

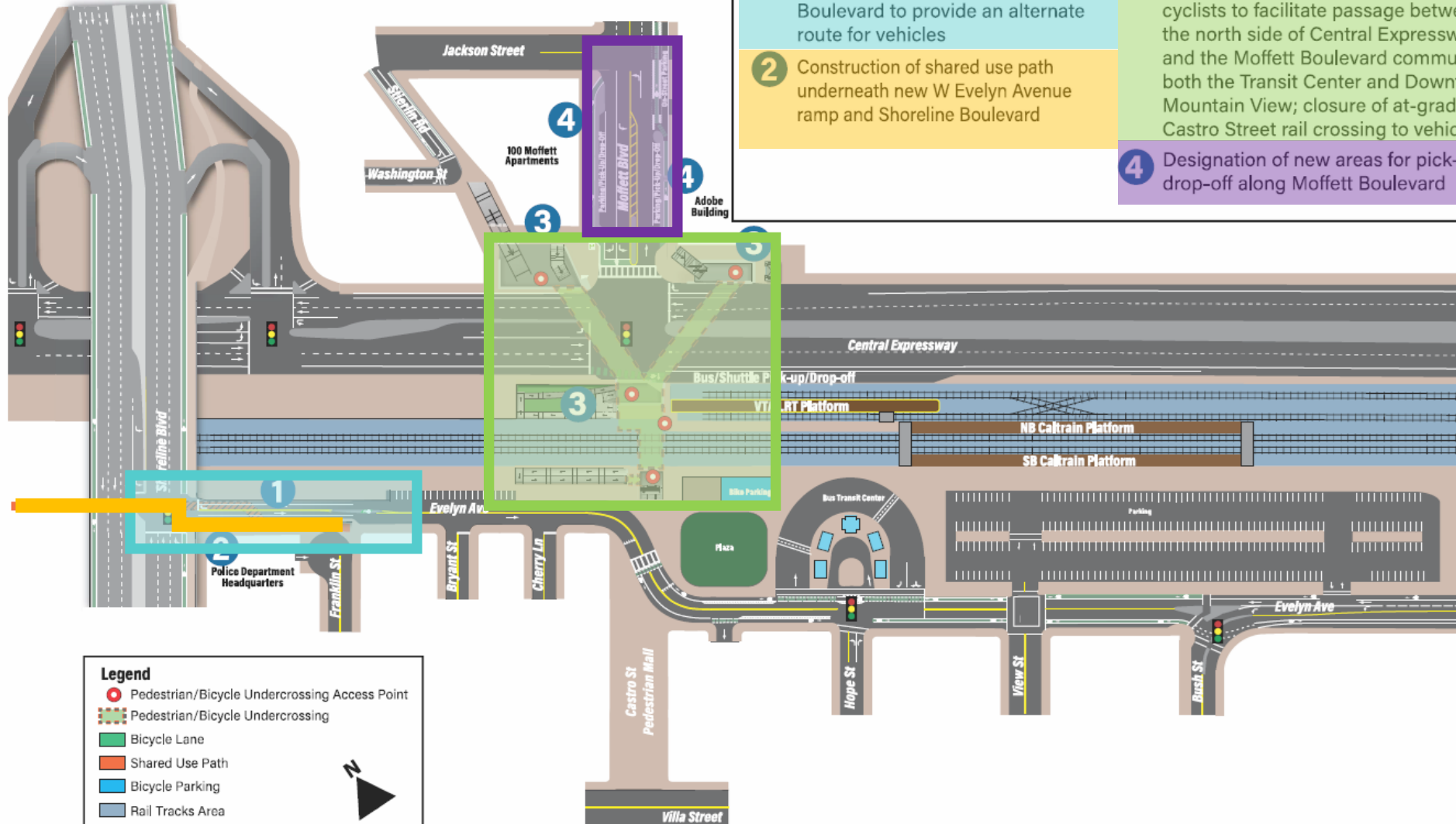


City of  
**Mountain  
View**

**TRANSIT CENTER GRADE SEPARATION AND ACCESS PROJECT  
PROJECT SCOPE AND FUNDING OPTIONS  
Council Transportation Committee**

