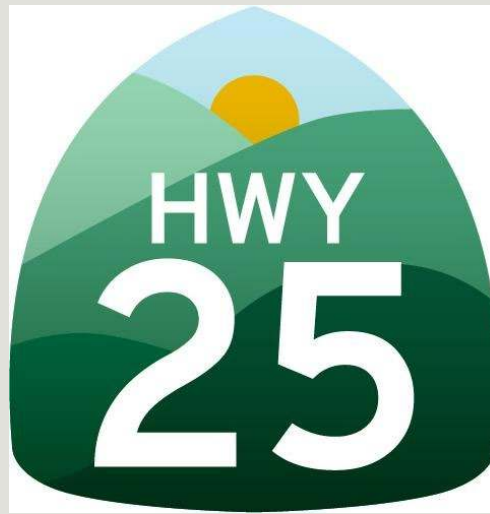




State Route 25 Improvement Project Range of Alternatives



Workshop: SR 25 Improvement Project

Vince Mammano,
Mark Thomas Associates

Workshop Objectives



- Increasing awareness of recent or active highway improvements benefiting San Benito County residents
- Summarizing the key federal and state planning requirements that must be completed before additional SR 25 improvements can be made
- Introducing potential corridor alternatives for a new SR 25 environmental study
- Gathering input on the SR 25 corridor alternatives in preparation for a Board concurrence action next week

Planning for Future

Binu Abraham,
SBCOG

SR 156/25 Turbo Roundabout Project



San Benito SR 156 Improvement Project



US 101/SR 25 Interchange Phases 1 & 2



Purpose and Need



Approved by SBCOG Board
on March 21, 2024

SR 25 - San Felipe Rd to the US 101 – Need and Purpose

Project Need

The project is needed due to:

- Multiple at-grade access points and congestion lead to a high number of conflict points creating safety issues on SR 25.
- Due to an existing jobs/housing imbalance, and an increase in population growth, partly driven by state mandated affordable housing allocation (Regional Housing Needs Allocation), there is an increased demand for travel along the corridor.
- Increased demand along SR 25, especially during morning and evening peak periods, reduces reliability for automobile travelers and transit.
- Lack of employment centers, institutions of higher education, health facilities, hospitals, and emergency care within San Benito County creates transportation demand for residents to travel to points north of the County, where jobs, educational institutions, and health facilities, hospitals, and emergency care are abundant.
- Lack of reliable multi-modal transportation options for traveling north of the County.
- Traffic diversion to surrounding rural roads due to travel delays on SR 25 raises safety and access concerns on rural roads not designed for the increased capacity.

Project Purpose

The project's purpose is to:

- Reduce fatal and serious injury collisions on SR 25.
- Provide sustainable multimodal mobility and travel options to improve person throughput while meeting current and future projected travel demand on the corridor to support and encourage the region's housing, economic, and job creation goals.
- Provide reliable goods movement between San Benito County and destinations on the Coast, Central Valley, and the Bay Area.
- Improve travel time reliability between San Benito County and Santa Clara County.
- Equitably improve connectivity and mobility for communities in San Benito County and provide access to job centers and services in Santa Clara County.
- Alleviate regional/inter-regional traffic diversion onto the local roads to bypass congestion.

Project Need

Safety/collision
issues

Increased travel
demand

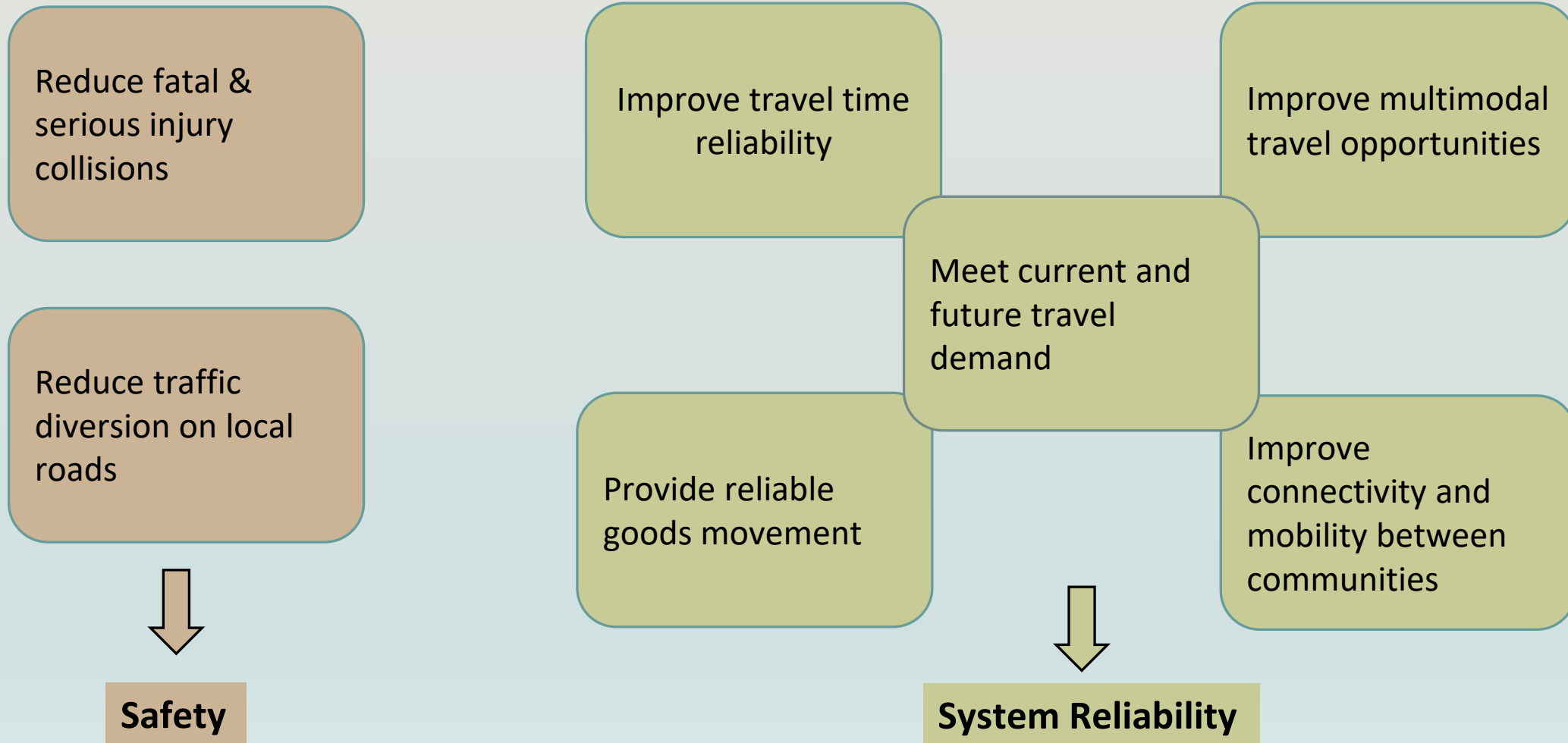
Limited multi-modal
transportation

Traffic diversion to
surrounding rural
roads

Delays along SR 25
during peak
periods.

Workforce travel
outside County

Project Purpose



State & Federal Planning Requirements

Kirk Trost,
SBCOG

Environmental Document Process

California Environmental Quality Act (CEQA)

- Environmental Impact Report (EIR)

National Environmental Policy Act (NEPA)

- Environmental Assessment (EA)



CEQA: Cornerstone of Environmental Policy in CA

- “The foremost principle under CEQA is that the Legislature intended the act ‘to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.’”
- Inform the public and decisionmakers of a project’s environmental effects
- Mitigate significant environmental effects to the extent feasible
- CEQA does *not* approve or deny a project – it is not a permit

CEQA Analysis & Senate Bill (SB) 743

- 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%).

