



## SR-710 North Study

### FREEWAY TUNNEL ALTERNATIVE FACT SHEET

#### DESCRIPTION

In the initial concept calls for two-level twin bored freeway tunnels, with 4 lanes in each direction, to connect the existing southern stub of State Route 710 in Alhambra, north of Interstate 10, to the existing northern stub of Interstate Route 710, south of the Interstate 210/State Route 134 interchange in Pasadena. A two-level single bore tunnel variation of this alternative, with 2 lanes in each direction, will also be studied. The freeway tunnel alternative is designed to improve mobility, reduce local arterial and regional freeway congestion, and decrease travel time.

Local input and coordination with cities, state and local fire representatives, first responders, California Highway Patrol, Caltrans, power companies, railroads, the flood control district and other affected agencies, prior to implementation, will be crucial to optimize performance and minimize potential impacts to surrounding communities.

#### DESIGN ELEMENTS & FEATURES

Both the double and single bore configurations include short segments of cut-and-cover tunnels at the south and north termini to provide access to the bored tunnels; a portal at the southern terminus located south of Valley Boulevard; a portal at the northern terminus located north of Del Mar Boulevard. Also, no intermediate interchanges or vertical ventilation dispersion systems (shafts) are planned for the tunnels. The freeway tunnel alignment is approximately 6.3 miles long, with a bored tunnel (4.2 miles), cut-and-cover tunnel (0.7

miles), and at-grade (1.4 miles) segments. The bored tunnel would have an outside diameter of about 59 feet and would have approximately 100 to 150 feet of cover above the tunnels.

Vehicles carrying flammable or hazardous materials will be prohibited from using the tunnels. Tunnel fire, life safety components will be coordinated with state and local fire departments, and others, as appropriate and adhere to current codes. Other supporting tunnel systems include:

- Cross passages for vehicles (dual bore only)
- Air scrubbers, fans and longitudinal ventilation systems
- Fire suppression systems (sprinkler system)
- Communications and surveillance systems
- Lighting
- 24 hour monitoring

Other variations of the Freeway Tunnel Alternative include operating an express bus service in the tunnels, with supporting bus feeder service; and analyses of tolling and non-tolling operations for the double and single bore tunnel configurations.

All of the variations will be evaluated with and without trucks in the tunnel and will include TSM/TDM elements. The Freeway Tunnel Alternative will be further refined to avoid and/or minimize potential impacts.

#### MAJOR TASKS COMPLETED:

INITIAL ENVIRONMENTAL ASSESSMENTS ✓  
CONCEPTUAL ENGINEERING ✓  
ALTERNATIVES ANALYSES ✓

