

EXHIBIT J

Attachment 3
Baseline Cost Estimate

Project Sponsor Name
Project Name

Table 1 - BCE by Standard Cost Category

<i>Applicable Line Items Only</i>	YOE Dollars Total (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)	1,340,167
10.01 Guideway: At-grade exclusive right-of-way	604
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	0
10.03 Guideway: At-grade in mixed traffic	13,900
10.04 Guideway: Aerial structure	1,209,913
10.05 Guideway: Built-up fill	0
10.06 Guideway: Underground cut & cover	3,338
10.07 Guideway: Underground tunnel	0
10.08 Guideway: Retained cut or fill	85,534
10.09 Track: Direct fixation	7,978
10.10 Track: Embedded	9,362
10.11 Track: Ballasted	3,820
10.12 Track: Special (switches, turnouts)	5,386
10.13 Track: Vibration and noise dampening	332
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	133,979
20.01 At-grade station, stop, shelter, mall, terminal, platform	18,002
20.02 Aerial station, stop, shelter, mall, terminal, platform	1,460
20.03 Underground station, stop, shelter, mall, terminal, platform	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	0
20.05 Joint development	0
20.06 Automobile parking multi-story structure	114,517
20.07 Elevators, escalators	0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	50,608
30.01 Administration Building: Office, sales, storage, revenue counting	0
30.02 Light Maintenance Facility	50,608
30.03 Heavy Maintenance Facility	0
30.04 Storage or Maintenance of Way Building	0
30.05 Yard and Yard Track	0
40 SITEWORK & SPECIAL CONDITIONS	731,522
40.01 Demolition, Clearing, Earthwork	77,617
40.02 Site Utilities, Utility Relocation	52,062
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatmen	13,915
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	38,273
40.05 Site structures including retaining walls, sound walls	0
40.06 Pedestrian / bike access and accommodation, landscaping	14,118
40.07 Automobile, bus, van accessways including roads, parking lots	204,946
40.08 Temporary Facilities and other indirect costs during construction	330,590
50 SYSTEMS	98,010
50.01 Train control and signals	13,734
50.02 Traffic signals and crossing protection	19,554
50.03 Traction power supply: substations	4,047
50.04 Traction power distribution: catenary and third rail	18,491
50.05 Communications	20,653
50.06 Fare collection system and equipment	17,248
50.07 Central Control	4,283
Construction Subtotal (10 - 50)	2,354,286
60 ROW, LAND, EXISTING IMPROVEMENTS	217,171
60.01 Purchase or lease of real estate	217,171
60.02 Relocation of existing households and businesses	0
70 VEHICLES (number)	123,200
70.01 Light Rail	123,200
70.02 Heavy Rail	0
70.03 Commuter Rail	0
70.04 Bus	0
70.05 Other	0
70.06 Non-revenue vehicles	0
70.07 Spare parts	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	490,908
80.01 Preliminary Engineering	132,993
80.02 Final Design	137,013
80.03 Project Management for Design and Construction	156,530
80.04 Construction Administration & Management	56,782
80.05 Professional Liability and other Non-Construction Insurance	3,314
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	0
80.07 Surveys, Testing, Investigation, Inspection	0
80.08 Start up	4,275
Subtotal (10 - 80)	3,185,564
90 UNALLOCATED CONTINGENCY	252,847
Subtotal (10 - 90)	3,438,411
100 FINANCE CHARGES	69,461
Total Project Cost (10 - 100)	3,507,872

EXHIBIT K

Sandy B.

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION**

**GRANT AGREEMENT
(FTA G-6, October 1, 1999)**

Upon execution of this Grant Agreement by the Grantee named below, the Grantee affirms the U.S. Department of Transportation, Federal Transit Administration (FTA) Award covering the Project described below and enters into this Grant Agreement with FTA. The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(6), October 1, 1999, [Internet Address: <http://www.fta.dot.gov/library/legal/agreements/2000/ma.html>]; and
- (2) Any Award notification containing special conditions or requirements, if issued.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FINANCIAL ASSISTANCE IF THE GRANTEE DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS AFTER THE OBLIGATION DATE OF THE FTA AWARD.

