

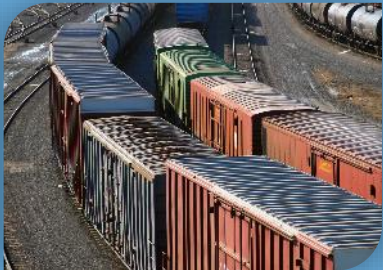
CALIFORNIA NEVADA ARIZONA UTAH



I-15 MOBILITY ALLIANCE

WORKSHOP #2: MAJOR INFRASTRUCTURE PROJECTS

MAY 31, 2022



TODAY'S AGENDA

- » Remarks from the USDOT
- » I-15 Mobility Alliance Background
- » Presentations of Major Project Priorities by State
- » Discussion



REMARKS FROM THE USDOT

CHARLES SMALL

USDOT Deputy Assistant Secretary,
Intergovernmental Affairs



I-15 MOBILITY ALLIANCE OVERVIEW

- ❖ Began in 2007 with a coalition of western state DOTs (AZ, CA, NV, UT)
- ❖ Goal: develop a long-range plan to address current and future mobility needs along I-15 from southern California to northern Utah
- ❖ Now includes 95+ public and private sector partners



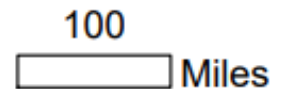
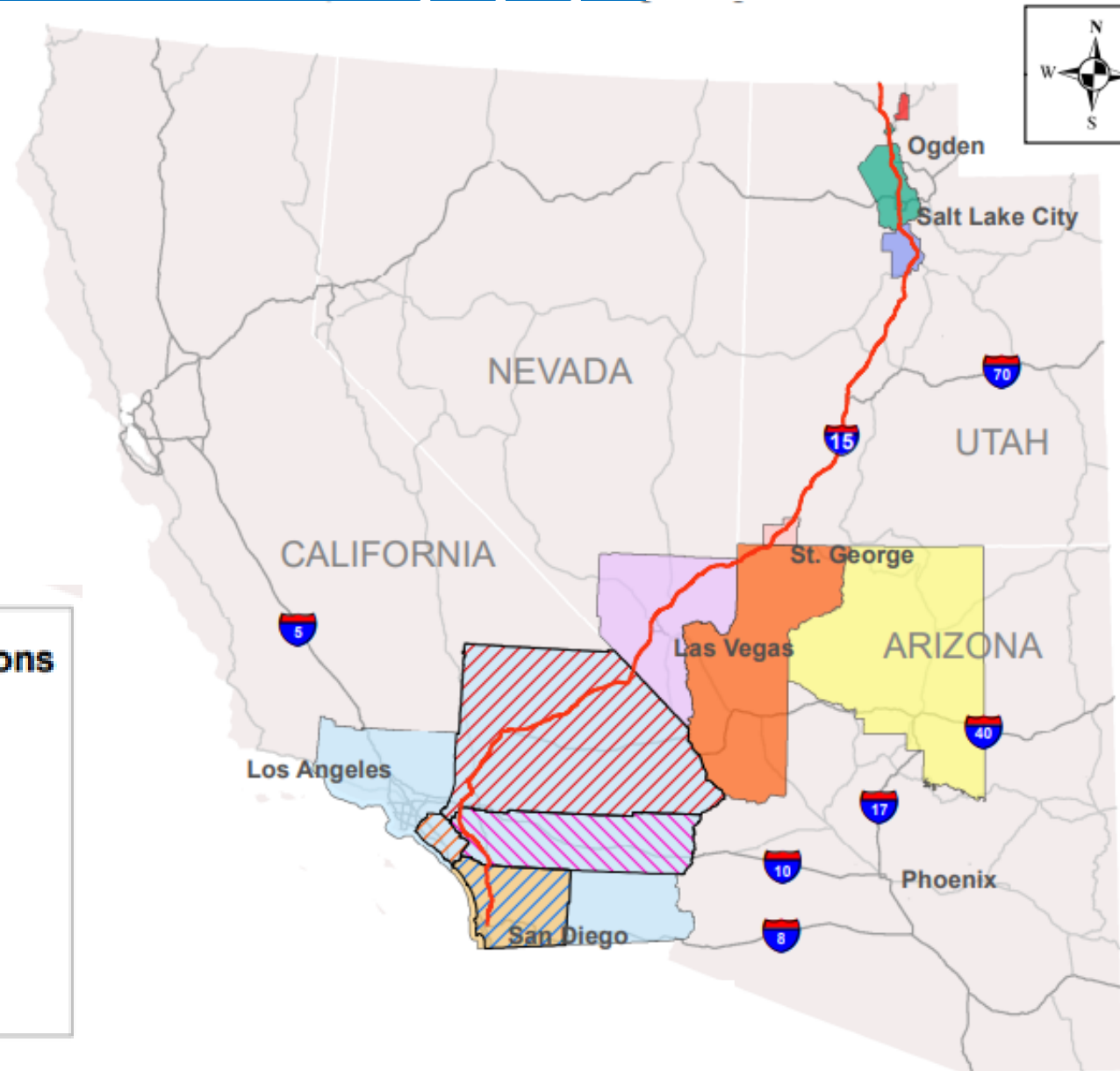
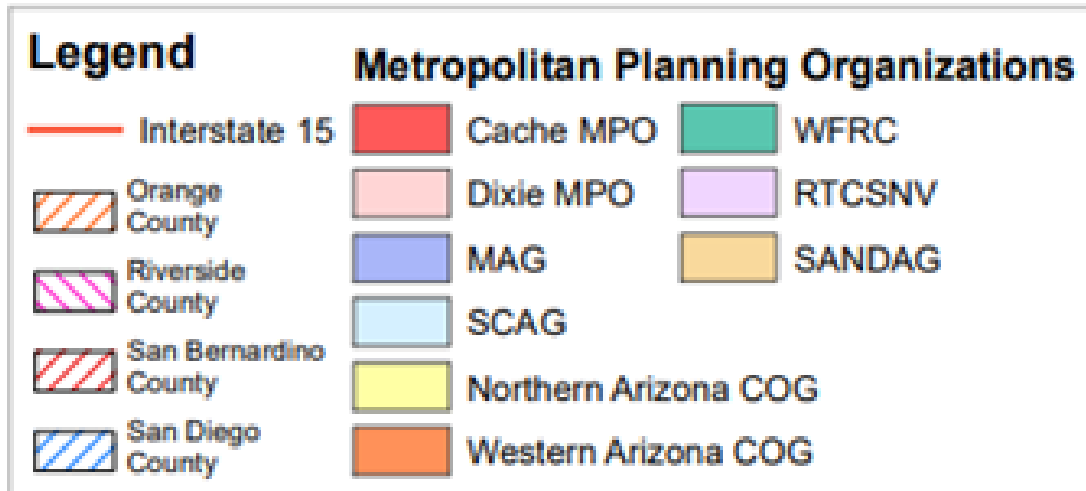
I-15 MOBILITY ALLIANCE OVERVIEW

❖ Partners include:

- State DOTs
- MPOs/Transportation Agencies
- Transit Agencies
- Cities and Counties
- Resource Agencies
- Private Industry
- Non-Profit Organizations
- Academics
- Economic Development/
Commerce



