

First/Last Mile Connectivity: Local Partnerships and Regional Sustainability

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Southern California Association of Governments

October 11, 2018



The SCAG Region



Nation's
Largest
MPO

191
Cities
6
Counties

19
Million
People

48.3% of
Total
State
Pop.

16th
Largest
Economy
in the
World

SCAG Regional Issues



TRANSPORTATION



GOODS MOVEMENT



HOUSING



AIR QUALITY



SCS/LAND USE



FUNDING



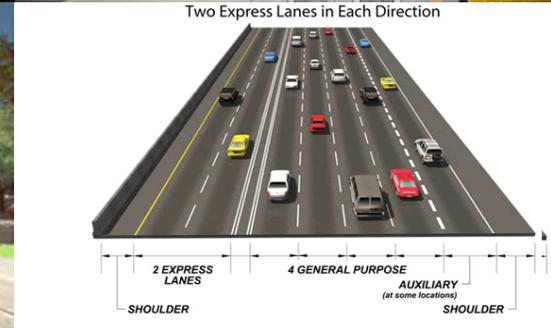
LONG TERM GROWTH FORECAST



WATER

RTP/SCS Highlights

- Strategic Investments to Relieve Congestion
- Rail Expansion
- Goods Movement/Logistics Industry Investment
- Increased Active Transportation Options
- Strengthens the Health of Our Communities
- Economic Development (Jobs)



2016 RTP/SCS Financial Plan

\$556.5 Billion (in nominal dollars)



\$254.7
Core Local

\$64.2
Additional Local
(e.g. Highway, Tolls, Ventura County Sales Tax Measure)

\$37.7
Core Federal

\$70.8
Additional Federal
(e.g. Federal Portion of Mileage Based User Fee, National Freight Program)

\$63.8
Core State

\$65.4
Additional State
(e.g. State Portion of Mileage Based User Fee)



\$250.9
Capital Projects

\$156.7
O&M State Highways

\$65.3
O&M State Highways

\$37.1
O&M Regionally Significant Local Streets & Roads

\$30.7
Debt Service

\$15.7
O&M Passenger Rail

Note: Numbers may not sum to total due to rounding

Regional Benefits

Spending Less Time on the Road

20.5 miles

average daily vehicle miles driven per person



7.4%

9.2 mins

daily delay per capita (extra time spent in traffic)



39%

More Economic Opportunities



\$1.00 = \$2.00
INVESTMENT BENEFIT



351,000

additional jobs supported by improving competitiveness

Efficiency Cost Savings

HOUSEHOLD COSTS (transportation/energy/water use)

\$14,000/yr

12%

REDUCTION IN BUILDING ENERGY COSTS

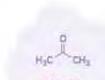


4%

PASSENGER VEHICLE FUEL USE

10%

Improved Air Quality



ROG

49.1 TONS

↓8%

45.0 TONS

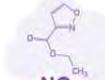


CO

338.6 TONS

↓9%

307.7 TONS



NOx

96.4 TONS

↓9%

88.2 TONS



PM2.5

13.3 TONS

↓5%

12.6 TONS

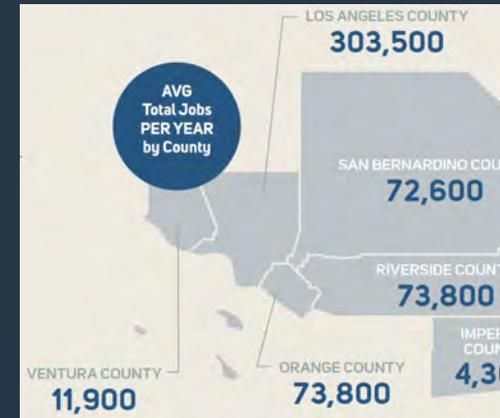
GHG

REDUCTIONS

2020 **↓8%**

2035 **↓18%**

2040 **↓21%**



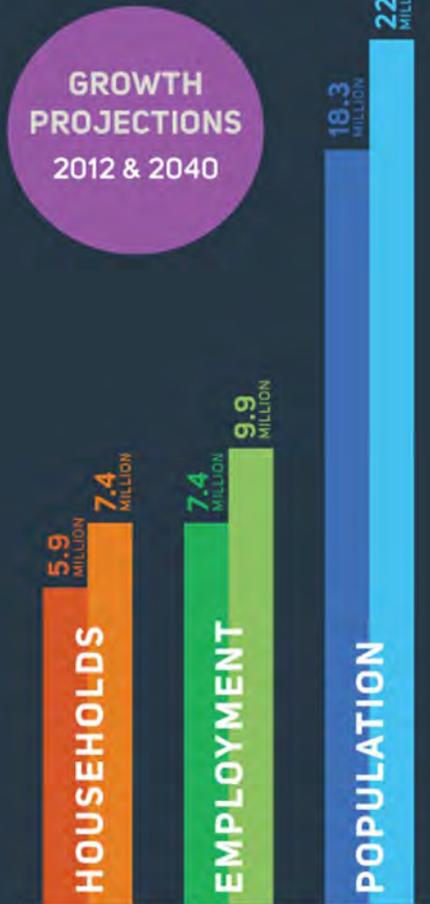
SB 1 – Road Repair and Accountability Act of 2017



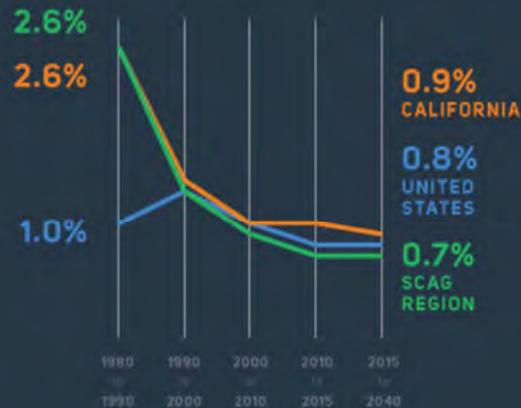
Raises \$52.3B over 10 Years

- Local Streets and Transportation Infrastructure: \$26.6B
- Doubles the state's investment in the Active Transportation Program.

Population Shifts

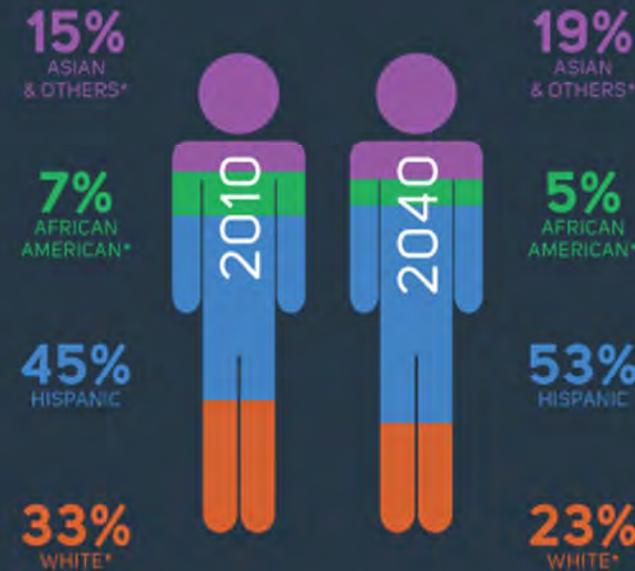


Average Annual Population Growth Rate

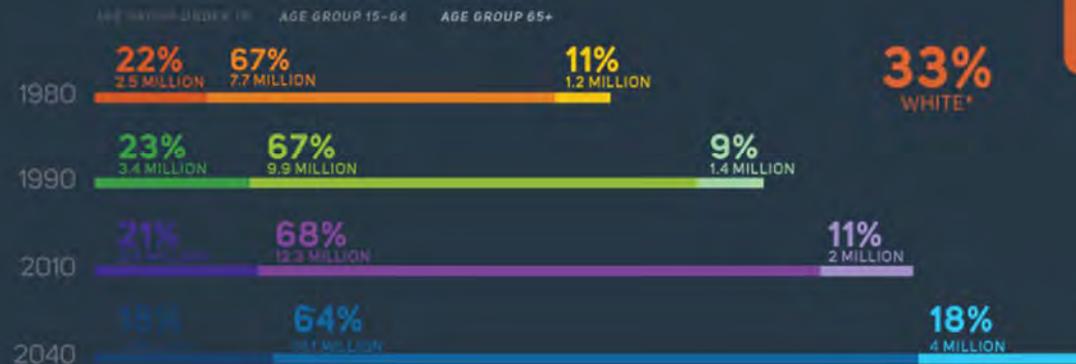


Source: US Census Bureau, CAPOP, SCAG

Changes in Ethnic Composition of Population



More Baby Boomers Will Age & Retire



Source: US Census Bureau, CAPOP, SCAG

Growing Number of Retirees

Aging Boomers will increase dependency for accessibility/mobility options and the sharing economy:

10,000

Roughly 10,000 Baby Boomers will turn 65 today, and about 10,000 more will cross that threshold every day for the next 19 years.

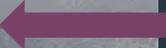
*Pew Research Center. 2010



Mobility



Walkability



Next Generation of Customers: Millennials



Interests

- Smaller footprint → Sharing Economy
- Convenience → Internet of Things
- Health and Sustainability → Big Data

The Millennial

- 16 – 36 year-olds
- Largest buying cohort as of 2017





First-Last Mile Regional Planning

Regional Goals:

- Increase transit ridership
- Maximize GHG reduction benefit of transit system
- Minimize GHG footprint of transit trip

Regional Investment Plan:

- 224 Heavy/Light Rail Stations Enhanced
- 670 miles Bus Corridors Improved
- Approx. \$3B

Plan Benefits:

- 10% increase in transit ridership
- 82% increase in active transportation trips in corridors
- Improved public health
- Increase local economic activity



Countywide Planning Partnerships

San Bernardino County

Improvement to Transit Access for Cyclists and Pedestrians Final Report



Submitted to the San Bernardino Associated Governments
by Alta Planning+Design
with Gruen Associates
November 2012

Governments
SANBAG
Working Together

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS

U.S. COUNTY
PLANNING BOARD

alta
PLANNING+DESIGN

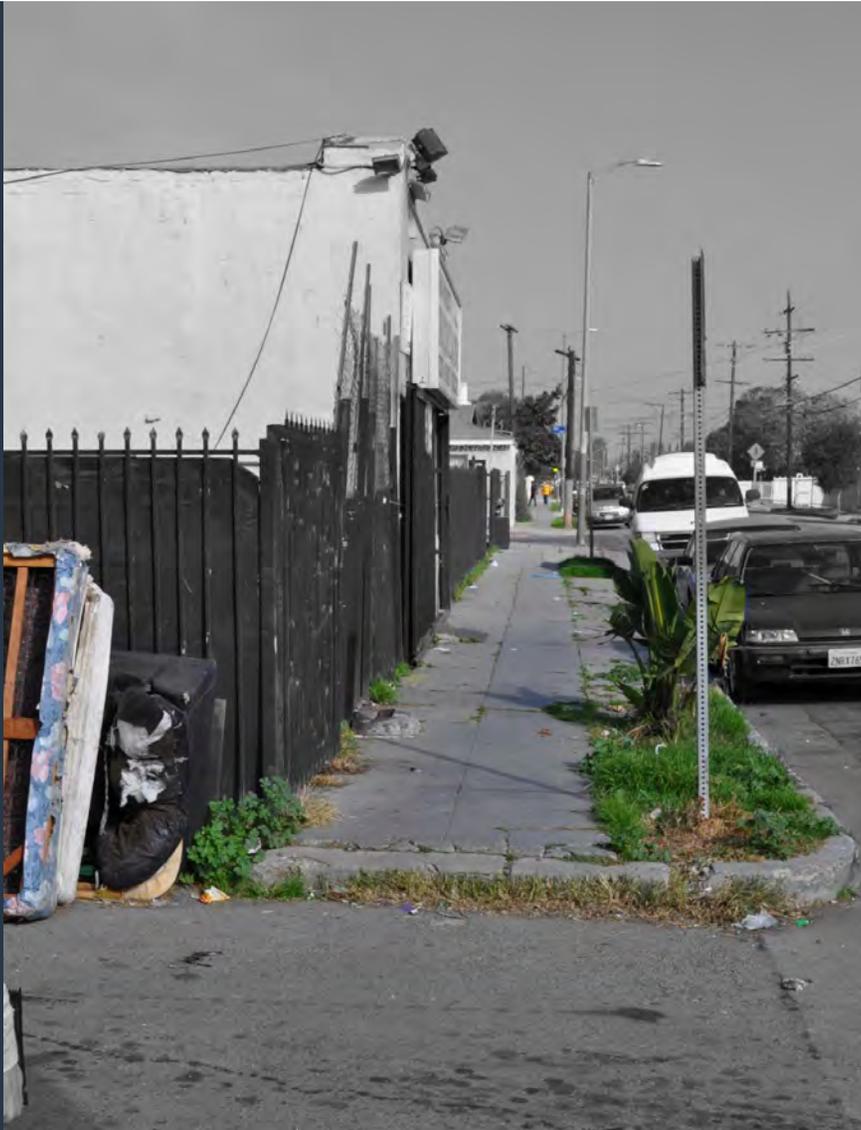
GRUEN ASSOCIATES

Los Angeles County

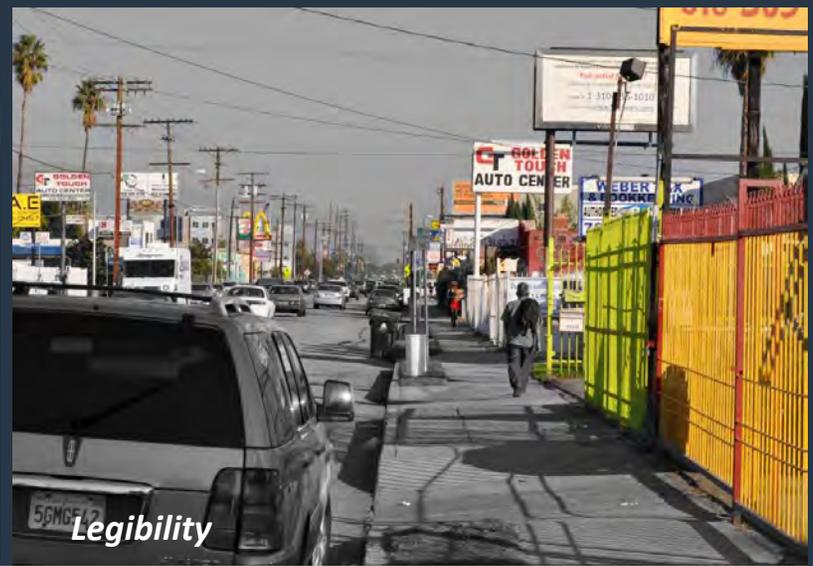
First Last Mile Strategic Plan & PLANNING GUIDELINES



Los Angeles County Metropolitan Transportation Authority Metro



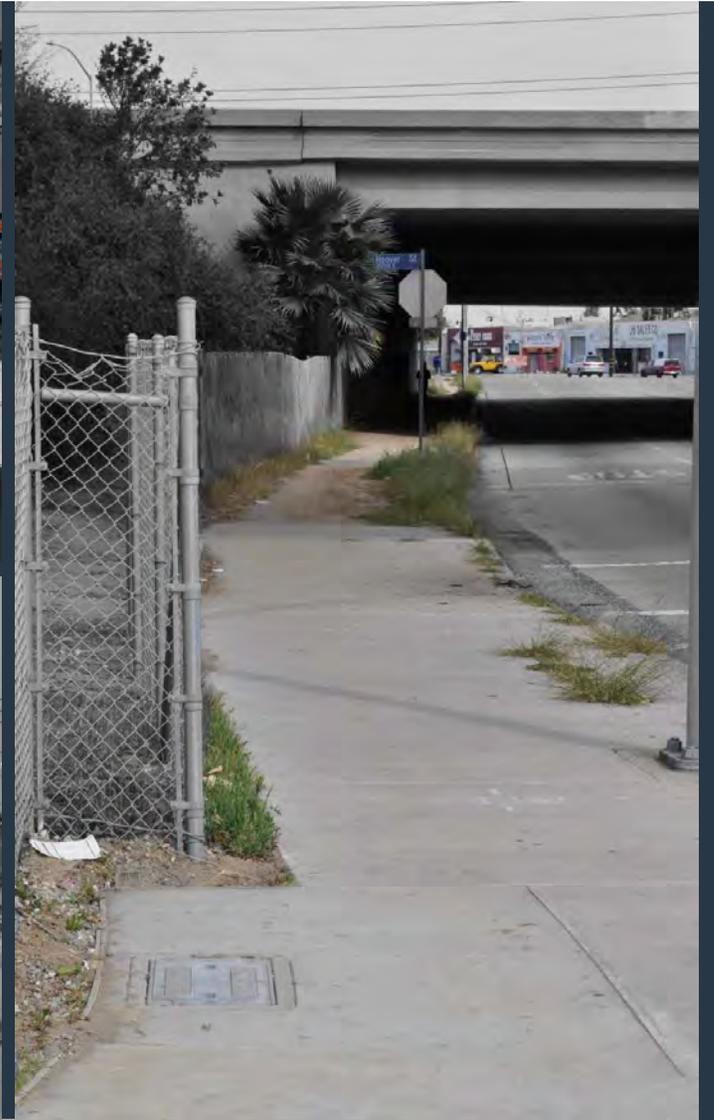
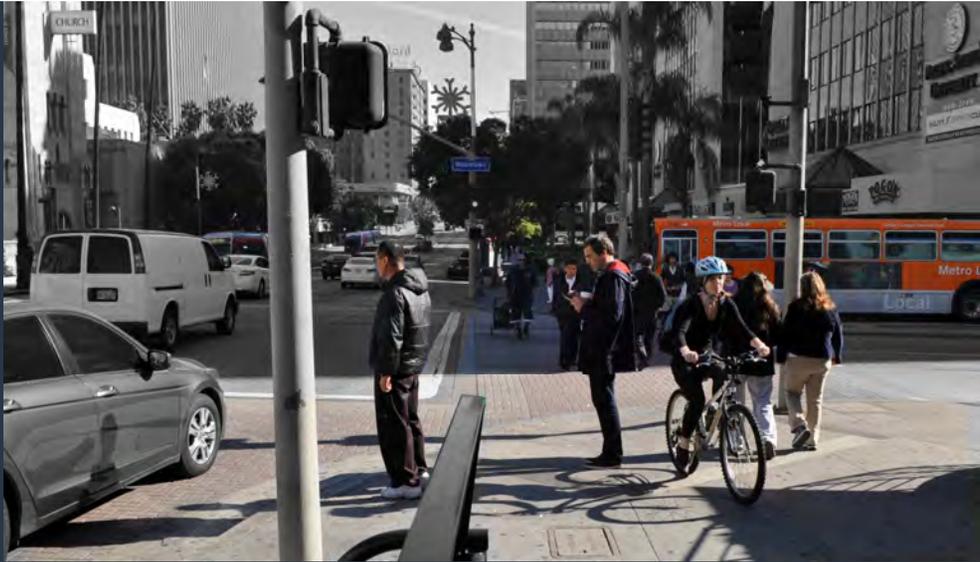
Maintenance



