

## 7

**ORDER OF MAGNITUDE COST ESTIMATES**

The Consultant Team has prepared ‘order-of-magnitude’ cost estimates for the El Camino Real improvement options. The estimates are intended to provide elected officials, city staff, and the public with an initial understanding of costs involved with undertaking the improvements described in the “Master Schematic Design Plan.”

**7.1 HOW THE COST ESTIMATES WERE PREPARED**

For each cross section a detailed estimate was made for a one foot long segment of the street section. One foot of each type of curb, one square foot of sidewalk, pavement or landscape area for each lineal foot of each item as it occurs in the cross section was totaled and multiplied by the appropriate cost per foot and summed to produce a cost per linear foot of roadway section.

For features that do not appear in each linear foot of roadway, such as trees or light standards, a 300-foot long interval of each typical section was used to calculate an average per linear foot cost. The number of features that occur in that 300-foot segment were counted and multiplied by their appropriate unit costs. The total cost for those features was then divided by the 300-foot length to determine a cost per linear foot of cross section.

A separate computation was made for curb bulb outs using similar methods. A cost per lineal foot for a cross section including bulb outs on both sides was computed. The typical cost per linear foot for a cross section without bulb outs (estimated per above) was subtracted. The difference was the estimated additional cost per linear foot of cross section with bulb outs on both sides.

The estimated costs per linear foot for each different cross section was then applied to the length of each cross section as it occurs in each of the design options for El Camino Real to determine the estimated costs for the entire option. The costs of a typical intersection, excluding traffic signals were also calculated. The cost per linear foot cost for the street within the intersection was calculated and compared to the linear foot costs for the typical cross sections. Since the costs per linear foot of El Camino through the intersection were comparable to the costs per lineal foot for the typical sections, we did not make an adjustment for cost differential through intersections.

For the purpose of estimating the approximate cost per linear foot of street subject to field testing, a mid-level set of improvements was assumed. This included the installation of temporary curbs at sidewalks and medians, temporary drainage, temporary bulb-outs with curb ramps, and the placement of additional trees in boxes or planters. The total cost for each field test segments was calculated in the same way as for the permanent improvements discussed above. More or less costly sets of temporary improvements are conceivable, but were not considered here.

**7.2 ORDER-OF-MAGNITUDE COST ESTIMATES FOR INITIAL IMPROVEMENTS, FIELD TESTING AND KEY DESIGN ALTERNATIVES**

The following outline the results of the order-of-magnitude cost estimates for rebuilding El Camino Real using the approach described above and the designs proposed in the Master Plan. All figures include a 30% contingency on capital cost items (excluding any “soft” costs such as design and engineering). Using this relatively high contingency is justified by the built up nature of this urban corridor, where potential complicating factors can result during detailed design and final Caltrans review, and where currently unknown conditions including, r.o.w. encroachments, or conditions can complicate the engineering and construction stages. It should also be noted that the overall cost figures for the alternative options include a significant amount for the construction of a completely new lighting system (roadway and pedestrian) throughout the Corridor.

All presently anticipated “soft” cost items, such as surveying, a signal timing study and its implementation, a parking utilization study, and design and engineering were accounted for after the 30% contingency was applied to the subtotal of all capital improvement costs.

The following order-of-magnitude cost estimates address the:

- Overall Cost for Alternative Options: 6-Lane Throughout Option, 6/4-Lane Hybrid Option – Configurations A & B;
- Cost for Initial Improvements;

- Approximate Cost for Field Tests; and
- Cost for individual recommended “Bracket Segments”.