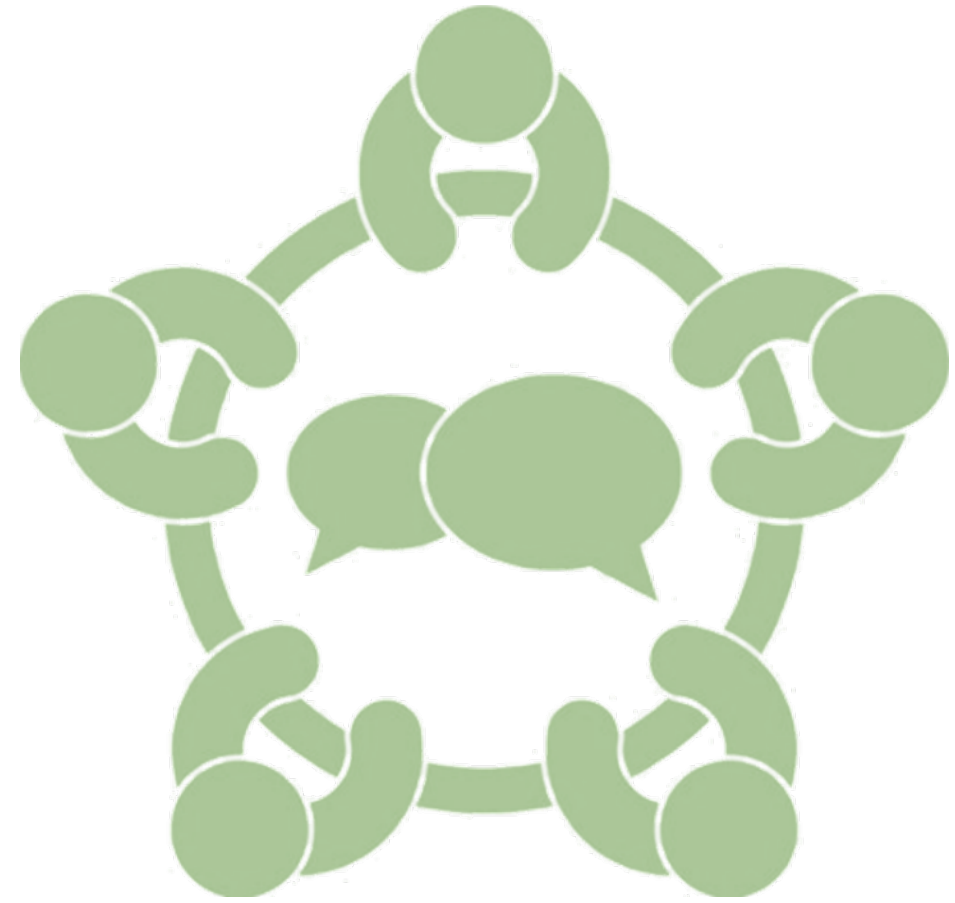
I-15 MPO PARTNERS



I-15 MOBILITY ALLIANCE FOCUS GROUPS/WORKSHOPS

Purpose: Gather agency and stakeholder input about needs and priorities

- ❖ High-Speed Rail & High-Capacity Transit (March '22)
- ❖ **Major Infrastructure Projects (May '22)**
- ❖ Freight Mobility (July '22)
- ❖ Alternative Fuels & Emerging Technologies (September '22)



IMMEDIATE PROJECTS OF INTERREGIONAL SIGNIFICANCE (IPIRS)

- ❖ Projects along I-15 or systemically connected to I-15
- ❖ Projects that have significant interregional benefits for moving people and moving goods on I-15
- ❖ Projects with:
 - community support
 - environmental clearance activities complete or underway, and
 - substantial commitment of state and local funding.
- ❖ Over 25 IPIRS project funded and advanced

HIGHWAY/BRIDGE 2012-2017 Accomplishments

	Sponsor	Project Name
AZ	ADOT	I-15: Virgin River Gorge Bridges
CA	Caltrans	I-15/French Valley Parkway Interchange
CA	RCTC	I-15/SR-91 Interchange
CA	SANBAG	I-15/I-215 (Devore) Interchange Reconstruction
CA	SANDAG	I-15/SR 76 East
NV	NDOT	Project NEON Phase I: I-15 from Sahara Ave to I-515/US 95 Interchange (Spaghetti Bowl)
UT	UDOT	I-15 Improvements from Lehi to Draper



TOLLING AND CONGESTION PRICING

	Sponsor	Project Name
UT	UDOT	I-15: HOV/HOT Lanes I-215 to Riverdale Phase I



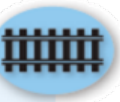
INTERMODAL FREIGHT DISTRIBUTION

	Sponsor	Project Name
CA	SANDAG	Port of San Diego Freeway Access Improvements
CA	SANDAG	State Route 11/Otay Mesa East Port of Entry Project



TRANSIT AND RAIL

	Sponsor	Project Name
CA	SANDAG	Mid-City Transit Projects/I-15 Corridor BRT
NV	RTCSNV	Flamingo BRT, Boulder Highway to Bruce Woodbury Parkway
NV	RTCSNV	I-15 Park and Ride Facilities, Various Locations
UT	UTA	I-15 Park & Ride Facilities, Various Locations
UT	UTA	Front Runner System Improvements
UT	UTA	Provo/Orem BRT via University Parkway and University Avenue



ITS/ATMS

	Sponsor	Project Name
CA	Caltrans	I-15 Integrated Corridor Management Project
NV	NDOT/FAST	I-15 from Craig Road to SR 604, FAST Package D
UT	UDOT	Expansion of ITS Digital Backbone on I-15
CA, NV, AZ, UT	I-15 Mobility Alliance	I-15 Dynamic Mobility Project



INTERSTATE STRATEGIC CORRIDOR INVESTMENTS

	Sponsor	Project Name
CA, NV, AZ, UT	FRA	Western High-Speed Rail Feasibility Study
UT	Dixie MPO	Utah I-15 MP 0 to 16 Environmental Assessment
NV, AZ	ADOT/NDOT	I-11 and Intermountain West Corridor Planning, Arizona to Nevada



PERFORMANCE MEASURES ADOPTED IN 2017

❖ Reliability

- Goal: Maintain travel speeds of 40 mph (minimum) throughout the day

❖ Safety

- Goal: Maintain fatal crash rate per MVMPT below 0.003

❖ Infrastructure Condition

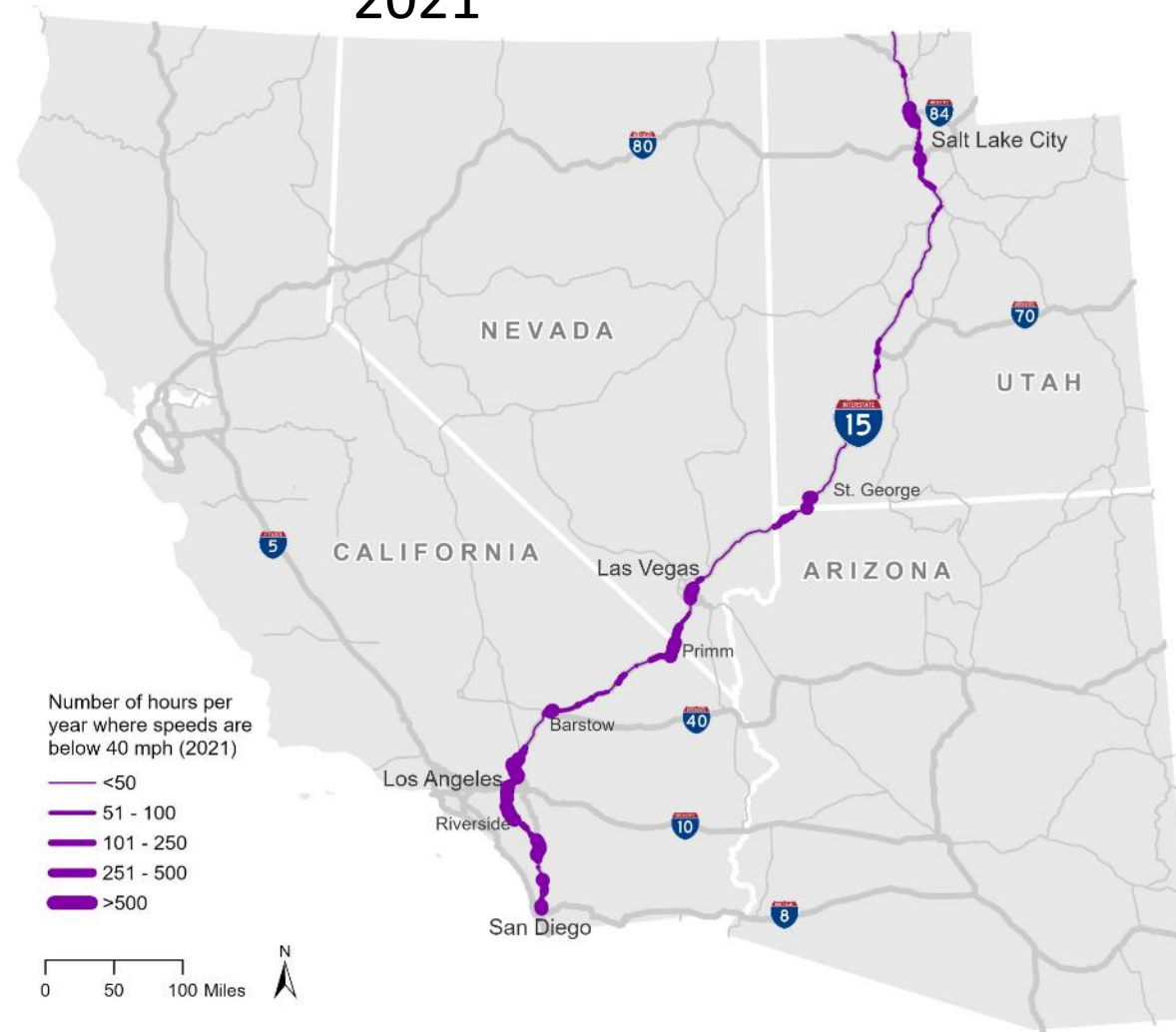
- Goal: Eliminate bridges in poor conditions along I-15