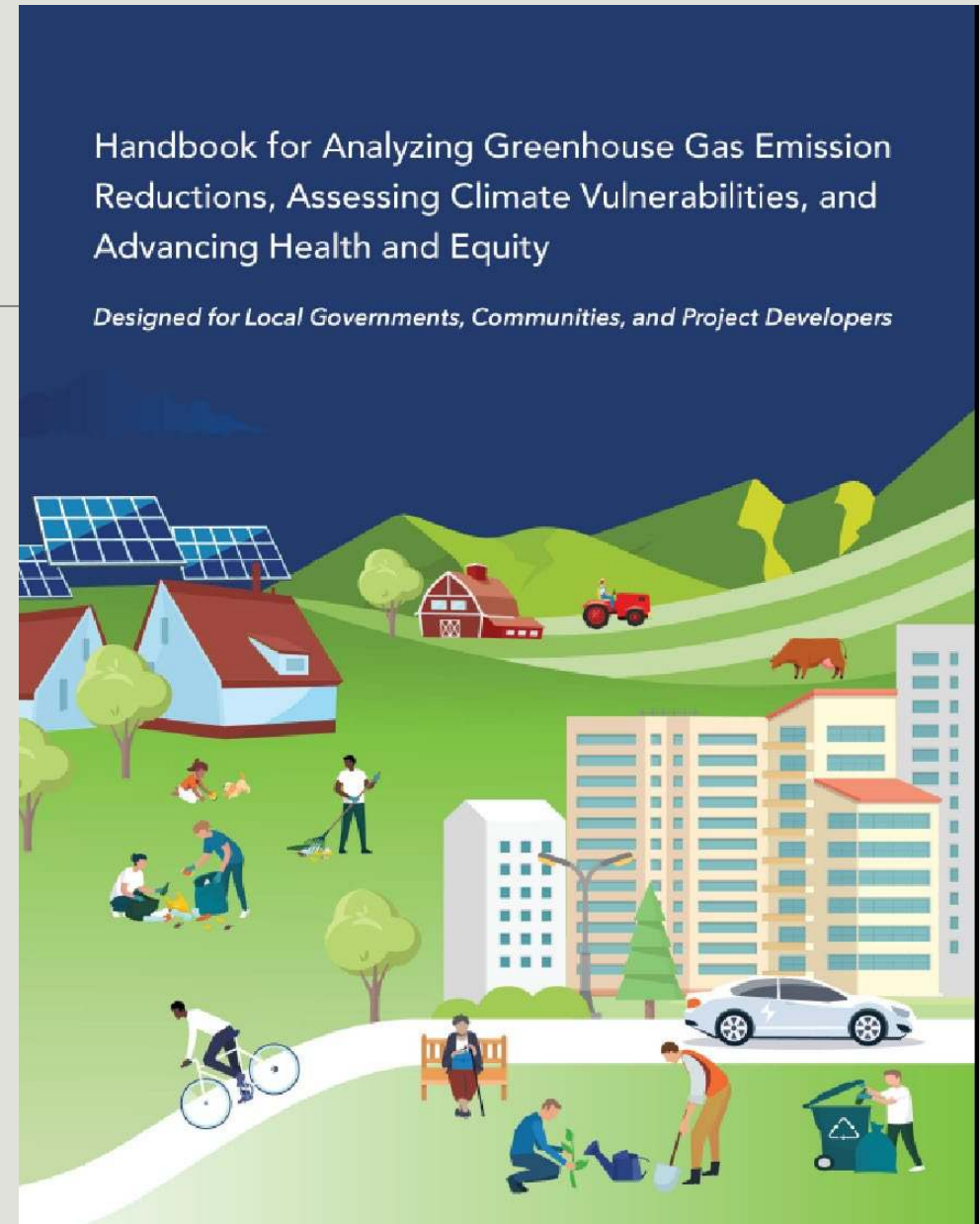
This calculation is using an elasticity of **0.75**.

[Read more about this calculator](#)

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

CEQA Mitigation & SB 743

- 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 (Climate Action Plan for Transportation Infrastructure)



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

CAPTI (Climate Action Plan for Transportation Infrastructure)



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 zero-emission freight transportation system

CEQA and CAPTI - Summary

- Conventional widenings are still being contemplated.
- However, they usually require expensive mitigations, which greatly add scope.
- They also 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 generate revenues to cover mitigation over their decades-long lifecycle.

What's Next?

Notice of Preparation

- Starts formal EIR process; typically sets the baseline
- Agencies must be given 30 days to review and comment
- All NOPs must be sent to the State Clearinghouse
- NOPs must be sent to responsible and trustee agencies by lead agency
- Scoping meeting for projects of statewide, regional or areawide significance



Project Alternative Considerations

Purpose

- Analysis to determine whether there is a feasible way to achieve the basic objectives of the project, while avoiding impacts

Goal

- “Foster informed decision-making and public participation” and to “to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”

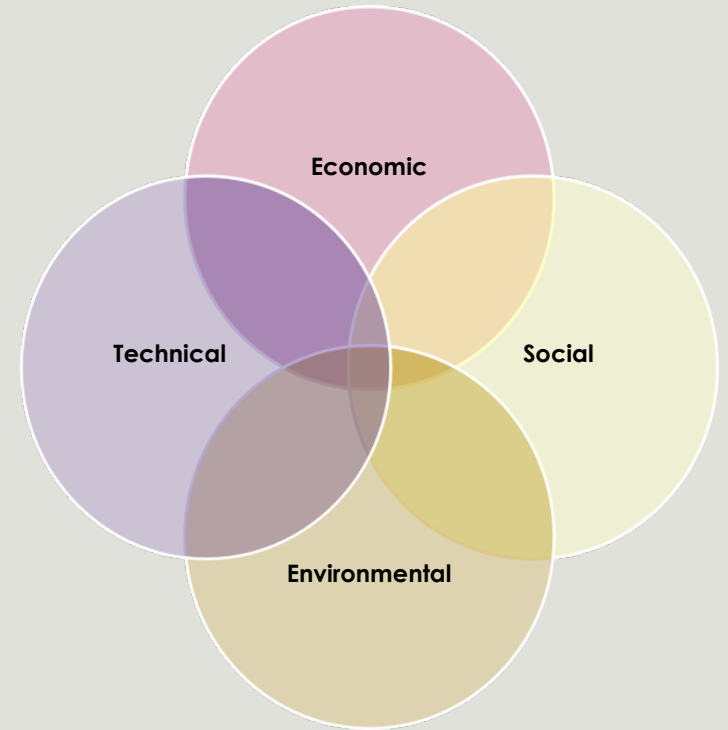
Project Alternative Considerations

Must consider reasonable range of alternatives

- That are *potentially* feasible
- That avoid or substantially lessen significant effects of the proposed project
- *Even if* they impede to some degree the attainment of the project objectives

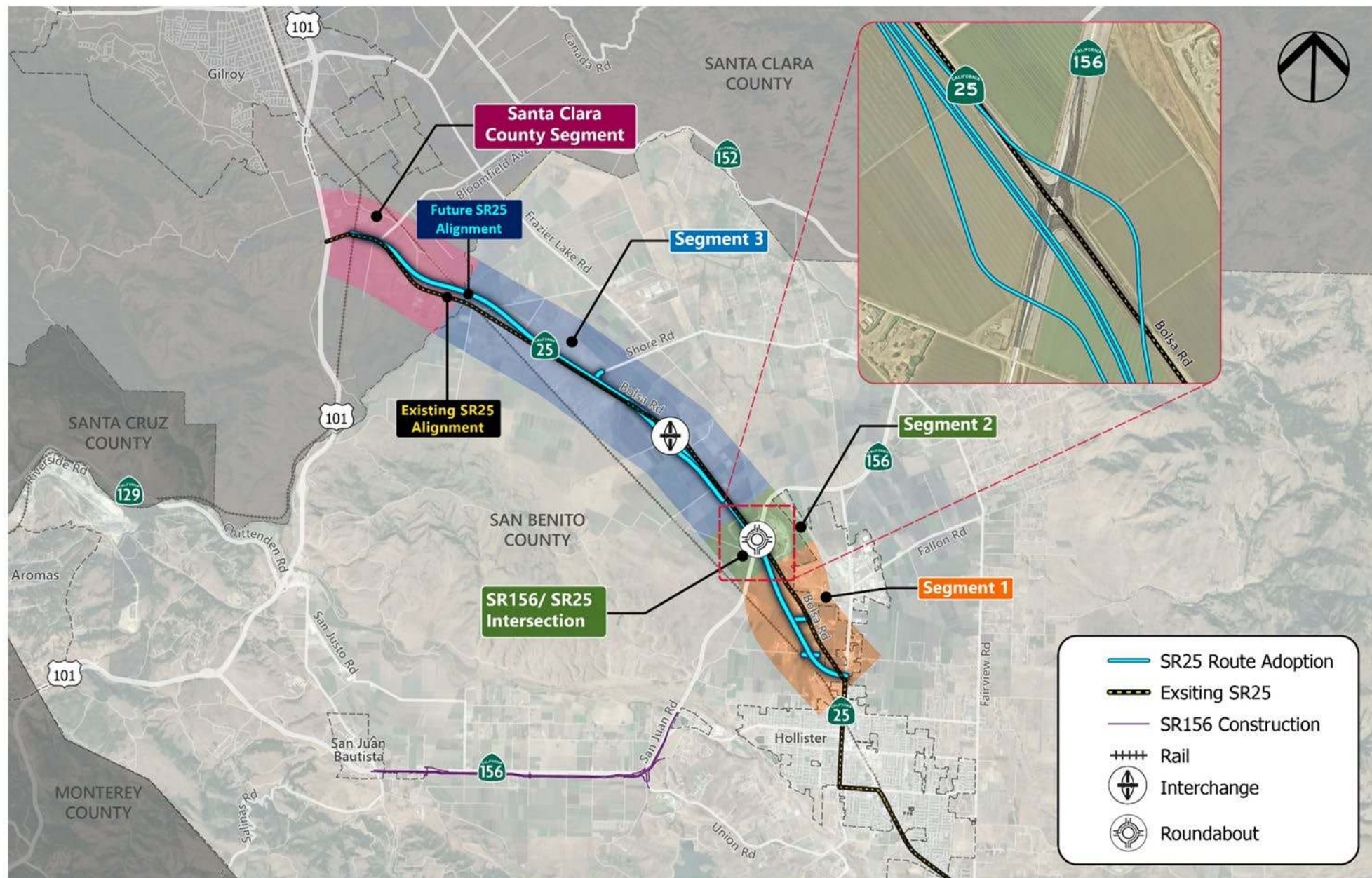
Potentially feasible:

- “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.”



