

# DRAFT Evaluation of Investment Packages Summary

## MovingAhead Investment Packages

The MovingAhead project proposes to extend multimodal investments in 5 key corridors throughout Eugene. Although each corridor is identified with a single street, LTD and the City of Eugene (City) refer to them as corridors because several streets may work as a system to serve transportation needs.

Corridor alternatives include 1 no action alternative (called the No-Build Alternative) and 1 or 2 build alternatives that are made up of multimodal investments. The build alternatives include either Enhanced Corridor or EmX transit service as described in Chapter 1 of the AA. Each of the alternatives was evaluated individually to determine which would work best for the corridors and their communities.

Then the most viable alternatives were combined to create 5 packages of improvements. The packages were evaluated to determine which combination of investments could be implemented in the near term and would best serve the corridor, the transportation system, and the community.

The LTD Board of Directors and Eugene City Council will consider the findings of the AA report along with input from the community to select the preferred investment package of multimodal investments.

## Evaluation Criteria Used for Investment Package Evaluation

When considering investment packages that involve improvements to multiple corridors, the evaluation criteria need to be tailored to those that help assess the systemwide benefits of the packages. The criteria for the investment packages are listed below. Some of these were used for the corridor-level evaluation, and some are new criteria.

- Capital cost
- Systemwide annual operating cost change from the No-Build Alternative
- Corridor service frequency
- Corridor in-vehicle transit travel time improvement
- Systemwide annual ridership increase compared to the No-Build Alternative
- New corridor bicycle/pedestrian access investments
- New corridor bicycle/pedestrian safety improvements
- Return on investment (ROI)
- Support for corridor development and redevelopment
- Number of medium and large trees impacted
- Corridor acreage of acquisitions
- Corridor displacements
- Corridor on-street parking impacts
- Corridor off-street parking impacts
- Support from the public

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## Investment Package Evaluation

The following analysis looks at 5 potential investment packages that represent a range of investment levels, benefits, and costs. The analysis presented here evaluates corridors for near-term (within 10 years) investments.

The 5 investment packages evaluated are identified in Table 1 below.

**Table 1. Possible Near-Term Investment Packages**

Investment Package	Corridor				
	Highway 99	River Road	30th Avenue to LCC	Coburg Road	MLK, Jr. Boulevard
Enhanced Corridor Package	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor
EmX Package	EmX	EmX	EmX	EmX	Enhanced Corridor
Package A	Enhanced Corridor	EmX	Enhanced Corridor	EmX	Enhanced Corridor
Package B	EmX	EmX	No-Build	Enhanced Corridor	Enhanced Corridor
Package C	Enhanced Corridor	EmX	EmX	No-Build	No-Build

One package is composed of the Enhanced Corridor Alternatives for each of the 5 corridors, while another is composed of the EmX Alternatives for each corridor except for the MLK, Jr. Boulevard Corridor, which uses an Enhanced Corridor Alternative because it does not have an EmX Alternative. Those 2 packages represent the ends of the spectrum of investment options. In addition, there are 3 other packages composed of various combinations of the most promising alternatives as determined from the corridor evaluations.

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Table 2 provides data for each criterion and color codes the results for the 5 packages with highlights indicating the following:

- **Green:** Better than average result compared to the other investment packages
- **Yellow:** Average result compared to the other investment packages
- **Red:** Worse than average result compared to the other investment packages

**Table 2. Investment Package Data Summary**

Evaluation Measure	Enhanced Corridor Package	EmX Package	Package A	Package B	Package C
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	\$148	\$335	\$274	\$210	\$172
Systemwide Annual Operating Cost Change from No-Build (millions)	-\$0.1	\$8.2	\$4.3	\$5.9	\$2.4
Corridor Service Frequency (peak buses per hour)	4.0	5.6	4.8	4.8	4.8
Corridor In-Vehicle Transit Travel Time Improvement	21%	25%	23%	23%	15%
Systemwide Annual Ridership Increase Compared to No-Build	386,000	1,318,000	757,000	771,000	651,000
New Corridor Bike/Ped Access Investments (1-5 rating)	2.8	4.2	3.8	3.2	3.0
New Corridor bike/Ped Safety Improvements (1-5 rating)	3.2	4.6	4.0	3.4	3.2
Return on Investment (1-5 rating)	4.4	3.2	3.8	3.5	3.3
Support Corridor Development and Redevelopment (1-5 rating)	3.0	4.6	3.8	3.4	3.0
Number of Medium and Large Trees Impacted	103	432	362	190	248
Corridor Acreage of Acquisitions	4.1	8.4	8.0	4.9	4.0
Corridor Displacements	4	8	8	6	6
Corridor On-Street Parking Impacts (number of spaces)	69	147	76	0	140
Corridor Off-Street Parking Impacts (number of spaces)	119	229	209	152	97

