



Nevada Freight Advisory Committee

Tim Mueller, NDOT Freight Program Manager

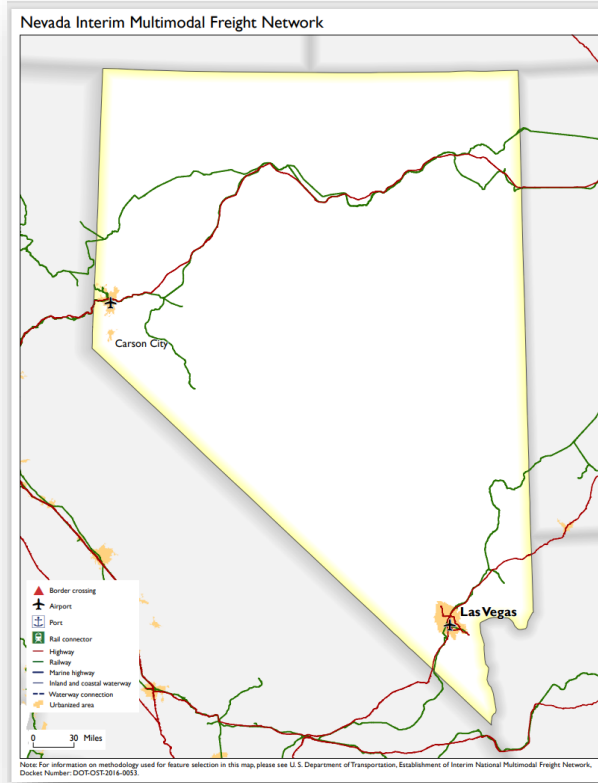
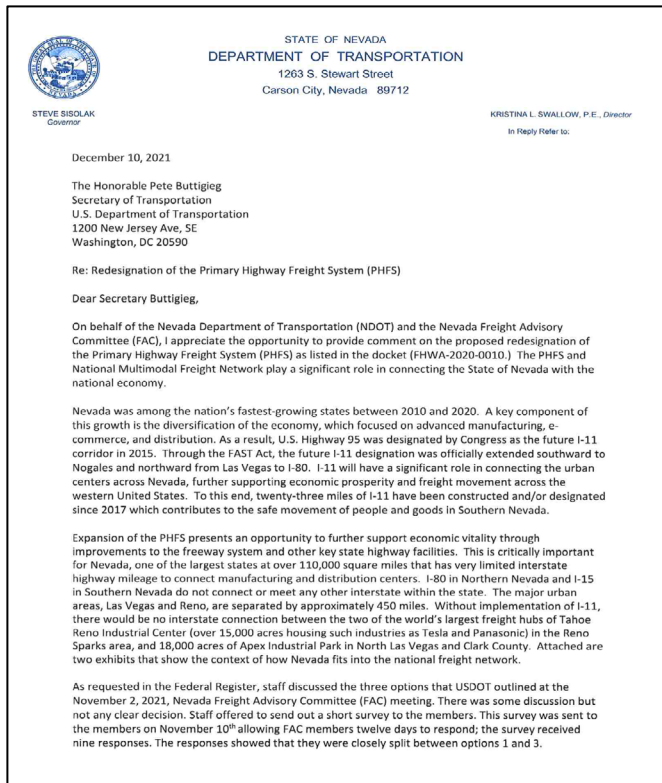
November 2, 2021

NEVADA FREIGHT ADVISORY COMMITTEE MEETING AGENDA

- Welcome and Introductions
- Primary Highway Freight System Re-Designation Update
- I-15 Mobility Alliance Update
- I-80 Winter Operations Coalition Update
- Nevada Freight Plan Update
- Passing and Truck Climbing Lanes Study Update
- Truck Parking Update
- Open Discussion/Other Items



- FAC survey responses
- Thank you!
- These helped staff draft the letter
- Letter sent in on December 10, 2021



NDOT Response to US DOT:

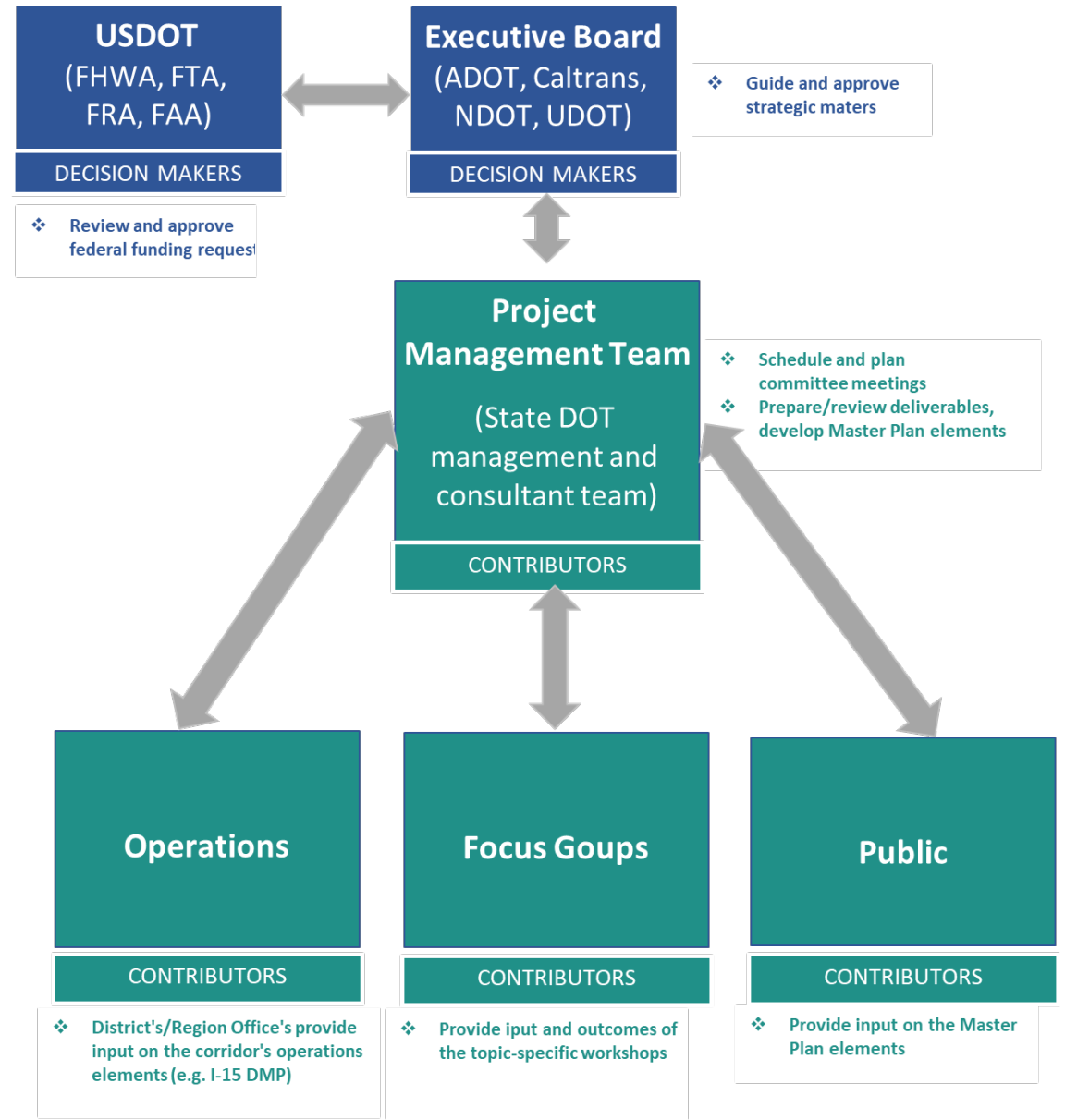
- ❖ **Support AASHTO recommendations** to include all interstates and remove restrictions on states' ability to add mileage
- ❖ **Option 1** provides small but positive benefit by adding 18 miles.
- ❖ **Option 3** provides the potential to add up to 24 new miles of I-11, but the method of allocating mileage across states is not defined.

