Appendix P
Public Comments and Responses

This document contains
- Guide to using this document,
- Index of commenters and
- Responses to comments received on the South Corridor Portland-Milwaukie Light Rail Project Supplemental Draft Environmental Impact Statement during the public comment period, May 9 to June 23, 2008. These responses are based on information gathered as part of the 25 percent design and subsequent analysis as reported in this Final Environmental Impact Statement.

2010

Prepared by: Metro

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Using this document

This document contains responses to all comments received during the Supplemental Draft Environmental Impact Statement public comment period (May 9 to June 23, 2008), per requirements of the National Environmental Policy Act. The comments were originally published in the SDEIS Public Comment Report in June 2008, which is available at www.trimet.org/pm/library.

Layout - The original comment submitted appears at half-size. A full-size version is available in the SDEIS Public Comment Report (June 2008).

Responses - When more than one topic is addressed, the responses are separated into the different topic areas.

Original comment

Response to that comment

C-006-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative to Park Avenue follows an old railroad right-of-way that predates most of the existing adjacent development. This railroad right-of-way is still under current use as a transportation corridor. The SDEIS noted that the Oregon Pacific and Union Pacific Railroads & Trestle, near Kellogg Lake and through downtown Milwaukee, is potentially eligible for the National Historic Register. The choice of the Locally Preferred Alternative does not create a new physical barrier through Milwaukee neighborhoods, it uses an existing transportation corridor.

C-006-002
The light rail alignment through downtown Milwaukee uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today including constructing safety fences, meshing gates, improved visibility and sight lines, clearly defined pedestrian zones and improved pedestrian facilities, and other safety measures. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zebra” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and pedestrian warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TrMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lodd District light rail stations, and a partnership with Operation Lifesaver to provide safety
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<td>604</td>
<td>Wertz, Maggie</td>
<td>646</td>
</tr>
<tr>
<td>Vaetz, Mary</td>
<td>692</td>
<td>White, John</td>
<td>649</td>
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<tr>
<td>Vernon, Shelley</td>
<td>693</td>
<td>Willamette Pedestrian Coalition</td>
<td>87</td>
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<td>Voeller, Paul and Sharon</td>
<td>694</td>
<td>Wingren, Karl</td>
<td>652</td>
</tr>
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<td>Vogel, Julie</td>
<td>697</td>
<td>Wisner, Julie</td>
<td>653, 656</td>
</tr>
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<td>Wacek, Hal</td>
<td>605</td>
<td>Wisner, Patty</td>
<td>657</td>
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<td>Walsh, Thomas J</td>
<td>607</td>
<td>Woods, Dawn</td>
<td>661</td>
</tr>
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<td>Waner, Cameron</td>
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<td>Wright, Julie</td>
<td>664</td>
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<td>Wasko, Beth</td>
<td>609</td>
<td>Wyss, Loren</td>
<td>665</td>
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<tr>
<td>Watkins, John</td>
<td>610</td>
<td>Zeiler, Susan and Doug</td>
<td>666</td>
</tr>
<tr>
<td>Watson, Dorothy</td>
<td>611</td>
<td>Zipagang, Joseph</td>
<td>668</td>
</tr>
</tbody>
</table>
Thank you for submitting your comments identifying your concerns with the 2003 Locally Preferred Alternative (LPA) alignment within the Industrial area, and your preference for a Tillamook Branch alignment. The LPA decision in 2008, following the SDEIS release, selected the Tillamook Branch alignment, and cited its ability to minimize traffic, parking and related impacts in the Industrial area, and also noted the economic importance of preserving the effective function of the freight, shipping and other industrial operations that occur in north Milwaukie.

Based on the results of the traffic analysis and other impacts to the industrial area, the Project Steering Committee recommended an alignment on the Tillamook Branch. The 2008 LPA alignment follows Tillamook Branch line and avoids locating light rail on SE Main Street through the North Milwaukie Industrial Area. Light rail will not cross SE Ochoco Street, but will cross SE Milport at the Tillamook Branch alignment at grade.

Temporary shutdown of the spur track to Holman Distribution Center of Oregon (HDCO) during construction of Portland to Milwaukee Light Rail is unavoidable. Construction of the light rail project requires realignment of the UPRR Tillamook Branch track between roughly SE Ochoco Street and Highway 224 and spur tracks (including the HDCO spur) that connect to this segment. It is too early to know how long the shutdown would last. However, TriMet will coordinate closely with Holman Distribution during final design of the light rail project to minimize the potential impact of Project construction on the business.
Because the 2008 LPA follows the Tillamook Branch alignment, there will be no impact to parking on SE Main Street or uses fronting SE Main Street in the North Milwaukie Industrial Area.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. Based on the results of the traffic analysis and other impacts to the industrial area, the project Steering Committee recommended an alignment on the Tillamook Branch. The 2008 LPA alignment follows Tillamook Branch line and avoids locating light rail on SE Main Street through the North Milwaukie Industrial Area. The choice of the Tillamook Branch line alignment in this area of Milwaukie avoids the area of concern in your comment. The park-and-ride recently opened at the Southgate Cinema site is not associated with this light rail project. There should be few additional traffic impacts at the Milport-McLoughlin intersection from the park-and-ride at Tacoma Street. Traffic analysis (Table 4.311 in the SDEIS) indicates that service levels at SE Milport Road and McLoughlin Boulevard would be the same as if no light rail project were built (volume/capacity ratio of 0.95 for No-Build and Tillamook Alignment).

The 2003 LPA alignment was not selected for the alignment of the 2008 LPA. The 2008 LPA uses the Tillamook Branch alignment and does not have a park-and-ride lot in the North Milwaukie Industrial area that is associated with the Portland-Milwaukie Light Rail Project.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. There are forecast to be little to no additional traffic impacts on intersections in the North Milwaukie Industrial Area. Please refer to Table 4.311 of the SDEIS for impacts from the Tillamook Branch alignment (now incorporated into the Locally Preferred Alternative) compared to the 2003 LPA.
Metro  
June 23, 2008  
Page 3

industrial district and employment center, and will negatively impact the economy of district and the City of Milwaukee as a whole. Metro’s final EIS should not disregard or marginalize the Industrial District by failing to completely consider the impacts of the proposed non-industrial use in a designated industrial area.

The economic considerations identified above and in the attached memos should be taken into account in Metro’s analysis, along with the higher costs and displaced businesses that would result from adopting the 2003 LPA alignment. The SDEIS expressly notes that the Tillamook Branch option would cost $25.6 million less to construct than the other options, and would also require fewer acquisitions and displacements of existing businesses in the Industrial District. Combined with the acknowledged fact that the 2003 LPA alignment would result in failure of the SE Milpore and McLoughlin intersection, causing disastrous impacts on businesses in the Industrial District, we believe that the more reasoned analysis requires a conclusion that the Tillamook Branch alignment provides the most judicious alternative, as previously concluded after careful study by the 2004 Transit Working Group and the elected leaders of the City of Milwaukee.

Thank you for your consideration of these comments and the attached memoranda from Johnson & Johnson.

Very truly yours,

Roger A. Alfred  
Encllosures
MEMORANDUM

DATE: January 10, 2005

TO: Mr. Mark Whislow
     PERKINS COGUE
     1120 NW Couch Street
     Tenth Floor
     Portland, OR 97209

FROM: JOHNSON GARDNER

SUBJECT: Impact Analysis of the North Milwaukee Industrial Cluster

JOHNSON GARDNER was retained by PERKINS COGUE to estimate the economic and fiscal contribution made by the North Milwaukee Industrial Cluster and Corridor to the Milwaukee and Clark County economies. The cluster is defined in this analysis as industrial and commercial development bounded by SE McDougall Boulevard on the west, the Union Pacific Railroad Line on the east, the Milwaukee city boundary to the north and the Milwaukee Expressway/Hwy 224 to the south.

BUSINESS REVENUES

JOHNSON GARDNER estimated direct, indirect and induced business revenues resulting from companies located within the Industrial Cluster. FIGURE 1 below provides a summary of study findings regarding business sales generated in Milwaukee.

FIGURE 1: MILWAUIKE BUSINESS REVENUES FROM INDUSTRIAL CLUSTER COMMERCE

<table>
<thead>
<tr>
<th>Industry</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$1,219,394</td>
<td>$1,089,386</td>
<td>$1,004,267</td>
<td>$3,313,047</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>$10,674,852</td>
<td>$2,674,852</td>
<td>$2,674,852</td>
<td>$15,924,560</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$18,504,909</td>
<td>$13,504,909</td>
<td>$13,504,909</td>
<td>$45,514,727</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>$1,395,671</td>
<td>$365,671</td>
<td>$365,671</td>
<td>$2,027,013</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>$32,764</td>
<td>$32,764</td>
<td>$32,764</td>
<td>$98,292</td>
</tr>
<tr>
<td>Finance</td>
<td>$1,403,454</td>
<td>$1,403,454</td>
<td>$1,403,454</td>
<td>$4,209,353</td>
</tr>
<tr>
<td>Other Services</td>
<td>$30,635,635</td>
<td>$2,063,563</td>
<td>$2,063,563</td>
<td>$34,762,761</td>
</tr>
<tr>
<td>Total</td>
<td>$42,059,909</td>
<td>$6,605,909</td>
<td>$6,605,909</td>
<td>$55,271,324</td>
</tr>
</tbody>
</table>

*Data gathered in the course of this study is confidential in nature. For reporting the aggregation of Propensity due to this study, Johnson Gardner follows Oregon Employment Department protocols. Publication of data is subject to the data being in a specific industry for data to be released.

ECONOMIC IMPACT OF THE NORTH MILWAUKIE INDUSTRIAL CLUSTER PAGE 3
Utilizing input methodology, JOHNSON GARDNER estimates that Industrial Cluster businesses generate a total of $508 million of economic activity in the City of Milwaukee. Based on a consensus single-handedly represented over 17% of the City’s economy.

- Direct Impacts: Business within the cluster generate $294 million in sales annually.
- Indirect Impacts: Businesses elsewhere in the City of Milwaukee benefit from Cluster connections to the tune of $8 million annually.
- Induced Impacts: Spending by employees in the Cluster generates an additional $6 million in sales for Milwaukee businesses.

Industrial Cluster connections benefit more than the City of Milwaukee, but provide significant economic activity throughout Waukesha County. Figure 2 below provides a summary of the business revenue impacts of the Industrial Cluster on Waukesha County businesses.

**Figure 3: Clackamas County Business Revenues from Industrial Cluster Commerce**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information &amp; Services</td>
<td>$835,021</td>
<td>$2,356,490</td>
<td>$1,944,000</td>
<td>$4,133,511</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>$1,281,118</td>
<td>$3,060,000</td>
<td>$1,620,000</td>
<td>$6,888,718</td>
</tr>
<tr>
<td>Educational &amp; Health Services</td>
<td>$1,830,000</td>
<td>$4,060,000</td>
<td>$2,000,000</td>
<td>$7,930,000</td>
</tr>
<tr>
<td>Retail &amp; Hospitality</td>
<td>$1,560,000</td>
<td>$3,120,000</td>
<td>$1,800,000</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>Other Services</td>
<td>$1,000,000</td>
<td>$2,200,000</td>
<td>$1,200,000</td>
<td>$4,400,000</td>
</tr>
<tr>
<td>Total</td>
<td>$5,965,021</td>
<td>$13,736,490</td>
<td>$7,264,000</td>
<td>$36,965,511</td>
</tr>
</tbody>
</table>

**Figure 3: Clackamas County Business Revenues from Industrial Cluster Commerce**

- Direct Impacts: Business within the cluster generate $294 million in sales annually, all within Clackamas County.
- Indirect Impacts: Businesses elsewhere in the County experience over $80 million in activity providing goods and services to Clackamas County.
- Induced Impacts: Spending by employees in the Cluster generates an additional $6 million in sales for businesses throughout Clackamas County.

**Employment**

JOHNSON GARDNER finds that the Industrial Cluster is a significant employment center in the City of Milwaukee directly and through economic ripple effects. The employment impact of the Industrial Cluster for the City of Milwaukee economy is found in Figure 3 on the following page.

Employment within the cluster are estimated to account for 2,544 jobs in the City of Milwaukee, or a full 17% of the City’s employment. The Industrial Cluster is the site of nearly 2,544 jobs.


predominantly in Manufacturing, Construction, Wholesale Trade, and Transportation, Warehousing & Utilities. These four sectors, as will be discussed later in this document, are among the highest-paying sectors locally, all paying family-wage jobs.

**FIGURE 5: MILWAUKEE EMPLOYMENT FROM INDUSTRIAL CLUSTER COMMERCE**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>6.0</td>
<td>0.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Transportation, Warehousing &amp; Utilities</td>
<td>17.5</td>
<td>3.1</td>
<td>20.6</td>
</tr>
<tr>
<td>Construction</td>
<td>2.2</td>
<td>0.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>3.1</td>
<td>0.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>2.5</td>
<td>0.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Information</td>
<td>1.9</td>
<td>0.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Financial Services</td>
<td>2.2</td>
<td>0.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>1.3</td>
<td>0.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>1.0</td>
<td>0.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>1.0</td>
<td>0.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Other Services</td>
<td>2.4</td>
<td>0.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>28.9</td>
<td>4.7</td>
<td>33.6</td>
</tr>
</tbody>
</table>

**SOURCE:** Imprints, U.S. Census Bureau, and Johnson Gardens, LLC.

- Direct Impacts: Businesses within the cluster employ 2,330 people annually.
- Indirect Impacts: Vendors and service suppliers to the Cluster employ over 67 people annually within the City of Milwaukee.
- Induced Impacts: Spending by Cluster employees generates an additional 72 jobs annually in the City of Milwaukee.

As with business revenues, Industrial Cluster employment clearly contributes to the broader Milwaukee County economy, significantly more than for the City of Milwaukee alone. **FIGURE 4-** on the following page demonstrates employment impacts of the North Milwaukee Industrial Cluster on the Milwaukee County economy.

In total, the Industrial Cluster is estimated to support nearly 6,000 jobs annually throughout Milwaukee County directly and via supplier effects.

- Direct Impacts: Businesses within the cluster employ 2,330 people annually.
- Indirect Impacts: Countywide vendors and service suppliers to the Cluster employ over 722 people annually.
- Induced Impacts: Spending by Cluster employees generates an additional 944 jobs annually throughout the County.

**ECONOMIC IMPACT OF THE NORTH MILWAUKEE INDUSTRIAL CLUSTER**
### FIGURE 4: CLACKAMAS COUNTY EMPLOYMENT FROM INDUSTRIAL CLUSTER COMMERCE

<table>
<thead>
<tr>
<th>Industry</th>
<th>Other</th>
<th>Industrial</th>
<th>Agriculture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources</td>
<td>2.0</td>
<td>11.8</td>
<td>0.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Mining</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Transportation, Warehousing &amp; Utilities</td>
<td>395.0</td>
<td>111.1</td>
<td>20.2</td>
<td>536.3</td>
</tr>
<tr>
<td>Construction</td>
<td>466.0</td>
<td>22.3</td>
<td>61.4</td>
<td>550.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>571.0</td>
<td>58.8</td>
<td>51.8</td>
<td>681.6</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>390.0</td>
<td>93.0</td>
<td>39.3</td>
<td>522.3</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>335.0</td>
<td>123.9</td>
<td>172.3</td>
<td>631.2</td>
</tr>
<tr>
<td>Finance</td>
<td>138.0</td>
<td>9.1</td>
<td>7.3</td>
<td>154.4</td>
</tr>
<tr>
<td>Information</td>
<td>0.0</td>
<td>9.4</td>
<td>0.0</td>
<td>9.4</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>240.0</td>
<td>66.6</td>
<td>20.6</td>
<td>327.2</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>2.0</td>
<td>2.1</td>
<td>2.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>74.0</td>
<td>148.5</td>
<td>2.9</td>
<td>225.4</td>
</tr>
<tr>
<td>Other Services</td>
<td>51.0</td>
<td>33.5</td>
<td>22.8</td>
<td>107.3</td>
</tr>
<tr>
<td>Total</td>
<td>2,535.0</td>
<td>797.6</td>
<td>245.6</td>
<td>3,594.2</td>
</tr>
</tbody>
</table>

**SOURCE:** Implant, U.S. Census Bureau, and Johnson Gardner, LLC.

### WAGE LEVELS

Analysis of payroll and wages generated by the Industrial Cluster indicates that the Clusters not only support substantial employment locally and countywide, but wages for those jobs match or exceed County averages for all industries affected. Findings of wage levels are found in FIGURE 5 below.

In total, Industrial Cluster-related commerce in Milwaukie and Clackamas County supports wages that average $44,200 across all industries affected. Furthermore, average wages supported by Cluster-related commerce are 25% higher than Clackamas County wages for corresponding industries, on average.

### FIGURE 5: MILWAUKIE & CLACKAMAS COUNTY INDUSTRIAL CLUSTER WAGE LEVELS (2006)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Average Annual Wages</th>
<th>Milwaukie</th>
<th>Clackamas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Annual Wages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$44,941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>$33,973</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$31,265</td>
<td></td>
<td></td>
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<tr>
<td>Finance</td>
<td>$47,882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>$47,904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>$31,265</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>$32,612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>$32,310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$43,609</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** Implant, U.S. Census Bureau, Oregon Employment Department, and Johnson Gardner, LLC.
MEMORANDUM

DATE: January 16, 2006

TO: Mr. Mark Whidow
PERKINS COX
1120 NW Couch Street
Tenth Floor
Portland, OR 97209

FROM: JOHNSON GARDNER

SUBJECT: Fiscal Impact Analysis of the North Milwaukee Industrial Cluster

JOHNSON GARDNER was retained by PERKINS COX to estimate the economic and fiscal contributions made by the North Milwaukee Industrial Cluster to the Multnomah County economy. The cluster is defined in this analysis as industrial and commercial development located by SW McLoughlin Boulevard/W 40th Avenue, the Union Pacific Railroad Line to the east, the Milwaukee city boundary to the north and the Milwaukee Expressway/Highway 224 to the south.

This memorandum summarizes key findings with regard to the fiscal impacts, or tax revenue contributions, made by the Industrial Cluster.

TAX IMPACTS

Utilizing Implan methodology, JOHNSON GARDNER estimated the tax revenue impacts of the Industrial Cluster at the State and local levels. Figure 1 below provides a summary of major tax impact categories and taxes paid as a result of Industrial Cluster construction.

![Table: Total Tax Revenues From Industrial Cluster Construction](image)

<table>
<thead>
<tr>
<th>Tax Origin (Category)</th>
<th>Annual Tax</th>
<th>Tax Origin (Category)</th>
<th>Annual Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Taxes</td>
<td></td>
<td>Business Taxes</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Profits &amp; Dividends</td>
<td>$5,712,210</td>
<td>Social Insurance - Employer Paid</td>
<td>$231,210</td>
</tr>
<tr>
<td></td>
<td>$10,205,070</td>
<td>Income Tax</td>
<td>$9,709,530</td>
</tr>
<tr>
<td></td>
<td>$1,914,260</td>
<td>Local</td>
<td>$7,082,460</td>
</tr>
<tr>
<td></td>
<td>$7,570,820</td>
<td>Property Tax</td>
<td>$5,899,140</td>
</tr>
<tr>
<td>Total Business-Paid Taxes</td>
<td>$30,765,570</td>
<td>Total Personal Taxes</td>
<td>$7,082,460</td>
</tr>
</tbody>
</table>

Data gathered in the course of this study is confidential in nature. For reporting the aggregation of proprietary data in this study, Johnson Gardner follows Oregon Employment Department protocol. Publication of data in aggregate requires at least three firms in a specific industry for data to be released.

ECONOMIC IMPACT OF THE NORTH MILWAUKIE INDUSTRIAL CLUSTER
On an annual basis, the Industrial Cluster is estimated to pay $5.72 million in local property taxes, or roughly 25% of all property tax revenues collected in the Milwaukie area. Property taxes paid by Industrial Cluster tenants fund a variety of local services and bond obligations.

- Local Education: Local schools receive $1.2 million in taxes annually. Including bond levy revenues, North Clackamas Schools are the single-largest beneficiary at $1.8 million annually.

- Municipal Services: The City of Milwaukie, the second-largest beneficiary, receives $1.4 million in property taxes for operations and maintenance (O&M) as well as bond debt obligation for capital expansion. Industrial Cluster property tax revenues represent over 17% of the City of Milwaukie General Fund property tax revenue budget.

- County Services: Clackamas County, the third-largest beneficiary, receives nearly $1.1 million annually for various public services including O&M and urban renewal.

- Capital Expansion: Property taxes generated support sizable capital purchases by several jurisdictions, most notably school space and vehicle purchases by the North Clackamas School District ($355,160). Other beneficiaries include City of Milwaukie capital facilities and equipment needs, community college expansion, fire service vehicles and equipment, micro-uses parks and public transportation vehicles and equipment for Tri-Met.

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1 As a percentage of total tax assessed for Clackamas County Tax Code sections 002-012, 012-018 and 012-133, which comprise the great majority of the City of Milwaukie (Clackamas County Assessment Office, 2005).

B-003-001
Thank you for submitting your comments identifying your concerns with the 2003 Locally Preferred Alternative (LPA) alignment within the Industrial area, and your preference for a Tillamook Branch alignment. The LPA decision in 2008, following the SDEIS release, selected the Tillamook Branch alignment, and cited its ability to minimize traffic, parking and related impacts in the Industrial area, and also noted the economic importance of preserving the effective function of the freight, shipping and other industrial operations that occur in north Milwaukie.
If the Main Street alignment is pursued, Pendleton’s retail store would lose direct pedestrian access from the sidewalk and decreased auto access due to degraded intersections. Since access is critical for the success of the retail store and warehouse, it is possible this alignment could force closure of these operations.

A similar concern occurs with the property at 2515 Mailwell Drive. Since the use is manufacturing and distribution, pedestrian access is not as important, however freight access would be heavily impacted due to the degraded intersections and tighter turning radius. This will not only impact the current use, but its future and long-term use as a distribution center. These issues are not isolated to just Pendleton’s properties; other properties in the area would have similar impact and in at least one case would be condemned. At the same time, the Tillamook Alignment avoids these issues.

Pendleton supports light rail and its intent to be part of a solution addressing transit issues faced by the region. But there is concern that Light Rail alignments are selected based on their potential to promote development. Transit solutions including their alignments should attempt to preserve and support areas that already have economic vitality such as the North Industrial property in Milwaukee. Industrial land is a resource and not a land bank for future mixed-use development.

Land designated for industrial use is limited in the region. Where as some industrial lands may be underutilized or vacant, the North Industrial property in Milwaukee remains vibrant and provides substantial economic benefit to the city, region and state.

We agree with the City of Milwaukee’s recommendation to support the Tillamook Branch Alignment instead of the Main Street Alignment. The Tillamook Branch avoids the substantial traffic intersection mitigation that would be required to address issues created by the Main Street Alignment. It is probable that the proposed Main Street Mitigations will further degrade intersections that in some cases are already below standard. As noted by the City of Milwaukee’s May 29, 2009 letter to the PMG and TAC; the traffic engineers used standard methods for determining impact to the two major intersections supporting freight, yet “this standard is problematic for measuring impact to the North Industrial Area”, suggesting the impact would likely be greater than projected. Further the significant out-of-direction mitigation proposal at Millport and McLaughlin add an additional 2-minute delay – decreasing the intersection to a grade “F” rating.

Other points in support of the Tillamook Branch:

1) The Tillamook Branch reduces the Light Rail travel time. According to TriMet staff, reduced travel time increases rider-ship.
2) The Tillamook Branch alignment avoids impacting the historic ODOT property on McLoughlin Boulevard.

3) The Tillamook Branch avoids the impact to freight access and mobility that would be created by the Main Street Alignment.

4) The Tillamook Branch avoids the loss of on street parking and creation of new parking lots that would be required by the Main Street Alignment.

5) The Tillamook Branch avoids the substantial impact and loss of business that would be created if the Main Street Alignment were implemented.

6) The Tillamook Branch is approximately $25.6M less to construct than the Main Street Alignment. Based on Metro’s reports and 2008 dollars – this number would likely be higher with inflation.

7) The Tillamook Branch alignment has the support of the city staff and council of Milwaukee and property owners of the North Industrial area businesses. In addition testimony of the Citizens Advisory Committee and South Corridor Steering Committee appear to have majority support.

8) Lastly the Tillamook Branch avoids a majority of the impact to the North Industrial District and a specifically avoids the impacts to our properties.

Please consider the negative impact the Main Street Alignment will have to the vibrant and profitable businesses that reside in the North Industrial area. Please support the alternate Tillamook Alignment. Thank you for your time and consideration.

Sincerely,

Charles B. Bishop
Vice President, Mill Production
Pendleton Woolen Mills, Inc.
Thank you for your comment. The SDEIS did not address this type of local overlay. The Locally Preferred Alternative now avoids the area mentioned.
Thank you for participating and sending questions concerning the alignments. While the 2003 LPA showed a potential impact to the property at 2000 Hanna Harvester Drive; the 2008 Locally Preferred Alternative to Park Avenue, which follows the railroad alignment in this area, shows no impact to the property. The result is no land will be needed at this location and the easement and parking will also not be impacted.

B-005-002
Pleas see response to B-005-004.

B-005-003
The property at 2000 SE Hanna Harvester Drive is currently zoned M, Manufacturing. The site will be unaffected by any land use acquisition by the project. The project is also not making any proposals for rezoning and does not control land use decisions for the area.

B-005-004
The only build alternatives carried forward into the Final Environmental Impact Statement (FEIS) are the 2008 LPA and the MOS, both of which assume the Tillamook Branch alignment without an increase to the 300-space park-and-ride facility at Southgate that would also exist in the No-Build. As such, neither of the build alternatives would have an impact on Hanna Harvester Drive and no changes are proposed for this road.
A property owner may be able to retain a portion of property and these decisions are arrived at on a parcel-specific basis using the procedures outlined in Section 3.1. Currently the plans for the 2008 Locally Preferred Alternative indicate the potential of a full acquisition of this parcel.
Thank you for submitting your comments for consideration. A variance on the Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

The project’s planning with stakeholders included an extensive analysis of both the vertical and horizontal clearances needed to conduct commercial river travel on the Willamette River in the vicinity of the Willamette River Transit Bridge (river mile 13.8). The project’s efforts are summarized in Appendix O to the FEIS. The data included an updated survey of river users and their navigational clearance needs, as well as a field test and meetings with commercial river users, the U.S. Coast Guard and the U.S. Army Corps of Engineers.

After discussions with river users, including a field test of barge movements that included representatives of tugboat/barge users and the U.S. Coast Guard, the bridge span was increased from 500 feet to 680 feet (with 600 feet of horizontal clearance). In addition, the proposed location of the east and west piers were relocated to allow more ease of boat and barge movement, particularly downstream movement, given the River current, Holgate channel influence, Ross Island Sand and Gravel Company access and other river user concerns.

The proposed bridge height has been reviewed by technical, advisory and policy committees and has been, after consideration of commercial river users needs, recommended by the technical and policy committees as representing the most reasonable definition of the bridge for further design and evaluation in the FEIS. Following the FEIS, the project will move forward with final design and permitting for the bridge, which requires permits by the U.S. Coast Guard and the Army Corps of Engineers.
The Willamette River Bridge would be constructed to accommodate a future streetcar crossing, including a connection between OMSI and South Waterfront. See Chapter 2 of the FEIS for more information.
Thank you for submitting your comments for consideration. The Portland-Milwaukie Light Rail Project SDEIS included detailed evaluations of three light rail alignments in Milwaukie, in addition to the No-Build Alternative --- the 2003 LPA, which followed Main Street between Tacoma and Highway 224 and terminated at Lake Road, the 2003 LPA to Park Avenue and the Tillamook Branch alignment. These options are detailed in Chapter 2, Section 2.1.1.3 and in figure 2.1-3 of the SDEIS. While all three light rail options follow the Tillamook Branch railroad line through downtown Milwaukie, these alternatives were selected only after an extensive alternatives analysis that included consideration of the alternatives the commenter has suggested. Documentation of the most recent process of examining these alternatives is found in two reports – Downtown Milwaukie Alignments Review, Metro, June 7, 2007 and Downtown Milwaukie Workshops Summary SE Main Street/SE 21st Avenue, Metro, August 2007. These are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS, and include the most recent assessment done in summer 2007 that included double track on Main Street and split tracks on Main Street and McLoughlin Blvd.

The suggestions for single track were not studied in detail in the SDEIS because they do not provide sufficient capacity to reliably serve riders and meet TriMet operational standards, as it would represent a long term constrain on future system capacity. Therefore, this option does not meet the project Purpose and Need.
Analysis of LRT alignment options in Milwaukie dates back to 1993:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002
- Portland-Milwaukie SDEIS, 2008

The Portland-Milwaukie SDEIS Appendix L presents a chronicled summary of alignment studies. Routes studied are shown in Figures L-5 and L-6.

In addition to previous analyses documented in Chapter 2 and Appendix L of the SDEIS, the alignments studied in the SDEIS in Milwaukie are the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option in downtown Milwaukie. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and SE Main Street options, including the couplet options, for not meeting the project's Purpose and Need.

The analyses were based on criteria utilized in the SDEIS that are key to distinguishing the comparative impacts and effectiveness of the options.
to allow decisions to be made about the alignment through Milwaukie by City staff, the Planning Commission, City Council, neighborhood leaders and interested citizens. The Locally Preferred Alternative decision was the product of this process. The LPA best meets the Purpose and Need for a major transit investment in the Milwaukie-Portland corridor. This process fully complies with FTA major capital project development process requirements. Approval of the Portland-Milwaukie Light Rail Project to enter the preliminary engineering phase of project development is the FTA’s acknowledgment that conceptual design, preparation of the SDEIS and selection of the LPA have complied with FTA and NEPA requirements to date, although no final decision on the project to be built can be made until the FEIS is complete. Similar, any of the LPA identifications made throughout the history of the project are preliminary steps in guiding a narrowing of alternatives to those that represent the most promising alternatives that address the purpose and need, consistent with the intents of NEPA, but they do not represent a final decision to implement a project.

The option to terminate the project north of downtown Milwaukie was also considered prior to the LPA decision and is documented on page 2-41 of the SDEIS. Downtown Milwaukie is a town center in the Metro 2040 Growth Concept, in which high quality transit service connects town centers to other town centers and regional centers. Terminating the project north of downtown Milwaukie would require a transfer just to either reach downtown Milwaukie from the end of the light rail line or reach the end of the light rail line from downtown Milwaukie; a significant degradation in what should be high quality transit service that is attractive to the greatest number of riders. The added transfer for trips originating south and east of downtown Milwaukie could encourage more driving to the light rail line terminus, with spill over from park-and-ride facilities back into downtown. Also, a goal of the Milwaukie downtown and riverfront plans is to make downtown Milwaukie a more attractive...
destination for both residents and visitors. Bringing the light rail line into downtown directly supports this local aspiration.

**B-008-003**

The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukie; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukie resolution, and the Mayor’s votes did not change the outcome of any decision. It is also important to note that the City’s resolution and the Steering committee recommendations are advisory to the Metro Council, which is actually the party that takes the action to identify project alternatives. Finally, all of these decisions remain preliminary until issuance of the FEIS and the Record of Decision by the Federal Transit Administration.

**B-008-004**

While a very important consideration for the Portland-Milwaukie Light Rail Project overall, funding did not drive the LPA alignment selection through Milwaukie. The public outreach-based processes described in response B-008-002, above, led to the alignment selection through Milwaukie. The outreach was conducted in direct response to concerns raised about the 2003 LPA alignment.

**B-008-005**

Alternative modes to light rail between Portland and Milwaukie were evaluated in the process of determining the 2003 LPA alignment for the South Corridor Project. The evaluation is documented in South Corridor Project Transportation Alternatives, SDEIS, December 2002 (2002 South Portland-Milwaukie Light Rail Final Environmental Impact Statement Appendix P Public Comments and Responses 2010
Corridor SDEIS). Chapter 2 of the 2002 South Corridor SDEIS describes all mode alternatives evaluated: Bus rapid transit and Busway in addition to light rail in the Portland to Milwaukie and/or I-205 corridors. Chapter 3 presents the environmental analysis; Chapter 4, the transportation analysis and Chapter 5, the financial analysis. From these analysis results, the 2003 South Corridor Project LPA was selected following extensive public outreach and local jurisdiction public hearings. The 2003 South Corridor Project LPA called for light rail in both the Portland to Milwaukie and I-205 corridors.

Prior to starting the SDEIS, a number of transportation alternatives were examined including river transit, high occupancy vehicle lanes, high occupancy toll lanes, radial commuter rail, circumferential commuter rail, busway, and bus rapid transit. Consideration of these alternatives was documented in the 2000 South Corridor Transportation Alternatives Study (SCTAS). The 2000 SCTAS was prepared as a step in the evaluation of alternatives required by the National Environmental Policy Act. As required by NEPA, the alternatives analysis process provided the opportunity for public review and comment.

**B-008-006**

Bus alternatives have been examined in previous analyses, including *South Corridor Transportation Alternatives Study Evaluation Report* (1999), *South Corridor Evaluation Summary* (2000), and the 2002 SDEIS. The LPA decision in 2003 selected light rail as the preferred mode over bus alternatives.

The 2008 SDEIS studied a No Build option which includes improvements to existing bus service. The full comparison against all criteria are included in the SDEIS and summarized in Chapter 5. Of note, on page 5-30, on Table 5.2-9, cites the cost per boarding ride for nine alternatives, including the No Build, Bus and various light rail alignments. The No Build is the most costly.
The portion of Kellogg Creek known as Kellogg Lake provides rearing and migration habitat for fall-run Lower Columbia River (LCR) Chinook salmon, LCR coho salmon, cutthroat, and winter-run LCR steelhead. These Evolutionarily Significant Units (ESUs) are listed as threatened, not endangered, under the federal Endangered Species Act (ESA). Critical habitat for LCR steelhead and LCR Chinook salmon has been designated in Kellogg Lake. The project has minimized negative effects in Kellogg Lake while providing for riparian enhancement and restoration along the shore.

The project has completed a biological assessment and conducted formal consultation with the National Marine Fisheries Service. The project determined that activities would likely adversely affect listed ESUs and adversely affect critical habitat. The National Marine Fisheries Service prepared a biological opinion that agreed with these findings. Furthermore, they determined that the project would not jeopardize the continued existence of any ESU nor adversely modify or destroy critical habitat.

These findings are discussed in Section 3.8 of the FEIS and further documented in the Biological Assessment.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

From: Neil <neilh@darkhorse.com>
To: <jenn.tuier@oregonmetro.gov>
Date: 5/17/2008 10:04 PM
Subject: In support of Light Rail from Portland to Milwaukee

I am writing to support the light rail line from Portland to Milwaukee. Dark Horse Comics has been located on Main St. in Milwaukee since 1988. Over this period, I have watched the gradual erosion of retail in the downtown core. I do not want to see downtown become an urban blight.

Milwaukee City Council has heard expert testimony detailing the access problems for the downtown and why a thriving retail downtown core will be difficult without mass transit. Natural and man-made barriers - the river, Kellogg Lake, and Hwy 234 make it inconvenient to go to downtown Milwaukee. As people move to the area, we will see more and more cars on McLoughlin and 234, making it harder for cars and buses to navigate these roads. Light rail will be immune to the congestion of the streets. A Park Avenue park and ride station would interject many of the cars destined to travel down McLoughlin through Milwaukee to Portland. A downtown light rail stop would make it much easier for customers to reach downtown Milwaukee. Customers have choices. Convenience is one of them.

Since downtown Milwaukee is a small area without parking buildings, parking for both consumer and employee is difficult. A light rail line will provide a convenient solution for both groups. There are currently many retail spaces for rent in Milwaukee. Retailers do not have enough confidence in the downtown area to make the required investment to open a shop. Retailers are looking for locations with consumer traffic to ensure their success. Milwaukee cannot offer that today.

Many people are feeling the pinch at the pump. The news repeatedly mentions how rising ridership of mass transit correlates with the rising price of gas. Dark Horse's 120 employees are part of this trend. We have had increasing numbers of our employees take advantage of the subsidy provided to them by Dark Horse for Tri-Met passes as gas prices rise. Now that the weather is better, we also are having increasing numbers riding bikes to work in addition to the usual several year around riders. I have employees asking each week about when light rail will be coming to Milwaukee. When I tell them that it is still a few years away, I get comments ranging from "I wish they would hurry up" to "I can't wait - I use it in Portland all the time" to "I always take it to the airport for trips."

The June 15, Sunday Oregonian, had a major article about the expected metro region population explosion. If the population doubles in the next fifty years, I wonder how people will be able to get around in Portland/Milwaukee without a substantial investment in light rail and other mass transit options. The particular beauty of the Milwaukee alignment is that it has a major portion of the line following an underutilized existing railroad track. The light rail will not have to compete with cars for travel lanes.

Neil Hankevsky
Executive Vice President
Dark Horse Comics, Inc.
Direct Line 503-605-2320
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Lastly, we all know that downtown has a parking problem. Light rail would help to eliminate some of the parking needed to support a vibrant downtown community.

Please continue your support of Light Rail.

Thank you.

Neil Hankerson
Executive Vice President
Dark Horse Comics, Inc.
Direct Line 503-905-2320

PUBLIC RECORDS LAW DISCLOSURE:
This e-mail is a public record of the City of Milwaukie and is subject to public disclosure unless exempt from disclosure under Oregon Public Records law. This e-mail is subject to the State Retention Schedule.
As identified in the Locally Preferred Alternative examined in the FEIS, the Harold Station remains a future station and is not eliminated from the project. However, it does add substantial costs to the project and ridership estimates did not warrant its development. The Portland to Milwaukie Light Rail ridership is projected to decrease by over 200 daily riders with the addition of the Harold Station, primarily due to the changes in overall travel times over the length of the corridor. The model responds to the delay and longer travel times for all riders when the train stops at Harold. This would encourage some riders from other stations to choose different modes such as auto or bus, or to choose other trips. This loss would not be offset by ridership at the Harold Station.

The Travel Demand Forecasting Methods Report contains a full description of the model and all factors influencing ridership, including trip purpose, demographic information, and the characteristics of other travel choices that are available. This document is referred to in Appendix C: Supporting Documents. All supporting documents are available upon request. The model is reviewed by the Federal Transit Administration and by modeling professionals from academia, consulting firms, and MPO agencies.
June 19, 2008

Mr. Mark Turpel, AICP
Portland-Milwaukie Light Rail Project SDEIS Manager
Metro
600 NE Grand Avenue
Portland, OR. 97232

Re: Portland-Milwaukie Light Rail Project Supplemental Draft Environmental Impact Statement

Dear Mr. Turpel:

Mason Supply Headquarters - Portland, Oregon

Mason Supply is a Portland family-owned and operated business, which was established in Portland in 1926. Today our Portland site, at 2637 SE 12th Avenue, which is our headquarters for 14 facilities in Oregon and Washington, employs about 30 people. (At this location we also own the properties at 2527-2529 SE 12th Avenue, 2516 SE 11th Avenue, and 1346 SE Clinton, which are part of our headquarters operation.)

Our Employees

Our Portland employees, and all our employees, earn family-support wages. Company wide we employ 150 people for a variety of jobs from truck drivers and laborers to draftsmen, project managers, and sales professionals. Mason supplies the equipment to build massive concrete construction components, such as support columns, bridge girders, and tilt-up walls for retail and office buildings. We also provide a variety of concrete products for small-scale projects.

Purpose of This Letter

We would like to remain in business at our Portland headquarters. All of our current interior and exterior space, and all vehicle access and parking, we currently have at our Portland headquarters, is essential to our operation.

We are a growing business and a fundamental commercial/light industrial operation in Portland's Central Eastside Industrial District (CEID). Our existing central location is vital for our success. We have spent decades developing our facility and customer base at this site. Finding another location that meets our needs would be extremely difficult. We want to ensure that our business is allowed to function, including the necessary vehicular access to and from our site, as we do currently.

We support the goals and objectives of the Portland-Milwaukie Light Rail Project. One of the stated project "Objectives" in the SDEIS is: "Promote regionally agreed upon land use patterns and development in the corridor."

Our property on the west side of SE 12th is zoned, and designated on Portland's Comprehensive Plan, Central Employment, and on the east side of SE 12th the zoning and plan designation is General Employment. Our land use is allowed by these zoning and plan designations. In order for our business to continue to operate at this location, the
Thank you for submitting your comments for consideration. Currently the plans for the 2008 Locally Preferred Alternative do not show any impact to SE 12th Avenue north of SE Clinton St, so no on-street parking should be impacted. Current plans show this property on SE Clinton Street will not be impacted as an acquisition.

The SDEIS and FEIS address traffic and circulation in Chapter 4.

Temporary impacts to local access and traffic circulation are unavoidable during construction of a major project like this light rail project. Interruption of regional transportation facility operation is also possible. These potentials are acknowledged in SDEIS Section 4.3. The section goes on (Section 4.3.4) to list potential measures applied in advance of and during construction to address such impacts. Further information is available in the FEIS. Specific plans to mitigate construction impacts and to engage affected businesses, neighborhoods and individuals in the planning dialogue will be developed during the final design and construction phases of the project.
Thank you for submitting your comments for consideration. Chapter 4 of the FEIS provides updated information on TriMet's approaches to addressing the project's long term and construction period impacts to parking. The Portland-Milwaukie Light Rail Project will leave 24 parking spaces on the east side of SE 17th Avenue from just north of SE Center Street to SE Mall Street. A total of approximately 160 on-street parking spaces along SE 17th Avenue will be removed between SE Powell and SE McLoughlin Boulevards. The parking impact analysis in Chapter 4 of the SDEIS finds that the parking loss along SE 17th Avenue would be offset by a combination of reduction in parking demand due to business displacements and greater utilization of remaining on-street parking spaces within one block of the light rail line. In addition, the provision of two light rail stations along SE 17th Avenue would also have the potential to reduce long term parking demand.

A current survey shows about 95 on-street parking spaces (of the 230 available spaces) being used within 1,000 feet of the Rhine Street Station, and the project would impact 50 on-street parking spaces around the Rhine Street Station. The current usage represents only 53% of the 180 available spaces in the future.

A current survey shows about 70 on-street parking spaces (of the 135 available spaces) being used within 1,000 feet of the Holgate Boulevard Station, and the project would impact 55 on-street parking spaces around the Holgate Boulevard Station. The current usage represents 88% of the 80 available spaces in the future.

Construction of the Portland-Milwaukie Light Rail Project along SE 17th Avenue will temporarily and unavoidably disrupt local business access. Pedestrian access to businesses will be maintained using temporary measures and traffic on SE 17th Avenue will be re-routed during some
portions of construction. Paralleling project construction will be an intensive public outreach program designed to keep businesses and people needing to travel to this area informed about temporary changes in street circulation, parking, and loading.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.

See response B-014-001, above.
Thank you for submitting your comments for consideration. The southernmost point of the Portland-Milwaukie Light Rail Project is Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is not proposed as part of this project. However, the region’s most recently updated High Capacity Transit Plan, and element of the Regional Transportation Improvement Plan, has identified a future high capacity transit connection to Oregon City, but no decision on a route or technology has yet been made and would be conducted in a separate process than this project level EIS review for the Portland-Milwaukie Light Rail project.

Chapter 2 of the FEIS and a Appendix L provide further background on how the region has confirmed light rail as the most appropriate transit mode to serve the corridor. Chapter 1 of the FEIS provides information on the reasons why the project has been proposed, which is not only to serve current transportation needs, but also to meet long range land use, economic, environmental quality and transportation mobility objectives.

Please see Section 3.16 for a discussion of safety and security; the FEIS analysis does not support a conclusion that crime would increase in your area as a result of the project.
May 12, 2008

Metro
710 NE Holladay Street
Portland, OR 97232

Attn: Ms. Bridget Wieghart Project Manager

Re: Potential Milwaukie Light Rail Alignment Environmental Impact Study

Ms. Wieghart:

I am writing to provide information for the above-referenced study. Harder Mechanical Contractors, Inc. currently operates a pipe fabrication shop at 2323 SE Hanna Harvester Drive in Milwaukie. The building was purchased in December 2000. A very significant financial and labor investment was made in renovating the old Cornell Pump Manufacturing Company property into a modern fabrication shop. Large cranes and pipe handling equipment were modified and upgraded, and we erected a class-100-classroom fabrication area which is one of the largest in the Northwest. This allows us to fabricate pipe and other items for the most sophisticated high-tech companies in the world including Intel. To create an environment for fabrication with virtually no particulates or impurities in order to meet the exacting standards for the high-tech industry is a complicated and expensive proposition. Relocating such a facility will also be extremely difficult, if possible at all, and very expensive.

The Harder fabrication shop employs between 40 and 60 union craftsmen. The current hourly wage for a journeyman is $34.99 plus fringe benefits of $16.54 with foremen and supervisors receiving even higher pay. We have 57,000 square feet of warehouse/shop plus 8,700 square feet of office space which houses the offices of up to 10 administrative people including safety officers, quality control people, project engineers and computer aided design specialists. These are also well-paying jobs by local standards. It will be difficult, at best, to relocate anywhere near the present location, and this current economic benefit to the city of Milwaukie, Clackamas County and, probably, even the State of Oregon will be lost.

Our former fabrication shop was in Vancouver, Washington at the Columbia Industrial Park. We looked for a place to relocate for several years before finding the building in Milwaukie. It is very difficult to find suitable property due to the industrial nature of the work which creates a certain amount of noise, truck traffic, etc. Our shop in Milwaukie is ideal and we
Thank you for submitting your comments for consideration, and for providing more detailed information on Harder Mechanical Contractors’ operations. The Tillamook branch alignment option was selected as the Locally Preferred Alternative, therefore the property will not be displaced. See FEIS Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

Very Truly Yours,

Harder Mechanical Contractors, Inc.

[Signature]

James E. Stilwell
Corporate Treasurer
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

B-017-001
Just a note to show support for the light rail plan as approved last August. Light rail is an important adjutant to the metro area’s transportation needs, and the rail system is certainly the most cost effective and least disruptive plan to bring light rail through Milwaukee. I have no doubt that the addition of rail transit will enhance downtown Milwaukee and help alleviate automotive commuter congestion, provide another less-expensive transportation alternative in a climate of skyrocketing gas prices, and contribute to a cleaner environment, lower carbon footprint, and more sustainable economy.

Thank you for your time.

Ches

Chris Warner
Senior Editor, Dark Horse Books
P: (503) 652-8615
F: (503) 654-9445
June 20, 2008

Mark Turpel, AICP
Portland-Milwaukie Light Rail Project
SDEIS Manager
600 NE Grand Ave
Portland, Oregon 97232

Linda Gehrke
Deputy Regional Manager
Region 10
Jackson Federal Building, Suite 3142
915 Second Avenue
Seattle, WA 98174

SUBJECT: SOUTH CORRIDOR, PORTLAND-MILWAUKIE LIGHT RAIL PROJECT, SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

Mr. Turpel and Ms. Gehrke:

The Portland Spirit has been an active participant in the Portland-Milwaukie Light Rail Project for many years. Portland Spirit representatives have participated in the process since its inception and have been actively involved with the South Corridor Steering Committee, the Citizen Advisory Committee, and the Willamette River Crossing Partnership. We appreciate this opportunity to provide comment on the South Corridor, Portland-Milwaukie Light Rail Project Supplemental Draft Environmental Impact Statement (SDEIS).

Our comments focus on four aspects of the SDEIS:

1. Support for selection of the refined Porter-Sherman alignment as the Locally Preferred Alternative (LPA) for a new Willamette River crossing.

2. Deficiencies of other alignments for a new Willamette River crossing considered in the planning process.

3. Issues related to bridge design and function that we believe should be addressed in selection of an LPA and in preparation of a Final EIS.

For Excellence in River Cruise Dining
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

For many of the same reasons cited, the refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.
The current design of the Willamette River bridge allows for 77.52 feet, which provides clearance in excess of 75 feet as recommended in the comment. The FEIS and Appendix O of the FEIS include updated information on the effects of the bridge on river navigation. They also identify the short term and long term impacts related to the ability of the Portland Spirit to maneuver into its dock, and identify TriMet's mitigation strategy for working with the Portland Spirit to minimize the impacts. See Appendix O, Navigation, Appendix M, Mitigation Plan, Section 4.1, Property Acquisitions and Displacements, for more information.
Temporary impacts to local access and traffic circulation are unavoidable during construction of a major project like the Portland-Milwaukie Light Rail Project. Interruption of regional transportation facility operation is also possible. These potentials are acknowledged in SDEIS Section 4.3. The section goes on (Section 4.3.4) to list potential measures applied in advance of and during construction to address such impacts. Further information is available in the FEIS. Specific plans to mitigate construction impacts and to engage affected businesses, neighborhoods, and individuals in the planning dialogue will be developed during the final design and construction phases of the project.

The build alternatives in the FEIS do not have a light rail crossing (or gates) at the SW Moody Avenue and SW River Parkway intersection and would have no worse traffic conditions than the No-Build conditions at this intersection.

The FEIS includes a full traffic impacts analysis of the SE Powell Blvd./SE 8th Avenue intersection for AM and PM peak hour traffic. In addition, the build alternatives carried into the FEIS do not have buses from the new transit bridge traveling south on SE 8th Avenue to access SE Powell, and therefore would not require a signal at SE Powell Boulevard/SE 8th Avenue for buses turning left onto SE Powell Boulevard.

Chapter 2 and Appendix L of the SDEIS and FEIS provide a detailed examination of the routes that have been identified to serve the projects purpose and need. Service connecting to downtown Portland is integral to the ability of the project to meet the purpose and need. Still, subsequent to the publication of the SDEIS in May 2008, the project did publicly assess this concept. These results were presented in a publicly
noticed meeting of the Project Steering Committee on June 4, 2008 and representatives of Portland Spirit and Association of Oregon Rail and Transit Advocates were present. It found that it would have substantially less ridership than one crossing the Willamette River. Further, it duplicates transit improvements that are now being constructed as part of the streetcar loop project. As proposed, a southeast Portland alignment would be substantially on elevated structures, a much more costly design to construct than at-grade. Alternatively, if this alignment were placed at-grade, there would be substantial issues concerning at-grade street crossings and displacements. The concept does not meet the project's Purpose and Need and the Steering Committee did not choose to pursue it.

B-018-007
Section 3.2.5 of the SDEIS addressed the economic impacts of the different project alternatives, including the different river crossing design options. The economic impacts analyzed included changes in transportation, potential business displacements, job losses, decreased tax revenues, and potential job gains due to construction and operations of the proposed project. Regarding Portland Spirit, the SDEIS concluded that the SE Caruthers Street options would likely displace the business. The economic analysis also considered the results of the River Users Study regarding navigational clearance. The FEIS has updated these conclusions for the Locally Preferred Alternative in Section 3.2.5., with supporting information provided in Appendix O. Appendix O details the additional project efforts, coordination and analysis that have been conducted to determine a proposed navigational clearance and bridge design that would maintain the reasonable needs of navigation, minimize economic impacts, while also considering other environmental, project implementation and land side land use and transportation objectives.

B-018-008
The FEIS includes discussions of climate change as part of the
cumulative effects analysis for Ecosystems, Air Quality, and Water Resources. In addition, the project has conducted a review of federal guidance and best available science on the effects of climate change on river levels. This information has been summarized in Appendix O to the FEIS, and includes a discussion on the related findings for the river's navigation needs and the adequacy of the proposed navigation clearance to be provided with the new bridge. While climate change is expected to cause rising sea levels and therefore have an effect on tidally influenced river systems, the effects on the Willamette River are more limited. In addition, both the Willamette River and the Columbia River are managed river systems with a system of dams that regulate flows. These factors will help ensure that the reasonable needs of navigation will be maintained with the proposed new bridge.
Thank you for submitting your comments for consideration. The FEIS provides additional information on the project's analysis of the effects of the proposed vertical and horizontal clearances for navigation related to a new Willamette River Transit Bridge (at river mile 13.8). This information is summarized in Appendix O bound within the FEIS, and an additional detailed compilation of all related information is available as a supporting document. These data include a survey of river users and their navigational clearance needs, as well as a field test and meetings with commercial river users, the US Coast Guard and the US Army Corps of Engineers. The currently proposed bridge height of 77.52 feet has been reviewed by technical, advisory and policy committees and has been, after consideration of commercial river users needs, recommended by the technical and policy committees as a height that would accommodate the reasonable needs of navigation. Following the publication of the FEIS, TriMet will apply to the Coast Guard and the Army Corps of Engineers for permits necessary to construct the bridge.
Appendix O of the FEIS includes a river user survey, as well as other information that was used to help assess navigation needs and impacts in the FEIS. The number of vessels listed is that provided by survey respondents. Two companies did not provide exact information about the number of tugs, while seven other tugboats were listed in the river user survey as individual tugboats with distinct attributes.

*Waterborne Transportation Lines of the United States* (2005 edition) lists Combined Forestry and Marine Services as having three tugboats and Larson’s Marine Services is not listed. Larson’s was called and a message left requesting additional information. Combined Forestry and Marine Services is not listed in Portland 2009 (DEX) phone book (white or yellow pages), and the number listed in Waterborne Transportation is a private number that does not identify itself as a business.

**B-019-003**

In addition to the cost of a lift or other movable bridge, another consideration in adding a lift or movable span to the bridge is the resulting loss in transit service reliability. For example, in assessing the use of the Hawthorne Bridge as a possible alignment, this alignment was ultimately rejected in large part because of the delays to transit use as a result of bridge openings as well as the fact that such openings are unpredictable and make keeping a transit schedule not possible.
I'm sorry. I think that there's a direct cost relationship to why many of the bridges on the Willamette are at 50, 60, 70 feet, and not at all at 120 feet. And I think that with the pressure from the city of Portland to have the bridge lower so that they can have and make less of a visual impact, views, with pushing the bridge up to -- well, right now, at 75 feet. I think if there is going to be a fixed bridge, it's going to be more in the area of 90 feet. I just don't see any way around that because not only does a fixed bridge have to take into account current users, it also has to take into account future uses.

