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**PLANNING AND PROGRAMMING COMMITTEE  
FEBRUARY 15, 2006**

**SUBJECT: METRO RED LINE WESTSIDE EXTENSION  
PLANNING AND DEVELOPMENT FRAMEWORK**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

Receive and file this report on potential implementation timeframes and cost for a Metro Red Line Westside Extension.

**ISSUE**

In December 2005, results of a Peer Review Panel evaluation conducted by the American Public Transportation Association were released which concluded that advances in tunneling technology now make it possible to both safely tunnel and operate an extended subway system to Westside areas that were previously restricted due to safety concerns. Legislation has been introduced (H.R. 4653- Waxman) to repeal the subway prohibitions from federal law, thereby making it possible to once again consider a subway extension into this area.

This Board report outlines the steps, timeframe and rough, order-of-magnitude cost to implement an extension of the Metro Red Line to the Westside.

**DISCUSSION**

The Metro Red Line Subway has been an integral element of local, regional and federal transportation planning for the past three decades. Extending westward from the Los Angeles Central Business District, the North Hollywood and Wilshire/Western branches of the subway were the subject of in-depth technical studies and extensive community involvement during the 1980's and 1990's.

In 1983, the original Locally Preferred Alternative (LPA) for the Metro Red Line identified an alignment that followed Wilshire Boulevard to Fairfax Avenue and then north along Fairfax to Hollywood and the San Fernando Valley. In 1985, a naturally occurring methane gas fire at a Ross “Dress-for-Less” store near Farmer’s Market resulted in an investigation by a special City of Los Angeles Task Force. Conclusions from this investigation lead to a Congressional prohibition on federal funding for subway construction within the designated Methane Gas Risk Zone, as determined by the Task Force’s 1985 report on subsurface conditions in the region.

In July 1988, a new LPA was chosen. This new LPA followed Wilshire Boulevard from Downtown Los Angeles to Wilshire/Vermont and split into two separate lines, one traveling west along Wilshire Boulevard to Wilshire/Western and the other proceeding north along Vermont to Hollywood Boulevard and then west through Hollywood before turning north to Universal City and North Hollywood in the San Fernando Valley. This alignment was subsequently approved for construction and completed in several segments. The subway was completed from Union Station to Westlake/MacArthur Park in 1993, to Wilshire/Western Station in 1996, to Hollywood/Vine in 1999 and to North Hollywood in 2000. The current Metro Red Line system includes 16 stations, extends for 17 miles and serves approximately 112,000 boardings per day.

It has been 15 years since the last planning study was conducted to consider extensions of the Metro Red Line to the far Westside. The Los Angeles Metro Orange Line Extension Transitional Analysis was completed in 1990 for the Los Angeles County Transportation Commission. That study considered two basic alternative extensions of the subway to the Westside. The first alternative extended the Metro Red Line along Wilshire Boulevard from the Wilshire/Western Station to the Fairfax District, Century City and Westwood/UCLA. The second alternative extended the subway along Santa Monica Boulevard from the Hollywood/Highland Station to West Hollywood, the Fairfax District, Century City and Westwood/UCLA. Other variations of the above two basic alignments were also considered. Most of these additional alternatives were developed as diversions from Wilshire Boulevard to bypass the prohibited Methane Gas Hazard Zone in the Mid-Wilshire district.

The Metro Red Line Westside Extension is included in the Strategic Element of the 2001 adopted Long Range Transportation Plan (LRTP). Because of the high cost of heavy rail subway construction, the LRTP has assumed that the Westside Extension will be built in stages. Probable segments that have been considered in earlier studies include an initial construction segment to the Fairfax district; a second segment to Century City and a third segment to Westwood/West Los Angeles. Possible terminus points that have been considered on the far Westside have included Westwood/UCLA, West Los Angeles near the Veteran’s Administration Hospital/I-405 Freeway and the City of Santa Monica.

## PROJECT DEVELOPMENT TIMELINE

The overall project timeline for a major capital project such as the Metro Red Line from the initial start of planning to the opening of the first segment for revenue operations is about

ten years. The following Table 1 provides a summary of the typical project development timeline that was followed for the currently operating segments of the Metro Red Line.

