



City of Tigard
Tigard Business Meeting – Agenda

TIGARD CITY COUNCIL & LOCAL CONTRACT REVIEW BOARD

MEETING DATE AND TIME: June 28, 2016 - 6:30 p.m. Study Session; 7:30 p.m. Business Meeting

MEETING LOCATION: City of Tigard - Town Hall - 13125 SW Hall Blvd., Tigard, OR 97223

PUBLIC NOTICE:

Anyone wishing to speak on an agenda item should sign on the appropriate sign-up sheet(s). If no sheet is available, ask to be recognized by the Mayor at the beginning of that agenda item. Citizen Communication items are asked to be two minutes or less. Longer matters can be set for a future Agenda by contacting either the Mayor or the City Manager.

Times noted are *estimated*; it is recommended that persons interested in testifying be present by 7:15 p.m. to sign in on the testimony sign-in sheet. *Business agenda items can be heard in any order after 7:30 p.m.*

Assistive Listening Devices are available for persons with impaired hearing and should be scheduled for Council meetings by noon on the Monday prior to the Council meeting. Please call 503-718-2419, (voice) or 503-684-2772 (TDD - Telecommunications Devices for the Deaf).

Upon request, the City will also endeavor to arrange for the following services:

- Qualified sign language interpreters for persons with speech or hearing impairments; and
- Qualified bilingual interpreters.

Since these services must be scheduled with outside service providers, it is important to allow as much lead time as possible. Please notify the City of your need by 5:00 p.m. on the Thursday preceding the meeting by calling: 503-718-2410 (voice) or 503-684-2772 (TDD - Telecommunications Devices for the Deaf).

SEE ATTACHED AGENDA

VIEW LIVE VIDEO STREAMING ONLINE:

<http://live.tigard-or.gov>

CABLE VIEWERS: The regular City Council meeting is shown live on Channel 28 at 7:30 p.m. The meeting will be rebroadcast at the following times on Channel 28:

Thursday	6:00 p.m.	Sunday	11:00 a.m.
Friday	10:00 p.m.	Monday	6:00 a.m.



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6:30 PM

- STUDY SESSION

- A. COUNCIL LIAISON REPORTS **6:30 p.m. estimated time**
- B. RECEIVE ECONOMIC DEVELOPMENT UPDATE **6:45 p.m. estimated time**
- C. DISCUSS THE LEAGUE OF OREGON CITIES' PROPOSED STATE LEGISLATIVE PRIORITIES **6:55 p.m. estimated time**
- D. RECEIVE BRIEFING ON METRO EQUITABLE HOUSING PLANNING AND DEVELOPMENT GRANT APPLICATION **7:00 p.m. estimated time**

- EXECUTIVE SESSION: The Tigard City Council may go into Executive Session. If an Executive Session is called to order, the appropriate ORS citation will be announced identifying the applicable statute. All discussions are confidential and those present may disclose nothing from the Session. Representatives of the news media are allowed to attend Executive Sessions, as provided by ORS 192.660(4), but must not disclose any information discussed. No Executive Session may be held for the purpose of taking any final action or making any final decision. Executive Sessions are closed to the public.

7:30 PM

- 1. BUSINESS MEETING
 - A. Call to Order
 - B. Roll Call
 - C. Pledge of Allegiance
 - D. Call to Council and Staff for Non-Agenda Items
- 2. CITIZEN COMMUNICATION (Two Minutes or Less, Please)

- A. Follow-up to Previous Citizen Communication
- B. Citizen Communication – Sign Up Sheet
- 3. CONSENT AGENDA: (Tigard City Council and Local Contract Review Board) These items are considered routine and may be enacted in one motion without separate discussion. Anyone may request that an item be removed by motion for discussion and separate action. Motion to: **7:35 p.m. estimated time**
 - A. CONSIDER RESOLUTION WAIVING TEMPORARY SIGN PERMIT FEES FOR TIGARD LITTLE LEAGUE
 - B. LCRB - CONSIDER POLICE VEHICLE PURCHASE
 - C. LCRB - CONSIDER WATER QUALITY TESTING SERVICES CONTRACT AWARD
- *Consent Agenda - Items Removed for Separate Discussion: Any items requested to be removed from the Consent Agenda for separate discussion will be considered immediately after the Council/ City Center Development Agency has voted on those items which do not need discussion.*
- 4. CONSIDER RESOLUTION TO REAPPOINT PARK AND RECREATION ADVISORY BOARD ALTERNATE MEMBERS **7:40 p.m. estimated time**
- 5. INFORMATIONAL PUBLIC HEARING: CONSIDER RESOLUTION APPROVING BALLOT TITLE LANGUAGE FOR A SW CORRIDOR BALLOT MEASURE FOR THE NOVEMBER 2016 BALLOT **7:45 p.m. estimated time**
- 6. NON AGENDA ITEMS
- 7. EXECUTIVE SESSION: The Tigard City Council may go into Executive Session. If an Executive Session is called to order, the appropriate ORS citation will be announced identifying the applicable statute. All discussions are confidential and those present may disclose nothing from the Session. Representatives of the news media are allowed to attend Executive Sessions, as provided by ORS 192.660(4), but must not disclose any information discussed. No Executive Session may be held for the purpose of taking any final action or making any final decision. Executive Sessions are closed to the public.
- 8. ADJOURNMENT **9:00 p.m. estimated time**

AIS-2461

B.

Business Meeting

Meeting Date: 06/28/2016

Length (in minutes): 15 Minutes

Agenda Title: Economic Development Update

Submitted By: Lloyd Purdy, Community
Development

Item Type: Receive and File

Meeting Type: Council
Workshop
Mtg.

Public Hearing: No

Publication Date:

Information

ISSUE

Update on economic development project and programs for the first half of calendar year 2016.

STAFF RECOMMENDATION / ACTION REQUEST

No council action required.

KEY FACTS AND INFORMATION SUMMARY

The attached memo provides an update and highlights on seven economic development projects that comprise the majority of work of Tigard's economic development team over the last six months.

Economic Development Projects

- Hunziker Infrastructure
- Tigard's Table
- Enterprise Zone
- Connect Oregon VI Proposal
- Tigard Downtown Alliance
- Delta Planning/State of Place
- Business Retention and Expansion
- Economic Development Data

Overall, this work covers a wide range of activity, some of which is traditional. Several of these programs are more innovative in the economic development profession. Infrastructure development with developers is fairly standard practice. Developing partnerships with local firms and supporting their growth is more innovative. Cultivating community and economic

capacity in downtown Tigard and targeted sectors - like food and beverage entrepreneurs - is even more innovative. Success in this range of activity includes active partnerships with agencies like Greater Portland Inc., WorkSource and colleagues in neighboring cities.

OTHER ALTERNATIVES

N/A

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

The projects and programs outlined in this update are consistent with the City of Tigard's Comprehensive Plan Goal 9 and the 2011 Economic Opportunity Analysis.

This work also supports the City's Strategic Vision Goal 2, Objectives one and two that help "ensure development advances the vision" of a more walkable, interconnected and healthy city.

Strategic Vision Goal 2, Objective 1:

Make best use of undeveloped and underdeveloped land to increase the value of the city.

Strategic Vision Goal 2, Objective 2:

Market Tigard, build a healthy business climate that attracts, serves and employs more Tigard residents.

DATES OF PREVIOUS COUNCIL CONSIDERATION

July 21, 2015 Economic Development Update

September 8, 2015 Update from GPI

September 22, 2015 US Department of Commerce EDA grant

October 27, 2015 Enterprise Zone Expansion

November 17, 2015 Economic Development Update

March 15, 2016 Economic Development Update

Attachments

Ec Dev 2016 Q2 Update



City of Tigard
Memorandum

To: Mayor John Cook and City Council

From: Lloyd Purdy, Economic Development Manager

Re: Economic Development Update

Date: June 6, 2016

Hunziker Infrastructure Project

Hunziker Infrastructure: 30% Design

In April, engineering consultancy MSA completed 30% Design for the Hunziker Infrastructure Project. Total construction costs are estimated to be \$7 million to convert Wall Street (currently a two lane private drive) into a fully functioning public street that connects to Tech Center Drive. Design work has stopped until the EDA notifies the city about grant funding.

Hunziker Infrastructure: EDA Grant

On April 11, economic development staff responded to an EDA Seattle regional office request for clarification and greater detail beyond the information allowed in the grant submission. This request for clarification included a conference call with EDA staff in March. Tigard's response included more extensive details on 22 follow up questions from EDA's regional staff in Seattle.

On May 10, the City of Tigard received notification that the EDA grant reviewers had 13 more questions to be answered before the EDA would reconsider the proposal at an upcoming meeting. Questions focused on project impacts, budget and coordination with other Federal agencies. A full response to those 13 questions was completed by June 2.

On June 2, economic development staff responded to an EDA regional office request for further details on the Hunziker Infrastructure Project. In preparation for this response the scope, budget and timeline for the project were adjusted to align more consistently with EDA funding priorities. This includes a simplified project with a direct connection to near term private-sector investments. The updated project proposed to the EDA ends at the property line of the "Trammell Crow" site and covers \$4.5 million in infrastructure expenses with local match and EDA funding. Notification from the EDA is expected in July 2016.

Hunziker Infrastructure: ROW

EDA staff reaffirmed their preference that property values not be included as in-kind match, nor should federal funding or matching funds be used to acquire property for the Hunziker Infrastructure Project. This change in grant criteria required a change in the scope, budget and grant proposal. It also requires acquiring right-of-way with alternate funds.

Three property appraisals were completed to develop estimates for right-of-way acquisition. These appraisals were shared with council in executive session on May 17. ROW may be a reimbursement expense for the funding committed to this project from the State of Oregon. Spending this funding on ROW reduces the amount of state funding dedicated to construction and as matching funds for the EDA grant.

Public/Private Partnership

Trammell Crow and the Fields Estate removed the privately owned rail spur in April. Trammell Crow has been an active partner in the 30% Design phase. As Trammell Crow moves forward with a development timeline and the city gains clarity regarding project funding, a development agreement will be used to outline roles and responsibilities for the partnership. Developer Holland Partners is no longer in negotiation with the Fields Estate for the 22 acres on the mixed-use employment zoned Hunziker Hillside.

Tigard's Table: Cultivating Tigard's Food and Beverage Entrepreneurs

The food and beverage entrepreneurs that Tigard's economic development team bring together at a recurring discussion group called "Tigard's Table" met to talk about food carts and the idea of a new food and beverage inspired event called "A Taste of Tigard." A project leadership team has been invited to a follow-up meeting in June to begin planning this event. The overall idea is to focus attention on food and beverage entrepreneurs with a connection to Tigard. In concept, the event would introduce residents to food and beverage entrepreneurs who operate in Tigard, live in Tigard, or have a strong connection to Tigard. The format would be a street festival style event dedicated strictly to food and beverage products. Residents would be invited to take a "tasting tour" of products from Tigard based firms like Zuniga Salsa, Baily's Burgers, Koi Fusion, Bon Baguette, Dad's Kitchen, McClesky Cellars, and Cascade Organics. These firms are just seven examples of existing Tigard food and beverage firms/entrepreneurs from different stages of the local food industry.

Tigard's economic development team is developing a business model for a food and beverage business incubator that includes commercial kitchen space for producers and micro restaurant space for restaurateurs. The economic development team is calling this "Project Spork." The preliminary business plan will include use of space and program cost/revenue alternatives.

Tigard's economic development team is also cooking up one more project focused on food and beverage entrepreneurship. Given the city's existing mix of food and beverage entrepreneurs, in 2016, it will be time to award the "Golden Fork" award recognizing excellence in entrepreneurship for this business sector. The idea is to invite nominations for the Golden Fork award from the community. Applications will be reviewed by the Tigard's Table team.

Enterprise Zone

No activity. One firm has completed their application but has not yet submitted.

Connect Oregon VI Proposal

This request for funding for the Tigard Street Trail continues to receive high marks at each level of review. The Mayor has been instrumental in this process. An announcement from ODOT is expected in August.

Tigard Downtown Alliance

The Tigard Downtown Alliance hosted the third annual Downtown Tigard Art Walk in May. A new piece of artwork was installed on private property (12405 Main Street) just before the event. The installation of this new sculpture was coordinated by the TDA; pairing a willing artist loaning a piece of sculpture to a willing property owner as host. Also new this year, the Downtown Art Walk included artists on the sidewalk with art for sale and art being created on the first Saturday of the event. Again this year, the pop-up art gallery was a core component of the Downtown Art Walk. The pop-up gallery, self-guided tour, and sidewalk art sale will all be considered as components in next year's Downtown Art Walk.

On April 29, the TDA hosted a very successful downtown walking tour for bankers, brokers, builders and business owners. A large group of more than 30 downtown stakeholders participated. This tour introduced the changes that have taken place downtown to leaders in real estate and development from around the region.

The TDA's preliminary application for an AmeriCorps staffer was well received. The TDA has been invited to participate in the process and interview as a candidate location. This first round of review will take place in June/July. An AmeriCorps staffer for the TDA could start as early as September.

In June, the TDA will host the third annual bus trip. This year the TDA is taking downtown stakeholders and friends of downtown to downtown Hillsboro. Of particular interest in downtown Hillsboro:

- A completed transit-oriented development project
- A transforming Main Street with an interesting retail mix
- A civic plaza used for events

Delta Planning & State of Place

Every year the economic development team produces data and analysis that help communicate general economic activity in Tigard. Since January, staff have been working with four graduate students from Portland State University and a consultant to develop metrics that can be used to put a dollar value on public and private sector investment and enhancements in the Tigard Triangle.

The four graduate students from Delta Planning presented their project and findings to council on May 24. The final report from State of Place will be completed by the end of June. This will include an analysis that shows how retail rents, office rents, sales and housing prices in the Tigard Triangle change given specific investments and changes in the State of Place Index Score. The State of Place Index Score for the Tigard Triangle is 33. For comparison purposes, the score for Main Street

Tigard is 66. In May, the graduate student team from Delta Planning gave a presentation to City Council. On June 6, they submitted their final written report.

Business Retention and Expansion

On March 22, the economic development team met with Tigard business owners for the first quarter's business roundtable at City Hall. This lunch meeting focused on SBIR funding (Small Business Innovation Research). The federal SBIR program supports small businesses by partially funding the initial stages of their business growth while bringing their technology or ideas to market. The program provides almost \$3 billion annually to small businesses throughout the United States. Oregon businesses typically compete for and receive an average of \$45 million in these innovation funds each year. One Tigard firm, AYUMETRIX, is now pursuing SBIR funding.

On June 15, business leaders from manufacturing firms in Tigard were invited to tour the PCC Sylvania campus education hub and MakerSpace. This is the first time the campus has opened up a tour opportunity to businesses with a city partner as cohort. Working with PCC staff, Tigard's economic development team extended the invitation to both Beaverton and Tualatin. This tour was an opportunity for local firms to learn about PCC Sylvania's workforce development training and programs for employees.

Data

Graphics illustrating Tigard's four primary business sectors have been updated with the most currently available data from the Oregon Employment Department. These graphics segment the local economy into four categories -- Management and Professional Services, Administrative Services, Traded Sector and Supply Chain and Consumer Related.

The [graphics](#) use these four categories to show:

- Number of firms in each sector
- Number of employees in each sector
- Average annual salary in each sector

[Supplemental graphics](#) show average commuting distance of residents in the workforce, commuting trends and growth in employment compared to other cities.

There has been no substantive change in the trends documented by these graphics since they were first created two years ago.

AIS-2751

C.

Business Meeting

Meeting Date: 06/28/2016

Length (in minutes): 10 Minutes

Agenda Title: Discuss the League of Oregon Cities' Proposed State Legislative Priorities

Prepared For: Kent Wyatt, City Management

Submitted By: Kent Wyatt, City Management

Item Type: Update, Discussion, Direct Staff

Meeting Type: Council Business Meeting - Main

Public Hearing: No

Publication Date:

Information

ISSUE

Discuss the proposed state legislative priorities from the League of Oregon Cities.

STAFF RECOMMENDATION / ACTION REQUEST

Develop a consensus opinion on the top four legislative priorities for the 2017 state legislative session.

KEY FACTS AND INFORMATION SUMMARY

The Oregon State legislature is scheduled to convene on February 1, 2017. The League of Oregon Cities (LOC) is requesting city participation and input in creating a set of specific legislative targets that reflect the issues of greatest importance to cities. The LOC has identified 29 legislative objectives that span a variety of issues. Cities are asked to submit their top four legislative priorities

Tigard's state legislative priorities for the 2016 session included: affordable housing, property tax reform, transportation funding, and local control related to marijuana dispensaries.

Later in the year, city staff will provide a draft state legislative agenda for the 2017 session. The draft agenda may overlap with the legislative issues brought forth by the League of Oregon Cities.

OTHER ALTERNATIVES

Submit input to the LOC with less than four legislative priorities.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

N/A

DATES OF PREVIOUS COUNCIL CONSIDERATION

N/A

Attachments

LOC Legislative Priorities

Tigard State Legislative Agenda - 2016



1201 Court Street NE, Suite 200 • Salem, Oregon 97301
(503) 588-6550 • (800) 452-0338 • Fax: (503) 399-4863
www.orcities.org

June 6, 2016

Dear Chief Administrative Official:

For the past three months, eight policy committees have been working to identify and propose specific actions as part of the League's effort to develop a pro-active legislative agenda for the 2017 session. They have identified 29 legislative objectives as set forth in the enclosed ballot and legislative recommendation materials. These objectives span a variety of issues and differ in the potential resources required to seek their achievement. Therefore, it is desirable to prioritize them in order to ensure that efforts are focused where they are most needed.

Each city is being asked to review the recommendations of the policy committees and provide input to the LOC Board of Directors as it prepares to adopt the League's 2017 legislative agenda. After your city council has had the opportunity to review the 29 proposals and discuss them with your staff, please return the enclosed ballot indicating the top four issues that your city council would like to see the League focus on in the 2017 session. **The deadline for response is July 22, 2016.** The board of directors will then review the results of this survey of member cities, along with the recommendations of the policy committees, and determine the League's 2017 legislative agenda.

Your city's participation and input will assist the board in creating a focused set of specific legislative targets that reflect the issues of greatest importance to cities. Thank you for your involvement, and thanks to those among you who gave many hours of time and expertise in developing these proposals.

Do not hesitate to contact me or Craig Honeyman, Legislative Director, with questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J. McCauley". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Michael J. McCauley
Executive Director

INSTRUCTIONS

1. Each city should submit one form that reflects the consensus opinion of its city council on the **top four** legislative priorities for 2017.
2. Simply place an **X** in the space to the left of the city's top four legislative proposals (last pages of the packet).
3. The top four do not need to be prioritized.
4. Return by **July 22nd** via mail, fax or e-mail to:

Paul Aljets
League of Oregon Cities
1201 Court St. NE, Suite 200
Salem, OR 97301
Fax – (503) 399-4863
paljets@orcities.org

Thank you for your participation.

City of: _____

Please mark **4** boxes with an **X** that reflect the top 4 issues that your city recommends be the priorities for the League's 2017 legislative agenda.

Legislation

Community Development	
A. Needed Housing Assistance Program	<input type="checkbox"/>
B. Natural Hazard Land Use Reform	<input type="checkbox"/>
C. DOGAMI Disaster Mapping	<input type="checkbox"/>
D. Floodplain Technical Assistance	<input type="checkbox"/>
Energy	
E. Green Energy Technology Requirement	<input type="checkbox"/>
F. Funding Public Energy Projects	<input type="checkbox"/>
G. Updates to Oregon Energy Code	<input type="checkbox"/>
Finance and Taxation	
H. Property Tax Reform - Market Value / Local Control	<input type="checkbox"/>
I. Property Tax Reform - Fairness and Equity	<input type="checkbox"/>
J. Local Lodging Tax	<input type="checkbox"/>
K. Nonprofit Property Tax Exemption	<input type="checkbox"/>
L. Marijuana and Vaping Taxes	<input type="checkbox"/>
General Government	
M. Restore Recreational Immunity	<input type="checkbox"/>
N. Increase Local Liquor Fees	<input type="checkbox"/>
O. Marijuana Legalization Implementation	<input type="checkbox"/>
P. Mental Health Investments	<input type="checkbox"/>
Q. Qualification Based Selection	<input type="checkbox"/>
Human Resources	
R. Subsidy for Retiree Health Insurance Repeal	<input type="checkbox"/>
S. PERS Reform	<input type="checkbox"/>
T. Arbitration Reform	<input type="checkbox"/>
U. Veterans Preference Clarifications	<input type="checkbox"/>
Telecommunications	
V. Rights of Way	<input type="checkbox"/>
W. Franchise Fees	<input type="checkbox"/>
X. 9-1-1 Emergency Communications	<input type="checkbox"/>
Y. Technology Funding	<input type="checkbox"/>
Transportation	
Z. Transportation Funding and Policy Package	<input type="checkbox"/>
Water/Wastewater	
AA. Funding Water System Resilience	<input type="checkbox"/>
BB. Enhanced Prescription Drug Take-Back	<input type="checkbox"/>
CC. Water Supply Development Fund	<input type="checkbox"/>

Community Development

Legislation	Background
<p>A. <u>Needed Housing Assistance Program</u></p> <p>Create state grants and technical assistance to cities working to develop housing development programs directed at new or innovative means of providing housing solutions for low-income or senior populations.</p>	<p>Cities are looking for new ways to serve the needs of a variety of people needing housing options and putting more resources toward housing projects. However, there is a need for state resources and assistance in implementing these programs. Funds that cities could access could be used to assist in land purchases for leasing for long-term low income housing, incentives for creating single story housing for seniors, tiny housing development, and planned developments that serve a range of incomes. Technical assistance to other cities should help a city determine what programs or planning options are available tools to help cities reach the goals set in the comprehensive plan.</p>
<p>B. <u>Natural Hazard Land Use Reform</u></p> <p>Create process for communities to move the UGB from an identified hazard area to resource lands and planning for replacing significant urban areas lost after a natural disaster.</p>	<p>As science has better located some hazards areas and as regulations impact the expected development of other areas, cities need to find ways to respond more efficiently to address long-term planning for development. This requires a simplification of the process for changing the location of development, including adding new areas to the UGB, to account for lost development capacity. There also needs to be a streamlined process for a city to identify areas of new development should a disaster remove a large portion of the buildable land supply if a disaster should strike.</p>
<p>C. <u>DOGAMI Disaster Mapping</u></p> <p>Increase funding for DOGAMI to complete comprehensive disaster mapping of cities, including landslide and floodplain risk identification, and natural hazard related evacuation planning for additional potential risks such as tsunami or wildfire inundation.</p>	<p>The Oregon Department of Geology and Mineral Industries (DOGAMI) provides a number of technical resources to cities to identify hazards that could impact development. The department is also an integral partner in creating plans for the emergency response for many disasters that could occur in the state. Increasing funds for comprehensive maps will help with long-term planning for hazard mitigation, resilience, and survival.</p>
<p>D. <u>Floodplain Technical Assistance</u></p> <p>Provide DLCD funding for technical assistance to cities implementing required changes to floodplain development management practices from FEMA.</p>	<p>Because of the recent release of the Biological Opinion from the National Oceanic and Atmospheric Administration Fisheries Service related to the National Flood Insurance Program's potential to impact endangered species, there is a need for cities to receive significant assistance in implementing any changes required by the Federal Emergency Management Agency. As the federal process moves forward, the state must provide resources to help cities update comprehensive plans and development codes. This issue will have a number of impacts and assistance in the form of model codes, staff resources, grants, and other expertise will be necessary for cities trying to implement any changes or additional work.</p>

Energy

Legislation	Background
<p data-bbox="107 201 594 268"><u>E. Changes to 1.5 Percent Green Energy Technology Requirement</u></p> <p data-bbox="107 306 669 478">Advance legislation to statutorily modify the existing “1.5 percent green energy technology for public buildings” requirement to allow for alternative investment options such as offsite solar or community solar projects.</p>	<p data-bbox="714 201 1484 445">Oregon statute currently requires public contracting agencies to invest 1.5% of the total contract price for new construction or major renovation of certain public buildings on solar or geothermal technology. The requirement allows for offsite technology, but only if the energy is directly transmitted back to the public building site and is more cost-effective than onsite installation.</p> <p data-bbox="714 483 1503 835">Removing the requirement that an offsite project be directly connected to the public building project could result in increased flexibility for local governments to invest in solar projects that are more cost-effective and provide for increased solar energy generation. In addition, the League will work to allow 1.5 percent funds to be invested in alternative projects that provide a greater economic or social return on investment. As an example, a city could use the funds on a community solar project to benefit low-income residents rather than being required to invest in solar generation at the site of the public building project.</p>
<p data-bbox="107 877 558 907"><u>F. Funding for Public Energy Projects</u></p> <p data-bbox="107 945 675 1117">Support enhanced incentives for public energy projects including grants for technical assistance, feasibility studies and resource recovery projects for energy and fuel generation.</p>	<p data-bbox="714 877 1500 1549">There are programs that exist in Oregon for the purpose of incentivizing energy projects including renewable energy generation, alternative fuel vehicles, and energy efficiency. Programs such as the Business Energy Tax Credit (BETC), which was discontinued in 2014, and the State Energy Loan Program have been important tools for incentivizing energy projects for local governments. However, as a result of scrutiny over the administration of these incentives including private loan defaults, these programs are either no longer available, such is the case with the BETC program, or are at risk of being discontinued. It is critical for municipalities to have ongoing access to incentive opportunities as energy projects can be difficult to pencil-out and even more difficult for smaller communities to finance. The state of Oregon should take into consideration that loans for public energy projects, including cities, are lower-risk and should not be penalized in light of recent scrutiny. In addition, investments in these projects often result in environmental, social and economic benefits including long-term savings for taxpayers and reductions in greenhouse gas emissions.</p> <p data-bbox="714 1587 1477 1864">The League will work to enhance funding, including grants for technical assistance and feasibility studies for communities that currently do not have access to resources. The League will also advocate for incentives for energy and fuel generation projects. Examples of projects that warrant funding incentives include methane capture for fuel or energy generation, investments in community solar projects, renewable energy generation, and energy efficiency improvements.</p>

Energy (Continued)

Legislation	Background
<p data-bbox="103 233 704 268">G. <u>Require Updates to Oregon Energy Code</u></p> <p data-bbox="103 304 704 514">Require the Oregon Building Codes Division (BCD) to engage in more frequent review of the state’s energy code to reduce greenhouse gas reductions and ensure that Oregonians can more affordably and efficiently heat their homes and businesses.</p>	<p data-bbox="716 233 1528 798">Oregon’s statewide energy code for commercial and residential buildings is an important tool for achieving greenhouse gas reductions through decreased energy consumption while helping to ensure that Oregonians are able to more efficiently and affordably heat their homes and businesses. Federal law requires each state to certify that their state energy code is equivalent to federal model energy codes. While Oregon was once a leader in energy code adoption and implementation, the state is now in a position of falling behind the federal code. This is due, in large part, to a decision made by the Oregon Building Codes Division in 2013 which changed the code cycle from a three-year update to a six-year update. Major code changes, including adoption of national codes, will now occur every six years with minor changes occurring every three years. This change will impact Oregon’s ability to keep pace with federal standards and new technologies in energy efficiency.</p> <p data-bbox="716 835 1528 1291">The League will work to support efforts to align new construction building codes with the state’s climate goal timelines. In addition, the League will support efforts to establish a periodic review schedule to ensure that Oregon more frequently updates the state energy code in order to reflect federal code requirements. Also, the League will encourage the state to set specific targets for increased energy efficiency in residential and commercial building construction with specific goals for increasing energy efficiency standards for affordable housing projects and increasing use of net-zero and passive house building requirements. Finally, the League will work to require BCD to make regular reports back to the legislature to update on energy code implementation and goals.</p>

