600 NE Grand Ave.
Portland, OR 97232-2736

Metro | *Agenda*

Meeting: Metro Council Work Session
Date: Tuesday, February 22, 2011
Time: 2 p.m.
Place: Council Chambers

CALL TO ORDER AND ROLL CALL

2 PM	**1.**	**DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, FEBRUARY 24, 2011/ADMINISTRATIVE/CHIEF OPERATING OFFICER COMMUNICATIONS**	
2:15 PM	**2.**	**BRIEFING ON THE EXPO CENTER CONDITIONAL USE MASTER PLAN – INFORMATION**	**Dresler Bailey Twete**
2:35 PM	**3.**	**LAKE OSWEGO TO PORTLAND TRANSIT PROJECT LOCALLY PREFERRED ALTERNATIVE– INFORMATION**	**Wieghart Withrow Snook**
3:35 PM	**4.**	**CREATING A CLIMATE SMART COMMUNITIES STRATEGY USING SCENARIOS – INFORMATION**	**Ellis**
4:15 PM	**5.**	**COUNCIL BRIEFINGS/COMMUNICATION**	

ADJOURN

Agenda Item Number 2.0

BRIEFING ON THE EXPO CENTER CONDITIONAL USE MASTER PLAN

Metro Council Work Session
Tuesday, Feb. 22, 2011
Metro Council Chambers

METRO COUNCIL

Work Session Worksheet

Presentation Date: February 22, 2011 Time: 2:00 p.m. Length: 10-15 minutes

Presentation Title: Briefing on the Expo Center Conditional Use Master Plan

Service, Office, or Center:
Metro Visitor Venues

Presenters (include phone number/extension and alternative contact information):
Teri Dresler (503.797-1790); Chris Bailey; Cheryl Twete

ISSUE & BACKGROUND

The Expo's current Conditional Use Master Plan was required by the City as a condition in approving the construction of Hall D in 2000-2001. The first CUMP was approved in June 2001 and expires in June 2011 and an update is needed to guide the Expo Center for the next ten years.

MERC Commission Resolution 10-12 authorized Shiels Obletz Johnsen Inc., to conduct Expo Center Conditional Use Master Plan (CUMP) consulting services and submit a Land Use Review Application in accordance with requirements established by the City of Portland, Bureau of Development Services.

A Pre-Application conference with the City of Portland was held on September 9, 2010. Affected City Bureaus have indicated that a "refresh" of the previously approved CUMP is appropriate given that there are no major changes anticipated to the amount of development in the next 10 years compared to the current plan. The City has indicated that transportation and storm water management are the elements requiring additional information and updated proposals.

The most significant City policy change since 2001 are the new requirements regarding stormwater management associated with new development. Upgrades will not be required for current facilities. New storm water facilities such as a rain-water garden street, green roof or swales are proposed with future development in order to better manage and treat stormwater run-off on-site.

An updated transportation management plan evaluation has been required by the City to address future access, congestion, parking and transportation management plans. The study by our transportation consultants Kittelson and Associates indicates that the current transportation demand management plan is working effectively at Expo to address impacts, especially those occurring at peak event times, and that expected future impacts will not change significantly. The Expo will continue to proactively encourage transit ridership to events and participate with CRC and the City of Portland on continued transportation planning for the area.

In order to ensure that the new plan successfully completes the land use review process in a timely manner, staff were authorized by Metro's Chief Operating Officer Michael Jordan on December 20, 2010 to submit the plan to the City in January to begin a "completeness check" review by City staff. Upon being deemed complete, City staff

will evaluate the application for conformance with approval critera. A staff recommendation will then be presented to the City Hearings Officer for decision making. A public hearing will be held and public testimony will be received prior to the Hearings Officer decision. Assuming no substantive problems with the application and general support from community stakeholders, we anticipate that the final decision be rendered by the City prior to the June 2011 expiration of the current CUMP.

On February 8, 2011, the MERC Commission approved the Expo Center Conditional Use Master Plan by Resolution No. 11-04 and authorized staff to forward the plan to Metro Council for your consideration and approval.

OPTIONS AVAILABLE

Metro Council has the option of adopting the Master Plan as submitted or, Council may wish to open a discussion that would change the current direction for future site improvements. to A decision to review and potentially change the current plan as submitted, could slow the approval process through the city and put Expo in a situation to be operating without an approved plan.

IMPLICATIONS AND SUGGESTIONS

Staff recommends approval of the Conditional Use Master Plan as prepared.

QUESTION(S) PRESENTED FOR CONSIDERATION

Please note that as Columbia River Crossing project planning develops, there may be impacts on the plan as currently submitted. Staff will address those issues if and when they come up and bring those to the Council for approval if appropriate.

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION XXYes __No
DRAFT IS ATTACHED ___Yes XXNo

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING THE EXPO CENTER CONDITIONAL USE MASTER PLAN	)))	RESOLUTION NO. 11- [insert number here] Introduced by Rex Burkholder and Teri Dresler

WHEREAS, in 2000, the City of Portland conditioned the construction of Hall D Land Use Review decision to include applying for a Conditional Use Master Plan;

WHEREAS, an Expo Center Conditional Use Master Plan was approved by the City of Portland in June 2001 and it will expire in June 2011;

WHEREAS,the Commission authorized Shiels Obletz Johnson, Inc. to conduct Expo Center Conditional Use Master Plan consulting services and submit a Land Use Review Application in accordance with requirements established by the City of Portland, Bureau of Development Services;

WHEREAS, it is in the best interests of the Commission to have an approved Expo Center Conditional Use Master Plan prior to the expiration of the current plan;

WHEREAS, on February 8, 2011, the MERC Commission approved the Expo Center Conditional Use Master Plan by Resolution No. 11-04 and authorized staff to forward the plan to Metro Council for their consideration, review and approval;
now, therefore

BE IT RESOLVED,

That the Metro Council approves the Expo Center Conditional Use Master Plan and authorizes staff to take actions necessary for approval of the Plan with the City of Portland, Bureau of Development Services.

ADOPTED by the Metro Council this 24th day of February, 2011.

_____
Tom Hughes, Council President

Approved as to Form:

_____
Daniel B. Cooper, Metro Attorney

Agenda Item Number 3.0

LAKE OSWEGO TO PORTLAND TRANSIT PROJECT LOCALLY PREFERRED ALTERNATIVE

Metro Council Work Session
Tuesday, Feb. 22, 2011
Metro Council Chambers

METRO COUNCIL

Work Session Worksheet

Presentation Date: February 22, 2011 Time: 2:35 p.m. Length: 60 minutes

Presentation Title: Lake Oswego to Portland Transit Project Locally Preferred Alternative

Service, Office, or Center: Planning and Development, Corridor Division

Presenters (include phone number/extension and alternative contact information):
Bridget Wieghart, x1775
Karen Withrow, x1932
Jamie Snook, x1751

ISSUE & BACKGROUND

The purpose of the work session is to brief the Council on findings of the Draft Environmental Impact Statement (DEIS) for the Lake Oswego to Portland Transit project and to obtain input into the selection of the Locally Preferred Alternative (LPA).

The Lake Oswego to Portland Transit Project DEIS was published on December 3, 2010. A 60-day public comment period following publication ended on January 31, 2011. Open houses were held on December 8 and 16, 2010 and a public hearing before the project Steering Committee was held on January 24, 2011. The DEIS may be found on Metro's website (www.oregonmetro.gov/lakeoswego) and paper copies or a compact disc can be obtained from the Metro Planning Department.

The Lake Oswego to Portland Transit Project DEIS was developed to compare transportation solutions in the corridor to assist in the selection of mode and preferred route. The DEIS includes three transit alternatives between Lake Oswego and Portland: no-build, enhanced bus and streetcar. The project newsletter provides a summary of the alternatives and their benefits and tradeoffs. A copy of the project newsletter is attached labeled Attachment A.

The Lake Oswego to Portland Transit and Trail Study began in the summer of 2005 as an alternatives analysis. That phase of the project evaluated a wide range of alternatives and narrowed down to an enhanced bus and streetcar transit alternatives to be studied further in the DEIS. The trail portion of the study is advancing through a separate process. The DEIS began in 2009.

The project has provided periodic briefings and obtained input regarding options and issues to be studied throughout the planning process. Most recently, at the September 21, 2010 work session the Council was briefed and provided feedback on the DEIS process and preliminary findings.

Approval of an LPA would allow the project to apply for a New Starts funding rating and approval to enter preliminary engineering and commence the Final Environmental Impact Statement (FEIS).

OPTIONS AVAILABLE

There are three transit alternatives currently under consideration: the no-build, enhanced bus and streetcar. The Locally Preferred Alternative (LPA) consists of key decision points: mode, alignment and terminus. The mode considerations include enhanced bus or streetcar. There are no alignment considerations for enhanced bus and the streetcar alternative is looking at a total of five phasing and design options throughout the corridor. The project alternatives and benefits and tradeoffs are further described in the project newsletter (Attachment A)

Based on public comments and impacts and potential mitigation measures identified in the DEIS, on February 7, 2011, the citizen advisory committee developed a recommendation to the Steering Committee. Four fifths of the CAC members at the final meeting supported carrying the Streetcar alternative into Preliminary Engineering and the Final Environmental Impact Statement. The recommendation (Attachment B) included majority and minority opinions as well as recommendations regarding design options in Johns Landing, Riverdale/Dunthorpe and in Lake Oswego. A media briefing was done on Feb. 10 to announce the CAC recommendation. Messages from that briefing are contained in Attachment C.

It is anticipated that the Project Management Group (PMG) will make its recommendation on February 16, 2011. The project Steering Committee is expected to make an LPA recommendation at its Monday, February 28, 2011 meeting from 2:30 – 4:00 pm. The LPA would then go to the various jurisdictions for review. It is being scheduled to be considered for approval by the Metro Council in summer 2011.

IMPLICATIONS AND SUGGESTIONS

Metro Council feedback is requested on the various options under consideration which will help with identifying the elements and features of a Locally Preferred Alternative. The CAC recommendation is attached. The PMG recommendation is not yet available but will be presented at the work session. The purpose of the work session is to provide information about the DEIS, to answer questions and to obtain Council input and direction to Councilor Collette as the Steering Committee Chair. The Steering Committee will consider the CAC and PMG recommendations at its meeting on February 28, 2011 and is expected to make its recommendation at that time.

QUESTION(S) PRESENTED FOR CONSIDERATION

1. Is there additional information that the Metro Council needs concerning the alignment or options under consideration for inclusion in the LPA?
2. Are there issues concerning the project that have not yet been addressed?
3. Does the Council have any input to Councilor Collette and/or the project team regarding the Locally Preferred Alternative for this corridor?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION X Yes __No

DRAFT IS ATTACHED ___Yes X No (Staff will develop a resolution for Metro Council consideration once the project Steering Committee has made a recommendation regarding a possible Locally Preferred Alternative.)

FALL 2010

Lake Oswego to Portland
TRANSIT PROJECT

PROJECT PARTNERS

Cities of Lake Oswego and Portland

Clackamas and Multnomah counties

Oregon Department of Transportation

Portland Streetcar Inc.

TriMet

Metro

Metro
www.oregonmetro.gov

Comment on the benefits and trade-offs

Project partners are working to develop a transit project that meets future travel demand between Lake Oswego and Portland, supports local and regional land use plans, and garners community support.

Highway 43 faces historic and projected increases in traffic congestion due to increases in regional and corridor population and employment. There are limited options for transportation improvements in the corridor due to topographic, geographic and built environment constraints that limit the ability to expand the highway and other roads. More efficient and reliable transit service would offer residents another option to meet expanding travel needs.

Improving transit in the Highway 43 corridor is an investment in the region's long-term future. Transit investments direct growth and redevelopment where we want it to be – in downtowns and along main streets – and often encourage neighborhood redevelopment that helps build vibrant, active communities – places where seniors can age-in-place and areas with essential services and cultural opportunities close by. Transit, particularly rail, is known to have a positive impact on development and property values. For instance, more than $3.5 billion in development has occurred near streetcar since 1997 and more than $8 billion in light rail stations areas since 1986.

Improved transit will provide people with choices about how they get around – to work, when travelling, to the symphony, to shop or visiting friends. By expanding the current transit system, we leverage past investments and make the most of what we have.

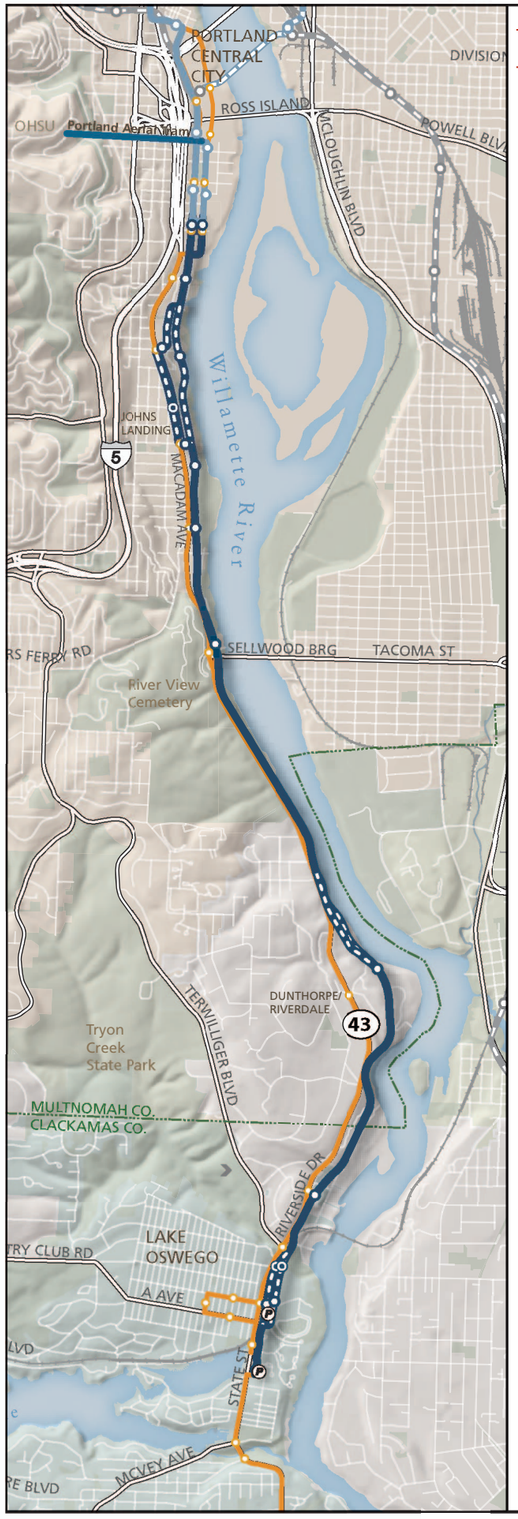
The process began with a wide range of alternatives that included bus, rail and river transit as well as widening or using reversible auto lanes on Highway 43. After review with the community-based project advisory committee and the public, in addition to technical analysis, the list of ideas was narrowed to three alternatives: no-build, enhanced bus and streetcar. For the past few months, project partners have been completing a detailed analysis of the benefits and trade-offs of the three alternatives as well as different design options for the streetcar alternative. This analysis is published by the Federal Transit Administration, Metro and TriMet for review and comment as the Draft Environmental Impact Statement.

Public comment period Dec. 3, 2010, to Jan. 31, 2011

Which of the alternatives offers the best mix of benefits and trade-offs that meet the transportation needs for the corridor? Your comments will help decision-makers select a Locally Preferred Alternative to advance for further study.

Visit www.oregonmetro.gov/lakeoswego to review the DEIS. Attend an open house, testify before the project steering committee at the public hearing, mail, e-mail or submit online comments.

Updated January 2011



Lake Oswego to Portland TRANSIT PROJECT

Alternatives studied in the Draft Environmental Impact Statement

Streetcar

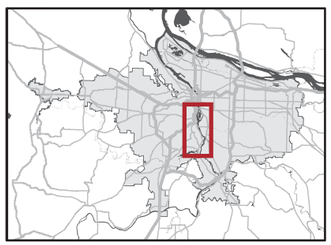
- Streetcar alternative
- Streetcar alternative design option
- station
- possible future
- park-and-ride

Enhanced Bus

- Enhanced Bus
- stop
- park-and-ride

Transit: existing/planned

- Streetcar, existing
- Streetcar, under construction
- Streetcar, planned
- MAX, existing
- MAX,planned
- Portland Aerial Tram
- Railroads



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Advantages, disadvantages and comparison of build-project alternatives

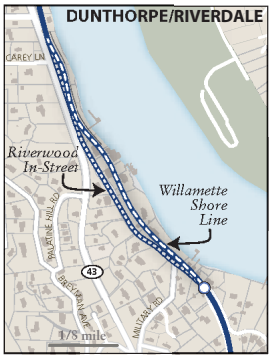
	Enhanced bus would enhance the existing TriMet Line 35 with a bus line with fewer stops and more frequent service between Portland and Lake Oswego and would include a park and ride lot near Albertsons in Lake Oswego.	**Streetcar** would extend service from the southern end of the existing streetcar, connecting downtown Lake Oswego to downtown and Northwest Portland. The streetcar would include mostly double and some single track operation and include park and ride lots in the Foothills area and near Albertsons in Lake Oswego. For most of the route, the streetcar would operate within the existing Willamette Shore Line right of way (*see streetcar alternative design options*).
Ridership and travel time	**Advantages:** 730,550 more new transit trips annually in 2035 than no-build A savings of three minutes* in transit travel time from Lake Oswego to Portland State University compared to the no-build; total travel time: 39 minutes	**Advantages:** 1.18 to 1.28 million more new transit trips annually in 2035 than the no-build, 450,00 to 547,350 more than enhanced bus A savings of 9 to 13 minutes* in transit travel time from Lake Oswego to Portland State University compared to the no-build, eight to nine minute savings compared to the enhanced bus; total travel time: 29 to 33 minutes*
Costs and financing	**Advantage:** Capital investment (in 2017 dollars) of $51.1 million, $328.5 to $407.2 million less than streetcar; local funding responsibility: $20.4 million **Disadvantages:** Annual operating cost (in 2010 dollars) of $2.79 million more than the no-build alternative in 2035, $1.54 million more than streetcar Does not use the value of the Willamette Shore Line right of way for local share of project funding	**Advantages:** Annual operating cost (in 2010 dollars) of $1.25 million more than the no-build alternative in 2035, $1.54 million less than enhanced bus Uses the value of the Willamette Shore Line right of way to contribute to local share of project funding (between $94.5 and $97 million in 2017 dollars for the high and low streetcar cost range), reducing other local funding responsibility to $57.3 to $86.3 million, depending on selected design options **Disadvantage:** Capital investment (in 2017 dollars) between $379.6 and $458.3 million, $328.5 to $407.2 million more than enhanced bus, depending on selected design options
Traffic	**Advantages:** Savings of 200 hours of "vehicle hours of delay" per day in 2035 compared to the no-build **Disadvantages:** No reduction of vehicles on Highway 43 at the peak hour (rush hour) in 2035 compared to the no-build Continues to operate transit on Highway 43 where buses will, at times, get stuck in traffic Three new congested intersections	**Advantages:** Savings of 400"vehicle hours of delay" per day in 2035 compared to the no-build, 200 more than enhanced bus Reduction of 100 vehicles on Highway 43 at the peak hour (rush hour) in 2035 compared to the no-build and enhanced bus alternatives Transit travel would be in all or mostly exclusive right of way that would be significantly less affected by traffic congestion on Highway 43 **Disadvantage:** Two to four new congested intersections, depending on selected design options Zero to 175 parking spaces removed in Johns Landing, depending on selected design option
Redevelopment and economy	**Advantage:** Creation of 240 construction jobs and 28 long-term jobs **Disadvantage:** Would not encourage development or redevelopment to occur sooner than the no-build alternative	**Advantages:** Creation of 1,430 to 1,500 construction jobs and 13 long-term jobs* Expected to encourage development and redevelopment in Johns Landing and Lake Oswego sooner than the no-build alternative (up to 25 million square feet* of allowed new floor area for retail or offices in the station areas)
Community environment	**Advantages:** No impacts to historic resources beyond potential indirect effects to the Red Electric Eastside Rail Line (generally, the Willamette Shore Line right of way) No impacts to parks or recreation facilities No noise and vibration impacts No potential displacements	**Advantage:** No impacts to historic resources beyond effects to the Red Electric Eastside Rail Line (generally, the Willamette Shore Line right of way) **Disadvantages:** Between 0.7 and 1 acre of parkland used for streetcar, depending on selected design options 23 to 28 vibration impacts that would require mitigation One possible severe noise impact that would require mitigation, depending on the selected design option Up to one residential and six business displacements, depending on selected design options
Natural environment	**Advantages:** A daily reduction of 25 tons of carbon dioxide released by vehicles compared to the no-build alternative No wetlands filled **Disadvantages:** 1.3 acres of flood plain filled Less than 1 acre of new paved surface	**Advantages:** An daily reduction of between 41 and 42 tons of carbon dioxide released by vehicles compared to no-build, 16 to 17 tons more than the enhanced bus alternative **Disadvantages:** Less than 0.1 acre of wetland filled, depending on selected design options 6.5 to 10.1 acres* of flood plain filled, depending on selected design options 7 to 18 acres of new paved surface

** corrected, Jan. 24, 2011*

Streetcar alternative design options

In three areas of the corridor, the streetcar alternative has two or more design options.

Lake Oswego In both design options, the streetcar would be configured to cross under the freight tracks north of Stampher Road. The Union Pacific Railroad right of way option would then follow the railroad right of way past the Foothills area. Under the Foothills option, the streetcar would run on a future Foothills Road extension. If the streetcar alternative and the Foothills option are decided on, final design for this area would depend on coordination with the City of Lake Oswego's development plans for the Foothills area.



Dunthorpe/Riverdale Under the Willamette Shore Line option, the streetcar would continue in the existing right of way through this area. Under the Riverwood in-street option, the streetcar would run with auto traffic on Riverwood Road beginning at the northern end of Riverwood Road and returning to the Willamette Shore Line right of way where it meets and crosses Riverwood Road south of Military Road.

