

## Northbound US-101 to Eastbound I-580 Direct Connector

Stakeholder Working Group Handbook April 30, 2021





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# Existing Conditions



Congestion on US 101 and local streets

- US 101 in Larkspur and San Rafael
- East Sir Francis Drake Boulevard to Richmond Bridge
- Bellam Boulevard
- No existing freeway to freeway connection.



# Proposed Project



- Build a new freeway-to-freeway connection from Northbound US 101 to eastbound I-580
- Improve bicycle, pedestrian, and transit access primarily along Bellam Blvd
- Replace existing two-span EB 580 bridge over Bellam with a single span bridge
- Construct auxiliary lane on EB I-580 from the new connector to the Richmond San Rafael Bridge



## Marin NB 101 to EB 580 Direct Connector Project Goals and Objectives



- Build a new freeway-to-freeway connection between NB US 101 and EB I-580 to improve connectivity and traffic flow for local and regional traffic
- Separate regional pass-through traffic from local traffic and reduce local traffic congestion
- Enhance bicycle and pedestrian network and local access within the project area
- Promote equity for all users, particularly members of the under-represented communities within the project area
- Project should not preclude construction of future WB 580 to SB 101 Connector

## Antiperior Authority of Marin

## Important Project Considerations

- Design speed
- Traffic & congestion
- Environmental impacts
  - Air quality & GHG emissions
  - Noise
  - Habitat and SF Bay
  - Visual impacts

- Equity
- Sea level rise considerations
- Costs and funding
- Property impacts
- Economic impacts & benefits
- Neighborhood connectivity
- Bike/pedestrian/transit access





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Vertical scale is exaggerated 10:1

I-580 Direct Connector Project

EB

to

**NB US 101** 



EB I-580 Direct Connector Project Central Marin Sanitation Agency TO RICHMOND to 101 NB US















## Alternative 2 View from Hillside West/South of US 101



## Alternative 3A - Low Speed A



I-580 Direct Connector Project EB to **NB US 101** 





## Alternative 3B - Low Speed B



#### Alternative 3B - New Southbound US101 Exit to Bellam TAM tation Authority of Marin (Via Francisco Blvd and Andersen Dr)









### Modified Alternative 3B With New EB I-580 Bellam Exit



## Modified Alternative 3B - Visual Simulation





## Alternative 5 - Medium Speed







### Alternative 6 - Andersen Dr Mid-Way



## Alternative 6 - Andersen Dr Mid-Way - Visual Simulation



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## Alternatives Comparison Tables

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### Existing and Future No Build Travel Times From Tamalpais Dr to RSR Bridge

(Subject to Change)

Through Bellam Blvd

Existing: 7.6 to 16 min

2040 No-Build PM: 26.5 min

Through Sir Francis Drake

Existing: 7.0 to 14 min

2040 No-Build PM: 27.5 min





### Alternatives Comparison 2040 Peak Hour Travel Times (in Min) From Tamalpais Dr to RSR Bridge

Direct Connector alternatives provide substantial travel time improvements for regional and local traffic.

		Alternatives						
Travel Route	No Build	1A/1B	3A/3B 3B Mod	2/4/5/6 (not modeled)				
Direct Connector	N/A	7.1	11.4	7.1 to 11.4				
Sir Francis Drake	26.5	15.7	16.5	Similar to other alternatives				
Bellam Blvd.	27.5	24.6	24.0	Similar to other alternatives				

## Alternatives Comparison - Design Speeds (mph)

Hillside A 1A	Hillside B 1B	Simms St 2	Low Speed A 3A	Low Speed B 3B	Low Speed B (Mod) Modified 3B	Swing Out 4	Medium Speed 5	Andersen Dr Mid-Way 6
50	50	45	35	35	35	35	40	45

## Alternatives Comparison - Preliminary Cost\*

Hillside A 1A	Hillside B 1B	Simms St 2	Low Speed A 3A	Low Speed B 3B	Low Speed B (Mod) Modified 3B	Swing Out 4	Medium Speed 5	Andersen Dr Mid-Way 6
\$292M	\$379M	\$168M	\$138M	\$114M	\$139M +	\$225M	\$189M	\$256M +

