

EUGENE CITY COUNCIL AGENDA ITEM SUMMARY



Work Session: West Eugene EmX Update

Meeting Date: January 24, 2011
Department: Public Works Engineering
www.eugene-or.gov

Agenda Item Number: B
Staff Contact: Rob Inerfeld, PWE; Tom Schwetz, LTD
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ISSUE STATEMENT

At this council work session, Lane Transit District (LTD) staff will provide an update on the West Eugene EmX Extension (WEEE) with emphases on describing mitigation measures developed to lessen impacts to adjacent properties and the process for selecting the locally preferred alternative.

BACKGROUND

On October 9, 2006, the Eugene City Council voted to identify West 11th Avenue as the City's priority for the next EmX corridor study. The LTD Board of Directors endorsed the Eugene City Council's action. Based on this direction, staff began planning for the West Eugene EmX Extension.

Through extensive outreach and design considerations, 58 distinct alternative alignments for the West Eugene EmX Extension (WEEE) emerged for evaluation. Environmental analysis and further public review led to the elimination of all but 10 routing options. During the continued public review period, LTD developed two more plans that incorporate measures that mitigate many of the impacts to adjacent properties. This was primarily achieved by identifying segments where the EmX vehicles could continue travelling in mixed traffic, thereby eliminating the need to widen the street as much as originally planned.

In order for LTD to submit a Small Starts grant application to the Federal Transit Administration and to be "on cycle" for the next available funding period, approval of the Locally Preferred Alternative, an Alternatives Analysis, demonstration of financial commitment, Fleet Management Plan, and additional National Environmental Policies Act documentation must be completed by early summer 2011. To maintain this schedule, LTD is hoping to receive approval of the Locally Preferred Alternative (LPA) by March 2011.

There are several committees working to make recommendations to the Eugene City Council, LTD Board of Directors, and Metropolitan Policy Committee (MPC) through the Joint Locally Preferred Alternative Committee (JLPAC). To date, the EmX Steering Committee, WEEE Corridor Committee, the Metropolitan Planning Organization's Citizen Advisory Committee, Transportation Planning Committee, and Project Management Group have completed their deliberations. A subcommittee of the Eugene Planning and Sustainability Commissions (CLUTAC) is still formulating its recommendations.

The Joint LPA Committee will develop a recommendation to the three deciding bodies based on the analysis and public input. The members of the Joint LPA Committee are Mayor Kitty Piercy and councilors Andrea Ortiz and Chris Pryor from the Eugene City Council; Mike Eyster, Greg Evans, and Dean Kortge from the LTD Board of Directors; County Commissioner Sid Leiken and Sonny Chickering, Oregon Department of Transportation (ODOT), representing the MPC. Following the Joint LPA Committee's recommendation, the three deciding bodies will work on endorsing a common LPA to move into the environmental process, along with the No-Build alternative.

More information about all the alignments that were studied, the project evaluation criteria and measures, and previous elimination of some alignments may be found in the minutes for the June 23, 2010, Eugene City Council meeting.

Public Involvement and Joint Locally Preferred Alternative (JLPAC) Committee Update

The projected travel time and cost data of the project alternatives have been refined in response to requests from the public, the Joint LPA Committee, and the LTD Board of Directors to provide more information on the alternatives' impacts on LTD's operating costs. The project's Alternatives Analysis report provided operating costs based on regional model transportation demand modeling (a macro-level analysis as required by the Federal Transit Administration). In response to the requests to aid the local decision-making process, LTD's consultants have produced supplemental analysis that provides more micro-level detail on corridor-specific operating costs, and travel time data that more precisely accounts for traffic congestion over time (see Cost Detail Sheets and Key Results attached).

The Joint LPA Committee has approved mitigation concepts for the 6th/7th - 11th and the 13th - 11th alternatives that further reduce impacts primarily through additional reductions in transit priority lanes and station relocations. This development of mitigation, for advancing alternatives by local decision-makers, is in keeping with standard Federal Transit Administration guidance on development of an LPA.

Additionally, at its January 6, 2011, meeting, the Joint LPA Committee eliminated all West 7th Place alternatives and the 6th/7th-11th, and 13th-11th alternatives that do not include mitigation concepts.