Potential Corridor Alternatives

Terry Thompson,
Caltrans D-5



Assumptions for SR 25 Alternatives

- Low to moderate mode-shift for transit (influenced by future service levels)
- Minor mode-shift for HOV and HOT
- Conditions are for ~5 years after opening
- Single-occupancy-vehicle induced demand for additional general-purpose lanes
- Conditions are for peak periods

Screening Process

- Developed potential alternatives utilizing the 2020 Value Analysis, 2023 Mini-Value Analysis and brainstorming
- Analyzed the Alternatives using Need and Purpose along with a Rubric screening system
- Evaluated 23 Alternatives and considering 7 Alternatives, including a No-Build, for further review.

Screening System

Alternatives are scored based on:

- Highway improvements to meet purpose & need (safety, system reliability)
- Amount of impact (Environmental, VMT, Properties)



Alt.	Name	Var.	Design Option	Description
2	4 Lanes (New Alignment)	2	4 Lane Expressway	4 Lanes General Purpose (GP)
		2a	Managed Lane - High Occupancy Vehicle (HOV)	2 Lanes GP; 2 Lanes HOV
		2b	Managed Lane - High Occupancy Toll (HOT)	2 Lanes GP; 2 Lanes HOT
		2c	Managed Lane – Busway	2 Lanes GP; 2 Lanes Transit Only
3	3 Lanes (New Alignment)	3	Reversable General Purpose Lane	2 Lanes GP; 1 Lane Reversible GP
		3a	Reversible HOV Lane	2 Lanes GP; 1 Lane Reversible HOV
		3b	Reversible HOT Lane	2 Lanes GP; 1 Lane Reversible HOT
		3c	Reversible Busway	2 Lanes GP; 1 Lane Reversible Transit Only
4	2 Lanes (New Alignment)	4	2 Lane Expressway	2 lanes GP
		4a	2 Lane Expressway with Bus-on-Shoulder	2 lanes GP with Bus on Shoulder
5	2 Lane Transit Only Busway on New Alignment			
6	1 Lane Reversible Transit Only Busway Beside Rail Corridor*			
7	Passenger Commuter Rail Service on Union Pacific Hollister Branch Line*			

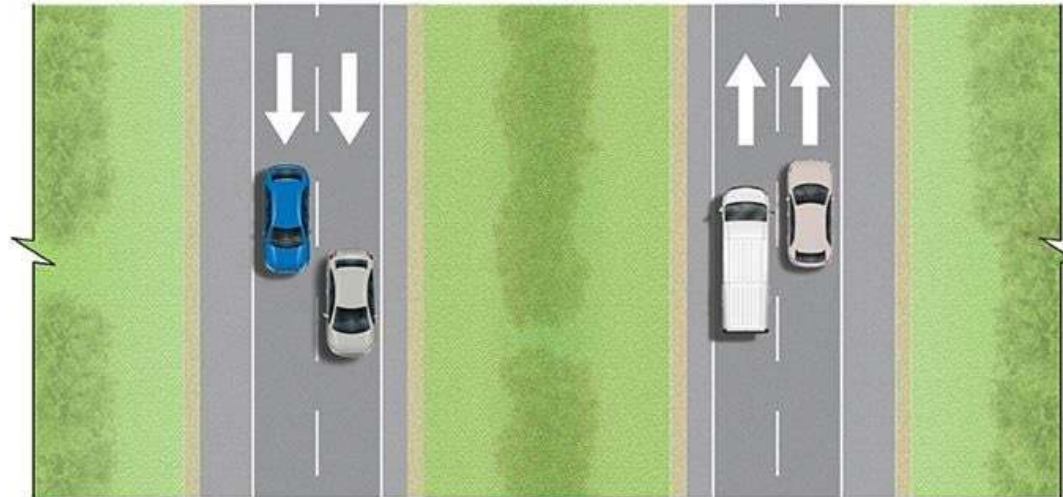
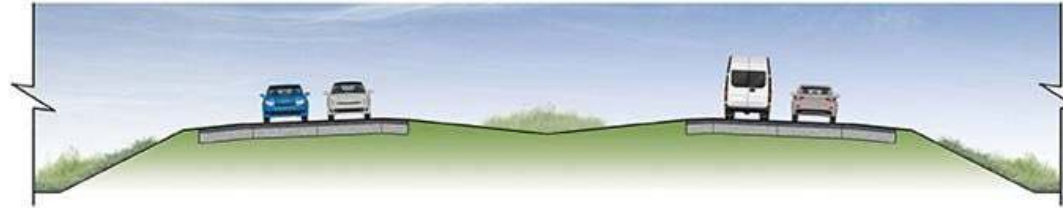
*SBCOG is Lead

Alternative 2: 4-Lane Expressway

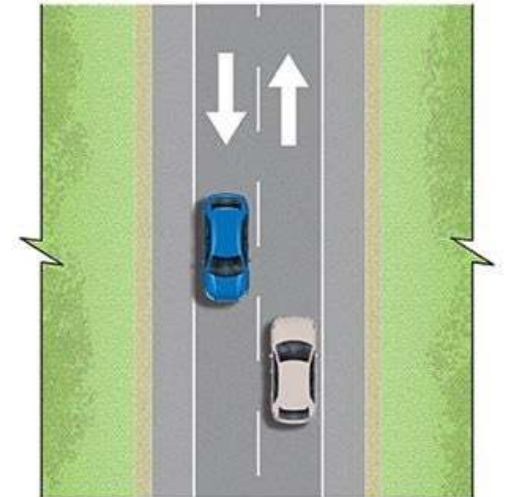
- 4-lane controlled access expressway on a new alignment
- Interchange at SR 25/ SR 156
- Existing route becomes 2-lane frontage road
- Capital Cost: TBD

PROPOSED 4 LANE EXPRESSWAY

4 LANES - GENERAL PURPOSE (GP)



FRONTAGE ROADS



Alternative 2: 4-Lane Expressway (continued)

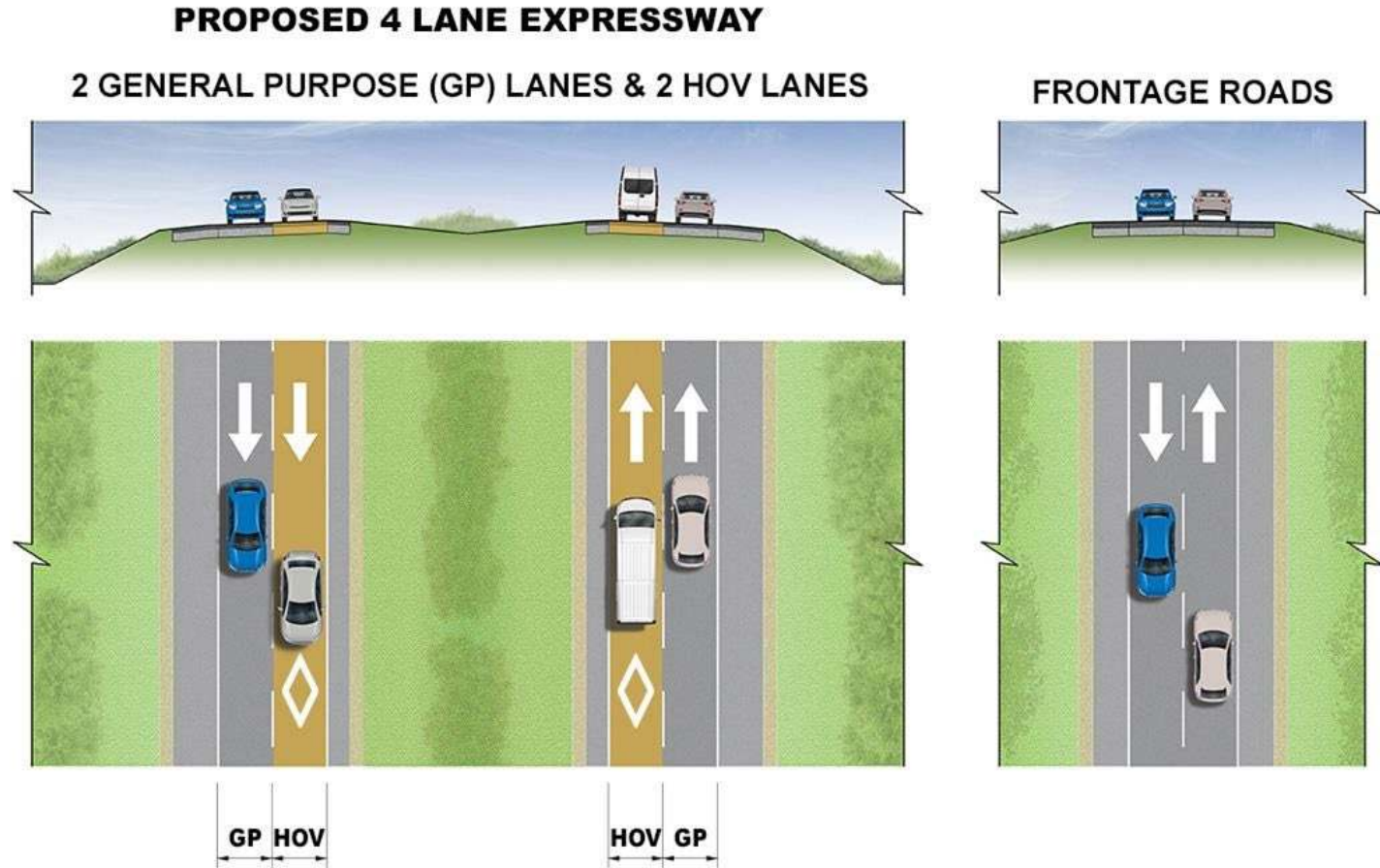
Safety	System Reliability	Environmental	VMT Impact	Property Impacts
<u>Pro:</u> • Removes at-grade intersections at Highway 156 & railroad crossing. • Reduces and consolidates access points (driveways) to the expressway. • Removes 5 at-grade intersections at public roads. • Old alignment becomes a frontage road (significantly lowering speeds for the local community) • Reduces serious and fatal injuries. • Improves safety on local roads due to less diversion. <u>Con:</u> • Few existing at-grade intersections to remain	<u>Pro:</u> • Improved travel time • Improved emergency network • Improved network resiliency • Improved goods movement • Reduces traffic diversion onto local roads. <u>Con:</u> • Some out-of-direction travel for locals due to driveway consolidation	<u>Pro:</u> • Expanding a road on the existing alignment has potential for more enviro. impacts <u>Con:</u> • Agricultural land impacts	<u>Pro:</u> • Reduced diversion • Potentially improves throughput for transit headways <u>Con:</u> • Potential for significant induced demand from adding 2 new lanes	<u>Pro:</u> • Low residential impacts. • Low commercial impacts. • Low utility impacts <u>Con:</u> • Agricultural land impacts

