






# FREIGHT ADVISORY COMMITTEE MEETING

May 4, 2021



# Announcement for Microsoft Teams



- **Note the “Participant” Icon to view list of Attendees.** 
- **Please mute yourselves by clicking on the “Microphone” Icon.** 
- **Click the “Raise Hand” Icon If you have a comment.** 

*This meeting is being recorded.*

# AGENDA

TIME	TOPIC	FACILITATOR(S)
9:00-9:05	Welcome and Introductions	Bill Thompson, NDOT
9:05-9:10	Freight Formula Funds Project Update <ul style="list-style-type: none"><li>Truck Parking Availability System</li><li>I-80 Truck Climbing Lane - Beowawe</li></ul>	Bill Thompson, NDOT
9:10-9:15	High-level Status Update On The Following Projects That Impact Movement Of Freight: <ul style="list-style-type: none"><li>Reno Spaghetti Bowl Xpress</li></ul>	Bill Thompson, NDOT
9:15-9:30	Nevada Infrastructure Roadmap (Update)	Kristopher Sanchez, Governor's Office of Economic Development
9:30-9:45	Port of Oakland update	Andrew Hwang, Port of Oakland
9:45-10:10	Truck Parking Information Management System (TPIMS) Cognitive TPIMS Update	Carl Rundell, TSPS
10:10-10:25	Legislative Update	Nevada Trucking Association
10:25-10:30	Vehicle Size And Weight Infrastructure And The Performance Measures Research.	Perry Gross, Atkins

# AGENDA – Continued

TIME	TOPIC	FACILITATOR(S)
10:30-10:55	<p>Medium and Heavy duty Zero Emission Vehicles (ZEV)</p> <ul style="list-style-type: none"><li>• Overview of Issues And Opportunities</li><li>• Nevada Specific and Multistate Initiatives</li><li>• Discussion</li></ul>	<p>Jim Brogan, Executive VP, Cambridge Systematics, Inc. Mark Brady, Governor’s Office of Energy</p>
10:55-11:00	Next Steps/Questions/Open Discussion	Bill Thompson, NDOT

# Truck Parking Availability System (TPAS)

Presented by: Bill Thompson, NDOT



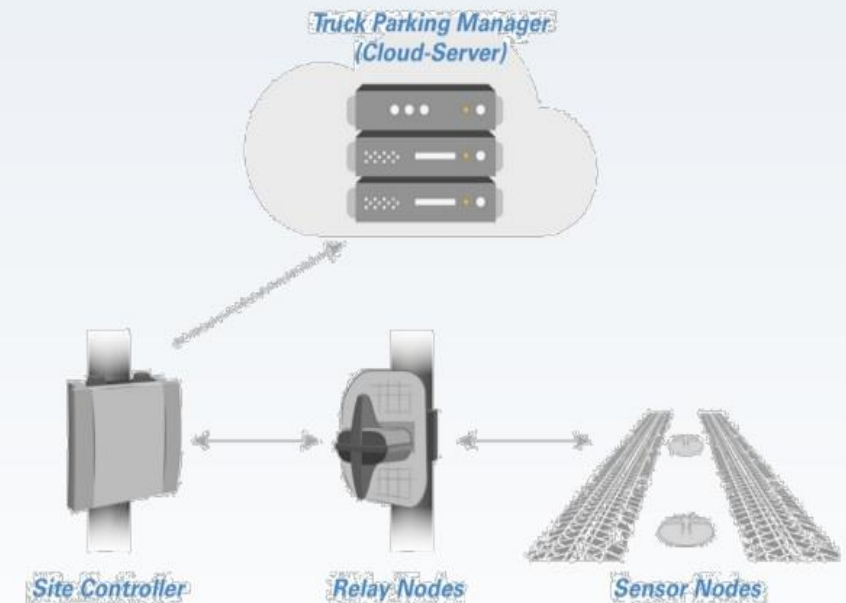
# Truck Parking Availability System (TPAS)

## Update

TPAS

## Truck Parking System Technology

- **In-Ground Sensor Nodes:** Wireless, lithium battery (with a life of 7 to 10 years) powered in-ground sensors to determine space occupancy. Two deployed per truck parking space to improve accuracy in detecting smaller trucks;
- **Relay Nodes:** Wireless, lithium battery powered. Attached to poles at site to collect data from sensors. The number required depends on site layout;
- **Data Collector:** Powered, one per site. Aggregates all data from relay nodes and transmits to a central location for processing; and
- **Truck Parking Management System:** Off-site. Data processing, performance and system management, and connection to information dissemination system



# TPAS Projects – Phase I



## TPAS Implementation Projects

- 1 Mogul Truck Parking (EB and WB)
- 2 Trinity/Fallon Rest Area
- 3 Beowawe Rest Area (EB and WB)
- 4 I-15 MP 110 Truck Parking (Expansion)
- 5 I-15 MP 96 Truck Parking (Expansion)
- 6 I-15 MP 88 Truck Parking



# I-80 Beowawe Truck Climbing lane

Presented by: Bill Thompson, NDOT



# I-80 Beowawe Truck Climbing lane & Interchange Improvements



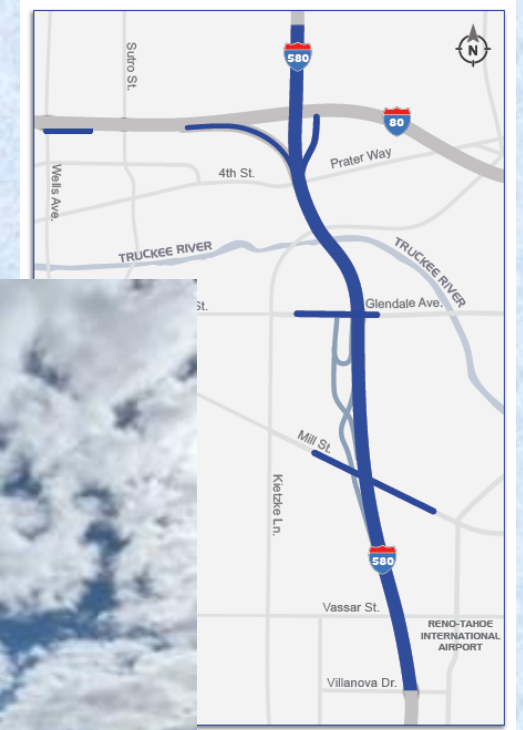
# Reno Spaghetti Bowl Express Project - Overview

