STUDY SESSION November 14, 2018 - FINAL









PRESENTATION OUTLINE



- Project Timeline (Since 2006)
- Project Budget and Schedule
- Selected Alternative: Road over Rail
- Project Benefits
- McKinley-Sampson Connector Road Alternatives
 - Alternatives Withdrawn
 - Alternatives Advanced
 - Recommended Alternative
- Next Steps



TIMELINE







TIMELINE





COUNCIL MEETING



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PROJECT BUDGET & SCHEDULE



- Project Budget: \$89.5M
 - Senate Bill (SB) 132: \$84.45M
 - Other Sources (TUMF, TDA LTF, etc.): ~\$5.0M
- Project Schedule
 - Per SB 132, funds must be encumbered and liquidated by June 2023
 - Grade separation alternatives
 - "Road over Rail": Feasible and under development
 - "Rail over Road": Not possible with schedule or budget











- Raised embankment would be ~2 miles long
- Sound walls on top of embankment
- Even ~1/2 mile west of grade crossing, wall is still tall because of gradual slopes and flat area required for Control Point









- BNSF Railway Approval
 - Railroad approval to raise tracks extremely difficult
 - North Milliken Grade Separation: Geometrics
 - Alameda Corridor-East GS (Fairway, Fullerton): Groundwater (*partial raise*)
 - Colton Crossing: Train over Train (one had to be raised)
 - All of these projects are UPRR, not BNSF Railway
- Riverside County Flood Control & Water Conservation District (RCFC&WCD) Approval
 - Proximity of Arlington Channel
 - Costly retrofit of channel needed for raised embankment, or
 - Expensive deep foundations needed for raised embankment









• Schedule: Project must be completed by June 2023







- Cost: ~\$89M budget. Rail over Road estimated at ~\$207M in November 2017.
- Refinements to cost estimate:
 - Use of precast walls with lightweight cellular concrete (similar to Colton Crossing)
 - Cheaper retaining wall system; faster to construct: ~\$6M savings.
 - Reduces load on adjacent flood control channel, reducing need for expensive shoring wall: ~\$18M savings.
 - T-Walls also evaluated (similar to North Milliken GS), but more expensive system with shoring wall or channel retrofit required: ~\$3M increase.
 - Eliminate roadway enhancements (add lanes at a later date): ~\$10M savings
 - Leave shoofly track in place as BNSF siding: ~\$2M savings

Refined Cost: ~**\$171M** >>> **Project Budget**



TRAFFIC CONGESTION



- Grade crossing causes significant delays: gate-down time
- Train volume and length will continue to grow

	Train Volumes (Per Day)				
	Freight	Metrolink	Amtrak	Total	
2018 (Estimated)	56	29	3	88	
2035 (Projected)	91	42	4	137	

Gate-Down Time (Per Day)		
2018 (Estimated)	2 hours 35 minutes	
2035 (Projected)	4 hours 20 minutes	Traffic on McKinley Street is stopped
		for over 4 hours per day





PROJECT BENEFIT: TRAFFIC RELIEF



3CF



WITHOUT PROJECT (No-Build Alternative) (Year 2043)



PROJECT BENEFIT: TRAFFIC RELIEF





WITHOUT PROJECT (No-Build Alternative) (Year 2043)



5 minutes 20 seconds

Emergency Response Time



CONNECTOR ROAD ALTERNATIVES











ALTERNATIVES WITHDRAWN



Challenges:

- Elevated intersection at McKinley and grade differential at back of Los Arcos Plaza challenging for access
- SR-91 EB Off-Ramp traffic cannot go straight across to connector road







Challenges:

- Driveway access to Los Arcos Plaza
- Grade differential
- Roadway curvature



ALTERNATIVES WITHDRAWN



Challenges:

- Majority of Los Arcos Plaza buildings face west (towards McKinley) complicating visibility
- Remnant parcel to north of connector road less viable
- Grade differential

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Challenges:

- Truck turning and tight curvature
- Parking challenges for Denny's remnant
- Proximity of intersections on Sampson Avenue



ALTERNATIVES ADVANCED



Parking loss







- Maintains connector road at-
- Preserves visibility and access for remaining buildings

Challenges:

- Building acquisition
- Tenant relocation
- **3C**

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relocation











Configuration: • 2 mixed-flow lanes

- 1 HOV lane
- Accommodates future widening of SR-91

Advantages:

- Avoids buildings
- Removes some traffic from McKinley Street (Sampson to SR-91 EB)

Challenges:

- EB on-ramp realignment requires ~250 parking spaces and clips rear of building on east side
- Offset intersection at **McKinley Street**
- Access/visibility to Los Arcos Plaza provided from rear (buildings face west)
- Retaining walls







PARKING STRUCTURE



- 4-story parking garage
- Temporary impacts during construction
 - Pave vacant lot for temporary parking
 - Provide shuttle service
- Detour SR-91 EB on-ramp during construction





RETAINING WALLS



- Difficult excavation in granite required
- A total of approximately one mile of retaining walls along the connector road and SR-91 EB on-ramp are needed for this alternative
- Construction cost significant, and complicates Streamlined Oversight Process with Caltrans (typically used for projects with a construction cost under \$3M within State right-ofway).







COST ESTIMATE

	Alt. 1	
Roadway/Civil Items	\$8.1M	
Retaining Walls (Permanent)	\$7.8M	
Retaining Walls (Temporary) & Grading of Vacant Lot	\$1.9M	
Parking Structure	\$12.0M	
Subtotal (Construction Cost)	\$29.8M	
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ALT. 2: INNER LOOP





ALT. 2: INNER LOOP





Configuration:

- Creates new signalized intersection along Sampson Avenue with preferable spacing between intersections
- Access to Los Arcos Plaza anticipated to be provided at intersection in the middle of the connector road

Challenges:

- Building acquisition
- Tenant relocation

Advantages:

- Caltrans involvement reduced, furthering ability to meet SB-132 schedule deadline
- Maintains connector road at-grade
 - Expensive retaining walls avoided
 - Granite excavation avoided
 - Ability to provide driveway connections to remainder of Los Arcos Plaza
- Improves visibility to remaining businesses within Los Arcos Plaza (building frontage)
- Remnant portions can be used for landscaping, parking, etc.
- Less expensive than Alt. 1: Roundabout Loop

ALT. 2: INNER LOOP

COST ESTIMATE

	Alt. 1	Alt. 2	
Roadway/Civil Items	\$8.1M	\$2.3M	
Retaining Walls (Permanent)	\$7.8M		
Retaining Walls (Temporary) & Grading of Vacant Lot	\$1.9M		-
Parking Structure	\$12.0M		
Subtotal (Construction Cost)	\$29.8M	\$2.3M	C
		A CONTRACT	

RECOMMENDED ALT. 2: INNER LOOP

RECOMMENDED ALT. 2: INNER LOOP

NEXT STEPS

- Advance recommended connector road alternative into Plans, Specifications, and Estimates (PS&E) phase
- Continue one-on-one meetings with property owners and businesses
- Begin appraisals and negotiations with affected property owners
- Solicit input from public and City Council on project aesthetic features

QUESTIONS/DISCUSSION