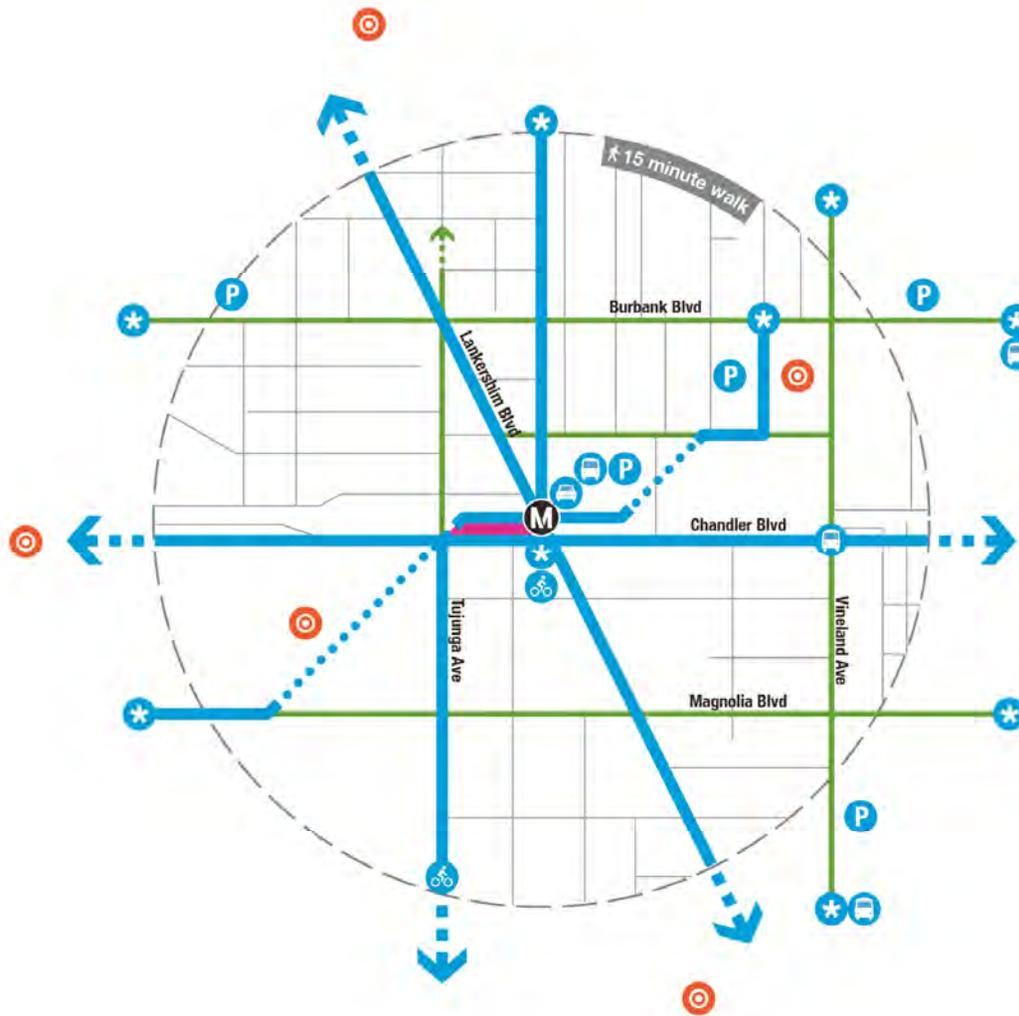
Legibility

M

Observed Access Barriers



Observed Access Barriers



THE PATH NORTH HOLLYWOOD

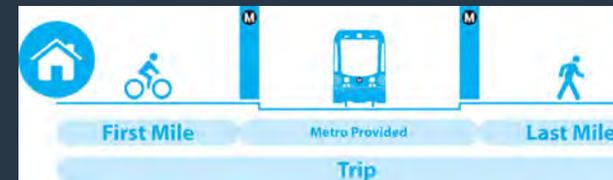
LEGEND

- Destination
- Parking
- Way Finding
- Bike Share
- Car Share
- Bus Stop
- Transit Plaza
- Path Collector
- Path Arterial
- Path Cut-Through
- To Regional Bike Network



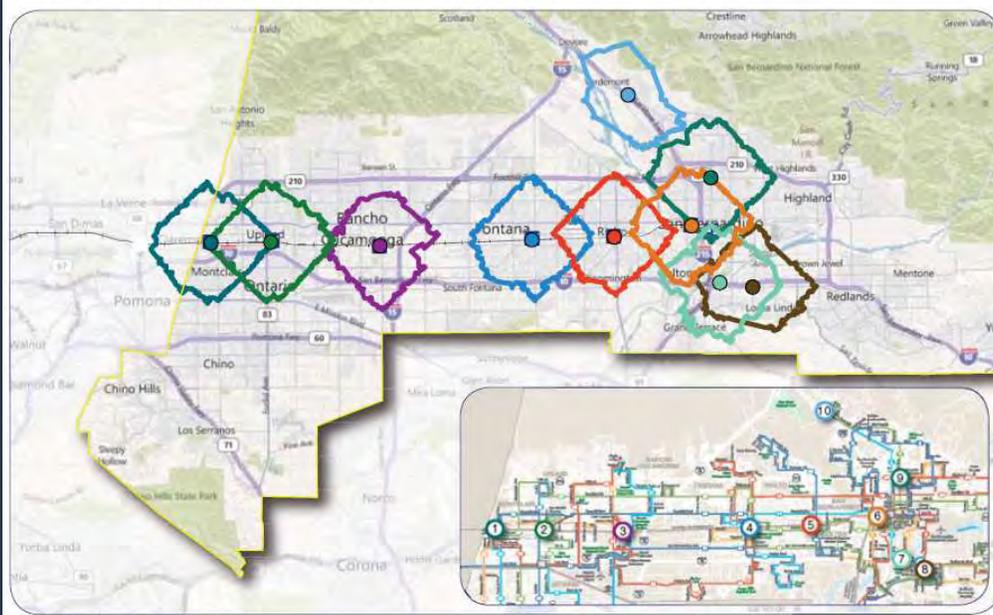
LA Metro Countywide Implementation

- 36 individual station areas underway
- Approximately 250 additional station area plans in future years
- Adopted policy requiring first/last mile implementation for all new stations
- Adopted policy allowing local match contributions for new rail transit lines to go toward first/last mile
- Measure M:
 - Dedicated funding program for active transportation and first/last mile
 - First/Last mile identified as eligible in the transit capital programs
 - Several multi-year subregional programs geared toward first/last mile and/or active transportation



San Bernardino Countywide Implementation

FIGURE 1.1 STUDY AREA LOCATIONS AND PROXIMITY BUFFERS



Planned Infrastructure Improvements:

- 6 Metrolink Stations & 4 sbX Stations
- 70 miles of bicycle network identified
- ~23 miles of sidewalk improvements identified
- Station Enhancements (Shade trees, lighting, crosswalks, wayfinding signage, bike parking, etc.)

Funding:

- \$5 M ATP Cycle 1 Award (2015)
- 2018 ATP Cycle 4 Application Submitted

Local Implementation



Active Transportation Program

- SCAG partners with CTC and counties to adopt program every odd year
- ~\$1/2 Billion for SoCal Projects (since program launched in 2014)
- SB 1 added \$100 million per year statewide



Local Planning Assistance

Sustainable Communities Program: Call for Applications

- \$6 million for planning and technical assistance
 - \$4.4 M Cycle 4 ATP grants
 - \$1.6 M SCAG SB 1 Formula Funds
- Provides planning resources to local jurisdictions for sustainable planning efforts, including:
 - First-Last Mile Plans
 - Active Transportation Demonstration Projects
 - Other



Sunset Junction, Los Angeles



City of Calexico



San Gabriel Valley COG



City of South Gate



City of West

Demonstration Projects

- Re-imagine streets for walking and biking
- 24 events completed
- Collect feedback on design treatments
- Direct public engagement to support grant requests



Demonstration Projects

"Please make it livable, walkable, and accessible to all folks."

"Looking forward to all the changes it's going to bring to the neighborhood."

"Thank you! Make biking safer."

"Love to see the community come together and seeing families and kids having fun."

"I love today. It's awesome. We should have this more often."

"Looking forward to the finished product."

"More bike lanes!"

Community Input

98%

of survey respondents supported their local governments' plans to make the temporary improvements permanent.

96%

of survey respondents said that the temporary safety improvements made the streets feel safer and more inviting to use.

**What if millennials talked
about baby boomers**



attn:

**the way baby boomers
talk about millennials?**



SCAGTM

INNOVATING FOR A BETTER TOMORROW

Thank you!

Learn more by visiting <http://www.scag.ca.gov>



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

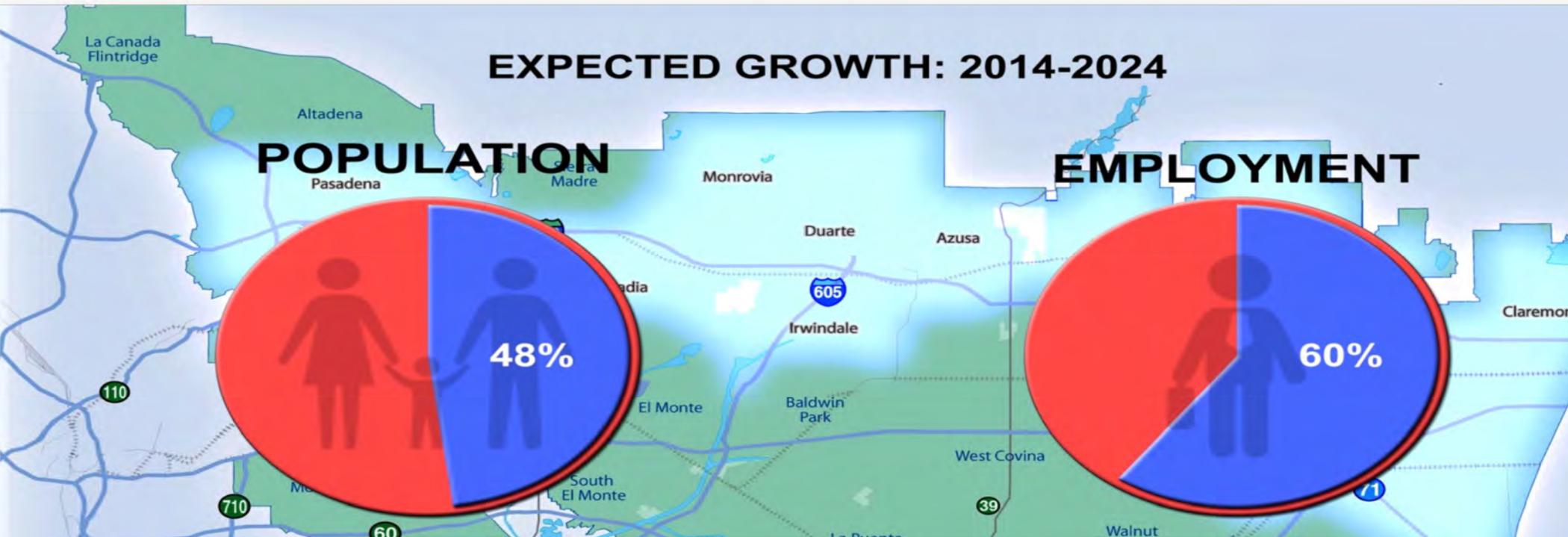
Rancho Cucamonga
City Council Chambers
Thursday, October 11



Foothill Gold Line

**CA Assembly Select Committee
October 11, 2018**

San Gabriel Valley's Growth



- The majority of SGV growth is expected in Foothill Gold Line Cities:
 - 48% of all SGV population growth
 - 60% of all SGV job growth

Part of LA County's Growing Rail Network



Montclair

County Rail and Busway Network with Measure R and Measure M

Gold Line's 3 Phases = \$3 Billion Investment



- Los Angeles to Pasadena – Completed On Time/Under Budget (2003)
 - 13.7 Miles, 3 Cities, 13 Stations
- Pasadena to Azusa – Completed On Time/Under Budget (2015)
 - 11.5 Miles, 5 Cities, 6 Stations
- Glendora to Montclair – Broke Ground December 2, 2017
 - 12.3 Miles, 6 Cities, 6 Stations

Ridership Exceeding Expectations



- Ridership is at historic highs (average for 2017)
 - More than 52,000 boardings each weekday (58,000+ on weekends)
 - 16.6 million annual boardings (137 million passenger miles)



Glendora to Montclair Segment

100% Shared Corridor



1. Relocate BNSF
2. Install Light-Rail

1. Relocate Metrolink & BNSF
2. Install Light-Rail

Project results in three shared station-areas with Metrolink:
- Pomona North, Claremont and Montclair

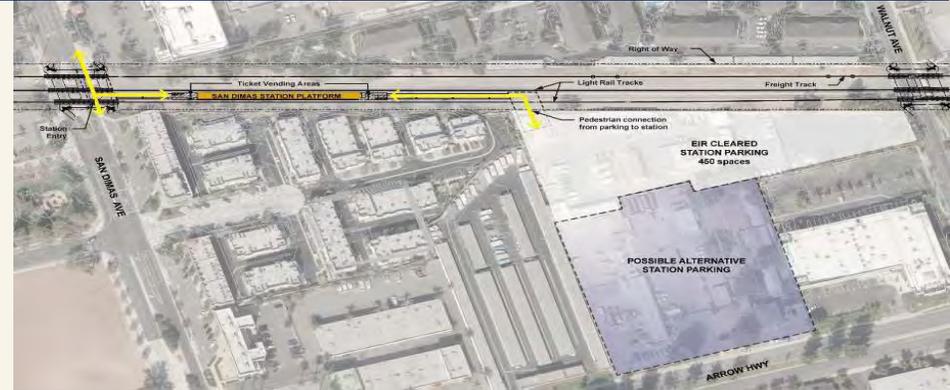
Six New Gold Line Stations

Glendora Station



Advanced Conceptual Engineering - September 2016

San Dimas Station



Advanced Conceptual Engineering - September 2016

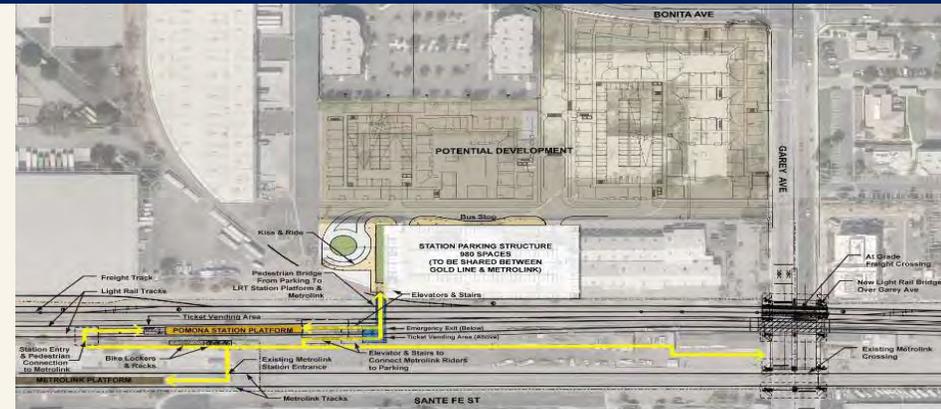
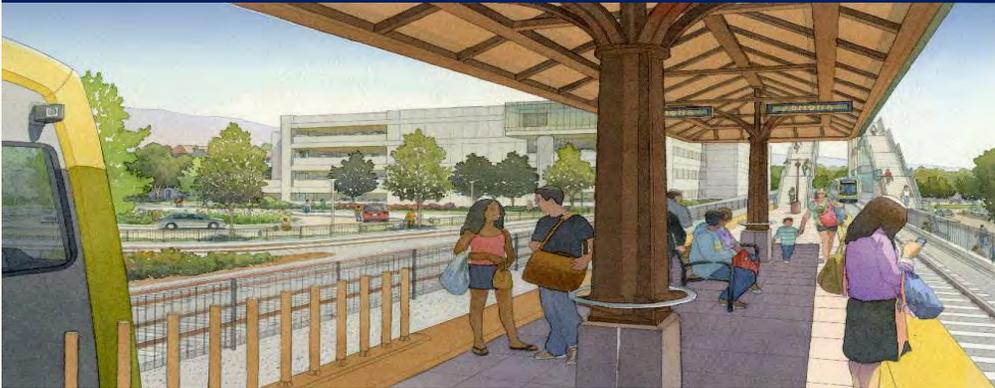
Six New Gold Line Stations

La Verne Station



Advanced Conceptual Engineering - September 2016

Pomona Station



Advanced Conceptual Engineering - September 2016

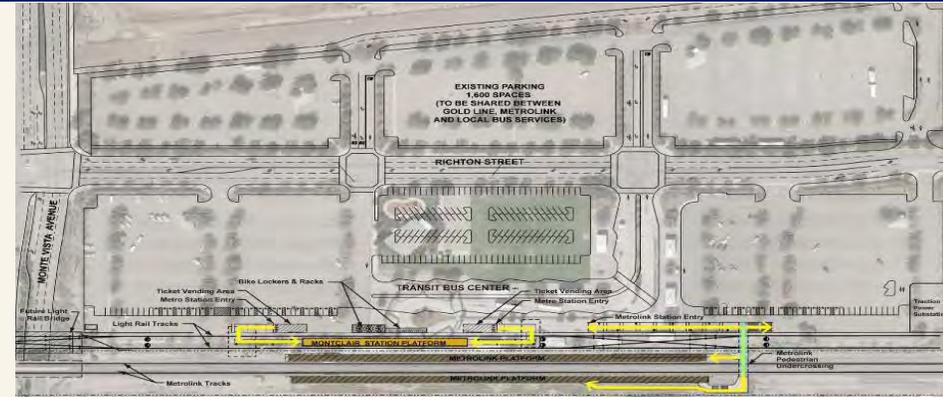
Six New Gold Line Stations

Claremont Station



Advanced Conceptual Engineering - September 2016

Montclair Station



Advanced Conceptual Engineering - September 2016

Multi-Modal Parking Facilities at Stations

Future Station	Parking Spaces
Glendora	420 (new structure)
San Dimas	450 (new structure)
La Verne	600 (new structure)
Pomona	850 (new structure) <i>Spaces Shared with Metrolink</i>
Claremont	1,260 (new structure) <i>Spaces Shared with Metrolink</i>
Montclair	1,600 existing (surface lot) <i>Spaces Shared with Metrolink</i>

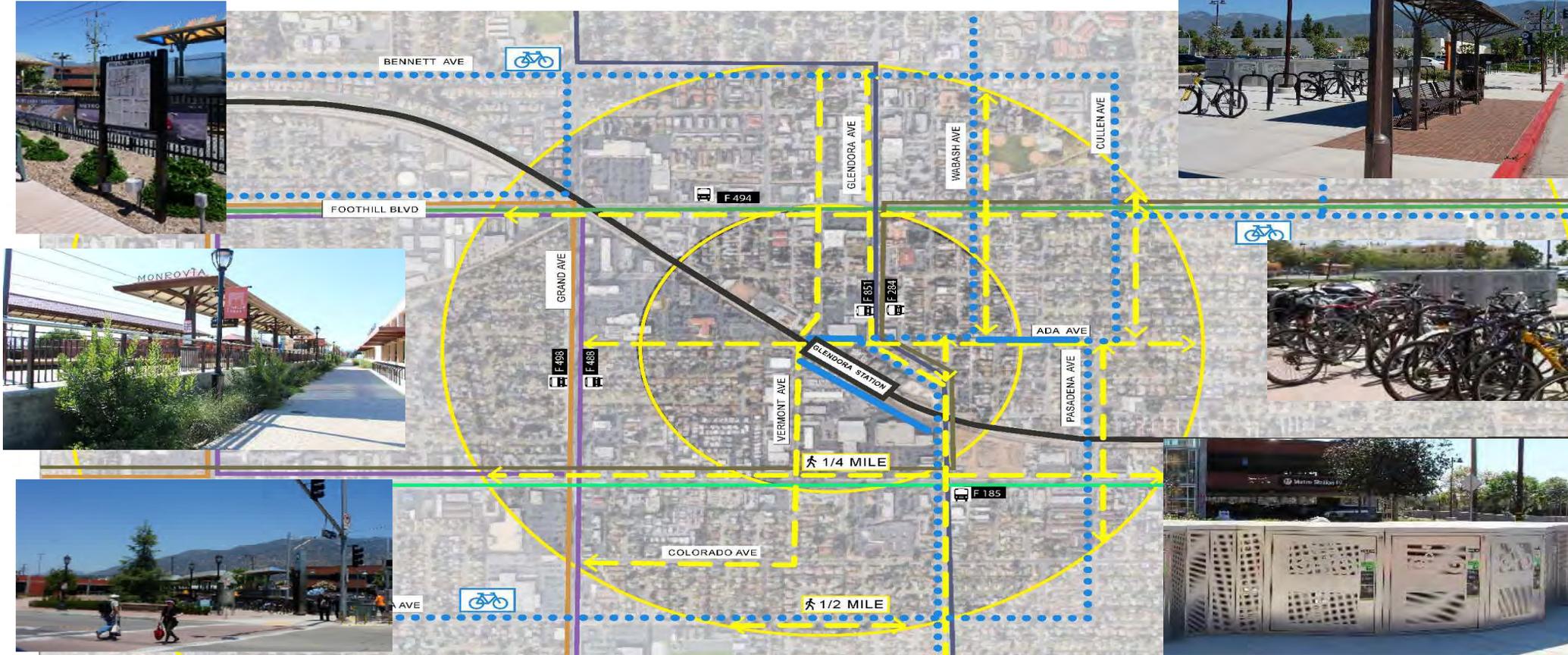


Under Review

To promote multi-modal access, each station is being designed to include more bike parking and lockers, shuttle and drop off areas, bus stop interfaces and pedestrian access from all sides.