Johns Landing The Willamette Shore Line option would continue through Johns Landing via the existing right of way. There are two Southwest Macadam Avenue options (in-street and additional lane), wherein the streetcar would leave the right of way south of Hamilton Court to run on Landing Drive to Boundary Street, where it would connect to and run on Macadam Avenue/Highway 43 before returning to the Willamette Shore Line via Carolina Street. The streetcar would run with auto traffic on Landing Drive and Boundary and Carolina streets. Under the Macadam in-street option, the streetcar would run with auto traffic on Macadam Avenue both southbound and northbound. Under the Macadam additional lane option, the streetcar would run on Macadam Avenue southbound, but a new lane would be added northbound for streetcar and right-turn-only access for autos.

In addition to the design options, there are phasing options in South Waterfront, at the west end of the Sellwood Bridge and in the Lake Oswego Foothills District. The phasing options would depend on, and coordinate with, the timing of other capital projects in those areas.

Quick comparison of alternatives

	No-build	Enhanced bus	Streetcar
Ridership	○	◐	●
Travel time	○	◐	●
Capital cost	●	◐	○
Operation and Maintenance	●	○	◐
Reliability	○	○	●
Additional corridor capacity	○	◐	●

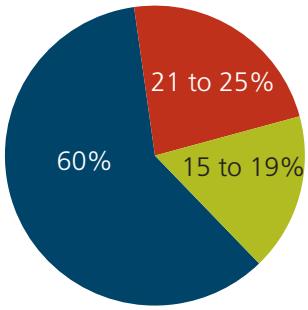
○=good | ◐=better | ●=best

www.oregonmetro.gov/lakeoswego

Estimated funding sources, 2017 dollars

Funding sources under either the streetcar or enhanced bus alternative would be confirmed in 2013. The local portion of capital funding is based on an anticipated 60 percent federal share of the budget. 2017 dollars are used based on the projected date of completed construction.

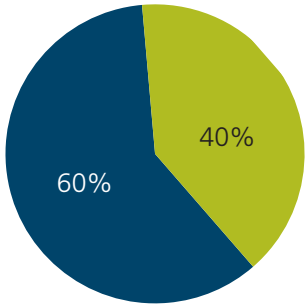
Potential funding sources, streetcar alternative:



Federal Transit Administration New Starts grant	$227.8 to 275.0 million
Willamette Shore Line value	$94.5 to 97.0 million
Local, regional and state funds	$57.3 to 86.3 million

The cost of the streetcar alternative depends on the alignment options selected. The low to high range of streetcar funding is presented here.

Potential funding sources, enhanced bus alternative:



Federal Transit Administration Small Starts grant	$30.7 million
Local, regional and state funds	$20.4 million

Willamette Shore Line right of way value

The value of the Willamette Shore Line right of way is both a cost and a funding source for the streetcar alternative. The rail line has been in service since 1887, as commuter trolley service, freight service or a combination of the two. In 1988, a consortium of local governments purchased the right of way for approximately $2 million.

Under the streetcar alternative, the real estate value of the right of way can be used to meet part of the local funding needed to match federal funds. Current estimates of the local funding value are based on a 2008 appraisal, the current real estate market and economic trends. The value of the right of way would not apply to the enhanced bus alternative.

Provide comment Dec. 3, 2010, to Jan. 31, 2011

Attend an open house

4 to 7 p.m. Thursday, Dec. 9, 2010 | PBS Conference Center, 4343 SW Corbett Ave., Portland

4 to 7 p.m. Thursday, Dec. 16, 2010 | Lakewood Center for the Arts, 368 S. State St., Lake Oswego

Give testimony before the project steering committee at the public hearing

5 to 8 p.m. Monday, Jan. 24, 2011 | Lakewood Center for the Arts, 368 S. State St., Lake Oswego

Comment online at www.oregonmetro.gov/lakeoswego.

E-mail comments to trans@oregonmetro.gov.

Send written comments to Lake Oswego to Portland Transit Project, 600 NE Grand Ave., Portland, OR 97232.

www.oregonmetro.gov/lakeoswego

Projected Locally Preferred Alternative decision-making timeline

December 2010	January 2011	February 2011	March 2011
DEIS publication Comment period begins Open houses	Steering committee public hearing Comment period ends	Community advisory committee recommendation Comment report published Steering committee recommendation Partner agency action on Locally Preferred Alternative recommendation	Partner agency action on Locally Preferred Alternative recommendation

Potential project development timeline

New transit service could open by the end of 2017.

2010	2011	2012	2013	2014	2015	2016	2017
Publish DEIS Develop Locally Preferred Alternative	Adopt Locally Preferred Alternative Develop conceptual funding plan Apply for Small/New Starts grant	Begin preliminary engineering Begin Final Environmental Impact Statement	Publish Final Environmental Impact Statement Confirm funding plan *(confirm funding sources)*	Final design Full Funding Grant Agreement Finalize funding plan *(secure funding sources)*	Start construction	Construction	Begin transit service

What's next?

The Draft Environmental Impact Statement is one phase of project development. The next phases are meant to refine the analysis in the DEIS, further developing community and environmental topics, including those below.

Operation. Portland Streetcar Inc. and TriMet would determine what responsibility each agency will have if the streetcar is selected as the Locally Preferred Alternative after selection. TriMet will be responsible if enhanced bus is selected.

Station locations and design. Proposals to add or remove stations for streetcar or stops for enhanced bus can be made during the Locally Preferred Alternative decision-making process. Final station design, and any changes suggested in the Locally Preferred Alternative, would be evaluated and planned during preliminary engineering and the Final Environmental Impact Statement.

Safety and security. Best practices for safe and secure public places would be integrated into streetcar station area design. Local jurisdictions would coordinate safety and security plans for on and around any new transit service. On average about three incidents are reported per day for the entire transit system, which carries about 12,000 streetcar rides per day and about 324,000 rides on TriMet bus, light rail and commuter rail.

Rail crossings. Thirty-five public and private roadway, railroad and pedestrian track crossings have been identified in the proposed streetcar alignment. Where there are private crossings, most typically a driveway or access road, appropriate private crossing treatments would be developed in conjunction with individual property owners. Safe crossing treatments could include closure or relocation, grade separation, stop signs, gates, traffic signals and pedestrian Z-crossings. Treatment selection criteria include sightlines, traffic volumes and speeds, transit vehicle speed, proximity and suitability of alternative routes, and convenience for pedestrians and transit patrons.

Informal access to Willamette Park. Current use of informal park access from Highway 43 would be addressed during preliminary engineering and further refined during final design under the streetcar alternative. The decision will be made in collaboration with project partners, including Portland Parks and Recreation.

February 10, 2011

Carlotta Collette, Chair
Lake Oswego to Portland Transit Project Steering Committee
c/o Metro
600 NE Grand Ave.
Portland, OR 97232

Dear Carlotta,

As you are aware the Community Advisory Committee has been meeting since October 2009 to learn about and consider the alternatives, design options, station locations, potential environmental impacts and other issues analyzed in the Lake Oswego to Portland Transit Project Draft Environmental Impact Statement (DEIS). After much thoughtful conversation, our recent discussions have focused on the benefits and tradeoffs associated with the alternatives and impacts identified in the DEIS. A summary of our key comments are reflected in the attached notes.

In addition, from our final deliberations, we offer majority and minority opinions to the Steering Committee as you prepare to make your own recommendation on a Locally Preferred Alternative (LPA).

On Feb. 7, the CAC held its final meeting to consider an LPA recommendation. Of the 23 members of the CAC, 16 voted in favor of streetcar (two votes provided in writing due to absence from meeting), 2 favored enhanced bus, 1 no-build and 1 abstained from voting. Three members were absent from the meeting.

Two-thirds of the CAC members support carrying the **Streetcar** alternative and the following design options into Preliminary Engineering and the Final Environmental Impact Statement:

- Johns Landing: Macadam In-Street design option
- Riverdale/Dunthorpe: carry both design options, the Willamette Shore Line and Riverwood Road design options
- Lake Oswego: carry both design options, the UPRR right of way and Foothills Road design options

Support of the Streetcar alternative includes requests for evaluation of station locations and other design considerations to be refined in advance of or during Preliminary Engineering and the Final Environmental Impact Statement, as follows:

- Analyze stations at SW Pendleton Street and in the vicinity of SW Radcliff Road near the Lewis and Clark trail/boat ramp
- Study opportunities to enhance the pedestrian environment and alternatives to Boundary entry/exit with the Macadam In-Street design option
- Seek to add pedestrian improvements between SW Carolina and SW Nevada along SW Macadam, with particular emphasis on creating strong connections between Macadam and the proposed streetcar stations at SW Nebraska and SW Nevada.
- Consider the potential for keeping the intersection of Riverwood and Highway 43 open under the Riverwood Road design option

Two CAC members support **Enhanced Bus** for the following reasons:

- Support for enhanced bus includes requests for evaluation of bus stop locations and other design considerations during Preliminary Engineering and the Final Environmental Impact Statement, as follows:
    - Review number of stops and stop locations, especially near Radcliffe Road
    - Consider new bus vehicle technology
    - Consider express bus service
- With enhanced bus or no-build there may be an option to use the Willamette Shore Line right of way for another use, potentially a multi-use path, pending legal analysis and engineering feasibility.

One CAC member supports **No-Build** for the following reasons:

- No-build maintains limited local transit service in the corridor with no additional capital investment

Thank you for your thoughtful consideration of the CAC recommendation for a Locally Preferred Alternative. Please feel free to contact me if there is something I can clarify or additional information I can provide.

Sincerely,

Ellie McPeak, Chair

Lake Oswego to Portland Transit Project Community Advisory Committee

cc: CAC Members
Douglas Obletz, Project Manager

LAKE OSWEGO TO PORTLAND TRANSIT PROJECT

Notes for Community Advisory Committee Recommendation

Below are notes from the December and January Community Advisory Committee meetings. As CAC discussion focused first on design options for streetcar in order to consider a "proposed streetcar concept" alongside the enhanced bus, this outline is organized by streetcar design option, alternatives (enhanced bus, streetcar, no-build), stops/station locations and other outstanding issues.

STREETCAR DESIGN OPTIONS

1. Johns Landing: ***support for Macadam In-Street design option***
   - Willamette Shore Line:
     - Streetcar on the Willamette Shore Line right of way will impact quality of life (not just noise, vibration and visibility but the intangible quality). If on Macadam, impacts are eliminated.
   - Macadam In Street (note: no preference for Macadam Additional Lane option):
     - Streetcar in-street on Macadam puts stops where they need to be to serve neighborhoods and avoids many property impacts.
     - Streetcar in Johns Landing is all about neighborhood redevelopment which means different math for residents who live there – it's not about cost they'll pay out but money coming back in property taxes and system development charges to improve the neighborhood.
     - There may be a short-term benefit (use of more of the Willamette Shore Line right of way value) to the Willamette Shore Line design option, but that is unacceptable to Johns Landing residents because it blocks access to the river, has property impacts and doesn't provide the same benefits. Streetcar has far more benefit to the community if operated in-street on Macadam where the neighborhood wants to see increased development and more transit riders. The thinking is that there will be more riders than the DEIS predicts since it can't count the effects of future development. They see streetcar as a way to increase private investment in development which will, in turn, produce substantially more property taxes and system development charges for investments in water and sewer systems. It can also lead to a better balance of jobs and housing in Johns Landing so some people don't have to commute out of the area to work, further decreasing traffic.
     - Because the LID concept being discussed in Johns Landing has always included residential property owners as well as commercial, the cost burden will be spread over more people and will be more reasonable than the recent one in South Waterfront which was difficult for property owners there to bear. All of Johns Landing property owners will benefit for less cost per property owner.
     - While an LID is not feasible in the unincorporated areas of Clackamas and Multnomah counties and Lake Oswego will need to decide whether to use an LID and how. Johns

Landing has a legitimate option to use the LID to recoup right of way costs so that streetcar can benefit the neighborhood and the whole City of Portland.

- With the streetcar alternative running in-street on Macadam Avenue, Bicycle Transportation Alliance wants to see streetcar on Macadam and the right of way used for a bike/pedestrian path. They challenge the condo associations to change current right of way easements to allow that, something they have expressed interest in doing.

2. Riverdale/Dunthorpe: ***support for studying both design options further (Willamette Shore Line and Riverwood Road)***

3. Lake Oswego: ***support for studying both design options further(UPRR right of way and Foothills Road)***

ALTERNATIVE (MODE)

1. No Build

- *Pluses*
  - Maintains transit service within Riverdale neighborhood
  - Could consider right of way for bike/walk trail instead
  - Less money spent or money could be spent in other corridors
- *Minuses*
  - Head in the sand option – pretends system is okay today and nothing will change in the future to affect corridor conditions
  - Not a satisfactory choice, especially in the future because Highway 43 corridor remains a choke point
  - Doesn't benefit jobs, development or housing
  - Investment less likely with flexible transit (bus) because development is encouraged by and benefits from improved transit
  - Trends here and world-wide show this value of nearby transit is real and rises over time
  - No opportunity to leverage federal money
  - Doesn't get value out of Willamette Shore Line Right of Way
  - Urban reserve expanded to include Stafford/Borland neighborhood and it's irresponsible not to plan for better transit
  - Doesn't address effects on environment

2. Enhanced Bus:

- *Pluses*
  - Anyone on transit takes cars off the road and makes room for someone else

- New technology, if proposed in the future for enhanced bus, could reduce air quality affects
- May be able to use Willamette Shore Line right of way for something else (bike/pedestrian trail)

- *Minuses*
  - Buses get stuck in traffic and frequent headways will be disruptive
  - Doesn't address congestion on Highway 43
  - Frequency of service not as good as streetcar
  - Means loss of service in Johns Landing due to removal of five stops compared to today's service and this will make buses so full that people can't get on
  - Means loss of service due to removal of a stop in Riverdale, leaving a 1.7 mile stretch between the Sellwood and Riverwood stops
  - Buses too full (e.g. CAC member boarded bus on bus mall in downtown Portland 1-18-11. By the edge of downtown, bus was "packed." In mid-Johns Landing, when she got off, bus was still "standing room only" at only 4:20 p.m., not even the peak commute)
  - Money is wasted on enhanced bus because buses are well-used now but there is still flat or disinvestment in Johns Landing. Even in economic boom times Johns Landing did not seen investment. Property values are flat or decreasing. The retail environment is poor. Residents are coming by the thousands to South Waterfront and could use Johns Landing as a place to find services nearby if there were better travel connections.
  - Bus has not generated neighborhood and community preservation or development. Aggressive action is needed to overcome these long-term trends and take advantage of existing locations for residents, services and jobs close to downtown.
  - Enhanced bus is the lower volume option at 700,000 riders/year (streetcar is 1.18-1.28 million rides/year)
  - Enhanced bus brings 300 parking spaces to the Old Town neighborhood in Lake Oswego without the potential for redevelopment that has been proven to occur with rail investment, like streetcar. Impacts without the benefits.
  - Based on a non-scientific email survey completed by some Old Town neighbors, only about 25% like enhanced bus and many did not realize there was a park and ride planned with the enhanced bus alternative.
  - Enhanced bus requires $20 million in local match that cannot include the value of the Willamette Shore Line right of way and makes system development charge revenue in Lake Oswego less likely. According to Williams, Dame and White, property owners in Foothills will not support an LID for enhanced bus. Other sources would be required to fund local match.
  - Operation and maintenance cost is higher. Over 20 years, this means $30 million (difference between enhanced bus and streetcar) will be needed from TriMet's payroll tax or it will be taken away from other service.

- Enhanced bus vehicle holds fewer riders than streetcar and doesn't last as long. Average useful life of a bus is 12 years while average useful life of a rail vehicle is 40 years.
- Buses pollute environment more than streetcar

NOTE: during the discussion of enhanced bus, a suggestion was made that enhanced bus could be a benefit in combination with streetcar from Portland to Johns Landing and across the Sellwood Bridge. Another suggestion was to add express service to the Line #35 instead of the enhanced bus.

3. Streetcar

- *Pluses*
  - The streetcar would carry 1,500 more trips a day than enhanced bus which adds up to over 500,000 more trips a year.
  - Not leveraging the past investment in the Willamette Shore Line right of way means losing a tremendous opportunity to put its current value to use as local match.
  - If you take the capital local match range for streetcar and subtract the capital local match for enhanced bus to get the difference and divide that by the additional operations and maintenance cost required to operate the enhanced bus ($1.54 million per year, adjusted down by 1/3 to make them 2010$ not 2017$), it only takes 18-32 years to pay off the additional capital cost. The streetcar will be operating far longer than that so this is a good investment.
  - Streetcars have more seats than buses, actually add capacity and provide a travel option besides Highway 43. More streetcar vehicles could be added to the route in the future. Even those who say traffic isn't that bad today should think to what it will be by 2035.
  - Facilitates quality and a variety of housing, access to jobs, and density where we want it (in Lake Oswego), which could have a positive effect on schools and enable all kinds of people will to find it easier to leave their cars at home.
  - Streetcar is faster than enhanced bus and will continue to operate fast despite gridlock on Highway 43.
  - Streetcar provides a savings in auto delay during rush hour that may be small now but at least moves us in the direction of addressing long commute times.
  - Streetcar removes 41-42 tons of CO^2 from the environment daily. This adds up to about 15,000 tons per year, a significant amount.
  - Streetcar plugs Lake Oswego into the regional transit system.
  - Cost to build streetcar will never be less than it is today

- Streetcar will likely happen someday and cost will only increase. While waiting, other projects may move ahead in the line for federal resources and we won't have a team at the federal level to support the project and project funding
- Everyone pays their federal taxes and that money is budgeted and spent for programs including New Starts funding for rail projects, whether Portland gets any of the funds or not. This project provides an opportunity bring some federal dollars home to benefit how we grow as a region.
- We should compete strongly for federal funds. Oregon sends much more money to DC than we get back. Go for it.
- For the West Linn residents, both enhanced bus and streetcar have some benefits. Streetcar requires a transfer in Lake Oswego but may provide better bus connections to other places (i.e. Beaverton) in the future, emits less CO^2 and is more predictable/reliable. Enhanced bus doesn't require a transfer but gets stuck in traffic.
- Many professionals live in West Linn and ride transit due to environmental benefits. Thinking about the need to transfer in Lake Oswego, there are many ways to get to the streetcar connection – some may be dropped off, others may walk or bike, others may take the bus and transfer.
- Leaves more room on Highway 43 for and best supports infrastructure for pedestrians and bicycles throughout the corridor.
- Better connects Johns Landing to South Waterfront and downtown.
- Streetcar is a regional solution that provides connectivity between centers so it makes sense to do now

- *Minuses*
  - Some residents in the Birdshill area think that streetcar is a good project in ideal times but these are not ideal times when schools may close and people are without jobs.
  - Concern level of detail provided in the DEIS regarding costs and funding and about where funding will come from. Lake Oswego has other expensive projects going on.
  - Density and ridership doesn't support transit investment in a dumbbell situation (development potential only at two ends of project). Invest funds elsewhere,
  - Think of this as a regional decision/investment.
  - Streetcar could increase traffic.
  - Concern about proximity of streetcar tracks to river.
  - To address traffic, streetcar should go on I5, I205.
  - Concern that ownership of Willamette Shore Line right of way has influenced analysis in DEIS and that if the right of way wasn't owned, this would be last corridor to have HCT. Maybe the Willamette Shore Line right of way should be sold or used another way.

- Hard to believe Willamette Shore Line is worth about $80 million. Johns Landing condo values down about one-third in economic recession. Has the value of the Willamette Shore Line decreased by a similar amount?
- Including federal and local funds for capital cost and the operating cost savings of streetcar over enhanced bus ($1.54 million per year), the capital cost will take time to pay off.
- Lake Oswego residents may not want to see streetcar and new development (per Riverdale/Dunthorpe)

NOTE: during the discussion of the three alternatives a couple of CAC members noted split opinions in the community about the choice between enhance bus and streetcar. This was reflected in testimony at the public hearing and can be summed up in statements about tradeoffs such as these: tough financial projections/losing opportunity and accepting future traffic, cost daunting/streetcar benefits most people over the longest term, and opportunity cost and higher future cost/huge cost for small benefit.

STOP/STATION LOCATIONS

- Enhanced Bus: ***recommend stops as identified in DEIS***
- Streetcar: ***recommend stop in DEIS plus analysis of two additional or different stops in Preliminary Engineering and the FEIS: Pendleton and in the vicinity of Riverdale Road and the Lewis and Clark trail***

OUTSTANDING ISSUES

The following additional issues should be considered in Preliminary Engineering and the FEIS:

- Potential revisions to Enhanced Bus conceptual design: ***none noted***
- Study potential revisions to Streetcar conceptual design: ***sidewalk improvements and alternatives to Boundary entry/exit with Macadam In-Street; pedestrian improvement between Carolina and Nevada along Macadam and potential for keeping intersection of Riverwood and Highway 43 open***

Media Briefing
February 10, 2011

Main messages

- After significant and very thoughtful conversation about the values and tradeoffs of project alternatives, 16 Community Advisory Committee members (of 20 voting) recommend that the streetcar alternative be advanced for further study. Two favored enhanced bus, one no-build and one abstained.
- The CAC acknowledged, during their discussion, that good dialogue about the project continues in the community where a variety of perspectives are still being considered.
- The CAC recommendation will be one of three key inputs to the Steering Committee who is scheduled to make an LPA recommendation on Feb. 28. The other key inputs are public comments received December 3 through January 31 and a project management group recommendation.

Streetcar

Community benefit

- Encouraging urban development in communities like Lake Oswego and Johns Landing makes the most of places we've already invested in, saves commute time, relieves pressure to develop farm and forestland and gives neighborhoods the chance to define how they want to grow and how they'll get around.
- Streetcar facilitates quality housing, access to jobs, and density where Lake Oswego wants it. This could encourage a diverse population in Lake Oswego and have a positive effect on schools.
- Streetcar on Macadam in Johns Landing means more services close to home and puts stops where they best serve the neighborhood while keeping access to the river open and avoiding property impacts.
- Balancing the jobs and houses in Johns Landing and Lake Oswego can lead to fewer people commute out of the area to work, further decreasing traffic and time away from family, even for those who drive.
- With transportation costs often being the second highest family expense, streetcar would provide a safe, reliable, cost-effective and efficient travel option for those who don't drive or own a car or who don't want to drive on congested roadways.
- Streetcar would generate approximately 1,430 to 1,500 construction jobs.
- The streetcar would provide improved access to eight parks along its route.
- The Bicycle Transportation Alliance supports streetcar because it best supports the vision for a multi-use path through the Lake Oswego to Portland corridor, especially if the Willamette Shore Line right of way can be used for a bike/pedestrian path in parts of Johns Landing.