Alternative 2a: Managed Lane (HOV)

- 4 lanes with managed lanes on new alignment.. Managed lane (HOV) on the left and a general-purpose lane on right for each direction.
- Option for part-time (peak periods) or fulltime (24/7) managed lane.
- Existing route becomes 2-lane frontage road.
- Interchange at SR 25/SR 156
- Capital Cost: Similar to Alt 2

Considerations:

- Benefits for HOV and express buses.
- May require jug-handle intersections - Additional area would be needed.
- Possibility of safety benefit with left turn removal.
- Increased operational improvement because there would be no left-hand movement.
- Potential use of HOV lane for express buses.

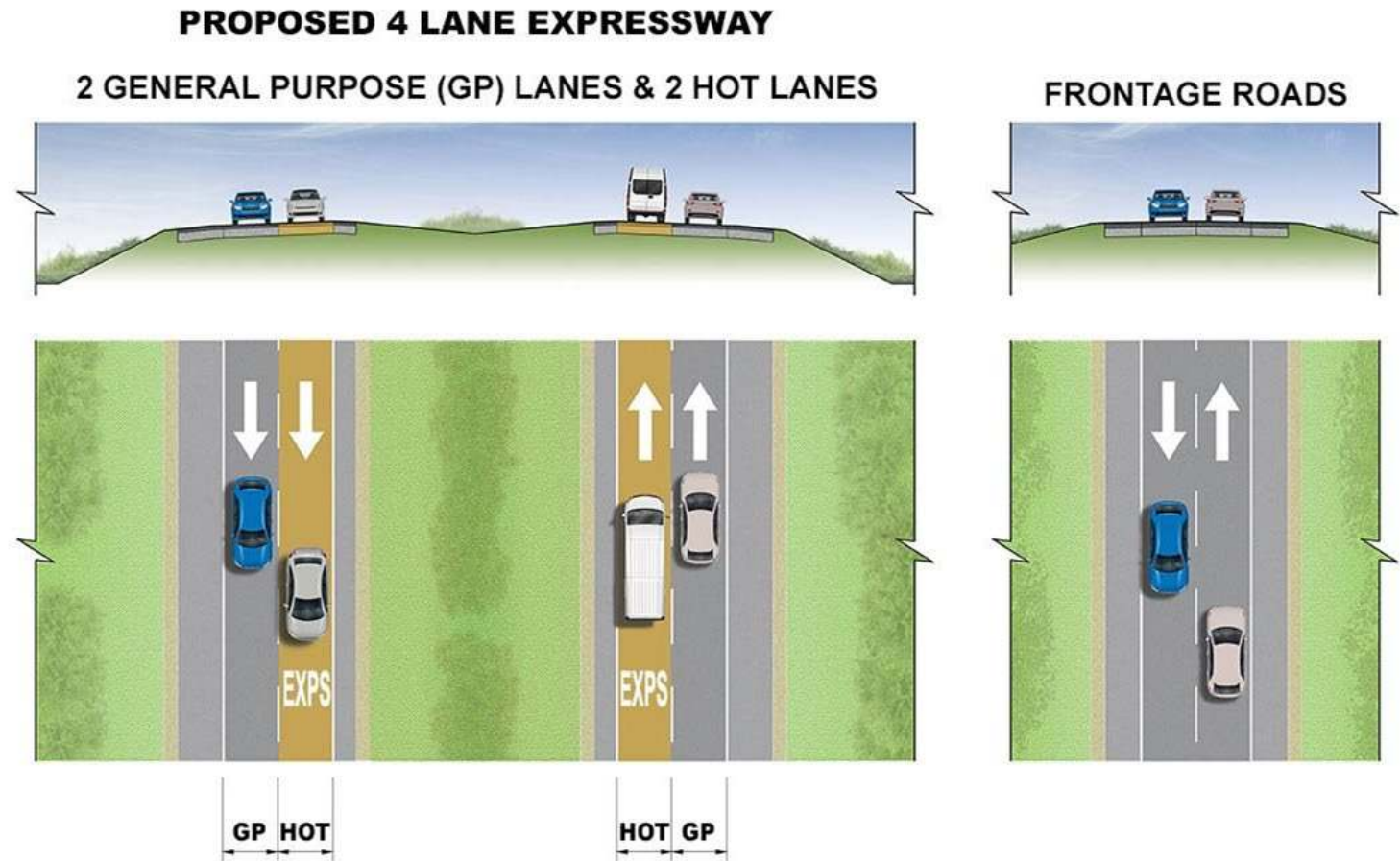


Alternative 2b: Managed Lane (HOT)

- 4 lanes with managed lanes. Managed lane – high occupancy toll (HOT) on the left and a general-purpose lane on right for each direction.
- Option for part-time (peak periods) or fulltime (24/7) managed lane.
- Existing route becomes 2-lane frontage road.
- Interchange at SR 25/SR 156
- Capital Cost: Similar to Alt 2

Considerations:

- May require jug-handle intersections - Additional area would be needed.
- Additional supplemental study maybe be necessary to study tolling in detail
- Possibility of safety benefit with left turn removal.
- Increased operational improvement because there would be no left-hand movement.
- Potential use of HOT lane for express buses.

