

CALIFORNIA NEVADA ARIZONA UTAH



I-15 MOBILITY ALLIANCE

WORKSHOP #1: HIGH-SPEED RAIL & HIGH-CAPACITY TRANSIT

MARCH 31, 2022



TODAY'S AGENDA

- » Welcome from the Nevada Department of Transportation
- » Remarks from the Federal Transit Administration
- » Overview of the Federal Highway Administration Megaregions Program
- » I-15 Mobility Alliance Background
- » Presentations of existing and planned rail and high-capacity transit in the I-15 corridor
- » Discussion



WELCOME TO THE I-15 MOBILITY ALLIANCE WORKSHOP

SONDRA ROSENBERG

NDOT Assistant Director,
Planning



REMARKS FROM THE FEDERAL TRANSIT ADMINISTRATION

CINDY TERWILLIGER

FTA Region 8 Regional
Administrator



RAY TELLIS

FTA Region 9 Regional
Administrator



Bipartisan Infrastructure Law

Significant Funding Increases



- Up to \$108 billion for public transit over five years
 - \$69.9 B from Highway Trust Fund
 - \$21.25 B in Advance Appropriations
 - \$17 B in Authorized Appropriations
- New and increased funding for State of Good Repair, Low or No Emission, and Capital Investment Grants
- Continues existing structure for FTA programs focused on urban, rural, and targeted populations

New Grant Programs

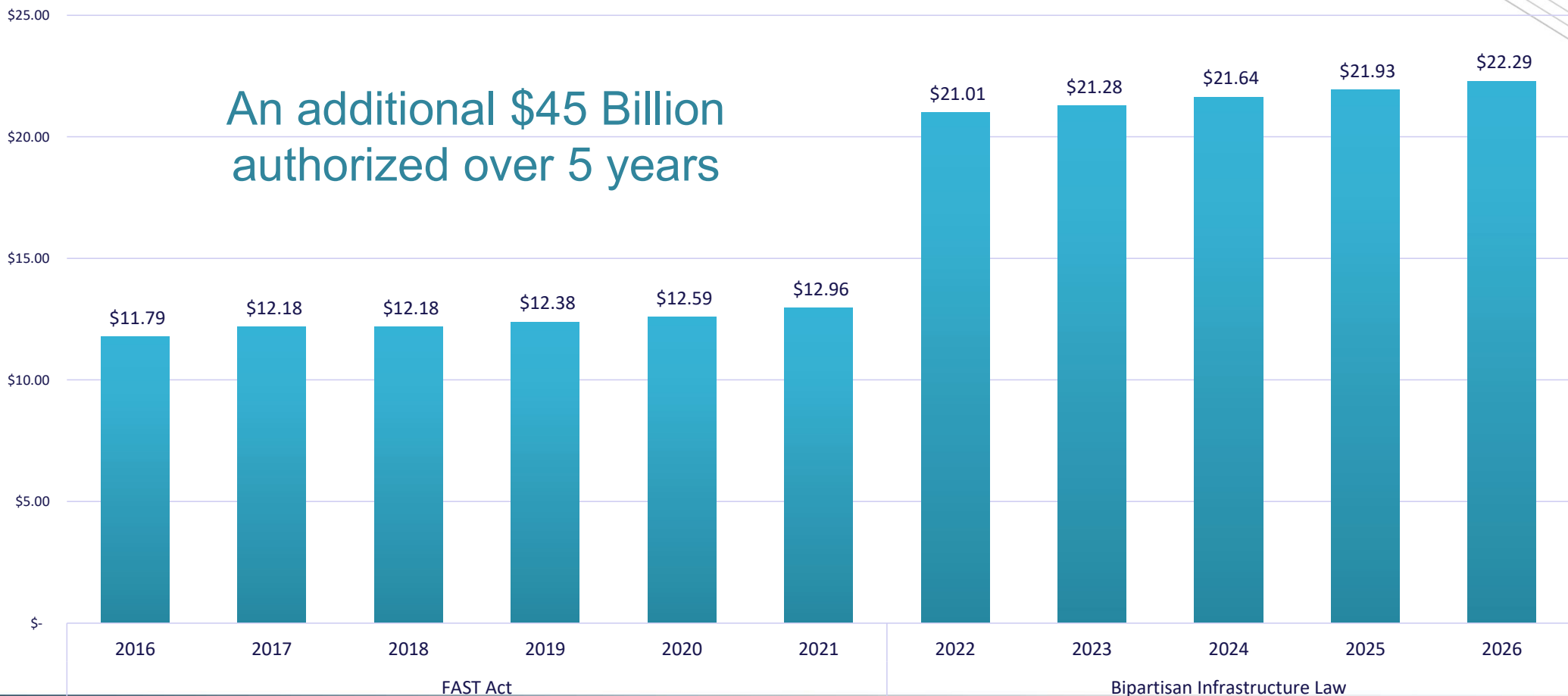


- Rail Vehicle Replacement Program
- All Station Accessibility Program
- Electric or Low-Emitting Ferry Pilot Program
- Ferry Service for Rural Communities

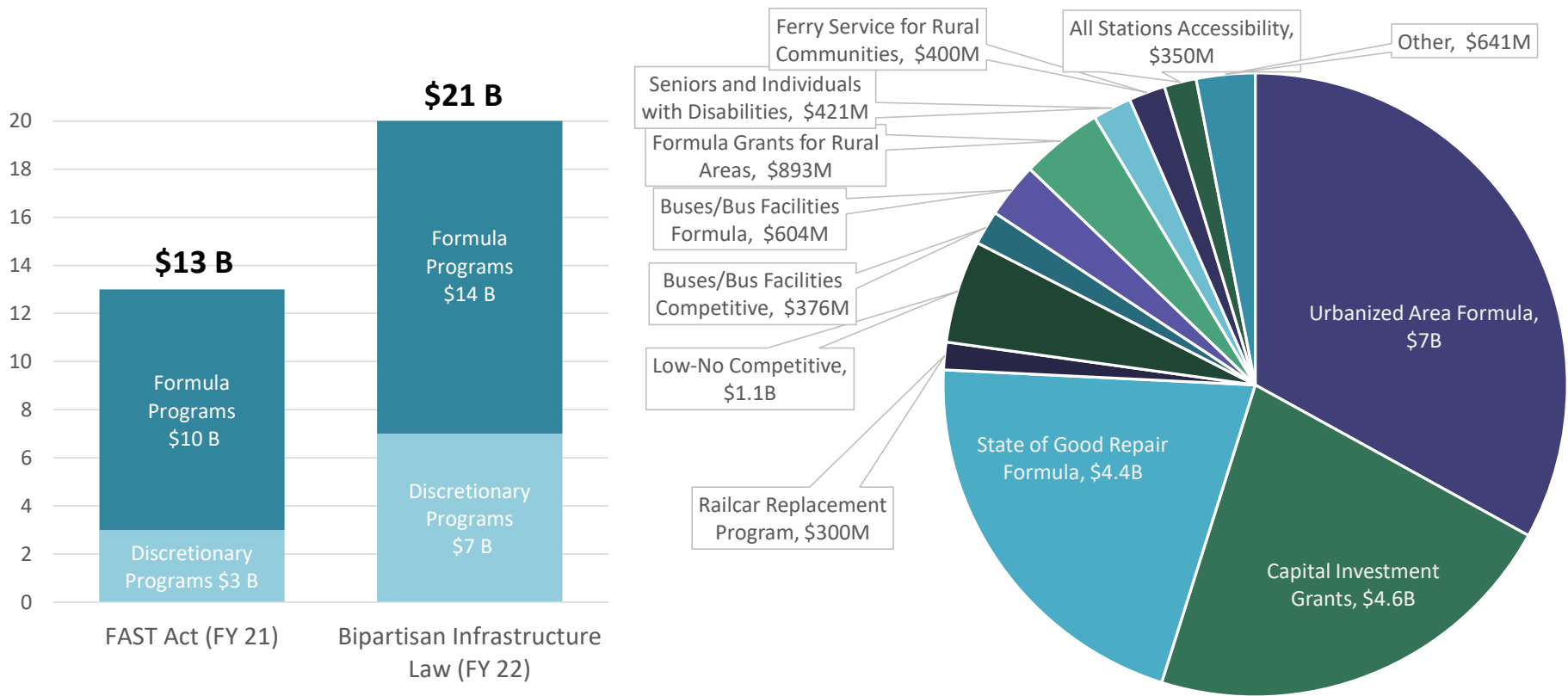


Increased Funding for Public Transportation

An additional \$45 Billion authorized over 5 years



Increased Formula and Competitive Funding



Note: Total funding shown includes authorized trust fund contract authority, authorized annual appropriations for FY22 and certain advance appropriations for FY22 enacted as a part of the Bipartisan Infrastructure Law. Annual appropriations are subject to Congressional action.

FTA Priorities for Implementation

FTA Bipartisan Infrastructure Law Priorities



Safety – The law will enable FTA to enhance state safety oversight programs by strengthening rail inspection practices to protect transit workers and riders from injuries and to ensure safe access to transit.



Modernization – Increased formula and competitive funding will begin to reduce the enormous state of good repair investment backlog in the nation's transit systems by repairing aging infrastructure and modernizing bus and rail fleets.



Climate – The law includes landmark investments to support the replacement of thousands of transit vehicles, including buses and ferries, with cleaner low- and zero-emission vehicles.



Equity – Investments in equity, including Justice40, will help eliminate transit deserts, improve connectivity to economic and social opportunities, ensure universal accessibility for people with disabilities, support minority and women-owned businesses, and reduce the disparity in quality and frequency of service in underserved communities.



Bipartisan Infrastructure Law – Formula Programs

Key formula funding levels increased by **30%** and programmatic changes for public transportation over a five-year period (Fiscal Years 2022 to 2026) to include:

- \$33.5 billion for the Urbanized Area Formula Program to support transit operations in 500 communities across the country
- \$23.1 billion for the State of Good Repair program to maintain public transit systems
- \$4.6 billion for Rural Area Formula Grants to support transit investments in rural areas communities
- \$3.9 billion for additional Urbanized and Rural Formula Program assistance through the Growing States and High-Density States formulas
- \$2.2 billion for the Enhanced Mobility of Seniors and Individuals with Disabilities program
- \$229 million for public transportation on Indian Reservations



Bipartisan Infrastructure Law – Discretionary & Other

- \$5.6 billion in Low or No Emission Vehicle Competitive Grants to support the transition of transit vehicles to low or zero emission technologies*
- \$5.1 billion in Buses and Bus Facilities formula and competitive grants*
- \$966.4 million to support Metropolitan and Statewide Planning programs
- \$23 billion for the Capital Investment Grants (CIG) Program, with \$8 billion guaranteed to invest in new high-capacity transit projects
- \$193 million for transit research activities
- \$62 million for technical assistance and workforce development activities

* *FTA Dear Colleague letter discusses the need for a Zero-Emission Transition Plan, when applying for funding under FTA's Bus & Bus Facilities & Low or No Emission competitive programs*



Timeframes for Deliverables

The FY2022 Consolidated Appropriations Act will allow FTA to make the BIL's new funding available to thousands of public transportation providers

FY2022 Apportionment

- FTA issued partial FY2022 Apportionment Notice for 4.5 months - February 3, 2022
- FTA will issue another Apportionment Notice for the remaining funds targeting early April 2022

Discretionary Buses & Bus Facilities and Low & No Emission Vehicle Programs

- FTA released the Joint NOFO **\$1.1 billion** for Low & No Emission program and **\$372 million** for Buses & Bus Facilities program – March 4, 2022
- [Biden-Harris Administration and the U.S. Department of Transportation Announce Nearly \\$1.5 Billion in Grants Funded by the Bipartisan Infrastructure Law to Modernize Bus Fleets and Facilities | FTA \(dot.gov\)](#)

New Program Notice of Funding Opportunities (NOFOs)

- NOFOs will be issued on a rolling basis beginning in late spring/early summer

President's FY2023 Budget Request

On March 28th, the released President's Budget for FY2023 demonstrates a commitment to improving the nation's transportation infrastructure and to delivering the historic funding provided in the BIL. This notable resources for public transportation includes:

- **\$13.6 billion for FTA's core programs and administration**, enabling FTA to support the work of more than 4,000 grantees and subrecipients to start new public transportation projects, fix aging infrastructure, invest in sustainable technologies, connect communities, and provide fast, safe, convenient service
- **\$2.9 billion in additional funding for the Capital Investment Grants (CIG) and Expedited Project Delivery (EPD) programs** to develop new and expand existing public transportation solutions that are safe, generate economic growth, improve equity and access to affordable and sustainable transit options, and create and retain jobs in local communities. This request will build on the **\$1.6 billion** in advance appropriations already provided to these programs under the BIL
- **\$2.1 billion** will support programs under Transit Infrastructure Grants



FTA's FY2023 Annual Report on Funding Recommendations

- On March 28th, USDOT recommended **\$4.45 billion** both to advance 7 new rail and bus rapid transit (BRT) projects for first-time funding and to continue funding for 8 projects with existing construction grants in FY2023
- These projects competed for funding through the **FTA's Capital Investment Grants (CIG) Program and Expedited Project Delivery (EPD) Pilot Program**
- The transit projects create and sustain construction and operations-related jobs and help communities provide better, more frequent transit service
- The [CIG Program](#) and [EPD Pilot Program](#) are the Federal government's primary grant programs supporting transit capital projects that are locally planned, implemented, and operate
- The programs provide funding for investments such as new and expanded subway systems, commuter rail, light rail, streetcars, bus rapid transit, and ferries, as well as corridor-based BRT investments



FY2023 Annual Report for High-Capacity Projects

- FTA's [FY 2023 Annual Report on Funding Recommendations](#) identifies projects for funding through the CIG and EPD Pilot Programs for FY2022 & 2023 under BIL
- Through this funding, FTA can accelerate payments to projects, completing the Federal commitment for 25 projects. This will not only result in lower financing costs incurred on projects but will also help meet demand by freeing up funds for additional new projects
- In the last year alone, there has been a 150% increase in the number of projects entering the programs

This announcement, consistent with the President's FY 2023 budget, includes first-time funding recommendations for seven transit projects in six states, including in **California**:

- \$250 million for the Los Angeles East San Fernando Valley Phase 1 light rail project (EPD)
- \$200 million for BART Silicon Valley Phase II heavy rail project (EPD)
- \$813 million for the existing Los Angeles Westside Subway Sections 1-3 rail projects (CIG)
- \$241 million for the existing San Diego Mid-Coast Light Rail transit project (CIG)

Transit Eligibility Across DOT (over 5 years)

- \$64.5 billion increase in DOT funding, \$8 billion of which is an increase in FTA programs.
- These other DOT programs can also fund transit infrastructure:
 - **Federal Highway Administration:**
 - Surface Transportation Program: \$84.14 billion
 - Congestion Mitigation & Air Quality: \$15.7 billion
 - Tribal Transportation Program: \$3.5 billion
 - Active Transportation Infrastructure Investment Program: \$1 billion
 - Reconnecting Communities Pilot Program: \$500 million
 - **Office of the Secretary:**
 - National Infrastructure Grants (RAISE): \$30 billion
 - Strengthening Mobility and Revolutionizing Transportation (SMART) Grants: \$1 billion
 - **Federal Railroad Administration:**
 - Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grants: \$10.33 billion
 - Railroad Crossing Elimination: \$5.5 billion



USDOT Notices of Funding Opportunity

- USDOT published a NOFO for **\$1.5 billion** in grant funding through the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) discretionary grant program for multimodal projects
- At least \$15 million is guaranteed for projects located in Areas of Persistent Poverty or Historically Disadvantaged Communities. Under BIL, RAISE expands number of communities eligible for 100 percent federal share of funding, specifically those in rural communities, Areas of Persistent Poverty and Historically Disadvantaged Communities
- Deadline April 14, 2022, and selections will be announced no later than August 12, 2022
- Another USDOT NOFO combines three major grant programs to provide **\$2.9 billion** in grants:
 1. [Infrastructure for Rebuilding America](#) (INFRA)
 2. [National Infrastructure Project Assistance](#) (MEGA)
 3. [Rural Surface Transportation Grant](#) (RURAL)
- Deadline for NOFO applications involving all three grant programs is May 23, 2022