And I have brought a picture of -- of a -- one of the newest green ships that's been designed, which I can pass out pictures to the council, but the bridges -- boats are now being designed with big, fixed wings or sails so they collect solar and wind. It's not that futuristic. The National Parks Service has put -- has put out a requirement for the Alcatraz run in San Francisco to be an all-solar, wind-powered, 600-passenger boat that has to be in place in the next two to
The bridge height has been changed to be 77.52 feet, and passage of boats is assessed in Appendix O of the FEIS.
B-019-005
The bridge height is now at 77.52 feet and includes a pedestrian path. A complete pedestrian network is vital to serving transit service. In addition, should there be a transit service incident, it may be that evacuation of a vehicle is needed and transit riders could include the disabled as well as pedestrians and bicyclists. When providing a pedestrian path, the project is obligated to meet the requirements of the Americans with Disabilities Act.
As part of the FEIS, bus routes are no longer under consideration to turn eastbound on SE Powell Boulevard from southbound SE 8th Avenue, and therefore no mitigation would be required.
work our way down through downtown onto I-5
south. If we put a bus turn lane on 8th, there
will not be enough turn radius for trucks to
make the U-turn. Basically, it's a U-turn on
Woodrow, onto 8th, and up onto the Ross Island
Bridge.

I encourage you to continue to look for
ways to run the buses farther down through the
district, deeper in 17th, 19th. I'm not sure
where. But I can assure you that the Central
East Side will fight very hard to maintain its
limited ability to maneuver trucks and our
employees in and out of our district. The 8th
Street light is a very important element for us
that should not have a stoplight on it.

Thank you.
COUNCIL LIBERTY: Thank you.
Any questions? Comments?
Mr. Grandy.

NEAL GRANDY: Hi. Thank you. My name is
Neal Grandy. I live in Oak Grove, which is
Southeast Milwaukie.
I would simply like to present a more
personal perspective as an adjunct to the
communal impact that has been addressed so far.
It's not easy being GREEN
But it will become mandatory.

Companies exploring "green" solutions now—such as this solar and wind-powered hybrid electric ferry for Circle Line—will have a leg up on the competition.
South Waterfront is where we hope to meet that demand and we hope to meet that healthcare crisis in the future. That's what the Schnitzer campus is there for, to help address the healthcare workforce crisis that we see coming and in some professions is here already.

The alignment recommended by the Willamette River Partnership offers, in our view, the greatest benefit to the greatest number in our community. OHSU is one of the community partners. We were asked to participate in this process. We did. We feel that the outcome came to the right place. There's a whole lot of things that need to be done yet to make this district work and to enable us to help carry out our mission. But we think that the alignment that's before you does the best job and we support it.

COUNCIL LIBERTY: Thank you.
Is it Agosti?
ELIZABETH CLARK AGOSTI: Agosti.
COUNCIL LIBERTY: Agosti.
ELIZABETH CLARK AGOSTI: I'm Elizabeth

Beovich Walter & Friend
Clark Agosti. I'm a director of the Holman Distribution Center of Oregon, originally Holman Transfer Company, which has done business for over 40 years at 2300 Southeast Beta, which is on Main between Milport and Ochoco streets in Milwaukie. It's a family-owned business that has been headquartered here since the mid '80s, served hundreds of local, regional and national accounts, and public warehousing storage, handling and freight transport. Operations are based out of its 200,000-square foot warehouse, which is currently leased to a light manufacturing and distribution lessee.

I don't relish opportunities for public speaking, but I feel irresponsible to pass up a chance to at least briefly address some concerns for the alignment options held by members of the North Milwaukie industrial area.

I've tried to follow the Regional Light Rail Planning process, and the Metro, Tri-Met, city of Milwaukie and other jurisdictions have been really helpful in presenting great information, and they've shown an interest in acquainting themselves with our operations.
I guess the central principle I conveyed to them I'll reiterate here, which is that a major issue for my company and its industrial neighbors is that the -- is the -- that the under -- an issue that the underlying industrial zoning designation is arguably designed to protect is the need for flexibility in these operations over time to protect flexibility of these warehouse and distribution operations. Even accurate human and traffic analyses may not be able to address the impacts for warehouse and distribution businesses that are characterized by changing accounts, changing inventories, and changing shipping patterns over time.

Our Milwaukie facility has demonstrated these changes. Our truck staging activity can increase or decrease as a function of the accounts and the tenants that occupy our -- our facility. The building function for many years for food storage and handling and the servicing of those accounts often utilized in the -- in the course of -- of the same day or the same week all of our 40 truck bays with 100 daily outbound orders regularly shipping at peak
Thank you for submitting your comments for consideration. The Locally Preferred Alternative includes the Tillamook Branch alignment, not the 2003 LPA. For more detailed responses to the issues you raise, please see our response to your written comments (comment document B-001).
want to emphasize the need to protect
flexibility in this industrial area.
    Thanks so much.
    COUNCIL LIBERTY: Thank you.
    Questions, comments?
    Thank you.
    I received an e-mail from Eileen Murray
that I would like to make part of the record of
this hearing. Today, this morning, 10:24 a.m:
I support the building of the Harold Street
station. It will bring property values up and
encourage quality development and restoration
of this already good neighborhood. Don't
exclude the plans for Hill Street, please.
Eileen Murray.
    Is there anyone else who would like to
testify that has completed a card?
    If not, that concludes the public hearing.
    Any comments from members of the steering
committee? We're adjourned.
    Oops, I'm sorry. I wanted to correct
something I said earlier, which is the meeting
dates for the city of Portland. Let me give
you those dates again.
    July 1 meeting is a work session; the
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA would accommodate construction of a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the FEIS for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure, including a pedestrian bridge, and bus routing options that would support a station at Harold Street will be evaluated. Chapter 4 provides information about bicycle access.
Thank you for submitting your comments for consideration. The Purpose and Need statement in SDEIS Chapter 1 provides the basis for defining the issues that need to be addressed in the SDEIS and establishing criteria by which to evaluate alternatives designed to address the Purpose and Need.

Following is the definition of high capacity transit used in the Portland metropolitan area from the 2035 Regional Transportation plan, scheduled for adoption in June 2010:

High capacity transit includes any form of public transit that has an exclusive right-of-way, a non-exclusive right-of-way or a possible combination of both. High capacity transit vehicles make fewer stops, travel at higher speeds, have more frequent service and carry more people than local service transit such as typical bus lines. High capacity transit includes options such as light rail, commuter rail, and bus rapid transit.

Numerous bus alternatives including bus rapid transit and busway were reviewed in pervious project phases and did not meet the project purpose and need as well as light rail. Chapter 2 and Appendix L of the SDEIS summarize these findings. In addition, the SDEIS included a No Build alternative, which includes increased bus service. It did not meet the Purpose and Need of the project as documented in Chapters 4 and 5 of the SDEIS. Chapter 4 Section 4.2.2.3 describes the transit volumes anticipated to be carried on the Willamette River Bridge.
The project must meet Federal Transit Administration New Start standards which include meeting or bettering a cost-effectiveness rating, a type of benefit/cost analysis. The FTA cost-effectiveness method is a very rigorous method that is overseen by the FTA, and must meet their requirements for assumptions and data and results are examined in detail by the FTA. The Portland-Milwaukie Light Rail Project has received a “Medium” cost-effectiveness rating from FTA using this method. The term “fiscally responsive” in the project Purpose and Need is meant to cover the wide range of fiscal concerns a project could have - from meeting FTA cost effectiveness criteria, to considering the specific financial requirements various partners funding the project may have, keeping project costs low. The term "fiscally responsible" could mean the same thing, but could imply a more limited definition and leads to the question, “to whom?” Since there are a number of project partners, the broader term is appropriate. The language has been in the project Purpose and Need for a number of years, through several scoping and comment periods.

Modification of the 99X bus is part of modeled transit network for the SDEIS analysis. Any final decisions on transit routing will be done by TriMet prior to opening the light rail line.

Section 3.2 of the FEIS describes how the project is consistent with a range of regional plans and policies, including the 2040 plan, and the park-and-ride facilities are an important component of maximizing the environmental, land use and transportation/mobility benefits of the project. The LPA Phasing Option would initially reduce parking capacity at Tacoma and Park Avenue Stations, which may in the future be developed to the full capacity identified in the LPA to Park Avenue. These estimates are reduced from the levels previously proposed in the Portland-Milwaukie Light Rail Final Environmental Impact Statement Appendix P Public Comments and Responses 2010
SDEIS. These park-and-ride lots provide a limited but important opportunity for riders to access the regional transit system. The stations are located along an existing major highway transportation corridor and support plans to redevelop the lower-density uses along the corridor, reduce reliance on the automobile, and encourage transit-oriented development. Park-and-ride stations play an important role in helping to provide access to high-quality transit service for riders who would not otherwise receive convenient or competitive transit connections to their destinations. Once on the system, riders can use transit to access destinations within centers and along corridors already served by the regional system, which is also consistent with the regional land use vision. The stations remain well within the boundaries of the urban growth area, and Metro's modeling information shows the majority of the riders would be traveling relatively short distances to reach stations. Finally, use of transit via park-and-ride lots comes at a premium—the added cost of owning and/or operating a car to reach the park-and-ride lot—in addition to the transit fare.
Thank you for submitting your comments for consideration. The light rail project will provide bicycle storage facilities at stations including the Clinton Street Station and the project includes numerous bicycle and pedestrian improvements including two 14-foot paths on the Willamette River Bridge, new bicycle lanes on SE 17th Avenue, and the new bridge over SE Powell Boulevard. The LPA will also include rebuilt pedestrian and bicycle connections over the Union Pacific Railroad track in SE Portland. TriMet will coordinate bus service to provide access to stations wherever possible.

Thank you for your suggestion supporting retail adjacent to the Clinton Station while maintaining the industrial character of the area.

The light rail project relies on existing zoning to estimate future growth, but the scope of the project does not include rezoning or redevelopment proposals. However, fixed-rail projects are known to stimulate more intense development or redevelopment where the zoning allows. The City of Milwaukie and the City of Portland set the zoning for their respective communities based on the regional need for housing and employment capacity outlines in the Urban Growth Report and 2040 Regional Plan. No specific changes are proposed in the SDEIS or the FEIS. Any potential changes to zoning or to comprehensive plan designations would be required to go through the local jurisdictions land use judicial or quasi-judicial land use approval process.

In a concurrent project during the same time as the SDEIS, Metro, TriMet, and their partners conducted a station area assessment to help maximize the ability of the light rail project to help support the region’s existing goal for livable communities. The “Portland to Milwaukie LRT Station Area Best Practices Assessments and Recommendations Report” (Draft, September 2009) has recommended actions for some of
the proposed light rail station areas. However, local governments control
the decisions about land use, including zoning and specific development
approvals. This report recommends that TriMet, Metro, and the City of
Portland develop a concept development plan for the area immediately
adjacent to the Clinton Station extending west to the Willamette River to
fully understand the redevelopment opportunities at the station.

C-003-003
As part of the FEIS, the Transportation Impacts Results Report shows an
impact to about 25 on-street parking spaces and 20 off-street parking
spaces around the Clinton Station. There are about 650 on-street
spaces available within 1000 feet of the station, and based on a survey
from June 2009, less than two-thirds of those spaces are currently being
used.

The loss of approximately 20 off-street parking spaces between SE 11th
Avenue and SE 12th Avenue south of SE Clinton Street would be
addressed through compensation to the property owner. Demand would
also be reduced through the provision of a light rail station.

C-003-004
Thank you for your suggestion of a strategy to accommodate growth into
the station area plans in Hosford-Abernethy.

"Portland to Milwaukie LRT Station Area Best Practices Assessments
and Recommendations Report" (Draft, September 2009) has
recommended actions for some of the proposed light rail station
areas. The recommendations of this assessment act only as guidance.
Local governments control the decisions about land use, including
zoning and specific development approvals. The Station Area
Assessment recommends several actions regarding potential
redevelopment in this neighborhood, and in particular around Clinton
Station. Actions include:
• Coordinate potential land use changes with recommended Inner Powell Boulevard Streetscape Plan transportation improvements along SE Powell by reconsidering existing planning and zoning designations.

• Initiate a concept development plan to explore the range of development and access possibilities for the station area.
Thank you for submitting your comments for consideration. The light rail project was endorsed by all participating jurisdictions in summer 2008. The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for HCT and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City.

The Tillamook Branch alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.
Thank you for submitting your comments for consideration. Analysis of light rail alignment options in Milwaukie dates back to 1993:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002
- Portland-Milwaukie SDEIS, 2008

The Portland-Milwaukie SDEIS Appendix L presents a chronicled summary of alignment studies. Routes studied are shown in Figures L-5 and L-6.

The LPA alignment is the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the PMLRT Project Purpose and Need. For additional detail, see Chapter 2 of the FEIS.

Analysis of alignment and terminus options through Milwaukie for the
Portland-Milwaukie Light Rail Project have been conducted and documented as described in the SDEIS on pages 2-35 through 2-41. The analyses were based on criteria utilized in the SDEIS that are key to distinguishing the comparative impacts and effectiveness of the options. It also considered recommendations about the alignment through Milwaukie by City staff, the Planning Commission, City Council, neighborhood leaders and interested citizens. The Locally Preferred Alternative decision was the product of this process. The LPA process and decision is detailed in Chapter 2, Section 2.4 of the FEIS. The LPA best meets the Purpose and Need for a major transit investment in the Milwaukie-Portland corridor. This process fully complies with FTA major capital project development process requirements. Approval of the project to enter the preliminary engineering phase of project development is the FTA’s acknowledgment that conceptual design, preparation of the SDEIS and selection of the LPA have complied with FTA and NEPA requirements.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative to Park Avenue follows an old railroad right-of-way that predates most of the existing adjacent development. This railroad right-of-way is still under current use as a transportation corridor. The SDEIS noted that the Oregon Pacific and Union Pacific Railroads & Trestle, near Kellogg Lake and through downtown Milwaukie is potentially eligible for the National Historic Register. The choice of the Locally Preferred Alternative does not create a new physical barrier through Milwaukie neighborhoods; it uses an existing transporation corridor.

The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety
During preliminary engineering, project staff held “pre-diagnostic” review of the intersections with the Federal Railroad Administration (FRA), Union Pacific Railroad (UPRR), Portland and Western Railroad, ODOT Rail, City of Portland, and City of Milwaukie staffs to discuss and refine designs of the shared crossings and to incorporate the appropriate supplemental safety measures in order to qualify for quiet zone consideration. The cities of Portland and Milwaukie are supportive of these supplemental safety measures and have indicated that they will support the request for the quiet zone.
C-006-004
Queuing of vehicles at the light rail crossing at SE Harrison Street was reported on as part of the SDEIS. However, the FEIS will look at queuing at SE Monroe and SE Washington as well as and SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay at the light rail crossings on SE Washington Street and on SE Monroe Street is between 6 and 12 seconds during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds. Therefore, unlike the delay due to freight trains, no vehicle would ever be delayed by light rail longer than 50 seconds. See the FEIS Transportation Impacts Results Report for more information.

C-006-005
Metro has evaluated the ridership potential of extending light rail to Milwaukie and Clackamas County. Demographic data is available through varying sources. For each EIS, we update the current demographics we use to be current information from the census. For future demographic projections, we calculate the amount of people who will be living and working in different areas. For the Portland-Milwaukie Light Rail Project we calculated this for the year 2030. Individual cities and counties provide us with their zoning and comprehensive plans. Based on this data, the assumed population and employment growth of the region is distributed accordingly. This information is then used for our 2030 modeling and the assumptions of land use. In addition, the federal government has rigorous standards to make sure that the projects we build are cost effective. We are required to pass the Transportation User Benefit test, which calculates the cost per rider. The more current and
In addition, from 2008-2009, Metro conducted a study, called the High Capacity Transit Study, to investigate where the Metro region should invest in High Capacity Transit and in what priority order. High Capacity Transit might include light rail, bus rapid transit, or commuter rail. In June/July 2009, the Metro Council and JPACT adopted by resolution No. 09-4052 the High Capacity Transit Plan. Public workshops, stakeholder interviews and review of numerous past regional transit planning efforts were considered in developing a “long list” of 55 potential regional HCT corridors to be studied. The plan used screening criteria to analyze over 55 potential corridors to determine a prioritized set of 13 corridors. The routes that you mention in your comment response were studied in the list of 13 corridors. These include: Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, and Clackamas Town Center to Washington Square in the vicinity of railroad ROW/Hwy 224. Then, Metro worked with local jurisdictions and regional partners and TriMet to develop and refine a set of evaluation criteria to be used to evaluate and prioritize the screened HCT corridors in the fall of 2008 and early 2009. Metro and the regional partners dedicated significant resources that enabled the team to conduct a significant level of transportation modeling. This technical analysis, combined with significant public outreach allowed decision-makers to prioritize corridors based on their technical merits and potential to achieve regional values of the citizenry. The regional high capacity transit system tiers and corridors identify near- and long-term regional HCT priorities. Regional HCT system corridors are grouped into one of four priority tiers, along with specific targets and various steps local jurisdictions could follow to advance a project to a higher tier. The four tiers relate to an HCT corridor’s readiness and regional capacity to study and implement HCT projects. Corridors within each tier would be updated with each RTP or
by RTP amendment.

- **Near-term regional priority corridors:** Corridors most viable for implementation in next four years. These corridors include the Portland to Gresham in the vicinity of Powell Corridor, Portland to Sherwood in the vicinity of Barbur/Hwy 99W Corridor, and Beaverton to Wilsonville in the vicinity of WES.

- **Next phase regional priority corridors:** Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented. These corridors include Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, which would be studied in conjunction. Clackamas Town Center to Washington Square in the vicinity of RR ROW is also included in this tier and might run in the vicinity of Hwy 224. Five other corridors are included in this tier.

- **Developing regional priority corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential based on political aspirations to create HCT supportive land uses.

- **Regional vision corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation.

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**C-006-006**

The City Council recommendation on the Locally Preferred Alternative alignment through Milwaukie was properly made following public processes. These two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41 were:

- The Milwaukie Transit Working Group process in 2003
recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

- The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the project's Purpose and Need. For additional detail, see Chapter 2 of the FEIS.

C-006-007
The parking study that was done for the Final Environmental Impact Statement (FEIS) was completed in August, as noted. A review of the latest City of Milwaukie Transportation System Plan also showed a parking study that was completed during August. The FEIS also used an updated City of Milwaukie Parking Inventory that was completed on December 1, 2009. The current parking utilization rates are shown in the Parking Impacts section in Table 6-13 in Chapter 6 of the Transportation Impacts Results Report, a technical report that provides additional information for the FEIS. This report is available from Metro. The SDEIS showed that the light rail project would remove 34 off-street parking spaces (next to the railroad tracks between SE Monroe and SE Washington) and about 12 on-street parking spaces in downtown Milwaukie. The parking impacts have been reevaluated and now show 52 on-street parking spaces being removed by the project. The City of Milwaukie no longer includes the 34 off-street parking spaces in the City's downtown parking inventory, and therefore the FEIS does not include the loss of these unofficial parking spaces as an impact of the LRT project.
Potential parking mitigation alternatives that could be implemented include replacement of on-street parking, parking management strategies and revising parking restrictions.

C-006-008
The 2003 LPA alignment included a station at Southgate. This option was eliminated in favor of the Tillamook Branch alignment through the North Industrial Area of Milwaukie. The Tillamook Branch alignment was endorsed through the 2008 LPA process, which included a recommendation from the Milwaukie City Council as well as participating jurisdictions.

C-006-009
In the FEIS, the Locally Preferred Alternative terminates at SE Park Avenue and has no park-and-ride lot in downtown Milwaukie. The Minimum Operable Segment (MOS) has a 275-space park-and-ride lot near the Lake Road Station in downtown Milwaukie.

C-006-010
Specific funding amounts and sources for all federal, regional and local funds were examined after the SDEIS was published and during preliminary engineering phase of the project. Based on these data, an updated financial analysis has been included in the FEIS in Section 5.1. However, for the purposes of developing an EIS for a project proposal, the ability to confirm funding is not a requirement. Decisions on funding at the local and federal level will be made through separate processes, following the issuance of the FEIS and subsequent final design and project development activities.

C-006-011
The project intends to improve transportation options for residents of Milwaukie, Clackamas County, and the Portland Metro region. The light
rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way which currently accommodates large freight rail vehicles. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones. For more information about the visual impacts, please see Section 3.4 of the FEIS, and for economic impacts on downtown Milwaukie, please see Section 3.2.

An example of a small, thriving downtown with light rail is Hillsboro, Oregon.

C-006-012
Thank you for submitting your comments for consideration. The project Steering Committee was apprised of the variety of public views about light rail in Milwaukie. The committee held a public hearing on June 9, 2008 and received public comment reports at most meetings. Additionally, each project Steering Committee meeting included opportunity for public comment. Prior to making their LPA recommendation, they received all comments collected during the 45-day public comment period. The LPA for the light rail project was endorsed by participating jurisdictions in summer 2008.

C-006-013
The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukee in accordance with Milwaukee Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukee; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukee resolution, and the Mayor’s votes did not change the outcome of any decision. It is also important to note that the City’s resolution and the Steering committee recommendations
are advisory to the Metro Council, which is actually the party that takes the action to identify project alternatives. Finally, all of these decisions remain preliminary until issuance of the FEIS and the Record of Decision by the Federal Transit Administration.

C-006-014

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.
See Section 3.16 for more information on safety and security.

**C-006-015**
The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002
- Portland-Milwaukie SDEIS, 2008

In addition to the discussion in the Portland-Milwaukie SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the
Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
June 23, 2008

Dear Members of the Steering Committee,

As the current Chair of the Brooklyn Action Corps (BAC) neighborhood association, I am submitting this letter in support for the proposed MAX light rail extension between Portland and Milwaukie.

Our neighborhood has a strong history of support for public transportation. In fact, we already have some of the highest transit riderhip rates in the region. The 2000 Census found that about 20% of all trips in Brooklyn are done by using public transportation. With the rapidly increasing price of gas and diesel, this percentage has certainly grown over the past eight years.

The introduction of MAX light rail is highly supported by a vast majority of Brooklyn residents. Most residents support alternative modes of transportation, and see this project as an excellent opportunity for the continued economic investment and revitalization of the neighborhood.

The following proposed stations are of particular importance to the future growth of the Brooklyn neighborhood:

1. OMSI
   This station will provide direct access from Brooklyn to OMSI, the Portland Opera headquarters, the soon to be constructed Portland City Storage facility, and the planned Oregon Rail Heritage Foundation Museum. Just as important, area residents will have improved access to both the Willamette River and the Springwater Corridor Trail.

2. SE Clinton and Gideon
   This station will serve the high number of transit riders that currently transfer bus lines in this area. A station in this area will also support the historic commercial center of Brooklyn at the nearby intersection of Milwaukie Avenue and Powell Boulevard. It will also promote redevelopment of the nearby Northwest Natural property to the west.
Thank you for submitting your comments for consideration. Stations along SE 17th Avenue will be located at SE Holgate and SE Rhine Streets.

The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.

The visual analysis of the LPA showed that visual impacts are expected to be high for residences on 16th Street. Mitigation suggested in the FEIS includes use of elements such as landscaping or fencing to provide a buffer between the corridor and the neighborhood. As the project design is refined, mitigation will also be adapted to each location and incorporated as commitments into the Record of Decision. Section 3.4 of the FEIS details the visual quality and aesthetics. Noise and vibration impacts appear in Section 3.10.
As part of the FEIS, the Transportation Impacts Results Report shows the Locally Preferred Alternative (LPA) has an impact to about 50 on-street parking spaces around the Rhine Street Station. Based on a survey conducted in June 2009, there are about 230 available spaces within 1,000 feet of the Rhine Street Station and the current daytime usage is about 95 spaces. Based on current usage, there would be about 180 available spaces and mitigation would not be required. The LPA also shows an impact to about 55 on-street parking spaces within 1,000 feet of the Holgate Station, and an impact of about 110 off-street parking spaces at the TriMet employee parking lot on SE 17th Street.

Based on a survey conducted in June 2009, there are about 135 available on-street spaces within 1,000 feet of the Holgate Station and the current daytime usage is about 70 spaces. Based on current usage, there would be about 80 available spaces and mitigation would not be required.

The off-street parking lot is currently fully occupied and the loss of spaces due to the project would require mitigation. The Transportation Impacts Results Report states that a parking mitigation strategy will be developed for off-street parking, and will consider other off-street parking locations for TriMet employee parking.

A new light rail and automobile bridge will be constructed over SE Powell Blvd, which will allow TriMet to reconstruct the pedestrian sidewalk connections on the west side to allow for improved pedestrian connections.

A traffic signal is planned for the intersection of SE 17th/Schiller. However, TriMet is also working with the UPRR to relocate their main truck egress to Harold in order to help alleviate traffic concerns at this intersection.
New signals along SE 17th Ave. are planned at Rhine, Center, and Schiller Streets and a signal modification is planned for SE Holgate Boulevard.

TriMet is working with ODOT and the City of Portland whether a crosswalk on the west side of 17th/99E is feasible and a desired addition to the project.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative decision called for the station at SE Harold to be a future station. The alignment will accommodate future construction of a station at SE Harold. The specific design characteristics of pedestrian improvements associated with the station would be determined in a design process for adding the station. The value of and potential for a pedestrian connection to areas east of the UPRR tracks may also be evaluated in the station design process.

Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet's Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD
commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.

C-008-003
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

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To Whom It May Concern:

**C-009-001**

I am writing to support the proposed light rail line to the city of Milwaukie in Oregon. Light rail is very important to our city and our region and it would be very beneficial to have the alignment built. I am supportive of a new bridge over the Willamette River. It is needed for transit to the OMSI district and South Waterfront and that will eventually support a streetcar connection around Portland’s inner core.

I strongly support this project.

Sincerely,

**Dee Walsh**

Dee Walsh
Executive Director

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file://C:\Documents and Settings\tuerk\Local Settings\Temp\XPgprwise\4385A6D0F.png
Thank you for submitting your comments for consideration.

Adequate width: These two pathways are not directly adjacent to a roadway, are physically separated from the transitway by railings and other barriers, and are also not adjacent to developed property. For these reasons, City of Portland standards are not deemed to apply directly.

Design of the pathways on the Willamette River Transit Bridge has evolved beyond the SDEIS depiction, from a multi-use style to a pathway which differentiates the space usage between bikes and pedestrians. The current design, supported by the local bike and pedestrian community, provides for a 14’ pathway on each side of the bridge. The apportionment of that 14’ space has not yet been completely decided.

Height: The bridge height will be the result of negotiations with river users and the U.S. Coast Guard. The current Portland-Milwaukie Light Rail Project goal is a bridge height of 77.52 feet above the river.

Length: Five alignments across the Willamette River were evaluated in detail in the 2008 SDEIS. The detailed evaluation, based on purpose and need, goals, objectives and criteria, included public comments as well as travel time, ridership, costs and impacts. The bridge and approaches, as located in the LPA, will be made as pedestrian- and bicycle-friendly as possible through the preliminary and final design phases.

Access from each approach: Pedestrian and bicycle connections to the bridge pathways from existing and anticipated pedestrian and bike ways at both ends of the bridge will be accessible and in compliance with City of Portland Greenway objectives. The design concept for these connections to the bridge will be worked out during preliminary
engineering and evaluated in the FEIS. Refinement of design concepts will take place during the final design phase for the project.

C-010-002

The current planning for the Willamette bridge includes a CCTV system for security surveillance. Lighting of the pedestrian pathways is planned to promote safety and allow surveillance. Emergency call boxes for public use are not currently included on the bridge. Public phones with emergency 911 access will be located on the platforms at the two adjacent transit stations. Police patrols and other security procedures for this bridge are under development. After the FEIS is completed and final design commences, the safety and security features of the bridge will continue to be defined in further detail.

C-010-003

During preliminary engineering, measures to mitigate bridge construction impacts were developed to a conceptual level and are reported in the FEIS. A key component of the bridge construction phase will be a public outreach program during which schedules for construction activities and measures to minimize construction impacts will shared with all affected and interested business, neighborhood, and citizen groups.
WPC is grateful to David Umsawth of TriMet, who presented the Portland-Milwaukie Light Rail Project.

While some may suggest pedestrians could simply board the Streetcar or MAX to cross the river, WPC believes that it is essential that any bridge crossing the Willamette provide an optimum crossing for pedestrians. Walking is healthy, offers nearly unlimited capacity for people-movement strengthens the identity of Portland and the livability of the region.

WPC believes the bridge will be highly used by pedestrians. WPC is aware that the bridge design currently requires a supportive structure for rail, streetcar and bus in the center; therefore, pedestrian/bike facilities are placed on the outer sides of the bridge. Since a 20’ shared path does not seem possible based on current engineering sketches, WPC recommends adding 2.5’ to both sides of the bridge. The cross section could then include 8’ sidewalk with grade-separated 6.5’ one-way bike lane on both sides of the bridge.

WPC believes a bridge shorter in length and height would be more attractive and safer for pedestrians. A shorter-height bridge would slow bicyclists and therefore provide a safer environment for pedestrians. WPC would be opposed to a bridge any taller than the proposed bridge because it would pose a barrier to travel by pedestrians, especially the young, old and pedestrians with disabilities.

WPC is interested in reviewing more about the pedestrian approaches and security plans for the Willamette River bridge.

Thank you for the opportunity to review the Portland-Milwaukie SDEIS. WPC is interested in reviewing more Portland-Milwaukie Light Rail plans and designs as they become available.

Sincerely,

WPC Board
(Board comments synthesized by Caleb Winter, WPC Board Member)
Thank you for submitting your comments for consideration. A traffic signal at SE 8th Avenue and SE Powell Boulevard has been eliminated from the LPA. Bus traffic will enter the transit way at SE 8th Avenue and depart the east end of the proposed transitway at SE 11th Avenue at SE Clinton Street.
TriMet and the project partners conducted an extensive survey of river users to understand the navigational needs of Willamette River users. The project considered all types of bridge structures, including moveable span structures, as part of the Willamette River Bridge Advisory Committee (WRBAC) effort from the summer of 2008 through the summer of 2009. WRBAC ultimately proposed that the project utilize a cable-stayed bridge type as a result of those evaluations. The project Steering Committee concurred with the cable-stayed bridge type recommendation in the December of 2009. The moveable bridge type scored low on evaluation factors including horizontal navigation clearance, transit ductbank integration, initial and life cycle costs, and transit performance. More information can be found in Appendix O, Navigation.

Guaranteed by both Federal Law under the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (42 USC 4601) as amended and associated regulation in 40 CFR part 24 and Oregon State law, every business that is displaced will receive relocation assistance. That assistance is designed to help relocate a business to a new property of suitable character. The project partners are working with economic development agencies in the affected area and will make resources available to help businesses relocate and reestablish, with an emphasis in retaining jobs within the region. This effort includes Portland Development Commission, the small business program at Portland State University, the state of Oregon, Clackamas County, the City of Milwaukie, TriMet, and Metro, among other partners.
November 19, 2007

Ms. Bridget Wigshart
Metro
600 NE Grand Avenue
Portland, OR 97232

Dear Bridget,

The Central Eastside Industry Council (CEIC) is concerned that Metro proposes constructing a new light rail, Portland-Milwaukie bridge at mile marker 13 (the "OMSI Bridge") across the Willamette River with a height of 65-72 feet above Columbia River Datum (CRD). The eastern edge of the bridge is in our industrial district and we want to protect existing and potential river users interests. This bridge height is unacceptable to us.

Multnomah County proposes to replace the Sellwood Bridge. We support replacing it to 72 feet above Ordinary High Water (OHW).

The CEIC wants any new bridge on the Willamette River to be built with the principle of "no loss of existing river capacity". Therefore, we support the construction of new bridges with a river height of 90 feet above OHW at OMSI and 72 feet above OHW at Sellwood.

The use of CRD for bridge height is obscurc, confusing and underestimates river clearances. All mariners use river chart that indicate OHW for bridge clearances. CRD is about 1.8 feet lower than ordinary low water (OHW), which varies from location to location, is 15-20 higher than CRD. For 10 months of a year the Willamette River runs closer to ordinary high water (OHW). The proposed bridge heights measured by CRD will be 15 to 20 feet lower than if measured by OHW. This is completely unacceptable.

The two proposed low bridges will significantly block access to the upper Willamette to many vessels. The Willamette River has a combination of lift bridges and free standing bridges that provide vessel clearance of 90-120 foot OHW for the lower river up to the existing Sellwood Bridge. The Sellwood Bridge, as the lowest point on the river, should be rebuilt at least to its current height of 72 feet above OHW. The County is proposing a bridge between 65-75 feet (at some unknown datum).

The OMSI Bridge has not been clearly explained and is the most controversial. This bridge, to be located between the Marquam and Ross Island Bridges, will be a fixed bridge with a proposed vertical clearance of about 50 to 57 feet OHW. To the North is the Marquam Bridge with vertical clearances of 120-122 feet OHW and to the South the Ross Island has vertical clearances of 120-90 feet OHW. The CEIC believes that the new bridge should be built with a clearance of at least 90 feet OHW to allow river commerce to continue to have full access to this stretch of the river.
Page 2
Water Datum Letter

Many vessels need the current clearances. Several cruise ships that operate in the Willamette require clearances of more than 65 feet ODW. In the near future taller vessels will require the higher clearances to access as much of the river as they can today. This issue impacts dredges, tugs, pile drivers, sailboats and any river user that needs access to the upper Willamette now or in the future.

The CEIC believes that a vibrant port city should support the varied industrial, commercial and recreational river users, by maintaining existing river capacity.

Sincerely,

Chris J Hammond
Central Eastside Industrial Council
Land Use Chairman

cc: Metro Steering Committee
David Knowles
Commissioner Sam Adams
Stu Kri, PDOT
OMSI District Property Owners
Remember, it is time that matters to people, but now also costs and environment. And in the process, spend less, save the cost of a new bridge, and get more riders. Show on this project concern for both ridership and fiscal responsibility. This, I would call win/win.

Thank you for your attention, and I hope that the fatal effort will be changed before it gets down on the ground like the mall.

COUNCIL LIBERTY: Thank you.

Any questions of Mr. Polani?
Mr. Charles?

JOHN CHARLES: Thank you, Mr. Chairman.
My name is John Charles, president of Cascade Policy Institute, a non-profit, non-partisan research center in Portland, and I have both a professional interest in this as well as a personal interest because I'm a homeowner in Clackamas County, and I happen to like trains. Not this particular proposal, but I have ridden the east side MAX probably 15,000 times in the last 12 years. I am familiar with how rail works as a practical project, not as a theoretical construct.
Thank you for submitting your comments for consideration. Following is the definition of high capacity transit used in the Portland metropolitan area from the 2035 Regional Transportation Plan, scheduled for adoption in June 2010:

High capacity transit includes any form of public transit that has an exclusive right of way, a non-exclusive right of way or a possible combination of both. High capacity transit vehicles make fewer stops, travel at higher speeds, have more frequent service and carry more people than local service transit such as typical bus lines. High capacity transit includes options such as light rail, commuter rail and bus rapid transit.
The Portland-Milwaukie Light Rail Project costs are based on year of expenditure - meaning that they account for the expected cost at the time of construction (years 2011 through 2015) and are considerably different and larger than costs incurred during the years 2000 through 2004. That is, project costs take into consideration between five and 15 years of inflation.

In addition, the project includes a bridge across the Willamette River, a major project element that is much more costly than construction at-grade. This bridge provides a second crossing of the Willamette River and provides a backup light rail transit route should there be any access problems on the Steel Bridge. Accordingly, this project investment improves system reliability as well as project access.
An adopted purpose and need statement for the project identifies transit. The purpose leading to the proposed light rail investment was originally defined by the South/North Corridor Project DEIS in 1998. The purpose and need was updated with the South Corridor Supplemental DEIS in December 2002 and a subsequent South Corridor LPA decision in 2003, and was confirmed in the most recent LPA decision in 2008. The purpose is:

To implement a major transit improvement in the South Corridor that maintains livability in the metropolitan region, supports land use goals, optimizes the transportation system, is environmentally sensitive, reflects community values, and is fiscally responsive.

High Capacity Transit, such as light rail, provides accessibility to pedestrians, bicyclists and those that park-and-ride. Transit provides accessibility to those who choose not to or are unable to drive, such as youths, the elderly and those with disabilities. High Capacity Transit provides higher quality and more reliable transit service to these groups.

To the extent that transit attracts riders who would otherwise be driving a vehicle, especially a single occupant vehicle, the project frees up street capacity for freight movement via various types of trucks.

This comment appears to be based on the City of Portland Auditor’s Office annual resident survey. It is a question posed to City of Portland residents regarding the primary means to get to and from work with a sample size of approximately 3,000. The margin of error is about 1.7%, meaning there may not actually be any reduction in percentage of work commute trips over that period. However, it’s important to note that of the three light rail lines built over this period, two were not designed to significantly effect work commute trips for City of Portland residents. The
Red Line was primarily constructed to serve the airport and most recently, a vacant industrial area east of the airport and thus, added little potential for better serving work commute trips for City of Portland residents over the time period cited. The Westside light rail primarily served Beaverton and Hillsboro, which saw dramatic increases in transit use for work commute trips that would not be reflected in the City of Portland Auditor’s survey. Finally, the Interstate MAX effect on work commute mode split for City of Portland residents is documented rather well, and shows a significant increase in transit riders in the corridor, a reduction of transfers needed to complete trips, and an increase in percentage of transit riders using transit to get to work.

In summary, based on our experience with the Interstate MAX, which is the only line that significantly increases light rail connections between Portland neighborhoods and downtown employment, there was a significant increase in transit ridership (almost double the bus line it replaced), fewer transfers needed to make trips (meaning the light rail didn’t force more transfers), and of this higher number of transit riders, a greater share was using transit to get to work.

C-012-005
The Willamette River bridge provides a path for crossing the river for transit riders using light rail, future streetcar, bus as well as for bicycle users and pedestrians. It provides an alternative to vehicular travel and is much more reliable and allows faster transit service given that it is a dedicated right-of-way. Without viable travel alternatives, one mode will prevail. With multiple modes travelers have more choice and travel is more reliable for all travelers whether they use transit or not as all travelers do not have to use one mode that likely would be highly congested and not nearly as reliable.

C-012-006
The project is working within the bounds of the federal transportation
funding system, which includes competing with all other projects around the country. Projects are rated based in large part on how cost-effective they are based on a calculation that the Federal Transit Administration carefully defines and reviews before choosing which projects to fund.

C-012-007
Roadway speed is not within the scope of the Portland-Milwaukie Light Rail Project. Congestion pricing, high occupancy vehicle and high occupancy toll lanes were studied in previous project phases. Appendix L of the SDEIS and FEIS summarizes the alternatives and why they were not carried forward.
cars out of stop-and-go traffic up to 40,
45 miles per hour, you're reducing the per mile
CO2 emissions by 70, 80, 90 percent. That's
the solution. You have to have a pricing
solution to any of these congestion problems;
that the train investment is simply irrelevant
to most motorists stuck in traffic who are not
going to switch modes, no matter even if you
get bullet trains. It wouldn't matter. It's
not taking them from where they are to where
they want to go, especially in a county like
Clackamas County.

Thank you.
COUNCIL LIBERTY: Thank you.
Any questions?
SUSAN KEIL: Yeah.
COUNCIL LIBERTY: Sue?
SUSAN KEIL: John, that figure that you
gave on Tri-Met losing market share, what were
you referencing specifically?
JOHN CHARLES: The annual auditor's
reports from the Portland City Auditor's Office
that come out in the service accomplishment
reports. They do surveys every year. So I
just went back and looked through the last 10
years of reports. You can also look just for the closer-in, look at the Portland Business Alliance. They do very in-depth surveys of people working just in city center. And the same trend to a lesser degree is happening there, and that's the most transit-oriented part of the whole region.

COUNCIL LIBERTY: Thank you.

Mr. Howell?

JIM HOWELL: Mr. Chairman, members of the committee. My name is Jim Howell. 3325 Northeast 45th Avenue.

I might mention that I, too, have served on the first Citizen Advisory Committee to light rail with Terry Parker here. We don't always agree on what we should be doing now, but we -- we did spend time on that committee back in 1975.

In any event, I -- I support the Tri-Met -- the Metro Tri-Met for filing a supplemental draft environmental impact statement to the FTA in order to construct a light rail line to Milwaukie and McLoughlin corridor. And I might add that I am in favor of the Tillamook option with extension to Park
Thank you for submitting your comments for consideration. The Locally Preferred Alternative decision called for the station at SE Harold to be a future station. The alignment will accommodate future construction of a station at SE Harold. The specific design characteristics of pedestrian improvements associated with the station would be determined in a design process for adding the station. The value of and potential for a pedestrian connection to areas east of the UPRR tracks may also be evaluated in the station design process.
Thank you for submitting your comments for consideration. The light rail project was endorsed by all participating jurisdictions in summer 2008. The Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

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**E-002-001**

The purpose of this letter is to voice my support for the proposed Milwaukee Light Rail system. The 60 year old Oregon Museum of Science and Industry has been located in the Central Eastside of Downtown Portland for over 15 years. During that time, OMSI has seen its attendance increase significantly. However, it has never had adequate public transportation available to it to fully accommodate its attendance.

For the past two years, OMSI has been an owner’s group to examine many proposed physical changes to what we call the OMSI district. My role has been to convene that group of 12 property owners for regular meetings to discuss issues. OMSI has been pursuing the preparation of a Master Plan for its future development at the same time.

We at OMSI have worked with Tri Met staff, Metro staff, OHSU, PSU, city planning staff, and many others on Master Plan related issues these past few years.

We are pleased to see Tri Met favor the Sherman alignment which would traverse OMSI land. Such route provides great access for OMSI’s growing attendance, and will facilitate the development of the OMSI property. It also supports the continued operation and development of the businesses in the area—especially those located on Caruthers which might otherwise have been negatively affected by an Alternate Rail route.

We believe the Rail Planning process has been productive and complete and we believe the addition of the Milwaukee Light Rail system overall will be a great boon to the Community and to the OMSI district in particular.

Sincerely,

Patrick LaCrosse
Plan Manager

OMSI Master Project
Thank you for submitting your comments for consideration. The light rail alignment would provide convenient transfer opportunities to west side bus, light rail transit, and streetcar lines in downtown Portland.

An extensive analysis of both the vertical and horizontal clearances needed to conduct commercial river travel on the Willamette River in the vicinity of the Willamette River Transit Bridge (river mile 13.8) have been completed and are compiled in Appendix O of the FEIS. These data include a survey of river users and their navigational clearance needs, as well as a field test and meetings with commercial river users, the US Coast Guard, and the US Army Corps of Engineers. The bridge height of 77.52 feet has been reviewed by technical, advisory and policy committees and has been recommended by the technical and policy committees.

As required by both Federal Law under the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (42 USC 4601) as amended and associated regulation in 40 CFR part 24 and Oregon State law, affected businesses that are displaced by the project will receive relocation assistance and compensation. That assistance is designed to help relocate a business to a new property of suitable character, and minimize the disruption that relocation might cause.

The FEIS identifies in Chapters 3, 4, and 5 the environmental, transportation, and fiscal/financial implications of this project as well as proposed mitigation to minimize the impact of the project. In this way, it is believed that the project provides all of the benefits that will come with
the project, such as a reliable and convenient transportation option, as well as address impacts and concerns that have been identified in the SDEIS and FEIS.
Thank you for submitting your comments for consideration.

Analysis of LRT alignment options in Milwaukie dates back to 1993:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002
- Portland-Milwaukie SDEIS, 2008

The Portland-Milwaukie SDEIS Appendix L presents a chronicled summary of alignment studies. Routes studied are shown in Figures L-5 and L-6.

The LPA alignment is the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the project’s Purpose and Need. For additional detail, see Chapter 2 of the FEIS.

Analysis of alignment and terminus options through Milwaukie for the Portland-Milwaukie Light Rail Project have been conducted and
documented as described in the SDEIS on pages 2-35 through 2-41. This discussion was updated for the FEIS, along with the discussion of environmental impacts in Chapters 3 and 4. The selection of the alternatives and the LPA were based on criteria utilized in the SDEIS that are key to distinguishing the comparative impacts and effectiveness of the options. It also considered recommendations about the alignment through Milwaukie by City staff, the Planning Commission, City Council, neighborhood leaders, and interested citizens. The Locally Preferred Alternative decision was the product of this process. The LPA process and decision is detailed in Chapter 2, Section 2.4 of the FEIS. The LPA best meets the Purpose and Need for a major transit investment in the Milwaukie-Portland corridor. This process fully complies with FTA’s major capital project development process requirements.

E-004-002

The SDEIS and the FEIS identify and address significant environmental impacts as required by NEPA, and identifies the methods that were applied to conduct the analysis and identify the need for mitigation where significant impacts occur. These methods incorporate best available science and engineering information, and also incorporate applicable regulatory requirements and guidance available from FTA, USDOT, the Council on Environmental Quality, and other agencies. The methods have been reviewed and approved by FTA, Metro, TriMet and state and local jurisdictions, including the City of Milwaukie. These methods were provided for public review in the Results Reports accompanying the release of the SDEIS. The comment does not identify questions about a specific method or type of analysis, and does not propose other standards that should be used. However, federal standards and other regulatory guidance used by the project represent reasonable means to identify the potential for adverse effects to the environment, including properties such as the Waldorf School.

The design of the project and the analysis of environmental impacts
were developed using all applicable federal standards and guidance, and they incorporate other technical standards and resources that represent decades of experience with light rail projects nationally and internationally. This includes the latest engineering standards, guidance and specifications applying to rail operations and traffic safety, including the USDOT’s Manual of Uniform Traffic Control Devices and the standards of the Federal Railroad Administration, which apply to this corridor because it has existing freight rail operations and street crossings. The project's design and environmental information also reflect the experience of TriMet, FTA and others with similar light rail projects.

For the areas the Trustees identify as concerns, including crossing safety, traffic impacts, visual effects, and noise and vibration, the standards for analysis, the identification of impacts, and the standards used to develop mitigation, were defined in detail in the SDEIS and its accompanying Results Reports. The Final EIS updates these environmental findings and includes additional detail developed through the advanced engineering conducted for the LPA and in response to public comments. It also provides further definition of the project’s mitigation commitments in Chapters 3, 4 and Appendix M. Chapter 2 also provides updated descriptions of the design features of the project that minimize environmental impacts.

The comment does not provide specific questions on effects or potential mitigation for the areas identified as concern including incremental crime, visual distraction, or safety hazards. For example, potential safety hazards related to light rail operation or the potential for incremental crime are described in detail in Section 3.16, Safety and Security. This includes gates, signals and other devices and measures to provide safe crossings of the existing rail corridor near the school, and accompanying measures to ensure safety along the rest of the rail corridor and around stations. Section 3.4, Visual Quality and Aesthetics, identifies the level
of impact on land uses throughout the corridor, and noted that in downtown Milwaukie the visual changes are limited because the project will be within an existing rail corridor and in a dynamic urban environment.

In response to the more specific comment about noise and vibration, Section 3.10 of the FEIS provides updated information on effects and areas requiring mitigation. The SDEIS and the FEIS identify the Waldorf School as a noise- and vibration-sensitive property with specific impact thresholds that must be met by the project. The SDEIS and FEIS include the results of the detailed noise and vibration analysis conducted consistent with FTA’s Noise and Vibration Manual, which is the result of decades of technical study of transit systems and the sensitivity of people to noise and vibration. The FEIS identifies TriMet’s commitments to mitigate all impacts that exceed FTA’s established thresholds for sensitive properties such as the Waldorf School. The analysis is consistent with the FTA manual, which states, “the impact criteria and descriptors depend on land use, designated Category 1, Category 2 or Category 3. Category 1 includes uses where quiet is an essential element in their intended purpose, such as indoor concert halls or outdoor concert pavilions or National Historic Landmarks where outdoor interpretation routinely takes place. Category 2 includes residences and buildings where people sleep, while Category 3 identifies other sensitive land uses such as institutional land uses with primarily daytime and evening use such as schools, places of worship and libraries.” FTA defined these three land use categories of noise-sensitive properties and designed specific impact and mitigation criteria required to maintain the properties’ ongoing qualities and functions when transit projects are proposed nearby. Waldorf school meets the FTA criteria for the Category 3 land use, and those standards were applied in the FEIS.
June 20, 2008

Robert Liberty, Metro Council
METRO
600 NE Grand Avenue
Portland, Oregon 97232-2738

Subject: Portland-Milwaukie Light Rail Project Testimony

Dear Councilmember Liberty:

Oregon Health & Science University is pleased to submit written testimony regarding the Portland-Milwaukie Light Rail Project.

Oregon Health & Science University, with over 12,000 employees and 2,400 students, is one of the many property owners that will be directly impacted by the proposed light rail project. Metro, Tri Met, the City of Portland and all of the other public agencies have done an outstanding job of seeking and listening to diverse public input.

We wish to acknowledge that each of the local jurisdictions and public agencies involved in the decision making process have a difficult task ahead of them. Not only do they have to make sure that the project meets all of the criteria outlined by the Federal Transit Administration, but they are accountable to a higher community standard to ensure that the new light rail alignment offers the greatest public and economic benefit to the citizens of this region.

OHSU is not a transportation agency, and does not propose to know the answers to the multitude of challenging questions that will need to be addressed during this process. For this reason our testimony will only address the segment of the proposed light rail line which impacts OHSU as a property owner.

OHSU's role in the community is to remain focused on fulfilling our mission as a public corporation: OHSU is dedicated to health and quality of life for all Oregonians through excellence in innovation and leadership in health care, education and research. OHSU is a public university and like other public universities in Oregon it does not make any profit. As Oregon’s only health and research university, OHSU provides care to those with the most difficult health challenges.
Councilmember Liberty  
June 20, 2008

OHSU also has a unique responsibility to help Oregon address another very serious challenge, and that is a critical shortage of health care workers. The demographic bulge of aging baby boomers will produce an exponential increase in demand for health care services. The same demographic bulge also means greater numbers of physicians, nurses, dentists and other health care workers are retiring themselves – a double whammy. The educational system is not keeping up with the demand for health care workers. OHSU does not have the physical infrastructure it needs to adequately respond to the health care workforce crisis. Addressing the health care workforce crisis will require new partnerships and working with the community to leverage existing resources and investments.

The Schnitzer family’s generous gift of 19 acres of land in the south waterfront area has allowed OHSU to begin planning a unique integrated health care teaching facility that, over time, will help increase the number of health care workers. Campus master planning efforts were accelerated to accommodate the light rail planning needs. The vision incorporates green building methods that maximize view corridors, solar potential and greenway enhancement.

As one of the property owners potentially affected by the Light Rail bridge crossing OHSU was asked to participate in the Willamette River Partnership Committee chaired by former Mayor Vera Katz. The process took an objective look at the 2003 LPA and the four alternative crossings and evaluated all of the options. The primary consideration of this committee was to determine which alignment offers the greatest public benefit. The options on the west side of the Willamette showed the alignment and new bridge crossing in one of two places; either through the middle of the campus on Meade Avenue, or on the southern edge of the campus along the Schnitzer-Zidell property line.

The “Sherman Porter” alignment (south of OMSI on the east side and on the Zidell and OHSU shared property line on the west side) emerged as the crossing that did the best job of maximizing transit connections, providing Science and Technology Quarter linkages between the east and west side of the Willamette, enabling expansion by OMSI and the Opera on the east side and preserving the river’s fish habitat – and therefore offered the greatest public benefit.

Metro determined that all four of the new options being looked at as part of the SDEIS would cost more than the original LPA alignment selected in 2003; depending on the alignment, between $20 million and $30 million more.

A property swap, of equal sized parcels of land, between OHSU and Zidell, emerged as one solution. The property swap would allow the bridge length to be shortened by moving the bridge landing on the west side of the Willamette River slightly north, closer to Meade. The alignment would then angle to the south so that transit station offers riders the best connection to the TriMet. We are also hoping that the “refined Sherman-Porter crossing” will also reduce the cost slightly compared to the original Sherman-Porter crossing studied in the SDEIS.
Thank you for submitting your comments for consideration. The LPA includes a Willamette River bridge that is on the “refined Sherman-Porter” alignment, and that will have a light rail station providing direct, regional transit access to the OHSU Schnitzer Campus. The LPA will support OHSU and Zidell developments at the west end of the bridge and OMSI and Portland Opera developments at the east end of the bridge.
Thank you for submitting your comments for consideration. The Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.
Thank you for submitting your comments for consideration. Exhibit C of the City of Portland’s LPA adoption resolution contained a request for additional outreach and technical analysis to optimize the location of the Lincoln Station. Based on this work, the stakeholder group confirmed its support for the Lincoln Station location. The Project Management Group, comprised of directors and high-level managers from project partner agencies, followed with its recommendation for assuming the Lincoln Station in the project. Preliminary engineering is proceeding with this assumption.
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.
participated in, on the alignment issues that are before you today. In particular, on that piece, we want to commend the public process that we were invited to participate in. Former Mayor Vera Katz did a terrific job chairing that committee. There were a lot of different interests in the room with different ideas, and somehow or another we all wound up more or less in the same place, and that was no small feat. So we appreciate both being invited to participate in that and also the way the process was run.

Just very briefly, you all know who we are, but a few words about OHSU and what our role is in this community.

We're not a transit agency, we're not a general purpose government. We have a core mission as a public corporation to provide healthcare, healthcare education, research discoveries and community outreach, not just to Portland, not just to the region, but to the entire state of Oregon and Southwest Washington. We are the only academic medical health center in this whole wide area, and that's what we do. Like any public university,
and we are a public university, even though we're not part of the Oregon university system, we're just like everybody else. We're struggling through budgets, we're trying to figure out how to make our mission work in a constrained climate. The fact that Oregon is 46th in the nation at last count on funding of higher education is not a small part in that.

Additionally, we're a major part of the economic fabric of this state and this region. With over 12,000 employees, we are the largest employer in the city of Portland, we're the fourth largest employer in the entire state of Oregon.

But the future is really what concerns us. We have dramatic healthcare worker shortages coming at us. Many of you have seen this before. I'm not going to bore you with all the details. But those of us who are in that Baby Boomer generation, we're going to need more healthcare. And our providers are all in that same generation. And they're leaving the workforce while their healthcare needs go up.

Why do I mention that? Because the Schnitzer campus located in the north of the
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South Waterfront is where we hope to meet that demand and we hope to meet that healthcare crisis in the future. That's what the Schnitzer campus is there for, to help address the healthcare workforce crisis that we see coming and in some professions is here already.

The alignment recommended by the Willamette River Partnership offers, in our view, the greatest benefit to the greatest number in our community. OHSU is one of the community partners. We were asked to participate in this process. We did. We feel that the outcome came to the right place. There's a whole lot of things that need to be done yet to make this district work and to enable us to help carry out our mission. But we think that the alignment that's before you does the best job and we support it.

COUNCIL LIBERTY: Thank you.

Questions? Comments? No?

Thank you for your testimony.