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Table 3 shows the data values converted to ratings symbols. This provides for a visual comparison of the investment packages using a five-point scale. The following symbols are used:



**Table 3. Investment Package Rating Summary**

Evaluation Measure	Enhanced Corridor Package	EmX Package	Package A	Package B	Package C
Capital Cost	●	○	◐	◑	◒
Systemwide Annual Operating Cost Change from No-Build	●	○	◑	◐	◒
Corridor Service Frequency	○	●	◑	◑	◑
Corridor In-Vehicle Transit Travel Time Improvement	◐	●	◒	◒	○
Systemwide Annual Ridership Increase Compared to No-Build	○	●	◑	◑	◐
New Corridor Bike/Ped Access Investments	○	●	◒	◑	◐
New Corridor bike/Ped Safety Improvements	◐	●	◒	◑	◐
Return on Investment	●	○	◒	◑	◐
Support Corridor Development and Redevelopment	◐	●	◒	◑	◐
Number of Medium and Large Trees Impacted	●	○	◐	◒	◑
Corridor Acreage of Acquisitions	●	○	◐	◑	◒
Corridor Displacements	●	○	◐	◑	◒
Corridor On-Street Parking Impacts	◑	○	◑	●	○
Corridor Off-Street Parking Impacts	◒	○	◐	◑	●
Support from the Public	TBD	TBD	TBD	TBD	TBD

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## Enhanced Corridor Investment Package

The Enhanced Corridor Package includes the Enhanced Corridor Alternatives for all 5 corridors. The evaluation findings of the Enhanced Corridor Investment Package are summarized in Table 4.

**Table 4. Enhanced Corridor Investment Package Results Summary**

Measure	Package Summary		Highway 99	River Road	30th Avenue to	Coburg Road	MLK, Jr. Boulevard
	Total	Average	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor	Enhanced Corridor
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	<b>\$148</b>		\$38.0	\$24.0	\$21.0	\$41.0	\$21.0
Systemwide Annual Operating Cost Change from No-Build (millions)	<b>-\$0.1</b>		-\$0.1	-\$0.6	-\$0.5	\$0.0	\$1.1
Corridor Service Frequency (peak buses per hour)		<b>4.0</b>	4	4	4	4	4
Corridor In-Vehicle Transit Travel Time Improvement		<b>21%</b>	34%	19%	6%	28%	15%
Systemwide Annual Ridership Increase Compared to No-Build	<b>386,000</b>		111,000	33,000	(30,000)	63,000	186,000
New Corridor Bike/Ped Access Investments (1-5 rating)		<b>2.8</b>	4	2	3	3	2
New Corridor Bike/Ped Safety Improvements (1-5 rating)		<b>3.2</b>	4	3	3	3	3
Return on Investment (1-5 rating)		<b>4.4</b>	4	5	5	3	5
Support Corridor Development and Redevelopment (1-5 rating)		<b>3.0</b>	3	3	3	3	3
Number of Medium and Large Trees Impacted	<b>103</b>		14	13	58	9	9
Corridor Acreage of Acquisitions	<b>4.1</b>		1.3	1.3	0.4	1.0	0.1
Corridor Displacements	<b>4</b>		0	4	0	0	0
Corridor On-Street Parking Impacts (number of spaces)	<b>69</b>		0	0	69	0	0
Corridor Off-Street Parking Impacts (number of spaces)	<b>119</b>		50	2	0	67	0
Support from the Public (1-5 rating)			TBD	TBD	TBD	TBD	TBD

