

Rail Overview to HDC JPA Board of Directors

Transportation Solutions
September 13, 2018



HIGH DESERT CONNECTION





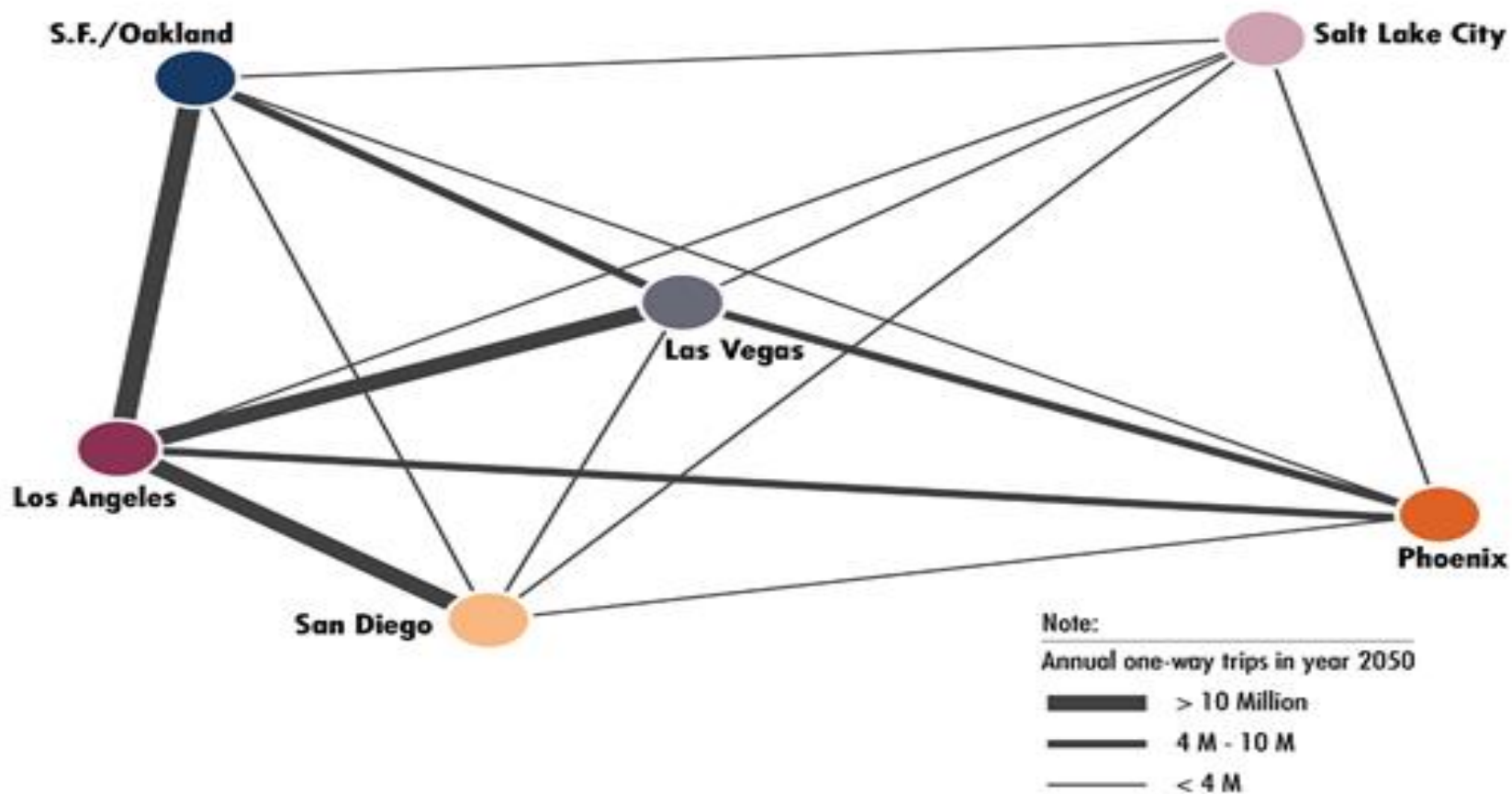
Primary Benefits of HSR on the Corridor

- Relieve congestion for one of the nation's most congested corridors (Interstate-15)
- Save two hours per trip (2.5 hr from LA to LV) - with improvements in safety, reliability, and convenience
- Create jobs and stimulate economic development around station sites
- Provide exponential economic growth for Southern California and Southern Nevada
- Connect to state-wide and regional transportation networks





Southwest Regional Study



2018 California State Rail Plan

Connecting California



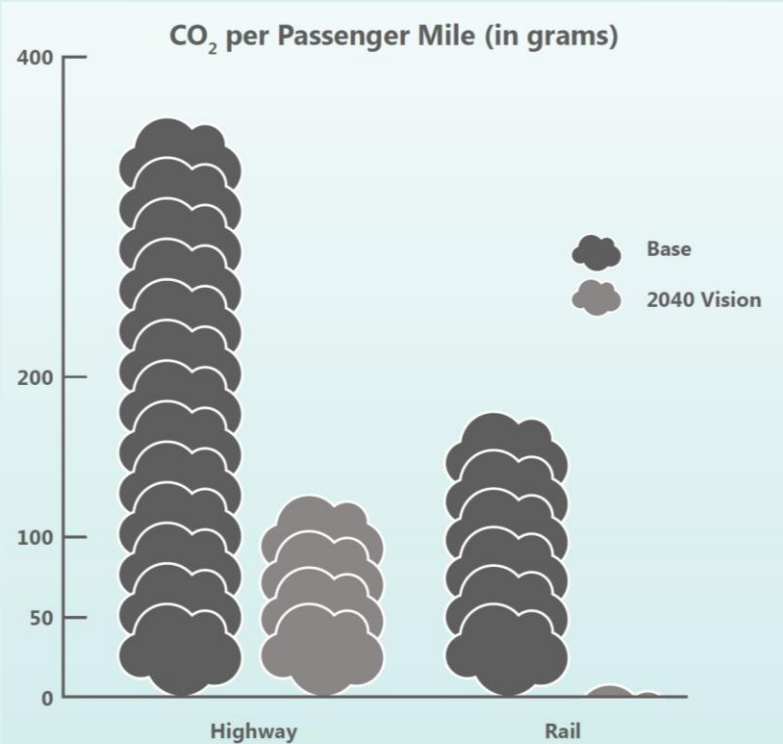
2040 Vision for Passenger Rail

- » **Integrated Statewide Network**
 - » High Speed Rail
 - » Intercity and Regional Services
 - » Integrated Express Bus
- » **Coordinated Schedules**
 - » Regular pulsed service
 - » Key transfer hubs
 - » Public Transit Connections
- » **Customer Focus**
 - » Seamless First/Last-Mile Access
 - » Integrated Ticketing
 - » Auto and air competitive



Rail Plan Vision: Outcomes

- Reduce greenhouse gas emissions
- Mitigate roadway congestion
- Reduce vehicle emissions



- Current Ridership**
110,000 Daily Trips
- Business as Usual (2040)**
161,000 Daily Trips
- 2040 Vision**
1,313,000 Daily Trips

- Offer a convenient and reliable alternative to private vehicle travel
- Increase electric and zero emission trains
- Provide alternative to truck transport of containerized cargo

Rail Mode Share

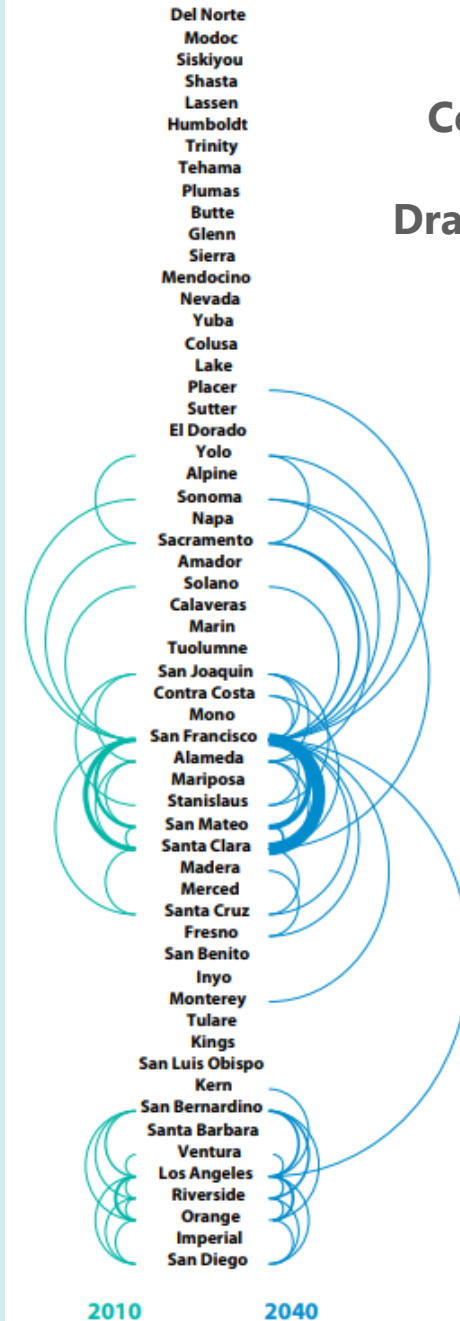
- Current: 0.34%**
- 2040 No Build: 0.52%**
- 2040 Vision: 6.8%**

Rail Plan Vision: Ridership

- » Results show moderate increase in rail ridership demand due to **population growth**
- » However, market potential for networked services is **unrealized**

