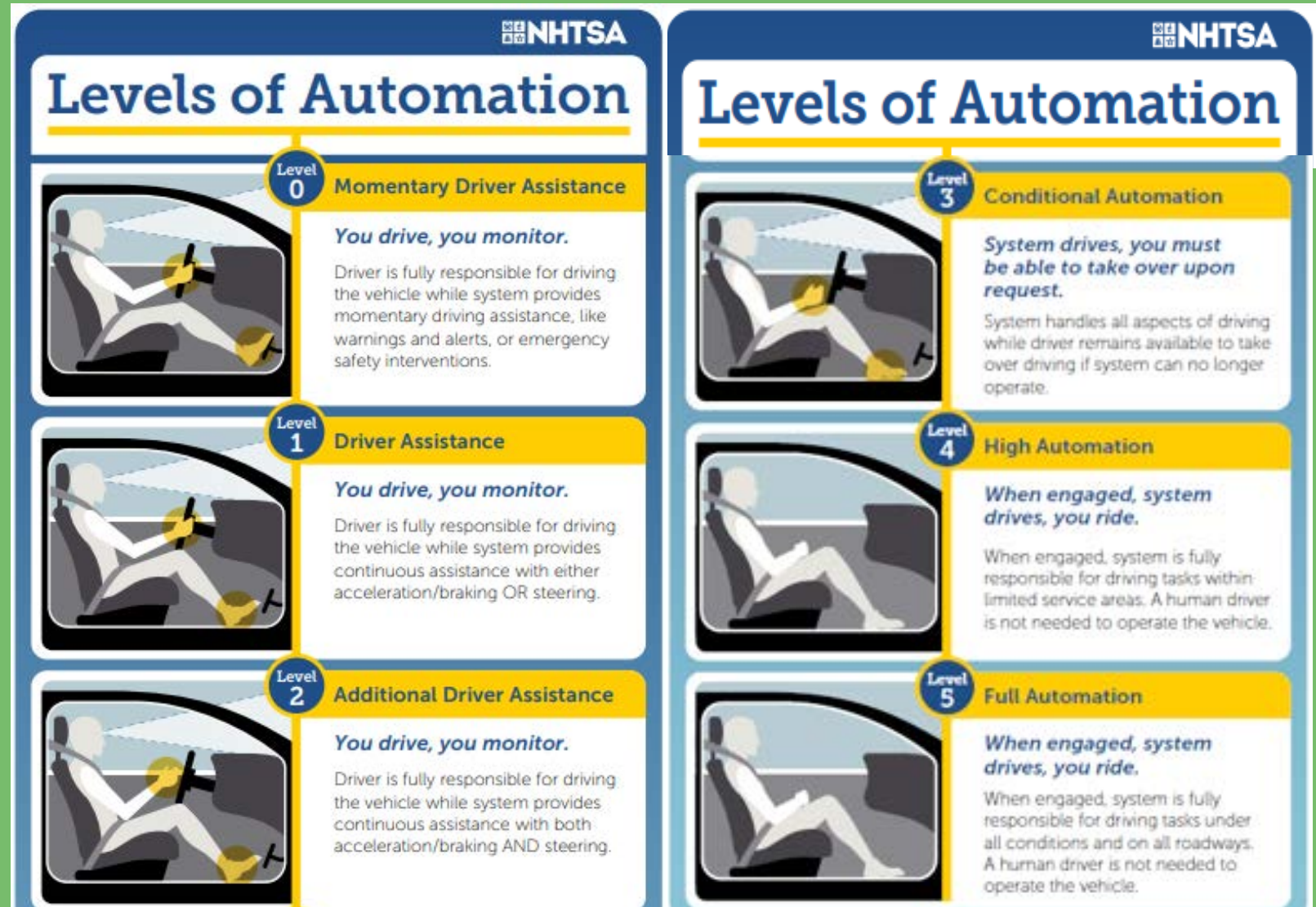
- Sparse electronic evidence for fault determination
- Evolution of legal standards and evidence expectations



NAVIGATING NOW

The Technological Transformation of Modern Trucking

Advanced Driver Assistance Systems (ADAS)



- Forward Collision Warning (FCW)
- Adaptive Cruise Control (ACC)
- Automatic Emergency Braking (AEB)
- Blind Spot Warning (BSW)
- Lane Departure Warning (LDW)
- Lane Keeping Assist (LKA)



Forward Camera Modules (FCM)



- Passenger Car FCM
- Pre-Event, 4.25 seconds prior to intervention event

Forward Camera Modules (FCM)



