

# State Route 710 North Study Alternatives

## ANALYSIS OF COSTS AND BENEFITS OVERVIEW

### Study Background

The State Route 710 North Study (SR 710 North) was initiated 5 years ago to alleviate mobility constraints in a study area, more than 100 square miles, that encompasses east/northeast Los Angeles and western San Gabriel Valley. Following a rigorous screening and selection process, five alternatives were advanced to the SR 710 North Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for further study. The SR 710 North Draft EIR/EIS was circulated for public review and comment from March 6, 2015 to August 5, 2015.

During the formal public review period that lasted over 150 days, Metro and Caltrans received approximately 2,600 submissions that represent more than 8,000 comments that require responses in the Study's Final EIR/EIS. Currently, the Study team is reviewing all of the comments received and developing responses for inclusion in the Final EIR/EIS.

### Cost-Benefit Analysis Overview

A Cost-Benefit Analysis (CBA) was requested by the Metro Board of Directors prior to the start of the SR 710 North Study. As referenced in the Draft EIR/EIS (Chapter 2, Section 2.3, Page 2-107), the CBA will be considered in conjunction with the information provided in Table 2.15 (Summary of Alternative and Impacts) during the identification of the Preferred Alternative.

#### Key distinctions between the SR 710 North Draft EIR/EIS and the CBA are as follows:

- > The SR 710 North Draft EIR/EIS is a document that discusses the environmental and social impacts of proposed alternatives. It is supported by more than two dozen technical studies (e.g. traffic, air quality, noise, etc.)
- > The CBA is a means of applying an economic (monetary) value to alternatives (transportation proposals), which enables the costs of an alternative to be compared directly to the benefits the alternative will deliver.

#### The following summarizes the salient points in the CBA for the SR 710 North Study:

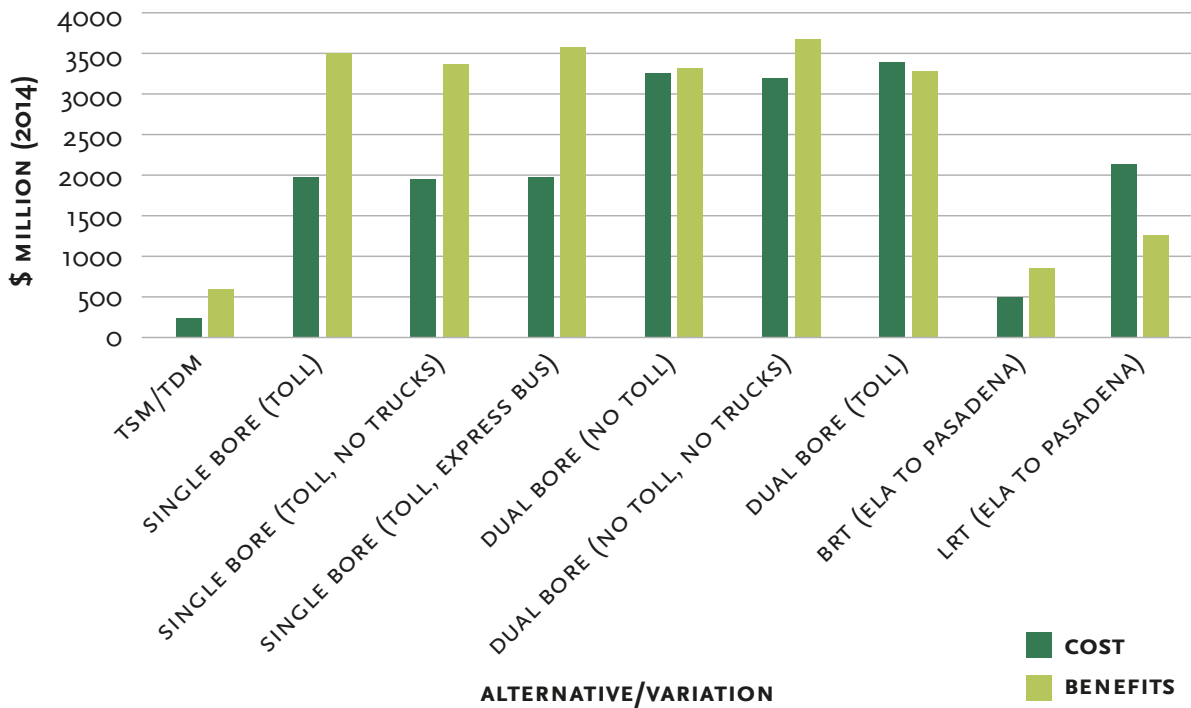
- > It is not the purpose of the CBA to serve as a stand-alone decision-making document. Financial feasibility is only one of over 40 performance measures that are used to evaluate the SR 710 North Study alternatives.
- > The CBA captures the relative cost/benefits of each of the SR 710 North multi-modal Build alternatives as compared to the No Build Alternative.
- > Factors evaluated in the CBA for each SR 710 North Study Alternative include:

TRAVEL TIME SAVINGS	SAFETY EFFECTS
CAPITAL EXPENDITURES (CONSTRUCTION AND RIGHT-OF-WAY)	EMISSIONS EFFECTS
VEHICLE OPERATING COSTS SAVINGS	EMPLOYMENT BENEFITS
SYSTEM OPERATIONS AND MAINTENANCE COSTS	RESIDUAL VALUES

- > The net present value (NPV) is a financial indicator that describes the difference between net present value of benefits and net present value of costs.
- > In general, a positive NPV indicates a better return on an investment. The Freeway Tunnel Alternative (Single Bore Variation) has the highest NPV as shown on the reverse.



# COST AND BENEFIT COMPARISON



## FIVE ALTERNATIVES EVALUATED IN THE CBA



### NO BUILD

The No Build Alternative includes transportation projects/planned improvement already programmed, excluding planned improvements within the SR-710 corridor.

### TRANSPORTATION SYSTEM MANAGEMENT/ TRANSPORTATION DEMAND MANAGEMENT

This alternative includes operational improvements, capacity enhancements, and demand management strategies throughout the study area.

### BUS RAPID TRANSIT

This alternative provides high speed, high frequency bus service along a 12 mile long corridor between East Los Angeles and Pasadena.

### LIGHT RAIL TRANSIT

This alternative provides a 7.5 mile long passenger rail service between East Los Angeles and Pasadena, that is comprised of an elevated segment (3 miles) and an underground (tunnel) segment (4.5 miles).

### FREEWAY TUNNEL

The freeway tunnel alternative provides a 6.3 mile route that connects the existing stubs on the 710 freeway, from Interstate 10 in Alhambra to the 134/210 interchange in Pasadena, with either one or two bored tunnels.