FTA AWARD

FTA hereby awards a Federal grant as follows:

Project No.: OR-03-0076

Grantee: Tri-County Metropolitan Transportation District of Oregon (Tri-Met)

Citation of Statute(s) Authorizing Project: 49 USC Section 5309 (a)(1)

Maximum Federal Financial Contribution: \$257,500,000

Estimated Total Eligible Cost: \$350,000,000

Maximum FTA Amount Approved [Including All Amendments]: \$0.00

Amount of This FTA Award: \$0.00

Maximum Percentage of Federal Section 5309 New Start Participation: Seventy-Three (73%)

Date of Department of Labor Certification(s) of Transit Employee Protective Arrangements:

Original Project or
(Amendment Number)
OR-03-0076

Certification Date
May 23, 2000

Project Description: The funds approved in this agreement will assist in financing the design and construction of the Interstate Max (IMAX) Light Rail Transit (LRT) Project. The Interstate Max LRT Project is an approximate 5.8-mile north/south LRT line, along Interstate Avenue between the Rose Quarter and Exposition and Recreation Center (Expo) in the Portland, Oregon metropolitan area. The IMAX Project will include 17 LRT vehicles, ten (10) new stations, two (2) park-and-ride lots for a total of approximately 600 vehicles and modifications to the existing Ruby Junction rail operations facility. See Attachments 1 and 2 for a more detailed description of the project.

Revenue Operation Date: September 30, 2004

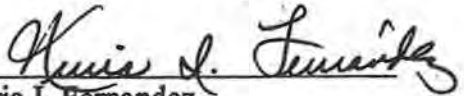
Special Requirement:

The Grantee agrees to comply with applicable Federal statutory provisions prohibiting the use of Federal assistance funds for activities designed to influence Congress or a State legislature on legislation or appropriations, except through proper, official channels.

Conditions of Award:

The maximum Federal contribution of \$257,500,000 of New Start (49 U.S.C. Section 5309) funding is based on the addition of \$24,000,000 of Congestion Mitigation and Air Quality Improvement (23 U.S.C. Section 149) and Surface Transportation Program (23 U.S.C. Section 133) funds and \$68,500,000 in local funds for the Estimated Total Eligible project cost of \$350,000,000 as shown on Attachment 3a to the Full Funding Grant Agreement.