\* Include right-of-way costs and Bellam improvements

## Alternatives Comparison - Height\*

Hillside A 1A	Hillside B 1B	Simms St	Low Speed A 3A	Low Speed B 3B	Low Speed B (Mod) Modified 3B	Swing Out 4	Medium Speed 5	Andersen Dr Mid- Way 6
Retaining walls on hillside up to 80' high	Retaining walls on hillside up to 100' high	New bridge above Andersen (40' high) Max height up to 55 ft	New bridge over Bellam off-ramp (25 ft)	Wider bridge over Bellam at same height as existing (~ 22ft)	Wider bridge over Bellam at same height as existing (~ 22ft)	New bridges over Andersen (50' high), over US 101 (35' high), over Francisco Blvd West (55' high) Max height 90 to 100 ft	New bridge over Andersen (40' high) and two bridges over Bellam (25' and 50' high) Max height up to 50 ft	New bridge (60' high over Andersen and 90' high over Jacoby)
			Repla	ce existing brid	lge over Bellam			

\*Top of pavement to bottom of bridge

For Reference: US 101 is 25' to 40' over Andersen

NB US 101 to EB I-580 Direct Connector Project

### Alternatives Comparison – Active Transportation

### Included in all alternatives

- Active transportation improvements along Bellam Blvd
- Creating a wider opening under I-580 Eastbound and removing the middle column

## Alternatives Comparison - Property/Business Impacts

	Hillside A 1A	Hillside B 1B	Simms St 2	Low Speed A 3A	Low Speed B 3B	Low Speed B (Mod) Modified 3B	Swing Out 4	Medium Speed 5	Andersen Dr Mid- Way 6
Parcels Impacted	7	6	16	3	2	2	8	12	3
Parcels w/ Business Relocation	2	2	6	2	2	2	0	4	2
Right of Way Cost	\$26.8M	\$16.3M	\$12.4M	\$6.3M	\$6.6M	\$6.6M*	\$3.7M	\$14.3M	\$20.0M

\* Costs could be higher depending on traffic analysis recommendations for additional turn lanes

### Alternatives Comparison - Potential Environmental Impacts

			Simms	Low	Low	Low Speed B		Medium	Andersen Dr
	Hillside A	Hillside B	St	Speed A	Speed B	(Mod)	Swing Out	Speed	Mid-Way
	1A	1B	2	3A	3B	Modified 3B	4	5	6
Special Status Species	v	v				v			
Trees	٧	٧			٧	v			
Archaeology	v	v	v	v	v	v			v
Water Resources/ Wetland	v	٧	٧	٧	٧	v	٧	v	٧
Visual	v	٧	٧	٧	٧	٧	v	v	٧
Biological Resources Special status species anticipated Biological Resources Tree Removal anticipated									

Archaeology - Former marsh shore, relatively undisturbed subsurface Water Resources/Emergent wetlands - Impacts to potential wetland/stream along I-580

Visual Impacts - Views from sensitive receptors

Preliminary Assessment Only -To be analyzed during environmental phase

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#### **Alternatives Comparison** Insportation Authority of Marin Compatibility with Future WB-SB Connector

ect Connector Pro	Hillside A/B 1A/1B	Simms St, Low Speed A, Low Speed B, Low Speed B(Mod), Medium Speed 2/3A/3B/3B Mod/5	Swing Out 4	Andersen Dr Mid-Way 6
NB US 101 to EB I-580 DIFE	Compatible with WB- SB on hillside - Apx \$372 Million+	Compatible with WB-SB in Bellam area - Apx \$220 Million	Not Compatible	Compatible with either WB-SB concept - Apx. \$220 Million/\$372 Million+

## Alternatives Comparison - Equity Consideration

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Category	Element			
Access and Parking	Access to Canal/ Travel Time			
	Parking			
	Transit Access			
Safety	Emergency/Evacuation Response			
	Pedestrian and Bike Safety			
	Vehicular Safety			
Environment	Air Quality			
	Visual			
Beautification/Placemaking	Landscape/ Beautification			
	Public Art/Placemaking			
Land Use/Job Impact	Residential/Commercial/Industrial			
·	Job Creation/Loss			

\*Equity analysis of recommended alternatives will be conducted in the environmental phase



## Project Timeline

## TAM 101-580 Near-term Planning Roadmap



#### 2021

TÀM

## nsportation Authority of Marin

## Targeted Project Schedule



\* Pending Available Funding



## Thank You for Your Participation

We look forward to meeting with you on May 18 at 3pm. Prior to the meeting, please:

- Review provided material
- Gather input from groups and community members you represent
- Draft comments about what you like/don't like about each alternative
- Consider alternatives that can be dropped for further evaluation
- Contact team for clarifying questions, <u>marin101-580@tam.ca.gov</u>