### A. Alternative Options: 6-Lane Throughout or 6/4-Lane Hybrid Options

OVERALL COST FOR ALTERNATIVE OPTIONS			
	6-Lane Throughout Option (w/o Segment North of University Avenue)	6/4-Lane Hybrid Option Configuration A (w/o Segment North of University Avenue)	6/4-Lane Hybrid Option Configuration B (w/o Segment North of University Avenue)
Total of Capital Cost Items	\$ 29,950,000	\$ 30,350,000	\$ 30,800,000
Total of “Soft” Costs Items	\$ 2,350,000	\$ 2,500,000	\$ 2,450,000
<b>Subtotal</b>	<b>\$ 32,300,000</b>	<b>\$ 32,850,000</b>	<b>\$ 33,250,000</b>
30% Contingency on Capital Cost Items	\$ 8,985,000	\$ 9,105,000	\$ 9,240,000
<b>Rounded Total</b>	<b>\$ 41,300,000</b>	<b>\$ 42,000,000</b>	<b>\$ 42,500,000</b>

This includes the following key items:

- Additional Survey of Detail Features;
- 2nd Signal Timing Study and Implementation of Re-timing;
- Parking Utilization Study;
- Design and Construction Drawings for fully improved Option;
- Utility Add-on for the relocation of some existing utilities between Maybell and Adobe Creek.
- Construction of fully improved 6-Lane Throughout or 6/4-Lane Hybrid Option.

### B. Initial Improvements

COST FOR INITIAL IMPROVEMENTS	
Initial Improvements	
Total of Capital Cost Items	\$ 850,000
Total of “Soft” Costs Items	\$ 350,000
<b>Subtotal</b>	<b>\$ 1,200,000</b>
30% Contingency on Capital Cost Items	\$ 255,000
<b>Rounded Total</b>	<b>\$ 1,450,000</b>

This cost includes the following key items:

- Initial survey and aerial;
- Signal Coordination Study and Implementation of Signal Re-timing;
- Limited Parking Utilization Study;
- Design and construction drawings for re-striping and model crosswalk improvements at one intersection;
- Construction of model crosswalk improvements at one intersection; and
- Re-striping of the entire Corridor and scraping off the old markings from the roadway surface (resulting in a cost at the lower end of the range given above); or
- Re-striping of the entire Corridor and covering of old markings by applying a thin layer of asphalt across the entire roadway surface (resulting in a cost at the higher end of the range given above).

### C. Estimated Cost for Possible Field Tests

APPROXIMATE COST FOR FIELD TESTS		
	Field Test between Park Blvd./ California Avenue	Field Test between Los Robles/ Maybell
Total of Capital Cost Items	\$ 660,000	\$ 460,000
Total of “Soft” Costs Items	\$ 80,000	\$ 50,000
<b>Subtotal</b>	<b>\$ 740,000</b>	<b>\$ 510,000</b>
30% Contingency on Capital Cost Items	\$ 198,000	\$ 138,000
<b>Rounded Total</b>	<b>\$ 940,000</b>	<b>\$ 650,000</b>

This cost includes the following key items:

- Additional Survey of Detail Features;
- Limited Parking Utilization Study;
- Design and Construction Drawings for Field Test Segment(s);
- Implementation of 4/5-Lane Field Test(s).

### D. Estimated Cost for Recommended ‘Bracket’ Segments

COST FOR ‘BRACKET’ SEGMENTS			
	Bracket Segment north of Churchill Ave.	Bracket Segment between California/ Acacia Ave.	Bracket Segment between Maybell/ Adobe Creek
Total of Capital Cost Items	\$ 2,000,000	\$ 3,600,000	\$ 4,200,000
Total of “Soft” Costs Items	\$ 150,000	\$ 270,000	\$ 310,000
<b>Subtotal</b>	<b>\$ 2,150,000</b>	<b>\$ 3,870,000</b>	<b>\$ 4,510,000</b>
30% Contingency on Capital Cost Items	\$ 600,000	\$ 1,080,000	\$ 1,240,000
<b>Rounded Total</b>	<b>\$ 2,750,000</b>	<b>\$ 4,950,000</b>	<b>\$ 5,750,000</b>

This cost includes the following key items:

- Additional Survey of Detail Features;
- Design and Construction Drawings for ‘Bracket’ Segment(s);
- Implementation of ‘Bracket’ Segment(s)
- Utility Add-on for the segment between Maybell and Adobe Creek.