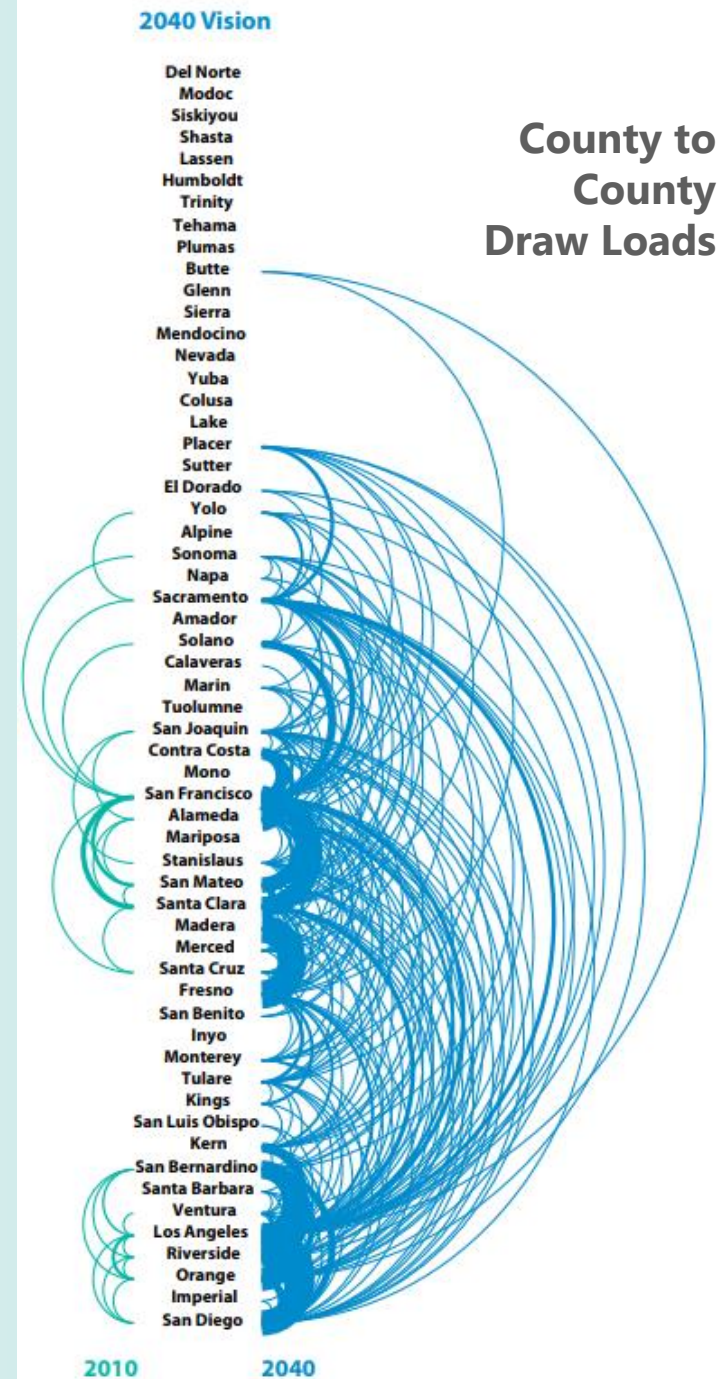
No Build Scenario

County to
County
Draw Loads



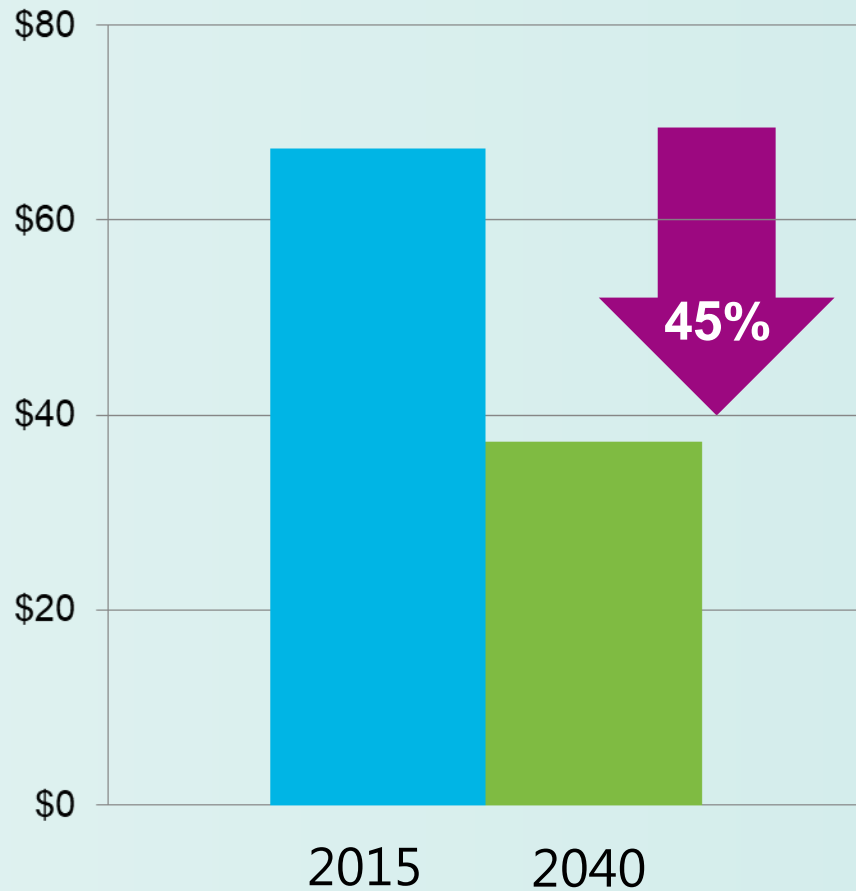
Rail Plan Vision: Ridership – Market Potential

- » Result of integration and HSR shows **huge increase** in rail ridership demand
- » Satisfies a **large market potential for networked services**