Presented by: Bill Thompson, NDOT



# Spaghetti Bowl Express (SBX)

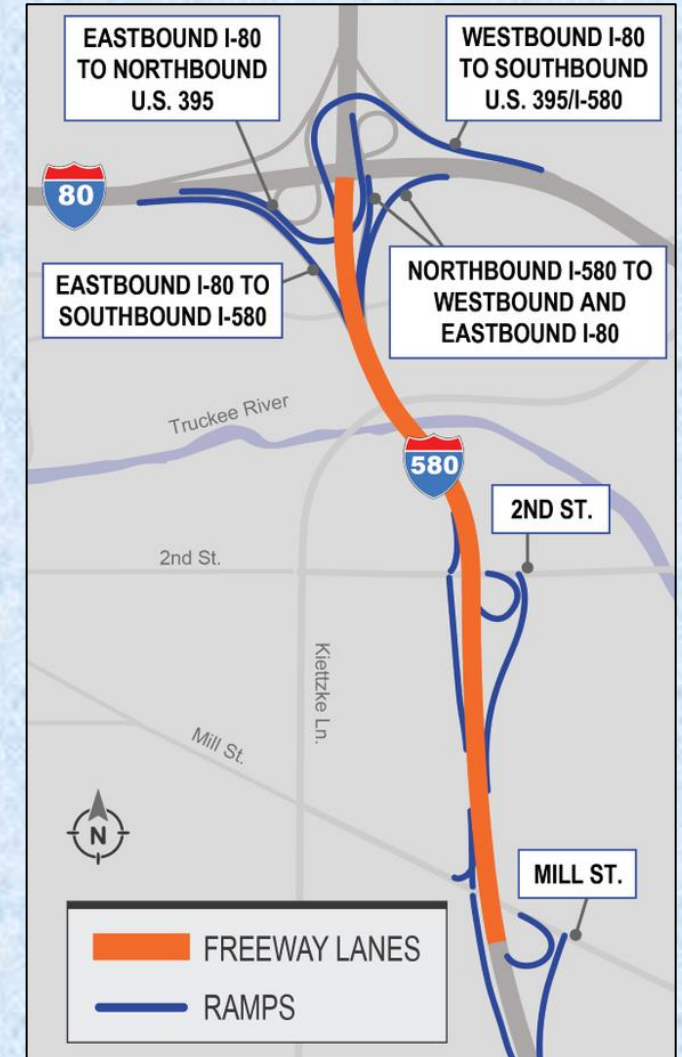
- Safety, capacity and operational improvements to I-580/US 395 and I-80.
- Busiest interchange in northern NV (260,000 vehicles/day).
- Crash rates throughout the project limits nearly 150% of the statewide average.



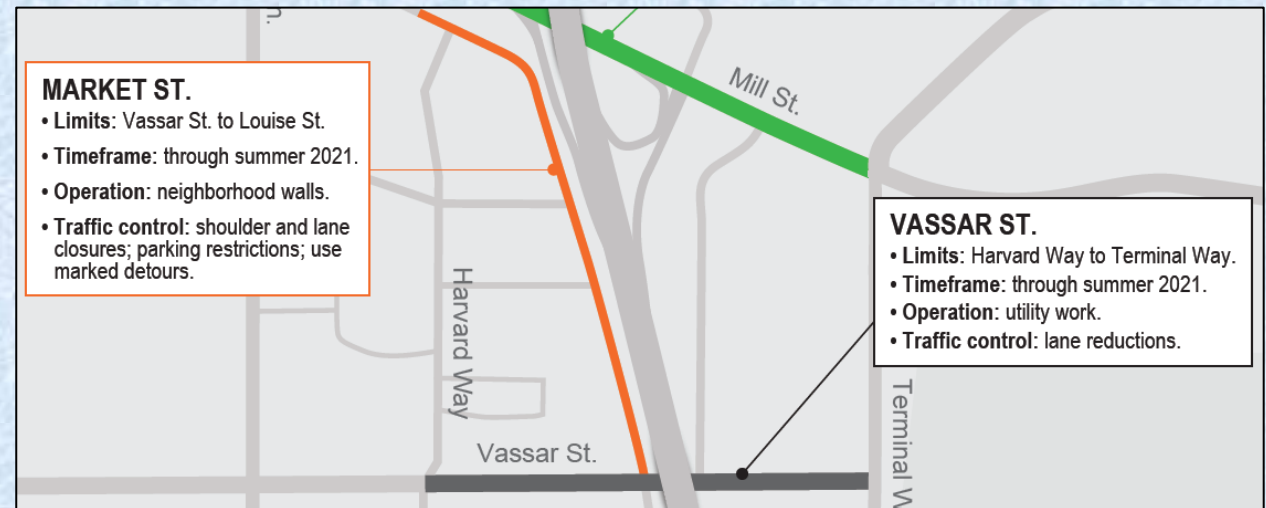
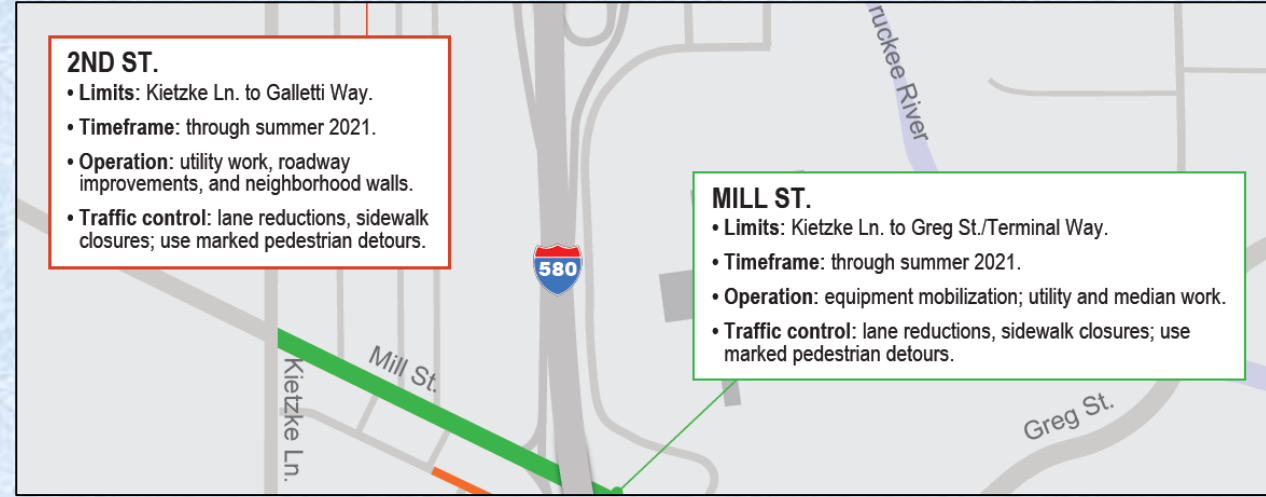