Is it Agosti?

ELIZABETH CLARK AGOSTI: Agosti.

COUNCIL LIBERTY: Agosti.

ELIZABETH CLARK AGOSTI: I'm Elizabeth.
June 23, 2008

Linda Gehrke, Deputy Regional Administrator
Federal Transit Administration
Jackson Federal Building, Suite 3142
915 Second Ave.
Seattle, WA 98174

Dear Ms. Gehrke:

The EPA has reviewed the fourth Draft Supplemental Environmental Impact Statement (SDEIS) for the proposed South Corridor Portland-Milwaukie Light Rail Project (CEQ No. 20060180) in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures, we also evaluate the document's adequacy in meeting NEPA requirements.

The SDEIS evaluates potential environmental impacts of a proposal to develop a light rail transit system connecting downtown Portland, the City of Milwaukie and north Clackamas and Multnomah Counties, OR and Clark County, WA. Because of higher concentration of population and facilities (public and private) within the project corridor, there is need to provide a dependable way for people to travel conveniently, safely, and economically in the area. When complete, the project will improve the quality of transit service and help to meet significant travel needs expected within the project corridor due to projected high population and employment growth in the near future. In South Portland area, for example, there will be 221% change in forecasted households from: 2005-2030 (p. 1-11), and the percent change in employment will be 59% over the same period.

In analyzing the impacts of the Light Rail project, the Federal Transit Administration (FTA) and its partners, Metro and Tri-County Metropolitan Transportation District of Oregon, considered a No-Build Alternative and Light Rail Alternatives based on the Locally Preferred Alternative (LPA) that was identified in the 2003 SDEIS. In addition to the LPA, FTA developed two alternatives for Light Rail corridor alignments (Fig. 2.1-3), four Willamette River crossing alternatives (Fig. 2.1-2), and three bridge designs (Fig. 2.1-4). Data presented in this document and reaching public comments will be used to identify a Preferred Alternative for the proposed Portland-Milwaukie Light Rail project.
This EPA comment includes several considerations. Accordingly, the response below is separated into sections dealing with each topic.

Water Quality

The first Project approach to stormwater runoff was to limit the amount of additional impervious surfaces. Wherever tie and ballast system design could be used (outside of structures and some urban areas where local officials urged, for urban design reasons, paved track design), the LRT track is pervious and allows stormwater to percolate into the ground. Similarly, where park and ride lots are needed, structured parking which reduces the amount of impervious surface to number of parking spaces was used in all instances.

For those elements of the project where impervious surfaces are required, the Project is applying the City of Portland Stormwater Manual (2008) as a standard for treating all stormwater runoff from the project (in Ruby Junction the City of Gresham stormwater requirements are used and these requirements are equal to City of Portland requirements.) Accordingly, the Project will treat stormwater runoff from the paved track and structures, including bridges, directing water to bioswales and other stormwater treatment designs prior to connection to municipal stormwater facilities and/or into water bodies.

In addition, the Project has submitted an application for a Clean Water Act Section 401 Certificate to demonstrate Project compliance with the Clean Water Act and related regulations and standards.

Impact to Fisheries

The potential impact of the project to fisheries was addressed in a number of ways and is addressed according to the seven water body...
crossings.

**Willamette River Bridge**

Extensive Project revisions were made to address potential impacts to fish. These included:

- Reduced the number of in-water piers from as many as four to the final design which has two in-water piers;
- Revised the bridge design by relocating the west piers to reduce the impact on scarce shallow water habitat;
- Revised the in-water construction periods to conform with Oregon Department of Fish and Wildlife in-water work window – eliminating all in-water work other than during the period July 1 to October 31 of any year so that fish passage, rearing and other fish activities are not disturbed;
- Reconfigured construction methods to use cofferdams with sheet piling vibrated rather than pile driven into place (though proofing with bubble curtains would be needed) and drilled shafts rather than placing shafts that are pile driven to greatly reduce underwater noise and vibrations that can be injurious to fish and other aquatic species.
- Provided shoreline restoration with native plantings from the ordinary low water point landward to points between 45 and 100 feet land side of the top of bank;
- Designed mitigation to place sand and cobble to improve fish habitat and reduce the impact of pier and cofferdam scour protection intended to secure existing hazardous materials on the river bottom;
- Removed derelict remnant pilings that leach contaminants and which can provide fish predator cover;
- Agreed to adhere to best management practices, including SLOPES IV, to minimize the chance of contaminant spills or other adverse impacts to water or habitat important to fish.
Crystal Springs Creek

In order to avoid disturbance of existing conditions on this Creek, the project was designed to bridge this Creek – that is currently within a culvert. This design would allow future culvert removal or rebuilding to more fish friendly design. Nearby wetlands that will be impacted by the Project are mitigated through offsite wetland restoration of equal value.

Johnson Creek

In association with this crossing, the project has redesigned the bridge so that there is no in-water work as well as to narrow the footprint of the structure crossing the Creek as well as determined that floodplain enhancement and wetland/streambank restoration will be provided.

Crystal Creek

The Project will replant areas disturbed during construction with native plantings that provide shade, habitat for species that fish feed on and which improve water quality thereby improving fish habitat.

Spring Creek

The Project has designed the crossing of the culvert containing Spring Creek so that disturbance of fish passage and of the existing culvert is keep to a minimum.

Kellogg Lake

The Project has created a design which limits in-water work to one set of in-water piers and will include streambank restoration to improve the fish habitat.
Courtney Creek

Because the Creek has been directed into a culvert about 30 feet below existing grade, the Project has limited ability to improve fish habitat with this crossing. However, stormwater generated from the Project at this site, including the park and ride structure as well as stormwater from adjacent properties and streets will be directed to an at-grade stormwater bioswale that will be planted with native plants and which will slow water flows, reduce contaminants in the water and cool the water – all actions that help promote better fish habitat.

Hazardous Materials/Contaminated Sediments

(There is another section of this response which deals in detail with the other specific questions from EPA about how the Project has determined how it will handle hazardous wastes.)

In regard to the EPA concerns noted in this paragraph about hazardous materials, the project investigated earlier samplings as well as completed additional samplings of the Willamette River bottom. These samples indicated that there are sites with varying contaminants and varying levels of contamination in the vicinity of the Project. The PMLR project design recognizes these existing conditions and has designed its structure and construction methods to contain these hazardous materials in place. Prior to construction, geotechnical borings were completed in the Willamette River. In order to address disturbing hazardous materials, boring holes will be sealed with bentonite approximately five feet below the mudline.

Further, the temporary work bridge on the west bank has been redesigned to span the hazardous material containment cap to be constructed by the property owner (Zidell). This design reduces the number of temporary piers. In addition, the Project will be placing a
layer of one foot of sand over this cap as well as over the location of the west bank temporary work bridge so that setting the temporary piers does not disturb existing sediments and contaminants (called the Sediment Management Area by Oregon Department of Environmental Quality).

For the permanent piers, a design was selected that reduced the number of in-water piers from as many as four to the final design which has only two in-water piers. Further, one foot layer of sand will be laid on the river bottom to contain any hazardous materials and then a cofferdam composed of vibrated in sheet piles will be constructed. A scour analysis was completed assessing the potential river bottom scour that could occur as a result of placing the coffer dam and permanent piers. Scour protection for the piers (placed on top of the sand layer) was designed to protect against the 500 year flood event for the permanent piers and the ten year event for the cofferdam, again to ensure that existing hazardous materials are not re-suspended into the water or otherwise transported as a result of Project actions.

On the west bank land side, the Project has coordinated with Oregon Department of Environmental Quality as well as the property owner (Zidell), who is under court order to complete site remediation, as well as other contaminated sites that the Project will construct upon. The PMLR project redesigned the LRT alignment to avoid more of the identified hazardous material sites and will conduct its construction consistent with the knowledge of hazardous materials and best management practices. (see the specific hazardous material handling response.)

F-001-002
The SDEIS and Water Quality & Hydrology Results Report discuss the 303(d) listings and the species known or suspected to occur in the streams affected by the project. Locally Preferred Alternative would cross the Willamette River, Kellogg Lake and five additional waterways.
The Minimum Operable Segment would not cross Kellogg Lake or Courtney Springs Creek. Future phases of the project would also expand the Ruby Junction Operations and Maintenance Facility in Gresham within the 100-year floodplain of Fairview Creek. Stormwater treatment for the LRT alignment is following City of Portland requirements, which should address increased stormwater volumes and pollutant loadings into project area streams. Where feasible, low-impact development (LID) is being integrated into the design. The Willamette River bridge and the Kellogg Lake bridge will have piers installed in the water column. The number and size of the piers have been reduced to extent practicable while still providing structural integrity. Investigations into effects to known in-water contaminants are still being conducted. Further information on effects and minimization measures are discussed in Section 3.8 Ecosystems of the FEIS and the Biological Assessment for the project.

The FEIS provides an update on the permitting requirements and processes, including the Section 401 WQ certification. Communication with DEQ water quality staff has occurred during the preliminary design and NEPA stages, and will continue to occur through advanced design, NEPA, and permitting efforts.

F-001-003
This comment had multiple points. Responses to each point made in the comment follow.

1) Regarding accidental spills and stormwater runoff during construction, the PMLR project team acknowledges that project construction activities can have an adverse effect on environmental media such as soil, sediment, surface water and groundwater from the release of hazardous substances and petroleum products. Construction activities will be conducted in a manner that is consistent with State of Oregon Revised Statue (ORS) Chapter 466, the City of Portland Charter and Code (CPC).
Chapters 10 and 21, and/or other relevant or applicable rules or regulations. Actions would include preparing site specific spill control and prevention plans (SCPC), construction stormwater control and pollution prevention plan (SWCPP), health and safety plans (HASP), and implementing best management practices (BMPs).

2) Regarding removal of structures, buildings and structures that have lead or asbestos containing materials (ACMs) will need to have proper abatement conducted prior to any demolition, renovation, or repair activities. Abatement must follow state guidelines and be conducted by licensed abatement firms (Oregon Administrative Rules [OAR] 248). Abatement materials must be properly disposed of at authorized solid waste facilities. In general, building and structures that were built prior to 1980 have a higher likelihood of containing asbestos. EPA issued a ban and phase out rule of asbestos in 1989.

3) Regarding river and stream crossing impacts, the PMLR project team recognizes that potential adverse impacts to the environment could occur from the installation of the Willamette River Crossing. The project team has been and continues to discuss these issues with Keith Johnson at Oregon Department of Environmental Quality (ODEQ), the City of Portland, and other potentially responsible parties (PRPs) including Zidell Realty Company (ZRZ) (ESCI No. 698), Portland General Electric (PGE) Station L (ESCI No. 51) and Oregon Health and Sciences University (OHSU) Former Schnitzer Property (ESCI No. 875) that are undergoing cleanup. This discussion will help in the determination of avoidance, minimization and mitigation strategies. These strategies will be developed as the remedial actions at these sites are finalized and the preliminary design for the crossing is completed.

EPA Recommendations

EPA Recommendation: FTA should coordinate with ODEQ as
contaminated sites are identified; and cleanup plans are developed and implemented to minimize impacts resulting from possible release of hazardous materials in the environment and disturbance of contaminated sites.

The PMLR project team has coordinated with ODEQ, especially on the existing hazardous materials located on the Zidell property and on the Willamette River bottom, as well as the hazardous waste users and known contaminated sites along the alignment. The Project will continue to coordinate through Project construction, and believes this will result in further protection to the environment and potential savings to the project in terms of costs and schedule.

EPA Recommendation: The final EIS should include detailed information regarding specific measures that will be taken to reduce impacts of potential releases of hazardous materials in the environment and disturbances of contaminated sites by the project.

The PMLR project team agrees with EPA’s recommendation. The FEIS contains a number of detailed avoidance, minimization and mitigation strategies to reduce adverse effects to the environment noted in Chapter 3.13. These include, but are not limited to a contaminated media management plan (CMMP), phase 1 and phase 2 environmental site assessments, SCPP, SWCPP, HASP, and NPDES permitting.

F-001-004
Monitoring
Following are the monitoring activities that the PMLR Project will be completing:
• The Federal Transit Administration will be monitoring compliance with the list of project mitigation measures so that all mitigation is completed prior to commencement of Project operation;

• The Project has agreed to monitor both land and limited in-water pile proofing for underwater noise and vibration levels and to promptly report to the National Marine Fisheries Service;

• The Project has an Inadvertent Discovery agreement with the State Office of Historic Preservation so that if any underground historic or prehistoric resources are discovered there are agreed upon procedures for next steps, including possible preservation;

• The Project has agreed to provide for Native American tribal monitoring of below ground excavation;

• The Project has agreed with the State Office of Historic Preservation through a Memorandum of Understanding, that the Project will coordinate with the SHPO on yet to be determined design details for treatments in the immediate vicinity of historic resources to ensure compatibility;

• The Project has agreed to monitor the health of all native plantings and streambank restoration areas for a period of five years to ensure that such plantings are well established;

• The Project has agreed to monitoring of all LRT bridges crossing water bodies to ensure that stormwater runoff systems and TriMet maintenance and operations methods successfully manage the potential for spills and surface water contamination.
Thank you for submitting your comments for consideration. Federal Transit Administration staff as well as light rail project staff met with James Holm and Sheryl Carrubba, U.S. Army Corps of Engineers on September 30, 2008 to address the issues raised in the U.S. Army Corps of Engineers email dated June 23, 2008.

Project staff reviewed the alternative alignments, especially documentation that use of existing bridges, including the Hawthorne Bridge, the Ross Island Bridge and the Marquam Bridge would result in substantially poorer transit service than a new bridge. This information is included in the SDEIS as well as in the FEIS (Chapter 2 and further information in the appendix). In the September 30 meeting, Mr. Holm further noted that his concern was that the bridge height not restrict onshore uses in the area. The project continued to provide updated information and briefings with the USACE, including an administrative review draft of the FEIS prior to its publication.

After further discussion, including comments from the US Coast Guard and the review of the administrative review draft of the FEIS, USACE indicated that the FEIS effectively describes its justification for the proposed new bridge, and that the U.S. Coast Guard would be conducting additional proceedings subject to NEPA that would include bridge height permitting, as would the USACE for other permits required by the project.

As noted in the response to the first comment by the U.S. Army Corps of Engineers (F-002-001), a meeting was held on September 30, 2008 with representatives of the Federal Transit Administration, U.S. Coast Guard and PMLR project staff.

After discussion of the PMLR process to consider bridge dimensions...
including bridge height and horizontal clearances, and considering further coordination, briefings and the information provided in the FEIS, USACE has indicated that the project has addressed the concerns raised in this comment, including those related to the appropriate height of the bridge and the effects on navigation. USCACE has noted that the U.S. Coast Guard will be holding proceedings to consider all public comment on the proposed bridge dimensions, especially bridge height.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008.

Money dedicated to the cost of constructing the light rail project may not be used for other purposes, such as roads. See Chapter 2.3 Capital Costs for more information.

See Chapter 3.16 Safety and Security for information about measures to provide for safety on and around light rail and its facilities.
Thank you for submitting your comment for consideration. The Locally Preferred Alternative includes a single station in Milwaukie at Lake Rd.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

The Transportation Impacts Results Report for the Final Environmental Impact Statement shows that in 2030 during the PM peak hour the average delay for vehicles at the LRT crossings on SE Monroe Street and SE Washington Street would be between 6 and 12 seconds. The maximum amount of time that the gates would stop a vehicle at these LRT crossings would be 50 seconds (including time for the gates to
come down, time for the LRT vehicle to cross, and time for the gates to come back up).
Thank you for your comments. The light rail project relies on existing zoning to estimate future growth, but the scope of the project does not include rezoning or redevelopment proposals. However, fixed-rail projects are known to stimulate more intense development or redevelopment where the zoning allows. The City of Milwaukie and the City of Portland set the zoning for their respective communities based on the regional need for housing and employment capacity outlines in the Urban Growth Report and 2040 Regional Plan. No specific changes are proposed in the SDEIS or the FEIS. Any potential changes to zoning or to comprehensive plan designations would be required to go through the local jurisdictions land use judicial or quasi-judicial land use approval process.

In a concurrent project during the same time as the SDEIS, Metro, TriMet, and its partners conducted a station area assessment to help maximize the ability of the light rail project to help support the region's existing goal for livable communities. The "Portland to Milwaukie LRT Station Area Best Practices Assessments and Recommendations Report" (Draft, September 2009) has recommended actions for some of the proposed light rail station areas. However, local governments control the decisions about land use, including zoning and specific development approvals.

The Locally Preferred Alternative shows an impact of about 110 off-street parking spaces at the TriMet employee parking lot on SE 17th Street. The off-street parking lot is currently fully occupied and the loss of spaces due to the light rail project would require mitigation. The Transportation Impacts Results Report suggests developing parking mitigation strategies for on-street parking, and consider other off-street parking locations for TriMet employee parking.
I-004-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Jena Tuerk - SUPPORT: Light Rail to Milwaukie Oregon

From: Denise Hawley <dhawley@pacificstar.biz>
To: jena.tuerk@oregonmetro.gov, jena.tuerk@oregonmetro.gov
Date: 6/19/2008 1:37 PM
Subject: SUPPORT: Light Rail to Milwaukie Oregon

To Whom It May Concern

1-004-001

I am writing to support light rail to Milwaukie Oregon. This line continues the region's transit and rail network. More importantly, it means that people are able to get to work and offers an alternative to cars. This makes perfect sense and this alignment is a good one. Finally, it provides a new and needed crossing over the Willamette that will have a number of beneficial affects including streamcar.

Please fund it and build it.

Sincerely,

Joe Angel

Denise Hawley
On behalf of Joseph Angel
Executive Assistant to Joseph W. Angel
1001 SE Water Avenue, Suite 450
Portland, OR 97214
(503) 526-9100 voice
(503) 296-9988 fax
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-006-001
Thank you for submitting your comments for consideration. Through preliminary engineering and further coordination with Clackamas County, the proposed design for the Trolley Trail in relation to McLoughlin Boulevard and light rail have been advanced since the SDEIS. The FEIS appendices include a plan and profile view of the currently proposed design, as well as selected visual simulations of the proposed facility with light rail. A complete design set is also available at TriMet and can be reviewed upon request (see the FEIS information availability sheet at the front of the FEIS). TriMet has also provided additional information and updates at community meetings and project open houses since the SDEIS comment period. Appendix K Final Section 4(f) evaluation, also provides additional description of the design as developed through collaboration with Clackamas County.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the 2008 SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.

One of the fundamental questions Metro and TriMet answer during the EIS process is: who does the light rail serve? This demographic data is available through varying sources. For current demographic information, we use census data. For each EIS, we update the data we use to be current information.

For future demographic data, we calculate the amount of people who will be living and working in different areas. For the Portland-Milwaukie Light Rail Project we calculated this for the year 2030. Individual cities and counties provide us with their zoning and comprehensive plans. Based on these data, the assumed population and employment growth of the region is distributed accordingly. This information is then used for our 2030 modeling and the assumptions of land use.

In addition, the federal government has rigorous standards to make sure that the projects we build are cost effective. We are required to pass the Transportation User Benefit test, which calculates the cost per rider. The more current and future potential riders (population) in an area, the better we perform according to this test.
Thank you for submitting your comments for consideration. Streetcar connections south of downtown Portland and the Central Eastside Industrial District are not within the scope of this project.
I-011-001
Thank you for submitting your comments for consideration. The light rail project, including a station location at Lake Road in downtown Milwaukie, was endorsed by all participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Portland-Milwaukie light rail line will connect North Clackamas County, Milwaukie, and Southeast Portland to the regional light rail system. The light rail line will run along the Portland Transit Mall, facilitating connections to the Red, Blue, Yellow, and Green Lines. A light rail connection that does not serve downtown would not meet the purpose and need, and an eastside-only line would duplicate a connection now being developed by the Eastside Portland Streetcar Loop project, which began construction in 2009.

Further, an additional bridge across the Willamette River provides capacity beyond the Steel Bridge, currently the only light rail crossing of the Willamette River. If the project were confined to use the Steel Bridge, not only would the capacity of the entire rail system be further constrained, it would require out-of-direction travel.

While both light rail and streetcar would serve South Waterfront, there would be distinctions between the service provided by each. The Portland-Milwaukie light rail would provide a fast rail connection between the Milwaukie corridor and downtown Portland and would travel along the transit mall on SW 5th and 6th Avenues. The streetcar extends further south into South Waterfront but would not connect to the Milwaukie Corridor, and travels on SW 10th and 11th Avenues downtown.

With the Green and Yellow Lines now routed along the transit mall, this new light rail line would be connected to much of the existing light rail infrastructure. The route could be interlined with the existing Yellow Line, providing a transfer-free connection between north and south, though a rider would have to travel through downtown Portland. For a traveler wishing to stay on the east side, the streetcar would provide a
connection between the Portland-Milwaukie light rail at OMSI and all other light rail lines at Rose Quarter.

transit/transfer snafus).

I-012-001
Why not build the MAX line heading south as a continuation of the path taken by the yellow-line that runs north, using the Rose Garden Transit Center as the branch point? This appears to be the idea behind the I-205 corridor line extension from Gateway to Clackamas/Sunnyvale. It's a reasonable course. It leverages existing infrastructure, services the growing East Bank restoration, and provides rail access to an area currently only supported by Grand Ave. & MLK Blvd. Not to mention you put OMSI and the Opera House on the line. More importantly it doesn't pervert the role of the MAX system in the overall landscape of Portland's public transit initiatives.

Why is the population growth along Hwy 224 and the economic downtown along south 99E being ignored? McLoughlin Blvd is already serviced well by the Tri-Met system, and most of the population growth and retail expansions have moved away from the Willamette toward 224. Why run the new line through a ghost-town? The time to run the MAX down McLoughlin was 20-years ago. Along 224 you have the industrial parks, local attractions like Bob's Red Mill, and growing retail land use, not to mention ample land for Park-and-Ride centers. The industrial parks alone seemingly drive the conclusion to run the MAX along 224; being that it is a commuter train, yet it is ultimately ignored.

Lastly, I'd like to make a suggestion. Keep the MAX as a long-distance city commuter that is the cardinal direction backbone for mass-transit. Connect neighborhoods with Streetcars. You could connect Hollywood to Downtown Milwaukie Waterfront through a multi-phase Streetcar project that individually serviced the unique districts that stretch along the way (Burnside, Belmont, Hawthorne, Division, Brooklyn, West Moreland, and Sellwood).

It seems like the MAX needs to be the backbone, the Streetcars are the ribs, and the buses ought to be the last-mile service that fills in the gaps.

Thanks so much for your time,

Nathan Aschbacher

# Cell Sixty-One | # Field Marshal | # 503.260.2526 | n,n@nethandeliver.com

P.S. Thank you for all your hard work making Portland the wonderful place it is. Portland is the most progressive and forward thinking city I've witnessed in the United States, and I appreciate all you have done in playing a part in creating that reality. This city has become a model for others nationwide.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

As documented in the SDEIS in Table 3.11-2, page 3-151, levels of Carbon Monoxide, Volatile Organic Compounds, and Oxides of Nitrogen would be less region-wide with the Portland-Milwaukie Light Rail project than with the No-Build. This is because the Portland-Milwaukie LRT Project will allow more trips to be made by light rail than by motor vehicles. Light rail is powered by electricity and as such, does not emit
the air pollutants listed above that motor vehicles do.

Further, a more localized analysis of roadway intersections has been made concerning auto congestion and potential localized concentrations of Carbon Monoxide. This analysis, summarized on page 3-151, concludes that the most congested intersections affected by LRT would not exceed the federal or state air quality standards for Carbon Monoxide. In fact, because of a variety of factors, levels of Carbon Monoxide as well as the other air pollutants listed above, will be much lower than current levels.

I-013-003
Light rail vehicles are far quieter than diesel-electric heavy rail locomotives, which depend on large diesel engines to power the train. Light rail vehicles are all electric and have no combustion engines. The high energy, low-frequency sound from locomotives has the ability to penetrate windows and walls far more effectively than noise generated from a typical light rail vehicle. As part of the SDEIS we performed a detailed analysis of potential noise and vibration and we always pay special attention to noise and vibration sensitive buildings and uses, such as schools and residences. This information is updated as a part of the FEIS (see Section 3.10). Also, the FTA criteria for noise and vibration are based on years of study and found to be a very effective criteria to address noise and vibration related to high capacity operations. If impacts are identified, we have several methods of potential mitigation that will be investigated and included with the project where applicable.

I-013-004
The existing Tillamook Branch freight track location is not expected to be altered by the Portland-Milwaukie Light Rail Project within downtown Milwaukie. North of Highway 224, the freight tracks will be modified to accommodate the light rail bridge over the Tillamook Branch Line and to keep an industrial spur access to industrial users.
I-013-005
The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.

I-013-006
The light rail alignment through downtown Milwaukie lies utilizes an existing, active railroad right-of-way. The project features several safety-related features, including safety fences, crossing gates, and improved pedestrian facilities. TriMet also offers classroom assistance to educate students about safety around and on light rail vehicles.

Construction could cause localized impacts including noise, vibration, traffic delays, and dust, which could affect nearby businesses and institutions such as the Waldorf School, but the most intensive construction activities would be focused within the linear alignment where light rail would be located and on the adjacent streets that would be improved at the light rail crossings. Access routes to the school would be maintained. Chapter 3.2 of the FEIS provides additional information on construction period mitigation measures that would help minimize impacts. These include communication and outreach programs to assist affected businesses about the periods of time that construction may occur, as well as programs and marketing efforts to help promote affected businesses.

I-013-007
The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments,
including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002

In addition to the Chapter 2 discussion, the 2008 SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project’s purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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In addition to the discussion in the 2008 SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area. Further, on July 15, 2008, the Milwaukie City Council approved Resolution no. 69-2008, recommending approval of light rail to Milwaukie using the Tillamook Branch alignment, a station at Lake Road and a terminus at Park Avenue.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the
Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project’s Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

The two previous statewide referenda would have provided a source of local funding for the original South/North light rail project, but voters were not asked to approve a specific light rail alignment. As described in Chapter 2 of the SDEIS and the FEIS, Metro and TriMet, working with FTA, the state, its local partners, and the region have since conducted an extensive public process leading to decisions to develop the South Corridor program in two phases. The South Corridor program includes the current Portland-Milwaukie light rail proposal as well as the I-205 and Downtown Transit Mall light rail improvements that are now in operation. The project development history, including decisions to move forward with the development of light rail in the South Corridor in two phases was extensively discussed in Chapter 2 of the SDEIS. The 2002 SDEIS for the South Corridor and the FEIS for the I-205/Portland Mall project provided information about the prior votes, and the votes are again presented in Appendix L of the current FEIS. It was also included in many of the background documents identified in the 2008 SDEIS.

I-014-002
The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor.
of Milwaukie. The votes were unanimous in the Steering Committee and in the City of Milwaukie resolution. It is also important to note that the City's resolution is a recommendation to the Metro Council, which is actually the party that takes the action to identify project alternatives. Finally, all of these actions remain preliminary until issuance of the FEIS and the Record of Decision by the Federal Transit Administration.

I-014-003
The centerline of freight and the nearest light rail track will be off set by 25-feet and will include a 6-foot high safety wall in locations setback 250-feet from intersections. This requirement exceeds FRA standards for freight and light trains operating in a shared corridor.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety. This was also evaluated in the SDEIS.
I-014-004
See response I-014-001, above.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
On Jun 10, 2008, at 11:13 AM, Dana Lucero wrote:

Valerie, Thank you for your email. I am terribly sorry you were turned away when you arrived last night. We very much do want to hear from you. We owe you both another opportunity to share your comments and an explanation of what happened.

It is by no means too late to let us know what you think. The comment period runs until noon on June 23. All comments received by Metro—including testimony from last night, emails, letters, comment cards—will be included in the Comment Record and will receive a written response in the Final Environmental Impact Statement.

The decision-making process moves through the project Steering Committee, then goes to the local jurisdictions, and then to Metro. This is also an important time to make your voice heard. Last night’s hearing was before the project Steering Committee. This group will meet again on June 26 (12:00-2:00 at Metro, 600 NE Grand Ave.) and will take public comment at the meeting. There will also be opportunities to testify before your local jurisdiction. The Milwaukie City Council will take testimony on July 14 and 15. Clackamas County will take testimony on July 17. We had only 9 people testify at last night’s hearing. When the hearing closed early, the Chair of the Steering Committee made himself available to listen personally to testimony if anyone else arrived to share their thoughts and opinions. We then called the front desk to alert them about what to do if anyone arrived but you had already come and gone at that point. I am so sorry we missed you and I know our Metro Councilors and Steering Committee members would regret it as well.

If you are interested, I can arrange a meeting for you to share your comments directly with a Metro Councilor working on this project. We
can come to a location convenient for you. If another meeting is not an option for you, please share them in any of the following ways. email: trans@oregonmetro.gov mail: Portland-Milwaukie Light Rail project, Metro, 600 NE Grand Ave., Portland, OR 97232 phone: 503-797-1900, option 6 Please contact me at 503-797-1755 to talk through the best way for us to hear from you.

Sincerely,

Dana Lucero

Dana Lucero, public involvement specialist
Portland-Milwaukie Light Rail Project
Metro 503-797-1755
dana.lucero@oregonmetro.gov

From: Carlotta Collette
Sent: Tuesday, June 10, 2008 12:08 PM
To: aschbacv@comcast.net
Cc: Robert Liberty; Dana Lucero; Bridget Wieghart; Ina Zucker
Subject: your comment on Milwaukie light rail

Dear Ms. Aschbacher, I am so sorry to hear the trouble you went through last night to testify on the Milwaukie Light Rail project. I would be happy to meet with you in Milwaukie or wherever you'd feel most comfortable to talk about the project. You clearly did your homework and should have had the opportunity to talk with us last night. I am copying my policy
Thank you for your prompt response and sincere effort to acknowledge my voice, as a concerned citizen. I appreciate you clearly outlining all future opportunities to present my questions/statements to Metro. Carlotta Collette also responded to me via email. At this point, I would like to have a meeting arranged with a Metro Councilor who is working on the project. My son, Nathan, who was involved with a task force in Spokane to explore light rail options would like to join me. He is leaving the country for a bicycle trip in Spain on June 19. With the end of the comment period fast approaching, also - we would prefer, if possible for both of us to meet with someone. He was also planning to attend the hearing, traveling from downtown PDX on his bicycle, I contacted him by cell phone about it no longer going on, and he returned disappointed to his apt. on the South Park Blocks, where he works out of his dwelling as a software engineer. When he moved back to PDX a few months ago, he parked his car in our driveway in Milwaukie, and has not used it once. He is very proud of the light rail system, mass transit in PDX - and made it his personal goal to be able to get around without a car. He uses his feet, three different bikes, Tri-Met bus, streetcars and light rail, with an
occasional ride from friends in a car. Unfortunately, he can't find a good way to get out to visit his family in Milwaukie! He has expressed an interest in getting more involved in local government, and is very impassioned about this project. We are both in agreement about what should happen with the light rail in Milwaukie area, but he has more to say about the bridge proposals. I have copied Carlotta Collette into this message as well. Again, thank you for your response and restoring my faith in the leadership of Metro. Valerie Aschbacher

From: Carlotta Collette
Sent: Friday, June 13, 2008 9:49 PM
To: Dana Lucero; Bridget Wieghart; Karen Withrow
Cc: aschbacv@comcast.net
Subject: comment on Milwaukie Light Rail from Valerie Aschbacher

I met this afternoon (Friday, June 13, 2008) with Valerie Aschbacher. You may recall that Valerie is the woman who tried to testify before the steering committee on Monday and was turned away because the evening guard didn't realize Councilor Liberty was staying late to hear any testimony that arrived. Ms. Aschbacher said that she'll also be submitting written testimony, so this is intended as a summary of our conversation, not her complete comments on the issue of Milwaukie Light Rail. Ms. Aschbacher explained that she has spent most of her life in Clackamas County and was upset when light rail did not come to Milwaukie when it was first proposed. She is not an opponent of light rail, but after reading the DEIS on the project she has concerns. She is a parishioner at St. John's Church and questions whether a streetcar wouldn't be a better fit with Milwaukie's "quaint small town" character. She didn't realize until recently that the stations under consideration in Milwaukie were close to the schools. After studying the DEIS, she said she had an "epiphany" that the entire project rests on projections of traffic growth to the south in the McLoughlin corridor. She questioned the
basis of these projections, noting that McLoughlin has changed and is not what it used to be. She no longer uses McLoughlin, taking either Riverroad or Oatfield instead because McLoughlin is so rundown. She believes that the real business and population centers, including Providence Milwaukie Hospital, are along highway 224 and light rail should be routed there instead. She also argued that with I-205 light rail coming, we don't need two lines heading south along parallel tracks to Oregon City. Milwaukie is beginning to turn around, particularly with Riverfront Park being redone. It needs a streetcar, not a light rail train. Furthermore, running light rail through a small town is inconsistent with how it is done on the other alignments where it follows a freeway (the exception is Interstate light rail). It is my understanding that Ms. Aschbacher will be submitting additional written comment. I am copying her on this email so she can make any corrections or additions she deems important. Carlotta Collette Metro Councilor, District 2600 NE Grand Avenue Portland, OR 97232 (503) 797-1887 collettec@metro.dst.or.us www.metro-region.org
Thank you for submitting your comments for consideration. The South Corridor is the north-south travel shed bounded by the Willamette River and the I-205 LRT line. Within this area, SE McLoughlin Blvd, or Highway 99E, has been the major north/south travel corridor and is still the only continuous public right-of-way within the corridor. The other right-of-way through this area is the Union Pacific railroad line. The Portland-Milwaukie light rail 2008 LPA alignment uses a combination of the Union Pacific Railroad line (the Tillamook Branch) and SE McLoughlin Blvd. This combination of rights-of-ways was found by the project partners to be the preferred alignment, considering estimated ridership, operational reliability and other factors. Impacts of this alignment are documented in the FEIS, especially Chapters 3, 4 and 5.

Further, Harmony Road is envisioned as a part of an arterial road network that provides the public with motor vehicle access. Harmony Road provides and will contribute to improved east-west access in addition to high capacity transit lines that move people from north to south (I-205 Green Line as well as the proposed Project).

The Project, as well as the I-205 Green Line and TriMet bus service are intended to provide alternative transit systems, but the region continues to show need for the road network which can carry cars, trucks (including freight) as well as buses. In this way, the public is provided transportation choices.

The Harmony Road Project is not within the scope of the Portland-Milwaukie Light Rail Project.
Harmony needs overpass to fix congestion

The purple section is Harmony Road from 67th Avenue to International Way. An overpass would go over the train tracks; the intersection may expand to five lanes. The plan could also include a roundabout at Fuller and an extension of Sunnybrook from there to 62nd.

by Matthew Graham
mgraham@clackamasreview.com

An overpass over the train tracks at Fairwood Avenue is the only way to sufficiently improve congestion along Harmony Road, according to the design firm working on road improvement possibilities.

"If we want to do something with Harmony, you have to do something with the Fairwood railroad intersection, you have to do a crossing there," said Ron Weinman, a transportation planner and project manager for the county. "You have Clackamas Community College being built up and then eventually you see the area north of Harmony and Fuller become a mixed-use area — all those things add up to additional traffic."

The county’s long-term plan for the area envisioning Harmony as a major artery through the area, which Weinman said would also limit adverse affects to the neighborhoods by keeping backed-up commuter traffic from reaching I-5.

Turn to Overpass, page A9
Neighbors say no overpass; planners say it's only way to alleviate traffic

Continued from page A1

cutting through residential streets.

But many nearby residents are unhappy with the plan. Representatives from the Cedarcrest Neighborhood, the southern border of which is Harmony Road, say they don't want to sacrifice their neighborhood for Happy Valley and other county communities.

"Myself and my neighbors do not want any alternative that has an overpass," said Stan Was, who lives just north of Harmony in the Linwood neighborhood."You can put two lanes on 62nd Avenue, get them up Sunny side to 234."

Peter Codley, of Oak consulting firm, said improvements to 82nd Avenue or the creation of the Sunrise Corridor would not significantly pull traffic away from Harmony.

"I've done this study with and without Sunrise, and there wasn't much difference in the amount of traffic on Harmony," he said.

The county currently has six options it's considering, though only two of those would significantly improve traffic conditions. Those two involve widening Harmony to either three lanes or three lanes most of the way and five lanes at points. They include a three-lane Sunnybrook extension that would curve behind the colleges and the Aquatic Center but still on top of the ridge, from Harmony down to 82nd Avenue.

Both would also have impacts on the wetlands and waterways in the area.

Charles Kemencing, a representative from ODOT, said the rail route is scheduled to be a "high-speed rail corridor."

"There's no doubt in my mind that this will be two tracks," he said. "By 2025 they say rail product will double; this is the only viable rail route. It's coming and the only safe way to deal with it is to treat it as a highway."

Kirk Pearson, with Clackamas Community College, said improvements to the road will be important for the college site on Harmony, which houses satellite campuses for GCC and the Oregon Institute of Technology, as well as the Aquatic Center.

"I think with the increasing population and the campuses and the park lands, that access is going to be really important," he said.

Comment on all the stories in this issue at www.clackamasreview.com & www.oregoncitynewsline.com
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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Railcars:
TriMet figures 2,500 trips a day to start

Continued from Page 1

The railcars weren’t ready to roll — the DMU was shipped with neither of its driveshafts installed, so its hydraulic transmissions wouldn’t be spinning during the tow, and other firing-up remains.

Then there are static and running tests to be conducted in the next few months, said TriMet’s director of operations, Steve Banta.

“This has all been theoretical so far — now we have to make sure that what works on paper actually works, that the doors and platforms line up and all that. So far it’s been great.”

TriMet estimates that initial ridership will be about 2,500 trips a day, said spokesperson Mary Peth. Those estimates were made well before $4-per-gallon gas, which could bump ridership above those numbers.

Fuel prices could well be higher when WES starts rolling, making TriMet’s choice of self-contained railcars over conventional locomotives and passenger cars look even more inspired.

John Rogers: 503-224-5076
johnrogers@news.oregonian.com
Thank you for submitting your comments for consideration. The project has been designed to serve regional trips, with stations located at a spacing that is more reflective of regional destinations, compared to a local bus route or other facility that might place stops every few blocks. Chapter 3.16 provides a detailed information about safety and security.

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider
security program that combines TriMet enforcement with public safety resources from other jurisdictions.
Milwaukie police chief wanted more officers in January

Continued from page 13

around 6:45 p.m. on Monday, June 9. The woman had been in and out of a hospital for treatment.

Four of the teens were arrested Monday and charged with crimes ranging from assault to intimidation. The fifth teen was captured Thursday, June 12.

"Perception is reality," Mengel said of the widespread media coverage of the assault. "How many husbands are going to tell their wives, 'I don't want you riding the train, take the car instead.'"

\textbf{What more can we do?}

The 2007 Oregon Legislature gave TriMet $250 million for preliminary stage of a transit bridge over the Willamette River between South Waterfront and inner east Portland. After a 73-year-old man was beaten by gang members at a Gresham MAX stop last November, Mengel co-chaired a joint committee of the Senate and House Transportation Committee that demanded TriMet report on its planned safety improvements.

"We can hold future funders and riders accountable if they do something about safety," said Mengel, who expected TriMet to report back to the committee this fall.

Portland City Transportation Commissioner Sam Adams agreed the incident could have widespread negative consequences.

"It would be a shame if five teenagers make it harder for everyone else to access transit," said Adams, who is working on projects that could extend light rail to Milwaukie and Vancouver. They include the bridge project the legislature helped fund and the Columbia River Crossing, which is considering adding light rail to a new $5 billion bridge.

TriMet spokeswoman Mary Fesch said the transit agency has already increased security since the June 9 assault. According to Fesch, about 50 fare inspectors, supervisors and other employees with light-rail responsibilities have been ordered to put aside their other duties and ride the trains every day, looking for fare evaders and disruptive behavior.

"We now have a lot more eyes on the trains," she said.

Fesch also noted that TriMet substantially increased security after the November assault. Among other things, the agency increased the number of sworn officers in its TriMet Police Division from 28 to 41, created new special-assignment units, hired more private security guards and began installing more surveillance cameras at light-rail stops.

- an effort that is still continuing.

"We are constantly asking ourselves, Are we at the right levels of security? What more can we do?" she said.

\textbf{Livability problems}

Some people think TriMet can do a lot more.

On Jan. 11, Milwaukie Police Chief Larry Kander sent TriMet General Manager Fred Horan a seven-page letter recommending changes in the agency's security system. Kander is worried about crime spreading into Clackamas County when the MAX line under construction to Clackamas Town Center opens next year.

"Soon, nefarious people who are engaged in gang/drug/crime activity will be traveling on light-rail between Hillsboro, Gresham and Clackamas Town Center," he wrote.

Kander is also worried about crime spreading to Milwaukie on the MAX line from downtown Portland that is still being planned.

In his letter, Kander said TriMet should increase and reorganize its security system by opening new 24-hour Central and South precincts supported by detectives who can investigate serious crimes.

He said TriMet needs 150 to 160 sworn officers — not just the number listed in the current budget.

Kander also said five more officers should be assigned to Milwaukie when the line opens there.

Fesch said the number of officers will need to be increased as service expands, but that no exact figures have yet been agreed upon.

"Obviously as we expand our system we also expand our police and our staff," she said.
June 22, 2008

Dear Metro Council Members and Planners of the Portland-Milwaukie Light Rail Project

My grandpa would be 100 years old on his next birthday. He drove his car until he was 95 years old, and as he drove along River Rd. and McLoughlin Blvd. he would often share stories about what used to be here or tell something about what is still there. When he told the stories, you get a real sense of the hustle and bustle, the periods of growth, and his role in it.

I grew up living only 2 blocks from McLoughlin Blvd., and one block from the trolley line. My mom tells me stories about how she loaded a (large) baby carriage onto the trolley car to go into downtown Portland, where my dad worked. When I was a child, and the trolley car was gone, I used to ride my bicycle on the path where the tracks had run, to get from my house to Gladstone, Jennings Lodge, and sometimes these treks would take me to the Clackamas River for more exploration. While I enjoyed these adventures, I would often wonder why the tracks were no longer in use.

Later, when I was married and our son was 3 years old, we purchased a home near Rex Putman High School, only 6 blocks from McLoughlin Blvd. and 2 blocks from Oakfield Rd. I had visions of him being able to ride his bicycle around the same neighborhoods as I had done. But, it was not possible. Living in an unincorporated area of Clackamas, the roads had no sidewalks or sufficient shoulders to safely traverse on foot or bike. Living in a 70’s housing development, we were confined to the cul-de-sac and two nearby streets. Our son would not be able to ride his bicycle to the local grocery store and get an ice cream bar, as I had often done. Instead, we were forced to use a car to conduct all daily living activities outside of the home, using McLoughlin Blvd. as the main transportation route.

I continued to think about the days of the trolley, and wondered if something like this would ever be able to exist again.

Then, the light rail came to Portland. I walked with great anticipation, and joined the crowds who rode it during its first week of operation. I imagined the possibility of a light rail coming down the old trolley trail, and was delighted to learn later that was to become the next planned route – from Portland, into the McLoughlin Blvd.

It made perfect sense – to resurrect a light rail where there once was a trolley car to serve the quite populated area within the McLoughlin Blvd. corridor. And, it seemed completely logical to run something new where something else had already run before, rather than to forge a completely new path. Each time I would find myself stuck in traffic on McLoughlin Blvd. or behind a Tri-Met bus, I would wish for the days of the return of a trolley in this corridor, but now in the form of a light rail.

The housing construction increased significantly in the 70’s and 80’s. Our son was in school, and we also noticed an increase in his class sizes. We eventually moved to a larger home, near property which had been set aside by the NCSD to build another middle school, 4 blocks above
Outfield Rd. We wondered about the impacts of this growth on our community. Also, we started using backroads to get around the increased traffic congestion.

We heard light rail would be headed our way......with excitement, we embraced the possibility wholeheartedly. Then, we learned it would not come to this area after all. Instead, it would be extended West from downtown PDX to Hillsboro. With great disdain and disappointment, we wondered if we would ever have our day.

Life went on.....Our son went off to college, and only returned to the area a few times a year. On one visit home, he commented on how much McLoughlin Blvd. had changed. I hadn’t really noticed, although I found myself subconsciously avoiding this route. I knew it had started its degradation in the 80’s with the addition of adult video stores and nude dancing bars. I knew each time another used car lot took up space on the boulevard, or car dealership was remodeled, that the auto industry was unfortunately going to continue to define commerce in this area, the same way it had done on SE 82nd Ave. and SW Canyon Rd. in Portland.

Having so much pride and personal history in this commercial/residential area, I was in denial that the landscape had really changed to the great extent my son had noticed. He continued to comment with each visit home, until I could not ignore it any longer.

In the meantime, NCSD decided to sell the property near our home, as the majority of growth had now shifted to the Sunnyside/Happy Valley area. The old Clackamas HS became the new middle school. This seemed better for our neighborhood, so this move didn’t bother me.

However, I did mourn the loss of The Emporium store at Oregon City Shopping Center and Albertson’s grocery at Holly Farms Mall. I made a concerted effort to patronize Oak Grove Cinema, Ace Hardware, Office Max, and any new restaurants/coffee shops or other businesses along the strip to help in some small way to keep the area alive. I still eagerly awaited the day light rail would arrive – with the possibility of rebuilding and revitalizing, not only McLoughlin Blvd., but downtown Milwaukie and downtown Oregon City, as well.

For a period, we contemplated moving out to Sunnyside, to a nicer, newer home, in a less rundown area for shopping and commuting. But, after traveling out there a few times, we decided the traffic was utterly unbearable! So, we decided to stay in Milwaukie, perhaps for another 50 years, - where 3 generations of my family, have lived, worked/owned businesses within the McLoughlin Blvd. corridor.

When, I learned the next light rail project was going to be from the airport to the Gresham/PDX line, I was starting to lose patience. Then, when I discovered this line would eventually be extended south to Clackamas Town Center, it seemed like light rail would never get to us. But with our hope, we kept a sense of humor. When picking our son up from the airport, we often joked that if he stayed away from Portland long enough, someday I could simply pick him up at the light rail station during my shopping errands at the mall!

But, secretly I wondered, would I really live long enough to see the day, when I could ride the Max from McLoughlin Blvd. to downtown Portland? There was hope on the horizon......
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
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In addition to the discussion in the 2008 SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

I-020-002
Future growth assumptions (2030) are based on the following:

* Households, population and employment (including the type of employment).

* Household size, income and age.

* Existing zoning, available buildable land and local plans for zone changes and anticipated growth - with local review.

I-020-003
A major purpose for locating the terminus of the LRT line at Park Avenue is to collect traffic bound for the lot before it reaches or passes through downtown Milwaukie. Since most of the traffic bound for the lot is projected to originate south of Milwaukie, the desirable location for the lot is south of the downtown area.

I-020-004
As with any planning effort, the EIS evaluation of potential benefits is based on judgement and the application of the best available tools and information. However, with regard to project estimates and forecasts, the Metro travel demand model was used to project ridership and traffic conditions. This is a model and its results are also not guaranteed, though the model has been peer reviewed. The independent peer review panel for the Columbia River Crossing (which was the same model used for this Project) concluded in November 2008 that: “The
Travel Demand Review Panel concluded that the Travel Demand Model used by the region is an advanced trip-based tool and that it represents a valid tool for a project of this type...” The entire discussion and assessment of the model may be found at: http://www.columbiarivercrossing.org/FileLibrary/TechnicalReports/TravelDemandModelReview_PanelReport.pdf  A comparison of actual to predicted ridership conducted by the Federal Transit Administration in 2007 for the MAX Blue Line found that Metro forecasts were 89% of actual – and among the best forecasts of 19 light rail lines studied throughout the U.S. A similar analysis completed May 2009 comparing the MAX Yellow Line against 7 other projects found similar results. Other estimates of costs and impacts are provided in Chapters 3, 4 and 5 of the SDEIS and FEIS. The methods for making estimates and assessments are included in the methods reports listed in Appendix C, Supporting Documents, and available from Metro or TriMet upon request.

The question of whether the benefits are substantial enough to warrant the expenditures is one that the project partners will make after consideration of the FEIS.

I-020-005
Thank you for your comment. According to Resolution No. 09-4052 the High Capacity Transit Plan, the two corridors you mention in your comment response, Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, would be studied in conjunction and not separately.

From 2008-2009, Metro conducted a study, called the High Capacity Transit study, to investigate where the Metro region should invest in High Capacity Transit and in what priority order. High Capacity Transit might
include light rail, bus rapid transit, or commuter rail. In June/July 2009, the Metro Council and JPACT adopted by resolution No. 09-4052 the High Capacity Transit Plan. The regional high capacity transit system tiers and corridors identify near- and long-term regional HCT priorities. Regional HCT system corridors are grouped into one of four priority tiers, along with specific targets and various steps local jurisdictions could follow to advance a project to a higher tier. The four tiers relate to an HCT corridor’s readiness and regional capacity to study and implement HCT projects. Corridors within each tier would be updated with each RTP or by RTP amendment.

- **Near-term regional priority corridors:** Corridors most viable for implementation in next four years. These corridors include the Portland to Gresham in the vicinity of Powell Corridor, Portland to Sherwood in the vicinity of Barbur/Hwy 99W Corridor, and Beaverton to Wilsonville in the vicinity of WES.

- **Next phase regional priority corridors:** Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented. These corridors include Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, which would be studied in conjunction. Six other corridors are include in this tier.

- **Developing regional priority corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential based on political aspirations to create HCT supportive land uses. Two corridors are in this tier.

- **Regional vision corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation. Three corridors lie in this tier. Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor will be studied together at a later date.
I-020-006
The light rail alignment is too far away from the Southgate Park-and-Ride to be used as a part of the project. The route and station locations were approved by all jurisdictions in summer 2008.

I-020-007
From 2008-2009, Metro conducted a study, called the High Capacity Transit study, to investigate where the Metro region should invest in High Capacity Transit and in what priority order. High Capacity Transit might include light rail, bus rapid transit, or commuter rail. In June/July 2009, the Metro Council and JPACT adopted by resolution No. 09-4052 the High Capacity Transit Plan.

Public workshops, stakeholder interviews and review of numerous past regional transit planning efforts were considered in developing a “long list” of 55 potential regional HCT corridors to be studied. The plan used screening criteria to analyze over 55 potential corridors to determine a prioritized set of 13 corridors. The routes that you mention in your comment response were all studied in the list of 13 corridors. These include: Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, and Clackamas Town Center to Washington Square in the vicinity of railroad ROW/Hwy 224, Clackamas Town Center to Damascus, and Troutdale to Damascus.

Then, Metro worked with local jurisdictions and regional partners and TriMet to develop and refine a set of evaluation criteria to be used to evaluate and prioritize the screened HCT corridors in the fall of 2008 and early 2009. The Metro Council strives to create a region with sustained economic competitiveness and prosperity, transportation choices, minimized contributions to global warming, healthy ecosystems and equitable burdens and benefits of growth. Therefore, the Regional High Capacity Transit System Plan adopted goals concentrated on
environment, citizens and the economy to reflect that vision. Metro and the regional partners dedicated significant resources that enabled the team to conduct a significant level of transportation modeling. This technical analysis, combined with significant public outreach allowed decision-makers to prioritize corridors based on their technical merits and potential to achieve regional values of the citizenry.

The regional high capacity transit system tiers and corridors identify near- and long-term regional HCT priorities. Regional HCT system corridors are grouped into one of four priority tiers, along with specific targets and various steps local jurisdictions could follow to advance a project to a higher tier. The four tiers relate to an HCT corridor’s readiness and regional capacity to study and implement HCT projects. Corridors within each tier would be updated with each RTP or by RTP amendment.

- **Near-term regional priority corridors:** Corridors most viable for implementation in next four years. These corridors include the Portland to Gresham in the vicinity of Powell Corridor, Portland to Sherwood in the vicinity of Barbur/Hwy 99W Corridor, and Beaverton to Wilsonville in the vicinity of WES.

- **Next phase regional priority corridors:** Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented. These corridors include Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, which would be studied in conjunction. Clackamas Town Center to Washington Square in the vicinity of RR ROW is also included in this tier and might run in the vicinity of Hwy 224. Five other corridors are included in this tier.

- **Developing regional priority corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term
potential based on political aspirations to create HCT supportive land uses. Two corridors are in this tier.

- **Regional vision corridors:** Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation. Clackamas Town Center to Damascus, and Troutdale to Damascus are included in this tier. Sherwood to Tualatin is the third corridor identified in this tier.

I-020-008

Light rail to Milwaukie is a key element of the Regional Transportation Plan. The recently opened Green Line concluded Phase 1 of the South Corridor Project. Portland to Milwaukie light rail is Phase 2 of the South Corridor Project. The Green Line terminus in downtown Portland on SW Jackson Street at 5th and 6th Avenues is the starting point for Portland to Milwaukie light rail.

I-020-009

After the SDEIS was published in May 2008, the project entered Preliminary Engineering, which enabled the project to begin detailed design of the project and to estimate costs based on an engineered design, rather than the concept that was described in the SDEIS. Subsequent discussions between the engineers and representatives of agencies responsible for environmental resources has resulted in a great many changes to the project design. Many of these changes avoided impacts or reduced the impact and provided for a better understanding of mitigating measures to further lessen impacts.

In addition, the project is projecting the number of homes and jobs as well as traffic and transit usage to the year 2030 in order to assess future conditions and be able to design a project that takes these conditions into account.
Thank you for submitting your comments for consideration. Public input plays a critical role in shaping the light rail project, and were part of the process to identify a Locally Preferred Alternative following the close of the public comment period for the SDEIS. All substantive comments received during the public comment period are responded to within this document. Public comments have also been used to update information in the Final EIS.

Submitting written comments during the 45-day SDEIS comment period is only one way input was received. See Chapter 6, Community Participation for an exhaustive description of public involvement during previous and current phases of the light rail project.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
I-023-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for your comments. Your comments have been noted. Bicycle parking will be provided at every light rail station and the #19 bus will serve the Bybee Station.

The SDEIS states that a future planning effort will determine the viability of a future station at SE Harold. As part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.

Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The light rail project was endorsed by all participating jurisdictions in summer 2008. The Park Avenue terminus option was selected as the Locally Preferred Alternative.
Thank you for submitting your comments for consideration. The light rail project was endorsed by all participating jurisdictions in summer 2008. The Tillamook Branch alignment option and Park Avenue terminus were selected as the Locally Preferred Alternative.

An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. For a description of the project’s scope see Chapter 2.