NOVEMBER 28, 2023  
Joy Houghton, Senior Civil Engineer

## PROJECT ELEMENTS




- 1 Construction of a new vehicle ramp from W Evelyn Avenue to Shoreline Boulevard to provide an alternate route for vehicles
- 2 Construction of shared use path underneath new W Evelyn Avenue ramp and Shoreline Boulevard
- 3 Construction of undercrossing and vertical circulation for pedestrians and cyclists to facilitate passage between the north side of Central Expressway and the Moffett Boulevard community to both the Transit Center and Downtown Mountain View; closure of at-grade Castro Street rail crossing to vehicles
- 4 Designation of new areas for pick-up/drop-off along Moffett Boulevard

**Legend**

- Pedestrian/Bicycle Undercrossing Access Point
- Pedestrian/Bicycle Undercrossing
- Bicycle Lane
- Shared Use Path
- Bicycle Parking
- Rail Tracks Area

Not to Scale





## April 10, 2023 CTC



FINAL DESIGN  
STATUS



PROJECT DELIVERY  
METHOD



SCHEDULE



FUNDING

PROJECT PHASE	COST (MILLIONS \$)
Preliminary Engineering Phase	2.5
Final Design and Preconstruction Phase	18.2
<b>Construction Cost</b>	<b>90</b>
Construction Phase Soft Costs	14
Project Contingency	11
<b>TOTAL PROJECT COST (ROUNDED UP)</b>	<b>136</b>

## Progress Since April 10, 2023



CM/GC  
CONTRACT



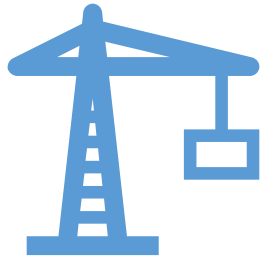
65% DESIGN



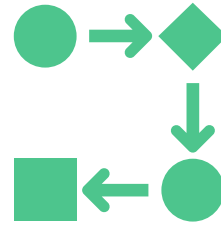
65% CONSTRUCTION  
COST ESTIMATE

**TABLE 2**

PROJECT PHASE	COST (MILLIONS \$)
Preliminary Engineering Phase	2.5
Final Design and Preconstruction Phase	18.2
<b>Construction Cost - \$216 million</b>	
<i>Construction Cost Estimate</i>	203
<i>CM/GC Fee</i>	13
Construction Phase Soft Costs	17
Project Contingency	17
<b>TOTAL PROJECT COST (ROUNDED UP)</b>	<b>271</b>