- Based on Metro’s new parking policies, the Construction Authority is reevaluating the amount of parking needed at the future stations

First/Last Mile Planning



First/Last Mile elements, as defined by the Metro planning study, will be part of the project and count toward city local contribution requirement

Project Challenges

- Freight/Metrolink Track Relocation
 - Both BNSF and Metrolink service must stay operational during construction
 - Will have to move the freight/Metrolink track first, before building the light rail tracks
 - Two projects in one; adding complication and time to construction
- Relocation of Claremont Metrolink Station
- 26 At-Grade Street Crossings
- 25 New/Renovated Bridge Structures
- Large Number of Third Parties; Two Counties
- Construction Costs Near All-Time High
 - Rate of Economic Growth/Escalation Factor
 - Concerns over Tariffs and Trade War



Project Work Plan and Funding



Broke Ground - December 2017

Glendora to Montclair Work Plan

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

* Could extend to December 2018



Foothill Gold L

Utilities Relocation Work Completed



DB1 contractor (W.A. Rasic Construction) completed a dozen utility relocation/protection locations over the last year and reached substantial completion.

RFP C2002 Phase 2B Alignment DB2 Contract: Next Steps

Activity	Date

* Could extend to December 2018

RFP C2002 Phase 2B Alignment DB2 Contract: Shortlist *(alphabetical order)*

- AECOM | Stacy and Witbeck JV
- Herzog Rados Lane, a Joint Venture
- Kiewit-Parsons, a JV
- San Gabriel Valley Transit Partners (STP), a Joint Venture of Fluor and Ames



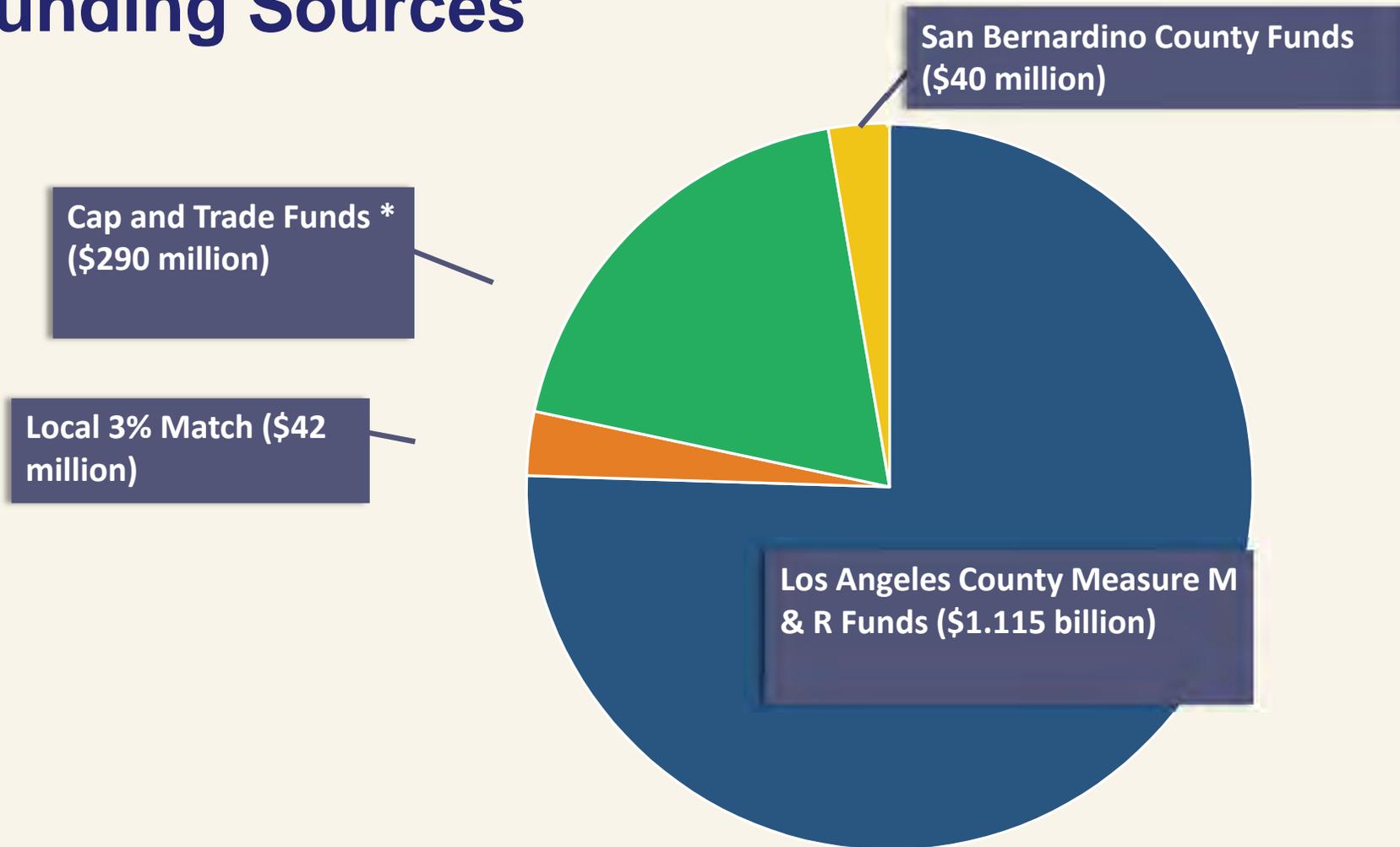
Project Estimate - September 2017



June 28, 2017

NOTE: Final project costs will be known when Alignment Design-Build Contractor has been selected.

Funding Sources





2016 TOD Study Results

Corridor Cities Support TOD

- Corridor cities have been engaged in TOD planning since 2003
- Strong grassroots and political support for denser development and mixed use
- Cities have spent millions in anticipation of Gold Line
 - **Updating General and Specific Plans**
- TOD will play significant role in accommodating future population and job growth in the Foothill Gold Line cities



Azusa's Rosedale Project



Claremont's Residential Project

Community Visions are Ready

Phase 2a Stations

Arcadia	<ul style="list-style-type: none">• <i>Arcadia General Plan</i>	Adopted: Sept 2010
Monrovia	<ul style="list-style-type: none">• <i>The Parks @ Station Square Specific Plan</i>	Adopted: Aug 2014
Duarte	<ul style="list-style-type: none">• <i>Duarte Station Specific Plan</i>	Adopted: Oct 2013
Irwindale	<ul style="list-style-type: none">• <i>Irwindale Station Specific Plan</i>	In Process
Azusa	<ul style="list-style-type: none">• <i>Azusa TOD Specific Plan</i>	Adopted: Nov 2015

Phase 2b Stations

Glendora	<ul style="list-style-type: none">• <i>Monrovia Nursery Specific Plan</i>• <i>Route 66 Specific Plan</i>	Adopted: 2016 Adopted: 2003
San Dimas	<ul style="list-style-type: none">• <i>Downtown San Dimas Specific Plan</i>	In Process
La Verne	<ul style="list-style-type: none">• <i>Old Town La Verne Specific Plan</i>• <i>University of La Verne Master Plan</i>	Adopted: Dec 2010 Adopted: Jan 2015
Pomona	<ul style="list-style-type: none">• <i>Pomona North Metrolink Station Area Plan</i>	Adopted: 2014
Claremont	<ul style="list-style-type: none">• <i>Claremont General Plan</i>	Adopted: 2006
Montclair	<ul style="list-style-type: none">• <i>North Montclair Transit Village Specific Plan</i>	Adopted: 2006

Corridor Development Since 2003

(built or underway within 1/2-mile of a Gold Line Station)



- 12,500 new housing units
- 3,600,000 square feet of commercial/institutional space
- 1,400 hotel rooms

\$6.7 Billion of Private Investment Value

Potential Development – Phase 2



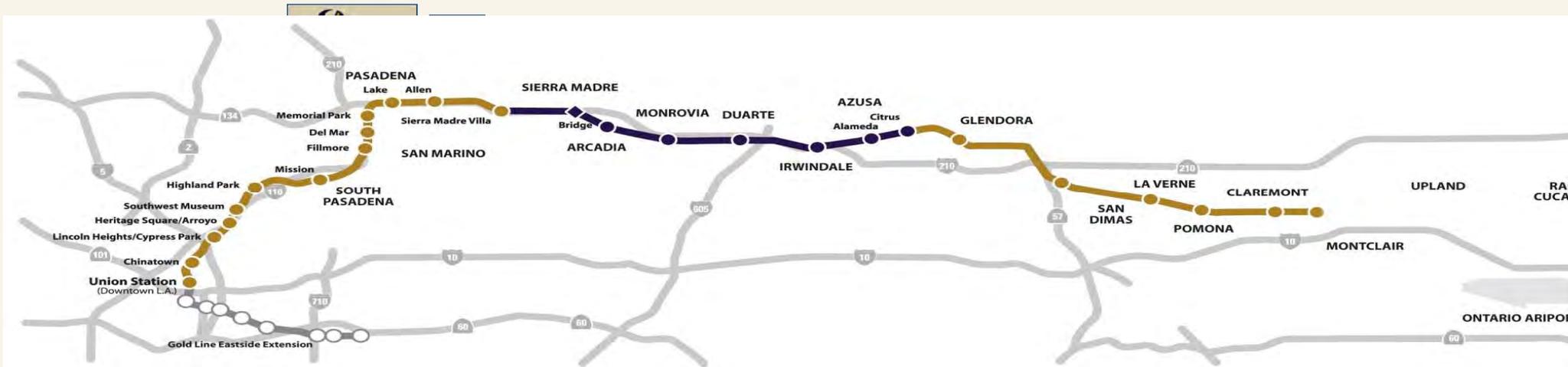
- 17,000 additional housing units
- 10,000,000 sf of additional commercial/institutional space
- 250 more hotel rooms

Potential for \$9 Billion Additional Private Investment



Future Connections

Higher Education



Two dozen more colleges within short walk, bike or bus ride of stations



Regional Destinations



LA County Fairplex



Montclair TransCenter



Regional Parks & Public Open Space Areas



Raging Waters



LA/Ontario International Airport

Historic Downtowns, Museums, Hospitals, etc.



Rubel Castle - Glendora





Stay Connected:
foothillgoldline.org
iwillride.org





CALIFORNIA
STRATEGIC
GROWTH
COUNCIL

About the Strategic Growth Council

- Bring together State agencies and departments to coordinate activities that support sustainable communities
- Emphasize strong economies, social equity and environmental stewardship
- Awarded over \$700 million, to date

Affordable Housing and Sustainable Communities

- Investing in affordable housing and sustainable transportation infrastructure
- Awarded over \$250 Million to 19 Projects in June 2018
- Round 4 guidelines and application will be released later this fall



PROVIDED OVER 

6,050

AFFORDABLE HOMES

 FOR FAMILIES IN NEED

 REDUCE
1.58 million
TONNES OF CO₂E
OVER THEIR OPERATING LIVES

Arrowhead Grove

City of San Bernardino

Project Details

- San Bernardino's first AHSC award
- "Disadvantaged" and low-income community
- 184 units in 18 midrise buildings
- 80% affordable
- LEED Gold buildings
- 33% of energy consumption produced onsite
- 2 miles of bike lanes
- ½ mile of sidewalks connecting to a local elementary school
- 2 new bus shelters
- Significant GHG reductions (14,867MT)
- **Total award amount: \$20 million**



March Veterans Village

City of Riverside



Project Details

- Round 1 AHSC award
- “Disadvantaged” community
- 138 units of multi-phase 400 unit project
 - 116 efficiency units
 - 6 one-bedroom units
 - 16 two-bedroom units
- 100% affordable
- Serves veterans on old March Air Force Base
- Joint application between Coachella Valley Housing Coalition and U.S. Veterans Initiative
- **Total award amount: \$6,109,114**

Transformative Climate Communities

- Neighborhood-scale, place-based approach
- Integrated climate strategies to achieve major environmental, health, and economic benefits
- Collaborative partnerships and community leadership
- Round 1 awards made in January 2018
 - Implementation Grants: \$140 million
 - Planning Grants: \$1.6 million
- Round 2 applications due Oct 30



Transformative Climate Communities Ontario Together

- Approximately \$35 million investment
 - \$16.6 million leverage
- 15 partners
- Integrated investment
 - Housing
 - Transportation options
 - Workforce development

101 AFFORDABLE
NEW HOMES



OVER 
5 MILES OF BIKE LANES 
— AND —
3 MILES OF SIDEWALK
CONSTRUCTION/IMPROVEMENTS

Transformative Climate Communities Watts Rising

- Approximately \$35 million investment
 - \$168.9 million leverage
- 17 partners
- Integrated investment
 - Housing
 - Electric transit options
 - Vanpool and car sharing

216 
NEW AFFORDABLE HOMES

4,000  NEW TREES
MORE THAN 

Technical Assistance

- Support communities in applying for the California Climate Investment (CCI) funding programs
 - Direct assistance
 - Capacity building
 - Integrating CCI programs
- Provides tailored assistance for public and active transportation, housing, community solar, low carbon transportation, and sustainable agriculture programs



Sustainable Agricultural Lands Conservation

- Protects agricultural lands from development to more carbon-intensive uses



52 EASEMENTS
PROJECTS
— TOTALING —
81,081
ACRES
— TO BE CONSERVED —

Climate Change Research Program

- Supports research on reducing carbon emissions, including clean energy, adaptation, and resiliency
- Strong emphasis on stakeholder engagement and outcome-based research
- \$10.5 million invested in Round 1
 - Policy implementation
 - Barriers and opportunities





CALIFORNIA
STRATEGIC
GROWTH
COUNCIL



Cap and Trade
Dollars at Work

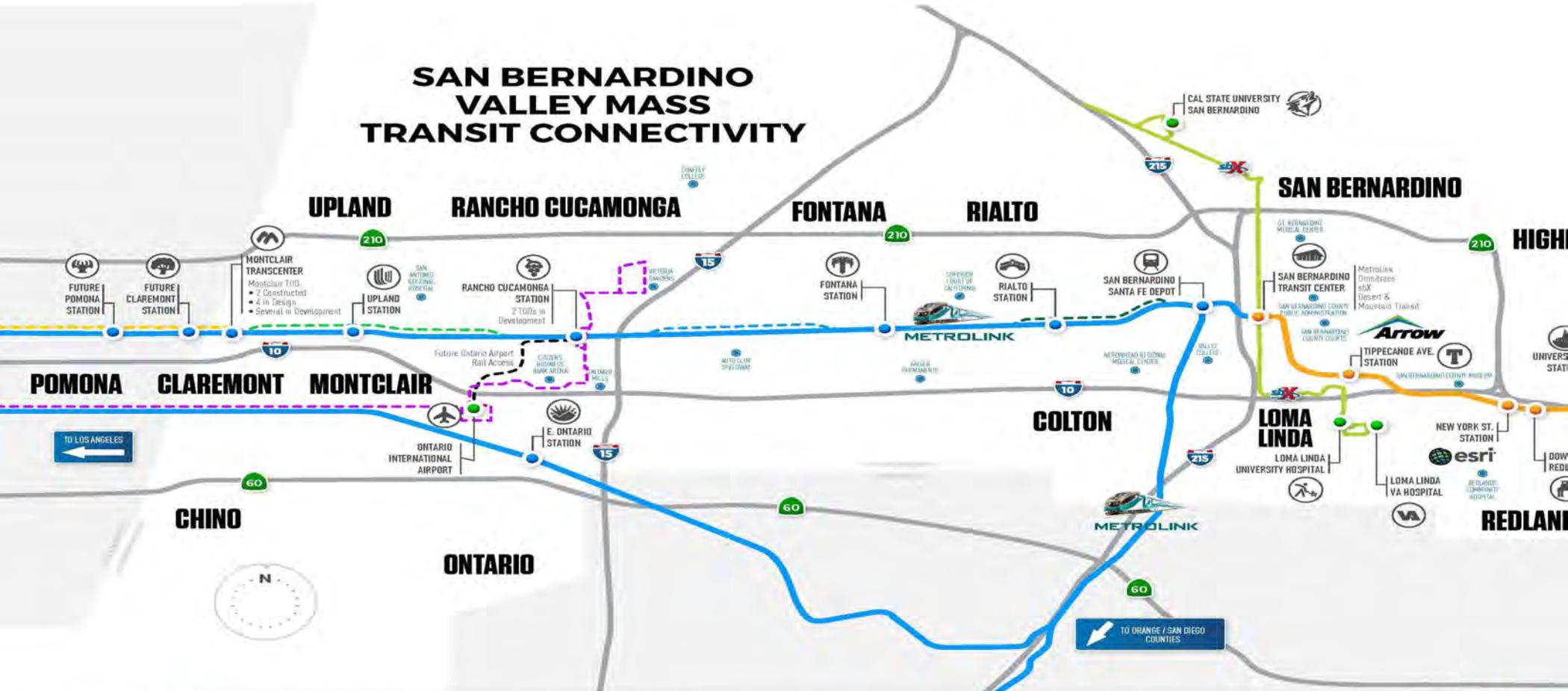


Ray Wolfe
Executive Director

cta

San Bernardino County
Transportation Authority

SAN BERNARDINO VALLEY MASS TRANSIT CONNECTIVITY



- LEGEND**
- Redlands Passenger Rail (Future Arrow Service)
 - Ontario Airport Rail Access (Future)
 - Central to Archibald Double Track (Future)
 - Metrolink
 - Gold Line (Future)
 - Rancho to Lilac Double Track (Future)
 - sbX Bus Rapid Transit
 - Omnitrans West Valley Connector - Phase I
 - Fontana to Rancho Cucamonga Double Track (Future)
 - TOD Transit Oriented Development





Arrow

A modern rail service brought to you by the Redlands Passenger Rail Project



Grant Recipient



First of its kind in San Bernardino County

...from **DMU** to **ZEMU**

First of its kind in North America





Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Rancho Cucamonga
City Council Chambers
Thursday, October 11



Select Committee on Regional Transportation Solutions
Securing Transportation Growth Opportunities
October 11, 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.