- Began in 2007 with a coalition of western state DOTs (AZ, CA, NV, UT)
- Alliance officially formed in 2011
- Goal: Address current and future mobility needs along I-15 from southern California to northern Utah
- Developing Immediate Projects of Inter-Regional Significance (IPIRS) List



Focus Groups/Workshops

- High Speed Rail & High-Capacity Transit (March)
- Major Infrastructure Projects (May)
- Freight Mobility (July)
- Alternative Fuels Corridor (September)
- Emerging Technologies (November)
- System Reliability (January 2023)



I-80 Corridor Operations and Management Program

Parametrix
Kimley»Horn



I-80 CORRIDOR OPERATIONS AND MANAGEMENT PROGRAM



- Established in 2010
- Focus on improving winter operations throughout the I-80 Corridor
 - State DOT notifications
 - TMC coordination during weather events
 - Communicate long-term closures
 - Proactive communications with freight
 - Improve consistency of traveler info across state lines
- Operations, maintenance, freight, public information
- Federal grant funding is helping to advance Coalition priorities
- **Specific inputs are needed from freight operators**



- Feedback from freight operations throughout the I-80 corridor
 - Webinars for freight industry reps
 - February 10, February 14
 - Electronic survey
 - Feedback will inform:
 - Recommendations
 - Future discussions needed
 - Next steps
- Freight Industry Input on I-80 Road and Travel Conditions Information
 - Sources of real-time road conditions info on I-80
 - What is working well?
 - What is a challenge?
 - Driver perspective, dispatch perspective

I-80 STATE DOT PARTNERS

- Caltrans District 3
- Nevada DOT – HQ, District 2 and District 3
- Utah DOT
- Wyoming DOT
- Nebraska DOT



- Additional BIL requirements
- Freight Implementation Plan
- Commodity Flows
- Update to Freight Network



BIPARTISAN INFRASTRUCTURE LAW



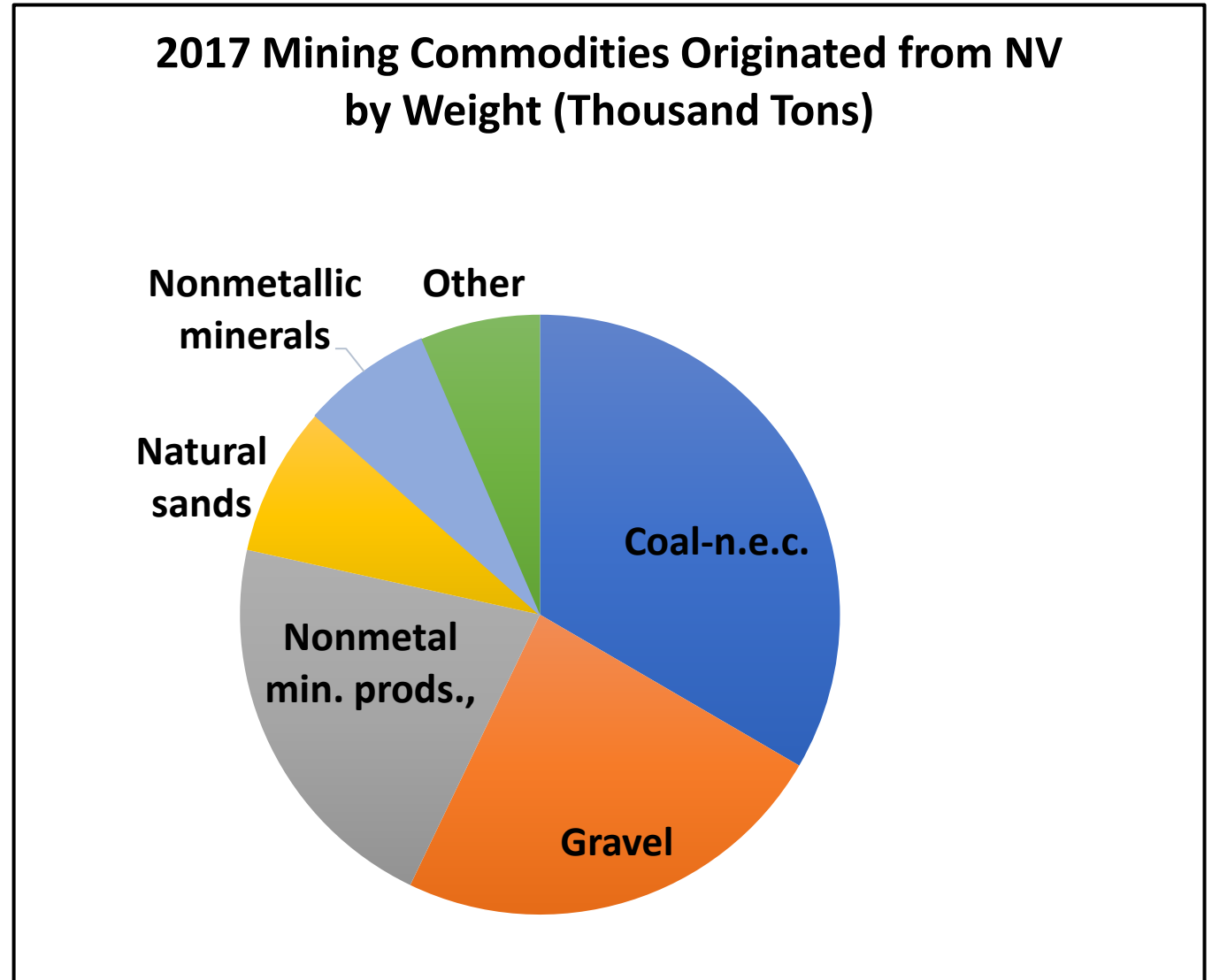
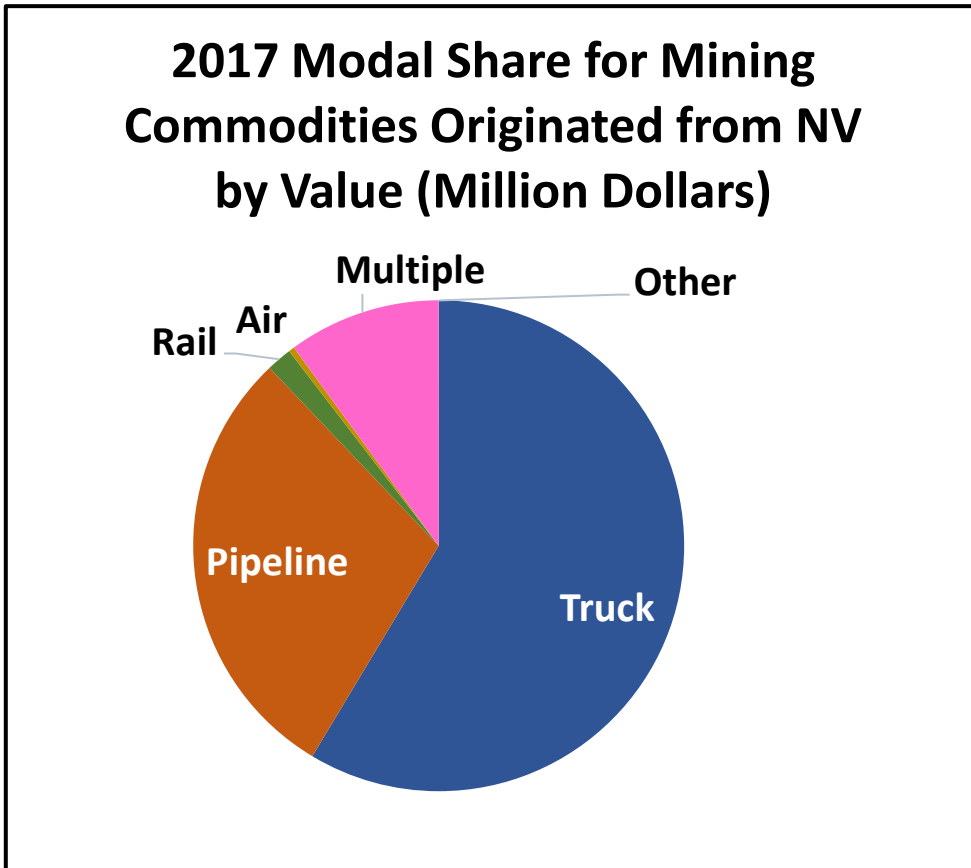
- Signed into law November 15, 2021
- Allows the designation of more miles as critical rural freight corridors and critical urban freight corridors
- Requires State freight plans include new elements:
 - Commercial motor vehicle parking and rest facilities
 - Supply chain cargo flows
 - Impacts of e-commerce & consideration of military freight
 - Strategies and goals to address impacts of freight movement on the environment
- Expands FAC to include state environmental and air quality agencies