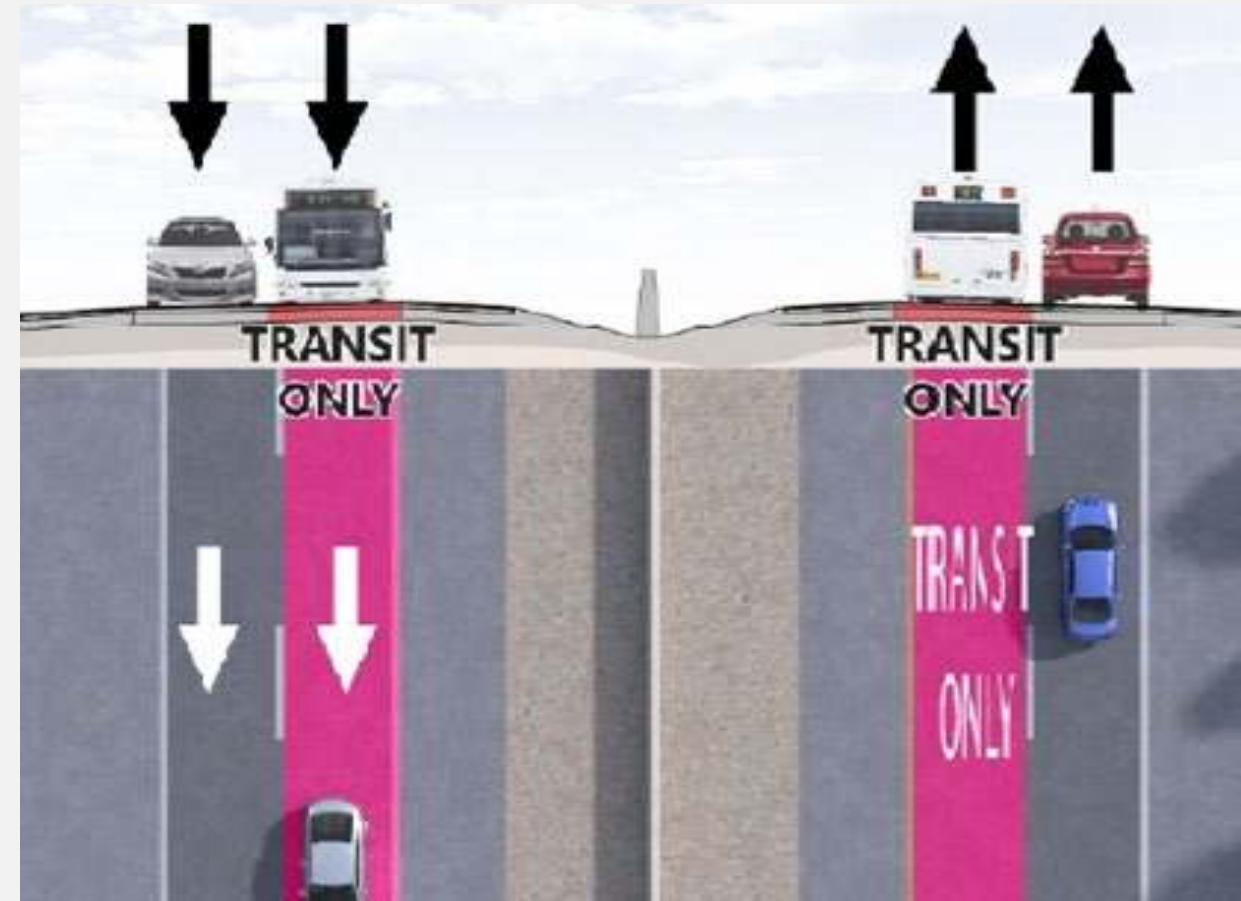


Alternative 2c: Managed Lane (Transit Only)

- 4 Lanes with managed lanes. Managed lane (Transit-only) on the left and a general-purpose lane on right for each direction.
- Operates as a full-time (24/7) managed lane
- Existing route becomes 2-lane frontage road.
- Interchange at SR 25/SR 156
- Capital Cost: Similar to Alt 2

Considerations:

- Transit focused benefits
- May require jug-handle intersections - Additional area would be needed.
- Possibility of safety benefit with left turn removal.
- Increased operational improvement because there would be no left-hand movement.



Alternative 3: Reversible Lane (General Purpose)

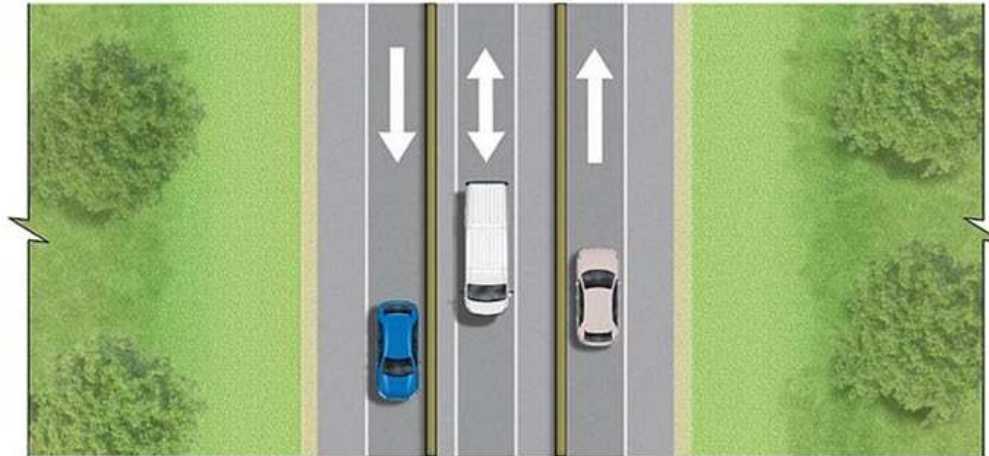
- 3 lanes using new alignment. Reversible lane would be open to Northbound travel in the AM and switch to Southbound travel in the PM to improve travel time for peak hours. The reversible lane would be general purpose.
- Interchange at SR 25/SR 156
- Existing route becomes 2-lane frontage road.
- Capital Cost: TBD

Considerations:

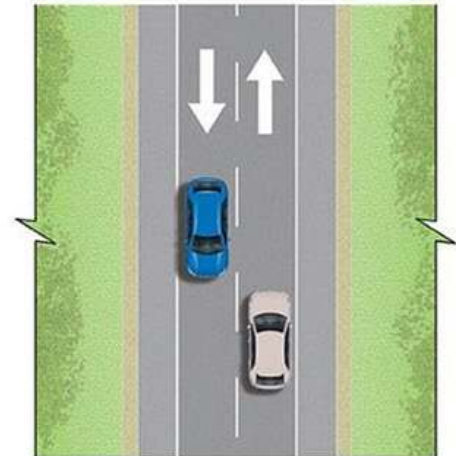
- Operational features (e.g. costs, intersections, termini, access control, enforcement) may need to be analyzed in more detail
- Would need to utilize space for jug-handled intersections
- Barriers would be required.

PROPOSED 3 LANE EXPRESSWAY

3 LANES - GENERAL PURPOSE (GP) w/ 1 REVERSIBLE GP LANE



FRONTAGE ROADS

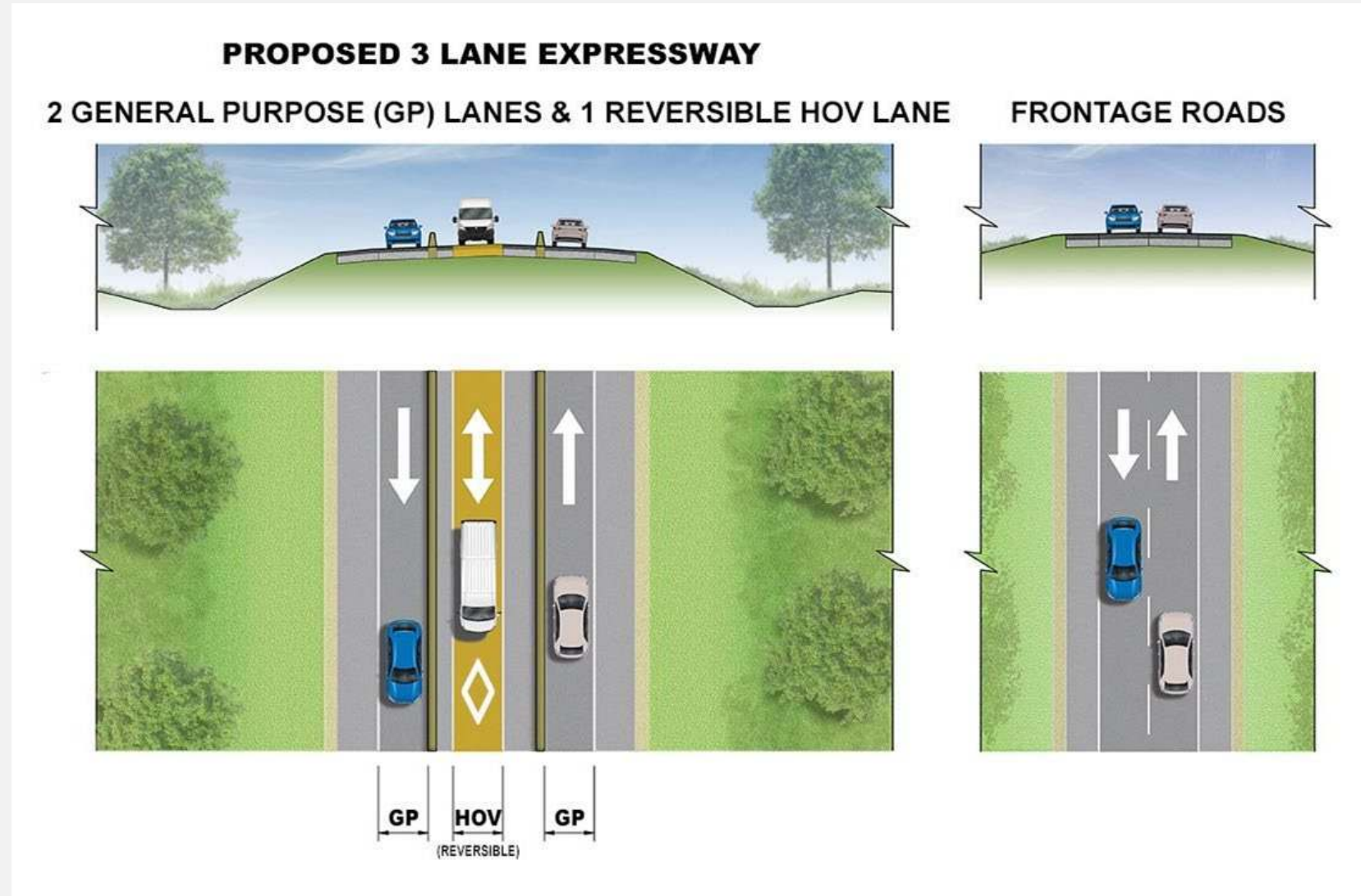


Alternative 3a: Reversible HOV Lane

- 3 lanes using new alignment.
- Reversible HOV lane would be open to Northbound travel in the AM and then switch to Southbound travel in the PM to improve travel time for peak hours.
- Interchange at SR 25/SR 156
- Existing route becomes 2-lane frontage road.
- Capital Cost: TBD