National Roadway Safety Strategy (NRSS)

Provides funding to help USDOT reach the ambitious goals outlined in the NRSS

- **Advance safety on highways:** \$3 billion for FHWA's Highway Safety Improvement Program, which seeks to reduce the number of lives lost on our Nation's highways, bridges, and roads
- **Improve safety of commercial drivers:** \$506 million for FMCSA's Motor Carrier Safety Grants, which represent an ongoing investment into commercial motor vehicle safety through the consistent nationwide application and enforcement of commercial motor vehicles and commercial driver's license laws,
- **Improve safety of vehicles:** \$49.8 million for NHTSA's Vehicle Safety Research, to study vehicle improvements and other technological advances that can better protect people in a crash and reduce the likelihood of crashes, including:
 - ✓ \$18.1 million for Advanced Driver Assistance Systems
 - ✓ \$3.1 million for Heavy Vehicle Safety Technologies Programs, that support testing and deployment of safety technologies for passenger vehicles, large trucks, and buses
 - ✓ \$11.8 million for Automated Driving Systems research to facilitate innovation and development of new tests, tools, and procedures to properly evaluate the safety of new technologies surrounding highly and fully automated vehicles



BIL Hiring Preference

- In 2021, FTA announced an initiative, implemented as a pilot program, to permit transit agencies to hiring preferences on FTA-funded construction projects, to promote equitable creation of employment opportunities and workforce development activities, particularly for economically or socially disadvantaged workers
- The initiative has transitioned in response to the Bipartisan Infrastructure Law, which includes hiring preferences related to the use of labor for transportation construction projects
- Section 25019 provides an express authorization for FTA grant recipients and subrecipients to use a geographical or economic hiring preference for the construction of federally supported transit projects
- See the [Federal Register Notice](#)



Bipartisan Infrastructure Law - Information

- <https://www.transit.dot.gov/BIL>
- FTA BIL Program Fact Sheets for existing and new programs; funding levels
- Sign up to receive email updates
- Webinars
- Town Hall meetings
- Storytelling
- Region 9 Webinar & Listening Session





[TRANSIT.DOT.GOV](https://www.transit.dot.gov)

FEDERAL HIGHWAY ADMINISTRATION

CHENG YAN

FHWA Transportation
Specialist/Megaregions



FHWA Office of Planning, Environment, and Realty

National Economic Partnerships and Megaregional Planning Under IIJA/BIL

Cheng Yan

I-15 Mobility Alliance High-Capacity Transit Workshop

March 31st, 2022



U.S. Department
of Transportation

**Federal Highway
Administration**



National Economic Partnerships

- A collection of urban centers and their surrounding rural areas, connected by existing economic, social, and infrastructure relationships
- Serves as incubator of innovation, driving vital parts of U.S. economy that benefit surrounding regions and rural areas
- Builds on FHWA Megaregions initiative and workshops
 - Intended to continue conversation on multi-jurisdictional coordination and collaboration – with FHWA leading advancement of NEP



Purpose of National Economic Partnership (NEP) Pilots

- **Address challenges that span traditional planning boundaries**
 - Provides support for freight flows and reduces freight bottlenecks
 - First mile/last mile connections
 - Truck Parking, ITS application/coordination and more
- **Provide Opportunities to Enhance Megaregional Planning**
 - Enhanced data sharing and supports coordinated performance measures
 - Increased communication, collaboration, and consultation across agencies
 - Expanded coordination with private industry



Completed FHWA/NEP Pilots

- **Maricopa Association of Governments** –
Sun Corridor Value Impact Analysis
- **Mid-America Regional Council** –
Central Plains Heartland Freight Technology Plan
- **Nevada Department of Transportation** –
I-15 Freight Mobility Enhancement Plan
- **Tennessee Department of Transportation** –
Future Freight Movement along Freight Alley –
The Greater Chattanooga Region



- National Economic Partnerships
- What Are Megaregions?
- Megaregion Case Studies
- Specific Issues Involving Megaregions
- Workshops
- Reports & Resources

Contacts

For more information, please contact:

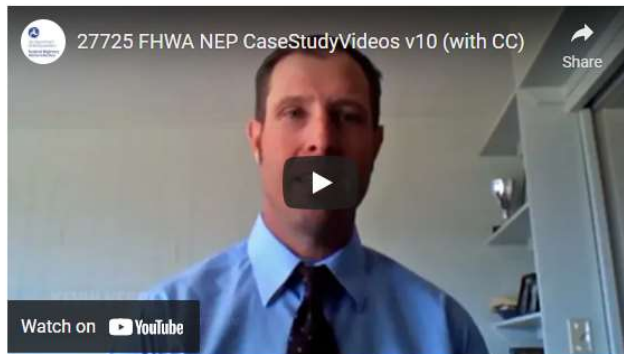
- [Cheng Yan](#)
- [Supin Yoder](#)

FHWA → Planning → Megaregions

National Economic Partnerships

National Economic Partnerships for Innovative Approaches to Multi-Jurisdictional Coordination

In May 2019, FHWA selected four projects to deliver innovative approaches to multi-jurisdictional coordination. As December 2020, all the projects are completed. Be sure to check out the [video from the project recipient](#). The following are factsheets and final reports on each awarded project.



- **Central Plains Heartland Freight Technology Plan** developed an approach to identify and assess emerging freight technologies as well as provide recommendations for harmonizing policies for transportation agencies in the region.
 - [Factsheet](#) (or [PDF](#) , 347KB)
 - [Case Study](#)  (445KB) **New: 2/14/2022**
 - [Final Report](#) (or [PDF](#) , 897KB)
- **Future Freight Movement along Freight Alley - The Greater Chattanooga Region** created a coordinated regional approach, to freight and truck parking, that would produce significant benefits to all the states in the region including more explicit identification of future parking, trucking, and freight demand.
 - [Factsheet](#) (or [PDF](#) , 678KB)
 - [Case Study](#)  (491KB) **New: 2/14/2022**
 - [Final Report](#) (or [PDF](#) , 28MB)



Lessons Learned from the Pilots

- Pilots were completed in 2021, Final Reports, Factsheets, Case studies and Video were [published](#).
- Include Stakeholders Early
 - Bring in diverse voices
- Consider Virtual Outreach
 - Bring everybody together in person at key points
- Policy Influences at the Local Level
 - Locals have the responsibility for implementation
- To Tackle Truck Parking Issues
 - Multiple States may need to work together
- Replicability



Megaregions and its Link to the Bipartisan Infrastructure Law

- IIJA/BIL grows the economy, enhances U.S. competitiveness, creates good jobs, and makes the U.S. economy more sustainable, resilient, and equitable
- Around \$550 B in new Federal infrastructure investment, including—
 - Largest federal investment in public transit ever
 - Largest federal investment in passenger rail since the creation of Amtrak
 - Largest dedicated bridge investment since the construction of the Interstate System
 - Largest investment in clean drinking water & wastewater infrastructure in U.S. history
 - Largest investment in clean energy transmission & electric vehicle infrastructure in history
 - Ensuring every American has access to reliable high-speed internet
- On average, around 2 M jobs per year over the course of the decade



Includes \$567.1 B (All DOT Modes) Over FY 22-26

Program	Contract Authority (CA) (\$ B, FY 22-26)	Advance appropriations (\$ B, FY 22-26)
Federal Aviation Administration	---	25.0
Federal Highway Administration	303.5	47.3
Federal Motor Carrier Safety Administration	4.5	0.7
Federal Railroad Administration / Amtrak	---	66.0
Federal Transit Administration	69.9	21.3
Maritime Administration	---	2.3
National Highway Traffic Safety Administration	5.1	1.6
Office of the Secretary	---	19.0
Pipeline & Hazardous Materials Safety Admin.	---	1.0
Total	383.0	184.1

Note: Table does not include amounts that BIL authorizes subject to [future] appropriation



High Points of BIL Highway Provisions

- **Funds highway programs for five years** (FY 22-26)
- **\$350.8 B (FY 22-26) for highway programs**
- **More than a dozen new highway programs**, including—
 - **Formula:** resilience, carbon reduction, bridges and electric vehicle (EV) charging infrastructure
 - **Discretionary:** bridges, EV charging infrastructure, rural projects, resilience, wildlife crossings, and reconnecting communities
- Focus on safety, bridges, climate change, resilience, and project delivery
- **More opportunities for local governments and other non-traditional entities** to access new funding



Funding Available to a Range of Recipients

Program Examples	State	MPO	Local	Tribe	PA*	Territory	FLMA*
Apportioned programs (formula)	✓						
Bridge Program (formula)	✓			✓			
National Electric Vehicle Formula Program	✓		✓				
Safe Streets and Roads for All program		✓	✓	✓			
PROTECT Grants (discretionary)	✓	✓	✓	✓	✓		✓
Charging and Fueling Infrastructure Program	✓	✓	✓	✓	✓	✓	
Congestion Relief Program	✓	✓	✓				
Bridge Investment Program (discretionary)	✓	✓	✓	✓	✓		✓
Reconnecting Communities Pilot Program	✓	✓	✓	✓			
Rural Surface Transportation Grants	✓		✓	✓			
INFRA	✓	✓	✓	✓	✓		✓
Nat'l Infra. Project Assistance	✓	✓	✓	✓	✓		
Local and Regional Project Assistance	✓	✓	✓	✓	✓	✓	

Note: This table does not include all BIL programs or eligible entities, and there are additional nuances not represented in this table. Additional programmatic information is provided in later slides. FHWA will administer most, but not all, programs listed.

* "PA" means a special purpose district or public authority with a transportation function; FLMA means Federal Land Management Agency



IJA/BIL and “Build a Better America”

- Section 11110 – National Significant Freight and Highway Projects
 - Promote regional cooperation, planning, and shared project implementation for programs and projects to improve transportation system management and operations for a shared transportation corridor.
- Section 11206 – Increasing Safe and Accessible Transportation Options
 - Transportation Plans to include regional and megaregional planning to address travel demand and capacity constraints through alternatives to new highway capacity, including through intercity passenger rail.
- FHWA Policy on Using Bipartisan Infrastructure Law Resource to Build a Better America



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



IMMEDIATE PROJECTS OF INTERREGIONAL SIGNIFICANCE

- » Projects along I-15 or systemically connected to I-15
- » Projects that have significant interregional impact on moving people and moving goods
- » Projects with community support
- » Over 25 IPIRS project funded and advanced



HIGHWAY/BRIDGE

	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 1: I-15 from Sahara Ave to I-5 I 5/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

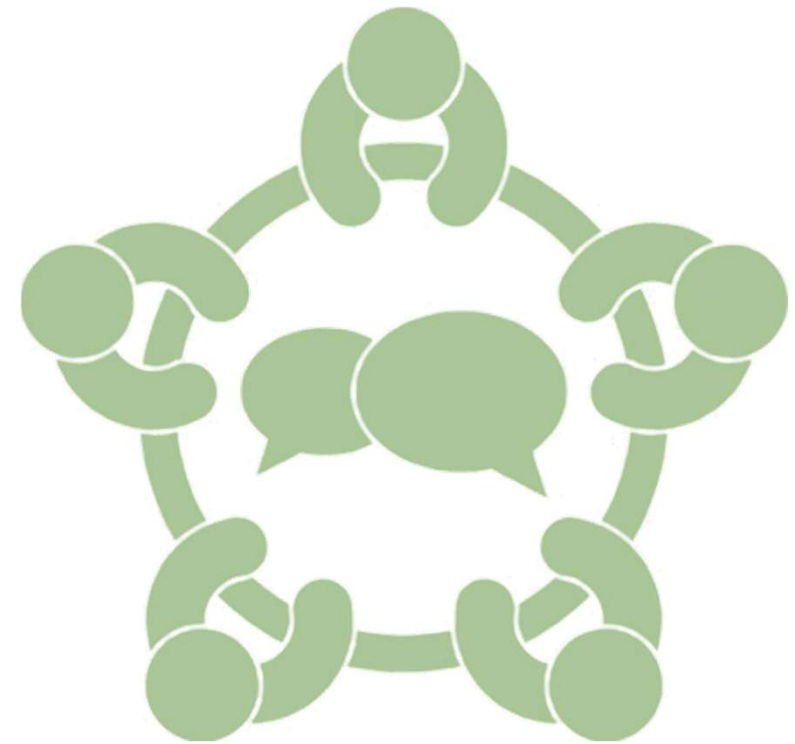
	Sponsor	Project Name
CA, NV, AZ, UT	FRA	Western High-Speed Rail Feasibility Study
UT	Dixie MPO	Utah I-15 MP 0 to 16 Environmental Assessment
NV, AZ	ADOT/NDOT	I-11 and Intermountain West Corridor Planning, Arizona to Nevada



I-15 MOBILITY ALLIANCE FOCUS GROUPS/WORKSHOPS

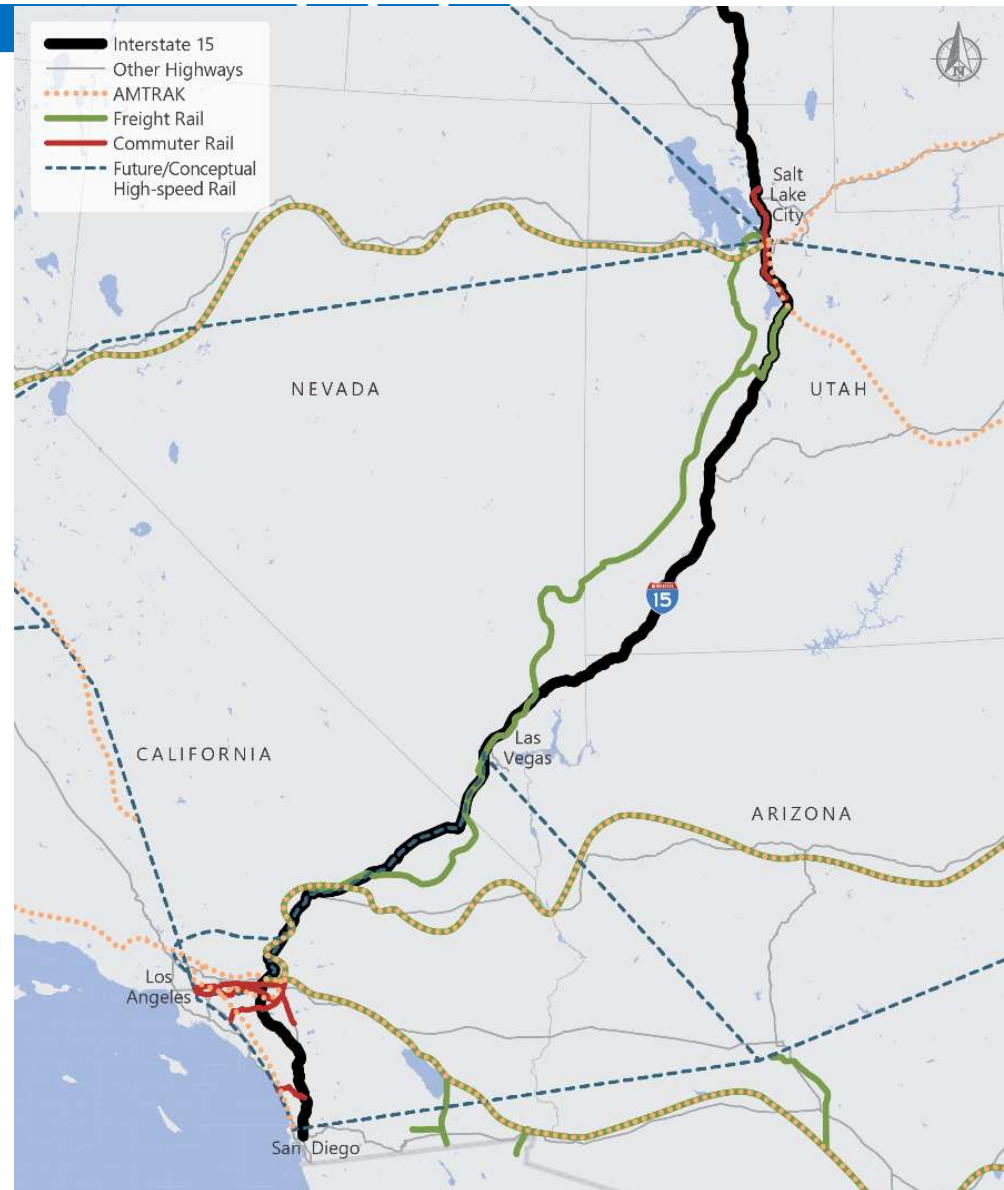
Purpose: Gather agency and stakeholder input about needs and priorities