# SBX Anticipated Traffic Control

- Nighttime and daytime lane closures on northbound and southbound I-580 between Mill St. and the spaghetti bowl.
- Nighttime ramp closures on northbound and southbound I-580 between Mill St. and the spaghetti bowl.
- Nighttime and daytime closures on I-80 to I-580 ramps.



# SBX Anticipated Traffic Control: Surface Streets



# SBX Upcoming Work

## **Kietzke Lane overnight closures**

- Limits: north of Second Street to Galletti Way.
- Timeframe: end of April through mid-May.
- Times: 8 p.m. to 6 a.m.
- Closure: full closure (overnights).
- Operation: bridge construction.

## **Kietzke Lane marathon weekends**

- Limits: north of Second Street to Galletti Way.
- Timeframe: May 7-10
- Times: 24 hours/day.
- Closure: full closure.
- Operation: bridge demolition.

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*Operations are anticipated and subject to change. Work is weather dependent. If there is inclement weather, the work will be rescheduled.*

## **Vassar Street girder placement**

- Limits: Vassar Street under I-580.
- Timeframe: May 18.
- Times: overnight (8 p.m. to 6 a.m.).
- Closure: full closure of Vassar Street under I-580 (overnight), westbound I-80 to southbound I-580 ramp, Market St. at Vassar St., and Mill St. off-ramp.
- Operation: bridge girder placement.

## **Second Street girder placement**

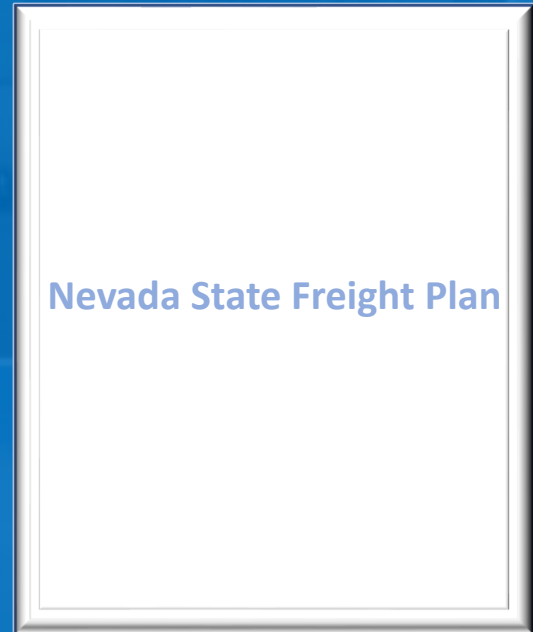
- Limits: Second Street under I-580.
- Timeframe: April 26, 29, and May 3.
- Times: 9 p.m. to 6 a.m.
- Closure: full closure of Second Street under I-580 and on and off ramps.
- Operation: bridge girder placement.