Travel and the environment

- Streetcar provides a fast, reliable travel option besides Highway 43. It's the only alternative that adds capacity and continues to operate fast despite gridlock.
- Streetcar would carry 1,500 more trips a day, or more than a half million more trips a year, than the enhanced bus.
- Streetcar would result in a reduction of about 68,000 vehicle miles traveled/day in 2035 within the region (approximately 3,700 to 4,200 vehicle mile/day in 2035 within the corridor) and 400 vehicle hours of delay/day in 2035. This means auto trips would be shorter and people will get home faster.

- The streetcar alternative would eliminate about 15,000 tons of CO_2 annually and reduce fuel consumption by 58,000 to 66,400 gallons/day, thus reducing reliance on foreign oil and providing a choice for people facing rising gas prices.
- Streetcar creates opportunities to improve fish passage in replaced or repaired culverts, add native vegetation, improve habitats and remove invasive vegetation. It would redevelop up to 7.6 acres of existing impervious surface to current standards, thereby reducing run-off and improving water quality.
- Streetcar would include remediation of 31 known hazardous sites in compliance with applicable state and federal standards.
- The project will seek to avoid, minimize and mitigate all potential impacts identified in the DEIS. Construction best practices will be developed to minimize or avoid impacts during construction.

Project funding

- Using the Willamette Shore Line right of way is a tremendous opportunity to leverage past investment.
- Cost to build streetcar will **never** be less than it is today and other projects may move ahead in the line for federal resources.
- Everyone pays federal taxes and that money is spent whether Portland and Lake Oswego get any of it or not. This project provides an opportunity to bring some federal dollars home and Portland and Lake Oswego should compete vigorously because Oregon sends significantly more money to DC than we get back.
- While times are not ideal now, funds for the project will not be committed for four or more years.
- Streetcar in Johns Landing is all about neighborhood redevelopment so their math is different – it's not about cost they'll pay out but money coming back in property taxes and system development charges to improve the neighborhood and the City of Portland.
- The concept of an LID is being discussed in Johns Landing, for residential and commercial property owners, as all will benefit from the project.

Enhanced Bus – *lacks community support because:*

- Doesn't address congestion on Highway 43.
- It's the lower volume option (700,000 riders/year rather than 1.18-1.28 million for streetcar).
- Brings 300-space park and ride to Old Town without the benefits of redevelopment.
- Costs more to operate and maintain, $30 million more over 20 years would be needed from TriMet's payroll tax or other sources.
- Requires $20 million in local match without the value of the Willamette Shore Line right of way, probably without system development charges and likely **with** the use of general fund or other sources. According to Williams, Dame and White, property owners in Foothills will not support an LID for enhance bus.
- Buses are well-used in Johns Landing and Lake Oswego but they do not generate the kind of development or re-development that these communities desire.
- In Johns Landing now, and even in economic booms, there is still disinvestment, a poor retail environment and flat or decreasing property values. Aggressive action is needed to overcome these

long-term trends and improve connections between jobs and residents in South Waterfront and downtown and existing/improved services in Johns Landing.

No build – w*hy not stick with the transit service we have today:*

- It's the "head in the sand option" where Highway 43 remains a choke point.
- It's irresponsible not to plan for better transit.

Agenda Item Number 4.0

CREATING A CLIMATE SMART COMMUNITIES STRATEGY USING SCENARIOS

Metro Council Work Session
Tuesday, Feb. 22, 2011
Metro Council Chambers

METRO COUNCIL
Work Session Worksheet

Presentation Date: February 22, 2011 Time: 3:35 p.m. Length: 40 minutes

Presentation Title: Creating a Climate Smart Communities Strategy Using Scenarios

Service, Office, or Center: Planning and Development Department

Presenters: Robin McArthur (797-1714 or robin.mcarthur@oregonmetro.gov)
Mike Hoglund (797-1743 or mike.hoglund@oregonmetro.gov)
Kim Ellis, Project Manager (797-1617 or kim.ellis@oregonmetro.gov)

ISSUE & BACKGROUND

In 2007, the Legislature established statewide goals for greenhouse gas emissions (GHGs) – calling for stopping increases in emissions by 2010; a 10 percent reduction below 1990 levels by 2020 and a 75 percent reduction below 1990 levels by 2050. The targets apply to all emission sectors, including energy production, buildings, solid waste and transportation.

In 2009, the Legislature passed House Bill 2001, directing Metro to "develop two or more alternative land use and transportation scenarios" by January 2012 that are designed to reduce greenhouse gas emissions from light-duty vehicles. The legislation also mandates adoption of a preferred scenario after public review and consultation with local governments, and local government implementation through comprehensive plans and land use regulations that are consistent with the adopted regional scenario. The Climate Smart Communities Scenarios effort responds to these mandates.

In 2010, the Legislature approved Senate Bill 1059, providing further direction to GHG scenario planning in the Metro region and the other five metropolitan areas in Oregon. Aimed at reducing GHG emissions from transportation, the legislation mandates several state agencies to work with stakeholders to develop a statewide transportation GHG emission reduction strategy, metropolitan-level GHG emissions reduction targets for cars and light trucks, guidelines for scenario planning, and a toolkit of actions to reduce GHG emissions.

In 2010, Metro's *Making the Greatest Place* initiative resulted in Council adoption of six desired outcomes, the Community Investment Strategy, urban and rural reserves and an updated Regional Transportation Plan. All of these actions provide the policy foundation for better integrating land use decisions with transportation investments to create prosperous and sustainable communities and meet state climate goals.

Work is underway at the state and regional level to respond to the legislative mandates and implement the 2010 Council actions.

State response – Oregon Sustainable Transportation Initiative[1]

The Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD) are leading the state response through the Oregon Sustainable Transportation Initiative (OSTI). A summary of the state activities is attached for reference.

A draft Technical Report will be released on March 1, 2011 to support Metro's work and the DLCD metropolitan-level target setting process. The Land Conservation and Development

[1] For more information, go to http://www.oregon.gov/ODOT/TD/TP/OSTI.shtml

Commission (LCDC) is expected to adopt GHG emissions reduction targets for the Metro region on May 19, 2011; draft targets will be released on April 1, 2011 and will be discussed by the Metro Council on April 12, 2011.

Regional response – Climate Smart Communities Scenarios

The Climate Smart Communities Scenarios effort will build on the state-level work conducted to date and the 2010 Metro Council actions. The project presents an opportunity to learn what combination of land use and transportation strategies will be required to meet the state GHG targets and how well the strategies support all of the region's desired outcomes.

The project will use existing policy and technical advisory committees and lead to adoption of a "preferred" land use and transportation strategy by the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council. The Metro Policy Advisory Committee (MPAC), JPACT and the Metro Council will make recommendations at key decision points based on input from the Transportation Policy Advisory Committee (TPAC), the Metro Technical Advisory Committee (MTAC) and the stakeholder engagement process.

- **Phase 1: Understanding the Choices (Scenario Framing and Research)**

  The first phase of regional-level scenario analysis will occur during Summer 2011 and focus on learning what combinations of land use and transportation strategies are required to meet the state GHG targets. Land use and transportation strategies (e.g. market incentives, mixed-use, transit supportive development and expanded transit service) as well as operational and pricing strategies (e.g. traffic signal timing, parking pricing and other user-based fees) will be evaluated through regional-level scenarios. Potential impacts and benefits will be identified through a comprehensive array of measures that link back to the six desired outcomes. The tools used for this analysis will limit the strategies, impacts and benefits that can be evaluated during this phase of the process.

  The April 1 MPAC and JPACT Climate Leadership Summit is aimed at gathering input from elected officials and business and community leaders on the combinations of strategies to be tested. Findings and recommendations from the analysis will be reported to MPAC, JPACT and the Metro Council in Fall 2011 before being finalized for submittal to the Legislature in January 2012. The recommendations will also guide future phases of the project, as shown in Figure 1.

- **Phase 2: Shaping the Direction (Alternative preferred scenario analysis)**

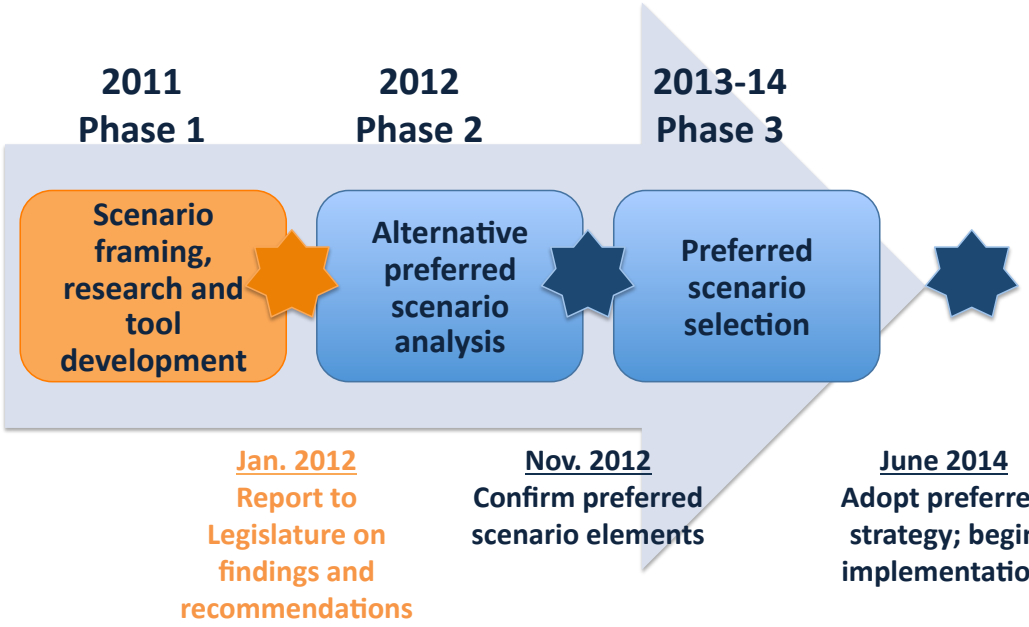
  In 2012, Metro and local government staff will further analyze alternative regional-level scenarios that apply the lessons learned and recommendations from Phase 1 in a more tailored manner to develop a "draft" preferred land use and transportation scenario. This phase provides an opportunity to incorporate strategies and new policies identified through local and regional planning efforts that are underway in the region (e.g., SW Corridor Plan, East Metro Connections Plan, Portland Plan, and other local periodic review and transportation system plan updates). MPAC, JPACT and the Metro Council will be asked to confirm a "draft" preferred scenario by the end of 2012 that will be brought forward to the final phase of the process.

- **Phase 3: Building the Strategy and Implementation (Preferred Scenario Selection)**

  The final project phase, in 2013 and 2014, will lead to adoption of a "preferred" land use and transportation strategy. The analysis in this phase will be conducted using the region's most robust analytic tools and methods – the regional travel demand model, MetroScope and regional emissions model, MOVES. Additional scoping of this phase will occur in 2012 to

better align this effort with mandated regional planning and growth management decisions. This phase will identify needed changes to regional policies and functional plans, and including updates to the Regional Transportation Plan and region's growth management strategy. Implementation of approved changes to policies, investments, and other actions would begin in 2014 at the regional and local levels to realize the adopted strategy.

Figure 1. Climate Smart Communities Scenarios Process



A more detailed schedule that includes state coordination milestones is attached for reference.

Next steps

A goal of this effort is to further advance 2040 implementation, local aspirations and the public and private investments needed to build great communities and meet state climate goals. Addressing the climate change challenge will take collaboration and partnerships in the public and private sectors and focused policy and investment discussions and decisions by elected leaders, stakeholders and the public.

Work is underway to compile a toolbox of strategies to be evaluated and develop analytic tools and methods to support the scenario analysis to be conducted this summer. Staff is also conducting stakeholder interviews and opinion research to further inform the project's communication and engagement strategy. The strategy is being coordinated with the state's climate activities, other Metro climate activities and implementation of Community Investment Strategy. Upcoming meetings will be focused on engaging and preparing the Metro Council, MPAC and JPACT members for the April 1 summit, and subsequent meetings to provide direction. A summary of upcoming policy discussions and milestones is provided for reference:

- **Feb. 23 – MPAC** discussion on several climate-related topics: the Climate Smart Communities scenarios process and opportunities for coordination; a report on the potential climate impacts to the region and actions local governments can take now; the Oregon Global Warming Commission 2020 Roadmap recommendations; and setting GHG emissions reduction targets for the Portland region.
- **March 1 – ODOT releases Agency Technical Report**, describing the technology and fuels assumptions to be included in region's scenario analysis.

- **March 3 – JPACT** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies; and setting GHG emissions reduction targets for the Portland region.
- **March 9 – MPAC** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies.
- **March 29 - Council** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies. (tentative date)
- **April 1 – JPACT and MPAC Climate Leadership Summit** to learn about opinion research and local case studies and provide input on the combinations of land use and transportation strategies to be tested during the summer.
- **April 1 – DLCD releases draft Metropolitan Greenhouse Gas Emissions Reduction Targets** rule and GHG emissions reduction target for Metro region and other metropolitan areas.
- **April 12 - Council** work session to ask questions and provide comments to DLCD staff on the draft Metropolitan Greenhouse Gas Emissions Reduction Targets rule and Metro region targets. LCDC is expected to act on the draft rule at their May 19 meeting.
- **April 13 - MPAC** discussion on April 1 summit and scenarios evaluation approach.
- **April 14 - JPACT** discussion on April 1 summit and scenarios evaluation approach.
- **May 11 - MPAC** direction on scenarios evaluation approach and strategies to test.
- **May 12 - JPACT** direction on scenarios evaluation approach and strategies to test.
- **June – Aug. –** Scenarios development and evaluation with technical committees.

OPTIONS AVAILABLE

- Move forward with Climate Smart Communities Scenarios approach as presented by staff.
- Identify topics or areas for refinement or discussion by Council at a future work session.

IMPLICATIONS AND SUGGESTIONS

Staff will present an update of the Climate Smart Communities Scenarios activities, preliminary results from the state-wide scenario analysis, the range of land use and transportation strategies identified to date and possible thematic approaches for testing the strategies this summer.

Staff is seeking comments and questions regarding the timeline and anticipated project outcomes and Council's role in advance of the April 1 Climate Leadership Summit. Staff will also seek input from Council on the range of land use and transportation strategies and thematic approaches for testing the strategies in regional-level scenarios this summer.

QUESTION(S) PRESENTED FOR CONSIDERATION

1. Does Council **support the overall approach** as presented by staff?

2. What **additional information** does Council need to prepare for the April 1 Climate Leadership summit and upcoming policy advisory committee discussions?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes _X No
DRAFT IS ATTACHED ___Yes ___No

- Attachment 1: Oregon Sustainable Transportation Initiative Overview *(dated 11/23/10)*
- Attachment 2: April 1 JPACT and MPAC Climate Leadership Summit flyer
- Attachment 3: Climate Smart Communities Scenarios Schedule *(dated 2/4/11)*

Oregon
Sustainable Transportation Initiative

Statewide Transportation Strategy

Statewide strategy for reducing GHG emissions from all transportation modes in all areas of Oregon.

- ODOT
- STS Technical Advisory Committee
- STS Policy Committee
- OTC

Draft by March–May 2011

§2 SB 1059

Agency Technical Report

Estimates of 1990 light vehicle GHG emissions and forecasts of future 2035 vehicle fleet and fuel characteristics.

- ODOT
- DEQ
- ODOE

Due by March 1, 2011

§5(2) SB 1059; §37(7) HB 2001

Scenario Planning Guidelines

Guidelines and process for metropolitan areas to develop land use and transportation scenarios to meet GHG reduction targets.

- ODOT
- DLCD
- SP Technical Advisory Committee

Draft by March–May 2011

§3 SB 1059

Toolkit

Information on actions and programs local governments may undertake to reduce GHG emissions from light vehicles.

- ODOT
- DLCD

Draft by March–May 2011

§4 SB 1059

Public Education

Statewide public education about the need to reduce GHG emissions from light vehicles and about the costs and benefits of doing so.

- ODOT
- DLCD

No deadline

§6 SB 1059

Scenario Planning Financial Report

Report to 76th Legislative Assembly on financing scenario planning.

- ODOT
- DLCD

Due by January 2011

§8 SB 1059

Target Rulemaking

Rules identifying reduction targets for GHG emissions from light vehicles in metropolitan areas.

- DLCD
- ODOT
- Technical Rulemaking Advisory Committee (TRAC)
- LCDC

Due by June 1, 2011

§5(1) SB 1059; §37(6) HB 2001 for Metro

Progress and Recommendations Report

Report to 77th Legislative Assembly regarding SB 1059 progress.

- ODOT
- DLCD

Due by January 2012

§9 SB 1059

Oregon Department of Transportation

www.oregon.gov/ODOT/TD/TP/OSTI.shtml

Last revised 11/23/2010

Registration is required.

Joint Policy Advisory Committee on Transportation & Metro Policy Advisory Committee

Climate Leadership Summit

Working together to build livable, prosperous, equitable and climate smart communities

8 A.M. TO NOON FRIDAY, APRIL 1, 2011

JPACT and MPAC members, other elected officials, and business and community leaders will work together at this half-day event to identify strategies to reduce the region's greenhouse gas emissions and create great communities.

The summit is designed to help participants:

- Learn how local aspirations can help achieve climate goals and gain momentum from climate strategies.
- Provide input on the combinations of land use and transportation strategies that should be tested this summer.
- Learn about public attitudes about climate change.
- Discuss which land use and transportation strategies are most effective in reducing greenhouse gas emissions and what it may take to meet state targets.

Oregon Convention Center

Room F150 - 151
777 NE Martin Luther King, Jr. Blvd.
Portland

TriMet MAX light rail service at Convention Center stop. Bus route #6 stops at the front entrance. Covered bicycle parking available in Lloyd Blvd parking garage.

For more information, contact Dylan Rivera at dylan.rivera@oregonmetro.gov or call 503-797-1551.

For registration information, contact Kelsey Newell at kelsey.newell@oregonmetro.gov or call 503-797-1916.

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Updated February 4, 2011

Climate Smart Communities Scenarios Schedule

UNDERSTANDING THE CHOICES														SHAPING THE DIRECTION												BUILDING THE STRATEGY AND IMPLEMENTATION 2013-14
2010			2011											2012												
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

Technical Work and Policy Development

Develop and select a preferred land use and transportation scenario that meets GHG reduction targets and advances 2040 Growth Concept implementation, local aspirations and the region's desired outcomes

Scenario Framing and Research

Identify land use and transportation strategies to be evaluated through regional scenario alternatives relative to greenhouse gas reduction (GHG) targets and the region's desired outcomes

Identify strategy options

Research GHG emissions reduction potential of land use and transportation strategies, co-benefits and options for applying strategies in the region

- 2040-based land use types
- Case studies
- Strategy Toolbox

◆ *Council, MPAC & JPACT provide direction on strategies to test (May 2011)*

Test strategy options

Evaluate reference case and alternatives designed to meet GHG targets

- Reference Case
- Scenario A
- Scenario B
- Scenario C

◆ *Council, MPAC & JPACT confirm strategy options to move forward, research findings & recommendations for report to 2012 Legislature (Nov. 2011)*

Preferred Scenario Development

Develop and evaluate alternative regional scenarios to identify the combination and phasing of local and regional strategies needed to meet GHG targets and achieve the region's desired outcomes

- Scenario A
- Scenario B
- Scenario C

→ Draft Preferred Land Use and Transportation Scenario

◆ *Council, MPAC & JPACT confirm elements to be included in preferred scenario (Nov. 2012)*

Preferred Scenario Selection

Select and implement local and regional policies, investments, tools and actions to meet GHG targets and achieve the region's desired outcomes

Final preferred strategy

- *Policies*
- *Investments*
- *Tools*
- *Actions*
- *2040 Growth Concept map, RTP, functional plan and framework plan changes*

◆ *Council adopts preferred strategy; local implem-entation begins (June 2014)*

Data and Tools Development and Research

Develop and enhance tools, data and methods to evaluate the costs, benefits, impacts and effectiveness of land use and transportation choices relative to GHG reduction targets and the region's desired outcomes

- Data needs/ gaps
- Sketch planning tool(s)
- Visualization tool(s)
- Travel model
- Land use model
- Emissions model
- Portland-Vancouver Regional indicators
- Equity analysis
- Economic analysis
- Public health analysis
- Environmental analysis

Communications and Outreach

Convene a collaborative regional process to achieve GHG reduction targets and advance 2040 Growth Concept implementation, local aspirations and the region's desired outcomes

◆ *Public opinion research and stakeholder engagement on toolbox of strategies (Winter 2010-11)*

◆ *MPAC and JPACT summit to discuss opinion research and refine strategy options (April 1, 2011)*

◆ *MTAC and TPAC technical workshop to develop alternative scenarios (June 2011)*

◆ *MPAC and JPACT summit to discuss research findings and recommendations (Fall 2011)*

◆ *Stakeholder engagement to share findings and gather input on preferred strategy elements (Winter 2012)*

◆ *Stakeholder workshop(s) to develop alternative scenarios (Spring 2012)*

◆ *MPAC and JPACT summit to discuss findings and recommendations (Fall 2012)*

◆ *Stakeholder engagement to develop preferred strategy (2013)*

◆ *Final public review and adoption process (Spring 2014)*

Coordination with State Scenario Planning and Policy Development

Coordinate with and inform state GHG target setting process and development of statewide transportation strategy, GHG toolkit and scenario planning guidelines

◆ *ODOT and DLCD Report to 2011 Legislature (Feb. 2011)*

◆ *ODOT/DEQ/ DOE provide Metro region VMT estimate, fuel and technology assumptions (March 1, 2011)*

◆ *LCDC provides draft Metro region and other MPOs GHG targets (April 2011)*

◆ *ODOT/DLCD establish draft GHG toolkit and scenario planning guidelines (Spring 2011)*

◆ *LCDC adopts Metro region and other MPO GHG targets (May 2011)*

◆ *OTC adopts Statewide Transportation Strategy (Dec. 2011)*

◆ *State Commissions briefings (Jan. 2012)*

◆ *ODOT and DLCD Report to 2012 Legislature (Jan. 2012)*

ODOT/DLCD develop rules and process for scenario planning:

- *Process for cooperative selection of preferred scenario*
- *Minimum planning standards*
- *Planning assumptions and approaches*
- *Cycle for local plan adoption and update*

◆ *State Commissions briefings (Jan. 2013)*

◆ *LCDC adopts rules and process for selecting preferred land use and transportation scenario (Jan. 2013)*

◆ *ODOT and DLCD Report to 2014 Legislature (Feb. 2014)*

◆ = *Technical and policy development milestones*

◆ = *Communication and outreach milestones and events*

◆ = *State scenario planning and policy development milestones*

Materials following this page were distributed at the meeting.