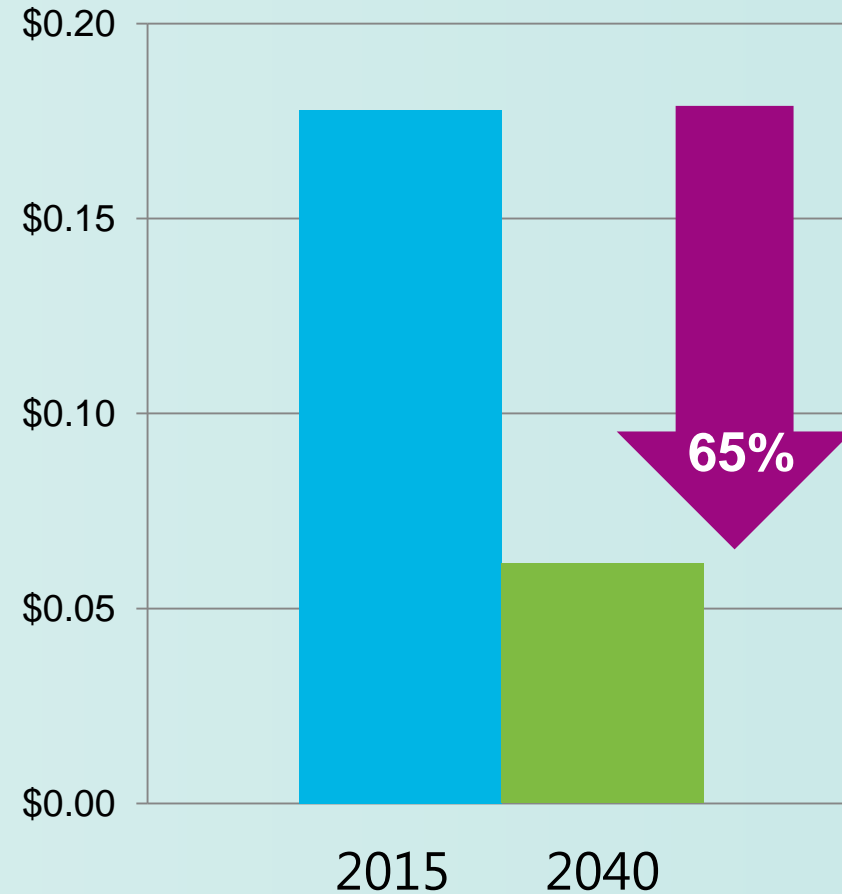


Comparing Metrics – Existing v. 2040

Cost per Train Mile

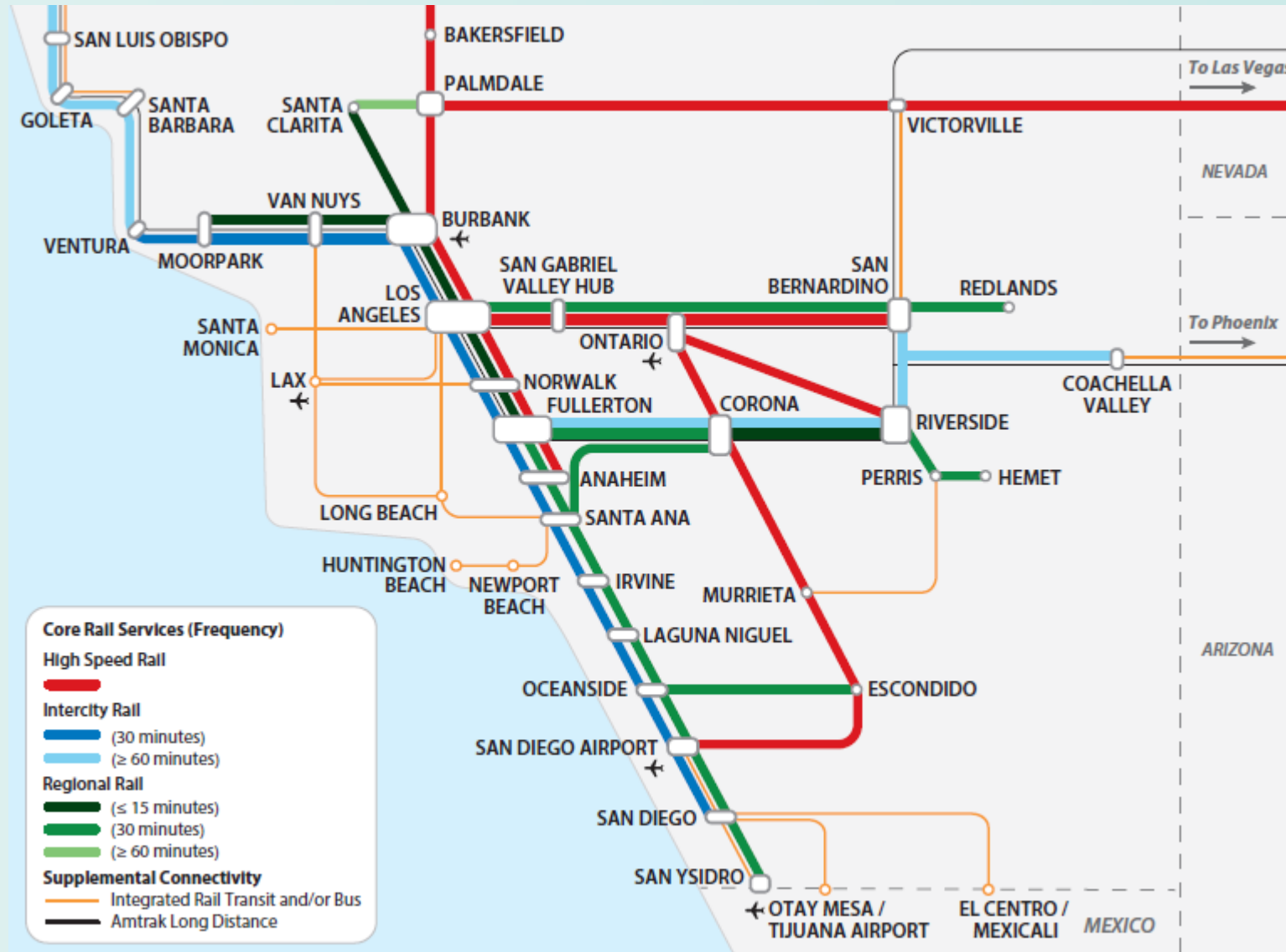


Cost per Seat Mile



All costs are in 2015\$

2040 Vision: Southern California



Complex questions Powerful answers

Content

- 1 High-Speed Rail Enabled by the HDC
- 2 Commuter Rail Along the HDC
- 3 Questions

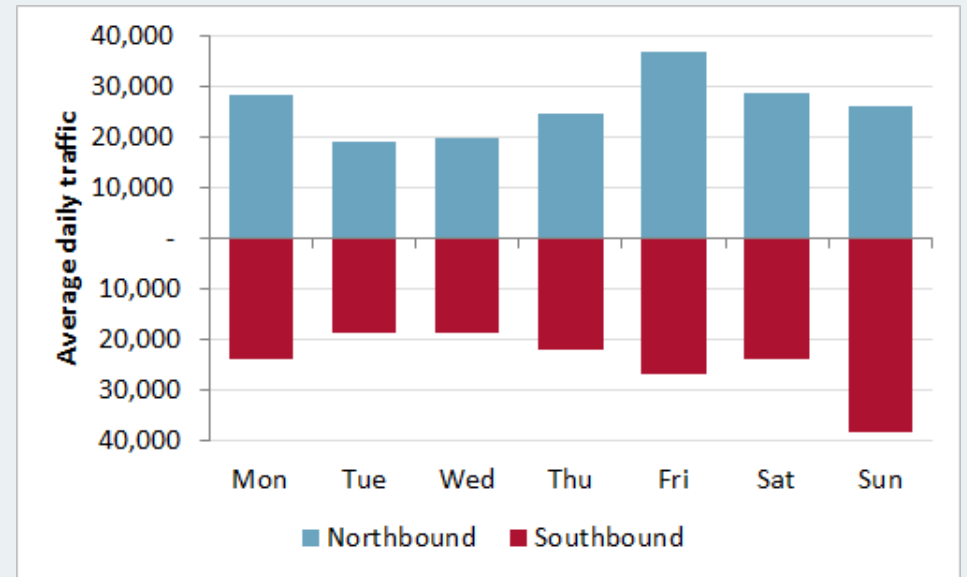
High-Speed Rail Enabled by the HDC: Scale of the Existing Market

- Las Vegas attracted over 42.9 million visitors in 2016
- Californian residents approximate 29% of all visitors
 - Of these, 80-85% reside in Southern California
- Many international visitors to Las Vegas also arrive via California
 - 75% of international visitors don't fly directly to Las Vegas



High-Speed Rail Enabled by the HDC: Existing Travel Options

- 90% of visitors from Southern California travel to Las Vegas by road
- Uncongested drive time from Southern California is 4-6 hours
- Travel times at peak times (Friday northbound, Sunday southbound) are often significantly longer
- Main alternative is travel by plane
 - From six major airports in Southern California



High-Speed Rail Enabled by the HDC: Investment Grade Ridership Study

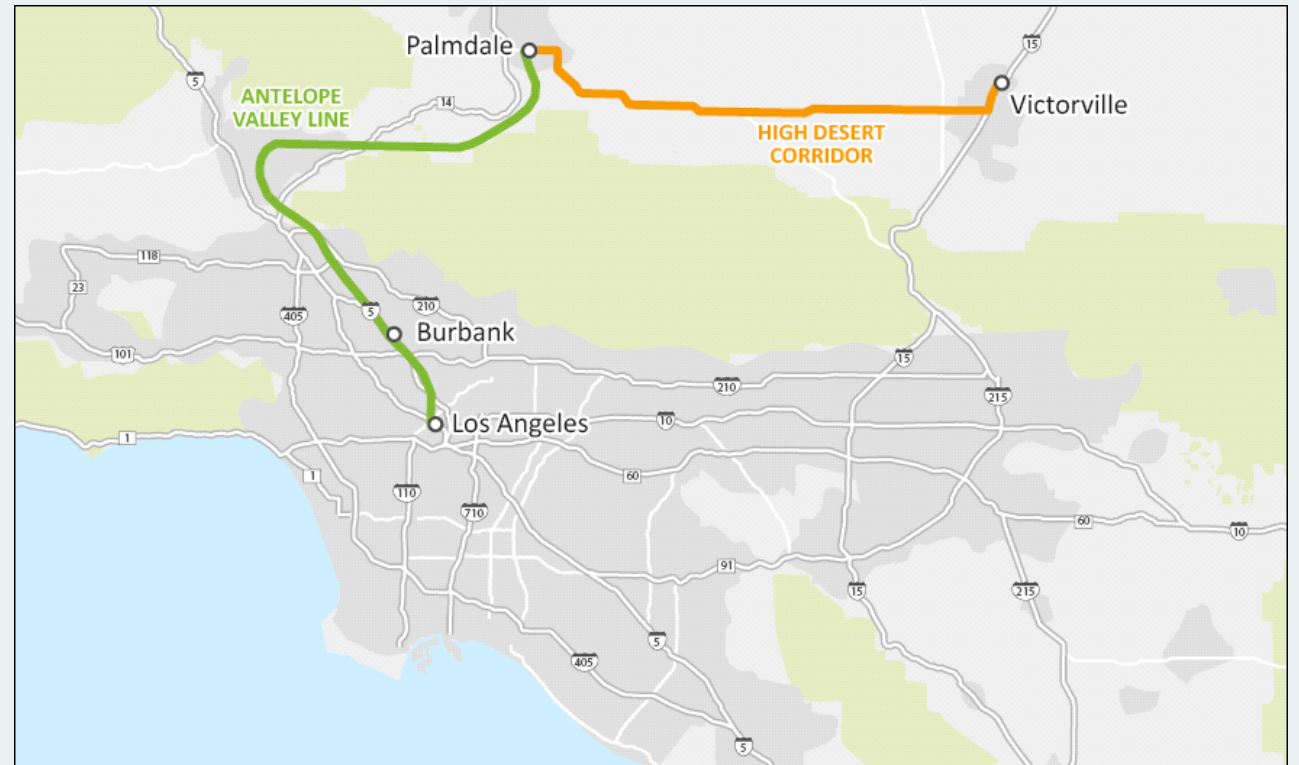
- Proven large scale demand between California and Las Vegas
- Potential 27% market share for HSR
- Forecast annual **ridership** of 3 million round-trips in 2021, rising to 11 million by 2035 with full corridor open, and 14 million by 2050
- Forecast **revenues** based on competitive fares:
 - \$600 million in 2025 (Palmdale to Las Vegas)
 - \$800 million in 2029 (Burbank to Las Vegas)
 - \$1 billion per year in in 2035 (LA/Anaheim to LV)
 - \$1.6 billion per year in 2050