# Nevada State Freight Plan update

2017



2022



# NEVADA'S INFRASTRUCTURE ROADMAP Update

Presented by: Kristopher Sanchez, GOED





# PORT OF OAKLAND

Presented by: Andrew Hwang, Port of Oakland

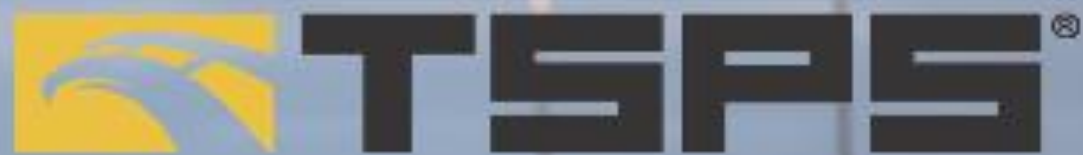


**PORT OF OAKLAND  
SEAPORT**

# Truck Parking Information Management System Cognitive TPIMS Update

Presented by: Carl Rundell, TSPS





# Cognitive TPIMS

*“The End of the Beginning”*

May 04, 2021

# PROBLEM – Truckers Increasingly Frustrated

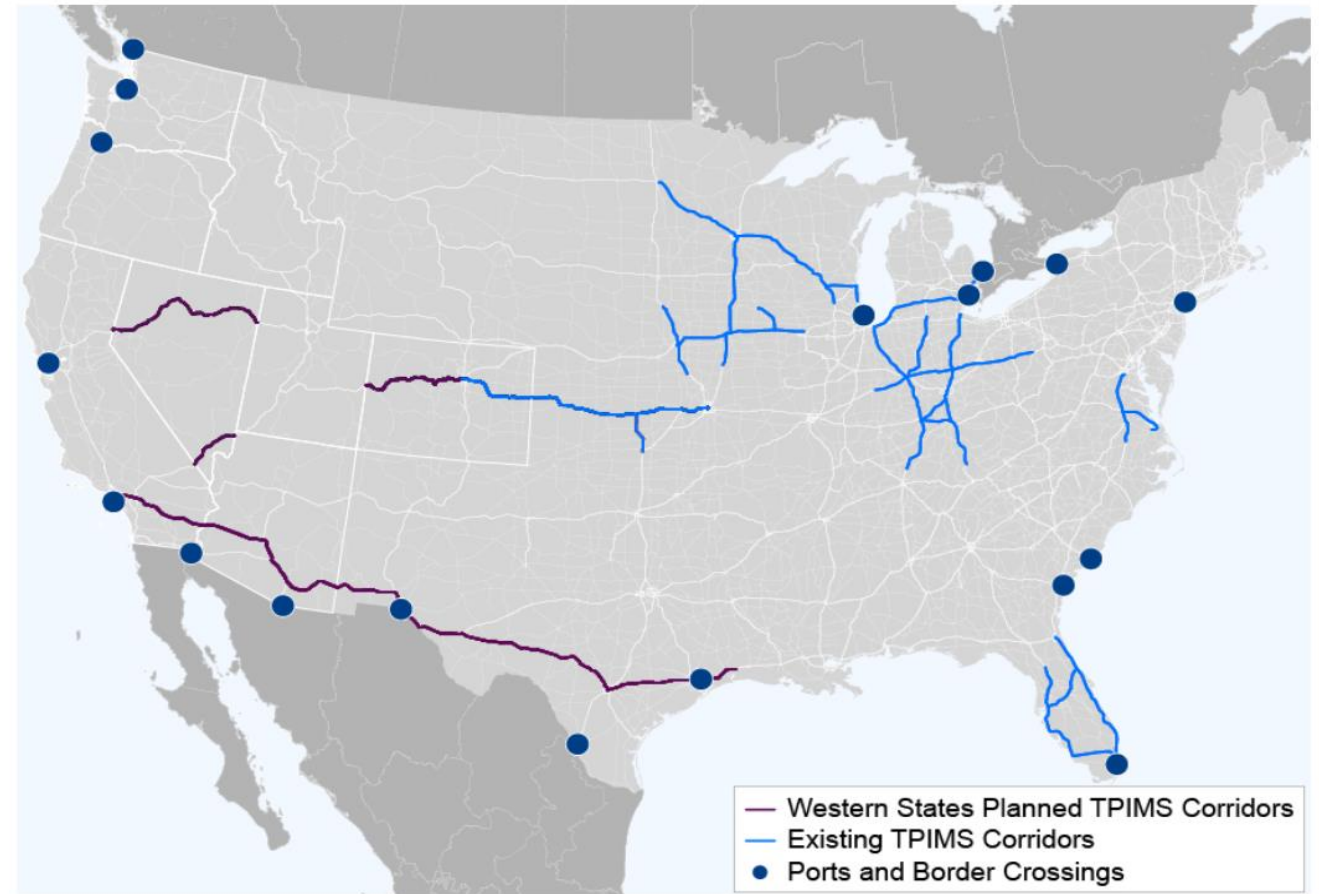
How long does it take to park?



Does ELD help?