I-026-001

I am a firm believer in light rail; a Clackamas County resident who voted for it any chance I got; and a person who has been very disappointed at the years that have passed while we’ve been talking about this. I’m in favor of the Park Extension and the Tillamook Branch option. In fact, I have been in favor of a line from Downtown PDX to downtown Oregon City for 15 years. It is a natural, for demographic and geographic reasons, and I’m not that happy with the first line to the County ending at a mall. That’s not my idea of access for the typical public transportation rider—elderly, young, disabled, not a driver, etc. I’m a bus rider and a big supporter of alternative transportation. I live in West Linn, where we’ll never have access to light rail until and unless it makes it to Oregon City. I’m also, of course, in favor of the Lake Oswego commuter rail project, to ease congestion/traffic delays/carbon emissions along the Highway 43 corridor. Don’t let the rich folks in Riverdale stop that one. It’s for the good of the many, not the few.

Move Heaven and Earth to make these projects happen, PLEASE. Thanks for the chance to comment. I go to too many meetings already, and the mailed booklet does a good job of laying out the project.

Sandy Carter
2555 Dellow Drive
West Linn, OR 97068
503-665-5649
I-027-001
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008.

From: Eric Chambers <chambere@hotmail.com>
To: <jenn.tuerk@oregonmetro.gov>
Date: 6/19/2008 11:16 AM
Subject: pdx Milwaukie light rail

I-027-001

I am an active member of the Portland Metro region. I write to STRONGLY encourage the quick development of the Portland-Milwaukie light rail extension, and the subsequent creation of a crossing across the Willamette in order to get it into downtown Portland. The high price of fuel and increasing traffic congestion—not to mention high costs of living in the urban core—make quick construction of this project an absolute imperative.

Sincerely,

Eric Chambers
Portland, OR

The other season of giving begins 6/24/08. Check out the I'm Talkathon. Check it out!
I-028-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Trans System Accounts - Milwaukie-Portland light rail

From: M'Lou Christ <mmortie@yahoo.com>
To: <jenn.nuerk@oregonmetro.gov>
Date: 6/20/2008 11:56 AM
Subject: Milwaukie-Portland light rail

To policy & decision-makers:

I was sooo much younger when I & other neighbors & business owners were 1st attending meetings to support light rail. And we kept voting for the lines that went thru all the other areas of the region (giving higher voter support than their neighborhoods must often), and trying to be patient when told we'd have to wait our turn.

And then I helped organize SE neighbors & business folks who refused to accept that light rail was "off the table"--but some areas voted against any other areas having that option--and we were successful in getting it back on the political agenda. But yet again, when it was revived the lines went elsewhere!

Well, this is my last shot. I'm not surprised the route is now being redrawn by folks on the west side--when have they ever been refused or told to wait?--but at least there's hope there will now be a Milwaukie-to-IPd downtown light rail.

I say, please, make it so.

~M'Lou Christ
Buckman, Willamette Watershed
Thank you for submitting your comments for consideration. The Sellwood Bridge is 75 feet above the Willamette River and the Portland-Milwaukie Willamette River Transit Bridge is designed to be 77.52 feet above the Willamette River – similar, but slightly higher than the Sellwood Bridge. It will be difficult to visually notice any significant difference in bridge heights – especially given that the Ross Island Bridge is between these two bridges.

The hybrid cable stayed bridge design has been endorsed by the Willamette River Bridge Advisory Committee, which includes design professionals.
Compensatory mitigation and required enhancement activities are being investigated in relation to further design, impact avoidance and minimization, and in coordination with regulatory agencies. Mitigation and enhancement will be completed in an effort to meet regulatory criteria and to increase overall ecosystem functions. Specific actions are included in the FEIS.

The Locally Preferred Alternative decision called for the station at SE Harold to be a future station. The alignment would accommodate future construction of a station at SE Harold, however, the specific design characteristics of pedestrian improvements associated with the station would be determined in a future design process for adding the station. The value of and potential for a pedestrian connection to areas east of the UPRR tracks may also be evaluated in the station design process.

The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA would accommodate construction of a future station at SE Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure, including a pedestrian bridge, and bus routing options that would support a station at Harold Street will be evaluated.
I-029-005
Complete information about the modeling methodology is included in Metro's Travel Demand Forecasting Methods Report. Specifically regarding the Harold Station, the added travel time with the station included causes potential riders from other stations to choose different paths or modes for their trip in the model. While this occurs with every station added, the Harold Station did not attract enough new riders to counter that effect.

I-029-006
The LPA decision to defer implementation of the Harold Station was based on insufficient ridership forecast for the 2030 planning horizon for the environmental impact analysis and impact on through travel time. Existing land use characteristics in the station area limit ridership generation potential. The analysis used in the LPA decision assumed pedestrian connections over SE McLoughlin Boulevard and the Union Pacific Railroad to capture as much potential ridership as possible.

I-029-007
The Harold station was analyzed both with and without a pedestrian connection to the Reed neighborhood. The reported number of 400 additional riders on the Milwaukie light rail line with a Harold station is from analysis with the pedestrian connection. This line ridership measure, however, is distinct from the station boardings and exits reported in Table 4.2-9 in the SDEIS, and the two are not comparable.

First, boardings and exits at specific stations don't equate to line ridership. A single rider counts as both a boarding at one station and an exit at another station.
Second, activity at specific stations, as shown in Table 4.2-9, does not show the effect on total line ridership of each station. In the travel forecasting model, households within a half-mile of a station generally have access to that station. Some households have access to multiple stations. The Harold station is just over 0.6 miles from the Holgate station and just under 0.6 miles from the Bybee station. Some of the boardings and exits that would be “lost” with the removal of the Harold station would instead occur at the Holgate and Bybee stations. The time required for the light rail to stop at each station affects the ridership in the model. For any trip which would travel through a station, but not use it, any added travel time would make that trip less attractive, and line ridership bypassing the station would decline.

Specifically regarding the Harold station, the additional riders served by station compared to the number of riders who would have access to another station and the number of riders negatively affected by the added travel time, and the cost of constructing the pedestrian access, make it a less cost-effective station than others in the vicinity.

I-029-008
The FEIS Chapter 2 Alternatives Considered provides further information on the factors influencing the decision of the Metro Council, after considering the SDEIS information and public comments, to define a Locally Preferred Alternative that defers the Harold Station.

I-029-009
The Portland-Milwaukie light rail project would provide travel time savings and improved reliability compared to bus service, benefiting most transit riders in the corridor. With a change in service from bus to light rail, however, some people would experience longer walks to a light rail station compared to existing bus stops.
Travel time is an important determinant of transit trips in the model. The longer a certain trip takes, the less attractive it is compared to trips using a different mode or trips to alternative destinations. In the model, any delay in travel time for transit users results in a decrease in ridership. Specifically regarding the Harold station, the riders lost due to the delay at the station is only one reason the station is designated a "future station," and is not planned to be constructed when the line opens. First, a pedestrian bridge would have to be constructed to provide access to the Reed neighborhood for the station to provide access to many nearby households. Second, many of the people who would use the Harold station would have access to either the Holgate station (just over 0.6 mile to the north) or Bybee station (under 0.6 mile to the south). For these reasons, the Harold station is a less cost-effective station than others in the immediate vicinity.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
I-032-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

I-032-002
The intention of all the jurisdictions participating in the Portland-Milwaukie Light Rail Project is to terminate the line at SE Park Avenue.

At all stations and park-and-ride facilities, the layout of project elements to promote the highest degree of transit user safety is of paramount importance. Each station plan will be subject to formal safety and security review and acceptance prior to construction.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

The Portland-Milwaukie Light Rail Project will provide safe, accessible pedestrian and bicycle connections between the Tacoma Station and Park-and-Ride and the Springwater Trail.

The SDEIS evaluated the 2003 LPA along with the 2003 LPA extended to Park Avenue and the Tillamook Branch Alignment to Park Avenue. The 2003 LPA terminated at Lake Road and included 1,475 park & ride spaces (600 at Tacoma, 600 at Southgate/Milwaukie, and 275 at Lake). The 1,475 spaces were estimated based on ridership demand for the 2003 project. Forecasting for SDEIS analysis determined the need for approximately 2,600 park & ride spaces. To provide these spaces, the 2003 LPA extended to Park Avenue called for 1,000 spaces at Tacoma, 600 at Milwaukie/Southgate and 1,000 at Park. The Tillamook Branch Alignment to Park Avenue cannot be served by the Milwaukie/Southgate site, so that alternative originally called for 1,000 spaces at Tacoma, 275 at Lake and 1,000 at Park. Subsequent to the adoption of the 2008 LPA, the structures have been reduced to 800 spaces at Tacoma and 600 spaces at Park Ave. Under an LPA Phasing Option, the initial capacity of these facilities would be further reduced. The FEIS acknowledges that the City of Milwaukie opposes a park-and-ride facility in its downtown. The Lake Road Park-and-Ride structure is not included in the LPA, although it is in a Minimum Operable Segment (MOS) Option. See Chapter 2 of the FEIS for more detailed descriptions of the LPA and its options.
Thank you for submitting your comments for consideration. The light rail project was endorsed by all participating jurisdictions in summer 2008. See Chapter 3.16 Safety and Security for information about measures to provide for safety on and around light rail and its facilities.

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I-034-001

Dear Council Members,

I was delighted to hear that a possible Light Rail system could be installed in Milwaukee. Recently, however, I've heard there are members of the community that don't want this great public transportation.

I understand their fears, for the school and children. But being a constant public transit rider, I can assure you that refusing to provide adequate transportation channels in Milwaukee is far more damaging than a rational fear than undesirable persons will infiltrate the community.

As Portland and the surrounding areas grow, Milwaukee must have a way for people to travel quickly and with ease between the two cities. If not, then the towns stand to cut itself off from the heart of the metropolitan area, killing economic growth.

Helping Milwaukee become more affluent is the best way to ensure a stable, safe, and thriving community. A light rail system is far more likely to bring business men and women into the town than bringing in predators or dangerous people.

Thank you for reading.

Best,

-Aaron Colter

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I-035-001
Thank you for submitting your comments for consideration. Analysis for the project showed strong travel demand both between north and south in the corridor and between the corridor and points east. The introduction of a light rail line serving the north-south demand provides an opportunity to improve the supporting bus network service between east and west. For example, some of the bus routes that currently travel between Oregon City and Portland could instead be improved between Milwaukie and points east. This connection has been identified as a potential improvement to frequent service. TriMet will determine the final bus routing changes associated with the light rail improvement.

I-035-002
The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
The closest station to SE McLoughlin Blvd and SE 17th Ave is the Holgate station, located at SE Holgate and SE 17th Ave. The LPA would accommodate future stations at Harold Street and SE McLoughlin Blvd.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the 2008 SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

I-037-002

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. Station locations were determined and confirmed through technical analysis, community discussions and jurisdictional review.

The LPA to Park Avenue replaces the existing Lafayette Street pedestrian bridge over the UPRR yard with an ADA-compliant pedestrian overcrossing at the Rhine Station. The LPA Phasing Option retains the existing structure and defers the new structure.

Combining stations would likely increase use of the remaining stations.

The light rail project relies on existing zoning to estimate future growth, but the scope of the project does not include rezoning or redevelopment proposals. However, fixed-rail projects are known to stimulate more intense development or redevelopment where the zoning allows. The City of Milwaukie and the City of Portland set the zoning for their respective communities based on the regional need for housing and employment capacity outlines in the Urban Growth Report and 2040 Regional Plan. No specific changes are proposed in the SDEIS or the FEIS. Any potential changes to zoning or to comprehensive plan designations would be required to go through the local jurisdictions land use judicial or quasi-judicial land use approval process.

In a concurrent project during the same time as the SDEIS, Metro, TriMet, and its partners conducted a station area assessment to help maximize the ability of the light rail project to help support the region’s existing goal for livable communities. The Portland to Milwaukie LRT Station Area Best Practices Assessments and Recommendations.
The modeled transit network was designed for the SDEIS analysis. Final decisions on transit routing would be done by TriMet prior to opening the light rail project.

I-040-006
Subsequent to the publication of the SDEIS in May 2008, the project publicly assessed this alternative and found that it would have less ridership than the one crossing the Willamette River. These results were presented in a publicly noticed meeting of the Project Steering Committee on June 4, 2008, and representatives of Portland Spirit and Association of Oregon Rail and Transit Advocates were present. As proposed, the alignment would be substantially on elevated structures, a much more costly design to construct than at-grade. Alternatively, if this alignment were placed at-grade, there would be substantial issues concerning at-grade street crossings and/or displacements. The Project Steering Committee did not choose to pursue this alternative, one of many alternative alignments considered as documented in Appendix L.

The connection to OHSU was found to better meet the project Purpose and Need, and provide more overall transit benefits to existing and new riders, than alignments that missed this connection.
I-041-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

From: Kimberly Dahl <k2dahlen@hotmail.com>
To: <trans@oregonmetro.gov>
Date: 8/8/2008 9:08 AM
Subject: Portland-Milwaukie Light Rail

I-041-001

I have lived in the Westmoreland area for 5 1/2 years now. I feel lucky to live in such a tight-knit neighborhood that is so close to the river, parks, shops, and transportation links to downtown. The arrival of the light rail will make the neighborhood just that much better! It is our hope that the light rail will reduce some of the traffic on S3E (which is very close to our house) and will bring more people into our neighborhood to support the local shops and eateries. We also look forward to taking simple, car-free trips downtown via the light rail to enjoy all that the city has to offer without the hassle of driving, parking, etc.

We appreciate all of the work that Metro and all of the neighborhood groups are doing to get the Portland-Milwaukie light rail line off of the drawing boards and made into reality!

Kimberly Dahl
5225 SE 18th Avenue
Portland, OR 97202

With Windows Live for mobile, your contacts travel with you.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail project, including the Porter-Sherman river crossing alignment, was endorsed by all participating jurisdictions in summer 2008.

The Locally Preferred Alternative (LPA) does not include a Harbor Street Station.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
I-045-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
The Transportation Impacts Results Report for the Final Environmental Impact Statement shows that in 2030 during the PM peak hour the average delay for vehicles at the light rail crossings on SE Monroe Street and SE Washington Street would be between 6 and 12 seconds. The Transportation Impacts Results Report also shows that in 2030 during the PM peak hour, vehicle queuing at the light rail crossings on SE Monroe Street, SE Washington Street and SE Adams Street do not exceed the available storage areas.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
I-049-002
The Locally Preferred Alternative includes a station at SE Lake Road, not Washington, in downtown Milwaukie. For more information about traffic impacts, see chapter 4 of the FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.
I-050-002

The Supplemental Draft Environmental Impact Statement studied a Bluebird station at-grade and above-grade. A station at Bluebird was not selected as a part of the Locally Preferred Alternative for several reasons. The at-grade station option was not considered feasible because the light rail must cross SE McLoughlin Blvd above-grade. An above-grade station environment was considered to be undesirable for safety and community impact reasons. The light rail structure over Kellogg Creek is designed to accommodate a future bicycle and pedestrian connection between the Lake Road station and the Island Station neighborhood.

Indeed, I think the need for such stimulus is also an argument for building a station at Bluebird. I will admit here that I have a personal interest, as a Bluebird station would be only a few blocks from my home. But I believe a Bluebird station can stimulate redevelopment of those blocks at the River Road/99E intersection which are already zoned commercial. The three-story buildings allowable with such redevelopment would be more compatible with an above-grade crossing of 99E, which will otherwise result in a mass of towering concrete dwarfing the single-story buildings currently there. Moreover, a Bluebird station would reduce the number of buses needing to enter downtown Milwaukie, as River Road buses could terminate at the Bluebird station.

In sum, I urge you to say yes to a light rail line through Milwaukie to Park Avenue, with a station stop at Bluebird.

Lisa Batey
11912 SE 19th Avenue
Milwaukie, Oregon 97222
Thank you for submitting your comments for consideration. The Metro travel forecasting model uses a variety of inputs, including socioeconomic and land use data, and auto and transit network characteristics. The inputs include survey data to help determine what are the factors important to people when deciding to travel by any mode (auto, walk, transit or bike). A full description of the model, including inputs, is included in the Travel Demand Forecasting Methods Report.

In the travel demand modeling, travel time is an important determinant of any trip. When looking at all modes, the model shows that the longer a trip takes, the less attractive it is compared to trips using a different mode or trips to alternative destinations. The model uses a series of mathematical equations to calculate transit trips; as such, any delay in travel time for transit users results in a decrease in ridership.

Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
In the modeling for the project, No-Build conditions were analyzed along with the various Build alternatives. Please see Table 4.2-2 of the FEIS for travel times. The transit travel times in the No-Build column reflect bus travel times.

Finally, the light rail project will accommodate a future station at Harold Street. See Chapter 4 for more information.

The Locally Preferred Alternative for the light rail project includes a terminus at SE Park Avenue in Oak Grove.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project’s analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project’s purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-054-001

Jim a supporter of the Portland-Light rail project. I live in the city of Milwaukie and I look forward to the light rail option of transportation as doe almost all of my neighbors. I also want to go on record as a supporter of the downtown Milwaukie station on Lake Rd (with the train running down the current Tillamook line). I think stations are safer the more people you have walking around – going to stores, restaurants, pubs, etc. The news media seems only to quote the few people against the project and I want you to know that the majority of Milwaukians are pro-light rail – the silent majority, it seems. The loudest people who live in Oak Grove (they have a Milwaukie address but live outside the city) have always hated anything to do with Milwaukie and always will. It sounds simplistic but if you lived here you would agree and it’s a one-sided feud that started 15 or 20 years ago and makes little sense now; but, there it is.

Anyway, Milwaukie light rail supporter.

Siri Bernard
503-515-4322
Thank you for submitting your comments for consideration. The Project provided briefings the TriMet's Committee on Accessible Transportation. This committee also received notice of the publication of this Final Environmental Impact Statement, as well as instructions for accessing all related documents.
I-056-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I live near Rex Putnam High School and commute several times a week to downtown Portland for work and play. If light rail were available, I would use it as often as I could to make that commute - and it would be fantastic to be able to use it to take my family downtown or to the zoo on the weekends. I also welcome the addition of light rail to this neck of the woods because we desperately need economic revitalization and the improved business opportunities that light rail would bring. Milwaukie also has a lot to offer the Metro area and is kind of an undiscovered gem in Portland's backyard. The benefits would definitely be mutual.

I will try to attend one of the upcoming open house events, but sent this message in case I cannot make it. Sincerely, Heather Decker

Heather W. Decker
Contract Attorney 503-786-2886 heather@deckerpdx.com

This e-mail may contain confidential and/or privileged information intended only for the addressee. If you received this e-mail in error, please notify me immediately.
Thank you for submitting your comments for consideration. The light rail project, including a station at Bybee and a station and park-and-ride at Tacoma, was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

Queuing of vehicles at the light rail crossings at SE Monroe Street and SE Washington Street were not reported in the SDEIS. However, the FEIS reports queuing at these locations and SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street...
and SE Monroe Street is between 6 and 12 seconds during the PM peak hour. By federal regulation, the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-060-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Original Message
From: "Casey Dixon" <casey1997@gmail.com>
Date: Tue, 17 Jun 2008 07:36:17
To: psd2008@oregon.gov, psd2009@oregon.gov
Cc: gregorycorrea@comcast.net, dennis1119@email.com, deloro2716@comcast.net
Subject: Milwaukee Light Rail

Dear,

My name is Casey and I commute via public transportation from NE Portland every day to work in downtown Milwaukee. I am very supportive of environmentally conscious efforts to solve pollution problems and I would like to voice my personal support of the Light Rail in Milwaukee. With the harmful emissions created and the escalating gas prices, I believe it would be in the best interest of the general public, thus positively effecting the community, to extend the Light Rail system to Milwaukee. Please keep in mind that the money saved by taking Light Rail rather than being spent on gas prices goes directly back into the local economy by the average consumer, which helps us all act in the end.

Thank you for your consideration and time to hear my voice,

Casey Dixon
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) has a terminus at Park Avenue (one mile past downtown Milwaukie) and does not have a park-and-ride facility at the Lake Road Station in downtown Milwaukie. The Minimum Operable Segment (MOS) ends in downtown Milwaukie at SE Lake Road, and has a 275 space park-and-ride lot at the corner of SE Main Street and SE Washington Street.

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside.
Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

The Final Environmental Impact Statement presents information about safety and security in Section 3.16.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Milwaukie Light Rail Project Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

The Final Environmental Impact Statement analyzes both safety & security and traffic impacts as a result of the project and presents mitigations where impacts are found. For safety & security information, see Section 3.16. For traffic information, see Chapter 4.

I-065-002
Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD...
commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

I-066-002
The Final Environmental Impact Statement presents information on both safety & security and traffic. For information about safety & security, see Section 3.16. For traffic impacts and mitigation, see Chapter 4.

The Locally Preferred Alternative, as adopted in July 2008, includes a terminus and park-and-ride at SE Park Ave and no park-and-ride at Lake Road in downtown Milwaukie. The FEIS analyzes an option called the Minimum Operable Segment, which does include a 275-space park-and-ride in downtown Milwaukie.
I-067-001
Thank you for submitting your comments for consideration. Alternative routes were studied and eliminated during the previous phases of the South/North project. See Chapter 2 for a full description. The light rail project's route and station locations were endorsed by participating jurisdictions in the summer of 2008. The Locally Preferred Alternative includes a terminus and park-and-ride at SE Park Ave. Extension to Oregon City is not in the scope of this project.

The Final Environmental Impact Statement analyzes traffic impacts. For more information about traffic impacts and mitigation, see Chapter 4 of the FEIS.
I-068-001
Thank you for submitting your comments for consideration. The Supplemental Draft Environmental Impact Statement studied at-grade and above-grade stations in this location. A station at Bluebird was not selected as a part of the Locally Preferred Alternative for several reasons. The at-grade station option was not considered feasible because the light rail must cross McLoughlin Blvd above-grade. An above-grade station environment was considered to be undesirable for safety and community impact reasons. A future connection to the SE Lake Road station is planned as a part of the light rail structure over Kellogg Creek.

I-068-002
Thank you for submitting your comments for consideration. The Bluebird Station in the SDEIS did impact and displace some businesses along SE McLoughlin Boulevard. The Locally Preferred Alternative endorsed by all participating jurisdictions in summer 2008, does not include the Bluebird Station. No displacements are anticipated at Bluebird Street and 22nd Avenue with the Locally Preferred Alternative.

I-068-003
The Locally Preferred Alternative for the light rail project was approved by all jurisdictions in summer 2008. See response I-068-001 above for information about the proposed Bluebird station.
Trans System Accounts - Fwd: RE: Portland-Milwaukie Light Rail Project

From: Karen Withrow
To: kenroth@spiritone.com
Date: 5/21/2008 12:37 PM
Subject: Fwd: RE: Portland-Milwaukie Light Rail Project
CC: Jenn Tuerk

Kate,

Thank you for your interest in and comments on the Portland-Milwaukie Light Rail project.

In response to your question about potential impacts to businesses near Bluebird, the SDEIS looked at an elevated crossing of McLoughlin which would have an elevated station and an at-grade or street level crossing with a street-level station. Each has different impacts but both envision a potential impact to at least one business. That said, one option will be selected as part of the current decision process and then the project team will work with the property owner to see if there is a way to avoid the impact or at least minimize it.

In terms of the total number of stations, there is likely to be one or two in downtown Milwaukie and could be another at Bluebird. The options were structured to study all possible options in different combinations knowing we could mix and match after the analysis was complete and based on public input. The only tradeoff to additional stations is travel time, the more stops the longer it takes to get to downtown.

Thanks again,

>>> On 5/20/2008 at 5:59 PM, “Kate Enroth” <kenroth@spiritone.com> wrote:

Option B shows a stop at Bluebird. There are several businesses right there, the Roadhouse tavern, the motorcycle shop (current incarnation) and across 22nd, a secondhand store and a guitar shop and something else? Would any of them be removed? Also, as an aside, I would like to see more stops than are shown on these plans. For example, if option c is preferred with a stop at Lake and one at Park, why not have one at Bluebird if the tracks have the same alignment as option B? If you want people to have the best access, give them the maximum number of options. Thanks for listening. All this will be done after my spouse (for sure) and I (maybe) have retired so we will not be commuting.

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From: Jenn Tuerk [mailto:jenn.tuerk@oregonmetro.gov]
Sent: Tuesday, May 20, 2008 11:37 AM
To: Kate Enroth
Cc: Karen Withrow
Subject: Re: Portland-Milwaukie Light Rail Project

Thank you for your interest in the Portland-Milwaukie Light Rail Project. Your comment will be included in the public record that is shared with project decision-makers and the Federal Transit Administration. The public comment period runs from May 9 to noon on June 23.

file://C:\Documents and Settings\merk\Local Settings\Temp\XPgwprwise=48341776MetroCen... 8/29/2008
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
I-070-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project’s purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. This Project is designed to look at transit alternatives in the corridor, consistent with the Project's purpose and need statement, including providing high-quality transit service and ensuring effective transit system operations in the corridor. As such, bus rapid transit and busways were considered as part of four analyses completed prior to the 2008 SDEIS (and as noted in the SDEIS in section 1.1.2.1 Modes Evaluated, starting on page L-2.) These alternatives included adding lanes for bus rapid transit, but did not include adding lanes for general traffic as the Federal Transit Administration does not fund non transit projects, such as roads, and to do so would require a significant change in federal transportation legislation to be considered a feasible alternative. The bus rapid transit and busways were not advanced for the reasons noted in SDEIS, Appendix L, pages L-8 and L-9.

In addition, ODOT, the region, and local partners plan additional road capacity consistent with the Regional Transportation Plan and local Transportation System Plans. These planned improvements are assumed in the traffic and transit modeling done for the Project for the year 2030. Individual road projects, over 60 percent of all planned transportation investments in the region to the year 2035, may be found at the Metro website page concerning the Regional Transportation Plan at: http://www.oregonmetro.gov/index.cfm/go/by.web/id=25036. There are numerous projects listed that do increase road capacity and which are included in the No Build alternative considered in the Project. That is, the region has identified road projects in the vicinity of the Project as well as funding and these road capacity projects will be built in the coming years and are taken into consideration in the “No Build” alternative.
I-073-001
Thank you for submitting your comments for consideration. The project will modify the intersections at McLoughlin/17th and McLoughlin/Harold. Crosswalks on all four legs of the intersections are being considered but design is not yet resolved.
Thank you for submitting your comments for consideration. As part of the FEIS, the Transportation Impacts Results Report shows the Locally Preferred Alternative (LPA) has an impact to about 50 on-street parking spaces around the Rhine Street Station. Based on the survey conducted in June 2009, there are about 230 available spaces within 1,000 feet of the Rhine Street Station and current daytime usage is about 95 spaces. Based on current usage, there would be about 180 available spaces and mitigation would not be required.

The Transportation Impacts Results Report suggests that parking mitigation strategies be developed for off-street parking impacts on SE 17th Avenue.

The project follows FTA noise and vibration regulations. The FTA criteria for noise and vibration are based on years of study and found to be a very effective criteria to address noise and vibration related to high capacity transit operations. TriMet has the benefit of the experience of assessing and providing noise vibration mitigation along other previously constructed alignments. The potential noise and vibration mitigation measures we have at our disposal are very effective at reducing noise and vibration from the light rail vehicles.

Documentation of noise and vibration impacts and mitigation measures for the Locally Preferred Alternative, Minimum Operable Segment as compared with No Build conditions are located in Chapter 3.10 of the FEIS.

The Portland-Milwaukie Light Rail Project will provide the following improvements to pedestrian access across SE Powell Boulevard in the vicinity of SE 17th Avenue:
• Realigned, safer pedestrian ramps along both north and south sides of Powell that connect to the existing pedestrian undercrossings of SE 17th Avenue and the UPRR tracks. Blind corners will be straightened as much as possible on these approaches to the undercrossings.

• The LPA identifies a pedestrian overcrossing at 13th Place / SE 14th Avenue, although the LPA Phasing Option defers its construction.

• A sidewalk on the new SE 17th Avenue bridge above SE Powell, which will connect to either the existing undercrossing of the UPRR on the north side of Powell or the new pedestrian bridge over the UPRR and light rail tracks at SE 13th Place.

I-074-004
Construction impacts would be temporary (6 to 18 months) and mitigation measures at intersections could result in potential short-term impacts the roadway network. Detailed construction impacts will be outlined during final design. TriMet would coordinate with property owners before and during construction.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

I-075-001
We are looking forward to having light rail at Clackamas Center this year. Thank you!

Daryl and Diana Boom
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-077-001

I am writing to support the proposed light rail line to Milwaukie in Oregon. The alignment makes sense and with gas prices finally going higher, people need an alternative to cars. A new bridge over the Willamette River is needed for transit to the OMSI district and South Waterfront and that will eventually support a streetcar connection around Portland’s inner core. This bridge further unites Portland economically and socially. Please build this light rail alignment right away.

Sincerely,
Peter Finley Fry

Peter Finley Fry, AICP PhD
2153 SW Main Street #105
Portland, Oregon 97205

503-274-2744
503-274-1415 FAX

Gas prices getting you down? Search AOL Autos for fuel-efficient used cars.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-079-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. As noted in your [the] comment, there have been analyses of alternatives in the corridor for many years, and many aspects of the corridor and region have changed. Accordingly, the Project has updated the EIS analysis data, including existing and planned land uses, existing and planned transportation network, economy, etc., and these updated data are reflected in the SDEIS analysis and further updated as appropriate in the FEIS, especially Chapter 3.2, Land Use and Economy and Chapter 4, Transportation.

During the last two years, the Regional Transportation Plan has also been updated and transportation priorities reviewed and re-evaluated. It is this plan where such broader issues such as how to serve additions to the urban growth boundary, address energy costs, and investment priorities around the region were debated and determined, recognizing the trade-offs between transportation investment choices. The Regional Transportation Plan, through a public process completed by the region’s elected officials at least every four years, is the document and forum for discussion of the broadest transportation investment debate and determinations to be made. The RTP sets out the broad goals and overall direction. The latest Metro Regional Transportation Plan confirms the Project as one of the transportation investments to be made within the South Corridor – though it does not mandate a specific alignment within the Corridor, nor does it prevent the selection of a No Build alternative.

Light rail alignments for the South Corridor were identified following the South Corridor Project SDEIS publication in 2002. The Locally Preferred Alternative adopted for South Corridor in 2003 identified a two-phase project to serve the transportation needs of the South Corridor, with I-205 as the first phase and Portland to Milwaukie as the second phase; this eliminated the need for a route following Highway 224, and instead...
allowed the route serving downtown Milwaukie and north Clackamas County. The Portland-Milwaukie SDEIS updated the South Corridor analysis and resolved issues that remained at the time the LPA was adopted in 2003.

I-084-002
Table S-3 identifies in a broad way that within the context of an entire neighborhood, overall adverse impacts will be low. More detailed evaluation of impacts on individual neighborhoods and mitigation is provided in Chapter 3.3 of the FEIS. In addition, more detailed information about safety and security are in Section 3.16, noise and vibration in Section 3.10, and traffic in Chapter 4. A summary of project mitigation is provided in Appendix M, Mitigation.

I-084-003
The South Corridor, as defined by the Project, is the travel shed, or area with the majority of homes and businesses immediately to the east of the Willamette River, from downtown Portland south and generally west of I-205 (see Figure S-1, SDEIS) - not the Damascus area or other areas added to the urban growth boundary or generally those recommended by Clackamas County to be added as urban reserves. There are some areas in the vicinity of Oregon City that are nearing final designation and approval as urban reserves. This is not included in the SDEIS or FEIS because changes to the urban growth boundary occur through a separate, though related, process. While any required changes to the urban growth boundary would occur in areas designated as urban reserves, the urban growth boundary process will continue beyond the duration of this study, to be finalized no later than the end of 2011.

The region’s land use plan calls for creating centers and connecting these centers with high capacity transit. Oregon City is a regional center
and Milwaukie and Gladstone are town centers within the South Corridor. The SDEIS and FEIS include land use and transportation projections out to the year 2030, and take growth in the whole South Corridor, as well as that projected for the region, into account. The projections of growth in the region are based on the capacity of areas (vacant buildable land inventory as well as estimates of redevelopment) that were completed based on local government staff review and comments. Ridership projections are based on detailed local demographic information. The SDEIS and FEIS contain detailed information about land use patterns in Section 3.2.

I-084-004

The Locally Preferred Alternative has a southern terminus at Park Avenue. In its High Capacity Transit System Plan (Metro 2010), the region has identified the potential for future extensions of high capacity transit from Park Avenue to Oregon City; the system plan was adopted by the Metro Council as part of the Regional Transportation Plan in June 2010. The extension of HCT from Park Avenue to Oregon City does not appear to be precluded by the LPA or MOS. Any extension would be a separate project-level decision.

The South/North Alternatives Analysis and DEIS evaluated several options to serve Clackamas Town Center along Highway 224, as well as Railroad Avenue. A ballot measure that would have reaffirmed funding for the South/North project was defeated and when the South Corridor project was initiated, no light rail alternative was included. In response to requests from community members and local jurisdictions to consider a light rail alternative, light rail on I-205 to serve Clackamas Town Center was included as a lower cost alternative. The 2002 South Corridor SDEIS and the I-205/Portland Mall FEIS, taken with the region’s 2003 selection of a South Corridor LPA, provided the basis for the region’s decision for developing light rail in two phases, one using I-205 and the
While districts 4 and 5 show modest population growth relative to other districts in the corridor between 2005 and 2030, they are among the highest populated corridor districts both in the base and future years. Together, they account for 35% of corridor households in 2005 and 24% of corridor households in 2030.

The project will provide people to the east of districts 4 and 5 with improved access to downtown Portland and to South Waterfront, as primary bus routes serving those areas (routes 9, 17, and 19) will travel over the new transit bridge.

Bus lines 9, 17, and 19 serve the areas east of districts 4 and 5 and will provide better access to downtown with their new routing over the new transit bridge.

The Regional High Capacity Transit System Plan was completed by Metro in 2009, and serves to provide guidance for the region’s long-term investments in future high capacity transit. The study included the routes mentioned in the comment:

- Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor (studied in conjunction)
- Clackamas Town Center to Washington Square in the vicinity of RR ROW

The study identified both corridors as “next phase regional priority corridors”. The summary report can be downloaded at http://www.oregonmetro.gov/index.cfm/go/by.web/id=26680
Metro evaluated the ridership potential of extending light rail to Milwaukie and Clackamas County. Demographic data is available through varying sources. For each EIS, we update the current demographics we use to be current information from the census. For future demographic data, we calculate the amount of people who will be living and working in different areas. For the Portland-Milwaukie Light Rail Project we calculated this for the year 2030. Individual cities and counties provide us with their zoning and comprehensive plans. Based on this data, the assumed population and employment growth of the region is distributed accordingly. This information is then used for our 2030 modelling and the assumptions of land use. In addition, the federal government has rigorous standards to make sure that the projects we build are cost effective. We are required to pass the Transportation User Benefit test, which calculates the cost per rider. The more current and future potential riders (population) in an area, the better we perform according to this test.

In addition, from 2008-2009, Metro conducted the High Capacity Transit study, to investigate where the Metro region should invest in High Capacity Transit and in what priority order. High Capacity Transit might include light rail, bus rapid transit, or commuter rail. In June/July 2009, the Metro Council and JPACT adopted by resolution No. 09-4052 the High Capacity Transit Plan. Public workshops, stakeholder interviews and review of numerous past regional transit planning efforts were considered in developing a “long list” of 55 potential regional HCT corridors to be studied. The plan used screening criteria to analyze over 55 potential corridors to determine a prioritized set of 13 corridors. The routes that you mention in your comment response were studied in the list of 13 corridors. These include: Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, and Clackamas Town Center to Washington Square in the vicinity of railroad ROW/Hwy 224. Then,
Metro worked with local jurisdictions and regional partners and TriMet to develop and refine a set of evaluation criteria to be used to evaluate and prioritize the screened HCT corridors in the fall of 2008 and early 2009. Metro and the regional partners dedicated significant resources that enabled the team to conduct a significant level of transportation modeling. This technical analysis, combined with significant public outreach allowed decision-makers to prioritize corridors based on their technical merits and potential to achieve regional values of the citizenry. The regional high capacity transit system tiers and corridors identify near- and long-term regional HCT priorities. Regional HCT system corridors are grouped into one of four priority tiers, along with specific targets and various steps local jurisdictions could follow to advance a project to a higher tier. The four tiers relate to an HCT corridor’s readiness and regional capacity to study and implement HCT projects. Corridors within each tier would be updated with each RTP or by RTP amendment.

- Near-term regional priority corridors: Corridors most viable for implementation in next four years. These corridors include the Portland to Gresham in the vicinity of Powell Corridor, Portland to Sherwood in the vicinity of Barbur/Hwy 99W Corridor, and Beaverton to Wilsonville in the vicinity of WES.

- Next phase regional priority corridors: Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented. These corridors include Clackamas Town Center to Oregon City in the vicinity of I-205 Corridor and Park Ave to Oregon City in the vicinity of McLoughlin Corridor, which would be studied in conjunction. Clackamas Town Center to Washington Square in the vicinity of RR ROW is also included in this tier and might run in the vicinity of Hwy 224. Five other corridors are include in this tier.

- Developing regional priority corridors: Corridors where projected 2035
land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential based on political aspirations to create HCT supportive land uses.

- Regional vision corridors: Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation.

**I-084-006**
The Supplemental Draft Environmental Impact Statement and Final Environmental Impact Statement were updated to reflect the latest information about existing conditions such as population and employment, road network and transit operations, as well as conditions forecast to the year 2030.

**I-084-007**
There were eight people who are listed in the August 7, 2007 City of Milwaukie City Council public hearing as testifying in favor of a Main Street alternative and 19 who are listed as against the alternative – a ratio of 2.4 to 1. However, as the Council asked for those in favor to testify first, many signed up to testify against the Main Street alternative left by the time their names were called. If all of those signed up in favor of Main Street were eight, those signed up in opposition were 28 – a ratio of 3.5 to 1. The City Council, however, after considering the testimony, did recommend, four to one, not to advance a Main Street alternative.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement includes a comprehensive review of the project's environmental impacts and alternatives, as well as a summary of public comments and responses.
Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002

In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

**I-084-008**

Highway 224 does have an underpass that allows north-south travel by motor vehicle, walking or biking. However, Highway 224, a limited
access road, does not provide as much access as an arterial with frequent at-grade intersections and all mode accessibility does. Further, the local street grid is not continuous. For example, SE 23 and 24th streets, Crystal Spring Lane and SE 29th do not continue to the North. Only SE Main and SE 26th Street have continuous north-south access under Highway 224. There are many locations in the potential station area travel shed where substantial out-of-direction travel is needed to either go around Highway 224 or to get to the underpass. Accordingly, there would be much more constrained access to a northern terminus than a terminus at Lake Road as included in the 2008 Locally Preferred Alternative alignment and design. Further, cut-through travel through this area to get to a light rail station would be less than other areas with greater access.

A current survey shows 47 on-street parking spaces (of the 64 available spaces) being used within 1,000 feet of the Lake Road Station, and the project would impact 12 on-street parking spaces around the Lake Road Station. The current usage represents about 90% of the 52 available spaces in the future.

There could be additional costs that the City and downtown property owners incur as a result of parking constraints. These costs will need to be weighed against the benefits of more people coming to the downtown via walk, bike, bus, light rail, and auto and conducting business with downtown Milwaukie merchants.

I-084-009
Response to comment on page 3-82. Further analysis on the park contained in the EIS refers to the Park as an existing resource, rather than planned. The proposed light rail alignment adjacent to the Park is not actually using park land, rather it is using existing rail right of way associated with the trestle that runs between the Robert Kronberg Nature Park and the Milwaukie Local Share Parcel. Because the park
already has a rail feature running along one leg of its boundary, the new impacts of the proposed light rail alignment are estimated to be limited to visual impacts. Impacts are measured in net change to the existing conditions and because an active rail line already exists here, the addition of the light rail alignment is seen as only having minimal impacts.

Response to page 3-80 comment. The light rail alignment is proposed along the northwestern boundary of the park.

Response to page 3-81 comment. In the SDEIS, the proposed LPA was to use some of the railroad right of way and a small amount of the park land. The amount noted by the commenter is only the small amount required from the park. The LPA to Park Avenue alignment has been slightly revised since the SDEIS and would require no permanent acquisition of park land.

I-084-010
The SDEIS states that the light rail alignment does not involve major modifications to police response routes, and that response times are not expected to be affected.

I-084-011
The parking study that was done for the Final Environmental Impact Statement (FEIS) was completed in August as noted in the comment. A review of the latest City of Milwaukie Transportation System Plan also showed a parking study that was completed during August. The FEIS also used an updated City of Milwaukie Parking Inventory that was completed on December 1, 2009. The current parking utilization rates are shown in the Parking Impacts section in Table 6-13 in Chapter 6 of the Transportation Impacts Results Report, a technical report that provides additional information for the FEIS. This report is available from Metro.
The SDEIS showed that the LRT project would remove 34 off-street parking spaces (next to the railroad tracks between SE Monroe and SE Washington) and about 12 on-street parking spaces in downtown Milwaukie. The parking impacts have been reevaluated and now show 52 on-street parking spaces being removed by the project. The City of Milwaukie no longer includes the 34 off-street parking spaces in the City’s downtown parking inventory, and therefore the FEIS does not include the loss of these unofficial parking spaces as an impact of the LRT project.

Potential parking mitigation alternatives that could be implemented include replacement of on-street parking, parking management strategies and revising parking restrictions. Coordination with the City of Milwaukie should occur to determine the best strategy to address the on- and off-street parking impacts should parking become an issue around station locations.

The Locally Preferred Alternative (LPA) has a terminus at Park Avenue (one mile past downtown Milwaukie) with a 600-space park-and-ride and does not have a park-and-ride at the Lake Road Station in downtown Milwaukie. This is the alternative that the project partners prefer to build. The Minimum Operable Segment (MOS) ends in downtown Milwaukie at Lake Road, and has a 275 space park-and-ride lot at the corner of SE Main Street and SE Washington Street. The LPA Phasing Option identifies smaller initial capacities for the park and rides. FTA requires that projects seeking federal funds identify interim or shorter sections that could be implemented if funding is not available for the full length project. Due to these cost considerations the project is looking at the MOS as part of the FEIS.

I-084-012
The issue of potential signal timing mitigation at the intersection of SE
McLoughlin Boulevard and SE Washington Street discussed on page 4-44 of the SDEIS is associated with the MOS. The mitigation would have been considered to minimize the potential for blockage of park-and-ride ingress and egress by traffic on SE Washington Street. There is no need for mitigation at SE McLoughlin Boulevard and SE Washington Street with the LPA, which terminates at SE Park Avenue with no park-and-ride facility on SE Washington Street.

Queuing of vehicles at the light rail crossing at SE Harrison Street was reported on as part of the SDEIS. However, the FEIS will look at queuing at SE Monroe and SE Washington as well as SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street and SE Monroe Street it is between 6 seconds to 12 seconds during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds. Therefore, unlike the delay due to freight trains, no vehicle would ever be delayed by light rail longer than 50 seconds. See the FEIS Transportation Impacts Results Report for more information.

I-084-013
The park-and-ride that the SDEIS is referring to is the new 330-space park-and-ride lot on the old Southgate Theatre site off SE Main Street north of downtown Milwaukie. This park-and-ride is not associated with the light rail project. The No Build and the Build Alternatives assume this park-and-ride is in place and would be served by buses. The 2008 Locally Preferred Alternative (LPA) would result in 1,400 additional park-and-ride spaces and the Minimum Operable Segment (MOS) would result in 1,275 additional spaces. An LPA Phasing Option identifies smaller initial capacities for the park and rides.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project’s analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project’s purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.

I-086-002
Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet's Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and
collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project’s methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.

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TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and
collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
I-088-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

I-088-002
The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
I-090-001

Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

Bus transit facilities are currently undergoing improvements at Jackson Street in downtown Milwaukie as a part of a separate effort. Transit facilities and lighting will be enhanced.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
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I-092-001
Thank you for taking the time to express your concerns. Section 3.3 of the SDEIS, Community Impact Assessment, considers the overall nature of change to neighborhoods and communities due to proposed changes in the project. Considering the benefits of the project with two nearby stations, and the project's design that avoids intrusions into the neighborhood, adverse impacts to the overall community or its functions are not expected.

The FEIS has been updated to reflect the advanced design that has been developed for the project's Preferred Alternative. The alignment has been designed to follow existing major rights of way, including the Tillamook Branch Line and SE McLoughlin Boulevard, which helps to minimize the effect of visual changes as well as other project effects to the neighborhood. The bridge will follow the existing railroad trestle to reach the existing edge of the Island Station neighborhood that is formed by the adjacent bluff, the planned trolley trail, and the existing roadway of SE McLoughlin Boulevard.

The project will modify intersections to SE McLoughlin Boulevard from the neighborhood, but these improvements will not restrict access to and from the neighborhood and will offer improvements to allow safe and effective operations for vehicles, pedestrians, bicyclists and transit.

As noted in the SDEIS, the elevated structures for light rail will be visible from some residences in Island Station neighborhood. These impacts were identified as high but affect only a portion of the Island Station neighborhood. For more information about visual impacts, please see Section 3.4 of the FEIS.

Finally, the light rail project will not create additional noise impacts that cannot be mitigated. Noise impacts are limited, and primarily affect a limited number of residences bordering SE McLoughlin Boulevard.
Section 3.10 of the FEIS provides additional information on the affected properties and TriMet’s mitigation commitments.

I-092-002

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Metro travel forecasting model uses a variety of inputs, including socioeconomic and land use data, and auto and transit network characteristics. The inputs include survey data to help determine what are the factors important to people when deciding to travel by any mode (auto, walk, transit or bicycle). A full description of the model, including inputs, is included in the Travel Demand Forecasting Methods Report.

In the travel demand modeling, travel time is an important determinant of any trip. When looking at all modes the model shows that the longer a trip takes, the less attractive it is compared to trips using a different mode or trips to alternative destinations. The model uses a series of mathematical equations to calculate transit trips; as such, any delay in travel time for transit users results in a decrease in ridership.

Specifically regarding the Harold station, the riders lost due to the delay at the station is only one reason the station is designated a “future station”, and is not planned to be constructed when the line opens. First, a pedestrian bridge would have to be constructed to provide access to the Reed neighborhood in order to make the station viable. Second, it would not serve a large number of households or employment that would not otherwise have access to either the Holgate station (just over 0.6 mile to the north) or Bybee station (under 0.6 mile to the south).

For these reasons, the Harold station is a less cost-effective station than others in the line.

Finally, the light rail project would accommodate construction of a future station at Harold Street. See Chapter 4 for more information.

Thank you for submitting your comments for consideration. The Locally
Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. Developed in support of the FEIS, the Transportation Impacts Results Report shows an impact to about 25 on-street parking spaces and 20 off-street parking spaces around the Clinton Station. There are about 650 on-street spaces available within 1000 feet of the station, and based on a survey from June 2009, less than two-thirds of those spaces are currently being used. The Transportation Impacts Results Report suggests that parking mitigation strategies for off-street parking impacts on both SE Clinton Street and SE Gideon Street be developed.

The light rail alignment within the SE Clinton/SE 11th/SE 12th area is within and/or adjacent to the existing, active railroad right of way. The project would improve existing conditions by constructing safety fences, crossing gates and pedestrian zones. Safety treatments would be designed to meet all applicable standards and regulations. Pedestrian crossings would remain at their current locations and would be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "Z" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches and residences. The project's analysis directly considers existing conditions that include freight operations to those that
would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:
- South/North DEIS, 1998
- South Corridor SDEIS, 2002

In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option.
or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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Chapter 4 provides updated information and details about the project's effects on traffic and parking in downtown Milwaukie and the mitigation commitments the project will make to avoid significant impacts.
I-101-001
Thank you for submitting your comments for consideration. The TriMet light rail system is capable of climbing the elevations to Park Avenue – it is capable of negotiating much greater grades than heavy rail – especially freight rail. Whether extension of light rail south will be advanced from Park Avenue or I-205 Town Center has not been determined, it appears as though topography can be addressed. However, many other significant issues would have to be addressed.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-105-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a station at SE Lake Road and a terminus at SE Park Ave, and was endorsed by all participating jurisdictions in summer 2008.

The proposals for the alignment and station locations south of Tacoma Street all have their own pros and cons. It is most important that we impact as little as possible the traffic flow and existing industrial and commercial entities.

I would definitely like to see the line extended to Park with an above grade crossing of McLoughlin, but without a station at Bluebird. I would prefer the Washington station location unless the line ends at Lake Road, in which case I believe Lake should be the only station in downtown Milwaukie. Having said this, I support the alignments and station locations that Milwaukee city staff has put forward. I have other preferences but I can see the logic in the choices they have made.

It is my personal belief that many of the citizens of Milwaukee really do and will support having light rail come into downtown, as long as we can resolve issues of public safety and the development around the station(s) is made attractive and useful. It is also my belief that a majority of the households don’t think they will be impacted one way or the other and are therefore indifferent to the issue.

I hope that we can overcome the resistance of some of the “old-timers” who don’t want progress and have continued to fight light rail despite growing congestion, gas prices and the clear message that we must have public transportation in the form of light rail to cope with future traffic issues.

Linda M Hedges
Milwaukie, OR
Secretary, Hector Campbell Neighborhood Association

Received
Jun 4 2008
via email
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. The adopted Locally Preferred Alternative includes a single station in Milwaukie at SE Lake Road, a terminus at SE Park Avenue and no Bluebird station.
I-107-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

I-107-001
Regarding whether to extend the line to Park Ave., I have this comment. Your statement that approximately 1200 to 1600 households live within a 1/2 mile radius of the Park Ave. station. Maybe you have considered the Willamette View residents that live on River Road but there are about 500 residents and many of them do not have cars that use Tri-Met lift buses and bus line 34 to get to the downtown area and also the OHSU hospital. Many of us are on special tests at the hospital and do need to visit it occasionally for live exams. I would be in favor of the Park Ave extension for another reason also. The 1000 to 1200 car parking would certainly be attractive for those who live in Oregon City but work in Portland or OHSU. As you know, parking up at the hospital is limited and employees who work there are charged a parking fee. Anyone working in downtown Portland also needs parking and usually with some parking fee cost. My vote is for the extension to Park Ave if the cost and benefits relate. I do understand that it would cost one million dollars more per year for operating costs but what is the long run expansion plan and would the cost of construction now be favorable rather than paying the inflation costs of a later extension if practical. Thanks for listening.
Cliff Jenne 13021 S.E. River Rd. Apt. 312 P Portland, Or. 97222-5063 Tel. 503-652-0009
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.

I-108-001

From: Jussi Heikkola <jheikkola@yahoo.com>
To: <trans@metro.dm.or.us>
Date: 5/21/2008 7:17 PM
Subject: Comments on Portland-Milwaukie Light Rail Project

Hi,

I strongly support extending the MAX line from Portland to Milwaukie and I would use this line daily. Also, I think the Harold street station is necessary for people living in northern Westmoreland and Reed College students.

Thank you,
Jussi Heikkola
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
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In addition to the discussion in SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. Analysis of LRT alignment options in Milwaukie dates back to 1993:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002
- Portland-Milwaukie SDEIS, 2008

In addition to the background on project decision-making provided in Chapter 2 of the SDEIS, the Portland-Milwaukie SDEIS Appendix L presents a chronicled summary of studies of other alignments. Routes studied were shown in Figures L-5 and L-6. In addition to previous analyses documented in Chapter 2 and Appendix L of the SDEIS, the alignments studied in the SDEIS in Milwaukie are the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option in downtown Milwaukie. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and SE Main Street options, including the couplet options, for not meeting the project’s Purpose and Need.

The analyses were based on criteria utilized in the SDEIS that are key to...
distinguishing the comparative impacts and effectiveness of the options to allow decisions to be made about the alignment through Milwaukie by City staff, the Planning Commission, City Council, neighborhood leaders and interested citizens. The Locally Preferred Alternative decision was the product of this process. The LPA best meets the Purpose and Need for a major transit investment in the Milwaukie-Portland corridor. This process fully complies with FTA major capital project development process requirements. Approval of the Portland-Milwaukie Light Rail Project to enter the preliminary engineering phase of project development is the FTA’s acknowledgment that conceptual design, preparation of the SDEIS and selection of the LPA have complied with FTA and NEPA requirements to date, although no final decision on the project to be built can be made until the FEIS is complete. Similar, any of the LPA identifications made throughout the history of the project are preliminary steps in guiding a narrowing of alternatives to those that represent the most promising alternatives that address the purpose and need, consistent with the intents of NEPA, but they do not represent a final decision to implement a project.

The option to terminate the project north of downtown Milwaukie was also considered prior to the LPA decision and is documented on page 2-41 of the SDEIS. Downtown Milwaukie is a town center in the Metro 2040 Growth Concept, in which high quality transit service connects town centers to other town centers and regional centers. Terminating the project north of downtown Milwaukie would require a transfer just to either reach downtown Milwaukie from the end of the light rail line or reach the end of the light rail line from downtown Milwaukie; a significant degradation in what should be high quality transit service that is attractive to the greatest number of riders. The added transfer for trips originating south and east of downtown Milwaukie could encourage more driving to the light rail line terminus, with spill over from park-and-ride facilities back into downtown. Also, a goal of the Milwaukie downtown and riverfront plans is to make downtown Milwaukie a more attractive...
destination for both residents and visitors. Bringing the light rail line into downtown directly supports this local aspiration.

**I-111-002**

As discussed in response I-111-001 above, the SDEIS section 2.3.3.2 disclosed the justifications behind selecting the alignments for continued review in the SDEIS. The recommended alignments were defined in 2007 in an open public process that was accompanied by a series of public meetings, workshops and hearings, leading to the recommendations of the Milwaukie City Council and the Milwaukie Planning Commission, followed by the Metro Council's action.

The comment does not specifically identify which alignments suggested by others were not evaluated fully. However, documents such as the Downtown Alignment Report provided further detailed information on why other alignments, including other local street alignments or the use of SE McLoughlin Boulevard, were less effective in meeting the project's purpose and need due to higher environmental impacts, lower benefits, higher costs, and other concerns. Chapter 2 and Appendix L of the SDEIS and the FEIS describe the range of alternatives considered through all stages of the project. The project has also employed the same range of factors, based on purpose and need, to evaluate the impacts and benefits of various alignments, allowing a side-by-side comparison of all potential alternatives. The recommendations by the City of Milwaukie City Council and the Planning Commission, which are bodies comprising citizens of the City, also indicates that the information provided was accessible to the general public.