Commuter Rail Along the HDC

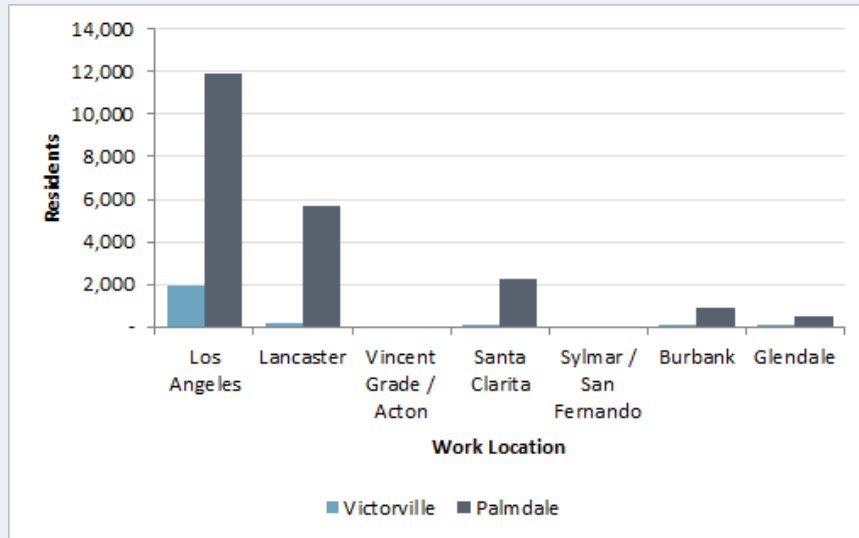
Commuter Rail Along the HDC

- The potential for mode shift to rail has been calculated based upon an assessment of:
 - The **existing commuter demand** to/from Palmdale and Victorville
 - The **existing modes** being used for commuting in the corridor
 - How the introduction of rail in the High Desert might **impact commuting patterns and mode choices**



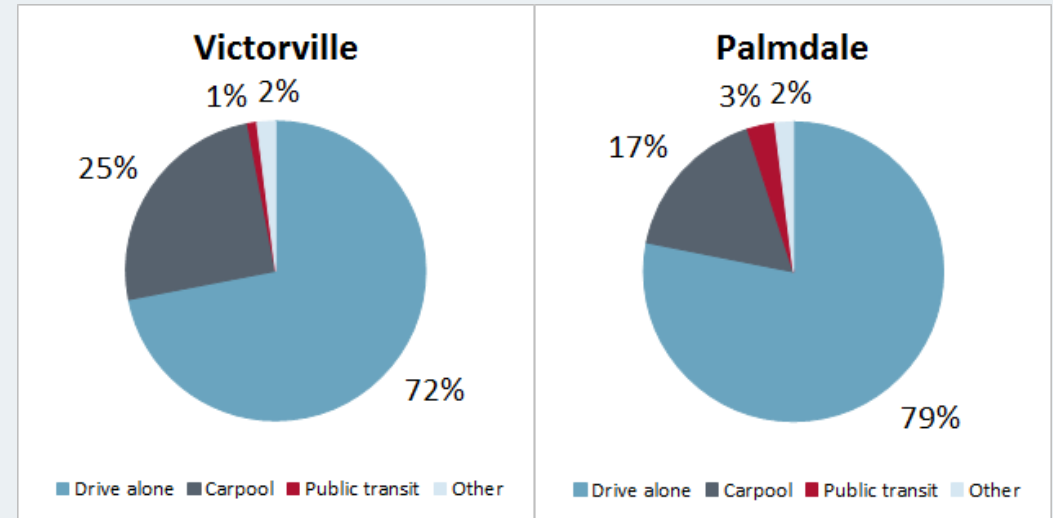
Commuter Rail Along the HDC: Existing Commuter Patterns

- Currently, approximately almost **22,000 residents** of Palmdale commute (by all modes) to areas served by the Metrolink Antelope Valley Line, compared to just over **2,500 residents** of Victorville



<https://www.scag.ca.gov/Documents/Victorville.pdf>;
<https://www.scag.ca.gov/Documents/Palmdale.pdf>

- The public transportation mode share for commuting in Palmdale is currently 3%; in Victorville it is currently 1%



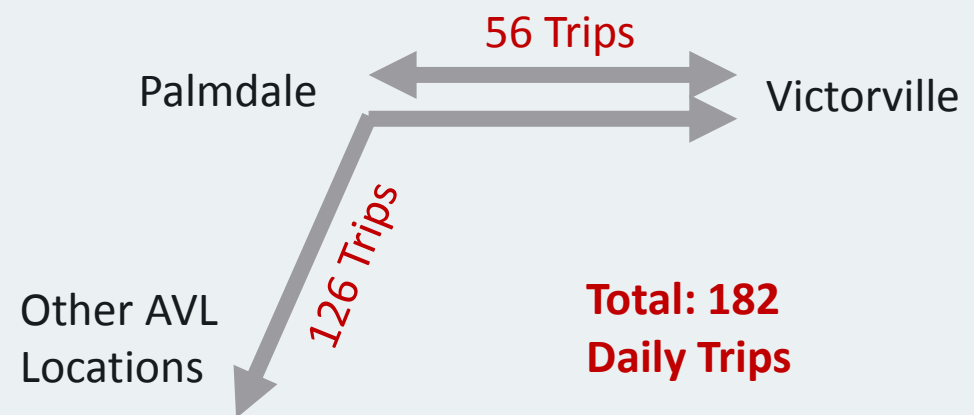
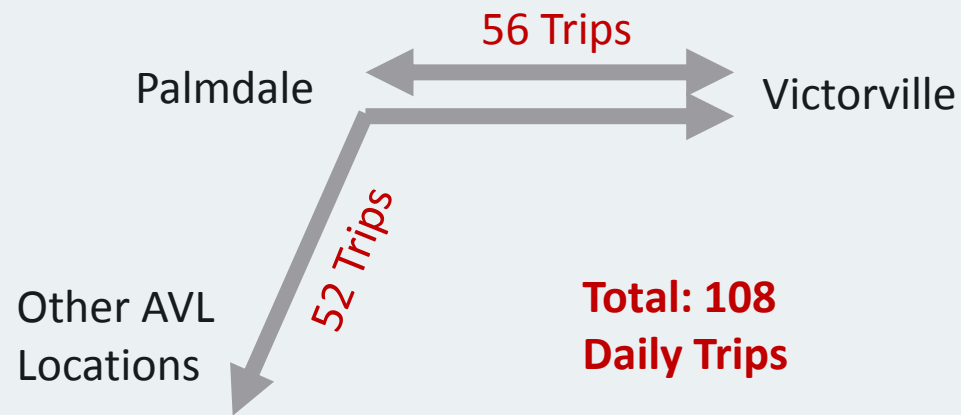
- Metrolink currently reports an average of **460 daily boardings from Palmdale** on the Antelope Valley Line

Commuter Rail Along the HDC: Potential Impact of Rail

- Potential daily demand for rail along the HDC has been estimated from two perspectives:

- Existing commuting patterns, and benchmarking of potential rail share

- Longer-term potential, given additional opportunities to access jobs



- 126 additional AVL riders would be a **27% increase** compared to current demand from Palmdale
- Both Victorville and Palmdale are projected to **grow faster** than the California average



CALIFORNIA
High-Speed Rail Authority

California High Speed Rail Update

September 2018



SOUTHERN CALIFORNIA: Meeting Our Commitments

- **Deliver the Silicon to Central Valley Line**
- **Deliver the full Phase 1 System**
- **Invest bookend funds as full partner in the Burbank – LA – Anaheim corridor**
 - » 45-mile corridor with statewide significance
 - » \$500 million in bookend funds unlocks \$1 Billion investment with required \$500 million match
 - \$155 million (total) – Rosecrans/Marquardt Grade Separation Project
 - Remaining funds to \$1 billion+(total) Los Angeles Union Station (Link US Project)
 - \$18 million already approved for Link US for engineering/design



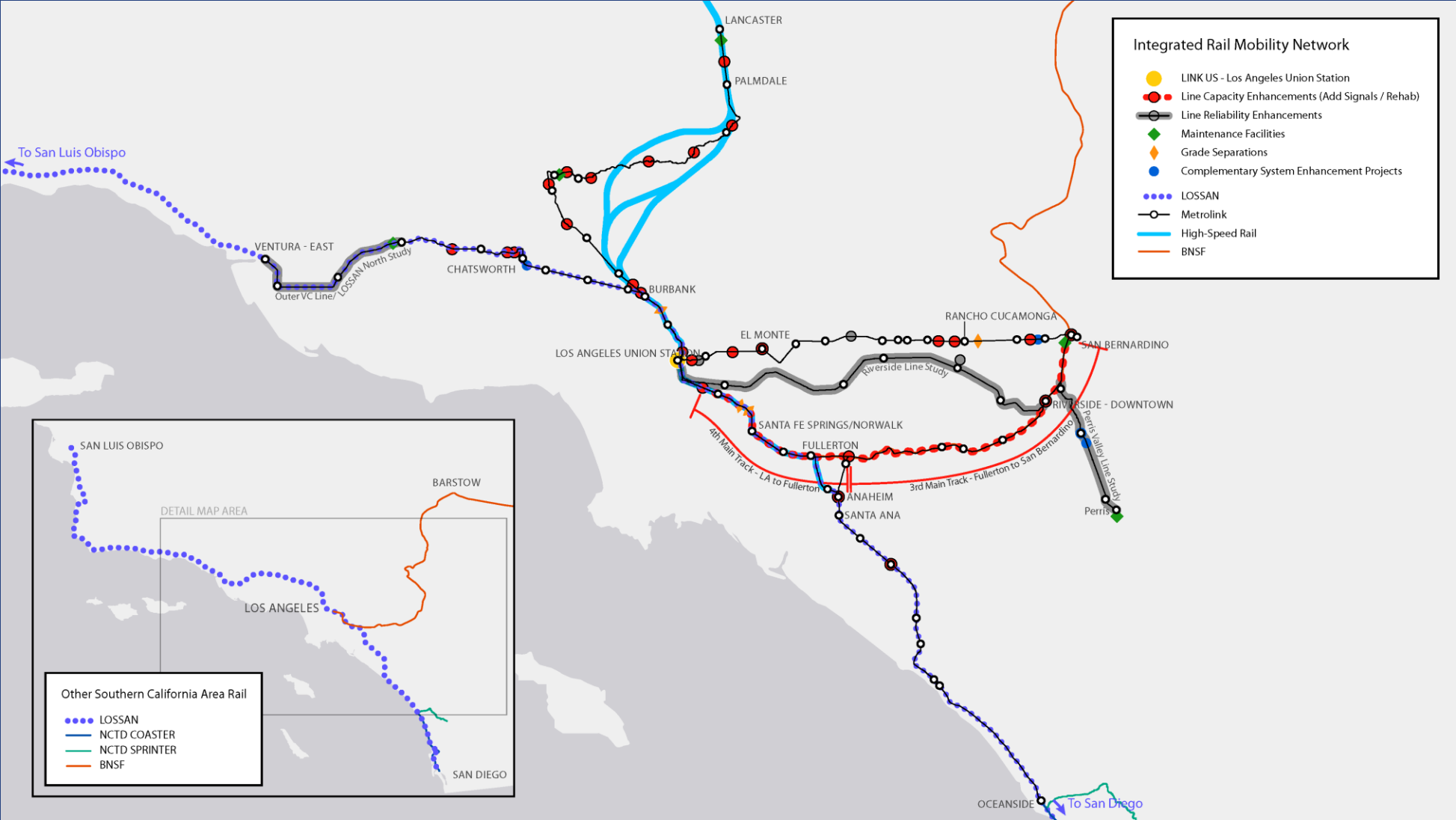
IT'S HAPPENING!