Lake Oswego to Portland TRANSIT PROJECT

Locally Preferred Alternative

Metro Council Work Session

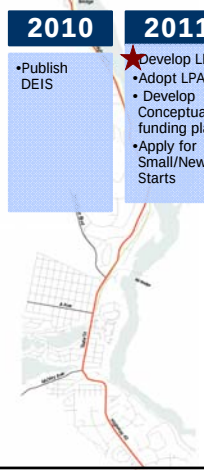
February 22, 2011

1

Lake Oswego to Portland TRANSIT PROJECT

Where are we?

Project timeline



2010	2011	2012	2013	2014	2015	2016	2017
•Publish DEIS	★ •Develop LPA •Adopt LPA • Develop Conceptual funding plan •Apply for Small/New Starts	•Begin Preliminary Engineering •Begin FEIS	•Publish FEIS •Confirm funding plan *(confirm funding sources)*	•Final Design •Full Funding Grant Agreement (FFGA) •Finalize funding plan *(secure funding sources)*	•Start Construction	•Construction	•Begin revenue service

LPA process schedule

FEB	MAR	APR	MAY / JUN	JUL
• CAC • PMG • Steering Committee	• Various briefings	• City of Portland action • City of Lake Oswego action	• Multnomah County action • Clackamas County action • Portland Streetcar Inc action	• TriMet action • TPAC/JPACT action • Metro Council action

3

Outcomes for a successful future

- Sustained economic competitiveness and prosperity
- Safe and reliable transportation choices
- Vibrant, walkable communities
- Minimal contributions to global warming
- Clean air, clean water and healthy ecosystems
- Benefits and burdens of growth shared throughout the region

4




Corridor overview

- In 1988 Willamette Shore Line right of way was purchased
- That $2 million investment is worth $80-$100 million today
- ODOT determined widening not feasible (1996)
- Long planned for transit enhancements
- Region's next priority for FTA funding




Project purpose

- Optimize the regional transit system by improving transit within the Hwy. 43 corridor
- Develop transit that:
  - ✓ Supports land use goals
  - ✓ Maximizes regional resources
  - ✓ Is environmentally sensitive
  - ✓ Is fiscally responsible
  - ✓ Garners public support
  - ✓ Maximizes economic development potential

Project need

- Population and employment growth
- Historic and projected traffic congestion
- Increasing transit travel times and deteriorating reliability
- Increasing transit operating expenses
- Topographic, geographic and built environment constraints
- Local and regional land use and development plans, goals and objectives

Draft EIS Alternatives and design options

- No-build alternative
- Enhanced bus alternative
- Streetcar alternative
  - Phasing and design options

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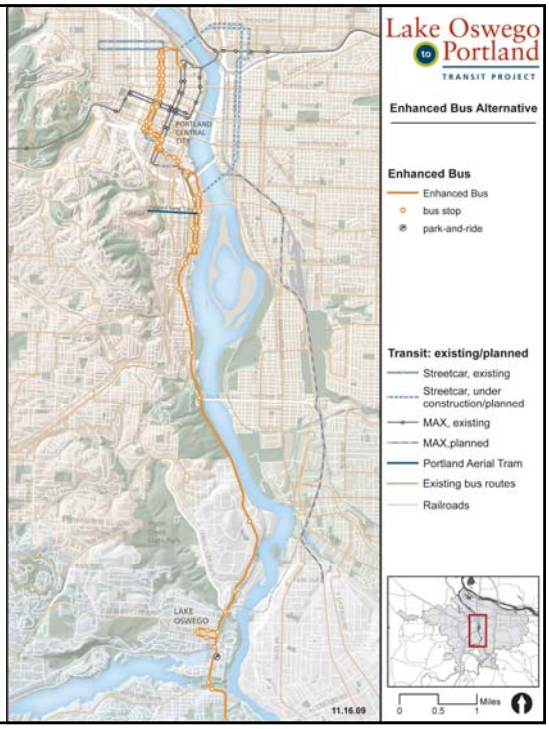
Enhanced bus alternative

- Operates in mixed-traffic on existing streets
- Has fewer stops than existing bus
- Operates more frequently than the existing bus



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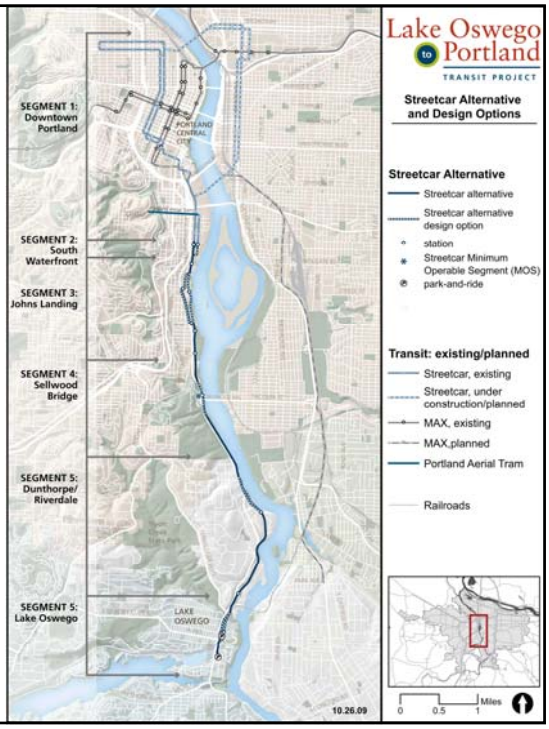
Streetcar alternative

- Extension of existing streetcar service
- Operates almost exclusively in existing rail right of way.
- Has fewer stops and more frequency than existing bus.



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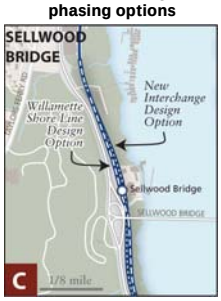
Design and phasing options

South Waterfront phasing options

Johns Landing design options

Dunthorpe / Riverdale design options

Sellwood Bridge phasing options



Lake Oswego design options

11

Average weekday ridership projections, L.O. to South Waterfront

	2035 ridership	Change from no-build	Percent change from no-build
No-build*	6,920	n/a	n/a
Enhanced bus	9,810	2,890	42%
Streetcar	11,170 to 11,920	4,250 to 5,000	61% to 72%

* No-build does not meet future demand of 8,590

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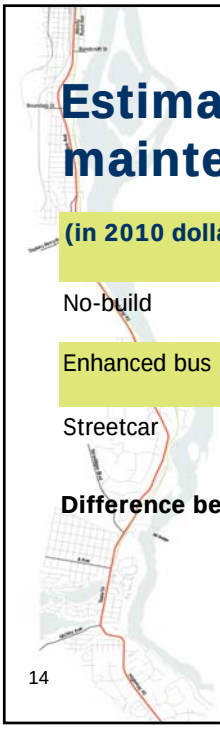
Peak Travel Times

- The streetcar would be the fastest option
- In 2035 between Lake Oswego and PSU, the streetcar would:
  - ✓save 9-13 minutes of total travel time over the No Build
  - ✓Would be 6-10 minutes faster than the Enhanced Bus



Estimated annual operations and maintenance costs, 2035

(in 2010 dollars)	Total corridor transit	Change from no-build
No-build	$26,710,000	n/a
Enhanced bus	$29,500,000	$2,790,000
Streetcar	$27,960,000	$1,250,000

Difference between streetcar and enhanced bus: $1,540,000 annually

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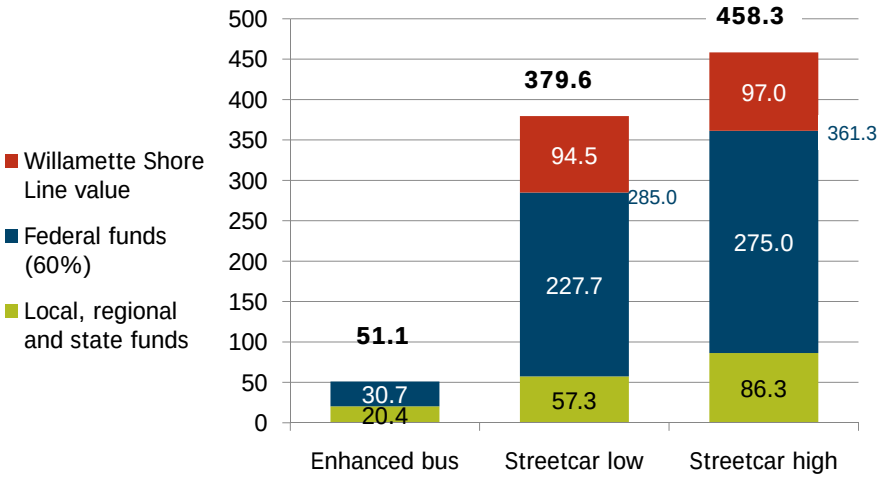
Capital funding concept

(YOE$ in millions)



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DEIS potential impacts

- DEIS identified potential impacts, such as impacts to
  - parks
  - historic
  - floodplain and wetland
  - ecosystems
  - wetland
  - noise & vibration
  - traffic

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Mitigation

- The Locally Preferred Alternative, more detailed look at impacts
  - Avoid
  - Minimize
  - Mitigate

Comparison of alternatives

	No-build	Enhanced bus	Streetcar
Ridership	○	◖	●
Capital cost	●	◖	○
Travel time	○	◖	●
Operating and maintenance	●	○	◖
Reliability	○	○	●
Capacity	○	◖	●

○=good | ◖=better | ●=best

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Locally Preferred Alternative (LPA) process

- DEIS public comment period
  - December 3rd - January 31st
- Open houses
  - December 9th and 16th
- Public Hearing with the Steering Committee
  - January 24th

Public comment

- Corridor investment
- Support of build alternatives
- Comments on design options
- Topic based issues
- Business, property owners
- Community groups
- Agencies

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Citizen Advisory Committee LPA Recommendation

- CAC recommendation on Feb 7th
- Of the 23 members of the CAC:
  - 16 voted for streetcar
  - 2 for enhanced bus
  - 1 for no-build
  - 1 abstained from voting
  - 3 members were absent from the meeting

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Citizen Advisory Committee LPA Recommendation

- A strong majority of the CAC members support carrying the **Streetcar** alternative and the following design options:
  - Johns Landing: Macadam In-Street design option
  - Riverdale/Dunthorpe: carry both design options
  - Lake Oswego: carry both design options

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Project Management Group LPA Recommendation

- Builds on the CAC recommendation
- PMG supports carrying the **Streetcar** alternative and the following design and phasing options for consideration

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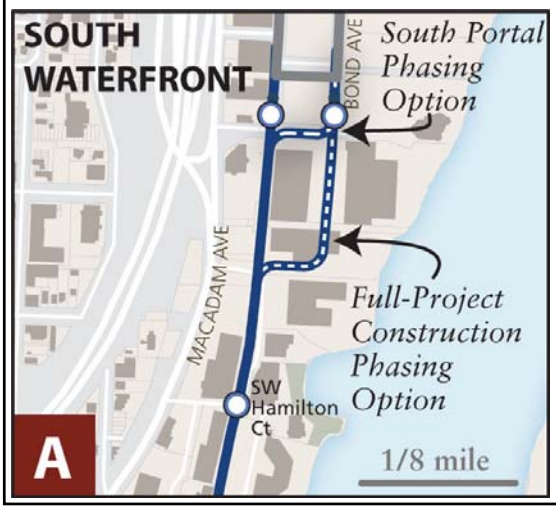
LPA Recommendation–

South Waterfront



Recommend both phasing options for further study:

- Depends on the conclusion of the South Portal Study

LPA Recommendation–

Johns Landing

Recommend Macadam In-Street for study further

- Optimize station locations (add Pendleton St. station?)
- Alternatives to Boundary Street for entry/exit onto Macadam
- Pedestrian improvements on SW Macadam
- Potential LID in Johns Landing
- Use of Willamette Shore Line for bicycle/pedestrian trail

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LPA Recommendation–

Sellwood Bridge

Recommend both phasing options for further study:

- Coordination with the Sellwood Bridge Project
- Study a potential Radcliffe Rd station

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LPA Recommendation–

Dunthorpe/Riverdale

Recommend both design options for further study:

- Riverwood Road Design option
  - Determine if the intersection of Highway 43 and Riverwood Rd could remain open
  - How to cover the loss of local match
- Willamette Shore Line design option
  - Evaluate in more detail mitigation measures for access, noise and vibration

LPA Recommendation–

Lake Oswego/ Foothills District

Recommend both design options for further study:

- Depends on the Foothills Redevelopment Plan
- Conversations with UPRR for use of their right of way
- Park and ride facilities
- Potential LID in Lake Oswego

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Project Management Group: Why Streetcar?

The streetcar would best meet the purpose and need:

- Optimize the regional transit system by improving transit within the Lake Oswego corridor
  - Carries the most transit riders
  - Most reduction in VMT, VHT and VHD
  - Provides the fastest and most reliable travel option

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Project Management Group: Why Streetcar?

The streetcar would best meet the purpose and need:

- Be fiscally responsive and maximize regional resources, to the extent possible
  - Most cost-effective option
  - More effective in its use of local operating revenues to meet demand
  - Best utilize the past investment to leverage federal funding

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Project Management Group: Why Streetcar?

The streetcar would best meet the purpose and need:

- Support regional and local land use and transportation plans and policies
  - Best supports local plans and policies
  - More likely to facilitate development and redevelopment

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Project Management Group: Why Streetcar?

The streetcar would best meet the purpose and need:

- Be sensitive to the natural, built and social environment
  - More likely to facilitate development plans
  - Includes the most bike/ped improvements
  - Removes the most CO2 from the environment
  - Would mitigate any impacts and create opportunities to improve fish passage, add native vegetation, improve habitats and remove invasive vegetation

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Project Management Group: Why Streetcar?

The streetcar would best meet the purpose and need:

- Gardner broad public support
  - Very strong support in City of Portland
  - Mixed support in City of Lake Oswego – need for transit alternative
  - CAC recommended streetcar

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Project Management Group: outstanding issues

General work plan considerations:

- Further define ownership, operation and maintenance responsibilities
- Funding considerations
- Resolution of environmental impacts identified in the DEIS
- Property impacts due to acquisitions
- Develop a more detailed work plan

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Metro Council

1. Is there additional information that the Metro Council needs concerning the alignment or options under consideration for inclusion in the LPA?

2. Are there issues concerning the project that have not yet been addressed?

3. Does the Council have any input to Councilor Collette and/or the project team regarding the Locally Preferred Alternative for this corridor?

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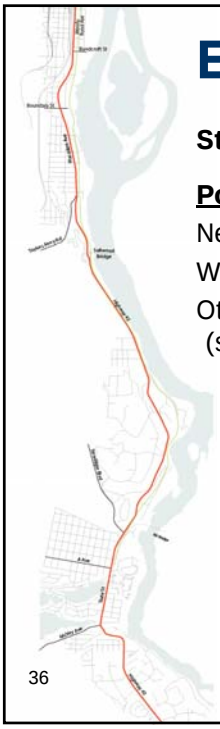
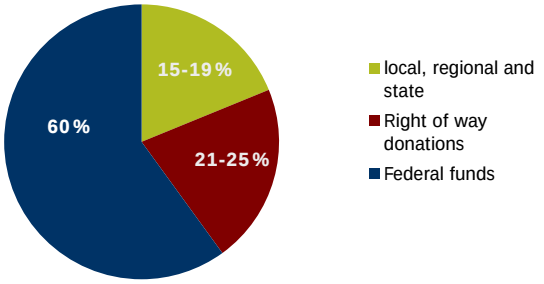


Estimated Funding Sources

Streetcar Project Costs (2017$): $379.6M to $458.3M

<u>Potential Streetcar Funding Sources</u>:

News Starts (60%)	$227.8M to $275.0M
Willamette Shore Line right of way	$94.5M to $97.0M
Other Regional Sources (state, region, cities)	$57.3M to $86.3M



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Citizen Advisory Committee: Why Streetcar?

The streetcar would:

- accommodate more riders
- Leverage past investment in the Willamette Shore Line right of way to use as local match.
- Be the most cost effective
- Have more capacity per vehicle
- Add additional people carrying capacity to the corridor
- Facilitate quality and a variety of housing, access to jobs, and density where we want it
- Provide a faster more reliable transit service enhanced bus

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Citizen Advisory Committee: Why Streetcar?

The streetcar would:

- Reduce CO_2 from the environment daily
- Connect Lake Oswego to the regional transit system
- Streetcar plugs Lake Oswego into the regional transit system.
- Be more expensive to build in the future
- Bring federal dollars here to benefit how we grow as a region
- Leave more room on Highway 43 for autos, pedestrians and bicycles throughout the corridor.
- Connect Johns Landing to South Waterfront and downtown.
- Provide connectivity between centers

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Citizen Advisory Committee: outstanding issues

Recommendation included analysis of:

- Two additional stations:
  1. Pendleton
  2. Radcliffe Rd (at or near intersection)
- Sidewalk improvements
- Pedestrian improvement between Carolina and Nevada along Macadam
- An alternatives to Boundary entry/exit with Macadam In-Street
- Keep the intersection of Riverwood and Highway 43 open

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Project Management Group: outstanding issues

Further work plan considerations should include analysis of:

- Two additional stations:
  1. Pendleton
  2. Radcliffe Rd (at or near intersection)
- Park and ride facilities
- Funding considerations
- Alternatives to Boundary Street for entry/exit onto Macadam
- Sidewalk widths on Macadam
- Pedestrian improvements in the Carolina to Nevada

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Project Management Group: outstanding issues

- Potential LID in Johns Landing
- Use of Willamette Shore Line for bicycle/pedestrian trail
- Resolution of environmental impacts identified in the DEIS
- Property impacts due to acquisitions
- Other work plan considerations…

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What are the trade offs between enhanced bus and streetcar?

- ODOT determined widening Hwy. 43 was infeasible
- High capacity transit provides a transportation option in the heavily congested Highway 43 corridor
- As a high capacity transit option, streetcar would:
  - ✓ provide the fastest service for riders
  - ✓ be the cheapest to operate and provide more reliable service because it will mostly operate on exclusive right of way
- Streetcar reliability and greater rider capacity = more riders
- Key tradeoff: One-time capital costs vs. lower ongoing operating expenses and quality of service
- Streetcar helps to maximize the region's scarce transit operating dollars

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Funding and operating cost comparison

- Streetcar would cost $380 to $458 million in YOE Dollars
- Project would only move forward with a federal match, likely at 60%
- The Willamette Shore Line R-O-W would be part of the local contribution
- That would leave $57M to $83M million in new local contributions to build a streetcar line, while enhanced bus would require $20.4M
- The streetcar also would save $1.54M annually in operating costs over the Enhanced Bus alternative

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Lake Oswego to Portland

TRANSIT PROJECT

LOCALLY PREFERRED ALTERNATIVE

-WITH ALIGNMENT OPTIONS FOR FURTHER ANALYSIS-

PROJECT MANAGEMENT GROUP RECOMMENDATION

PROJECT PARTNERS:

City of Lake Oswego
City of Portland
Clackamas County
Multnomah County
Metro
TriMet
ODOT

D R A F T

February 22, 2011

EXECUTIVE SUMMARY

This document comprises the Project Management Group recommendation to the Lake Oswego to Portland Transit Project Steering Committee for a Locally Preferred Alternative (LPA) for the Lake Oswego to Portland Transit Project. In sum, the following is recommended:

MODE

The **Streetcar Alternative** is the recommended, preferred transit mode for the Lake Oswego to Portland Transit Corridor. This alternative best meets the project's *Purpose and Need* and the goals and objectives as outlined in Chapters 1 and 6 of the Draft Environmental Impact Statement (DEIS). The Streetcar Alternative has garnered community support as shown by the public comments received and the strong endorsement of the Community Advisory Committee (CAC).

ALIGNMENT OPTIONS

This document recommends how the design and phasing options analyzed in the DEIS should be addressed in subsequent study phases of the project. Specifically, it is recommended that:

- Both the Willamette Shore Line and the Moody/Bond (South Portal) phasing options in the City of Portland be carried forward for additional study;
- The Macadam In-Street option be selected as the LPA alignment within the Johns Landing neighborhood;
- Both the Willamette Shore Line and Sellwood Bridge phasing options be carried forward for additional study;
- Both the Willamette Shore Line and Riverwood Road design options in Dunthorpe/Riverdale be carried forward for additional study; and
- Both the UPRR and Foothills Road design options in Lake Oswego be carried forward for additional study.

OTHER ISSUES

This document prioritizes a series of additional, critical design and program considerations that require further study and resolution. The issues that are identified as unresolved in this document will be addressed and resolved in either a "Pre-Preliminary Engineering" phase or during the Preliminary Engineering phase. All issues will be resolved prior to completion of the Final Environmental Impact Statement (FEIS).

DECISION-MAKING PROCESS GOING FORWARD

It is recommended that, after completion of additional studies, the unresolved issues identified herein should be brought back to the Steering Committee for review, or, as appropriate, resolution.