- Freight Investment Plan Update
 - A freight investment plan includes a list of fiscally constrained priority projects
 - Describes how funds made available, invested, and matched for the primary freight network
 - The planning period shall be an 8-year forecast period



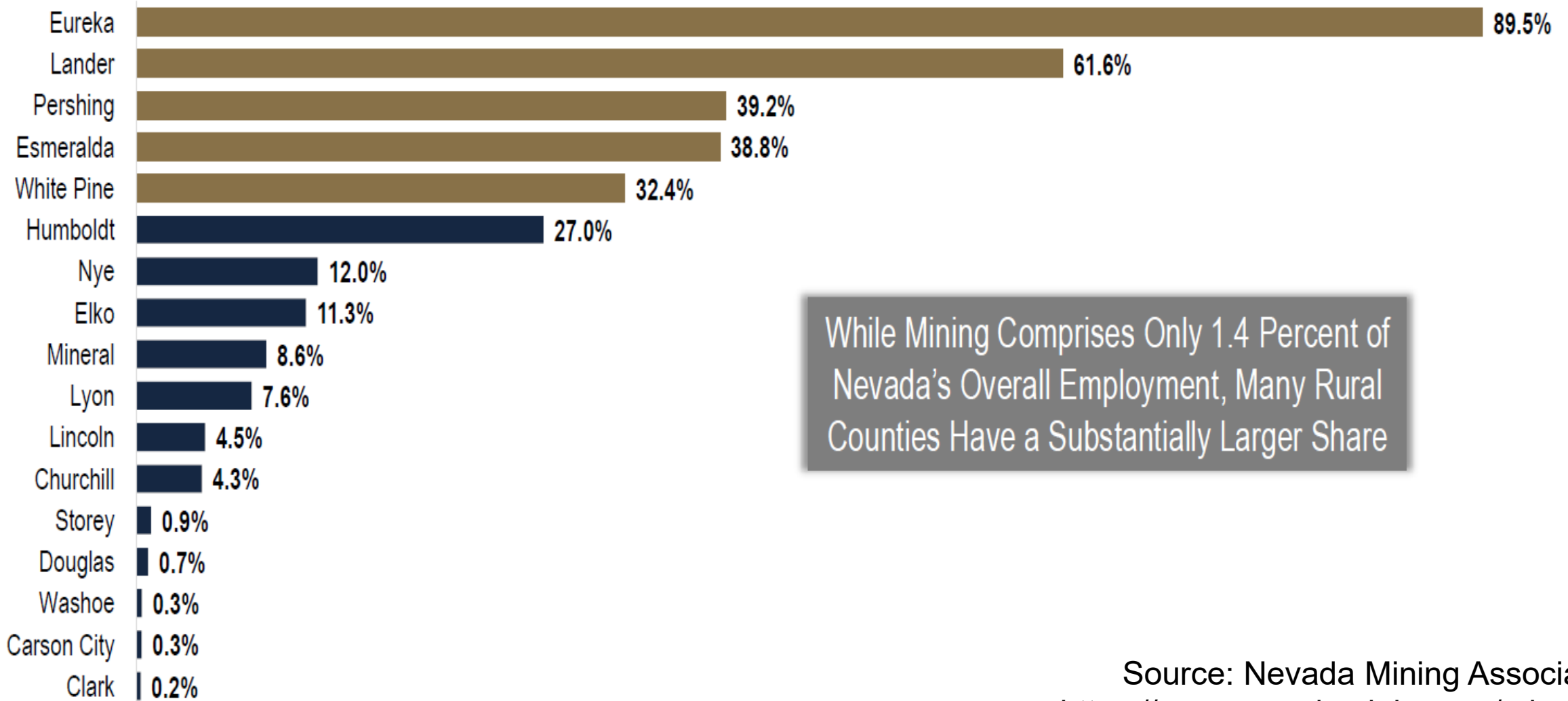
- Used for commodity flow analysis
- Produced by Bureau of Transportation Statistics (BTS) and FHWA
- Creates a picture of freight movements among states and major metro areas by mode
- FAF version 5 (FAF5) uses agriculture, mining, utility, construction, service, and other sectors
- Provides estimates for tonnage and value by regions of origin and destination, commodity type, and mode for base year 2017 and a 30- year forecast

- Mining commodity flow data presented on January 24, 2022





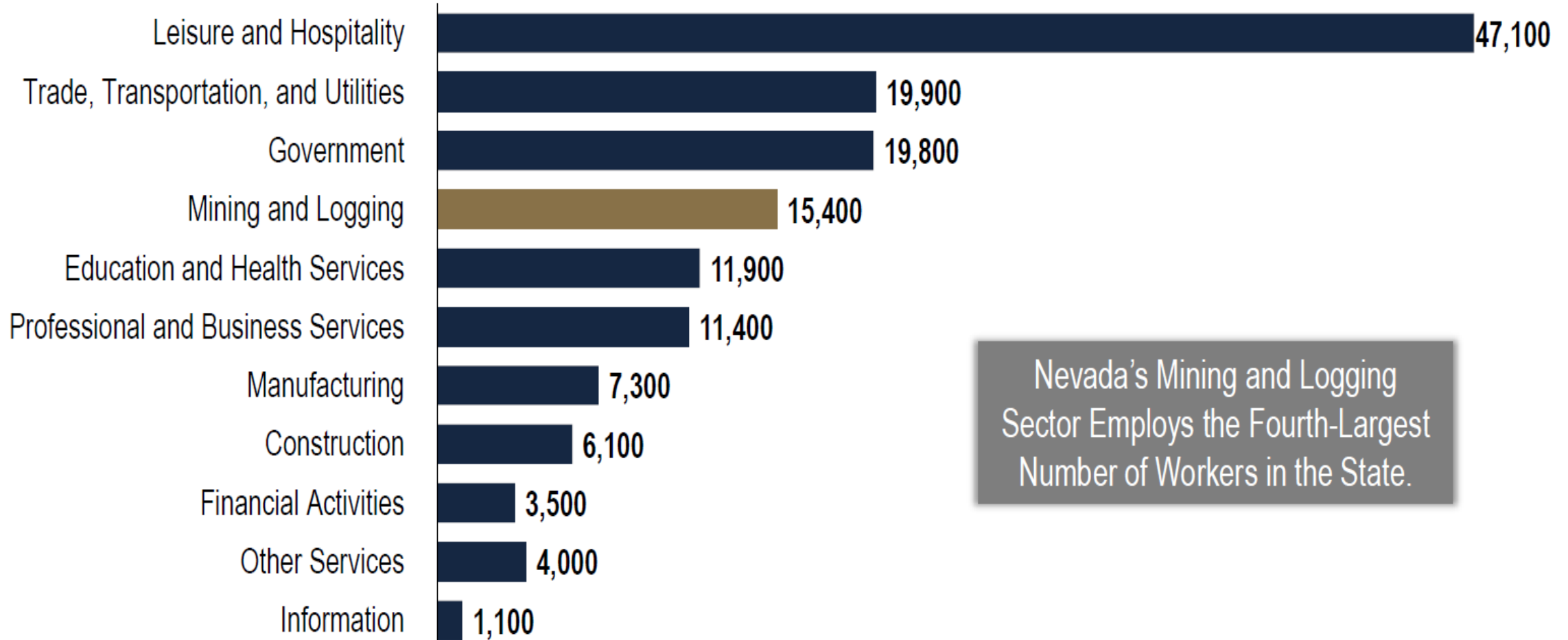
NEVADA MINING AND NATURAL RESOURCES EMPLOYMENT AS PERCENTAGE OF TOTAL EMPLOYMENT BY COUNTY



While Mining Comprises Only 1.4 Percent of Nevada's Overall Employment, Many Rural Counties Have a Substantially Larger Share

Source: Nevada Mining Association, <https://www.nevadamining.org/minerals/>.