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## EmX Investment Package

The EmX Package includes the EmX Alternatives for 4 corridors. The MLK, Jr. Boulevard Corridor, which does not have an EmX Alternative, is included in this package as an Enhanced Corridor Alternative. The evaluation findings of the EmX Corridor Investment Package are summarized in Table 5

**Table 5. EmX Corridor Investment Package Results Summary**

Measure	Package Summary		Highway 99	River Road	30th Avenue to LCC	Coburg Road	MLK, Jr. Boulevard
	Total	Average	EmX	EmX	EmX	EmX	Enhanced Corridor
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	\$335		\$67.0	\$78.0	\$53.0	\$113.0	\$21.0
Systemwide Annual Operating Cost Change from No-Build (millions)	\$8.2		\$2.8	\$2.0	\$0.5	\$1.8	\$1.1
Corridor Service Frequency (peak buses per hour)		5.6	6	6	6	6	4
Corridor In-Vehicle Transit Travel Time Improvement		25%	41%	31%	12%	28%	15%
Systemwide Annual Ridership Increase Compared to No-Build	1,318,000		267,000	246,000	198,000	258,000	186,000
New Corridor Bike/Ped Access Investments (1-5 rating)		4.2	5	5	4	5	2
New Corridor Bike/Ped Safety Improvements (1-5 rating)		4.6	5	5	5	5	3
Return on Investment (1-5 rating)		3.2	3	3	3	2	5
Support Corridor Development and Redevelopment (1-5 rating)		4.6	5	5	5	5	3
Number of Medium and Large Trees Impacted	432		40	132	102	149	9
Corridor Acreage of Acquisitions	8.4		1.6	2.2	0.5	4.0	0.1
Corridor Displacements	8		0	6	0	2	0
Corridor On-Street Parking Impacts (number of spaces)	147		0	0	140	7	0
Corridor Off-Street Parking Impacts (number of spaces)	229		54	31	16	128	0
Support from the Public (1-5 rating)			TBD	TBD	TBD	TBD	TBD

# DRAFT Evaluation of Investment Packages Summary

## Investment Package A

Package A is composed of 2 corridors with EmX Alternatives (River Road and Coburg Corridors) and 3 corridors with Enhanced Corridor Alternatives (Highway 99, 30th Avenue to LCC, and MLK, Jr. Boulevard Corridors). The evaluation findings of the Investment Package A are summarized in Table 6.

**Table 6. Investment Package A Results Summary**

Measure	Package Summary		Highway 99	River Road	30th Avenue to LCC	Coburg Road	MLK, Jr. Boulevard
	Total	Average	Enhanced Corridor	EmX	Enhanced Corridor	EmX	Enhanced Corridor
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	\$274		\$38.0	\$78.0	\$21.0	\$113.0	\$21.0
Systemwide Annual Operating Cost Change from No-Build (millions)	\$4.3		-\$0.1	\$2.0	-\$0.5	\$1.8	\$1.1
Corridor Service Frequency (peak buses per hour)		4.8	4	6	4	6	4
Corridor In-Vehicle Transit Travel Time Improvement		23%	34%	31%	6%	28%	15%
Systemwide Annual Ridership Increase Compared to No-Build	757,000		111,000	246,000	(30,000)	258,000	186,000
New Corridor Bike/Ped Access Investments (1-5 rating)		3.8	4	5	3	5	2
New Corridor Bike/Ped Safety Improvements (1-5 rating)		4.0	4	5	3	5	3
Return on Investment (1-5 rating)		3.8	4	3	5	2	5
Support Corridor Development and Redevelopment (1-5 rating)		3.8	3	5	3	5	3
Number of Medium and Large Trees Impacted	362		14	132	58	149	9
Corridor Acreage of Acquisitions	8.0		1.3	2.2	0.4	4.0	0.1
Corridor Displacements	8		0	6	0	2	0
Corridor On-Street Parking Impacts (number of spaces)	76		0	0	69	7	0
Corridor Off-Street Parking Impacts (number of spaces)	209		50	31	0	128	0
Support from the Public (1-5 rating)			TBD	TBD	TBD	TBD	TBD

# DRAFT Evaluation of Investment Packages Summary

## Investment Package B

Package B is composed of 2 corridors with EmX Alternatives (Highway 99 and River Road Corridors), 2 corridors with Enhanced Corridor Alternatives (Coburg Road and MLK, Jr. Boulevard Corridors), and 1 corridor (30th Avenue to LCC Corridor) as the No-Build Alternative. The evaluation findings of the Investment Package B are summarized in Table 7.