Considerations:

- Would need to utilize space for jug-handled intersections
- Operational features (e.g. costs, intersections, termini, access control, enforcement) may need to be analyzed in more detail
- Barriers would be required

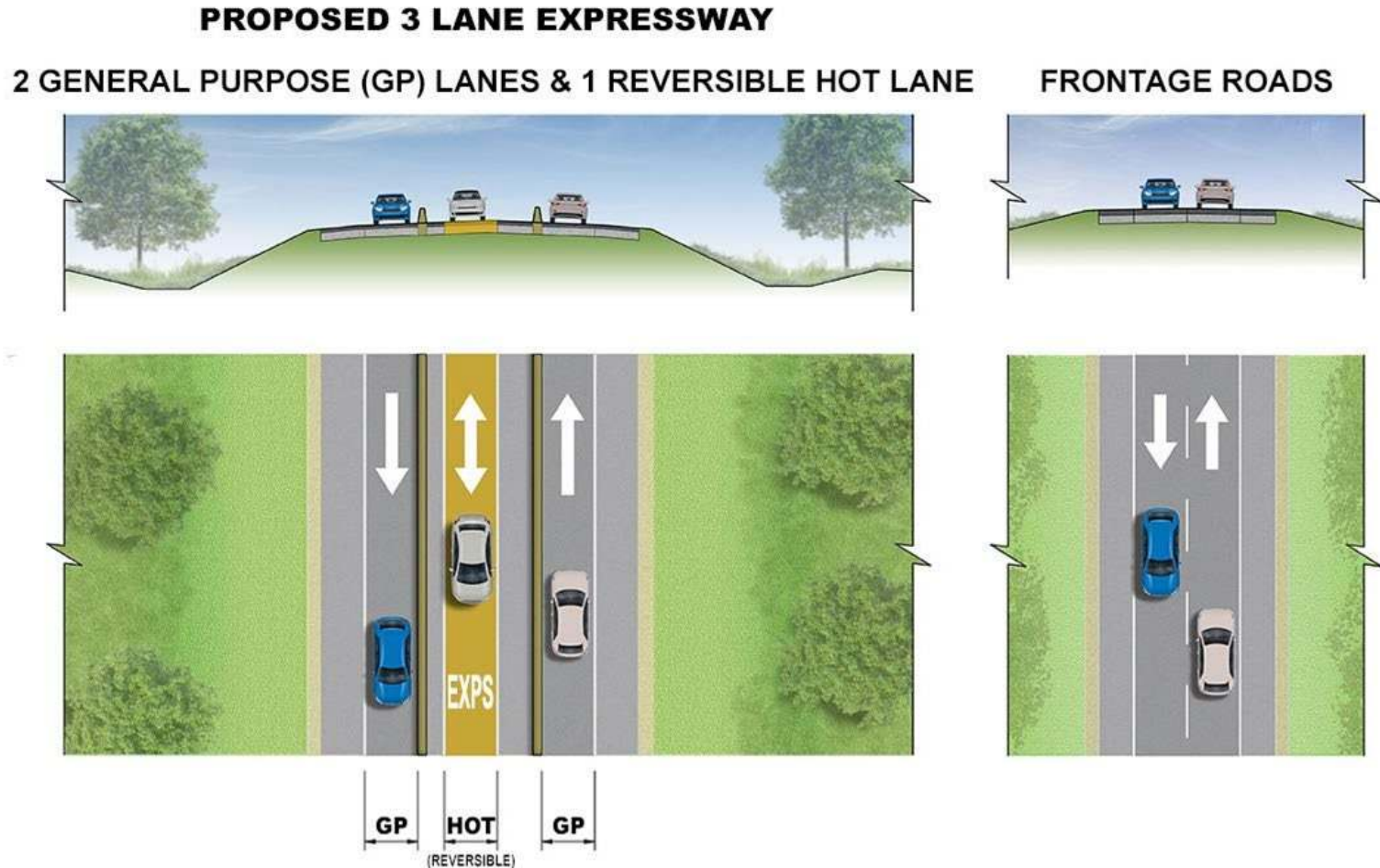


Alternative 3b: Reversible HOT Lane

- 3 lanes using new alignment. Reversible high occupancy toll (HOT) lane would be open to Northbound travel in the AM and then switch to Southbound travel in the PM to improve travel time for peak hours.
- Interchange at SR 25/SR 156
- Existing route becomes 2-lane frontage road.
- Capital Cost: TBD

Considerations:

- Would require tolling
- Operational features (e.g. costs, intersections, termini, access control, enforcement) may need to be analyzed in more detail
- Would need to utilize space for jug-handled intersections
- Barriers would be required

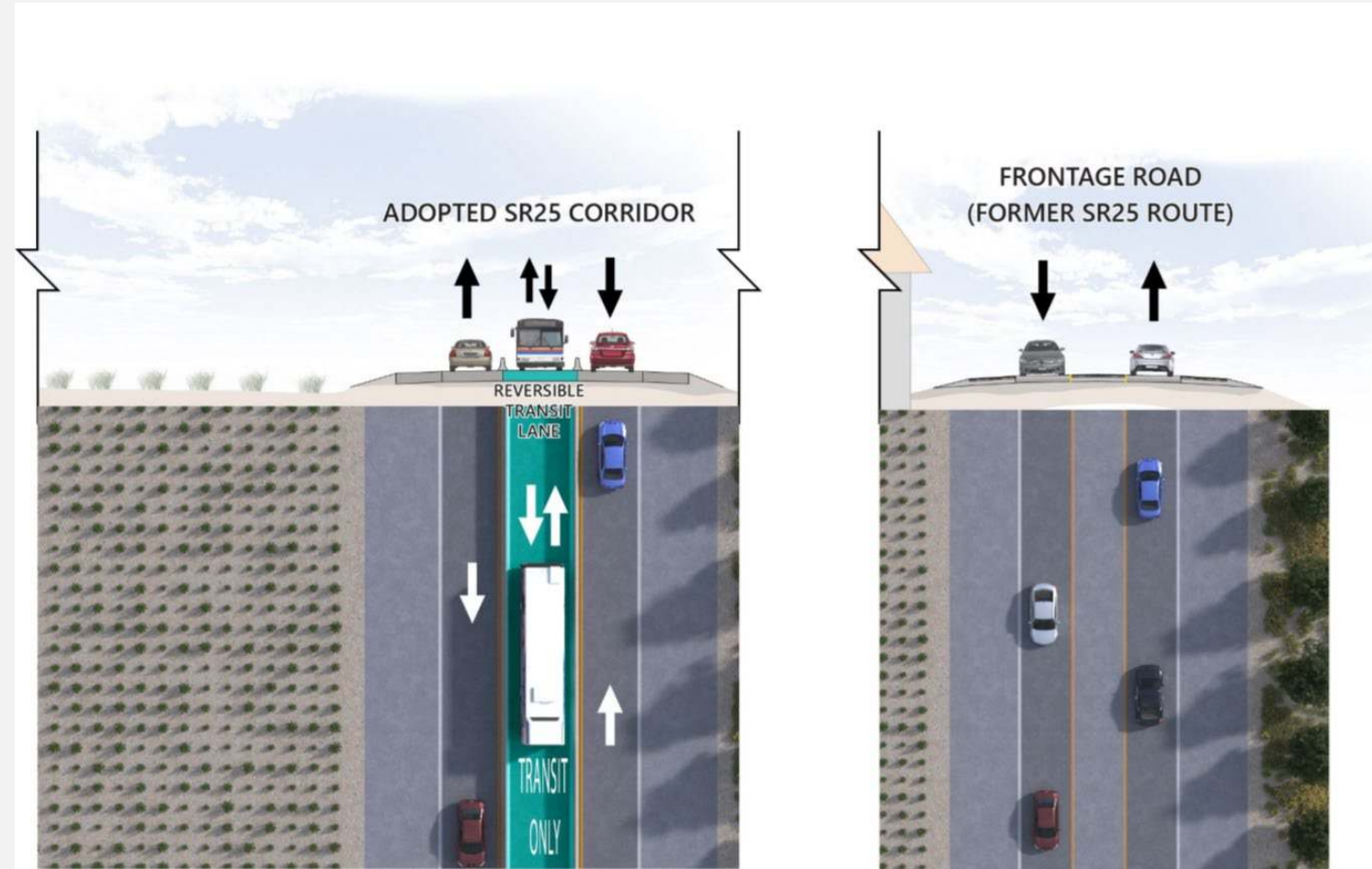


Alternative 3c: Reversible Transit Lane on New Alignment

- 3 lanes using new alignment. Reversible lane would be open to Northbound transit travel in the AM and then switch to Southbound transit travel in the PM to improve travel time for peak hours.
- Grade separated intersection at SR 25/SR 156
- Existing route becomes 2-lane frontage road.
- Capital Cost: TBD