Finance and Tax

Legislation	Background
<p data-bbox="107 201 691 264">H. <u>Property Tax Reform – Market Value / Local Control</u></p> <p data-bbox="107 306 699 369">A legislative constitutional referral to reform the property tax system:</p> <ul data-bbox="155 411 760 621" style="list-style-type: none">a) to achieve equity, transitions to a market based property tax valuation system; andb) to restore choice, allows local voters to adopt tax levies and establish tax rates outside of current constitutional limits in their taxing jurisdictions.	<p data-bbox="799 201 1531 695">Property taxes are regulated largely by Measure 5 (1990) and Measure 50 (1997), as provided in the Oregon Constitution. Measure 50 established a new method for assessing property, discounting the assessment at 10 percent of the real market value and calling this assessed value. Assessed value is capped at an annual growth limit of 3 percent. As a state total, due to the limits and market changes, the gap between real market value and assessed value has now grown to nearly 25 percent over the past 20 years. This gap varies widely on a property by property basis, creating considerable property tax inequities for properties that sell for similar prices in a city. In short, Oregon property taxes have become disassociated from real market value and the result is considerable inequity.</p> <p data-bbox="799 737 1531 1115">For FY 2014-15, 60 percent of cities, 97 percent of counties, and 89 percent of school districts had some compression. This means that the Measure 5 caps of \$5 per \$1000 for education and \$10 per \$1000 for general government on real market value have been exceeded in most taxing jurisdictions. The caps are over 25 years old and were set low as voters were anticipating a sales tax to be coupled with it. Voters can no longer vote for the services they desire due to these caps. With looming PERS costs increases, paying for services with the present restrictions will become very difficult in some cities.</p>
<p data-bbox="107 1161 672 1192">I. <u>Property Tax Reform – Fairness and Equity</u></p> <p data-bbox="155 1234 748 1335">A bill that pursues statutory modifications to the existing property tax system that enhances the fairness and adequacy of the current system.</p>	<p data-bbox="799 1161 1531 1476">There are some adjustments to the property tax process and calculations that can be done statutorily. These include altering the changed property ratio statute and the statutory discount given to property owners who pay their taxes by November 15th. New property is added to the tax rolls using a county-wide ratio (assessed value to real market value) for determining the discount to apply to the real market value and that could be changed statutorily to a city-wide ratio in taxing districts who elect the change.</p>

Finance and Tax (Continued)

Legislation	Background
<p data-bbox="102 199 370 231">J. <u>Local Lodging Tax</u></p> <p data-bbox="102 268 690 300">A lodging tax bill, the outcome of which, would:</p> <ul data-bbox="154 338 743 688" style="list-style-type: none"><li data-bbox="154 338 743 478">a) Provide jurisdictions greater flexibility to spend local lodging tax revenue to plan for and provide services and infrastructure related to tourism;<li data-bbox="154 485 743 625">b) Reduce or eliminate the required reimbursement charge that a lodging tax collector is allowed to retain for filing a local lodging tax return; and<li data-bbox="154 632 743 688">c) Improve efficiency and collection of local lodging taxes in cooperation with the state.	<p data-bbox="797 199 1549 724">State law restricts how local lodging tax revenues may be expended. Post 2003, any new taxes or any tax increase requires a 70 percent revenue dedication to tourism promotion or tourism-related facilities. In addition, state statute provides that cities may not lower the actual percentage of lodging tax revenues that were dedicated to tourism prior to 2003. This means that cities have varied percentages of restricted local lodging taxes revenues. These numbers are arbitrary as they were set based on circumstances in 2003 that have often greatly changed. In addition, the legislative history shows that the legislature intended to provide some revenue flexibility and provide that certain infrastructure (roads, sewer lines, etc.) would qualify as tourism-related but the statutes need revision and clarification.</p> <p data-bbox="797 766 1549 1144">State law requires local governments to provide a 5 percent collector reimbursement charge if they impose a new lodging tax or tax increase after January 1, 2001. This is a deduction from the taxes that would otherwise be due. The state also provides a 5 percent collector reimbursement charge for state lodging taxes. In addition, local governments that had a reimbursement charge, must continue it. Thus, cities have very different reimbursement requirements—some are at zero, others are at 5 percent, and some are in between. When coupled with the state deduction, the deduction seems too generous.</p> <p data-bbox="797 1186 1549 1543">The Oregon Department of Revenue now collects state lodging taxes throughout the state and could collect and enforce local lodging taxes at the same time if given statutory authority. Local governments could then enter into voluntary agreements with the state to delegate the collection. This option could make collection much more efficient and cost-effective for some local governments. In addition, cities continue to struggle with collections and auditing, particularly from online companies and private home rentals (through Airbnb, etc.) and this area of the law could be improved.</p>

Finance and Tax (Continued)

Legislation	Background
<p data-bbox="97 191 786 231">K. <u>Nonprofit Property Tax Exemption</u></p> <p data-bbox="97 262 786 478">Clarify and reform the statutory property tax exemption provided to nonprofit entities to address cost-benefit concerns for the continued full exemption in light of cost of city services provided to nonprofits and the changing services and business models of some nonprofit entity types.</p>	<p data-bbox="786 191 1550 514">Nonprofit organizations that are charitable, literary, benevolent or scientific are provided a property tax exemption that will cost more than \$194 million in the 2015-17 biennium. In addition, exemptions for the property of nonprofit religious organizations costs more than \$113 million for the biennium. For many cities, much of the city is exempt from property taxes due to the public property exemption and these nonprofit exemptions. This includes hospitals, nursing homes, etc.</p> <p data-bbox="786 546 1550 903">The Legislature has formed a work group to look at the nonprofit property tax exemption issue as the nature and number of nonprofits is changing and the administration of the exemption has become complex for county tax assessors. Nonprofit entities require significant services, including transportation, water, sewer, police, fire, etc. Thus, the legislature is looking at property taxes more as a service tax and considering how the full exemption could be adjusted to have nonprofits pay for their fair share of costs of services or otherwise meet a benefit test for continuing an exemption.</p>
<p data-bbox="97 940 786 980">L. <u>Marijuana and Vaping Taxes</u></p> <p data-bbox="97 1012 786 1186">Defend against restrictions and preemptions regarding local marijuana and vaping taxes and advocate for appropriate state shared revenue levels and distribution formulas for state marijuana taxes and potential vaping taxes.</p>	<p data-bbox="786 940 1550 1186">There are no revenue use restrictions on local marijuana taxes, but the local marijuana tax rate is capped at 3 percent. There are no restrictions on local governments imposing a vaping tax. The state has not imposed a tax on vaping products to date but is considering a tax. Often when the state imposes a tax (for example, cigarette or liquor), the state preempts local governments from also imposing a tax.</p> <p data-bbox="786 1218 1550 1575">10 percent of state marijuana taxes will be distributed to cities after state administrative costs. Distributions will be made per capita for revenues received prior to July 1, 2017. After July 1, they will be distributed based on the number of the various marijuana licenses issued in a city. Cities that prohibit establishments for recreational marijuana producers, processors, wholesalers or retailers will receive no state shared revenue. Likewise, cities that prohibit a medical marijuana grow site or facility will receive no state shared revenue.</p>

General Government

Legislation	Background
<p data-bbox="115 205 540 233">M. <u>Restore Recreational Immunity</u></p> <p data-bbox="115 275 760 373">Cities should enjoy protection from unreasonable litigation when offering recreational opportunities to the public.</p>	<p data-bbox="808 205 1511 409">ORS 105.682 grants that a land owner is not liable for any personal injury, death or property damage that arises out of the use of their land for recreational purposes as long as no fee is charged in order to access that property. This statute allows cities to operate parks and trails without fear of lawsuit.</p> <p data-bbox="808 451 1503 655">However, in the recently decided Oregon Supreme Court case, <i>Johnson v Gibson</i>, It was held that even though the landowner may be immune from liability, their employees are not. As a result, two employees of the City of Portland were found liable for injuries sustained by a jogger in a park, employees who are indemnified by their employer.</p> <p data-bbox="808 697 1503 871">The practical effect of this ruling is that the immunity previously enjoyed by cities that allowed for robust park development have been eroded to the point of being non-existent. This priority directs LOC staff to seek to amend the ORS 105.682 to restore that immunity.</p>
<p data-bbox="115 917 472 945">N. <u>Increase Local Liquor Fees</u></p> <p data-bbox="115 987 743 1085">Cities play an important role in the review and investigation of liquor license applicants and should be able to recoup costs associated with that role.</p>	<p data-bbox="808 917 1511 1121">ORS 471.166 allows cities to adopt fees that are “reasonable and necessary to pay expenses” associated the review and investigation of liquor license applicants. However, the same statute limits the amounts of those fees to between \$25 and \$100 depending on the license or approval being sought by the applicant.</p> <p data-bbox="808 1163 1490 1297">This priority is to pursue changes to this statute that allow cities to recoup the actual costs associated with performing their role in the liquor licensing process and allowing for periodic increases.</p>

General Government (Continued)

Legislation	Background
<p><u>O. Continue Marijuana Legalization Implementation</u></p> <p>Allow for civil enforcement of marijuana laws. Ensure equitable distribution of marijuana shared revenues. Eliminate limitations on shared revenue use.</p>	<p>One of the promises made by marijuana legalization advocates is that illicit sales and production of marijuana would shift into a legalized and regulated market. This has occurred to a large extent but many producers and retailers continue to seek the financial benefits or participation in the marijuana industry while avoiding the inconvenience of its regulatory framework. This priority seeks legislation that gives the Oregon Liquor Control Commission (OLCC) the same civil and administrative authority to prevent unlicensed sales and production of marijuana as it has in regards to liquor.</p> <p>Beginning in 2017, state shared revenue from marijuana will be distributed to cities based in the number of OLCC licensed commercial marijuana entities exist in their jurisdiction. This priority is to alter that arrangement so that is it distributed on a per capita basis to ensure equitable distribution among cities that are incurring costs.</p> <p>Measure 91 required that money distributed by the state to cities be used exclusively for costs associated with marijuana legalization. Tracking a dollar though a city's general fund and determining if a service was related to marijuana is inefficient if not impossible, and is not imposed for the receipt of liquor revenue. This priority is to advocate for legislation that removes this burden.</p>
<p><u>P. Protect Mental Health Investments Made in 2015</u></p> <p>Oregon made significant and strategic investments in protecting and caring for the mentally ill in 2015 that should be maintained.</p>	<p>The Legislature increased access to mental health care and expanded existing, proven programs designed to de-escalate police contacts with the mentally ill. Those programs could be vulnerable in a difficult budget environment made challenging by increased PERS rates.</p> <p>This priority is defensive in nature and seeks to preserve investments that are improving the lives of mentally ill Oregonians.</p>
<p><u>Q. Remove Qualification Based Selection Mandate</u></p> <p>Cities should be allowed to consider cost when making initial contract award decisions when hiring architects and engineers.</p>	<p>Cities are currently required to use a procurement method that prevents the consideration of cost when contracting with architects and engineers for public improvements. Instead, cities must base their initial selection for these services based solely on qualifications and can only negotiate the price after an initial selection is made.</p> <p>This mandate is not a cost effective means for procuring services and is poor stewardship of the public's dollars. This priority is to seek the removal of this mandate.</p>

Human Resources

Legislation	Background
<p data-bbox="107 239 732 304">R. <u>Repeal Requirement to Subsidize Retiree Health Insurance</u></p> <p data-bbox="107 346 768 447">Public employers should not subsidize the health insurance of former employees when reasonable, cost competitive options exist.</p>	<p data-bbox="799 239 1502 695">ORS 243.303 mandates that local governments provide retirees with access to health insurance and requires that they be placed in the same risk pool as active employees. As retirees are approximately 2.5 times more expensive to insure than active employees this mandate results in employers and current employees subsidizing the health insurance costs of former employees. This subsidization, according to the Government Accounting Standards Board, must be shown on an audit as long term liability, thus creating an inaccurate perception of a city's financial condition. Further, this requirement could be described as anachronistic as individuals are now able to purchase health insurance under the Affordable Care Act.</p> <p data-bbox="799 737 1456 802">This priority is to eliminate ORS 243.303 from Oregon's laws.</p>
<p data-bbox="107 844 302 875">S. <u>PERS Reform</u></p> <p data-bbox="107 917 735 1018">PERS benefits should be adjusted where legally allowable and investments should be maximized to ensure a sustainable and adequate pension system.</p>	<p data-bbox="799 844 1487 1018">The PERS unfunded liability stands at \$22 billion and employer rates are anticipated to approach 30 percent of payroll in the coming biennium. Rates are expected to remain at that level for the next twenty years. This is not sustainable.</p> <p data-bbox="799 1060 1511 1266">This priority is to seek any equitable changes to benefits that will reduce employer rates while not pursuing options that are legally tenuous or counterproductive. Additionally, changes are to be sought to the investment portfolio that will maximize returns through improved risk management and efficiencies.</p>

Human Resources (Continued)

Legislation	Background
<p>T. <u>Arbitration Changes</u></p> <p>Public employers should have greater influence over the disciplining of their employees.</p>	<p>Currently under the Public Employee Collective Bargaining Act, contested employee discipline matters must be submitted to an outside arbitrator for adjudication. Decisions by arbitrators are binding unless the conduct was a violation of public policy as defined by the state, there was serious criminal conduct or an egregious inappropriate use of force.</p> <p>This priority is to seek the following changes to the statute:</p> <ul style="list-style-type: none">• Arbitrator decisions should also comply with local policies;• Decisions should comply with policies related to any inappropriate use of force a;• Arbitrator decisions should recognize all criminal misconduct related to employment not just “serious”;• Employer disciplinary decisions as it regards employees who are supervisors as defined by the EEOC and BOLI should be given more weight.
<p>U. <u>Veterans Preference Clarifications</u></p> <p>Requirements that veterans be given preference in public sector hiring should be clear and unambiguous for the benefit of veterans and employers.</p>	<p>The State of Oregon requires and the League agrees that honorably discharged veterans deserve special consideration in public sector hiring. However, statutes describing how this is to be accomplished are unclear and ambiguous. Vague statutes do not serve the interests of employers or veterans.</p> <p>This priority seeks a clear definition of “preference” in the statute, ensure that recently separated veterans receive the consideration necessary for them to successfully enter the workforce and establishes clarity as to when the preference is to be applied.</p>

Telecommunications, Cable & Broadband

Legislation	Background
<p>V. <u>Rights of Way</u></p> <p>Oppose legislation that preempts local authority to manage public rights-of-way and receive compensation for their use.</p>	<p>In its commitment to the protection of Home Rule and local control, the League consistently opposes restrictions on the rights of cities to manage their own affairs. From time to time, in the context of franchise fee and rights-of-way management authority discussions, proposals to restriction to this authority arise. These include a statewide franchise policy and revenue collection system as well as limiting the ability of cities to charge fees of other government entities. This is contrary to local government management authority, the ability to enter into agreements with service providers either by agreement/contract or ordinance and to derive revenues from business fees charged to users of public rights-of-way.</p>
<p>W. <u>Franchise Fees</u></p> <p>To ensure market fairness and equity, prepare legislation for possible introduction repealing ORS 221.515 (HB 2455 -7 in 2013, and HB 2172 in 2015) to remove franchise fee rate and revenue restrictions which currently apply to incumbent local exchange carriers but not to competitive local exchange carriers.</p>	<p>Oregon statute currently contains a discrepancy between how cities collect franchise fees from incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs). ORS 221.515 limits cities collecting franchise fees from ILECs to a maximum of 7 percent of revenues derived from dial-up services, which represents only a portion of ILEC total revenues due to the addition of a broader array of customer services. There is no such rate cap or revenue restriction on CLECs, hence the discrepancy. In the past the League has worked with CLECs to “level the playing field.” Repeal of ORS 221.515 would accomplish that.</p>
<p>X. <u>9-1-1 Emergency Communications</u></p> <p>Support legislation enhancing the effectiveness of the state’s emergency communications system through an increase in the 9-1-1 tax and/or a prohibition of legislative “sweeps” from accounts managed by the Oregon Office of Emergency Management.</p>	<p>The League worked with other stakeholder groups in 2013 to extend the sunset date on the statewide 9-1-1 emergency communications tax to January 1, 2022 (HB 3317). In 2014, the League also worked to pass legislation including prepaid cellular devices and services under the 9-1-1 tax (HB 4055). As concerns mount with regard to disaster preparedness and recovery and as new upgrades to communications technology becomes available, it is apparent that state and local governments do not have the resources necessary to address challenges or take advantage of opportunities. Additional funding is needed and the practice of periodically sweeping funds out of the state’s emergency management account for other uses should cease. It is worthy of note that the practice of “sweeps” disqualifies the state from receiving federal funds for emergency communications. It is unknown how many federal dollars have been foregone as a result of this policy.</p>

Telecommunications, Cable & Broadband (Continued)

Legislation	Background
<p>Y. <u>Technology Funding</u></p> <p>Seek additional funding to assist for cities in:</p> <ul style="list-style-type: none"> • Increasing high speed broadband deployment and close the digital divide. • Purchasing upgraded emergency management communications equipment. • Providing local match money for federal funding programs, such as high speed broadband deployment. 	<p>The deployment of broadband throughout the state of Oregon is critical to economic development, education, health and the ability of citizens to link with their governments. Additional funding, from various sources, including the state and federal government, needs to be allocated for this purpose. The need becomes even more acute when consideration is given to the certainty of a major seismic event. Often federal assistance comes with the requirement of a state or local match which is problematical for cities. A state mechanism for providing matching fund assistance would be helpful to those communities seeking to take control of their broadband destiny.</p>

Transportation

Legislation

Z. Comprehensive, Multi-modal Transportation Funding and Policy Package

The League of Oregon Cities proposes that transportation infrastructure be raised to the same level of importance as other utilities, and be funded at a level capable of maintaining appropriate standards of operation and service. Therefore, the League will help draft and advocate for a comprehensive, inter-modal and statewide transportation funding and policy package that:

1. Provides a significant increase in resources available for the preservation and maintenance of city streets by:
 - Substantially increasing the state gas tax and licensing and registration fees.
 - Indexing the state gas tax.
 - Continuing efforts to identify and implement alternative funding mechanisms (VMT, tolling, public-private partnerships, etc.).
 - Disaster resilience and seismic upgrades for all transportation modes.
 - The completion of transportation projects begun but not yet completed due to lack of funding or changes in funding criteria.
 - Providing additional funding for voluntary jurisdictional transfer.
 - Funding transportation enhancements such as bike-ped facilities.
 - Increasing funding for the statutory Special City Allotment program while maintaining the 50%-50% ODOT/city split.
 - Repealing the referral requirement (2009 Jobs and Transportation Act) on cities seeking to create/increase local gas tax.

2. Addresses statewide needs relating to intermodal transportation through:
 - Additional funding for transit operations and capital projects.
 - Additional funding for freight rail capital projects and operations (*ConnectOregon*, short-line rail and transload facilities).

Background

Maintenance and preservation needs have outpaced the resources available for streets, roads and highways. In its March, 2016 Infrastructure Survey Report the League identifies a \$3.7 billion capital need for highway and non-highway transportation projects (\$2.6 billion highway / \$1.1 billion non-highway). In addition, the report shows, for the 120 cities that participated, an aggregated street budget shortfall for operations and maintenance of approximately \$217 million per year. Safety and disaster resilience were cited as major challenges and needs by most cities. Cities also expressed support for a voluntary jurisdictional transfer program (the sensible alignment of highway facilities and management responsibility) provided the availability of adequate funding to facilitate the transfer and to maintain the asset.

Given the threat that inadequate funding represents to investments already made in the transportation system, the League will insist on a transportation package that increases and makes more sustainable the ability of all government jurisdictions to preserve and maintain these assets. Notwithstanding its emphasis on the need to preserve and maintain existing streets, the League of Oregon Cities agrees that the state's transportation system and the policy and funding programs that support it must be multimodal and statewide in scope. The League will therefore work to pass legislation in 2017 that addresses funding and policy initiatives relating to all modes (streets, bike/ped, transit, rail, aviation and marine) and in so doing address such issues as:

- Connectivity and capacity (especially truck mobility/rail)
- Safety for all users across all modes
- Resiliency and recovery (seismic retrofit across all modes)
- Jobs and economic development
- Impact on climate change
- Active transportation and public health
- Transportation access available on an equitable basis to all Oregonians
- Continuing and extending *ConnectOregon*
- Ensuring adequate new revenues for program/equipment such as the Oregon Department of Motor Vehicles technology upgrade
- Creative solutions to ongoing challenges (dedicated non-roadway fund, increased local authority to fund transit, bike-ped funding, etc.)

-
- **Additional funding for passenger rail operations, equipment and capital projects (federal matching money and AMTRAK Cascades).**

3. Does not:

- **Preempt local government ability to self-generate transportation revenues for street maintenance and preservation.**
- **Change the dedication of State Highway Fund dollars to highway, road and street projects contained in Article 8, Section 3a of the Oregon Constitution.**
- **Reduce cities 20% share of the State Highway Fund.**
- **Create unfunded mandates requiring cities to undertake specific programs, such as greenhouse gas reduction scenarios.**
- **Further complicate the planning and regulatory process that currently governs the project delivery process.**

- **Maximizing local benefits of the federal FAST Act in Oregon**
-

Water & Wastewater

Legislation

AA. Funding for Water System Resilience

Secure dedicated funding for water and wastewater system resilience and emergency preparation. This would include additional funds to plan for and upgrade water systems to increase seismic resiliency and funding to better position communities to better prepare for water supply shortages due to drought, climate change or other emergency scenarios.

Background

In general, Oregon’s drinking water and wastewater systems are woefully underprepared for a catastrophic earthquake event. Restoration of water supply following such an event is critical for fire suppression, first aid, and for human health and safety. In 2013, the Oregon Resilience Plan provided estimates for service recovery of water and wastewaters systems in the event of a Cascadia earthquake under current infrastructure conditions. According to the plan, the estimated the timeframe for service recovery in the valley ranges from one to twelve months. For the coast, service recovery is estimated between one to three years.

In addition to risks associated with significant natural disaster events, recent drought conditions in Oregon have demonstrated the need for emergency supply planning and coordination with other water users to better address water supply challenges. It is critical that communities are able to acquire alternative and back-up water supplies from multiple sources in order to better prepare for supply shortages or emergency situations, such as natural disasters or supply contamination.

The League will work to identify and secure low-interest loans or grants to seismically upgrade drinking water and wastewater system infrastructure and to help ensure that these systems are more resilient and better positioned to respond to water supply shortages resulting from drought, climate change, natural disasters, or other system failures.

Water & Wastewater (Continued)

Legislation	Background
<p>BB. <u>Promote an Enhanced Prescription Drug Take-Back</u></p> <p>Advocate for enhanced prescription drug take-back program funding and additional collection locations to reduce contamination of water from unwanted prescription drugs.</p>	<p>Unused prescription drugs are problematic from both a public health and safety perspective as well as from a water quality perspective. Drug take-back programs help to ensure that unused prescription drugs are properly disposed of which keeps them from being abused, keeps them out of the hands of children, and keeps them from entering Oregon’s waterways. Unwanted prescription drugs are often flushed down the toilet and despite wastewater treatment systems, they can end up contaminating lakes, streams and rivers. In 2014, U. S. Drug Enforcement Administration (DEA) expanded the types of locations allowed to accept unwanted medications including retail pharmacies and drug manufacturers. Prior to 2014, drug-take back programs were primarily supported through police department drop boxes. The challenge in expanding prescription drug take-back programs is now focused on the cost of transporting unused drugs from the take-back location to the disposal site and in educating the public about responsible disposal opportunities.</p> <p>The League will work with a variety of stakeholders, including public health advocates, to identify additional funding mechanisms to increase drug take-back collection locations across Oregon. Funding should support the transportation and responsible disposal of unused prescription drugs. Funds should also be dedicated for enhanced education of disposal opportunities and the establishment of convenience standards to ensure that all Oregonians have reasonable access to drug take-back locations.</p>
<p>CC. <u>Increased Funding for Water Supply Development</u></p> <p>Support additional water supply funding through the state’s Water Supply Development Account.</p>	<p>According to a survey conducted by the League, Oregon’s water and wastewater infrastructure needs for cities alone are estimated to be \$9 billion over the next twenty years. In addition, the survey identified 66 percent of respondent cities as being in need of additional water supply storage. The 2015 drought highlighted the need for additional investments in water supply infrastructure, including storage and water delivery system efficiencies. Additional storage project investments are not only critical for adequate drinking water supply, they are an important tool for supplementing streamflows and habitat restoration.</p> <p>The League will work to secure additional funding for existing water supply development programs. This includes support for feasibility grants and for the state’s Water Supply Development Account which provides funding for water supply storage, reuse, restoration and conservation projects.</p>

Oregon's 2016
Regular Legislative Session:
February 2 – March 5



Sen. Ginny Burdick
SENATE DISTRICT 18
900 Court St. NE, S-213
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Rep. Margaret Doherty
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"She flies with her own wings." – Judge Jessie Quinn Thornton

Oregon uses a system of single-member districts to elect its legislators. Each of the 90 members represent a designated senatorial or representative district, meaning each Oregonian is represented by a single senator and a single representative. Representative districts have a population of about 63,850; Senate districts contain about 127,700 people. These district lines are redrawn every ten years.

2016
Legislative Agenda
Tigard, Oregon

Tigard City Council



Mayor
John Cook



Council President
Jason Snider



Councilor
Marland Henderson



Councilor
Marc Woodard



Councilor
John Goodhouse

~
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Affordable Housing

- Support opportunities to meet the affordable housing needs of the community and to improve the quality of life for its low-income residents.

Economic Development and Land Use

- Support funding and policies to facilitate for brownfield mediation and clean-up.
- Advocate for legislative funding of the Oregon Transportation Forum on Climate Smart Communities

Finance

- **Property Tax Reform:**
 - ▶ Support referral to voters that would allow local control of temporary property tax outside of statewide caps;
 - ▶ Support an amendment of the state constitution that would reset a property's assessed value to its real market value at the time of sale or construction;
 - ▶ Support a statutory change regarding the way new property is added to the tax rolls to provide the option of applying a city-wide changed property ratio to new property.
- Allow for price comparison when procuring the services of architects and engineers.
- Oppose preemption of the ability of cities to manage and receive compensation for the use of public ROW.
- Advocate for a change to the current fiscal year (July 1 to June 30) as mandated by state law to a calendar that better coincides with the legislative session.

Transportation

- Support passage of a comprehensive transportation funding and policy package to address multi-modal needs with a priority of maintaining and preserving existing infrastructure.
- Support legislative priorities that address traffic congestion, economic development and jobs.
- Request funding for improvements to SW Hall Boulevard – Burnham Street to Durham Road. This project will add turn lanes at key intersections, illuminate, add transit stop amenities and fill in the sidewalk gap along Hall Boulevard from downtown Tigard to Durham Road. Sidewalks along Hall Boulevard are one of the top priorities identified by citizens to make the city more walkable.

Request Amount: \$7,100,000

Other Focus Areas

- Advocate for legislative changes that will clarify and enhance public safety and local control related to marijuana dispensaries.
- Support increased resources for persons with mental health issues, especially in crisis situations.

AIS-2739

D.

Business Meeting

Meeting Date: 06/28/2016

Length (in minutes): 5 Minutes

Agenda Title: Briefing on Metro Equitable Housing Planning and Development Grant Application

Submitted By: Sean Farrelly, Community Development

Item Type: Update, Discussion, Direct Staff **Meeting Type:** Council Workshop Mtg.

Public Hearing No

Newspaper Legal Ad Required?:

Public Hearing Publication

Date in Newspaper:

Information

ISSUE

Staff requests Council's direction on whether to submit a full application to Metro's Equitable Housing Planning and Development Grant Program for a project to address the impacts of the SW Corridor on affordable housing.

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends directing staff to prepare a resolution approving application for Metro's Equitable Housing Planning and Development Grant Program.

KEY FACTS AND INFORMATION SUMMARY

The City of Tigard is participating in the regional Southwest Corridor Plan with the goal of bringing light rail transit to Tigard's designated Town Center (Downtown Tigard and the Tigard Triangle) by 2025. Existing unregulated low income housing in these areas may be displaced both by construction of the light rail infrastructure, and by the rising rents that will result from high quality transit service. Much of the current housing stock in the Town Center could be described as "de-facto" affordable housing: older buildings with lower than average rent that are not designated as permanently affordable units.