**Table 7. Investment Package B Results Summary**

Measure	Package Summary		Highway 99	River Road	30th Avenue to LCC	Coburg Road	MLK, Jr. Boulevard
	Total	Average	EmX	EmX	No-Build	Enhanced Corridor	Enhanced Corridor
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	\$210		\$67.0	\$78.0	\$0.0	\$41.0	\$21.0
Systemwide Annual Operating Cost Change from No-Build (millions)	\$5.9		\$2.8	\$2.0	\$0.0	\$0.0	\$1.1
Corridor Service Frequency (peak buses per hour)		4.8	6	6	4	4	4
Corridor In-Vehicle Transit Travel Time Improvement		23%	41%	31%	0%	28%	15%
Systemwide Annual Ridership Increase Compared to No-Build	771,000		267,000	246,000	0	63,000	186,000
New Corridor Bike/Ped Access Investments (1-5 rating)		3.2	5	5	1	3	2
New Corridor Bike/Ped Safety Improvements (1-5 rating)		3.4	5	5	1	3	3
Return on Investment (1-5 rating)		3.5	3	3	N/A	3	5
Support Corridor Development and Redevelopment (1-5 rating)		3.4	5	5	1	3	3
Number of Medium and Large Trees Impacted	190		40	132	0	9	9
Corridor Acreage of Acquisitions	4.9		1.6	2.2	0.0	1.0	0.1
Corridor Displacements	6		0	6	0	0	0
Corridor On-Street Parking Impacts (number of spaces)	0		0	0	0	0	0
Corridor Off-Street Parking Impacts (number of spaces)	152		54	31	0	67	0
Support from the Public (1-5 rating)			TBD	TBD	TBD	TBD	TBD



# DRAFT Evaluation of Investment Packages Summary

## Investment Package C

Package C is composed of 2 corridors with EmX Alternatives (River Road and 30th Avenue to LCC Corridors), 1 corridor with the Enhanced Corridor Alternative (Highway 99 Corridor), and 2 corridors included as the No-Build Alternative (Coburg Road and MLK, Jr. Boulevard Corridors). The evaluation findings of the Investment Package C is summarized in Table 8.

**Table 8. Investment Package C Results Summary**

Measure	Package Summary		Highway 99	River Road	30th Avenue to LCC	Coburg Road	MLK, Jr. Boulevard
	Total	Average	Enhanced Corridor	EmX	EmX	No-Build	No-Build
Capital Cost (millions); includes \$2.5 million for maintenance facility expansion	\$172		\$38.0	\$78.0	\$53.0	\$0.0	\$0.0
Systemwide Annual Operating Cost Change from No-Build (millions)	\$2.4		-\$0.1	\$2.0	\$0.5	\$0.0	\$0.0
Corridor Service Frequency (peak buses per hour)		4.8	4	6	6	4	4
Corridor In-Vehicle Transit Travel Time Improvement		15%	34%	31%	12%	0%	0%
Systemwide Annual Ridership Increase Compared to No-Build	651,000		111,000	246,000	198,000	0	0
New Corridor Bike/Ped Access Investments (1-5 rating)		3.0	4	5	4	1	1
New Corridor Bike/Ped Safety Improvements (1-5 rating)		3.2	4	5	5	1	1
Return on Investment (1-5 rating)		3.3	4	3	3	N/A	N/A
Support Corridor Development and Redevelopment (1-5 rating)		3.0	3	5	5	1	1
Number of Medium and Large Trees Impacted	248		14	132	102	0	0
Corridor Acreage of Acquisitions	4.0		1.3	2.2	0.5	0.0	0.0
Corridor Displacements	6		0	6	0	0	0
Corridor On-Street Parking Impacts (number of spaces)	140		0	0	140	0	0
Corridor Off-Street Parking Impacts (number of spaces)	97		50	31	16	0	0
Support from the Public (1-5 rating)			TBD	TBD	TBD	TBD	TBD