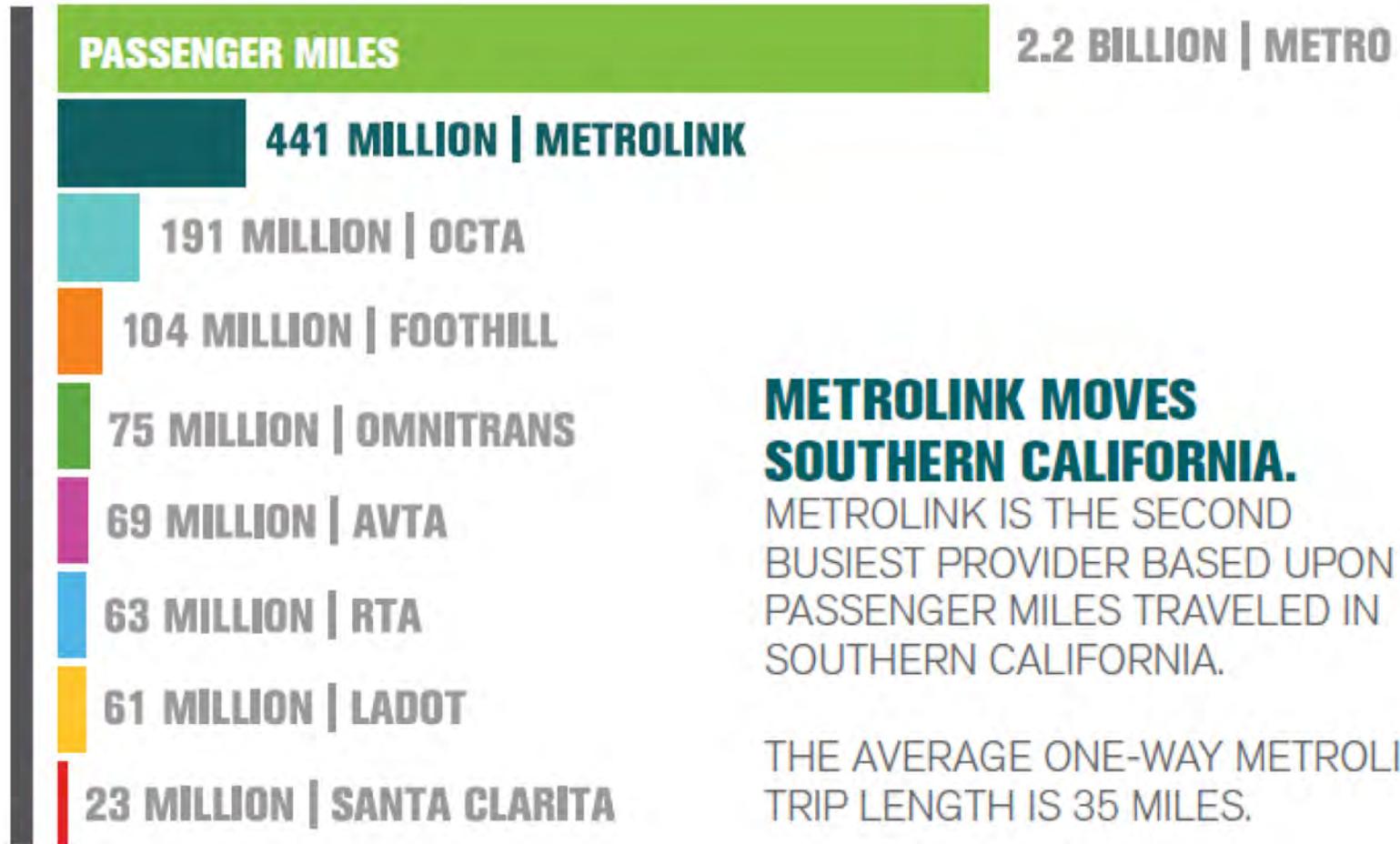
Service

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 Serves the Entire Southern California Region



Metrolink is the 2nd Busiest Carrier in the Region



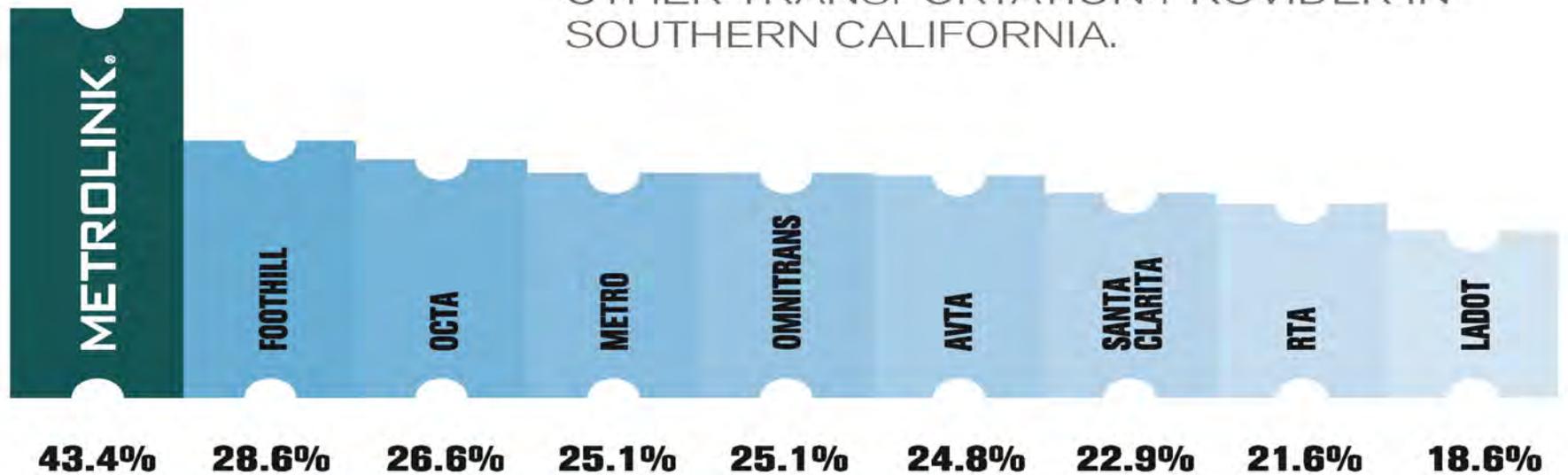
METROLINK MOVES SOUTHERN CALIFORNIA.

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

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



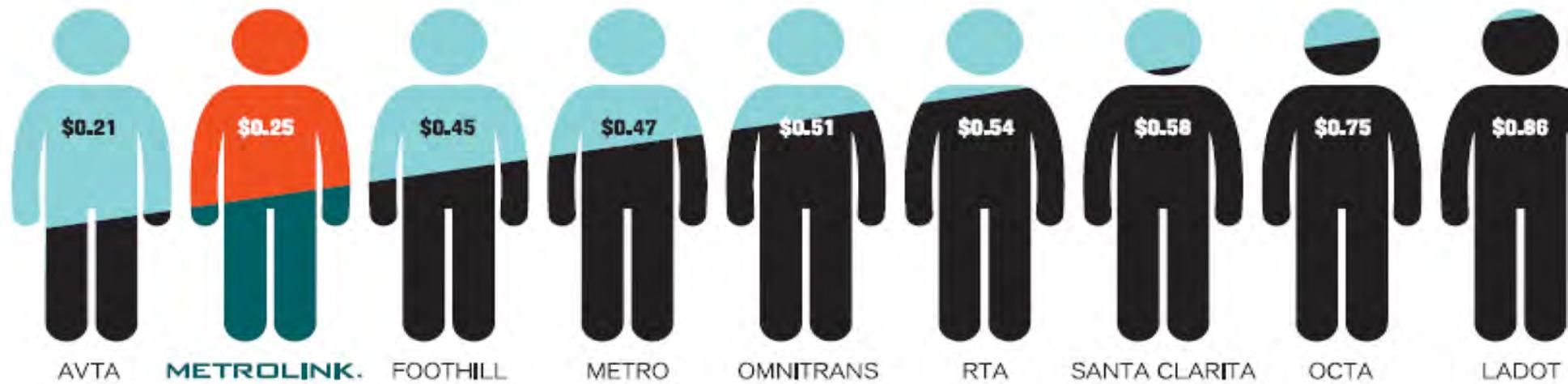
METROLINK FARES CONTRIBUTE MORE TO ITS BUDGET THAN ANY OTHER TRANSPORTATION PROVIDER IN SOUTHERN CALIFORNIA.



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

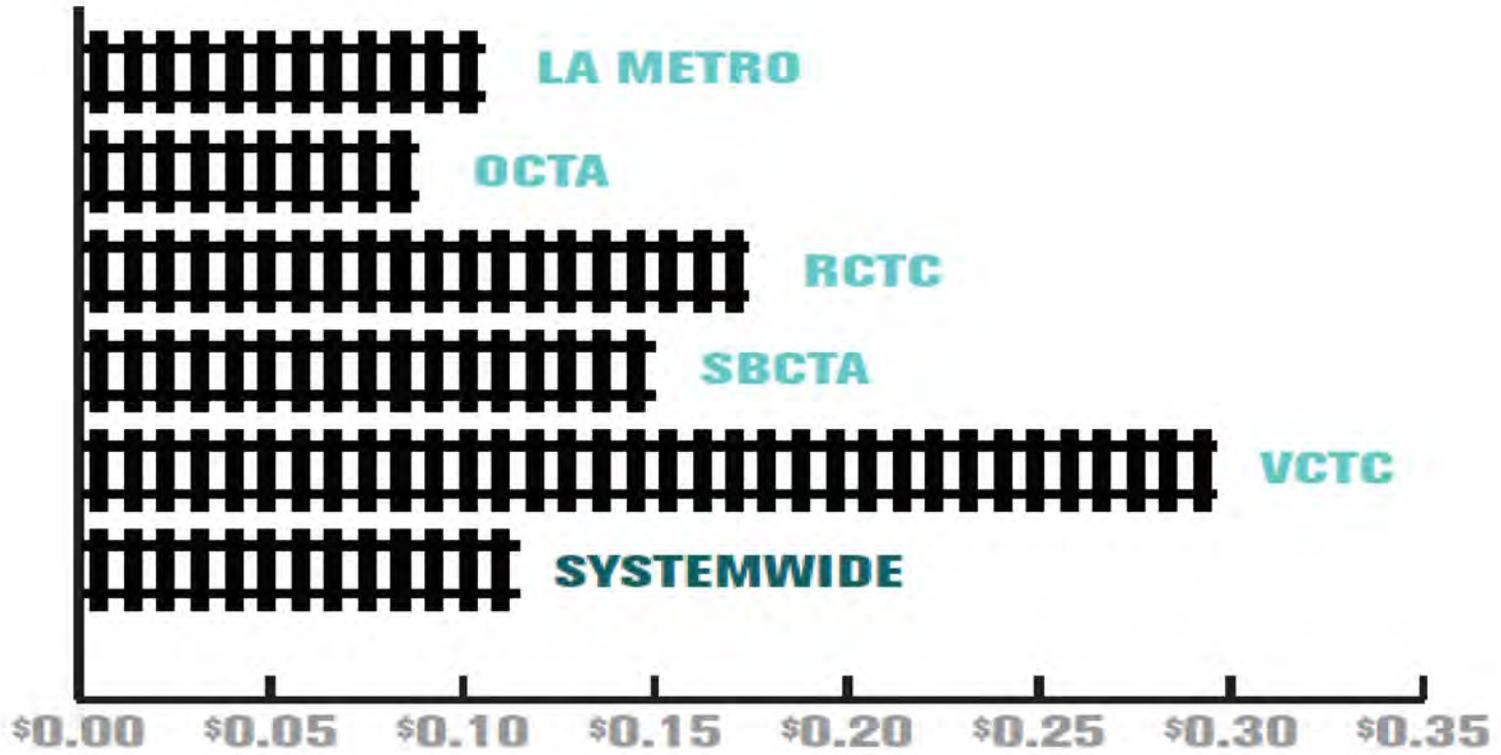
METROLINK HAS A VERY LOW SUBSIDY PER PASSENGER MILE

AMONG SOUTHERN CALIFORNIA PUBLIC TRANSIT AGENCIES.



NET COUNTY COST PER PASSENGER MILE

FY 2014 THROUGH FY 2018





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
ONLY PROVIDER TO
RELIEVE
THE REGIONAL
FREEWAY SYSTEM**



METROLINK COMMUTER RAIL SYSTEM



	Antelope Valley Line		Station Served by Multiple Lines
	Inland Empire-Orange County Line		Amtrak Pacific Surfliner
	Orange County Line		Metro Rail/Metro Bus
	Riverside Line		LAX FlyAway Bus
	San Bernardino Line		Coaster
	Ventura County Line		Oceanside to San Diego
	91/Perris Valley Line		Sprinter Oceanside to Escondido
	Future Station		

* Formerly Burbank/Bob Hope Airport Station
 ** Formerly San Bernardino Station

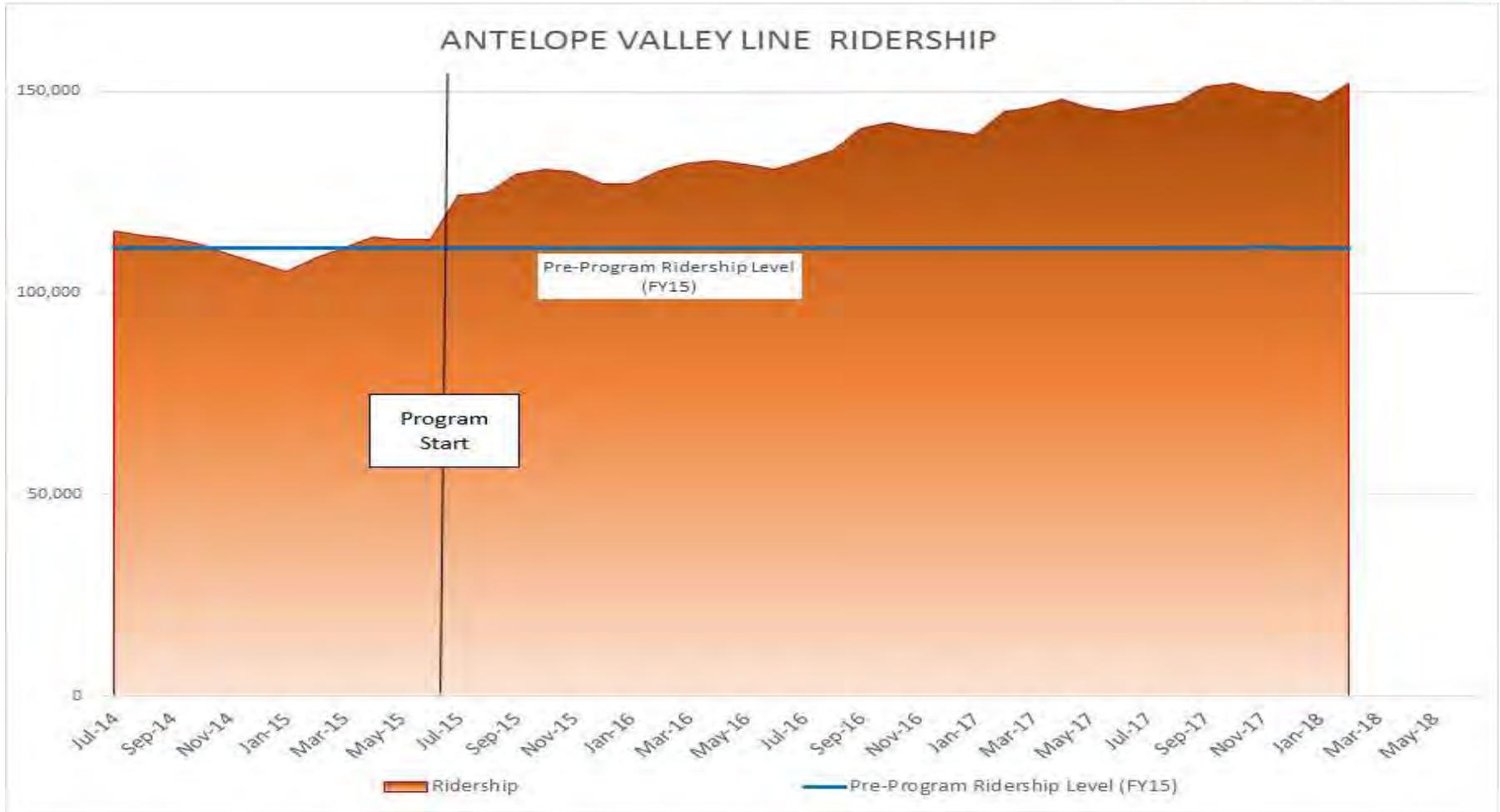
metrolinktrains.com

Effective May 14, 2018

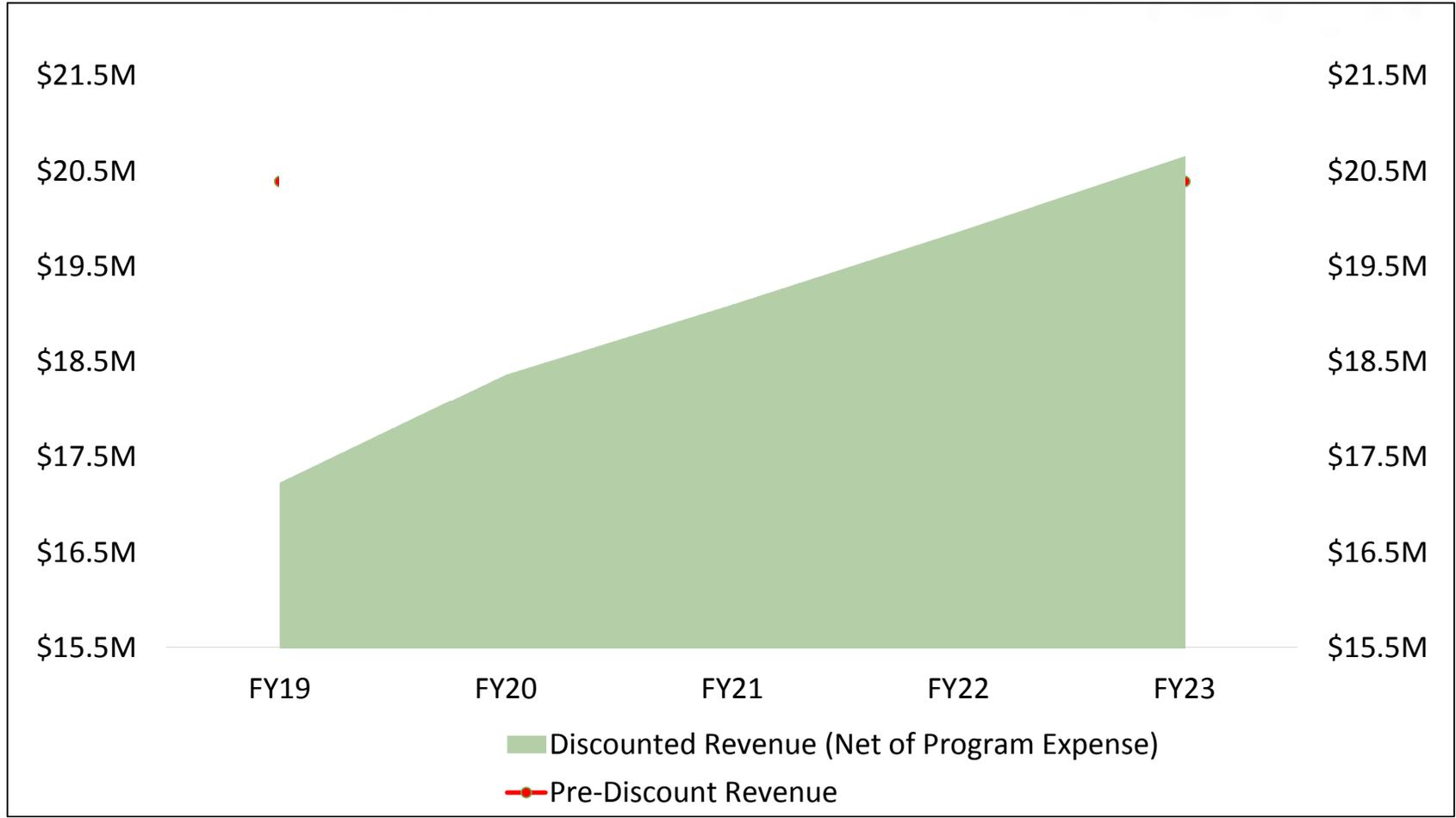
METROLINK.



