

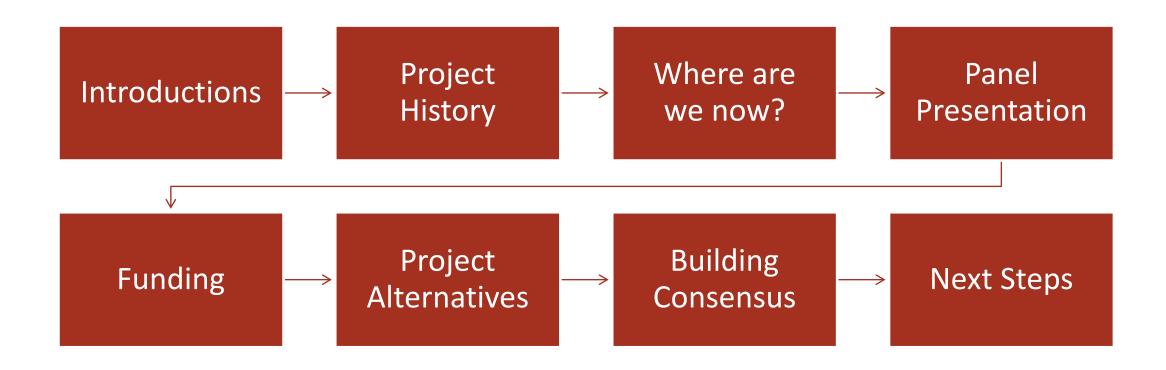
Highway 25 Workshop

JANUARY 31, 2024





Agenda



Introductions and Review of Day

Eileen Goodwin

Apex Strategies

Project History

Binu Abraham

Executive Director

Council of San Benito County Governments



Brandy Rider

Deputy District Director

Caltrans District 5

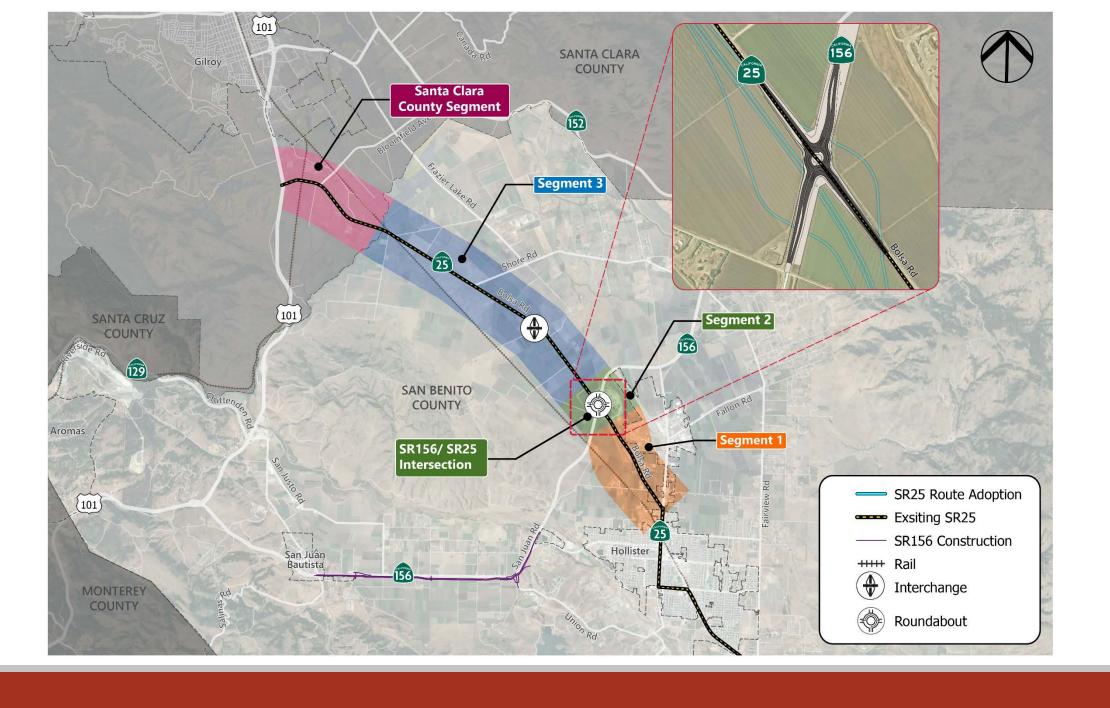


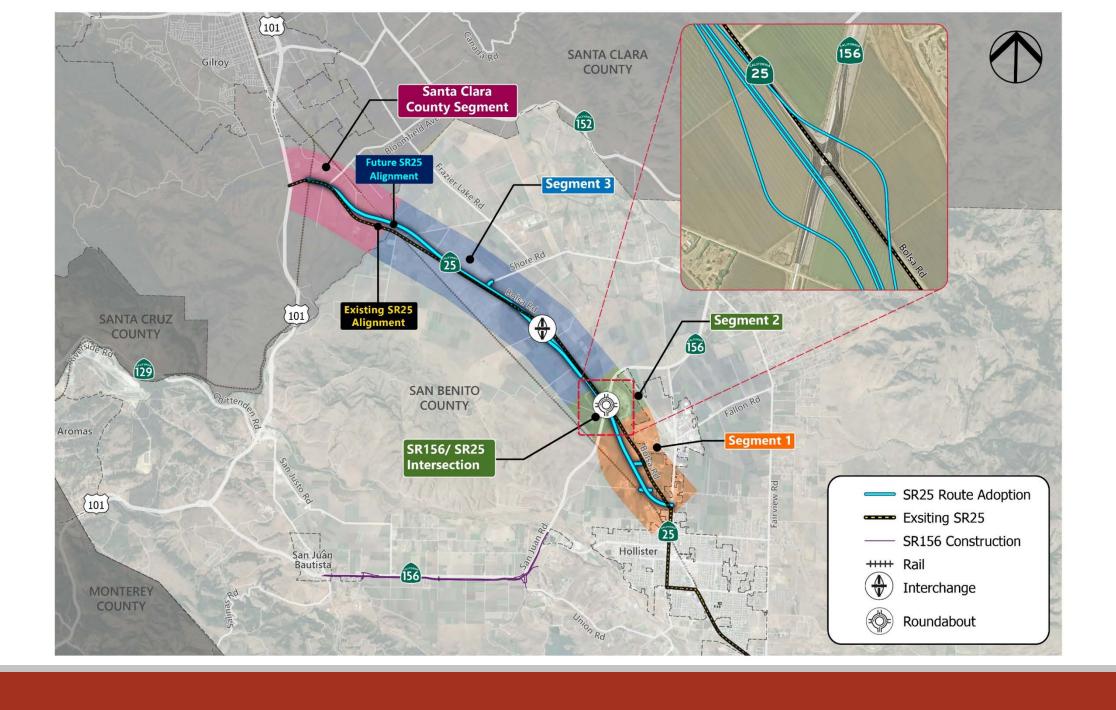
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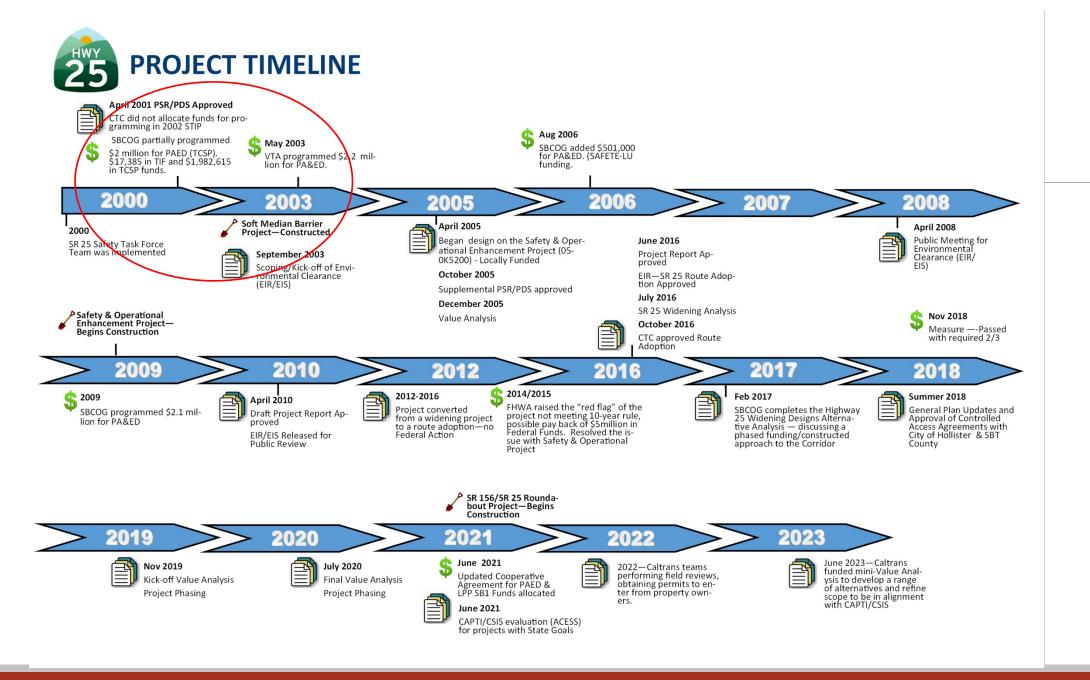


Corridor History

Why did we begin?