**Table 1  
Metro Red Line Westside Extension  
Typical Project Development Timeline**

Phase		Year												
		1	2	3	4	5	6	7	8	9	10			
1	<b>Planning</b> Alternatives Analysis Draft EIS/EIR-Conceptual Engineering Final EIS/EIR-Preliminary Engineering Record of Decision Full Funding Grant Agreement	x	x	x										
2	<b>Pre-Construction</b> Right of Way Acquisition Utility Relocation Final Engineering Design Bid/Award				x	x	x							
3	<b>Construction</b> Tunnel Construction Station Construction Systems/Trackwork Installation Yards/Shops/Ancillary Facilities					x	x	x	x	x	x			
4	<b>Operation</b> Pre-Revenue Testing Revenue Operations													x

The above schedule could be accelerated in the Pre-Construction and Construction phases if a design-build method of contracting is utilized. In addition, this timeline includes meeting all the requirements for Federal New Starts funding. Funding the project without using New Starts funding could further shorten the schedule. It is also likely, however, that the full Metro Red Line Westside Extension would need to be built in segments as funding becomes available.

#### PROJECT DEVELOPMENT COSTS

As shown in the following Table 2, the overall cost for a major capital project such as the Metro Red Line from the present terminus at Wilshire/Western Station to the vicinity of Westwood/I-405 Freeway would be about \$3.2 billion. Further extension to Santa Monica/Ocean Avenue would increase this total cost to about \$4.8 billion. These figures are

based on a rough order of magnitude cost of \$300 million/mile escalated to a mid-point of construction in the year 2015 using standard inflation factors.

An initial operable segment between Wilshire/Western and the Fairfax District would extend for 3.0 miles and would cost approximately \$1.2 billion. Extending this segment from the Fairfax District to Century City would require another 3.5 miles of service and would cost approximately \$1.3 billion. Extending from Century City to Westwood would require another 2.0 miles of service and would cost approximately \$735 million. Although previous studies have stopped the Red Line in the vicinity of the I-405 Freeway, it would be possible to consider extending the line all the way to Ocean Avenue in the City of Santa Monica. This further extension would require another 4.4 miles of service and would cost approximately \$1.6 billion.

**Table 2  
Metro Red Line Westside Extension  
Typical Order of Magnitude Costs**

Segment #	Assumed Westside Terminus	Length <sup>1</sup> (Miles)	Assumed Number of Stations	ROM Cost <sup>2</sup> (\$2006)	ROM Cost <sup>3</sup> (\$2015)
1	Fairfax District	3.0	3	\$900 million	\$1.2 billion
2	Century City	3.5	3	\$1.1 billion	\$1.3 billion
3	Westwood	2.0	1	\$600 million	\$735 million
<b>Total for Project from Wilshire/Western to Westwood/UCLA</b>		<b>8.5</b>	<b>7</b>	<b>\$2.6 billion</b>	<b>\$3.2 billion</b>
4	Santa Monica	4.5	5	\$1.3 billion	\$1.6 billion
<b>Total for Project from Wilshire/Western to Wilshire/Ocean</b>		<b>13.0</b>	<b>12</b>	<b>\$3.9 billion</b>	<b>\$4.8 billion</b>

<sup>1</sup> Assumes Wilshire Boulevard alignment. Actual alignment is subject to Alternatives Analysis and Board approval.

<sup>2</sup> Assumes year 2006 cost of \$300 million/mile for Metro Red Line subway planning, design and construction.

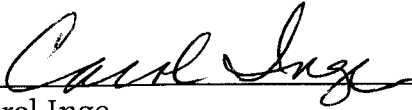
<sup>3</sup> Assumes year 2015 mid-point of construction escalated annually by CPI as forecasted by the UCLA Anderson School as of August 2005.

Funding a project of this size is a major undertaking, and funding sources for the full project have not been identified in the Long Range Transportation Plan. Because of this, the project has been included in the Strategic Element of the LRTP, meaning that additional sources of funding would need to be identified in order to construct and operate the project within the timeframe of the plan.

### **NEXT STEPS**

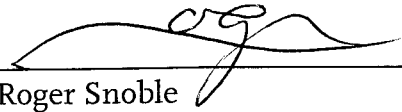
Metro staff will evaluate the Metro Red Line Westside Extension as part of the current Long Range Transportation Plan update process.

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