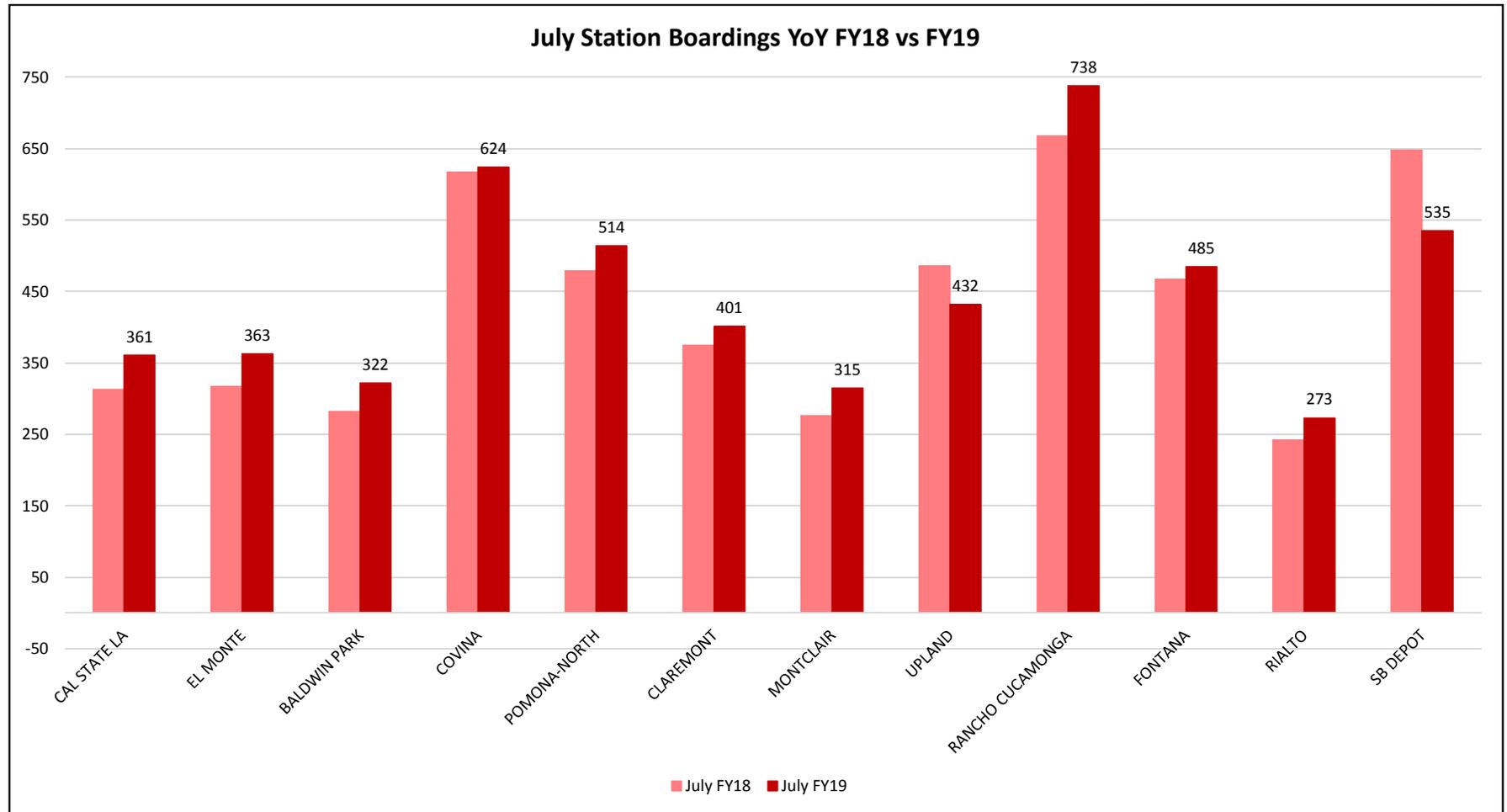
Antelope Valley Line Fare Discount Program



San Bernardino Line Promotion Projections



San Bernardino Line Station Boardings



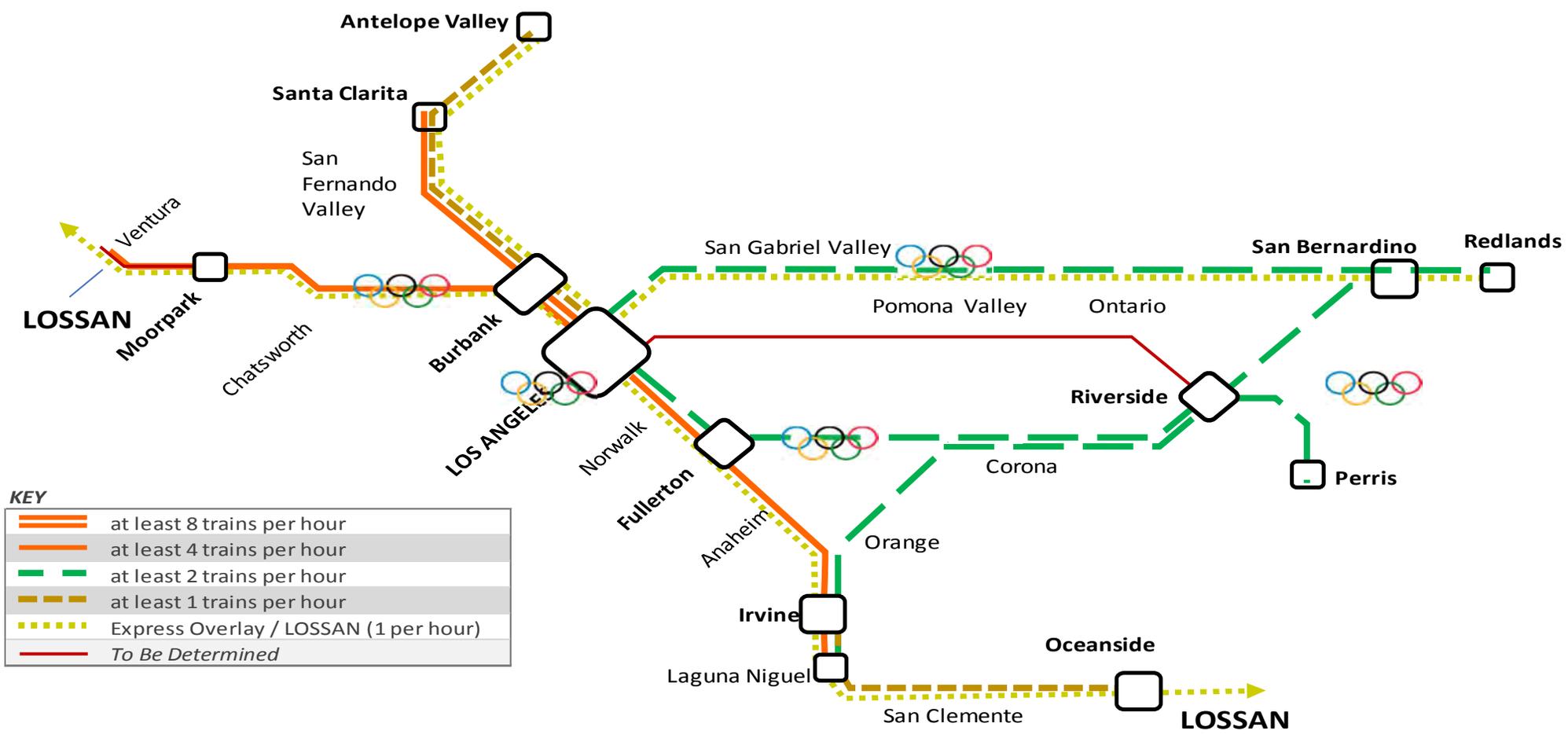
Metrolink Constrained with Fixed-Capacity System



Line Capacity Constraints



Southern California Optimized Rail Expansion (SCORE)





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



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Rancho Cucamonga
City Council Chambers
Thursday, October 11

Los Angeles and San Bernardino Inter-County Transit and Rail Connectivity Study

Select Committee on Regional Transportation Solutions

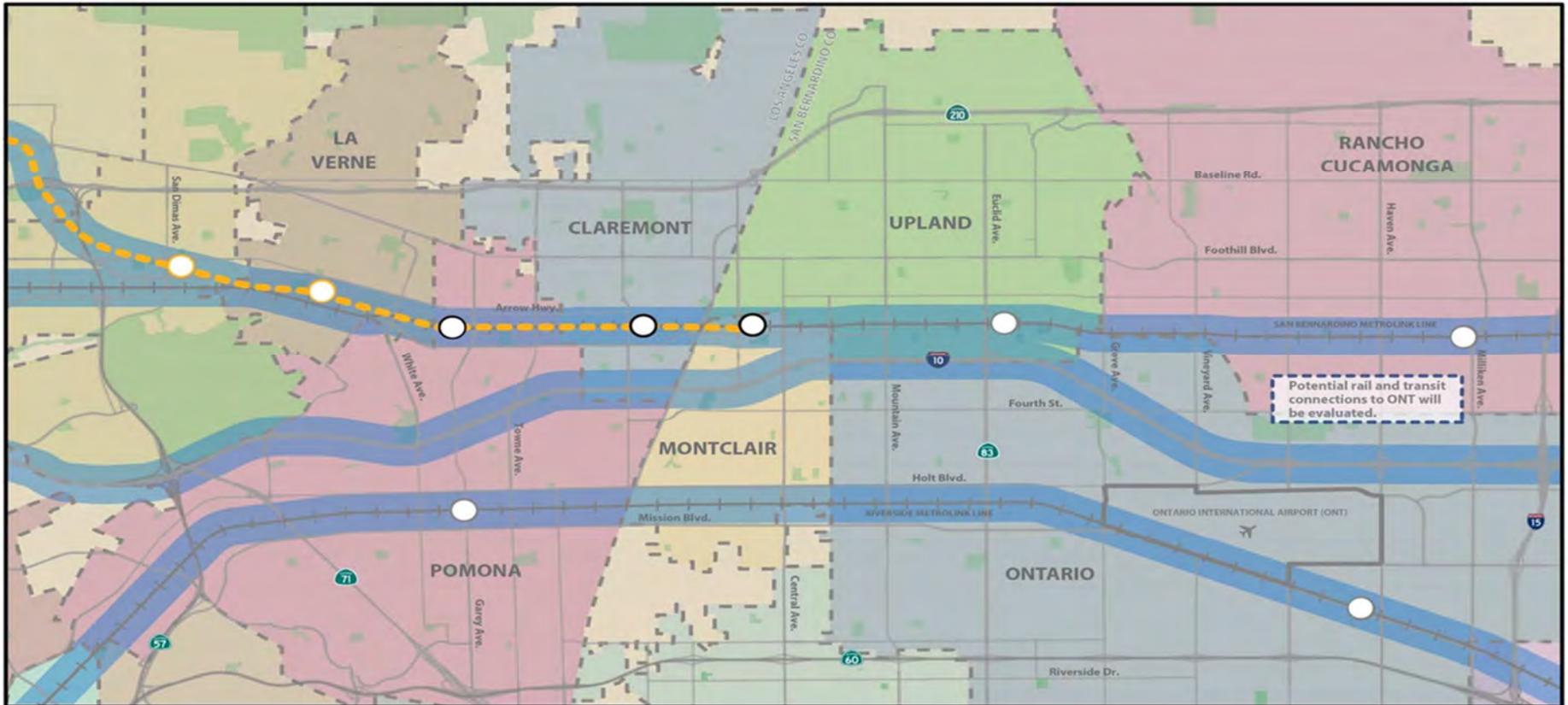
Steve Fox

Senior Regional Planner

October 11, 2018



Inter-County Study Area



- City Boundary
- Ontario International Airport
- Study Transportation Corridors
- Proposed Metro Gold Line Foothill Extension Phase 2B / Station
- Existing Metrolink Line / Station
- Existing Metrolink / Proposed Gold Line Station

Inter-County Study Background

SCAG

- Significant transportation improvements are under construction or are being planned in the Inter-County Study corridor.
 - Metro Gold Line extensions 2B and 2C
 - Speed and service improvements to the Metrolink San Bernardino Line
- New HOV/Express Lanes on the I-10 San Bernardino Freeway
- SCAG initiated Inter-County Study in partnership with L.A. Metro and San Bernardino County Transportation Authority (SBCTA).

Inter-County Study Key Questions

SCA

- L.A. Metro wanted to evaluate the efficiency and effectiveness of providing both light rail transit and commuter rail service in the same corridor.
- SBCTA wanted to understand and ensure that San Bernardino County investments in direct rail transit service to Ontario International Airport will benefit San Bernardino County residents.



Inter-County Study Goal

SCA



To determine the optimum mix and service levels of commuter rail, light rail, hybrid rail, BRT, and express bus in the corridor.

Inter-County Study Objectives

SCA

- Assess the market for intra- and inter-county transit and rail travel in the corridor, including the geographic distribution of origins for employee and passenger trips to ONT.
- Estimate potential ridership, travel and economic benefits, and capital/operating costs associated with transit and rail alternatives in the corridor.
- Recommend a path forward for cost-effective transit and rail services to best serve communities along the corridor and to/from ONT, with a focus on coordinating plans for Gold Line, Metrolink, and transit access to ONT.

Study Considerations

- Nature of the study:
 - Complex
 - Planning-level
 - Broadly defined
 - Financially unconstrained
- Recommended path forward:
 - Findings transmitted to Metro and SBCTA
 - Metro and SBCTA's discretion to conduct further studies and select LPA

Inter-County Study Committees

Technical Working Group (TWG)

Representatives from councils of governments and transit agencies
Advised project team regarding technical assumptions and methodologies.
Reviewed and provided input on draft deliverables over the course of the study.

Stakeholder Review Committee (SRC)

City representatives, transportation agencies, and TWG members
Represented various community and stakeholder perspectives.
Advised project team.

- Open Houses – Summer 2016 and Summer 2017
- SCAG Transportation Committee - Transmitted study findings to L.A. Metro and SBCTA for further project development process.

Inter-County Study Travel Market Analysis

SCA

- Most trips that originate within study area stay within study area (56%). Of these, 62% begin and end in the same city.
- Ontario to Rancho Cucamonga, Ontario to Upland, and Upland to Rancho Cucamonga top city pairs.
- Existing and planned transit and rail infrastructure is designed to move people in an east/west pattern; however travel patterns are “polycentric.”
- North/south transit services are sub-optimal and need to be improved for future connectivity to east/west improvements.

Inter-County Study Alternatives Analysis

- Two phases of screening
- 38 alternatives developed based on previous studies, travel market analysis, and input from the public and study committees.
- Scored using Phase I screening criteria that included travel time and transfer time, number of transfers, miles of new infrastructure, short-, medium-, and long-term implementation scenarios, and existing and future land use.
- No-Build, Transportation Systems Management and four build alternatives forwarded in to second stage of evaluation.
- Evaluation included ridership forecasting, cost/benefit analysis, facility capacity analysis; and land use, neighborhood and traffic impacts.

Inter-County Study Build Alternatives



Light Rail Transit



Commuter Rail



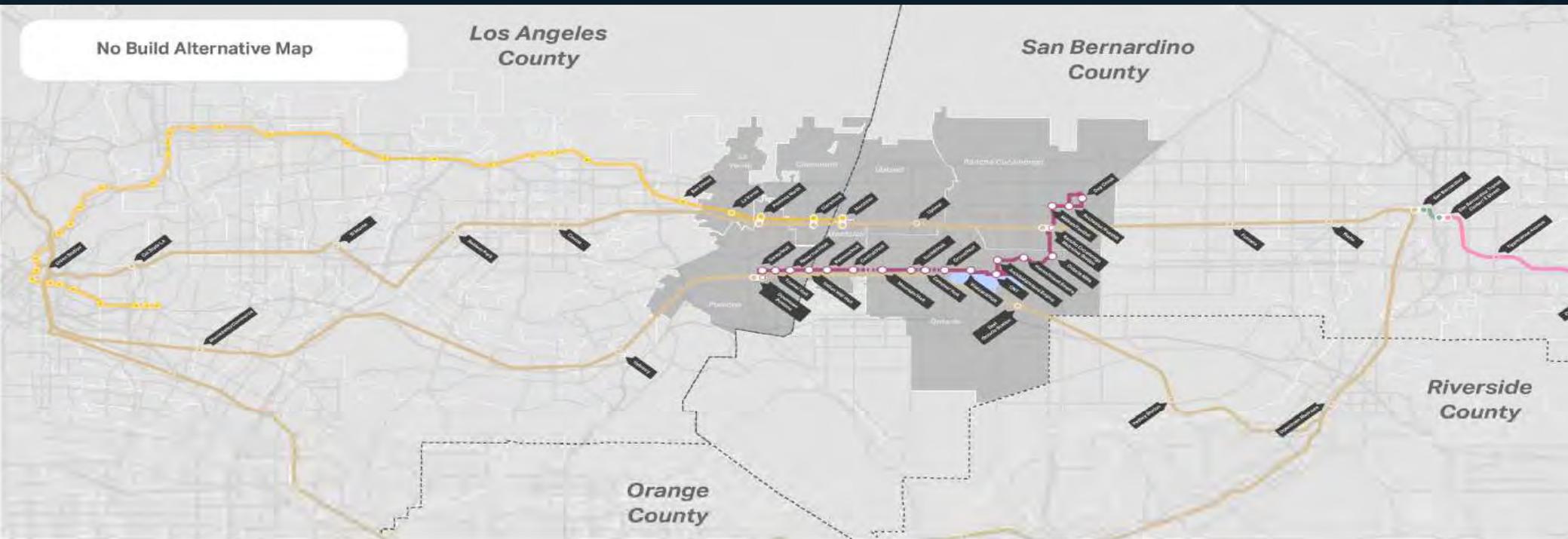
Hybrid Rail



Bus Rapid Transit

No-Build Alternative

No Build Alternative Map



- Stations
- Transfer Stations
- San Bernardino Metrolink Extension
- Redlands Rail Passenger Project
- West Valley Connector BRT Phase 1 - Mixed Lanes
- West Valley Connector BRT Phase 1 - Dedicated Lanes

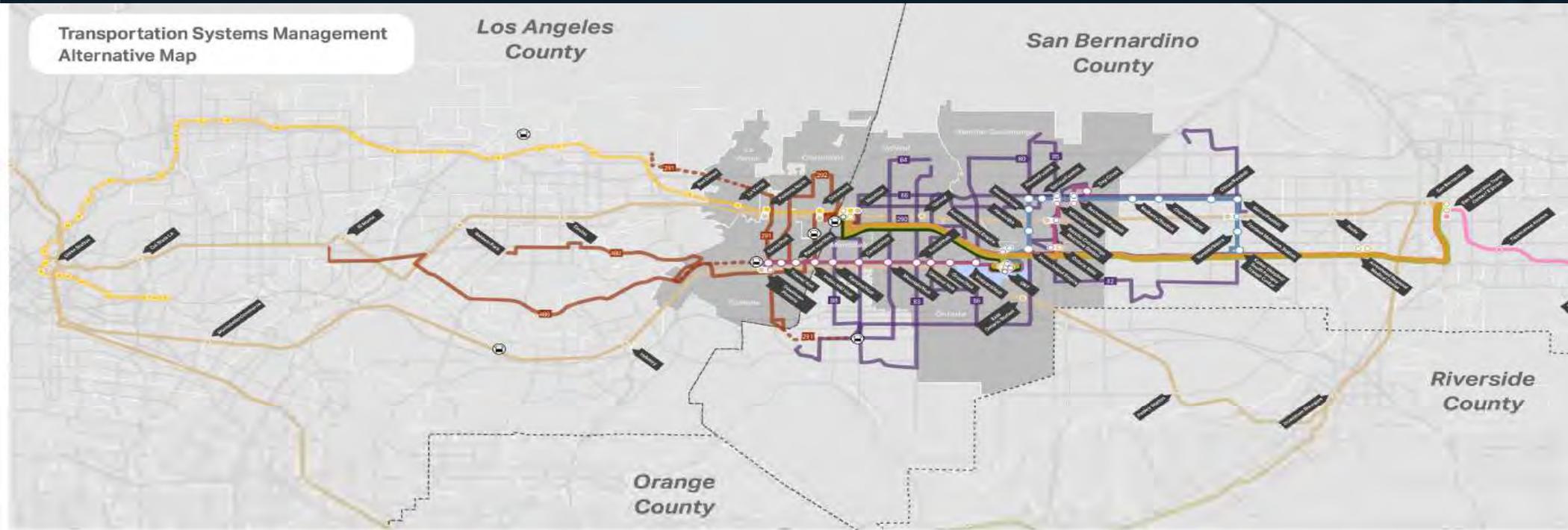
- Metrolink Services
- Gold Line to Montclair
- Ontario International Airport
- County Boundaries



Note: NB Alternative includes WVC BRT Phase 1

TSM Alternative

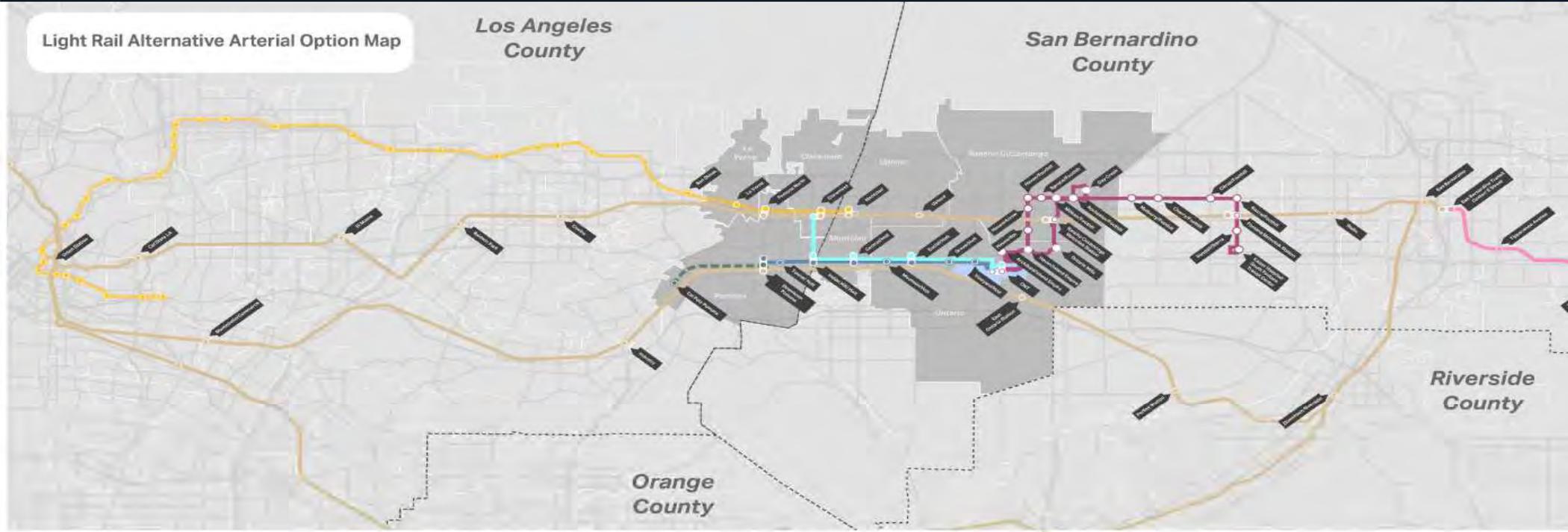
Transportation Systems Management
Alternative Map