- » High-Speed Rail & High-Capacity Transit
- » Major Infrastructure Projects (May)
- » Freight Mobility (July)
- » Alternative Fuels & Emerging Technologies (September)



RAIL OVERVIEW

- » Relationship between I-15, freight rail, AMTRAK, light rail, commuter rail, and proposed high-speed rail
- » Provide redundancy and congestion relief for the I-15 corridor
- » Congestion and transit solutions concentrated in more urban areas
- » Key intersections and intermodal connection points should be considered in future planning and design work



AMTRAK

- » AMTRAK travels west from San Bernardino, CA, passing through Flagstaff, AZ and Albuquerque, NM before heading north
- » Another route runs from Sacramento, CA to Salt Lake City, Utah, passing through Reno and northeastern Nevada
- » AMTRAK has identified “Thruway Connecting Service” (various modes) heading northeast from Barstow, CA to Salt Lake City, along I-15



Image: AMTRAK

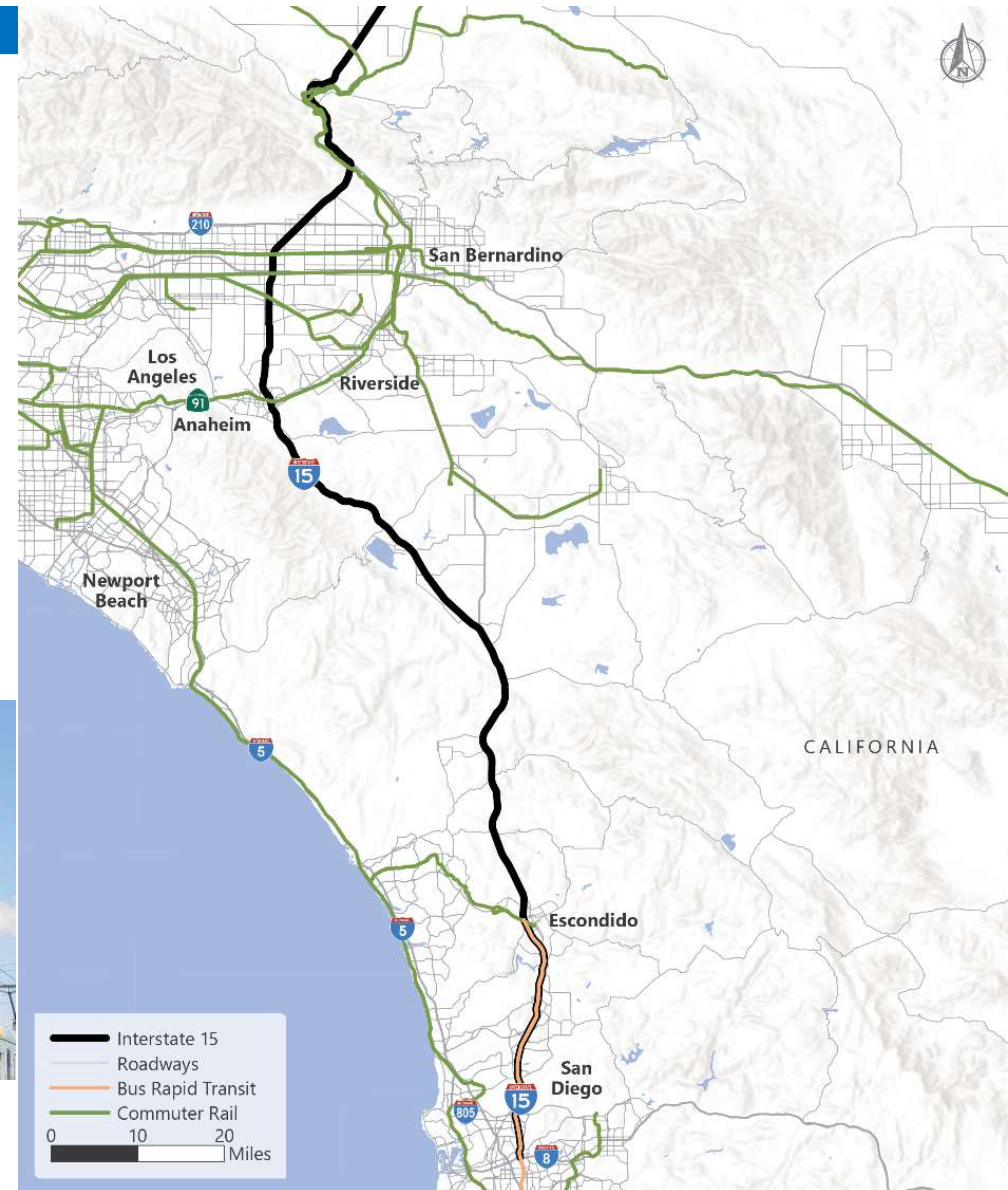


SOUTHERN CA

- » Future high-speed rail
- » Existing/planned bus rapid transit running along I-15 near San Diego
- » Existing commuter rail intersecting with and running parallel to I-15
- » Light rail – LA Metro Lines A, C, E, L

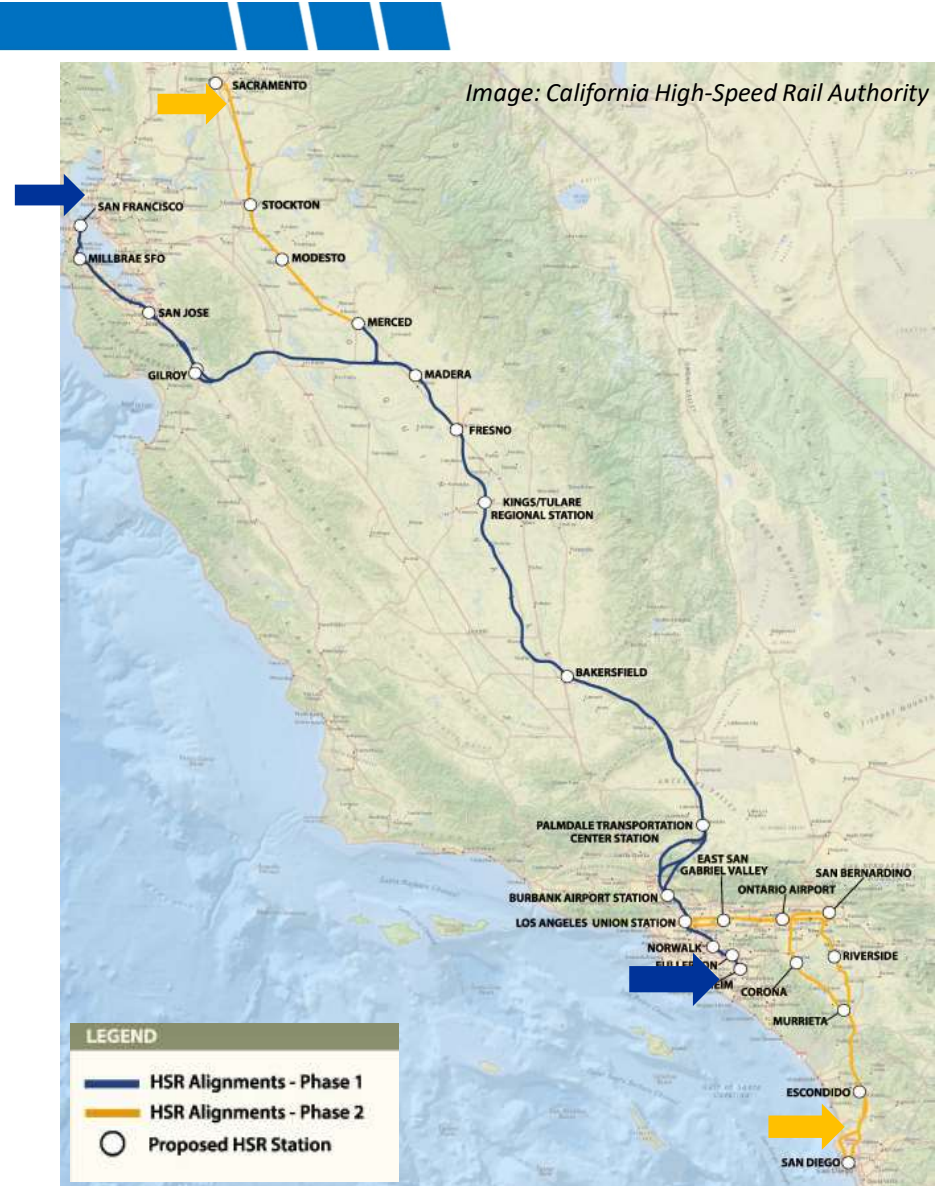


Image: LA Metro



CALIFORNIA HIGH-SPEED RAIL

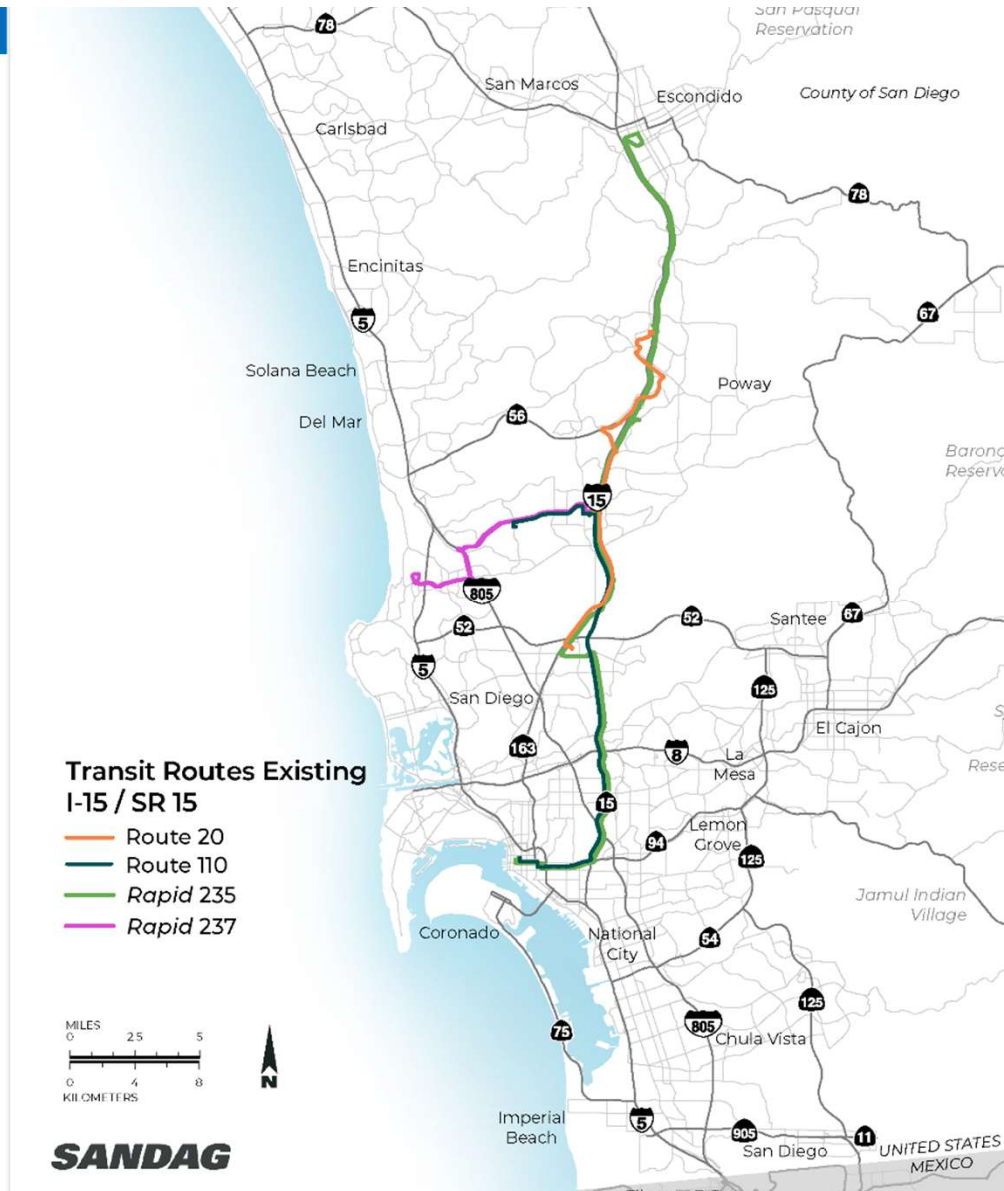
- » California High-Speed Rail Authority has identified phases within the larger planned lines
- » A series of Phase I projects would connect San Francisco and Anaheim, stopping in San Jose, Fresno, Bakersfield, Burbank, and Los Angeles
- » Phase II projects would extend the line north from Merced to Sacramento and south from Los Angeles to San Diego



SAN DIEGO RAPID

Existing

- » Operates between San Diego and Escondido
- » *Rapid 235* and *237*
- » *Rapid Express 280* and *290*
- » Other local routes – Route 20 and Route 110
- » 2019 ridership (average weekday): ~10,220