CONSTRUCTION METHODS  
AND SEQUENCE



DESIGN MODIFICATIONS



PROJECT PHASING

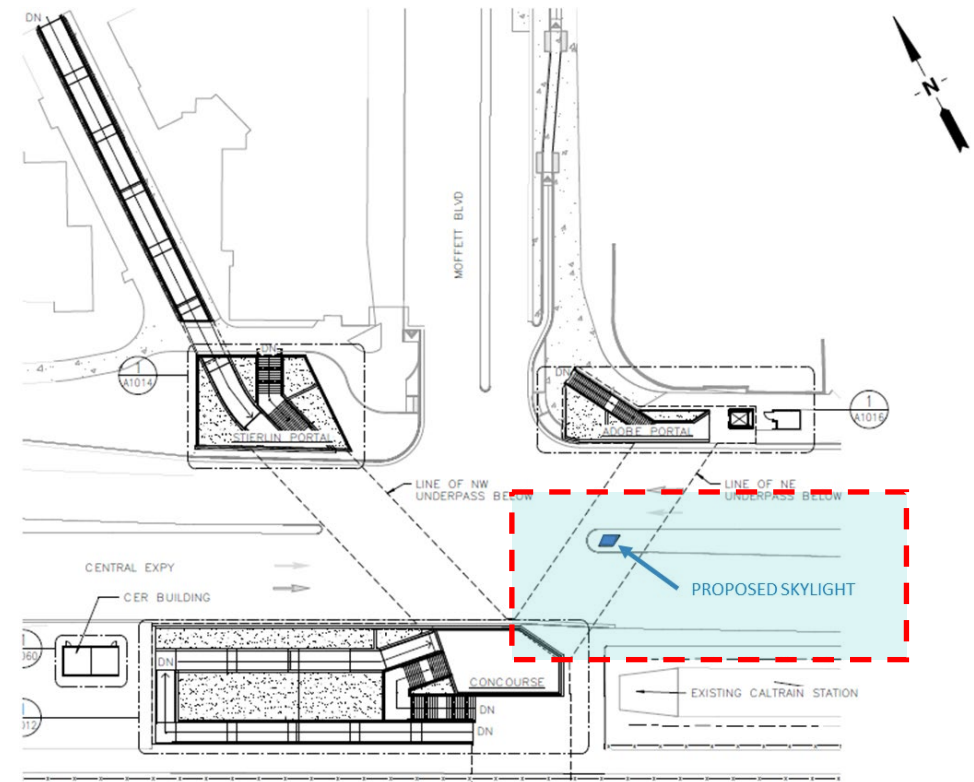
# CONSTRUCTION METHODS AND SEQUENCE

**TABLE 3**

COST SAVING OPTION	SAVINGS (MILLIONS \$)	NOTES
Construction Methodology – Various Modifications	14.3 -15.7	Modifications to shoring, structures and formwork.
Tunnel Construction Method – Box-Jacking Open-Cut Tunnel	9.7 – 10.7	Assumes a one-time 55-hour weekend Caltrain service shutdown (subject to Caltrain approval). Assumes two weekend closures of the Moffett/Central Intersection (County is supportive).
Construction Sequence – Evelyn Ramp and Castro Undercrossing at Same Time	7.5 – 8.3	Reduces construction duration.
Construction Sequence – Stierlin and Adobe Pit at Same Time	2.5 -2.8	Requires traffic phasing approval from the Santa Clara County.
<b>TOTAL POTENTIAL SAVINGS</b>	<b>34.0 – 37.5</b>	

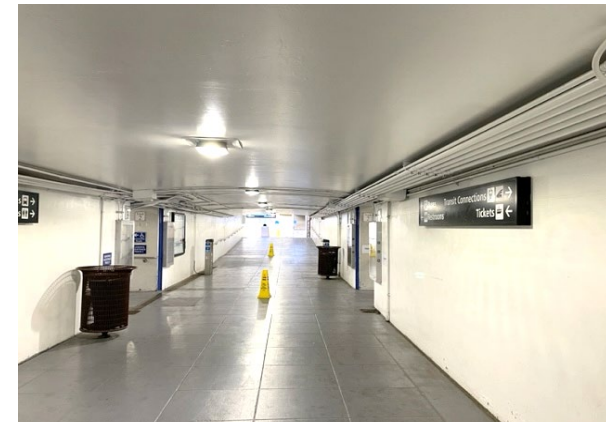
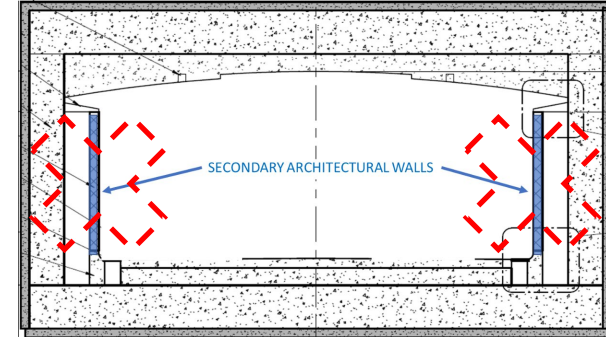
**TABLE 4**