Obligation Date: SEP 22 2000

Signature: 
Name: Nuria I. Fernandez
Title: Acting Administrator

Jun-00	Section 5309		Section 5307		Total Amounts		
	Federal	Local	Federal	Local	Federal	Local	Total
SCOPE							
131000 NEW START ROLLING STOCK							
131320 Purchase expansion rail cars	\$42,407,948	\$9,661,651	\$5,000,000	\$572,272	\$47,407,948	\$10,233,923	\$57,641,871
SCOPE							
132000 TRANSITWAY LINES							
132203 Acquisition - track materials	\$6,252,820	\$1,410,318	\$750,000	\$85,841	\$7,002,820	\$1,496,159	\$8,498,979
132303 Construction - line and equipment	\$74,466,487	\$17,834,461	\$8,000,000	\$915,636	\$82,466,487	\$18,750,097	\$101,216,584
SCOPE							
133000 STATIONS, STOPS, TERMINALS							
133206 Acquire fare collection equipment	\$1,259,642	\$173,879	\$250,000	\$28,614	\$1,509,642	\$202,493	\$1,712,135
133208 Acquire furniture and graphics	\$2,386,905	\$467,373	\$350,000	\$40,059	\$2,736,905	\$507,432	\$3,244,337
133302 Construction - stations	\$4,727,561	\$1,308,191	\$350,000	\$40,059	\$5,077,561	\$1,348,250	\$6,425,811
133304 Construction - park and ride lots	\$1,771,361	\$413,423	\$200,000	\$22,891	\$1,971,361	\$436,314	\$2,407,675
SCOPE							
134000 SUPPORT AND EQUIPMENT FACILITIES							
134403 Renovation- maintenance facility	\$6,735,003	\$1,583,529	\$750,000	\$85,841	\$7,485,003	\$1,669,370	\$9,154,373
SCOPE							
135000 ELECTRIFICATION POWER DIST.							
135201 Traction power - acquisition	\$12,354,802	\$3,323,678	\$1,000,000	\$114,454	\$13,354,802	\$3,438,132	\$16,792,934
SCOPE							
136000 SIGNAL & COMMUNICATION							
136201 Train control/signal system acquisition	\$9,926,679	\$3,510,172	\$50,000	\$5,723	\$9,976,679	\$3,515,895	\$13,492,574
136202 Communications system acquisition	\$3,603,950	\$1,016,009	\$250,000	\$28,614	\$3,853,950	\$1,044,623	\$4,898,573
SCOPE							
137000 OTHER CAPITAL PROGRAM							
137102 Final engineering - civil and systems	\$16,594,258	\$3,732,135	\$2,000,000	\$228,909	\$18,594,258	\$3,961,044	\$22,555,302
137104 Construction management	\$1,804,839	\$425,450	\$200,000	\$22,891	\$2,004,839	\$448,341	\$2,453,180
137105 Insurance	\$4,318,436	\$994,056	\$500,000	\$57,227	\$4,818,436	\$1,051,283	\$5,869,719
137111 Other contracted services / IGA	\$2,566,122	\$531,752	\$350,000	\$40,059	\$2,916,122	\$571,811	\$3,487,933
137112 Capital cost of contracting (interim finance)	\$5,690,940	\$1,346,832	\$500,000	\$57,227	\$6,190,940	\$1,404,059	\$7,595,000
137300 Contingencies	\$25,547,704	\$8,089,623	\$976,000	\$111,708	\$26,523,704	\$8,201,331	\$34,725,035
137591 Acquisition - real estate	\$4,764,513	\$875,683	\$750,000	\$85,841	\$5,514,513	\$961,524	\$6,476,037
137592 Relocation - real estate	\$11,036	\$2,293	\$1,500	\$170	\$12,536	\$2,463	\$14,999
137593 Demolition - real estate	\$45,733	\$8,070	\$7,500	\$858	\$53,233	\$8,928	\$62,161
137594 Appraisal - real estate	\$73,571	\$15,284	\$10,000	\$1,145	\$83,571	\$16,429	\$100,000
137600 Other - real estate	\$38,441	\$8,237	\$5,000	\$572	\$43,441	\$8,809	\$52,250
137900 Project administration (support services)	\$26,010,066	\$8,507,581	\$750,000	\$85,841	\$26,760,066	\$8,593,422	\$35,353,488
137900 Project administration (start up)	\$3,064,060	\$405,099	\$750,000	\$85,841	\$3,814,060	\$490,940	\$4,305,000
SCOPE							
139000 TRANSIT ENHANCEMENTS							
139304 Public art - construction	\$1,077,123	\$108,314	\$250,000	\$28,614	\$1,327,123	\$136,928	\$1,464,050
Total	\$257,500,000	\$65,753,093	\$24,000,000	\$2,746,907	\$281,500,000	\$68,500,000	\$350,000,000
		\$323,253,093		\$26,746,907			
	79.66%	20.34%	89.73%	10.27%	80.43%	19.57%	\$350,000,000

**INTERSTATE MAX LIGHT RAIL PROJECT
TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT
SUMMARY SCHEDULE
ATTACHMENT 4**

	Early Start	Early Finish	2000				2001				2002				2003				2004				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Civil Construction	Nov-00	Sep-03				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Insurance	Nov-00	Sep-04				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Track Materials	Aug-00	Nov-01		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Transit Vehicles	Aug-00	Jul-03		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Operations Facilities	Nov-00	Aug-02				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Traction Electrification System/Signals	Mar-01	Jul-04					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Communications/ Fare Collection	Mar-01	Jul-04					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Right-of-Way / Real Estate	Mar-00	Oct-01		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Engineering & Administration	Feb-00	Sep-04	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Contingency	Jul-00	Sep-04		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Interim Financing	Jul-00	Sep-04		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Start-Up	Oct-02	Sep-04																				■	■
Revenue Service		Sep-04																					◆

EXHIBIT L

S. EXECUTIVE SUMMARY

The Portland-Milwaukie Light Rail Project Final Environmental Impact Statement (FEIS) examines a proposal to develop a light rail transit extension to connect downtown Portland, Oregon, the City of Milwaukie, and north Clackamas County. Figure S-1 shows the regional setting for the proposed project.