LOCALLY PREFERRED ALTERNATIVE RECOMMENDATION

I) OVERVIEW

The Purpose of the project is to optimize the regional transit system by improving transit within the Lake Oswego to Portland Transit Corridor, while being fiscally responsive and by supporting regional and local land use goals. The project should maximize, to the extent possible, regional resources, economic development and garner public support. The project should build on previous corridor transit studies, analyses and conclusions and should be environmentally sensitive. The need for the project results from:

- Historic and projected increases in traffic congestion in the Lake Oswego to Portland Corridor due to increases in regional and corridor population and employment;
- Lengthy and increasing transit travel times and deteriorating public transportation reliability in the corridor due to growing traffic congestion;
- Increasing operating expenses, combined with increasingly scarce operating resources, while demanding more efficient public transportation operations;
- Local and regional land use and development plans, goals and objectives that target the corridor for residential, commercial, retail and mixed-use development to help accommodate forecast regional population and employment growth and previous corridor transit studies, analyses and conclusions;
- The region's growing reliance on public transportation to meet future growth in travel demand in the corridor;
- The topographic, geographic and built environment constraints within the corridor that limit the ability of the region to expand the highway and arterial infrastructure in the corridor; and
- Limited options for transportation improvements in the corridor caused by the identification and protection of important natural, built and socioeconomic environmental resources in the corridor.

This document presents the Project Management Group recommendation to the Steering Committee for a Locally Preferred Alternative (LPA) for the Lake Oswego to Portland Transit Corridor. These recommendations are based on information documented in the *Lake Oswego to Portland Transit Project Draft Environmental Impact Statement* (DEIS) [Metro, December 2010]; from public input received from Community Advisory Committee (CAC) deliberations during 2009-2011; and comments received during the public comment period and in the public hearing held on January 24, 2010 before the Lake Oswego to Portland Transit Project Steering Committee.

The LPA decision consists of several distinct decisions and recommendations. First and foremost is the alternative decision that chooses between the "No Build", "Enhanced Bus" and "Streetcar" alternatives. Secondly, because the DEIS analyzes a series of **design and phasing options** for the Streetcar Alternative, this document provides recommendations regarding the advancement of these design and phasing options into follow-on studies. And lastly, this document provides recommendations concerning a series of additional, critical **design and programmatic issues** that have emerged during the course of the DEIS process.

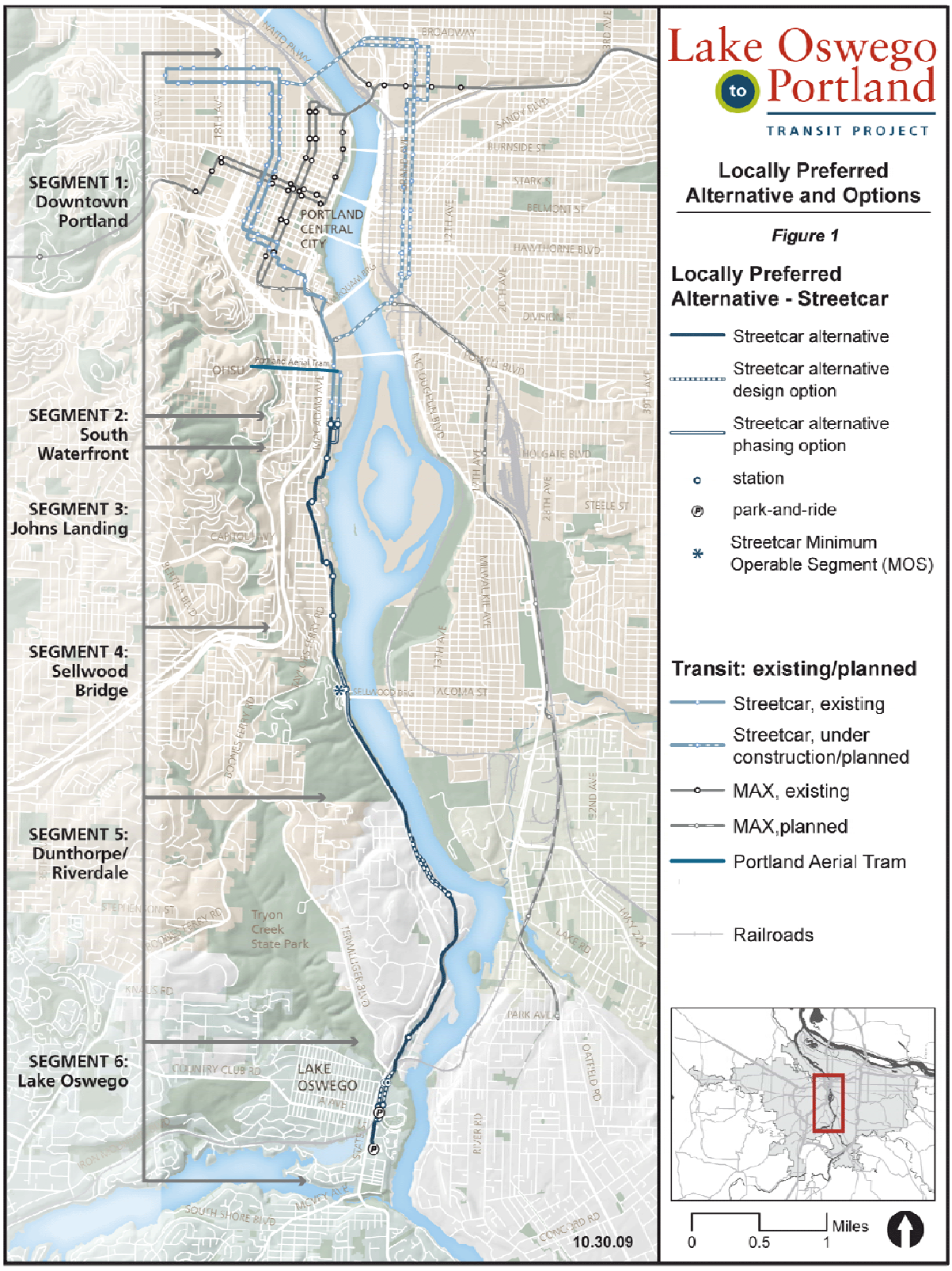
II) LAKE OSWEGO TO PORTLAND TRANSIT PROJECT - LOCALLY PREFERRED ALTERNATIVE

A) Transit Alternative – Streetcar

The **Streetcar Alternative** is the recommended, preferred transit mode for the Lake Oswego to Portland Transit Corridor. This alternative best meets the project's *Purpose and Need* and the goals and objectives as outlined in Chapters 1 and 6 of the DEIS. The proposed streetcar alignment is shown in Figure 1. The Streetcar Alternative has garnered community support as shown by the public comments received and the strong endorsement of the Community Advisory Committee (CAC).

The **Streetcar Alternative** is preferred because:

1. The Streetcar Alternative would best address the *Purpose and Need* for the Lake Oswego to Portland Transit Project as defined in the DEIS. In particular, the Streetcar Alternative would meet the following need for the project:
    - Provide an effective alternative to the traffic congestion in the Highway 43 corridor;
    - Decrease transit travel times and provide increased transit reliability as traffic congestion increases in the Highway 43 corridor;
    - Significantly increase the overall capacity for transportation in the corridor;
    - Result in reduced transit operating expenses and will help preserve scare transit operating resources;
    - Provide the greatest support for local and regional land use and development plans, goals and objectives and encourage development to accommodate expected regional population and employment growth;
    - Help to decrease the region's dependency on the automobile and meet the region's growing reliance on public transportation to meet future growth in travel demand;
    - Address the topographic, geographic and built environment constraints in the corridor while recognizing the very limited options for expansion of the existing Highway 43 corridor; and
    - Provide a viable transportation option in a constrained corridor that has limited options for transportation improvements resulting from the need to protect natural, built, socioeconomic and environmental resources.


Lake Oswego to Portland
TRANSIT PROJECT
Locally Preferred Alternative and Options
Figure 1
SEGMENT 1: Downtown Portland
SEGMENT 2: South Waterfront
SEGMENT 3: Johns Landing
SEGMENT 4: Sellwood Bridge
SEGMENT 5: Dunthorpe/ Riverdale
SEGMENT 6: Lake Oswego
PORTLAND CENTRAL CITY
OHSU
Tryon Creek State Park
LAKE OSWEGO
Locally Preferred Alternative - Streetcar
Streetcar alternative
Streetcar alternative design option
Streetcar alternative phasing option
station
park-and-ride
Streetcar Minimum Operable Segment (MOS)
Transit: existing/planned
Streetcar, existing
Streetcar, under construction/planned
MAX, existing
MAX,planned
Portland Aerial Tram
Railroads
Miles
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1
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2. The Streetcar Alternative best addresses goals and objectives for the Lake Oswego to Portland Transit Project as defined in the DEIS. In particular, the Streetcar Alternative would:

   A. Optimize the regional transit system by improving transit within the Lake Oswego corridor.

   - The Streetcar Alternative would result in 61-72% higher ridership than the No Build option and 14-22% higher ridership than the Enhanced Bus option. The streetcar would carry approximately 1,500 more trips a day than enhanced bus. This translates to approximately 500,000 more transit trips a year compared to the Enhanced Bus.
   - The Streetcar Alternative would result in approximately 1.28 million new transit riders annually in 2035 compared to the No-Build. The Enhanced Bus would result in approximately 730,550 new transit riders annually in 2035.
   - For an average weekday in 2035, the Streetcar Alternative would reduce vehicle miles traveled by 65,400 to 68,000 miles; vehicle hours traveled by up to 5,700 hours; and vehicle hours of delay by 400 hours when compared to the No-Build Alternative. The Streetcar Alternative would reduce vehicle miles traveled by up to 24,400 to 27,000 miles; vehicle hours traveled by up to 2,100 to 2,400 hours; and vehicle hours of delay by 200 hours based on an average weekday in 2035, compared to the Enhanced Bus Alternative.
   - Streetcar would provide faster and more reliable travel option through the most congested parts of the Highway 43 corridor. Streetcar would optimize the transit system by facilitating improved bus connections to the west of Lake Oswego. Streetcar is the only alternative that would add capacity and continue to operate quickly despite worsening traffic congestion on Highway 43. The Streetcar Alternative would provide small savings in auto delay during rush hour[1]. However, the streetcar alternative would provide a high quality transit option that would free up needed roadway capacity for autos.
   - The Streetcar Alternative would result in an increase of up to 5.4 miles of additional exclusive transit right-of-way in the corridor. Neither the No-Build nor the Enhanced Bus would increase the miles of exclusive transit right-of-way in the corridor.
   - The Streetcar Alternative would provide access to faster more reliable transit to approximately 12,080 households and 24,920 jobs within a half-mile of a new streetcar station.
   - The Streetcar Alternative would reduce transit p.m. peak-period peak-direction in-vehicle travel times by up to 13 to 14 minutes from PSU and Lowell Street to Lake Oswego, respectively, compared to the No-Build. The Enhanced Bus would reduce

[1] The Streetcar Alternative would reduce the traffic volume on Highway 43 by approximately 100 vehicles during the p.m. peak hour (see p. 4-26 of DEIS) and would provide a reduction in vehicle hours of delay by 200 hours per day (see p. 4-22, Table 4.3-1 of the DEIS).

travel time by 3 minutes from PSU and Lowell Street to Lake Oswego compared to the No-Build.

- The Streetcar Alternative would have a greater capability for future transit service expansion than the No-Build or Enhanced Bus alternatives, because: a) the Streetcar Alternative would result in a new transit right-of-way between Lake Oswego and the South Waterfront; b) frequencies of transit vehicles could be increased to respond to increasing demand over time; and c) single-track sections could be changed in the future into two-track sections, thereby allowing even more frequent streetcar service. With the no-build and enhanced bus alternatives, the corridor's trunk line bus routes would operate in mixed traffic on the congested Highway 43, thereby limiting alternatives' ability to expand to increasing demand.

B. Be fiscally responsive and maximize regional resources, to the extent possible.

- The DEIS indicates that the capital cost for the Streetcar Alternative would be significantly higher than that for the Enhanced Bus Alternative[2]. However, Streetcar represents lower annual operating costs when compared to the Enhanced Bus Alternative. Initial projections show that the Streetcar Alternative would be $1.5 million per year less expensive to operate than Enhanced Bus. Over the planning horizon for the project, i.e., to the Year 2035, streetcar would result in over $37.7 million[3] (Year of Expenditure) in operating costs savings over the Enhanced Bus alternative.

- The DEIS indicates that the No Build Alternative would not provide sufficient service to meet projected demand. The Enhanced Bus Alternative, while sufficient to meet demand, would be more expensive to operate than streetcar, and would be subject to the same level of traffic delays as automobiles travelling in the corridor.

- Factoring in capital costs, ridership and long-term operating costs, the Streetcar Alternative would be the most cost-effective option. The Streetcar Alternative would be more effective in its use of local operating revenues in generating new transit ridership than the Enhanced Bus Alternative. The streetcar would cost up to $1.06 per new system wide transit person trips compared to $3.82 per new transit trip under the Enhanced Bus Alternative.

- The public already owns the Willamette Shore Line right-of-way which would be utilized for the bulk of the project alignment. Not using it would mean losing a tremendous opportunity to utilize a past investment as local match to significantly leverage federal funding for the project.

C. Support regional and local land use and transportation plans and policies.

- The Streetcar Alternative would provide additional support for activity centers within the corridor, over the Enhanced Bus, by: a) providing additional transit travel time improvements between the activity centers; b) improving the reliability of the

[2] $51.1M for Enhanced Bus compared to $379.6M-$458.3M for Streetcar (Year of Expenditure $$). See p. S-11 of DEIS.

[3] See Table 5.1-3, p. 5-5 of DEIS.

connecting transit line through the addition of exclusive transit right-of-way; and c) constructing visible streetcar stations integrated within the various activity centers.

- The Streetcar Alternative would comply or would better comply with regional and local land use plans and policies through the construction of a streetcar line, generally using exclusive transit right-of-way, connecting the corridor's key activity centers.
- The Streetcar Alternative would result in up to 1,500 short-term jobs and 13 long term jobs. The Enhanced Bus Alternative would result in 240 short-term jobs and 28 long-term jobs.
- Based on regional and national experience, a streetcar line is likely to leverage higher levels of economic development in the Johns Landing neighborhood and downtown Lake Oswego. Streetcar would provide enhanced opportunities for land use that fosters compact urban form, reduced vehicle miles travelled and higher transit mode split than bus transit alone could provide.
- The Streetcar Alternative is supportive of other planning efforts to develop a multi-use path through the Lake Oswego to Portland corridor. In particular, the in-street Macadam design option (as discussed below) would allow the existing Willamette Shore Line to be considered for a bike/pedestrian path.
- The Streetcar Alternative could help to jump start other critical public transportation projects including the South Portal project in Portland and Foothills Road in Lake Oswego.
- Streetcar would be more likely to facilitate development and redevelopment in the corridor, because of the major capital investment that would be made in the corridor's transportation infrastructure and because of improved transit travel time, reliability and visibility linking the corridor's major activity centers.

D. Be sensitive to the natural, built and social environment.

- In Lake Oswego, the Streetcar Alternative would provide for safe pedestrian connections, including a route under the Union Pacific railroad connecting the Stampher Road neighborhood with downtown Lake Oswego; a pedestrian connection between downtown and the Foothills area with a safe crossing of the Union Pacific Railroad; and improved pedestrian facilities between downtown and the Oswego Village shopping center.
- The Streetcar Alternative would remove about 40,000 tons of CO_2 from the environment on an average weekday. This is a significant amount and is 15,000 tons more than the Enhanced Bus Alternative. By comparison, the No Build option provides no reduction on CO_2. Streetcar would also reduce fuel consumption by about 60,000 gallons per year, compared to the No-Build Alternative.
- Streetcar would create opportunities to improve fish passage in replaced or repaired culverts, add native vegetation, improve habitats and remove invasive vegetation. It

would redevelop up to 7.6 acres of existing impervious surface to current standards, thereby reducing run-off and improving water quality.

- Streetcar would include remediation of up to 31 known hazardous sites in compliance with applicable state and Federal standards.

E. Garner broad public support.

- Within the city limits of Portland, streetcar has considerable community support as evidenced by comments and testimony from community members and organizations.
- Within Lake Oswego, vocal community support is more mixed. However, comments from community members and organizations indicate an understanding of the need and benefits of high capacity transit relative to Lake Oswego achieving its goals under the Metro 2040 Plan and local plans, including redevelopment of the Foothills area.
- Based on public comments and impacts and potential mitigation measures identified in the DEIS, the citizen advisory committee (CAC) developed their recommendation to the Steering Committee. Four-fifths of the CAC members at the final meeting supported carrying the Streetcar Alternative into Preliminary Engineering and the Final Environmental Impact Statement.

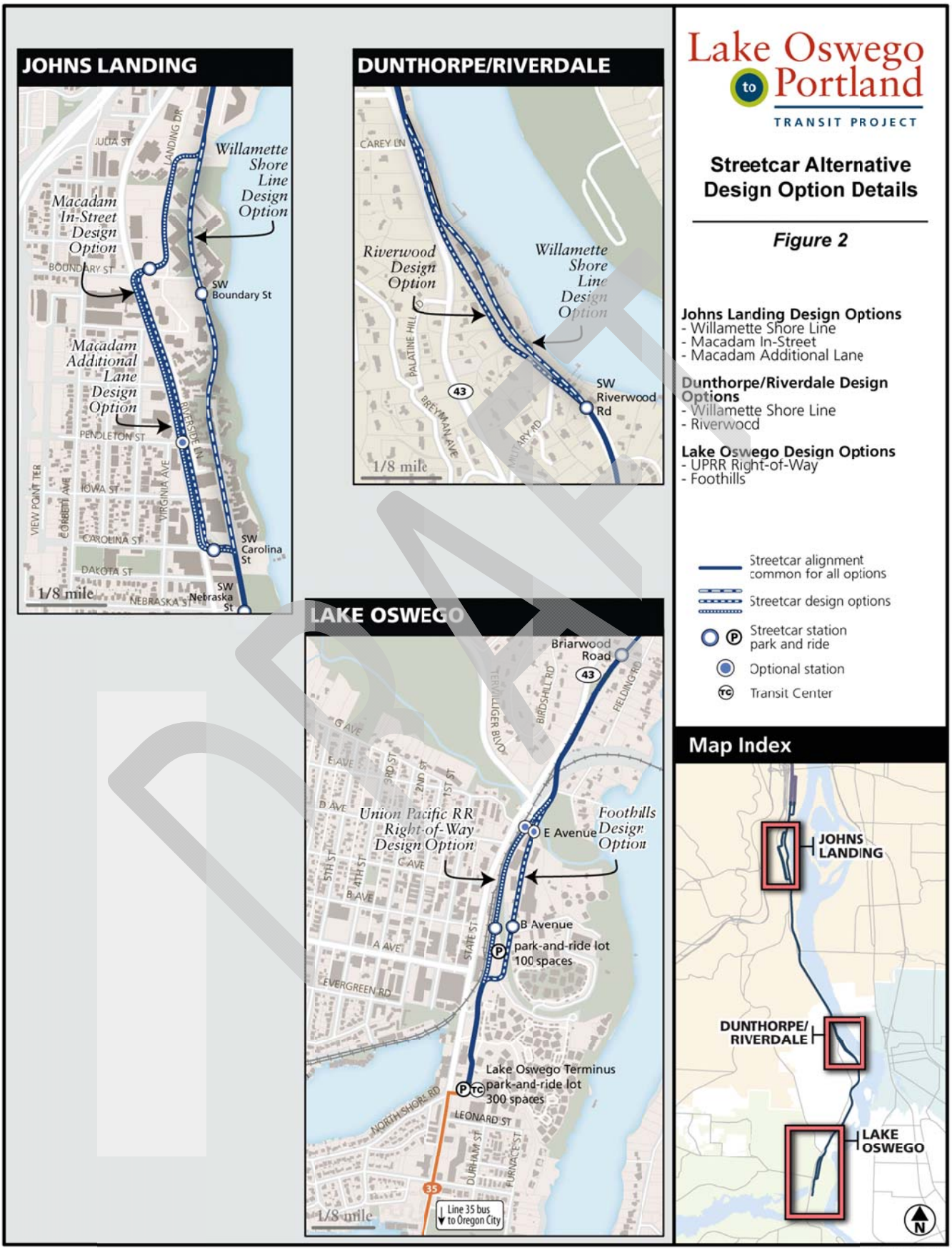
III) STREETCAR DESIGN OPTIONS AND CONSIDERATIONS

The DEIS outlines a series of phasing or design options in five locations along the proposed streetcar alignment (See Figures 2 and 3). These design and phasing options include: 1) phasing options in South Waterfront in the location of the proposed South Portal Project; 2) three design options in Johns Landing; 3) phasing options at the Sellwood Bridge where the streetcar alignment would be impacted by the ultimate design and construction timeline for the Sellwood Bridge replacement project; 4) two design options in Dunthorpe/Riverdale were considered in order to assess the impact of the streetcar on existing residential properties; and 5) two design options in Lake Oswego were considered in the Foothills redevelopment area which are dependent on the character and timing of the Foothills redevelopment.

The following is recommended for each of these design or phasing options:

A) South Waterfront (Phasing Option)

The DEIS assumed that the City of Portland's South Portal project is completed in 2035 and streetcar would operate in the extended Moody/Bond couplet. The ultimate design of the streetcar in the South Waterfront will be dependent on the final design and timing for construction of the South Portal Project. Based on the conclusion of the South Portal Study, the City of Portland along with the project team will recommend an alignment in this segment to the Steering Committee for approval. In the interim, it is recommended that both options be carried forward for further study.