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Tesla Video



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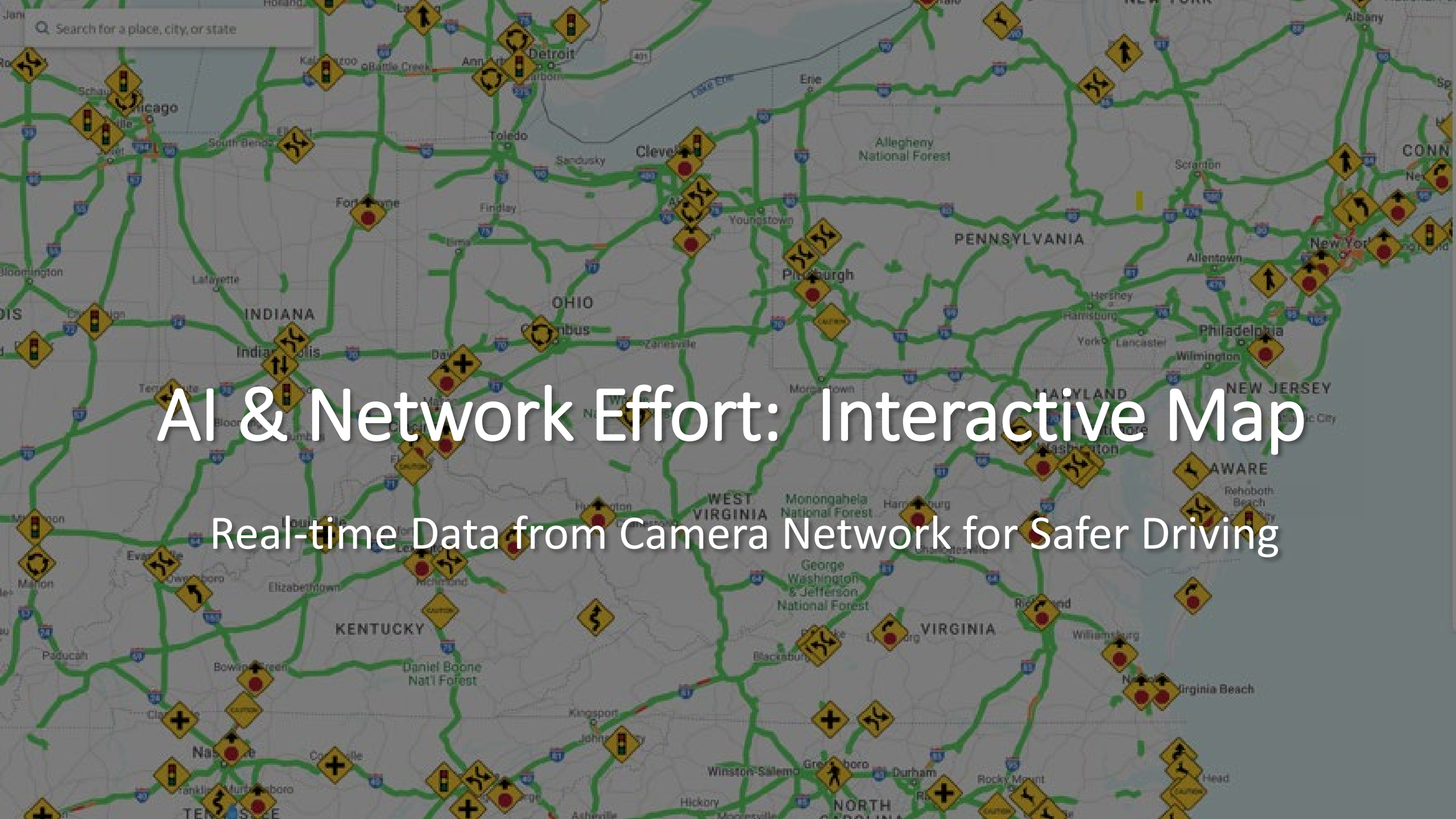
FUTURE FLEET

Charting the Course of Tomorrow's Innovations

Artificial Intelligence AI Dash Cameras

- Use AI to detect unsafe driving actions instantly
- Provide audio and visual alerts to drivers
- Customize training for employees
- Connect to ECM for richer data set
- API-powered platforms – ingesting diverse data sets
- Using AI to analyze maintenance data, routing data & more



