

## APPENDIX B

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# Updated Capital Costs Report

## MEMORANDUM

To: Scott Hartwell, Project Manager

From: Greg Kyle, AICP  
Kimley-Horn and Associates, Inc.

Date: March 10, 2022

Subject: North Hollywood to Pasadena Bus Rapid Transit Corridor Project  
Summary of Capital Cost Updates

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The capital cost estimate for the North Hollywood to Pasadena Bus Rapid Transit (BRT) Corridor Project was updated to reflect several scope and basis of design decisions in late 2021 and early 2022. This memorandum summarizes these assumptions and corresponding revisions to the capital cost estimate, provides an updated 2022 Cost Estimate Summary Table, and presents the capital cost estimate in the main worksheet of the Federal Transit Administration's (FTA) Standard Cost Categories (SCC) format.

Overall capital cost estimate factors and project-wide elements that were revised, updated, or confirmed as part of this update included:

- Updated the base year for the unit prices of the capital cost estimate from 2020 to 2021.
  - A 5% increase was applied to unit prices from the 2020 capital cost estimate, except for the cost of asphalt which was increased more based on latest cost information.
- Updated the inflation rate used for year-of-expenditure (YOE) calculations from 3% to 5% to reflect current market conditions.
- Did not adjust contingency or professional services assumptions.
- Confirmed public art allowance is calculated as 0.5% of the overall estimated construction cost.
  - Excluded from the calculation of the public art allowance: temporary and permanent right-of-way acquisitions, vehicle procurement, professional services, and unallocated contingency.
- Reduced red colored pavement for dedicated bus lanes from full extent treatment to application only at emphasis locations (this approach is consistent with Advanced Conceptual Engineering (ACE) drawings prepared for the Eagle Rock segment of the Project).
- Reduced fiber optic duct bank assumptions for station communications from ¼ mile per station to 300 feet per station, assuming there will be opportunities to

connect with existing commercial fiber networks based on input of Metro Systems and Telecommunications Engineer.

- Revised vehicle costs to match information provided in Table 8-2 of the LA Metro ZEB Master Plan. The revised vehicle costs include spare parts and procurement support. Allocated contingency and inflation were not applied to the vehicle costs.
- Revised costs for electric vehicle charging units at the Metro Bus Division where the Project's vehicles will be stored, based on information obtained from the LA Metro ZEB Master Plan. Allocated contingency and inflation were not applied to the electric vehicle charging units.
- Adjusted the estimate so that contingency, professional services, and inflation factors are not applied to the allowances established for improvements at the Bus Operation Center (BOC).

Cost estimate revisions for the new design option in the Burbank segment of the Project included:

- New route alignment from Olive Avenue to Alameda Avenue to Buena Vista Street and back to Olive Avenue.
  - This new route alignment eliminated the need for roadway widening, milling, and resurfacing on Olive Avenue between Alameda Avenue and Buena Vista Street.
- Consolidated stations.
  - Eliminated station at Olive Avenue/Alameda Avenue.
  - Added station at Alameda Avenue/Naomi Street.
  - Eliminated station at Olive Avenue/Buena Vista Street.
- Relocated the station serving the Burbank – Downtown Metrolink Station from the Olive Avenue bridge to the Olive Avenue/Lake Street intersection.
  - Removed costs associated with improvements to the Olive Avenue bridge.
- Mixed-flow operations for the BRT on Glenoaks Boulevard between Olive Avenue and Providencia Avenue.
  - Eliminated the need for roadway widening, milling, and resurfacing.

Cost estimate revisions for new design options in the Eagle Rock segment of the Project included:

- Updated the cost estimate per the ACE drawings prepared for the one travel lane per direction and the two travel lanes per direction design options.
- Removed active transportation improvements (curb extensions) that will be constructed by others (City of Los Angeles) based on ongoing coordination for consistency with the Project's design configuration.

Cost estimate revisions for the Glendale segment of the Project included:

- Added an allowance for bicycle facility improvements along Glenoaks Boulevard, which will be coordinated with the City of Glendale.

The table below summarizes the current Year 2022 capital cost estimate for the Project, reflecting the adjustments described above.

<b>2022 Cost Estimate Update</b>		
<b>SCC</b>	<b>Cost Category</b>	<b>2022 Estimate YOE (x,1000)</b>
20	Station Stops	\$22,949
40	Roadway / Utilities / Special Conditions	\$115,207
50	Systems	\$40,502
<b>10-50</b>	<b>Construction Subtotal</b>	<b>\$178,657</b>
60	Right-of-Way	\$18,275
70	Vehicles	\$22,308
80	Professional Services	\$63,054
90	Unallocated Contingency	\$26,609
<b>10-100</b>	<b>Total Project Cost</b>	<b>\$308,904</b>
	<b>Low (-15%)</b>	<b>\$262,568</b>
	<b>High (+25%)</b>	<b>\$386,129</b>

**Attachment:**

- FTA SCC Main Worksheet - Build