COST SAVING OPTION	SAVINGS (MILLIONS \$)	NOTES
Eliminate Skylight for Adobe Tunnel	0.3 – 0.4	Sufficient tunnel lighting will be included for visibility and safety.
Eliminate Secondary Architectural Walls in Tunnels	0.6 – 0.7	Treatments such as tile, panels and stucco will not be possible; however, decorative paint treatments could still be provided.
Eliminate form liners for retaining walls	1.3 – 1.4	Decorative paint treatments could be provided.
Reduce tunnel dimensions and raise tunnel elevation	3.1 – 3.4	Enough width would still be provided for separated bike/pedestrian areas under Central Expressway.
<b>TOTAL POTENTIAL SAVINGS</b>	<b>5.3 – 5.9</b>	



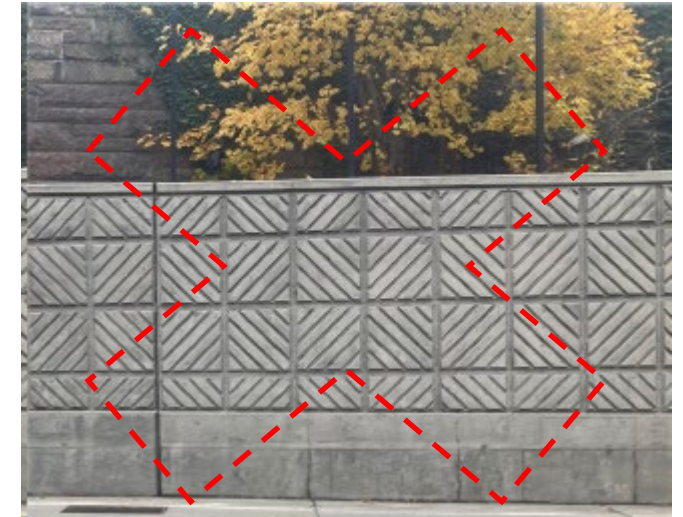
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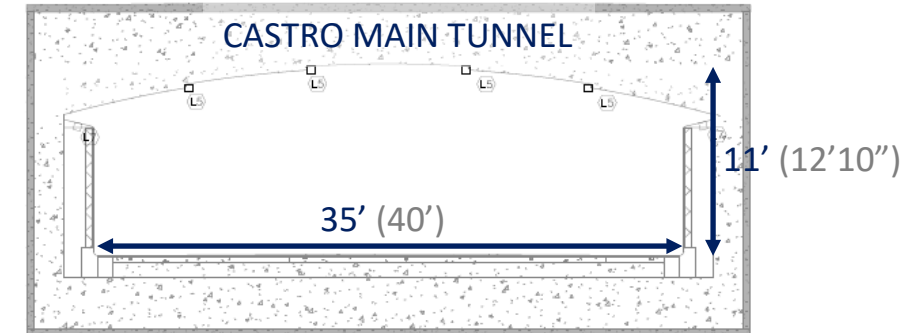
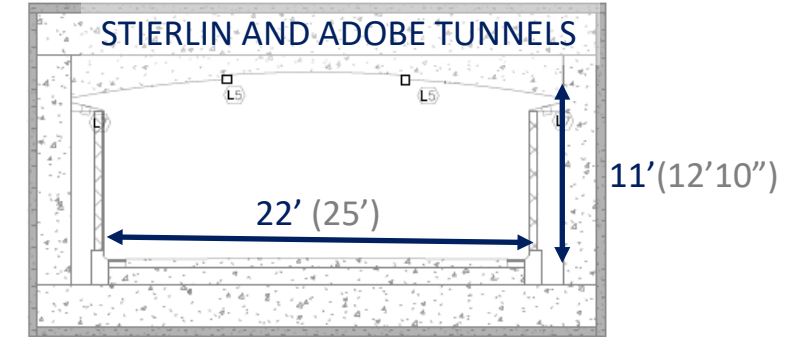
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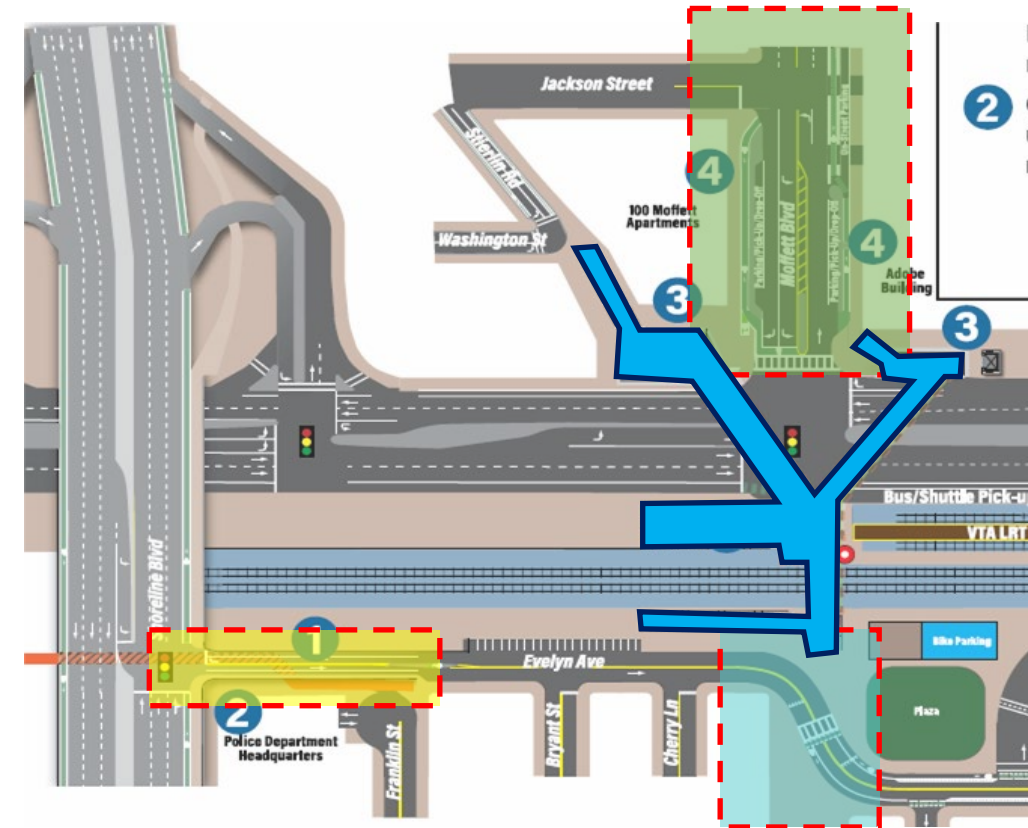
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<b>TOTAL POTENTIAL SAVINGS</b>	<b>5.3 – 5.9</b>	