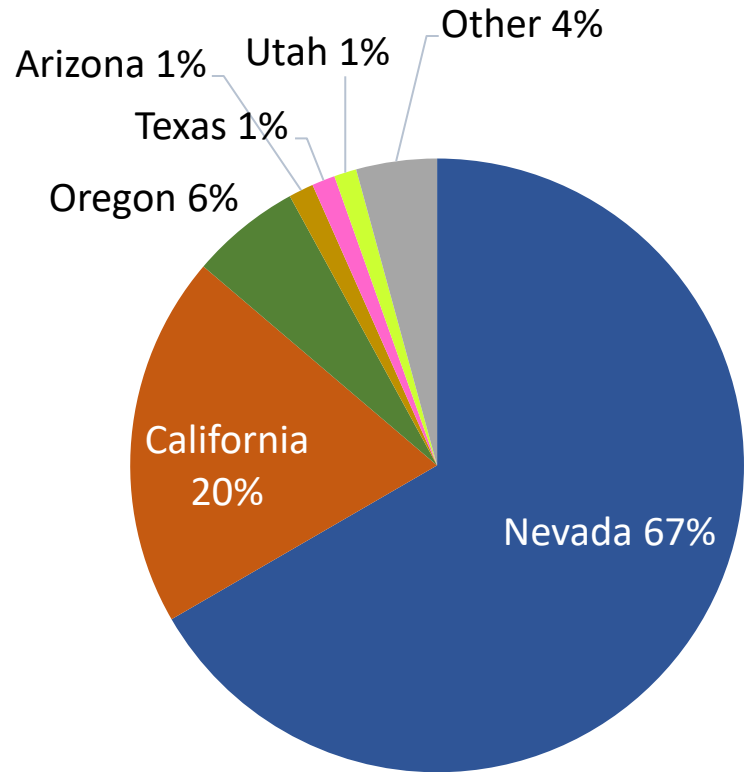
NEVADA EMPLOYMENT BY ECONOMIC SECTOR (EXCLUDING CLARK & WASHOE COUNTIES)



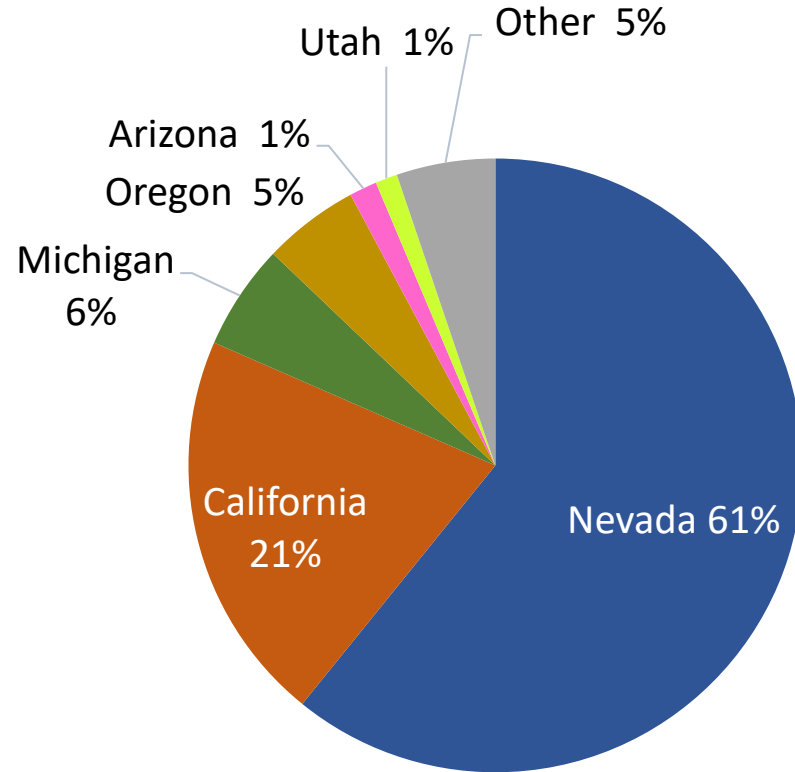
Nevada's Mining and Logging Sector Employs the Fourth-Largest Number of Workers in the State.