Following are the four remaining alternatives under consideration by the committee:

- No-Build
- TSM
- West 6th/West 7th - 11th mitigation concept
- West 13th - West 11th mitigation concept

The Joint LPA Committee requested that LTD staff develop additional mitigation for the two remaining build alternatives to be considered at their fourth meeting on January 31, 2011. These design refinements and the analysis of the West 6th/West 7th - 11th and West 13th - West 11th will be presented to the committee and distributed to the public by January 31, 2011. Under the committee's current work plan, a *preliminary* LPA will be identified on January 31, 2011, to advance for public comment in early February through open houses and at a joint public hearing between the Eugene City Council, the LTD Board of Directors, and MPC (see attached WEEE Meeting Schedule). Following public review and input on the preliminary LPA, the committee will meet on February 14, 2011, to select a final recommended LPA to advance to the Eugene City Council, LTD Board of Directors, and MPC.

RELATED CITY POLICIES

From Eugene-Springfield Transportation System Plan (TransPlan):

TSI Transit Policy #2: Bus Rapid Transit

Establish a Bus Rapid Transit (BRT) system composed of frequent, fast transit service along major corridors and neighborhood feeder service that connects with the corridor service and with activity centers, if the system is shown to increase transit mode split along BRT corridors, if local governments demonstrate support, and if financing for the system is feasible.

From Adopted Growth Management Policies:

Growth Management Policy 11

Increase the use of alternative modes of transportation by improving the capacity, design, safety, and convenience of the transit, bicycle, and pedestrian transportation systems.

COUNCIL OPTIONS

Provide feedback to LTD and City staff.

CITY MANAGER'S RECOMMENDATION

This item is for discussion only.

SUGGESTED MOTION

None.

ATTACHMENTS

- A. Cost Detail Sheets
- B. Key Results attached
- C. WEEE Meeting Schedule

FOR MORE INFORMATION

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**West Eugene EmX: Corridor Operating Costs
For Selected Alternatives
January 3, 2011**

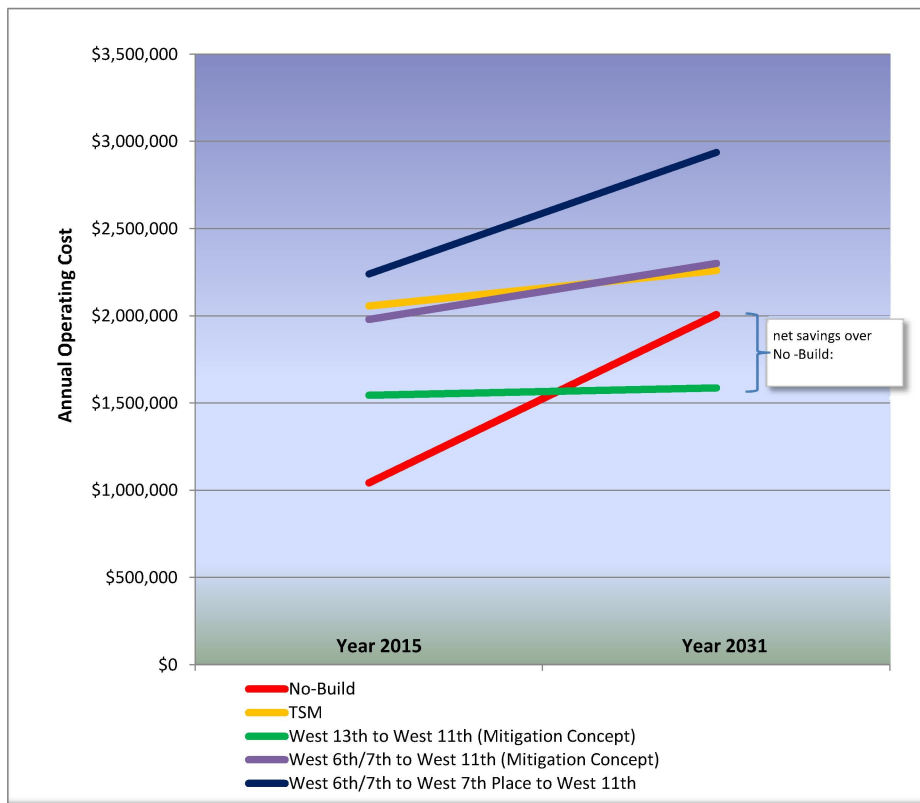
ATTACHMENT A

Summary Table

Alternative	Year 2011	Year 2015		Year 2031	
	Operating Cost	Operating Cost	Change vs. No-Build	Operating Cost	Change vs. No-Build
No-Build	\$977,119	\$1,042,828		\$2,006,834	
TSM		\$2,057,842	\$1,015,014	\$2,259,914	\$253,080
West 13th to West 11th (Mitigation Concept)		\$1,546,138	\$503,310	\$1,587,377	-\$419,457
West 6th/7th to West 11th (Mitigation Concept)		\$1,979,782	\$936,954	\$2,301,057	\$294,223
West 6th/7th to West 7th Place to West 11th		\$2,240,422	\$1,197,594	\$2,938,165	\$931,331