To mitigate the potential effects of displacement, staff submitted a letter of interest to Metro's Equitable Housing Planning and Development Grant Program to fund the SW Corridor Affordable Housing Predevelopment project. The Tigard Southwest Corridor Affordable Housing Predevelopment project is for predevelopment feasibility assistance that will lead to:

- Engagement with Town Center residents at risk of displacement to determine equitable

solutions for affordable housing.

- Identification of opportunity sites for affordable housing development near the proposed SW Corridor station locations in Downtown Tigard and the Tigard Triangle.
- An affordable housing funding analysis to support an anti-displacement strategy.
- A model relocation program for residents impacted by SW Corridor rail alignments and expected rental market price escalation.
- Building capacity and community leadership for affordable housing tenants and advocates.

The City of Tigard is proposing to partner with three non-profits on the project. Community Partners for Affordable Housing (CPAH), dedicated to the development of permanently affordable is interested in utilizing a public-private partnership to develop and maintain affordable housing in Tigard. The Community Housing Fund's goal is to secure new sources of capital, and make those funds available in strategic investments to create and preserve affordable housing in Washington County. 1000 Friends of Oregon advocates for affordable housing solutions throughout the state. All three nonprofits would provide technical assistance on the project and have representatives serving on the project advisory committee.

On June 8, 2016 staff submitted a letter of interest to Metro's Equitable Housing Planning and Development Grant Program to fund \$50,000 toward this project. The city proposed approximately \$10,000 of in-kind match of staff time. Metro will review the letters of interest and notify eligible projects to submit applications by July 1. A full application requires a council resolution authorizing the application submittal. This will be formally requested at the July 26 council meeting.

OTHER ALTERNATIVES

Council could direct staff not to submit the full application.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

Tigard Comprehensive Plan

Housing

Goal 10.1: Provide opportunities for a variety of housing types to meet the diverse housing needs of current and future city residents.

Special Planning Areas: Downtown

Goal 15.2 Facilitate the development of an urban village

Policy 6: New housing in the downtown shall provide for a range of housing types, including ownership, workforce, and affordable housing in a high quality living environment.

DATES OF PREVIOUS CONSIDERATION

First time for council's consideration

Cost: 60,000

Budgeted (yes or no): yes-match

Where Budgeted (department/program): Community Development

Additional Fiscal Notes:

The grant request is for \$50,000. The city has proposed approximately \$10,000 of in-kind match (staff time).

Attachments

No file(s) attached.

Tigard Little League is a qualifying non-profit. They have made their request to waive fees in writing. If council determines that the benefit to the community outweighs the loss of \$126 in permit fees, then council is authorized to waive the fees.

OTHER ALTERNATIVES

City Council could deny the request.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

Tigard citizens are involved in the community and participate effectively. Programs and activities are available in the community to meet the needs of a diverse population.

DATES OF PREVIOUS CONSIDERATION

The Tigard City Council approved the waiver of banners for Tigard Little League on November 25, 2014.

Fiscal Impact

Cost: \$126

Budgeted (yes or no): No

Where Budgeted (department/program): NA

Additional Fiscal Notes:

Approval of this resolution will reduce the City of Tigard General Fund revenues by \$126.

Attachments

Resolution

Waive Request Letter

**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 16-**

A RESOLUTION WAIVING \$126 IN TEMPORARY SIGN PERMIT FEES FOR TIGARD LITTLE LEAGUE

WHEREAS, Tigard Municipal Code 3.32.070 authorizes City Council to waive fees for non-profits when the request is made in writing and council determines that the community benefit outweighs the financial burden to the city; and

WHEREAS, Tigard Little League has requested in writing the waiver of fees for two temporary sign permits; and

WHEREAS, The Master Fees and Charges states that the fee for temporary sign permits is \$63 per sign; and

WHEREAS, council determines that the community benefit outweighs the \$126 financial burden to the city.

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: Tigard Little League receives a waiver of \$126 in temporary sign permit fees.

SECTION : This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2016.

Mayor - City of Tigard

ATTEST:

City Recorder - City of Tigard



May 15, 2016

Dear Ms. Lutz,

I am contacting you in hopes to receive a waiver from the City of Tigard for banner permits. Tigard Little League is a non-profit organization that has served kids in Tigard ages 5-12 for over 60 years. We are always looking for ways to keep expenses down to offer the lowest registration fees possible to benefit all the families in our community. Waiving the fee will allow us to use more funds towards equipment, coach training and field maintenance.

We would like to put up two banners announcing registration:

- One banner on the corner of Durham Road and Hall Boulevard on the Tigard High School fence
- One banner on the corner of Tiedeman Avenue and Walnut Street on the Fowler Middle School fence

The banners would be displayed from December to January in accordance with school district and city requirements.

Please let me know if you need any further information and we appreciate your consideration of this request.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Smith", with a long horizontal line extending to the right.

Ryan Smith

Tigard Little League President

AIS-2757

3. B.

Business Meeting

Meeting Date: 06/28/2016
Length (in minutes): Consent Item
Agenda Title: Purchase Authorization - Police Vehicles
Prepared For: Joseph Barrett
Submitted By: Joseph Barrett, Finance and Information Services
Item Type: Motion Requested **Meeting Type:** Consent
Agenda -
LCRB

Public Hearing No

Newspaper Legal Ad Required?:

Public Hearing Publication

Date in Newspaper:

Information

ISSUE

Shall the Local Contract Review Board authorize the purchase of six (6) new police vehicles?

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends the Local Contract Review Board authorize the purchase of the new police vehicles and authorize the City Manager to take the necessary steps to execute the purchase.

KEY FACTS AND INFORMATION SUMMARY

Every year, the Police Department (PD) reviews its vehicle inventory with Fleet. In order to maintain vehicles efficiently and economically, each vehicle type is evaluated based on a set of criteria: mileage, lifecycle replacement year, and maintenance costs inception to date. For patrol vehicles, this is 75,000 miles and four years of service and for detective vehicles this is 75,000 and six years of service. In both cases operation and maintenance costs are taken into consideration as well. As part of the Police Department's FY 2016-17 approved base budget, Police intends to purchase six (6) vehicles.

Three (3) Ford Crown Victorias (2009 (1) and 2010 (2) models) in the patrol fleet and one (1) 2011 Chevy Tahoe will be replaced with 2017 Police Interceptor Ford Explorers. PD will also replace one (1) service vehicle, a 2007 Chevy Blazer. Service vehicles are unmarked and purposefully not all the same make and model. This allows them to be used in an undercover or covert capacity in a way that marked patrol car cannot.

In collaboration with Fleet, the PD has been in the process over the past several budget cycles

to standardize the patrol fleet by shifting entirely to Ford Explorers. There are economies of scale in terms of initial outfitting, as well as ongoing operations and maintenance by shifting to a more uniform patrol fleet. The Ford Explorer has worked well in this capacity as it allows officers to navigate more safely in all types of weather and has greater space for guns and other police equipment. Ingress and egress is much easier for officers which reduces lower back injuries and increases officer safety.

In addition, the PD will expand its patrol fleet by one (1) Ford Explorer. That is, one vehicle will be purchased without replacing an older vehicle. The expansion was originally planned to alleviate wear and tear on the existing patrol fleet as many vehicles are currently driven seven days a week. The additional vehicle will also help to accommodate the three (3) new patrol officers that have been identified in the FY 2016-17 Approved Budget process. The patrol fleet will be evaluated again next year where it is anticipated that at least one more inventory expansion will be needed next year to fully accommodate staff expansion.

As with the majority of the vehicles in the city's fleet, these vehicles will be purchased through an existing State of Oregon contract with Landmark Ford that is open to a permissive cooperative purchases. This manner of purchase assures the city receives competitive pricing via bulk volume and saves the city the cost and time of preparing a formal solicitation that would likely lead to higher pricing.

The estimated cost of the vehicles is \$151,260 for the five Ford Explorers (\$30,252/each) and an estimated \$30,000 for the yet to be identified vehicle to replace the service Chevy Blazer. The total cost for the purchase of the vehicles is anticipated to be \$181,260.

OTHER ALTERNATIVES

The Local Contract Review Board may reject this purchase and direct staff to issue an Invitation to Bid for the vehicles or direct staff to stretch the life of the current vehicles.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

DATES OF PREVIOUS COUNCIL CONSIDERATION

The Local Contract Review Board discussed this purchase at their June 14, 2016 business meeting and voted to include this item on consent.

Fiscal Impact

Cost: \$181,260

Budgeted (yes or no): Yes

Where budgeted?: General Fund

Additional Fiscal Notes:

The estimated cost of the vehicles is \$151,260 for the five Ford Explorers (\$30,252/each) and an estimated \$30,000 for the yet to be identified vehicle to replace the service Chevy Blazer. The total cost for the purchase of the vehicles is anticipated to be \$181,260. The Police Department has funds appropriated for the purchase in their operating budget in the General Fund for FY 2016-2017.

Attachments

No file(s) attached.

AIS-2758

3. C.

Business Meeting

Meeting Date: 06/28/2016
Length (in minutes): Consent Item
Agenda Title: Contract Award - Water Quality Testing Services
Prepared For: Joseph Barrett
Submitted By: Joseph Barrett, Finance and Information Services
Item Type: Motion Requested **Meeting Type:** Consent
Agenda -
LCRB

Public Hearing No

Newspaper Legal Ad Required?:

Public Hearing Publication

Date in Newspaper:

Information

ISSUE

Shall the Local Contract Review Board award a contract for water quality analytical testing services to Alexin Analytical for an anticipated \$225,000 over five years?

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends the Local Contract Review Board award the contract for the city's water quality analytical testing service needs to Alexin Analytical and authorize the City Manager to take the steps necessary to execute the contract.

KEY FACTS AND INFORMATION SUMMARY

The city has the need for a contractor to provide analytical services related to water quality testing. The Contractor will provide specified laboratory services within the appropriate or required turnaround times. The Contractor shall assure the accuracy and precision of laboratory results related to the work performed. The major tasks of this work shall be as follows:

1. Analysis in accordance with the Oregon Environmental Laboratory Accreditation Program
2. Reporting within six calendar days of sample collection.

The city issued a Request for Proposal for the work in late April 2016. Upon closing, the city received proposals from three firms. The firms, and their scores from the evaluation team (out of 300) are as follows:

- Alexin Analytical (290)

- Eurofins Eaton Analytical (281)
- ALS Analytical (245)

As Alexin Analytical was determined to best meet the current needs of the city for this project, staff will be recommending Alexin receive the contract award from the Local Contract Review Board. Alexin has been the city's contractor for this work under the previous contract as well. The contract will be for an estimated \$45,000 each year for possibly five years. The total cost is not anticipated to exceed \$225,000 over the life of the contract.

OTHER ALTERNATIVES

The Local Contract Review Board may reject the proposals and direct staff to reissue the Request for Proposal for the service.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

DATES OF PREVIOUS COUNCIL CONSIDERATION

The Local Contract Review Board discussed this contract at their June 14, 2016 business meeting and authorized this award to be placed on consent.

Fiscal Impact

Cost: \$225,000

Budgeted (yes or no): Yes

Where budgeted?: Water Fund

Additional Fiscal Notes:

The contract will be for an estimated \$45,000 each year for possibly five years. The total cost is not anticipated to exceed \$225,000 over the life of the contract. The Water Division budgets for this cost annually in their operations in the Water Fund.

Attachments

No file(s) attached.

AIS-2723

4.

Business Meeting

Meeting Date: 06/28/2016

Length (in minutes): 5 Minutes

Agenda Title: Reappointment of Park and Recreation Advisory Board Alternate Members

Prepared For: Steve Martin, Public Works

Submitted By: Steve Martin, Public Works

Item Type: Resolution

Meeting Type: Council Business Meeting - Main

Public Hearing: No

Publication Date:

Information

ISSUE

Shall Council reappoint two Park and Recreation Advisory Board (PRAB) alternate members to serve one more year as alternates until PRAB applications are taken next year?

STAFF RECOMMENDATION / ACTION REQUEST

Staff recommends reappointment of the the two alternates.

KEY FACTS AND INFORMATION SUMMARY

There are no PRAB member terms expiring in 2016, and no new members are needed at this time. As such, staff is requesting that two alternates be considered for an additional year. Both current alternate members, Timothy Pepper and Sara Darland, are interested in continuing as alternate members for another year.

PRAB Member Appointment Process

Voting PRAB members serve four year terms, but the terms only expire in three out of four years. 2016 is a "fourth year" in which no PRAB member terms expire.

Alternates serve one year terms and are only appointed during the interviews for PRAB members.

OTHER ALTERNATIVES

Council could choose to not reappoint the two alternate PRAB members, and have no alternate members on the PRAB Board.

COUNCIL GOALS, POLICIES, APPROVED MASTER PLANS

The Park and Recreation Advisory Board was formed to make recommendations to the Council on matters related to Parks and Recreation. The PRAB is also the citizen board responsible for making decisions related to the city's tree codes, as required for Tree City USA status.

DATES OF PREVIOUS COUNCIL CONSIDERATION

Council appointed the current alternates in July 2015 to one year terms, when PRAB members were last appointed.

Attachments

PRAB Alt Resolution

**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 16-**

A RESOLUTION TO REAPPOINT TIMOTHY PEPPER AND SARA DARLAND TO ONE YEAR TERMS AS PARK AND RECREATION ADVISORY BOARD ALTERNATE MEMBERS

WHEREAS, no applications for new PRAB members have been recruited for 2016, as no PRAB member terms expire this year; and

WHEREAS, Alternate members are appointed to serve one year terms; and

WHEREAS, Timothy Pepper and Sara Darland have expressed an interest as continuing on the PRAB as alternate members for one year; and

WHEREAS, Timothy Pepper and Sara Darland have been productive and contributing as alternate members of the PRAB, and have faithfully fulfilled their obligations as alternates.

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: Timothy Pepper and Sara Darland be reappointed to serve one year terms as PRAB alternate members.

SECTION : This resolution is effective immediately upon passage.

PASSED: This _____ day of _____ 2012.

Mayor - City of Tigard

ATTEST:

City Recorder - City of Tigard

The City of Tigard Charter Section 53 states that the City of Tigard, as a matter of public policy, opposes construction of a new high capacity transit corridor within the city boundary unless voter approval is first obtained.

The Southwest Corridor High Capacity Transit Project is proceeding under regional direction to construct a MAX light rail line that would link Tualatin, downtown Tigard, and Portland with fixed rail service. The project would improve mobility in the corridor for thousands of regional employees and residents, and would lay the groundwork for Southwest Corridor communities to achieve local land use visions. In Tigard, aspirations for the walkability and development of the Downtown and Triangle districts are especially reliant on future high capacity transit.

A light rail transit project in the Southwest Corridor is needed to address the following issues:

- Transit service to places where people need or want to go is limited, and demand for transit is increasing due to growth.
- Limited street connectivity and gaps in pedestrian and bicycle networks create barriers and unsafe conditions for transit access and active transportation.
- Travel is slow and is not reliable on congested roadways.
- The regional transportation network needs to maximize the ability of future development to meet local and regional goals.

On June 13, 2016, the Southwest Corridor Steering Committee endorsed a few alignments for environmental review. These alignments generally travel through the Tigard Triangle and downtown Tigard before heading south to Bridgeport, although there are options that would have trains terminate their routes in downtown Tigard and at Bridgeport. There continue to be alternatives along this general route and these will be studied in the environmental review phase, which would begin this winter, subject to Tigard voters support for the project.

To comply with Section 53 of the City Charter, the City Attorney has prepared two ordinances, a resolution and a draft ballot title. A Procedural Ordinance is drafted to clarify definitions and procedures for implementing Section 53. An Authorization Ordinance is drafted for voter approval which allows city support for the project and authorizes changes to land use regulations to accommodate siting of the project. A resolution is drafted for council to adopt ballot title language and refer the Authorization Ordinance (if approved), to the voting public.

In further compliance with Section 53, the city's website is being modified to provide detailed information about the authorization ordinance and the project generally. The information to be updated on the city's website is attached to this agenda item summary.

The documents under review for this action have been slightly modified from those discussed at the June 7 CCDA meeting. Staff and the City Attorney have updated the ordinances and ballot title language to reflect direction provided by the CCDA at that meeting, which was informed by public testimony. The resolution has been prepared since the June 7 meeting. It

is required to formally refer the ballot title and, in this case, the Authorization Ordinance, to voters.

OTHER ALTERNATIVES

Council may elect to forego action on any or all of the draft legislation under review. The implications of inaction would be most likely missing the November election date, delaying the Southwest Corridor environmental review schedule and possibly delaying or jeopardizing the Southwest Corridor funding schedule. Short of foregoing action, council may offer amendments to the ordinances and resolution. In light of project and election schedule issues, it would be advisable to keep such amendments fairly simple and straightforward so that staff and the city attorney could review them and offer comment prior to or at the hearing on June 28th. The public would also then have an opportunity to weigh in on proposed amendments.

COUNCIL OR CCDA GOALS, POLICIES, MASTER PLANS

Tigard Strategic Plan:

Vision "To be the most walkable community in the Pacific Northwest where people of all ages and abilities enjoy health and interconnected lives."

Goal 1. "Facilitate walking connections to develop an identity."

Objective 2. "The trail system is used for all kinds of trips."

- "The walking/transit connection is creatively engaged."

- "The transit waiting experience is improved."

- "Sidewalks are part of the plan, especially in relation to connections to transit stops."

Goal 2. "Ensure development advances the vision."

Tigard City Council Goals and Milestones 2015-17

Goal 2. "Make Downtown Tigard a Place Where People Want to Be"

Tigard City Center Urban Renewal Plan:

Goal 3. "Downtown's transportation system should be multi-modal, connecting people, places and activities safely and conveniently."

Goal 5. "Promote high quality development of retail, office and residential uses that support and are supported by public streetscape, transportation, recreation, and open space investments."

Tigard Comprehensive Plan:

Special Planning Areas: Downtown

Goal 15.1. "The City will promote the creation of a vibrant and active urban village at the heart of the community that is pedestrian oriented, accessible by many modes of transportation, recognizes natural resources as an asset, and features a combination of uses that enable people to live, work, play, and shop in an environment that is uniquely Tigard."

Goal 15.4. "Develop comprehensive street and circulation improvements for pedestrians,

automobiles, bicycles, and transit."

Policy 1. "The downtown shall be served by a complete array of multi-modal transportation services including auto, transit, bike, and pedestrian facilities."

Policy 2. "The downtown shall be Tigard's primary transit center for rail and bus transit service and supporting land uses."

Economic Development

Goal 9.1. "Develop and maintain a strong, diversified, and sustainable local economy."

Policy 10. "The City shall strongly support, as essential to the region's economic future, the development of efficient regional multi-modal transportation systems throughout the Portland Metropolitan area."

Housing

Goal 10.1. "Provide opportunities for a variety of housing types to meet the diverse housing needs of current and future City residents."

Policy 5. "The City shall provide for high and medium density housing in the areas such as town centers (Downtown), regional centers (Washington Square), and along transit corridors where employment opportunities, commercial services, transit, and other public services necessary to support higher population densities are either present or planned for in the future."

Transportation

Goal 12.1. "Develop mutually supportive land use and transportation plans to enhance the livability of the community."

Policy 3. "The City shall maintain and enhance transportation functionality by emphasizing multi-modal travel options for all types of land uses."

Policy 4. "The City shall promote land uses and transportation investments that promote balanced transportation options."

Policy 5. "The City shall develop plans for major transportation corridors and provide appropriate land uses in and adjacent to those corridors."

Tigard Transportation System Plan:

Goal 3. Multi-modal Transportation System "Provide an accessible, multi-modal transportation system that meets the mobility needs of the community."

Policy 2. "The city shall engage with regional partners to support development of high capacity transit serving the Tigard area."

Tigard High Capacity Transit Land Use Plan:

Serves as a tool for implementing Tigard's vision for HCT stations.

DATES OF PREVIOUS CONSIDERATION

June 7, 2016: City Center Development Agency discussed draft Procedural and Authorization Ordinances and deliberated on draft ballot title language. Public testimony was taken.

September 1, 2015: Southwest Corridor/Downtown Zoom-in.

July 21, 2015: Presentation of Southwest Corridor Planning Progress.

Resolution No. 15-05 on February 10, 2015, authorizing an IGA to fund ongoing planning and public involvement activities related to the Southwest Corridor Plan.

Resolution No. 14-11 on February 11, 2014, opposing ballot measure 34-210, a measure to adopt Tigard policy opposing new HCT projects.

Resolution No. 13-43 on October 8, 2013, endorsing the Southwest Corridor Plan and shared investment strategy.

Resolution No. 13-42 on September 24, 2013, submitting to the voters a proposed charter amendment to be considered at the March 11, 2014 special election.

Resolution No. 12-33 on August 21, 2012, submitting to the voters a proposed charter amendment which would require a public vote prior to imposing new local taxes or fees to fund light rail construction.

Attachments

[Procedural Ordinance](#)

[Authorization Ordinance](#)

[Resolution](#)

[Site Map for Website](#)

[Public Comment Received after June 7 2016](#)

[June 7 2016 Public Hearing Comments](#)

**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
ORDINANCE NO. 16-**

AN ORDINANCE TO PROVIDE A PROCEDURE FOR IMPLEMENTATION OF TIGARD CITY CHARTER SECTION 53C. RELATING TO CONSTRUCTION OF A NEW HIGH-CAPACITY TRANSIT CORRIDOR PROJECT.

WHEREAS, the City of Tigard City Council has authority to adopt definitions for terms left undefined or otherwise ambiguous in the Tigard City Charter; and

WHEREAS, Tigard City Council has authority and responsibility to implement provisions of the Tigard City Charter; and

WHEREAS, Tigard City Charter Section 53 contains ambiguous or undefined terms and lacks procedures for implementation of some of its requirements; and

WHEREAS, the Tigard City Council intends to adopt definitions and procedures for the purpose of implementing Tigard City Charter Section 53; and

WHEREAS, the City Council desires to establish a public process to determine if an authorization ordinance proposed under Charter Section 53 complies with the requirements of the Charter.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1. An Ordinance of the City of Tigard is hereby created as follows:

Charter Section 53 Procedural Ordinance

SECTION A. Purpose.

Definitions are created and a procedure is imposed for the purpose of interpretation and implementation of Tigard City Charter Section 53 relating to new high-capacity transit corridor projects within the City boundary. The purpose of the implementation procedure is to assure that any authorization ordinance referred to the voters under Charter Section 53 is in conformance with the requirements of that Section.

The purpose of the definitions is to clarify any ambiguities that may exist regarding the words and phrases within Tigard City Charter Section 53.

SECTION B. Definitions.

As used in Tigard City Charter Section 53, the following definitions shall apply:

1. “Accurately summarizes the information required” means that the ballot title approved by the City Council shall:
 - a. Contain a link to a website where Charter required information is available.

- b. Provide the estimated total amount of road capacity that would be reduced by the new high-capacity transit corridor, as that phrase is defined in Section B.9. and quantified in Appendix A of this Ordinance.
 - c. Describe in general terms any increases in housing density or changes to land use regulations that will be proposed to site or otherwise accommodate the new high-capacity transit corridor, as described in Section B.3 and B.4 of this Ordinance.
 - d. Provide projected public cost of the entire high-capacity transit corridor project based upon information from the government responsible for constructing the project, as described in Section B.6 of this Ordinance.
 - e. Be based on the information and data issued by TriMet at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council.
2. “Authorization Ordinance” means the authorization ordinance described in Section 53 of the City of Tigard Charter which, subject to voter approval, authorizes the City of Tigard to support a new high-capacity transit corridor project and contains the information required in Charter Section 53C.
 3. “Changes to land use regulations within the City that will be proposed to site or otherwise accommodate the new high-capacity transit corridor” means the amendments to the City comprehensive plan, zoning map, or development code that may be required to site or accommodate the new high-capacity transit corridor project within the City of Tigard.
 4. “Increases in housing density” means changes to zoning maps, comprehensive plan maps, zoning district text or comprehensive plan text, which have the effect of authorizing a greater number of housing units.
 5. “New high-capacity transit corridor project” means a proposal or proposed options to extend light rail transit service to Tigard, including to downtown Tigard. For the purposes of the Authorization Ordinance, the new high-capacity transit corridor project shall include the plans, designs, and descriptions of the proposal or proposed options issued by TriMet for the Authorization Ordinance.
 6. “Projected public cost of the entire high-capacity transit corridor project” means the estimated capital cost estimate for a new high-capacity transit corridor project issued by TriMet for use in an Authorization Ordinance.
 7. “Public rights-of-way that could otherwise provide additional road capacity at a future date” means right-of-way within an estimated five miles of the City of Tigard that at the time the Authorization Ordinance is referred for a vote is in public ownership, not improved for general public use as a transportation facility, and, based on the criteria set forth in Section 7 of Appendix A, potentially can be used in the future to site one or more additional vehicular lanes that provide additional road capacity.
 8. “Roadway within five miles of the City that currently permits public motor vehicle traffic” means any public right-of-way within five miles of the City boundary line which at the time the Authorization Ordinance is referred to the voters by the Tigard City Council permits motor vehicle traffic.

9. “Total amount of road capacity that would be reduced by the new high-capacity transit corridor” means:
 - a. For roadways that currently permit public motor vehicle traffic: a comparison of the roadway capacity prior to construction of the new high-capacity transit corridor project to the roadway capacity after project construction is completed.
 - b. For public rights-of-way that could otherwise provide additional road capacity at a future date: a comparison of the acreage that could provide additional road capacity at a future date which is available prior to construction of a new high-capacity transit corridor project to the acreage available after project construction is complete.

SECTION C. General Provisions.

1. **Required Information.** The information required by Section 53 of the City’s Charter to meet the requirements for the Authorization Ordinance and the ballot title shall be based on information and data available at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council. The calculation of factors described in Appendix A shall be based on the conceptual plans and designs issued by TriMet for the new high-capacity transit corridor project options endorsed by the Southwest Corridor Steering Committee at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council.
2. **Roadway Capacity Information.** All roadway capacity information required for the Authorization Ordinance and ballot measure shall be based on the methodology of Section D. of this Ordinance as determined by a qualified traffic engineer and contained in a written report of the results of application of Section D.
3. **Corridor Housing Redevelopment.** Increases in the number of housing units in Tigard caused by the siting or accommodation of a high-capacity transit corridor, including increases that replace units lost to corridor construction or that take advantage of increased transportation capacity provided by a new high-capacity transit corridor, shall not be considered an increase in housing density if the increased number of units are permitted by zoning codes adopted prior to voter approval of the Authorization Ordinance. The City may not increase housing density by changing zoning or comprehensive plan maps or text for the purpose of siting or otherwise accommodating a new high-capacity transit corridor without voter approval.

SECTION D. Methodology to determine roadway capacity impacts.

The roadway capacity determinations required by this Ordinance and Tigard City Charter Section 53 shall be based on the methodology described in Appendix A to this ordinance (Methodology to Estimate the Total Amount of Road Capacity Reduced by a New High-Capacity Transit Corridor) (which is attached and incorporated herein by reference.)

SECTION E. Authorization Ordinance Approval Procedure.

Before referring an authorization ordinance to the voters, the City Council shall determine whether the proposed ordinance satisfies the requirements of Tigard City Charter Section 53 and the definitions of this ordinance. The decision to refer may be made at a regular or special meeting of the City of Tigard City Council and the public will be permitted the opportunity to present written or oral testimony on the proposed ordinance at or prior to such meeting.

SECTION 2. The sections, subsections, paragraphs and clauses of this ordinance are severable. The invalidity of one section, subsection, paragraph, or clause shall not affect the validity of the remaining sections, subsections, paragraphs and clauses.

SECTION 3. The City Council finds that the immediate availability of the procedure provided in this Ordinance is necessary to assure that the Authorization Ordinance required by Charter Section 53C. can be considered by voters in November, 2016.

SECTION 4. For the reasons set forth in Section 3, an emergency is declared to exist and this Ordinance takes effect upon adoption by the City Council and signature of the Mayor.

PASSED: By _____ vote of all Council members present after being read by number and title only, this ____ day of _____, 2016.