To address the specific alignments on SR 99/McLoughlin Boulevard and Highway 224: the SR 99 Alignments were reviewed in detail in EIS documents and in alignment refinement phases. SR 99 alignments were part of the alternatives analyzed in the 2002 SDEIS; they were not forwarded for further consideration in the Portland-Milwaukie SDEIS.
because they had higher levels of traffic, property and business impacts, particularly in the Milwaukie Industrial area, compared to the LPA. They would have required reconstructing a section of McLoughlin Boulevard that were recently rebuilt and improved, they did not serve downtown Milwaukie as well, and they would have impacted the city's waterfront park as well as the historic trestle. Alignments that left McLoughlin Boulevard and used local streets including SE Main were also reviewed and again environmental, traffic and parking impacts were found to be higher than the LPA alignment.

The South/North Alternatives Analysis and DEIS evaluated several options to serve Clackamas Town Center along Highway 224, as well as Railroad Avenue. A ballot measure that would have reaffirmed funding for the South/North project was defeated and when the South Corridor project was initiated, no light rail alternative was included. In response to requests from community members and local jurisdictions to consider a light rail alternative, light rail on I-205 to serve Clackamas Town Center was included as a lower cost alternative. The 2002 South Corridor SDEIS and the I-205/Portland Mall FEIS, taken with the region's 2003 selection of a South Corridor LPA, provided the basis for the region's decision for developing light rail in two phases, one using I-205 and the other connecting from downtown Portland to the city of Milwaukie, and eliminating a Highway 224 alternative from further consideration.

**I-111-003**

The statewide referenda would have provided a source of local funding for the original South/North light rail project, but voters were not asked to approve or reject a specific light rail alignment. As described in Chapter 2 of the SDEIS and the FEIS, Metro and TriMet, working with FTA, the state, its local partners, and the region have since conducted an extensive public process leading to decisions to develop the South Corridor program in two phases. The South Corridor program includes the current Portland-Milwaukie light rail proposal as well as the I-205 and
Downtown Transit Mall light rail improvements that are now in operation. The project development history, including decisions to move forward with the development of light rail in the South Corridor in two phases was extensively discussed in Chapter 2 of the SDEIS. The 2002 SDEIS for the South Corridor and the FEIS for the I-205/Portland Mall project provided information about the prior votes, and the votes are again presented in Appendix L of the current FEIS. It was also included in many of the background documents identified in the 2008 SDEIS.

I-111-004

The financial analysis is a part of Chapter 5 of the FEIS and includes information about local financing. The local share comes from a variety of sources including: State of Oregon, TriMet, City of Portland, City of Milwaukie, Clackamas County, in-kind contributions and MTIP funds.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

A terminus at SE Lake Road was considered during the selection of the LPA and was rejected in favor of a SE Park Avenue Terminus. If the Minimum Operable Segment is selected to move forward then the project would only be built to SE Lake Road and would include a 275-space park & ride garage on SE Washington Street between SE Main Street and SE McLoughlin Boulevard.

The Portland-Milwaukie Light Rail Project's history dates back to the mid 1990s and has studied many routes and modes in this corridor. This history is recounted in Chapter 2 and Appendix L of the Final Environmental Impact Statement. Community participation has played an important role in shaping the alternatives that have been eliminated as well as those that have advanced through these studies.

Chapter 6 of the Final Environmental Impact Statement details the public involvement programs and activities during the Supplemental Draft Environmental Impact Statement, the Final Environmental Impact Statement, and Preliminary Engineering.

The public involvement programs during this phase of the project have expanded its focus on activities to engage Oak Grove citizens in response to your concern. From spring 2009 to winter 2010, the project has held eight public meetings for Oak Grove citizens. In addition, four representatives from Oak Grove were, and continue to serve as members of the project's Citizens Advisory Committee. The Citizens Advisory Committee meetings are open to the public and
frequently focus on issues related to the Oak Grove portion of the alignment.

I-114-004
The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.

I-114-005
Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet's Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal
activity so officials can work with the youths and their families to stop the activity.

These officers TriMet's Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.

I-114-006
The commenter notes that the Levy specifically noted the funding was for a trail in this area. The light rail alignment will not change this use. FTA, TriMet, and Metro are working with the North Clackamas Parks and Recreation District (NCPRD) to ensure that trail connectivity is not compromised. Specific mitigation measures are being proposed and coordinated with NCPRD in areas where the light rail alignment will be located closely adjacent to the trail. The project is working to provide the appropriate width for the trail, consistent with Trolley Trail planning, as well as a buffer between light rail and the trail.

I-114-007
The SDEIS examined impacts and proposed mitigation at intersections along Park, Oatfield, and McLoughlin in the area of the park-and-ride. The FEIS looks in more detail at traffic impacts during the AM and PM peak periods due to the Locally Preferred Alternative (with a 600 space park-and-ride lot at Park Avenue, or an initial 355 space facility as part of the LPA Phasing Option) at the intersections of SE McLoughlin Blvd. at SE Park Avenue, SE Park Avenue at SE Oatfield Road, SE Oatfield Road at SE Aldercrest Road, and on SE Park Avenue at the entrance to
the park-and-ride lot. Traffic impacts and mitigation for these intersections is described in Chapter 4 of the FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly
considers existing conditions that include freight operations and those
that would occur with light rail and freight in the same corridor. The
Federal Transit Administration criteria for noise and vibration are based
on decades of study of modern high capacity transit systems, including
modern electric light rail, which perform very differently than freight
systems operating with diesel-electric engines on existing railroads,
many of which have been in place for decades. The Locally Preferred
Alternative alignment and stations serving Milwaukie reflect an extensive
public planning process dating back to 1993. This has included detailed
reviews of the alignments and transit technologies that were found to
best meet the project's purpose and need, providing effective service to
the city and the region while minimizing environmental impacts. Chapter
2 of the FEIS provides a summary of the alignments, including the
factors shaping the selection of an alignment in Milwaukie. The
Supplemental Draft Environmental Impact Statement (SDEIS), published
May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L
presents a chronicled summary of alignment studies. The routes studied
are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group
process in 2003 recommended the Tillamook Branch Line alignment in
the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through
downtown Milwaukie, the Refinement Study conducted in 2007
evaluated alignment options between Highway 224 and SE Lake Road
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
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Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Thank you for submitting your comments for consideration. The project staff have and continue to work closely with City of Milwaukie staff and within the framework of the City’s planning efforts. During the Final Environmental Impact Statement and Preliminary Engineering phase, staff have coordinated closely with Milwaukie's South Downtown Plan, which accounts for the light rail project and a station at SE Lake Road.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between
Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

City of Milwaukie's most recent planning effort, South Downtown Plan, refines the previous planning document and accounts for the light rail alignment and station at Lake Rd.
Thank you for submitting your comments for consideration. This project is designed to look at transit alternatives in the corridor, consistent with the project’s Purpose and Need statement, including providing high-quality transit service and ensuring effective transit system operations in the corridor. As such, bus rapid transit and busways were considered as part of four analyses completed prior to the SDEIS (and as noted in the SDEIS in section 1.1.2.1 Modes Evaluated, starting on page L-2. These alternatives included adding lanes for bus rapid transit, but did not include adding lanes for general traffic as the Federal Transit Administration does not fund non-transit projects, such as roads, and to do so would require a significant change in federal transportation legislation to be considered a feasible alternative. The bus rapid transit and busways were not advanced for the reasons noted in SDEIS, Appendix L, pages L-8 and L-9.

In addition, ODOT, the region and local partners do plan additional road capacity consistent with the Regional Transportation Plan and local Transportation System Plans and these planned improvements are assumed in the traffic and transit modeling done for the Project for the year 2030. Individual road projects, over 60 percent of all planned transportation investments in the region to the year 2035, may be found at the Metro website page concerning the Regional Transportation Plan at: http://www.oregonmetro.gov/index.cfm/go/by.web/id=25036. There are numerous projects listed that do increase road capacity and which are included in the No Build alternative considered in the Project. That is, the region has identified road projects in the vicinity of the Project as well as funding and these road capacity projects will be built in the coming years and are taken into consideration in the “No Build” alternative.

The mode split in Table 4.2-8 of the SDEIS is an output of the model and
reflects only the mode split for trips between the corridor and the Central Business District. A key driver of the mode split is the projected increase in households and employment in the region between today and 2030.

I-119-003
The energy analysis shown in section 3.12 is designed to indicate if the project (or any major transportation project) is likely to substantially impact the supply or delivery of energy within a region. It is not designed to show an energy cost-benefit or to estimate life-cycle energy costs for the project. While the amount of operational energy shown may appear statistically slight, it is in part because the scale of the estimate is regional and is based on Metro's regional forecasts showing the project's ridership and the resulting travel demand effects due to the implementation of the light rail project in one corridor within the region. Similarly, the construction period estimates of energy use are also based on a planning-level review of anticipated construction costs, and then using construction industry factors to estimate what portion of construction costs would be for energy-related activities. Both methods are very conservative ways to show that the project would not create energy impacts, and Metro and TriMet believe it is appropriate to show that there would be a reduction in energy consumption regionally.

I-119-004
The EIS analysis of air quality is using best available data and methods. The air quality differences between the No-Build and Portland-Milwaukie Light Rail Project are very small. However, these figures are region-wide and virtually all of the surface transportation based air pollution is from motor vehicles. LRT emits almost no amount of Carbon Monoxide, Volatile Organic Compounds or Oxides of Nitrogen. Accordingly, each trip for which light rail is substituted for a motor vehicle trip, reduces by almost 100 percent the level of these pollutants associated with this trip and the more motor vehicle trips avoided, the more air quality is
improved.

With the Portland-Milwaukie Light Rail Project, people within the transit shed will have a new transportation choice, the option of taking light rail trips that reduce the health and quality of life impacts of air pollutants from surface transportation travel from motor vehicles using internal combustion. If, in the future, all autos are all electric or use some other method of propulsion comparable to light rail transit, this assessment would change to be mode neutral with regard to air pollution.

**I-119-005**
Delivering high capacity transit to this corridor has been deemed a regional priority.

**I-119-006**
At a number of intersection locations the project is projected to negatively impact the intersection level of service. In year 2030, when the intersection meets the local level of service standard in the No-Build condition but fails to meet the standard in the Build Alternative, the project will mitigate for the impacts. If the intersection fails to meet the the local level of service standard in the No-Build condition and the Build Alternative creates an additional 10 seconds of delay (on average) at that intersection, then the project will mitigate for the impact.

**I-119-007**
The project has been designed so that SE McLoughlin Boulevard may be expanded by ODOT in the future. See response to I-119-001 for information about this being a transit project and how it would take a very significant change in federal legislation to use transit funds for primarily road investments.

Further, building an exclusive transit right-of-way provides a much more
reliable, fast and convenient transportation alternative and choice to those who wish to use such an option – as well as those who cannot drive a motor vehicle.

**I-119-008**

Given that 1) the region’s transportation plan calls for a balance of transportation modes and choices and includes plans for motor vehicles, freight, transit, walking and biking; and, 2) the Metro Regional Transportation Plan calls for a number of road and transit improvements in the South Corridor; and, 3) one of the major proposed funding sources is the Federal Transit Administration; and, 4) that there are other funds (over 60 percent of the region’s total transportation investments) devoted to road investments, it is reasonable to have the purpose and need focus on transit improvements.

The region’s livability will be increased by having improved transit reliability, speed and convenience by building and operating light rail. The decision as to whether the benefits outweigh the costs varies by perspective, and the region’s elected officials have endorsed this approach.

The interaction between land use and transportation is a critical consideration as existing and forecast land uses – and the jobs and people to be served – help assess the potential benefit of any transportation project – whether transit or road.

The region’s local elected officials, through the Metro Regional Transportation Plan as well as local transportation system plans have concluded that a balanced transportation system is the most effective approach to take. Building a system that relies solely on any one mode does not provide for choice, nor does it provide flexibility in how people move around the region. The goal of the transit system is to provide another means of getting around as well as to take advantage of the
environmental benefits of transit. Transportation forecasts completed for the Project do not show that traffic will be reduced as a result of light rail transit, rather that the capacity of the corridor – including road capacity and transit capacity is increased so that more people are able to move along and through the corridor.

Motor vehicles (not including buses) consume over 99 percent of the total energy consumed in surface transportation in the region (see Chapter 3.12, Table 3.12-1), with all transit, including buses consume less than 1 percent. While not all trips can be made by transit and there is uncertainty and a margin of error in most calculations, to the extent that travelers choose transit, energy is saved. Likewise, light rail, when powered by electricity generated by hydropower does not have the air pollution emissions that motor vehicles have.

It is difficult to say what the public preferences for travel is when there are not viable choices from which to choose.

The Federal Transit Administration requires that projects assess their cost-effectiveness and the FTA chooses to fund only those projects with the highest level of cost-effectiveness. There is no corresponding process when considering new roads.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches and residences. The project's analysis directly considers existing conditions that include freight operations to those that
would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option
or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.

Chapter 4 provides updated information and details about the project's effects on traffic and parking in downtown Milwaukie and the mitigation commitments the project will make to avoid significant impacts.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008.

The Final Environmental Impact Statement studies and addresses your concerns. For traffic impacts and mitigations, see Chapter 4. Safety and security is addressed in Section 3.16.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The light rail project, including a single Milwaukie station at SE Lake Road, was endorsed by participating jurisdictions in summer 2008. The Locally Preferred Alternative calls for a station and park-and-ride at SE Park Avenue.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-129-001
Thank you for submitting your comments for consideration. The Portland-Milwaukie Light Rail Project does not include a northbound exit ramp from SE McLoughlin Boulevard to SE Bybee Boulevard for the Bybee Station location. Also, ODOT does not have any current plans to increase access to SE Bybee Boulevard from SE McLoughlin Boulevard, which is a state highway.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
I-131-001
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. The Locally Preferred Alternative includes a terminus at SE Park Avenue and the river crossing with a connection to the South Waterfront. It does not include a station at Bluebird.
Thank you for submitting your comments for consideration. In the Brooklyn neighborhood, as described in the discussion of visual impacts in the SDEIS and FEIS, shallow excavation would be required to construct the subgrade and track and station platform slabs for at-grade segments. Overhead catenary support poles would be placed in the street or on the sidewalks, before the overhead catenary system would be installed above the trackway. A station would be located in an island median north of the SE 17th Avenue and SE Rhine Street intersection. The existing pedestrian overpass of the UPRR tracks at SE Lafayette would be replaced by a new structure with the LPA, although the LPA Phasing Option defers the replacement.

Along SE 17th Avenue, the addition of light rail would require modifications at most intersections and a widening of the SE 17th Avenue right of way. Signalized intersections with crosswalks will be provided for the crossings of light rail and SE 17th Avenue at SE Rhine, SE Center, a SE Holgate Boulevard, and SE Schiller Street. A traffic signal would also be located at the TriMet bus parking access on SE 17th Avenue. Other side streets and driveways along SE 17th Avenue will be restricted to right-in, right-out movements only. An island station would be located in a median of SE 17th Avenue, just north of SE Holgate Boulevard. Mitigation measures may include landscaping to screen the view of the light rail from residences on SE 16th Avenue.

The project follows FTA noise and vibration regulations. The FTA criteria for noise and vibration are based on years of study and found to be a very effective criteria to address noise and vibration related to high capacity transit operations. TriMet has the benefit of the experience of assessing and providing noise vibration mitigation along other previously constructed alignments. The potential noise and vibration mitigation measures we have at our disposal are very effective at reducing noise and vibration from the light rail vehicles.
vibration impacts and mitigation measures for the Locally Preferred Alternative, Minimum Operable Segment as compared with No Build conditions are located in Section 3.10 of the FEIS.

The project follows FTA air quality regulations. Light rail vehicles are all electric and have no combustion engines, and so therefore, have less air quality impact than autos or diesel buses, for example. For more information on Air Quality impacts, please see Section 3.11 of the FEIS. Mitigation for any air quality impacts, will also be addressed in Section 3.11.

I-132-002
The LPA also shows an impact to about 55 on-street parking spaces within 1,000 feet of the Holgate Boulevard Station, and an impact of about 110 off-street parking spaces at the TriMet employee parking lot on SE 17th Avenue. Based on the survey conducted in June 2009, there are about 135 available spaces within 1,000 feet of the Holgate Station and the current daytime usage is about 70 spaces. Based on current usage, there would be about 80 available spaces and mitigation for on-street parking would not be required.

The off-street parking lot is currently fully occupied and the loss of spaces due to LRT would require mitigation. The Transportation Impacts Results Report suggests that parking management strategies be developed for off-street parking impacts on SE 17th Avenue, and consider other off-street parking locations for TriMet employee parking.

I-132-003
Dedicated bike lanes will be striped on 17th Avenue from SE McLoughlin Boulevard to SE Powell Boulevard.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. Subsequent to the publication of the SDEIS in May 2008, the project publicly assessed this alternative and found that it would have less ridership than one crossing the Willamette River. These results were presented in a publicly noticed meeting of the Project Steering Committee on June 4, 2008 and representatives of Portland Spirit and Association of Oregon Rail and Transit Advocates were present. As proposed, the alignment would be substantially on elevated structures, a much more costly design to construct than at-grade. Alternatively, if this alignment were placed at-grade, there would be substantial issues concerning at-grade street crossings and/or displacements. The Project Steering Committee did not choose to pursue this alternative, one of many alternative alignments considered as documented in Appendix L.
East Side North/South light Rail Line

Serious flaws with light rail on the mall have been identified. Consideration of other options should be analyzed before further assumptions about the alignment of the Milwaukie Light Rail Line are written in stone.

An old idea proposing an eastside north/south Water Avenue route should be reconsidered. Slow downtown operation now discourages regional east-west commuters from using light rail. The downtown mall operation should not do the same for north-south commuters. Light rail must do a better job of attracting non-downtown trips if it is to have a significant impact on reducing freeway congestion. This more direct route, mostly on a separated right-of-way, would be faster, cheaper and less costly to operate than diverting the Yellow Line downtown over two Willamette River bridges and it would eliminate the train delaying interlock at the Rose Quarter.

Given the serious traffic congestion in the McLoughlin Blvd./I-5 corridor, this faster Yellow Line alignment is needed as soon as possible, along with an extension north to Hayden Island. In the future, the line should be extended north to Clark County and south to Oregon City, providing a north-south and east-west high capacity rail system as an effective alternative to freeways.

Transfers would not be a significant deterrent to downtown-bound commuters if frequent service, a quality transfer environment and sufficient capacity were provided. Rail systems throughout the world require many passengers to transfer to reach their destinations. As an example, in Toronto, passengers on the heavily used Bloor-Danforth cross-town line must transfer to the Yonge-University-Spadina Lines to go to or from downtown.

The Rose Quarter Station should be modified to provide a better environment for high levels of transferring passengers. Platform-to-platform escalator connections could provide safe indoor access between trains if an elevated Yellow Line station was located immediately west of the existing platforms. A similar covered station would be needed at the Hawthorne Bridge ramps to provide direct platform-to-platform connections to all of the Hawthorne Bridge bus routes and a streetcar or trolleybus line.
March 3, 2007

Reasons to Keep the Yellow Line on the Eastside

The current plan to connect the future McLoughlin light rail line to downtown Portland via a new "Caruthers Bridge" should be reevaluated.

Many regional commuters currently clogging north-south corridors (McLoughlin, MLK/Grand and I-5) would opt for a fast and reliable transit mode if one existed. Light rail must do a better job of attracting non-downtown trips if it is to have a significant impact on reducing freeway congestion.

If large numbers of auto commuters are going to switch to transit, light rail will have to operate more like a metro system with faster trains and fewer stops.

One way to provide this service is to connect the future McLoughlin line to the Interstate line through the inner eastside. If the McLoughlin line is diverted to downtown, north-south, east-south and east-north transit trips will continue to be too slow to lure many non-downtown bound commuters from their cars.

Water Avenue is the logical corridor for this line because it is the most direct route between OMSI and the Rose Quarter and would require little land acquisition. Trains operated on an exclusive right of way, making stops only at stations under the Hawthorne, Morrison and Burnside bridgeheads, could travel between OMSI and the Rose Quarter in seven or eight minutes. Dual-level covered stations with elevators or escalators would provide easy transfers to and from buses and streetcars on the bridges. These stations could also provide access to new eastside developments such as the Burnside Bridgehead Project.

The Yellow Line could connect with the 1,100 buses that cross these bridges every weekday, greatly enhancing transit access to the eastside. These buses, on eight different routes, currently carry one-quarter of TriMet's bus riders.
The Yellow Line in this corridor would not compete with an eastside streetcar circulator proposed to serve the Lloyd District, the MLK/Grand Corridor and OMSI. Conversely, it would compliment and feed that system.

Transfers between north-south and east-west trains would not be a serious deterrent to downtown-bound commuters. Both lines, if connected with a high capacity station at the Rose Quarter, could accommodate more downtown commuters than the current system. This would eliminate the Yellow Line junction now causing operational delays at the Rose Quarter. These delays will become more frequent when another junction is added at the west end of the Steel Bridge to accommodate rail trains.

The Interstate Line could extend south of the Rose Garden on an elevated track avoiding traffic, buses and pedestrians. It could cross the existing east-west tracks immediately west of the freeway. The station, with escalator access between train platforms, could be completely covered or developed in conjunction with a high-rise transit oriented project on the site.

A covered station at the Hawthorne Bridge ramps would provide a direct connection with the 590 buses that cross this bridge every day. The proposed eastside streetcar, if routed from OMSI over the Hawthorne Bridge instead of a new bridge, could provide additional capacity for Yellow Line passengers traveling to or from downtown during peak hours.

Given the serious traffic congestion in the McLoughlin Blvd/T-5 corridor, this faster Yellow Line alignment, along with an extension north to Hayden Island, is needed as soon as possible. This direct eastside north-south light rail route would be cheaper to build and operate and would attract more passengers than one that is detoured through downtown.

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MEMORANDUM

July 9, 2007

To: South Corridor Phase II Steering Committee
From: Jim Howell
Re: Potential Yellow Line ridership - CBD vs. Eastside routing

The purpose of this memo is to begin to assess the ridership potential of routing the Yellow LRT Line (Expo to Milwaukee) through Southeast Portland rather than through downtown. It is my understanding that this route will be modeled as one of the South Corridor Phase II options.

The information on the attached maps is from Metro’s 2025 origin and destination forecast aggregated into 26 metropolitan area zones. Zone 26, Clark County, is not included. Yellow indicates zones of origin, orange, westside destinations and blue, eastside destinations.

Figures #1 and #2 show the relative number of trips from the Interstate and McLoughlin Corridors to the CBD and the Central East Side. The Central Eastside attracts almost 9,000 (27%) more trips from the Interstate Corridor than the Central Business District (40,876 vs. 32,133). The relative number of trips to the CES or the CBD from the McLoughlin Corridor is roughly equal (29,246 vs. 28,877).

However, if the Interstate and McLoughlin corridors can be interconnected directly through the eastside with light rail (Figures #3 and #4), the potential for attracting more commuters to transit grows substantially (Interstate to the CES and McLoughlin - 61,259 vs. Interstate to the CBD - 32,133). From McLoughlin, the daily trips are 40,615 to the CES and Interstate vs. 28,877 to the CBD. When both routes take a slow diversion through downtown, the advantage of this fast-interconnected system is not realized.

Furthermore, access between the Yellow Line and the east-west light rail and bus routes would be faster on the eastside than in the CBD. Figures #5 and #6 show the potential destinations that could be served with convenient eastside transfers. The 71,218 trips from the Interstate Corridor that could benefit from the eastside connections are in addition to those trips to the east that are currently transferring to the Blue and Red Lines at the Rose Quarter and do not include future transfers to the Green Line.

The total number of trips from the McLoughlin Corridor to the north and east, which could benefit from an eastside connection, is 119,921 (Figure #6). This is 3 times more than would benefit from a westside alignment (39,481), even when the South
Waterfront Zone is included with the CBD. The O and D data clearly shows that an eastside alignment would serve more commuters than a downtown alignment.

The crucial detail is to design the transfers and the modeling of the transfers so that they work effectively and do not pose an analytical bias. Recent analysis shows that when service is reasonably frequent, and the transfer environment is conducive, the penalty for transferring is no different from an amount of walking time equal to the actual time involved in making the transfer. As the purpose of the eastside alignment is to open up the system to many more potential riders, effort (and ultimately capital and operating cost) spent on optimizing transfers would be appropriate for this analysis.

While current transit ridership is skewed much more toward downtown than is travel in general, the obvious reason is that is where the current transit service is provided with sufficient intensity. The modeling process should be carefully reviewed to make sure that the calibration process to enable the model to replicate current ridership under the current system does not introduce any hidden bias toward that skewed pattern.

Contact:
Jim Howell – Director, Strategic Planner
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A North – South Rapid Transit Corridor

Traffic congestion in the 99-E travel corridor (McLoughlin – MLK/Grand – I-5N) is projected to grow to intolerable levels and yet there are no current plans to relieve this congestion with an effective public transportation alternative along this heavily used corridor.

A high capacity rapid transit line from Oregon City to Vancouver WA could be the optimal alternative. It would provide many varied trip opportunities along its 22-mile length, as well as convenient transfer opportunities to numerous east-west bus routes and three MAX lines.

Part of this line is already in place. The Interstate MAX (Yellow Line) provides frequent, reliable service on the 5.6 mile segment between the Rose Quarter and the Expo Center. Plans for the 5.5 mile segment between OMSI and Milwaukie are well under way and could be submitted for federal funding within a year.

What is missing? A critical 2.5 mile segment between the Expo Center and Vancouver, which could provide traffic relief across the Columbia River, is tied up as part of an expensive freeway river-crossing project. Ironically, the Columbia River Crossing Project will add to the corridor traffic congestion. It may take a decade or more to fund and construct, thus holding up any traffic relief that light rail could provide.

The 6.7 mile Milwaukie to Oregon City segment is not currently part of any regional plan. Although it is not as critical to the viability of the total corridor, this section should be included.

This leaves the 1.5 mile link between the Rose Quarter and OMSI to connect the north and south segments of this vital rapid transit corridor. This segment could – and should - be included as one of the alternatives to be evaluated in the Supplemental Draft Environmental Study (SDEIS) required by the Federal Transit Administration for obtaining federal funding for the proposed Milwaukee Light Rail Line.

All of the current alternatives being considered require diverting this line downtown over a new Willamette River bridge, through the Transit Mall and then returning to the eastside over the Steel Bridge. This slow diversion to the CBD would seriously diminish this route’s effectiveness as an alternative to auto commuting in this corridor.

Leadership at TriMet, Metro and the City must make a decision by September to include this alternative in the SDEIS if it is to be evaluated for further consideration. It would be a shame if they didn’t.

Jim Howell 7-19-07 jimhowell89@hotmail.com 503 294-7182
July 31, 2007

Transit Access to South Waterfront

Is putting a Milwaukie MAX station on the west bank of the river, either at the location in the Locally Preferred Alternative (LPA) or one at the recently donated OHSU site, the best way to serve South Waterfront with public transportation?

There is strong evidence that it is not.

If transit is expected to make a significant impact in reducing traffic congestion in the area, South Waterfront must have fast and reliable transit service from all areas of the metropolitan region, not just the McLoughlin Corridor. If most commuters must run the gauntlet on the transit mall and then transfer to a streetcar or bus, their trip would be neither fast nor reliable.

What if the Milwaukie Light Rail Line were routed directly north on the eastside from OMSI to the Rose Quarter where it would interconnect with the Interstate (Yellow) Line, and the proposed Eastside Streetcar crossed the Hawthorne Bridge and then ran south through South Waterfront?

No new bridge would be needed.

This combination of light rail and streetcar would provide the same transit access between Milwaukie and South Waterfront as the current proposals, with transfers between light rail and the streetcar being made on the eastside rather than westside. (See attached map.)

More importantly, this proposal would provide commuters from N, NE and SE Portland more direct and reliable transit access to the South Waterfront.

An eastside MAX connection would provide a direct north-south high capacity rapid transit spine that could eventually extend from Clark County to Oregon City. It would also provide convenient eastside transfer connections with three other MAX lines and over 20 heavily used eastside bus routes.

In addition, the Eastside Streetcar, routed directly to South Waterfront would provide a no-transfer trip between the Central Eastside/Lloyd District and South Waterfront. Furthermore, it would provide streetcar access to the Keller Auditorium Area.

The following table is created from Metro’s 26 Zone Origin and Destination estimates for all trips in 2025.
Trips between South Waterfront (Zone 3) and the following:

<table>
<thead>
<tr>
<th></th>
<th>To SW</th>
<th>From SW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milwaukee Corridor (Zones 4, 5 and 7)</td>
<td>10,604</td>
<td>8,083</td>
<td>18,687</td>
</tr>
<tr>
<td>North Corridor (Zones 2, 15, 19, and 20)</td>
<td>12,508</td>
<td>13,722</td>
<td>26,230</td>
</tr>
<tr>
<td>East Portland (Zones 6, 13 and 17)</td>
<td>19,537</td>
<td>11,658</td>
<td>31,195</td>
</tr>
</tbody>
</table>

The potential trip market between South Waterfront and the Milwaukee Corridor is about 17,000 weekday trips. The potential ridership between South Waterfront and N, NE and SE Portland is about 58,000 weekday trips, more than three times as many.

Common sense indicates that a significant number of commuters who must travel between this large eastside area and South Waterfront would use public transit as their travel choice if this faster, more direct routing through the eastside were provided.

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Milwaukie LRT Facts

- According to the latest data from Metro and TriMet, the 2003 Locally Preferred Alignment (Lake Road to SW Jackson Street) would cost $1,265,090,000 in inflated dollars including 16 vehicles, expanded maintenance facilities and a new bridge across the Willamette River. The system cost of the bridge and its approaches is $443,000,000, 34% of the total project.

- The projected LRT ridership in 2030 is 24,960 daily boardings resulting in 8,000 additional boardings to the entire system over what would be expected if the project were not built (No-Build Option).

- The estimated running time between Lake Road and the Rose Quarter (8.53 miles) is 36 minutes (see attached table).

- 22 minutes of the total running time (60%) is devoted to the 2.53-mile segment between OMSI and the Rose Quarter with an average speed of 7 MPH.

- If the line extended north from OMSI to the Rose Quarter on a Water Avenue alignment (1.56 miles), it would take 8 minutes with an average speed of 12 MPH.

- The total running time between Lake Road and the Rose Quarter on the eastside alignment would be 22 minutes, equal to the running time in the LPA for only the downtown diversion between OMSI and the Rose Quarter.

- The constructed length of the LPA, including the bridge, would be 6.62 miles compared with 7.04 miles for the Eastside Alternative.

- The current running time on the Yellow Line between the Rose Quarter and Expo (5.76 miles) averages 16 minutes.

- If the Yellow Line were extended 0.5 mile to Hayden Island it would add approximately 2 minutes to its current running time.

- The running time between Lake Road in Milwaukie and Hayden Island on the eastside alignment (13.81 miles) would be approximately 42 minutes with an average speed of 20 MPH.

- The running time between Lake Road in Milwaukie and Hayden Island on the downtown alignment (14.79 miles) would be approximately 56 minutes with an average speed of 16 MPH.

Jimhowell89@hotmail.com 2-23-08
An Eastside Light Rail Link

Why is a bridge over the Willamette River being considered for the proposed light-rail extension to Milwaukie? Isn’t this overkill? Every weekday, more than 3,000 buses and MAX trains pour over the six existing bridges that connect the eastside and downtown.

What is missing in the transit system is a north-south high-capacity transit line serving the 99E / I-5 corridor. The heavy commuter traffic on McLoughlin, MLK/Grand and I-5 north is a direct result of the lack of this transit service.

This option would be possible if, rather than crossing the river on a very expensive new bridge, the proposed Milwaukee light rail line extended north on the eastside from OMSI to the existing Interstate Yellow Line at the Rose Quarter. On this route, travel time between Milwaukie and the Expo Center could be only about 40 minutes, 20 to 30 minutes faster than today and at least 15 minutes faster than the via the proposed downtown routing.

According to data from Metro, two out of three commuters using this corridor have destinations on the eastside as opposed to downtown. These commuters would benefit from a direct eastside line. Excellent access to downtown can still be maintained with a quick transfer to over 3,000 buses and trains that will continue to cross the river.

South Waterfront would also benefit. The Portland/Sherman Bridge would only provide faster service from the South Corridor to a station at OHSU’s proposed new campus, where transfers to the streetcar would still be required for transit access to most of the South Waterfront District.

With the eastside alignment, this transfer could be made at a Hawthorne Bridge Station to either a streetcar or bus, routed across the Hawthorne Bridge and south on 1st Avenue to Harrison Street, where it could follow the existing streetcar route that serves South Waterfront.

The big advantage of this option is that South Waterfront would gain direct transit access to and from north Portland via the Yellow Line, and faster access to and from the airport and east county via the Blue, Red and Green Lines. In addition, it would provide faster connections with at least 16 bus routes that serve N, NE and SE Portland.

Following the principles of “least cost planning” an eastside alignment should have been considered as a South Corridor Alternative. It clearly would be less expensive to build, less expensive to operate and would most likely carry more passengers and stimulate more ridership on the overall transit system.

Jim Howell 5-21-08 jimhowel89@hcomail.com
Testimony to Steering Committee on the South Corridor SDEIS

By Jim Howell, 6-6-08

I support Metro and TriMet for filing a Supplemental Draft Environment Impact Statement to the FTA in order to construct a light rail line to Milwaukie in the McLoughlin Corridor.

Unfortunately, the sole purpose of this SDEIS is to obtain federal funds to build a narrowly defined project. A project primarily focused on the needs of a small segment of the population that will have to drive to park-and-ride facilities in order to access a light rail line to their jobs in the CBD and the OSHU South Waterfront campus.

The ridership forecast used to show the FTA that this project meets their cost-benefit threshold is largely dependent on auto dependent commuters.

It may be cheaper and easier to pick the low hanging fruit — these auto oriented commuters, attracted to free parking, rather than car-free commuters making the light rail connection via a network of direct and frequent bus routes.

In the long run, a system approach to transit planning will have to be used if transit is expected to become a major player in the region’s transportation system. The current approach, focusing on one piece at a time, will be too costly and will not shift enough people from cars to transit to achieve a significant reduction in greenhouse gas emissions and oil consumption.

I am a realist. A Locally Preferred Alignment will probably be selected from the options identified in this SDEIS but, the following suggestions would have made the project more environmentally sustainable, cheaper to build, cheaper to operate, and would have added more ridership to the total transit system.

1. Do not build park-and-ride structures.

They are expensive, they encourage auto dependence and they are a major impediment to transit oriented development around stations. Nevertheless, low cost surface parking can become a temporary land-banking use until an adequate transit network is in place, at which time the parking lot can be converted to a compact mixed use development.

2. Include in the project a more robust bus feeder system.

For example, a frequent service cross-town bus route could provide a fast and convenient transfer connection at the Tacoma Station and replace the need for a thousand stall parking structure. A new route connecting Clackamas Town Center to Washington Square and WES via Johnson Creek Blvd., Tacoma Street, the Sellwood Bridge and Taylors Ferry Road would greatly reduce traffic...
demand in these corridors. It would interconnect three rail lines and 30 bus routes, providing an exponential increase in transit opportunities over what is provided today.

3. Forego the construction of an expensive new light rail bridge by connecting this line to the MAX Yellow line through the eastside.

- The 3,200 buses and trains now crossing the river every weekday could provide downtown access. During peak hours, shuttle buses or streetcars from the OMSI Station could provide additional capacity to and from downtown. Incidentally, if these shuttles were timed to meet the Max trains, the trip to the CBD would be as fast or faster than the trip over the proposed out-of-direction Porter-Sherman alignment.

- South Waterfront would actually get better transit service than with the Porter-Sherman crossing if the project included a direct bus or streetcar link to South Waterfront via the Hawthorne Bridge, SW First and Naito and Harrison Street. This new faster connection to and from North, Northeast and Eastside Portland would attract many new riders, more than would be lost from the South Corridor because of a slightly longer trip.

- An eastside connection provides redundancy to the system not provided by an additional river crossing. The Steel Bridge will become a major bottleneck in the system when all four Max lines cross it. The Yellow Line will become a major problem because of crossing issues at the Rose Quarter Junction when the Green Line is added next year. An eastside alignment avoids this problem. In the event of a Steel Bridge breakdown, it could also provide access to all the buses that cross the river on the other bridges.

- An eastside connection would allow more frequent service with the same equipment and operating hours because it would cut about 25% from the total route running time. Frequency of service is a primary factor in attracting ridership.

In closing, an eleventh hour modeling attempt by metro staff of an eastside alternative, that did not include the systemic improvements mentioned above, still showed it would attract about as many passengers to the system as would the downtown options.

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Portland, OR 97213
Jimhowell89@hotmail.com
Thank you for submitting your comments for consideration. Alternative modes to light rail between Portland and Milwaukie were evaluated in the process of determining the 2003 LPA alignment for the South Corridor Project. The evaluation is documented in South Corridor Project Transportation Alternatives, SDEIS, December 2002 (2002 South Corridor SDEIS). Chapter 2 of the 2002 South Corridor SDEIS describes all mode alternatives evaluated: Bus rapid transit and Busway in addition to light rail in the Portland to Milwaukie and/or I-205 corridors. Chapter 3 presents the environmental analysis; Chapter 4, the transportation analysis and Chapter 5, the financial analysis. From these analysis results, the 2003 South Corridor Project LPA was selected following extensive public outreach and local jurisdiction public hearings. The 2003 South Corridor Project LPA called for light rail in both the Portland to Milwaukie and I-205 corridors.

Prior to starting the SDEIS, a number of transportation alternatives were examined including river transit, high occupancy vehicle lanes, high occupancy toll lanes, radial commuter rail, circumferential commuter rail, busway, and bus rapid transit. Consideration of these alternatives was documented in the 2000 South Corridor Transportation Alternatives Study (SCTAS). The 2000 SCTAS was prepared as a step in the evaluation of alternatives required by the National Environmental Policy Act. As required by NEPA, the alternatives analysis process provided the opportunity for public review and comment.

The region's decisions to move forward with light rail as the most appropriate transit technology for the corridor were described in the SDEIS in Chapter 2 and Appendix J, and were updated for the FEIS. Energy use is but one of many of the reasons that influenced the region to make the decision to further invest in light rail. Other factors include travel speeds, ridership capacity, travel time reliability, and system
Further, light rail systems are in use throughout the world and as more and more systems come into development, the technologies used continue to become more and more efficient. Light rail is not be considered an old technology. Metro and TriMet recognize that technological advances are also occurring in other transit modes such as buses, and TriMet will continue to consider such technologies in its overall transit systems planning and operations.

I-137-003

The scope of the project does not include rezoning, redevelopment, or tax increment financing proposals.

The light rail project relies on existing zoning to estimate future growth, but the scope of the project does not include rezoning or redevelopment proposals. However, fixed-rail projects are known to stimulate more intense development or redevelopment where the zoning allows. The City of Milwaukie and the City of Portland set the zoning for their respective communities based on the regional need for housing and employment capacity outlines in the Urban Growth Report and 2040 Regional Plan. No specific changes are proposed in the SDEIS or the FEIS. Any potential changes to zoning or to comprehensive plan designations would be required to go through the local jurisdictions land use judicial or quasi-judicial land use approval process. In a concurrent project during the same time as the SDEIS, Metro, TriMet, and its partners conducted a station area assessment to help maximize the ability of the light rail project to help support the region’s existing goal for livable communities. The “Portland to Milwaukie LRT Station Area Best Practices Assessments and Recommendations Report” (Draft, September 2009) has recommended actions for some of the proposed light rail station areas. The recommendations of this assessment act only as guidance. Local governments control the decisions about land use, including zoning and specific development approvals.
The City of Milwaukie also chooses how to tax its residents. At this time, the City has not proposed tax increment financing to support additional development along light rail.

I-137-004
Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.
See Section 3.16 for more information on safety and security.

**I-137-005**
The presence of light rail in Milwaukie does represent change. However, growth in Milwaukie will occur with or without the light rail line. The footprint generally would be confined to the existing UPRR right-of-way so there would be no discernible change in size through downtown, although the frequency of the trains would clearly be different and the line would ‘feel’ more active and present in the downtown community. The light rail station at SE Lake Road would create some additional building mass that does not currently exist, but as it is on the south edge of downtown, it is not expected to have an adverse impact on the major downtown streets or buildings. To the extent that light rail would bring more people into and through downtown, it may support the vitality of the downtown. Additional transportation options will help manage growth and provide a higher-speed transportation option to the single occupant vehicle that currently does not exist.

If the MOS option is chosen, then there would be a greater displacement of existing businesses in downtown Milwaukie. However, the MOS option will provide replacement retail space, as well as additional parking to serve light rail as well as businesses.

**I-137-006**
Queuing of vehicles at the LRT crossings at SE Monroe Street and SE Washington Street were not reported in the SDEIS. However, the FEIS considered queuing at these locations and SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street is 8 seconds for each direction, and on SE Monroe Street it is 6 seconds in the eastbound direction and 12 seconds in the westbound direction.
during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds.

**I-137-007**
The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches and residences. The project's analysis directly
considers existing conditions that include freight operations to those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41. Previous studies covering the project corridor include: South/North Alternatives Analysis, 1993-1998; South/North DEIS, 1998; and South Corridor SDEIS, 2002.

In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and
hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.

I-137-008
As stated in the SDEIS, a narrow vegetated corridor near Kellogg Lake will be impacted by the construction and operation of the LRT line. In coordination with City of Milwaukie planning staff, impacts have been minimized to the extent practicable. The project has supported recovery of the Kellogg Creek system, and is proposing ecosystem enhancement activities for portions of the Kellogg Creek area in accordance with local, state, and federal requirements. Additional information on enhancement activities is discussed in the FEIS.

I-137-009
The purpose of the Final Environmental Impact Statement is to study the impacts of constructing and operating light rail. The light rail will lie almost entirely within the current, active railroad corridor. For impacts and mitigations related to traffic in downtown Milwaukie, see Chapter 4. Safety and security practices and mitigations are detailed in Section 3.16. Community impacts are are detailed in Section 3.3. Water quality and ecosystems impacts and mitigations are found in Sections 3.8 and 3.9.

Community participation plays an important role in shaping the light rail project. The public involvement programs and activities in the Supplemental Draft Environmental Impact Statement phase and the Final Environmental Impact Statement and Preliminary Engineering phase are detailed in Chapter 6. In response to your concern the project has held numerous light rail meetings focused on specific topics such as traffic and station area design, in addition to city-sponsored monthly public light rail meetings in Milwaukie since spring 2009.
I-137-010
See response I-137-007.
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

From: "Peter Markgraf" <markgraf@gmail.com>
To: <Jenn.Tuerk@oregonmetro.gov>
Date: 6/19/2008 11:28 AM
Subject: Milwaukie light rail comment

I would like to comment on the Milwaukie light rail DEIS:

The extension of light rail through OMSI district is a logical next step, and I support it. I ride MAX every day, and every addition to the system makes it more valuable and increases transportation options. The Sherman option balances the needs of eastside businesses with the transportation and circulation needs of the City. Putting MAX through the OMSI district establishes a new transportation corridor on the east side – that makes sense, and the investment in light rail is a proven winner.

As more people move to this region, we will need to find creative transportation solutions to move people between their homes and jobs. Light rail has proven that it can be effective in Portland.

Sincerely,
Peter Markgraf
I-139-001
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

Jenn Tuerk - I support light rail to Milwaukie

From: "Tom Markgraf" <markgraf@teleport.com>
To: <jenn.tuerk@oregonmetro.gov>
Date: 6/19/2008 11:22 AM
Subject: I support light rail to Milwaukie

I-139-001
I support the extension of light rail from Portland to Milwaukie. We are especially supportive of the Sherman street crossing. Light rail has been a good investment in this region and adding this segment will increase the value of the entire system.

The light rail crossing at Sherman is a good compromise. It is the least intrusive to businesses, and it was forged in collaboration with the public, balancing the needs of everyone who will be affected by this development.

Commuters, businesses, and people traveling into Downtown will benefit from this new light rail. It will promote economic development, private investment, and sustainable transportation.

Build the damn thing and build it soon.

Sincerely,

Tom Markgraf
Thank you for submitting your comments for consideration. Consolidation of the stations that will be built on SE 17th Avenue and at SE Harold Street was considered during Preliminary Engineering phase. The Project will move forward with a station at SE Holgate and SE Bybee Boulevard bridge. A future station at SE Harold Street will provide more convenient access to the light rail line for residents and businesses in that station area. When a determination is made to add the Harold Station, a design study will be conducted that will address pedestrian connections to the station.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.
Thank you for submitting your comments for consideration. A cable stay bridge design has been recommended to be constructed as part of the project.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. The Locally Preferred Alternative follows the Tillamook Branch, ends at a terminus at SE Park Avenue and includes a single station in Milwaukie at SE Lake Road. There will not be a station at SE Washington Street.
Thank you for submitting your comments for consideration. Specific details of how bus service will connect neighborhood areas to light rail stations will be determined by TriMet during the final design phase.
I-145-001
Thank you for submitting your comments for consideration. While the project's capital construction costs are substantial, there are trade-offs between capital costs and operating and maintenance costs. Light rail service has been proven to attract more riders than buses, and, because of its substantially greater passenger capacity, resulting operating costs per rider are lower with light rail than with bus service. Capital costs are substantially funded by the Federal Transit Administration through competitive grants. Operating funds, however, are almost all locally derived and recovered through the farebox. Accordingly, the project's approach is more likely in the long run to be more cost-effective and keep fares lower, than bus service on such high ridership corridors.

I-145-002
The proposed Lake Road station would occupy currently vacant space. There is sufficient room on publicly-owned property to build the station within those limits. This station location is not expected to serve as a transit center. The City of Milwaukie and TriMet have recently completed a reorganization and remodel of the bus transit center, which is outside the scope of the Portland-Milwaukie Light Rail Project, in northern downtown Milwaukie. TriMet expects that the benefits to the city of easier access to downtown Portland will outweigh the use of this land for a light rail station rather than a different use.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project’s methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. Analysis of light rail alignment options in Milwaukie dates back to 1993:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

SDEIS Appendix L presents a chronicled summary of alignment studies. Routes studied are shown in Figures L-5 and L-6.

The Locally Preferred Alternative is the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the project’s Purpose and Need.

The statewide referenda would have provided a source of local funding for the original South/North light rail project, but voters were not asked to approve or reject a specific light rail alignment. As described in Chapter
Metro would argue that they already looked at the 224 alignment option in a past EIS, but that alignment still came into the Historic Neighborhood and went out to 224 on Monroe St, which would have cut through and destroyed the Historic Neighborhood which is why it was rejected by citizens.

We have enough pieces of large transportation infrastructure that have cut up Milwaukee (hwy 224, 99E, and 2 rail road lines). If the goal is to replace car trips, then put the alignment where the cars are currently traveling, and encourage people to leave their cars at home. If it must go south of downtown, then put it on 99E or Main Street, rather than the Tilmannmoor alignment. The mayor should not have been allowed to remove these reasonable and viable alignment options from the SDEIS.

Cut through traffic and parking problems?

Increased cut through traffic in Milwaukee, on Harrison, Monroe, Washington, and Lake Road have not adequately been addressed in the SDEIS. If the alignment goes into Milwaukie, cut through traffic coming from Hwy 224 into the Historic Neighborhood and downtown Milwaukie will increase, as will increased parking issues (which are currently problematic without light rail). Add to that the need for crossing signalization at 4 of 4 of those streets where the Light Rail line crosses them and there will become a traffic problem where they traditionally have not been one. We do not want to see more traffic coming through the neighborhoods just so that they can park and ride light rail. We already have that problem with the 30 year old "temporary" bus transit center. Issues around downtown and the Historic Neighborhood have increased since Tri-Met closed the park and ride station at Southgate a white back.

All 4 of these streets have schools located on them:

- Lake Road- Rose Middle School & Milwaukie High School
- Harrison- Milwaukie High School & St. John the Baptist
- Monroe- Portland Waldorf School
- Harrison- Portland Waldorf School

Increased cut through traffic on these streets will pose more danger to students at these schools as well as pedestrians accessing the Ladd Library (on Harrison) or multiple churches parishes.

Chapter 4.2.6.6 in the SDEIS says:

"While all alignment options terminating at Lake Avenue (it's actually Road), the most frequently used station would be in downtown Milwaukie (Harrison/Monroe/Washington), with 16 to 18 percent of riders." Where are these cars coming from/to and where are they going to? The SDEIS does not properly address the traffic and parking problems that will arise from this quote.

Noise and Vibration impacts:

We are not going to dive into this subject too deep because it is probably going to be addressed quite well by those associated with the Schools and Historic Neighborhood. They all have very valid points about why the alignment should not be located so close to their houses or buildings and we totally agree with them. Everything that we have heard from Tri-Met to this point leads us to believe that they will only do the minimum mediation required by NEPA to address these problems, especially as the cost of this project continues to climb and costs need to be contained.

Problems with light rail trains in freight corridors:

Our understanding is that there have been some accidents with light rail lines located in close proximity to freight rail lines (Littleton, CO and San Diego, CA) is there a possibility that the Federal Railroad Administration or the Railroad company that owns the right of way will not allow the light rail alignment to be built along the Tilmannmoor Alignment? If that is a possibility, then should other alignments be included in this study?

Doesn't the Mayor of Milwaukee have a conflict of interest?

The Mayor of Milwaukee, Jim Bernard, owns commercial property directly adjacent to the proposed alignment and possible station/terminus at Lake Road. It is essentially guaranteed that the Mayor's property values will increase dramatically should light rail be built on the proposed alignment, because it is zoned as commercial property. Commercial property values began to rise dramatically on North Interstate as that light rail line was planned and built. We would gather that the Mayor's property would do the same.

2 of the SDEIS and the FEIS, Metro and TriMet, working with FTA, the state, its local partners, and the region have since conducted an extensive public process leading to decisions to develop the South Corridor program in two phases. The South Corridor program includes the current Portland-Milwaukie light rail proposal as well as the I-205 and Downtown Transit Mall light rail improvements that are now in operation. The project development history, including decisions to move forward with the development of light rail in the South Corridor in two phases was extensively discussed in Chapter 2 of the SDEIS. The 2002 SDEIS for the South Corridor and the FEIS for the I-205/Portland Mall project provided information about the prior votes, and the votes are again presented in Appendix L of the current FEIS. It was also included in many of the background documents identified in the 2008 SDEIS.

I-151-003

The financial analysis is a part of Chapter 5 of the FEIS and includes information about local financing. The local share comes from a variety of sources including State of Oregon, TriMet, City of Portland, City of Milwaukee, Clackamas County and MTIP funds.

I-151-004

The FTA project development process requires that each subsequent analysis and documentation step review all previous background assumptions and update them if conditions have changed. The FTA must concur that this action has been taken before it approves the scope of the proposed analysis and documentation. This is accomplished through the required public “scoping” process. Scoping for the Portland-Milwaukie Light Rail Project SDEIS took place in spring 2007. The project development process and background for PMLRT is documented on pages 2-24 through 2-41 in the SDEIS.

The option to terminate Portland-Milwaukie Light Rail Project north of downtown Milwaukee was also considered prior to the LPA decision and
is documented on page 2-41 of the SDEIS. Downtown Milwaukie is a town center in the Metro 2040 Growth Concept, in which high quality transit service connects town centers to other town centers and regional centers. Terminating the Portland-Milwaukie Light Rail Project north of downtown Milwaukie would require a transfer just to either reach downtown Milwaukie from the end of the light rail line or reach the end of the light rail line from downtown Milwaukie; a significant degradation in what should be high quality transit service that is attractive to the greatest number of riders. Also, a goal of the Milwaukie downtown and riverfront plans is to make downtown Milwaukie a more attractive destination for both residents and visitors. Bringing the light rail line into downtown directly supports this local aspiration.

Corridors for potential extensions of light rail or other modes of high capacity transit to serve future growth areas in Clackamas County are being identified in the ongoing update of the Regional Transportation Plan. Future major transit investment decisions will build on the existing light rail system and the planned Portland-Milwaukie Light Rail Project; and integrate with locations of regional centers and town centers.

**I-151-005**

Queuing of vehicles at the light rail crossing at SE Harrison Street was reported on as part of the SDEIS. However, the FEIS looked at queuing at SE Monroe and SE Washington as well as and SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street and SE Monroe Street is between 6 seconds and 12 seconds during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds. Therefore, unlike the delay due to freight trains, no vehicle would ever be delayed by light rail longer than 50 seconds. See the FEIS Transportation Impacts Results Report for more information.
The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project would improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones. Safety treatments would be designed to meet all applicable standards and regulations. Existing pedestrian crossings would continue to occur in their current locations and would be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on light rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

I-151-006
The Locally Preferred Alternative (LPA) has a terminus at Park Avenue (one mile past downtown Milwaukie) and does not have a park and ride lot at the Lake Road Station in downtown Milwaukie. This is the alternative that the project partners prefer to build. However, FTA requires that projects seeking federal funds identify interim or shorter sections that could be implemented if funding is not available for the full length project. Thus, the project is looking at the MOS as part of the FEIS. The Minimum Operable Segment (MOS) ends in downtown Milwaukie at Lake Road, and has a 275-space park-and-ride lot at the
corner of SE Main Street and SE Washington Street. The LPA reduces traffic at SE Washington Street and SE McLoughlin Boulevard (and other intersections in downtown Milwaukie) since more trips that would be on SE McLoughlin Boulevard are now on transit (compared to an alternative that has no light rail project).

The SDEIS showed that the light rail project would remove 34 off-street parking spaces (next to the railroad tracks between SE Monroe and SE Washington) and about 12 on-street parking spaces in downtown Milwaukie. The parking impacts have been reevaluated and now show 52 on-street parking spaces being removed by the project. The City of Milwaukie does not include the 34 off-street parking spaces in the City’s downtown parking inventory, and therefore the FEIS does not include the loss of these unofficial parking spaces as an impact of the light rail project.

Potential parking mitigation alternatives that could be implemented include replacement of on-street parking, parking management strategies and revising parking restrictions. Coordination with the City of Milwaukie should occur to determine the best strategy to address the on- and off-street parking impacts should parking become an issue around station locations.