Reliability

Total Number of Hours where Speeds are Below 40 mph

2021



Safety

Fatal Crashes per MVMT

I-15 Fatal Crash Rate Change (2014-2018)



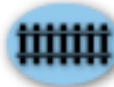
Infrastructure Condition

Bridges in Poor Condition

2021



IPIRS – 2017 PRIORITIES



Transit and Rail (TR)

- 1 XpressWest High-Speed Rail Connection between Las Vegas, NV and Victorville, CA.....CA/NV
- 2 Front Runner System Improvements.....UT
- 3 Front Runner System First/Last Mile ConnectionsUT



Intelligent Transportation/Active Traffic Management Systems (ITS/ATMS)

- 1 I-15 Integrated Corridor Management; SR 163 to SR 78.....CA
- 2 I-15 from Las Vegas Valley to Mesquite, FAST Package H.....NV
- 3 Expansion of ITS Digital Backbone on I-15UT
- 4 Managed Motorways.....UT
- 5 I-15 Dynamic Mobility Project: Multi-State ITS ArchitectureAZ/CA/NV/UT



Interstate Strategic Corridor Investments

- 1 Southwest Passenger Rail Planning CA/NV/UT
- 2 I-15 Mobility Alliance Planning.....CA/NV/AZ/UT
- 3 I-11 Corridor, Arizona & Nevada.....AZ/NV
- 4 I-15 Alternative Route Implementation..... CA/NV/UT
- 5 Smart Truck Parking Study..... CA/NV/UT
- 6 Alternative Fuel Corridor ImplementationCA/NV/AZ/UT
- 7 Hyperloop, Las Vegas to Ports of LA/LBCA/NV



Highway/Bridge Projects of Regional and National Significance (HB)

- 1 I-15: Virgin River Gorge Bridges.....AZ
- 2 I-15/French Valley Parkway Interchange..... CA
- 3 I-10 Express Lanes.....CA
- 4 I-15 HOV Improvements, Blue Diamond Rd to I-515.....NV
- 5 I-15 Improvements: Utah MP 0 to 16.....UT
- 6 I-15/Provo 820 North Interchange.....UT



Tolling and Congestion Pricing (TCP)

- 1 I-15: Toll Express Lanes from Cajalco Rd to State Route 210CA
- 2 I-15: HOV/HOT Lanes, Layton to RiverdaleUT



Intermodal Freight Distribution (IFD)

- 1 Port of San Diego Freeway Access Improvements ... CA
- 2 SR-11/Otay Mesa East Port of Entry Project..... CA
- 3 I-15 Improvements from Apex Economic Development District to CC-215NV
- 4 I-15 Truck Climbing Lanes (various locations).....UT
- 5 5600 W. Access to Intermodal FacilityUT

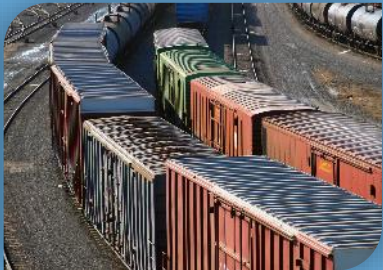


CALIFORNIA NEVADA ARIZONA UTAH



I-15 MOBILITY ALLIANCE

CALIFORNIA Major Project Priorities Discussion



IPIRS – IN PROGRESS

- ❖ Harbor Drive 2.0 – Vesta Street
 - Approve Project Initiation – June 2022
 - Project Approval & Environmental – December 2023
 - Design – January 2024
 - Approve Contract – February 2026
 - Final Project Closeout – April 2031



IPIRS – IN PROGRESS

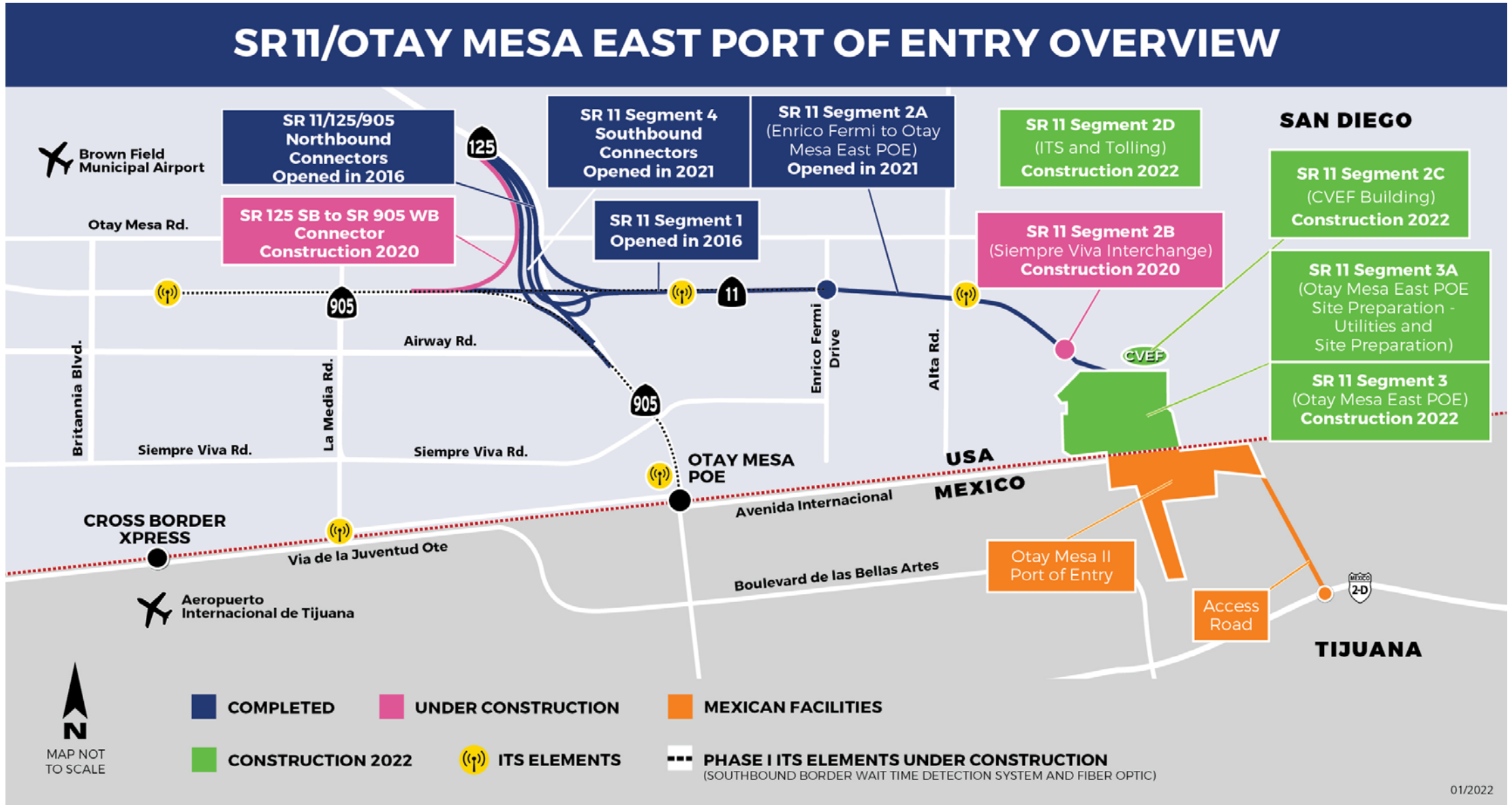
- ❖ SR-11/Otay Mesa East Port of Entry Project
 - Construction underway on final segment of SR 11 and SR 125/SR11/SR 905 connector ramps; estimated 2024 opening