Carol A. Krager, City Recorder

APPROVED: By Tigard City Council this ____ day of _____, 2016.

John L. Cook, Mayor

Approved as to form:

City Attorney

Date

APPENDIX A
METHODOLOGY TO ESTIMATE THE TOTAL AMOUNT OF ROAD CAPACITY
REDUCED BY A NEW HIGH-CAPACITY TRANSIT CORRIDOR

1. Purpose

The provisions in this methodology will be used to fulfill the requirement in City of Tigard Charter Section 53.C to include in an Authorization Ordinance the estimated impact of a new high-capacity transit corridor project (such as a proposed light rail transit extension to Tigard) on the capacity of roadways and the future potential capacity of unused public rights-of-way within five miles of the boundary of the City of Tigard.

2. Definitions:

- A. Alignment Option means a proposed high-capacity transit route or proposed route options sanctioned by the Southwest Corridor Project Steering Committee at the time the Authorization Ordinance is referred to the voters by the Tigard City Council, or a phase thereof, including the track alignment, associated pedestrian and bicycle facilities, and other ancillary facilities or improvements included in the conceptual plan or design for such Alignment Option.
- B. Critical Direction means the direction of the main thoroughfare (i.e.; Barbur Boulevard, I-5) that has the highest Volume to Capacity Ratio in a Peak Hour.
- C. Critical Intersection means an intersection or other capacity-limiting feature (e.g.; where two lanes merge) identified by the Traffic Engineer on an Existing Roadway that has a forecasted (2035) Volume-to-Capacity Ratio of greater than 0.90.
- D. Existing Roadway means a public roadway within five miles of the City of Tigard that permits general vehicular traffic at the time of the Authorization Ordinance is referred to the voters by the City of Tigard Council that may be affected by an Alignment Option.
- E. Increased Person Trip Capacity means for an Alignment Option the estimated difference between the Person Trip Capacity of the Total Radial Corridor with the Alignment Option and the Person Trip Capacity of the Total Radial Corridor without the Alignment Option.
- F. Metro Transportation Model means the input data and outputs encompassed in the suite of transportation computer models employed by Metro to forecast regional travel, including without limitation the digitized road network, the general capacity and length of highway links, and the traffic volume forecasts.
- G. Motor Vehicle Capacity means for a signalized roadway or highway the estimated maximum number of motor vehicles that can pass through a Critical Intersection in the Critical Direction in the Peak Hour.
- H. Needed Distance from Centerline means the estimated distance (width) from the existing centerline of an Existing Roadway required to fully comply with applicable

design standards or criteria (including cross-section specifications) if one or more additional auto lanes were added at a future date to the Existing Roadway.

- I. Net Motor Vehicle Capacity Reduction means for an Alignment Option the estimated net change in Motor Vehicle Capacity of an Existing Roadway taking into account reductions in capacity (caused by displaced motor vehicle lanes, reduced green time at traffic signals due to increased conflicting pedestrian movements and other factors) and any increase in motor vehicle capacity due to the reduced volume of on-street buses associated with the Alignment Option or changes to traffic signalization.
- J. Peak-Hour means the one hour period of an average weekday that exhibits the highest volume of traffic. AM Peak Hour refers to the morning hour with the highest traffic volume and PM Peak Hour refers to the afternoon hour with the highest traffic volume.
- K. Percentage Increase in Person Trip Capacity means the Increased Person Trip Capacity caused by an Alignment Option expressed as a percentage.
- L. Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity means for an Alignment Option the estimated percent by which the total Motor Vehicle Capacity in the Radial Corridor is reduced by an Alignment Option.
- M. Percentage Reduction in Tigard Subarea Motor Vehicle Capacity means for an Alignment Option the estimated percent by which the Alignment Option reduces motor vehicle capacity in the Tigard Subarea.
- N. Person Trip Capacity means for an Alignment Option the estimated maximum number of persons that can pass through a Critical Intersection in the Critical Direction in motor vehicles or high-capacity transit.
- O. Radial Corridor means the aggregation of the following three major auto travel routes within Metro's Mobility Corridor #2 (Portland-Tigard-Tualatin): Barbur Boulevard-99W-72nd Avenue, Interstate-5, and Macadam Avenue-OR 43-Boones Ferry Road.
- P. Reduced Motor Vehicle Capacity of a Critical Intersection means the difference between the Motor Vehicle Capacity of the Critical Intersection without an Alignment Option minus the Motor Vehicle Capacity of the Critical Intersection with the Alignment Option.
- Q. Reduced Motor Vehicle Capacity of Unused Public ROW means the estimated amount that the Motor Vehicle Capacity of the Unused Public ROW is reduced by the introduction of an Alignment Option, measured in acres.
- R. Standard Practice means the use of assumptions, data, and methods commonly used in the traffic engineering profession by registered engineers and that take into account the definitions and provisions described in this ordinance, the conceptual level of engineering/design available for Alignment Options, the absence of plans

for adding lanes on Unused Public ROW, and the conceptual nature of other data and information at the time the Authorization Ordinance is referred to the voters, as determined by the Traffic Engineer.

- S. Tigard Subarea means the subarea created by drawing a boundary line approximately five miles in all directions from the boundary of the City of Tigard.
- T. Total Radial Corridor Motor Vehicle Capacity means the estimated aggregate Motor Vehicle Capacity of the three major routes in the Radial Travel Corridor.
- U. Total Tigard Subarea Motor Vehicle Capacity means the estimated length-weighted total of the motor vehicle capacity on all roadway segments included in the Metro Transportation Model that are within the Tigard Subarea.
- V. Traffic Engineer means a Professional Engineer licensed in Oregon and specializing in traffic engineering.
- W. Traffic Engineer Report means a report signed and sealed by a Traffic Engineer in conformance with this Section.
- X. Unused Public Right-of-Way (ROW) means right-of-way proximate to an Alignment Option that, at the time the Authorization Ordinance is referred for a vote, is in public ownership and is not improved for general public use as a transportation facility.
- Y. Useful Unused Public ROW means the estimated surface area, measured in acres, of Unused Public ROW potentially capable of providing additional motor vehicle capacity at a future date as determined by the criteria in Section 7 of this Appendix A.
- Z. Unused Public ROW Map means one or more maps portraying for an Alignment Option the general location of the (I) Useful Unused Public ROW used by high-capacity transit (i.e.; the Reduced Motor Vehicle Capacity of the Unused Public ROW) and (II) Unused Public ROW used by the Alignment Option that does not impact the potential future motor vehicle capacity available from Unused Public ROW.
- AA. Vehicle Lane Impact Map means one or more maps portraying the general location of vehicular lanes on Existing Roadways that would be displaced or that would be added for general public traffic by an Alignment Option.
- BB. Volume to Capacity Ratio, or V/C Ratio, means the forecasted volume of traffic at a location divided by the motor vehicle capacity at the location, and represents the sufficiency of an intersection to accommodate vehicular demand. A V/C Ratio less than 0.90 or less generally indicates that capacity is adequate and significant traffic queues and delays are not anticipated. A V/C Ratio of 1.0 generally indicates unstable traffic flow, excessive delay, and traffic queuing. Intersection V/C Ratios are based on critical lane groups which constrain the operations of a traffic signal, as described in the Highway Capacity Manual.

3. General Provisions

- A. The calculation of factors described in this Appendix A shall be based on information and data available at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council. The calculation of factors described in this Appendix A shall be based on the conceptual plans of the Alignment Options sanctioned by the Southwest Corridor Steering Committee at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council. Any revisions to Alignment Options, plans, designs, data, assumptions, or any other information used to prepare the information described herein or used in the Traffic Engineer Report following approval of an Authorization Ordinance shall not invalidate or nullify the approval of the Authorization Ordinance.
- B. The Traffic Engineer Report shall be posted on a website prepared or caused to be prepared by the City of Tigard.

4. Traffic Engineer's Report

- A. A Traffic Engineer's Report shall be prepared by a Traffic Engineer documenting for the Alignment Option estimated to have the greatest impact and the Alignment Option estimated to have the least impact on Motor Vehicle Capacity and/or Unused Public Right-of-Way, as applicable, the following:
 - a. A Vehicle Lane Impact Map
 - b. An Unused Public ROW Map
 - c. For each Existing Roadway potentially having its Motor Vehicle Capacity reduced by the Alignment Option the following shall be estimated:
 - i. Motor Vehicle Capacity at each Critical Intersection without the Alignment Option;
 - ii. Motor Vehicle Capacity at each Critical Intersection with the Alignment Option; and
 - iii. Reduced Motor Vehicle Capacity for each Critical Intersection.
 - d. For each applicable Alignment Option , the following shall be estimated:
 - i. Net Motor Vehicle Capacity Reduction;
 - ii. Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity;
 - iii. Percentage Reduction in Tigard Subarea Motor Vehicle Capacity;
 - iv. Increased Person Trip Capacity;
 - v. Percentage Increase in Person Trip Capacity; and
 - vi. Reduced Motor Vehicle Capacity of the Unused Public ROW.
- B. In preparing the Traffic Engineer's Report, the Traffic Engineer shall employ the methodologies described herein and shall use Standard Practice for identifying other assumptions, data, and methodologies as the Traffic Engineer determines are necessary or appropriate for the required analyses.

- C. The Traffic Engineer's Report shall be signed and sealed by a Traffic Engineer.
- D. The Traffic Engineer's Report shall be posted on a website prepared or caused to be prepared by the City of Tigard.

5. Methodology to Estimate Motor Vehicle Capacity Impacts on Existing Roadways

- A. The Traffic Engineer shall estimate or cause to be estimated each factor described in this Section 5 for the Alignment Option with the greatest impact on Motor Vehicle Capacity and for the Alignment Option with the least impact on Motor Vehicle Capacity.
- B. Motor Vehicle Capacity and Net Motor Vehicle Capacity Reduction on of Existing Roadways shall be estimated as follows:
 - a. The Traffic Engineer shall identify Critical Intersections on Existing Roadways for the year 2035 AM Peak Hour and PM Peak Hour.
 - b. The Motor Vehicle Capacity of each Critical Intersection on an Existing Roadway shall be estimated by the Traffic Engineer for the AM Peak Hour and PM Peak Hour in the year 2035, in the Critical Direction, for prevailing average weekday traffic and roadway conditions for the Existing Roadway without the Alignment Option and the Existing Roadway with the Alignment Option. For each Critical Intersection, the Traffic Engineer shall estimate the Reduced Motor Vehicle Capacity of the Critical Intersection calculated as the difference of the Motor Vehicle Capacity of the Critical Intersection without the Alignment Option minus the Motor Vehicle Capacity of the Critical Intersection with the Alignment Option. The Motor Vehicle Capacity of the Existing Roadway shall be the estimated Motor Vehicle Capacity of the Critical Intersection exhibiting the highest Reduced Motor Vehicle Capacity (i.e.; the greatest decrease in Motor Vehicle Capacity) among all Critical Intersections assessed by the Traffic Engineer.
 - c. For an Alignment Option, the Net Motor Vehicle Capacity Reduction on an Existing Roadway shall be calculated as (I) the Motor Vehicle Capacity of the Existing Roadway without the Alignment Option, minus (II) the Motor Vehicle Capacity of the Existing Roadway with the Alignment Option, minus (III) the capacity freed-up for motor vehicle traffic on the Existing Roadway by relocating on-street transit vehicles to the separated guideway in the Alignment Option. For the calculation the Net Motor Vehicle Capacity Reduction of an Alignment Option, the capacity freed-up for motor vehicle traffic shall be calculated as the product of multiplying (I) the difference of forecasted 2035 Peak Hour, Peak Direction on-street bus volume with the Alignment Option minus forecasted 2035 Peak Hour, Peak Direction on-street bus volume without the Alignment Option, by (II) the bus-auto capacity equivalence factor identified by the Traffic Engineer.

- d. A Vehicle Lane Impact Map shall be prepared portraying for Existing Roadways the general location of vehicular lanes that are impacted by the Alignment Option.
 - C. The Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity shall be estimated as follows:
 - a. The Motor Vehicle Capacity of each of the roadway routes constituting Metro's Mobility Corridor #2 shall be estimated in segments (or at cutlines) identified by the Traffic Engineer, the capacity of each segment for each roadway shall be the capacity shown for such segment on such roadway in the Metro Transportation Model except that more specific capacities may be used for roadway segments abutting Alignment Options (such as Barbur Boulevard), where more detailed traffic capacity information is available.
 - b. The Total Radial Corridor Motor Vehicle Capacity for each segment (i.e. at each cutline) shall be the sum of the Motor Vehicle Capacity for each segment for each of the three major motor vehicle travel routes within Metro Mobility Corridor #2. The Total Radial Corridor Motor Vehicle Capacity, taking into account all segments, shall be the Total Radial Corridor Motor Vehicle Capacity for the segment (or at the cutline) having the lowest total capacity.
 - c. The Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity of an Alignment Option shall be calculated as the fraction, expressed as a percentage, resulting from dividing (I) the Net Motor Vehicle Capacity Reduction for the Alignment Option by (II) the Total Radial Corridor Motor Vehicle Capacity.
 - D. Total Tigard Subarea Motor Vehicle Capacity and the Percentage Reduction in Tigard Subarea Motor Vehicle Capacity shall be estimated as follows:
 - a. The Tigard Subarea shall be established as an area with a boundary that is five miles from the boundary of the City of Tigard.
 - b. Using data from the Metro Transportation Model, the length and bi-directional capacity of each link shall be determined for all roadway links coded in the Metro Transportation Model that are located within the Tigard Subarea.
 - c. The Total Tigard Subarea Capacity shall be calculated as the aggregate sum of the weighted capacity of each link within the subarea, where the weight for a link is calculated as the length of the link. The Total Tigard Subarea Capacity shall be calculated for each applicable Alignment Option and for a scenario without any Alignment Option.
 - d. For each applicable Alignment Option, the Percentage Reduction in Tigard Subarea Motor Vehicle Capacity shall be estimated as the fraction, expressed as a percentage, resulting from: (I) calculating the difference between Total

Tigard Subarea Capacity with the Alignment Option minus the Total Tigard Subarea Capacity without the Alignment Option, and dividing the difference by (II) the Total Tigard Subarea Motor Vehicle Capacity without the Alignment Option.

6. Methodology to Estimate Person Trip Capacity Impacts

- A. The factors described in this Section 6 shall be calculated for the Alignment Option with the greatest impact on Motor Vehicle Capacity and for the Alignment Option with the least impact on Motor Vehicle Capacity.
- B. The Person Trip Capacity of the Radial Corridor shall be calculated for each applicable Alignment Option and a scenario without an Alignment Option by summing (I) the person trip capacity of the roadways in the Radial Corridor with, when applicable, the Alignment Option plus, when applicable, (II) the person trip capacity of high-capacity transit in the Alignment Option. In doing so:
 - a. The person trip capacity of the roadways in the Radial Corridor shall be calculated as the product of multiplying (I) the Total Radial Corridor Motor Vehicle Capacity by (II) an average Peak Hour auto occupancy rate estimated by the Traffic Engineer; and
 - b. The person trip capacity of high-capacity transit shall be calculated as:
 - i. (I) The estimated maximum number of transit vehicles or consists that can be operated in the Peak Hour on the Alignment Option multiplied by (II) the person capacity of high-capacity transit in the Alignment Option; minus
 - ii. (I)The forecasted reduction in the volume of on-street buses eliminated by high-capacity transit multiplied by (II) the person capacity of a regular bus.
- C. The Increased Person Trip Capacity of an Alignment Option shall be calculated as the numeric difference of the Person Trip Capacity of the Radial Corridor with the Alignment Option minus the Person Trip Capacity of the Radial Corridor without the Alignment Option
- D. The Percentage Increase in Person Trip Capacity of an Alignment Option shall be the fraction, expressed as a percentage, calculated as (I) the Increased Person Trip Capacity of the Alignment Option, divided by (II) the Person Trip Capacity of the Radial Corridor without the Alignment Option.

7. Methodology to Estimate Reduced Motor Vehicle Capacity of Unused Public ROW

- A. The Traffic Engineer shall estimate or cause to be estimated the Reduced Motor Vehicle Capacity of the Unused Public ROW for the Alignment Option with the greatest impact on Unused Public ROW and for the Alignment Option with the least impact on Unused Public ROW.

- B. For each applicable Alignment Option, the location of Unused Public ROW impacted by the Alignment Option shall be identified using the conceptual plans of the applicable Alignment Options and property ownership records or databases.
- C. For each applicable Alignment Option, the Useful Unused Public ROW shall be identified as follows:
- a. The roadway design standards or criteria (including cross-section specifications) applicable to expanding the number of lanes on the Existing Roadway shall be identified; cross-sections shall include the width of all bicycle facilities, sidewalks, shoulders, medians, or other features needed to comply with the design standard or criteria.
 - b. The Needed Distance from Centerline shall be estimated for Existing Roadways that may in the future potentially expand onto Unused Public ROW as the width (measured from the centerline of the Existing Roadway) of a cross-section needed for the added lane or lanes that is required to comply with any applicable design standards or criteria.
 - c. Useful Unused Public ROW shall be estimated as the area of Unused Public ROW underlying an Alignment Option:
 - i. Where the outer boundary (measured from the existing centerline of the Existing Roadway) of the Unused Public ROW equals or exceeds the outer boundary (measured from the existing centerline) of the Needed Distance from the Centerline required to add an auto lane or lanes; and
 - ii. If the Existing Roadway to be expanded is a freeway or throughway (i.e.; I-5), where the potential added lane or lanes either (I) extends along the Existing Roadway for a distance of at least one-half of one mile or (II) materially addresses a capacity-reducing systems bottleneck identified in the Traffic Engineering Report; or
 - iii. If the Existing Roadway to be expanded is not a freeway or throughway (i.e., Barbur Boulevard), addresses a systems bottleneck identified in the Traffic Engineering Report.
- D. For each applicable Alignment Option, the Reduced Motor Vehicle Capacity of the Unused Public ROW shall be the area (measured in acres) of Useful Unused Public ROW that would be displaced by the Alignment Option. In making this calculation, the area used by bicycle and pedestrian facilities incorporated in an Alignment Option shall not count as Reduced Motor Vehicle Capacity of the Unused Public ROW for roadway expansions that are subject to jurisdictional design standards or criteria that require that such bicycle and pedestrian facilities as part of a roadway expansion.

**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
ORDINANCE NO. 16-_____**

AN AUTHORIZATION ORDINANCE TO ALLOW SUPPORT FOR SITING OF A NEW HIGH-CAPACITY TRANSIT CORRIDOR FOR LIGHT RAIL TRANSIT SERVICE WHICH INCLUDES DOWNTOWN TIGARD, RELATED AMENDMENTS TO THE COMPREHENSIVE PLAN AND LAND USE REGULATIONS, PROVIDING REQUIRED INFORMATION AND OTHER ACTIONS.

WHEREAS, the City of Tigard City Charter, Section 53A. includes a policy that requires the City to oppose the construction of a new high-capacity transit corridor within the City boundary unless voter approval is first obtained; and

WHEREAS, an extension of light rail transit service to and within the City of Tigard is being considered and such light rail extension constitutes a new high-capacity transit corridor under Section 53A. of the Tigard City Charter; and

WHEREAS, voter approval of an authorization ordinance (under City of Tigard Charter Section 53) allowing the City to support the proposed light rail extension will substantially facilitate the development and construction of the light rail extension; and

WHEREAS, the City of Tigard City Charter Section 53C. provides that the City may not amend its comprehensive plan or land use regulations to accommodate a new high-capacity transit corridor project unless the project has first received voter approval of an authorization ordinance; and

WHEREAS, changes to City of Tigard land use regulations are required to accommodate the proposed light rail extension to the City of Tigard, including downtown Tigard; and

WHEREAS, the Tigard City Council desires to refer the authorization ordinance required under Charter Section 53C. to the voters of the City of Tigard for voter approval on November 8, 2016.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: A City of Tigard ordinance is hereby created as provided as follows:

NEW HIGH-CAPACITY TRANSIT CORRIDOR AUTHORIZATION ORDINANCE

SECTION A. City of Tigard support for a new high-capacity transit corridor in the City of Tigard boundary, including downtown Tigard, is allowed. The City shall send letters notifying the public officials listed in City Charter Section 53D. of this support.

SECTION B. The City of Tigard is authorized to make changes to the comprehensive plan and land use regulations to allow: (I) light rail to cross wetlands with proper mitigation protecting natural areas, habitat, and water quality; and (II) a light rail maintenance facility to be sited in specified industrial zones.

SECTION C. The following describes aspects of the new high-capacity transit corridor project, which would extend light rail service to the City of Tigard, including downtown Tigard (“Project”) as required by City of Tigard City Charter, Section 53C.:

1. Road Capacity: The total change in road capacity as a result of the new high-capacity transit corridor is described in the attached Appendix A and incorporated herein by reference.
2. Housing Density: Increases in housing density are not required to site or otherwise accommodate a new high-capacity transit corridor.
3. Land Use Regulations and Comprehensive Plan: Changes anticipated to be proposed to land use regulations or the comprehensive plan to accommodate light rail are limited to: (I) allowing light rail to cross wetlands with proper mitigation protecting natural areas, habitat, and water quality; and (II) allowing a light rail maintenance facility to be sited in specified industrial zones.
4. Projected Public Cost: the current projected public cost of the entire Project is \$2.4-2.8 billion. No new or increase in City of Tigard fees or taxes is proposed for the light rail project under Tigard City Charter Section 52.

SECTION D. The information in this Authorization Ordinance is based on (I) information and data available at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council and (II) the light rail corridor project options sanctioned by the Southwest Corridor Steering Committee at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council.

SECTION 2: The City Council of the City of Tigard finds that this Authorization Ordinance satisfies the requirements of Tigard City Charter Section 53 and Ordinance _____.

SECTION 3: The sections, subsections, paragraphs and clauses of this ordinance are severable. The invalidity of one section, subsection, paragraph or clause shall

not affect the validity of the remaining sections, subsections, paragraphs and clauses.

SECTION 4: This ordinance shall be effective upon certification by the County Elections official that it has received voter approval at an election conducted on November 8, 2016.

PASSED: By _____ vote of all Council members present after being read by number and title only, this _____ day of _____, 2016.

Carol A. Krager, City Recorder

APPROVED: By Tigard City Council this _____ day of _____, 2016.

John L. Cook, Mayor

Approved as to form:

City Attorney

Date

APPENDIX A

Roadway Capacity Reduction Analysis
June 20, 2016

MEMORANDUM

DATE: June 20, 2016
TO: City of Tigard
FROM: Peter L. Coffey, PE
SUBJECT: Impacts on Road Capacity of Southwest Corridor Light Rail Transit Project Options



720 SW Washington St.
Suite 500
Portland, OR 97205
503.243.3500
www.dksassociates.com

The City of Tigard Charter requires the City to oppose any high-capacity transit project, such as the proposed options to extend light rail service to Tigard, unless the voters first approve an authorization ordinance supporting the project. The Charter also creates requirements for what must be included in the authorization ordinance. One requirement is that the ordinance must describe the total amount of road capacity or potential future road capacity that may be reduced by the project options.

The Charter requirement does not call for a comprehensive analysis of the impacts and benefits of the light rail options on the road network, it solely focuses on the reduction in road or potential road capacity within the five mile radius around the City of Tigard boundary. A reduction in public right-of-way that is not currently used for a roadway but that could potentially be available for new road or highway lanes in the future must be addressed, whether or not there is any plan for the additional road or highway lanes.

Thus the Charter requires road capacity to be measured on a spatial (or area) basis and to consider the capacity of unused rights-of-way on which no roadways are currently planned. To address the unique requirements of the Charter, the City enacted an ordinance that established the "*Methodology to Estimate the Total Amount of Road Capacity Reduced by a New High-Capacity Transit Corridor*," which sets in the city's laws a definitive and transparent approach to addressing the Charter requirement regarding road capacity.

This report is prepared in accordance with city's required methodology, and uses the terms defined therein. The analysis is based on alignment options, information, and data available at the time the authorization ordinance is referred to the voters by the City Council. The analysis and findings of this analysis do not supplant the need for future traffic analysis that will be done for the Environmental Impact Statement.

The report finds that while causing a slight loss of road capacity along the overall transportation corridor between Tigard and Portland, the proposed light rail options cause substantial increase in the person-trip capacity of the overall transportation corridor between Tigard and Portland. No loss of existing road capacity occurs in Tigard, although light rail options use some unused right-of-way, primarily alongside

of Interstate 5 that potentially could be available for added lanes should additional lanes be planned in the future. None of the light rail options impact Pacific Highway in Tigard.

Background Traffic Analysis of Barbur Boulevard Corridor

This analysis of the capacity impacts of the Southwest Corridor light rail options on existing roadways focuses on Barbur Boulevard because it is the existing roadway (as opposed to possible future roadways, which are addressed separately later in this report) affected by the proposed light rail options between Tigard and Portland. No lanes on Interstate 5 nor on Pacific Highway in Tigard are impacted by the proposed light rail options, except to the extent that the light rail options may attract more riders and thereby reduce auto traffic on these facilities.¹

There have been several recent traffic analyses of the Southwest Corridor and Barbur Boulevard in connection with the proposed options to extend light rail to Tigard that evaluated the corridor from downtown Portland to Tigard and Tualatin.² These previous traffic analyses concluded that key signalized intersections in the year 2035 will either continue to operate within mobility targets³ or will not significantly worsen from 2035 No-build conditions with the addition of light rail along Barbur Boulevard.

The City of Portland recently adopted the Barbur Concept Plan for the six-mile Barbur Boulevard corridor from Portland's Central City to the Tigard city limit. Key provisions of this plan are to "establish safe and comfortable conditions for active transportation" in the corridor, "complete pedestrian and bicycle connections and access to transit throughout the corridor," and "prioritize active transportation improvements on Barbur."⁴ To make Barbur Boulevard more pedestrian- and bicycle-friendly, the traffic signals on Barbur Boulevard will need to devote more "green time" for cross-streets to make it easier for pedestrians and bicyclists to cross Barbur Boulevard. Consequently there will be less "green time" for the north-south motor vehicle traffic on mainline Barbur Boulevard. This change in signal timing along Barbur Boulevard results in decreases in *Motor Vehicle Capacity*, and is anticipated whether or not light rail is extended to Tigard.

¹ Along Interstate 5, all existing lanes remain in each direction and along Barbur Boulevard, south of the Naito Parkway confluence, two through lanes remain in each direction.

² *SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report*, DKS Associates, March 16, 2016 and *Final SW Corridor Traffic Analysis and Operations Memorandum*, DKS Associates, July 29, 2014.

³ Mobility targets measured through a volume to capacity ratio (v/c ratio).

⁴ *Barbur Concept Plan*, City of Portland, April 2013 (page 48); Resolution No. 37014, adopted by City Council April 24, 2013.

Motor Vehicle Capacity Impacts on Existing Roadways

The *Vehicle Lane Impact Map*, provided as Figure 1, shows the general location of vehicular lanes on *Existing Roadways* that will be displaced or that will be added for general public traffic by an *Alignment Option*. As shown, while there are no impacts along Interstate 5 or on Pacific Highway in Tigard, some use of existing lanes occur in locations along Barbur Boulevard in Portland. However, the changes in the configuration of lanes on Barbur Boulevard may not directly translate into a material change in the Motor Vehicle Capacity of Barbur Boulevard, as the operations of the intersections along Barbur Boulevard must also be taken into consideration.

The design of intersections (including traffic signals) along arterial roadways and interchanges along freeway segments (where weaving and merging conditions exist) are major considerations in determining the *Motor Vehicle Capacity* of these facilities. Intersections and interchanges are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to efficiently carry traffic is generally diminished in these areas. The main consequence of a bottleneck is an immediate reduction in capacity of the roadway. For arterial roadways such as Barbur Boulevard, the controlling bottlenecks are signalized intersections, and the most congested of these intersections are referred to as *Critical Intersections*.