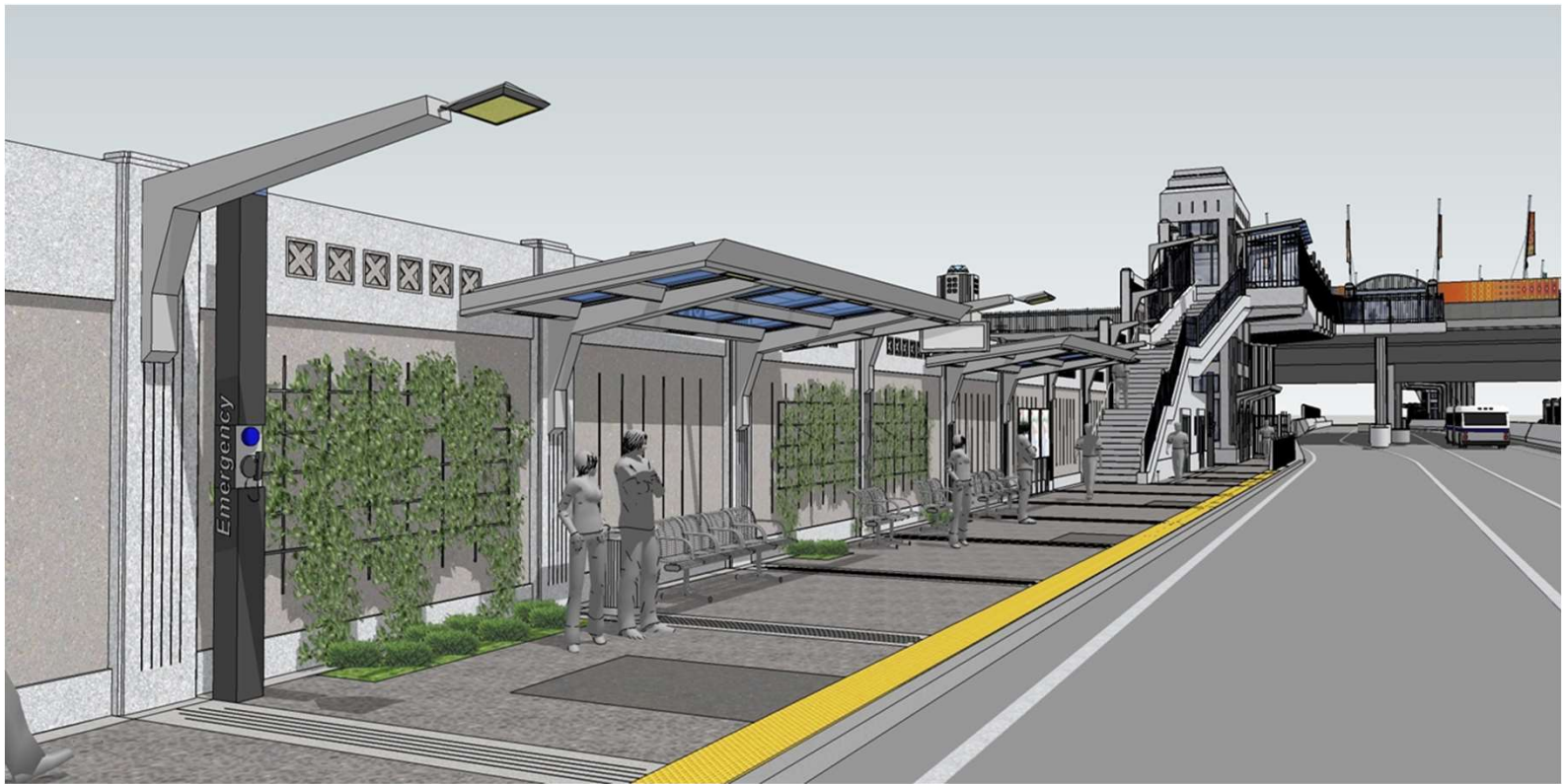
SAN DIEGO *RAPID*

Bird's Eye View – In-Line Station at University Avenue



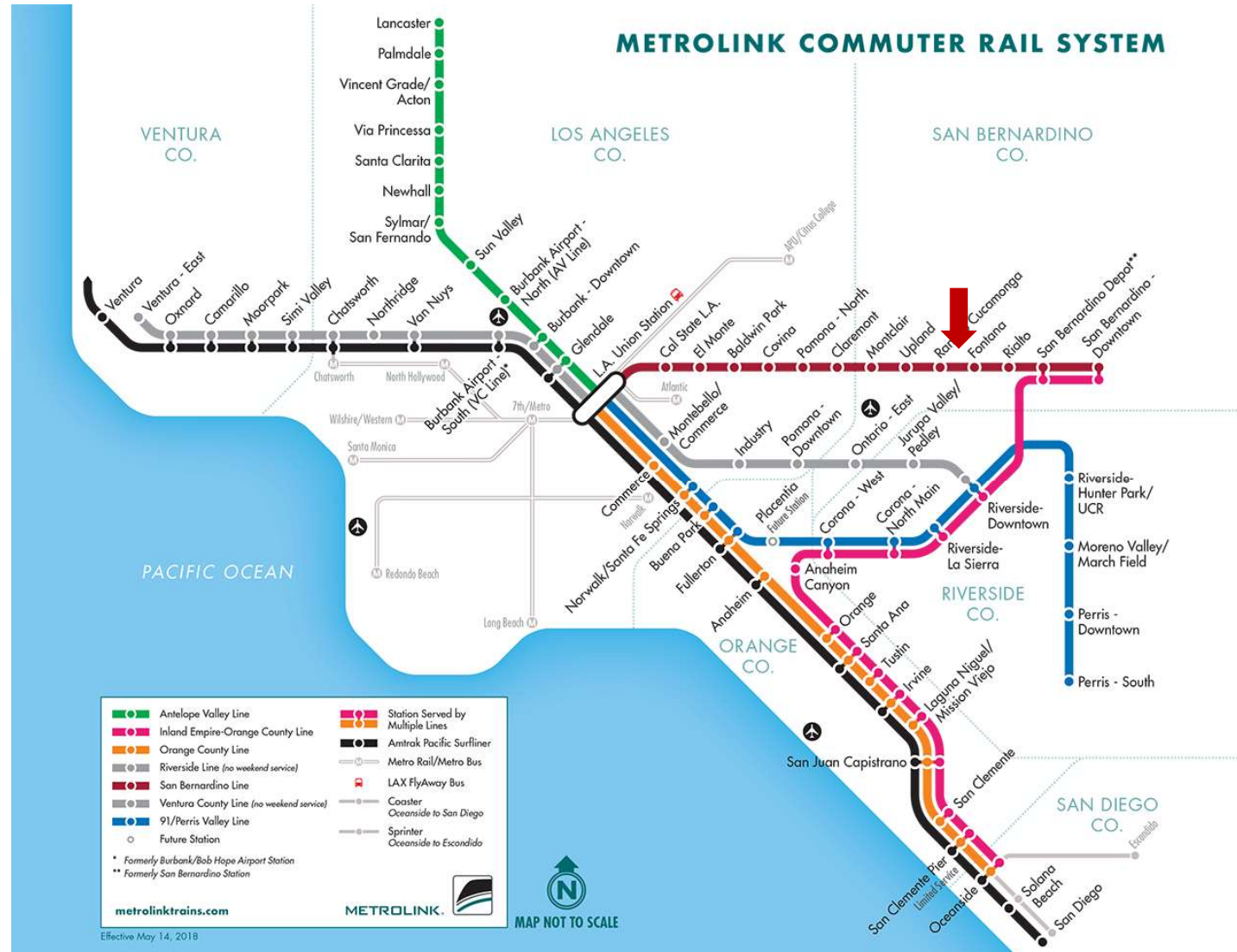
SAN DIEGO *RAPID*

Bird's Eye View – In-Line Station at University Avenue



METROLINK

- » I-15 intersects with the following lines:
 - » San Bernardino (red)
 - » Riverside (gray)
 - » 91 (blue)
 - » Inland Empire-Orange County (pink)
- » Stations are located relatively close to their respective freeway exits



SPRINTER

- » I-15 intersects with the SPRINTER commuter rail line in Escondido, CA
- » SPRINTER provides service west to Vista and Oceanside and connects to several other NCTD routes





Juan Carlos Velasquez – Brightline West
March 31, 2022

Brightline West Overview

Connecting America's 2nd largest region with the global entertainment capital



50+ million trips made each year between Southern CA & Las Vegas



Travel between LA & Las Vegas in **3.5 hours, vs. 5+ hours by car**

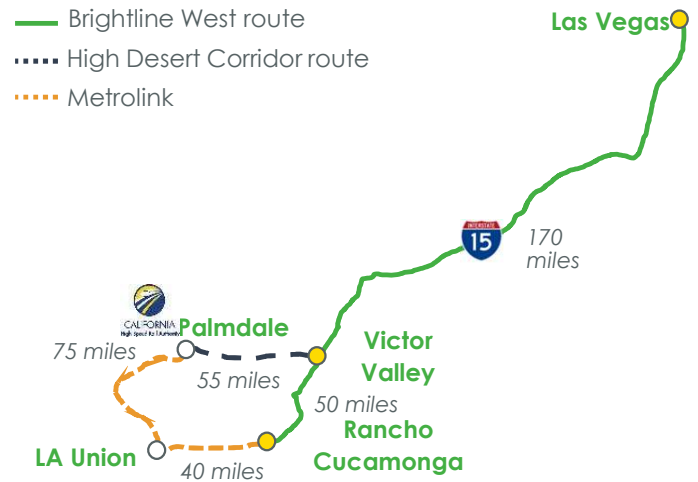


Green transportation via high-speed electric trains reduces carbon emissions versus car and air travel



Invested 15 years and \$400M; now in a position to break ground in 2022 and be running ~3 years later

Plan to Carry +10M Passengers Across BLW Route



brightline
west

High-Speed Travel Between Southern California and Las Vegas

Greener, faster, more convenient travel

Improves the Planet

- All-electric, emission free high-speed trains
- Removes 3 million cars per year from I-15
- Lowers emissions by +400K tons of CO2 annually
- Reduces VMT by 935 million annually

Boosts the Economy

- +\$10 billion economic impact⁽²⁾
- +\$1 billion tax revenues⁽³⁾
- Economic development in areas surrounding stations

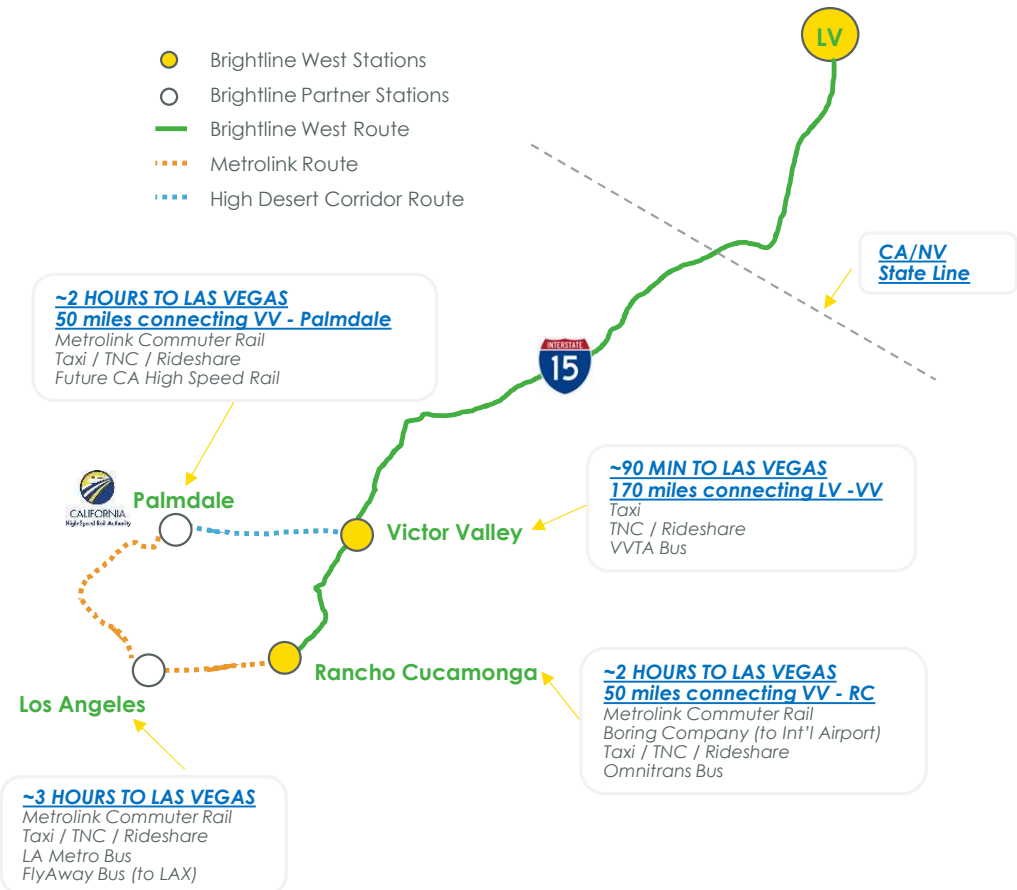
Creates Many Jobs

- 40,000 construction jobs⁽¹⁾
- 1,000 permanent jobs
- Spurs indirect jobs during operations

Promotes a Safe Travel Option

- Supports +11 million trips per year
- Almost exclusively in the I-15 right-of-way
- Approximately half the time of driving
- Enhanced passenger amenities and experience
- Rail is one of the safest modes of travel worldwide

- Brightline West Stations
- Brightline Partner Stations
- Brightline West Route
- ⋯ Metrolink Route
- ⋯ High Desert Corridor Route



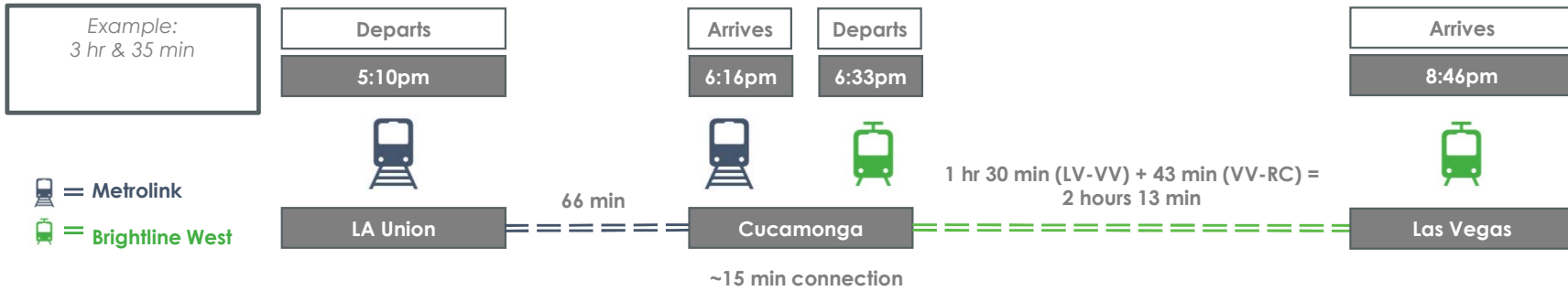
(1) Equivalent jobs based on project job hours.

(2) Impact inclusive of total construction spend and 10 years of operation.

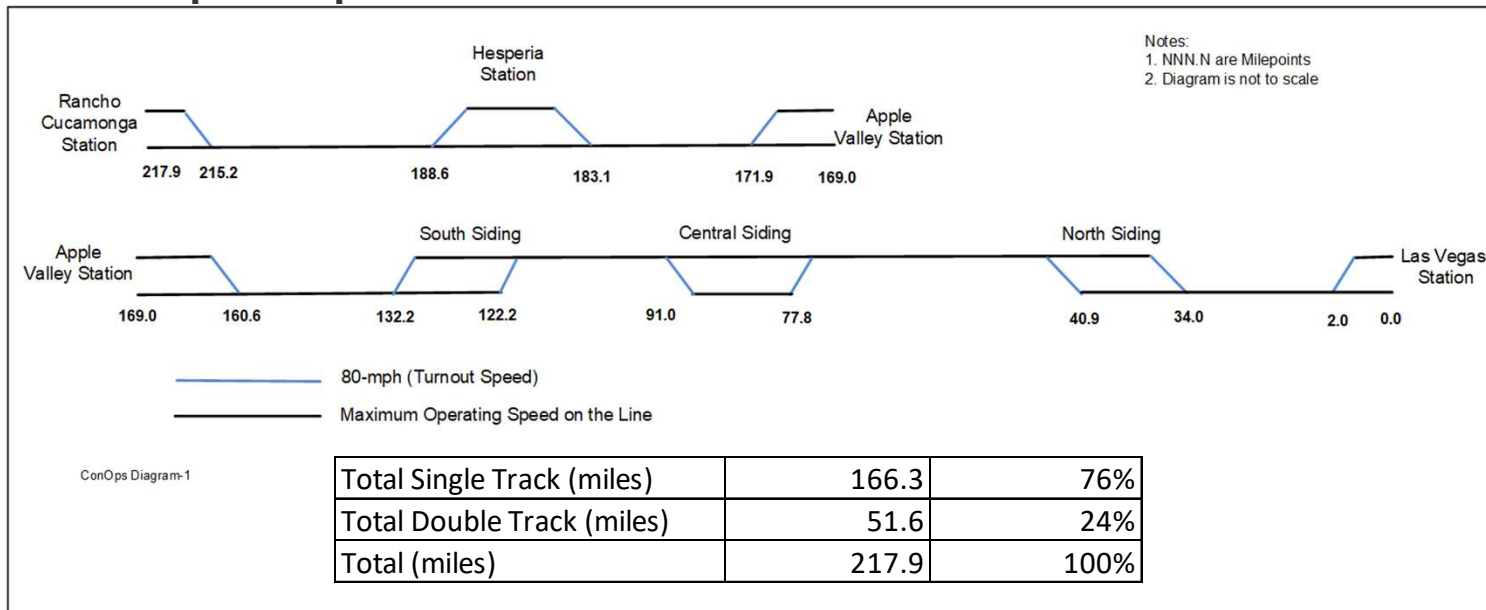
(3) Revenues achieved at the federal, state, and local levels during time frame of construction and 10 years of operation.