The project is part of a larger high-capacity transit corridor known as the South/North Corridor, which extends from Clackamas County to downtown Portland and north to the Columbia River and Vancouver, Washington. Figure S-2 shows the regional high-capacity transit system serving this area. In 1998, the Federal Transit Administration (FTA), Metro, and the Tri-County Metropolitan Transportation District (TriMet) released the *South/North Corridor Project Draft Environmental Impact Statement* (DEIS). The Supplemental DEIS (SDEIS) prepared for this project in May 2008 augmented the *South/North DEIS* by updating information on the purpose and need, alternatives considered, affected environment, and anticipated environmental impacts for the Portland-Milwaukie Corridor to reflect the changed conditions since the *South/North DEIS* was published. It also incorporated findings developed through the *South Corridor Supplemental Draft Environmental Impact Statement*, issued in December 2002. This FEIS presents the proposed light rail project and updated estimates of impacts compared to a No-Build Alternative, and presents and responds to the public and agency comments received by the project.

This FEIS has been prepared in compliance with the National Environmental Policy Act (NEPA). The FTA is the federal lead agency for this FEIS, and Metro is the project's local lead agency, working in cooperation with TriMet. The purpose of this FEIS is to present details of the Locally Preferred Alternative (LPA) and its environmental and transportation performance. When the LPA was adopted in 2008, it included a recommendation for a Minimum Operable Segment (MOS) if funding could not be secured to construct the full LPA alignment to SE Park Avenue. In addition, the FEIS evaluates a phasing option (the LPA Phasing Option) that allows the project to be completed to SE Park Avenue at a lower cost by deferring or modifying some features of the LPA. The FEIS also addresses an expansion of the Ruby Junction maintenance facility in Gresham, Oregon. Streetcar and roadway facilities in and around the Willamette River bridge crossing that are associated with, but not funded by, the project are also included in this FEIS. These related projects complement the Portland-Milwaukie Light Rail Project, but they are each independent.

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LPA Phasing Option

The LPA Phasing Option differs from the LPA by eliminating or deferring the elements of the LPA noted above in order to reduce the project cost. TriMet is seeking additional funding for the project to proceed with the LPA, but may need to implement some of the cost-reduction elements identified in the LPA Phasing Option. In this Final EIS, TriMet, Metro and FTA fully evaluate the environmental and community impacts of all of these elements as part of the LPA, and also consider the impacts of their deletion from the project as part of the LPA Phasing Option. If after the environmental Record of Decision has been issued by FTA, TriMet's financial plan requires additional deferral or elimination of project elements not identified in the ROD, TriMet, Metro and FTA will follow the environmental procedures defined in 23 CFR Part 771.129, and FTA may issue an amended ROD to identify the modified elements and any additional commitments to mitigate environmental and community impacts for such amended project.

S.4.2 Minimum Operating Segment (MOS) to Lake Road

The MOS to Lake Road would be the same as the LPA to Park Avenue except that it would have an initial southern terminus at SE Lake Road. The MOS to Lake Road would allow the project to be developed in phases if there is not sufficient funding to fully extend the project to SE Park Avenue. The MOS would still be designed to accommodate a future extension to the south. A downtown Milwaukie station would be located at SE Lake Road, similar to the LPA to Park Avenue, but there would be a third track at the terminus and a park-and-ride with 275 parking spaces located north of Kellogg Lake between SE Washington Street and SE McLoughlin Boulevard. In addition, the capacity of the Tacoma Park-and-Ride would increase to accommodate up to 1,000 spaces.

S.4.3 Related Facilities

Ruby Junction

The Portland-Milwaukie Light Rail Project would also require expanding the existing Ruby Junction Operations and Maintenance Facility in Gresham to store and service the additional light rail vehicles and supporting maintenance activities associated with the project.

Related Bridge Area Transportation Facilities

This FEIS also evaluates streetcar facility improvements designed to connect with the shared transitway over the Willamette River bridge, as well as related street modifications. On the west side, this would involve raising and reconstructing a portion of SW Moody Avenue to include double tracks in the median for the existing Portland Streetcar line serving the South Waterfront. On the east side, the improvements would complete the streetcar connection between the shared transitway and the Portland Streetcar Loop Project streetcar line (now under construction) at OMSI, which would also involve realigning a portion of SE Water Avenue.

- **System Fiscal Feasibility Analysis** focuses on whether there are adequate resources to operate and maintain the entire transit system, including operations of the Portland-Milwaukie Light Rail Project, between now and the year 2030 and, if not, the options for resolving the system’s financial needs. System costs include all transit operation and maintenance (O&M) costs and all transit capital expenditures to the year 2030, except for the capital costs of the Portland-Milwaukie Light Rail Project accounted for in the Project Capital Financial Feasibility Analysis.