Net Motor Vehicle Capacity Reduction on Existing Roadways

Using the recent traffic analyses for the SW Corridor,⁵ the Barbur Boulevard corridor was assessed to identify *Critical Intersections* associated with the proposed *Alignment Options*. Since Interstate 5, Pacific Highway in Tigard, and other corridor routes are not impacted by any *Alignment Option*, there was no need to assess *Critical Intersections* on those facilities.

Intersections on Barbur Boulevard were identified as *Critical Intersections* if the overall intersection *Volume to Capacity Ratio* (V/C Ratio) forecasted for the year 2035 was greater than 0.90. The following intersections met this criterion:

- Barbur Boulevard and 60th Avenue (AM peak)
- Barbur Boulevard and Capitol Highway (AM and PM peak)
- Barbur Boulevard and 24th Avenue/I-5 SB Off-Ramp (AM peak)

⁵ *SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report*, DKS Associates, March 16, 2016 and *Final SW Corridor Traffic Analysis and Operations Memorandum*, DKS Associates, July 29, 2014.⁶ The 4th Avenue/Caruthers Street/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the *Motor Vehicle Capacity* of the roadway system in this area of closely spaced traffic signals. The downstream constraint (6th/Broadway) is not changed by this project. Therefore, the 4th Avenue/Caruthers Street/Broadway intersection was not considered a *Critical Intersection* for this analysis.

SW Corridor Vehicle Lane Impact Map

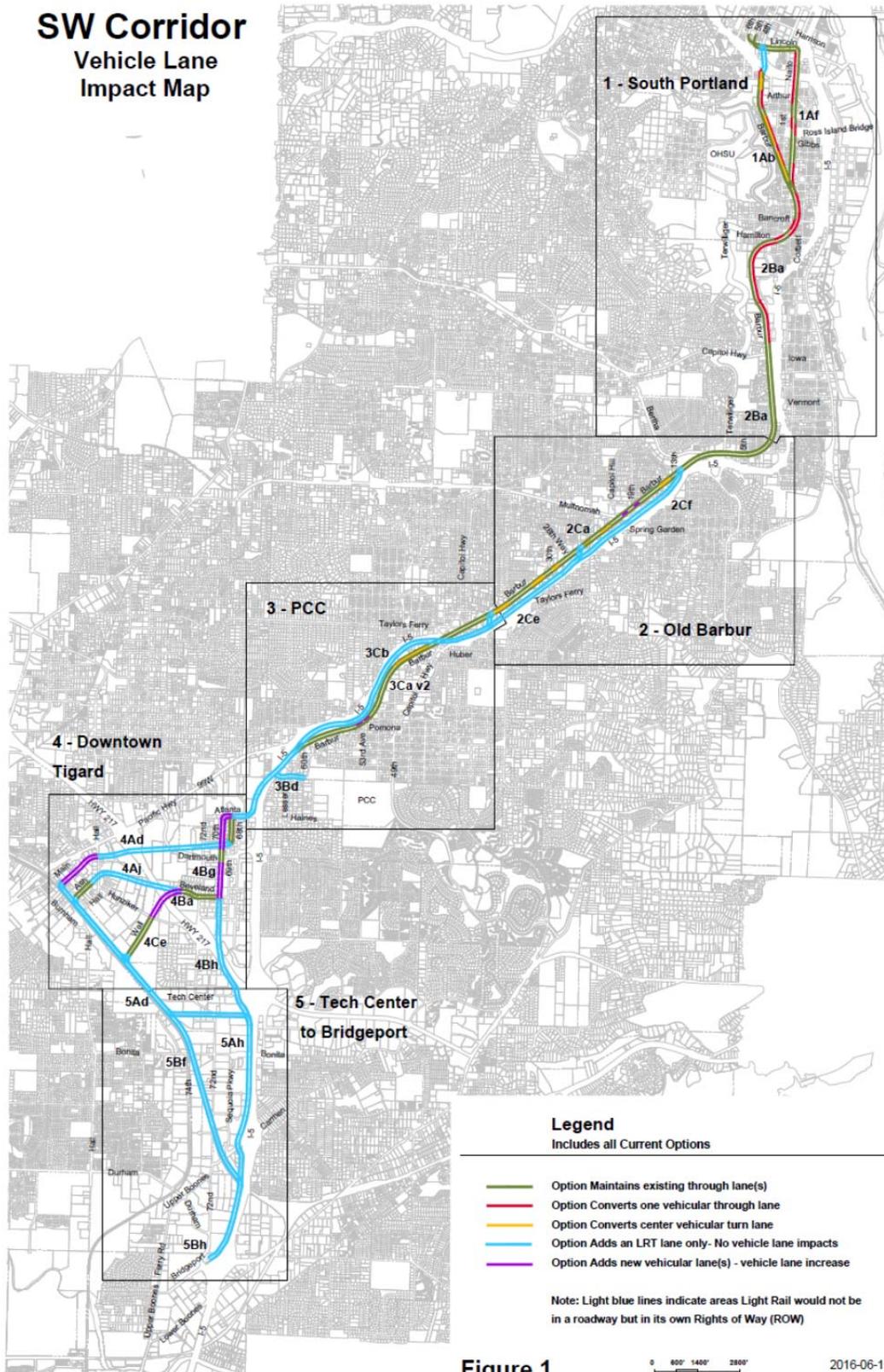


Figure 1

- Barbur Boulevard and 19th Avenue/Capitol Hill Road (AM and PM peak)
- Barbur Boulevard and Terwilliger Boulevard (AM and PM peak)
- Barbur Boulevard and Hamilton Street (AM peak)
- 4th Avenue and Caruthers Street/Broadway (AM peak) ⁶

Motor Vehicle Capacity and Volume to Capacity (V/C) Ratios for each of the *Critical Intersections* were estimated, using the practices described in the Highway Capacity Manual,⁷ for the 2035 No-Build (without an *Alignment Option*) and the 2035 system with *Alignment Options* (with light rail transit). During the *AM Peak-Hour* (future year conditions) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two-to-four times greater than southbound traffic volumes and *V/C Ratios* for the northbound through movements are also significantly higher than for the southbound movements (see Table 1A and Table 1B). Therefore, *Motor Vehicle Capacity* reductions for the AM Peak Hour were evaluated in the northbound (critical) direction. During the PM peak hour (future year conditions) traffic volumes were relatively balanced in both directions and therefore *Motor Vehicle Capacity* reductions were evaluated in both directions on Barbur Boulevard.

Tables 1A and 1B show the estimated reduction in the *Motor Vehicle Capacity* of each *Critical Intersection* along Barbur Boulevard caused by the *Alignment Options*. *Reduced Motor Vehicle Capacity* is calculated as the difference of the *Motor Vehicle Capacity* of the *Critical Intersection* without the *Alignment Option* minus the *Motor Vehicle Capacity* of the *Critical Intersection* with the *Alignment Option*. To illustrate the range of potential impacts of the *Alignment Options*, Table 1A shows results for the *Alignment Option* having the greatest impact on *Motor Vehicle Capacity* on Barbur Boulevard and Table 1B shows results for the *Alignment Option* with the least impact.

The *Motor Vehicle Capacity* impacts of *Alignment Options* on the *Critical Intersections* are used to determine the overall *Motor Vehicle Capacity* impact on the Barbur Boulevard corridor. *Alignment Options* impact the overall *Motor Vehicle Capacity* of a roadway in two distinct ways: (i) changes in the physical configuration and traffic signalization of *Critical Intersections*, as described above, and (ii) changes in the volume of on-street buses on Barbur Boulevard. With the introduction of light rail, some buses currently operating on Barbur Boulevard are no longer required because they are replaced by light rail vehicles operating on a dedicated right-of-way. This makes additional *Motor Vehicle Capacity*

⁶ The 4th Avenue/Caruthers Street/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the *Motor Vehicle Capacity* of the roadway system in this area of closely spaced traffic signals. The downstream constraint (6th/Broadway) is not changed by this project. Therefore, the 4th Avenue/Caruthers Street/Broadway intersection was not considered a *Critical Intersection* for this analysis.

⁷ 2000 Highway Capacity Manual, Transportation Research Board, Special Report 209, 2000, Chapter 16, Washington DC, 2000.

**Table 1A - Motor Vehicle Capacity and Net Motor Vehicle Capacity Reduction on Existing Roadways (Barbur Boulevard)
(Alignment Option with *Greatest Impact* on Motor Vehicle Capacity)**

	Motor Vehicle Capacity								Net Motor Vehicle Capacity Reduction					
	Northbound Direction				Southbound Direction				Northbound Direction			Southbound Direction		
	No-Build ² Capacity ³	No-Build ² v/c Ratio ⁴	Alignment Option ¹ Capacity ³	Alignment Option ¹ v/c Ratio ⁴	No-Build ² Capacity ³	No-Build ² v/c Ratio ⁴	Alignment Option ¹ Capacity ³	Alignment Option ¹ v/c Ratio ⁴	Reduced Motor Vehicle Capacity of Intersection ⁵	Capacity Freed-Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷	Reduced Motor Vehicle Capacity of Intersection ⁵	Capacity Freed-Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷
Critical Intersections^{1,2}														
PM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Capitol Hwy	1638	0.61	1866	0.49	2692	0.64	2605	0.81	(228)	24	(252)	87	24	63
SW Barbur Blvd (Hwy 99W) & Capitol Hill Rd/19th	1886	0.86	1694	0.97	1825	0.83	1642	0.98	192	24	168	183	24	159
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1334	1.07	1140	1.13	1604	0.76	1424	0.82	194	24	170	180	24	156
AM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & 60th	1534	0.91	1504	0.92	5	0.38	5	0.38	30	24	6	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Capitol Hwy	1521	0.89	1504	0.90	5	0.70	5	0.70	17	24	(7)	5	5	5
SW Barbur Blvd (Hwy 99W) & 34th/J-5 Off-Ramp	2397	0.90	2410	0.90	5	0.43	5	0.43	(13)	24	(37)	5	5	5
SW Barbur Blvd (Hwy 99W) & Capitol Hill Rd/19th	1866	0.95	1656	1.05	5	0.45	5	0.45	210	24	186	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1657	1.00	1592	0.86	5	0.30	5	0.30	65	24	41	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Hamilton Street	2616	1.22	2492	1.02	5	0.25	5	0.25	124	24	100	5	5	5

- Note 1: Listing of "Critical Intersections" obtained from: 1) SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report, DKS Associates, March 16, 2016 and 2) Final SW Corridor Traffic Analysis and Operations Memorandum, DKS Associates, July 29, 2014.
- Note 2: The 4th Avenue/Caruthers Street/Broadway Intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway Intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the motor vehicle capacity of the roadway system in this area of closely spaced traffic signals and therefore was not considered a critical intersection.
- Note 3: Definitions: "No-Build" is the Same as "without an Alignment Option"; "Alignment Option" is the option with Light Rail considered to have Greatest Impact on Motor Vehicle Capacity which is Option 3a/3c/v2
- Note 4: Definitions: "Capacity" (or Motor Vehicle Capacity) and "v/c Ratio" (Volume to Capacity Ratio) obtained from Highway Capacity Manual analysis determination of Lane Group Capacity (see Note 1). Capacity is in vehicles/hour.
- Note 5: During the AM peak hour (year 2035) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two to four times greater than southbound traffic volumes. Volume to Capacity Ratios for the northbound direction are also significantly higher than the southbound direction. Therefore, during the AM peak hour, capacity reductions were evaluated in the northbound or Critical Direction only. During the PM peak hour (year 2035) traffic volumes are relatively balanced in both directions and therefore capacity reductions were considered in both directions on Barbur Boulevard.

- Note 6: The year 2035 Peak Hour Motor Vehicle Capacity freed-up on the Existing Roadway by relocating on-street transit vehicles (buses) to the separated guideway in the Alignment Option. Assumes with Alignment Option, there will be a reduction of 12 buses in each direction along Barbur Boulevard in the year 2035 peak hour. A bus-motor vehicle capacity equivalence factor of 1 bus equals approximately 2 motor vehicles from a capacity perspective is assumed.
- Note 7: The Net Motor Vehicle Capacity is the highest reduction at the Critical Intersections. The yellow highlighted cells indicate a Net Motor Vehicle Capacity Reduction of: 170 vehicles per hour in the PM peak hour northbound direction; 160 [rounded] vehicles per hour in the PM peak hour southbound direction; 190 [rounded] vehicles per hour in the AM peak hour northbound direction. Capacity reductions from multiple intersections are not additive.
- Note 8: Reduced Motor Vehicle Capacity of Intersection equals No-Build Capacity minus Alignment Option Capacity.

**Table 1B - Motor Vehicle Capacity and Net Motor Vehicle Capacity Reduction on Existing Roadways (Barbur Boulevard)
(Alignment Option with *Least Impact* on Motor Vehicle Capacity)**

	Motor Vehicle Capacity								Net Motor Vehicle Capacity Reduction					
	Northbound Direction				Southbound Direction				Northbound Direction			Southbound Direction		
	No-Build ^d Capacity ^e	No-Build ^d v/c Ratio ^a	Alignment Option ¹ Capacity ^e	Alignment Option ¹ v/c Ratio ^a	No-Build ^d Capacity ^e	No-Build ^d v/c Ratio ^a	Alignment Option ¹ Capacity ^e	Alignment Option ¹ v/c Ratio ^a	Reduced Motor Vehicle Capacity of Intersection ⁴	Capacity Freed- Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷	Reduced Motor Vehicle Capacity of Intersection ⁴	Capacity Freed- Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷
Critical Intersections^{1,2}														
PM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1334	1.07	1140	1.13	1604	0.76	1424	0.82	194	24	170	180	24	156
AM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1657	1.00	1592	0.86	5	0.30	5	0.32	65	24	41	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Hamilton Street	2616	1.22	2492	1.02	5	0.25	5	0.34	124	24	100	5	5	5

Note 1: Listing of "Critical Intersections" obtained from: 1) SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report, DKS Associates, March 16, 2016 and 2) Final SW Corridor Traffic Analysis and Operations Memorandum, DKS Associates, July 29, 2014.

Note 2: The 4th Avenue/Caruthers Streets/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the motor vehicle capacity of the roadway system in this area of closely spaced traffic signals and therefore was not considered a critical intersection.

Note 3: Definitions: "No-Build" is the same as "without an Alignment Option"; "Alignment Option" is the option with Light Rail considered to have Least Impact on Motor Vehicle Capacity which is Option 2C/2C6/3C3.

Note 4: Definitions: "Capacity" (or Motor Vehicle Capacity) and "v/c Ratio" (Volume to Capacity Ratio) obtained from Highway Capacity Manual analysis determination of Lane Group Capacity (see Note 1). Capacity is in vehicles/hour.

Note 5: During the AM peak hour (year 2035) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two to four times greater than southbound traffic volumes. Volume to Capacity Ratios for the northbound direction are also significantly higher than the southbound direction. Therefore, during the AM peak hour, capacity reductions were evaluated in the northbound or Critical Direction only. During the PM peak hour (year 2035) traffic volumes are relatively balanced in both directions and therefore capacity reductions were considered in both directions on Barbur Boulevard.

Note 6: The year 2035 Peak Hour Motor Vehicle Capacity freed up on the Existing Roadway by relocating on-street transit vehicles (buses) to the separated guideway in the Alignment Option. Assumes with Alignment Option, there will be a reduction of 12 buses in each direction along Barbur Boulevard in the year 2035 peak hour. A bus-motor vehicle capacity equivalence factor of 1 bus equals approximately 2 motor vehicles from a capacity perspective is assumed.

Note 7: The Net Motor Vehicle Capacity is the highest reduction at the Critical Intersections. The yellow highlighted cells indicate a Net Motor Vehicle Capacity Reduction of: 170 vehicles per hour in the PM peak hour northbound direction; 160 (rounded) vehicles per hour in the PM peak hour southbound direction; 100 (rounded) vehicles per hour in the AM peak hour northbound direction. Capacity reductions from multiple intersections are not additive.

Note 8: Reduced Motor Vehicle Capacity of Intersection equals No-Build Capacity minus Alignment Option Capacity.

available on Barbur Boulevard for auto and truck traffic. The composite effect of these impacts is referred to in this analysis as the *Net Motor Vehicle Capacity Reduction*.

In calculating the *Net Motor Vehicle Capacity Reduction* caused by an *Alignment Option*, the reduction in the overall corridor capacity of Barbur Boulevard is estimated as the highest *Reduced Motor Vehicle Capacity* among all of the evaluated *Critical Intersections* for the *Alignment Option*. The capacity made available to truck and auto traffic by reducing the volume of on-street buses is estimated by multiplying the reduction in the forecasted 2035 *Peak Hour, Peak Direction* on-street bus volume caused by the *Alignment Option* by the bus-auto capacity equivalence factor (1 bus uses capacity of 2 autos). These factors yield the following estimated *Net Motor Vehicle Capacity Reduction* on Barbur Boulevard in year 2035:

- Northbound PM Peak Hour: 170 vehicles per hour⁸
- Southbound PM Peak Hour: 160 vehicles per hour⁹
- Northbound AM Peak Hour: 100 vehicles per hour¹⁰ to 190 vehicles per hour¹¹

As mentioned earlier, the *Alignment Options* do not impact motor vehicle capacity on Interstate 5 or Pacific Highway in Tigard.

Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity

The estimated *Net Motor Vehicle Capacity Reduction* on Barbur Boulevard can best be understood in the context of the overall transportation corridor serving travel between Tigard and Portland. While there are many routes that may be used to travel between Tigard and Portland, this analysis uses the three major routes included in Metro's Mobility Corridor #2¹² as the overall Portland Central City to Tigard/Tualatin motor vehicle corridor. As shown in Figure 2, Metro's Mobility Corridor #2 includes:

- Interstate 5 (shown in blue in Figure 2)
- SW Barbur Boulevard (99W), then along Pacific Highway and 72nd Avenue (shown in red in Figure 2)
- SW Macadam Avenue/OR 43/A Avenue/Boones Ferry Road (shown in yellow in Figure 2)

Using the *Metro Transportation Model* and more detailed estimates for some segments of Barbur Boulevard, the aggregate *Motor Vehicle Capacity* for each of four segments of each of the three routes

⁸ 170 vehicles per hour for both the most and least impactful Alignment Options.

⁹ 160 vehicles per hour is rounded up from 156 or 159 vehicles per hour, and is the same for the Alignment Options with the least and greatest impact on Motor Vehicle Capacity.

¹⁰ 100 vehicles per hour for the Alignment Option with the least impact on Motor Vehicle Capacity.

¹¹ 190 vehicles per hour is rounded up from 186 vehicles per hour for the Alignment Option with the greatest impact on Motor Vehicles Capacity.

¹² <http://www.oregonmetro.gov/mobility-corridors-atlas>

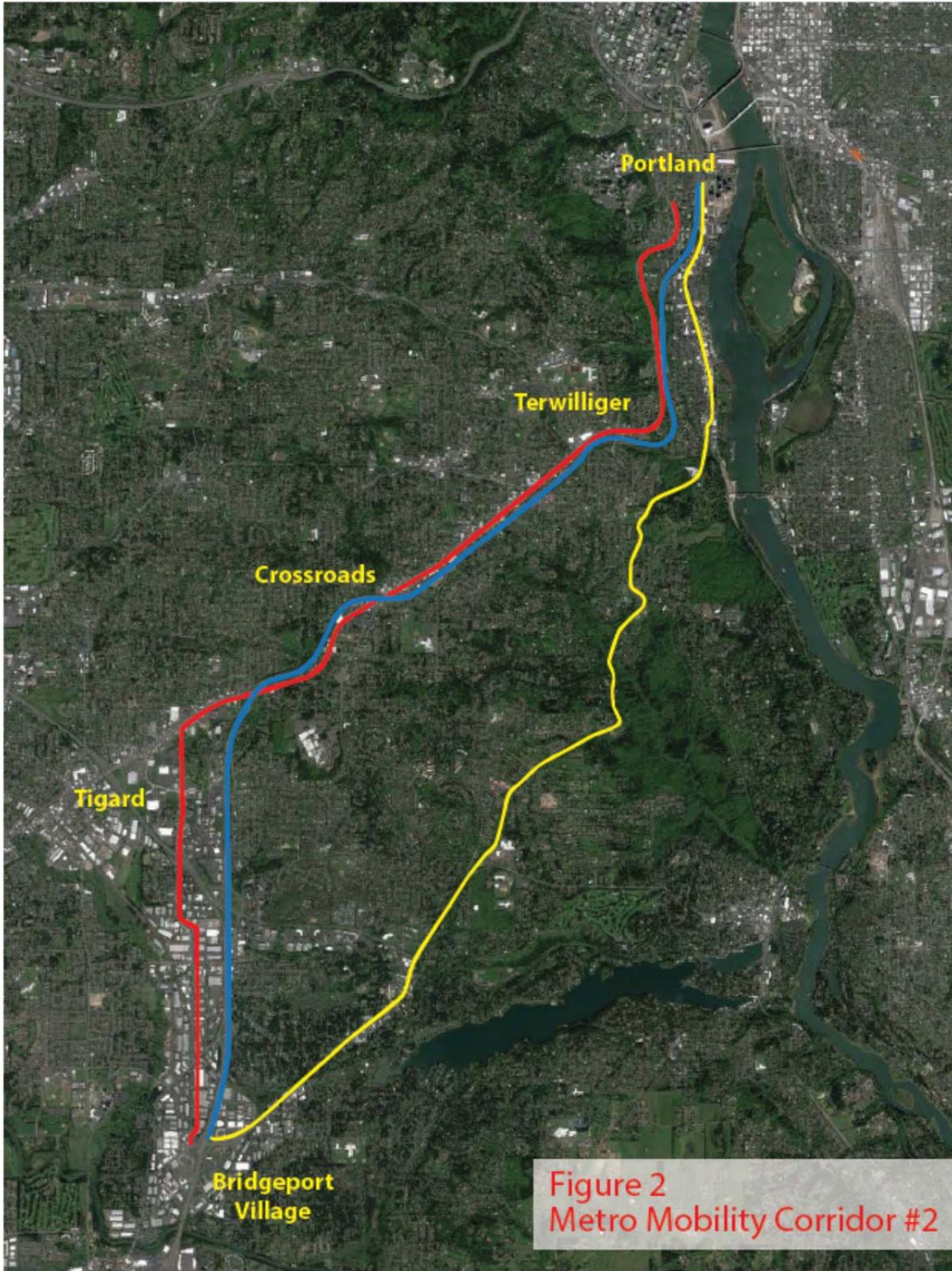


Table 2 - Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity

Metro's Mobility Corridor #2		Motor Vehicle Capacity (Peak Hour) ¹			
		North Segment: Portland- Terwilliger	Mid-Barbur Segment: Terwilliger- Crossroads	Tigard Segment: Crossroads- OR217/Kruse	South Segment: OR217/Kruse- Bridgeport Village
Red Route -	Barbur Blvd - Pacific Hwy - 72nd	1,600 ³	1,700 ³	900	900
Blue Route -	Interstate 5	6,300	6,300	6,300	7,200
Yellow Route -	Macadam/OR 43-A Avenue - Boones Ferry	1,200	700	1,400	1,400
Total Radial Corridor Motor Vehicle Capacity		9,100	8,700	8,600⁴	9,500

	Total Radial Corridor Motor Vehicle Capacity ⁶	Net Motor Vehicle Capacity Reduction ⁵	Net Total Radial Corridor Motor Vehicle Capacity ⁷	Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity
Alignment Option with Greatest Impact on Motor Vehicle	8,600	186	8,414	2.2%
Alignment Option with Least Impact on Motor Vehicle	8,600	170	8,430	2.0%

- Note 1: Motor Vehicle Capacity based on Metro's Transportation Model measured in vehicles per hour in Critical Direction (unless as noted)
- Note 2: Metro has defined a series of Mobility Corridors (<http://www.oregonmetro.gov/mobility-corridors-atlas>) for the region and for the Portland Central City to Tigard/Tualatin corridor (Mobility Corridor 2) three parallel routes (including Barbur Boulevard) have been considered part of the Mobility Corridor. The three routes are shown in Figure 2 and listed in the above Table.
- Note 3: Capacity based on Highway Capacity Manual analysis of corridor signalized intersections
- Note 4: Total Radial Corridor Motor Vehicle Capacity for the segment having the lowest total capacity. The yellow highlighted cell shows the lowest segment capacity and hence the Total Radial Corridor Motor Vehicle Capacity which is 8,600 vehicles per hour.
- Note 5: Net Motor Vehicle Capacity Reduction values obtained from Table 1A (largest "Net Motor Vehicle Capacity Reduction" value) and Table 1B (largest "Net Motor Vehicle Capacity Reduction" value).
- Note 6: Without Alignment Option
- Note 7: Net Total Radial Corridor Motor Vehicle Capacity is the Total Radial Corridor Motor Vehicle Capacity minus the Net Motor Vehicle Capacity Reduction.

comprising Metro Mobility Corridor #2 was estimated (see Table 2). The aggregate *Motor Vehicle Capacity* of each segment was estimated by summing the *Motor Vehicle Capacity* of the three routes in each segment (see Table 2). The controlling *Total Radial Corridor Motor Vehicle Capacity* is estimated as the capacity of the segment with the lowest aggregate *Motor Vehicle Capacity*, which in this case is the Tigard Segment between Crossroads (Capitol Highway) and OR 217 with an aggregate *Motor Vehicle Capacity* of 8,600 vehicles per hour per direction.

The *Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity* is the *Net Motor Vehicle Capacity Reduction* of an *Alignment Option* (from Table 1A and Table 1B) divided by the *Total Radial Corridor Motor Vehicle Capacity* (8,600 vehicles per hour). To estimate the range *Net Motor Vehicle Capacity Reduction* of the *Alignment Options*, the largest value from Table 1A (190 vehicles per hour-rounded) and the largest value from Table 1B (170 vehicles per hour) were used.

As shown in Table 2, the combination of the changes in traffic signalization (which are planned with our without light rail) and the lane displacements and additional changes in traffic signalization caused by the *Alignment Options* reduce the motor vehicle capacity on the main facilities serving Tigard-Portland traffic by about a **two percent (2%)** (the high and low estimates round to about same percent).

Percentage Reduction in Tigard Subarea Motor Vehicle Capacity

Section 53 of the City of Tigard Charter focuses on an area that extends five miles from the boundary of the City of Tigard. To consider Motor Vehicle Capacity impacts in this context, a *Tigard Subarea* was created as an area with a boundary that is five miles in all directions from the boundary of the City of Tigard.

While the capacity of each (non-local) roadway link in the Tigard Subarea is available from the *Metro Transportation Model*, a methodology is required to determine the composite capacity within the *Tigard Subarea*. The *Total Tigard Subarea Vehicle Capacity* was estimated as the aggregate sum of the weighted capacity of each link coded in the Metro Transportation Model within the subarea. The weight for a link was calculated as the length of the link. The length and bi-directional capacity of each link was derived from the *Metro Transportation Model*. The length-weighted capacity of the Tigard Subarea was calculated for the No Build scenario (without any *Alignment Option*) and a scenario with an *Alignment Option* and the *Percentage Reduction in Tigard Subarea Motor Vehicle Capacity* was estimated as the percentage difference in these scenarios.

As shown in Table 3, the *Alignment Options* are estimated to decrease the length-weighted *Motor Vehicle Capacity* of the *Tigard Subarea* by about **0.03 percent (3/100th of 1%)**. This value will be similar for any of the *Alignment Options*.

Table 3 - Percentage Reduction in Tigard Subarea Motor Vehicle Capacity

	<i>Total Tigard Subarea {Length-Weighted} Capacity ¹</i>	<i>Percentage Reduction in Tigard Subarea Motor Vehicle Capacity</i>
<i>No Alignment Option (No Build)</i>	1,600,864	Not Applicable
<i>Alignment Option</i>	1,600,399	0.03%

Note 1: The *Total Tigard Subarea Capacity* is calculated by using the length and bi-directional capacity of each link coded in the *Metro Transportation Model* located within five miles of the City of Tigard. The *Total Tigard Subarea Capacity* is calculated as the aggregate sum of the weighted capacity of each link within the subarea, where the weight for a link is calculated as the length of the link.