COMMODITY FLOW DESTINATIONS BY WEIGHT FOR ALL FREIGHT TYPES

2017 Top Five Destinations by Weight

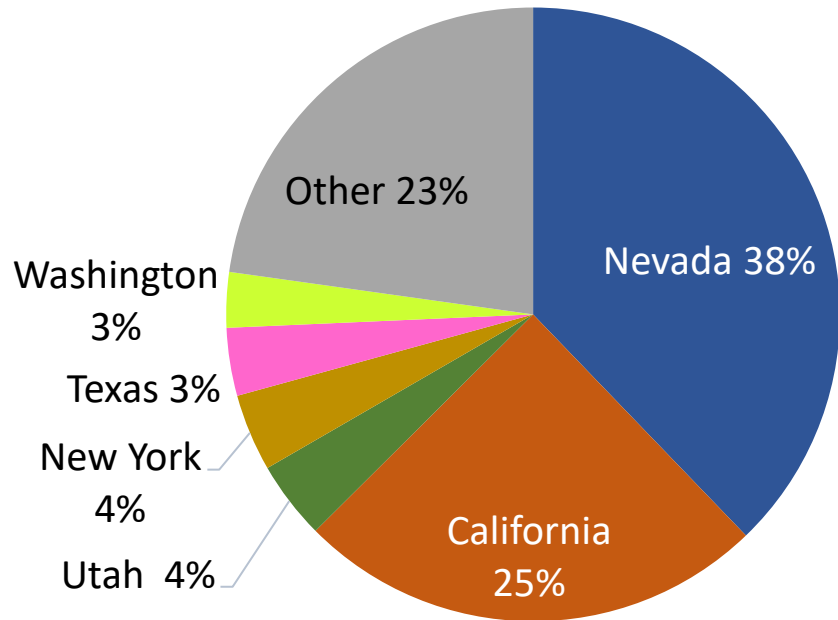


2050 Top Five Destinations by Weight

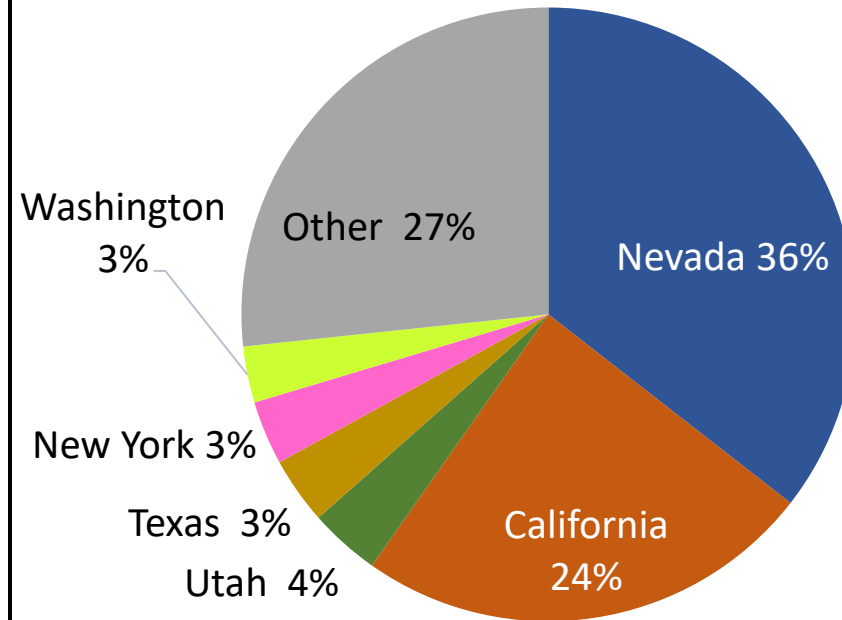


COMMODITY FLOW DESTINATIONS BY VALUE FOR ALL FREIGHT TYPES

2017 Top Five Destinations by Value

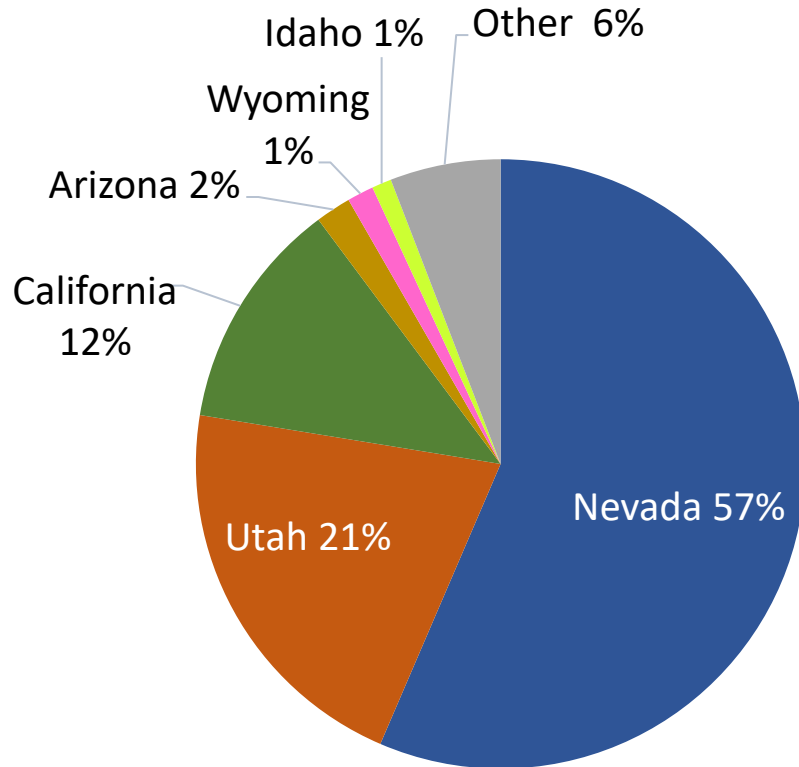


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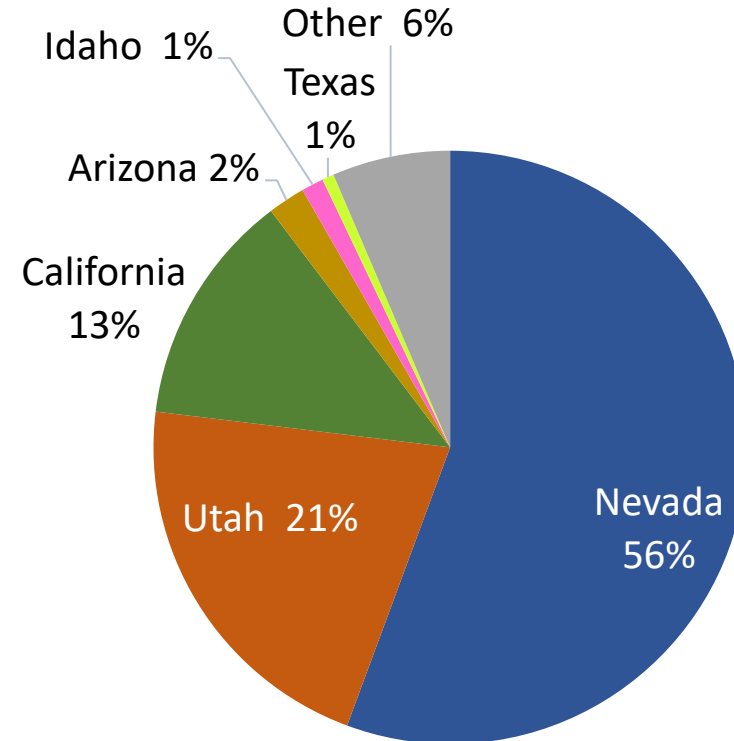


COMMODITY FLOW ORIGINS BY WEIGHT FOR ALL FREIGHT TYPES

2017 Top Five Origins by Weight (Thousand Tons)

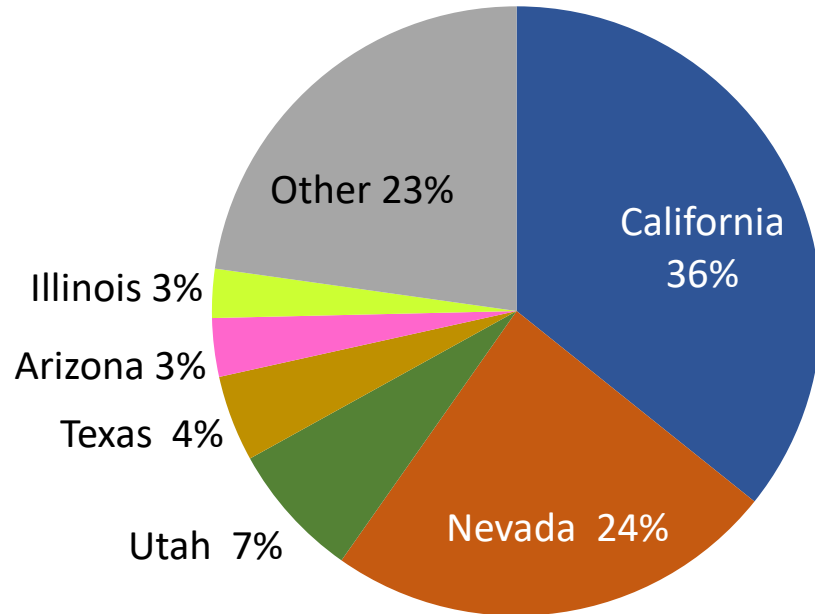


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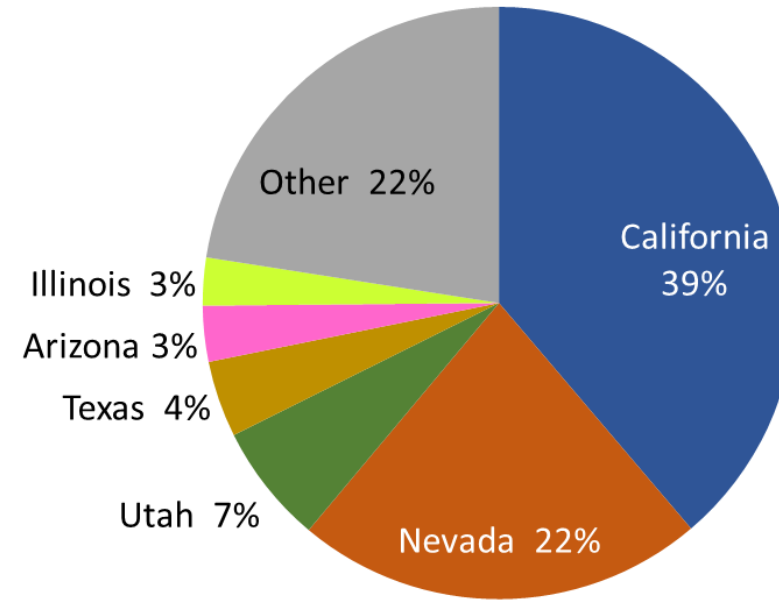