- Approximately 119 miles
- Madera to North of Bakersfield
- Approximately \$3 Billion Investment
- 21 Active Construction Sites
- 2,000 + Jobs and Counting



COMPLEMENTARY PLANNING SUPPORTS MOBILITY ENHANCEMENTS ACROSS ENTIRE REGION



SCHEDULE FOR COMPLETION OF PHASE 1 ENV. DOCUMENTS

Project Section	Preliminary Proposed/Preferred Project/Alternative (Baseline)	Circulation of Draft EIR/EIS (Baseline)	Baseline ROD Dates
San Fran - San Jose	Dec-19	Mar-20	Mar-21
San Jose - Merced	Sep-19	Dec-19	Nov-20
Central Valley Wye (Merced)	Complete	Sep-18	Jul-19
LGA (Bakersfield Station)	Complete	Complete	Oct-18
Bakersfield - Palmdale	Oct-18	Jul-19	Jun-20
Palmdale - Burbank	Nov-18	Dec-19	Jan-21
Burbank - Los Angeles	Nov-18	Sep-19	Jul-20
Los Angeles - Anaheim	Nov-18	Nov-18	Oct-19

STAY INVOLVED



Southern California Regional Office

California High-Speed Rail Authority

355 S. Grand Avenue, Suite 2050

Los Angeles, CA 90071

www.hsr.ca.gov



[instagram.com/cahsra](https://www.instagram.com/cahsra)



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[youtube.com/user/CAHighSpeedRail](https://www.youtube.com/user/CAHighSpeedRail)



High Desert Corridor Joint Powers Authority
Workshop

September 13, 2018



Project Development Activities Federal, State and Local Agency Coordination

XPRESSWEST.COM

- Federal Railroad Administration
 - Engineering Task Force for Tier III Trainsets for rules governing trainset
 - Implementation of the Section 106 requirements prior to construction
- Bureau of Land Management
 - Right-of-Way lease agreement
 - Preconstruction Requirements per BLM ROW Grant and preconstruction mitigation requirements
- Federal Aviation Administration
 - Permits for elevated structure and appurtenances in Las Vegas
- US Army Corps of Engineers
 - 404 Permit reverification work



Project Development Activities Federal, State and Local Agency Coordination

XPRESSWEST.COM

- California High Speed Rail
 - Palmdale to Anaheim Segment coordination
 - Palmdale Station Area Planning
 - System interoperability
- Nevada High Speed Rail Authority
 - Maintain status as selected Franchisee for high speed rail connectivity between Southern California and Las Vegas
- City of Palmdale
 - Cooperation on the Palmdale station area planning
- Regional Transportation Commission of Southern Nevada
 - Las Vegas circulation in and around the station including consideration for the primary station at the Central Station location included in the ROD at Flamingo and Frank Sinatra Drive.
- Caltrans / NDOT
 - Coordination regarding joint use of the I-15



- XpressWest will continue its coordination work with local, state and federal agencies.
- Discussions continue with Strategic Investors (both foreign and domestic) to move the project into construction and operation.
- Securing right-of-way is a critical component of the project.



**High Desert Corridor JPA
September 13, 2018**



What Is Metrolink?

Governance Structure

Joint Powers Authority made up of the 5 five county transportation commissions with 11 board members representing the commissions. Our Board members are appointed by our member agencies; LA Metro, OCTA, SBCTA, RCTC, VCTC.

Funding

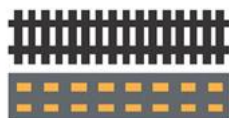
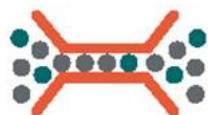
Our primary funding comes from our member agencies. We receive limited funds directly. Our member agencies do pass through some of their state and federal dollars.

Service

We link 6 counties in Southern California and dispatch up to 300 trains a day from our major dispatching center in Pomona. Provide seamless transfers to 30 other transportation providers.



Metrolink's Rail System:



538 route miles shared with freight and Amtrak

Approximately **61%** of Metrolink-owned right-of-way is **single track**, creating bottlenecks and delays for commuters and freight trains

Currently limited to mostly **one-directional** peak service

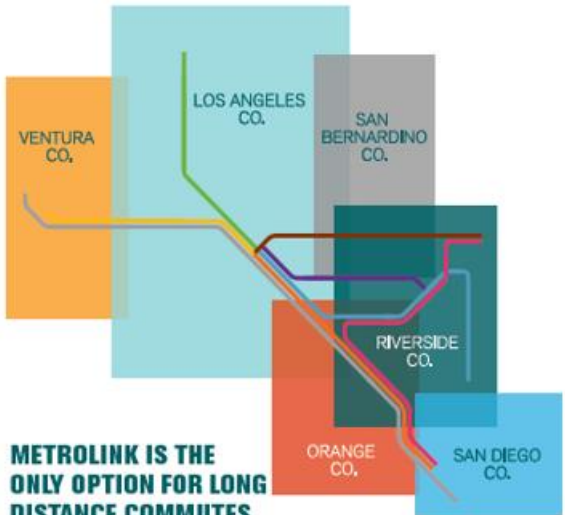
Parallel to some of the **most crowded freeways** in the nation

Connects job centers with affordable housing throughout Southern California

No dedicated funding for system expansion and growth

METROLINK IS THE ONLY PROVIDER TO RELIEVE THE REGIONAL FREEWAY SYSTEM

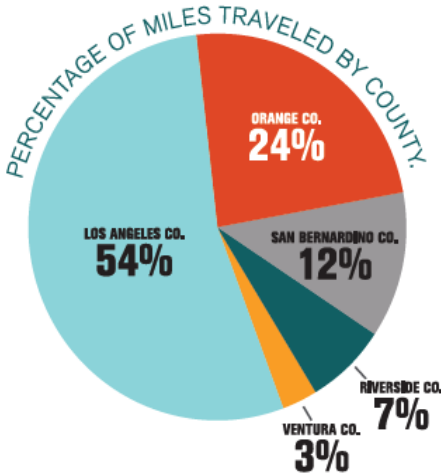
METROLINK.



METROLINK IS THE ONLY OPTION FOR LONG DISTANCE COMMUTES THROUGHOUT THE ENTIRE REGION.

METROLINK CARRIES PASSENGERS ACROSS CITY AND COUNTY LINES TAKING RIDERS FROM CITY-TO-CITY, COUNTY-TO-COUNTY FOR A REGION-WIDE COMMUTE, AND RUNS PARALLEL TO THE 5, 10, 60, 91 AND 101 FREEWAYS.

EACH YEAR METROLINK TRAINS TRAVEL 2.7 MILLION MILES



82%

OF METROLINK RIDERS HAVE AN AUTOMOBILE BUT CHOOSE TO TAKE THE TRAIN, CREATING MORE ROOM ON THE REGION'S FREEWAYS.