Person Trip Capacity Impacts

The *Motor Vehicle Capacity* measures evaluated above describe only part of the overall transportation capacity impact of the proposed light rail options to Tigard and Tualatin. While *Motor Vehicle Capacity* is slightly impacted in limited locations on Barbur Boulevard, these impacts are mitigated by the added Person Trip Capacity from introducing light rail into the corridor. The impacts on travel (whether by motor vehicle or transit) can be measured as *Person Trip Capacity*, which estimates the maximum number of persons that can pass through a *Critical Intersection* in the *Critical Direction* in motor vehicles or on transit.

The *Person Trip Capacity* of the *Radial Corridor* was determined for *Alignment Options* with the greatest impact on *Motor Vehicle Capacity* and the least impact on *Motor Vehicle Capacity*, as well as for a scenario without an *Alignment Option* (No-Build). Table 4 shows the steps utilized to determine the *Percentage Increase in Person Trip Capacity*. The *Increased Person Trip Capacity* on transit resulting from the introduction of the light rail options was determined by multiplying the estimated maximum number of light rail trains that can be operated in the *Peak Hour* by the person capacity of a light rail train, and then subtracting the person capacity of the on-street buses that were removed from Barbur Boulevard due to light rail. The *Person Trip Capacity* in motor vehicles was estimated by multiplying the *Net Total Radial Corridor Motor Vehicle Capacity* from Table 2 by an assumed vehicle occupancy rate of 1.4. The *Increased Person Trip Capacity* of the *Radial Corridor* is the sum in the *Radial Corridor* of the increased person trip capacity on transit and the decreased person trip capacity in motor vehicles.

The *Percentage Increase in Person Trip Capacity* is estimated to be 36 to 37 percent for all *Alignment Options* (the high and low estimate round to about the same percentage). Thus, while the introduction of light rail reduces the *Motor Vehicle Capacity* of the *Radial Corridor* by about 2%, it increases the *Person Trip Capacity* of the *Radial Corridor* by about 36 to 37 percent.

Table 4 - Person Trip Capacity Impacts

Person Trip Capacity of High Capacity Transit Per Direction

Alignment Options	# of Light Rail Transit Trains Per Hour ¹	Person Capacity Per Light Rail Transit Train ²	Transit Person Capacity Per Hour	Number of Buses Removed Per Hour ³	Number of Persons Per Bus ⁴	Person Capacity Reduction (from Buses) Per Hour	Increase in Transit Person Trip Capacity Per Hour Due to High Capacity Transit ⁵
Alignment Option with Greatest Impact on Motor Vehicle Capacity	20	266	5,320	12	56	672	4,648
Alignment Option with Least Impact on Motor Vehicle Capacity	20	266	5,320	12	56	672	4,648

Person Trip Capacity Impacts for Alignment Options

	Net Total Radial Corridor Motor Vehicle Capacity ⁶	Assumed Vehicle Occupancy Rate ⁷	Person Trip Capacity of Radial Corridor Per Hour ⁸	Increase in Person Trip Capacity of Alignment Options Per Hour ⁹	Percentage Increase in Person Trip Capacity ¹⁰
No Alignment Option (No Build)	8,600	1.4	12,040	-	0%
Alignment Option with Greatest Impact on Motor Vehicle Capacity	8,414	1.4	16,428	4,388	36%
Alignment Option with Least Impact on Motor Vehicle Capacity	8,430	1.4	16,450	4,410	37%

- Note 1: Assumed headway of 3 minutes per light rail train per direction resulting in 20 light rail trains per hour per direction for the Alignment Option
- Note 2: Assumed two-consist light rail trains which can accommodate 266 persons (seating and standing)
- Note 3: The forecasted reduction in the 2035 volume of on-street buses eliminated by high-capacity transit is 12 buses per hour per direction
- Note 4: Assumed 40 foot standard bus which can accommodate 56 persons (seating and standing)
- Note 5: Increase in Transit Person Trip Capacity Per Hour Due to High Capacity Transit equals Transit Person Capacity Per Hour minus Person Capacity Reduction (from Buses) Per Hour
- Note 6: See Table 2 for "Net Total Radial Corridor Motor Vehicle Capacity" for different Alignment Option.
- Note 7: An average Peak Hour auto occupancy rate for the corridor is 1.4 persons per vehicle which is consistent with the Metro Transportation Model.
- Note 8: Person Trip Capacity of Radial Corridor Per Hour equals Net Total Radial Corridor Motor Vehicle Capacity times Assumed Vehicle Occupancy Rate plus Increase in Person Trip Capacity Per Hour Due to High Capacity Transit
- Note 9: Increased Person Trip Capacity of an Alignment Option shall be calculated as the numeric difference of the Person Trip Capacity of the Radial Corridor with the Alignment Option minus the Person Trip Capacity of the Radial Corridor without the Alignment Option
- Note 10: The Percentage Increase in Person Trip Capacity of an Alignment Option is the fraction, expressed as a percentage, calculated as (i) the increased Person Trip Capacity of the Alignment Option, divided by (ii) the Person Trip Capacity of the Radial Corridor without the Alignment Option.

Reduced Motor Vehicle Capacity of Unused Public ROW

Section 53 of the City of Tigard Charter includes a requirement to describe the reduction in road capacity caused by the displacement (by the light rail options) of "*public rights-of-way that could otherwise provide additional road capacity at a future date.*" These are not lanes or roads that currently exist and, in the affected parts of the Southwest Corridor, there are not any planned lanes or roads to serve as a basis for estimating such impacts.

As a practical matter, there are many constraints to adding *Motor Vehicle Capacity* to either Interstate 5 or Barbur Boulevard. The most significant constraint may be a lack of right-of-way in the necessary (bottleneck) locations. Adding a travel lane along Interstate 5 will require widening the roadway for an additional travel lane or lanes and widening the shoulders on both sides of the roadway to bring them up to ODOT/US DOT standards. It also likely requires reconstruction of all interchanges, reconstruction of many bridges and overpasses which connect surface streets over I-5, substantial new walls and most likely an adjustment to the roadway alignment to straighten out some of the curved sections to provide adequate sight distance meeting current standards. In addition to the reconstruction challenges, this will require ODOT to obtain additional right-of-way that they do not currently own. Along Barbur Boulevard, expanding capacity from today's conditions requires not only additional travel lanes at bottleneck locations, but the addition of standard-width sidewalks, bicycle facilities, ADA treatments, water quality facilities, and other improvements to bring the roadway up to applicable standards.

Reduced Motor Vehicle Capacity of Unused Public ROW

To address this Charter requirement, the *Reduced Motor Vehicle Capacity of the Unused Public ROW* was estimated for the *Alignment Options* with the greatest and least impact on Unused Public ROW that "*could otherwise provide additional motor vehicle capacity at a future date.*" This does not include all public right-of-way in the corridor currently not being used for a transportation facility (*Unused Public ROW*), as much of the *Unused Public ROW* is too small to accommodate a new lane or road and/or is located where a new lane or road cannot efficiently function. The *Reduced Motor Vehicle Capacity of the Unused Public ROW* only considers *Unused Public ROW* that "*could otherwise provide additional motor vehicle capacity at a future date,*" which is referred to as *Useful Unused Public ROW* in this analysis.

For each applicable *Alignment Option*, *Useful Unused Public ROW* was identified as follows:

- The roadway design standards or criteria (including cross-section specifications) applicable to expanding the number of lanes on the roadway was identified; cross-sections include the width of all bicycle facilities, sidewalks, shoulders, medians, or other features needed to comply with the design standard or criteria.
- Based on the cross-section required to comply with applicable design standards or criteria, the width (i.e.; distance from the centerline of the roadway) of *Unused Public ROW* needed to added one or more lanes was determined.

- *Useful Unused Public ROW* was identified as the area of *Unused Public ROW* displaced by an *Alignment Option*¹³ where:
 - The width of the *Unused Public ROW* is sufficient to accommodate one or more additional lanes in compliance with applicable design standards and criteria; and
 - If the roadway to be expanded is a freeway or throughway (i.e.; I-5), the location of the *Unused Public ROW* either (I) extends along the roadway for a distance of at least one-half of one mile or (II) addresses a system bottleneck; or
 - If the roadway to be expanded is an arterial (i.e., Barbur Boulevard), the location of the *Unused Public ROW* addresses a system bottleneck.

The location of *Useful Unused Public ROW* and *Unused Public ROW* impacted by the *Alignment Options* was identified, based on the criteria described above. Figure 3 shows the *Unused Public ROW* for the highest impact scenario while Figure 4 shows the *Unused Public ROW* for the lowest impact scenario. Table 5 shows the *Reduced Motor Vehicle Capacity of Unused Public ROW*, which is measured by the area (in acres) of *Useful Unused Public ROW* displaced by the *Alignment Option*.

Table 5 - Reduced Motor Vehicle Capacity of Unused Public ROW¹ (Measured in Acres)

	Low ²	High ³
<i>Unused Public ROW</i> underlying <i>Alignment Option</i> ⁴	28.3	33.9
<i>Reduced Motor Vehicle Capacity of Unused Public ROW</i> due to <i>Alignment Option</i> ⁵	1.3	5.0
<i>Unused Public ROW</i> Impacted by <i>Alignment Option</i> that does not Reduce the Potential Future Motor Vehicle Capacity of the ROW	27.0	28.9

Note 1 *Unused Public Right-of-Way (ROW)* is right-of-way underlying an *Alignment Option* that is currently in public ownership and is not improved for general public use as a transportation facility. *Useful Unused Public ROW* is *Unused Public ROW* potentially available for future Motor Vehicle Capacity.

Note 2 Low estimates are for *Alignment Options* that have the least impact on *Useful Unused Public ROW* (*Alignment Options* Nos. 1Ab/2Ba, 2Ca, 3Ca v2, 4Bg/4Ce/4Bh, 4Bh/5Ah/5Bh)

Note 3 High estimates are for *Alignment Options* that have the greatest impact on *Useful Unused Public ROW* (*Alignment Options* Nos. 1Af/2Ba, 2Cf/2Ce, 3Cb, 4Bg/4Aj 5Ad/5Ah/5Bh)

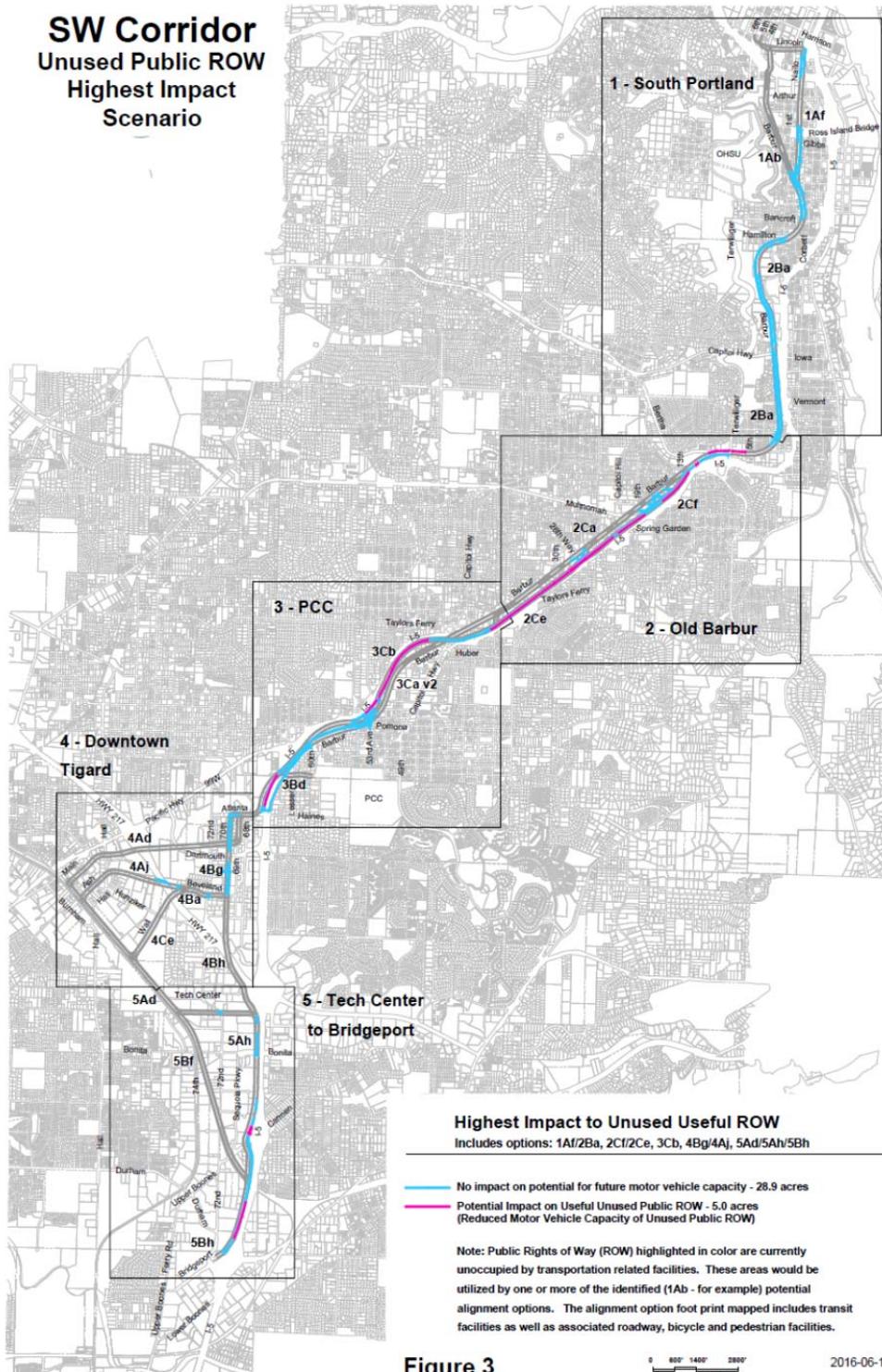
¹³ This analysis only identified *Useful Unused Public ROW* that would be used by an *Alignment Option*; it did not estimate the total amount of *Useful Unused Public ROW* in the *Radial Corridor* or the *Tigard Subarea*.

Note 4 The amount of *Unused Public ROW* that is impacted by an *Alignment Option*, whether or not the amount of potential future *Motor Vehicle Capacity* on such ROW is impacted.

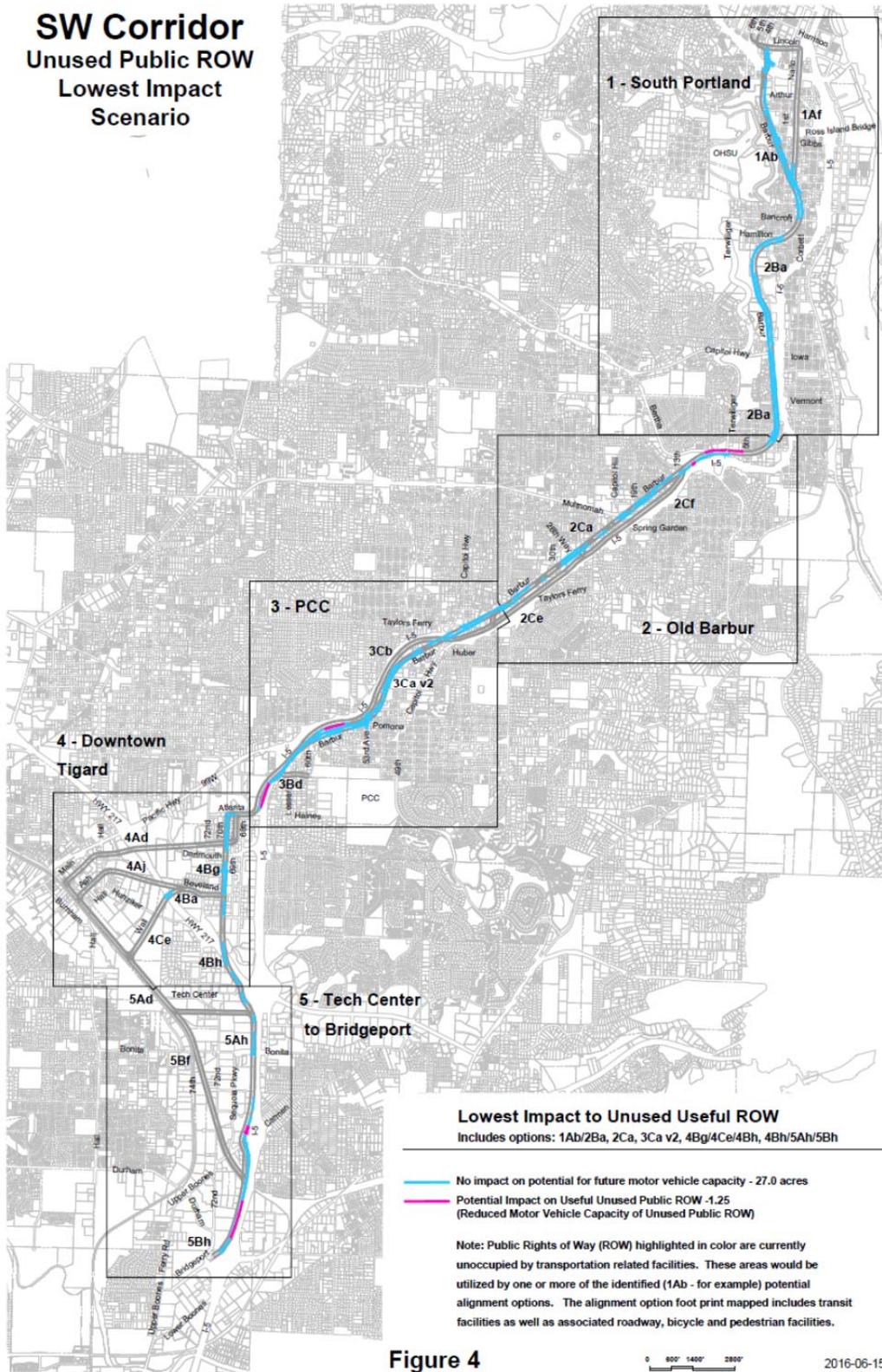
Note 5 *Reduced Motor Vehicle Capacity of Unused Public ROW* estimates the amount that potential future road capacity is reduced, measured in acre, by constructing an *Alignment Option* on *Unused Public ROW*.

Thus, the *Alignment Options* are estimated to displace 1.3- 5.0 acres of public ROW could potentially provide additional motor vehicle capacity at a future date. Keep in mind that this estimate does not consider all of the practical limitations of providing additional lanes.

**SW Corridor
Unused Public ROW
Highest Impact
Scenario**



**SW Corridor
Unused Public ROW
Lowest Impact
Scenario**



**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
RESOLUTION NO. 16-___**

A RESOLUTION OF THE TIGARD CITY COUNCIL SUBMITTING TO THE VOTERS A PROPOSED AUTHORIZING ORDINANCE TO BE CONSIDERED AT THE NOVEMBER 8, 2016 ELECTION, WHICH WOULD AUTHORIZE SITING AND CONSTRUCTION OF A HIGH-CAPACITY CORRIDOR PROJECT IN THE CITY OF TIGARD

WHEREAS, the City of Tigard City Charter (“Charter”), Section 53A, requires the City to oppose the construction of a new high-capacity transit corridor within the City boundary unless voter approval is first obtained; and

WHEREAS, the Charter, Section 53C, provides that the City may not amend its comprehensive plan or land use regulations to accommodate the siting of a new high-capacity transit corridor project if the project has not first received voter approval at an election on an authorization ordinance; and

WHEREAS, after due consideration, the Tigard City Council has decided to forward to the voters a proposed authorization ordinance, to allow the siting and construction of a high-capacity corridor project.

NOW, THEREFORE, BE IT RESOLVED by the Tigard City Council that:

SECTION 1: An election is hereby called in and for the City of Tigard, Washington County, Oregon, for the purpose of submitting to the legal voters the question of whether or not to enact an ordinance allowing City support for extending MAX light rail service to Tigard, including downtown Tigard.

SECTION 2: The measure election hereby called shall be held in the City of Tigard on the 8th day of November, 2016. The election shall be conducted by mail pursuant to ORS 254.465 and 254.470.

SECTION 3: The Tigard City Council authorizes the mayor, the city manager (each an “authorized representative”) or a designee of the authorized representative to act on behalf of the City of Tigard and to take such further action as is necessary to carry out the intent and purposes herein in compliance with the applicable provisions of law.

SECTION 4: Pursuant to ORS 250.285 and ORS 254.095, the Tigard City Council directs the city elections officer to file a Notice of City Measure Election in substantially the form of Exhibit A with the Washington County Elections Office, unless, pursuant to a valid ballot title challenge, the Tigard City Council certifies a different Notice of City Measure Election be filed, such filing shall occur no earlier than the eighth business day after the date on which Exhibit A is filed with the city elections officer and not later than September 8, 2016.

SECTION 5: The city elections officer is further instructed to publish notice of receipt of the ballot title in a newspaper of general distribution in compliance with ORS 250.275(5).

SECTION 6: Pursuant to ORS 251.345, the Tigard City Council directs the city manager to prepare a Measure Explanatory Statement for publication in the county voters’ pamphlet; said statement shall be filed with the Washington County Elections Office at the same time the Notice of City Measure Election is filed by the city elections officer.

SECTION 7: The Act, containing the full proposed authorization ordinance, is attached hereto as Exhibit B and included in this resolution by reference.

SECTION 8: This resolution is effective immediately upon passage.

PASSED: This _____ day of _____, 2016.

Mayor - City of Tigard

ATTEST:

City Recorder - City of Tigard

EXHIBIT A

Notice of Measure Election City

SEL 802

rev 1/14: ORS 250.035, 250.041,
250.275, 250.285, 254.095, 254.465

Notice		
Date of Notice	Name of City or Cities City of Tigard	Date of Election November 8, 2016

The following is the final ballot title of the measure to be submitted to the city's voters.

Final Ballot Title Notice of receipt of ballot title has been published and the ballot title challenge process has been completed.
Caption 10 words which reasonably identifies the subject of the measure
Allow City to support extending light rail service to Tigard.

Question 20 words which plainly phrases the chief purpose of the measure
Shall Tigard enact an ordinance allowing City support for extending MAX light rail service to Tigard, including downtown Tigard?

Summary 175 words which concisely and impartially summarizes the measure and its major effect
Tigard's Charter requires the City to oppose proposed MAX light rail service to Tigard ("Project") without voter approval. A yes vote approves the authorization ordinance, satisfies Charter allowing City support for Project, including service to downtown Tigard, and land use amendments. A no vote maintains Charter's opposition.
City land use regulations would be amended to allow light rail maintenance yards in specified industrial zones and allow light rail to cross wetlands with proper mitigation. No housing density increase is proposed to accommodate the Project.
The estimated \$2.4-2.8 billion Project would only be built if federal grants are secured. Ordinance does not impose or increase any fees or taxes.
No traffic lanes or contiguous properties on Pacific Highway in Tigard are impacted. Project includes sidewalk, bicycle, and road improvements in Tigard.
The total amount of road capacity on existing roadways along the route is reduced by 0.03%; unused public right-of-way is reduced by 5 acres.
See www.tigard-or.gov/swc for authorization ordinance and details on Project.

Explanatory Statement 500 words that impartially explains the measure and its effect, if required attach to this form						
If the county is producing a voters' pamphlet an explanatory statement must be submitted for any measure referred by the city governing body and if required by local ordinance, for any initiative or referendum.						
Measure Type	County producing voters' pamphlet		Local ordinance requiring submission		Explanatory statement required	
<input checked="" type="checkbox"/> Referral	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not applicable		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Initiative	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Referendum	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Authorized City Official Not required to be notarized
→ By signing this document, I hereby state that I am authorized by the city to submit this Notice of Measure Election and I certify that notice of receipt of ballot title has been published and the ballot title challenge process for this measure completed.

Name	Title	Work Phone
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Signature	Date Signed
------------------	--------------------

Exhibit B

**CITY OF TIGARD, OREGON
TIGARD CITY COUNCIL
ORDINANCE NO. 16-_____**

AN AUTHORIZATION ORDINANCE TO ALLOW SUPPORT FOR SITING OF A NEW HIGH-CAPACITY TRANSIT CORRIDOR FOR LIGHT RAIL TRANSIT SERVICE WHICH INCLUDES DOWNTOWN TIGARD, RELATED AMENDMENTS TO THE COMPREHENSIVE PLAN AND LAND USE REGULATIONS, PROVIDING REQUIRED INFORMATION AND OTHER ACTIONS.

WHEREAS, the City of Tigard City Charter, Section 53A. includes a policy that requires the City to oppose the construction of a new high-capacity transit corridor within the City boundary unless voter approval is first obtained; and

WHEREAS, an extension of light rail transit service to and within the City of Tigard is being considered and such light rail extension constitutes a new high-capacity transit corridor under Section 53A. of the Tigard City Charter; and

WHEREAS, voter approval of an authorization ordinance (under City of Tigard Charter Section 53) allowing the City to support the proposed light rail extension will substantially facilitate the development and construction of the light rail extension; and

WHEREAS, the City of Tigard City Charter Section 53C. provides that the City may not amend its comprehensive plan or land use regulations to accommodate a new high-capacity transit corridor project unless the project has first received voter approval of an authorization ordinance; and

WHEREAS, changes to City of Tigard land use regulations are required to accommodate the proposed light rail extension to the City of Tigard, including downtown Tigard; and

WHEREAS, the Tigard City Council desires to refer the authorization ordinance required under Charter Section 53C. to the voters of the City of Tigard for voter approval on November 8, 2016.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: A City of Tigard ordinance is hereby created as provided as follows:

NEW HIGH-CAPACITY TRANSIT CORRIDOR AUTHORIZATION ORDINANCE

SECTION A. City of Tigard support for a new high-capacity transit corridor in the City of Tigard boundary, including downtown Tigard, is allowed. The City shall send letters notifying the public officials listed in City Charter Section 53D. of this support.

SECTION B. The City of Tigard is authorized to make changes to the comprehensive plan and land use regulations to allow: (I) light rail to cross wetlands with proper

mitigation protecting natural areas, habitat, and water quality; and (II) a light rail maintenance facility to be sited in specified industrial zones.

SECTION C.

The following describes aspects of the new high-capacity transit corridor project, which would extend light rail service to the City of Tigard, including downtown Tigard (“Project”) as required by City of Tigard City Charter, Section 53C.:

1. Road Capacity: The total change in road capacity as a result of the new high-capacity transit corridor is described in the attached Appendix A and incorporated herein by reference.
2. Housing Density: Increases in housing density are not required to site or otherwise accommodate a new high-capacity transit corridor.
3. Land Use Regulations and Comprehensive Plan: Changes anticipated to be proposed to land use regulations or the comprehensive plan to accommodate light rail are limited to: (I) allowing light rail to cross wetlands with proper mitigation protecting natural areas, habitat, and water quality; and (II) allowing a light rail maintenance facility to be sited in specified industrial zones.
4. Projected Public Cost: the current projected public cost of the entire Project is \$2.4-2.8 billion. No new or increase in City of Tigard fees or taxes is proposed for the light rail project under Tigard City Charter Section 52.

SECTION D.

The information in this Authorization Ordinance is based on (I) information and data available at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council and (II) the light rail corridor project options sanctioned by the Southwest Corridor Steering Committee at the time the Authorization Ordinance is referred to the voters by the City of Tigard Council.

SECTION 2:

The City Council of the City of Tigard finds that this Authorization Ordinance satisfies the requirements of Tigard City Charter Section 53 and Ordinance _____.

SECTION 3:

The sections, subsections, paragraphs and clauses of this ordinance are severable. The invalidity of one section, subsection, paragraph or clause shall not affect the validity of the remaining sections, subsections, paragraphs and clauses.

SECTION 4:

This ordinance shall be effective upon certification by the County Elections official that it has received voter approval at an election conducted on November 8, 2016.

PASSED: By _____ vote of all Council members present after being read by number and title only, this _____ day of _____, 2016.

Carol A. Krager, City Recorder

APPROVED: By Tigard City Council this _____ day of _____, 2016.