All costs in 2009 dollars

**Graph of Annual Corridor Operating Costs for Years 2015 and 2031
For Selected Alternatives**



Detailed Data Tables

A B C D E F G H I J K L

No-Build 2011

Route (all routes round trips)	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday Daytime # 41/43 (Eugene Station/Commerce)	7.95	30	27	44	19.8	\$ 1,082	214.7	\$ 363	1.5	\$ 239,972	\$ 608,352
Weekday Evening #41/43 (Eugene Station/Commerce)	7.95	60	3.5	39	2.3	\$ 124	27.8	\$ 47			\$ 43,689
Weekday #76 (Eugene Station/Oak Patch)	4.60	30/60	16.5	19	5.2	\$ 285	75.9	\$ 128	0.6	\$ 103,624	\$ 209,134
Saturday # 41/43 (Eugene Station/Commerce)	7.95	30/60	25.5	43	18.3	\$ 999	202.7	\$ 343			\$ 69,740
Sunday # 41/43 (Eugene Station/Commerce)	7.95	30/60	17.5	41	12.0	\$ 653	139.1	\$ 235			\$ 46,203
Total									2.1		\$ 977,119

No-Build 2015

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday Daytime # 41/43 (Eugene Station/Commerce)	7.95	30	27	47	21.2	\$ 1,156	214.7	\$ 363	1.6	\$ 256,333	\$ 643,524
Weekday Evening #41/43 (Eugene Station/Commerce)	7.95	60	3.5	43	2.5	\$ 137	27.8	\$ 47			\$ 46,940
Weekday #76 (Eugene Station/Oak Patch)	4.60	30/60	16.5	22	5.9	\$ 323	75.9	\$ 128	0.7	\$ 117,259	\$ 232,348
Saturday # 41/43 (Eugene Station/Commerce)	7.95	30/60	25.5	45	19.1	\$ 1,045	202.7	\$ 343			\$ 72,155
Sunday # 41/43 (Eugene Station/Commerce)	7.95	30/60	17.5	43	12.5	\$ 685	139.1	\$ 235			\$ 47,861
Total									2.3		\$ 1,042,828

No-Build 2031

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday Daytime # 41/43 (Eugene Station/Commerce)	7.95	15	54	56.1	50.5	\$ 2,759	429.3	\$ 726	3.7	\$ 611,928	\$ 1,500,422
Weekday Evening #41/43 (Eugene Station/Commerce)	7.95	30	7	50	5.8	\$ 319	55.7	\$ 94			\$ 55,259
Weekday #76 (Eugene Station/Oak Patch)	4.60	30/60	16.5	25	6.9	\$ 376	75.9	\$ 128	0.8	\$ 136,348	\$ 264,847
Saturday # 41/43 (Eugene Station/Commerce)	7.95	30/60	25.5	53	22.5	\$ 1,231	202.7	\$ 343			\$ 81,815
Sunday # 41/43 (Eugene Station/Commerce)	7.95	30/60	17.5	51	14.9	\$ 813	139.1	\$ 235			\$ 54,490
Total									4.6		\$ 2,006,834

TSM 2015

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
TSM Weekday Day (Eugene Station/Commerce)	7.95	10	77	41	52.6	\$ 2,875	612.2	\$ 1,035	4.1	\$ 670,830	\$ 1,667,754
TSM Weekday Early Evening (Eugene Station/Commerce)	7.95	15	9	41	6.2	\$ 336	71.6	\$ 121			\$ 116,524
TSM Weekday Late Evening (Eugene Station/Commerce)	7.95	30	4	41	2.7	\$ 149	31.8	\$ 54			\$ 51,788
TSM Saturday (Eugene Station/Commerce)	7.95	15/30	47	41	32.1	\$ 1,755	373.7	\$ 631			\$ 124,089
TSM Sunday (Eugene Station/Commerce)	7.95	15/30	37	41	25.3	\$ 1,381	294.2	\$ 497			\$ 97,687
Total									4.1		\$ 2,057,842