Vision of Brightline West: Travel Time targets



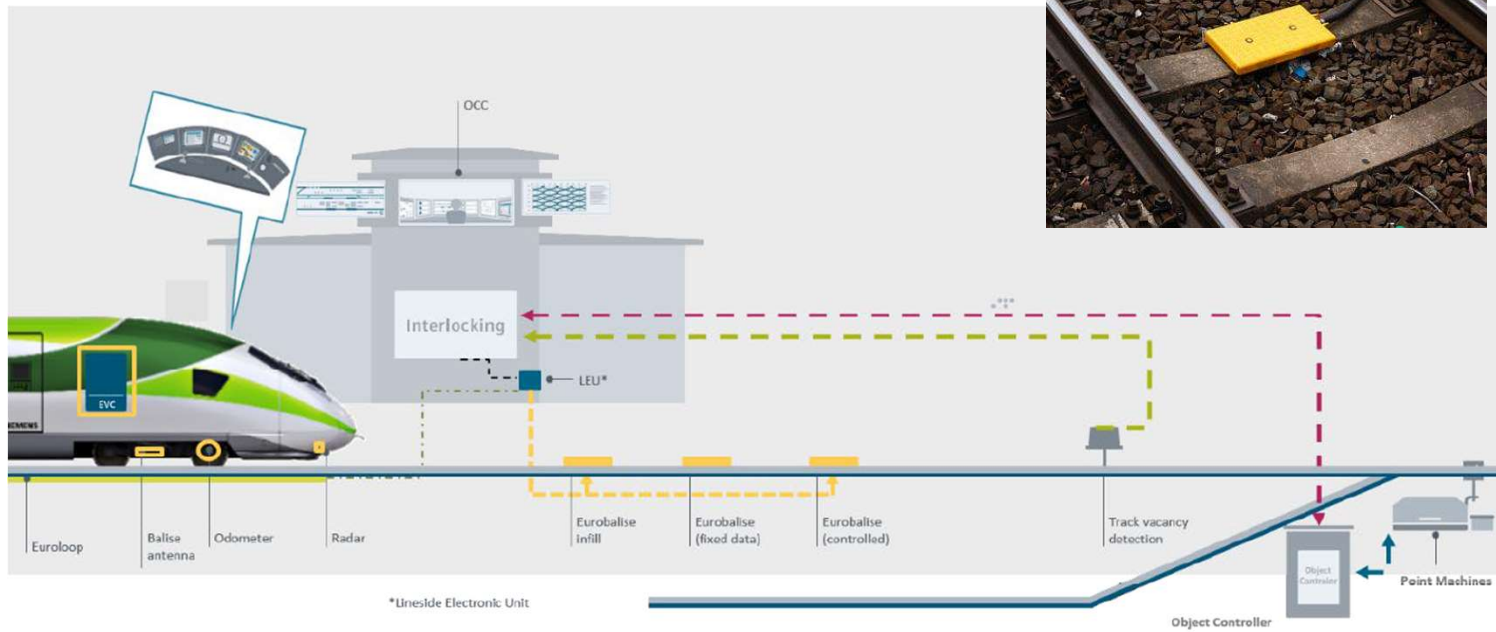
Concept of Operations – Overview



Double Track Sidings Optimized for Train Passing in Middle
Trains Scheduled every 45-Minutes each Direction
Run Time LV-VV, 1:35 ; LV-RC, 2:18 with stop at Hesperia Station
Buffer time allows for operational adjustments to maintain schedule



European Train Control System (ETCS) Level 1



PROJECT OVERVIEW:

High-Speed Fully Electric Rail Travel Between Southern California and Las Vegas

LAS VEGAS – VICTOR VALLEY PROJECT

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



Key Stakeholders– Victor Valley To Las Vegas

Federal Railroad Administration

- NEPA reevaluation completed in September 2020
- Section 106 under way – completion scheduled Summer '22
- Corridor safety approval
- Rolling stock regulatory approval

Federal Highway Administration Caltrans & NDOT

- Caltrans (135 miles) and NDOT (34 miles) participated in the NEPA and environmental process with FHWA.
- Multiple Agreements being advanced with each DOT – Right of Way, Design and Construction, Operations and Maintenance

Bureau of Land Management

- Grants now limited to substation work in CA and limited parcels in NV

Surface Transportation Board

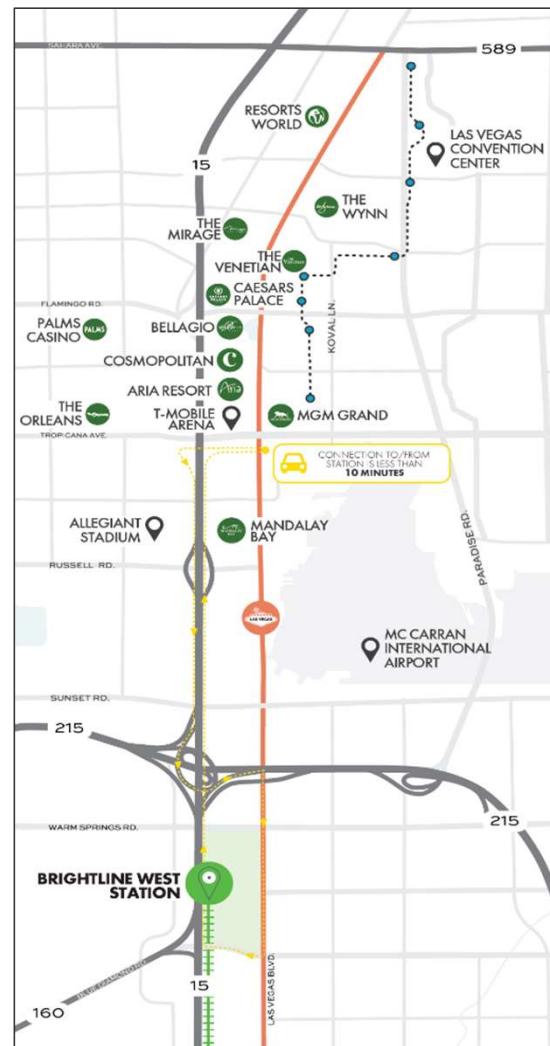
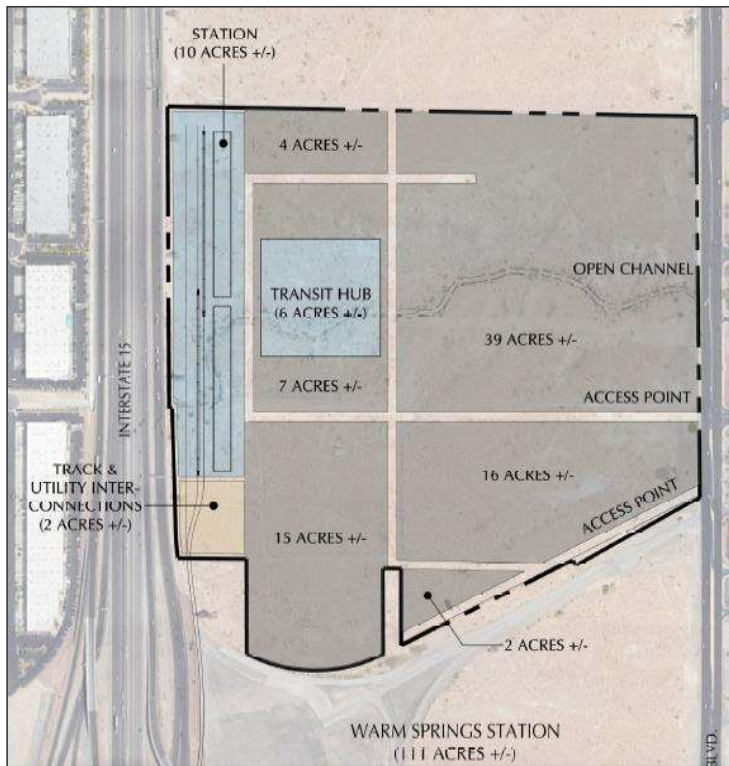
- STB certification in place
- Preempts state and local regulations and permit requirements including CEQA

Railroads and Utilities

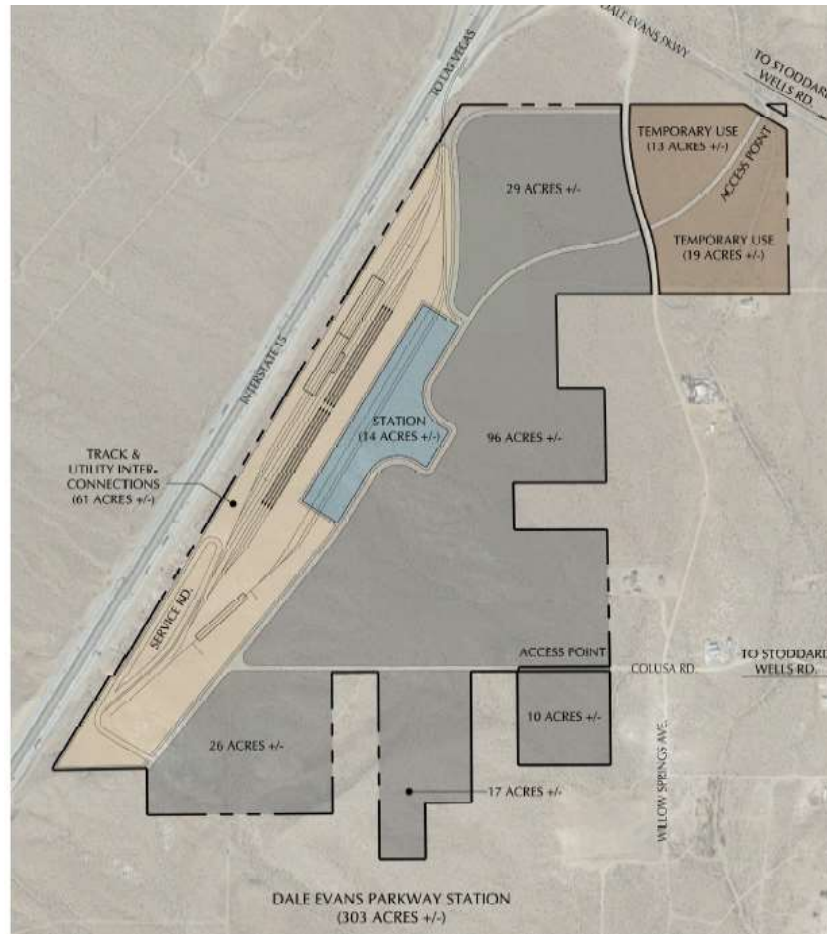
- One UPRR crossing (NV) and one BNSF (CA) crossing
- Multiple utility crossings primarily power (SCE, LADWP and NVE)



Las Vegas Station Site



Victor Valley Station Site



Pathways to the LA Basin



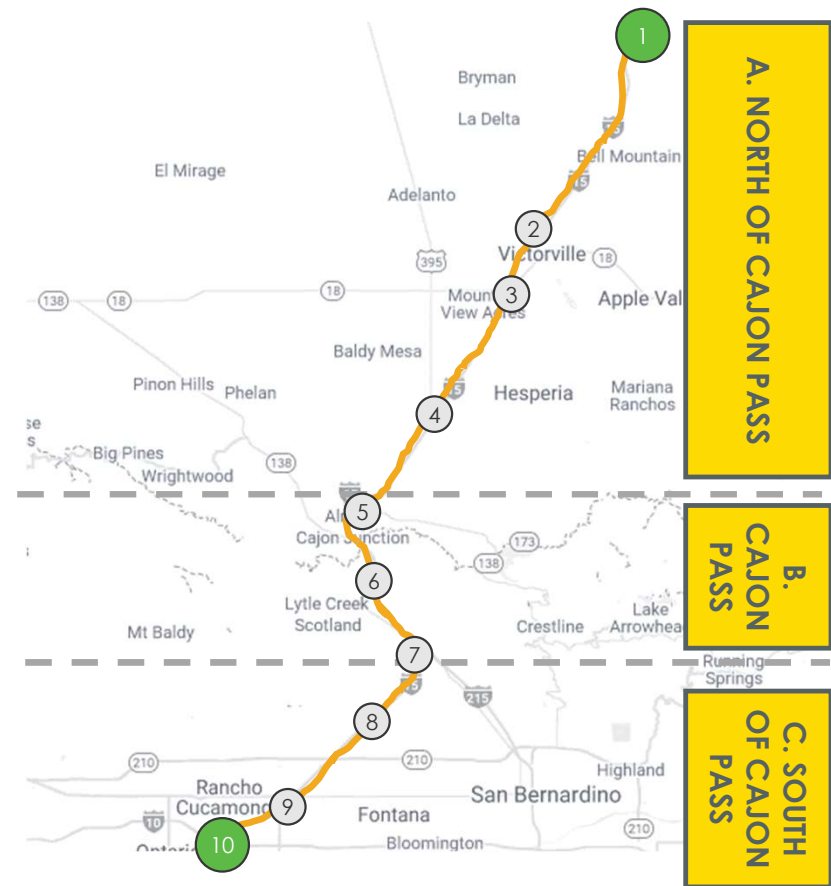
Victor Valley to Rancho Cucamonga Alignment

Eliminates need to build express lanes and provides a significant safety benefit by replacing car travel

- A. North of Cajon Pass – 25 miles
- B. Cajon Pass to I-15 / I-215 split – 13 miles
- C. South of Cajon Pass – 12 miles

Key Locations on Alignment:

1. Victor Valley station site
2. Victorville viaduct
3. Begin median running
4. Hesperia inline commuter station
5. Cajon Pass
6. Base of Cajon
7. I-15 and I-215 split
8. Begin express lane footprint
9. Exit I-15 and move onto 8th St.
10. Rancho Cucamonga station



Rancho Cucamonga Station Site



brightline
west

Victor Valley to Rancho Cucamonga Stakeholder Involvement

FRA

- Initiated NEPA and Section 106
- Target completion of NEPA November '22

Caltrans

- Memorandum of Understanding executed with Caltrans, CalSTA and CAHSR allows use of I-15

SBCTA and City of Rancho Cucamonga

- MOU in place, Agreements in progress

Metrolink / LA Metro

- Memorandum of Understanding complete
- Coordination on schedule of operations

Railroads and Utilities

- BNSF and UP – five total crossings
- CHP crossings
- Other utilities





50 Miles Connecting Victor Valley and Palmdale

BLW participating in the High Desert Intercity Rail Corridor Service Development Plan by collaborating on the following items:

- Station platform interface
- Rail alignments
- Operations and timetables
- RTC modeling input
- Relevant design criteria
- Train control systems
- Other

RTC OF SOUTHERN NEVADA

DAVID SWALLOW, P.E.

Deputy CEO, Regional
Transportation Commission of
Southern Nevada





Mobility Alliance

High-Capacity Transit Workshop



GROWTH AND DEMAND

Southern Nevada
Visitor Increase

42 M

2019



Southern Nevada
Resident Increase

2.2 M

2019



RECENT COMMUNITY GROWTH

Allegiant Stadium

\$1.8 BILLION





Circa Las Vegas
APPROX.