John L. Cook, Mayor

Approved as to form:

City Attorney

Date

APPENDIX A

Roadway Capacity Reduction Analysis
June 20, 2016



720 SW Washington St.
 Suite 500
 Portland, OR 97205
 503.243.3500
 www.dksassociates.com



EXPIRES: 2/24/17

MEMORANDUM

DATE: June 20, 2016
TO: City of Tigard
FROM: Peter L. Coffey, PE
SUBJECT: Impacts on Road Capacity of Southwest Corridor Light Rail Transit Project Options

The City of Tigard Charter requires the City to oppose any high-capacity transit project, such as the proposed options to extend light rail service to Tigard, unless the voters first approve an authorization ordinance supporting the project. The Charter also creates requirements for what must be included in the authorization ordinance. One requirement is that the ordinance must describe the total amount of road capacity or potential future road capacity that may be reduced by the project options.

The Charter requirement does not call for a comprehensive analysis of the impacts and benefits of the light rail options on the road network, it solely focuses on the reduction in road or potential road capacity within the five mile radius around the City of Tigard boundary. A reduction in public right-of-way that is not currently used for a roadway but that could potentially be available for new road or highway lanes in the future must be addressed, whether or not there is any plan for the additional road or highway lanes.

Thus the Charter requires road capacity to be measured on a spatial (or area) basis and to consider the capacity of unused rights-of-way on which no roadways are currently planned. To address the unique requirements of the Charter, the City enacted an ordinance that established the *"Methodology to Estimate the Total Amount of Road Capacity Reduced by a New High-Capacity Transit Corridor,"* which sets in the city's laws a definitive and transparent approach to addressing the Charter requirement regarding road capacity.

This report is prepared in accordance with city's required methodology, and uses the terms defined therein. The analysis is based on alignment options, information, and data available at the time the authorization ordinance is referred to the voters by the City Council. The analysis and findings of this analysis do not supplant the need for future traffic analysis that will be done for the Environmental Impact Statement.

The report finds that while causing a slight loss of road capacity along the overall transportation corridor between Tigard and Portland, the proposed light rail options cause substantial increase in the person-trip capacity of the overall transportation corridor between Tigard and Portland. No loss of existing road capacity occurs in Tigard, although light rail options use some unused right-of-way, primarily alongside

of Interstate 5 that potentially could be available for added lanes should additional lanes be planned in the future. None of the light rail options impact Pacific Highway in Tigard.

Background Traffic Analysis of Barbur Boulevard Corridor

This analysis of the capacity impacts of the Southwest Corridor light rail options on existing roadways focuses on Barbur Boulevard because it is the existing roadway (as opposed to possible future roadways, which are addressed separately later in this report) affected by the proposed light rail options between Tigard and Portland. No lanes on Interstate 5 nor on Pacific Highway in Tigard are impacted by the proposed light rail options, except to the extent that the light rail options may attract more riders and thereby reduce auto traffic on these facilities.¹

There have been several recent traffic analyses of the Southwest Corridor and Barbur Boulevard in connection with the proposed options to extend light rail to Tigard that evaluated the corridor from downtown Portland to Tigard and Tualatin.² These previous traffic analyses concluded that key signalized intersections in the year 2035 will either continue to operate within mobility targets³ or will not significantly worsen from 2035 No-build conditions with the addition of light rail along Barbur Boulevard.

The City of Portland recently adopted the Barbur Concept Plan for the six-mile Barbur Boulevard corridor from Portland's Central City to the Tigard city limit. Key provisions of this plan are to "establish safe and comfortable conditions for active transportation" in the corridor, "complete pedestrian and bicycle connections and access to transit throughout the corridor," and "prioritize active transportation improvements on Barbur."⁴ To make Barbur Boulevard more pedestrian- and bicycle-friendly, the traffic signals on Barbur Boulevard will need to devote more "green time" for cross-streets to make it easier for pedestrians and bicyclists to cross Barbur Boulevard. Consequently there will be less "green time" for the north-south motor vehicle traffic on mainline Barbur Boulevard. This change in signal timing along Barbur Boulevard results in decreases in *Motor Vehicle Capacity*, and is anticipated whether or not light rail is extended to Tigard.

¹ Along Interstate 5, all existing lanes remain in each direction and along Barbur Boulevard, south of the Naito Parkway confluence, two through lanes remain in each direction.

² *SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report*, DKS Associates, March 16, 2016 and *Final SW Corridor Traffic Analysis and Operations Memorandum*, DKS Associates, July 29, 2014.

³ Mobility targets measured through a volume to capacity ratio (v/c ratio).

⁴ *Barbur Concept Plan*, City of Portland, April 2013 (page 48); Resolution No. 37014, adopted by City Council April 24, 2013.

Motor Vehicle Capacity Impacts on Existing Roadways

The *Vehicle Lane Impact Map*, provided as Figure 1, shows the general location of vehicular lanes on *Existing Roadways* that will be displaced or that will be added for general public traffic by an *Alignment Option*. As shown, while there are no impacts along Interstate 5 or on Pacific Highway in Tigard, some use of existing lanes occur in locations along Barbur Boulevard in Portland. However, the changes in the configuration of lanes on Barbur Boulevard may not directly translate into a material change in the Motor Vehicle Capacity of Barbur Boulevard, as the operations of the intersections along Barbur Boulevard must also be taken into consideration.

The design of intersections (including traffic signals) along arterial roadways and interchanges along freeway segments (where weaving and merging conditions exist) are major considerations in determining the *Motor Vehicle Capacity* of these facilities. Intersections and interchanges are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to efficiently carry traffic is generally diminished in these areas. The main consequence of a bottleneck is an immediate reduction in capacity of the roadway. For arterial roadways such as Barbur Boulevard, the controlling bottlenecks are signalized intersections, and the most congested of these intersections are referred to as *Critical Intersections*.

Net Motor Vehicle Capacity Reduction on Existing Roadways

Using the recent traffic analyses for the SW Corridor,⁵ the Barbur Boulevard corridor was assessed to identify *Critical Intersections* associated with the proposed *Alignment Options*. Since Interstate 5, Pacific Highway in Tigard, and other corridor routes are not impacted by any *Alignment Option*, there was no need to assess *Critical Intersections* on those facilities.

Intersections on Barbur Boulevard were identified as *Critical Intersections* if the overall intersection *Volume to Capacity Ratio* (V/C Ratio) forecasted for the year 2035 was greater than 0.90. The following intersections met this criterion:

- Barbur Boulevard and 60th Avenue (AM peak)
- Barbur Boulevard and Capitol Highway (AM and PM peak)
- Barbur Boulevard and 24th Avenue/I-5 SB Off-Ramp (AM peak)

⁵ *SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report*, DKS Associates, March 16, 2016 and *Final SW Corridor Traffic Analysis and Operations Memorandum*, DKS Associates, July 29, 2014.⁶ The 4th Avenue/Caruthers Street/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the *Motor Vehicle Capacity* of the roadway system in this area of closely spaced traffic signals. The downstream constraint (6th/Broadway) is not changed by this project. Therefore, the 4th Avenue/Caruthers Street/Broadway intersection was not considered a *Critical Intersection* for this analysis.

SW Corridor Vehicle Lane Impact Map

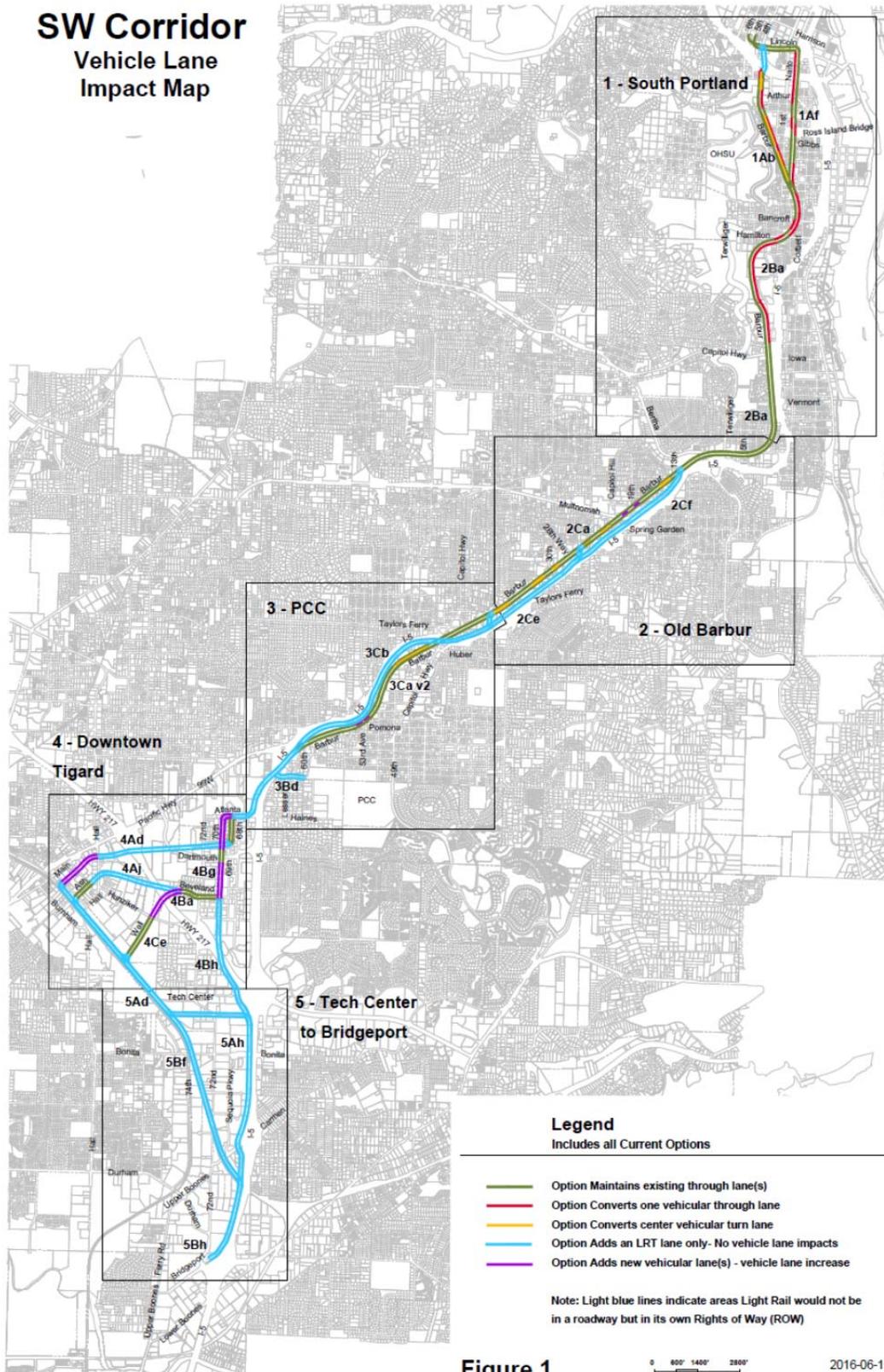


Figure 1

- Barbur Boulevard and 19th Avenue/Capitol Hill Road (AM and PM peak)
- Barbur Boulevard and Terwilliger Boulevard (AM and PM peak)
- Barbur Boulevard and Hamilton Street (AM peak)
- 4th Avenue and Caruthers Street/Broadway (AM peak) ⁶

Motor Vehicle Capacity and Volume to Capacity (V/C) Ratios for each of the *Critical Intersections* were estimated, using the practices described in the Highway Capacity Manual,⁷ for the 2035 No-Build (without an *Alignment Option*) and the 2035 system with *Alignment Options* (with light rail transit). During the *AM Peak-Hour* (future year conditions) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two-to-four times greater than southbound traffic volumes and *V/C Ratios* for the northbound through movements are also significantly higher than for the southbound movements (see Table 1A and Table 1B). Therefore, *Motor Vehicle Capacity* reductions for the AM Peak Hour were evaluated in the northbound (critical) direction. During the PM peak hour (future year conditions) traffic volumes were relatively balanced in both directions and therefore *Motor Vehicle Capacity* reductions were evaluated in both directions on Barbur Boulevard.

Tables 1A and 1B show the estimated reduction in the *Motor Vehicle Capacity* of each *Critical Intersection* along Barbur Boulevard caused by the *Alignment Options*. *Reduced Motor Vehicle Capacity* is calculated as the difference of the *Motor Vehicle Capacity* of the *Critical Intersection* without the *Alignment Option* minus the *Motor Vehicle Capacity* of the *Critical Intersection* with the *Alignment Option*. To illustrate the range of potential impacts of the *Alignment Options*, Table 1A shows results for the *Alignment Option* having the greatest impact on *Motor Vehicle Capacity* on Barbur Boulevard and Table 1B shows results for the *Alignment Option* with the least impact.

The *Motor Vehicle Capacity* impacts of *Alignment Options* on the *Critical Intersections* are used to determine the overall *Motor Vehicle Capacity* impact on the Barbur Boulevard corridor. *Alignment Options* impact the overall *Motor Vehicle Capacity* of a roadway in two distinct ways: (i) changes in the physical configuration and traffic signalization of *Critical Intersections*, as described above, and (ii) changes in the volume of on-street buses on Barbur Boulevard. With the introduction of light rail, some buses currently operating on Barbur Boulevard are no longer required because they are replaced by light rail vehicles operating on a dedicated right-of-way. This makes additional *Motor Vehicle Capacity*

⁶ The 4th Avenue/Caruthers Street/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the *Motor Vehicle Capacity* of the roadway system in this area of closely spaced traffic signals. The downstream constraint (6th/Broadway) is not changed by this project. Therefore, the 4th Avenue/Caruthers Street/Broadway intersection was not considered a *Critical Intersection* for this analysis.

⁷ 2000 Highway Capacity Manual, Transportation Research Board, Special Report 209, 2000, Chapter 16, Washington DC, 2000.

**Table 1A - Motor Vehicle Capacity and Net Motor Vehicle Capacity Reduction on Existing Roadways (Barbur Boulevard)
(Alignment Option with *Greatest Impact* on Motor Vehicle Capacity)**

	Motor Vehicle Capacity								Net Motor Vehicle Capacity Reduction					
	Northbound Direction				Southbound Direction				Northbound Direction			Southbound Direction		
	No-Build ² Capacity ³	No-Build ² v/c Ratio ⁴	Alignment Option ¹ Capacity ³	Alignment Option ¹ v/c Ratio ⁴	No-Build ² Capacity ³	No-Build ² v/c Ratio ⁴	Alignment Option ¹ Capacity ³	Alignment Option ¹ v/c Ratio ⁴	Reduced Motor Vehicle Capacity of Intersection ⁵	Capacity Freed-Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷	Reduced Motor Vehicle Capacity of Intersection ⁵	Capacity Freed-Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷
Critical Intersections^{1,2}														
PM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Capitol Hwy	1638	0.61	1866	0.49	2692	0.64	2605	0.81	(228)	24	(252)	87	24	63
SW Barbur Blvd (Hwy 99W) & Capitol Hill Rd/19th	1886	0.86	1694	0.97	1825	0.83	1642	0.98	192	24	168	183	24	159
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1334	1.07	1140	1.13	1604	0.76	1424	0.82	194	24	170	180	24	156
AM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & 60th	1534	0.91	1504	0.92	5	0.38	5	0.38	30	24	6	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Capitol Hwy	1521	0.89	1504	0.90	5	0.70	5	0.70	17	24	(7)	5	5	5
SW Barbur Blvd (Hwy 99W) & 34th/US Off-Ramp	2397	0.90	2410	0.90	5	0.43	5	0.43	(13)	24	(37)	5	5	5
SW Barbur Blvd (Hwy 99W) & Capitol Hill Rd/19th	1866	0.95	1656	1.05	5	0.45	5	0.45	210	24	186	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1657	1.00	1592	0.86	5	0.30	5	0.30	65	24	41	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Hamilton Street	2616	1.22	2492	1.02	5	0.25	5	0.25	124	24	100	5	5	5

- Note 1: Listing of "Critical Intersections" obtained from: 1) SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report, DKS Associates, March 16, 2016 and 2) Final SW Corridor Traffic Analysis and Operations Memorandum, DKS Associates, July 29, 2014.
- Note 2: The 4th Avenue/Caruthers Street/Broadway Intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway Intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the motor vehicle capacity of the roadway system in this area of closely spaced traffic signals and therefore was not considered a critical intersection.
- Note 3: Definitions: "No-Build" is the Same as "without an Alignment Option"; "Alignment Option" is the option with Light Rail considered to have Greatest Impact on Motor Vehicle Capacity which is Option 3ca/3ca v2
- Note 4: Definitions: "Capacity" (or Motor Vehicle Capacity) and "v/c Ratio" (Volume to Capacity Ratio) obtained from Highway Capacity Manual analysis determination of Lane Group Capacity (see Note 1). Capacity is in vehicles/hour.
- Note 5: During the AM peak hour (year 2035) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two to four times greater than southbound traffic volumes. Volume to Capacity Ratios for the northbound direction are also significantly higher than the southbound direction. Therefore, during the AM peak hour, capacity reductions were evaluated in the northbound or Critical Direction only. During the PM peak hour (year 2035) traffic volumes are relatively balanced in both directions and therefore capacity reductions were considered in both directions on Barbur Boulevard.

- Note 6: The year 2035 Peak Hour Motor Vehicle Capacity freed-up on the Existing Roadway by relocating on-street transit vehicles (buses) to the separated guideway in the Alignment Option. Assumes with Alignment Option, there will be a reduction of 12 buses in each direction along Barbur Boulevard in the year 2035 peak hour. A bus-motor vehicle capacity equivalence factor of 1 bus equals approximately 2 motor vehicles from a capacity perspective is assumed.
- Note 7: The Net Motor Vehicle Capacity is the highest reduction at the Critical Intersections. The yellow highlighted cells indicate a Net Motor Vehicle Capacity Reduction of: 170 vehicles per hour in the PM peak hour northbound direction; 160 (rounded) vehicles per hour in the PM peak hour southbound direction; 190 (rounded) vehicles per hour in the AM peak hour northbound direction. Capacity reductions from multiple intersections are not additive.
- Note 8: Reduced Motor Vehicle Capacity of Intersection equals No-Build Capacity minus Alignment Option Capacity.

**Table 1B - Motor Vehicle Capacity and Net Motor Vehicle Capacity Reduction on Existing Roadways (Barbur Boulevard)
(Alignment Option with *Least Impact* on Motor Vehicle Capacity)**

	Motor Vehicle Capacity								Net Motor Vehicle Capacity Reduction					
	Northbound Direction				Southbound Direction				Northbound Direction			Southbound Direction		
	No-Build ^d Capacity ^e	No-Build ^d v/c Ratio ^e	Alignment Option ¹ Capacity ^e	Alignment Option ¹ v/c Ratio ^e	No-Build ^d Capacity ^e	No-Build ^d v/c Ratio ^e	Alignment Option ¹ Capacity ^e	Alignment Option ¹ v/c Ratio ^e	Reduced Motor Vehicle Capacity of Intersection ⁴	Capacity Freed- Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷	Reduced Motor Vehicle Capacity of Intersection ⁴	Capacity Freed- Up By Relocation of Buses ⁶	Net Motor Vehicle Capacity Reduction ⁷
Critical Intersections^{1,2}														
PM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1334	1.07	1140	1.13	1604	0.76	1424	0.82	194	24	170	180	24	156
AM Peak Hour (Year 2035)														
SW Barbur Blvd (Hwy 99W) & SW Terwilliger Blvd	1657	1.00	1592	0.86	5	0.30	5	0.32	65	24	41	5	5	5
SW Barbur Blvd (Hwy 99W) & SW Hamilton Street	2616	1.22	2492	1.02	5	0.25	5	0.34	124	24	100	5	5	5

Note 1: Listing of "Critical Intersections" obtained from: 1) SW Corridor Supplemental Refinement Traffic Impact Analysis Executive Summary Traffic Report, DKS Associates, March 16, 2016 and 2) Final SW Corridor Traffic Analysis and Operations Memorandum, DKS Associates, July 29, 2014.

Note 2: The 4th Avenue/Caruthers Streets/Broadway intersection in downtown Portland is controlled by downstream congestion at the 6th Avenue/Broadway intersection, the on-ramp to I-405 and other downstream congestion locations. The reconfiguration of this intersection does not impact the motor vehicle capacity of the roadway system in this area of closely spaced traffic signals and therefore was not considered a critical intersection.

Note 3: Definitions: "No-Build" is the same as "without an Alignment Option"; "Alignment Option" is the option with Light Rail considered to have Least Impact on Motor Vehicle Capacity which is Option 2C/2C6/3C3.

Note 4: Definitions: "Capacity" (or Motor Vehicle Capacity) and "v/c Ratio" (Volume to Capacity Ratio) obtained from Highway Capacity Manual analysis determination of Lane Group Capacity (see Note 1). Capacity is in vehicles/hour.

Note 5: During the AM peak hour (year 2035) traffic volumes are very directional on Barbur Boulevard with northbound volumes approximately two to four times greater than southbound traffic volumes. Volume to Capacity Ratios for the northbound direction are also significantly higher than the southbound direction. Therefore, during the AM peak hour, capacity reductions were evaluated in the northbound or Critical Direction only. During the PM peak hour (year 2035) traffic volumes are relatively balanced in both directions and therefore capacity reductions were considered in both directions on Barbur Boulevard.

Note 6: The year 2035 Peak Hour Motor Vehicle Capacity freed up on the Existing Roadway by relocating on-street transit vehicles (buses) to the separated guideway in the Alignment Option. Assumes with Alignment Option, there will be a reduction of 12 buses in each direction along Barbur Boulevard in the year 2035 peak hour. A bus-motor vehicle capacity equivalence factor of 1 bus equals approximately 2 motor vehicles from a capacity perspective is assumed.

Note 7: The Net Motor Vehicle Capacity is the highest reduction at the Critical Intersections. The yellow highlighted cells indicate a Net Motor Vehicle Capacity Reduction of: 170 vehicles per hour in the PM peak hour northbound direction; 160 (rounded) vehicles per hour in the PM peak hour southbound direction; 100 (rounded) vehicles per hour in the AM peak hour northbound direction. Capacity reductions from multiple intersections are not additive.

Note 8: Reduced Motor Vehicle Capacity of Intersection equals No-Build Capacity minus Alignment Option Capacity.

available on Barbur Boulevard for auto and truck traffic. The composite effect of these impacts is referred to in this analysis as the *Net Motor Vehicle Capacity Reduction*.

In calculating the *Net Motor Vehicle Capacity Reduction* caused by an *Alignment Option*, the reduction in the overall corridor capacity of Barbur Boulevard is estimated as the highest *Reduced Motor Vehicle Capacity* among all of the evaluated *Critical Intersections* for the *Alignment Option*. The capacity made available to truck and auto traffic by reducing the volume of on-street buses is estimated by multiplying the reduction in the forecasted 2035 *Peak Hour, Peak Direction* on-street bus volume caused by the *Alignment Option* by the bus-auto capacity equivalence factor (1 bus uses capacity of 2 autos). These factors yield the following estimated *Net Motor Vehicle Capacity Reduction* on Barbur Boulevard in year 2035:

- Northbound PM Peak Hour: 170 vehicles per hour⁸
- Southbound PM Peak Hour: 160 vehicles per hour⁹
- Northbound AM Peak Hour: 100 vehicles per hour¹⁰ to 190 vehicles per hour¹¹

As mentioned earlier, the *Alignment Options* do not impact motor vehicle capacity on Interstate 5 or Pacific Highway in Tigard.

Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity

The estimated *Net Motor Vehicle Capacity Reduction* on Barbur Boulevard can best be understood in the context of the overall transportation corridor serving travel between Tigard and Portland. While there are many routes that may be used to travel between Tigard and Portland, this analysis uses the three major routes included in Metro's Mobility Corridor #2¹² as the overall Portland Central City to Tigard/Tualatin motor vehicle corridor. As shown in Figure 2, Metro's Mobility Corridor #2 includes:

- Interstate 5 (shown in blue in Figure 2)
- SW Barbur Boulevard (99W), then along Pacific Highway and 72nd Avenue (shown in red in Figure 2)
- SW Macadam Avenue/OR 43/A Avenue/Boones Ferry Road (shown in yellow in Figure 2)

Using the *Metro Transportation Model* and more detailed estimates for some segments of Barbur Boulevard, the aggregate *Motor Vehicle Capacity* for each of four segments of each of the three routes

⁸ 170 vehicles per hour for both the most and least impactful Alignment Options.

⁹ 160 vehicles per hour is rounded up from 156 or 159 vehicles per hour, and is the same for the Alignment Options with the least and greatest impact on Motor Vehicle Capacity.

¹⁰ 100 vehicles per hour for the Alignment Option with the least impact on Motor Vehicle Capacity.

¹¹ 190 vehicles per hour is rounded up from 186 vehicles per hour for the Alignment Option with the greatest impact on Motor Vehicles Capacity.