It is estimated that approximately 50% of the park and ride trips for the Lake Road facility would access via SE McLoughlin Boulevard from the south. Other approaches are estimated at approximately 30% for SE Lake Road, 12% SE Washington Street, 5% SE Monroe Street and 3% SE Harrison Street. It should also be noted that not all trips generated at a park and ride are trips that are destined to/from the park-and-ride (meaning motor vehicle trips that would require parking). Some trips are actually “quick drops” or pick-up/drop-off trips where the vehicle passes by the park and ride and either picks-up or drops-off passengers, but does not park at the facility.
The project will comply with the FTA regulations for noise and vibration. The FTA criteria for noise and vibration are based on years of study related to high capacity transit operations, including light rail. TriMet has the benefit of years of experience with providing noise vibration mitigation for light rail along other previously constructed alignments. The potential noise and vibration mitigation measures we have at our disposal are very effective at reducing noise and vibration from the light rail vehicles.

Section 3.10 of the FEIS provides the location of noise and vibration impacts and mitigation measures for each impact.

The Union Pacific Railroad (UPRR) will require a 25-foot separation between the center lines of the freight and light rail track centers with a six-foot tall safety wall down the middle of the separation along the Tillamook Branch Line. This is the same distance between track centers as included in the SDEIS. Safety wall will start 250-feet from intersections to meet the UPRR sight distance requirements.

The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukie; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukie resolution, and the Mayor’s votes did not change the outcome of any decision. It is also important to note that the City’s resolution and the Steering committee recommendations are advisory to the Metro Council, which is actually the party that takes
the action to identify project alternatives. Finally, all of these decisions remain preliminary until issuance of the FEIS and the Record of Decision by the Federal Transit Administration.
The advantages and disadvantages of buses and light rail have been weighed during the project's history. There are many choices that have been considered before selecting light rail. For example, light rail has a fixed location, and does not have the flexibility of bus routing. However, it is less likely that substantial urban development will occur as a result of bus service as bus service can be relocated. Light rail uses electricity and buses may use a variety of fuels. However, the source of the electricity can vary greatly and in this way a wide range of energy sources may power light rail. Chapter 2 and Appendix L of the FEIS document the reasons for choosing light rail and not bus.
Thank you for submitting your comments for consideration. The light rail project was approved by participating jurisdictions in summer 2008. The Locally Preferred Alternative includes an alignment along the Tillamook Branch in the North Industrial Area of Milwaukie. The Main Street alignment, near McLoughlin Blvd, was rejected due to its impacts on the businesses in this area. Commuters coming from Highway 224 will have direct access to the park-and-ride at Tacoma and SE McLoughlin Boulevard.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

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the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.

I-153-003

All noise related to the project is reviewed in section 3.10 Noise and Vibration of the Final EIS. The project assumes a successful application for a quiet zone exemption or a light rail horn waiver. Under the quiet zone exemption, neither the light rail nor Amtrak or freight trains would be required to sound the vehicle-mounted horns unless there was an obstruction on the tracks or in case of emergency.

During preliminary engineering, project staff held “pre-diagnostic” review of the intersections with the Federal Railroad Administration (FRA), Union Pacific Railroad (UPRR), Portland and Western Railroad, ODOT Rail, City of Portland, and City of Milwaukie staffs to discuss and refine designs of the shared crossings and to incorporate the appropriate supplemental safety measures in order to qualify for quiet zone consideration. The cities of Portland and Milwaukie are supportive of these supplemental safety measures and have indicated that they will support the request for the quiet zone.
Transit center functions are planned to be shifted to the Lake Road station. Dwell locations will be determined by TriMet prior to the light rail opening.

The Locally Preferred Alternative (LPA) includes a grade separated light rail crossing over SE McLoughlin Boulevard. The project evaluated an at-grade and a grade separated alternative and concluded that a grade separated alignment would be the most appropriate solution at this location because of potential safety and traffic concerns.

The project has done a visual analysis for this alignment, see Section 3.4 of the FEIS for more information. The light rail structure would located parallel to the existing Tillamook Branch line trestle and would be of similar scale and height. The proposed structure would cross over SE McLoughlin Boulevard and curve towards the south to return at grade parallel to SE McLoughlin Boulevard. A small number of residences with visual access to SE McLoughlin Boulevard would have long duration foreground views of light rail bridge and associated structural elements.

The Locally Preferred Alternative includes a terminus at Park Ave, but not a station at Bluebird.

A station at Bluebird was not advanced for reasons cited in section 4.4.2 of the July 24, 2008 Locally Preferred Alternative Report and are listed below:
- the station would need to be elevated and station construction costs and visual impact would be substantially greater than at-grade stations.

- the light rail ridership would be significantly lower than other stations along the light rail line (the Bluebird station is estimated to have only about 1,400 boardings and alightings daily compared with the station median of 2,748)

- the real estate potential of the surrounding area is very limited because of existing zoning and land uses.

- there are existing commercial uses that would have to be acquired and displaced.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-155-001

I am writing to express my strong support for bringing light rail service to Milwaukie.

I am a resident and homeowner in the Island Station neighborhood of Milwaukie. The proposed light rail service would provide a reliable, inexpensive alternative for transportation to downtown Portland and other areas. It would also help ease traffic load on McLaughlin Boulevard between Milwaukie and Portland.

As the population of the area grows, and transportation and fuel costs increase, the light rail project will go a long way to maintaining essential transportation required to keep this area viable.

Eric Miller
12322 SE 20th Avenue
Milwaukie, OR 97222
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

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From: "Anders Liljeholm" <liljeholm@gmail.com>
To: <trans@oregonmetro.gov>
Date: 5/25/2008 1:24 PM
Subject: Milwaukee MAX Alignment

I think the proposed Milwaukee MAX line is an excellent idea.
I do believe that either Sherman alignment is superior to the Garth’s alignments.
It’s frustrating that OHSU is being catered to, disrupting the already established, perfectly good 2003 alignment. But since they do employ a huge number of people, I understand the desire to make their facility accessible by transit.
Thank you for submitting your comments for consideration. Federal, State, and local transportation funding do have some flexibility in some areas, but in large part, the funds are allocated to specific types of transportation investment types. For example, some funds are dedicated to safety improvements and cannot be used for adding capacity. With regard to funding buses rather than light rail, Federal Transit Administration funding does allow funding improved bus service as well as light rail. However, in comparing bus service in the corridor with light rail, light rail performed better - that is, served more riders - than bus service. Accordingly, Federal funding for light rail service is being sought for the project.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The bus network studied in the SDEIS includes several bus lines connecting Oregon City and points south to the proposed park-and-ride facility at SE Park Avenue.

I-159-001

Please, please get that south rail line built asap! I reside near the I-205 section as it swings into West Linn in the Willamette area and the cars take the area's city streets when the 205 is jammed up morning and evening. Every car I see has a single driver in it. The highest density residential areas from Oregon City, Gladstone, West Linn and northward on the East side of the Willamette would benefit from that light rail extension. If adequate parking and feeder buses were available to move people to a Max station in Milwaukie or even further south, that jam on the freeway and thus my neighborhood streets would be greatly relieved. When those cars leave the 205 for city streets, no one who lives along Willamette Falls Drive can get out of their neighborhood street without a long wait for a break in the line of traffic from the freeway. Bus service south of Portland has always been miserable here in the suburbs. Register that service to provide access the southern Max line would help everyone and encourage folks to leave their cars at home. As a self-employed business owner, I have been required to pay TriMet taxes for many years and would love to be able to drive or bus part of the way north and take a Max to a meeting in Portland rather than circle blocks looking for a parking garage or street space in downtown. I would also love to be able to get to the airport without someone chauffeuring me or having to leave my car in an airport lot. I want my money's worth in tax payments to TriMet! I'm a great fan of the existing Max system, even if I seldom ride it and have lobbied for the extension. I'll be retired by the time you finish the south extension, but that will still be wonderful for me and my family members!

Chris Ling
Registered Representative
Agent
Financial Advisor
West Linn, OR
voice 503.657.8433
fax 503.657.0390

file:C:\Documents and Settings\zack\Local Settings\Temp\XPgrpwins\4832EAAF\MetCom_... 6/5/2008
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes the Tillamook Branch alignment. For information about utilities, see Section 3.14.

With the Locally Preferred Alternative (LPA), light rail would cross SE 11th Avenue and SE 12th Avenue near SE Clinton Street at-grade. Both SE 11th and SE 12th would continue to serve auto traffic after the construction of light rail.

Bridge design will consider pier ("piling") shapes that reduce debris collection on piers.

Bridge design will consider pier ("piling") shapes to reduce debris collection.

Bridge design will consider pier ("piling") shapes to reduce debris collection.

During the FEIS, TriMet and the project partners have been coordinating with the City of Portland to take into considerations the project objectives and improvements from the SE Division Street/SE Main Street Plan for both the intersections of SE 11th and SE 12th Avenues at SE Division Street.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA would accommodate construction of a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure, including a pedestrian bridge, and bus routing options that would support a station at Harold Street will be evaluated.

I-161-001

Dear Metro,

I am a property owner and resident of North Westmoreland, we are writing to declare our strong support for inclusion of the Harold Street Station in the Portland to Milwaukie Light Rail Project.

As you have heard, both the Metro Citizens Advisory Council (CAC) and Sellwood Westmoreland Improvement League (SWILE) have voted on this issue, and are now publicly calling for inclusion of the station in the project. I attended the meetings where these decisions were made, and was impressed by the variety of input, and number of compelling reasons for inclusion of the station. These issues include:

- The station costs and travel time impact may be mitigated by City of Milwaukie's request for a single downtown station, and the CAC recommendation to follow the Tillamook alignment.
- The physical barriers and terrain for accessing either Bybee or Holgate Stations would be difficult and treacherous for most riders from the Harold Street area.
- The Harold station neighborhood has already been "up-zoned" in anticipation of the station. This is affecting property values and neighborhood development now.

We believe that the addition of the Harold Street station can be the cornerstone for rebuilding North Westmoreland into a dynamic neighborhood of affordable, family centered homes. With the amenity of easy access to LRT provided by the Harold Street Station, the incentive for investment to renovate existing housing and develop quality multi-family housing is much higher. Besides increasing light rail ridership, this type of development will lead to stability in the local schools, and increased support for local businesses.

For all of these reasons, I strongly urge you to work to include the Harold Street Station in the final planning for the Portland to Milwaukee Light Rail Project.

Sincerely,

Sean & Cathy Murray

2043 SE Ellis

Portland, OR

503-919-4044
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-165-001

From: "Erin Lubbers" <erin.lubbers@gmail.com>
To: <jenn.tuerk@oregonmetro.gov>
Date: 6/23/2008 9:05 AM
Subject: Milwaukie Lightrail

I-165-001

The light rail line between downtown Portland and Milwaukie gives people attractive options beyond single occupancy vehicles. That is the most effective way to add value and extend the effective life of our system, and the bridge option is the best they have come up with so far.

We have made smart steps with mass transit, and every addition has been prudent, well-thought out, and effective. We have every reason to believe that this line is being planned with the same care. I hope that the needs of businesses and the community are balanced in the decision making process.

We don't need to wait for far off plans – light rail has proven itself for 20 years. I support this new line from Portland to Milwaukie.

Erin Lubbers
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes the Tillamook Branch alignment and was endorsed by participating jurisdictions in summer 2008.
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Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
I-172-001
Thank you for your comment. The project design team has been coordinating with the City of Portland concerning all of their utilities. As the plans are developed and potential impacts or conflicts with utilities are pinpointed, location specific solutions will be discussed and designed. That can include the relocation or protection of the utility.

I-172-002
Through a collaborative process engaging the broad scope of parties interested in the Willamette crossing location (river users, land-side businesses, residents, property owners, pedestrian and bicycle communities, neighborhoods, the City of Portland, TriMet, and others) a bridge location was selected, that while in the same area of the river as the options in the SDEIS, is slightly different than any of them. The bridge location decision resolves that key element of the LPA alignment.

I-172-003
The meeting that was canceled due to a power outage was not affiliated with the Portland-Milwaukie Light Rail Project or the bridge recommendation from the Willamette River Partnership group. It was an open house for Oregon Health and Sciences University’s planning process.
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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Sherman alignment option was selected as the Locally Preferred Alternative, as was a terminus at Park Ave. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information. The cable-stayed bridge type was selected during the Preliminary Engineering phase.
Thank you for submitting your comments for consideration. The Federal Transit Administration, which is being asked to shoulder a substantial portion of the project, will do only after comparing the Portland-Milwaukie Light Rail Project with all other projects in the country and funding only the most cost-effective. This procedure is not done for roads and therefore it is only possible to compare transit projects with other transit projects and not in comparison with road projects.

Local governments have considered the financial implications of the project, both capital and operating, as documented in Chapter 5 of the FEIS.

A comparison of a broad range of transit modes, including bus rapid transit and busway, was completed as part of an earlier analysis - South Corridor Transportation Alternatives Study Evaluation Report. The decisions about which transit mode to advance are documented in the South Corridor Evaluation Summary. These decision rationales are also summarized in Appendix L of the Portland-Milwaukie Light Rail Project SDEIS and FEIS. The decision to advance LRT and not bus was made for a variety of reasons, including conclusions that LRT would provide substantially higher benefits than bus service. That is, reliability and ridership were concluded to be higher with LRT than with bus. Further, while capital costs would be higher for LRT than for bus, they are federally assisted. Operating costs for LRT are lower than bus and are mainly locally borne.

More specifically, the SDEIS, on page 5-30, on Table 5.2-9, cites the cost per boarding ride for nine alternatives, including the No Build, Bus and various LRT alignments. The No Build is the most costly, at $1.59 per boarding ride and the 2003 LPA without buses the lowest cost at $1.47 and the 2008 LPA second least expensive at $1.48 per boarding ride.
ride. It further cites the FY 2007 costs for comparison – noting that bus costs $2.66 per boarding ride and $1.48 per light rail boarding ride. That is, from an operating standpoint, light rail is and is expected to be much less expensive to operate than bus transit.

I-177-003
In addition to the alternatives analysis described in response I-177-003 above, the No Build Alternative would be based on the 2007 transit service network (including newly operational Green Line service), enhanced with additional service hours and buses to provide transit service adequate to meet 2030 transit travel demand in the Portland-Milwaukie Corridor without investment in light rail. Included in the No Build Alternative are all roadway improvements in the 2004 RTP financially constrained highway network. As shown in SDEIS Table 4.2-1 on page 4-11, within the Portland-Milwaukie corridor, the No Build Alternative would provide 13,010 weekday revenue vehicle miles and 793 weekday revenue vehicle hours of service, compared to 12,760 revenue vehicle miles and 759 revenue vehicle hours of service for the LPA (Tillamook Branch to Park). These service characteristics compare to 9,734 weekday revenue vehicle miles and 532 weekday revenue vehicle hours of existing (2005) transit service in the corridor. SDEIS Table 5.2-9 shows the 2030 cost per boarding ride for the No Build Alternative to be $1.59 and for the LPA (Tillamook Branch to Park), $1.53.

I-177-004
The light rail project is a major public infrastructure investment, and as with any major construction project, energy will be consumed to complete the project. The SDEIS and the FEIS disclose the information for the public and decision-makers to consider as the LPA was identified and as further decisions are made to move forward with the project. The level of energy use in construction is not dissimilar to any major highway, utility, or building construction activity, including the overall construction
activities in the private sector. The estimates used for construction energy in the SDEIS and the FEIS are very conservative, based on a Caltrans construction-derived methodology developed in the 1970's when the nation encountered its first energy crisis. The method was designed to show that a project would not result in disruptions to area fuel supplies, particularly gasoline or diesel. It factors a project's construction costs and applies them to broad categories of materials, labor, equipment and energy, and is a highly conservative approach. Energy use is quite likely to be lower than the SDEIS estimates depending on more detailed design information, more definition of construction approaches, and based on contractor choices.

I-177-005
The current tools for estimating construction CO2 impacts are primitive at best.

The use of energy consumption for construction CO2 is based on older methodologies and is likely over estimated.

There are also so many factors in the engineering and construction approach that would influence amount of CO2 released.

Thus, given the timing of construction, and the changes on CO2 fleet emissions over time, a long range CO2 estimate was considered too uncertain and thus not presented.

Since CO2 impacts are on a global, rather than local scale, ODOT is currently recommending that GHG be evaluated at the state level where regional planning and trade-offs can be employed to reduce GHG emissions across the entire state.

ODOT is currently evaluating statewide transportation GHG emissions
under its Sustainability Program, as part of the Oregon Sustainability Mandates.

At the federal level, the FTA document entitled: Public Transportation’s Role in Responding to Climate Change states: “Based on an examination of FTA’s data and other academic, government, and industry sources, public transportation can reduce greenhouse gas emissions by:

- providing a low emissions alternative to driving;

- facilitating compact land use, reducing the need to travel long distances;

- minimizing the carbon footprint of transit operations and construction.

Further, the paper documents the greenhouse gas emissions from single occupant vehicles in comparison to various transit modes and states that “national averages show significant greenhouse gas savings from transit”. It documents light rail emissions as less than half of single occupant vehicle when assessing pounds of CO2 per passenger mile.

I-177-006
The tables displayed in Section 3.12 of the SDEIS list calculated energy usage and savings among the various alternatives measured in billions of Btu. The calculations were made based on MOBILE6 VMT assumptions regarding daily VMT, vehicle distribution, and fuel economy (mpg). Table 3.12-2, which was referenced in the comment, compares total daily energy usage between the No-Build and two Build Alternatives (2003 LPA and 2003 LPA Park). The energy savings between the No-Build and 2003 LPA Park Build Alternative equals 541 million Btu – the difference between 495.173 billion Btu (No Build) and 494.632 billion Btu (2003 LPA Park). The annual estimated savings between the two
alternatives, as displayed in Table 3.12-4 is to over 184 billion Btu per year (assumes annualization factor of 340 days per year) equal to nearly 1.5 million gallons of gasoline (1 gallon = 125,000 Btu) or 1.3 million gallons of diesel (1 gallon = 138,700 Btu). Whether this saving is considered marginal or small is subject to interpretation.

Regarding page 3-151 where the SDEIS presumably states that “future energy consumption will remain proportional to miles of driving.” (Air Quality Section of the SDEIS.) It’s true that assumed fuel economy for various vehicle types were factored into the calculations to arrive at estimated energy usage based on MOBILE6 VMT distribution. These calculations assumed mpg remained consistent between the existing condition and future no build and build alternatives. These statements are further addressed in Comment 1-177-007: Air Quality. However, hypothetically applying a blanket assumption that fuel efficiency standards increase by 27% in 2030 (25.5 mpg to 35 mpg) across the various vehicle types, from gas auto to large diesel trucks and from diesel transit buses to diesel commuter trains, the proportional drop in energy usage between the No Build and Build Alternatives would be relatively equal. In other words, the light rail alternative still saves more energy. Regarding his statement on energy usage during construction, please refer to comments under 1-177-004 (construction related energy usage impact similar to major highway, utility, or building construction activity).

I-177-007
The commenter correctly notes that CO2 emissions would drop in the future cases because of new vehicle emissions standards. The emissions models for incorporating the fleet MPG reductions are currently being developed and will be refined as new fuel efficiency regulations are implemented. These reductions would not be
instantaneous but would be gradual as older vehicles are replaced with new, higher efficiency vehicles. Thus, using only the 2030 future case may underestimate the actual CO2 reduction emissions as previous year’s emissions would likely be greater. As mentioned in response to comment I-177-005, the tools for estimating construction CO2 impacts are primitive at best and thus too uncertain to be meaningful. Thus, using the current approaches, comparing an overly conservative estimate for construction to the operating scenario reduction may lead to an inaccurate estimate of CO2 impacts. Although the construction portion of the project may be a net CO2 contributor, the project provides choices for different transportation options that could lead to further reductions in VMT and hence GHG emissions.

I-177-008
See response I-177-002 and I-177-003, above.
I-178-001
Thank you for submitting your comments for consideration. An extensive analysis of both the vertical and horizontal clearances needed to conduct commercial river travel on the Willamette River in the vicinity of the Willamette River Transit Bridge (river mile 13.8) have been completed and are compiled in Appendix O. These data include a survey of river users and their navigational clearance needs, as well as a field test and meetings with commercial river users, the US Coast Guard and the US Army Corps of Engineers. The bridge height of 77.52 feet has been reviewed by technical, advisory and policy committees and has been, after consideration of commercial river users needs, recommended by the technical and policy committees.

I-178-002
The LPA design for the Portland-Milwaukie Light Rail Project on SE 17th Avenue retains the one existing travel lane in each direction of the street. In addition, the project will create a new transitway across the Willamette River for buses currently using the Ross Island Bridge, completely removing buses on Lines 9, 17 and 19 from Ross Island Bridge traffic.

I-178-003
The Project will be funded in compliance with all federal, state and local laws and regulations concerning use of public revenues.
Thank you for submitting your comments for consideration. The alignment along SE 17th Avenue must provide the two-track trackway and stations, flanked by a car travel lane in each direction, a bike lane in each direction, and a planting strip and sidewalk along each edge. Additional right-of-way, primarily from the west side of the street, is required to accommodate these elements.

The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
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I-181-001
Back when the first Milwaukie light rail Citizen Advisory Com began, (meeting in Sellwood) I joined the brigade because I saw it was so necessary for my neighborhood and for commuters who didn't want to add to the already packed McLoughlin. I cried when it didn't go through but worked with other Brooklyn leaders to get it back on the board again. Maybe now it will be built before I meet my creator.

Perhaps the rising gas prices is a blessing. People will now understand that the car is the last resort when they have other options. We need to give them those options and for a city the size of Portland, buses can't do it all.

I feel that if Metro had listened to Milwaukie leaders the first time around, (as far as the route,) it would have made it. This time it appears that there is synergy going on so I have hope that the Milwaukie/Portland Light Rail will really be built and it will be a great addition to our city and a saving grace to the neighborhoods.

Marie Phillips
Brooklyn Action Corps
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff...
members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.

SE Lake Road will be closed near the south entrance to the light rail station. Related traffic impacts and mitigations are detailed in Chapter 4.

I-182-002

The Locally Preferred Alternative includes a terminus and station at SE Park Avenue. There will be no park-and-ride in downtown Milwaukie unless the project is unable to secure funds required to get to SE Park Avenue (the Minimum Operable Segment option includes a 275 space park-and-ride facility in downtown Milwaukie).

TriMet and the City of Milwaukie undertook efforts to improve and consolidate bus activity on Jackson St; that project is not a part of the Portland-Milwaukie Light Rail Project.
Thank you for submitting your comments for consideration. The project will comply with the FTA regulations for noise and vibration. The FTA criteria for noise and vibration are based on years of study related to high capacity transit operations, including light rail. TriMet has the benefit of years of experience with providing noise vibration mitigation for light rail along other previously constructed alignments. The potential noise and vibration mitigation measures we have at our disposal are very effective at reducing noise and vibration from the light rail vehicles. Chapter 3.10 provides the location of noise and vibration impacts and mitigation measures for each impact.

The light rail project, including a single Milwaukie station at SE Lake Road, was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The light rail project, including a terminus at SE Park Avenue, was endorsed by participating jurisdictions in summer 2008. The Final Environmental Impact Statement recounts the impacts and associated mitigation with the extension to SE Park Avenue. For information on the finance plan, see Section 5.1. For parks information, see Section 3.6. For noise and vibration impacts and mitigation, see Section 3.10.

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I-184-001

Despite our years-long citizen participation into the foregoing fact finding process and Oak Grove's ongoing Input, we do get it! We can see it clearly...the handwriting on the wall...the reality. Metro and Milwaukie will have light rail... It is my belief that light rail ridership would certainly benefit bus/traffic downtown congestion for the south corridor residents of Milwaukie and the development and business stimuli that Milwaukie believes it will bring.

Julie L. Pittenger-Stanley
14320 SE Fairoaks Avenue
juliestanley11@comcast.net
Oak Grove Resident
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The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option.
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schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. Your comments about additional bus service in this area have been forwarded to TriMet Service planning.
Thank you for submitting your comments for consideration. The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.
Thank you for submitting your comments for consideration. According to the November 30, 2009 Engineering News Record (ENR), steel prices have decreased from 2008 levels. Specifically, the ENR notes: “Reinforcing concrete bar prices increased 0.4% in November, capping a five-month rebound from last summer’s low. Despite the rally, rebar prices remain 7.2% below November 2008’s level, according to ENR’s 20-city average price for grade-60 rebar. Structural steel prices showed mixed results this month, with wide-flange prices decreasing 0.9%, while I-beam prices rose 1.4% and channel beam prices increased 0.3%. However, prices for all three structural beams remain between 4% and 6% below a year ago.” According to the US Energy Information Administration, at the time of the SDEIS publication, gasoline prices were $3.66 per gallon and prices on November 30, 2009 were $2.84 per gallon – approximately 36% lower.

These figures show that prices have been very volatile and future prices are difficult to predict. The project is using sources such as Engineering News Record and other recognized price tracking services and assuming that prices will be inflated and in addition, there are contingency funds set aside to address any unforeseen price increases.

The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow
down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

I-190-003
See response (I-190-002) for information about added safety features and educational programming, and see Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. Any construction or activity you witnessed along SE McLoughlin Blvd. was not associated with the Portland-Milwaukie Light Rail Project. The light rail project will not purchase property or begin on-the-ground work until after the Record of Decision is published in summer 2010.

Community participation is critical in shaping the light rail project. For a description of public involvement in the Oak Grove area during the Final Environmental Impact Statement and Preliminary Engineering phase as well as the Supplemental Draft Environmental Impact Statement phase, see Chapter 6 of the Final Environmental Impact Statement.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in SDEIS Chapter 2, SDEIS Appendix L presents a chronicle summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the FEIS for more detailed information about safety.

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff
members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 of the FEIS for more information on safety and security, and see Chapter 4 for information about traffic impacts and related mitigations in downtown Milwaukie. 
whether the vehicle they are riding on has rubber tires or steel wheels. They care instead about the quality of service. When TriMet improved bus service on the #33 McDonald bus in 2000, it gained 20 percent more riders.

Buses can run more frequently than rail, they can run as fast or faster than rail, and they can serve more neighborhoods than rail, all at a far lower cost. Buses can also move more people: a bus lane can move ten times as many people as a light-rail line.

Light Rail Is a Tragic Waste of Money

The Sellwood Bridge is so badly deteriorated that it has been closed to bus and truck traffic; several other bridges in the Portland area are also overdue for replacement; and Metro claims it doesn’t have the money to relieve congestion at some of the worst bottlenecks in the Portland area. At times like these, spending money on light rail is a tragic misplacement of priorities.

Because of the high cost of light rail, Portland is spending well over half of its transportation dollars on a transit system that carries less than 2.5 percent of all travel (including both buses and rail). The result is that your time is wasted in traffic and your car wastes fuel and emits more pollution. Portland should spend money on actions that will relieve congestion, not make it worse.

Sources

Data in this fact sheet come from the U.S. Department of Transportation’s reports, Highway Statistics and National Transit Database, and from the U.S. Department of Energy report, Transportation Energy Data Book. All of these reports are available on line.
Portland-Milwaukie Light Rail Project

Wednesday, March 19, 2008
6:00 pm to 8:30 pm
Milwaukie High School commons
11300 SE 23rd Ave., Milwaukie

Join the Portland-Milwaukie Light Rail Project community process and discuss the trade-offs between potential light rail station locations in the North downtown Milwaukie.

This meeting will focus on gathering community input about what makes a good station and/or park and ride, what good things are already present in the community, what downtown stations work best and why and what folks would like the area to look like in 20 years. Information will also be available on the Milwaukie station and park and ride in the North industrial area of Milwaukie and the potential Bluebird Street Station south of downtown. For more information, please call City of Milwaukie Information Coordinator, Grady Wheeler, at (503) 786-7503, or visit the project’s website at www.metro-region.org/southcorridor.

Light Rail Is a Tragic Waste of Money

The Sellwood Bridge has been closed to bus and truck traffic and Metro claims it doesn’t have the money to relieve congestion at some of the worst bottlenecks in the region. At times like these, spending money on light rail is a tragic misplacement of priorities.

Portland is spending well over half of its transportation dollars on a transit system that carries less than 2.5 percent of all travel (including both buses and rail). The result is that your time is wasted in traffic and your car wastes fuel and emits more pollution. Portland should spend money on actions that will relieve congestion, not make it worse.

Light Rail Does Not Save Energy

When Tri-Met opens a new light-rail line, it changes corridor buses that once took people directly to their destinations into feeder buses, which require people to transfer to the light rail. But most people end up driving to the light-rail stations, so the feeder buses run emptier than the corridor buses they replaced. The result is that the Tri-Met system as a whole consumes more energy and emits more greenhouse gases than before the light-rail line opened.

* After Tri-Met opened the light-rail line to Gresham, its energy consumption per passenger mile increased by 5 percent, and its CO2 emissions per passenger mile increased by 13 percent.
* After TriMet opened the light-rail line to Hillsboro, its energy consumption per passenger mile increased by 7 percent, and its CO2 emissions per passenger mile increased by 11 percent.

This does not even count the huge energy cost required to build light rail. Since few people ride it, the energy cost per rider is very high relative to roads.

For More Information

Data in this Fact Sheet come from the U.S. Department of Transportation’s Highway Statistics and National Transit Database, and from the U.S. Department of Energy report, Transportation Energy Data Book. All of these reports are available online. Also see americansharedcoalition.org, tri-regionplanners, sustainableportland.com, and oregon.org.
Why Light Rail Is Wrong for Clackamas County

Light Rail Does Not Reduce Congestion

If light rail comes to Milwaukie, be prepared for more congestion. Portland’s light rail carries only about 1 percent of passenger travel in the Portland area, which is not enough to make a difference on our crowded roads. Instead, new light-rail lines add to congestion and parking problems when they run in or cross streets.

Light rail expensively improves service in only a few corridors. Due to the high cost of light rail, Tri-Met cannot make many improvements in bus service, and at times has had to reduce bus service to pay for rail cost overruns.

In 1980, 9.8 percent of all commuters in the Portland area rode transit to work. Today, thanks to the high cost of light rail, only 7.6 percent of Portland-area commuters ride transit to work. How does that relieve congestion?

Light Rail Does Not Stimulate Development

If light rail comes to Milwaukie, expect more density and subsidies. Even if you want five-story apartment buildings and mixed-use developments in your neighborhood which most people do not-light rail does not stimulate such developments.

Instead, Portland and its suburbs have given close to $2 billion in subsidies to developers on the light-rail and streetcar lines—subsidies that take money from schools, fire, police, and other essential services. It is these subsidies, not the rail lines, that stimulated development.

Light Rail Is Not High-Capacity Transit

Rail advocates like to claim that rail lines can carry as many people as an eight-lane freeway. That’s only true if people ride it. The average mile of Portland-area light-rail line carries less than 20 percent as many people per day as the average mile of Portland-area freeway lane. Yet light rail costs far more to build than a freeway lane.

Buses Are Better than Rail

Transit riders don’t care whether the vehicle they are riding on has rubber tires or steel wheels. They care instead about the quality of service. When Tri-Met improved bus service on the #33 McLoughlin bus in 2000, it gained 20 percent more riders.

Buses can run faster, more frequently, and serve more neighborhoods than rail, all at a far lower cost. Buses can also move more people: a bus lane can move ten times as many people as a light-rail line.

Portland-Milwaukie Light Rail Project

Wednesday, March 19, 2008
6:00 pm to 8:30 pm
Milwaukie High School Commons
11300 SE 23rd Ave., Milwaukie
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. The financial plan is addressed in Section 5.1 of the Final Environmental Impact Statement.
Thank you for submitting your comments for consideration. Chapter 6 of the Final Environmental Impact Statement details the public involvement programs and activities during the Supplemental Draft Environmental Impact Statement, the Final Environmental Impact Statement and Preliminary Engineering.

The public involvement programs during this phase of the project have expanded its focus on activities to engage Oak Grove citizens in response to your concern. From spring 2009 to winter 2010, the project has held eight public meetings for Oak Grove citizens. In addition, four representatives from Oak Grove were, and continue to serve as, members of the project's Citizens Advisory Committee. The Citizens Advisory Committee meetings are open to the public and frequently focus on issues related to the Oak Grove portion of the alignment.

Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet's Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods.
of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 of the FEIS for more information on safety and security.

I-196-003
The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002
In addition to the discussion in SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the FEIS for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches and residences. The project's analysis directly
considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project’s purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.

The vote of Mayor Barnard at the Portland-Milwaukie Light Rail Project Steering Committee was not a conflict of interest, because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukie; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukie resolution, thus the Mayor’s votes did not change the outcome of any decision.
Thank you for submitting your comments for consideration. The existing railroad bridge is not proposed to be replaced, so no cost estimate is provided. The light rail crossing of SE McLoughlin Boulevard will bridge the existing road and right-of-way and does not include a southbound through lane or southbound right-turn lane. However, the project is designed to accommodate widening of SE McLoughlin Boulevard in the event that ODOT, owner of SE McLoughlin Boulevard (OR 99E), determines at a time in the future that it will be widened.

The LPA extends the bridge over Kellogg Lake to carry the Portland-Milwaukie Light Rail Project trackway above and across SE McLoughlin Boulevard. There will not be an at-grade crossing of McLoughlin Boulevard.
I-199-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at SE Park Avenue.
Thank you for submitting your comments for consideration. The light rail project, including a Park Avenue terminus and park-and-ride, was endorsed by participating jurisdictions in summer 2008.

The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. For a description of the project's scope, see Chapter 2 of the FEIS.

Chapter 6 of the FEIS details the public involvement programs and activities during the Supplemental Draft Environmental Impact Statement, the FEIS, and Preliminary Engineering.

The public involvement programs during this phase of the project have expanded its focus on activities to engage Oak Grove citizens in response to your concern. From spring 2009 to winter 2010, the project has held eight public meetings for Oak Grove citizens. In addition, we invited you to serve as one of the four representatives from Oak Grove on the project’s Citizens Advisory Committee. As you know, the Citizens Advisory Committee meetings are open to the public and frequently focus on issues related to the Oak Grove portion of the alignment.

Elevated structures for light rail are significantly more expensive than at-grade designs. The project has worked extensively with ODOT concerning the crossing of SE McLoughlin Boulevard and concluded that it would be unsafe and would constrict the capacity of SE McLoughlin Boulevard to have an at-grade crossing.

That said, a park-and-ride lot at SE Park Avenue will provide additional
FTA, TriMet, and Metro are coordinating with the North Clackamas Parks and Recreation District to design appropriate mitigation measures in the areas where trees will be removed. The goal of these measures is to mitigate changes in the visual quality of the area and provide safe transitions between the light rail alignment and the surrounding neighborhood. These measures may include retaining walls, as well as vegetation, or other measures to soften the change in the existing environment.

Currently the plans for the 2008 Locally Preferred Alternative to Park Avenue do indicate potential impact and displacement of businesses and residences. Appendix G provides a list of properties potentially affected by acquisition. All displaced businesses and residences will receive relocation assistance. The Oak Lodge Sanitary District's pumping station property will not be impacted by the project. The LPA plans for the park-and-ride include a four level structure with 600 spaces, and the LPA Phased Option include an initial 355-space structure.

The FEIS provides analysis on the visual attributes at this location. The project is currently working with the county and local citizens to design a facility consistent with the character of the location. See Section 3.4 for information about visual impacts and mitigations.
McLoughlin Boulevard. The LPA Phasing Option includes an initial 355 space facility. The LPA terminates with the Park Avenue Station just north of SE Park Avenue (west of SE McLoughlin Boulevard) and the tracks do not cross SE Park Avenue. As part of the FEIS, the Transportation Impacts Results Report has identified needed traffic mitigation at the SE Park Avenue entrance to the park-and-ride lot, at SE McLoughlin Boulevard and SE Park Avenue and at SE Park Avenue and SE Oatfield Road.

I-200-007
Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law
enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.

I-200-008
The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukie; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukie resolution, thus the Mayor’s votes did not change the outcome of any decision.

See response I-200-02 regarding public involvement in Oak Grove.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff
members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 of the FEIS for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.
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along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
I-206-001
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

I-206-002
The Portland-Milwaukie Light Rail Project would have transfer opportunities to streetcar at OMSI, South Waterfront, and Portland State University. Generally, analysis for environmental impact studies includes other projects that are funded; as such, future streetcar connections to the project exclusive of those listed above would be analyzed in the studies of those future streetcar projects.

I-206-003
Bicycle connections at each location mentioned have been designed to integrate the Portland-Milwaukie Light Rail Project with regional and local bike ways. The project will incorporate bicycle parking at each station.

I-206-004
Project staff is coordinating with City of Portland station area planning efforts for the Southeast Portland stations.
The Locally Preferred Alternative for the light rail project includes an alignment along the Tillamook Branch and a terminus at SE Park Avenue and was endorsed by participating jurisdictions in summer 2008. The Main Street alignment through the North Industrial Area of Milwaukie was eliminated due to impacts to area businesses. See Chapter 2 of the FEIS for more information.

The 2008 Locally Preferred Alternative (LPA) has light rail that terminates just north of SE Park Avenue (south of downtown Milwaukie) and assumes a 800-space park-and-ride lot at the Tacoma Station and a 600-space park-and-ride lot at the Park Avenue Station. The LPA Phasing Option includes initial parking facilities with fewer spaces at these locations. As part of the Final Environmental Impact Statement (FEIS), the Transportation Impacts Results Report has identified needed traffic mitigation at local street intersections in the areas around both of these light rail stations.

The locations of the stations were confirmed by the LPA for the light rail project, which was endorsed by all participating jurisdictions in summer 2008. The project is studying transit oriented development opportunities at many of the stations. The Bybee Station remains below street level; however, designs reflect efforts to ensure the safety of transit riders, including Transit Tracker units at the street level. See Appendix D for visual simulations.

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and
to minimize potential conflicts among trains, people, and other vehicles.

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See Section 3.16 of the FEIS for more information on safety and security.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at SE Park Avenue and the Tillamook Branch alignment, and was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region’s 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.
Trans System Accounts - Comments on SDEIS Portland-Milwaukie LRT

From: Pat Russell <flanagan112@hotmail.com>
To: <trans@oregonmetro.gov>
Date: 6/17/2008 6:53 PM
Subject: Comments on SDEIS Portland-Milwaukie LRT

DEAR PDX-MILW LRT SDEIS Administrator(s):

Please include in the SDEIS the three documents attached. One is a cover letter containing my comments on the SDEIS. The other two attachments are background information referenced in my letter.

Thank you

Pat Russell
1635A SE Hearthwood Drive
Clackamas, OR 97015
(503) 656-9681
Email: flanagan112@hotmail.com

Earn cashback on your purchases with Live Search - the search that pays you back! Learn More
Thank you for submitting your comments for consideration. The supporting material attached to your comments have been taken into consideration as well.

The purpose of the SDEIS was an update of previous NEPA efforts focused solely on the alternatives described in the 2008 SDEIS. More detailed information was available in the Ecosystem discipline report that was part of the 2008 SDEIS. Further information on the overall state of the Kellogg-Mt. Scott watershed is available in the 2002 North-South Light Rail SDEIS. This SDEIS does note the presence of the dam below McLoughlin Blvd in a footnote on page 3-94. The SDEIS did not state the scale of blockage to various species of fish. The FEIS does provide more information on the scale of blockage. However, information from NOAA, ODFW, and StreamNet (www.streamnet.org, an information clearinghouse using ODFW data), does show that salmon, steelhead, and other fish are able to access Kellogg Creek using the fish ladder. This information was shown in Table 3.8-4 of the SDEIS.

The SDEIS also noted in the footnote on page 3-94 that dam removal and creek restoration efforts had been proposed. At the time of publication, detailed information on methods or funding were not available. In early 2009, a proposal was submitted to NOAA for restoration funds. The project was not selected to receive these funds. The City of Milwaukie, ODOT, and others are exploring options for removal of the dam, bridge replacement, and creek restoration. The light rail project has been coordinating with NOAA and the City of Milwaukie (and their "Kellogg for Coho" program) to ensure that this project does not inhibit full implementation of planned restoration efforts. This information is noted in the FEIS. Further details on these efforts, including funding, methods of removal and construction, restoration, etc. is beyond the scope of this NEPA document.
The SDEIS did provide a brief description of the dam in a footnote on page 3-94. Discussion of impacts based on existing conditions is present on page 3-107. Additional information on the Kellogg Creek watershed is present in the Ecosystems and Water Quality and Hydrology discipline reports that were part of the 2008 SDEIS. Detailed past activities noted in this comment are appreciated, and provide a fuller description of past activities. However, due to the nature of SDEIS and FEIS documents, such detail is outside of the scope of the documents. In addition, in reference to conditions near I-205, that area lies outside of this project area's limits and would not be included in SDEIS or FEIS documents. The commenter notes that fish access to the watershed is blocked, but this is not completely true. The dam and fish ladder to block some access, but not at all times. More detail on the scale of blockage is included in the FEIS.

This SDEIS supplements the 2002 SDEIS for the North-South light rail corridor, which provided more information on the activities near I-205. Details such as this are outside the scope of this SDEIS and FEIS. The information on dam removal efforts has been updated for the FEIS.
The 2008 SDEIS provides discussion of impacts related to project activities. It attempts to capture direct, indirect, and cumulative impacts. Due to the nature of the SDEIS, it is not able to fully discuss all aspects of existing conditions adjacent to the project alignment, for example the existing road bridge. With respect to analysis of cumulative impacts from land use and development, the FEIS provides discussion based on the LPA. Impacts are addressed through the NEPA process, and also through regulatory permitting processes such as consultation with NOAA under the Endangered Species Act, the Corps of Engineers under Section 404 of the Clean Water Act, the Oregon Department of Environmental Quality under Section 401 of the Clean Water Act, the Oregon Department of State Lands under Oregon Removal-Fill laws, the Oregon Department of Fish and Wildlife under the Federal Wildlife Coordination Act, and the City of Milwaukie under its land use approval processes. Review of the project under the Endangered Species Act is currently occurring, with a biological opinion anticipated prior to publication of the FEIS which will mandate specific terms and conditions for protection and recovery of listed fish species in Kellogg Creek and other project streams.

Based on coordination with resource agency staff, the dam is not a complete barrier to steelhead, salmon, or many other fish. The SDEIS and FEIS address impacts to wildlife throughout the project corridor, including at and adjacent to Kellogg Lake. Because dam removal is not certain to occur, this project must assess impacts based on its continued presence.
I-210-006
Updated information on proposed efforts to remove the dam and restore Kellogg Creek is included in the FEIS.

I-210-007
It is noted that the commenter suggests placing the existing structures over Kellogg Creek into one corridor, and combining the existing railroad alignment with the proposed light rail alignment. One reason given for this suggestion is to comply with the federal Endangered Species Act. This project has undergone consultation with NOAA to identify project impacts, discuss impact minimization and conservation measures, and gain approval for the project. Impacts based on the LPA are discussed in the FEIS.

The commenter notes that light rail vehicles crossing McLoughlin Boulevard at-grade would cause traffic delays. The LPA proposes that the light rail bridge cross McLoughlin Boulevard on a structure and not at-grade. This would not cause any traffic delays.

With respect to funding of the McLoughlin Crossing of Kellogg Creek, alternatives for this were analyzed during the design and ESA consultation process. Given the relatively small impact from the LPA, and the extent of coordination and funding needed between numerous agencies as shown in the comment, dam removal was deemed to be uncertain given the timeline of this project. Regulatory agencies have requested that any mitigation and conservation measures are relatively certain to occur within the time frame of the project. It was deemed that dam removal and creek restoration were not likely to occur in a timely manner. The project proponents have supported removal of the dam and restoration of the creek in the past, but have worked toward minimizing their impacts rather than funding uncertain restoration projects by others.
- National Marine Fisheries Service (NMFS) - Endangered Species Act (ESA) jurisdiction over anadromous fish; it also has a role regulating fisheries.
- US Army Corps of Engineers (USACE) - operates federal dams and locks for multiple uses.
- Bonneville Power Administration (BPA) - markets electricity from federal dams; it also has a key role funding fish and wildlife mitigation.
- Environmental Protection Agency (EPA) - implements and enforces the Clean Water Act.
- US Fish and Wildlife Service (USFWS) - ESA jurisdiction over plants, wildlife and resident fish and also operates and administers hatchery programs and national wildlife refuges.
- US Bureau of Reclamation (USBR) - operates federal dams for multiple uses.
- US Forest Service (USFS) - manages the national forest system.
- Bureau of Land Management (BLM) - manages 16,233,739 acres of public lands in Oregon and 370,110 acres in Washington for wildlife, recreation, timber harvest, livestock grazing, mineral extraction and other public uses.
- Bureau of Indian Affairs (BIA) - trustee for tribal and individual Indian lands and resources held in trust.
- Individual Congressional public works legislation

State Agencies (& suggested funding) $3,200,000
- ODOT (bridge/segment modernization) $3,000,000
- Watershed Enhancement Board Grant $100,000
- ODF&W $50,000
- Lottery Funds grants (15% dedicated to Parks and Open Space statewide)
- 2008 State Legislation: “Agriculture and Community Water Act” ($10M in matching grants)
- DEQ (water quality enhancement) $50,000

Regional $2,000,000
- Metro 2008 Open Space Bond Grant $250,000 (Phase Two)
- MTIP (2010-2013 cycle earliest) $1,000,000
- I-777 PDX – Milwaukee mitigation $750,000

Local $2,700,000
- DTD Road Impact mitigation, SDCs $400,000
- DTD Watershed planning $50,000
- CCGWCD (portion of property tax) $80,000
- CCSDW1 SWM 10% monthly service of service fee over three year program set-aside * $1,000,000
- NCPRD (FY 2010)** $300,000 SUBTOTAL County/Unincorp ** $2,000,000
- City of Milwaukie *** YSP CIP $500,000 SUBTOTAL Milwaukie $500,000
- City of Happy Valley, Johnson City $200,000 SUBTOTAL Other Cities $200,000

Notes:
* FOOTNOTES: CCSDW1 SWM monthly service fee intake is about $3.5 million/year. Allocating about 10% of that income over the three years would generate about $1 million. This major contribution would enable fish to access the watershed within the jurisdiction of CCSDW1. (development within CCSDW1 has downscaled the watershed over the years; opening the dams will allow fish an opportunity to return to the watershed and the CCSDW1 ability to analyze the benefits of its past investments on habitat restoration.
** FOOTNOTE: North Clackamas Park and Recreation District program either increases funding revenue through grants; adjustments of CIP priorities; or new Natural Areas Program. Project within district and would benefit the district and city of Milwaukie’s plans for regional trail from downtown Milwaukie at the Waterfront Park to Mt. Tabor, the Bowl in Happy Valley and Rock Creek in Damascus. Kellogg Mt. Scott Creek greenway recognized by Metro 2040 Concept Plan.
*** FOOTNOTE: The City of Milwaukie has received a $1.5 Million MTIP project approval for US Corp Engineers Study and Preliminary Engineering. The city also has the bridge reconstruction as a CIP proposal that they submitted to the Metro RTP 2015 project for inclusion. This project is identified as RPT 2035 Project 10898 and 10899 which includes about $4 million for entry into Riverfront Park/service.
drives and then 59 million for Hwy 99E bridge replacement under “Kellogg Creek Dam Removal/Bridge Bridge Replacement/Milwaukie TC River Access Improvements” (Meto Fall 2007, RTP 2015). There is no identified funding source for the city’s project, hence the reason for the multi-agency strategy. The meaningful restoration of the watershed is the removal of the blockage due to the crossing of the McLoughlin Blvd. (US 99E) roadway over the estuary and such as significant capital improvement has not been prioritized by any agency. In of itself, this lack of funding commitment could also be translated as a “taking” according to the Endangered Species Act 4(d) Rules, where lead and responsible government agencies resist recovery efforts. An appropriate “push back” action on the part of NOAA/NMFS could be imposition of a building moratoria within the Kellogg-Mt. Scott Watershed.

Please be more specific in the mitigation measures section of SDEIS. Otherwise, the language can only be interpreted as “do nothing.”

Sincerely,

Pat Russell

Attachments:
--Pat Russell June 5, 2007 Letter to City of Milwaukie Planning Commission
--Notes of August 10, 2006 Meeting Concerning Kellogg Lake Dam Removal, sponsored by the City of Milwaukie
Pat Russell  
16358 SE Hearthwood Drive  
Clackamas, OR 97015  
Phone: 503-656-9681; email: lanagan112@hotmail.com

June 5, 2007

City of Milwaukee Planning Commission  
City Hall  
18222 SE Main Street  
Milwaukie, OR 97222

Rli:  Testimony

Phase II: Milwaukee – Portland Light Rail Transit Alternatives (LRT), SDEIS,  
4th Alternative (Through Downtown Milwaukee) and  
Kellogg Creek Watershed Impacts

Dear Staff, Chair and Commission Members,

My thanks to Mayor Bernard and the city for extending the discussion on the need to  
include a fourth LRT option for consideration in the SDEIS (Supplemental Draft Impact  
Statement): an alignment that would enter downtown via Main Street or McLoughlin  
Boulevard as opposed to following the Tillamook Branch.

According to the city’s website: “Mayor Bernard has asked the community to consider this alternative so he can see if there is community consensus for including it in the  
study.” This letter encourages the Planning Commission to recommend to the Mayor and  
City Council the inclusion of such a 4th alternative. Further, the letter attempts to provide  
some background on the need for more detailed planning of a multi-modal transportation  
alignment, habitat setting and possible methods to CPR salmon and wildlife (Conserve,  
Protect, Rehabilitate), entering or inhabiting the watershed from the Willamette River to  
approximately the SE Oakfield Road bridge over the creek.

Purpose of Comments

Less than adequate attention has been paid to the critical habitat needs of fish and wildlife  
in the Kellogg Creek Watershed within the downtown area of Milwaukie, during the  
regional discussion of transportation options and Light Rail options over the last ten  
years. However, with the Metro/Tri-Met and City of Milwaukie movement to reenergize the  
Milwaukee-Portland LRT project, habitat issues must be an integral part of the  
consideration of options to be explored and studied in the 2007 SDEIS.

The absolute health and survival of the Kellogg Creek Watershed must be a high priority
during the project scoping, research, analysis, preparation and implementation of mitigation measures associated not only with the Milwaukee-Portland LRT, but other projects within the study area which will be noted in more detail below. Names is not a partner in balancing acts prescribed by politicians—such as EESE analysis (Goal 5), “best practices” or mitigation measures “where practicable” due to cost. Either the habitat will be functional or it won’t, either fish will migrate or they won’t. There is no middle ground.

The lower Kellogg watershed habitat is in dire straits, and we are in danger of losing migratory salmon and other important wildlife which historically have inhabited this watershed. Right now, the key obstacle to recovery is the dam, the non-functioning fish ladder, US Highway 99E crossing the habitat, the lake and numerous related human activities and planned projects in this area noted below, including the Milwaukee-Portland LRT.

The cumulative impact of these activities must be considered and addressed in the SDEIS, along with the LRT alternatives. The primary planning priority should be avoidance of further impacts on the habitat and most importantly, LRT should be a major player in facilitating the recovery of the habitat. It will likely promote urban infill and revitalization and densification of the downtown area—placing additional pressure on the salmon & wildlife habitat needs in the Kellogg Creek corridor. LRT will impact the habitat either directly or indirectly, depending upon the alternatives.

By combining the energies and resources of the various public and private projects in the immediate area, there is an opportunity to fundamentally restore fish & wildlife access to the watershed—especially for salmon. The Planning Commission is encouraged to recognize and support a focus toward habitat CPR as part of this project SDEIS. Specific recommendations are outlined at the end of this letter.

**Importance of ESA**

The implementation of regional and local plans, including transportation components are subject to the federal Endangered Species Act (ESA). Under this act, a "4(d) Rule" was established in 2000 by the National Marine Fisheries Service (NMFS) to protect salmon and steelhead listed as “threatened” under the Act and is currently administered by the National Oceanic and Atmospheric Administration (NOAA). The June 2000 4(d) rule adopted by NMFS prohibits “take” of salmon and steelhead listed as threatened under the Endangered Species Act (ESA) except in cases where the take is associated with an approved program that causes under one of the limits in the 4(d) rule. Certain “Municipal, Residential, Commercial and Industrial” (MRCI) Development and Redevelopment Activities have a significant potential to degrade habitat and injure or kill salmon and steelhead in a variety of ways.

The rule specifically makes reference to Portland-area Metro's Urban Growth
Management Functional Plan with focus on 12 specific issues in our urban region, including:

- storm water discharge;
- riparian buffers;
- stream crossings;
- stream banks;
- impacts to wetlands and surrounding vegetation;
- erosion and sediment runoff during and after construction;
- water supply demands;
- monitoring;
- funding; and
- enforcement.

Significantly, Metro has not yet submitted its Plan to NMFS for consideration as a limit to the take prohibition, nor has NMFS approved it for that purpose.

Further, Metro’s “Nature in Neighborhood”, to this writer’s knowledge has yet to be recognized as satisfying the ESA standard. However, “Nature in Neighborhood” is a step in the right direction. Therefore each capital improvement project must be measured against the ESA on its own merits, which needs to be fleshed out in the SDEIS. The city should make sure it is.

According to the “Rule”, NMFS will focus on the following issues when evaluating the adequacy of Metro guidelines or local ordinances:

a. Siting that avoids sensitive or constrained sites.
b. Avoiding storm water discharge impacts to water quality and quantity, and to the historic hydrograph characteristics of the watershed.
c. Protection of adequate vegetated riparian buffer along all streams.
d. Avoiding stream crossings by roads wherever possible, and minimizing their impacts.
e. Protecting historic stream meander patterns, flood plains and channel migration zones.
f. Protecting wetlands and surrounding vegetation to maintain wetland functions.
g. Preserving the hydrologic capacity of streams to pass peak flows.
h. Landscaping to reduce need for watering and chemical application.
i. Preventing erosion and sediment run-off during and after construction.
j. Assuring that water supply demands do not impact flows needed for salmonids.
k. Monitoring and maintaining detention basins and similar works.
l. Providing needed enforcement, funding, monitoring, reporting, and implementation mechanisms.


LRT Alignment Issues from Southeast Fox to points south

Although this writer is not attempting to take sides on whether light rail should happen in Milwaukee, (there is considerable opposition being voiced), there are a number of alternative alignments/corridors that could be examined in this study, in addition to the alignment south of SR 224 (Expressway) following the P & W Railroad corridor.
diagonally through downtown.