State Route 11 Corridor



IPIRS – IN PROGRESS



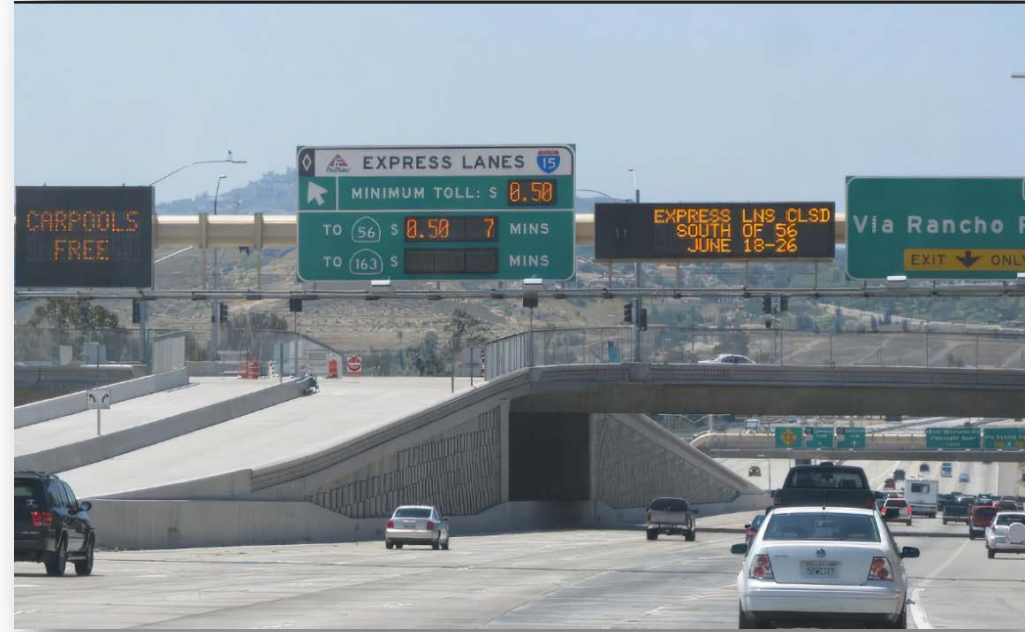
IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

- ❖ RAPID 235 – Enhanced service
 - Escondido to Downtown San Diego via I-15, \$34M
- ❖ RAPID 238
 - San Diego via I-15, \$78M



IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

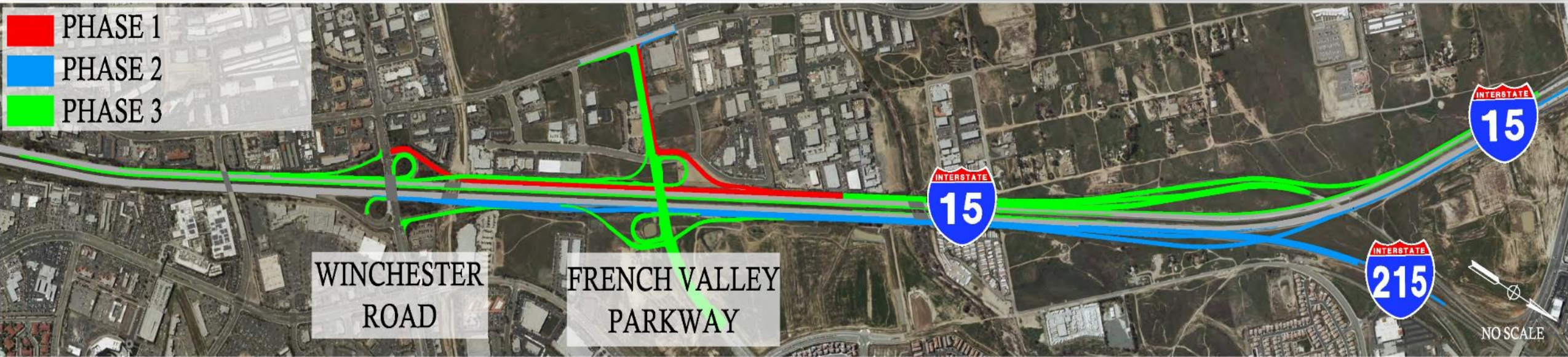
- ❖ I-15 Complete Corridor: Managed Lanes
 - I-5 to I-805: add 2 managed lanes, \$103M
 - I-805 to I-8: add 2 managed lanes, \$115M
 - I-8 to SR 163: convert 2 general purpose lanes to managed lanes and add 2 managed lanes, \$241M
 - Valley Parkway to County line: convert 2 general purpose lanes to managed lanes and add 1 managed lane, \$607M



IPIRS – IN PROGRESS

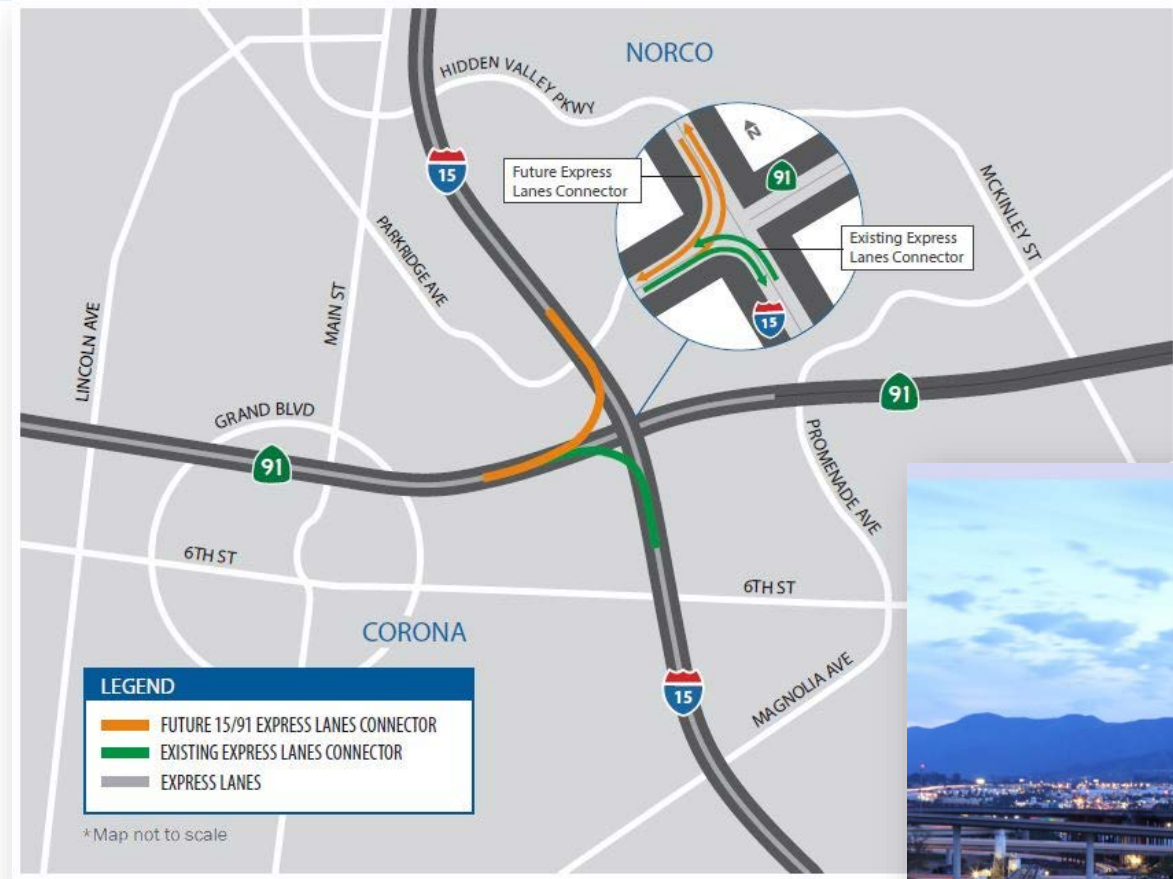
❖ I-15 French Valley Parkway Interchange

- \$50M INFRA grant in 2019
- Phase 1 complete, Phase 2 in design
- Project included in RTP



IPIRS – IN PROGRESS

- ❖ Riverside County Transportation Commission (RCTC)
 - I-15/SR 91 Express Lanes Connector project between I-15N and 91E; between I-15S and 91W (under construction)



IPIRS – IN PROGRESS

❖ RCTC

- I-15: Toll Express Lanes from Cajalco Rd. to SR 60 in 2021
- I-15 Express Lanes Project – Southern Extension
- I-15 Interim Corridor Operations Project
- I-15 Corridor Operations Project
- I-15 Smart Roads Project (Temecula)



IPIRS – IN PROGRESS

- ❖ San Bernardino County Transportation Authority (SBCTA):
I-10 Freight and Express Lane project, LA Co. Line to I-15
- Focused on addressing I-10/I-15 bottleneck
- 9th most critical truck bottleneck in the U.S. (ATRI ranking)
- Phase 1: Under construction