Highway Safety Corridor Task Force kicked off in 2000

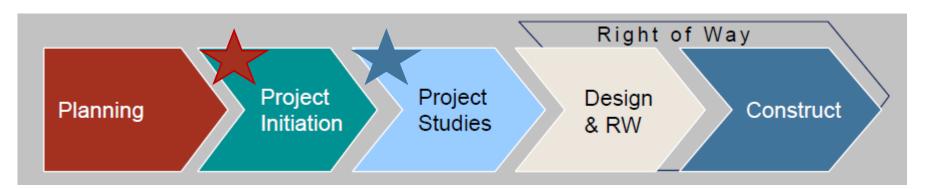
- "Stay Alive on 25" campaign began
- Projects Constructed between 2000-2004
 - Rumble Strips Project (2000)
 - Ground-In Rumble Strip with, 2-foot soft barrier (2001)
 - 4-foot soft barrier, rumble strip, highly reflective striping, shoulder widening and channelization at Flynn Road (2002)
 - 4- foot soft barrier, shoulder widening, drainage improvements and channelization at Bloomfield Road (2004)





Securing Funds - Project Begins

2000 Project Initiation Document kicked off and completed in 2001.



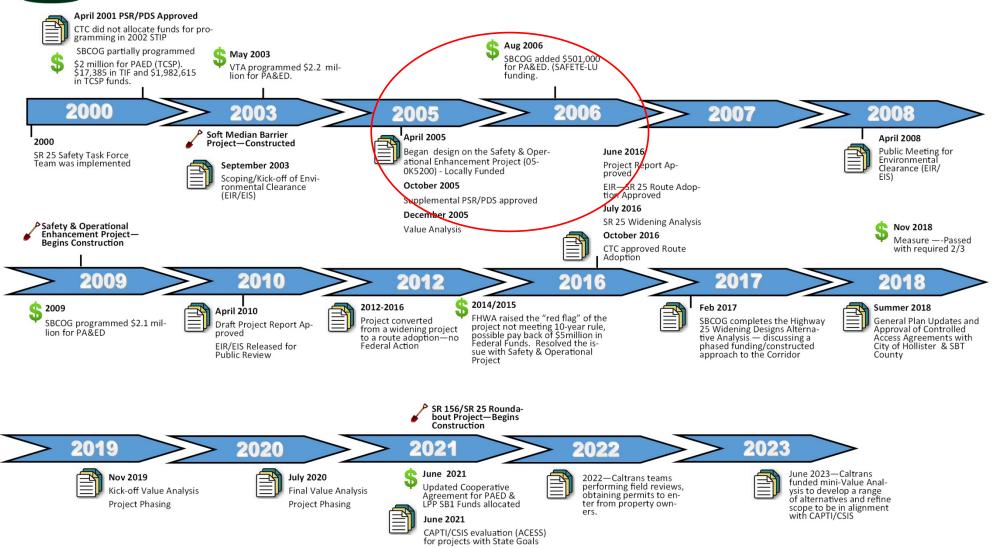
In 2001 the Project Approval & Environmental Document Phase begins.

- 2001, SBCOG received \$2M
- 2003, Santa Clara Valley Transportation Authority, partners on project contributing \$2.2M for PAED





PROJECT TIMELINE

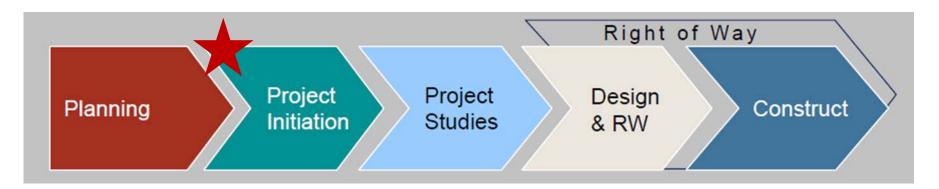




Project Study Report Completed, Funds Programmed



2005 a Supplemental Project Study Report completed

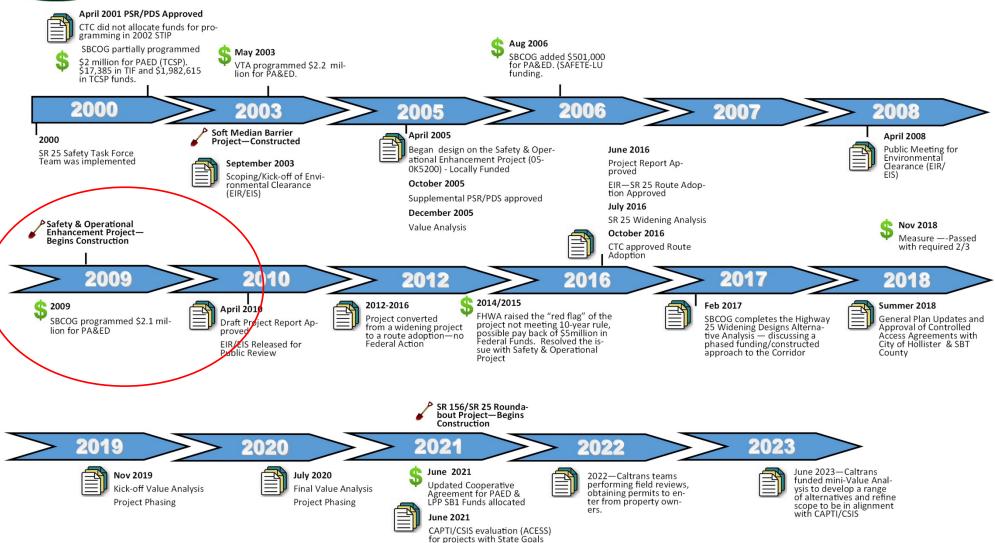


The Mobility Partnership established





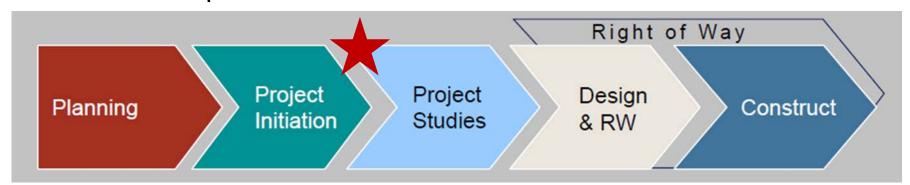
PROJECT TIMELINE





Project Environmental & Design Begin

2008, Caltrans & SBCOG hosted a public scoping meeting to kick off the environmental process.



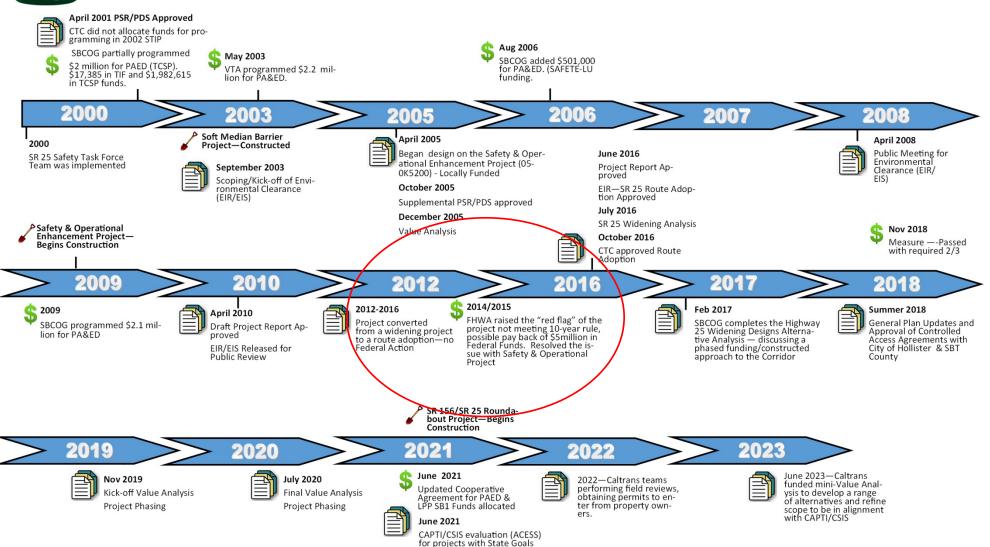
- 2009, SR 25 Safety Project constructed, \$12.5M received
- 2010, The Draft Project Report & Draft EIR/EIS was released to the public for comment.





SR 25 Safety Enhancement Project – Constructed 2009

PROJECT TIMELINE





Project Does Not Meet Federally Constrained Criteria

• 2012, project future funding unclear, project not included in a constrained Regional Transportation Plan.

What does this mean?

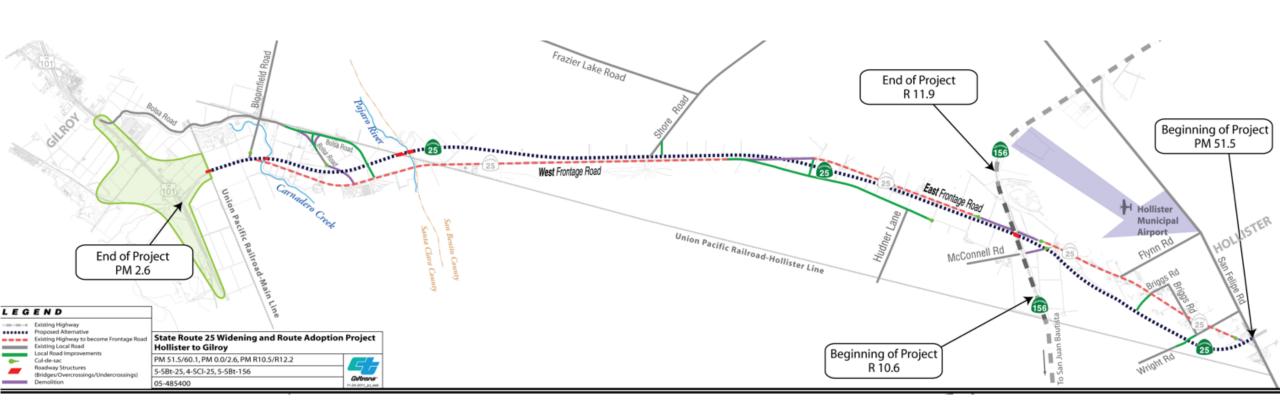
What actions were taken to address the lack of funding?