Considerations:

- Operational features (e.g. costs, intersections, termini, access control, enforcement) may need to be analyzed in more detail
- Would need to utilize space for jug-handled intersections
- Barriers would be required



Alternative 4: 2-Lane Expressway

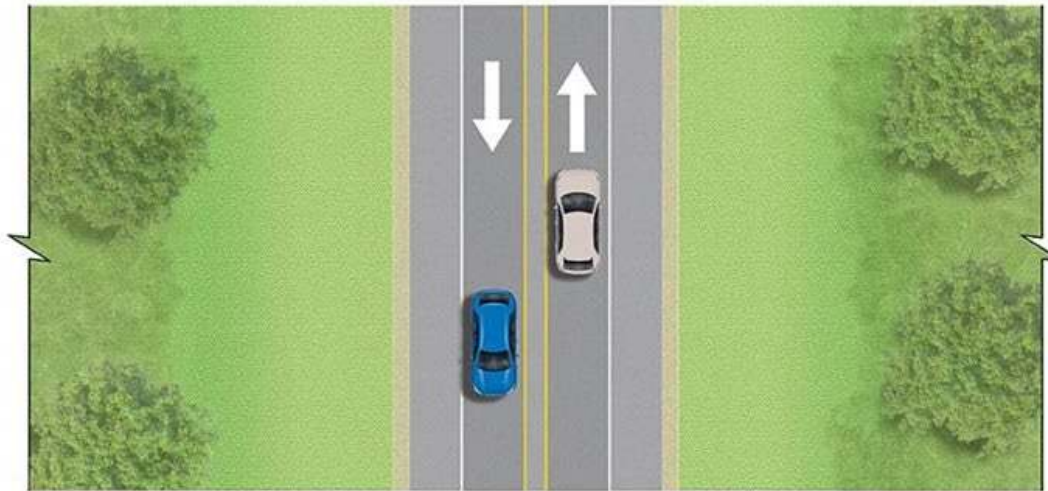
- 2-lane highway on new alignment.
- Existing route becomes 2-lane frontage road.
- Interchange at SR 25/SR 156
- Capital Cost: TBD

Considerations:

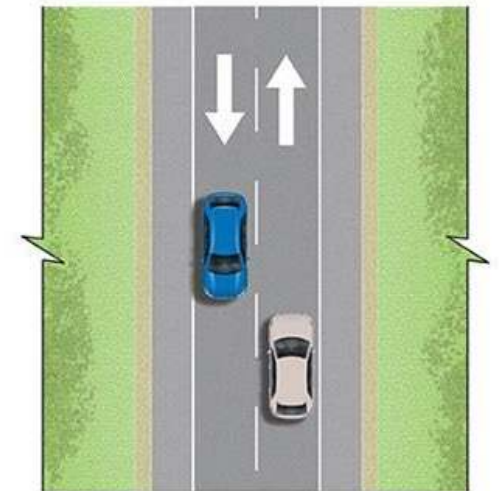
- No passing option
- System reliability improvement may be small

PROPOSED 2 LANE EXPRESSWAY

2 LANES - GENERAL PURPOSE (GP)



FRONTAGE ROADS

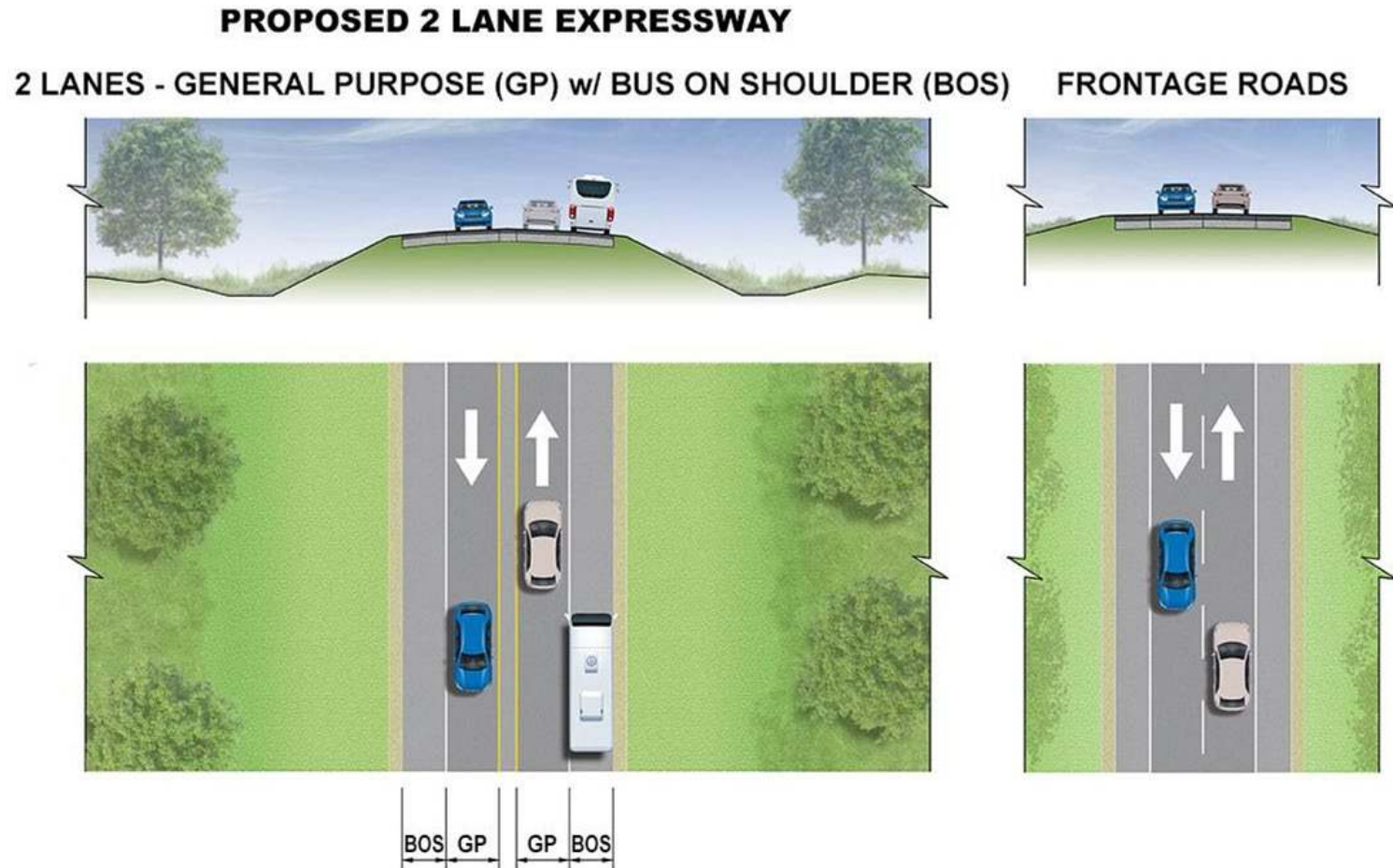


Alternative 4a: 2-lane Expressway with Bus-on-Shoulder

- 2-lane expressway on new alignment with Bus-On-Shoulder.
- Interchange at SR 25/SR 156
- Existing route becomes 2-lane frontage road for general purpose travel
- Capital Cost: TBD

Considerations:

- Requires legislation
- Restricts ped & bicycle access (could provide separate pathway or frontage road connection).
- If traffic speed is above 35mph then BOS will not be necessary.
- Potential to increase ridership demand & bus travel time reliability (if traffic is <35 mph)
- Minimum 10' shoulder, 35mph maximum shoulder speed, 15 mph maximum speed differential between general traffic speeds.
- Buses yield to motorists exiting highway at at-grade intersections.