- Less Than 15 Minutes
- Less Than 30 Minutes
- Less Than 60 Minutes

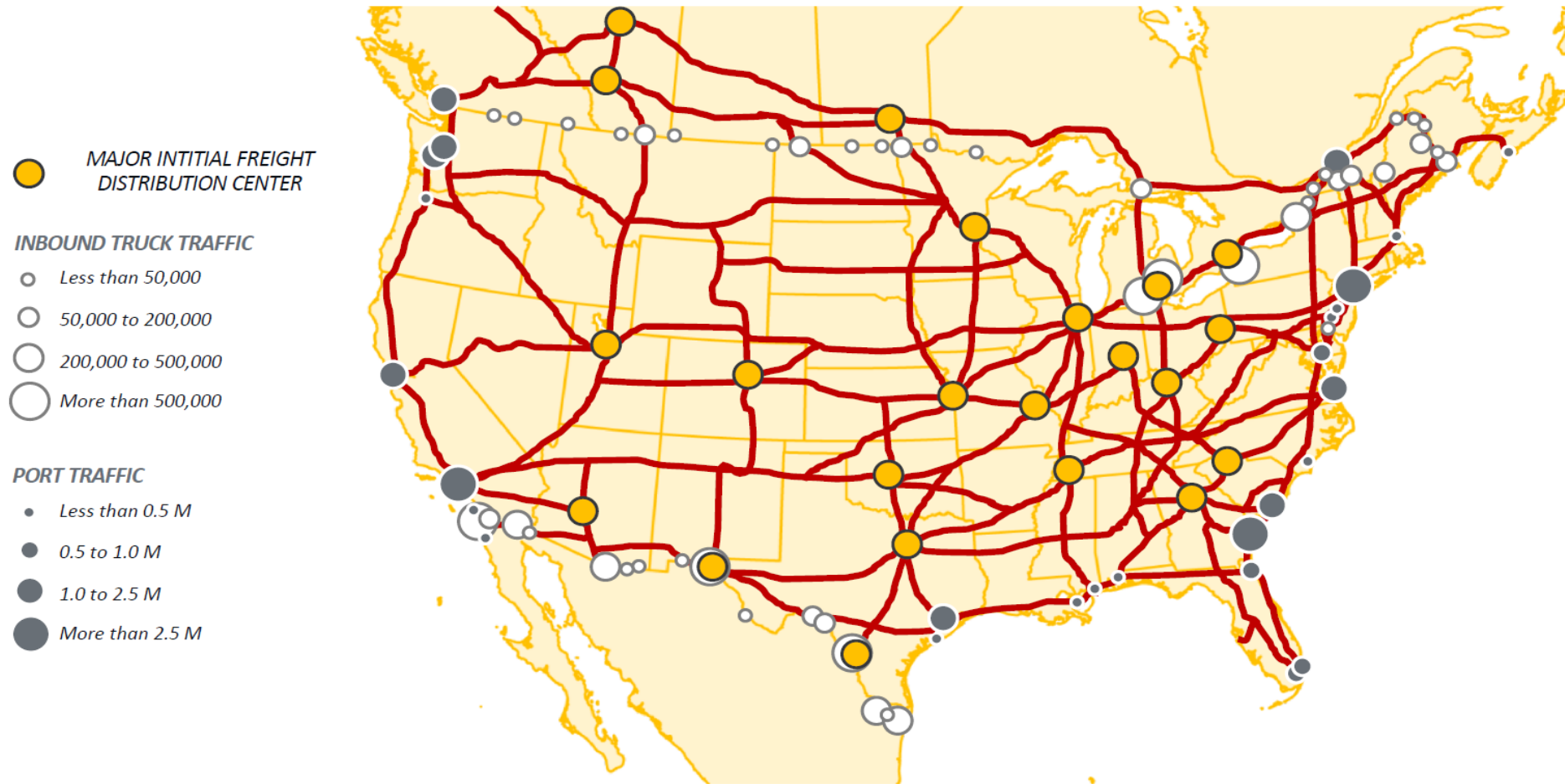
1 HOUR OR LONGER



*Not enough inventory!*

*Not enough information!*

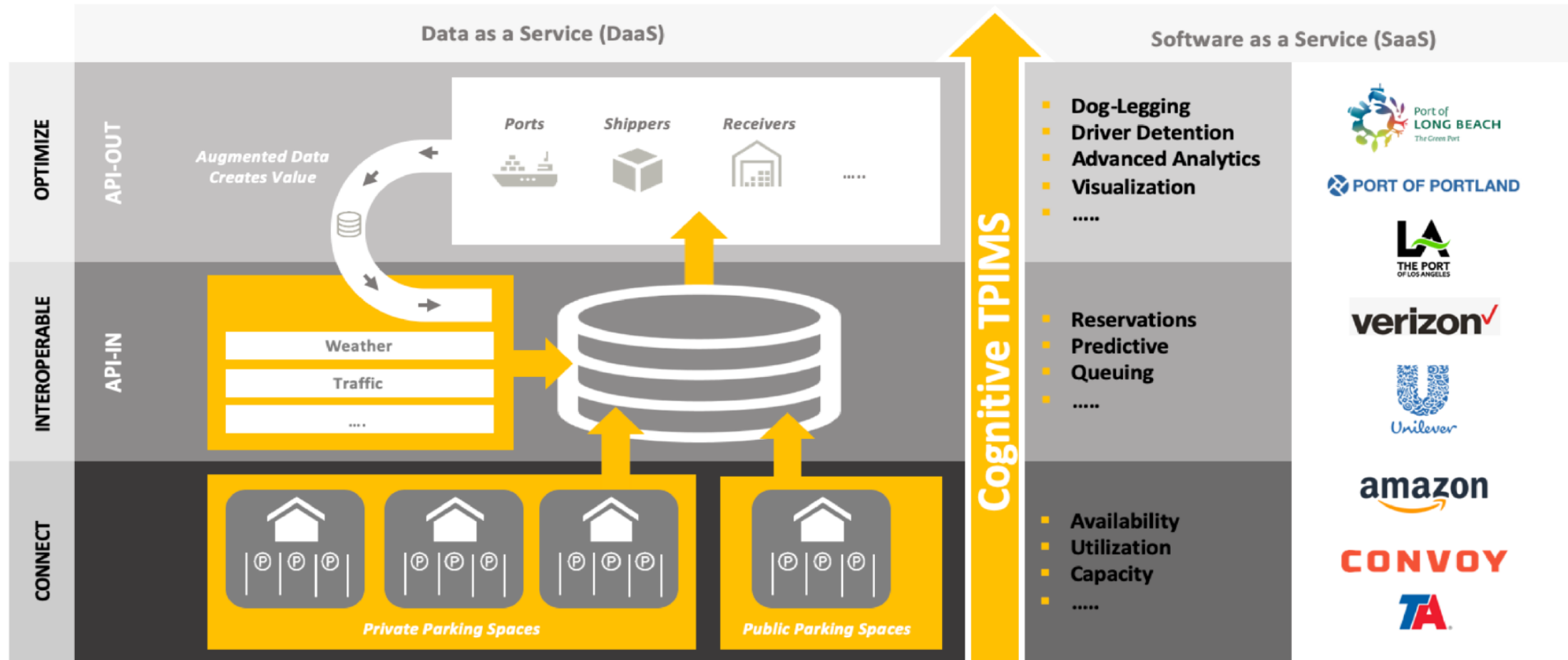
# WHAT IS A MINIMUM VIABLE NETWORK (MVN)?



- Safety
- Security
- Mobility
- Productivity
- Emissions

***Freight corridors and gateways are the key elements of the transportation network, and thus investment in them is critical.***

# WHAT IS A COGNITIVE TPIMS?



***A Cognitive TPIMS is a connected, interoperable, end-to-end network optimizing the parking event to move more goods more quickly to more places with more transparency and more efficiency.***

# WHAT ARE THE CAPABILITIES OF A COGNITIVE TPIMS?

- Deeper human engagement and personalization.
- Enhanced expertise and knowledge processing.
- The ability for products and services to sense and think.
- Improved business processes and operations.
- Accelerated discovery and innovation.



Deloitte

*A Cognitive TPIMS will assist — not compete with — humans moving forward.*

# HOW ARE WE GOING TO GET THERE?



## Think big.

Size up our opportunities, talking to all stakeholders in the transportation ecosystem.



## Start small.

Prioritize our opportunities based on where we gain the most value quickly.



## Scale fast.

Once we have achieved success in pilot environment, rollout immediately and socialize with other states.