\$1 BILLION



Las Vegas Convention Center
\$1.4 BILLION

LAS VEGAS CONVENTION CENTER WEST HALL



Resorts World Las Vegas
\$4 BILLION

NEAR FUTURE GROWTH

MSG Sphere





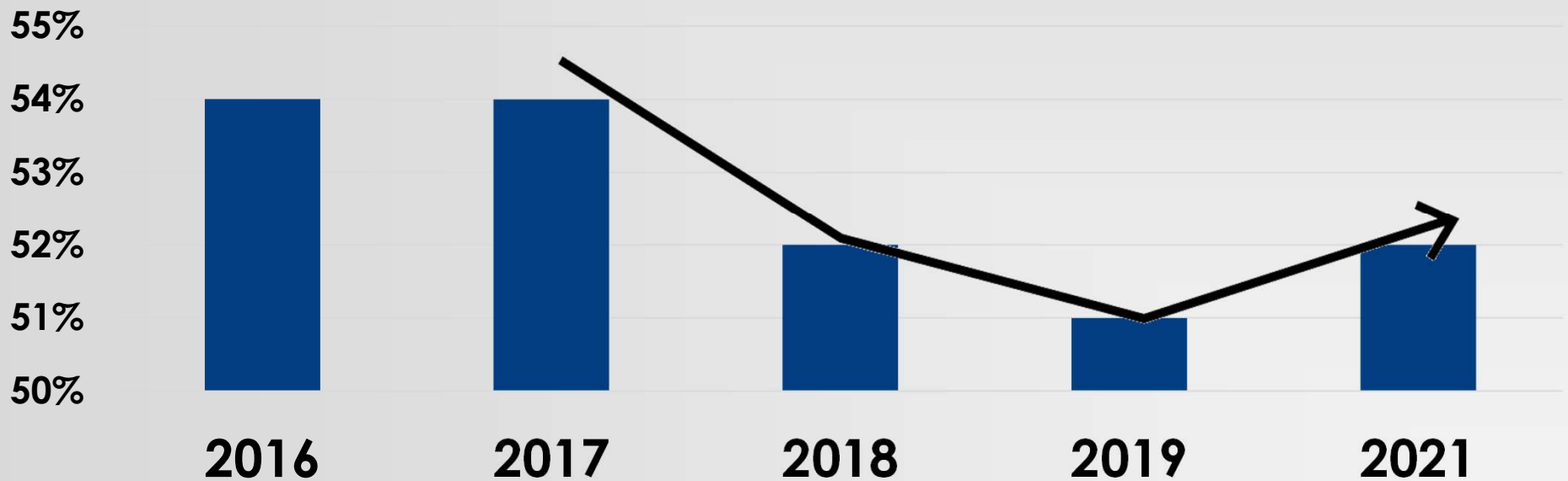
Fontainebleau

2021 Las Vegas Visitor Profile

TRANSPORTATION TO LAS VEGAS

51-54% of visitors traveled to Las Vegas by Ground Transportation (2016-2021)

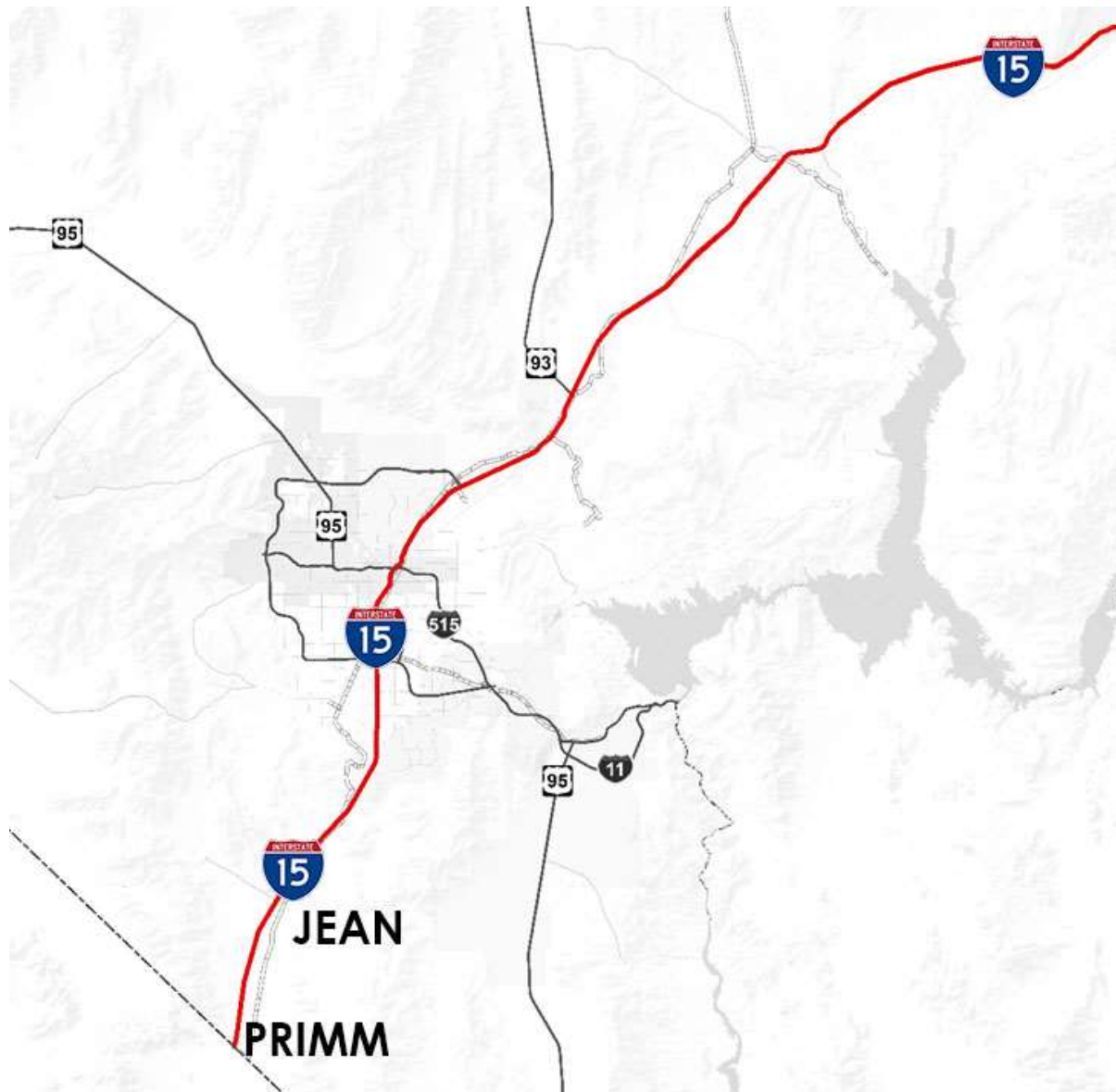
Proportion of visitors who traveled to Las Vegas by ground transportation

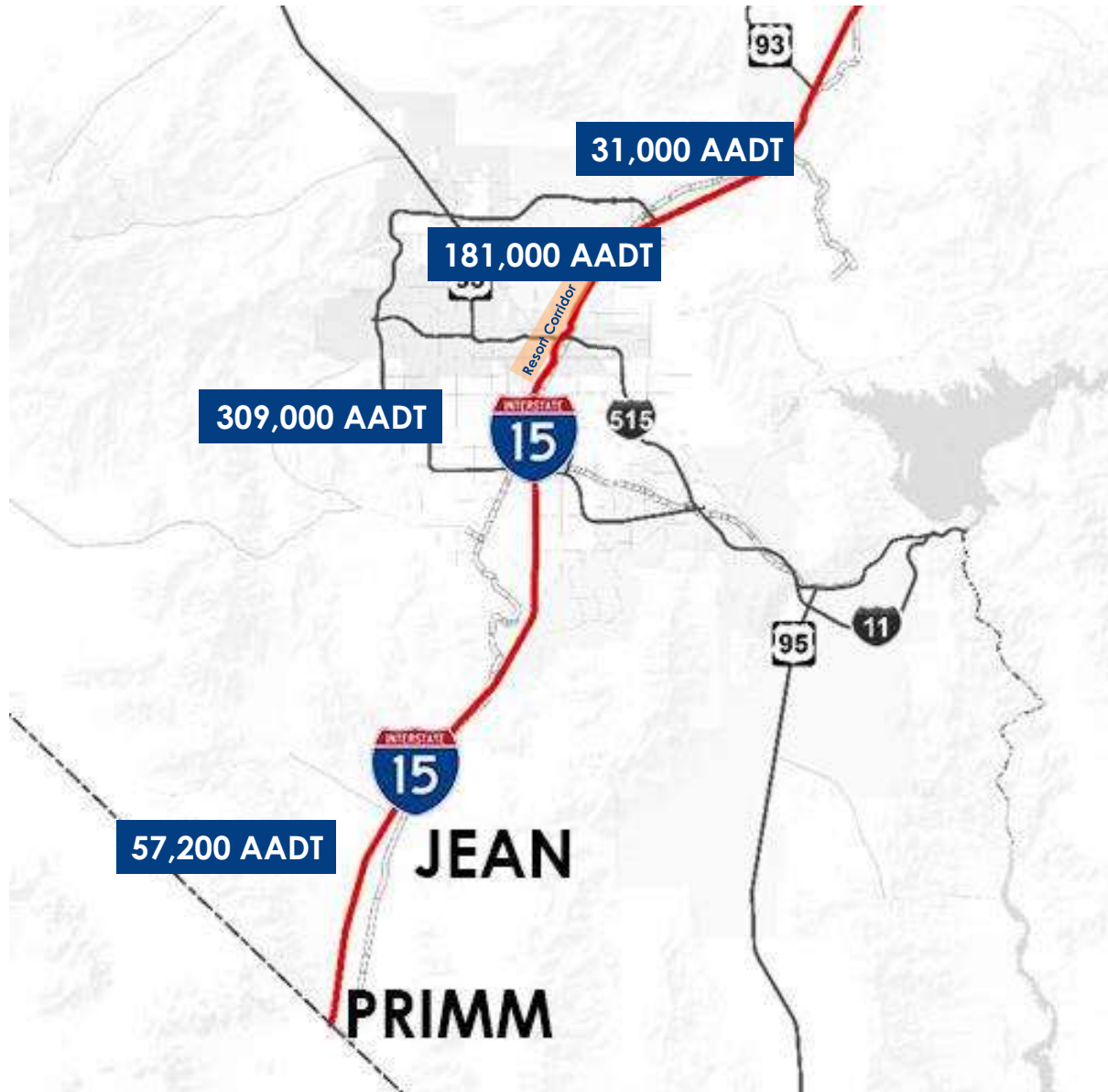


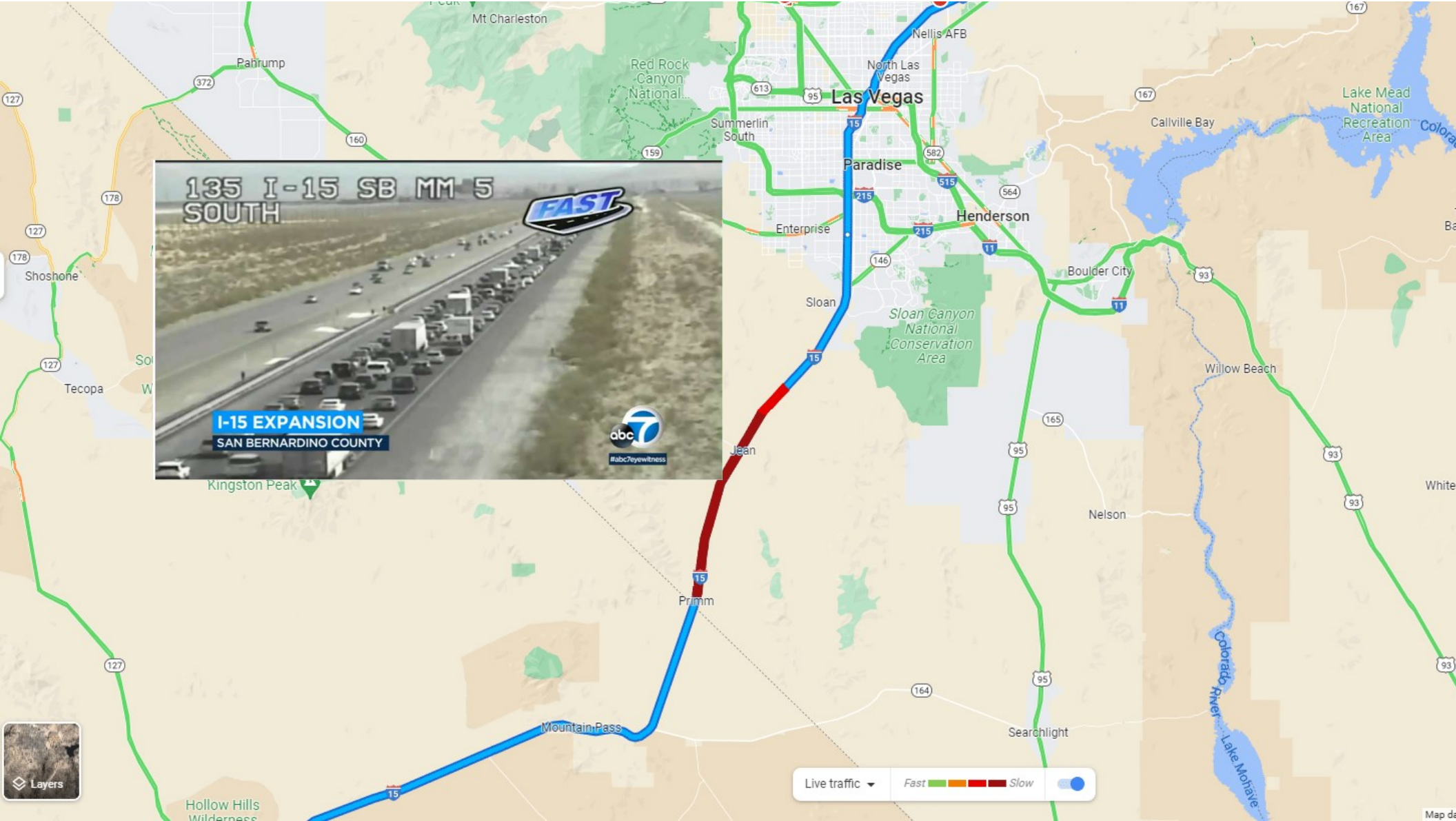
LAS VEGAS HISTORIC TOURISM STATISTICS

Visitor Volumes and Convention Attendance

Year	Visitor Volume	Convention Attendance	Average Daily Auto Traffic (I-15 at NV/CA Border)	En/Deplaned Air Passengers
2016	42,936,100	6,310,600	45,329	47,368,219
2017	42,214,200	6,646,200	44,913	48,430,118
2018	42,116,800	6,501,800	45,402	49,646,118
2019	42,523,700	6,649,100	44,678	51,528,524
2020	19,031,100	1,727,200	37,460	22,200,595
2021	32,230,600	2,206,400	48,047	39,710,493