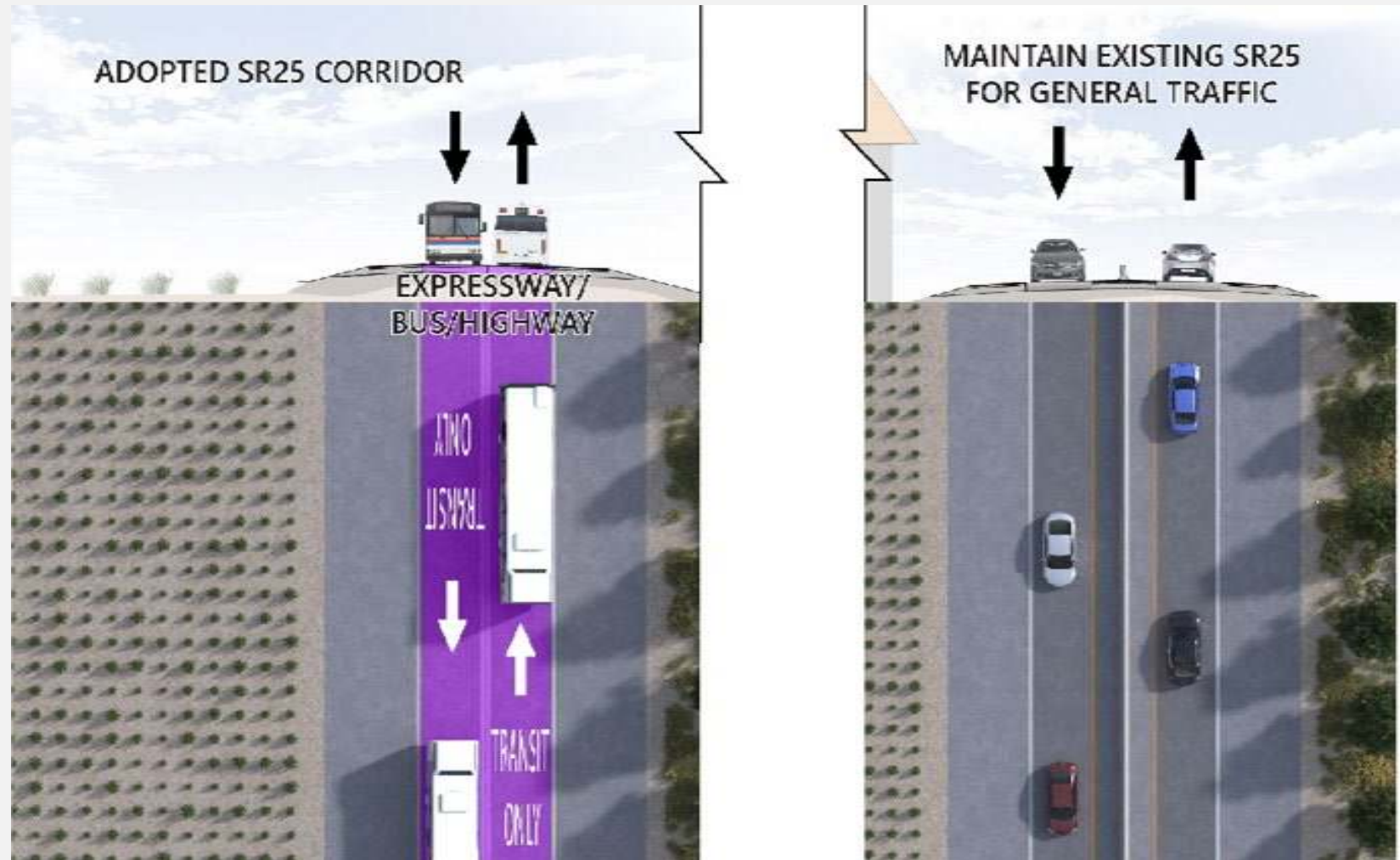


Alternative 5: Transit Expressway

- 2 Lane (new) transit expressway & 2 lane general traffic on existing Route 25.
- Existing SR25 route for general traffic
- Capital Cost: TBD

Considerations:

- Question on who would maintain the transit route
- Would involve added road connection to provide full connectivity.



SBCOG-Lead Alternatives: Alternatives 6 and 7

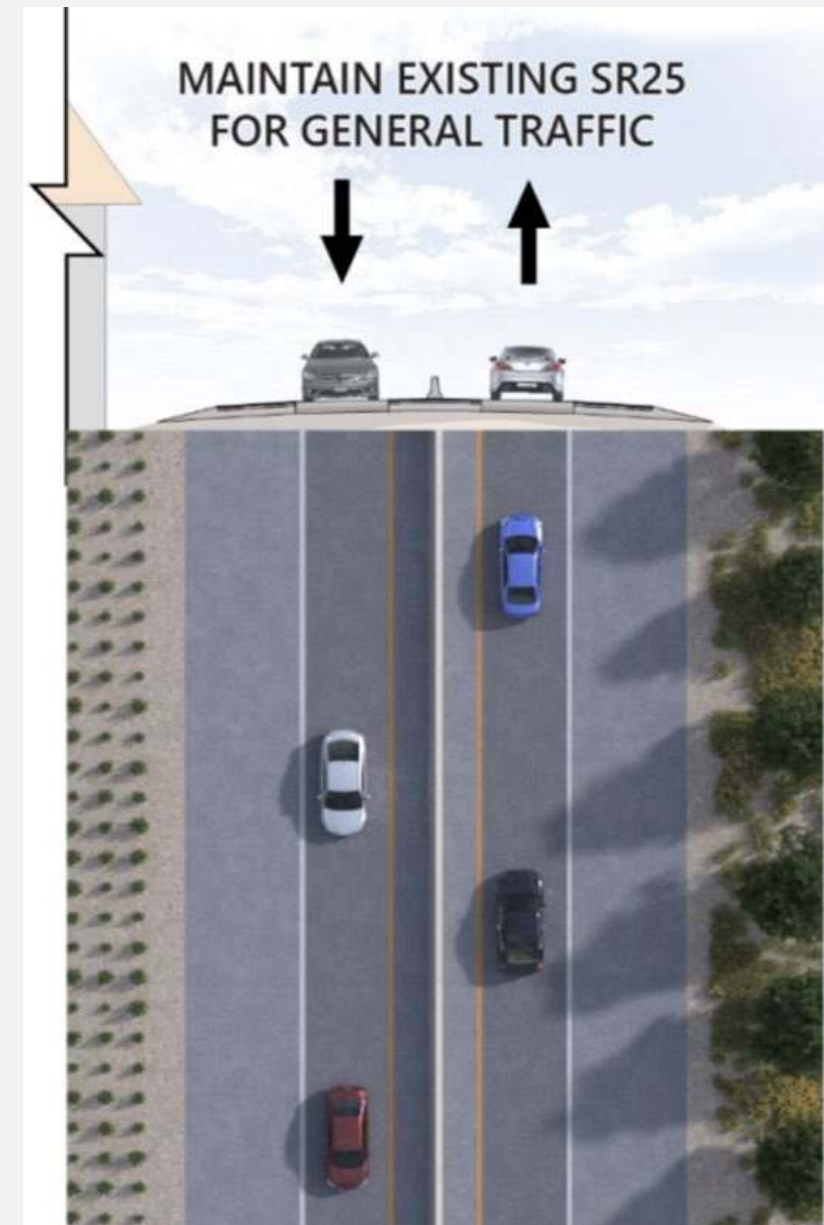
Alternative 6: Transit Adjacent to Rail *

- 1-Lane (reversible) transit lane adjacent to Rail.
- Existing SR25 route for general traffic
- Capital Cost: TBD

Considerations:

- Maintenance and operation agreement with Railroad presents challenges and requires San Benito LTA to maintain
- Include mobility hub at RR/156 crossing. Could include bike lane or multi modal trail.
- Design standards different for bus-only lanes
- Unknown mode shift

*SBCOG will lead feasibility analysis



Alternative 7: Passenger Rail *

New passenger rail service on the Union Pacific Hollister Branch Line

- New service between Hollister and Gilroy; or
- Caltrain extension to Hollister

Existing route for general purpose travel

Considerations:

- Maintenance and operation agreement with Railroad presents challenges and requires San Benito LTA to maintain
- Potential Infrastructure Requirements:
 - Track improvement
 - Station development in Hollister
 - Signal upgrades
 - Maintenance yard
 - Alt. fuel infrastructure (battery electric or hydrogen)
- No acquisition of Adopted Route
- Unknown mode shift

*SBCOG will lead feasibility analysis



Questions

Break

Information Stations

1. Corridor Alternatives.
2. State & Federal Planning Requirements.
3. US 101/SR 25 Interchange Improvements.
4. Public Engagement & Outreach

Next Steps

Vince Mammano,
Mark Thomas Associates

Environmental Document Process

California Environmental Quality Act (CEQA)

- Environmental Impact Report (EIR)

National Environmental Policy Act (NEPA)

- Environmental Assessment (EA)



Today's Outcomes



- ☒ Increasing awareness of recent or active highway improvements benefiting San Benito County residents
- ☒ Summarizing the key federal and state planning requirements that must be completed before additional SR 25 improvements can be made
- ☒ Introducing potential corridor alternatives for a new SR 25 environmental study
- ☒ Gathering input on the SR 25 corridor alternatives in preparation for a Board concurrence action next week

Next Steps

- Receive concurrence of potential Alternatives to release in Notice of Preparation at the next Board Meeting
- Public release of the Notice of Preparation (30 day review)
- Environmental public scoping and public outreach
- Public outreach with comment opportunities.
- Environmental analysis of alternatives
- Pursue State and Federal funding sources



State Route 25 Improvement Project