Phase 1



IPIRS – IN PROGRESS

- ❖ I-10 Freight and Managed Lane Project I-15 to Colton
 - Phase 2: In Design Phase
 - Includes incentives for zero-emission trucks and fueling infrastructure
 - Competing for INFRA/Mega grant to close remaining funding gap

Phase 2



IPIRS – IN PROGRESS

- ❖ I-15: SR 60 to SR 210 Express and Auxiliary Lanes (in Design)



IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

- ❖ Autonomous ZEV Transit Tunnel to Ontario International Airport (called ONTLoop)
 - On-demand transit tunnel from Cucamonga Metrolink Station to ONT
 - Included in RTP
 - Currently in environmental with design-build contract in place by end of 2023



IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

- ❖ US 395 Freight Mobility and Safety Project between SR 18 and I-15, in Design Phase (7-mile stretch **in red**)



IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

- ❖ I-15 SB Bottleneck Relief Phase 1 - CA Agriculture Station to Primm, NV
 - Utilizing shoulder for SB through traffic during peak periods (pilot)
 - Phase 1 - construction to begin summer 2022
- ❖ I-15 SB Bottleneck Relief Phase 2 - CA Agriculture Station to Baker, CA (after successful completion of first pilot)



IPIRS – IN PROGRESS

❖ Brightline High-Speed Rail - Victor Valley, CA to Las Vegas, NV

- High-speed fully electric rail
- No at-grade crossings; mostly single track
- 170-mile corridor of protected track, mostly in median of I-15
- Running up to 180 MPH with 90-minute travel times
- At full operations, expected to capture 11 million one-way trips annually



❖ Discussion of California's Major Project Priorities

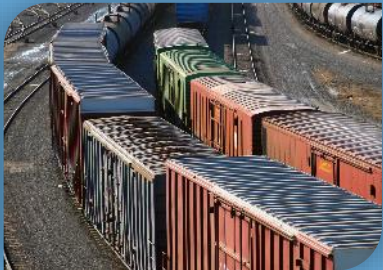


CALIFORNIA NEVADA ARIZONA UTAH



I-15 MOBILITY ALLIANCE

NEVADA
Major Project Priorities
Discussion



IPIRS – COMPLETED PROJECTS

- ❖ I-15 HOV Improvement, Blue Diamond Rd to I-15/US-95/I-515
 - Completed through Project NEON



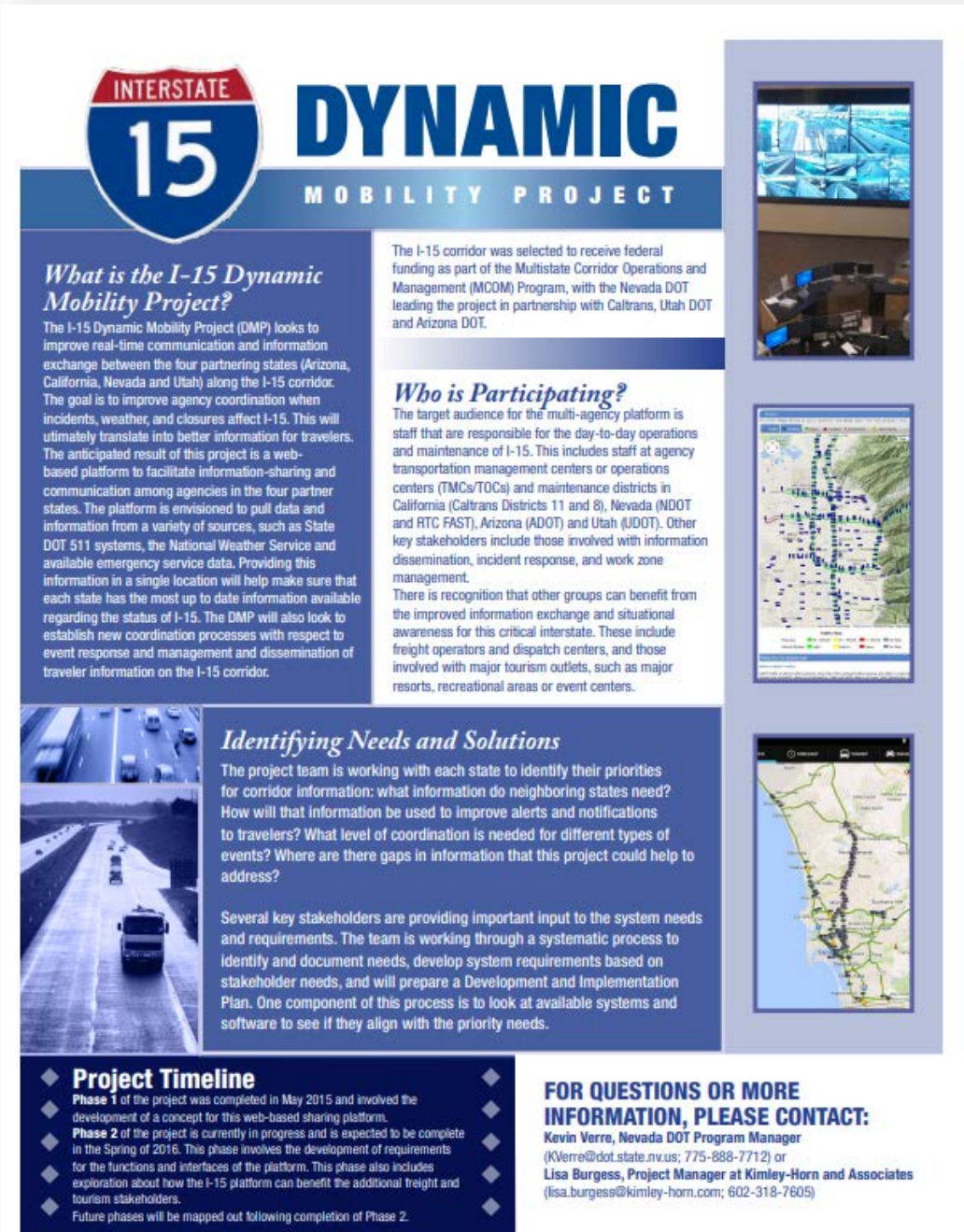
IPIRS – PROJECTS IN PROGRESS

- ❖ I-15 Improvements from Apex Economic Development District to CC-215
 - CC-215 Interchange under construction



IPIRS – COMPLETED PROJECTS

- ❖ I-15 Dynamic Mobility Project
- ❖ I-15 Freight Mobility Enhancement Plan (CA, NV)



The brochure features a blue and white color scheme. At the top left is the Interstate 15 shield logo. To its right, the word "DYNAMIC" is written in large, bold, blue letters, with "MOBILITY PROJECT" in smaller white letters on a blue background below it. The main content is organized into several sections with blue headers and white text. On the right side, there are four vertical panels: a top panel showing a control room with multiple screens, a second panel showing a map of the I-15 corridor, a third panel showing a map of the I-15 corridor, and a bottom panel showing a map of the I-15 corridor. At the bottom left, there is a small circular logo for the "I-15 Mobility Alliance" showing a map of the corridor. The bottom right corner contains contact information for project managers.

INTERSTATE 15 DYNAMIC MOBILITY PROJECT

What is the I-15 Dynamic Mobility Project?

The I-15 Dynamic Mobility Project (DMP) looks to improve real-time communication and information exchange between the four partnering states (Arizona, California, Nevada and Utah) along the I-15 corridor. The goal is to improve agency coordination when incidents, weather, and closures affect I-15. This will ultimately translate into better information for travelers. The anticipated result of this project is a web-based platform to facilitate information-sharing and communication among agencies in the four partner states. The platform is envisioned to pull data and information from a variety of sources, such as State DOT 511 systems, the National Weather Service and available emergency service data. Providing this information in a single location will help make sure that each state has the most up to date information available regarding the status of I-15. The DMP will also look to establish new coordination processes with respect to event response and management and dissemination of traveler information on the I-15 corridor.

Who is Participating?

The target audience for the multi-agency platform is staff that are responsible for the day-to-day operations and maintenance of I-15. This includes staff at agency transportation management centers or operations centers (TMCs/TOCs) and maintenance districts in California (Caltrans Districts 11 and 8), Nevada (NDOT and RTC FAST), Arizona (ADOT) and Utah (UDOT). Other key stakeholders include those involved with information dissemination, incident response, and work zone management. There is recognition that other groups can benefit from the improved information exchange and situational awareness for this critical interstate. These include freight operators and dispatch centers, and those involved with major tourism outlets, such as major resorts, recreational areas or event centers.

