

Highway 101 Interchange Studies

TAM Citizens' Oversight Committee
July 20, 2020

Outline

- Project Overview
- Goals & Objectives
- Selection of 12th Interchange
- Study Process
- Schedule

Project Overview

- Study included in the Measure AA ½-Cent Transportation Sales Tax Expenditure Plan
- Plan allocates 3% of sales tax revenue, estimated at \$24.8 million over the 30-year period of the Measure
- Will fund improvements to local road interchanges:
 - improve the operation and safety for all users
 - allow smoother travel to and from Highway 101 and local roads
 - provide seed money to perform the planning, public outreach, and develop the scope of improvements needed at these interchanges
 - prioritize improvements for short-medium and long-term implementation

Proposed Goals and Objectives

- Goal 1: Enhance Health and Safety
- Goal 2: Relieve Local Traffic Congestion
- Goal 3: Improve Multimodal Access to/from and across Highway 101
- Goal 4: Promote Economic Vitality
- Goal 5: Implementability

Goals and Objectives

Goals & Objectives	Draft Evaluation Criteria	Draft Performance Measures	
Enhance Health and Safety	Improves safety for all modes	Reduction in prevalence of incidents	
	Increased walking/biking	Improved pedestrian/bicyclist infrastructure & gap closure	
	Reduces greenhouse gas emissions and improves air quality		Improved travel times
			Incorporation of TSM Measures
Relieve Local Traffic Congestion	Alleviates congestion and improves traffic flow for current and future traffic	Level of Service	
		Vehicle hours of delay	
		Vehicle miles traveled (VMT)	
Improve Multimodal Access to/ from and across Highway 101	Enhances intermodal connectivity and removes access barriers	Improved connectivity for vehicular and active transportation	
	Encourages mode shift from single-occupancy vehicles	Mode shift to non-single-occupant vehicles	
Promote Economic Vitality	Accommodates future land use changes and growth	Assessment of future operating conditions with forecast growth	
	Cost effectiveness	Cost-benefit ratio	
	Reduces transportation costs	Peak period travel time	
Implementability	Attractiveness to funding sources	Funding criteria/potential	
	Ease of regulatory approval	Project can obtain necessary approvals	
		Environmentally cleared, or exempt	
		Consistency with Regional Plans	

Selection of 12th Interchange

- Eleven Interchanges Identified in Measure AA – Transportation Sales Tax Expenditure Plan
 - Alexander Avenue
 - Sausalito/Marin City
 - Tiburon Blvd./East Blithedale Avenue
 - Paradise Drive/Tamalpais Drive
 - Sir Francis Drake Boulevard
 - San Rafael On-Ramp at 2nd Street and Hetherton Avenue
 - Merrydale Road/North San Pedro Road
 - Manuel T. Freitas Parkway
 - Lucas Valley Road/Smith Ranch Road
 - Ignacio Boulevard
 - San Marin Drive/Atherton Avenue

Selection of 12th Interchange

- Sixteen Remaining Highway 101 Interchanges in Marin
 - Spencer Avenue
 - Rodeo Avenue
 - Shoreline Highway (Highway 1)
 - Redwood Hwy. Frontage Road (Seminary)
 - Redwood Hwy. Frontage Road (Southbound Off-Ramp)
 - Casa Buena Drive
 - Interstate 580/Bellam Boulevard
 - Francisco Blvd. West
 - Mission/Irwin/Hetherton Streets
 - Lincoln Avenue/Villa Avenue
 - Miller Creek Road
 - Alameda del Prado/Nave Drive
 - Highway 37/S. Novato Blvd.
 - Rowland Boulevard
 - DeLong Avenue
 - San Antonio Road

Selection of 12th Interchange

■ Eliminating Interchanges being Studied Separately or Recently Improved

- Spencer Avenue
- Rodeo Avenue
- Shoreline Highway (Highway 1)
- Redwood Hwy. Frontage Road (Seminary)
- Redwood Hwy. Frontage Road (Southbound Off-Ramp)
- Casa Buena Drive
- Interstate 580/Bellam Boulevard
- Francisco Blvd. West
- Mission/Irwin/Hetherton Streets
- Lincoln Avenue/Villa Avenue
- Miller Creek Road
- Alameda del Prado/Nave Drive
- Highway 37/S. Novato Blvd.
- Rowland Boulevard
- DeLong Avenue
- San Antonio Road