- 2016, the Final EIR was revised & completed as a Route Adoption approved
 CTC*
- 2018, County & City of Hollister adopt the Route and incorporate in the local General Plans

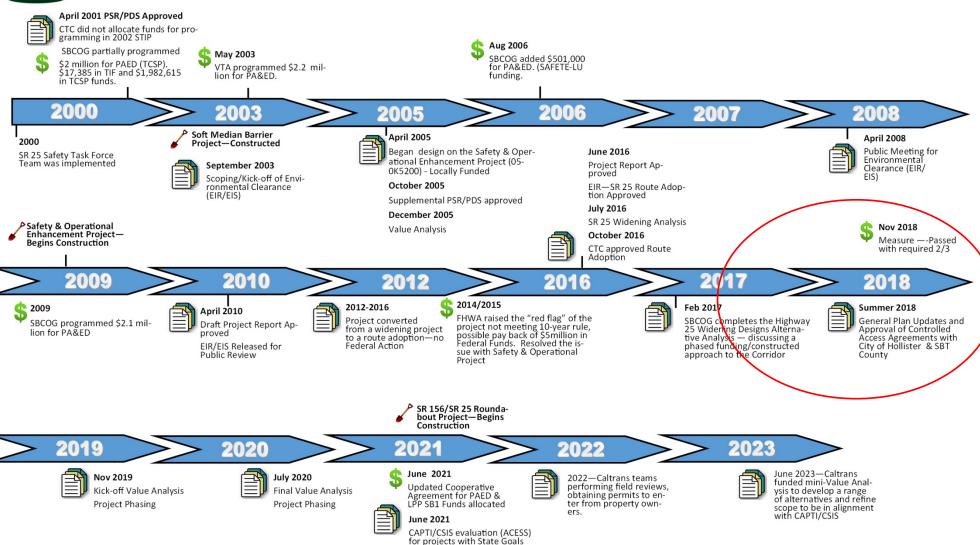




Route Adoption Alignment



PROJECT TIMELINE





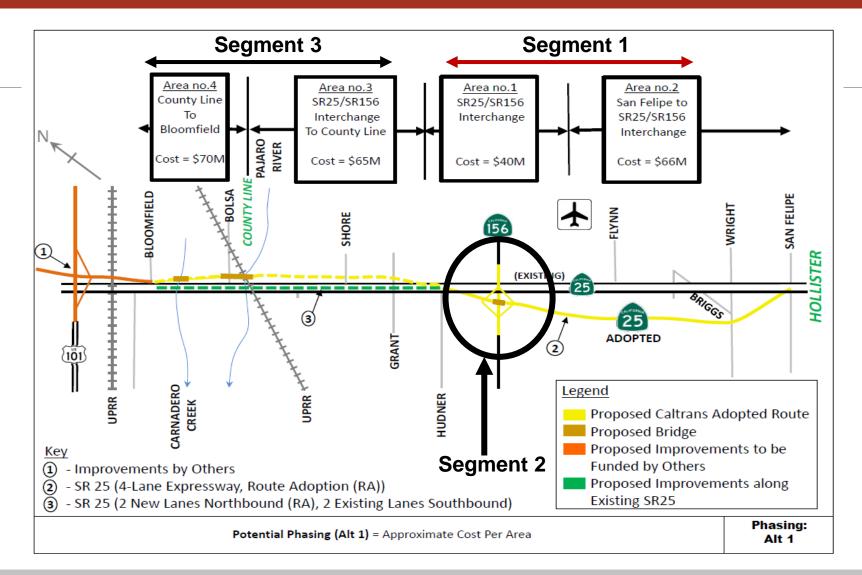
Measure G Passes

- 2018, Measure G passes
 Project now meets the federally constrained criteria
- 2019, Caltrans and SBCOG develop agreements to reinitiate the project
- 2020, a Value Analysis Study is completed focusing on project segments and feasibility of phasing the project for anticipated funding





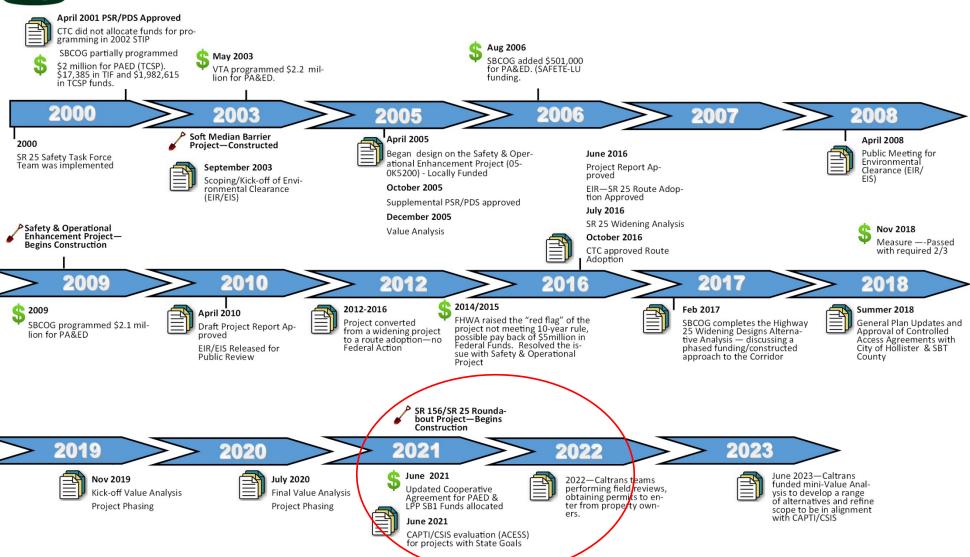
2020 Value Analysis Results







PROJECT TIMELINE





Alignment with State Funding Framework

- 2020/2021 Funding is secured for the Project Approval & Environmental Document phase of the project (PAED)
- 2021 --- Statewide funding programs were transitioning alignment to CAPTI. SR 25 was evaluated for CAPTI compliance
- 2022 Project ranked not in alignment with statewide CAPTI goals.
- 2023 --- Value Analysis Study was done to bring project into CAPTI alignment.

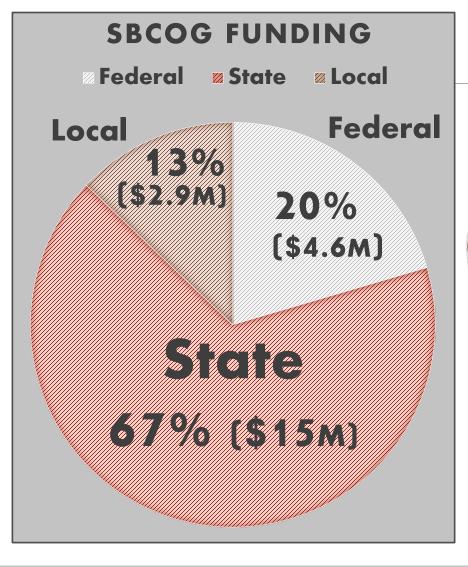




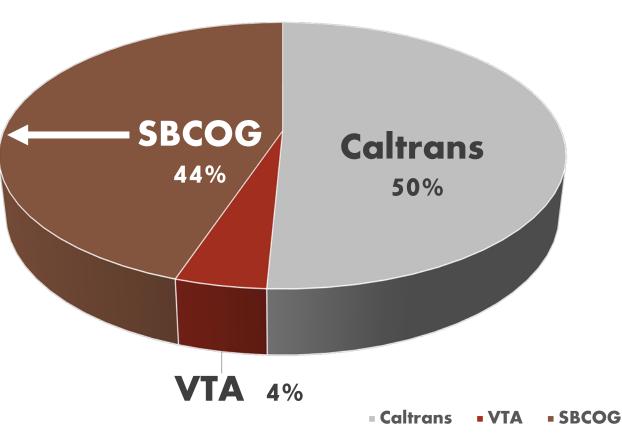
Year	Allocation	Funding Agency	Fund Source	Expenditures	Deliverables
Environmental Document/Design – FEIR for Route Adoption					
2001	\$2M	San Benito COG	TCSP (federal – 1.98M & 17K local match)		Environmental Doc & Alternative Design
2003	\$2.2M	Santa Clara VTA	VTA Local		Environmental Doc & Alternative Design
	\$365K	San Benito COG	SBCOG Local		Environmental Doc & Alternative Design
2006 2009	\$501K \$2.1M	San Benito COG	Federal DEMO		Environmental Doc & Route Adoption
Sub-Total	\$7.2*M			\$7.1M	*approximately 45K to be returned to SBCOG
Environmental Document/Design – Segment 1					
2021	\$2.5M	San Benito COG	SB-1 LPP (state)	\$1.4M	Environmental Doc & Alternative Design
2021	\$2.5M	San Benito COG	Measure G		Environmental Doc & Alternative Design
Sub-Total	\$5M			\$1.4M	
Expenditures for Safety Improvement Projects Constructed in Corridor					
2001	\$10.8M	Caltrans	SHOPP	\$10.8M	SR 25 Soft Median Barrier Project
2009	\$12.5M	San Benito COG	RIP	\$12.5M	SR 25 Safety Enhancement Project
2021	\$14.6M	Caltrans	SHOPP	\$14.6M	SR 25/SR 156 Roundabout Project
Sub-Total	\$37.9M			\$37.9M	
TOTAL	\$50.1M			\$46.4M	

Corridor Investments

Corridor Investments by Agency







Current & Future Challenges

Binu Abraham

Executive Director

Council of San Benito County Governments



Scott Eades

District Director

Caltrans District 5



Where we are now?

Regional Needs

State Goals

- Regional Growth (18.4%)
- Employment / Housing Imbalance
- Housing
- CAPTI
- SB 743

Funding Needs

Panel Presentation: CAPTI / SB 743

Eric Sundquist

Acting Deputy Director

Caltrans Director's Office
of Equity Sustainability &

Tribal Affairs

Scott Eades

Director

Caltrans District 5

Sasha Dansky
PE Principal

Mark Thomas & Co.







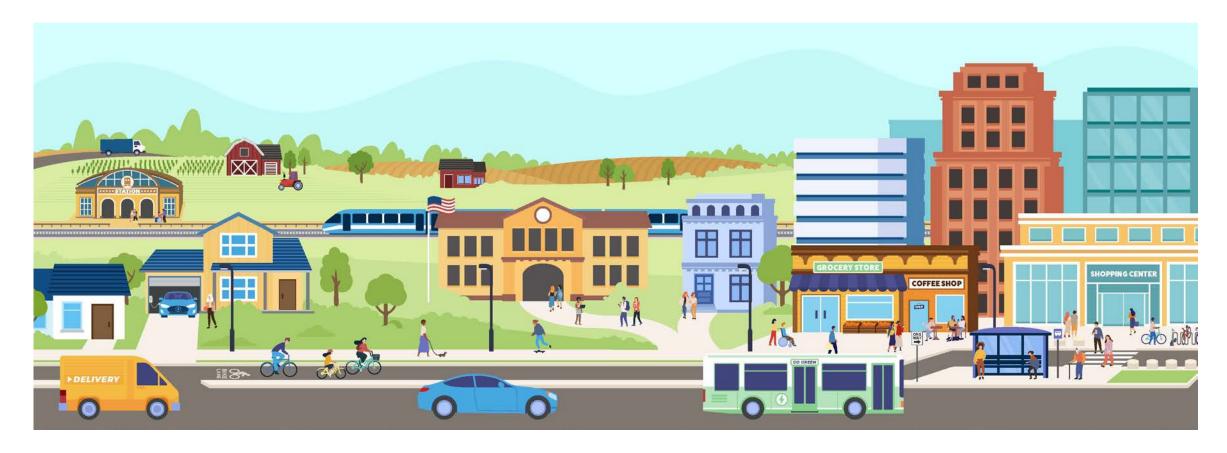
Eric Sundquist

Acting Deputy Director

Caltrans Director's Office of Equity

Sustainability & Tribal Affairs



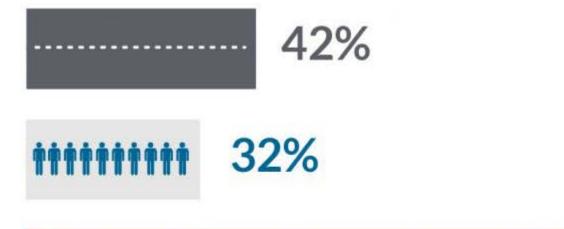


Transportation demand policy

Eric Sundquist Deputy Director for Equity, Sustainability, and Tribal Affairs Jan. 31, 2024 San Benito COG

Old paradigm: Increase supply

From 1993 to 2017, lane-miles grew faster than population in the biggest urbanized areas, yet congestion grew.