TSM 2031

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
TSM Weekday Day (Eugene Station/Commerce)	7.95	10	77	45.9	58.9	\$ 3,219	612.2	\$ 1,035	4.6	\$ 751,002	\$ 1,835,543
TSM Weekday Early Evening (Eugene Station/Commerce)	7.95	15	9	45.9	6.9	\$ 376	71.6	\$ 121			\$ 126,765
TSM Weekday Late Evening (Eugene Station/Commerce)	7.95	30	4	45.9	3.1	\$ 167	31.8	\$ 54			\$ 56,340
TSM Saturday (Eugene Station/Commerce)	7.95	15/30	47	45.9	36.0	\$ 1,965	373.7	\$ 631			\$ 134,995
TSM Sunday (Eugene Station/Commerce)	7.95	15/30	37	45.9	28.3	\$ 1,547	294.2	\$ 497			\$ 106,272
Total									4.6		\$ 2,259,914

West 13th/West 11th EmX: 2015

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
EmX Weekday Day (Eugene Station/Commerce)	8.30	10	77	28.2	36.2	\$ 1,977	639.1	\$ 1,080	2.8	\$ 461,400	\$ 1,241,063
EmX Weekday Early evening (Eugene Station/Commerce)	8.30	15	9	28.2	4.2	\$ 231	74.7	\$ 126			\$ 91,129
EmX Weekday Late Evening (Eugene Station/Commerce)	8.30	30	4	28.2	1.9	\$ 103	33.2	\$ 56			\$ 40,502
EmX Saturday (Eugene Station/Commerce)	8.30	15/30	47	28.2	22.1	\$ 1,207	390.1	\$ 659			\$ 97,046
EmX Sunday (Eugene Station/Commerce)	8.30	15/31	37	28.2	17.4	\$ 950	307.1	\$ 519			\$ 76,398
Total									2.8		\$ 1,546,138

West 13th/West 11th EmX: 2031

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
EmX Weekday Day (Eugene Station/Commerce)	8.30	10	77	29.2	37.5	\$ 2,048	639.1	\$ 1,080	2.9	\$ 477,762	\$ 1,275,305
EmX Weekday Early evening (Eugene Station/Commerce)	8.30	15	9	29.2	4.4	\$ 239	74.7	\$ 126			\$ 93,219
EmX Weekday Late Evening (Eugene Station/Commerce)	8.30	30	4	29.2	1.9	\$ 106	33.2	\$ 56			\$ 41,431
EmX Saturday (Eugene Station/Commerce)	8.30	15/30	47	29.2	22.9	\$ 1,250	390.1	\$ 659			\$ 99,272
EmX Sunday (Eugene Station/Commerce)	8.30	15/31	37	29.2	18.0	\$ 984	307.1	\$ 519			\$ 78,150
Total									2.9		\$ 1,587,377

West 6th/7th/11th EmX: 2015

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday 11th/13th Route (Eugene Station/Garfield)	3.40	30	29	13	6.3	\$ 343	98.6	\$ 167	0.4	\$ 70,901	\$ 200,939
EmX Weekday Day (Eugene Station/Commerce)	8.80	10	77	32.4	41.6	\$ 2,272	677.6	\$ 1,145	3.2	\$ 530,119	\$ 1,401,473
EmX Weekday Early evening (Eugene Station/Commerce)	8.80	15	9	32.4	4.9	\$ 266	79.2	\$ 134			\$ 101,847
EmX Weekday Late Evening (Eugene Station/Commerce)	8.80	30	4	32.4	2.2	\$ 118	35.2	\$ 59			\$ 45,265
Saturday 11th/13th Route (Eugene Station/Garfield)	3.40	30/60	25	12	5.0	\$ 273	85.0	\$ 144			\$ 21,676
EmX Saturday (Eugene Station/Commerce)	8.80	15/30	47	32.4	25.4	\$ 1,387	413.6	\$ 699			\$ 108,459
Sunday 11th/13th Route (Eugene Station/Garfield)	3.40	30/60	17	12	3.4	\$ 186	57.8	\$ 98			\$ 14,740
EmX Sunday (Eugene Station/Commerce)	8.80	15/31	37	32.4	20.0	\$ 1,092	325.6	\$ 550			\$ 85,383
Total									3.7		\$ 1,979,782