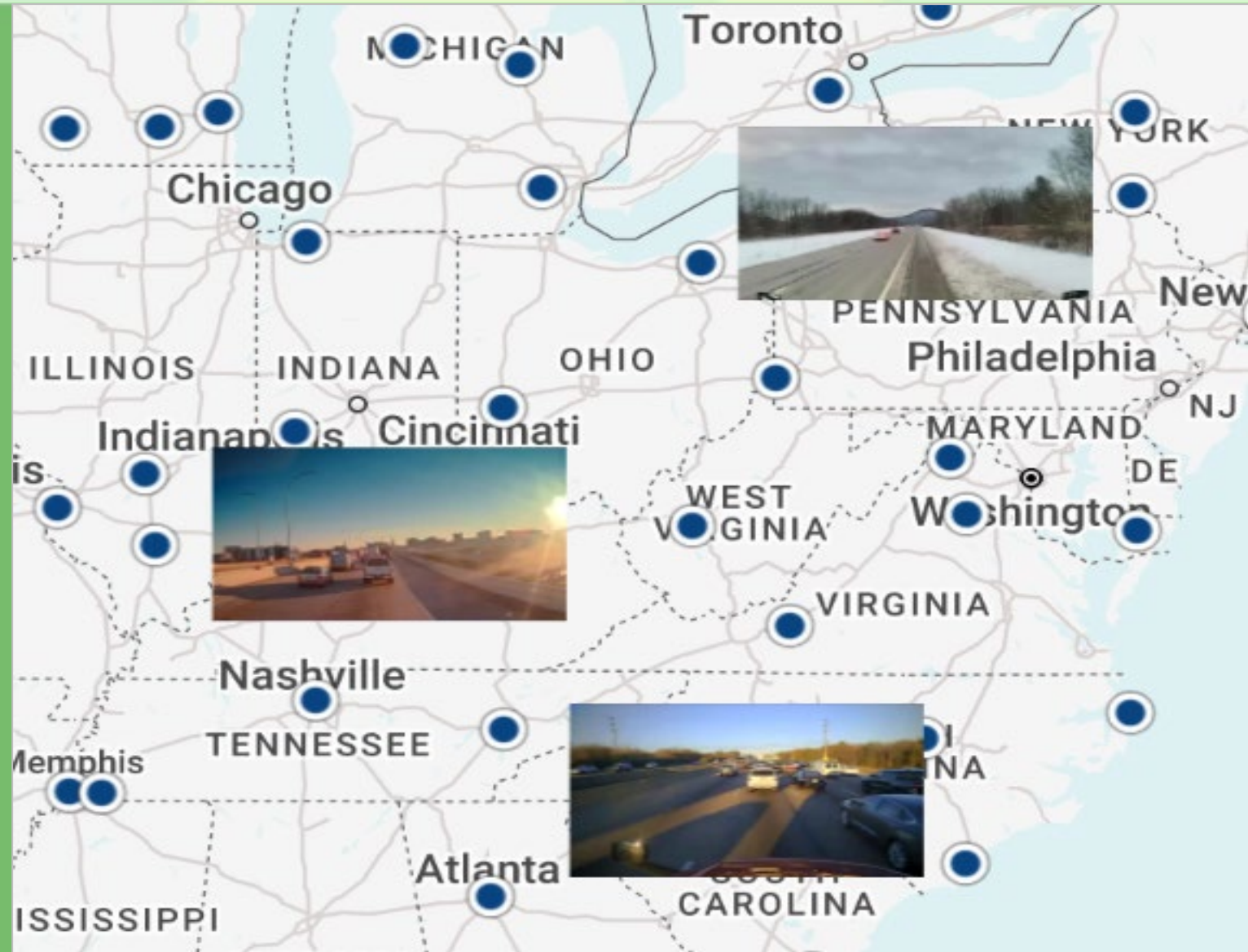


AI & Network Effort: Interactive Map

Real-time Data from Camera Network for Safer Driving

Weather Alerts

- Use AI-powered geospatial technology
- Managers can be alerted when vehicles are in/near hazardous weather conditions
- In-cab audio alerts to drivers