- | | | |
|-------------------------------------|--|-------------------------------|
| Stations | West Valley Connector BRT Phase 1 | 0 2.5 5 10 15 |
| Transfer Stations | West Valley Connector BRT Phase 2 | |
| Transit Centers | Omnitrans Line 290 Original Service Line | |
| Foothill Transit Routes | Omnitrans Line 290 New Service Line | |
| OmniTrans Routes | Metrolink Services | |
| Proposed Foothill Transit Extension | Gold Line to Montclair | Ontario International Airport |
| Montclair to ONT Shuttle | Redlands Rail Passenger Project | County Boundaries |

Light Rail Alternative Arterial Option

Light Rail Alternative Arterial Option Map

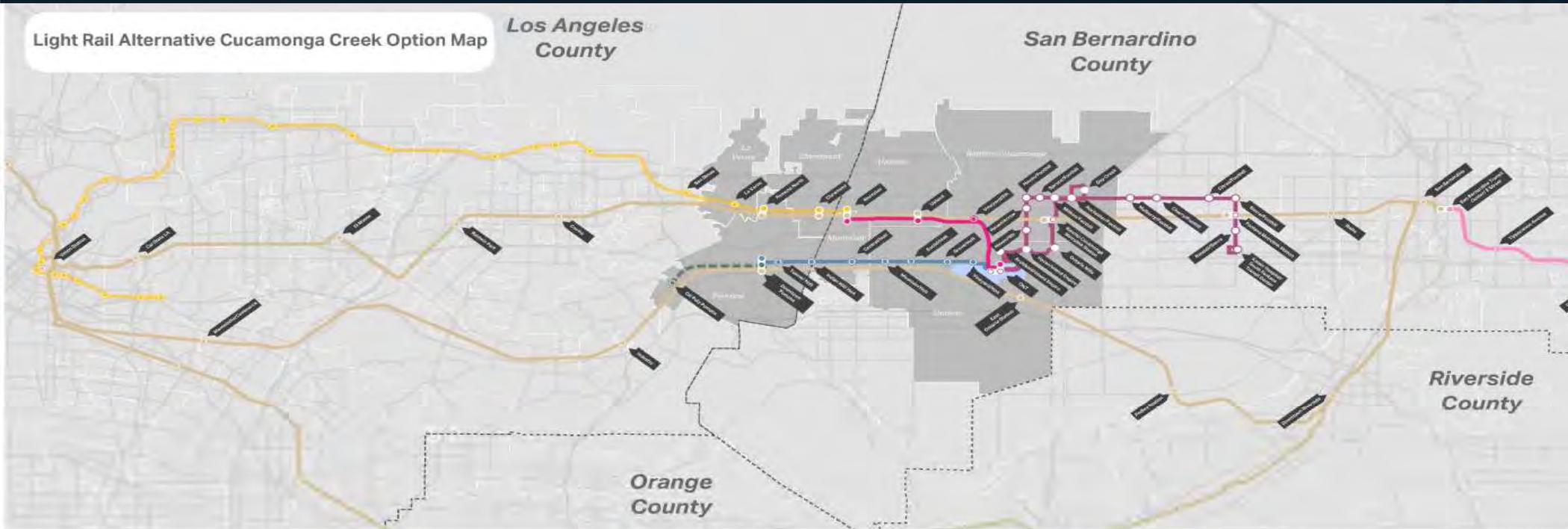


-  Stations
-  Transfer Stations
-  West Valley Connector BRT
-  West Valley Connector LRT
-  Optional Cal Poly Pomona LRT Connection
-  Gold Line to ONT Arterial Option
-  Metrolink Services
-  Gold Line to Montclair
-  Redlands Rail Passenger Project
-  Ontario International Airport
-  County Boundaries



Light Rail Alternative Cucamonga Creek Option

Light Rail Alternative Cucamonga Creek Option Map

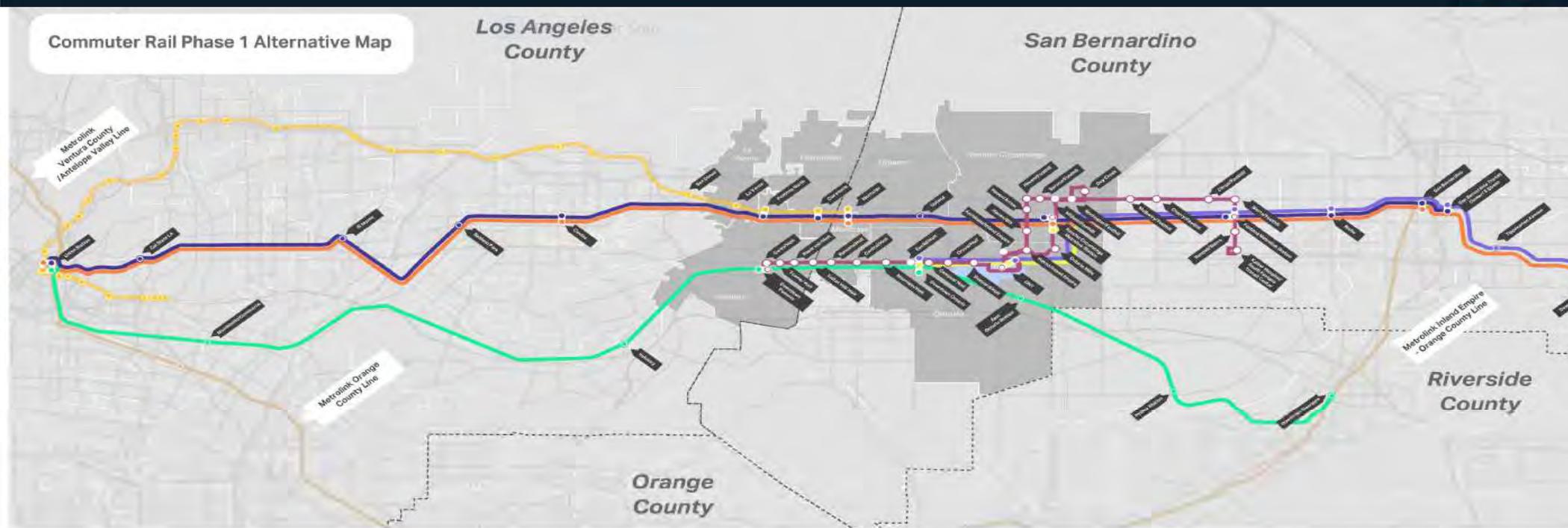


- Stations
- Transfer Stations
- West Valley Connector BRT
- West Valley Connector LRT
- Optional Cal Poly Pomona LRT Connection
- Gold Line to ONT Cucamonga Creek Option
- Metrolink Services
- Gold Line to Montclair
- Redlands Rail Passenger Project
- Ontario International Airport
- County Boundaries



Commuter Rail Phase One

Commuter Rail Phase 1 Alternative Map

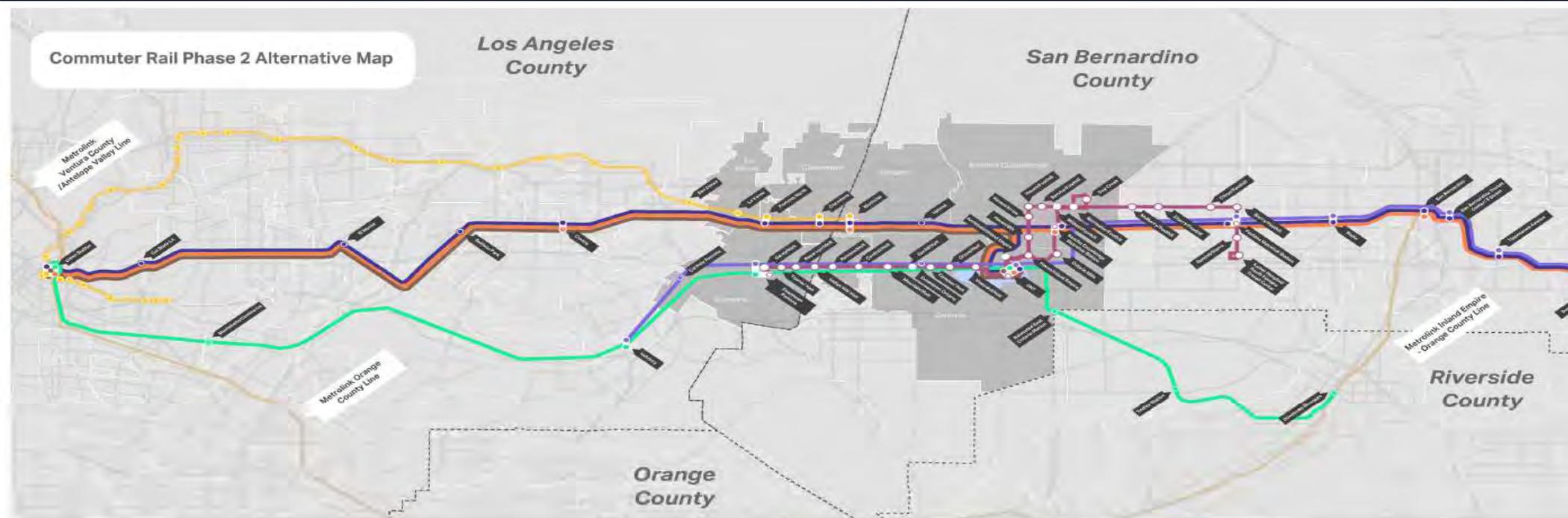


- Stations
- Transfer Stations
- Metrolink San Bernardino Line Local Service (Commuter Rail)
- Metrolink San Bernardino Line Express Service (Commuter Rail)
- Metrolink Riverside Line (Commuter Rail)
- Ontario International Airport
- Redlands Rail Passenger Project (Hybrid Rail)
- San Bernardino Line - ONT Rail Shuttle Service (Hybrid Rail)
- West Valley Connector BRT Line
- Metrolink Services
- Gold Line to Montclair
- County Boundaries



Commuter Rail Phase Two

Commuter Rail Phase 2 Alternative Map

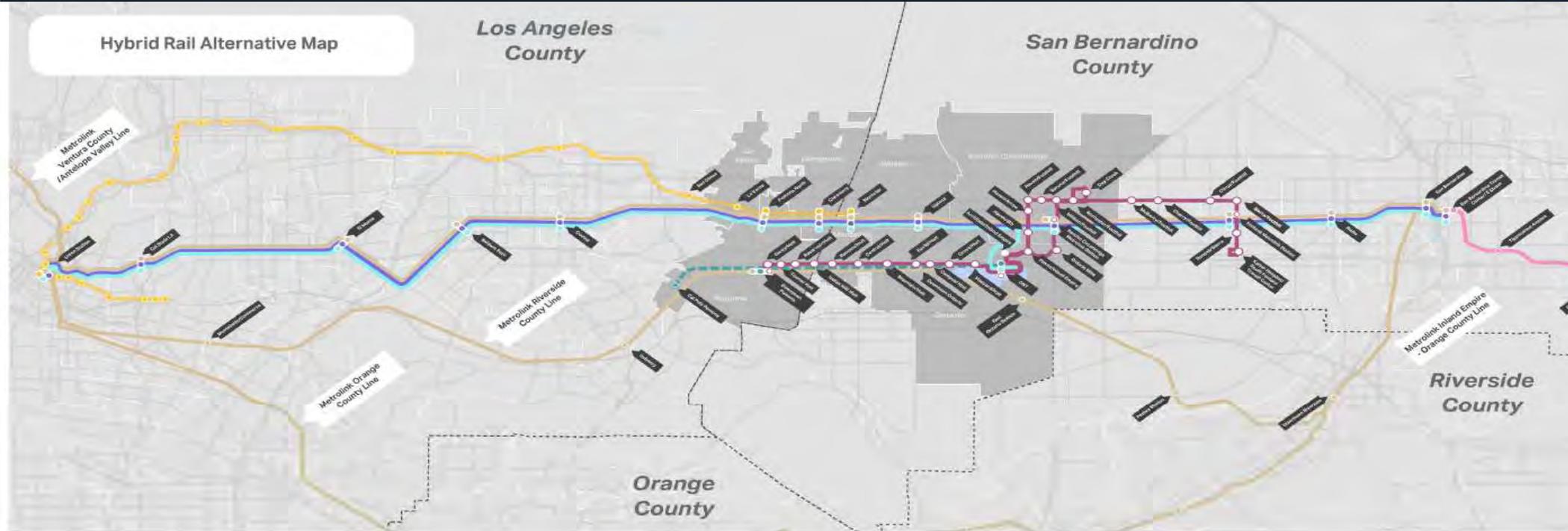


- Stations
- Transfer Stations
- Metrolink San Bernardino Line Local Service (Hybrid Rail)
- Metrolink San Bernardino Line Express Service (Commuter Rail)
- Metrolink Riverside Line (Commuter Rail)
- Ontario International Airport
- Redlands Rail Passenger Project (Hybrid Rail)
- LAUS - ONT Express Service (Hybrid Rail)
- West Valley Connector BRT Line
- Metrolink Services
- Gold Line to Montclair
- County Boundaries



Hybrid Rail Alternative

Hybrid Rail Alternative Map

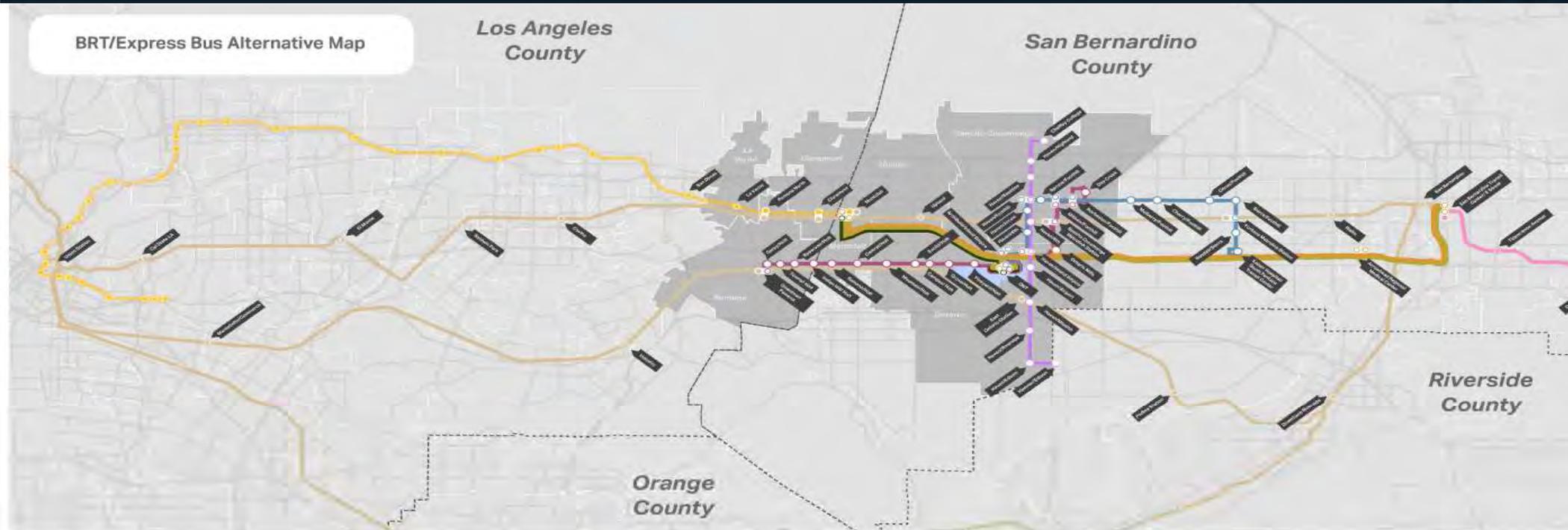


- Stations
- Transfer Stations
- Hybrid Rail Service Pattern 1 – Metrolink San Bernardino Line
- Hybrid Rail Service Pattern 2 – Connection to ONT
- West Valley Connector BRT
- Optional Cal Poly Pomona Hybrid Rail Connection
- Metrolink Services
- Gold Line to Montclair
- Redlands Rail Passenger Project
- Ontario International Airport
- County Boundaries



BRT/Express Bus Alternative

BRT/Express Bus Alternative Map



- Stations
- Transfer Stations
- Haven BRT Service
- West Valley Connector BRT Phase 1
- West Valley Connector BRT Phase 2
- Omnitrans Line 290 Original Service
- Omnitrans Line 290 New Service

- Montclair to ONT Shuttle
- Metrolink Services
- Gold Line to Montclair
- Redlands Rail Passenger Project
- Ontario International Airport
- - - County Boundaries



Note: WVC BRT Phase 1 is included as part of NB Alternative

Inter-County Study Goals and Screening Criteria



Goal 1 - Enhance Connectivity and Accessibility

Including inter-county, first/last mile, access to ONT

Goal 2 - Provide Cost Effective Transit and Rail Services

Goal 3 - Promote Sustainable Transportation

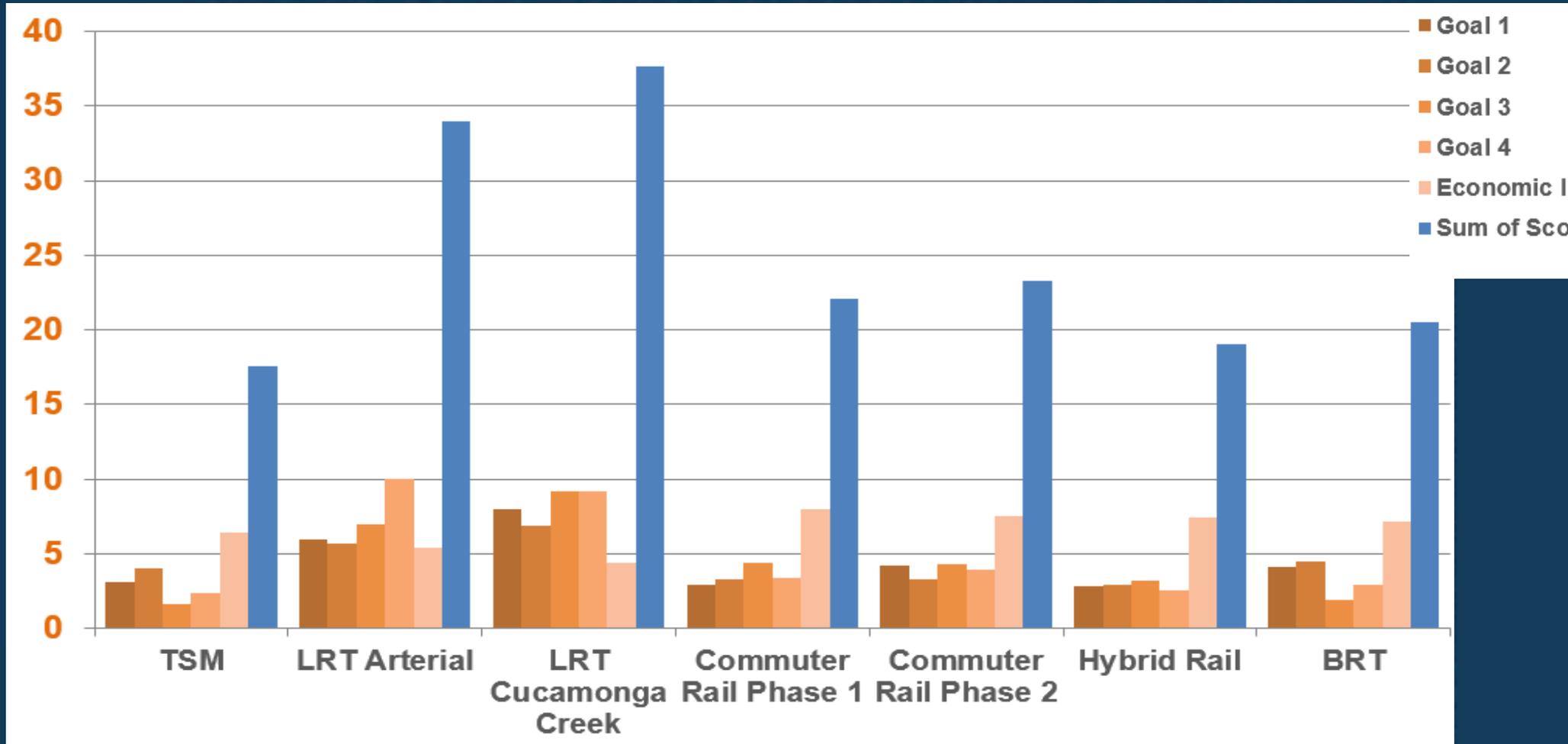
Reduce vehicle miles traveled, greenhouse gas emissions

Goal 4 - Support Transit-Oriented Development

Economic Impact Analysis

Including incremental job accessibility, revenue impacts

Inter-County Study Findings



Inter-County Study Findings

	Regional Daily Ridership	Air Passenger Boardings at ONT	Capital Cost (Average)	O&M Cost (Annual Average)
Unit	# of Riders	# of Riders	2017\$ Billions	2017\$ Millions
TSM	786,000	200	\$ 1.7	\$ 71
LRT Arterial	833,000	800	\$ 2.0	\$ 89
LRT Cucamonga Creek	850,000	1,700	\$ 2.9	\$ 44
Commuter Rail Phase 1	792,000	300	\$ 1.5	\$ 122
Commuter Rail Phase 2	799,000	1,500	\$ 3.8	\$ 111
Hybrid Rail	785,000	400	\$ 2.5	\$ 91
BRT/Express Bus	781,000	300	\$ 0.3	\$ 19

Next Steps

- SCAG Transportation Committee accepted draft study findings on October 4, 2018.
- Final Report handed over to L.A. Metro and SBCTA for consideration on further project development process.