Selection of 12th Interchange

■ Eliminating Interchanges with Low Volumes and Limited Connectivity

- Spencer Avenue
- Rodeo Avenue
- Shoreline Highway (Highway 1)
- Redwood Hwy. Frontage Road (Seminary)
- Redwood Hwy. Frontage Road (Southbound Off-Ramp)
- Casa Buena Drive
- Interstate 580/Bellam Boulevard
- Francisco Blvd. West
- Mission/Irwin/Hetherton Streets
- Lincoln Avenue/Villa Avenue
- Miller Creek Road
- Alameda del Prado/Nave Drive
- Highway 37/S. Novato Blvd.
- Rowland Boulevard
- DeLong Avenue
- San Antonio Road

Selection of 12th Interchange

■ Comparison of Six Remaining Candidate Interchanges

Interchange	Traffic Congestion Relief		Multimodal Safety				Multimodal Access		SLR & Storm Surge
	Weekday Congestion	Ramps ADT	Total Collisions	Fatal / Injury	Ped / Bike	Key Nonstd. Conditions	Pedestrian & Bicycle	Transit Service Use	Flooding / Vulnerability Risk
Shoreline Highway (Highway 1)	43%	44,200	6	0 / 0	0 / 2	SB Decel	Constrained	Substantial	High
Redwood Highway Frontage Road	39%	20,100	1	0 / 0	0 / 0	SB Accel	Constrained	Minor	Moderate-High
Mission/Irwin/Hetherton Streets	46%	51,500	4	0 / 0	0 / 1	n/a	Constrained	Minor	Moderate
Alameda del Prado/Nave Drive	48%	37,800	11	0 / 1	0 / 0	NB Accel	Constrained	Substantial	Low-Moderate
Rowland Boulevard	47%	40,300	3	1 / 0	0 / 0	n/a	Limited	Substantial	High
DeLong Avenue	30%	26,800	3	0 / 0	0 / 0	n/a	Limited	Minor	Low-Moderate

Selection of 12th Interchange

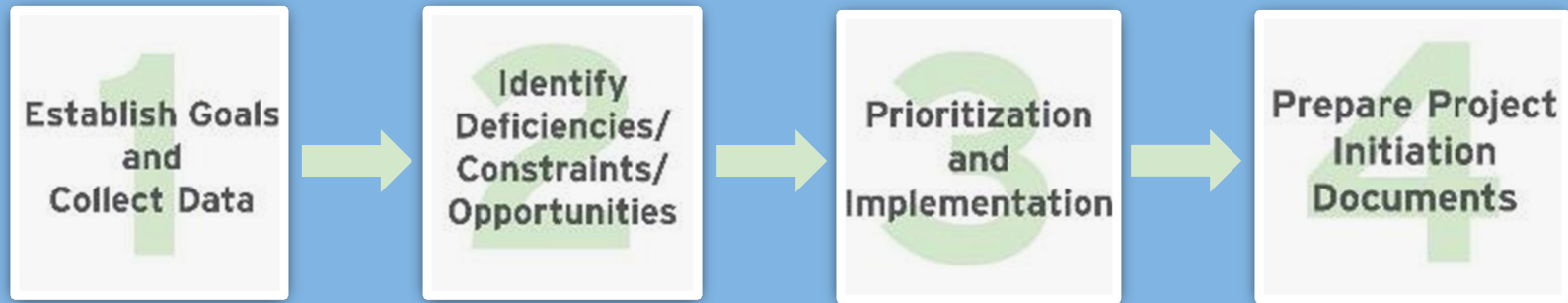
- Based on the discussion and comparison above, the top two candidates are the Shoreline Highway (State Route 1) and Alameda Del Prado/ Nave Drive Interchanges.
- Shoreline Highway has been studied multiple times in the past. Caltrans intention is to include major improvements to the interchange in the 2024 SHOPP (Estimated to be \$160M)
- The intention of the Measure AA Expenditure Plan is to identify interchange improvements and to leverage our local funds by seeking other funding sources.

Selection of 12th Interchange

Recommendation:

- The Alameda Del Prado/ Nave Drive Interchange be included in the interchange study program.