**TABLE 5**

POTENTIAL PROJECT ELEMENTS TO DEFER	SAVINGS (MILLIONS \$)	NOTES
Evelyn Ramp to Shoreline, including bicycle/pedestrian pathway on Evelyn from Franklin to west of Shoreline	16.3 – 17.9	Traffic projected to use the ramp to access downtown and the Transit Center from Central Expressway and Shoreline would use Villa Street.
Evelyn Avenue “S” Curve at Castro Street	1.3- 1.4	The project would keep Evelyn’s existing intersections at Castro in place but reduce Evelyn between Blossom Lane and Wild Cherry Lane into a single-lane westbound only connection across Castro Street with bicycle accommodations.
Moffett Streetscape Improvements	1.8 – 2.0	Project would include just the minimum Moffett/Central Expressway intersection improvements necessary to convert to a T-intersection.
<b>TOTAL POTENTIAL SAVINGS</b>	<b>19.4 – 21.3</b>	



Updated Project Cost	\$271M
Secured Funding	\$133M
<b>Current Funding Shortfall</b>	<b>\$138M</b>

**TABLE 6**

CATEGORY	SAVINGS (MILLIONS \$)
Construction Method and Sequence	34.0 – 37.5
Design Modifications	5.3 – 5.9
Project Phasing	19.4 – 21.3
<b>TOTAL POTENTIAL SAVINGS</b>	<b>58.7 – 64.7</b>
<b>NET FUNDING SHORTFALL</b>	<b>73.3 – 79.3</b>

## QUESTION #1

- A. Are there any Cost Reduction Strategy Options listed in Tables 2, 3 or 4 that the Committee would not recommend for Council consideration?
  
- B. Are there any other cost reduction options the Committee would like staff to explore?

**TABLE 7**

POTENTIAL PROJECT ELEMENTS TO REMOVE	SAVINGS (MILLIONS \$)	DRAWBACKS/CONCERNS
Defer the Adobe tunnel under Central Expressway	26.0 – 28.6	Bicyclists and pedestrians approaching the intersection from east of Moffett may choose to cross Central Expressway at grade rather than cross Moffett to access the Stierlin entrance to the undercrossing. Therefore, the project will likely have to continue to provide an at-grade crossing of Central Expressway on the east side reducing some of the safety benefits of the project.
Defer both legs of the Central Expressway undercrossing and construct just an undercrossing of the train tracks	70.0 - 77.0	Bicyclists and pedestrians would have to continue to cross Central Expressway at grade from both corners. This will significantly reduce the safety benefits of the project. This option may also present a risk of losing the \$25 million State SB-1 grant.

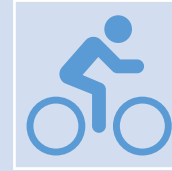




## QUESTION #2

- A. Does the Committee recommend deferring the Adobe tunnel leg under Central Expressway to be included in the cost reduction options to be presented to Council?
  
- B. Does the Committee recommend that staff further explore deferring the undercrossing of Central Expressway, including whether it will jeopardize the grant?

COST REDUCTION ALTERNATIVES	NET PROJECT SHORTFALL (MILLIONS \$)
None – Project Scope Remains As Is	<b>138</b>
Implement All Cost Reduction Strategies	<b>73 – 79</b>
Defer Adobe Tunnel	<b>53</b>
Defer Central Expressway Undercrossings	<b>2 – 9</b>

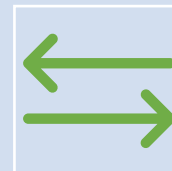


## Pursue Additional Grant Funding

Active Transportation Program  
Solutions for Congested Corridors Program



## Pursue Potential City Revenue Measure



## Reallocate City Capital Improvement Program (CIP) Funding From Other Projects

CIP Reserve  
Construction/Conveyance Tax  
Transportation Reserve

**TABLE 8**

GRADE SEPARATION PROJECT	PHASE	AMOUNT (MILLIONS \$)	STATUS
Castro	Final Design/Preconstruction	17	Nearly Fully Expended
	Construction	77	Planned
<b>CASTRO TOTAL</b>		<b>94</b>	
Rengstorff	Final Design/Right-of-Way	42	Partially Expended
	Construction	98	Planned
<b>RENGSTORFF TOTAL</b>		<b>140</b>	
<b>TOTAL MEASURE B AVAILABLE TO CITY</b>		<b>234</b>	

## QUESTION #3

- A. Does the Committee have any feedback on the potential funding sources for closing the funding gap?
  
- B. Does the Committee recommend that staff conduct an analysis comparing the needs and benefits of the two grade separation projects and request that Council prioritize the projects, including possible re-allocation of Measure B funding and the TIRCP grant?



January 23, 2024 – City Council

Options to City Council to receive direction prior to project 95% design.

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