S.7.2 Costs

S.7.2.1 Project Capital Costs

As shown in Table S-3, LPA to Park Avenue is estimated to cost about \$1.548 billion in YOE dollars, about \$57 million more than the LPA Phasing Option and almost \$167 million more than the MOS to Lake Road. The LPA Phasing Option is estimated to cost about \$109 million (YOE dollars) more than the MOS to Lake Road.

Table S-3
Capital Costs of Portland-Milwaukie Light Rail Project
In Millions of 2010 and Year-of-Expenditure (YOE) Dollars

	LPA to Park Ave	LPA Phasing Option	MOS to Lake Rd
Insurance, Special Condition	\$49.6	\$49.3	\$44.3
Utilities/street construction	\$76.5	\$76.8	\$69.6
Track Grade, Structures, Installation	\$274.1	\$270.2	\$247.7
Stations/Park and Rides	\$50.1	\$34.8	\$48.6
System	\$69.9	\$69.1	\$64.9
Operations/Maintenance Facility	\$8.1	\$5.1	\$7.8
Right-of-Way ³	\$204.0	\$203.6	\$196.8
Vehicles ¹	\$87.1	\$77.3	\$69.9
Professional Services	\$173.5	\$166.3	\$154.8
Unallocated Contingency	\$161.0	\$159.6	\$139.3
Sub-Total (2010 Dollars)	\$1,153.9	\$1,112.1	\$1,043.7
Escalation to Year-of-Expenditure on Sub-Total	\$120.6	\$116.2	\$111.1
Finance Charges ²	\$273.4	\$262.1	\$226.4
Total in Year-of-Expenditure Dollars	\$1,547.9	\$1,490.4	\$1,381.2

Source: TriMet, 2010; numbers may not add due to rounding.

¹ LPA to Park Avenue cost incorporates 20 vehicles; LPA Phasing Option incorporates 18 vehicles, and MOS to Lake Road cost incorporates 16 vehicles.

² Includes interest payments for interim borrowing and net finance costs during the construction period on bonds issued to provide local match. Finance costs are based on assumption that annual appropriations of New Start funds for the project would not exceed \$100 million in any one year. Finance costs and, therefore, total project costs would change if assumption regarding annual appropriation levels change during Final Design.

³ Includes Land and right-of-way purchased plus value of land and right-of-way donated to project.

EXHIBIT M

Cost Estimate and Preliminary Engineering drawing set completed in April 2011. Labor, materials and equipments costs are based on current market prices in the project area.

In addition to base year costs, year-of-expenditure (YOE) cost estimates were developed for the financial analysis of the project. The YOE capital cost estimates are based on the project implementation schedule and escalation rates established by Metro for its Long Range Transportation Plan (LRTP). The expenditures are planned to occur between 2011 and 2020. Most of the major expenditures for construction of the major components of the project are expected to occur between 2013 and 2018. As the project schedule is developed further through the remainder of Preliminary Engineering, cash flow and YOE dollars will be updated.

Table 8-1 presents the estimated capital cost (in thousands of 2010 dollars) by SCC, total capital cost, and YOE capital costs for the revised LPA, which includes an extended below-grade section between Exposition Boulevard and 48th Street. The revised LPA is estimated to cost a total of \$1.589 billion in 2010 dollars. The YOE capital costs are estimated to total \$1.810 billion.

**Table 8-1. Capital Cost Estimates
 Refined LPA (with Incorporated Design Options to the Project Definition)
 (Thousands 2010 Dollars)**

SCC Code	Cost Categories	2010 Base Year Cost	YOE Costs
10	Guideway and Track Elements	\$424,280	\$487,608
20	Stations, Stops, Terminals, Intermodal	\$128,337	\$150,736
30	Support Facilities: Yards, Shops, Administrative Buildings	\$65,732	\$75,255
40	Sitework and Special Conditions	\$242,392	\$276,913
50	Systems	\$111,013	\$133,414
	Subtotal Construction (10-50)	\$971,754	\$1,123,926
60	Right-of-Way, Land, Existing Improvements	\$133,913	\$145,321
70	Vehicles	\$87,780	\$87,780
80	Professional Services	\$255,982	\$293,754
90	Unallocated Contingency	\$115,525	\$135,318
	Metro Planning/Environmental Costs	\$24,200	\$24,200
	Total Cost	\$1,589,154	\$1,810,299

Note-Project costs include the incorporation of the Partially-Covered LAX Trench Option.
 Source: Hatch Mott McDonald, 2011.