*To realize this vision, the Cognitive TPIMS needs to receive real-time, accurate data from multiple source systems.*



# Legislative Update

Presented by: Nevada Trucking Association

Tessa Laxalt, Government Affairs Manager



# **Vehicle Size & Weight Infrastructure and Performance Measures Research**

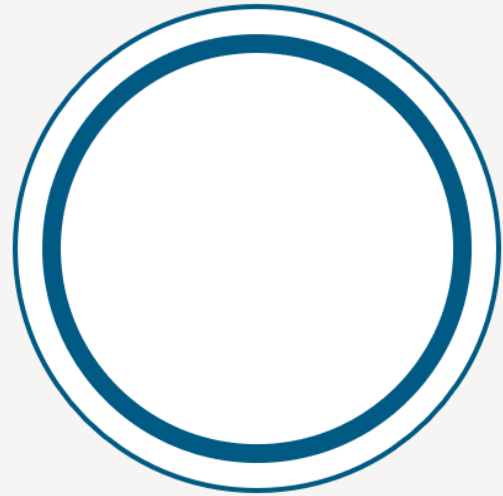
**Presented by: Perry Gross, Atkins North America, Inc.**



# **ATKINS**

# Nevada's Vehicle Size and Weight Program: The Business Side

By the end of this session, participants will be able to:



- Exploring the Nevada Approach to Vehicle Size and Weight
- Working to Enhance Nevada's Vehicle Size and Weight Program for the 21<sup>st</sup> Century
- Nevada Commercial Vehicle Enforcement Infrastructure
- Nevada Vehicle Size and Weight Program Performance Measurement / Management

# Exploring the Nevada Approach to Vehicle Size and Weight

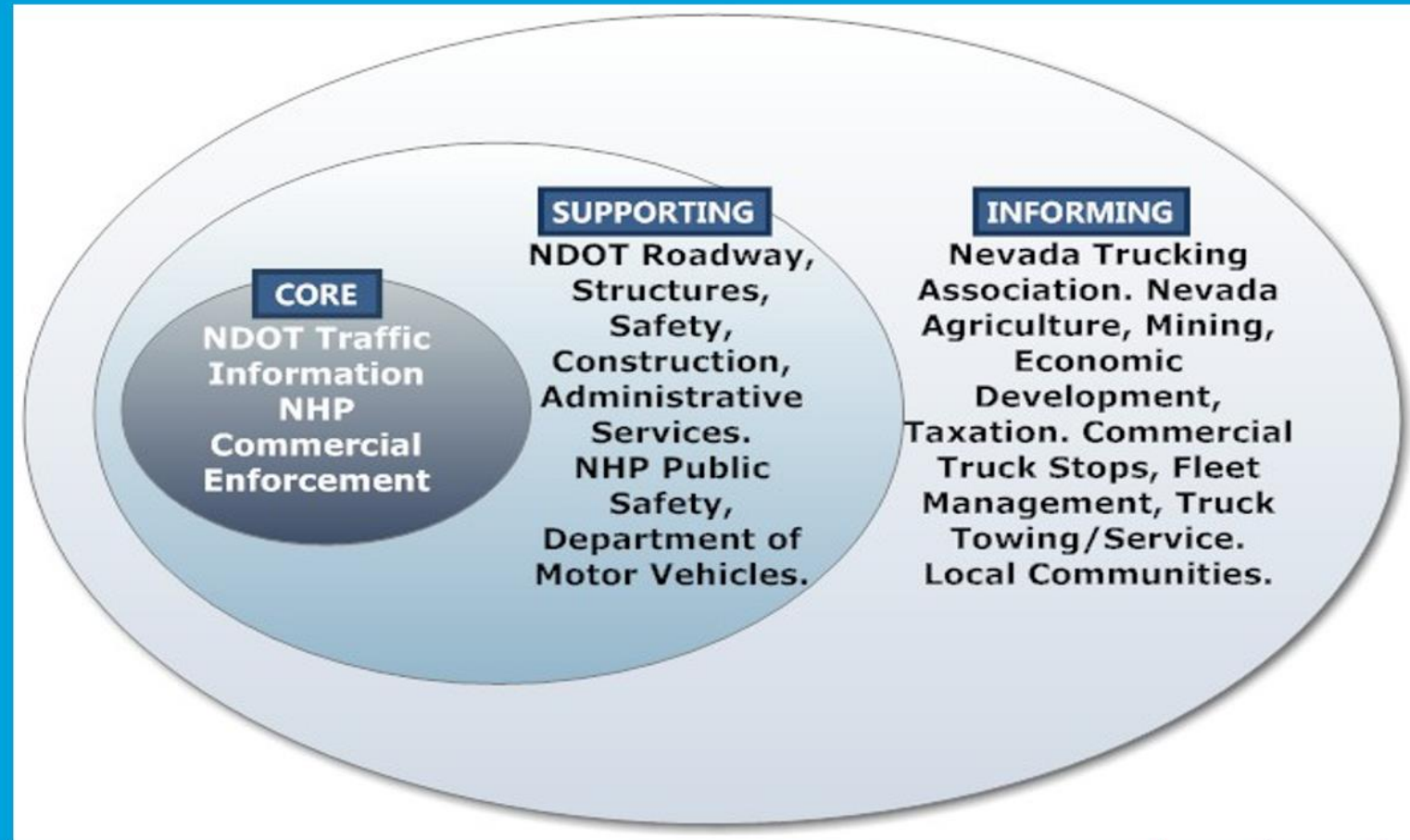
Nevada Vehicle Size and Weight Levels of Involvement.