JOHNS LANDING
Willamette Shore Line Design Option
Macadam In-Street Design Option
Macadam Additional Lane Design Option
SW Boundary St
SW Carolina St
SW Nebraska St
1/8 mile
DUNTHORPE/RIVERDALE
Riverwood Design Option
Willamette Shore Line Design Option
SW Riverwood Rd
1/8 mile
LAKE OSWEGO
Union Pacific RR Right-of-Way Design Option
Foothills Design Option
Briarwood Road
E Avenue
B Avenue
park-and-ride lot 100 spaces
Lake Oswego Terminus park-and-ride lot 300 spaces
Line 35 bus to Oregon City
1/8 mile
Lake Oswego to Portland
TRANSIT PROJECT
Streetcar Alternative Design Option Details
Figure 2
Johns Landing Design Options
- Willamette Shore Line
- Macadam In-Street
- Macadam Additional Lane
Dunthorpe/Riverdale Design Options
- Willamette Shore Line
- Riverwood
Lake Oswego Design Options
- UPRR Right-of-Way
- Foothills
Streetcar alignment common for all options
Streetcar design options
Streetcar station park and ride
Optional station
Transit Center
Map Index
JOHNS LANDING
DUNTHORPE/ RIVERDALE
LAKE OSWEGO
N

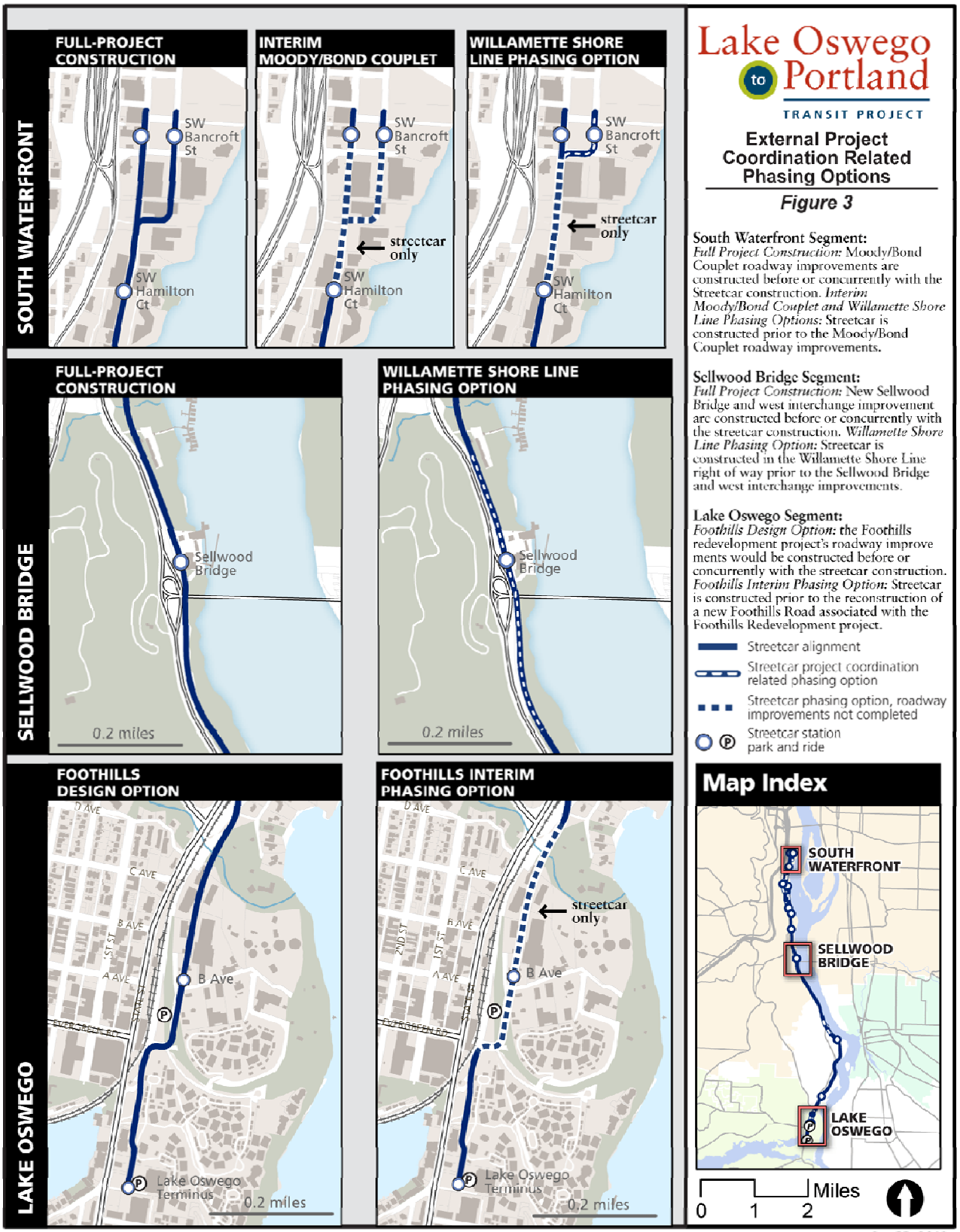
A) Johns Landing (Design Option)

The DEIS considered three (3) design options for the alignment in the central portion of Johns Landing between approximately SW Julia Street extended to SW Carolina Street. The options included:

- Willamette Shore Line. This option would have the streetcar alignment within the existing Willamette Shore Line right-of-way through Johns Landing.
- Macadam In-Street. This option would bring the streetcar alignment out of the Willamette Shore Line at approximately SW Julia Street extended, along SW Landing Drive (currently a private street), on to SW Boundary Street, along SW Macadam in the existing outside travel lanes, and return the alignment to the Willamette Shore Line at SW Carolina Street.
- Macadam Additional Lane. This option would bring the streetcar alignment out of the Willamette Shore Line at approximately SW Julia Street extended, along SW Landing Drive (currently a private street), on to SW Boundary Street, along SW Macadam in the existing outside travel lane southbound and in a new exclusive streetcar/right turn lane northbound, and return the alignment to the Willamette Shore Line at SW Carolina Street.

Following review of the design options, including detailed traffic analyses by both Metro and ODOT, and discussions with neighborhood representatives and the CAC, the **Macadam In-Street option** is recommended for the following reasons:

1. The Willamette Shore Line Option, while providing the fastest travel times and highest ridership, would be extremely close to a large number of residential units in several condominium complexes. The proximity of the residential units to the streetcar in this alignment, and the potential creation of additional barriers to river access, makes this the least desirable design option.
2. The differences in traffic impacts between the Macadam In-Street and Macadam Additional Lane are relatively minor. The Additional Lane option would require additional property acquisition and street construction, and is more costly.
3. Compared to the Macadam Additional Lane Option, the Macadam In-Street option would help to preserve the vegetative buffer and visual screen between Macadam and the Willamette Shore condominiums.
4. Streetcar on Macadam could help to improve the pedestrian environment from SW Boundary to SW Carolina Street. The neighborhood has long desired traffic calming amenities such as more frequent crosswalks, wider sidewalks, a lower speed limit and better bicycle/pedestrian accessibility from neighborhoods on both sides of Macadam. The Streetcar Alternative can help address these objectives but will need further analysis, design and engineering to determine what is feasible.
5. Bringing the streetcar alignment into Macadam Avenue for approximately one-half mile would improve the potential for the streetcar to bring about additional development within the neighborhood—a key goal of the neighborhood and the project.


SOUTH WATERFRONT
FULL-PROJECT CONSTRUCTION
INTERIM MOODY/BOND COUPLET
WILLAMETTE SHORE LINE PHASING OPTION
SW Bancroft St
SW Hamilton Ct
streetcar only
SELLWOOD BRIDGE
FULL-PROJECT CONSTRUCTION
WILLAMETTE SHORE LINE PHASING OPTION
Sellwood Bridge
0.2 miles
LAKE OSWEGO
FOOTHILLS DESIGN OPTION
FOOTHILLS INTERIM PHASING OPTION
D AVE
C AVE
B AVE
A AVE
1ST ST
2ND ST
B Ave
Lake Oswego Terminus
0.2 miles
Lake Oswego to Portland
TRANSIT PROJECT
External Project Coordination Related Phasing Options
Figure 3
South Waterfront Segment:
Full Project Construction: Moody/Bond Couplet roadway improvements are constructed before or concurrently with the Streetcar construction. Interim Moody/Bond Couplet and Willamette Shore Line Phasing Options: Streetcar is constructed prior to the Moody/Bond Couplet roadway improvements.
Sellwood Bridge Segment:
Full Project Construction: New Sellwood Bridge and west interchange improvement are constructed before or concurrently with the streetcar construction. Willamette Shore Line Phasing Option: Streetcar is constructed in the Willamette Shore Line right of way prior to the Sellwood Bridge and west interchange improvements.
Lake Oswego Segment:
Foothills Design Option: the Foothills redevelopment project's roadway improve ments would be constructed before or concurrently with the streetcar construction.
Foothills Interim Phasing Option: Streetcar is constructed prior to the reconstruction of a new Foothills Road associated with the Foothills Redevelopment project.
Streetcar alignment
Streetcar project coordination related phasing option
Streetcar phasing option, roadway improvements not completed
Streetcar station park and ride
Map Index
SOUTH WATERFRONT
SELLWOOD BRIDGE
LAKE OSWEGO
Miles
0 1 2

- Macadam Avenue is currently a state highway administered by ODOT. Implementation of the Macadam In-Street option as discussed above would require a set of discreet approvals from ODOT as described in the DEIS comments provided by the Agency (e.g., approval of new traffic signals, crosswalks and traffic calming measures). If Macadam Avenue remains under state jurisdiction, and the appropriate approvals cannot be obtained, modifications to the alignment through the John's Landing area may become necessary. Discussions are currently underway between ODOT and the project partners regarding a possible jurisdictional transfer of Macadam Avenue and Highway 43 to local governments. Should this occur, approvals necessary to implement the LPA within the Johns Landing area would fall exclusively to the City of Portland.

B) Sellwood Bridge (Phasing Option)

The DEIS reviewed two phasing options for streetcar construction in the vicinity of the Sellwood Bridge. The difference between the two options is defined by the ultimate design and timing for construction of the Sellwood Bridge replacement project. It is recommended that both options be carried forward for additional study in coordination with the Sellwood Bridge replacement project.

C) Riverdale/Dunthorpe (Design Option)

The DEIS considered two (2) design options in this portion of the corridor: a) Willamette Shore Line; and b) Riverwood Road. The Riverwood Road option resulted from early discussions with property owners who were interested in understanding the pros and cons of an alignment within an existing public street that would allow the streetcar alignment to move away from several houses that were built in very close proximity to the Willamette Shore Line. Under the Riverwood Road option, the streetcar alignment would shift into Riverwood Road from approximately its intersection with Highway 43 to a point several hundred feet south of SW Military Road. It is recommended that both options be carried forward for further study for the following reasons:

1. While the Riverwood Road option has supporters, the conceptual design defined in the DEIS would result in the proposed closure of the intersection of Highway 43 and Riverwood Rd. in order to accommodate the streetcar alignment. A site specific study should be undertaken to determine whether a practical engineering solution exists that would allow this intersection of Highway 43 and Riverwood Road to remain open, as well as mitigation measures for access, noise and vibration with the Willamette Shore Line right-of-way option and resolution of concerns about the design of Riverwood. Based on further technical work and public outreach, and discussions with ODOT, the project team will make a recommendation to the Steering Committee regarding a preferred alignment to advance for further study.
2. In determining whether the Riverwood Road design option is selected to move forward, one consideration is the value of the Willamette Shore Line right-of-way in this portion of the alignment and how this portion of 'lost' local match can be covered.

D) Lake Oswego (Design Option)

The DEIS considers two (2) design options within the Foothills Redevelopment area: a) the Foothills Road; and b) the UPRR Right-of-Way option. The Foothills Road option would construct the streetcar tracks as part of a new extension of Foothills Road that would serve future redevelopment in the area. The UPRR option would utilize existing Union Pacific right-of-way. It is recommended that both design options be carried forward for further study for the following reasons:

1. Detailed planning and preparation of a development plan for the Foothills area is currently underway and is expected to be ready for detailed public review over the next 6-12 months. As such, the timing for redevelopment, including construction of new roads and infrastructure is uncertain. Until more is known about the redevelopment plans, it is not possible to ascertain the best option for this area. Moreover, should the Foothills redevelopment not move forward within the planning horizon for streetcar, or not move forward at all, determination of the best alignment may be delayed. More detailed, joint planning with the City of Lake Oswego should be undertaken to establish the viability of the Foothills Road alignment.
2. While the UPRR alignment exists today and benefits from closer proximity to State Street, its availability and ultimate cost for use as a streetcar alignment has not been determined with certainty. During follow-on studies it will be possible to enter into detailed discussions with the Union Pacific regarding the potential use of the right-of-way and the costs associated with such use will be ascertained with greater accuracy.

Based on the conclusion of the Foothills planning process and discussion with the Union Pacific Railroad, the Steering Committee should select an alignment to advance for further analysis in the FEIS.

II) OTHER CRITICAL DESIGN/PROGRAM CONSIDERATIONS

The analysis in the DEIS and community discussions have resulted in the identification of a series of additional design and programmatic issues that need to be addressed in future study phases of the project. Issues that change the scope of the project or add additional costs to the project should be reviewed by the Steering Committee prior to advancement in the FEIS. The following summarizes these considerations:

A) Streetcar Stop/Station Locations

In addition to the streetcar stop/station locations identified in the DEIS, it is recommended the following additional stations be studied:

1. *SW Pendleton St.* A station location along the Willamette Shore Line at SW Pendleton Street was deemed infeasible due to private property impacts. At the same time, the lack of a station between SW Boundary Street and SW Carolina Street in the Macadam In-Street option creates a gap between stations in this critical stretch of Macadam Avenue. Siting of a station at SW Pendleton St. will require specific approval by ODOT unless a jurisdictional transfer of Macadam Avenue from ODOT to the City of Portland is approved (see III.B.6. above).

2. *SW Radcliff Rd.* There appears to be support in the community for adding a station on the streetcar alignment at/near SW Radcliff Rd. A station at this location should be evaluated during the next phase of study, along with safe pedestrian and bike access and trail connections to and from the station and to Lewis & Clark College.

Prior to, or as part of, Preliminary Engineering, possible stations at SW Pendleton Street and SW Radcliff Road should be reviewed and station locations in the John's Landing area optimized in consultation with appropriate jurisdictions. Results from a station area analysis and the study of potential stations at SW Pendleton and SW Radcliffe stations will be shared with the Steering Committee to confirm the final number and location of stations for inclusion in the FEIS.

B) Lake Oswego Park and Ride Facilities

The Lake Oswego community has raised a number of issues concerning the two (2) proposed park and ride facilities in Lake Oswego. During the next phase of the project the following issues, among potential others, should be addressed:

1. Confirm the need for and size of the proposed park and ride facilities.
2. Undertake additional urban design studies of the proposed park and ride facilities to address the impact of the proposed park and ride facilities on adjacent properties and development potential.
3. Follow-on studies should assess in more detail mitigation measures to address traffic impacts of the park and ride facilities. In addition, mitigation measures for traffic impacts should address community concerns regarding potential impacts to North Shore Rd. Of particular concern is the potential increase in "cut through" traffic coming from the west side of Lake Oswego and impacting this narrow residential street.

C) Other Critical Issues

It is recommended that the following additional critical issues be addressed during the next study phases of the project:

1. *Funding Considerations*. Project costs should be further analyzed and a conceptual finance plan for the project brought forward for review by the Steering Committee and partner jurisdictions.
2. *Alternatives to Boundary Street for entry/exit point for Macadam In-Street option.* The traffic analysis in the DEIS shows that the intersection of SW Boundary Street at Macadam Avenue represents a potential area requiring significant modification to address future traffic congestion issues. One possible approach to reduce traffic congestion at this intersection would be to move the streetcar access point to Macadam Avenue approximately two blocks north to the vicinity of an extension of SW Richardson St. Consideration should also be given to minimizing the number of 90 degree turns with this option to save travel time. This and other options should be discussed with impacted jurisdictions and studied prior to or during Preliminary Engineering. The results of the analysis should be presented to the Steering Committee which will determine the final configuration for study in the FEIS.

3. *Sidewalk Widths on Macadam Avenue.* The Johns Landing neighborhood is keenly interested in increasing the width of sidewalks along Macadam, particularly along the east side of Macadam between Boundary and Carolina. The scope of work for Preliminary Engineering should include a study of opportunities to increase sidewalks widths and discussion with impacted jurisdictions (also see III.B.6 above).

4. *Pedestrian improvements in the Carolina to Nevada area of Macadam Avenue.* The Johns Landing neighborhood initially expressed some interest in seeing the streetcar alignment continue south along Macadam from SW Carolina to approximately SW Nevada. Given right-of-way and traffic issues in this stretch of Macadam, this approach is not a viable option. Alternatively, the neighborhood would be interested in pursuing a concerted set of pedestrian improvements in this area, including, but not limited to: a) slower traffic speeds; b) improved pedestrian crossings; c) significant pedestrian improvements between Macadam and the station locations at SW Nebraska and SW Nevada Streets; and d) pedestrian improvements on Macadam, including improved sidewalks, street lighting, benches and other pedestrian-scale amenities. The scope of work for Preliminary Engineering should include a study of opportunities for an improved pedestrian environment in this area and discussion with impacted jurisdictions regarding how to implement such improvements (also see III.B.6 above).

5. *Potential for Local Improvement Districts in Johns Landing and Foothills.* Further studies should be undertaken to assess the potential for Local Improvement District (LID) or other mechanism to provide local match for the federal funding of the project. In Johns Landing, in particular, an LID could mitigate the loss of local match associated with not using the WSL in portions of the John's landing neighborhood. In Foothills, certain industrial property owners have already agreed to support an LID for the project.

6. *Use of the Existing Willamette Shore Line Right-of-Way for bicycle/pedestrian improvements.* The Johns Landing neighborhood is open to considering the use of the existing Willamette Shore Line right-of-way for improvements to the bicycle and pedestrian facilities should the streetcar move forward under the Macadam In-Street alignment as recommended herein. The legal steps necessary to evaluate this idea should be addressed during the next phase of study.

7. *Resolution of Environmental Issues Identified in the DEIS.* As detailed in Chapter 3 of the DEIS, certain environmental issues have been identified. These issues will be further analyzed and mitigation measures identified and developed in the course of undertaking the Preliminary Engineering and preparation of the Final Environmental Impact Statement.

8. *Property Impacts Due to Acquisition.* Work with affected property owners along the alignment to minimize the impact due to property acquisition. In Lake Oswego, property acquisition in the Foothills area needs to be coordinated with the Foothills planning work to maximize the benefit of the project to property owners and to facilitate quality redevelopment opportunities as they become known.

9. Issues that change the scope of the project or add additional costs to the project will be reviewed by the Steering Committee as part of its determination of what should be advanced in the FEIS.

III) OTHER FUTURE WORK PLAN CONSIDERATIONS

Exhibit "A" to this recommendation provides a list of secondary issues/concerns that should be considered during the follow-on study phases of the project.

-- END OF LPA RECOMMENDATION --

APPENDIX A

OTHER FUTURE WORK PLAN CONSIDERATIONS

GENERAL

1. Further define responsibilities for operation, ownership and maintenance of the extension.

JOHNS LANDING

1. Consider ways to calm traffic, including reducing the speed limit on Macadam, additional enforcement and other traffic calming measures.
2. While there is community support for SW Landing Drive becoming a public street, the community is interested in keeping the reconstructed street as narrow as possible (i.e., the community is looking for street design flexibility beyond the normal City of Portland standards).
3. Property owners want transparency with regard to a potential local improvement district. They want to know up front what their share of the project will be and the geographic boundaries of the projects costs that will be borne by property owners.
4. The Preliminary Engineering studies should include development of specific noise and vibration mitigation and visual screening options and recommendations. Particular attention should be given to the OPB facility and appropriate vibration mitigation to ensure compatible operations.

RIVERDALE/DUNTHORPE

1. The Riverdale/Dunthorpe community is interested in what happens to WSL right-of-way if Riverwood Rd. is selected, i.e., will it be abandoned? Future disposition of the right-of-way should be resolved in the next phase of the project.
2. The community is concerned about the visual impact of the catenary wire and support system. Options for reducing the visual impact of the catenary wire system should be addressed in the next phase of the project.
3. Further development of the Riverwood Road option should consider shifting the right-of-way to the west at the south end of Riverwood in order to further buffer houses from the alignment.
4. The community is concerned about commuters parking in the neighborhood, particularly near the Riverwood station, and it is felt that strong measures would be needed to prevent such parking. More specific options in this regard should be considered in the next phase of the project.
5. With regard to the Riverwood Road option, community concerns about pedestrian and bike safety and diminishment of the neighborhood character need to be addressed in the next phase of the project.
6. The Preliminary Engineering studies should include development of specific noise and vibration mitigation and visual screening options and recommendations.
7. Improvements to the intersection of Highway 43 and SW Military Rd. could be considered as part of the project.

8. Community concern about the potential for additional traffic on Military Rd. near Riverdale School should be addressed in the next phase of the project.

LAKE OSWEGO

1. In considering the two alignment options for the Foothills area, consideration should be given to the benefits of the Foothills Road option to provide development opportunities on both sides of the streetcar alignment as compared to the UP option, which would provide for new development on only one side of the alignment.
2. Additional details are needed as to how to create a "special" and inviting access to the streetcar option from State St. and B Ave., potentially through an overpass over the UP tracks, including stairs and elevator.
3. The studies undertaken in the next phase of the project should address the relationship between the Foothills development plan and streetcar, e.g., does an alignment decision need to be tied to the Foothills development? Is it possible to undertake phased development of the alignment?
4. The studies undertaken in the next phase of the project should address the question: what would be the cost to increase the width of the UP right-of-way for future double tracking?

February 23, 2011

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

DISCUSSION DRAFT Phase 1 Scenario Approach and Framework

PHASE 1. UNDERSTANDING CHOICES (JAN. – DEC. 2011)

SCENARIO FRAMING AND RESEARCH

WHAT IS A SCENARIO?

A scenario is a possible future, representing a hypothetical sequence of possible events or set of circumstances. Scenarios are often used to help see the potential impacts of different land-use and transportation decisions on future generations and their quality of life. Scenarios can be created around a set of themes or stories to test what might happen if the strategies assumed in the scenario are implemented. Scenarios can foster an understanding of the opportunities and challenges that the future might hold to inform development of a preferred strategy or course of action. Scenarios can also help manage uncertainty because scenarios are a range of possible futures.

The scenarios to be tested in this phase are for discussion and research purposes only, and do not represent a Metro Council, JPACT or MPAC endorsed policy proposal.