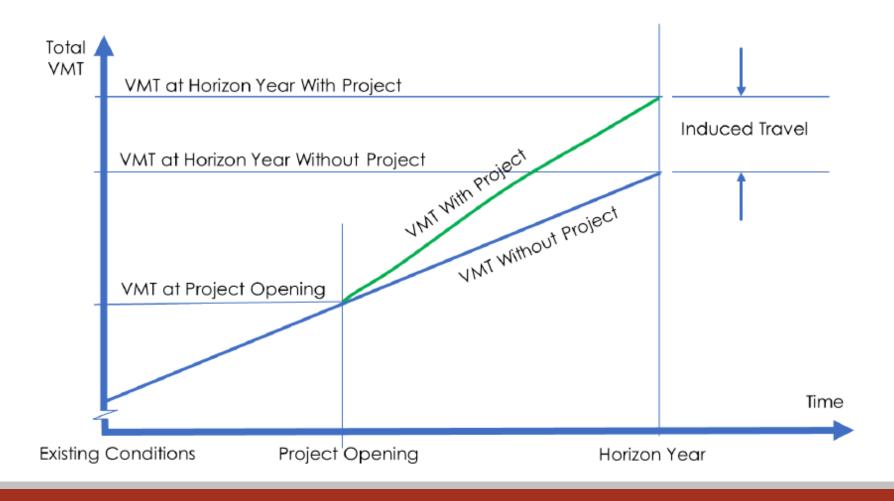




Change in freeway lane-miles, population growth, and annual hours of delay in largest 100 urbanized areas from 1993-2017. Delay = extra time spent traveling at congested rather than free-flow speeds.

Source: Transportation for America from FHWA and Texas Transportation Institute

New paradigm: Consider demand



Induced travel

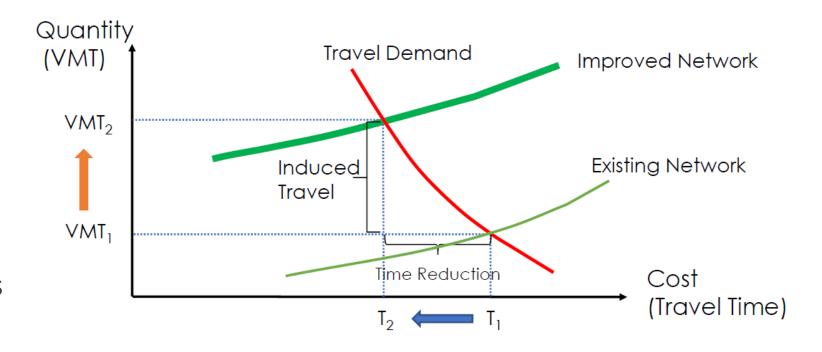
Galtrans .



THE IMPACT OF INDUCED TRAVEL

Induced travel: Factors

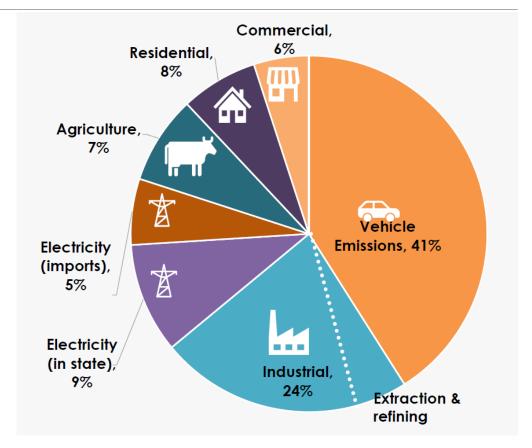
- Longer trips
- More trips
- Change in mode choice
- Route changes
- Land use changes



Induced travel: Outcomes

- Congestion
- Crashes
- Emissions
- Land consumption
- Less transportation choice
- Personal transportation costs
- Maintenance and operational costs
- Heat island
- Stormwater runoff
- Noise

See <u>SB 743 at 10: The Environmental Effects of Traffic |</u>
<u>Caltrans</u>



2021 California GHG emissions Source: CARB

CEQA*

- No longer counts slow traffic as an environmental impact
- Assesses induced traffic –
 measured in vehicle-miles traveled
 (VMT) as an impact
- Rule of thumb: For every 1 percent of new lane-miles, we induce 1 percent more VMT
- CEQA requires mitigation of impacts to the extent feasible
- Price tags for such mitigation have ranged up to \$400+ million per project to date

Results

28.6 million additional VMT/year

(Vehicle Miles Travelled

In **2019**, **San Benito County** had **128.4 lane miles** of Caltrans-managed class 2 and 3 facilities on which **489 million million** vehicle miles are travelled per year.

A project adding 10 lane miles would induce an additional 28.6 million vehicle miles travelled per year on average with a rough 95% confidence interval of 22.9 - 34.3 million VMT (+/-20%).

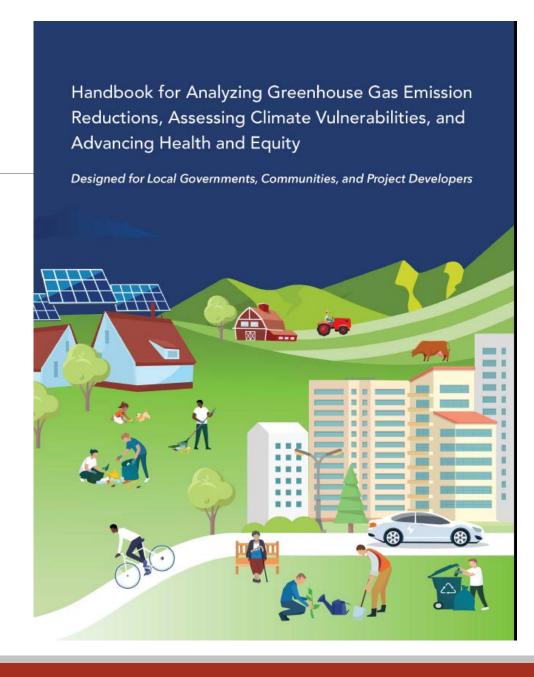
This calculation is using an elasticity of **0.75**.

Read more about this calculator

*California Environmental Quality Act as amended by SB 743 (2013)

CEQA Mitigation

- New or improved transit service
- New or improved active transportation facilities
- Transportation demand management
 - Discounted fares
 - Education and outreach
 - Ride matching
 - Guaranteed rides home
- Low VMT land use
- Pricing and other lane management



CAPTI*



Building towards an integrated, statewide rail and transit network



Investing in networks of safe and accessible bicycle and pedestrian infrastructure



Including investments in light, medium, and heavy-duty zero-emission-vehicle (ZEV) infrastructure

^{*}Climate Action Plan for Transportation Infrastructure

CAPTI



Strengthening our commitment to social and racial equity by reducing public health and economic harms and maximizing community benefits



Making safety improvements to reduce fatalities and severe injuries of all users towards zero



Assessing physical climate risk



Promoting projects that do not increase passenger vehicle travel



Promoting compact infill development while protecting residents and businesses from displacement



Protecting natural and working lands



Developing a zeroemission freight transportation system

Summary

- Conventional widenings are still being contemplated.
- However, they usually require expensive mitigations, which greatly add scope.
- As well they can be more difficult to fund than projects that are more CAPTI-aligned.
- In response some projects are rescoping to avoid or reduce VMT impacts
 - Truck-only lanes
 - Transit-only lanes
 - Operational improvements
- Other expansion projects are moving to pricing to both manage traffic and also generate revenues to cover mitigation over their decades-long lifecycle.