A. Extending LRT south of downtown

One alignment preferred by many is aligning the LRT with the US Hwy 99E corridor, especially south of the SE 224. This alignment would link the LRT with the roadway and both could be looked at together as they cross the Kellogg Waterbird habitat. Federal, state and regional guidelines encourage avoidance or limited crossings of a habitat. There would be an opportunity to significantly reduce the corridor with existing crossings, should the LRT be extended south of downtown. That is because the railroad LRT and highway will be merging in the area and will need to be routed. Additional local crossings of utilities and service roads should be included in this corridor. This multi-purpose corridor crossing should be as narrow as possible and must be bridged over the habitat and floodplain, beginning as far north as Jefferson Street and as far south as the one-way street on Cherry Road at McLaughlin.

It is likely that even though the railroad line will remain a stand-alone improvement, the LRT and roadway design could take advantage of multi-level engineering and be pulled closer to the railroad tracks to narrow the corridor of the two existing crossings existing. Currently Hwy 99E and the railroad take up a crossing area on the north bank of at least 500 feet or more. (The city has an excellent map that shows the existing creek erosion, parcel & road patterns and building placements — see ATTACHED).

The existing transportation corridors are a very wide swath of transportation impact because each facility approaches the creek at a different angle. The Hwy 99E roadway could be realigned entirely toward Main Street (and be elevated) and be in tandem with the LRT alignment. This could impact Douglass Park and the Riverview city-owned property (dedicated to the city for park use), but provide significant habitat improvements and increase Riverfront usability. Further, an "S"-curve alignment would ensure slower speeds through the downtown corridor, such as 20 mph (“downtowners” comes and goes very quickly and it shouldn’t).

As the downtown area is higher than the habitat/creek level, the bridging will not need to be significantly higher than the river. The visual compatibility of the highway, LRT, footpath drivers and the visual result should also be analyzed from an architectural perspective, along with minimal visual impact on the habitat. Wide expansion of concrete would NOT be compatible. Blocking light, air and rainfall. Instead the crossing should be broken into smaller crossings to lighten its massive structure. The historical impacts of the crossing, whose support structure was heavily treated with concrete, needs review and possible consideration for reconstruction.

The need for an independent service road crossing should be seriously questioned, especially if local access is available by other means. Reasons: streets on either side of the creek/habitat are in public ownership as far upstream as at least the river, local access is available from a public street without crossing the river. This has implications for the city-owned park and boat ramp access concepts and the construction of improvements/access for the Kellogg Treatment facility.

As noted, there is considerable opposition in the Oak Grove/Milwaukie Heights neighborhood toward extending light rail south to Oregon City via Hwy 99E. Along with this concept the alternative being considered (extension of LRT to Park Avenue) Hwy 99E, including a Park N’ Ride Station), this writer suggests the alternative of following the P & W railroad corridor to downtown Lake Oswego. This alternative would provide an accessory link to the "mainline," taking commuting burden off the I-205 corridor and Sellwood Bridge corridor. Metro did conduct a river crossing study a number of years ago.

South Williams River Crossing Study Findings and Recommendations Report (Metro,
1999 - The South Willamette River Crossing Study examined travel constraints and capacity demands across the Willamette River and identified multi-modal crossing improvements between the Marquam Bridge in Portland and the I-205 Bridge in Oregon City.

Metro and the cities of Portland, Lake Oswego and West Linn are now discussing the Willamette Shore Trolley and undertaking an Draft Environmental Impact Statement. This corridor has many concerns that could be resolved by combining its efforts with a new crossing of the Willamette River.

**B. Extending the I-205 LRT instead to Oregon City**

As noted, if there is strong opposition to extending the light rail to Oregon City via the McLoughlin corridor, then perhaps, the resources should be focused on a more acceptable corridor along I-205 extended from the existing terminus at the Clackamas Town Center. This I-205 alignment could access: a) the SR 213 to the Beaver Creek and Red Soils area (or as far as Molalla); and b) old town Oregon City.

**Cumulative Impacts on the Kellogg Creek Watershed**

The exacerbating impact of the Portland-Milwaukie LRT extending south of downtown Milwaukie across the Kellogg Creek Watershed has not been adequately scoped out in enough detail to determine the cumulative impacts of the existing and planned crossings and developments/activities/conditions that include or will include:

- soil characteristics of the Kellogg Creek and Willamette River (tidal influences)
- sewage treatment plant activities & discharge
- motor vehicle crossings (service roads and Hwys 99W, etc.),
- dams, fish ladders, culverts, drainage discharge & rip-rap/revetments, streambanks,
- Willamette Riverflats park activities and boating ramps,
- development of the Dogwood Park and Rosburg parcel,
- pedestrian and bike crossings,
- existing domestic pet activities,
- downtown redevelopment projects and intensity,
- Park N Ride structures and activities,
- LRT stations, staging and crossings,
- utility crossings and
- the existing P & W RR crossing (and future use, capacity).

The impacts of the cumulative crossings need to include the fish needs and impacts outlined in the 4(d) Rule of the ESA. The incremental impacts of each activity or project coupled with the other parts is what constitutes to a drastic cumulative condition that puts the habitat in jeopardy. All of the activities-projects must be studied and discussed within the context of the other. The most recent detailed analysis of the condition of the Kellogg Creek in the area was by a multi-disciplinary team composed of public agency staff, environmentalists and citizens in 2006.

*Kellogg Lake Task Force, City of Milwaukie, Clackamas County Service District No. 1 (County Water Environmental Services) METRO, ODOT, US Corps of Engineers, National Oceanic & Atmospheric Administration (NOAA), 15 August 2006 (Manuscript available).*
Additional discussion occurred during the planning of the city’s riverfront park and Dogwood Park/Kroenke property and adjacent public holdings (along with the potential siting of a Park N Ride station as part of the LRT corridor—later abandoned in view of the Kroenke hand dedication for park purposes). Both of these projects are ongoing with the goal to complete capital improvements in the near future.

Also, Metro and JPACT recently awarded the City of Milwaukie MTP Funds (2008–11 Metropolitan Transportation Improvement Program) to study:

- OR 99-E bridge at Kellogg Lane
- Project code: 067399
- Funding category: Green streets
- Location: Clackamas County
- Status: Recommended
- Sponsor: City of Milwaukie
- Funds requested: $130,950
- Total project cost: $53,213

The Kellogg Lake Culvert Replacement Project would replace the existing two-cell culvert and replace the current OR 99-E bridge with a structure that would allow the site to become part of the Portland Metro Floodplain Buffer. According to an Army Corp assessment, the dam restricts fish passage under current flow conditions. The replacement bridge would also be designed to accommodate metric and bicycle users and pedestrian safety and access. The study would provide engineering, environmental, and final design work in preparation for construction.

Information source: Metro Website.

According to this study description, the effort falls short of examining the total project area and activities affecting the habitat [STUDY AREA description] from the Willamette River, east to roughly SE Ousfield Road, and from downtown to roughly Hwy 99E, southeasterly/ easterly of SE River Road (one way couplet, northbound).

Metro has adopted Title 3 and Goal 5 (Nature in Neighborhood) policies to guide local jurisdictions on water quality and habitat protection. However, as noted above these policies have yet to be recognized by NOAA as a specific 4(d) Rule program for Salmon CPK and are not designed with a high level of specificity that would assure protection of the Kellogg Creek habitat and fish needs in the study area.

Over the last few years, there has also been a series of studies and in-depth discussion concerning the current and future sewer needs of north Clackamas County, including its cities, Milwaukie, Happy Valley, Damascus, Gladstone, Johnson City, Oregon City, West Linn, and Lake Oswego. As of this writing, the future of the Kellogg Treatment facility on the south banks of the creek and fronting the Willamette River is under study.

There are no capital fund commitments for the reconstruction of Hwy 99E, which must compete for funding priority with other highway projects in the region.

There are other important, ongoing community studies and planning in the immediate area such as neighborhood planning, surface water management, transportation planning updates, downtown redevelopment and the like. However, there is less focus on the character and seed of the Kellogg Watershed and specific SALMON CPK. The habitat is
more than just the 100 year floodplain or water's edge.

Defining Habitat Need

In 1995, just prior to the publishing of the NMFS 4(d) Rule for Salmon CPR, Metro published a study on Salmon CPR that initially suggested a MINIMUM 200 foot setback from all fish bearing creeks. This created such a stir that the study was pulled and the Metro Council initiated a refocused program, forestalled primarily on the state’s Goal 5 (now referred to as “Nature in the Neighborhoods” program). Metro never did address SALMON CPR head-on to the extent envisioned by wildlife planners. It is interesting to note that although an aggressive/protective setback measure was never adopted, Metro recognized the importance of existing high quality habitat (especially riparian) and that it should be protected. Another NMFS notion of defining the streamside habitat dealt with tree heights.

"In the urban growth limit, NMFS sought to underscore the importance of assessing the health of existing riparian zones. These zones provide critical life support functions for salmon such as food, shade and stream bank stability. The protection and restoration of riparian zones, especially in urban areas, is a common-sense starting point in any salmon recovery effort. Trees are a primary feature of most riparian zones. As a general guide, NMFS noted that a distance equal to the height of the tallest tree that can grow on that site (known as the site-potential tree height and often found to approximate 200 feet) is a good starting point for designing a new use of the urban development limit. However, the agency noted that land ownership patterns would alter the actual extent of the riparian zone. Different jurisdictions will need to tailor their riparian and wetland management actions to match local needs and conditions." [*Common Myths About the 4(d) Rule*, NMFS—http://www.nwr.noaa.gov/ESA-Salmon-Recovery-Planning/PdF/NMFS-M0001.pdf]

This principal should apply to our “study area” as a minimum starting point. With the high percentage of public ownership surrounding the habitat, there is an obligation under ESA that the local agencies make every effort they can to CPR the salmon and wildlife habitat. And, it gets more complicated as the Willamette River influence is factored into the study. Without looking at the “big” picture, the habitat planning will fail for any one project. The overarching guide is recovery planning and assuring that public and wildlife enter the watershed, they will be fully protected and assured of opportunities migrate upstream or return to the river from a short stay (such as flood events).

According to information on the NMFS website (http://www.nwr.noaa.gov/Salmon-Recovery-Planning/):

"Recovery is the process by which listed species and their ecosystems are restored and their future ensured to the point that protection under the ESA is no longer needed...recovery must be predicated on existing conservation efforts under way throughout the region...[NMFS] has established a recovery planning process to advance local conservation and capture ongoing efforts. As a result, the Northwest Region is taking the recovery planning processes to engage regional and local salmon conservation and planning efforts.

NMFS Fisheries Service has developed a strategy for recovery planning in the four states of Washington, Idaho, Oregon and California that combine ESA-based salmon and associated衍生 practices specific to geographic areas. The Northwest Region has identified these recovery planning areas, or recovery domains, and has established technical recovery teams of experts for each domain. Recovery plans for each domain will address all salmon species within that geographic area and will involve stakeholders on a project basis. The agency is crafting recovery planning that..."
implementation processes that are uniquely suited to each recovery domain in cooperated local by in the Northwest Region has encouraged development of sub-basin- and watershed- plans that the agency expects will provide the
building blocks for EIA recovery plans.

While NOAA Fisheries Service is responsible for adopting recovery plans, these plans will have a greater likelihood of
success if they are developed in partnership with entities that have the responsibility and authority to implement recovery
actions. NOAA is using locally developed plans to complete EIA recovery plans. Where local agencies are not preparing
recovery plans, NOAA Fisheries Service is working with them.

Site-specific sub-basin and watershed plans have been drafted for areas throughout Puget Sound and the Columbia Basin.
These smaller-scale plans are designed and intended to be building blocks for locally developed recovery plans. NOAA
Fisheries Service is very interested in working with state and local agencies and organizations to help ensure that these
plans lead to the development of recovery plans.

Consultation needs to occur across land ownership boundaries and programs. The Northwest Region is working in
collaboration with each area to develop locally supported plans that fit within the overall regional policy framework, and
to meet the needs for full recovery plans that comply with the Endangered Species Act.

The agency has a specific consultation process to be utilized by agencies when an EIS is written; the city is encouraged to fully utilize this resource by listing and describing all the projects and activities noted above within the “study area”. The city should request and encourage NMFS to be proactive and pursue not only resolution of the LRT impacts, but the impacts and opportunities of all the projects/activities combined in the “study area”. Only then will the watershed stakeholders have a good assessment of SALMON CPR needs and requirements.

Recommendation

The Planning Commission is encouraged to recommend to the City Council and LRT Steering Committee to:

1. consider the additional alternative of LRT alignment through downtown Milwaukee via McLoughlin or other north south street through downtown;

2. evaluate detailed LRT alignment options across Kellogg Creek corridor and floodplains to include cumulative activities and avoidance of new impacts by restricting crossings to one confined, multi-use corridor between the Williams River and the current bike/foot crossing. Assumption here is that when crossing alignment will take precedence due to pre-existing bike

entitlements and that auto and LRT alignments are more flexible. Therefore, the study should focus on moving all existing and planned motor vehicle movement across the habitat to one location and build one NEW bridge for bike, motor vehicles, LRT and trails.

Thank you,

Pat Russell

Attachment: City’s Map of the Kronberg Park area for illustrative purposes
Postscript:

Excerpt from the NMFS’s website:
http://www.nmfs.noaa.gov/Science/Habitats/index.cfm

Salmon Habitat

Habitat loss and modification are believed to be the major factors determining the current status of salmon populations. Conservation and recovery of Pacific Northwest salmon and steelhead depend on having diverse habitats with connections among those habitats. The salmonid lifecycle involves adults migrating in the ocean, migrating back to their home stream and spawning, eggs hatching, fingerling growing, and smolts migrating to the ocean to return to the river and moving out into the ocean. Each phase may require use of and access to distinct habitats. Loss of habitat reduces the diversity in salmon and steelhead life histories, which influences the ability of these fish to adapt to natural and man-made change.

Salmon need freshwater habitat that includes:

- quiet, clear water
- appropriate water depth, quantity and flow velocities
- upland and riparian (means bank) vegetation to stabilize soil and provide shade
- clean gravel for spawning and egg rearing
- large woody debris to provide rearing and hiding places
- adequate food
- varied channel forms.

Please help CPR Salmon in the Kellogg Mt. Scott Watershed. Let’s make it happen!
City of Milwaukie, Clackamas County Service District #1 (County Water Environment Services) METRO, ODOT, US Corps of Engineers, National Oceanic & Atmospheric Administration (NOAA)
Kellogg Lake Dam Removal Meeting
9/10/06

In attendance:
City Staff: JoAnn Herrigel (Community Services Director), Beth Ragel (Community Services Program Coordinator)
Guest Speakers: Chuck Willis (Corps of Engineers fish biologist), Bob Storer (Clackamas County)
Others in attendance: National Oceanic and Atmospheric Administration (NOAA) reps: Megan Callahan-Grant and Nancy Munn, and Chris Runyard (Friends of Trees)

Questions and Answers:
Q: What is the recent history of this proposal?
In 2000 an interagency group was convened to look at fish passage in Kellogg and Mt. Scott Crooks (Mt. Scott fish passage study). They worked with HARZA, a consultant, who found that there was a need for improved fish passage and suggested further study to develop options for addressing the problem. The Corps of Engineers offered to do this study with Federal funds from the Water Resources Conservation Act (section 206) but they needed a public partner. The City of Milwaukie (COM) agreed and City Council approved a request for the Corps to conduct a study in February 2002. In September of 2002 JoAnn Herrigel, City of Milwaukie Community Services Director, held the first public meeting to cover the basics of the study. Due to a loss of section 206 funding in 2004 the study was put on hold. The COM requested a line item in the Federal budget with help from Representative Blumenauer and in 2005 the Federal government awarded the Corps a $500,000 line item specifically to complete the Kellogg Lake study. The Corps has been working since then on an environmental analysis. At this point funds have again been restricted and the final piece of the study, the economic analysis, is not complete. COM staff identified MTIP funds as a potential funding source and applied, in June 2005, for over a million dollars to complete a design of the removal of both the dam and the bridge and replacement of the bridge.

Q: What were the components and alternatives that the Corps of Engineers evaluated?
The Corps of Engineers developed the following three options:
1. Do nothing
2. Modify the dam but leave bridge over McLoughlin as is
3. Remove the bridge and the dam and replace the bridge

The last two options would return the lake to a natural creek bed. The COM prefers to remove the dam and replace the bridge because this would provide benefits for fish and the natural habitat as well as provide benefits for people. As proposed, the bridge over the creek at McLoughlin would be replaced (it cannot be widened) and an underpass would be created for pedestrians and bicycling to safely cross under McLoughlin. Sidewalks and bike lanes would also be added on McLoughlin. These improvements would create north-south and east-west access to and from the Riverfront park and downtown Milwaukee.

Q: What has the City of Milwaukie done with the Corps of Engineer’s study so far?

In June of 2005 the COM applied for Metropolitan Transportation Improvement Program (MTIP) funding in the sum of $1,044,083, to conduct the preliminary engineering and environmental assessment of removing the dam and replacing the bridge. This proposed study would also look at how to re-vegetate the area once the lake is returned to a creek. The COM will know in February 2007 if they receive the MTIP grant. If the grant is awarded the study would begin in 2009 or 2010 and would take 2-3 years to complete. The proposal received a 100% rating on all criteria and is the only project in this MTIP “culvert” category.

Q: What is the existing condition of the lake?

Currently the lake is shallow, warm, and has low levels of oxygen due to slow water flow and lack of turbulence. The result is that key fish species cannot survive in the lake. There is also a lack of habitat for fish to take shelter in or rear young. Examples of fish shelters include streamside trees, plants and in-water pools created by downed trees or large rocks. A natural flowing creek would have lower temperatures and higher oxygen levels so fish could survive in the creek. A restored creek would also increase the availability of rearing habitat, including over-winter rearing habitat, for fish.

Q: Is cold ground water coming in to lake now?

Yes, there are underground springs that bring cold water into the lake. However, this water stays down at the bottom so that most of the water is too warm for host fish. The deepest part of the lake is about 8 feet now—just upstream of the train trestle. Water temperatures at this point are about 68 degrees. At the surface it gets up to 70-80 degrees.

Q: What species of fish would benefit from creek restoration?

Key species that migrate through the project area to and from the upper Kellogg Creek watershed include Lower Columbia coho salmon, Lower Columbia winter steelhead/rainbow trout, Lower Columbia coastal cutthroat trout, Pacific lamprey, and largescale sucker. These fish species currently spawn and rear to an unknown extent in the upstream reaches of the Kellogg Creek watershed. The species that are likely to benefit the most from an increase in the availability of over-winter rearing habitat in Kellogg Creek
include ESA listed spring Chinook salmon, winter steelhead, and coho salmon. Resident outmigrant trout, which are listed as endangered under the Endangered Species Act (ESA), are also likely to benefit. Whenever it floods juvenile spring Chinook would come up the creek (ESA listed) using the backwater area as winter habitat and over winter bearing (though spring Chinook Salmon don’t normally occur in the lake.) In the winter at high water stage the area would flood back to a lake but in the summer it would be manly with the beaded awl and a high diversity of wild life.

Q: Are any of these fish species classified as “endangered”?

Yes, several are classified as endangered or threatened. Lower Columbia coho salmon is proposed for listing as Threatened under the federal Endangered Species Act (ESA). It is listed as Endangered under the Oregon Sensitive Species listings. Both Lower Columbia and Upper Willamette River spring Chinook salmon are listed as Threatened under the federal Endangered Species Act (ESA). Like winter steelhead, they are not currently listed under the Oregon Sensitive Species listings, but a recent review of their status by ODFW (2008) concluded that they were “At Risk”.

Q: What aspects of the lake did the Corps study?

The Corps assembled a team of biologist, anthropologists, engineers, and others. The various biologists looked at all species of fish and other animals present at the lake (particularly all species that are endangered) and the habitat presently available for these animals. Anthropologists looked at historic structures in the area like the bridge. The team determined what the likely response would be by various species if the creek were restored. This required that they study the lake at all stages throughout year—low flow in summer to flood stage in winter. The Corps also studied the fish ladder to determine its usefulness.

Q: How does the fish ladder currently work?

The dam at the top of the fish ladder is a “weir” system with squared off edges. This creates a situation where most of the year the water simply overflows and rushes over the ladder—making it unusable by fish. There is only a small window of time in the year when the fish ladder is usable—when water flows are low.

Q: What would the proposed project look like once complete?

The proposed project has not been engineered yet. However, the general plan would involve creating a series of pools connected by the creek (called a “beaded awl”) using natural river rock, cobble and gravel. The water in the creek would be about 1 foot deep most of the year (enough for fish passage). The beaded awl would consist of about 3 to 8 pools and about 1-2 acres total surface area approximately 50% of the year. About 3-5% of the time it would fill up to the current lake area of 15 acres. The design would be kind of like a footprint—the central lower part would be deeper and the fingers would extend back towards the lake and become shallower. In the winter the “fingers”, or ponds, would flood. This pooling of water would provide shelter for fish to over winter. During the summer the pools would be shallow and filled with cold ground water (Kellogg Lake is a net receiving area for ground water). The slopes along the banks would be re-vegetated with native plants and would be very green. Park-like elements could be incorporated such as pathways, kiosks and other features.
Q: What will determine where ponds go?

Again, the final design needs to be developed based on further study. The major consideration will be the existing contours of the lake. The ponds will be placed where contours would make them the most natural. This is most practical because over time the lake would revert to these contours anyway.

Q: Is the “beaded swale” design a practical or aesthetic approach?

It is a practical concern—the more excavation the more costly the project. So if you keep excavation to a minimum it keeps costs down while still providing habitat for fish and other animals.

Q: Is removing the silt the same as dredging?

No—dredging would remove much more material. Most of the sediment in the lake is probably uncontaminated and can be left on site and used. Where the silt first settles at the mouth is where the pockets tend to be contaminated. The contaminated material will need to be removed or buried.

Q: Is dredging the lake an option? Would that help the fish?

Dredging would not change the habitat available for fish nor change the temperature of the lake. Temperature determines density of water and oxygen level of water in the lake. Cold water stays down at bottom—separate from water above it. Also, what is dredged out would need to be disposed of—creating a challenge. Further, over time the lake would fill in again. By contrast, in free flowing creek silt and cobble move in and out downstream and tend not to build up.

Dredging also would not serve to oxygenate the water—“bubbling” and flowing over shallow rocks is required for this to happen.

Q: How is the alignment of the creek determined? How constructed?

The Corps developed some contour maps of the project sites that depicted the likely location of the original streambed. If the dam is removed and the lake drained, the existing stream will tend to form a new channel in the old streambed. The Corps intends to work with this natural alignment. Basically, the old streambed followed along the right bank of the project sight (i.e., toward SE McLoughlin) with a few meanders out into what is now the lakebed.

Q: Have projects like this been done before?

Two similar projects have been conducted in the local area. The first example of a "beaded swale" project can be viewed off 112th and Foster Road. This beaded swale is a component of a park located on the south bank of Johnson Creek just upstream of the bridge that crosses between SE 110th and SE 112th. From Foster go south on SE 110th (which becomes SE
1120 and take the first left just after crossing the bridge over Johnson Creek. The park is located on the left. There is information about the beaded swale and its function at various kiosks. The beaded swale at this location will have a changing appearance throughout the year under differing conditions of wetness and during the dry summer some of the ponds may be dry and overgrown with plants while others may still have some standing water in them. By contrast, the people that we hope to develop at the Kellogg Creek site will be designed to have water in them throughout the year—providing nesting habitat for Coho salmon.

The second similar project was a dam removal project at Mt Scott Creek. This project, done by Clackamas County in 2002, returned a small lake to a creek. The site is located in Clackamas on 122nd (north of Sunnyside Rd) across from Spring Mountain Drive. The COM has maps and photos of the project available. This creek has become a great habitat for many fish species and particularly Cutthroat Trout. Currently there are more Cutthroat in Mt. Scott creek than 10 other streams in the area.

Q: Would this design increase or attract mosquitoes?

Mosquitoes are drawn to warm standing water. Restoring the lake to a creek will reduce mosquito populations. Even in the summer with the marshy ponds formed from the beaded swale design, there will be fewer mosquitoes than currently, because the water filling the ponds will be cold ground water. Studies indicate that the best way to reduce mosquito populations is to restore functioning wetlands—partly because healthy wetlands have the right birds and fish that eat the mosquitoes.

Q: What happens to the nesting waterfowl once the lake is returned to a creek?

Wildlife biologists with the Corps of Engineers studied this. This studies indicate that there will be a tradeoff—there will likely be some changes in the types of birds in the area but the area will not see a net loss of birds overall. Some birds may adapt, some may leave, and other birds (particularly those that feed on fish) may increase. Smaller ponds will be more protective for waterfowl but there would also be less surface area for waterfowl—creating a trade off.

Q: Will fishing be possible?

Fishing will be possible—there will be Salmon, Steelhead and Cutthroat Trout in the creek and the creek was used for fishing in the 1950s (date?)

Q: How would safety/buffer/access to homes be mitigated?

This would be considered in the design of the project. Vegetative barriers (e.g. thorny bushes or shrubs) can be used along with fencing. Part of year the lake water will be high enough to also act as a barrier.

Q: How does Kellogg Creek compare to other creeks in the area such as Johnson Creek?

There are some similarities. Johnson Creek has many problems—one is that sections were lined in stone—which affects the creek and eliminates spawning habitat. Also, the headwaters of Johnson Creek are in high gradient areas that transition into flat plains—creating a problem
with flooding, Kellogg Creek has the opposite gradient and so major flooding is unusual. Kelly Creek, a tributary of Jubecon Creek, is about half way up the basin and is in good condition and has good species diversity. Coho need a 6% gradient or less to migrate and spawn—and upper Kellogg Creek and a small area of Mt. Scott Creek are two of the only places that this condition exists in the region. (??)

Q: Is there a sewer line under the lake?

There are some sewer lines under the mouth of the lake—but we don’t know for sure what else is under the lake. Some sediment has been studied and contours of the bottom have been studied but further information is needed. If the COM receives the MTIP grant this will be studied.

Q: What is the elevation difference between the upper end of lake to the Willamette River and how will the slope be accommodated?

The top of the dam is at 17.5 feet above sea level. About 7.5 feet would be removed—taking the culvert/erosion berm at the dam and down to 10 feet above sea level. Currently, rock and debris have accumulated above the dam. This material will likely be moved down to the other side of the dam—creating a gentle slope out towards the Willamette River. The Corps would design so that there would almost always be at least a foot of water in the creek—sometimes more. If the dam is removed, about 50% of the time the Willamette will flood up into the area and create a lake—1/2 acre to 15 acres of water. About 3% of the time the area would flood (17.5 feet above sea level).

Q: How tall is the dam?

The dam is about 7 3/4 feet tall and about 17 1/2 feet above mean sea level at its top.

Q: Is the silt contaminated?

At the mouth of the lake the silt is contaminated from residential pesticides and other chemicals contributed from the upper watershed. There would be restrictions as to what we could use the silt for. Some could be buried provided it was not "biologically available"—would not leach into the water. Permits will be required and part of the evaluation to ensure the appropriate disposal of the silt. Some or most of the sediment may be uncontaminated and could be left on site.

Q: What is the MTIP and what will it fund?

The Metropolitan Transportation Improvement Fund is a program administered by Metro, our regional government, to grant Federal transportation funds. This proposed project fits in the "culverts" category. If the COM receives the MTIP grant this will fund the economic study and the development of the design for the project.

Q: How will the final project be funded?

The COM does not have funding secured to actually construct the project. However, NOAA and other agencies have already expressed interest in contributing to this project.
There are Endangered Species Act mitigation dollars and Natural Resources mitigation dollars from the Federal government that are available in the region. There are no plans to raise taxes to finance this project.

Q: What are cost projections?

Early estimates suggest the project could cost about $8 million. The Oregon Department of Transportation would need to be a partner since the bridge to be replaced belongs to them.

Q: What is the most expensive part of this project?

The removal/replacement of the bridge will be the most expensive part.

Q: Why has an option been picked already?

The Corps has said this is the most beneficial option. The COM prefers to remove the dam and replace the bridge because this will provide benefits for fish and the natural habitat as well as provide benefits for people. As proposed, the bridge over the creek at McLoughlin would be replaced (it cannot be widened) and an underpass would be created for pedestrians and bicycles to safely cross under McLoughlin. Sidewalks and bike lanes would also be added on McLoughlin. These improvements would create north-south and east-west access to and from the Riverview Park and downtown Milwaukie.

[Note by Pat Russell: In view of the number of travel lanes, paved shoulder, etc., the paved width of the road is significant and causes shading severely enough to prevent growth of plants. This should be carefully evaluated and options should be explored that increase light and air under the “bridge.” Some options might include:]

1. Raising the height of the bridge that permits the light angle to cover the entire area.
2. Dividing the roadway into two parts (is north-bound and south-bound) and creating an open air “pathway” that allows space to grow in the space.
3. Design a bridge that NARROWS the lanes to minimum widths, such as 8 feet and provide design elements on the bridge and prior to the bridge that causes vehicles to slow to 35 mph. The City/State could also lower the speed limit since it is in the downtown area, due to presence of pedestrians and commerce, including traffic signals.
4. With the creation of a pedestrian, open space corridor along the stream corridor. Pedestrian crossings of the stream area could be done by SEPARATE crossing structures. For example, part of the master plan for the Riverfront Park would include a way to move bicyclists and pedestrians. On the upstream side of McLoughlin would be an “off-road” crossing in a very natural setting, taking into consideration the fact that Willamette River water will back up into the creek during the winter and spring high water.

The concept of creating a pedestrian environment under the bridge must be an aesthetic experience and it is extremely important that this area contains the highest degree of fish habitat protection and vibration as is adjacent the Willamette River.

Q: What would a “culvert” be in this situation?

A ‘culvert’ in this project would involve returning the lake to its natural stream bed—not a
cement culvert or pipe. The cement that is currently under the bridge would be replaced by natural rock.

Q: How will this impact property values?

Property values are difficult to project or evaluate. However, the design can be done so that it is attractive. Restoration of the creek may also attract some new wildlife and bring some new features to the area that are pleasing.

Q: What is the mission statement for this project?

The Corps of Engineers study had the stated goal of improving fish passage. The COM has since expanded the goal of this project to include benefits to people—the underpass, new bike lanes and sidewalks as the result of replacing the bridge.

Q: How complete is the Army Corps study? Are copies available?

The economic analysis/feasibility study is not done and final design has not been done. The MTIP grant, if awarded will fund this. The COM of Milwaukee will try to get the final of the Corps of Engineers’s study and make it available to the public.

Q: Will the COM seek further public input or will this proposal go to a vote?

Milwaukee City Council approved going forward with the MTIP application at their May meeting. If any additional funding will be required from the City then the City Council will need to look at it. All City Council meetings are public meetings and people will be informed. There will also be additional public process required under NEPA—any project with Federal funding must have public review process which would involve a presentation of the final design and alternatives including a “no action” alternative. In short, there will be several more opportunities for public input and comment. Likewise, the COM is committed to working with local homeowner to mitigate any negative impacts of this project as much as possible.

Q: Who owns the dam and bridge?

The dam and bridge are owned by the Oregon Department of Transportation (ODOT).

:) ☺ ☺ ☺ ☺ ☺

Miscellaneous Notes and Articles of Interest:

EMAIL
RE: Milwaukee info [History]
From: Thelma Haggenmiller (thelma.haggenmiller@man.com)
Sent: Mon 11/26/07 1:55 PM
To: "Pat Russell" (maragen112@hotmail.com)

Fat.

Ironically, the site of the Kellogg Wastewater Treatment was formerly the site of a rock crushing plant that the neighborhood wanded out of there because of noise and dust.
Your best local resource for any Milwaukee information is Madeline Bohl. She is the person who runs the Milwaukee Museum.

She did a lot of research for us about the Trinity Trail and eventually put the information into a book that we now sell for the Museum.

Contact information:  
Madeline Bohl  
2416 SE Monroe  
Milwaukee, OR 53222  
563255-5687  
maddoh@juno.com

EMAIL  
From:  
Pat Russell <argospe112@comcast.com>  
Sent:  
Wednesday, August 1, 2009 1:37 PM  
To:  
dsparker@wscn.oregonian.com  
CC:  
tohawen@comcast.net  
Subject:  
From the "Langward Oral"

Andy,

I am glad for your op ed because DEQ and other state and federal agencies need to know that there's a definite problem on the Clackamas River. If it can't meet its rather minimal TMDL's (Water Quality set by a federal DEQ) after all we have to have balance among competing and stakeholder interests, even if the native fish can't talk, it seems that the balance is a fuzzy word for "the fish are on their own to survive because its not happening in our weak economy and societal lifestyle" and not in this county.

"This has not been a life or death issue for our citizens, like a tanking economy or war on terror or powerful and controlling "taxationwithout". I haven't heard anyone being killed from drinking the water or dying of water borne diseases from being in the water.

At least the Clackamas River still has fish; the Kellogg-Ant. Scott Creek has NO FISH and we still are doing nothing about it as a priority, even though its a 408 rated watershed. The "fix" will cost about $16 million (maybe a bit more). its called removing a dam on McLoughlin Blvd, just south of Downtown Milwaukie.

We have to spend $1.5 MILLION in MTIP funds (thank you US Taxpayers) to study the problem to death (I don't know how many years this has been going on, but apparently there is quite a history to Kellogg Lake...most public officials refer to it as a "laker" as if we are talking about some natural water feature which it is not). I only learned about it year ago and cannot fathom why there seems to be so much inaction or lethargy-like its the city of Milwaukie's problem, I've been here since 2001 and was more focused at the time on METRO's fish recovery program (the compromises referred to as "Nature in Neighborhood"-coming to your local neighborhood, no later than December 2009).

The state legislature since 2000 has authorized 100s of millions of dollars to repair STATE bridges, but apparently they forgot this one. And then they shuffled "access" funding over to build more arterials and expand/improve freeways and capacity.

It reminds me how long it took to finally require Washington County and cities to solve their sewer problem back in the 80s and 90s.

This is one reason why I am so critical of the county and use of COCDP1. How many millions of dollars has our sewer and surface water management fees gone toward different CIP projects. But someone (some folks in the county administration over the years) have never apparently questioned whether all the surface water pollutants dumping in the Kellogg Watershed drainage should be mitigated through a rather simple solution (that would have a lot of bang for its buck) that would REALLY help the salmon in the creek (that are not there)--get rid of that DAM.
What gives— they are going to blame the blockage on ODOT and the city of Milwaukie? Give me a break, ODOT could have really been a "hero" if they had directed more focus on a rather simple CIP project. How hard is it to raise a four lane arterial?

Yet we are spending $1 million to plan the "HARMONY ROAD/SUNNYBROOK EXTENSION arterials and construction of a RIVER LANE BRIDGE" over the st crossing at Lawrence/Oregon/Willamette Avenue/Lake Road intersection) through a combination of funding--mostly SDGs. I believe this project has been placed on a high priority list and funding projected to be available within the next two years.

We are snapping up regional center and Scavystad (and Industrial Sanctuary) SDGs and tax increment (Urban Renewal) to build Sunnyvale road and Sunnybrook Blvd to Damascus's downtown, including a high priority construction of SE 172nd Avenue (now part of the Sunrise Corridor "SYSTEM" priority program).

The county's ODOT and WES pretty well speak for the values of this county and fish are at the bottom of the list.

Also, did you know that WES has dropped their leadership role in maintaining the Salmon Recovery Coordinating Council because the new director or his boss (the county administrator) don't see the connection between water quality (TMDL's mandated by DEQ) and fish habitat? I guess they figure it costs too much to do their share in mitigating for all the runoff we generate that flows into the Kellogg Watershed and Clackamas Watershed. And yet eight next door, Johnson Creek has been a quite high priority focus over the years in Portland/Mult., o/Whitehall, etc. as they recognize their obligation to return that creek to a healthier salmon habitat. Actions certainly speak louder than a bunch of plans sitting on shelf (mining collecting dust—like the CEQ #3 Surface Water Mailing Plan that no one can figure out what it was supposed do and what are the MEASURABLE implementation strategies, except maybe flesh it in front of DEQ).

I am looking for performance. I know our staff mean well and we still have quite a ways to go. However, if you look at all this through the eyes of the Chamber of Commerce (aka as the BCC), one word of fish and trees raises all sorts of red flags. No leadership there. Of course, we are all looking toward the substance of the county's newly created Office of Sustainability. Certainly, they will be welcomed with our long-standing wish list, including that D&A.

I am getting awfully tired of hearing from ODOT staff that our codes do not apply or the standard doesn't require the level of standards our neighborhoods have come to expect in sensitive areas. This environmental issue is NOT a MEASURE 37 issue. It is a mandate that can be justified by the NOAA/NMFS 2000 EQ regulations under the Endangered Species Act and Clean Water Act...we at the state level cannot excuse our own selves using federal policy.

This critique has been a little like a shotgun blast, but your article evoked some more feelings this afternoon that I couldn't focus toward something else.

Again, I personally appreciate your elevation of these issues. 15,000 partners was certainly a kicker.

Pat Russell
16358 SE Heathwood Drive
Clackamas, OR 97015
(503) 950-9651
Email: saran412@hotmail.com
[end email]
Before returning to Washington, D.C., last week, Representative Darlene Hooley spent several days just going with the flow. Starting in Eugene, she took a two-day trip by boat downstream to Portland, slipping below in Clackamas County.

Her motivation to promote a new piece of legislation she intends to introduce in Congress to benefit the river and the communities that share its banks.

"The inspiration came from the communities themselves," she said. "We want to connect communities to each other and to the river. We turned away from the river for many years, but now we are turning towards it.

"My legislation would provide $10 million per year for 10 years, to be used for recreational facilities, interpretive materials, the health of the river itself as well as economic development."

She came armed with facts about the Willamette, which lies principally within her district.

"Seventy percent of Oregon's population lies within 30 minutes of the river," she said. "It's a treasure that people need to enjoy."

She also explained that a canoeist or rafter who headed north from Salem would need to paddle for four hours before reaching a suitable take-out spot.

Hooley herself made better time on the river, traveling on board law enforcement patrol boats. Including from the different sheriffs' offices along her route, the Oregon State Police and the Department of Inland Security.

"They know the river – they have the expertise," said Hooley, explaining her choice of traveling companions. "Today, we stopped at a boat that didn't have the right flag displayed for having a stern in the water, and we also pulled over a boat for making waves in a no-wake zone.

"This is what they do, anyhow – so we just hitched a ride along with them. We've also had experts in all kinds of different fields riding along with us."

In Wilsonville, Hooley was met by Oregon City Mayor Alice Nortis and West Linn Mayor Norm King, who rode with her as far as Clackamas Park.

"We're both so pleased that Congresswoman Hooley has taken the interest to focus on the river, which is the lifeline of so many Oregon communities," said Nortis. "Norm and I would like to see a project go forward which would result in a new state park or a national heritage area centered on Willamette Falls."

Hooley explained that, as a national heritage area, the falls would rise to national prominence, as well as the national standards for a geographic feature of its type, but that control would remain in local hands.

"It would be different in that the state or federal government wouldn't take ownership," said King. "It's more of a partnership, which is a big part of Darlene's proposal."

For Hooley, the trip was an opportunity to see and appreciate the river as she never had before.

"I went from Cornell to Independence, and I don't think I saw another boat," she said. "There were blue herons all over the place, and we saw three bald eagles.

"It's been amazing – this has been an amazing trip. I'm so glad I did this."

Readers comments
Re: River keepers
Pork barrel spending? I hope voters remember this the next time the Democrats accuse Republicans of misspending tax dollars.

"This Guy" (Not verified) Thu, Sep 13, 2007 at 04:47 PM
Re: River keepers
Dear Darlene, you didn't go far enough in your district visit on the Willamette River to see what's happening to the...
waterfront along downtown Milwaukie. Did you know that our state has blocked a salmon-bearing stream a number of years ago and has not taken any step to control the situation? This is as a kilo ESA Salmon Recovery Stream, the NOAA/NEF’s indicated seven years ago in 2000 that this stream requires recovery for salmon migration and rearing.

Did you know this stream upstream from the dam is actually in pretty good shape and that 4 cities, and a county, special districts and many community leaders have been spending 10% of millions of dollars to repair damaged habitat to bring back some semblance of its historic character?

What good does it do to spend 10% of millions of dollars to meet the Clean Water Act and the STATE’s Dept. of Environmental Quality tap $MNL standards if the salmon have no way to use this river? The dam entirely BLOCKS their passage.

Because you represent us concerning federal priorities, would you investigate and come up with some strategy to remove this dam within the next 6 to 7 years? Do what it takes.

Yes, you ask which 4(5) ESA protected stream this is? I encourage you to ask the city councils of Happy Valley, Johnson City, Gladstone, Milwaukie and the Board of County Commissioners for Clackamas County. It is really a no brainer.

So what can you do for us. A local citizen trying to make sense out of why a dam is not being removed at HWY 89 for the KelloggsMr. Scott Watershed...It is no less serious than the showcase problems of the Clackamas River, Johnson Creek, Tryon Creek, Williamette River, or Tu Tu Tin River. It is no less important than the billions of dollars being spent on the Columbia River trying to please too water users while the salmon runs have been decimated. Remember that the EPA, Em. Corp. has pointed out many times that natural streams and drainage area below the dam (downriver) are ideal areas to focus salmon recovery to help offset what is being lost upstream of the Columbia River dams.

This salmon habitat I am referring to is part of the Lower Columbia/Lower Willamette system that you have recognized for needed at least $500 Million over a ten year period. At the same time I am sure you will talk even louder about how the Portland region needs a $6 BILLION Bridge over the Columbia, along with a $1 BILLION FREEDMAY to Sandy, Oregon via Clackamas. So what counts the most? Salmon and community sustainability and lifestyle or more of our choking our tail in our car to get from Point A to B.

It is time to put your influence where the federal government has said is a priority. We can build $100 Million Light Rail projects to Milwaukie, we certainly can fix a little dam for a whole lot less. We cannot continue to build capital improvements around this problem and continue to avoid it while pumping 100’s of millions into freight and transportation mobility projects or upscale downtown housing to spark economic investment in a small community at the crossroads of regional rail.

Thank you for listening.

“Pal Russell, Clackamas, Oregon”
(last verified) Fri, Sep 14, 2007 at 12:37 PM

City’s state: Great!
Milwaukee Mayor Jim Saimann points out the progress the city has made since his first State of the City address in 2001
By Patrick Sherman
The Clackamas Review
September 12, 2007 (1 Reader comment)

According to Milwaukee Mayor Jim Saimann, the state of his city is “Great!” That was the message he delivered at his sixth State of the City address, held at the Milwaukee Rotary Club’s weekly meeting last Tuesday.

“Things have been a lot of change around here since I delivered my first address back in 2001,” he said.

The mayor described how the city had control of the disused Safeway store on Main Street, and was going to find a new use for the property.

“I had been the site projected for a new transit center, but that idea fell through. Other development ideas included a coffee warehouse or a taxidermy museum. According to the downtown plan that was adopted in September 2000.”
That parcel was slated to be the location of a downtown anchor.

"Neither a coffin warehouse nor a taxidermy museum seemed to be the kind of anchor that would successfully launch revitalization in downtown."

Today, he said, North Main Village has risen on that property, drawing residents back to downtown and creating new retail space, which will be home to a new restaurant in coming months.

The mayor continued, highlighting other achievements of the past half-decade: re-making McLoughlin Boulevard, the city's new softball fields, as well as the progress being made towards bringing light rail to Milwaukie and the ongoing planning for Riverfront Park.

"I have talked about real, physical changes since 2001, but something else has changed - something that's harder to define, but I think it's much more important," said Bernard. "Every Sunday, I work our Farmer's Market, I've been doing it for nine years, since before I became mayor, and I talk to hundreds of people of all ages and all walks of life."

"Despite their varied backgrounds, they are united by two things: The first, and this has been present for years, is their dedication to the market. The other, which has developed over the past few years, is their excitement about where Milwaukie is headed. There is an optimism in this community that I had not felt the first time I made this address in 2001."

Looking ahead, he stated that the city council had last month signed a memorandum of understanding with Tom Kemper and Main Street Partners to develop the Town Center project on the site of a city-owned parking lot and the former Elks Brothers Tobacco station.

"Plan call for 78 town homes and condos, 10,000 square feet of retail space on Main Street, 6,000 square feet of office space facing McLoughlin, and 80 residential parking spaces within the first floor," said Bernard. "This will be a signature project for Milwaukie. It's right on McLoughlin, and the upper floors facing west will have some of the greatest views that Willamette River has to offer."

The mayor also said that the city had just secured over $1 million from the federal government for preliminary engineering, environmental analysis and design work related to the restoration of Kellogg Lake.

"Once completed, this project will allow us to replace the Kellogg Lake Bridge on McLoughlin and build a mixed-use path extending kenneth-McLoughlin Boulevard, creating a straight connection between our downtown and Riverfront Park," he said. "Furthermore, this project includes the removal of the Kellogg Dam and the restoration of fish passage for several endangered and threatened fish species."

He highlighted the city's success in reducing Part 1 crimes -- serious offenses such as murder, rape, robbery and assault. In 2006, Milwaukie enjoyed a 27 percent decline in these offenses: the steepest rate of decline in the nation.

Bernard also heralded the growing economy, noting that the previous year brought with it more than 600 new jobs, as well as a commitment by PCC Structures to build a $20 million plant in the city.

"A lot has changed, and in the coming year and beyond, things are going to change even more here in Milwaukie," he said. "But if we focus on the things we value most, like citizen input and citizen participation, I'm confident we will continue growing in ways that respect our past."

"There's a new feeling here in Milwaukee, and I'm proud and excited to be a part of it."

Reader comment:
Re: City's state "Great!"
I guess bringing light rail to the city is "accomplishment" if you define accomplishment as not listening to your voters.

"This Guy" (Not verified) Thu, Sep 13, 2007 at 04:50 PM
Re: City's state: Fish trying to get upstream job 1/2d done.
What our beloved mayor didn't tell us is that there is no money to actually construct the improvements that would eliminate the dam that is blocking salmon from migrating into the Kellogg-Mt. Scott WATERSHED. Its simply not enough to study it to death. It needs to get fixed.
If our Mayor is "n e e d s s t r a t e g y " bent on bringing a $1 BILLION light rail to town, and ignore its impacts on fishers at Kellogg Creek, then he has failed the community and the watershed. He has secured major improvements over the Johnson Creek; widened McLoughlin to Jefferson, a stone throwing shot of being the dam under the highway; demolished deserted old buildings between the river and the historic McLoughlin Blvd.; pursued riverfront plans and funding; mounted a campaign to get our schools fixed; spared discussion to remove the Kellogg treatment (sewage) facility off the river and out of the downtown; championed the Trolley trail to tie in the Scappoose Trail; promised economic development to protect the existing industry and businesses in town; secured cheaper drinking water through wells; encourages the building of a new freeway; has seen ODOT fix parts of the Milwaukie Expressway; and the list goes on. But when it comes to fish, the waiting has become unreasonably. That little segment of McLoughlin is a no-man's land because no one wants to spend the money to correct a historical wrong. (Do you see ODOT stepping up the game?) I thought our governors have proclaimed that the state can do a better job of recovering salmon that the feds and has insisted to let us do it our way. So far, this poor little forgotten channel (a good home for many salmon to spawn and rear young) has just not gotten the same attention as a freeway or bridge over the Columbia River. We power rate payers are also spending billions of dollars to watch an expensive salmon on dams vs. salmon go ANYWHERE. No one is questioning the little engine that could (the Kellogg Creek and fish). Let's put its recovery on the MAIN TRACK right now. Fund it over mobility CIP proposals. Connect it to the light rail greenway, do too well the Kellogg Dam and open the gates for the salmon. Otherwise everyone will be shaking their heads, tearfully crying that we really want to do something, but there's no money... especially while we are sending money (about $1 BILLION a day) and human investments over seas to promote democracy.

"Pat Russell, Coquamans, Oregon"
(first verified) Fri, Sep 14, 2007 at 01:00 PM
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. Funding for transit projects may not be used for road improvements or changes.

From: "Barbara Spears" <bpears@osistreet.net>
To: <trans@oregonmetro.gov>
Date: 5/6/2008 11:07 AM
Subject: Portland-Milwaukie Light Rail Project

Sirs: This is in response to your recent postcard soliciting comments about the Portland-Milwaukie Light Rail Project. I wish to be counted as someone who objects to this project in its entirety. When I sit in traffic on the highways in Portland, I will think about the fact that Metro, in its ultimate wisdom, has decided that they should decide where I need to go and what kind of transportation I should take, rather than leaving it up to me. If there is money available, it should be spent on our roads, which are clearly popular and in need of expansion.

Barbara Spears
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA would accommodate the construction of a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure, including a pedestrian bridge, and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-220-001

I am applaud your continuous efforts to expand the MAX light rail from Portland to Milwaukie.

I live in Westmoreland and look forward to having the MAX as an option of commuting. It seems like an obvious move if the right direction to expand our light rail as our gas prices continue to increase with no end in sight, and the traffic congestion on MLK grows worse each day.

Please continue to fight the good fight and expand the MAX light rail from Portland to Milwaukie!

Thank you.
Peter Tackaberry
6222 SE 17th Ave.
Portland, OR 97202
503.220.7858
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for your interest in a stadium, although it is outside the scope of this project to consider such development. Property between the Marquam Bridge and the Ross Island bridge is currently under private ownership. If the property owner(s) favor development of a stadium at that location, the light rail station at South Waterfront would be there to serve it, as it would the intensive residential, industrial, commercial, recreational, and office uses allowed by the current zoning.
Thank you for submitting your comments for consideration. The refined Porter-Sherman alignment option was selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

The cable-stayed bridge type was selected and moved forward into Preliminary Engineering.

New at-grade crossings of the UPRR freight tracks were considered and rejected during Preliminary Engineering due to safety concerns and opposition by the UPRR and regulators.
I-224-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.

I-224-002
Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.
See Section 3.16 for more information on safety and security.
Thank you for submitting your comments for consideration. Based on TriMet's experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

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These officers, TriMet's Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
I-225-002

One of the fundamental questions Metro and TriMet answer during the EIS process is: who does the light rail project serve? This demographic data is available through varying sources. For current demographic information, we use census data. For each EIS, we update the data we use to be current information.

For future demographic data, we calculate the amount of people who will be living and working in different areas. For the Portland-Milwaukie Light Rail Project we calculated this for the year 2030. Individual cities and counties provide us with their zoning and comprehensive plans. Based on this data, the assumed population and employment growth of the region is distributed accordingly. This information is then used for our 2030 modeling and the assumptions of land use.

In addition, the federal government has rigorous standards to make sure that the projects we build are cost-effective. We are required to pass the Transportation User Benefit test, which calculates the cost per rider. The more current and future potential riders (population) in an area, the better we perform according to this test.

See Chapter 2 for information about the capital costs of the light rail project, and Chapter 5 for the finance plan.

I-225-003

The Locally Preferred Alternative that was endorsed by participating jurisdictions in summer 2008 includes the Tillamook Branch alignment through downtown Milwaukie, a SE Park Avenue terminus and the Porter-Sherman river crossing alignment. Crossing the river over the Ross Island bridge was not within the scope of the Portland-Milwaukie Light Rail Project.
I-226-001
Thank you for submitting your comments for consideration. The light rail project, including a single Milwaukee station at SE Lake Road, was endorsed by participating jurisdictions in summer 2008. With the LPA to Park Avenue, there are two park-and-ride facilities along the alignment, at Tacoma and Park Ave. The Southgate park-and-ride was developed by TriMet, but not as a part of the Portland-Milwaukie Light Rail Project.

I-226-002
The Park-and-Ride lot on the Southgate Theater site has been constructed and is in service.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA would accommodate construction of a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure, including a pedestrian bridge, and bus routing options that would support a station at Harold Street will be evaluated. The Locally Preferred Alternative includes a terminus at Park Ave and the Porter-Sherman river crossing alignment endorsed by the Willamette River Partnership, Citizens Advisory Committee and project Steering Committee. The project maintains a commitment to minimize and mitigate impacts to the natural environment.
Thank you for submitting your comments for consideration. Access to RiverPlace would be accomplished by transfer from light rail to streetcar at the South Waterfront Station (or at the existing PSU Urban Center Station/SW 5th and Mill Station from downtown Portland or points outside the Portland-Milwaukie Corridor). The Keller Auditorium would be within walking distance of either the streetcar station on Harrison or the Lincoln Station for the light rail project; bus routes following the shared transitway could also be used for this connection.

Design of the light rail project OMSI Station will include a safe, accessible connection to OMSI for pedestrians and bicycles, with an adjacent streetcar station. No traffic streets will be crossed. The design along SE 17th Avenue adds light rail tracks in the median while enhancing the single-lane-in-each-direction traffic capacity with intersection improvements at SE Rhine, Center and SE Holgate Streets. The widened street also improves sidewalks and shoulders along SE 17th Avenue, and provides for landscaping improvements/street trees that also provide stormwater management features. This supports the overall multimodal function of SE 17th Avenue, which plays an important role in serving industrial uses, through traffic, but is also part of the adjacent Brooklyn residential neighborhood. The project has sought to minimize impacts to industrial properties, but some of the property impacts are unavoidable. An updated assessment of the impacts of the removal of properties along SE 17th Avenue is provided in sections 3.1, 3.2 and 3.3 in the FEIS.

The light rail project, including a single Milwaukie station at SE Lake Road and a terminus at SE Park Avenue, was endorsed by participating jurisdictions in summer 2008.
The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.
Thank you for submitting your comments for consideration. The Portland-Milwaukie Light Rail Project will comply with the FTA regulations for noise and vibration. The FTA criteria for noise and vibration are based on years of study related to high capacity transit operations, including light rail. TriMet has the benefit of years of experience with providing noise and vibration mitigation for light rail along other previously constructed alignments. The potential noise and vibration mitigation measures we have at our disposal are very effective at reducing noise and vibration from the light rail vehicles. We have included consideration of potential reflections of noise from some of the projects safety walls and reflections from any proposed sound walls. Chapter 3.10 provides the location of noise and vibration impacts and mitigation measures for each impact.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

The Locally Preferred Alternative includes a single station in Milwaukie at SE Lake Road and a terminus at SE Park Avenue. SE Lake Road will be closed near the south end of the station. For related traffic impacts and mitigation, see Chapter 4.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. The alignment through downtown Milwaukie is within the historic and active railroad corridor, the Tillamook Branch.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
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In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

As a resident for 28 years in the Oak Grove, Milwaukie area I have been looking forward to Light Rail for years. With gas prices so high and environmental issues, I would love to be able to walk to a light rail stop and get off downtown Portland. Now I can take the 32 or 33 bus with not the best schedule during the week-ends.
I live above Rex Putnam High School, off Oakfield Rd. I can now walk down to McLaughlin or stay on Oakfield to catch the bus.
My sister lives in NW Portland and with Max and the street car she uses her car infrequently. Actually she uses it just to come to my home because the bus service is not commuter friendly.
North Clackamas County with light Rail will be a piece of heaven in 2011!!! Bring us Light Rail. I will support. I will vote.