GUIDING PRINCIPLES:

- **Local and Regional Aspirations:** Start with local aspirations and 2010 actions.[1]
- **Show Cause and Effect:** Provide sufficient clarity to discern cause and effect relationships between policy levers.
- **Plausible**: Explore a range of possible futures to show the benefits and impacts of different choices.
- **Understandable:** Organize to be easily communicated so decision-makers and stakeholders can understand clear choices and tradeoffs.
- **Meet State Climate Goals:** Demonstrate what is required to meet state climate goals.
- **Outcomes-based and Focused on Making a Great Place:** Demonstrate how strategies affect realization of local and regional aspirations, as measured by progress toward the six desired outcomes.

The region's six desired outcomes – adopted by the Metro Council on December 16, 2010.

WHAT WE HOPE TO ACCOMPLISH:

- Learn what combinations of land use and transportation strategies are required to meet the state GHG targets.
- Show potential impacts and benefits through a comprehensive array of measures that link back to the six desired outcomes.
- Learn how well the strategies support local aspirations and the region's desired outcomes.
- Identify the potential risks and tradeoffs associated with different strategies and implications for the region and state.
- Report findings and make recommendations to the 2012 Legislature and future project phases.

DEFINING THE SCENARIOS:

- This approach would create scenarios for analysis using a metropolitan–level GreenSTEP model, with support from Envision Tomorrow, a sketch planning tool, the regional travel demand model and MetroScope.
- The first phase is not about 'picking a winner' from the set of scenarios evaluated, but to explore a range of possible futures and then discuss and agree on the associated opportunities, challenges and implications for the region and state.
- Scenario inputs will be based on different combinations of strategies and levels of implementation or investment, reflecting MPAC, JPACT and Metro Council direction.
- Scenarios will be created by applying different levels of implementation or investment.
  - Level 1 will serve as a "Reference Case" scenario – representing the most likely scenario given current plans, trends and policies.
  - Levels 2 and 3 represent progressively higher levels of implementation or investment for the strategies being tested.
  - Agreement is needed on how many levels should be evaluated for each category, and on what combination of strategies should be assumed within each level.
- Each scenario is intended to reduce the light vehicle travel greenhouse gas (GHG) emissions estimated from the Reference Case.
- The scenarios will be developed and analyzed with input from Metro's technical advisory committees during the summer 2011. Results will be presented to decision makers and stakeholders in the Fall 2011.

[1] In 2010, Metro's Making the Greatest Place initiative resulted in Metro Council adoption of six desired outcomes, the Community Investment Strategy, urban and rural reserves and an updated Regional Transportation Plan. All of these actions provide the policy foundation for better integrating land use decisions with transportation investments to create prosperous and sustainable communities and meet state climate goals.

February 23, 2011

DISCUSSION DRAFT Phase 1 Scenario Approach and Framework

This table is for discussion and research purposes only, and does not represent a Metro Council, JPACT or MPAC endorsed policy proposal.

- The table provides a framework for identifying regional-level scenario inputs for each GreenSTEP category.
- Each category includes a set of inputs that represent land use and transportation strategies that the GreenSTEP model is able to test. Each level represents an increased amount of implementation or investment.
- Agreement is needed on how many levels should be evaluated for each category, and on what combination of strategies should be assumed within each level.
- Scenarios would be created, reflecting different implementation/investment levels for each category of inputs.
- Each scenario is intended to reduce the light vehicle travel greenhouse gas (GHG) emissions estimated from the Reference Case (Level 1).

Green STEP Category	Implementation/Investment Levels			Potential GreenSTEP Inputs (indicated in bold)
	Level 1	Level 2	Level 3	
URBAN				Households in **mixed-use areas** with well-connected "complete" streets and active transportation networks [2] (percent)
				Urban growth boundary expansion
				Bicycle travel (mode share)
				Workers paying **parkin**g fees (percent)
				Household daily **parking fees**
				Bus and rail transit expansion (percent)
PRICING [3]				**Fuel use and emissions fees** [4]
				Vehicle travel fees [5]
				Pay-as-you drive insurance
MARKETING				Households participating in **individualized marking programs** (percent)
				Workers participating in **employer-based demand management programs** (e.g., transit fare reduction, carpool matching and other carpool programs, compressed work week) (percent)
				Households participating in **ecodriving** (percent)
ROADS				**Incident management** (percent of delay addressed)
				Freeway and arterial lane-mile **capacity** (e.g., traffic signal timing and other system management strategies, physical expansion, and bottleneck removal)
FLEET				Households participating in **carsharing** (percent)
	TBD in State Agency Technical Report			Level 2 and Level 3 inputs to be defined in State Agency Technical Report (includes, **auto/truck vehicle proportions** and **fleet turnover rate**/ages)
TECH	*TBD in State Agency Technical Report*			Level 2 and Level 3 inputs to be defined in State Agency Technical Report (includes **fuel economy**, **carbon intensity of fuels**, and **electric vehicles and plug-in hybrids market shares**)

[2] Existing zoning and forecasted population and employment held constant across all scenarios.
[3] Reflected as the cost per mile to drive. Fuel price held constant across all scenarios, reflecting market trends.
[4] Carbon fee, gas tax, or other instruments could be used.
[5] Vehicle miles traveled fee or other instruments could be used.

Climate Smart Communities Scenarios

Overview of State Analytical Approach to Setting GHG Targets for MPOs

Metro Council Work Session
February 22, 2011

Metro | *Making a great place*

Presentation Overview

1. Describe Oregon Sustainable Transportation Initiative
2. Provide update on State GHG Target Setting
3. Share results of statewide scenario planning
4. Describe possible similarity to upcoming Metro-wide scenario planning

Oregon Sustainable Transportation Initiative

Two Major Activities

1. Statewide Transportation Strategy (STS)
   a) Policy Advisory Committee
   b) Technical Advisory Committee

2. State Target Rulemaking Advisory Committee (TRAC)
   a) Policy Advisory Committee

State Scenario planning guidelines

- Technical Advisory Committee

Statewide Transportation Strategy (STS)

- Phase 1: Light vehicles (< 10,000 lbs)
  - Use scenarios to develop technical report and transportation-related GHG reduction targets for state and six metropolitan areas (MPOs)
  - Submit technical report (due March 1)
    - ✓ Fuel costs
    - ✓ Vehicle technology
- Phase 2: Long-distance travel and freight
  - Statewide toolkit -
    - ✓ Best GHG Reduction Strategies
  - State System, Inter-city rail, etc.

State Target Rulemaking Advisory Committee (TRAC)

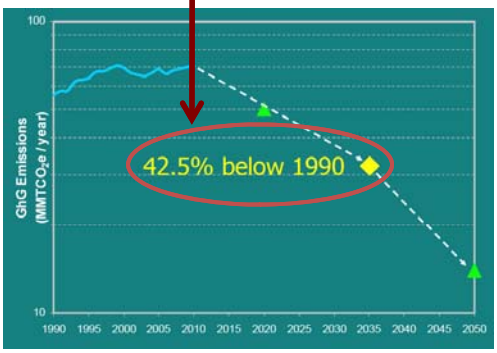
Incorporate technical assumptions (March 1)

Recommend MPO Targets for 2035 (April 1)

- Per capita-based
- VMT and GHG
- MPO specific

Define process for revisions and updates (June 1)

Anticipated Statewide 2035 Target
for cars and light trucks



Source: Oregon Department of Transportation

State GHG scenario planning purpose

Guide development of targets

Identify plausible/feasible policy options

Test options

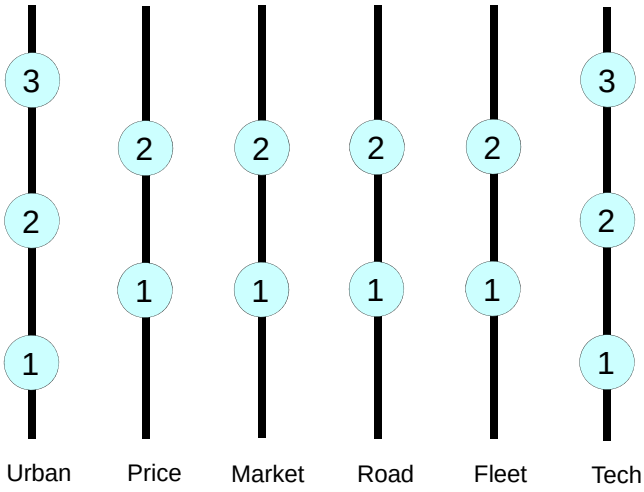
Provide 2035 targets to MPOs (4/1)

State GHG scenario planning model

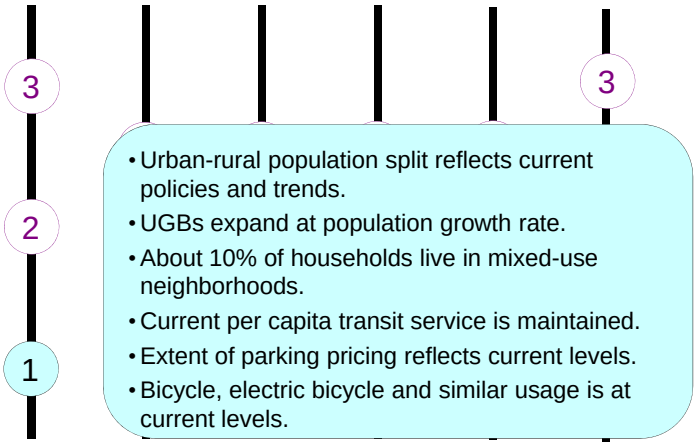
Greenhouse gas State Transportation Emissions Planning model (GreenSTEP)

Statewide GHG planning model with sensitivity to larger number of transportation vehicle, price, fuels and other inputs

Policy levers: Levels for each factor grouping

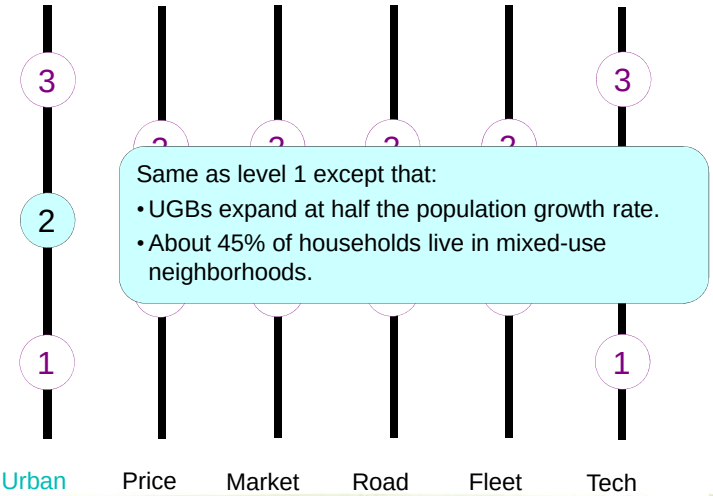


Urban level 1 assumptions



- Urban-rural population split reflects current policies and trends.
- UGBs expand at population growth rate.
- About 10% of households live in mixed-use neighborhoods.
- Current per capita transit service is maintained.
- Extent of parking pricing reflects current levels.
- Bicycle, electric bicycle and similar usage is at current levels.

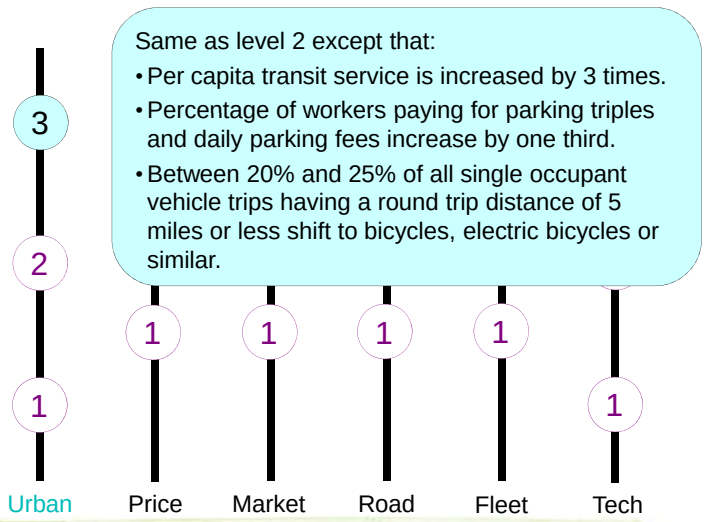
Urban level 2 assumptions



Same as level 1 except that:

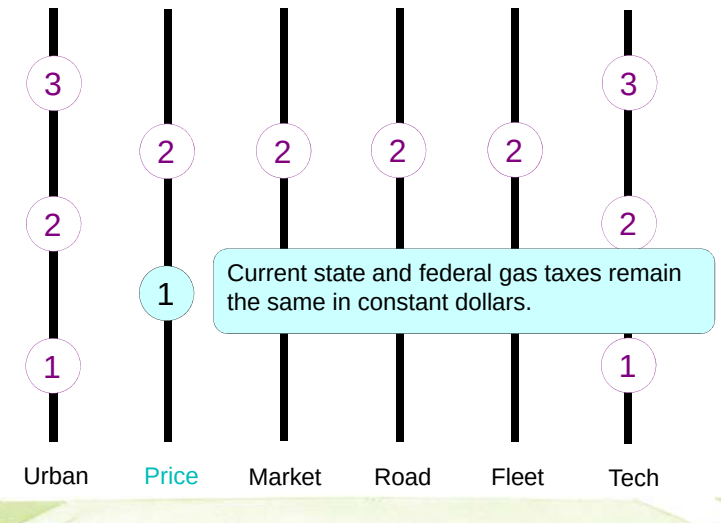
- UGBs expand at half the population growth rate.
- About 45% of households live in mixed-use neighborhoods.

Urban level 3 assumptions



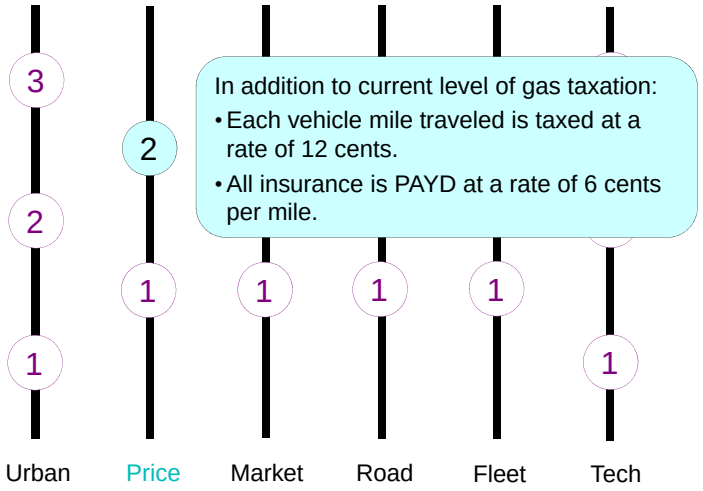
Oregon Sustainable Transportation Initiative 11

Price level 1 assumptions



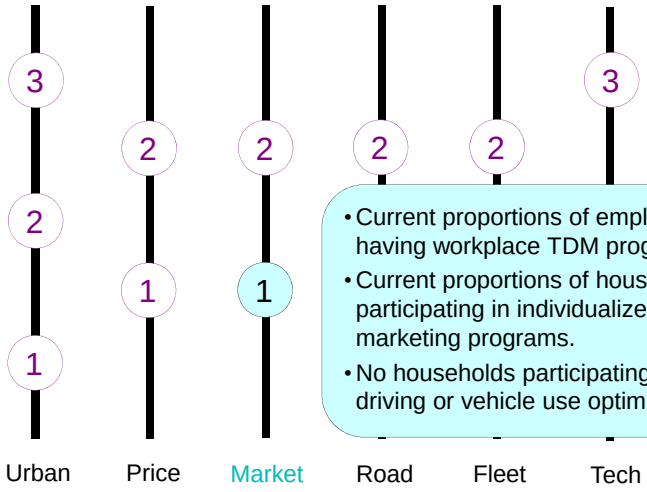
Oregon Sustainable Transportation Initiative 12

Price level 2 assumptions



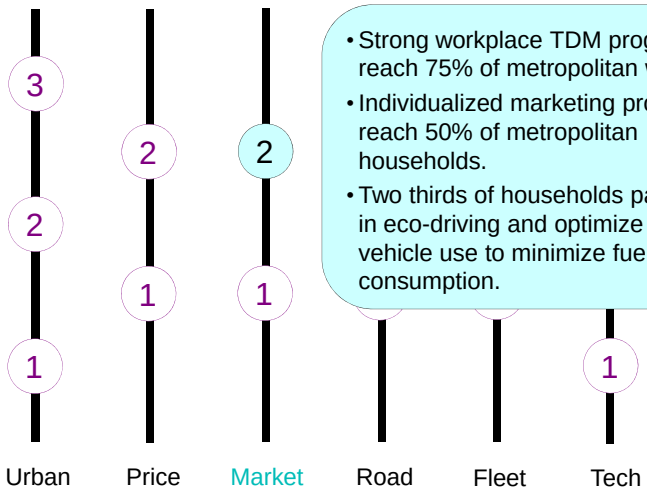
In addition to current level of gas taxation:
- Each vehicle mile traveled is taxed at a rate of 12 cents.
- All insurance is PAYD at a rate of 6 cents per mile.

Marketing level 1 assumptions



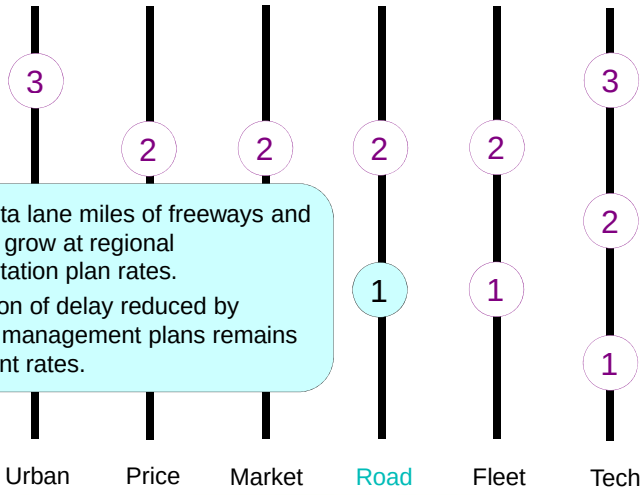
- Current proportions of employers having workplace TDM programs
- Current proportions of households participating in individualized marketing programs.
- No households participating in eco-driving or vehicle use optimization.

Marketing level 2 assumptions



- Strong workplace TDM programs reach 75% of metropolitan workers.
- Individualized marketing programs reach 50% of metropolitan households.
- Two thirds of households participate in eco-driving and optimize their vehicle use to minimize fuel consumption.

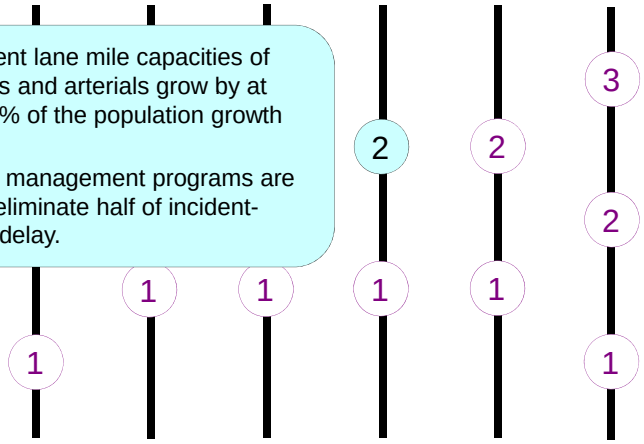
Road level 1 assumptions



- Per capita lane miles of freeways and arterials grow at regional transportation plan rates.
- Proportion of delay reduced by incident management plans remains at present rates.

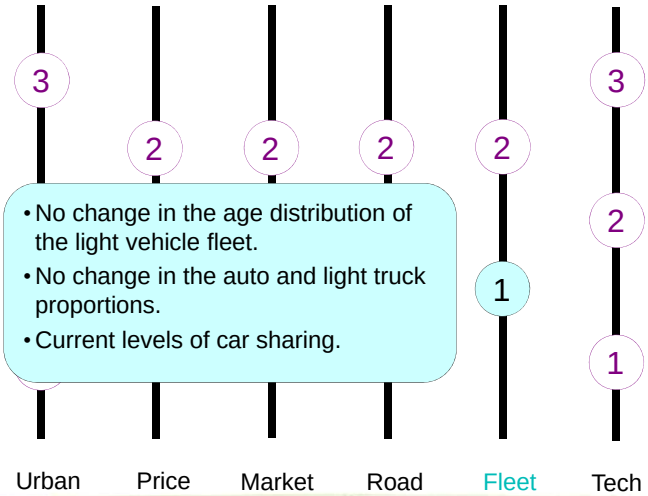
Road level 2 assumptions

- Equivalent lane mile capacities of freeways and arterials grow by at least 85% of the population growth rate.
- Incident management programs are able to eliminate half of incident-caused delay.



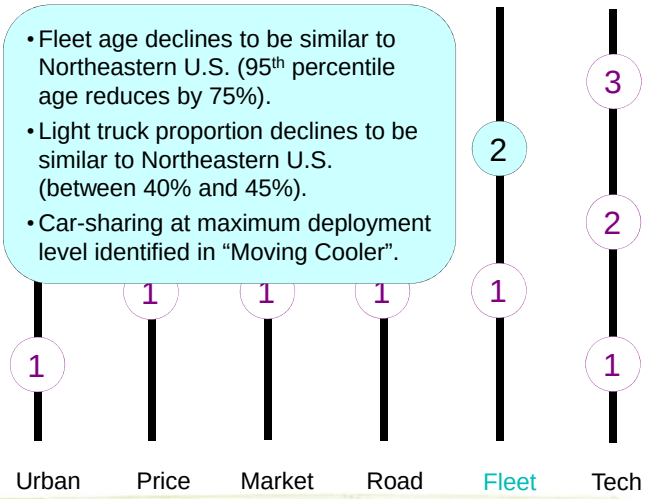
Fleet level 1 assumptions

- No change in the age distribution of the light vehicle fleet.
- No change in the auto and light truck proportions.
- Current levels of car sharing.