Thank you

Steve Fox

fox@scag.ca.gov

213-236-1855





Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Alan Wapner, President, Ontario Airport Authority
President SCAG
Airport Connectivity



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Paul Granillo, Executive Director
Inland Empire Economic Partnership
Regional Importance of Connectivity



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

John Bulinski, District 7 Director
California Department of Transportation
SB 1 Benefits in Southern California



*San Gabriel Valley Council of
Governments*

STATE TRANSPORTATION DOLLARS AT WORK IN THE SAN GABRIEL VALLEY

SB 1 FUNDING OVERVIEW

**Mark Christoffels
Chief Engineer**



SENATE BILL 1 PURPOSE

New revenues for:

- road safety
- fill potholes; repair streets
- expand public transit
- improve highways
- build bridges & overpasses





SENATE BILL 1 REVENUES



\$5.2 billion statewide from:

- increase in state excise tax on gasoline (12 cents/gallon)
- increases in state sales and excise tax on diesel (20 cents/gallon)
- Vehicle registration fees, including zero- emission vehicles



SENATE BILL 1 LOS ANGELES COUNTY



- \$1 billion per year
- accelerates Measure M transit and highway projects
- improves local streets and sidewalks
- delivers high-priority goods movement projects



SAN GABRIEL VALLEY

Local Streets and Roads Funding Per Year



City	Revenue	City	Revenue	City	Revenue
Alhambra	\$1.5M	Industry	\$0.01M	San Dimas	\$0.6M
Arcadia	\$1.0M	Irwindale	\$0.02M	San Gabriel	\$0.7M
Azusa	\$0.9M	La Canada	\$0.4M	San Marino	\$0.2M
Baldwin Park	\$1.3M	La Puente	\$0.7M	Sierra Madre	\$0.2M
Bradbury	\$0.02M	La Verne	\$0.6M	South El Monte	\$0.3M
Claremont	\$0.6M	Monrovia	\$0.7M	So Pasadena	\$0.5M
Covina	\$0.9M	Montebello	\$1.0M	Temple City	\$0.6M
Diamond Bar	\$1.0M	Monterey Park	\$1.1M	Walnut	\$0.5M
Duarte	\$0.4M	Pasadena	\$2.5M	West Covina	\$2.0M
El Monte	\$2.0M	Pomona	\$2.7M	SGV TOTAL	\$27.0M
Glendora	\$1.0M	Rosemead	\$1.0M		



Foothill Gold Line: Glendora to Montclair Extension Project



Start : 2021
 Cost : \$1.5 billion
 SB 1 : \$290 million



- Gold Line Rail Corridor (shared with freight)
- Metrolink Rail Corridor
- Gold Line Station
- Gold Line Station and Metrolink Station (not shared)
- Planned Grade Separation for Gold Line Train



State Route 57-60 Confluence Chokepoint Relief Project



57/60 INTERCHANGE IMPROVEMENTS

Start: Early 2021

Cost: \$288.6 million

SB 1: \$22 million

Collisions: 670 per year
(1/3=injury/fatality)





State Route 71 Freeway Conversion Project



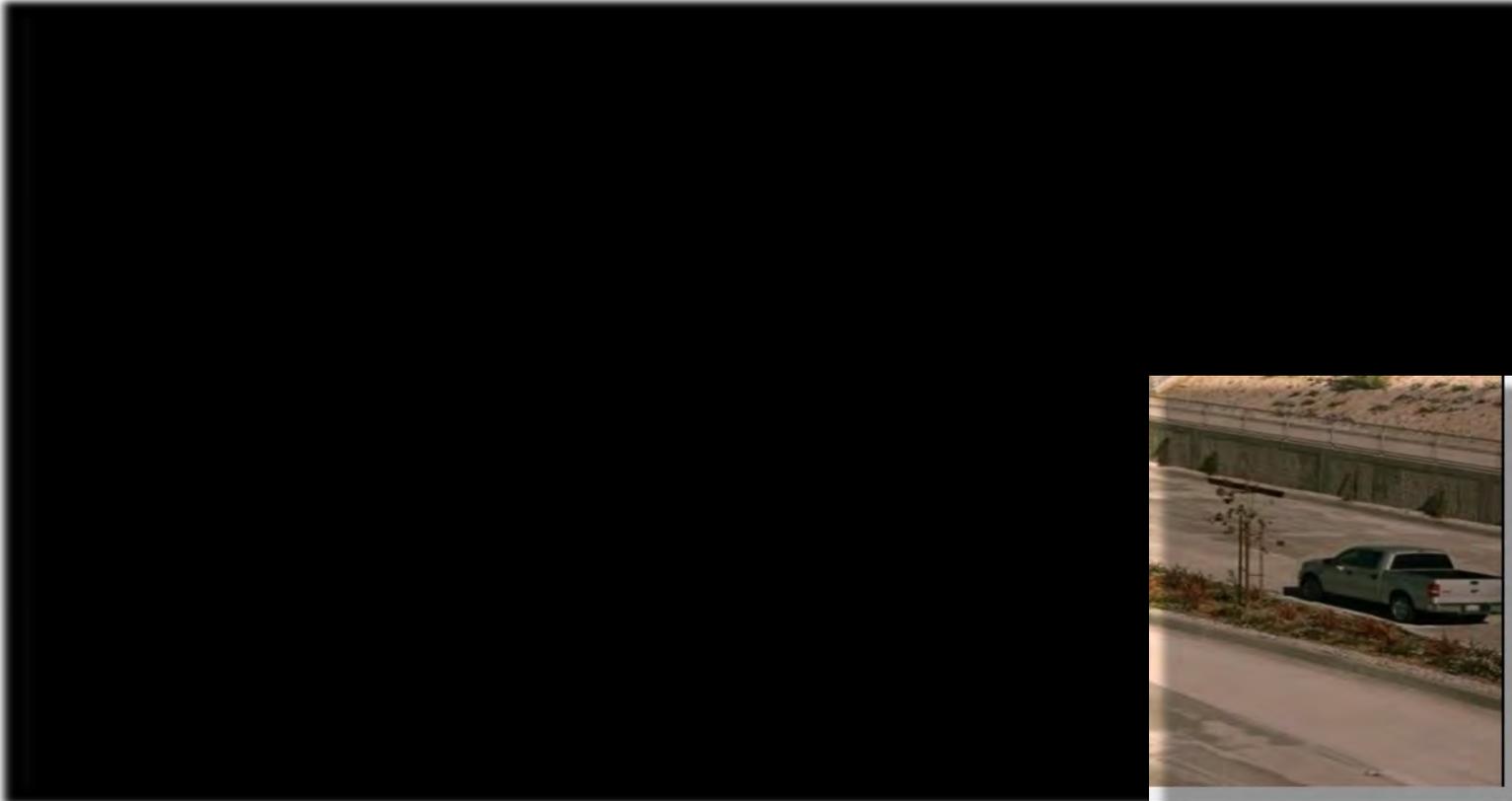
Start: Early 2020
 Cost: \$175.5 million
 SB 1: \$44 million
 Project: Widen 4 lane expressway to 8 lane freeway

- SR71 - Mission Boulevard to State Route 60 (Segment 1)
- SR71 - Interstate 10 Freeway to Mission Boulevard (Segment 2)





ALAMEDA CORRIDOR-EAST PROJECTS





Montebello Boulevard Grade Separation



Start: Early 2021

Cost: \$128.6 million

SB 1: \$49 million

Trains: 49 per day

V-H Delay: 53.6 hrs/day



Turnbull Canyon Road Grade Separation



Start: late 2020
Cost: \$86.2 million
SB 1: \$29 million
Trains: 49 per day
V-H Delay: 17.3 hrs/day



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

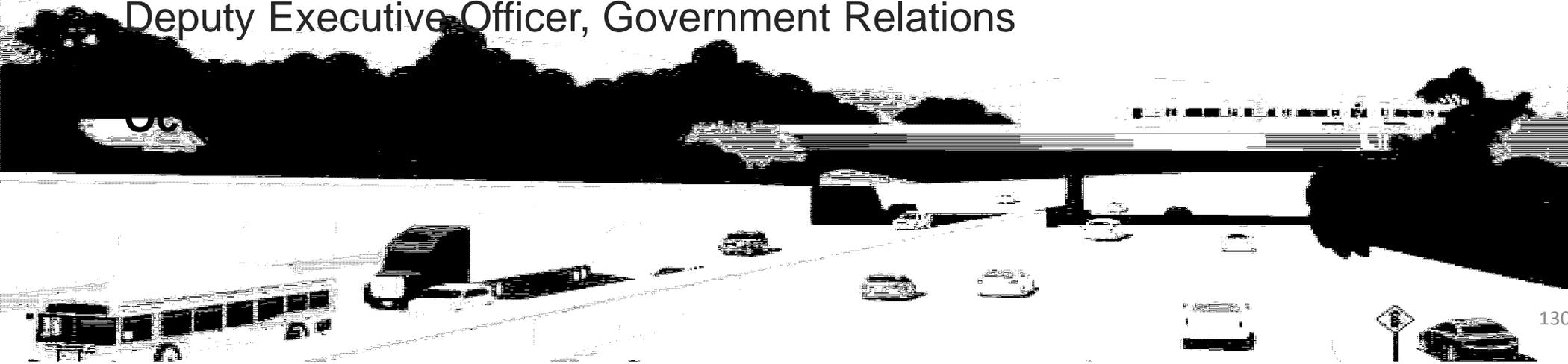
Rancho Cucamonga
City Council Chambers
Thursday, October 11

YOUR STATE TRANSPORTATION DOLLARS AT WORK.

SB 1 FUNDING OVERVIEW

Michael Turner

Deputy Executive Officer, Government Relations



What is SB 1?

- SB 1 is a long-term transportation reform and funding package that contains new revenues to make road safety improvements, fill potholes and repair local streets, expand public transit, improve highways, and build bridges and overpasses.
- SB 1 provides \$5.2 billion statewide to fund transportation improvements through
 - Increases in that state excise tax on gasoline (12 cents per gallon)
 - Increases in the state sales and excise tax on diesel fuel
 - Vehicle registration fees, including zero-emission vehicles

How State Transportation Funds are rebuilding LA County

- LA County will receive about \$1 billion per year in new transportation funding from state gas taxes and fees authorized by SB 1.
- Assuming this funding stays in place, this money will help Metro and your cities to fund its priority transportation projects.
- The gas tax is the state's multi-billion dollar commitment to fund vital transportation improvements.



How does SB 1 Impact LA County?

- A portion of SB 1 funding goes directly to cities for your priority public works and transportation projects.
- \$1.72 billion of SB 1 funding is helping Metro:
 - Deliver Measure M projects
 - Expand public transit
 - Reduce congestion
 - Improve air quality

...for the 10 million residents of LA County.

Your transportation taxes are already at work across LA County

- SB 1 is helping:
 - To provide consistent constitutionally-protected annual funding levels
 - Accelerate Measure M transit and highway projects
 - Improve local streets, roads and sidewalks
 - Deliver high-priority goods movement projects
 - Invest state gas tax funds at the local level

Why would the funding go away?

- Proposition 6 on the November 2018 General Election ballot would eliminate these recently enacted gas taxes and fees that are the source of transportation funding, if passed by voters.

How is SB 1 Impacting Municipalities

To fix local streets and roads, LA County's 88 cities and unincorporated areas will receive

\$272 MILLION EACH YEAR.

This funding comes from various sources that will drop by about 50 percent if the SB 1 gas tax funding does not stay in place.

SB 1 is... Expanding Transit

- Bringing Light Rail to the San Fernando Valley
- Delivering the West Santa Ana Branch Transit project
- Extending the Metro Green Line to Torrance
- Connecting North Hollywood to Pasadena with New BRT
- Studying BRT on Vermont Blvd. from Hollywood to South Bay
- Extending the Metro Gold Line from Azusa to Montclair





#	PROGRAM OF F
10	Gold Line Foothill Extension to M
5	East San Fernan Transit Corr
11	West Santa Ana l Transit Corr
12	Green Line Light Ra to Torranc
13	Orange/Red Line to C Rapid Transit Conne Hollywood to Pa
14	Vermont Transit

SB 1 FUNDING AWARD
\$1,076,500,000
\$5,000,000
\$1,081,500,000

SB 1 is... Fixing Potholes

- Annual funding that goes directly to cities and unincorporated areas to fix local streets, sidewalks and fill potholes.
- Safer streets for pedestrians and bikes



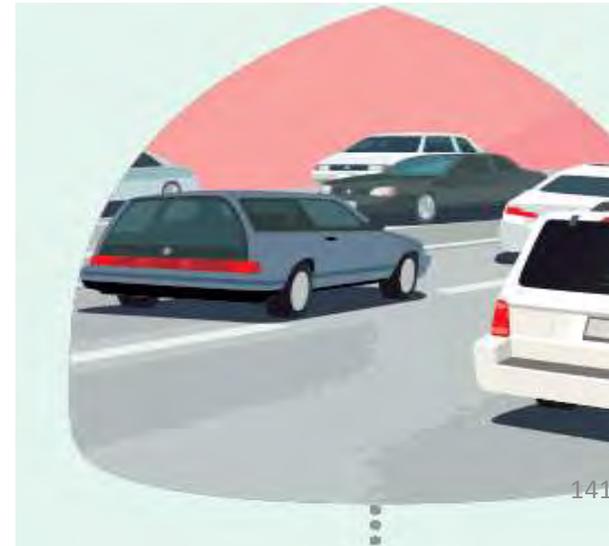
SB 1 is... Improving Highways

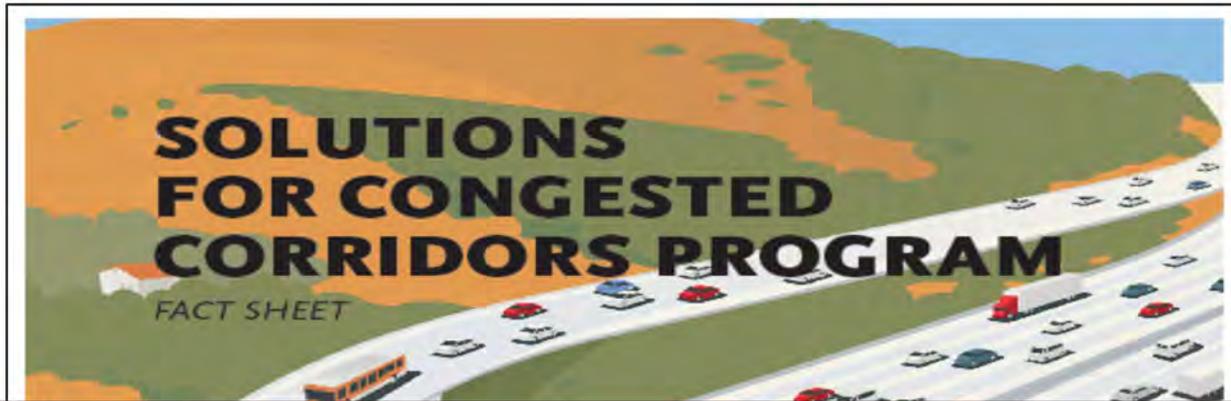
- Caltrans will be completing major highway infrastructure upgrades around the state.
 - Easing congestion
 - Safer interchanges
 - More sound walls
 - Bridge upgrades



SB 1 is... Easing Congestion

- Building the Airport Metro Connector
- Fixing chokepoints on the I-5 North
- Building the State Route 71 Freeway conversion
- Making the Metro Orange Line safer and faster





PROGRAM	MAP #	PROJECTS	TOTAL PROJECT COST	FUNDING LEVERAGED BY SB 1	SB 1 FUNDING AWARD
Solutions for Congested Corridors Program (\$1 billion)	1	Airport Metro Connector 96th Street Transit Station Project	\$525,200,000	\$375,200,000	\$150,000,000
	5	East San Fernando Valley Transit Corridor	\$1,563,000,000	\$1,263,000,000	FUNDED IN TIR
	2	Metro Orange Line Bus Rapid Transit Improvements Project	\$320,000,000	\$240,000,000	FUNDED IN LPI
	6	Interstate 5 Golden State Chokepoint Relief Project	\$539,200,000	\$292,200,000	FUNDED IN TCE
			\$2,947,400,000	\$2,170,400,000	\$150,000,000



SB 1 is... Investing in Goods Movement

- Building cleaner freight corridors
- Increasing efficiency and access to the Ports of Los Angeles and Long Beach
- Supporting the nation's busiest trade corridors
- America's Global Freight Gateway Project
- Building the I-605/SR-91 Interchange Improvements project



TRADE CORRIDOR ENHANCEMENT PROGRAM

FACT SHEET



SENATE BILL 1 FUNDING FOR LOS ANGELES COUNTY
JANUARY 2018

PROGRAM	MAP
Trade Corridor Enhancement Program (\$1.34 billion)	7
	6
	8
	9
	3

	SB 1 FUNDING AWARD
	\$22,000,000
	\$247,000,000
	\$128,600,000
	\$32,000,000
	\$44,000,000
	\$473,600,000

SB 1 is... Clean Air

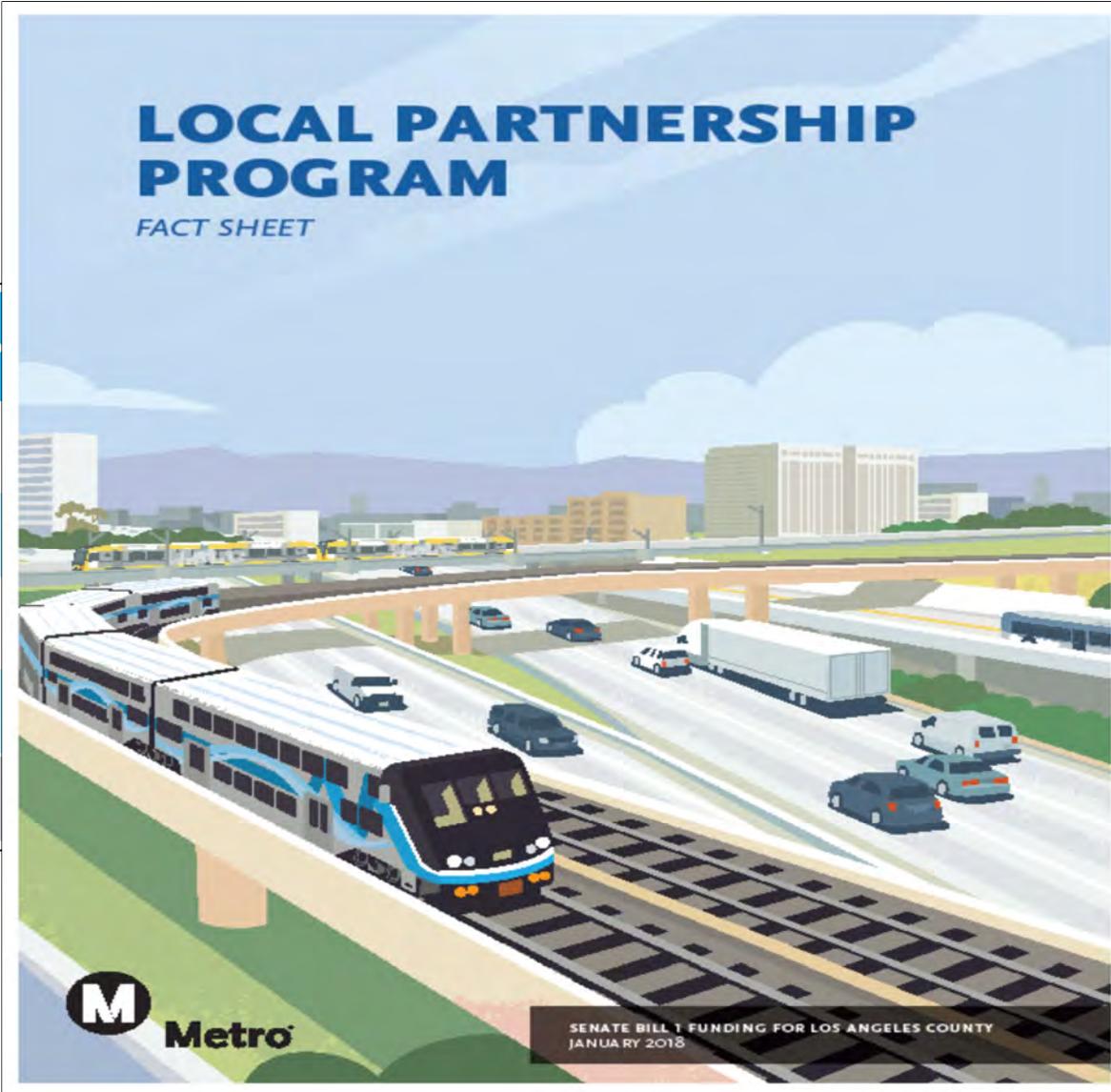
- More electric buses for the Metro Orange Line
- Reducing Greenhouse Gas Emissions
- Reducing traffic and easing congestion for a smoother commute
- Active Transportation Projects to make it easier to walk, bike or “scoot” to rail and bus stations



LOCAL PARTNERSHIP PROGRAM

FACT SHEET

PROGRAM	MAP
Local Partnership Program (\$300 million)	1
	2
	3
	4



FUNDING ALLOTTED BY SB 1	SB 1 FUNDING AWARD
100,000,000	FUNDED IN SC
100,000,000	\$75,000,000
100,000,000	FUNDED IN TCF
100,000,000	\$5,000,000
100,000,000	\$80,000,000

Questions?