Identifying Needs and Solutions

The project team is working with each state to identify their priorities for corridor information: what information do neighboring states need? How will that information be used to improve alerts and notifications to travelers? What level of coordination is needed for different types of events? Where are there gaps in information that this project could help to address?

Several key stakeholders are providing important input to the system needs and requirements. The team is working through a systematic process to identify and document needs, develop system requirements based on stakeholder needs, and will prepare a Development and Implementation Plan. One component of this process is to look at available systems and software to see if they align with the priority needs.

Project Timeline

- Phase 1 of the project was completed in May 2015 and involved the development of a concept for this web-based sharing platform.
- Phase 2 of the project is currently in progress and is expected to be complete in the Spring of 2016. This phase involves the development of requirements for the functions and interfaces of the platform. This phase also includes exploration about how the I-15 platform can benefit the additional freight and tourism stakeholders.
- Future phases will be mapped out following completion of Phase 2.

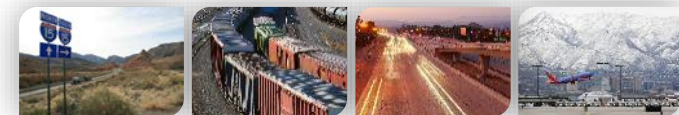
FOR QUESTIONS OR MORE INFORMATION, PLEASE CONTACT:

Kevin Verre, Nevada DOT Program Manager
(KVerre@dot.state.nv.us; 775-888-7712) or
Lisa Burgess, Project Manager at Kimley-Horn and Associates
(lisa.burgess@kimley-horn.com; 602-318-7605)



IPIRS – IN PROGRESS

❖ I-15 ITS/FAST Improvements





Harry Reid
International
Airport

Resort Corridor

Allegiant
Stadium



IPIRS - ONGOING PLANNING STUDIES (For Information Only)

- ❖ I-15/Resort Corridor Event Management (“Perfect Storm”)
- ❖ Region-wide Traffic Signal Optimization/Replacement
- ❖ RTC FAST - ITS Master Plan
- ❖ I-15 (Sloan to CA/NV Stateline) Feasibility Study



IPIRS – NEW CAPITAL PROJECTS TO CONSIDER

- ❖ Brightline High-Speed Rail - Victor Valley, CA to Las Vegas, NV
- ❖ I-15 Project NEON NB Ramp Braiding (Package B1)
- ❖ I-15 Central Corridor (Sahara to Flamingo) PE/NEPA
- ❖ I-15 South Package 2 (Sloan Rd. to Blue Diamond) Widening Construction
- ❖ ATCMTD; I-15 N of Spaghetti Bowl



❖ Discussion of Nevada's Major Project Priorities

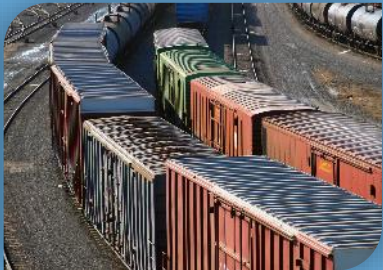


CALIFORNIA NEVADA ARIZONA UTAH



I-15 MOBILITY ALLIANCE

ARIZONA
Major Project Priorities
Discussion



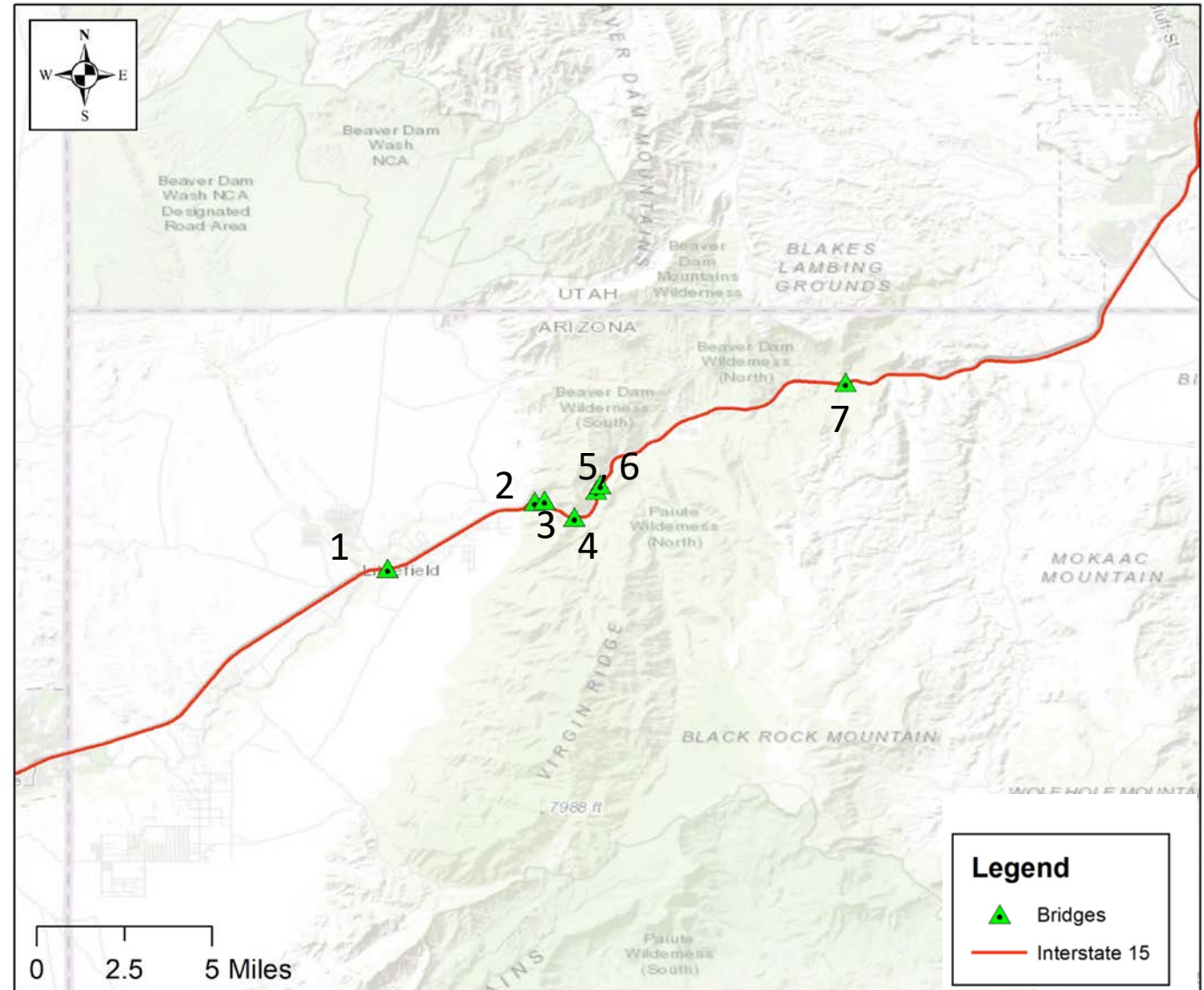
ARIZONA PROJECT PRIORITIES

Virgin River Bridges

- ❖ Repairs and deck rehab to Bridges # 2, 4, and 5 completed in 2020
- ❖ Bridge #1 replacement under construction, \$73M, estimated completion 2023
- ❖ Next priorities:
 - Bridge #5 replacement or superstructure
 - Bridge #7 replacement or superstructure