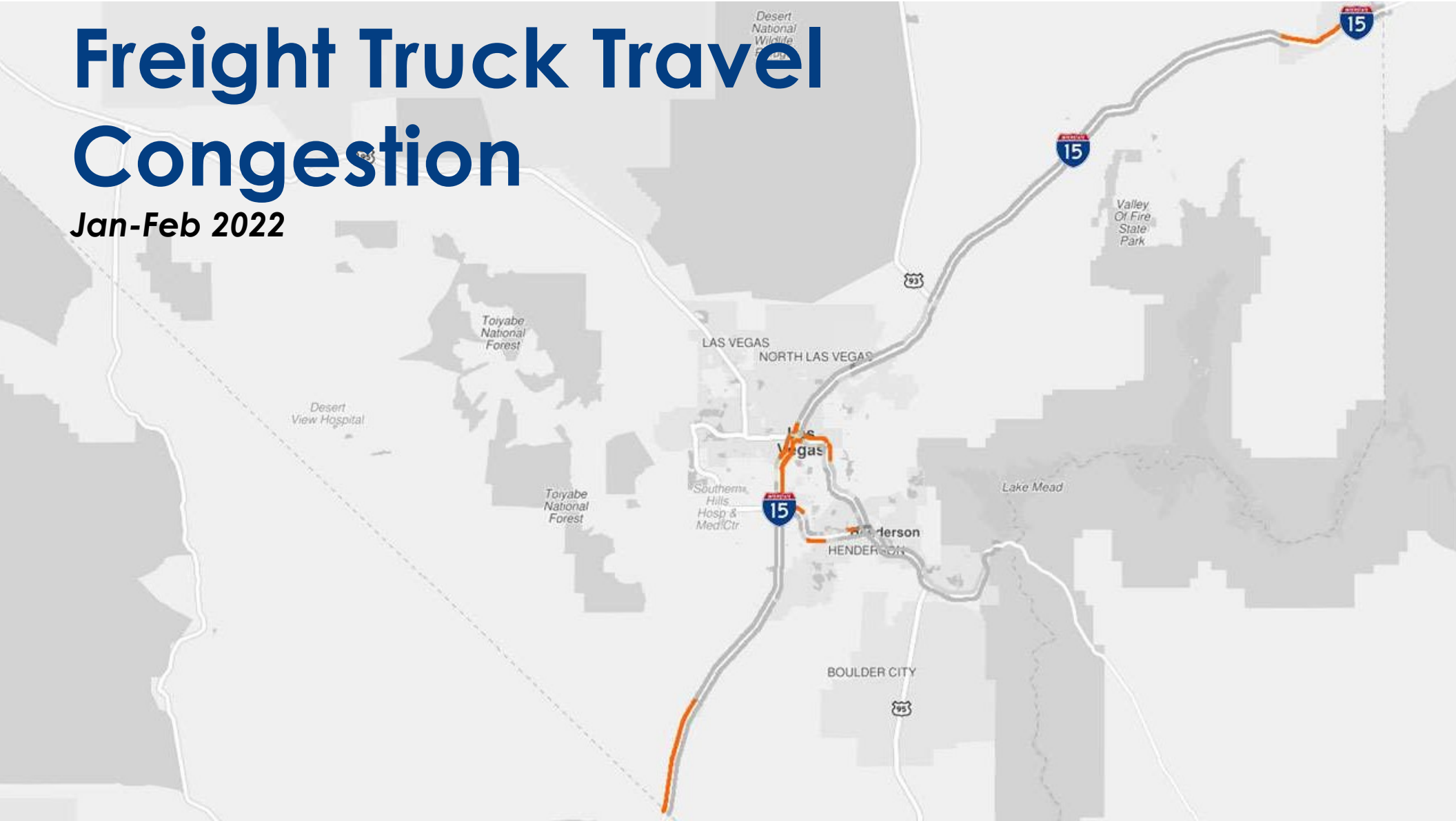




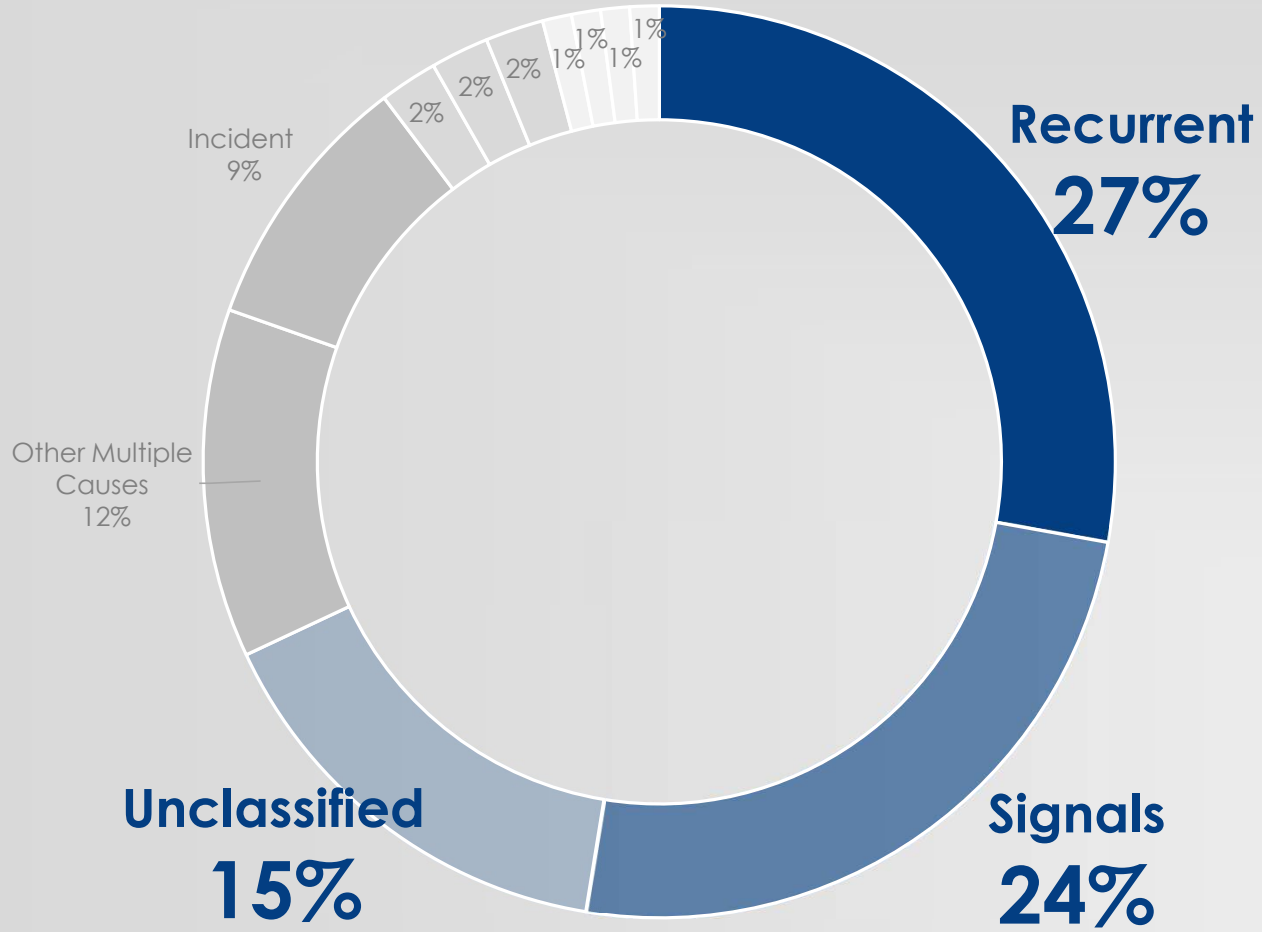


Freight Truck Travel Congestion

Jan-Feb 2022



CONGESTION CAUSES



Clark, NV
2019

\$231.29M

User Delay Cost
(79.0% of NV)

8.84M

Vehicle Hours of Delay

Southern Nevada Bottleneck Ranking

6 OF TOP 10 ON I-15

Jan-March 2022

Rank	Head Location	Average max queue length (miles)	Average daily duration	Total duration
1	I-515 N @ LAS VEGAS BLVD/EXIT 75	2.41	4 h 32 m	14 d 23 h 2 m
2	US-95 S @ I-15/EXIT 76B	0.92	5 h 44 m	18 d 21 h 4 m
3	I-515 N @ CASINO CENTER BLVD/EXIT 75	3.05	2 h 11 m	7 d 5 h 19 m
4	I-15 N @ I-515/US-95/EXIT 42	5.28	1 h 18 m	4 d 7 h 24 m
5	I-515 N @ I-15/EXIT 76A	3.85	57 m	3 d 3 h 15 m
6	I-15 S @ NV-170/EXIT 112	4.15	2 h 48 m	9 d 6 h 17 m
7	I-15 S @ SAHARA AVE/EXIT 40	1.95	1 h 37 m	5 d 8 h 18 m
8	I-15 N @ I-15/DESERT INN RD	3.2	50 m	2 d 18 h 25 m
9	I-15 S @ NEVADA/CALIFORNIA STATE LINE	0.15	8 h 20 m	27 d 10 h 7 m
10	I-15 S @ SPRING MOUNTAIN RD/EXIT 39	2.83	53 m	2 d 23 h



access **2050**
Enhancing Mobility for Southern Nevada Residents

REGIONAL TRANSPORTATION PLAN
for
SOUTHERN NEVADA
2021 - 2050



I-15 PROJECTS

2021-2045

29

Projects

\$1.78B

Investment

PROJECT HIGHLIGHTS/ ELEMENTS

Truck climbing lanes

Truck parking

Third lane addition from PRIMM to CA STATELINE

Tropicana Interchange

Future NEON phases



on
board

YOUR FUTURE MOBILITY PLAN



8 BIG MOVES

1

**High-Capacity
Transit Network**

2

**Expand Transit to
Homes and Jobs**

3

**Make All Travel
Safer**

4

**Make Short Trips
Easier**

5

**Service for Seniors,
Veterans & Persons
with Disabilities**

6

**Connect to Major
Destinations**

7

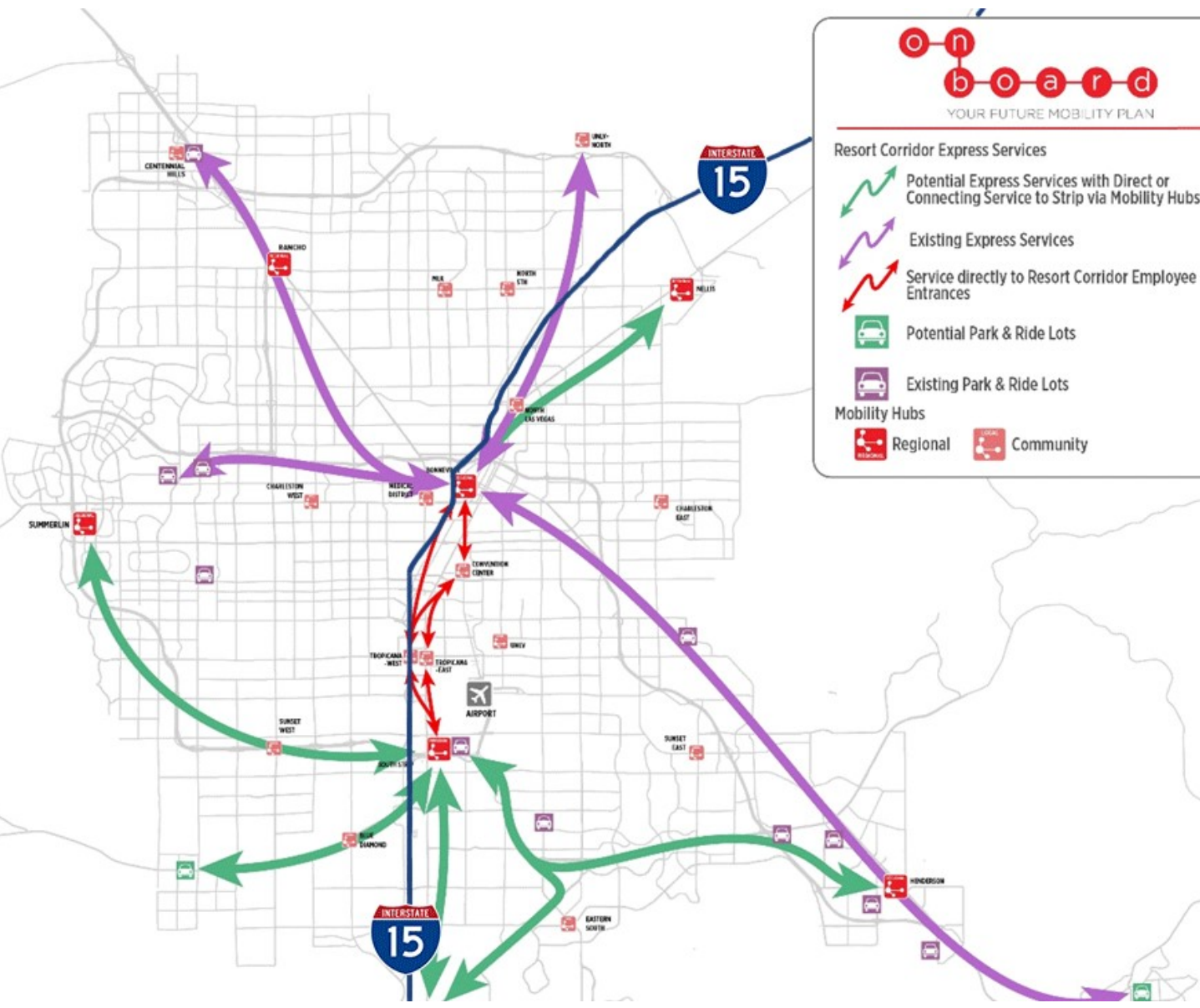
**Reliable Transit for
Employees**

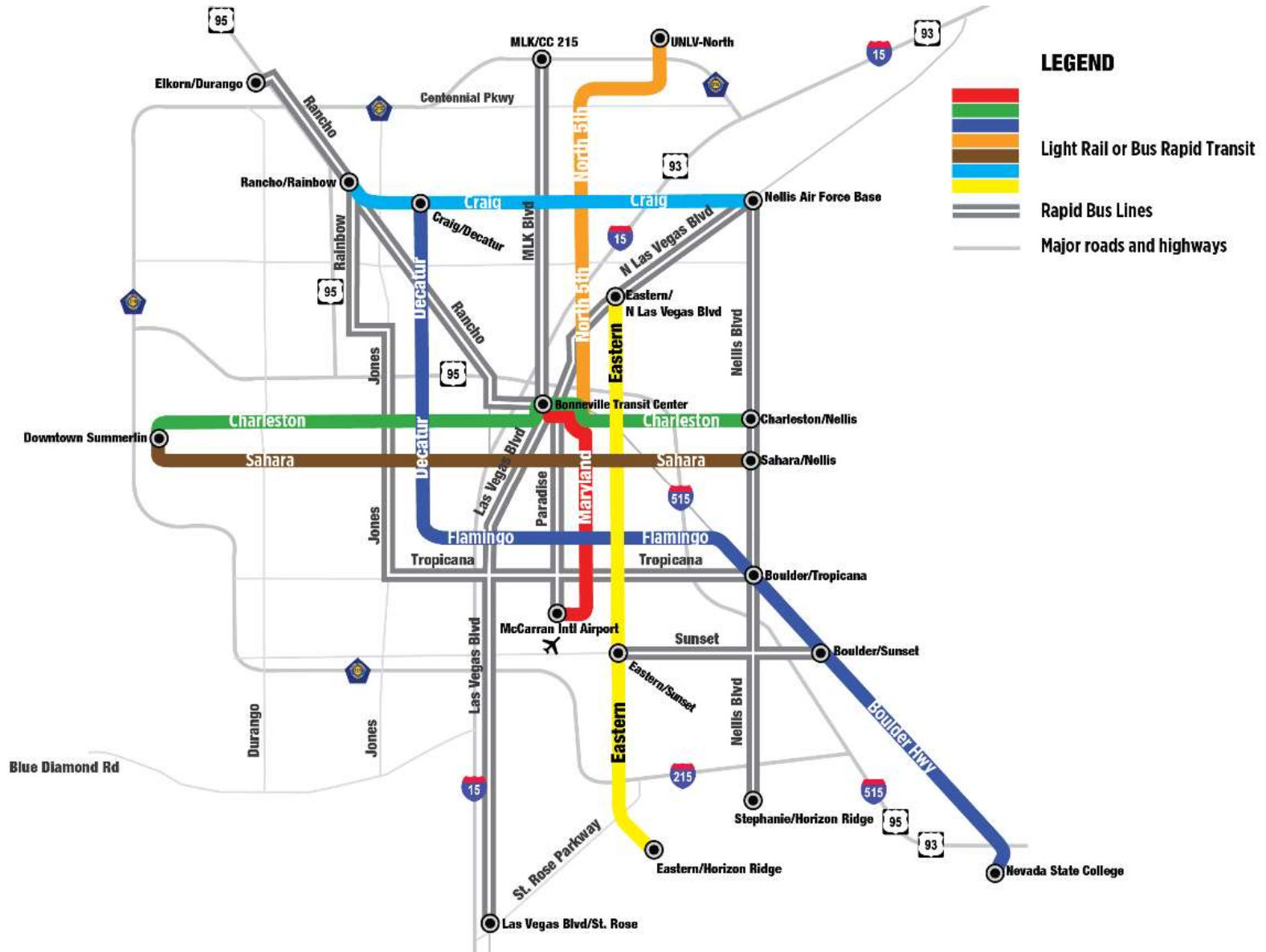
8

**Technology to
Improve Mobility
and Sustainability**

Resort Corridor Express Services

-  Potential Express Services with Direct or Connecting Service to Strip via Mobility Hubs
-  Existing Express Services
-  Service directly to Resort Corridor Employee Entrances
-  Potential Park & Ride Lots
-  Existing Park & Ride Lots
- Mobility Hubs
 -  Regional
 -  Community