COMMODITY FLOW ORIGINS BY VALUE FOR ALL FREIGHT TYPES

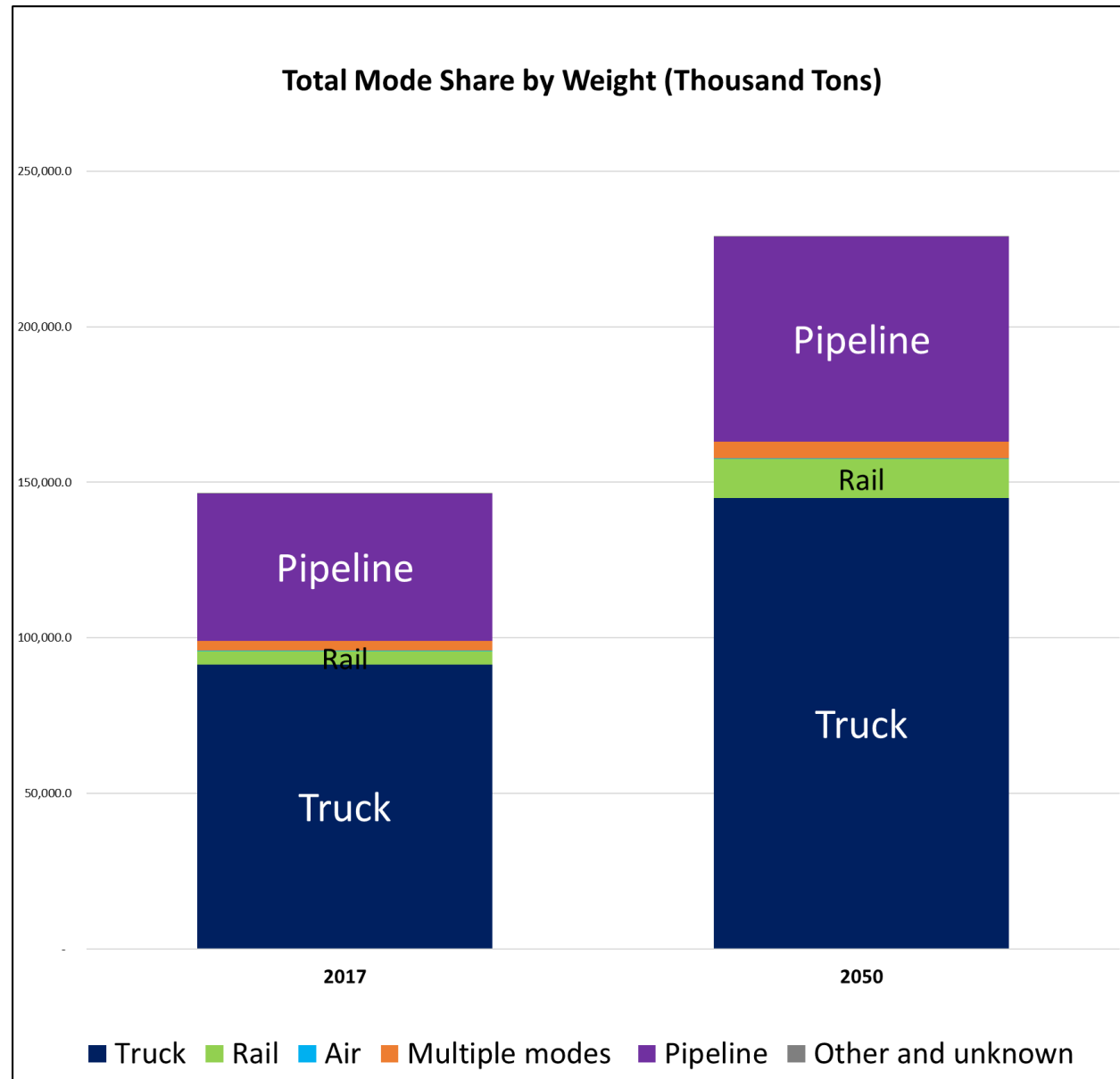
2017 Top Five Origins by Value (Million Dollars)



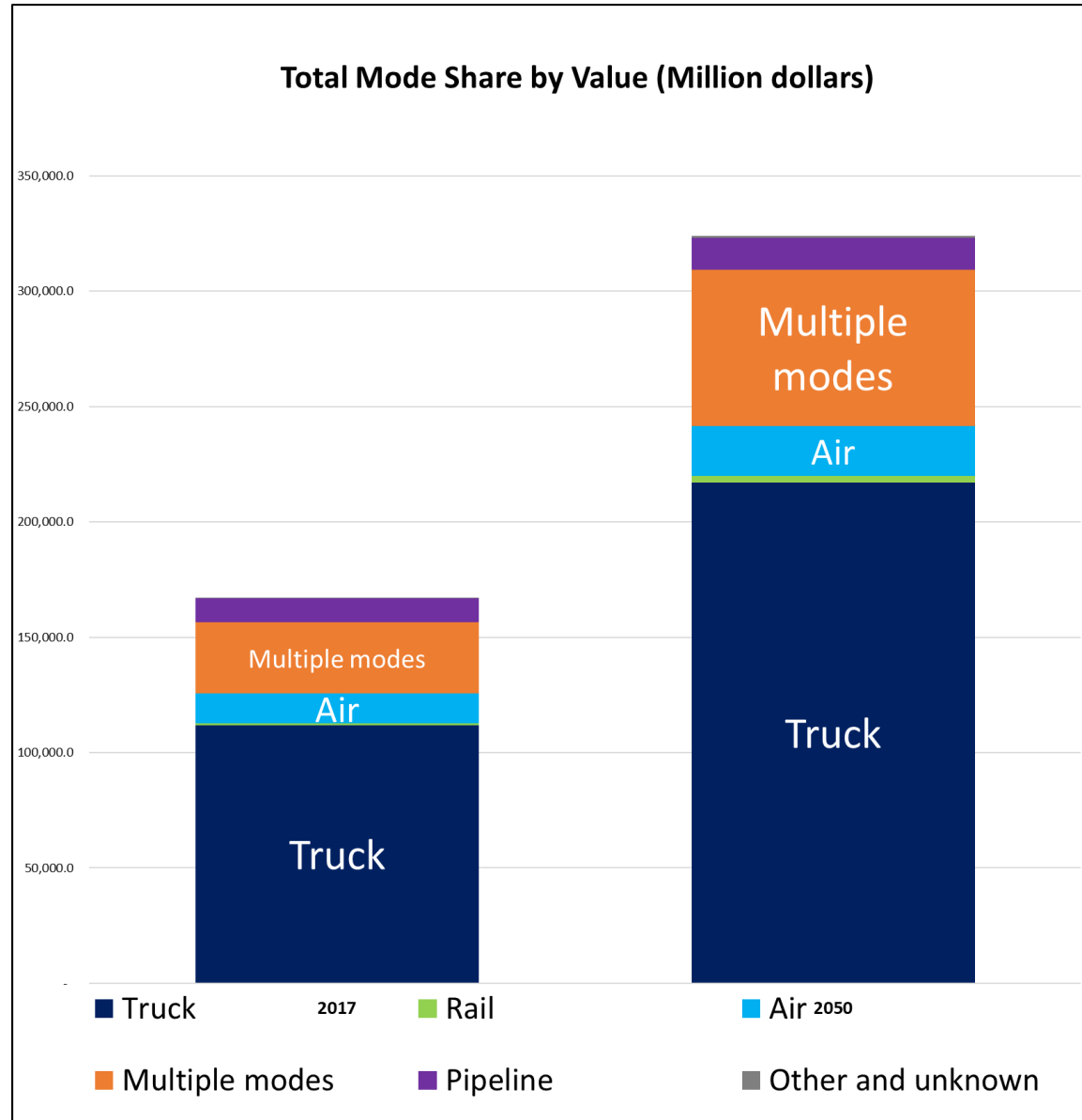
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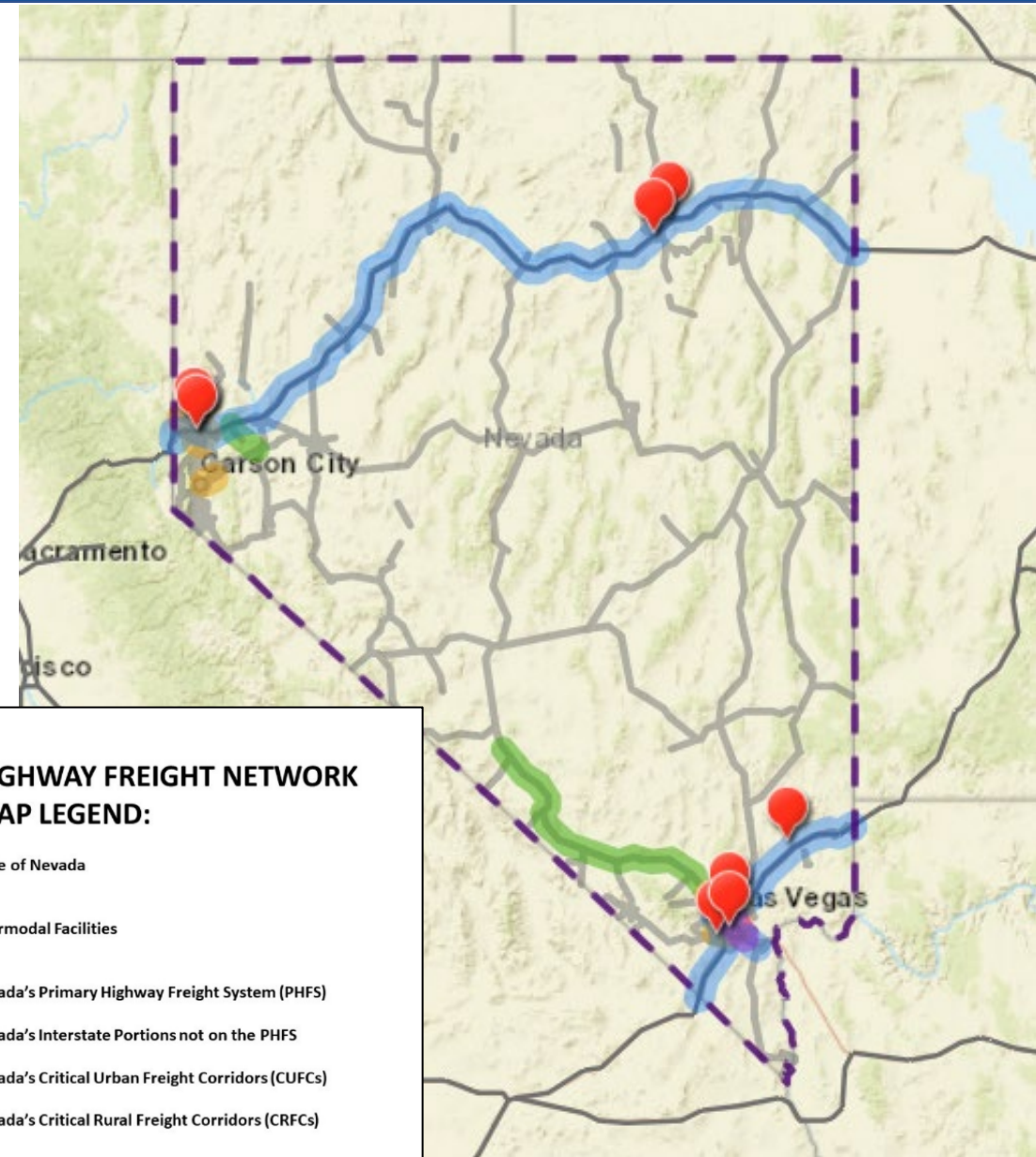
COMMODITY FLOW MODE SHARE BY WEIGHT FOR ALL FREIGHT TYPES