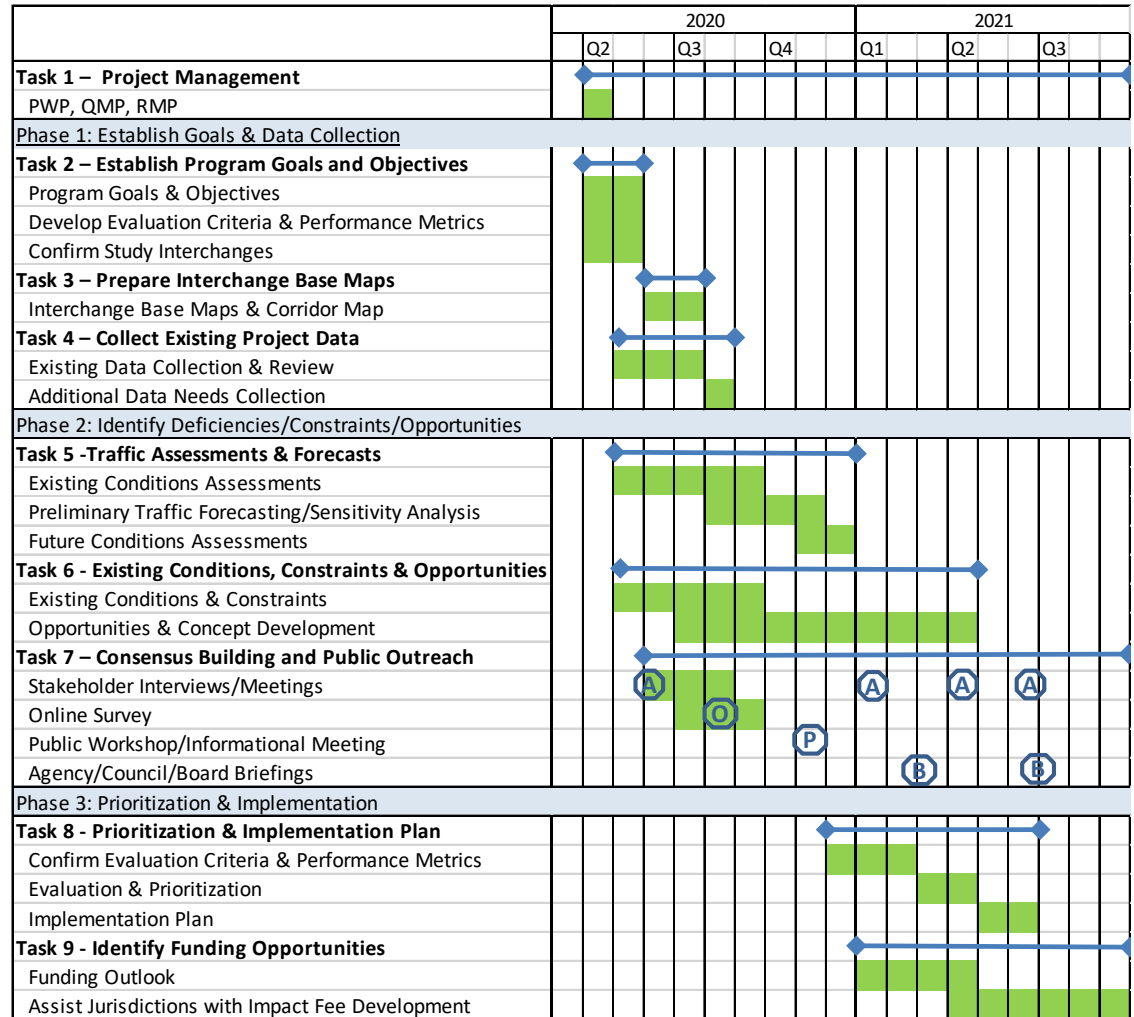
Study Process

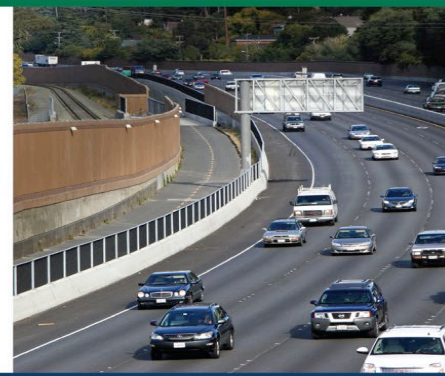
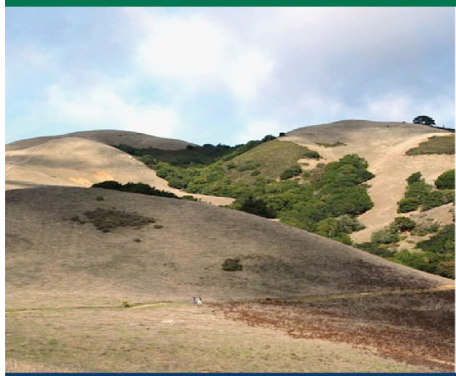


Future Phase

Project Schedule

A	Stakeholder Agency Meeting
P	Public Workshop/Meeting
B	Board Briefing/Approval
O	Online Survey





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QUESTIONS ?