Table 8-2 presents the estimate capital costs (in thousands of 2010 dollars and year of expenditure dollars) for each of the design options and MOSs. The cost estimates for the design options providing for the additional stations range from \$9.42 million, or \$11.58 million in YOE dollars, for the at-grade optional Aviation/Manchester Station to \$106.31 million, or \$130.74 million in YOE dollars, for the optional Crenshaw/Vernon Station. The cut-and-cover crossing at Centinela is estimated to cost \$20.6 million, or \$25.33 million in YOE dollars. The Partially-Covered LAX Trench Option would result in a cost savings of \$41 million or \$46.4 million in YOE. (Since consultation with FAA suggests that the



Train Control Systems

Train control includes signal houses, grade crossing, crossovers, wayside equipment, wiring, and vehicle interfaces. Communications and signaling (C&S) buildings house train control and communications for LRT operations in a central facility at each station. Each facility is an enclosure located within the station site area, typically adjacent to a station platform. The positioning of the C&S buildings must be done to provide clearances for maintenance and servicing, and to maintain sight lines for LRT operations. Crossovers are required to maintain flexibility and ensure the operational efficiency of the line. There are three crossovers included in the project. The southern crossover is located in a grade-separated configuration passing 111th Street. There is also a crossover in the median of Crenshaw Boulevard north of Slauson Avenue where the alignment is at grade. The northern crossover would be located south of the Crenshaw/King Station for the MOS and south of Rodeo Road in a below-grade configuration with the incorporation of Design Option 6.

Vehicles

The project transit services would use LRVs equivalent to those Metro operates on the existing Metro Blue, Green, or Gold Lines and the Expo LRT line (under construction) with compatible train subsystems. These vehicles are double-ended, articulated, six-axle LRVs capable of multiple unit operation in trains of up to three vehicles.

Based on the existing LRV vehicles Metro uses, each future vehicle would be approximately 90 feet long and would have 55 miles per hour maximum design speed, although capable of achieving 24 miles per hour average speed including normally-spaced stops and anticipated delays in street-running sections. The project would be designed to accommodate up to three-car trains. Each three-car train set could carry up to 500 passengers. Each vehicle would be equipped for independent two-way operation, with a driver's cab at each end and would have equal performance in either direction.

2.7.1.5 Maintenance Facility Site

The Crenshaw/LAX Transit Corridor Project would require a new maintenance and operations facility. The facility would provide LRV service and maintenance and storage for vehicles that are not in service. The facility would operate 24 hours a day, seven days a week. The facility would ultimately be large enough to support approximately 70 light rail vehicles. The ultimate facility size would be determined after the project operating plan is finalized.

Four maintenance facility site alternatives were evaluated in a Supplemental Draft Environmental Impact Statement/Recirculated Draft Environmental Impact Report (SDEIS/RDEIR) for the Crenshaw/LAX Transit Corridor Project. The Site #14 – Arbor Vitae/Bellanca Alternative was selected as the preferred maintenance facility site.

Site #14 – Arbor Vitae/Bellanca Alternative. This site is approximately 17.6 acres and is located in the City of Los Angeles. The site contains industrial uses, Dollar Car Rental, Avis Car Rental administrative offices, Barthco International, and Gourmet Trading Company. The site is bounded by Arbor Vitae Street to the north, Neutrogena

EXHIBIT N

Construction cost estimates and funding sources



Oregon Roadway and Interchanges	Cost	Funding Source
Oregon Roadway and Interchanges Total	\$595 million	State and/or federal funds

Columbia River Bridge and Approaches	Cost	Funding Source
Columbia River Bridge and Approaches Total	\$1.2 billion	Tolls and State or Federal funds

Light Rail Transit Extension	Cost	Funding Source
Light Rail Transit Extension Total	\$850 million	FTA New Starts

Washington Roadway and Interchanges	Cost	Funding Source
Washington Roadway and Interchanges Total	\$435 million	State and/or Federal Funds

Total costs based on 2011 CEVP and assume a 95-foot bridge height = \$3.1 billion

Targeted Columbia River Crossing Funding Sources	Amount (billions)
FTA New Starts (light rail)	\$0.85
FHWA	\$0.4
Tolls	\$0.9 - \$1.3
OR/WA	\$0.9
TOTAL FUNDING SOURCES	\$3.05 - \$3.45