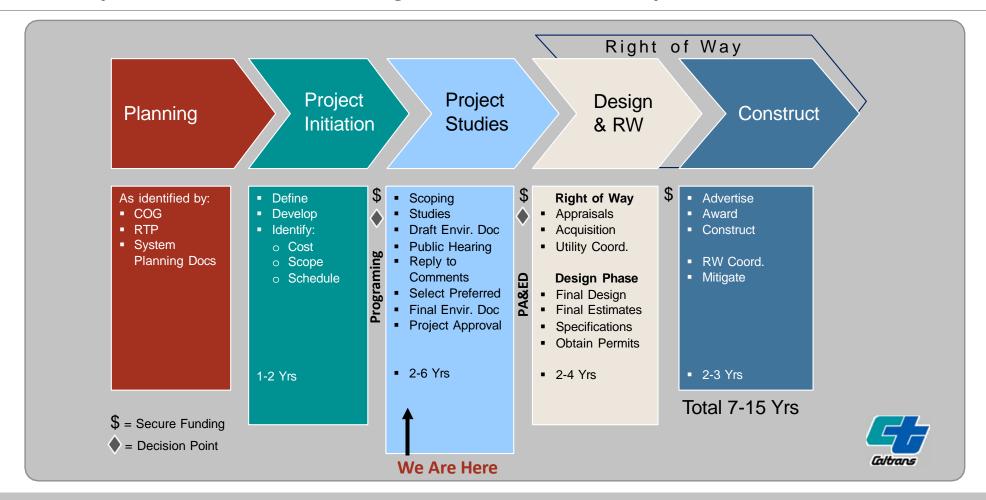
Scott Eades

Director

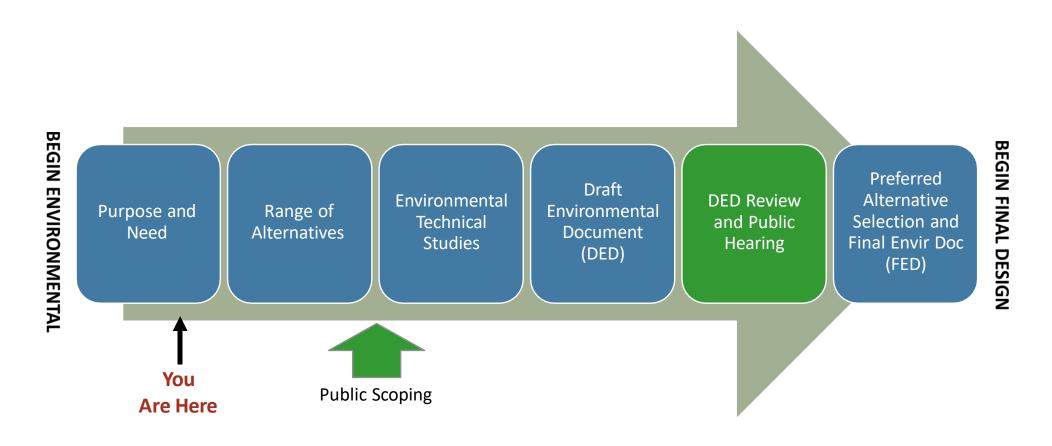
Caltrans District 5



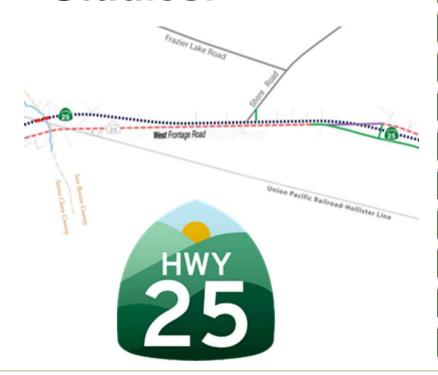
Transportation Project Development Process



Project Studies and Alternatives Analysis



Anticipated Environmental Studies:



Visual Impact Analysis

Air Quality

Noise

Water Quality

Hazardous Waste Investigations

Hydraulic / Floodplain

Paleontology

Biological and Wetland

Community Impact Assessment

Archeological and Historical Architectural

Farmland

Traffic and VMT

Cumulative Impacts









California Coastal Trail Enhancements





Interregional **Bus Service**



Carpooling -Vanpooling



SANTA







Santa Barbara U.S. 101 Multimodal Corridor





WWW.SBROADS.COM 805.845.5112

















PROJECT GOALS AND BENEFITS



Provide high quality transportation choices to reduce countywide VMT



Eliminate barriers to mobility created by the Highway 1 to reconnect the community



Reduce travel times and vehicle hours of delay along the Highway 1 corridor



Reduce mobile source emissions and improve air quality and public health



Increase transit frequency and on-time performance

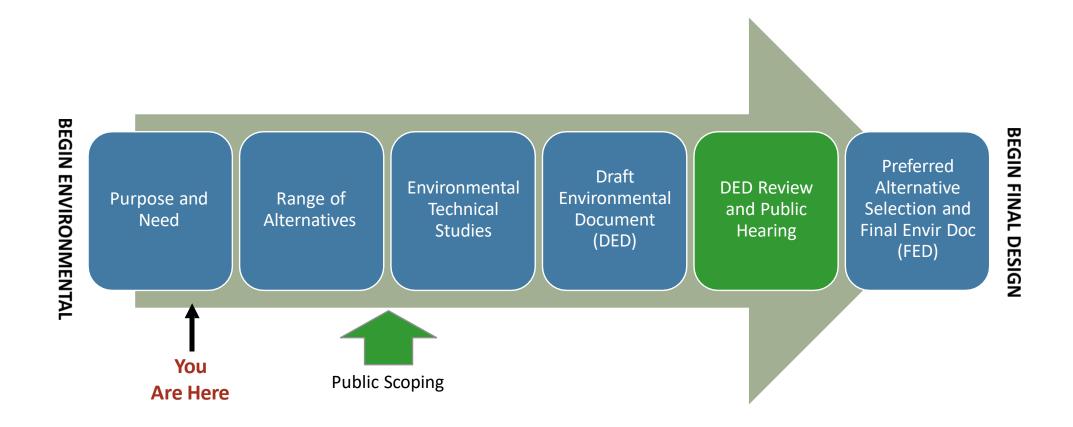


Advance equity through competitive, low-cost transportation alternatives serving disadvantaged communities, including more frequent bus service and improvements to complete streets facilities



Enhance safety and mobility for vehicles, transit, bicycles, and pedestrians

Project Studies and Alternatives Analysis



Sasha Dansky

PE, Principal

Mark Thomas and Co.



Components of Transportation Solutions

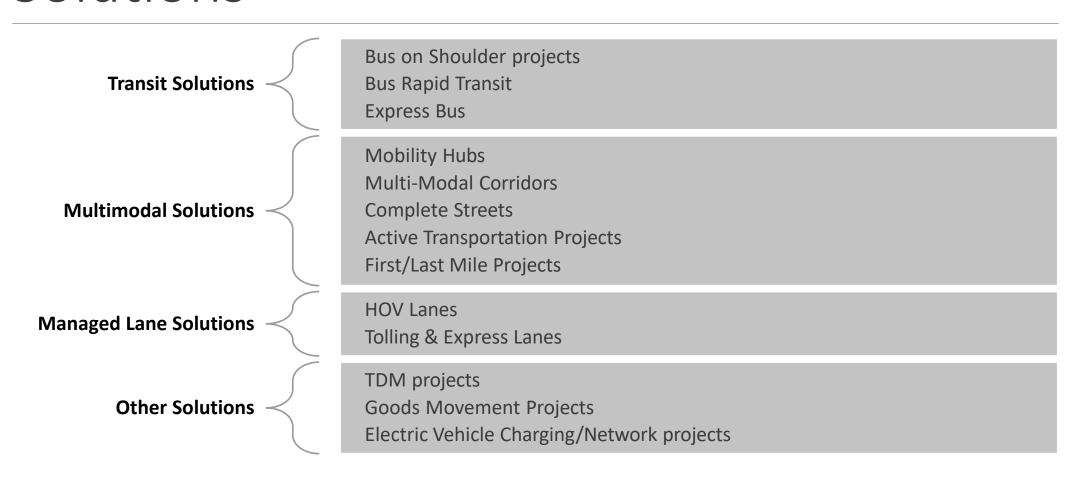
Transit Solutions

Multimodal Solutions

Managed
Lane Solutions

Other Solutions

Examples of Encouraged Transportation Solutions



Transit Solutions

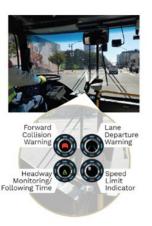
Bus on Shoulder

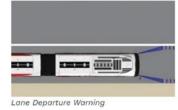
Buses utilize the shoulder lane of a roadway during peak hours

Alleviates congestion, reduces bus travel times, and improves bus travel time

reliability

















Blind Spot Warning



Example: Bus On Shoulder Pilot Project is a collaboration between SANDAG, Caltrans, and San Diego Metropolitan Transit Services (MTS) and incorporates advanced safety technology to provide service on select shoulders of I-805 and SR 94

Bus Rapid Transit (BRT) / Dedicated Transit Lanes

Buses operate in dedicated lanes or busways

Provides the efficiency and speed of a rail system with the flexibility and lower cost of bus services



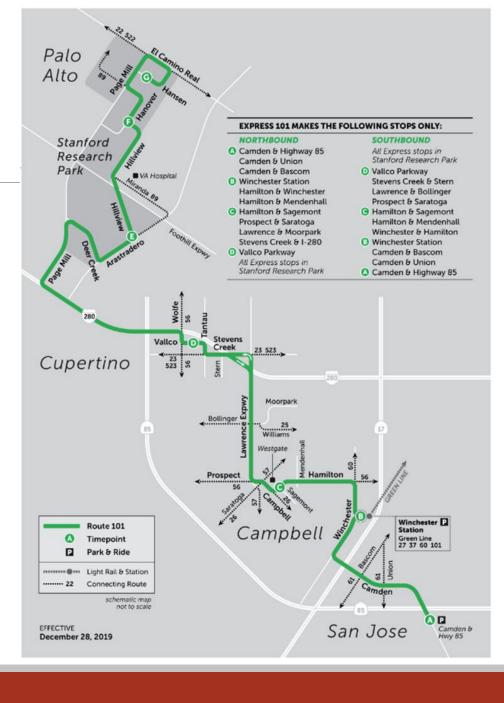
Example: Van Ness is a BRT corridor in San Francisco implemented by San Francisco Municipal Transportation Agency and opened in April 2022

Express Bus

Faster and more direct routes compared to typical bus services.

 Typically have limited stops to prioritize speed

Provide efficient bus transportation for longer-distance travel or corridors with high demand

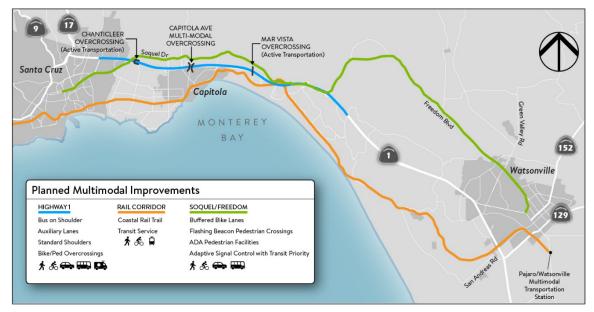


Multi-Modal Solutions

Multimodal Corridors

Data-driven transportation plans identifying multimodal project and program recommendations support

- Active transportation
- Air quality and public health
- Low income and disadvantaged communities
- Preservation of existing infrastructure
- Public safety and security
- GHG emission reductions and VMT
- System operations and congestion relief



Example: The Santa Cruz County Regional Transportation Commission has adopted a Comprehensive Multimodal Corridor Plan (CMCP) that includes projects along Highway 1, Soquel Drive/Freedom Boulevard, and the Santa Cruz Branch Line between Santa Cruz and Watsonville.