RTC

Regional Objectives for FrontRunner

 Provide additional options to **connect jobs & employees**

 **Increase ridership** of FrontRunner & overall transit system

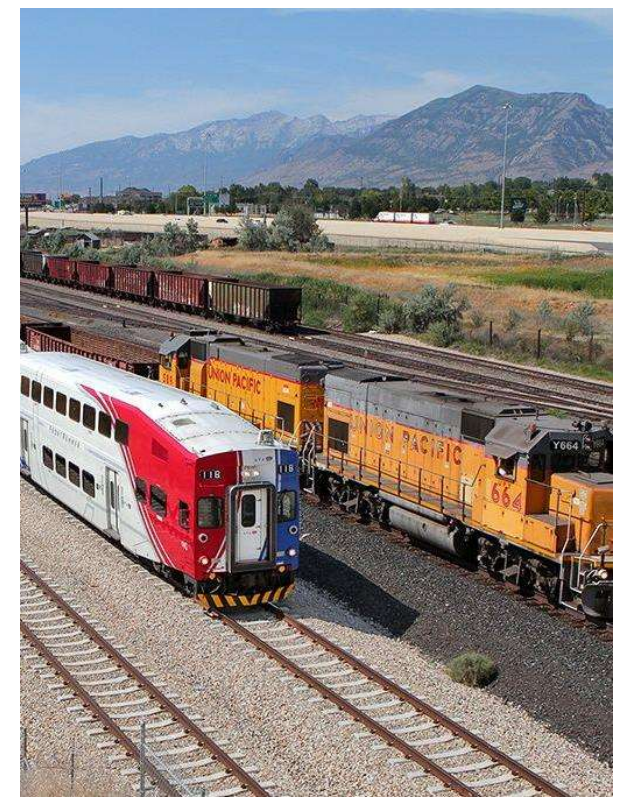
 Support real estate & **economic development**

 **Reduce congestion** on the I-15 corridor

 Improve **air quality**

 **Enhance safety** at grade crossings

 Consider as backbone to **future passenger rail**





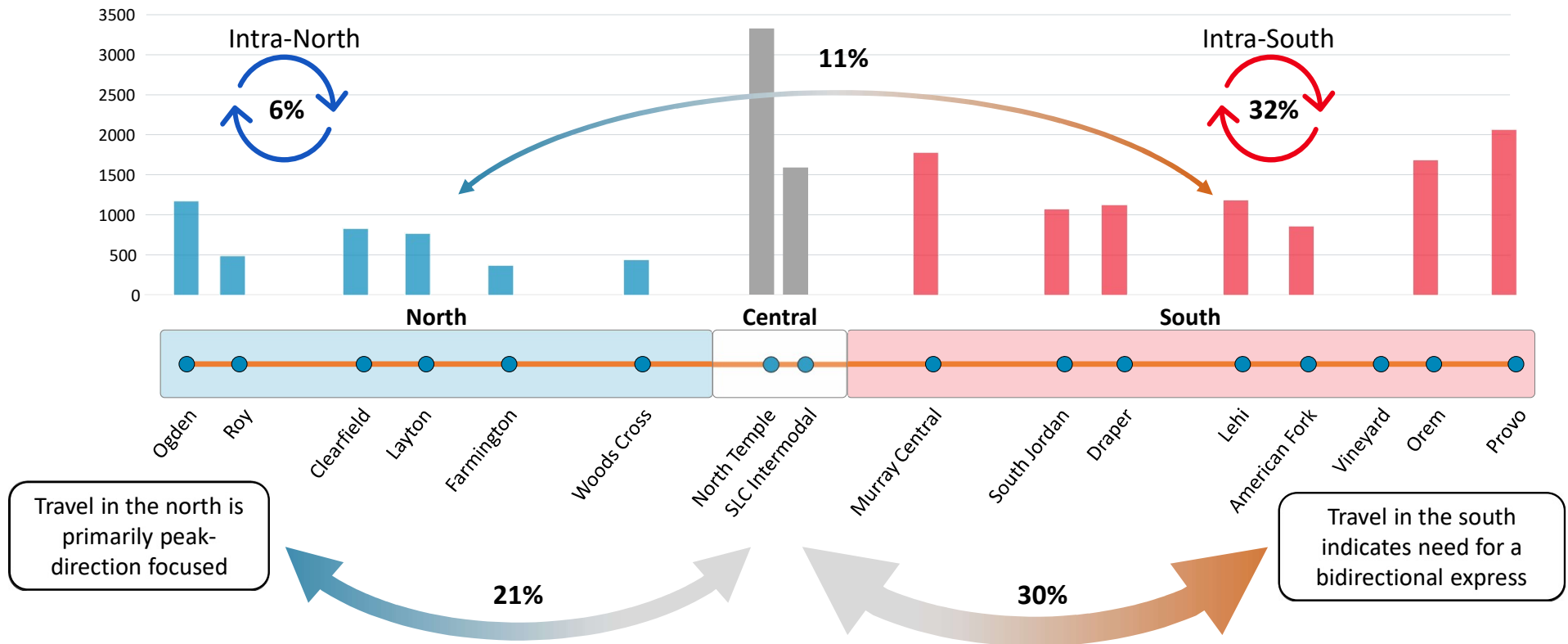
Current FrontRunner System

- Current frequency
 - 30-min peak service
 - 60-min off-peak service
- System is mostly single track segments
 - 61.4 miles of single track (74%)
 - 21.8 miles of double track (26%)
- Single track presents logistical challenges that can slow service
 - A delay at one point can cause delays throughout the system





Existing Demand (2019)



Funding from State Legislature

- ◎ \$375 million funding to double track strategic sections of FrontRunner
 - \$68 million – Legislative appropriation (2021)
 - \$232 million - Legislative appropriation (2022)
 - \$75 million - Legislative appropriation (2022)
- ◎ Transit Capital Development Modifications (UTA/UDOT Collaboration)
- ◎ UTA pays \$5M/Year (15 years) for low-emission/no emission vehicles



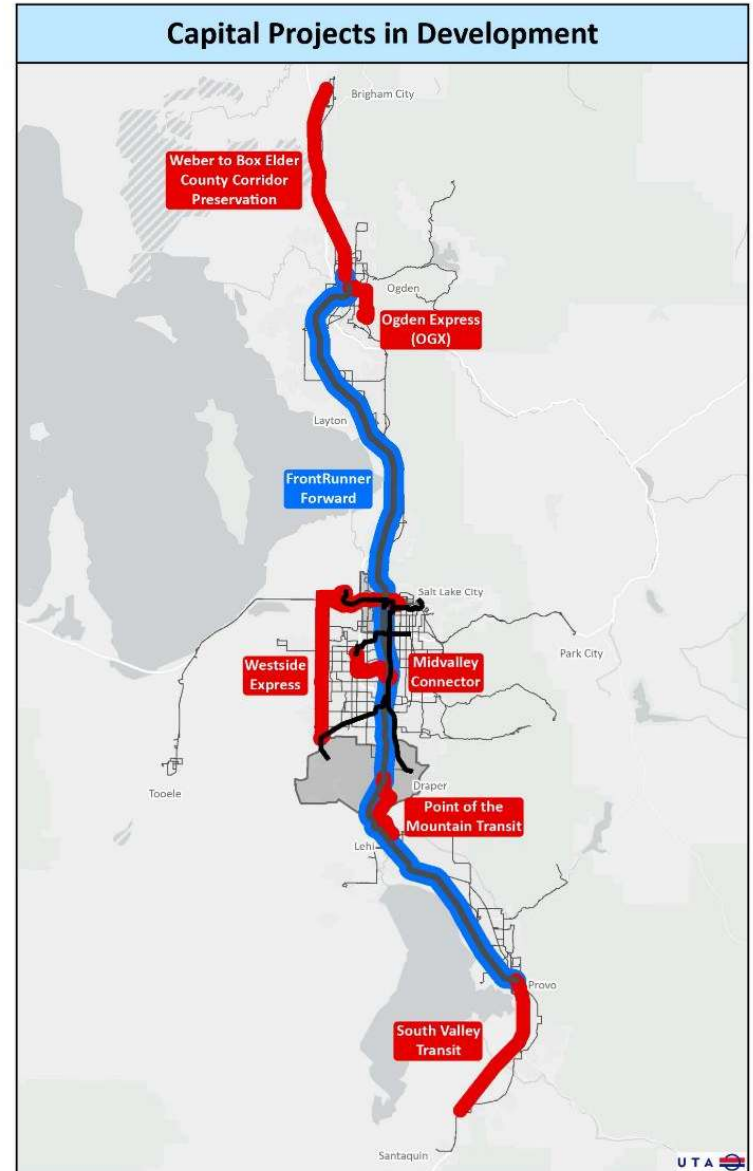
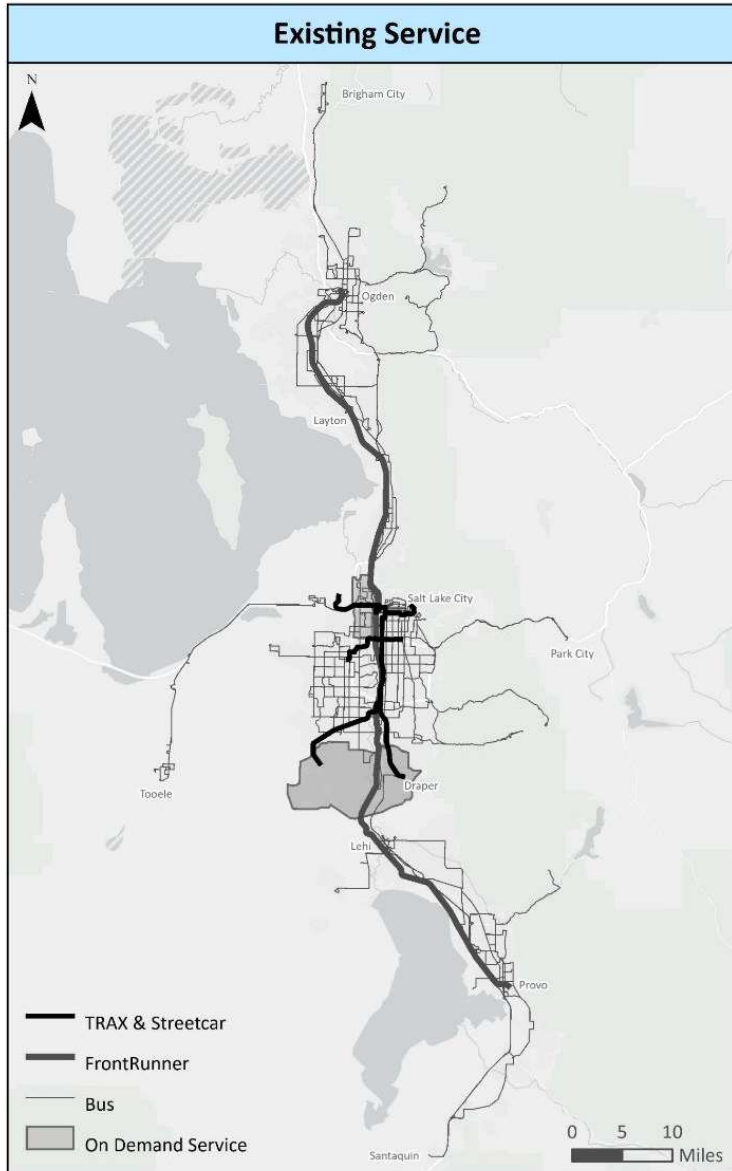
Double Track Investment Plan



Express and frequency improvements throughout the entire system

- 8 double track segments
- Results in ~50% system double track
- 30 min. frequency all day
- 15 min. peak hour frequency (all stops) and 15 min. peak hour express
- 10 new vehicles needed (minimum)
- Platform safety improvements needed for express
- Potential to grow FrontRunner rider market capture by ~185%
- Saves 28 min. for express and 14 min. total

Other UTA Projects



LEGISLATION AND FUNDING

- » Bipartisan Infrastructure Law will invest \$66 billion in rail
- » Goal: creating safe, efficient, and climate-friendly alternatives for moving people and freight
- » Focus on AMTRAK maintenance and expanding rail service and competitive FRA grants
- » This funding will position rail to play a central role in our transportation and economic future



Image: Library of Congress



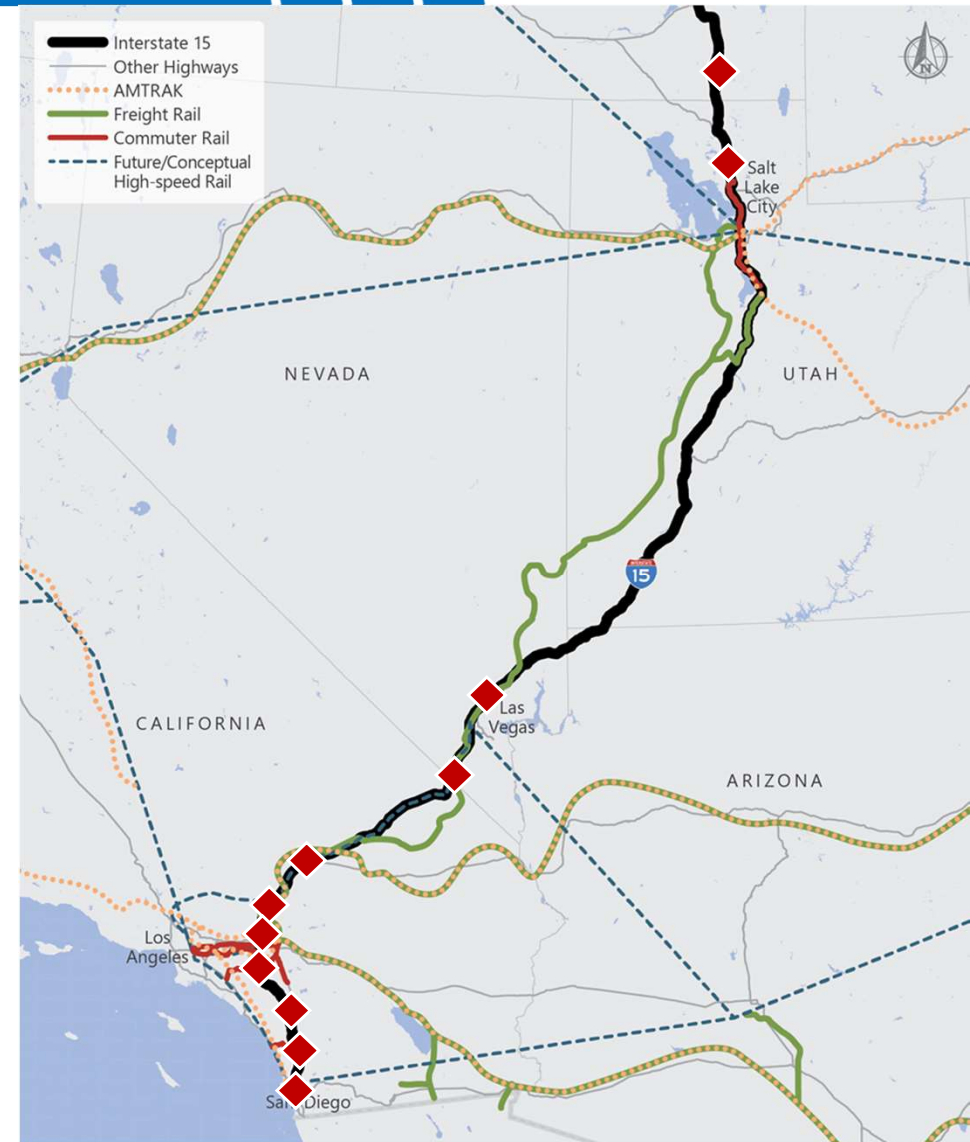
RAIL/HIGH-CAPACITY TRANSIT FUNDING

- » Amtrak funding in BIL
 - » \$28.65B for National Network for FY 2022-2026
- » Competitive grants through FRA (FY 2022-2026)
 - » Consolidated Rail Infrastructure and Safety Improvements (CRISI) - \$10B
 - » Railroad Crossing Elimination - \$5.5B
 - » Federal-State Partnership for Intercity Passenger Rail - \$43.5B
- » Other US DOT Multimodal Grants
 - » RAISE
 - » Projects of National & Regional Significance (INFRA)
 - » Congestion Relief Discretionary Grants
 - » National Infrastructure Project Assistance Discretionary Grants
- » Potential for additional high-speed rail funds in Build Back Better



DISCUSSION

- » What is the role of transit in supporting improved safety and operations on I-15?
- » What is the role of the Alliance in furthering rail alternatives and improving multi-modal connections?
- » Other thoughts?



THANK YOU



I-15 MOBILITY ALLIANCE

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