West 6th/7th/11th EmX: 2031

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday 11th/13th Route (Eugene Station/Garfield)	3.40	15	58	16	15.5	\$ 845	197.2	\$ 333	1.1	\$ 174,525	\$ 475,008
EmX Weekday Day (Eugene Station/Commerce)	8.80	10	77	33.4	42.9	\$ 2,342	677.6	\$ 1,145	3.3	\$ 546,481	\$ 1,435,716
EmX Weekday Early evening (Eugene Station/Commerce)	8.80	15	9	33.4	5.0	\$ 274	79.2	\$ 134			\$ 103,937
EmX Weekday Late Evening (Eugene Station/Commerce)	8.80	30	4	33.4	2.2	\$ 122	35.2	\$ 59			\$ 46,194
Saturday 11th/13th Route (Eugene Station/Garfield)	3.40	30/60	25	15	6.3	\$ 342	85.0	\$ 144			\$ 25,228
EmX Saturday (Eugene Station/Commerce)	8.80	15/30	47	33.4	26.2	\$ 1,430	413.6	\$ 699			\$ 110,685
Sunday 11th/13th Route (Eugene Station/Garfield)	3.40	30/60	17	15	4.3	\$ 232	57.8	\$ 98			\$ 17,155
EmX Sunday (Eugene Station/Commerce)	8.80	15/31	37	33.4	20.6	\$ 1,125	325.6	\$ 550			\$ 87,135
Total									4.4		\$ 2,301,057

West 6th/7th/7th Place/11th EmX: 2015

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday 11th/13th Route (Eugene Station/Seneca)	5.10	30	29	26	12.6	\$ 687	147.9	\$ 250	0.9	\$ 141,801	\$ 380,633
EmX Weekday Day (Eugene Station/Commerce)	8.70	10	77	35.1	45.0	\$ 2,461	669.9	\$ 1,132	3.5	\$ 574,296	\$ 1,490,610
EmX Weekday Early evening (Eugene Station/Commerce)	8.70	15	9	35.1	5.3	\$ 288	78.3	\$ 132			\$ 107,102
EmX Weekday Late Evening (Eugene Station/Commerce)	8.70	30	4	35.1	2.3	\$ 128	34.8	\$ 59			\$ 47,601
Saturday 11th/13th Route (Eugene Station/Seneca)	5.10	30/60	25	24	10.0	\$ 546	127.5	\$ 215			\$ 118,185
EmX Saturday (Eugene Station/Commerce)	9.70	15/30	47	35.1	27.5	\$ 1,502	455.9	\$ 770			\$ 118,185
Sunday 11th/13th Route (Eugene Station/Seneca)	5.10	30/60	17	24	6.8	\$ 372	86.7	\$ 147			\$ 17,155
EmX Sunday (Eugene Station/Commerce)	10.70	15/31	37	35.1	21.6	\$ 1,183	395.9	\$ 669			\$ 96,291
Total									4.4		\$ 2,240,422

West 6th/7th/7th Place/11th EmX: 2031

Route or Route Segment	Miles per Round Trip	Freq. of Service	Trips per Day	Travel Time (minutes)	Hours per Day	Daily Cost Based on Hours	Miles per Day	Daily Cost Based on Miles	Peak Buses	Cost Based on Buses	Annualized Cost
Weekday 11th/13th Route (Eugene Station/Seneca)	5.10	15	58	34	32.9	\$ 1,796	295.8	\$ 500	2.3	\$ 370,865	\$ 956,278
EmX Weekday Day (Eugene Station/Commerce)	8.70	10	77	36.1	46.3	\$ 2,531	669.9	\$ 1,132	3.6	\$ 590,657	\$ 1,524,853
EmX Weekday Early evening (Eugene Station/Commerce)	8.70	15	9	36.1	5.4	\$ 296	78.3	\$ 132			\$ 109,192
EmX Weekday Late Evening (Eugene Station/Commerce)	8.70	30	4	36.1	2.4	\$ 132	34.8	\$ 59			\$ 48,530
Saturday 11th/13th Route (Eugene Station/Seneca)	5.10	30/60	25	32	13.3	\$ 729	127.5	\$ 215			\$ 49,088
EmX Saturday (Eugene Station/Commerce)	9.70	15/30	47	36.1	28.3	\$ 1,545	455.9	\$ 770			\$ 120,411
Sunday 11th/13th Route (Eugene Station/Seneca)	5.10	30/60	17	30	8.5	\$ 464	86.7	\$ 147			\$ 31,770
EmX Sunday (Eugene Station/Commerce)	10.70	15/30	37	36.1	22.3	\$ 1,216	395.9	\$ 669			\$ 98,043
Total									5.9		\$ 2,938,165