Other Project Priorities

- ❖ Pavement Rehab
- ❖ Passing Lanes
- ❖ POE Improvements



Parametrix



❖ Discussion of Arizona's Major Project Priorities

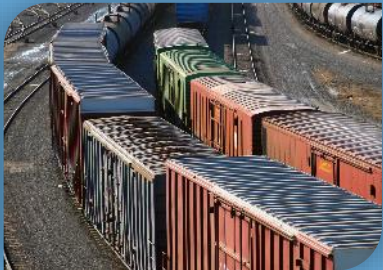


CALIFORNIA NEVADA ARIZONA UTAH



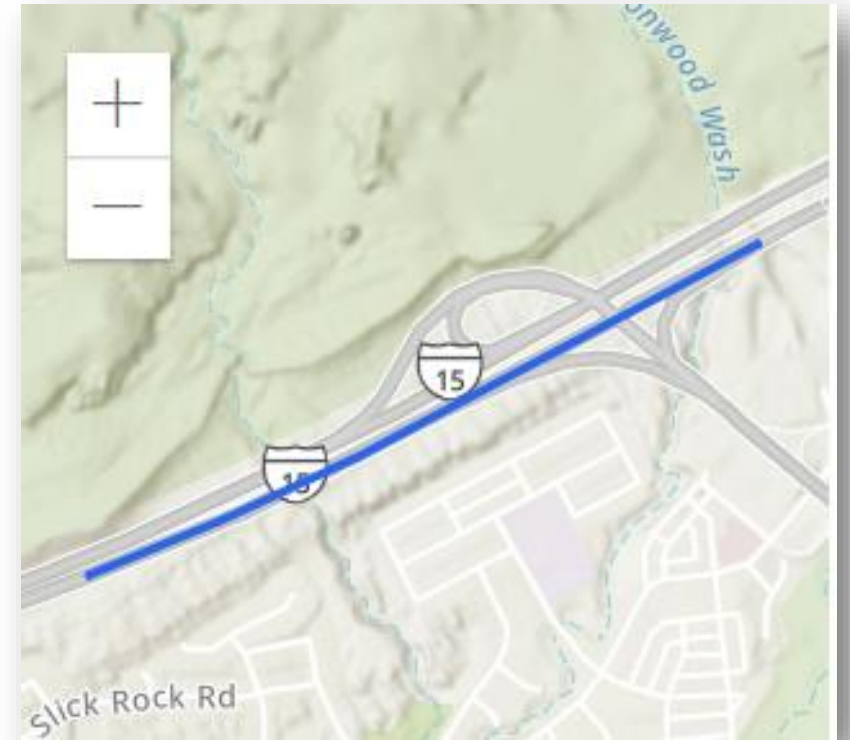
I-15 MOBILITY ALLIANCE

UTAH
Major Project Priorities
Discussion




IPIRS – PARTIALLY COMPLETED PROJECTS

- ❖ I-15 Improvement, MP 0 to 16
 - SR-9 (Exit to Zion National Park), MP 13.6-16.2
 - \$28.9M project, construction started in 2019
- ❖ I-15 Improvement, MP 10 to 13
 - Widening from 4 to 6 lanes, adding interchange at MP 11; currently in design, 2022/2023 construction
 - Need to add money but considered fully funded
- ❖ I-15 Improvement, MP 6 to 8
 - Widening from 4 to 6 lanes, potential interchange at MP 7; currently in environmental, 2023 construction
 - Need to add money but considered fully funded



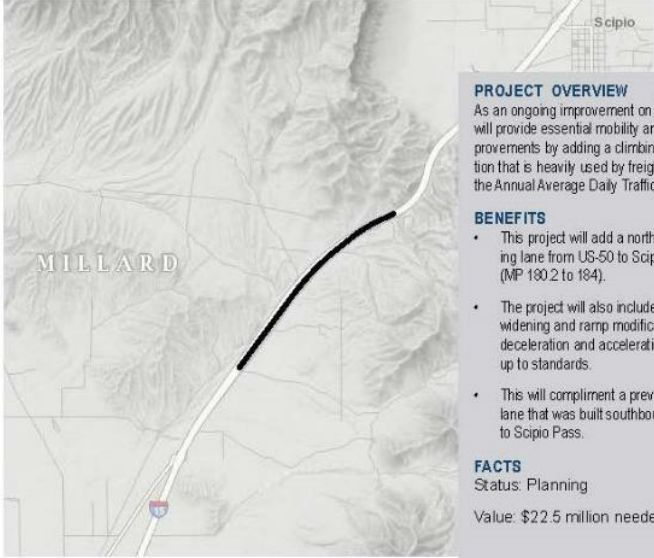
IPIRS – PARTIALLY COMPLETED PROJECTS/UNDER CONSTRUCTION

- ❖ Millard County truck climbing lanes, funded, \$37M
 - Baker Canyon Southbound MP 139.59 to 143.30
 - Dog Valley Pass Southbound MP 137.7 to 135.4
 - Northbound MP 135.41 to 136.86
- ❖ Washington County truck climbing lanes, MP 37.5 to MP 42, \$24.4M, construction 2019
- ❖ Beaver County, Beaver Ridge climbing lanes, MP 98 -102.93, completed
- ❖ Millard County: northbound climbing lane from US-50 to Scipio Pass (MP 180.2 to 184). In planning phase; \$22.5M needed



I-15 NORTHBOUND CLIMBING LANE

Millard County - South of Scipio




PROJECT OVERVIEW
As an ongoing improvement on I-15, this project will provide essential mobility and safety improvements by adding a climbing lane in a section that is heavily used by freight trucks (41% of the Annual Average Daily Traffic).

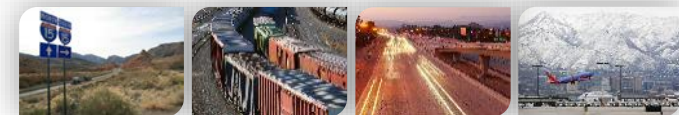
BENEFITS

- This project will add a northbound climbing lane from US-50 to Scipio Pass (MP 180.2 to 184).
- The project will also include structure widening and ramp modifications to ensure deceleration and acceleration lengths are up to standards.
- This will compliment a previous climbing lane that was built southbound from Scipio to Scipio Pass.

FACTS
Status: Planning
Value: \$22.5 million needed

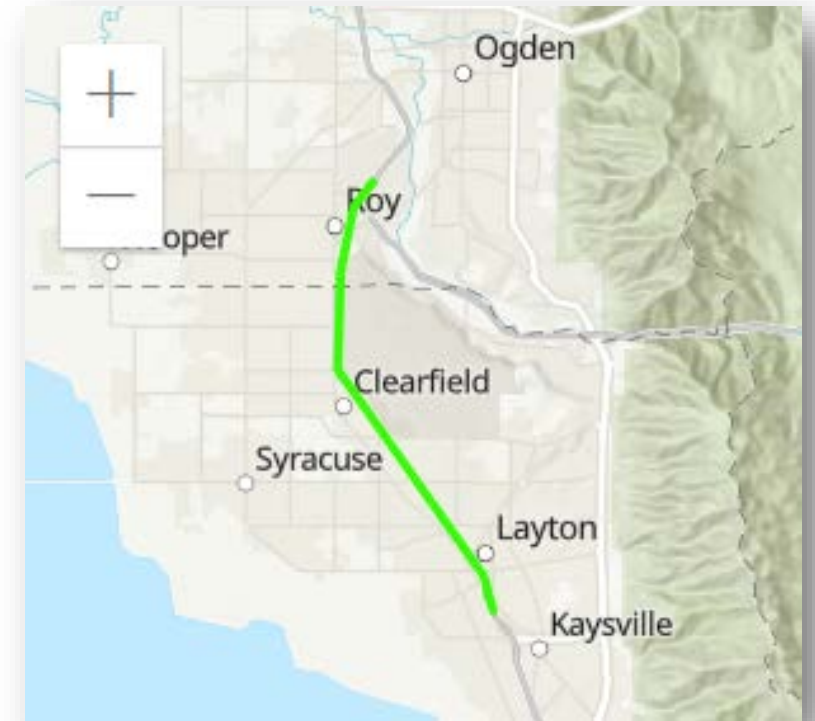


www.udot.utah.gov
Jan 2018



IPIRS – COMPLETED PROJECTS

- ❖ I-15 HOV/HOT Lanes, Layton to Riverside
 - Construction 2019-2021, almost fully operational
- ❖ 5600 W. Access to Intermodal Facility
 - Improvements at UP mainline crossing, widening, intersection improvements
 - Construction completed 1/2022
 - Completing minor utilities, landscaping