Traffic Circle

M 5 N and Minor Rd
Commerce Township, Michigan

Top 1% Rank ⓘ

583 Crashes | 50 Injuries

69,000 Daily Traffic

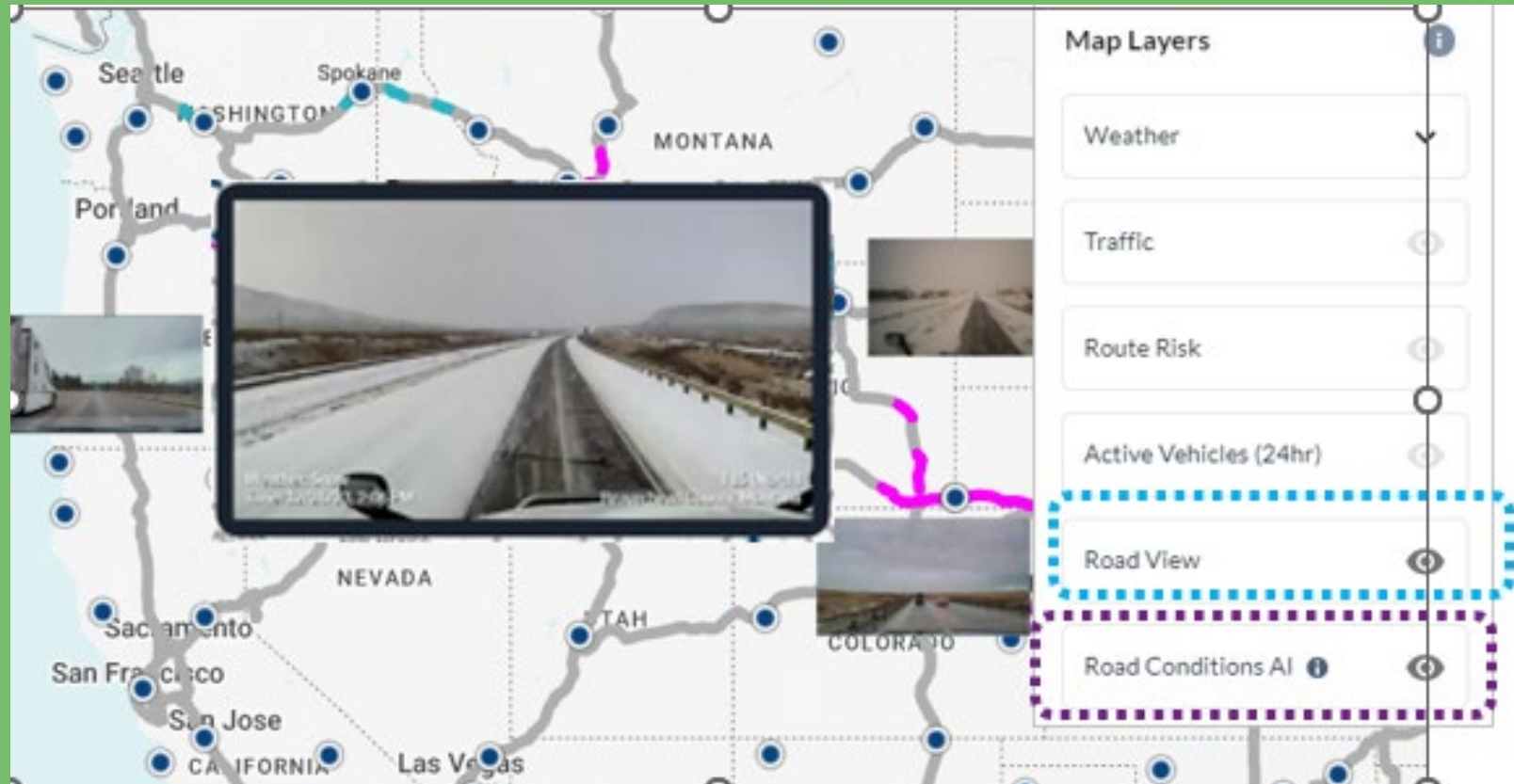
Source: 16 years DOT crash data

Data Driven Route Risk

- Leverages data to see collision-prone locations
- Drivers can hear voice alerts when approaching risky areas

Road View

- Uses network of Lytx on-vehicle cameras to see road view still images
- Road Conditions AI highlights surface roads impacted by rain or snow



Powered by machine vision AI, reads images from 1M+ vehicles

Navigating the Legal Roadmap

- 1. Compliance with Evolving Regulations** - Stay abreast of changes in federal and state regulations, such as emissions standards, HOS rules, and safety regulations.
 - **Action:** Develop strategies to ensure client compliance and minimize legal risks.
- 2. Liability in Autonomous Trucking** - Understand the shifting landscape of liability as autonomous and semi-autonomous technologies become prevalent.
 - **Action:** Prepare to address complex issues of fault, product liability, and insurance claims.
- 3. Data Security and Privacy** - With increased data collection through IoT and telematics, ensuring the security and privacy of data is crucial.
 - **Action:** Guide clients on best practices for data management and compliance with privacy laws.
- 4. Employment Law Challenges** - Address the implications of changing employment models, including the use of independent contractors and implications of new gig economy regulations.
 - **Action:** Assist in structuring employment agreements and navigating labor disputes.