All costs in 2009 Dollars: Formula is (Hours*\$54.64)+ (miles *\$1.69)+(peak buses *\$163,617)

Key	
Column A	"Route" is a listing of the routes for each alternative that operate within the corridor and that experience a change with one or more of the alternatives. Route are segregated by day of week and, for some, by time of day. Note that for the No-Build Alternative, routes #41 and #43, which provide inbound and outbound service on West 11th Avenue, have been combined into a single round-trip route.
Column B	"Miles per Round Trip" indicates the mileage for one round trip of each route.
Column C	"Freq. of Service" indicates the time, in minutes, between buses. For example, a frequency of 10 minutes is six buses per hour. Two numbers in this column (such as 30/60) indicates that both frequencies operate during the day.
Column D	"Trips per Day" indicates the number of bus trips operated on the designated route for the day and time period indicated in Column A.
Column E	"Travel time (minutes)" shows the travel time in minutes for a round trip on the designated route. Year 2011 travel times are based on published schedules. Year 2031 travel times are based on an analysis conducted by DKS & Associates that takes into account dwell time at stops and traffic signal and congestion delays. Year 2015 travel times were interpolated using existing and 2031 times.
Column F	"Hours per Day" is the total amount of revenue service hours on the designated route for the day and time period indicated. This is calculated by multiplying the per trip travel time by the number of trips per day (Column D x Column E).
Column G	"Daily Cost Based on Hours" is the cost based on hourly factors associated with one day of service for the route listed in Column A. Costs include bus operator costs, Operations Supervisor costs, and apportion of administrative expenses. The cost for 2009 was determined to be \$54.64 per hour of service.
Column H	"Miles per Day" indicates the total number of miles operated in a day by the route listed in Column A. This is calculated by multiplying the number of miles per trip by the number of trips per day (Column B x Column D).
Column I	"Daily Cost Based on Miles" is the cost based on mileage factors associated with one day of service for the route listed in Column A. Costs include fleet maintenance, parts, and fuel, as well as a portion of administrative expenses. The cost for 2009 was determined to be \$1.69 per mile.
Column J	"Peak Buses" is the number of buses needed to operate the route listed in Column A during the peak bus demand period. Note that the peak bus period is during weekday afternoon, so there are no peak bus requirements for evening or weekend service.
Column K	"Cost Based on Buses" is the cost based on the number of peak buses associated with service for the route listed in Column A. Costs include overhead and administrative costs, as well as depreciation. The cost for 2009 was determined to be \$163,617 per peak bus.
Column L	"Annualized Cost" is the total cost based on the number of hours, miles, and peak buses associated with the route listed in Column A. Weekday costs are multiplied by 255 (the estimated number of days in a year with weekday level service). Saturday and Sunday costs are multiplied by 52.

West Eugene EmX Extension Alternatives Analysis: Key Results; Revised: January 3, 2011