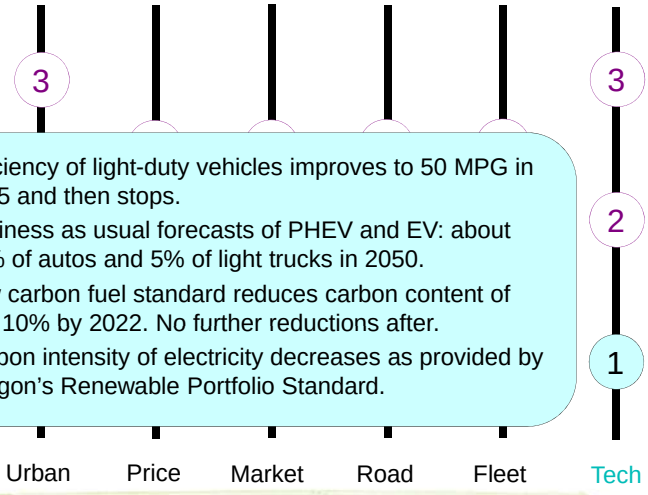
Fleet level 2 assumptions

- Fleet age declines to be similar to Northeastern U.S. (95th percentile age reduces by 75%).
- Light truck proportion declines to be similar to Northeastern U.S. (between 40% and 45%).
- Car-sharing at maximum deployment level identified in "Moving Cooler".



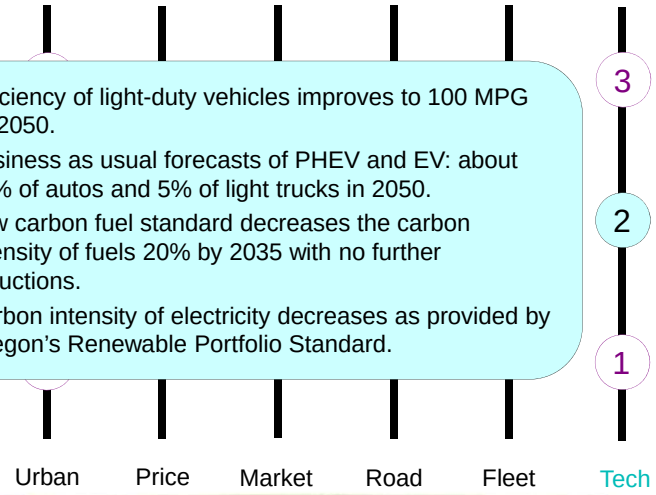
Technology level 1 assumptions

- Efficiency of light-duty vehicles improves to 50 MPG in 2025 and then stops.
- Business as usual forecasts of PHEV and EV: about 15% of autos and 5% of light trucks in 2050.
- Low carbon fuel standard reduces carbon content of fuel 10% by 2022. No further reductions after.
- Carbon intensity of electricity decreases as provided by Oregon's Renewable Portfolio Standard.



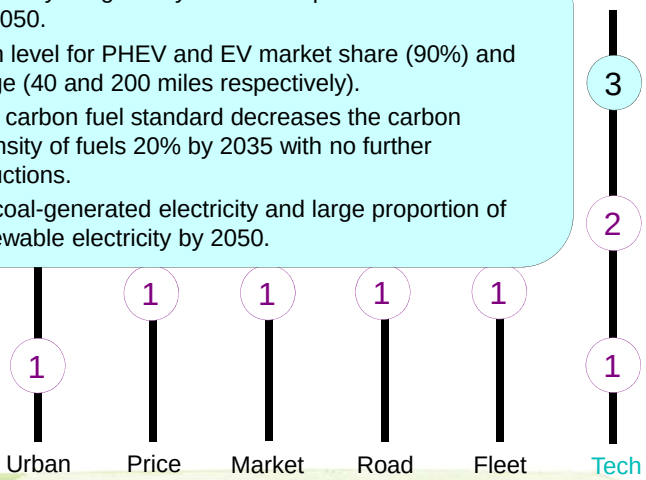
Technology level 2 assumptions

- Efficiency of light-duty vehicles improves to 100 MPG by 2050.
- Business as usual forecasts of PHEV and EV: about 15% of autos and 5% of light trucks in 2050.
- Low carbon fuel standard decreases the carbon intensity of fuels 20% by 2035 with no further reductions.
- Carbon intensity of electricity decreases as provided by Oregon's Renewable Portfolio Standard.

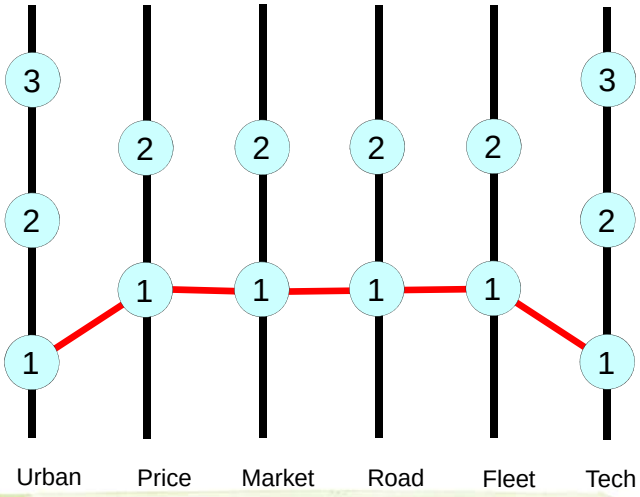


Technology level 3 assumptions

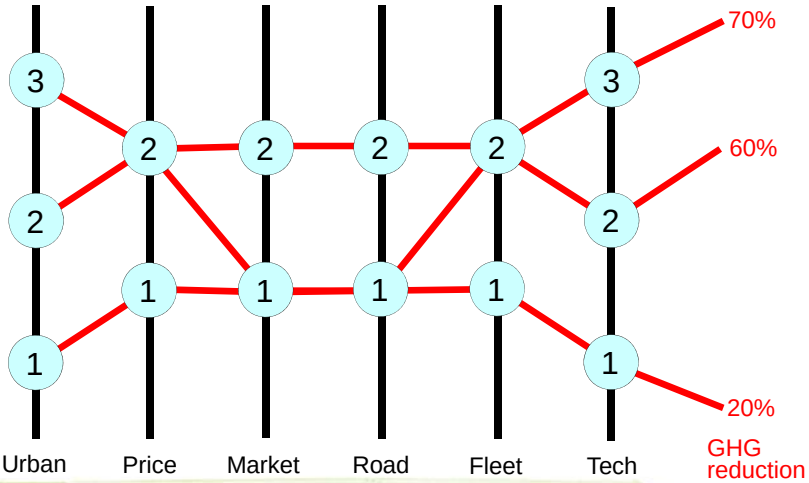
- Efficiency of light-duty vehicles improves to 100 MPG by 2050.
- High level for PHEV and EV market share (90%) and range (40 and 200 miles respectively).
- Low carbon fuel standard decreases the carbon intensity of fuels 20% by 2035 with no further reductions.
- No coal-generated electricity and large proportion of renewable electricity by 2050.



Reference case = current policies



Statewide scenarios show a range of potential reductions



Preliminary statewide results…

Most effective = vehicle technology

- 100 miles/gallon required for 65-75% ghg reductions

Second most effective = urban

Least effective = additional lane miles

…preliminary statewide results

Results are estimated percentages (ordinal)

- No network or spatial modeling

Background conditions (controlled) vs. policy levers (uncontrolled)

- Ex. Gasoline price (background) and fuel economy (policy lever)

State evaluation criteria…

Proposed Criteria	Potential Evaluation Measures
Travel and System Performance	• Change in total VMT by vehicle type (light, heavy) • Change in light vehicle VMT per capita (state & metropolitan area) • Change in metropolitan area vehicle travel time and delay by vehicle type • Change in transit service level by metropolitan area
Energy Consumption and GHG Emissions	• Change in GHG emissions (state & metropolitan area) • Change in petroleum based fuel consumption (state & metropolitan area) • Change in transportation electricity consumption (state & metropolitan area)
Economic Impact	• Change in transportation cost per household (not including travel time) compared to average household income o State & metropolitan area o All households & lower income households • Metropolitan area truck travel costs (including travel time) • Change in variable transportation cost per capita • Revenue collected from transportation taxes or fees (state & metropolitan area) • Floor space costs • Public service costs • Change in cost for importing fuel

…State evaluation criteria

Proposed Criteria	Potential Evaluation Measures
Land Use and Natural Resource Impacts	• Amount of land consumed for development (metropolitan, other urban, rural) • Proportion of metropolitan area population living in "complete communities" (i.e. urban mixed-use neighborhoods) • Amount of urban area redevelopment • Residential water consumption
Public health impact	• Impact on criteria pollutants (PM, NO_X, VOC) • Amount of non-motorized travel (bicycle, walking etc..)
Infrastructure and Implementation Costs	• Capital costs • Other implementation costs
Potential Implementation Risks	• Legal, legislative or regulatory barriers for implementation • Institutional framework for implementation and long term "ownership" • Technology

Lessons for Metro Scenario Planning

- Potential targets achievable with aggressive, plausible policy and investment decisions
- Some actions more effective than others
- Levels of "aggressiveness" approach provides a useful understanding of key choices
- Results are ordinal estimates; additional refinement modeling and analysis will be necessary
- GHG emission analysis is an evolving field; estimates will change as precision increases
- Communication of results is key challenge

Climate Smart Communities Scenarios communication and engagement

Research
Feb-March
Literature review and stakeholder interviews
Final report – key messages, language bank

Public opinion research
March
Focus groups
Phone surveys
Report , DVD and presentation

Climate Leadership Summit
April 1
Strategies, visual demos, public opinion, discussion and input

Metro | *Making a great place*

Oregon Department of Transportation

Department of Land Conservation and Development

February 1, 2011

Reducing Greenhouse Gas Emissions in the Transportation Sector
— Oregon Sustainable Transportation Initiative Overview —

The Oregon Sustainable Transportation Initiative (OSTI) is an integrated statewide effort to reduce greenhouse gas emissions (GHG) from transportation while considering ways to improve the built environment for healthier, more livable communities and greater economic opportunity. The effort is the result of several pieces of legislation including HB 2001 and SB 1059, passed by the 2009 and 2010 Oregon Legislatures. OSTI is being led by the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD), in consultation with the Department of Environmental Quality (DEQ), the Oregon Department of Energy (DOE), and stakeholder committees. The effort is designed to help the state meet its 2050 goal of reducing GHG emissions by 75 percent below 1990 levels by curbing emissions from light vehicle travel and transportation.

OSTI has four main focus areas under development:

I. STS: Statewide Transportation Strategy

This process will develop Oregon's vision for transportation systems, vehicle and fuel technologies and urban form that reduce transportation sector greenhouse gas emissions. The STS vision will aid the state in the achievement of its greenhouse gas emission reduction goals.

II. Rulemaking

HB 2001 (2009) Sections 37 and 38 directed the Land Conservation and Development Commission (LCDC) to adopt rules setting GHG emission reduction targets for the Portland metropolitan area served by Metro. SB 1059 (2010) directed LCDC to adopt rules setting GHG emission reduction targets for the other Oregon metropolitan areas served by metropolitan planning organizations (the Bend, Corvallis, Eugene-Springfield, Rogue Valley and Salem-Keizer regions). LCDC has convened a Target Rulemaking Advisory Committee (TRAC) to assist in the development of targets that will be used to guide land use and transportation scenario planning in these areas.

Rules will set targets for reducing emissions from light vehicles (10,000 pounds or less) traveling in each of the state's metropolitan areas through the year 2035 and must be adopted by June 1, 2011. By March 1, 2011, ODOT, DEQ and DOE are required to provide technical estimates and recommendations to LCDC to inform this rulemaking effort.

III. Scenario Planning Guidelines

The Scenario Planning Technical Advisory Committee (SP TAC) is in the process of developing guidelines to help metropolitan areas with their land use and transportation planning, including a step-by-step technical guide to addressing GHG emissions reduction targets. This involves establishing a transportation and land use vision, goals and approaches for reducing GHG emissions from light vehicles.

Through scenario planning, metropolitan areas will be able to evaluate different ways to accommodate expected population and employment growth through 2035. They will be asked to identify a preferred approach that best reduces GHG emissions, while meeting a full range of community livability objectives.

IV. Toolkit

The toolkit will provide metropolitan areas and local governments with a comprehensive listing of programs and actions that can be implemented to reduce GHG emissions from light vehicles. The toolkit will allow each metropolitan area to select the most appropriate tools to meet local needs. In addition, the toolkit will include information on analysis tools such as modeling that can be used in scenario development and outreach, and will touch on public education and engagement techniques.

Reducing Greenhouse Gas Emissions in the Transportation Sector
— Oregon Sustainable Transportation Initiative Overview —

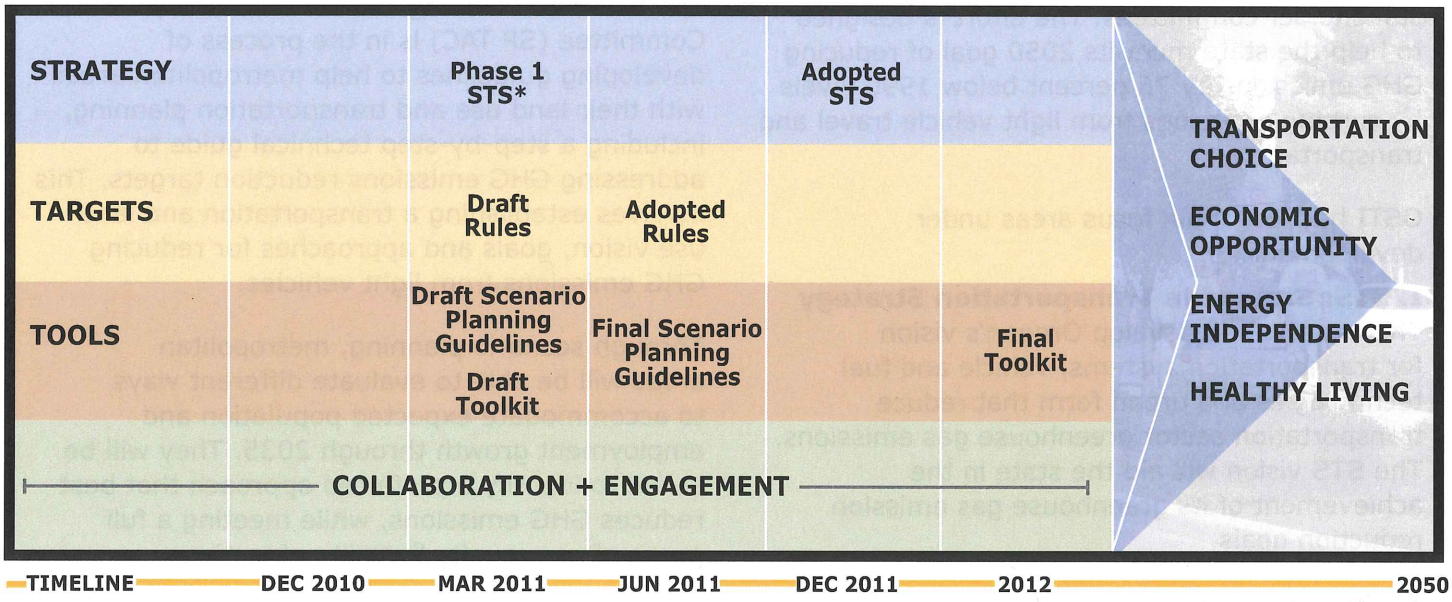
Stakeholder involvement
Coordination of the focus areas is being accomplished with the use of software and technology that supports cross-agency and multiple partner collaboration and communication. There is a strong focus throughout the development of OSTI on stakeholder involvement, including representation on advisory committees by staff from local jurisdictions, advocacy organizations and businesses. ODOT and DLCD are also working closely with Metro to link to work on HB 2001 Sections 37 and 38 with the work being done under SB 1059.

Timeline
Many of the requirements of SB 1059 and the Target Rulemaking required by HB 2001 Sections 37 and 38 are being implemented through OSTI simultaneously. Key dates include:

- **March 2011:** ODOT, DEQ and DOE provide LCDC with information necessary to determine proposed GHG emissions reductions targets for 2035.
- **June 2011:** LCDC adopts rules setting targets for each region served by a metropolitan planning organization.
- **December 2011:** Statewide Transportation Strategy is adopted.
- **March 2013:** ODOT and DLCD give a joint report to the Legislature on the progress of OSTI and meeting reduction targets.

For more information and to sign up for updates visit: www.oregon.gov/ODOT/TD/TP/OSTI.shtml

Oregon Sustainable Transportation Initiative Summary at a Glance



The Oregon Sustainable Transportation Initiative (OSTI) is an integrated statewide effort to create healthy, livable communities while reducing greenhouse gas emissions (GHG) from transportation. The effort includes ongoing work in a number of different areas.

STS: Statewide Transportation Strategy
This process will develop Oregon's vision for transportation systems, vehicle and fuel technologies and urban form that reduce transportation sector greenhouse gas emissions. The STS vision will aid the state in the achievement of its greenhouse gas emission reduction goals.

* Phase 1 includes light vehicle transportation within metropolitan areas and Phase 2 includes all transportation within the state including long distance and freight.

Rulemaking
The rules will set GHG reduction targets for each of Oregon's six metropolitan areas (the Bend, Corvallis, Eugene-Springfield, Portland, Rogue Valley and Salem-Keizer regions). These will be adopted by the Land Conservation and Development Commission (LCDC) in June 2011.

Scenario Planning Guidelines
The guidelines will provide step-by-step assistance for local governments to use in creating their own plans to meet GHG reduction targets.

Toolkit
The toolkit will be a resource of actions and programs local governments can adopt to facilitate transportation-related GHG reductions.

DRAFT

Climate Smart Communities Scenarios project: Greenhouse gas emission reduction for light duty vehicles

The state of Oregon established greenhouse gas reduction goals of 10 percent below 1990 levels by 2020 and 75 percent by 2050. To address one sector of emissions, **House Bill 2001**and **Senate Bill 1059** call for greenhouse gas emission reduction targets for **light duty vehicles** (under 10,000 lbs. gross vehicle weight) for each of the six Oregon metropolitan planning organizations (MPOs) by 2035.

Q & A

- **What are the targets?** A state policy committee is currently developing the targets, which are expected to be announced **April 1, 2011**. The committee will set two targets - greenhouse gas (GHG) emissions and vehicle miles traveled (VMT) per capita.

- **Can we provide input on the targets?** Yes. Once the targets are announced, a formal comment process will begin, with hearings in April before a final Land Conservation and Development Commission decision expected in May.

- **Has or will Metro set goals or targets for Metro area jurisdictions?** Metro has not set any targets for cities or sub-regions of the Metro area, and is not planning to do so.

- **How are we going to reach the targets for light duty vehicle GHG reduction?** The state has directed Metro to develop two or more land use and transportation "scenarios", or groups of strategies, designed to reduce GHG emissions from light duty vehicles.

- **What will the scenarios include?** The scenarios will build on the 2040 Growth Concept that continues to guide the region's development as well as local community aspirations. The scenarios will test the effectiveness of various actions and investments such as technology, auto-operating costs, land use, demand management, system management, and transit service toward VMT and GHG reductions.

- **What will that mean in terms of policies?** Strategies that address climate change should also enhance our quality of life, economic vitality and otherwise help the region achieve our six desired outcomes. Metro will work collaboratively with local decision-makers to select and test strategies that are feasible, do-able and effective.

- **When will all this happen?** Metro will work with the regional Joint Policy Advisory Committee on Transportation and Metro Policy Advisory Committee to direct staff work on scenarios development this summer. Results will be presented in the fall; Metro must present two or more possible scenarios to the state legislature in January 2012. After additional refinement and public input, Metro must adopt one scenario in 2014 that will meet the state targets. Local governments must then adopt comprehensive plan and land use regulations consistent with the adopted scenario in 2014-2015.

- **Is there a silver lining?** Metro and the region have already shown that leadership in creating livable communities can reduce the growth of greenhouse gas emissions while creating a green economy and desirable places to live. The end result will include cleaner air, too, so we can all breathe easier.

Table 7 – Comparative Risk Ratings

Risk Factor / Risk Ranking[4]	Comp. Deck Truss	Tied Arch	Cable-Stayed	Open-Web Boxed Girder
Cost (bid cost variance from forecast cost)	1	3	2	4
Schedule (design)	1	2	2	4
Schedule (construction)	1	2	1	4
Design (greater level of effort anticipated)	1	3	2	4
Procurement (number of bidders)	2	3	3	3
Construction (claims, etc.)	1	3	2	4
Public Support (aesthetics)	4	1	1	4
Long-Term Maintenance (higher than anticipated)	2	2	2	4
Seismic (predicted behavior)	2	3	1	4
Environmental (problems with in-water construction)	2	1	1	3
Environmental (risk of delay of ROD)	1	2	2	1
Legal challenge to the ROD	3	2	2	4
Operational reliability (risk of facility closure)	2	3	3	2
Successful modification of existing constraints (risk of aviation modification going forward)	1	2	2	1
Impact to Sustainability (risk of obsolescence)	2	2	2	2

What conclusions can be drawn from this risk information? It is clear that the option offering the highest risk in the most areas is the open-web box girder. In fact, of the four options under consideration it is by far the most risky in almost all areas considered by the BRP. While there isn't sufficient information to assign a quantitative value to this risk, it is clear that cost, schedule and other implications would result were the project to continue with this alternative. The other three bridge types offer varying levels of risk amongst one another depending on the factor involved.

[4] 1 = Lower risk, 4 = Highest Risk

The BRP identified fifteen risk factors for consideration. Each one was assessed against all four bridge types described in this report: composite deck truss, tied arch, cable-stayed and the current design, the open-web box girder. By including the open-web box girder, the comparison provides decision-makers a contrasting picture of how that design compares against the others proposed by the panel.

In addition to the fifteen factors the BRP chose to rank risk on a scale from one to four with one being a low risk and four being the highest risk. In some cases the relative risks between bridge types were the same so not all factors have four different numbers.

The risk factors and their ratings are found in Table 7. Although the BRP deems cost, aesthetics, and technical/engineering criteria to be most important, no effort was made by the panel to weight the risk factors against one another. Thus, a simple addition of the numerical values in each column would not necessarily provide a quantitative picture of the risks for the four bridge types. That said, some conclusions can be drawn from the information found in Table 7.