Haralee Weintraub
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Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative includes a single Milwaukie station at SE Lake Road, and was endorsed by participating jurisdictions in summer 2008.
I-248-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

I-250-001

I live in the neighborhood through which the route passes.
I pay lots of taxes.
No light rail.
None.
Stop it.
I don’t want it.
I don’t ride it.
I won’t ride it.
Stop taking my money for something I don’t want.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Chapter 4 provides updated information and details about the project's effects on traffic and parking in downtown Milwaukie and the mitigation commitments the project will make to avoid significant impacts.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the
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In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.
I-252-001
The statewide referenda would have provided a source of local funding for the original South/North light rail project, but voters were not asked to approve or reject a specific light rail alignment. As described in Chapter 2 of the SDEIS and the FEIS, Metro and TriMet, working with FTA, the state, its local partners, and the region have since conducted an extensive public process leading to decisions to develop the South Corridor program in two phases. The South Corridor program includes the current Portland-Milwaukie light rail proposal as well as the I-205 and Downtown Transit Mall light rail improvements that are now in operation. The project development history, including decisions to move forward with the development of light rail in the South Corridor in two phases was extensively discussed in Chapter 2 of the SDEIS. The 2002 SDEIS for the South Corridor and the FEIS for the I-205/Portland Mall project provided information about the prior votes, and the votes are again presented in Appendix L of the current FEIS. It was also included in many of the background documents identified in the 2008 SDEIS.
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Thank you for expressing your concerns. The vision of the Milwaukie Downtown and Riverfront Plan calls for more intensive development than currently exists. This growth is planned, allowed by current zoning, and will occur with or without light rail.

The light rail project relies on existing zoning to estimate future growth, but the scope of the project does not include rezoning or redevelopment proposals. However, fixed-rail projects are known to stimulate more intense development or redevelopment where the zoning allows. The City of Milwaukie and the City of Portland set the zoning for their respective communities based on the regional need for housing and employment capacity outlines in the Urban Growth Report and 2040 Regional Plan. No specific changes are proposed in the SDEIS or the FEIS. Any potential changes to zoning or to comprehensive plan designations would be required to go through the local jurisdictions land use judicial or quasi-judicial land use approval process.

In a concurrent project during the same time as the SDEIS, Metro, TriMet, and their partners conducted a station area assessment to help maximize the ability of the light rail project to help support the region’s existing goal for livable communities. The “Portland to Milwaukie LRT Station Area Best Practices Assessments and Recommendations Report” (Draft, September 2009) has recommended actions for some of the proposed light rail station areas. The recommendations of this assessment act only as guidance. Local governments control the decisions about land use, including zoning and specific development approvals.

Queuing of vehicles at the light rail crossings at SE Monroe Street and SE Washington Street were not reported in the SDEIS. However, the FEIS looks at queuing at these locations and SE Harrison Street in
downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street and SE Monroe Street is between 6 seconds and 12 seconds during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds.
Staff should use the average speed of the train and the frequency and duration of each train traveling in both directions to formulate a best guess estimate of how trains will travel between S.E. Harrison to S.E. Lake Road in both directions to set the schedule for stopping and delaying traffic on all four streets during each trip of each train which would service Milwaukee during rush hours for this simulation study.

Once this timing has been determined, Staff will plan the type of signage needed on each of the four collector streets informing drivers they will be stopped temporarily, staff will also plan the number of flaggers needed (two for each street), also how many staff are needed to record data and use video cameras. Staff could also enlist the help of local neighborhood volunteers and high school students interested in community service. Traffic backups should be noted, especially if traffic is backing up in excess of one quarter-to-one half mile or more from the proposed light rail alignment.

Staff will be stationed at all four collector streets to record the amount of cars stopped (in each direction) at each time the flaggers stop traffic to simulate each train traveling in either direction. Staff will record whether traffic backs up on adjacent streets and highways. Staff can also video significant backups or driver behaviors such as road rage.

The study will be conducted for a minimum of five consecutive days during peak morning and evening rush hours. Staff will collect data, evaluate it and present findings to the City Council, Planning Staff and key decision makers.

This study will require the use of the following equipment:

Flagger Signs for Stop and Slow.
Walkie-talkies
Video cameras
laptop computers
Paper and Pen
Road Signage to denote change in traffic pattern

Optional: A driver response form handed to drivers stopped in traffic to gather driver’s opinion of being stopped everyday from light rail trains. How will affected drivers really feel about this? They have a right to use the roads to get where they need to go, what is their reaction to building a permanent obstruction to their road usage in the form of light rail?

SOUND STUDY: The study could also include examining the decibel level of required light rail horns and bells at each collector street crossing. Staff would have to research what would be involved in a study to use sound equipment to create accurate sound levels of light rail warnings at each crossing during rush hours.
I-254-001
Thank you for your comment. TriMet is concerned about the impacts of removing the commercial buildings on the west side of SE 17th Avenue on the residences to the west. Commitments regarding landscaping and other measures to mitigate for the impacts were developed for the FEIS and will be explicitly stated in the Record of Decision.
The LPA shows an impact to about 55 on-street parking spaces within 1,000 feet of the Holgate Boulevard Station, and an impact of about 110 off-street parking spaces at the TriMet employee parking lot on SE 17th Street.

The off-street parking lot is currently fully occupied and the loss of spaces due to the project would require mitigation. The Transportation Impacts Results Report suggests that potential parking management strategies be developed for off-street parking impacts on SE 17th, and consider other off-street parking locations for TriMet employee parking.

The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Thank you for your thoughtful suggestions for mitigation measures. TriMet will be considering these suggestions as part of the final design.
Brooklyn Neighborhood Development Highlights


- Tibbet's Donation Land Claim as a farm and grist mill
- Oregon Central Railway Right of Way through Brooklyn
- Tibbet's first development plat of 36 blocks for a "town"
  - Brooklyn (Tibbet's Addition) incorporated into Portland
  - Inman-Pulson Lumber Mill built just north of Ross Island
  - Brooklyn neighborhood served by streetcar
  - Brooklyn Public School and Community Building built
  - Ross Island used as park courtesy of Ross's Farm
- Ross Island Bridge built
  - Powell Blvd Cut Brooklyn Neighborhood in Half
  - Brooklyn's public square and fountain, as well as commercial and residential property were removed
- Ross Island Sand and Gravel operation started
  - and recreation opportunity was unavailable
- McLoughlin Blvd / 99E was completed
  - Eliminating Brooklyn's access to the river, and restoration of alternate access was deferred for later consideration and funding
- Brooklyn's Victory Gardens were an extension of the farmer's market type industry long-standing in the neighborhood
- Trolley service stopped

Brooklyn Action Corps Neighborhood Association Established
Tom Potter was a police officer in the neighborhood

Brooklyn School began charging BAC to use school space for community meetings

Brooklyn Public School students diverted to Grout Elementary School

Eastbank Esplanade Improvements
No direct connection from Brooklyn Neighborhood provided and both younger older residents must be transported 1+ miles to use the park

Powell Blvd Improvements
Street Trees were not included, and when requested by Brooklyn were deferred to a later date for consideration and funding

Light Rail through Brooklyn Neighborhood in review
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. During the design phase, the project has continued to consider speed in order to provide high quality and competitive service to attract riders - especially given federal funding requirements considering ridership and project cost are carefully weighed by the Federal Transit Administration before considering project funding.

While there are some portions of the alignment where speeds are not at maximum levels, these instances are ones where conditions are not optimal for the highest light rail transit speeds. For example, during school hours the light rail trains will operate at lower speeds near schools than other times. Further, designs such as the elevated segments over SE McLoughlin Boulevard help ensure that not only are intersection crossings fast, they are safe. In addition, by including a new bridge over the Willamette River, access to the Portland Central City from north Clackamas County and other points along the alignment will be much faster than if the alignment used an existing bridge.

Safety and security are very important to the Project. Chapter 3.16 includes a description of the safety and security actions to be taken to address riders and potential rider concerns.
Thank you for submitting your comments for consideration. Light rail was the chosen mode for this corridor because of its improved reliability and travel times compared to bus, among other reasons. The addition of a reliable rail option in the corridor provides people with the choice of avoiding traffic on SE McLoughlin Boulevard.

Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issuing warnings, citations, and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity, so that officials can work with the youths and their families to stop the activity.

These officers, TriMet’s Director of Safety and Security, and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider
security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.

I-257-003
In the FEIS, the Locally Preferred Alternative (LPA) terminates at Park Avenue and has no park-and-ride lot in downtown Milwaukie. The Minimum Operable Segment (MOS) has a 275-space park-and-ride lot near the Lake Road Station in downtown Milwaukie. FTA requires that projects seeking federal funds identify interim or shorter sections that could be implemented if funding is not available for the full length project.

I-257-004
The light rail project has been identified as a regional priority since the mid-1990s. Roadway or other bridge improvements are not within the scope of the Portland-Milwaukie Light Rail Project.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative (LPA) for the light rail project was endorsed by participating jurisdictions in summer 2008. The LPA will accommodate a future station at Harold Street. Most of the station area is within 1/2 mile of either the Bybee or Holgate stations, and most riders could currently be served by the existing #19 or other bus routes, which will have increased reliability and decreased travel times with the new Willamette River bridge. See Chapter 2 of the Final Environmental Impact Statement for more information.

As a part of future area planning processes conducted in coordination with the City of Portland, ridership, cost effectiveness, alternative funding sources, land use, zoning, infrastructure (including a pedestrian bridge), and bus routing options that would support a station at Harold Street will be evaluated.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published in May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

The Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 were held. The evaluation based on project criteria resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-
Milwaukie Light Rail Project's Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002

In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

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Milwaukie Light Rail Project Purpose and Need. Results of the refinement study may be found in Downtown Milwaukie Alignments Review (June 2007, August 2007) and are summarized in Chapter 2 and Appendix L of the SDEIS and FEIS.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as...
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

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Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
I-265-001

Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Chapter 4 provides updated information and details about the project's effects on traffic and parking in downtown Milwaukie and the mitigation commitments the project will make to avoid significant impacts.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the...
project's methods, its effect on noise and vibration conditions in the
corridor, and the mitigation commitments the project will make to avoid
significant noise and vibration impacts on sensitive properties such as
schools, churches and residences. The project's analysis directly
considers existing conditions that include freight operations to those that
would occur with light rail and freight in the same corridor. The Federal
Transit Administration criteria for noise and vibration are based on
decades of study of modern high capacity transit systems, including
modern electric light rail, which perform very differently than freight
systems operating with diesel-electric engines on existing railroads,
many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving
Milwaukie reflect an extensive public planning process dating back to
1993. This has included detailed reviews of the alignments and transit
technologies that were found to best meet the project's purpose and
need, providing effective service to the city and the region while
minimizing environmental impacts. Chapter 2 of the Final Environmental
Impact Statement (FEIS) provides a summary of the alignments,
including the factors shaping the selection of an alignment in Milwaukie.
The Supplemental Draft Environmental Impact Statement (SDEIS),
published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
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In addition to the Chapter 2 discussion, SDEIS Appendix L presents a
chronicled summary of alignment studies. The routes studied are shown
in Figures L-5 and L-6. The Milwaukie Transit Working Group process in
2003 recommended the Tillamook Branch Line alignment in the North
Milwaukie Industrial Area.
The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.
I-266-001
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as zee crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-aged children near the Westside Express Service Commuter Rail line. See Section 3.16 for more detailed information about safety.

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would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes a terminus at Park Ave.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

[Image of a comment card]

Keep light rail out of Milwaukee. If you think we need it consider the light rail running from Oregon City to Portland. The line that went by my house. Light rail costs too much money you might consider not doing a thing. The light rail will do more harm than good.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008. Project updates, materials, and community participation information are available at the Portland-Milwaukie Light Rail Project web site, www.trimet.org/pm.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project’s methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

In addition to the discussion in the SDEIS Chapter 2, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.

Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road...
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie uses an existing, active railroad right-of-way. The project provides several features to help reduce potential conflicts with rail, compared to today, including constructing safety fences, crossing gates, improved visibility and sight distances, clearly established pedestrian zones and improved pedestrian facilities, and other safety treatments. All features will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as “zee” crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

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Thank you for submitting your comments for consideration. The light rail project, including a terminus at SE Park Avenue, was endorsed by participating jurisdictions in summer 2008.

The Final Environmental Impact Statement addresses impacts and mitigation related to your areas of concern. For traffic information, see Chapter 4. Safety and security information is presented in Section 3.16.
Thank you for submitting your comments for consideration. Analysis of light rail transit alignment options in Milwaukie dates back to 1993:

- South/North Draft Environmental Impact Statement, 1998
- South Corridor SDEIS, 2002

SDEIS Appendix L presents a chronicled summary of alignment studies. Routes studied are shown in Figures L-5 and L-6.

The LPA alignment is the product of two intensive, outreach-based processes discussed in detail in the SDEIS on pages 2-35 through 2-41:

- The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
- Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study in 2007 evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the project’s Purpose and Need.

Analysis of alignment and terminus options through Milwaukie for the project have been conducted and documented as described in the SDEIS on pages 2-35 through 2-41. The analyses were based on criteria utilized in the SDEIS that are key to distinguishing the
comparative impacts and effectiveness of the options to allow decisions to be made about the alignment through Milwaukie by City staff, the Planning Commission, City Council, neighborhood leaders and interested citizens. The Locally Preferred Alternative decision was the product of this process. The LPA best meets the Purpose and Need for a major transit investment in the Milwaukie-Portland corridor. This process fully complies with FTA major capital project development process requirements. Approval of the Portland-Milwaukie Light Rail Project to enter the preliminary engineering phase of project development is the FTA’s acknowledgement that conceptual design, preparation of the SDEIS and selection of the LPA have complied with FTA and NEPA requirements.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008.

Chapter 4 provides updated information and details about the project's effects on traffic and parking in downtown Milwaukie and the mitigation commitments the project will make to avoid significant impacts.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right of way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

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The Final EIS Section 3.10 and its accompanying Noise and Vibration Results Report provides updated information and details about the
project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as schools, churches and residences. The project's analysis directly considers existing conditions that include freight operations to those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades.

The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the Final Environmental Impact Statement (FEIS) provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

Previous studies covering the project corridor include:

- South/North DEIS, 1998
- South Corridor SDEIS, 2002

In addition to the Chapter 2 discussion, SDEIS Appendix L presents a chronicled summary of alignment studies. The routes studied are shown in Figures L-5 and L-6. The Milwaukie Transit Working Group process in 2003 recommended the Tillamook Branch Line alignment in the North Milwaukie Industrial Area.
The Refinement Study in 2007, due to concerns about the Tillamook Branch alignment through downtown Milwaukie, evaluated alignment options between Highway 224 and SE Lake Road along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project Purpose and Need.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

The FEIS Section 3.10 and its accompanying Noise and Vibration Results Report provide updated information and details about the project's methods, its effect on noise and vibration conditions in the corridor, and the mitigation commitments the project will make to avoid significant noise and vibration impacts on sensitive properties such as
schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The Porter-Sherman river crossing alignment option, a Tillamook Branch alignment and a Park Avenue terminus were selected as the Locally Preferred Alternative. See Chapter 2.1 Portland-Milwaukie Light Rail Alternative for more information.

The cable-stayed bridge type was chosen as the type to advance into Preliminary Engineering.
I-277-001
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project, including a terminus at Park Ave, was endorsed by participating jurisdictions in summer 2008.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by all participating jurisdictions in summer 2008.

The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates, and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project.

Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line. See Section 3.16 of the Final Environmental Impact Statement (FEIS) for more detailed information about safety.

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schools, churches, and residences. The project's analysis directly considers existing conditions that include freight operations and those that would occur with light rail and freight in the same corridor. The Federal Transit Administration criteria for noise and vibration are based on decades of study of modern high capacity transit systems, including modern electric light rail, which perform very differently than freight systems operating with diesel-electric engines on existing railroads, many of which have been in place for decades. The Locally Preferred Alternative alignment and stations serving Milwaukie reflect an extensive public planning process dating back to 1993. This has included detailed reviews of the alignments and transit technologies that were found to best meet the project's purpose and need, providing effective service to the city and the region while minimizing environmental impacts. Chapter 2 of the FEIS provides a summary of the alignments, including the factors shaping the selection of an alignment in Milwaukie. The Supplemental Draft Environmental Impact Statement (SDEIS), published May 2008, also discussed this on pages 2-35 through 2-41.

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Because of concerns about the Tillamook Branch alignment through downtown Milwaukie, the Refinement Study conducted in 2007 evaluated alignment options between Highway 224 and SE Lake Road.
along SE McLoughlin Boulevard or SE Main Street and also a McLoughlin/Main couplet option or a Main/21st couplet option. A series of public workshops and hearings before the Planning Commission and City Council during June through August 2007 resulted in elimination of the SE McLoughlin Boulevard options and Main Street options, including the couplet options, for not meeting the Portland-Milwaukie Light Rail Project's Purpose and Need.
Thank you for submitting your comments for consideration. The light rail project was endorsed by participating jurisdictions in summer 2008.
The vote of Mayor Bernard at the Portland-Milwaukie Project Steering Committee was not a conflict of interest because the Mayor publicly disclosed and declared his property ownership throughout all stages of the proceedings; the Mayor’s vote in the Steering Committee was as a representative of the City of Milwaukie in accordance with Milwaukie Resolution 51-2008, and not as a private citizen or as simply the Mayor of Milwaukie; and in any case the votes were unanimous in the Steering Committee and in the City of Milwaukie resolution, and the Mayor’s votes did not change the outcome of any decision. It is also important to note that the City’s resolution and the Steering committee recommendations are advisory to the Metro Council, which is actually the party that takes the action to identify project alternatives. Finally, all of these decisions remain preliminary until issuance of the FEIS and the Record of Decision by the Federal Transit Administration.
Thank you for submitting your comments for consideration. The SDEIS showed that the light rail project would remove 34 off-street parking spaces (next to the railroad tracks between SE Monroe and SE Washington) and about 12 on-street parking spaces in downtown Milwaukie. The parking impacts have been reevaluated and now show 52 on-street parking spaces being removed by the project. The City of Milwaukie no longer includes the 34 off-street parking spaces in the City’s downtown parking inventory, and therefore the FEIS does not include the loss of these un-official parking spaces as an impact of the LRT project.

Potential parking mitigation alternatives that could be implemented include replacement of on-street parking, parking management strategies and revising parking restrictions. Coordination with the City of Milwaukie should occur to determine the best strategy to address the on- and off-street parking impacts should parking become an issue around station locations.
Thank you for submitting your comments for consideration. The method by which the City of Milwaukie chose to make its financial commitment to the light rail project did not require a popular vote.
The City of Milwaukie's taxing authority is not affected by the location of the light rail alignment. So, yes, the City of Milwaukie can continue to tax its citizens if light rail is built on an ODOT right-of-way - such as McLoughlin Blvd. The majority of the alignment, however, does follow the Tillamook Branch line through most of the City of Milwaukie.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. An extension of light rail to Oregon City on McLoughlin Boulevard or any other route is outside the scope of this project. For a description of the project's scope see Chapter 2.

I-285-001

Yes, I’d like to leave a comment regarding my opinion on the light rail as far it coming out through Milwaukie and to, at least for now, to Park Avenue. I think it’s a great idea. I think we should just hurry up and get it going. I think it’s inevitable. There’s no going backwards here; we’re going to have to do something. And eventually I’d like to see it go through Oregon City and out to Canby and, who knows, past there.

They’ve been doing this in Europe for years and it works really well and we just need to catch up with the times and realize that we need to get it going. I’ve lived in Milwaukee for fifty years and I use my car and sometimes MAX and TriMet. But for me, in Milwaukee, it’s quite a trek to get to St. Vincent Hospital, where I work sometimes, and Providence Portland where I work other times.

I wish I had that option and I hope I’m still in the workforce when it is available, but I’m afraid I probably won’t be. At least not at that current position.

Anyway, my opinion is that we just need to get it going and as quickly as possible. Thank you.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project was endorsed by participating jurisdictions in summer 2008. Alternative routes and high capacity transit corridors are outside the scope of this phase of the Portland-Milwaukie Light Rail Project. For a description of the project's scope see Chapter 2.
I-287-001

Thank you for submitting your comments for consideration. Please refer to SDEIS Table 5-29 where costs per boarding ride of the different alternatives are presented. The table shows that estimated costs of $1.59 for No-Build and $1.54 for 2003 LPA-Park.
Thank you for submitting your comments for consideration. The Locally Preferred Alternative for the light rail project includes the Tillamook Branch alignment.
Additional information on the systems planning context behind the current project proposal is provided in Chapter 1, Purpose and Need, and in Chapter 4, Transportation. The project is designed to integrate with several other regional transit lines and systems, as well as the roadway and non-motorized systems within the corridor. Updated travel demand forecasts provided in the FEIS Chapter 4 demonstrate that the project's higher levels of ridership are a result of its ability to connect with other systems, including the streetcar line being built on the east side of the Willamette River, and the existing line on the west.
I-289-003

There are locations within the project corridor not within walking distance of either the proposed light rail stations or connecting bus service. Surface park-and-ride lots typically accommodate about 100 cars per acre when local requirements for landscaping and stormwater management are factored in. Along the proposed alignment of the project are only two stations (Tacoma and Park) where park-and-ride facilities are provided. Land suitable for a park-and-ride facility is very limited at both stations. The park-and-ride at Tacoma will have 800 spaces and the park-and-ride at Park Avenue will have 600 spaces. Under the LPA Phasing Option, these park-and-ride facilities would be initially developed with fewer spaces. We recognize that structured parking virtually precludes transit oriented development (TOD) of these sites for the foreseeable future. However, there are other potential TOD sites at other station areas. Providing cost-effective access to the proposed light rail line for as many riders as possible establishes the need and justification for both of the proposed park-and-ride structures.
Thank you for your comments and suggestions. Final supporting bus routing decisions will be made by TriMet.

Connecting the proposed Portland to Milwaukie Light Rail Project to the existing MAX system Yellow Line at the Rose Quarter via an alignment that remains on the east side of the Willamette River from OMSI and travels north misses the major concentration of trip destinations and generators in the metropolitan area. Downtown Portland has 100,000 jobs, thousands of residents and Portland State University. Direct service between downtown and the Milwaukie corridor for users of a high capacity transit line in the corridor can only be provided by crossing the Willamette River with the high capacity transit line. Light rail directly to downtown avoids forcing heavy transfers from light rail trains to already crowded and more expensive to operate eastside buses (or MAX trains at Rose Quarter) to reach downtown destinations—in effect, a permanent “bus bridge” operation that is eliminated by the new light rail bridge. Light rail across the proposed Willamette River bridge will also provide the most direct access to the South Waterfront area and OHSU from the corridor. Serving the highest concentration of trip destinations and generators with the highest capacity transit service makes sense. The Central Eastside area between OMSI and Rose Quarter presents a lower concentration of trip destinations and generators. The now-under-construction Eastside Streetcar line, connecting with the Portland-Milwaukie Light Rail Project at OMSI, will provide a quality, appropriately lower-capacity transit service for trips to or through this area from the corridor.

Limited redundancy to the Steel Bridge crossing of the Willamette River for the MAX system will be provided by Eastside Streetcar in combination with the proposed new bridge across the Willamette. The option of foregoing the proposed Willamette River bridge in favor of
continuing the light rail line north from OMSI to Rose Quarter was assessed. Results were presented at a publicly noticed meeting of the PMLRT Project Steering Committee on June 4, 2008. The assessment found that the eastside alignment option would have lower ridership than the proposed Project. Also, the eastside alignment would involve either a substantially elevated structure or an at-grade alignment involving considerable at-grade street crossing and displacement issues. The Steering Committee did not choose to pursue this option, as documented in Appendix L of the SDEIS.

and from downtown.

And incidentally, if these shuttles were timed to meet the MAX trains, the trip to the CBD would be as fast or faster than the trip over the proposed out-of-direction Porter-Sherman alignment.

Second one: South Waterfront would actually get better transit service than the Porter-Sherman crossing if the project included a direct bus or street car link to South Waterfront via the Hawthorne Bridge, First and Naito and Harrison Street. This new faster connection to and from North, Northeast, East side -- even Clark County and Gresham -- would attract many new riders, more than would be lost from the south corridor because of a slightly longer trip.

And a third one is an east side connection provides redundancy to the system not provided by an additional river crossing. The Steel Bridge will become a major bottleneck in the system when all four MAX lines cross it. The yellow line will become a major problem because of crossing issues at the Rose Quarter junction when the green line is added next year. And I
am pretty sure it's going to happen. An east side alignment avoids this problem. In the event of a Steel Bridge breakdown, it could also provide access to all the buses that cross the river on the other bridges.

And fourth, an east side connection would allow more frequent service with the same equipment and operating hours because we cut about 25 percent from the total route running time. Frequency of service is a primary factor in attracting ridership.

And in closing, an 11th hour modeling attempt by Metro staff of an east side alternative that did not include the systemic improvements mentioned above still showed it would attract about as many passengers to the system as with the downtown options.

And I would be glad to answer any questions, if you have any.

COUNCIL LIBERTY: Are there questions?

Comments?

All right. Thank you.

JIM HOWELL: Thank you.

COUNCIL LIBERTY: Next we have signed up to testify Daniel Yates, Neal Grandy, Ralph
work our way down through downtown onto I-5 south. If we put a bus turn lane on 8th, there will not be enough turn radius for trucks to make the U-turn. Basically, it's a U-turn on Woodrow, onto 8th, and up onto the Ross Island Bridge.

I encourage you to continue to look for ways to run the buses farther down through the district, deeper in 17th, 19th. I'm not sure where. But I can assure you that the Central East Side will fight very hard to maintain its limited ability to maneuver trucks and our employees in and out of our district. The 8th Street light is a very important element for us that should not have a stoplight on it.

Thank you.

COUNCIL LIBERTY: Thank you.

Any questions? Comments?

Mr. Grandy.

NEAL GRANDY: Hi. Thank you. My name is Neal Grandy. I live in Oak Grove, which is Southeast Milwaukie.

I would simply like to present a more personal perspective as an adjunct to the communal impact that has been addressed so far.
Thank you for submitting your comments for consideration. Based on TriMet’s experience with its existing system and on national information, crime levels along light rail project corridors are typically closely related to the existing crime conditions that prevail in the surrounding community. TriMet uses a combination of design, public education, and operations measures to lower the potential for crime and to minimize potential conflicts among trains, people, and other vehicles.

TriMet’s Transit Police Division (TPD) is made up of contracted law enforcement officers from police agencies in the region. The TPD currently consists of 58 sworn officers, and an additional 30 TriMet staff members are dedicated to checking fares and issue warnings, citations and exclusions for riders without a valid fare. Another 46 TriMet supervisors check fares as a part of their daily duties. The TriMet Code includes penalties for fare evasion and rowdy or intimidating behavior on the system. Riders can also be immediately excluded from the system for up to six hours, and can receive longer exclusion periods of up to 90 days. Juvenile detention allows for a safety hold of up to 36 hours for repeat offenders violating the TriMet code or engaged in certain criminal activity so officials can work with the youths and their families to stop the activity.

These officers TriMet’s Director of Safety and Security and the TPD commander meet regularly with various community members, law enforcement agencies, and security partners to evaluate issues and collaborate on solutions. The agency also has an established transit rider security program that combines TriMet enforcement with public safety resources from other jurisdictions.

See Section 3.16 for more information on safety and security.
The LPA to Park Avenue currently calls for a 600 space park-and-ride lot on the south side of SE Park Avenue, just west of SE McLoughlin Boulevard. As documented in the Final Environmental Impact Statement (FEIS), the Locally Preferred Alternative to Park Avenue will provide traffic mitigation at both the Park Avenue entrance to the park-and-ride lot and at SE McLoughlin Boulevard and SE Park Avenue. Traffic mitigation with a 600 space park-and-ride lot calls for offset left turn lanes on SE Park Avenue between SE McLoughlin Boulevard and SE 27th Avenue (at the park-and-ride lot entrance). Under an LPA Phasing Option, the volumes of vehicles will be lower because the park-and-ride would initially be developed as a smaller structure with approximately 355 spaces, but the project currently includes the same mitigation as the LPA to Park Avenue.

Chapter 4 of the FEIS also provides an updated discussion of how the size of the park-and-ride lot has been balanced to minimize its impacts to traffic congestion and the need for mitigation.

The southernmost point of the Portland-Milwaukie Light Rail Project is Park Avenue. An extension of light rail to Gladstone on McLoughlin Boulevard or any other route is outside the scope of this project. However, Metro's recently completed High Capacity Transit System Plan, which represents the region's 20-year plan for high capacity transit and has been adopted as a part of the Regional Transportation Plan, includes a connection to Oregon City. For a description of the Portland-Milwaukie Light Rail Project's scope see Chapter 2.
Thank you for submitting your comments for consideration. The light rail alignment through downtown Milwaukie lies within the existing, active railroad right-of-way. The project will improve existing conditions by constructing safety fences, crossing gates and pedestrian zones, and safety treatments will be designed to meet all applicable standards and regulations. All pedestrian crossings occur in their current locations and will be improved as a result of the light rail project. Improvements may include pedestrian crossing control structures such as "zee" crossings, which compel pedestrians to slow down and increase awareness when crossing light rail tracks, and part-time warning systems, which flash lights in the direction of pedestrian traffic when trains are approaching.

To ensure safety around light rail operations and facilities, TriMet combines design with education and outreach. This includes classroom assistance to educate school-age children about safety around and on rail vehicles. Successful programs for other lines in operation near schools include programs implemented for the Lloyd District light rail stations, and a partnership with Operation Lifesaver to provide safety education to residents and school-age children near the Westside Express Service Commuter Rail line.

Section 3.16 includes more detailed information about safety, including enforcement and security.
Thank you for your comments.

Queuing of vehicles at the light rail crossings at SE Monroe Street and SE Washington Street were not reported as part of the SDEIS. However, the FEIS considered queuing at these locations and SE Harrison Street in downtown Milwaukie along with the average delay per vehicle in the PM peak hour, when the most light rail trains will be crossing these streets. It is estimated that in 2030 the average delay on SE Washington Street and SE Monroe Street is between 6 seconds and 12 seconds during the PM peak hour. By federal regulation the gates at the crossings are down (including the time it takes for the gates to come down and go back up) for a total of 50 seconds.

We are aware of potential impacts related to audible warning devices at the grade crossings, and we are working with the Federal Railroad Administration to provide mitigation for these sources. Thank you for your comment.
for good.

And to me, I don't think people realize
what it's going to be like to have that train
go through downtown. Besides building it,
what's it going to take, two years to build
through town? At least a year. And it will be
a big mess. And people -- of course, I -- I
take it -- I don't take light rail very much,
but I drive through town almost all the time to
go to Milwaukie marketplace.

Thanks for your time. That's my thoughts.

COUNCIL LIBERTY: Thank you.

Any questions for Mr. Rigdon?

Comments?

Thank you for your testimony, sir.

I think we have two more cards. Mark
Williams, Elizabeth Clark -- is it Agosti?

Mr. Williams?

MARK WILLIAMS: Thank you, Mr. Chair,
members of the committee.

I'm Mark Williams. I'm the vice president
of OHSU campus planning, development and real
estate.

We are here to support the decision of the
Willamette River Partnership, which we
Thank you for submitting your comments for consideration. Since the publication of the SDEIS, the Project has engaged in extensive analysis of bridge height. From this analysis the following has been concluded:

- There is no standard bridge clearance on the Willamette River or in this reach of the river;
- A variety of bridge heights has been evaluated – from the original 65 feet to 75 feet, 77 feet and more. The Project has concluded that a higher bridge height (measured from the bottom of the bridge structure to the water) should be built - 77.52 feet;
- Review of the bridge height with other river users indicates that almost all boats that commonly use the River can navigate with a bridge height of 77.52 feet;
- This height (77.52 feet) provides a safety margin of 2.52 feet over the 75 foot height;
- This height allows for passage for the largest boat of the Portland Spirit to pass under the Portland-Milwaukie Light Rail Project Willamette River Bridge over 90% of the time (a higher percentage if a wind turbine is not added to the boat);
- The cost of building a bridge higher than 77.52 feet increases exponentially with each foot of height, while the additional time or number of additional boats that could be accommodated changes very little beyond a height of 77.52 feet;
- While there will be times when a combination of high river levels and a bridge height of 77.52 feet will restrict river travel, these will be very limited occurrences and likely during flood stages when most commercial river traffic will not be operating;
- A bridge height above 77.52 feet would trigger either a less satisfactory pedestrian design, higher landside construction, both of which are significantly more costly and which have adverse impacts because of ADA requirements or further loss of street/Portland-Milwaukie Light Rail Project connection.
The project is responding to and consistent with the requirements of the Federal Transit Administration (FTA). The FTA uses a cost-effectiveness measure to assess all projects across the country in a way so that all fixed rail projects, including any pedestrian and bicycle paths to serve the transit users, must be compared and compete with other projects. Many projects are not funded, as only the most competitive are awarded funding.
infrastructure -- and the reason I'm talking about bicycles is because we're talking about a bridge here -- must become more user-based, and that must be somewhat based on the cost per passenger mile providing that infrastructure. That requires transit passengers to start paying higher transit fares or a fare surcharge to help pay for a transit expansion, which would include any light rail or street car infrastructure. Collecting this money from transit passengers should start immediately so a fund can be established and built up that collects interest, rather than paying it.

Eliminating Fareless Square might be a good idea, too, because that will take you a long way towards getting some more money for infrastructure.

Additionally, the bicyclists need to be directly taxed, and immediately, to pay for their share of any proposed new bridge. If a bicycle tax is not imposed, the bridge needs to have a bicycle toll placed on it. And equitable pricing structure for such a toll would be one that reflects again the cost per bicycle mile providing the infrastructure, and
Thank you for your comments.

The light rail transit alignment for the Locally Preferred Alternative has track within the center line of the street system in a couple of locations (such as SE 17th Avenue). This will impact the on-street parking on these streets but not travel lanes. During the construction phase of the project, temporary lane and road closures or detours may occur.

All construction impacts would be temporary (6 to 18 months) and mitigation measures at intersections could result in potential short-term impacts to the roadway network. Detailed construction impacts will be outlined for each segment when final design is developed. Construction impacts can be addressed at that point through a temporary traffic control plan. TriMet would coordinate with property owners before and during construction.
not increasing VMTs, then Metro must start by
looking at the bigger picture of reducing
regional population growth, rather than
confining roadway infrastructure.

Thank you.

COUNCIL LIBERTY: Thank you.
Any questions?
All right. Thank you, Mr. Parker.
Mr. Polani.

RAY POLANI: Mr. Chairman, members of the
committee, my name is Ray Polani. I live at
6110 Southeast Anchorage Street in Portland.
But I've also lived two years in Milwaukie, in
Lake Grove, 1989 to 1991. So I can speak on
both sides of my mouth.

What is the overriding purpose of public
transit? Well, it seems to me that it is to
attract riders, primarily from automobiles.
With this in mind, all efforts and projects
must maximize this paramount aim and purpose.
Unfortunately, Tri-Met and other transit
systems in the United States too often do not
act accordingly.

Let me be specific. Tri-Met is finishing
the transit mall Light Rail Project which will
not increasing VMTs, then Metro must start by looking at the bigger picture of reducing regional population growth, rather than confining roadway infrastructure.

    Thank you.
    COUNCIL LIBERTY: Thank you.
    Any questions?
    All right. Thank you, Mr. Parker.
    Mr. Polani.
    RAY POLANI: Mr. Chairman, members of the committee, my name is Ray Polani. I live at 6110 Southeast Anchorage Street in Portland. But I've also lived two years in Milwaukie, in Lake Grove, 1989 to 1991. So I can speak on both sides of my mouth.

    What is the overriding purpose of public transit? Well, it seems to me that it is to attract riders, primarily from automobiles. With this in mind, all efforts and projects must maximize this paramount aim and purpose. Unfortunately, Tri-Met and other transit systems in the United States too often do not act accordingly.

    Let me be specific. Tri-Met is finishing the transit mall Light Rail Project which will
work against the primary goal of the system, riders. It will be slow-running the length of the mall in both directions, and it will be limited to two-car trains because of the length of the blocks, 200 feet. Three regional lines will be subjected to that, and now Tri-Met will add one more regional line to their problem.

This line will also cross the Steel Bridge, then go to Union Station and slowly up the mall to Portland State University, and then down to the South Waterfront to cross another bridge to be built at the cost of 300 to $400 million.

What should be done instead to cut running time and attract many more riders from automobiles primarily? Obviously, stay on the east side and continue south on Portland’s east side where most of the population lives and works, and proceed past OMSI to Milwaukee. Have a straight, fast, north/south line from Vancouver, eventually to Oregon City. Much faster and much more appealing to the bulk of North, Northeast and Southeast Portland residents and workers, and also to the regional east side would-be riders.
Remember, it is time that matters to people, but now also costs and environment. And in the process, spend less, save the cost of a new bridge, and get more riders. Show on this project concern for both ridership and fiscal responsibility. This, I would call win/win.

Thank you for your attention, and I hope that the fatal effort will be changed before it gets down on the ground like the mall.

COUNCIL LIBERTY: Thank you.

Any questions of Mr. Polani?

Mr. Charles?

JOHN CHARLES: Thank you, Mr. Chairman.

My name is John Charles, president of Cascade Policy Institute, a non-profit, non-partisan research center in Portland, and I have both a professional interest in this as well as a personal interest because I'm a homeowner in Clackamas County, and I happen to like trains. Not this particular proposal, but I have ridden the east side MAX probably 15,000 times in the last 12 years. I am familiar with how rail works as a practical project, not as a theoretical construct.
Thank you for submitting your comments for consideration. Project designers welcome the input on existing conditions at Courtney Springs Creek. During preliminary engineering following the SDEIS release, additional investigations into the condition of the pipes were conducted. A TV camera was used to evaluate the pipe. The pipe north of Park Avenue is adequate. Loading of light rail tracks and platform is insignificant to a pipe 30 feet deep. An existing manhole, allowing future access and maintenance, will be incorporated into future platform plaza area.

The pipe section south of Park Avenue requires some repair. A section of pipe will be removed and replaced, as required, based on preliminary engineering findings, and will extend to replace the section of pipe that cuts under the proposed parking garage. As the project proceeds into final design, additional engineering evaluations will be conducted.

Updated information and clarification of water quality parameters for each stream are included in the FEIS in Section 3.9.
Thank you for submitting your comments for consideration and for identifying the City's preference for a Park Avenue terminus, as well as its interest in extending light rail to Oregon City. The light rail project, including the Tillamook Branch alignment and SE Park Avenue terminus, was endorsed by participating jurisdictions in summer 2008.

The southernmost point of the Portland-Milwaukie Light Rail Project is SE Park Avenue. An extension of light rail to Oregon City on SE McLoughlin Boulevard or any other route is identified in the region's most recent updated High Capacity Transit Plan.
Thank you for submitting your comments for consideration. FTA, TriMet, and Metro are happy to have the involvement of the North Clackamas Parks and Recreation District in the development of the light rail project. We look forward to continuing our coordination in the design of the two projects, as well as in proposing mutually beneficial mitigation measures that will offset impacts to the Trolley Trail. We also look forward to working with NCPRD to coordinate design elements so that both projects provide better multi-modal access to the community.
Columbia Region Harbor Safety Committee

June 19, 2008

To: trans@portlandmetro.gov
Metro: Portland-Milwaukie Light Rail Project
630 NE Grand Avenue, Portland, Oregon, 97232

From: Capt. Peter L. Richards
Chairman, Columbia Region Harbor Safety Committee (CRHSC)

Re: Public Comment on the Draft Environmental Impact Statement and Section 4(f) Evaluation in the South Corridor, Portland-Milwaukie Light Rail Project

cc: Capt. Fred Myer, COTP, USCG Sector Portland (via Lt. William Taylor)
Capt. Paul Amos, President Columbia River Pilots, Vice Chair CRHSC
Ms. Heather Moala, Port Manager - Iroquois Shipping Services, Secretary Treasurer, CRHSC
Lt. William Taylor, USCG Liaison, CRHSC
Ms. Linda Mack, USCG Liaison, CRHSC
Members of the CRHSC Bridges Sub-Committee

To whom it may concern:

The CRHSC is comprised of commercial and private waterway users; federal, state and local waterway regulators and others interested in the preservation and use of the waterways in our area of responsibility.

Goals of the CRHSC include:
• Ensuring the continuity and improvement of safe, reliable, cost-effective maritime transportation,
• Enhancing the safety of waterway recreation, and
• Fostering prudent management practices for our waterways.

The CRHSC works to accomplish its goals by providing a forum for the cooperative coordination of actions by all concerned, committed and informed stakeholders. The CRHSC Bridges Sub-Committee evaluates and acts on issues of concern relating to bridges over our navigable waterways under the direction of the CRHSC Managing Board. The South Corridor, Portland-Milwaukie Light Rail Project has become a focus of attention of the Bridges Sub-Committee.

This letter is to notify you of our specific and continuing interest in providing meaningful public comment during all stages of planning and implementation of the project. Therefore, as the project moves forward, please keep us informed in advance of all:
1. Progress concerning the project,
2. Opportunities for us to partner with your planners, and
3. Opportunities to provide public comment.

We also invite you to nominate a representative from your organization to the Bridges Sub-Committee. Please let us know if you will take us up on this offer. Our comments follow.

Thank you for your attention to this matter.

Capt. Peter L. Richards
Chairman, Columbia Region Harbor Safety Committee
805 Broadway, Suite 410
Vancouver, WA 98660
peter.richards@portamerica.com
Office: 360-796-0555
Cell: 503-519-2161

Page 1 of 2
Thank you for submitting your comments for consideration.

Bridge Height. Since the publication of the SDEIS, the Project has engaged in extensive analysis of bridge height. From this analysis the following has been concluded:

- There is no standard bridge clearance on the Willamette River or in this reach of the river;
- A variety of bridge heights has been evaluated – from the original 65 feet to 75 feet, 77 feet and more. The Project has concluded that a higher bridge height (measured from the bottom of the bridge structure to the water) should be built - 77.36 feet;
- Review of the bridge height with other river users indicates that almost all boats that commonly use the River can navigate with a bridge height of 77.36 feet;
- This height (77.36 feet) provides a safety margin of 2.36 feet over the 75 foot height;
- This height allows for (check number) boat passage for the largest boat of the Portland Spirit to pass under the Portland-Milwaukie Light Rail Project Willamette River Bridge 99% of the time;
- The cost of building a bridge higher than 77.36 feet increases exponentially with each foot of height, while the additional time or number of additional boats that could be accommodated changes very little beyond a height of 77.36 feet;
- While there will be times when a combination of high river levels and a bridge height of 77.36 feet will restrict river travel, these will be very limited occurrences and likely during flood stages when most commercial river traffic will not be operating.
- A bridge height above 77.36 feet would trigger either a less satisfactory pedestrian design, higher landside construction, both of which are significantly more costly and which have adverse impacts because of ADA requirements or further loss of street/Portland-Milwaukie Light Rail Project connection.
**Channel Alignment and Width.** Subsequent to the publication of the Portland-Milwaukie Light Rail Project SDEIS, the project has further assessed the channel width and alignment as follows:

- The Project did a field test of barge movements, using a barge and boats located in the location of the piers and including a representative of the U.S. Coast Guard as an observer. As a result, the Project concluded that the bridge span needed to be increased from 500 feet to 660 feet and that the location of the piers needed to be changed to help ensure that boats, especially the harder to maneuver barge/tugboat vessels, could navigate the piers of a new Willamette River Bridge. These changes meant that one bridge type proposed in the SDEIS (concrete segmental) had to be abandoned as a potential bridge type and that another bridge type, Cable Stay Bridge, would have to be used.

- These findings, along with a video presentation showing the effects of current, channel, span width and tugboat/barge vessels, was shown to the WRBAC, a group representing land and water interests in the Project area as well as citizens, so that a public discussion of the channel alignment and width was open for public review and comment.

**Expanded River User List.** The Project has resurveyed and expanded the list of river users in order to ensure that the list and heights of boats and other river users is accurately and completely reflected in the FEIS.

**L-004-002**
In the course of the additional engineering and environmental review conducted for the Locally Preferred Alternative's bridge over the Willamette River, Metro, TriMet and FTA considered best available science and recent federal guidance on climate change to determine how future river levels could be affected. This information, along with updated information on navigational needs along the river, was used to
support the current proposal for the bridge height. Additional information
is provided in several sections of the FEIS, including Chapter 2,
Alternatives, Chapter 3, Section 3.9, Water Quality and Hydrology, and
Section 4.2, Transportation Impacts, and Appendix O, Navigation.

**L-004-003**
Construction Impact (Willamette River and navigation)

With regard to Willamette River navigation and construction, the project
recognizes that this reach of the River is a working river, with commerce
conducted virtually continually.

Accordingly, the Project has designed its construction method to ensure
that there are no river closures. However, the movement and placement
of work barges will be a part of the Project construction method and this
work will comply with all Willamette River operating rules and regulations
for this River reach.

In addition, the construction method will work from cofferdams and
cantilever bridge segments out from these in-water structures that
contain the bridge piers. This method avoids the construction of
falsework or other temporary extensions of scaffolding that would
otherwise extend beyond the Bridge span and height dimensions.
L-005-001
Thank you for submitting your comments for consideration. The design of the new Portland-Milwaukie Light Rail Project Willamette River Bridge has been completed with commercial river traffic in mind. As noted elsewhere, the design has been revised to both have longer bridge spans, a higher bridge and relocation of bridge piers in order to accommodate commercial river traffic, especially barge/tugboat vessels as well as commercial river travel associated with tourism. The Project estimates that commercial river traffic for tourism will be able to operate over 99 percent of the time and are not aware of any restrictions as a result of a new Willamette River Bridge that would restrict barge/tugboat vessels, although such vessels may choose not to travel the River for other reasons, such as flood conditions unrelated to the Project. Appendix O provides substantial analysis and documentation of this effort.
2. Vertical Clearance: Any fixed-span crossing of the Willamette must provide sufficient vertical clearance to accommodate the reasonable needs of commercial navigation. It goes without saying that these decisions will affect vessel safety. Moreover, where rivers are available, they usually prove to be the most economical and fuel efficient means to transport large or heavy cargoes, commodities, or pieces of equipment. We are aware that every additional foot of span height will have an immediate cost to the project, similarly any unreasonable restriction in vertical clearance may have a long term adverse impact on commercial navigation and on the regional economy as a whole. For that reason, we appreciate Metro and Tri-Met taking deliberate steps to find the correct balance.

3. Horizontal Clearance: The question of horizontal clearance under any new span is just as important as that of vertical clearance. Several of the alignments under discussion may result in a final configuration in which a) the bridge is not perpendicular to the established channel and b) the current may also set strongly across the channel under some conditions. Without sufficient horizontal clearance, both these factors could make maneuvering a tug and barge hazardous, especially when maneuvering downriver in a strong seasonal current. Individually and together, these factors argue in favor of the widest practicable horizontal clearance.

4. Bridge Pier Placement: We appreciate the aesthetic appeal of all the bridge concepts presented in the SDEIS. However, solely from the perspective of commercial navigability, we would like to express our concern about one proposed bridge design. Depending on the eventual design details, the single pier/single pylon cable-stayed span could result in a major new obstruction being created either in, or immediately adjacent to, the Willamette’s navigation channel. We believe this sort of new obstruction could constitute a direct hazard to navigation, and if so, a significant environmental hazard as well. By contrast, the twin pier, cable stayed bridge concept (as presented) appears to offer the best combination of total horizontal clearance and maximum offset distance from the channel centerline to the likely pier locations.

5. Future Commercial Navigation on the Willamette: As noted in the SDEIS, the U.S. Coast Guard has designated the Willamette River a navigable waterway from its confluence with the Columbia up to River Mile 182.3. Access to the upper reaches of the Willamette River is controlled by the operational (though infrequently used) locks at
L-005-001

Metro
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June 13, 2008

Oregon City. In light of the rapidly increasing cost of energy, it is in
the best interest of the region to preserve viable navigable waterways
as an alternative for moving heavy equipment and some commodities.
Therefore, any new crossings of the Willamette River should be
designed with likely river traffic in mind.

We appreciate the opportunity to participate in the refinement of the
alternatives through the Columbia Region Harbor Safety Committee,
and through the U.S. Coast Guard’s own bridge evaluation process.
Please contact Eric Burnette, Sr. Waterways Planner (503) 944 7791
or eric.burnette@portofportland.com with any questions.

Sincerely,

Sam Ruda
Director, Marine & Industrial Development

cc: Austin Pratt, U.S. Coast Guard
    Steve Greenwood, Oregon Solutions
    Pete Richards, Columbia Region Harbor Safety Committee
    Captain Fred Myer, U.S. Coast Guard
    Jeremy Weber, U.S. Army Corps of Engineers
Thank you for submitting your comments for consideration. The Locally Preferred Alternative calls for grade separation of the light rail at the crossing of SE McLoughlin Boulevard south of downtown Milwaukie. ODOT’s concern about an at-grade crossing has been resolved.

A signalized left turn for buses at SE 8th Avenue and SE Powell Boulevard is no longer being considered as part of the FEIS.

Thank you for indicating ODOT’s preferences for the light rail alignment. The adopted Locally Preferred Alternative, as endorsed by all participating jurisdictions in summer 2008, includes a minor modification to the original Porter-Sherman river crossing alignment, the Tillamook Branch alignment through the North Industrial area of Milwaukie, and the Park Avenue terminus. ODOT’s letter of support was very helpful in allowing the project to move forward with consensus among the participating jurisdictions.
TriMet has worked with, and will continue to work with ODOT Rail to design crossings to ODOT Rail standards. Where LRT is located in UPRR property north of SE Tacoma Blvd., LRT will be 50 feet away from the nearest UPRR track. From SE Tacoma Blvd. south, the LRT tracks will be 25 feet away with a safety wall constructed in between.

- Traffic signals and railroad crossing signals will be interconnected to ensure auto clear-out occurs.
- Rail crossings will be designed to ODOT Rail standards and will be interconnected with traffic signals. Medians will be installed where applicable and in cases where not feasible, quad gates may be utilized. During Preliminary Engineering, ODOT Rail, UPRR, Portland and Western Railroad and Federal Railroad Administration employees participated in field tours and provided advice and direction on the design of at-grade crossing along the alignment.
- TriMet has conducted additional review of the Brooklyn yard railroad switching operations during preliminary engineering in support of the FEIS, and will continue to consider yard operations during Final Design.
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The house at 2326 SE Monroe St was determined eligible during the survey process conducted in accordance with the Historic, Archeological, and Cultural Resources Analysis Methods established in 2007. This Spanish Revival style house is one of the best-known examples in Milwaukie, it retains a high degree of integrity, and is considered potentially eligible on its architectural merit. SHPO concurred with the finding that it was eligible and that the effect of taking a portion of the parcel would not adversely affect the property or render it ineligible for listing because it does not significantly change its setting. The property retains the seven aspects of eligibility, as briefly described below:

- location - remains in its original location
- design - retains its Spanish Revival characteristics
- setting - retains its historic setting on the higher elevation portion of the lot facing the railroad tracks, downtown and the river
- materials - retains its stucco siding and wood windows
- workmanship - retains the original features
- feeling - retains the historic feeling of a residential neighborhood property in an older section of town
- association - continues to be associated with residential living and displays the period of its construction, associated with the stylistic trends of the era

The Section 4(f) evaluation has been updated to cite 23 CFR 774. The Final Section 4(f) Evaluation in Appendix K of the FEIS also now references the USDOT's final rule, which clarified other guidelines and procedures for Section 4(f)'s implementation. Appendix K retains a description of Section 106 findings because it is a key factor in Section 4(f) determinations, and we have provided clarification for how an effect under Section 106 relates to a use under Section 4(f).
The two pathways, one on either side of the Willamette River bridge, are not directly adjacent to a roadway, and are physically separated from the transitway by railings and other barriers. The pathways are also not adjacent to developed property. For these reasons, the code and standards cited in the comment do not directly apply.

The pathways on the bridge have developed beyond those depicted in the SDEIS from a multi-use style to a pathway that differentiates the space usage between bikes and pedestrians. The current design, supported by the local bike and pedestrian community, provides for a 14-foot pathway on each side of the bridge. The FEIS provides further details on the currently proposed design features.
Oregon

Department of Transportation
Rail Division
535 13th Street NE Suite 3
Salem, OR 97301-4179
(503) 986-4321
Fax: (503) 986-3183

File Code:
January 25, 2008

Bridget Weighart
Corridor Planning Mgr, Metro
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Portland OR 97232

Richard Boardman
Deputy Planning Director, Metro
600 NE Grand Ave
Portland OR 97232

Neil McFarlane
Executive Director Capital Projects, TriMet
710 NE Holladay St
Portland OR 97232

Re: Proposed at grade crossing of McLoughlin Blvd by Milwaukee light rail extension.

ODOT Rail Division is opposed to an at grade crossing of McLoughlin Blvd by the light rail line because of the safety risk associated with the volume, including trucks, and speed of vehicles on this highway.

In addition to the primary objection stated above, there are numerous additional safety risks associated with the particular location proposed. They include the following:

1. The proposed crossing is at the bottom of a long hill. This compounds the speed issue especially with regard to large trucks and inclement weather.
2. Visibility is severely restricted to northbound motorists in the SE quadrant.
3. Visibility is severely limited to southbound motorists because of the roadway curvature and railroad overpass north of the proposed crossing.
4. The proposed crossing traverses the highway at an acute angle which creates an extreme hazard to motorcyclists and can cause even four wheeled vehicles to fishtail while going around the curve in wet weather.
5. The angle of the crossing makes it very long and wide which in turn makes the distance between crossing gates excessive, increasing the opportunity for gate runarounds.

Form 715-9020 (9/07)  JAN 8 2008
6. There is a signaled intersection to the south of the proposed crossing which will create queues across the tracks.

This letter is a follow-up to a meeting held with Metro, TriMet and ODOT Region 1 on January 11, 2008.

Charles S Kettering, PE
Mgr Crossing Safety

Cc: Kelly Taylor, Administrator, ODOT Rail Division
    David Kim, ODOT, Area Mgr, Region 1