ATTACHMENT B

Alt. Number	Alternative Name/Design Options	Year 2031 System-wide Boardings		Year 2031 Estimated Transit Travel Time		Year 2031 Estimated Auto Travel Time		Year 2031 System-wide Operating Cost per Boarding		Potential Property Acquisitions		Transit Priority Lanes		On-Street Parking		Trees			
		Total Boardings	Additional Boardings Compared to No-Build	PM Round Trip between the Eugene Station and Commerce St. (in minutes)	Percent Change Compared to No-Build	PM Round Trip between the Eugene Station and Commerce St. (in minutes)	Percent Change Compared to No-Build	Year 2031 Transit travel time as a percentage of auto travel time	Annual cost for the system (in millions)	Change in Cost Compared to No-Build (in millions)	Actual Cost Per Boarding	Cost per added boarding (compared to No-Build)	Partial	Full	Percent Exclusive BAT	Percent with Priority (total)	Spaces potentially displaced	Utilization Rate	Street Trees
1	No-Build	14,355,000	N/A	56.1	N/A	32.2	N/A	\$41.46	N/A	\$2.89	N/A	0	0	0%	0%	0	N/A	0	0
2	Transportation Systems Management	14,445,000	90,000	45.9	-18%	28.0	-13%	\$41.71	\$0.25	\$2.89	\$2.78	34	0	20%	20%	0	N/A	25	0
W 13th Avenue to W 11th Avenue																			
3	Frontage Alley Design Option	14,928,000	573,000	27.4	-51%	27.9	-13%	\$40.97	(\$0.49)	\$2.74	No Cost	116	5	18%	71%	119	Low	107	57
3-MC	Frontage Alley Design Option	14,928,000	573,000	29.2	-48%	28.9	-10%	\$41.04	(\$0.42)	\$2.75	No Cost	88	0	18%	58%	124	Low	97	46
4	Two-Way Transitway Design Option	14,928,000	573,000	27.4	-51%	27.9	-13%	\$40.97	(\$0.49)	\$2.74	No Cost	112	9	18%	71%	119	Low	107	55
W 6th/7th Avenue to W 11th Avenue																			
5	Charmelton Two-Way, Reassign-A-Lane DOs	15,000,000	645,000	32.1	-43%	31.5	-2%	\$41.70	\$0.24	\$2.78	\$0.37	145	8	0%	89%	57	Medium	138	35
5-MC	Charmelton Two-Way, Reassign-A-Lane DOs	15,000,000	645,000	33.4	-40%	31.6	-2%	\$41.75	\$0.29	\$2.78	\$0.45	114	2	0%	76%	63	Medium	131	35
6	Charmelton Two-Way, Add-A-Lane DOs	15,000,000	645,000	32.1	-43%	31.5	-2%	\$41.70	\$0.24	\$2.78	\$0.37	207	11	0%	89%	57	Medium	257	39
7	Lincoln/Charmelton, Reassign-A-Lane DOs	15,000,000	645,000	32.1	-43%	31.5	-2%	\$41.70	\$0.24	\$2.78	\$0.37	147	7	0%	89%	29	Medium	144	36
8	Lincoln/Charmelton, Add-A-Lane DOs	15,000,000	645,000	32.1	-43%	31.5	-2%	\$41.70	\$0.24	\$2.78	\$0.37	208	11	0%	89%	29	Medium	263	38
W 6th/7th Avenue to W 7th Place																			
9	Charmelton Two-Way, Reassign-A-Lane DOs	14,892,000	537,000	36.1	-36%	32.7	2%	\$42.39	\$0.83	\$2.85	\$1.73	123	5	0%	92%	57	Medium	103	31
10	Charmelton Two-Way, Add-A-Lane DOs	14,892,000	537,000	36.1	-36%	32.7	2%	\$42.39	\$0.83	\$2.85	\$1.73	185	8	0%	92%	57	Medium	222	35
11	Lincoln/Charmelton, Reassign-A-Lane DOs	14,892,000	537,000	36.1	-36%	32.7	2%	\$42.39	\$0.83	\$2.85	\$1.73	124	5	0%	92%	29	Medium	109	32
12	Lincoln/Charmelton, Add-A-Lane DOs	14,892,000	537,000	36.1	-36%	32.7	2%	\$42.39	\$0.83	\$2.85	\$1.73	186	8	0%	92%	29	Medium	228	34

Definitions/Sources/Descriptions

Year 2031 System-wide Boardings
 This figure is an estimate of total boardings for each alternative for the year 2031. The data was generated by the ridership forecasting model. The "Additional Ridership Compared to No-Build" shows the increase in boardings for each of the alternatives compared to the No-Build Alternative. One boarding is one passenger entering, riding and exiting one transit vehicle.

Year 2031 Estimated Transit Travel Time
 A traffic model was used to calculate pm peak hour transit travel time between downtown Eugene and West 11th & Commerce St (route terminus). The figures in the table represent the in-vehicle travel time. The "Percentage Decrease Compared to No-Build" indicates the percent that the travel time for each of the alternatives is less than No-Build.

Year 2031 Estimated Auto Travel Time
 A traffic model was used to calculate pm peak hour auto travel time between downtown Eugene and West 11th & Commerce St. The figures in the table represent the in-vehicle travel time. The "Percentage Decrease Compared to No-Build" indicates the percent that the travel time for each of the alternatives is less than No-Build.