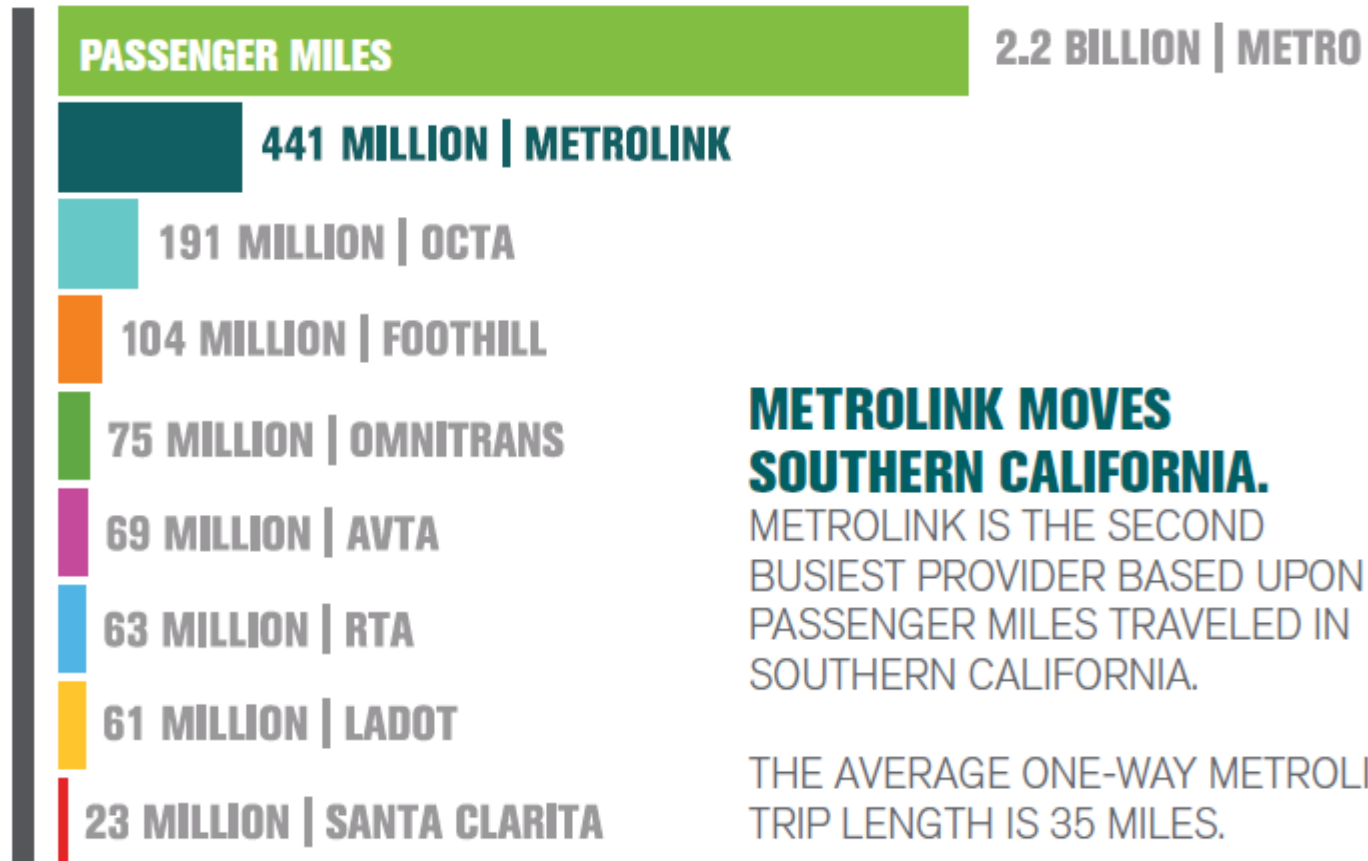
METROLINK IS THE LEAST EXPENSIVE, MOST EFFECTIVE WAY TO CUT FREEWAY CONGESTION.

METROLINK IS THE 2ND BUSIEST CARRIER IN THE REGION

METROLINK.



METROLINK RIDERS TRAVEL GREAT DISTANCES



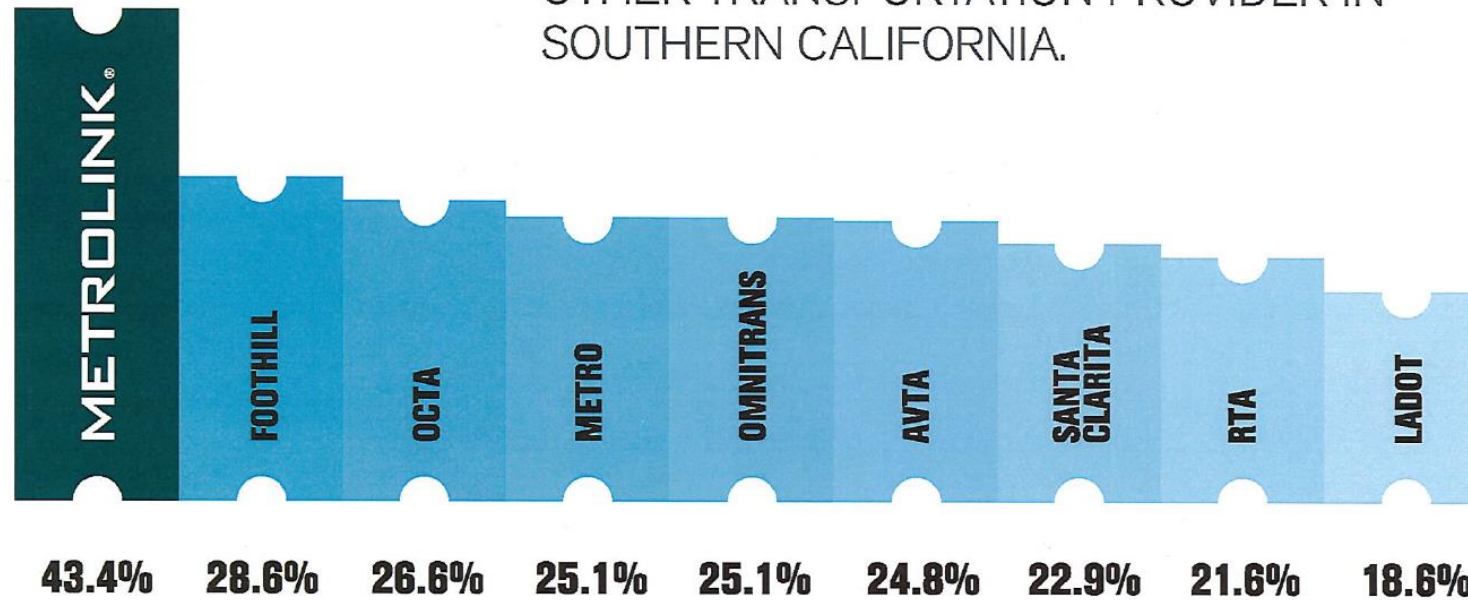
METROLINK MOVES SOUTHERN CALIFORNIA.

METROLINK IS THE SECOND BUSIEST PROVIDER BASED UPON PASSENGER MILES TRAVELED IN SOUTHERN CALIFORNIA.

THE AVERAGE ONE-WAY METROLINK TRIP LENGTH IS 35 MILES.



METROLINK FARES CONTRIBUTE MORE TO ITS BUDGET THAN ANY OTHER TRANSPORTATION PROVIDER IN SOUTHERN CALIFORNIA.

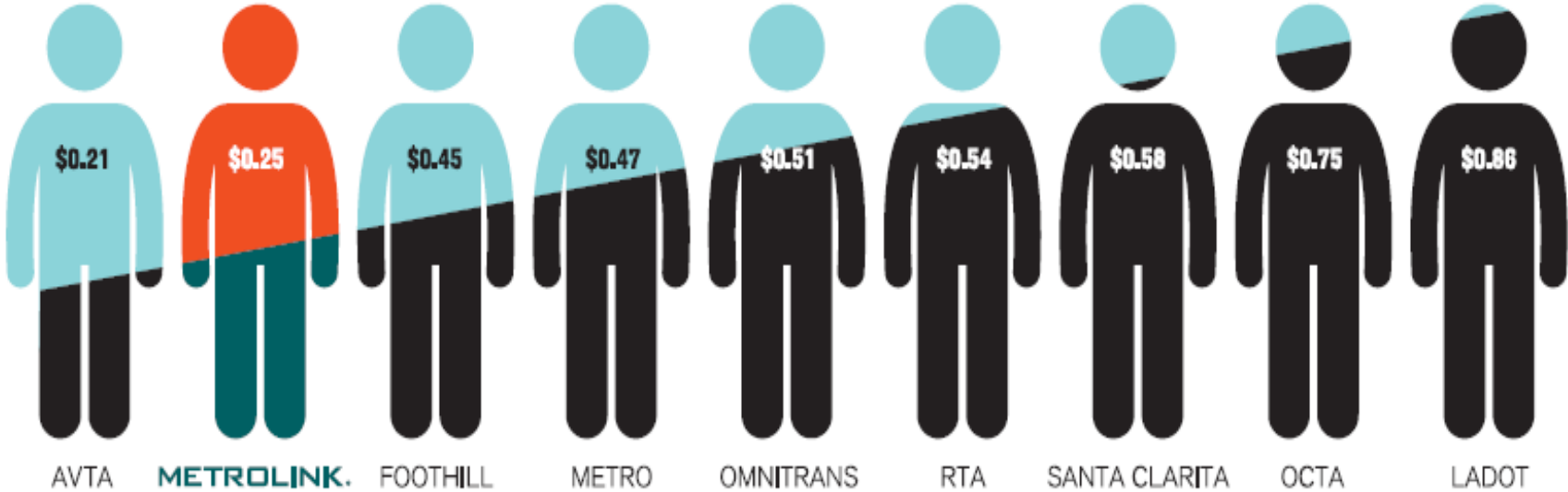


METROLINK HAS THE HIGHEST FAREBOX RECOVERY AMONG MAJOR PUBLIC TRANSIT OPERATORS IN SOUTHERN CALIFORNIA.