- Visit www.metro.net/SB1 for up-to-date fact sheets and information on SB 1.
- Cities and COGs should visit the [League of California Cities](#) and [Rebuilding California](#) websites for specific local streets and roads funding information and resources.



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Rancho Cucamonga
City Council Chambers
Thursday, October 11



Proposition Potential Impact in San Bernardino County

Andrea Zurek
Director of Fund Administration

Select Committee
Regional Transportation Solutions
October 11, 2011



cta

San Bernardino County
Transportation Authority

Guaranteed Annual Apportionments



m

M



Fiscal Year 2017/2018



Fiscal Year 2018/2019

- 101 projects identified for improvement
- \$21M received
- 50% increase over same period

- 111 projects identified for improvement
- \$59M estimated to be received
- 77% increase



**Local Partnership
Program**
\$100M annually



**Trade Corridor
Enhancement
Program**
\$300M annually



**Solutions for
Congested
Corridors Program**
\$250M annually



**Transit and Intercity
Rail Capital
Program**
\$250M annually



**Active
Transportation
Program**
\$100M annually



**Local Planning
Grants**
\$25M annually



Competitive Opportunities

**Local Partnership
Program**
\$100M annually

\$26.9M

**Trade Corridor
Enhancement
Program**
\$300M annually

\$202.1M

**Solutions for
Congested
Corridors Program**
\$250M annually

\$65.0M

\$71.0M+

**Transit and Intercity
Rail Capital
Program**
\$250M annually

\$12.6M

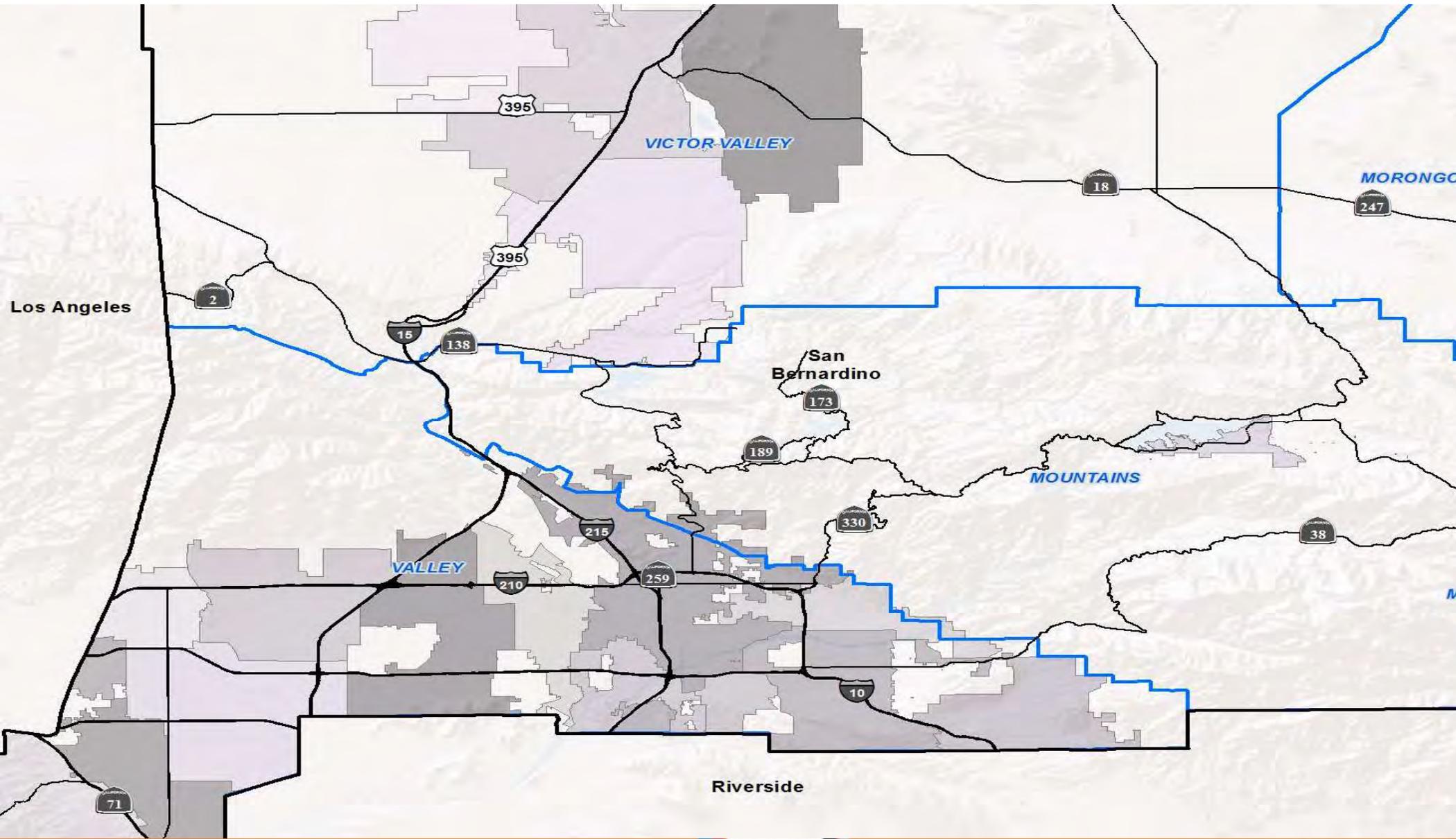
**Active
Transportation
Program**
\$100M annually

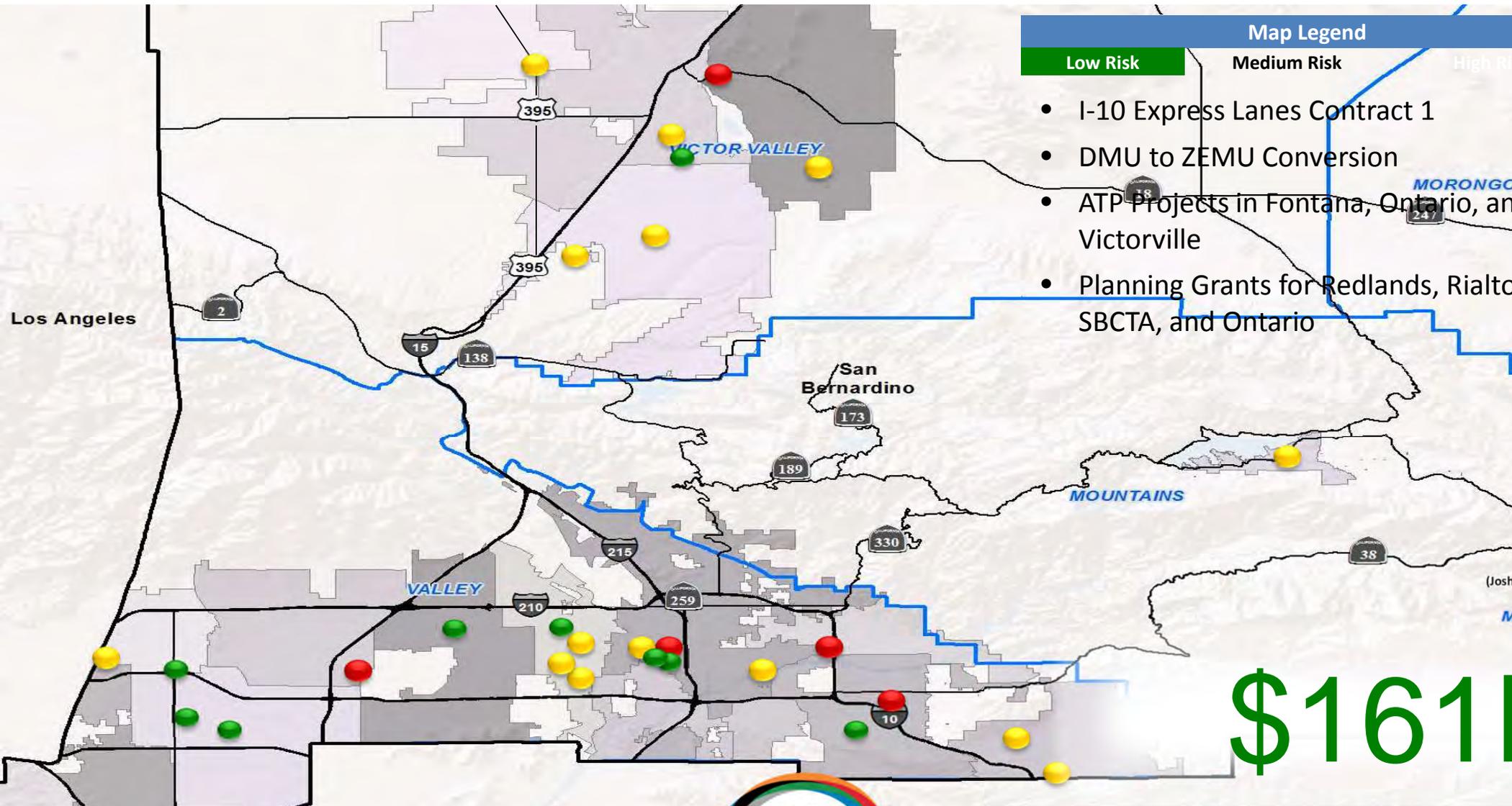
\$3.1M

**Local Planning
Grants**
\$25M annually



Competitive Awards to Date





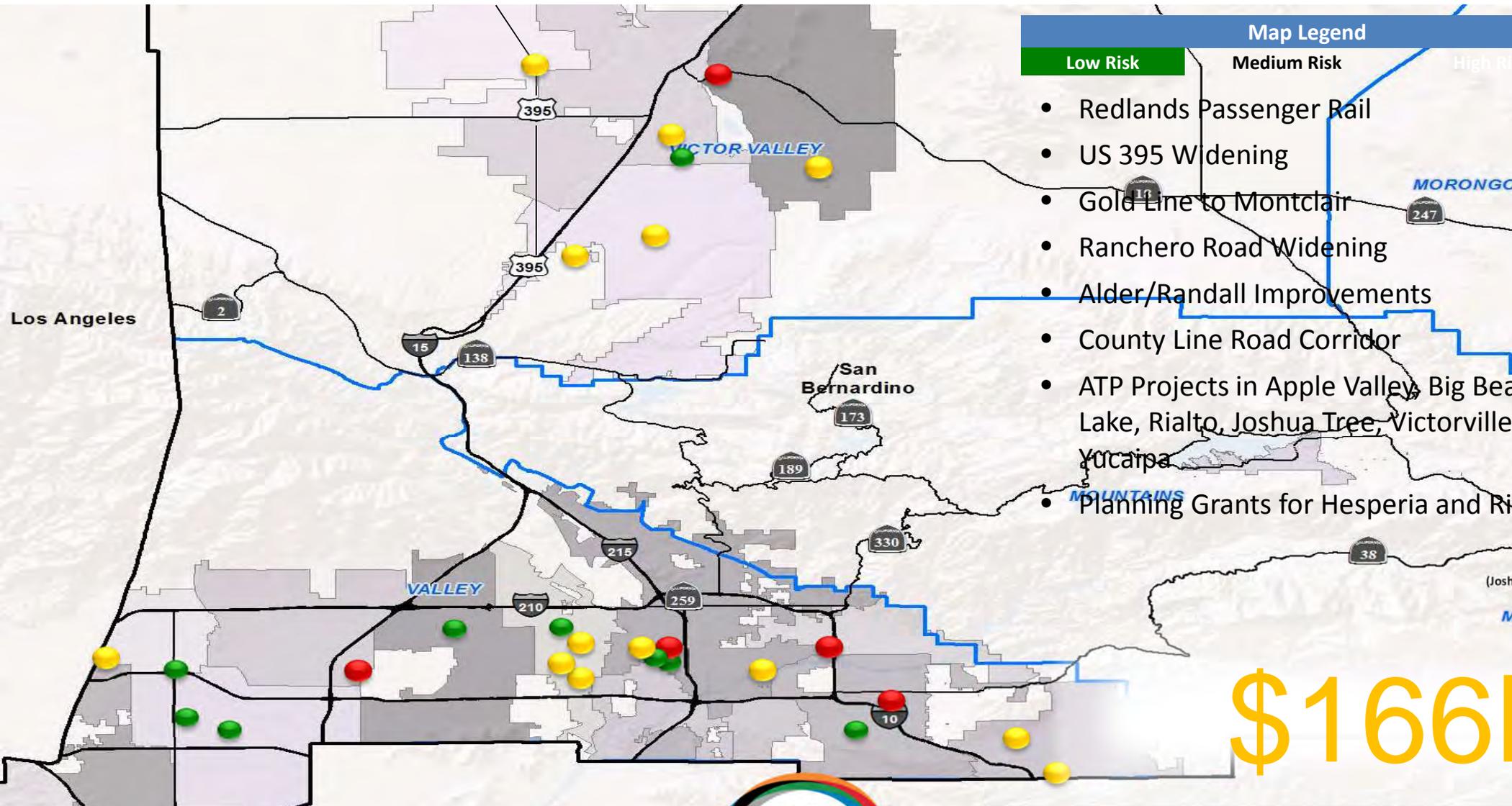
Map Legend

- | Low Risk | Medium Risk | High Risk |
|--|-------------|-----------|
| <ul style="list-style-type: none"> • I-10 Express Lanes Contract 1 • DMU to ZEMU Conversion • ATP Projects in Fontana, Ontario, and Victorville • Planning Grants for Redlands, Rialto, SBCTA, and Ontario | | |

\$161M



“Low Risk” Projects

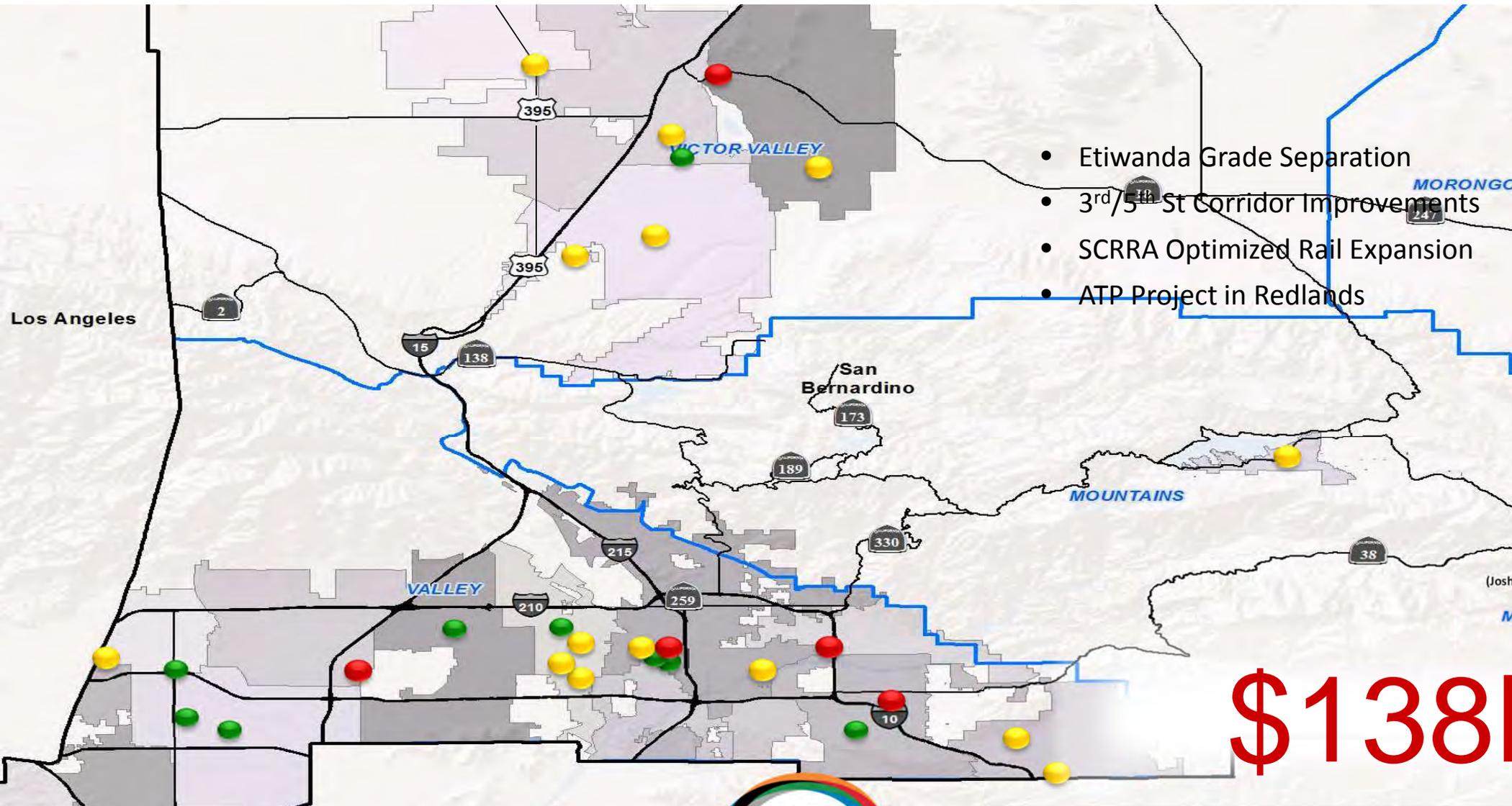


- Map Legend**
- Low Risk**
 - Medium Risk**
 - High Risk**
- Redlands Passenger Rail
 - US 395 Widening
 - Gold Line to Montclair
 - Rancho Road Widening
 - Alder/Randall Improvements
 - County Line Road Corridor
 - ATP Projects in Apple Valley, Big Bear Lake, Rialto, Joshua Tree, Victorville, Yucaipa
 - Planning Grants for Hesperia and Rialto

\$166B



“Medium Risk” Projects



- Etiwanda Grade Separation
- 3rd/5th St Corridor Improvements
- SCRRA Optimized Rail Expansion
- ATP Project in Redlands

\$138



“High Risk” Projects

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San Bernardino County
Transportation Authority



Select Committee on Regional Transportation Solutions
Assemblymember Chris Holden, Chair

Securing Transportation Growth Opportunities

Rancho Cucamonga
City Council Chambers
Thursday, October 11