COMMODITY FLOW MODE SHARE BY VALUE FOR ALL FREIGHT TYPES









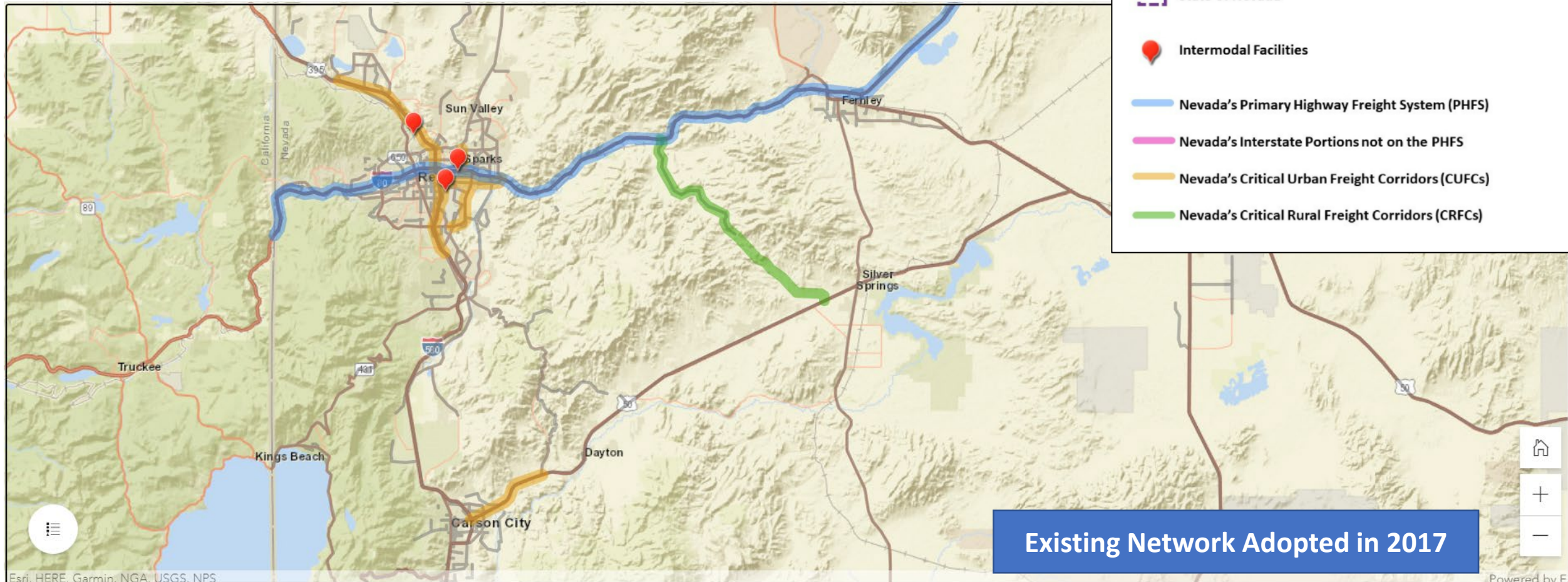
- Last update in 2017
- Additional mileage allowed under BIL
 - Critical Urban Freight Corridors
 - Increase from 75 to 150 miles
 - Critical Rural Freight Corridors
 - Increase from 150 to 300 miles
- To be updated in 2022 Nevada Freight Plan in coordination with local agencies and stakeholders



- Recommendations to be based on truck GPS data analysis and stakeholder input

HIGHWAY FREIGHT NETWORK MAP LEGEND:

-  State of Nevada
-  Intermodal Facilities
-  Nevada's Primary Highway Freight System (PHFS)
-  Nevada's Interstate Portions not on the PHFS
-  Nevada's Critical Urban Freight Corridors (CUFCs)
-  Nevada's Critical Rural Freight Corridors (CRFCs)