HIGH FAREBOX RETURN

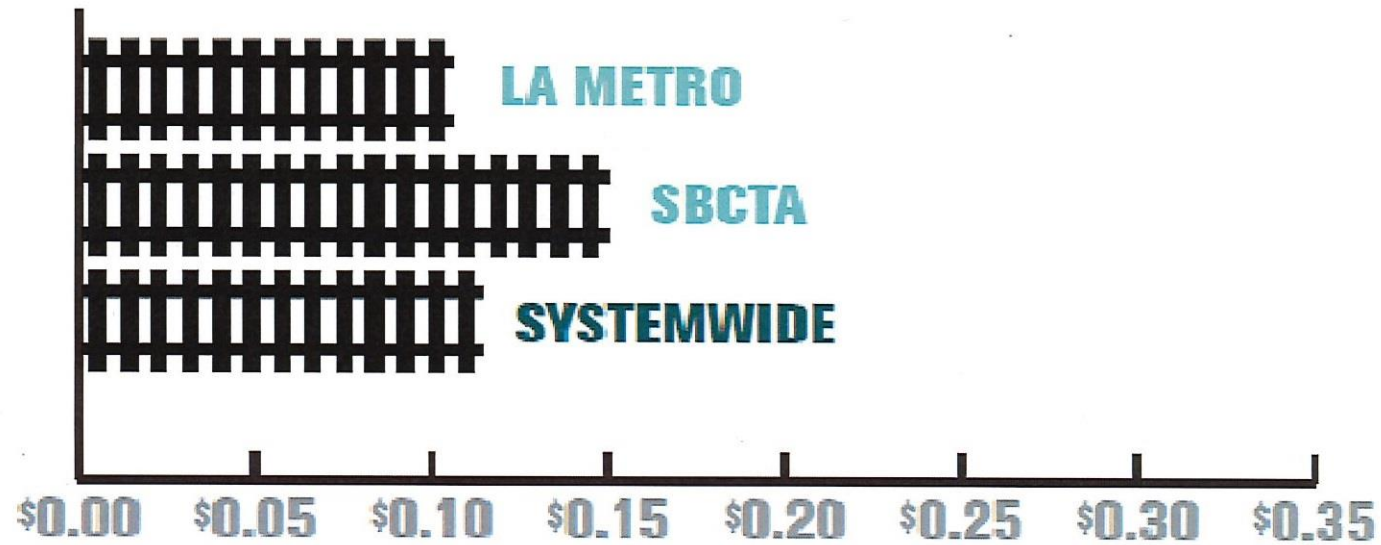


METROLINK HAS A VERY LOW SUBSIDY PER PASSENGER MILE
AMONG SOUTHERN CALIFORNIA PUBLIC TRANSIT AGENCIES.



NET COUNTY COST PER PASSENGER MILE

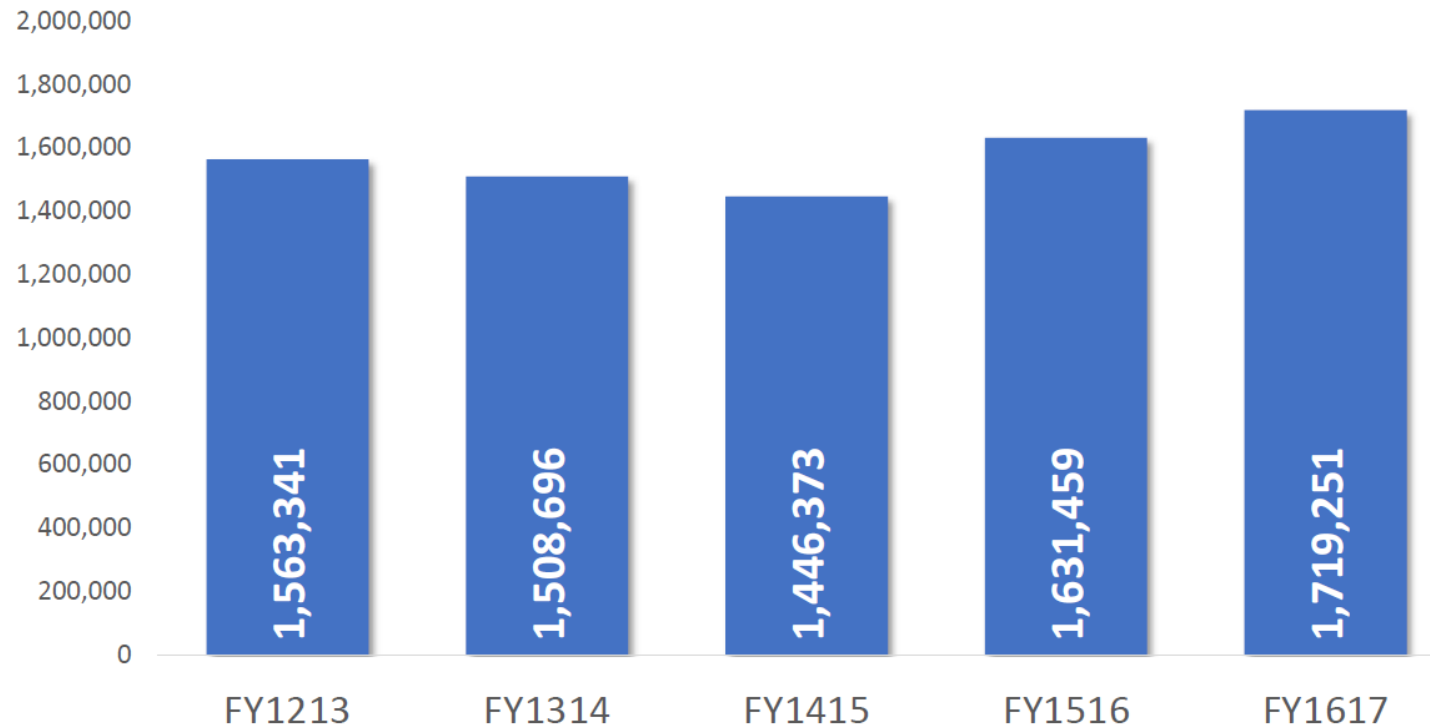
FY 2014 THROUGH FY 2018





ANTELOPE VALLEY LINE RIDERSHIP PROFILE

Annual Ridership



SCORE GUIDING PRINCIPLES

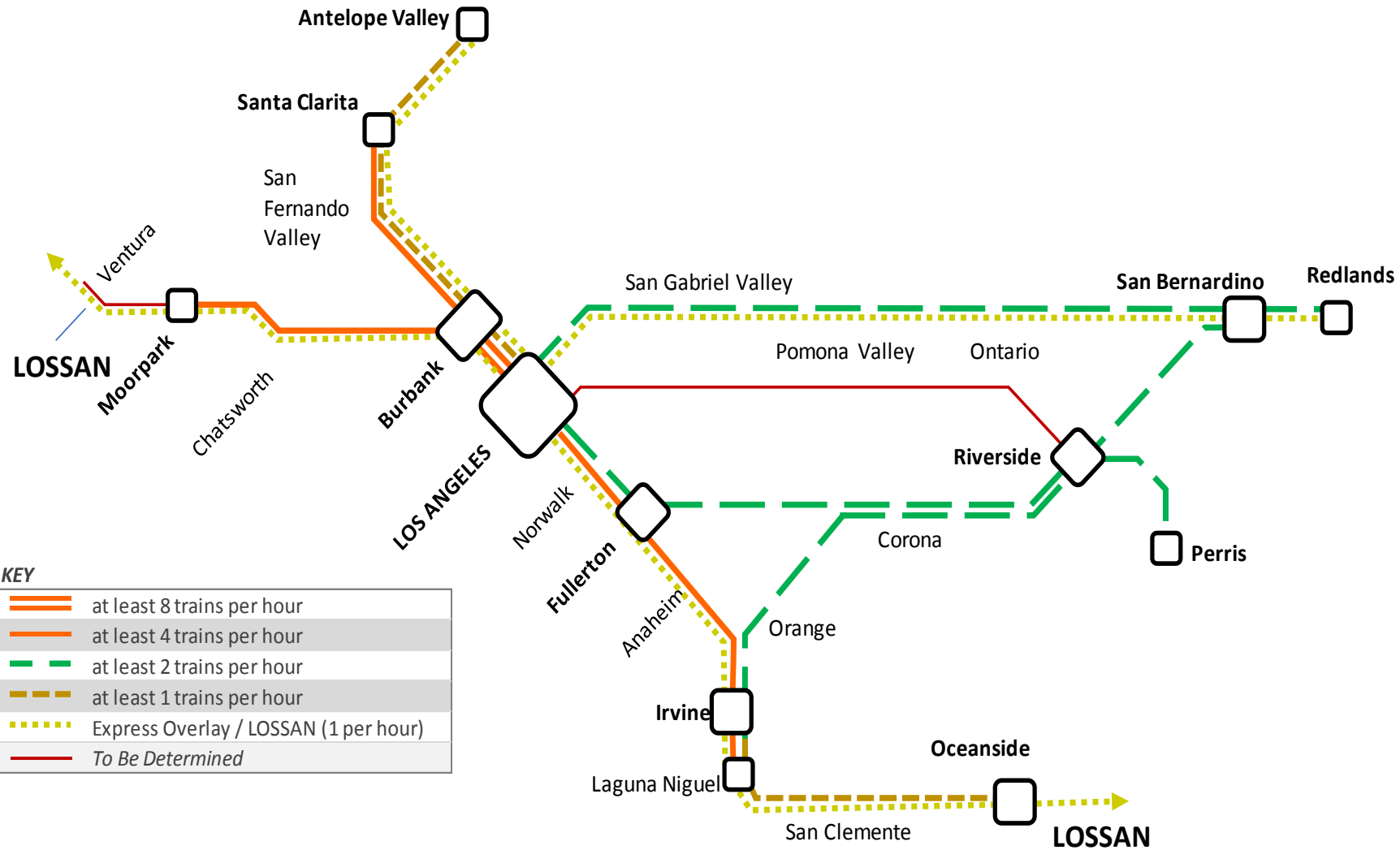
METROLINK.