Year 2031 transit travel time as a percentage of auto travel time
 This column indicates year 2031 transit travel time as a percentage of year 2031 auto travel time for each alternative. A number greater than 100% indicates that transit travel time is projected to be longer than auto travel time. A number less than 100% indicates that transit travel time is projected to be shorter than auto travel time.

Capital Cost (in millions)
 This is the total estimated cost to design and construct the project, including land, vehicles, permits, staff time, consultant costs, etc.

Year 2031 Operating Cost
 Operating cost is based on year 2031 system designs for No-Build, TSM, and the various BRT Alternatives. Cost is based on service hours, miles and peak buses needed to operate each alternative. Year 2009 dollars are used. The "Additional Cost Compared to No-Build" is the increase in operating cost for each of the alternatives compared to the No-Build Alternative.

Year 2031 Operating Cost per Boarding
 The Year 2031 operating cost per boarding is the annual operating cost divided by annual system-wide boardings. The "Cost per Added Boarding" is a measure of the added cost for each alternative compared to No-Build, divided by the added boardings for each alternative compared to No-Build. This essentially reflects how cost-effective each alternative is in adding ridership to the system.

Potential Property Acquisitions
 This is an estimate of the properties impacted by each of the alternatives. Partial acquisitions are those which do not displace the business or residence. Full acquisitions could displace the business or residence, either because the building is directly impacted, parking is reduced to the point that the business is no longer viable, or access to the property has been eliminated. Assumes worst-case need to acquire property for all acquisitions; in final design stage, design impact modifications and property negotiations between LTD and owners, would result in the need for fewer acquisitions.

Transit Priority Lanes
 This data indicates, for each alternative, the percentage of the route that is in exclusive transit lanes, in BAT (Business Access/Transit - lanes shared with turning traffic) lanes, and the total in either type of transit priority.

On-Street Parking
 The first column shows the estimated number of on-street parking places that would be eliminated for each of the alternatives. The estimate was based on an overlay of the designs with aerial photos. Parking counts were confirmed with field investigations. The second column is the estimated utilization rate of the on-street parking. A technician counted parked cars in the morning, afternoon, and evening on two separate days. A low utilization rate indicates that no more than 25 percent of the on-street spaces were used at any one of those six observations. A medium utilization rate indicates that on at least one count, more than 25 percent, but no more than 50 percent of the spaces were used. A high utilization rate (not observed in any of these situations) would have been noted if more than 50 percent of the on-street spaces were used on any of the observations.

Trees
 The data shows an estimate of the number of trees that could be eliminated with each alternative. Street trees are those within the street right-of-way. Landscape trees are those outside the street right-of-way.

3-MC
 Current Mitigation Concept for the West 13th/West 11th Alternative using the Frontage Alley Design Option.

5-MC
 Current Mitigation Concept for the West 6th/7th-11th Alternative using the Charmelton two-way and Reassign-a-Lane Design Options.

DO
 Design Option

BAT
 Business Access and Transit Lane. An EmX lane shared with vehicles turning from regular travel lanes. Removes EmX and slow turnings vehicles from regular travel lanes.

West Eugene Extension EmX - LPA Meetings and Public Comment Opportunities

ATTACHMENT C

	December	January	February	March
Joint LPA Committee		6		
- Preliminary LPA Recommendation		31		
- Joint (LTD/ECC/MPC) Open House (4 - 6:30 pm)			1	
- Joint (LTD/ECC/MPC) Open House/Public Hearing			9	
Open House - 3:30 - 5:30 p.m.				
Public Hearing - 5:30 - 8:00 p.m.				
- Final Recommendation			14	
EmX Steering Committee - Recommendation		5		
- Recommended 13th/11th Alignment Alternative				
PMG - Recommendation		10		
- Recommended 13th/11th Alignment Alternative				
MPC CAC - Recommendation	16			
- Recommended 13th/11th Alignment Alternative				
TPC		27		
MPC - LPA Selection				10
CLUTAC		13		
Eugene City Council				
- WEEE worksession		24		
- WEEE worksession			23	
- LPA Selection				9
LTD Board				
- LPA Selection				16
Others:				
Listening Sessions				
Neighborhood Meetings				
Title VI/Low-income housing meetings				