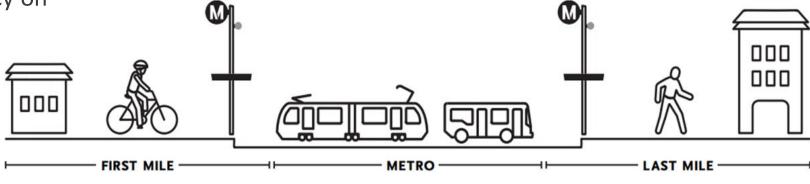
First / Last Mile

Focus on transportation challenges when traveling to or after using public transit services

Trips usually begin and end on foot

First/Last Mile planning can:

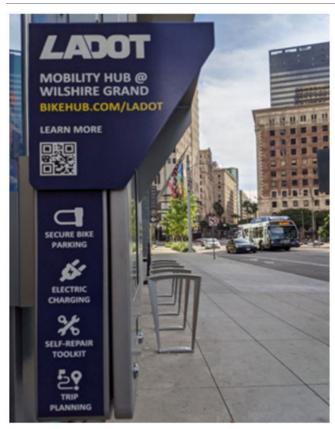
- Reduce dependency on private vehicles
- Strengthen transit
- Improve safety



YOUR TRIP

Example: In 2016, the LA Metro Board passed a motion to integrate first/last mile improvements as part of all new rail and bus rapid transit projects.

Mobility Hubs



A location that offers a variety of transportation options, amenities, or resources:

- Public transit
- Micromobility (bike or scooter share)
- Ride-Hailing and Rideshare
- EV Charging
- Package delivery lockers
- Co-working spaces
- Benches and green space
- Public art

Support multimodal connectivity and create vibrant community spaces

Example: The Wilshire Grand Mobility Hub is the first of a larger network of 97 mobility hubs being designed and implemented by LADOT to support transit services, electric vehicle charging, bike- and scooter-share, ridesharing, and delivery services.

Complete Streets

Create roadways that are safe, accessible, and accommodating for all users

Complete Streets projects may include:

- Bike facilities
- Pedestrian enhancements
- Transit enhancements
- Traffic calming measures (reduce vehicle speeds)
- Intersection improvements
- Accessibility upgrades
- Landscaping and streetscaping



Active Transportation

Promotes walking, cycling, and other forms of active-based mobility

Active transportation planning enhances:

- Safety
- Mobility
- Preservation of transportation infrastructure
- Social Equity

Example: Toward an active California, released in 2017, is Caltrans' first statewide plan for active modes of transportation



Managed Lane Solutions

High Occupancy Vehicle (HOV) Lanes



Lanes that are reserved for vehicles with a designated minimum number of occupants

Incentivize and prioritize the use of carpooling and help reduce congestion

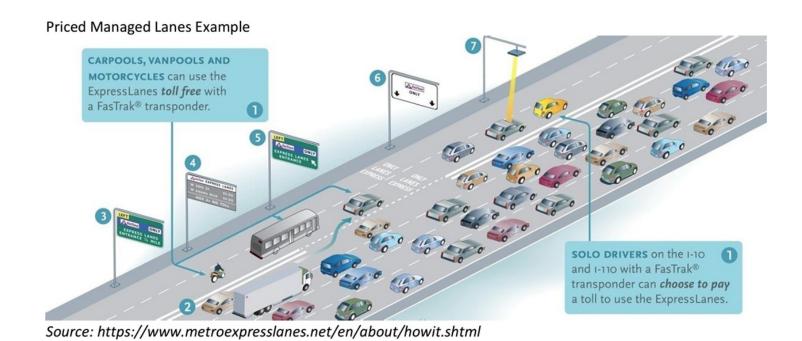
Toll and Managed Lanes

Toll Lanes

- Charge a fee to provide faster and more reliable travel
- Can reduce congestion and manage traffic flow

Managed Lanes

 Similar to toll lanes but may include other strategies to manage traffic flow like including high-occupancy vehicle, transit, or toll requirements



Other Solutions

Transportation Demand Management (TDM) Strategies

Manage and optimize transportation systems by:

- Reducing travel demand
- Promoting sustainable modes of transportation
- Improving overall transportation efficiency

Focus on shifting travel behavior and reducing the reliance on single-occupancy vehicles



Goods Movement Planning

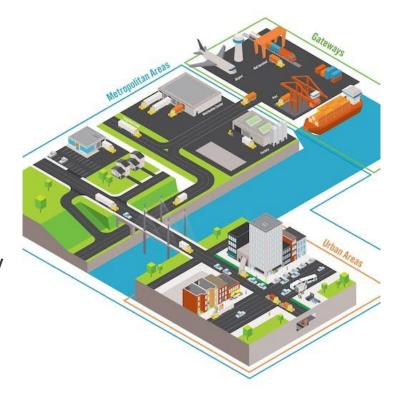
The strategic management and coordination of the transportation of goods and freight

Includes:

- Infrastructure planning
- Modal integration
- Freight corridor planning
- Freight demand forecasting
- Last-mile delivery
- Freight-oriented development
- Sustainable freight practices

Supports:

- Economic growth
- Improved mobility
- GHG emission reductions
- Environmental sustainability



Electric Vehicle (EV) Charging/Network Projects



Support the adoption and widespread use of electric vehicles

Projects generally consider:

- Charging infrastructure planning
- Charging station installation
- Charger types and network management
- Grid integration and power management
- Interoperability and roaming
- Scalability and future expansion

Discussion

Steve Van Denburgh

President

Cathedral Oaks Consulting



Funding Challenges

Current project cost estimate: \$600 million to \$800 million

Escalated to year of construction

Funding available:

- Measure G: \$242 million (2018 estimate) over life of program
- Impact fees: Expenditure Plan states developers to pay "fair share"

Leveraged Funding:

- State Grants
 - Congested Corridors
 - Local Partnership (Formula & Competitive)
 - Active Transportation Program
- Federal Grants
 - INFRA, MEGA, RAISE, Congressional Earmarks

Shovel ready projects attract more state\fed grant funds

State Funding Policy Priorities

The State is using discretionary transportation funding to support its policy priorities:

1. Advance "CAPTI" goals

Climate Action Plan for Transportation Infrastructure

- Adopted July 2021 by CalSTA
- Invest billions of discretionary transportation dollars to aggressively combat and adapt to climate change

2. Advance Racial Equity goals

Racial Equity Statement

- Adopted by California Transportation Commission in 2021
- Create mobility opportunities for all Californians, especially those from disadvantaged communities

State\Federal Grant Screening Criteria

- Air Quality and Greenhouse Gases
 - Reduce GHG emissions
- Vehicle Miles Traveled
 - Minimize VMT while maximizing person throughput
- Climate Change Resilience and Adaption
 - How will the project mitigate the impacts of climate change?
- Protection of Natural and Working Environments
 - Does the project protect Forests, Rangelands, Farms, Green Spaces, Wetlands, etc.?
- Community Engagement
 - Demonstrate that the project scope was developed by partnering with disadvantaged and marginalized communities
 - Create mobility options for disadvantaged and marginalized communities

Grant Screening Criteria cont.

- Accessibility (especially for disadvantaged communities)
 - Connect to jobs, major destinations, residential areas
 - Improve access to multi-modal infrastructure (sidewalks, bus lanes, bike lanes, transit centers)
- Congestion Relief
 - Reduce congestion, incorporate multiple modes, reduce Vehicle Miles Traveled
- Transportation, Land Use, Housing Goals
 - Is the project consistent with and promote local and regional plans?
- System Preservation
 - Does the project improve pavement condition or bridge deficiencies?
- Cost Effectiveness
 - Benefit \ Cost Analysis
- Leveraging
 - Are local funds being contributed to the project?

Grant Screening Criteria cont.

- Safety
 - Will the project improve safety in the corridor?
- Economic Development and Job Creation
 - Improve access to employment, economic development, improved movement of goods and services
- Innovation
 - New or innovative technologies, project delivery or financing methods
- Project Readiness
 - How close to "shovel ready" is the project?

District:

PROJECT:

10

Eastern Segment (Phase 2)

Benefit \ Cost Calculation Summary (Cal B\C Sketch Model)

EA: PPNO:

3

INVESTMENT ANALYSI	IALYSIS
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SUMMARY RESULTS

Life-Cycle Costs (mil. \$)	\$58.8
Life-Cycle Benefits (mil. \$)	\$160.6
Net Present Value (mil. \$)	\$101.7
	•
Benefit / Cost Ratio:	2.729
Rate of Return on Investment:	17.8%
Payback Period:	5 years

	Passenger	Freight	Total Over	Average
ITEMIZED BENEFITS (mil. \$)	Benefits	Benefits	20 Years	Annual
Travel Time Savings	\$42.3	\$7.4	\$49.7	\$2.5
Travel Time Reliability Benefits	\$0.0	\$0.0	\$0.0	\$0.0
Veh. Op. Cost Savings	-\$0.5	\$0.4	-\$0.1	-\$0.0
Accident Cost Savings	\$99.8	\$11.1	\$110.9	\$5.5
Emission Cost Savings	-\$0.1	\$0.1	\$0.0	\$0.0
TOTAL BENEFITS	\$141.5	\$19.0	\$160.6	\$8.0
Person-Hours of Time Saved			4,333,216	216,661

Should benefit-cost results include:				
1) Induced Travel? (y/n)	Y			
	Default - Y			
2) Travel Time Reliablity? (y/n)	Y			
	Default - Y			
3) Vehicle Operating Costs? (y/n)	Y			
	Default - Y			
4) Accident Costs? (y/n)	Y			
	Default - Y			
5) Vehicle Emissions? (y/n)	Y			
includes value for CO₂e	Default - Y			

	<u>Tons</u>		Value (mil. \$)	
	Total Over	Average	Total Over	Average
EMISSIONS REDUCTION	20 Years	Annual	20 Years	Annual
CO Emissions Saved	45	2	\$0.0	\$0.0
CO ₂ Emissions Saved	-1,027	-51	-\$0.0	-\$0.0
NO _X Emissions Saved	5	0	\$0.1	\$0.0
PM ₁₀ Emissions Saved	0	0	\$0.0	\$0.0
PM _{2.5} Emissions Saved	0	0		
SO _X Emissions Saved	0	0	-\$0.0	-\$0.0
VOC Emissions Saved	1	0	\$0.0	\$0.0