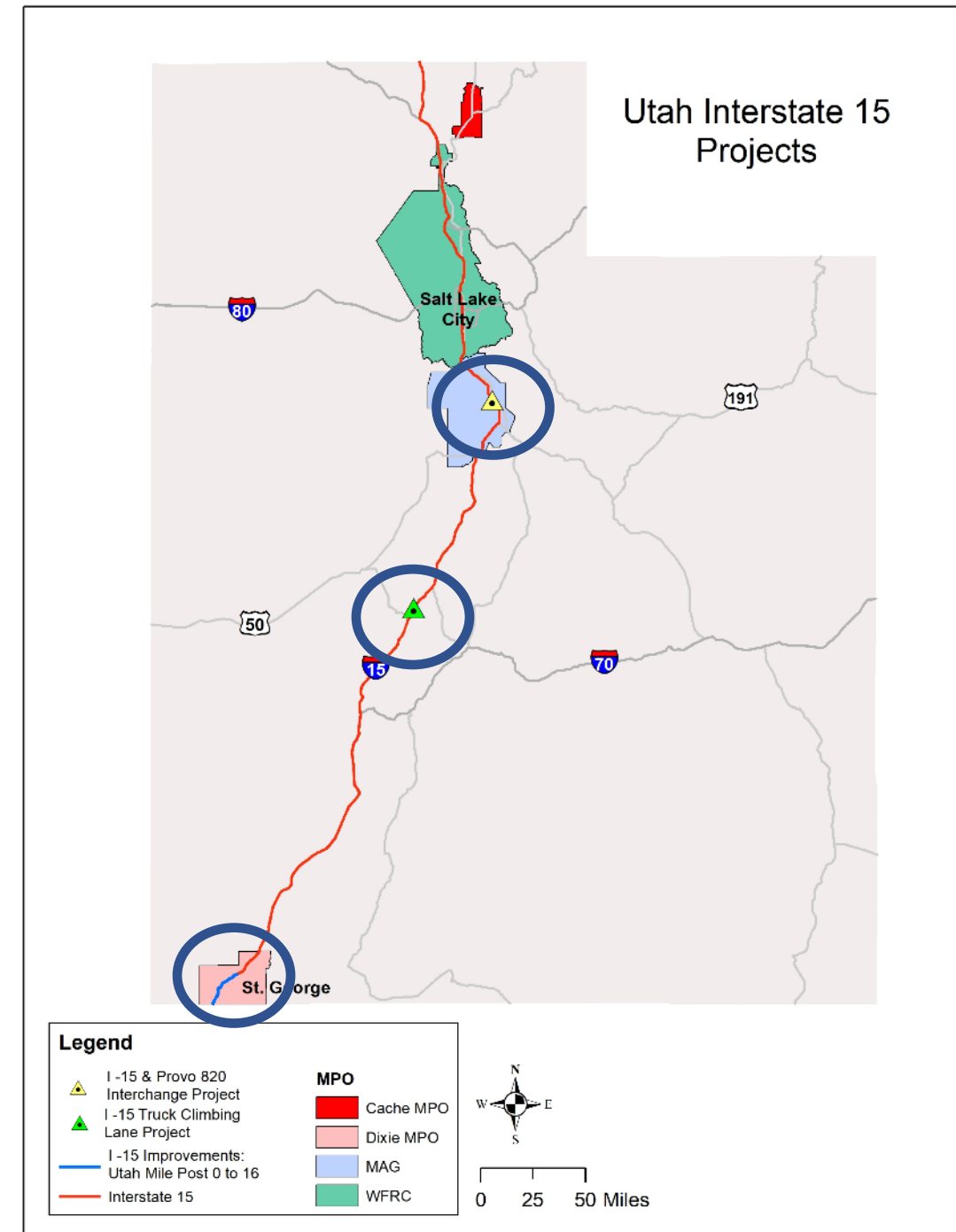


https://www.udot.utah.gov/projectpages/f?p=250:2007:::NO::P2007_EPM_PROJ_XREF_NO,P2007_PROJECT_TY PE_IND_FLAG:11271,A



IPIRS - NEW CAPITAL PROJECTS TO CONSIDER

- ❖ I-15/Provo North Interchange
- ❖ Frontrunner Double Tracking & First/Last Mile Improvements
- ❖ I-15/Bingham Rd. (MP 4) Roundabout Reconstruction/Reconfiguration (in planning)

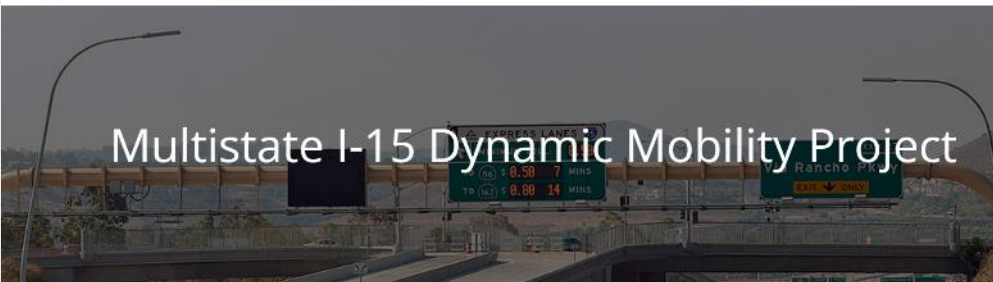


❖ Discussion of Utah's Major Project Priorities



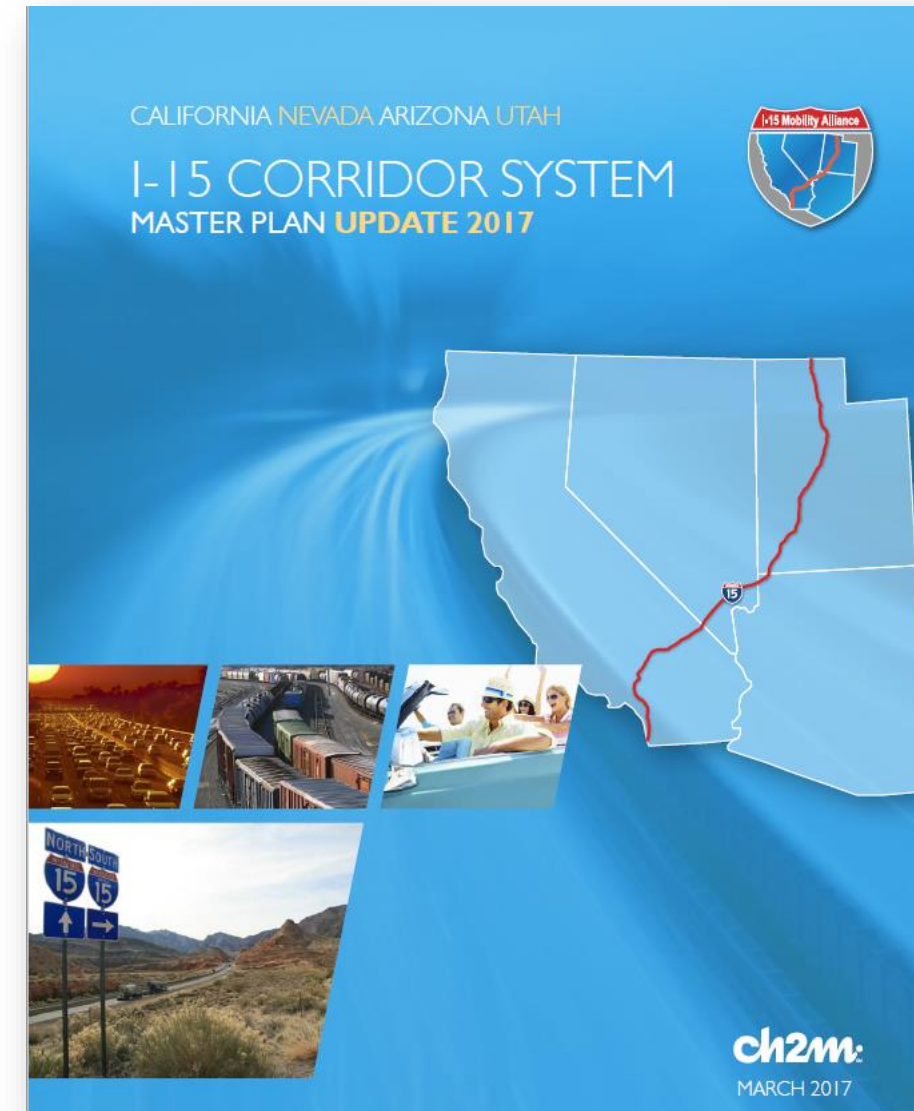
IPIRS – STUDIES COMPLETED OR IN PROGRESS

- ❖ I-11 Corridor (AZ/NV)
- ❖ I-15 Alternative Route Study (CA/NV/AZ/UT)
- ❖ I-15 Dynamic Mobility Project
- ❖ Expansion of ITS Digital Backbone, UT



IPIRS - NEW PLANNING STUDIES TO CONSIDER

- ❖ I-15 Dynamic Mobility Project: Multi-State ITS Architecture (CA/NV/AZ/UT) – next gen
- ❖ I-15 Mobility Alliance Program Management
- ❖ Alternative Fuel Corridor Implementation
- ❖ Smart Truck Parking Study, CA, NV & UT (partially completed – I-15 Freight MEP, CA & NV)



- ❖ Questions/Discussion
- ❖ Next Steps



THANK YOU



I-15 MOBILITY ALLIANCE

CONTACTS



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<http://www.i15alliance.org/>