NDOT Responsibility

NHP Authority

Resource Sensitive

Different Budgets, Business Cycles, and Organizational Cultures



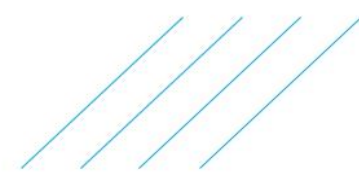
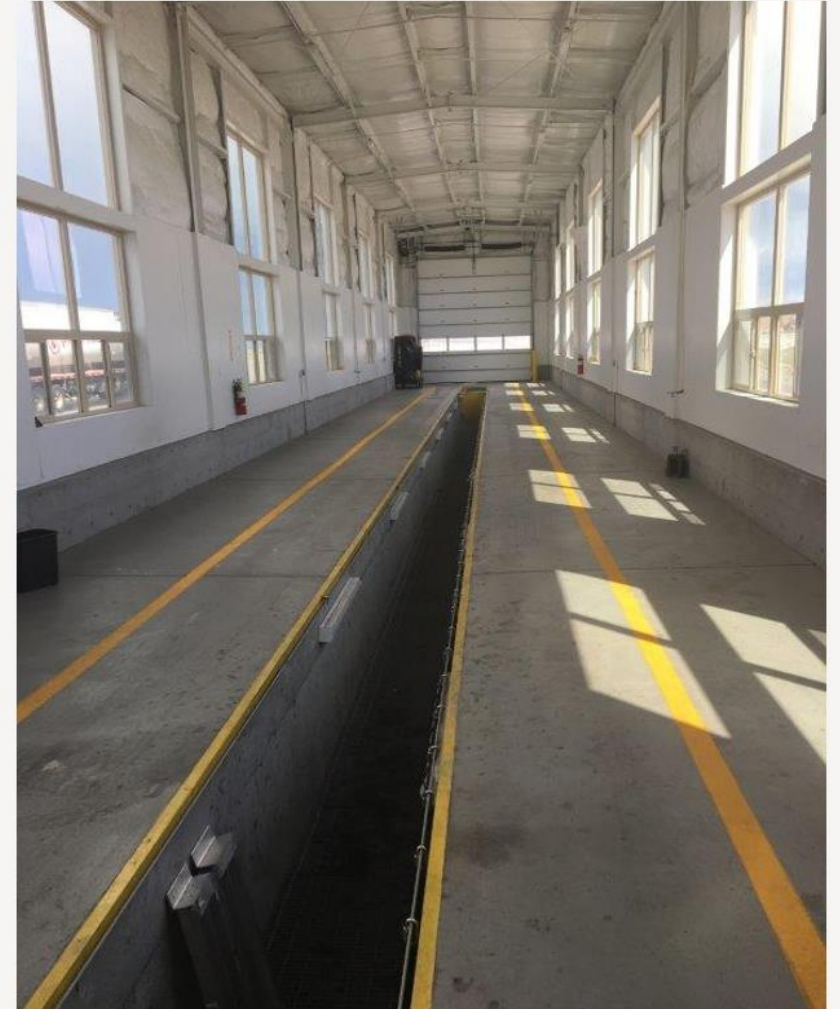
# Working to Enhance Nevada's Vehicle Size and Weight Program for the 21<sup>st</sup> Century

## What are the Issues and Opportunities?

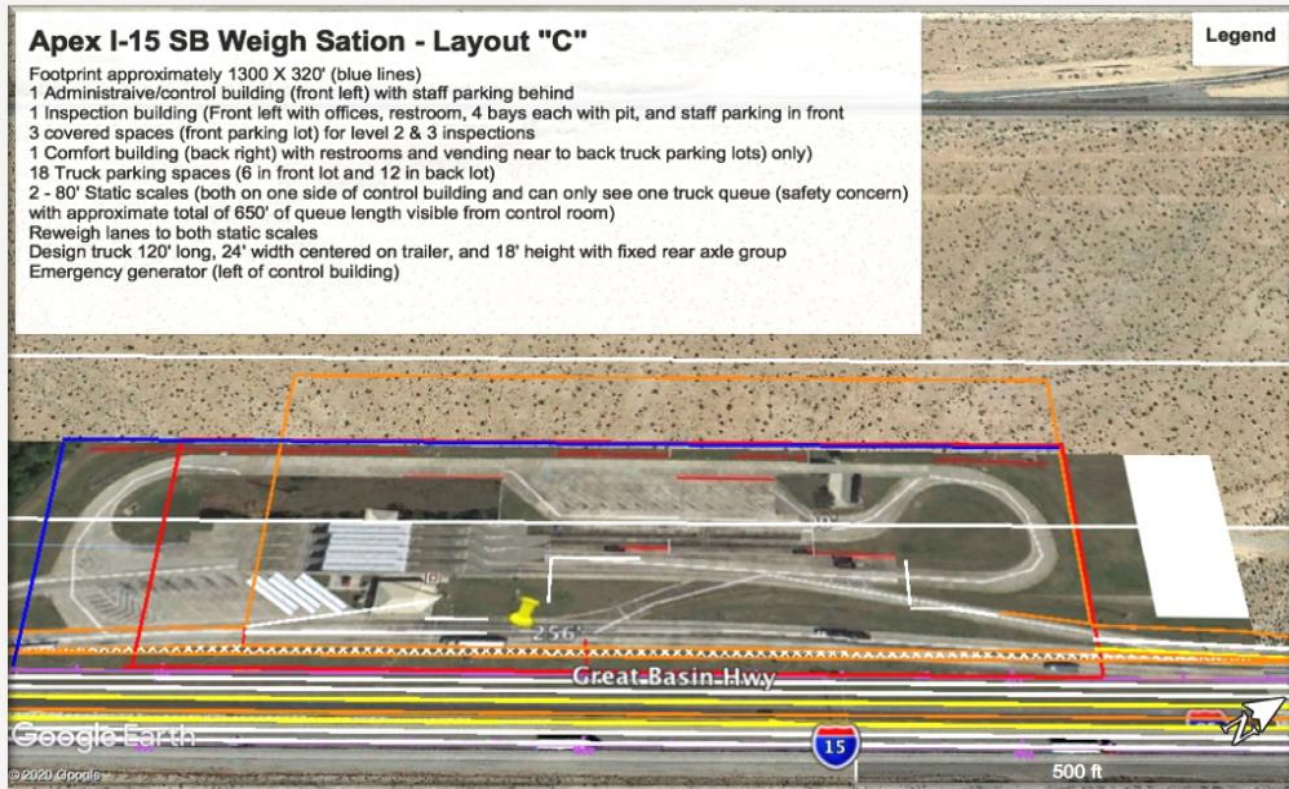
- › Sequence, Timing, and Verification
- › Enforcement Critical Elements
- › Getting Ready for Technology
- › Truck Size and Weight and Associated Professionals
- › Job Experience Sharing
- › Getting Arms Around Innovations
- › Cross Training
- › Legislation and Legislature
- › Research

## What could and should be done?

- › Initial Exploration of Goal and Outcome dynamics
- › Develop a Strategic Plan for Developing Performance Metrics
- › Explore Issues, Champions, Process, Influencers, Roadblocks, and Goals