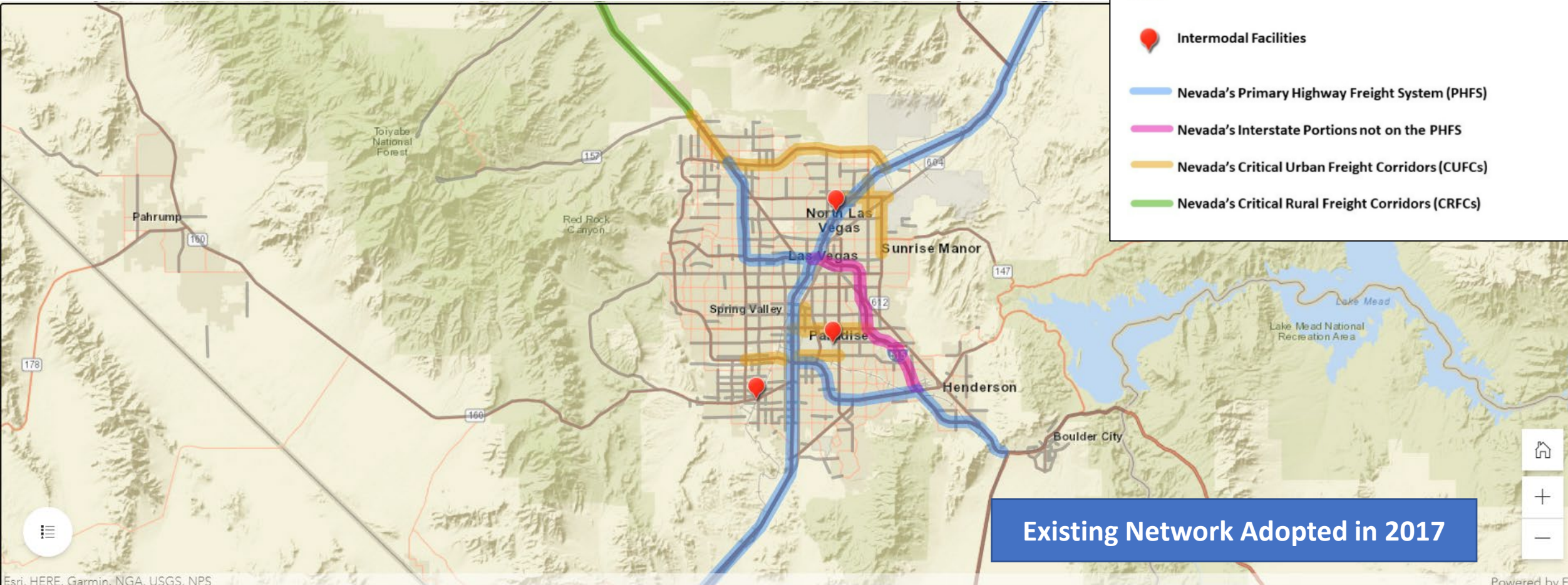


UPDATING THE HIGHWAY FREIGHT NETWORK

- Recommendations to be based on truck GPS data analysis and stakeholder input

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Existing Network Adopted in 2017

NEVADA FREIGHT PLAN UPDATE SCHEDULE

NDOT Project Schedule Nevada State Freight Plan Update - 2022																
Task	Description	2021				2022										
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	Project Management															
2	Stakeholder Outreach															
3	Freight Supply Chains & Trends															
4	Sustainable Freight Transportation															
5	Freight Performance Reporting & Needs Assessment															
6	Risk-Based Management															
7	Freight Plan Strategies & Investment Plan															
8	Final Documentation/Transportation Board Adoption/FHWA Approval															

LEGEND:



FAC Meeting



State Transportation Board Meeting



FHWA Review/Approval



Draft Submittal



Final Submittal



ABOUT THE PASSING & TRUCK CLIMBING LANE STUDY

A lack of passing opportunities can increase frequencies of unsafe passing maneuvers by motorists

An increase in unsafe passing maneuvers directly results in increased crashes

Studies reported that the addition of passing and climbing lanes directly reduced these types of crashes

NDOT is identifying and prioritizing candidate locations to enhance safety and mobility on Nevada's highways and high-risk rural roadways



STUDY OVERVIEW



- Prepare an inventory of existing passing and climbing lane locations to help create a proper distribution
- Develop a methodology that attributes risk to potential locations on 2-lane and multilane highways
- Systematically identify and prioritize locations coinciding with Traffic Safety Engineering and Federal data-driven goals
- Create an implementation and phasing plan that takes factors such as constructability and right-of-way into account
- Recommendations will be considered across other statewide safety and One Nevada Transportation Plan priorities





SELECT FACILITIES

Facility Selection Factors

- Traffic volumes
- Percentage of trucks
- Urban boundaries
- Rural “Main Street” locations



GIS COMPILATION

Leverage GIS Methods

- Convert all datasets to GIS
- Visualize prioritization results
- No specialized licensing



PRIORITIZATION METHODOLOGY

Custom Prioritization Methods

- Passing Lanes: Single Lane
- Climbing Lanes: Single Lane
- Climbing Lanes: Multi-Lane



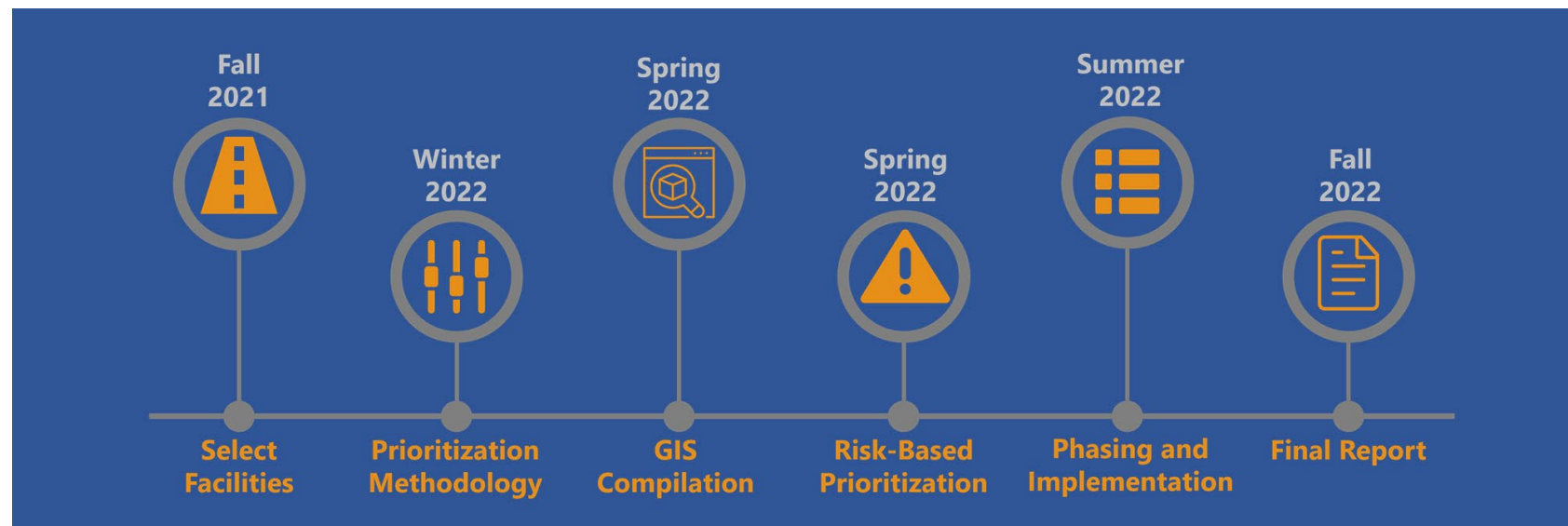
RISK-BASED PRIORITIZATION

Apply Prioritization Methods

- 9 potential traffic factors
- 6 potential safety factors
- Factors may be weighted to emphasize issues (e.g. safety)

STUDY OUTCOMES

- ▶ Provides a data-driven process and implementation plan coinciding with NDOT and Federal goals
- ▶ Candidate locations can then be considered for funding through safety, state and other funding sources
- ▶ The GIS prioritization model can be updated to account for changing conditions over time
- ▶ NDOT strives for more transparency about project selection



- Plan completed 2019
- Trinity, Beowawe and Millers Rest Areas under development
- I-15 and I-80 Preliminary Design Field Studies



- Discussion among FAC members
- Next FAC meeting May 3, 2022





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