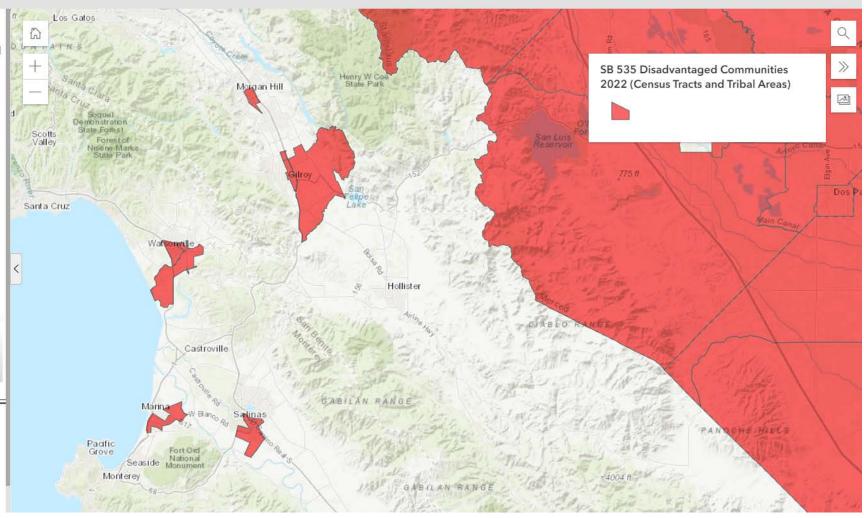
California Climate Investments are funds (Greenhouse Gas Reduction Fund and appropriated by the Legislature) from the proceeds of the State's Cap-and-Trade Program specifically targeted for investment in disadvantaged communities in California. These funds must be used for programs that further reduce emissions of greenhouse gases.

Senate Bill 535 (De León, Statutes of 2012) directed that at least a quarter of the proceeds go to projects that provide a benefit to disadvantaged communities and at least 10 percent of the funds go to projects located within those communities. The legislation gives CalEPA the responsibility for identifying those communities.

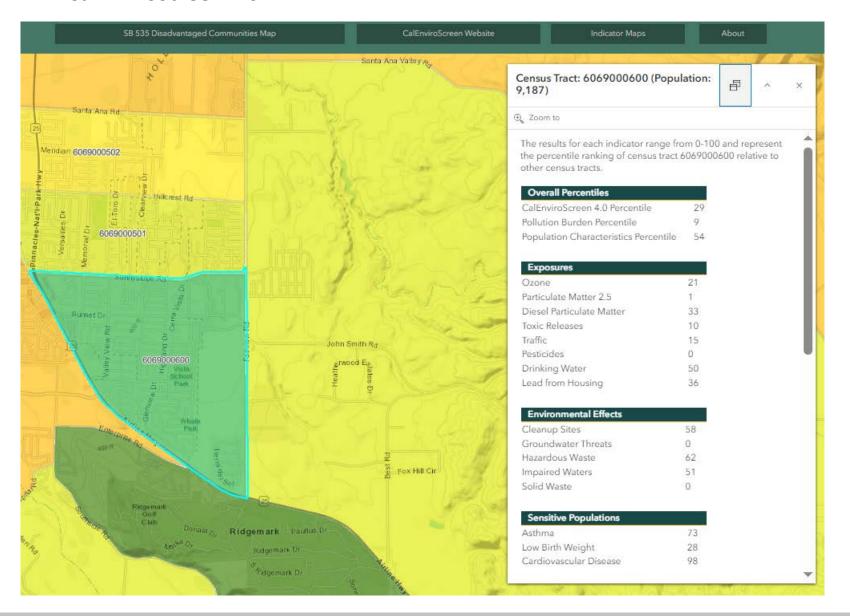
How to use this map

- Use your mouse or touchpad to pan around.
- Zoom in/out with a mouse wheel or the +/- icons.
- Search by location or census tract number with the search icon.
- Click on a census tract to view additional information in the popup window.
- Dock the pop-up window to the side of the screen by clicking the dock iron.
- Export a map view that includes the legend and popup using the screenshot widget.
- Click the links in the header to view additional resources related

SB 535 Disadvantaged Communities 2022 (Census Tracts and Tribal Areas)



CalEnviroScreen 4.0



Securing Grant Funding

At a minimum, make integral to the project's scope elements that:

- 1. Mitigate Climate Change \ minimize Vehicle Miles Traveled
- 2. Create mobility opportunities for underserved, disadvantaged, marginalized communities

Examples of elements that can address these emphasis areas:

- investments in bus and rail transit service, especially those that improve travel time or service frequency
- active transportation and highway solutions that improve transit travel times and reliability
- generate revenue to fund projects that reduce VMT (example HOT lanes)

Adding these types of elements to Hwy 25 improves your chance of success in receiving grants

But it also increases project cost

Funding Drives Project Phasing

\$600 to \$800 million estimated project cost

- + integrated Climate Change & Disadvantaged Community elements
- = Project cost is going to be higher than anticipated

Hwy 25 will need to be delivered in phases

How many phases? Depends on...

- the potential size of grant awards
- the cost of projects typically funded
- the size of the Measure match

Recent Grant Awards For Projects Similar to Hwy. 25

- Congested Corridors
 \$263 mil. project phase, \$107 mil. grant (Santa Barbara)
- Local Partnership C
 \$130 mil. project, \$25 mil. grant (Oakland, Sacramento)

This suggests Hwy 25 will be delivered as 3\4\5 phases in San Benito County.

Lunch

Project Alternatives

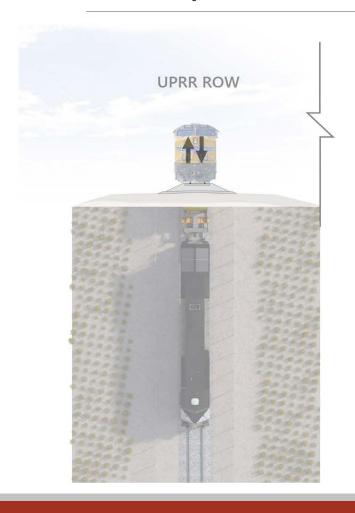
Sasha Dansky

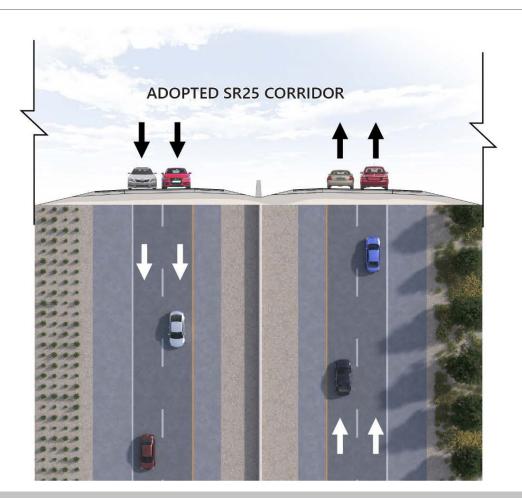
PE, Principal

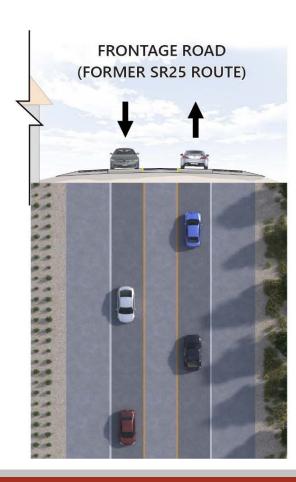
Mark Thomas & Co.



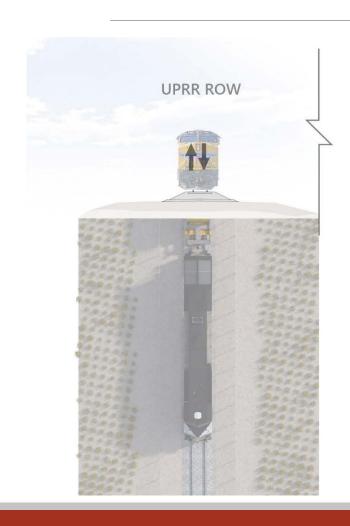
Adopted Expressway Plan

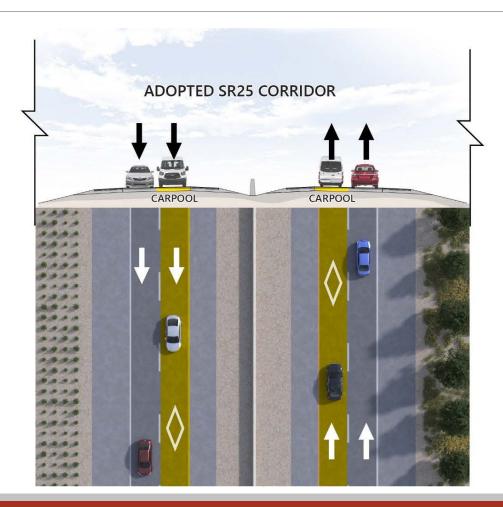


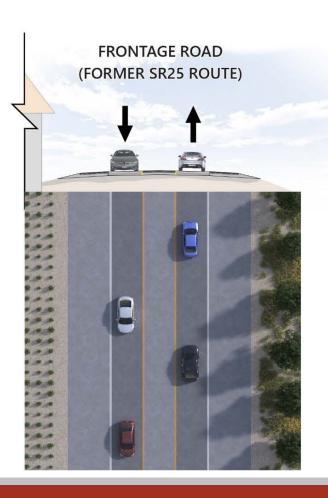




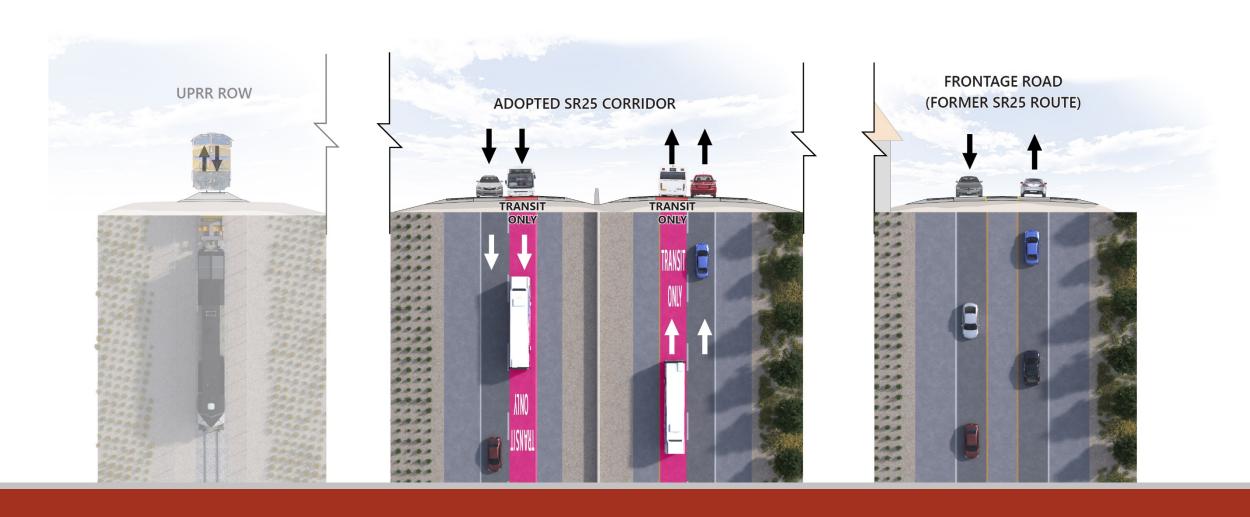
Adopted Expressway Plan with Carpool Lanes