# Nevada Commercial Vehicle Enforcement Infrastructure



## Fixed Facilities

Stakeholder Needs

Design Criteria

Strategies and Networking

Inspection Facilities

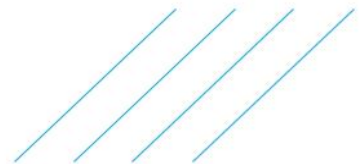
Neighboring State Stakeholders

Locations and Layouts

Vendor Capabilities

Fixed Facilities Nationwide

State of Nevada Vehicle Size and Weight Program Guidebook



# Nevada Vehicle Size and Weight Program Performance Measurement / Management

Extensive, detailed interviews about how different organizational units make decisions

Three focus groups:

- Strategies
- Money
- Authority

Trial Balloon Time

Implementation Workshop

The screenshot displays the MAXQDA 2020 software interface. The main window shows a document titled "Document Browser: Maya, Angie, Monday, August 17, 2020 9.00.26 AM (156 Paragraphs)". The document content includes text such as "we're not doing that right now because-" and "Angie: And it's really tough. I'm sorry. I just want to jump in. It's really tough to do that because every phone call is different. We get phone calls that should be the DMV or USDOT, and then we're trying to give them information for other...". A "Coded Segments" window is open, showing a table of 104 coded segments. The table has columns for Comment, Document group, Document name, Code, Beginning, End, Weight score, and Preview. The code used for all segments is "YELLOW".

Comment	Document gro...	Document na...	Code	Beginning	End	Weight score	Preview
		Maya, Angie, ...	YELLOW	32	32	0	We have to
		Maya, Angie, ...	YELLOW	40	40	0	So Angie's rc
		Maya, Angie, ...	YELLOW	40	40	0	So right now
		Maya, Angie, ...	YELLOW	40	40	0	but we got 1
		Maya, Angie, ...	YELLOW	41	41	0	how we can
		Maya, Angie, ...	YELLOW	41	41	0	But it's a got
		Maya, Angie, ...	YELLOW	52	52	0	Our truck dri
		Maya, Angie, ...	YELLOW	52	52	0	I'll call highw
		Maya, Angie, ...	YELLOW	52	52	0	The trucker.
		Maya, Angie, ...	YELLOW	52	52	0	The districts,
		Maya, Angie, ...	YELLOW	52	52	0	So I think th

# Medium and Heavy Duty, Zero Emission Vehicles (ZEV)

Presented by: Jim Brogran, Cambridge Systematics, Inc  
Mark Brady, Governor Office of Energy



CAMBRIDGE  
SYSTEMATICS





# **Medium and Heavy Duty, Zero Emission Vehicles (ZEV)**

- **Overview of Issues And Opportunities**
- **Nevada Specific and Multistate Initiatives**
- **Discussion**



# Governor's Office of Energy

## Medium & Heavy Duty, ZEV

Nevada Freight Advisory Committee

*5/4/2021*

Mark Brady, Energy Program Manager

# Nevada (light duty)

- DCNR/NDEP
  - <https://ndep.nv.gov/air>
  - LEV/ZEV “Clean Cars Nevada”
    - <https://ndep.nv.gov/air/clean-cars-nevada>
- GOE
  - [https://energy.nv.gov/Programs/Nevada\\_Electric\\_Highway/](https://energy.nv.gov/Programs/Nevada_Electric_Highway/)
- REV West
  - <https://www.naseo.org/issues/transportation/rev-west>
- NV Energy
  - <https://www.nvenergy.com/cleanenergy/electric-vehicles>



**Governor's Office of Energy**

# Med/Heavy

## West Coast Collaborative

- <https://westcoastcollaborative.org/>



### Seeking Input on Medium and Heavy-Duty Alternative Fuel Infrastructure Funding Needs

The West Coast Collaborative's Alternative Fuel Infrastructure Corridor Coalition (WCC AFICC) seeks input on funding needs for plug-in electric, hydrogen, propane, compressed and/or liquefied natural gas fueling stations that are accessible to Class 5+ on-highway vehicles ( $\geq 16,001$  lbs), locomotives, marine vessels, and/or other heavy-duty nonroad equipment.

The WCC AFICC has developed a survey to collect information that will help evaluate funding needs for medium and heavy-duty (MHD) accessible alternative fuel stations along the West Coast.

Feedback from this survey will also help to evaluate awareness of and satisfaction with the [EPA Diesel Emissions Reduction Act \(DERA\)](#) grant programs.

**>>>>>> TAKE THE SURVEY NOW <<<<<< (ACTION by September 30, 2021 )**

## Governor's Office of Energy



## Multi-State Medium- and Heavy- Duty Zero Emission Vehicle MOU

- <https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf/>
- CA, CO, CT, DC, HI, ME, MD, MA, NJ, NY, NC, OR, PA, RI, VT, WA
- 1. OVERALL COMMITMENT The Signatory States agree to work together to foster a self-sustaining market for zero emission medium- and heavy-duty vehicles through the existing Multi-State ZEV Task Force, which will serve as a forum for state coordination, collaboration and information sharing on market enabling actions, research, and technology developments.



# CONTACT US

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[energy.nv.gov](http://energy.nv.gov)

[twitter.com/NevGOE](https://twitter.com/NevGOE)



**Governor's Office of Energy**

# **Medium and Heavy Duty, Zero Emission Vehicles (ZEV)**

- **Overview of Issues And Opportunities**
- **Nevada Specific and Multistate Initiatives**
- **Discussion**



# NEXT STEPS

## Questions & Open Discussion





Bill Thompson  
Freight Program Manager



# THANK YOU

Next FAC Meeting: August 3, 2021



**Bill Thompson**  
**NDOT Freight Program Manager**



775-888-7354



[bthompson@dot.nv.gov](mailto:bthompson@dot.nv.gov)



<https://www.dot.nv.gov/mobility/freight-planning>

**Freight StoryMap Dashboard:**

<https://storymaps.arcgis.com/collections/940b9f9d1a164f3194907ac6a1e1dded?item=3>