- **Service is:**
 - Regular – service at regular intervals (e.g., every hour, every 30 minutes)
 - Repeating – service repeats at the same times every hour
 - Pulsed – line schedules are synchronized to facilitate transfers
 - Bi-directional – relatively balanced in both directions to serve multiple destination points
 - Reliable – scheduled times can be reliably met at all stations
- **For the customer, the service product is:**
 - Intuitive
 - Easy to use
 - Attractive
- **For the system:**
 - Operating efficiencies
 - Lower cost structures

2028 Vision

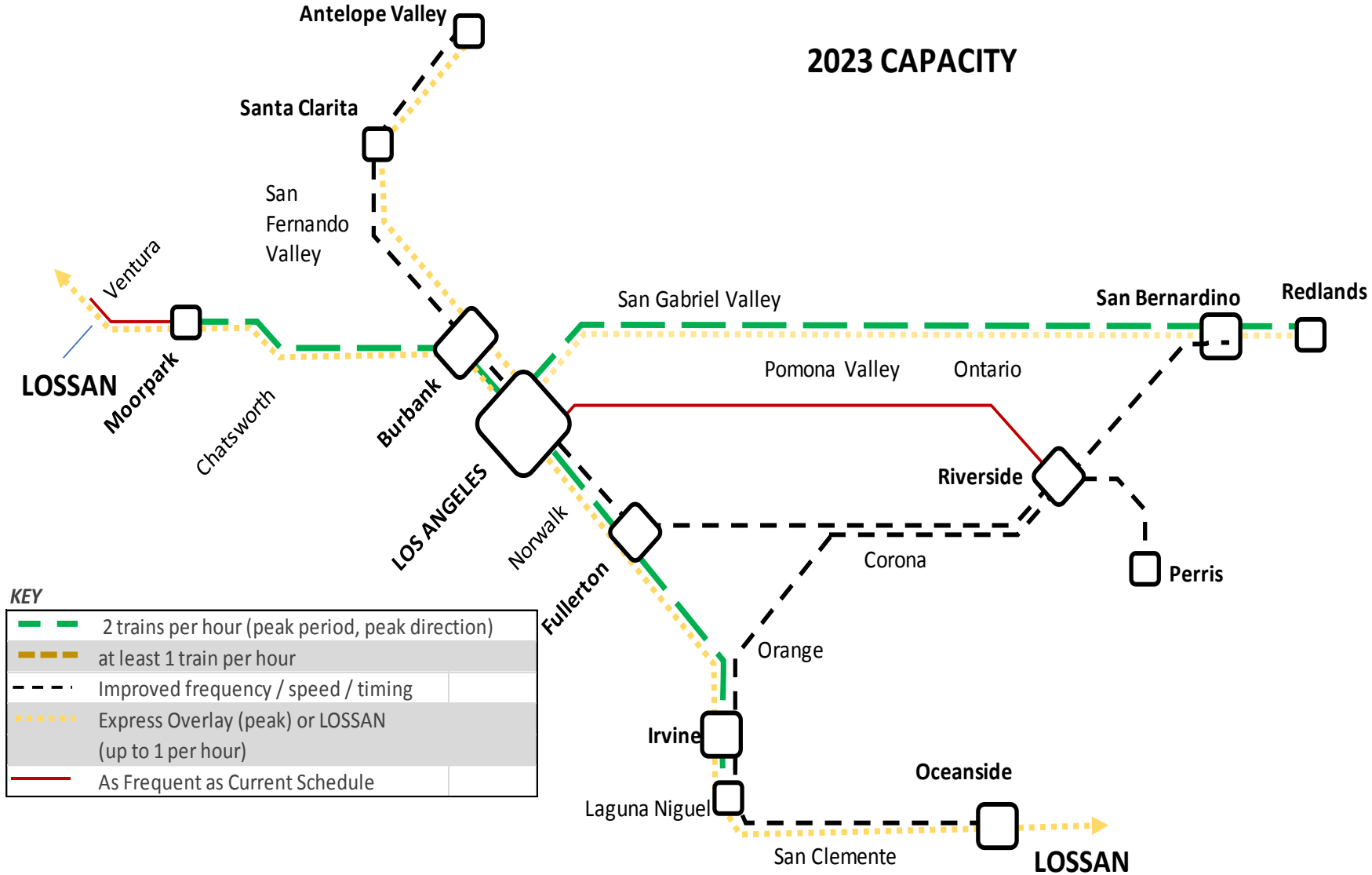
METROLINK



SCORE PHASE 1 – TIRCP 2018

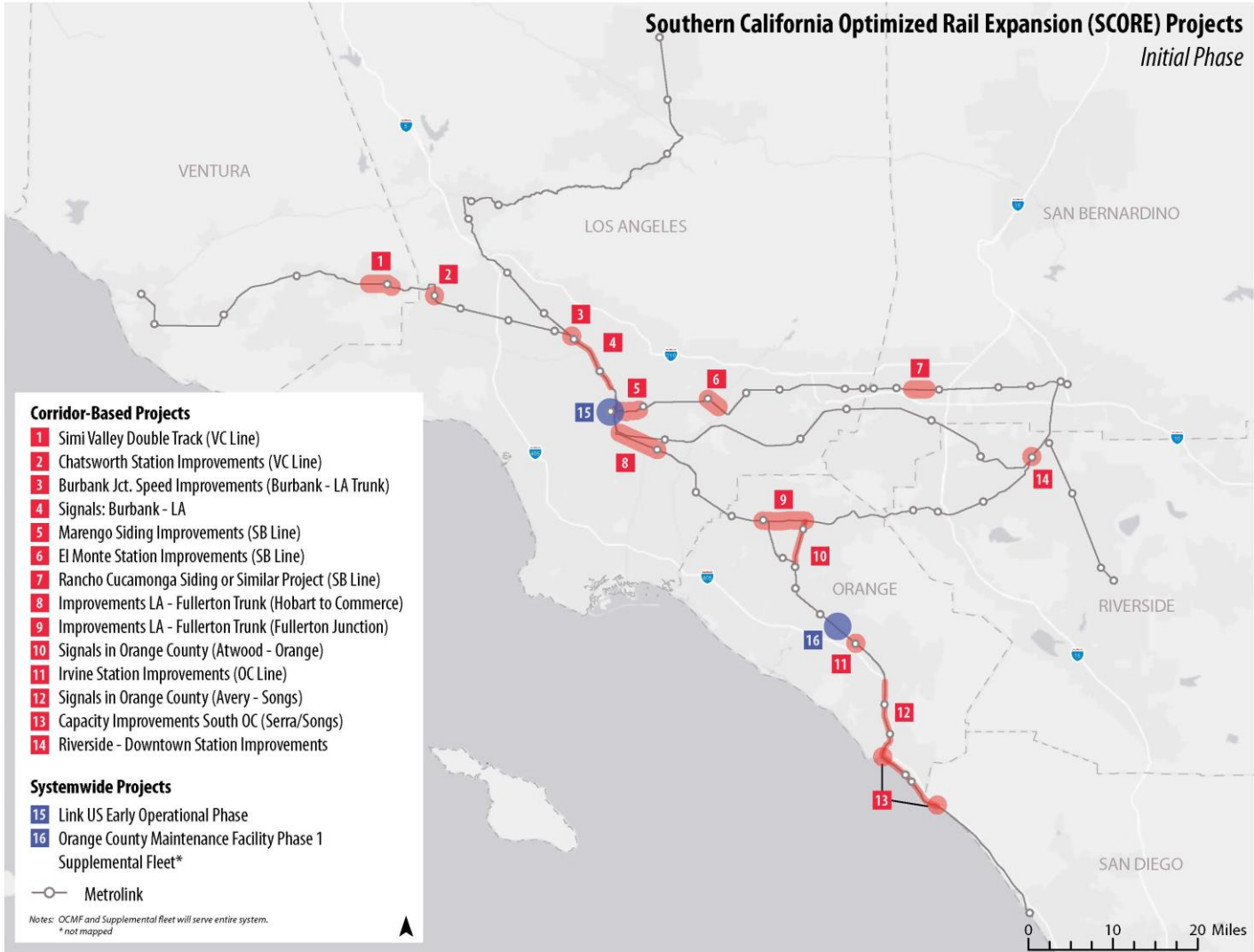


2023 CAPACITY



SCORE PROJECTS

METROLINK.





METROLINK MISSION

**TO PROVIDE SAFE, EFFICIENT, DEPENDABLE AND ON-TIME
TRANSPORTATION SERVICE THAT OFFERS OUTSTANDING
CUSTOMER EXPERIENCE AND ENHANCES QUALITY OF LIFE.**



SAFETY | PEOPLE | GROWTH | QUALITY | EFFICIENCY

Potential Metrolink Connectivity

- In short term, interconnectivity with Metrolink and transit
- Metrolink plans call for hourly service to the High Desert
- During peak hour two trains in peak direction
- Interim station in Victorville at SCLA
- Opportunity for interim station in Adelanto
- HDC's adds 27% to Metrolink's Antelope Valley line ridership



Initial Private Sector Discussions

- Private sector is looking for an opportunity to have a successful project.
- What is really important to them:
 - ROW secured
 - Environmental work completed
 - A good, reliable, straight forward public sector client, which is able to:

play a unique role in bringing together the various stakeholders
obtain governmental planning approvals and
build community awareness and support



Next steps to commence final project development

- Secure FRA ROD
- Preserve ROW



Securing ROD from USDOT's FRA

- USDOT's FRA willing to take lead for ROD on rail component
- Revalidation – determination that adjustments to project configuration fit within the NEPA documentation
- Work required
 - Technical drawings
 - Environmental analysis
 - Legal guidance



Project Readiness -- Right of Way (ROW)

- Single most important next step is to preserve the rights of way
- Mapping of parcels and ownership identification is ongoing
- Involvement, interest and support of cities indicated
- Funding for acquisitions in LA County provided in Measure M