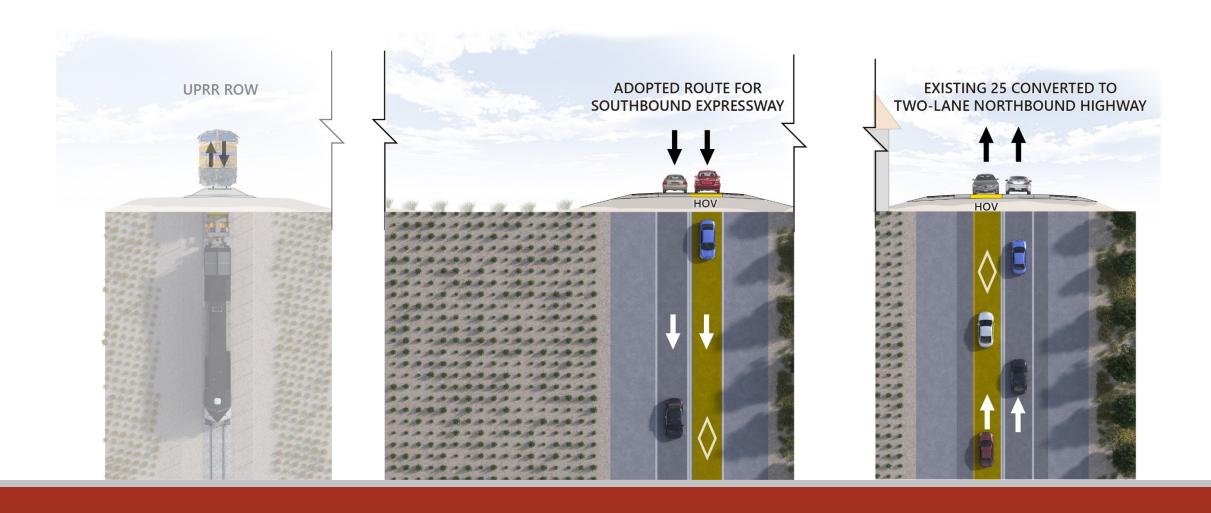
Adopted Expressway Plan with Transit Only Lane



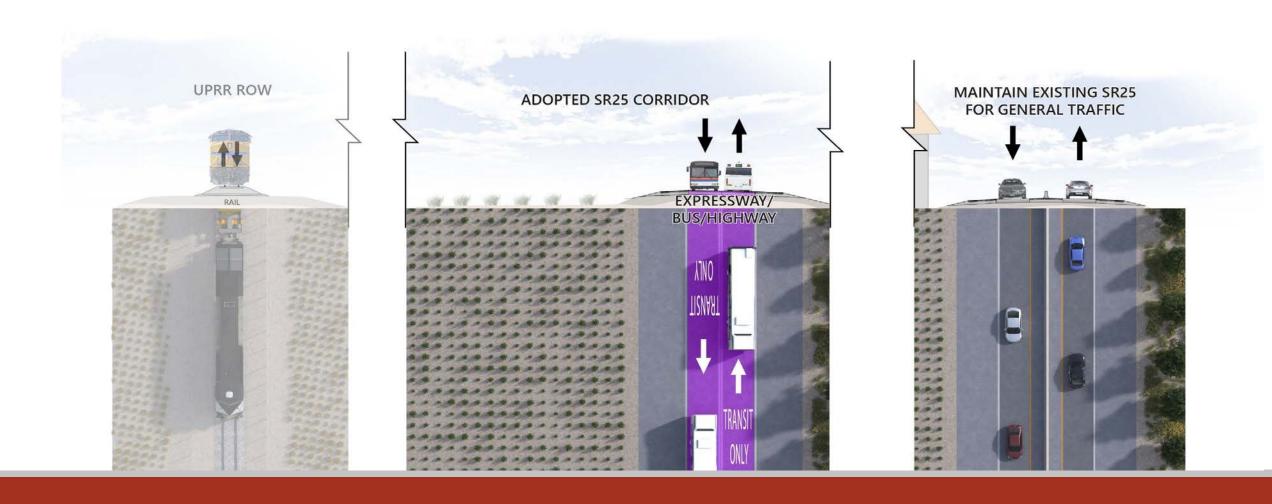
3-Lane Expressway – Reversible Transit Lane



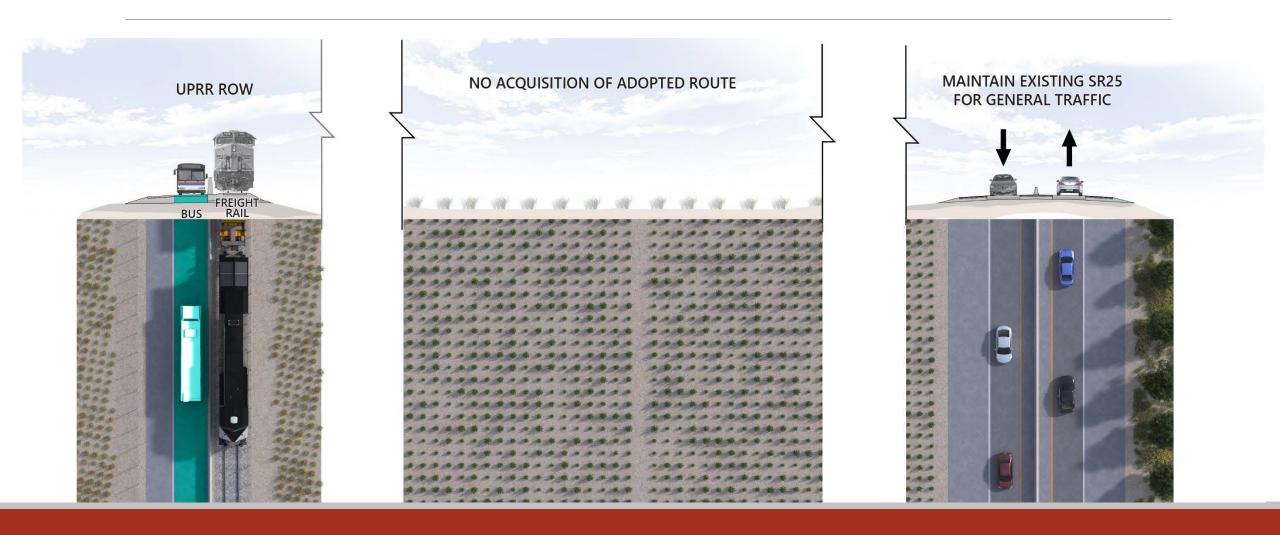
Hybrid Expressway/ Highway Interim Alternative



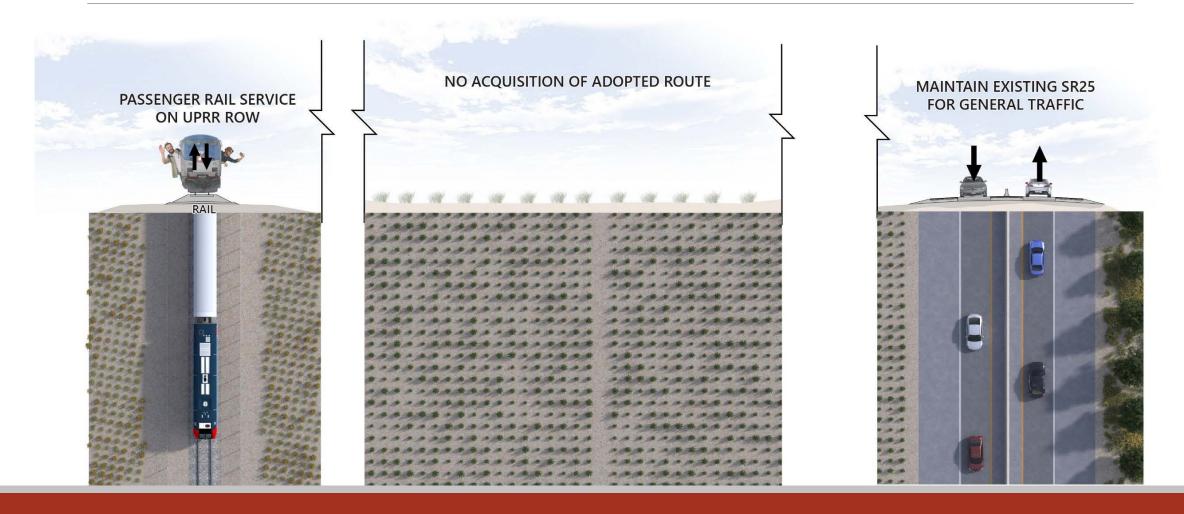
Transit Expressway Alternative



Bus next to Commercial Rail Alternative



Rail Transit Only Alternative



Questions?

Project Communication & Consensus Building

Discussion

Next Steps

Public Comment

Final Remarks