¹² <http://www.oregonmetro.gov/mobility-corridors-atlas>

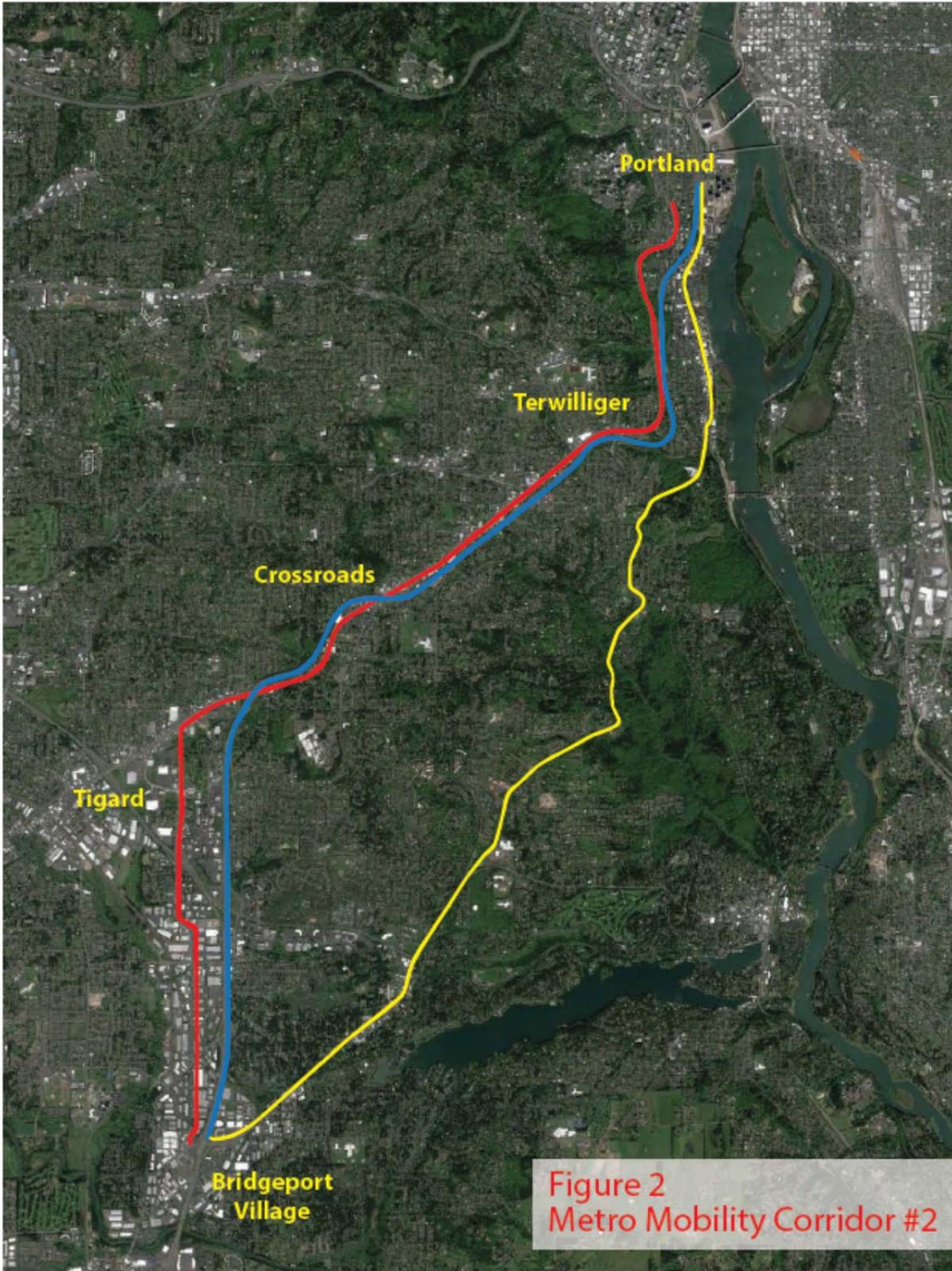


Figure 2
Metro Mobility Corridor #2

Table 2 - Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity

Metro's Mobility Corridor #2		Motor Vehicle Capacity (Peak Hour) ¹			
		North Segment: Portland- Terwilliger	Mid-Barbur Segment: Terwilliger- Crossroads	Tigard Segment: Crossroads- OR217/Kruse	South Segment: OR217/Kruse- Bridgeport Village
Red Route -	Barbur Blvd - Pacific Hwy - 72nd	1,600 ³	1,700 ³	900	900
Blue Route -	Interstate 5	6,300	6,300	6,300	7,200
Yellow Route -	Macadam/OR 43-A Avenue - Boones Ferry	1,200	700	1,400	1,400
Total Radial Corridor Motor Vehicle Capacity		9,100	8,700	8,600⁴	9,500

	Total Radial Corridor Motor Vehicle Capacity ⁶	Net Motor Vehicle Capacity Reduction ⁵	Net Total Radial Corridor Motor Vehicle Capacity ⁷	Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity
Alignment Option with Greatest Impact on Motor Vehicle	8,600	186	8,414	2.2%
Alignment Option with Least Impact on Motor Vehicle	8,600	170	8,430	2.0%

- Note 1: Motor Vehicle Capacity based on Metro's Transportation Model measured in vehicles per hour in Critical Direction (unless as noted)
- Note 2: Metro has defined a series of Mobility Corridors (<http://www.oregonmetro.gov/mobility-corridors-atlas>) for the region and for the Portland Central City to Tigard/Tualatin corridor (Mobility Corridor 2) three parallel routes (including Barbur Boulevard) have been considered part of the Mobility Corridor. The three routes are shown in Figure 2 and listed in the above Table.
- Note 3: Capacity based on Highway Capacity Manual analysis of corridor signalized intersections
- Note 4: Total Radial Corridor Motor Vehicle Capacity for the segment having the lowest total capacity. The yellow highlighted cell shows the lowest segment capacity and hence the Total Radial Corridor Motor Vehicle Capacity which is 8,600 vehicles per hour.
- Note 5: Net Motor Vehicle Capacity Reduction values obtained from Table 1A (largest "Net Motor Vehicle Capacity Reduction" value) and Table 1B (largest "Net Motor Vehicle Capacity Reduction" value).
- Note 6: Without Alignment Option
- Note 7: Net Total Radial Corridor Motor Vehicle Capacity is the Total Radial Corridor Motor Vehicle Capacity minus the Net Motor Vehicle Capacity Reduction.

comprising Metro Mobility Corridor #2 was estimated (see Table 2). The aggregate *Motor Vehicle Capacity* of each segment was estimated by summing the *Motor Vehicle Capacity* of the three routes in each segment (see Table 2). The controlling *Total Radial Corridor Motor Vehicle Capacity* is estimated as the capacity of the segment with the lowest aggregate *Motor Vehicle Capacity*, which in this case is the Tigard Segment between Crossroads (Capitol Highway) and OR 217 with an aggregate *Motor Vehicle Capacity* of 8,600 vehicles per hour per direction.

The *Percentage Reduction in Total Radial Corridor Motor Vehicle Capacity* is the *Net Motor Vehicle Capacity Reduction* of an *Alignment Option* (from Table 1A and Table 1B) divided by the *Total Radial Corridor Motor Vehicle Capacity* (8,600 vehicles per hour). To estimate the range *Net Motor Vehicle Capacity Reduction* of the *Alignment Options*, the largest value from Table 1A (190 vehicles per hour-rounded) and the largest value from Table 1B (170 vehicles per hour) were used.

As shown in Table 2, the combination of the changes in traffic signalization (which are planned with our without light rail) and the lane displacements and additional changes in traffic signalization caused by the *Alignment Options* reduce the motor vehicle capacity on the main facilities serving Tigard-Portland traffic by about a **two percent (2%)** (the high and low estimates round to about same percent).

Percentage Reduction in Tigard Subarea Motor Vehicle Capacity

Section 53 of the City of Tigard Charter focuses on an area that extends five miles from the boundary of the City of Tigard. To consider Motor Vehicle Capacity impacts in this context, a *Tigard Subarea* was created as an area with a boundary that is five miles in all directions from the boundary of the City of Tigard.

While the capacity of each (non-local) roadway link in the Tigard Subarea is available from the *Metro Transportation Model*, a methodology is required to determine the composite capacity within the *Tigard Subarea*. The *Total Tigard Subarea Vehicle Capacity* was estimated as the aggregate sum of the weighted capacity of each link coded in the Metro Transportation Model within the subarea. The weight for a link was calculated as the length of the link. The length and bi-directional capacity of each link was derived from the *Metro Transportation Model*. The length-weighted capacity of the Tigard Subarea was calculated for the No Build scenario (without any *Alignment Option*) and a scenario with an *Alignment Option* and the *Percentage Reduction in Tigard Subarea Motor Vehicle Capacity* was estimated as the percentage difference in these scenarios.

As shown in Table 3, the *Alignment Options* are estimated to decrease the length-weighted *Motor Vehicle Capacity* of the *Tigard Subarea* by about **0.03 percent (3/100th of 1%)**. This value will be similar for any of the *Alignment Options*.

Table 3 - Percentage Reduction in Tigard Subarea Motor Vehicle Capacity

	<i>Total Tigard Subarea {Length-Weighted} Capacity ¹</i>	<i>Percentage Reduction in Tigard Subarea Motor Vehicle Capacity</i>
<i>No Alignment Option (No Build)</i>	1,600,864	Not Applicable
<i>Alignment Option</i>	1,600,399	0.03%

Note 1: The *Total Tigard Subarea Capacity* is calculated by using the length and bi-directional capacity of each link coded in the *Metro Transportation Model* located within five miles of the City of Tigard. The *Total Tigard Subarea Capacity* is calculated as the aggregate sum of the weighted capacity of each link within the subarea, where the weight for a link is calculated as the length of the link.

Person Trip Capacity Impacts

The *Motor Vehicle Capacity* measures evaluated above describe only part of the overall transportation capacity impact of the proposed light rail options to Tigard and Tualatin. While *Motor Vehicle Capacity* is slightly impacted in limited locations on Barbur Boulevard, these impacts are mitigated by the added Person Trip Capacity from introducing light rail into the corridor. The impacts on travel (whether by motor vehicle or transit) can be measured as *Person Trip Capacity*, which estimates the maximum number of persons that can pass through a *Critical Intersection* in the *Critical Direction* in motor vehicles or on transit.

The *Person Trip Capacity* of the *Radial Corridor* was determined for *Alignment Options* with the greatest impact on *Motor Vehicle Capacity* and the least impact on *Motor Vehicle Capacity*, as well as for a scenario without an *Alignment Option* (No-Build). Table 4 shows the steps utilized to determine the *Percentage Increase in Person Trip Capacity*. The *Increased Person Trip Capacity* on transit resulting from the introduction of the light rail options was determined by multiplying the estimated maximum number of light rail trains that can be operated in the *Peak Hour* by the person capacity of a light rail train, and then subtracting the person capacity of the on-street buses that were removed from Barbur Boulevard due to light rail. The *Person Trip Capacity* in motor vehicles was estimated by multiplying the *Net Total Radial Corridor Motor Vehicle Capacity* from Table 2 by an assumed vehicle occupancy rate of 1.4. The *Increased Person Trip Capacity* of the *Radial Corridor* is the sum in the *Radial Corridor* of the increased person trip capacity on transit and the decreased person trip capacity in motor vehicles.

The *Percentage Increase in Person Trip Capacity* is estimated to be 36 to 37 percent for all *Alignment Options* (the high and low estimate round to about the same percentage). Thus, while the introduction of light rail reduces the *Motor Vehicle Capacity* of the *Radial Corridor* by about 2%, it increases the *Person Trip Capacity* of the *Radial Corridor* by about 36 to 37 percent.

Table 4 - Person Trip Capacity Impacts

Person Trip Capacity of High Capacity Transit Per Direction

Alignment Options	# of Light Rail Transit Trains Per Hour ¹	Person Capacity Per Light Rail Transit Train ²	Transit Person Capacity Per Hour	Number of Buses Removed Per Hour ³	Number of Persons Per Bus ⁴	Person Capacity Reduction (from Buses) Per Hour	Increase in Transit Person Trip Capacity Per Hour Due to High Capacity Transit ⁵
Alignment Option with Greatest Impact on Motor Vehicle Capacity	20	266	5,320	12	56	672	4,648
Alignment Option with Least Impact on Motor Vehicle Capacity	20	266	5,320	12	56	672	4,648

Person Trip Capacity Impacts for Alignment Options

	Net Total Radial Corridor Motor Vehicle Capacity ⁶	Assumed Vehicle Occupancy Rate ⁷	Person Trip Capacity of Radial Corridor Per Hour ⁸	Increase in Person Trip Capacity of Alignment Options Per Hour ⁹	Percentage Increase in Person Trip Capacity ¹⁰
No Alignment Option (No Build)	8,600	1.4	12,040	-	0%
Alignment Option with Greatest Impact on Motor Vehicle Capacity	8,414	1.4	16,428	4,388	36%
Alignment Option with Least Impact on Motor Vehicle Capacity	8,430	1.4	16,450	4,410	37%

- Note 1: Assumed headway of 3 minutes per light rail train per direction resulting in 20 light rail trains per hour per direction for the Alignment Option
- Note 2: Assumed two-consist light rail trains which can accommodate 266 persons (seating and standing)
- Note 3: The forecasted reduction in the 2035 volume of on-street buses eliminated by high-capacity transit is 12 buses per hour per direction
- Note 4: Assumed 40 foot standard bus which can accommodate 56 persons (seating and standing)
- Note 5: Increase in Transit Person Trip Capacity Per Hour Due to High Capacity Transit equals Transit Person Capacity Per Hour minus Person Capacity Reduction (from Buses) Per Hour
- Note 6: See Table 2 for "Net Total Radial Corridor Motor Vehicle Capacity" for different Alignment Option.
- Note 7: An average Peak Hour auto occupancy rate for the corridor is 1.4 persons per vehicle which is consistent with the Metro Transportation Model.
- Note 8: Person Trip Capacity of Radial Corridor Per Hour equals Net Total Radial Corridor Motor Vehicle Capacity times Assumed Vehicle Occupancy Rate plus Increase in Person Trip Capacity Per Hour Due to High Capacity Transit
- Note 9: Increased Person Trip Capacity of an Alignment Option shall be calculated as the numeric difference of the Person Trip Capacity of the Radial Corridor with the Alignment Option minus the Person Trip Capacity of the Radial Corridor without the Alignment Option
- Note 10: The Percentage Increase in Person Trip Capacity of an Alignment Option is the fraction, expressed as a percentage, calculated as (i) the increased Person Trip Capacity of the Alignment Option, divided by (ii) the Person Trip Capacity of the Radial Corridor without the Alignment Option.

Reduced Motor Vehicle Capacity of Unused Public ROW

Section 53 of the City of Tigard Charter includes a requirement to describe the reduction in road capacity caused by the displacement (by the light rail options) of "*public rights-of-way that could otherwise provide additional road capacity at a future date.*" These are not lanes or roads that currently exist and, in the affected parts of the Southwest Corridor, there are not any planned lanes or roads to serve as a basis for estimating such impacts.

As a practical matter, there are many constraints to adding *Motor Vehicle Capacity* to either Interstate 5 or Barbur Boulevard. The most significant constraint may be a lack of right-of-way in the necessary (bottleneck) locations. Adding a travel lane along Interstate 5 will require widening the roadway for an additional travel lane or lanes and widening the shoulders on both sides of the roadway to bring them up to ODOT/US DOT standards. It also likely requires reconstruction of all interchanges, reconstruction of many bridges and overpasses which connect surface streets over I-5, substantial new walls and most likely an adjustment to the roadway alignment to straighten out some of the curved sections to provide adequate sight distance meeting current standards. In addition to the reconstruction challenges, this will require ODOT to obtain additional right-of-way that they do not currently own. Along Barbur Boulevard, expanding capacity from today's conditions requires not only additional travel lanes at bottleneck locations, but the addition of standard-width sidewalks, bicycle facilities, ADA treatments, water quality facilities, and other improvements to bring the roadway up to applicable standards.

Reduced Motor Vehicle Capacity of Unused Public ROW

To address this Charter requirement, the *Reduced Motor Vehicle Capacity of the Unused Public ROW* was estimated for the *Alignment Options* with the greatest and least impact on Unused Public ROW that "*could otherwise provide additional motor vehicle capacity at a future date.*" This does not include all public right-of-way in the corridor currently not being used for a transportation facility (*Unused Public ROW*), as much of the *Unused Public ROW* is too small to accommodate a new lane or road and/or is located where a new lane or road cannot efficiently function. The *Reduced Motor Vehicle Capacity of the Unused Public ROW* only considers *Unused Public ROW* that "*could otherwise provide additional motor vehicle capacity at a future date,*" which is referred to as *Useful Unused Public ROW* in this analysis.

For each applicable *Alignment Option*, *Useful Unused Public ROW* was identified as follows:

- The roadway design standards or criteria (including cross-section specifications) applicable to expanding the number of lanes on the roadway was identified; cross-sections include the width of all bicycle facilities, sidewalks, shoulders, medians, or other features needed to comply with the design standard or criteria.
- Based on the cross-section required to comply with applicable design standards or criteria, the width (i.e.; distance from the centerline of the roadway) of *Unused Public ROW* needed to added one or more lanes was determined.

- *Useful Unused Public ROW* was identified as the area of *Unused Public ROW* displaced by an *Alignment Option*¹³ where:
 - The width of the *Unused Public ROW* is sufficient to accommodate one or more additional lanes in compliance with applicable design standards and criteria; and
 - If the roadway to be expanded is a freeway or throughway (i.e.; I-5), the location of the *Unused Public ROW* either (I) extends along the roadway for a distance of at least one-half of one mile or (II) addresses a system bottleneck; or
 - If the roadway to be expanded is an arterial (i.e., Barbur Boulevard), the location of the *Unused Public ROW* addresses a system bottleneck.

The location of *Useful Unused Public ROW* and *Unused Public ROW* impacted by the *Alignment Options* was identified, based on the criteria described above. Figure 3 shows the *Unused Public ROW* for the highest impact scenario while Figure 4 shows the *Unused Public ROW* for the lowest impact scenario. Table 5 shows the *Reduced Motor Vehicle Capacity of Unused Public ROW*, which is measured by the area (in acres) of *Useful Unused Public ROW* displaced by the *Alignment Option*.

Table 5 - Reduced Motor Vehicle Capacity of Unused Public ROW¹ (Measured in Acres)

	Low ²	High ³
<i>Unused Public ROW</i> underlying <i>Alignment Option</i> ⁴	28.3	33.9
<i>Reduced Motor Vehicle Capacity of Unused Public ROW</i> due to <i>Alignment Option</i> ⁵	1.3	5.0
<i>Unused Public ROW</i> Impacted by <i>Alignment Option</i> that does not Reduce the Potential Future Motor Vehicle Capacity of the ROW	27.0	28.9

Note 1 *Unused Public Right-of-Way (ROW)* is right-of-way underlying an *Alignment Option* that is currently in public ownership and is not improved for general public use as a transportation facility. *Useful Unused Public ROW* is *Unused Public ROW* potentially available for future Motor Vehicle Capacity.

Note 2 Low estimates are for *Alignment Options* that have the least impact on *Useful Unused Public ROW* (*Alignment Options* Nos. 1Ab/2Ba, 2Ca, 3Ca v2, 4Bg/4Ce/4Bh, 4Bh/5Ah/5Bh)

Note 3 High estimates are for *Alignment Options* that have the greatest impact on *Useful Unused Public ROW* (*Alignment Options* Nos. 1Af/2Ba, 2Cf/2Ce, 3Cb, 4Bg/4Aj 5Ad/5Ah/5Bh)

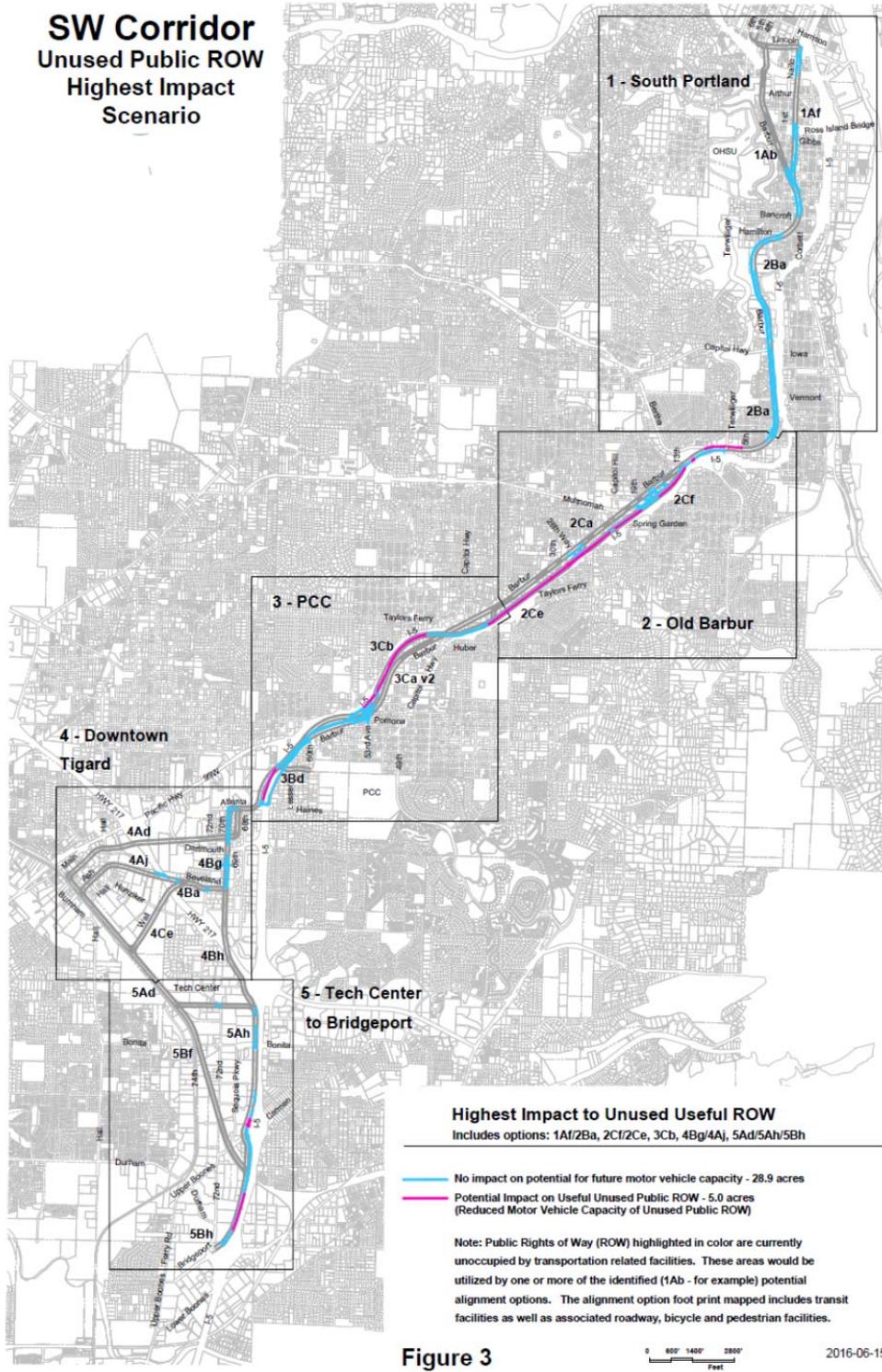
¹³ This analysis only identified *Useful Unused Public ROW* that would be used by an *Alignment Option*; it did not estimate the total amount of *Useful Unused Public ROW* in the *Radial Corridor* or the *Tigard Subarea*.

Note 4 The amount of *Unused Public ROW* that is impacted by an *Alignment Option*, whether or not the amount of potential future *Motor Vehicle Capacity* on such ROW is impacted.

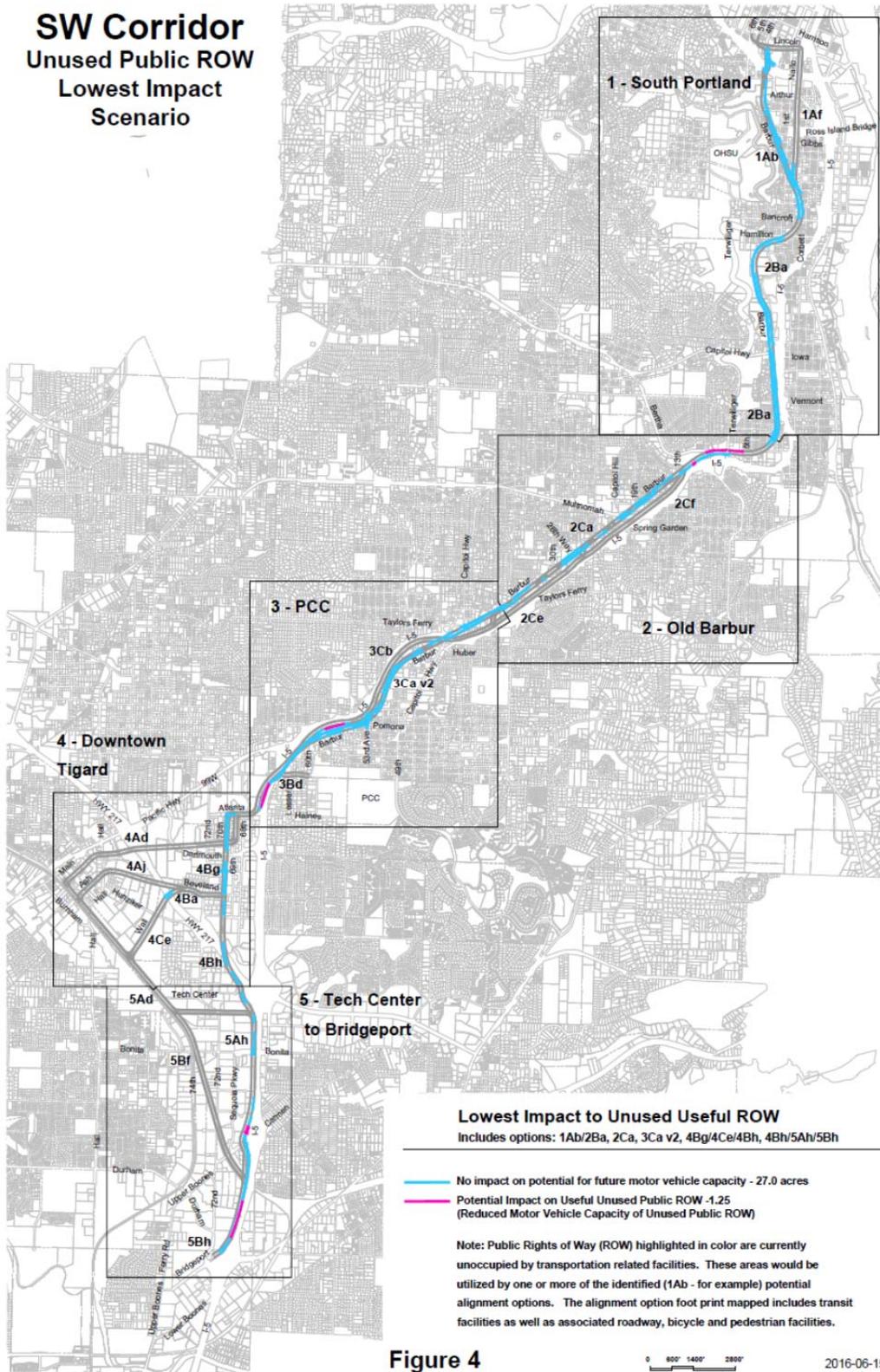
Note 5 *Reduced Motor Vehicle Capacity of Unused Public ROW* estimates the amount that potential future road capacity is reduced, measured in acre, by constructing an *Alignment Option* on *Unused Public ROW*.

Thus, the *Alignment Options* are estimated to displace 1.3- 5.0 acres of public ROW could potentially provide additional motor vehicle capacity at a future date. Keep in mind that this estimate does not consider all of the practical limitations of providing additional lanes.

**SW Corridor
Unused Public ROW
Highest Impact
Scenario**



**SW Corridor
Unused Public ROW
Lowest Impact
Scenario**



Sitemap for Southwest Corridor Webpage:

All items outlined in the table will provide links to content—either PDF files as attachments, separate web pages or items that will drop down below each topic. The links will appear on the Southwest Corridor Webpage: http://www.tigard-or.gov/city_hall/southwest_corridor_plan.php.

November Election FAQs	
	· Ballot Title
	· Authorization Ordinance
	· Procedural Ordinance
Project FAQs	
Project Maps	
	· Light Rail Transit Corridor
	· Route Options, Triangle and Downtown Tigard
Ballot Measure Information	
	· City Charter, Section 53
	· Road Capacity Impact
	· Land Use Impact
	· Projected Public Cost
Tigard Links	
Project Links	

Carol Krager

From: Joanne Bengtson
Sent: Thursday, June 09, 2016 3:41 PM
To: Carol Krager; Kelly Burgoyne
Cc: Liz Newton
Subject: FW: SW Corridor Project - Comments on Ballot Measure

Comments for the public record

From: Kevin Watkins [<mailto:kwatkinspdx@gmail.com>]
Sent: Thursday, June 09, 2016 3:31 PM
To: John Cook
Subject: SW Corridor Project - Comments on Ballot Measure

Mayor John Cook:

I wanted to follow-up on my verbal comments regarding the upcoming SW Corridor ballot measure. (Recall that I made comments at the June 7th meeting.)

I believe that the language for the ballot measure should be very clear in what it **does not do**. As I understand the process, a "YES" vote on this ballot measure **does not** commit the citizens of Tigard to a specific funding responsibility; a special vote will be required to authorize funding later in the project when more planning is completed. The language in the ballot measure should make this point in order to minimize confusion.

Thanks again for the opportunity to provide comments and please contact me if you have any questions.

Kevin Watkins
11330 SW Viewmount Ct.
Tigard, OR 97223

971.404.4859

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Public Comments from June 7, 2016 CCDA/Council Meeting Public Hearing on SW Corridor:

Carine Arendes, City Center Advisory Commission Chair, 9524 SW North Dakota Street, Tigard, OR, said she appreciated the public hearing and was not speaking so much to the ballot language, but to the importance of having a light rail station downtown, which is the scope of the CCAC. According to the city's budget we are adding over 200 homes annually and Tigard's population is expected to grow by 500 people, or 1 percent annually. Over the course of 20 years that means about 10,000 more people living in Tigard and they will need housing. The city currently has policies to preserve single-family neighborhoods and provide a wide range of housing options. One way to accommodate the expected population growth is to create new neighborhoods such as River Terrace but we cannot expand indefinitely. It is also expensive to expand new services to River Terrace so most of that housing ends up on the high end of the affordability scale and does not really encourage a wide range of housing types such as townhouses, duplexes and apartments. What else can we do? Look for other opportunities to provide housing that is more affordable and compact in areas where we already have service or in other words, infill development. This is why the downtown has been identified as a place for infill and why we prioritize adding housing in the downtown area. Not many live downtown and certainly not as many as could live there in the future.

The city has made recent investments to activate downtown; however, one of the most important amenities is having a rapid and reliable transit system. Having a downtown light rail station would be a valuable amenity and would make living downtown more attractive. It would make it possible for people to live without a car, which costs the average American at least \$8,000 a year according to a study by AAA. Even those who commute by car like to have the option of using light rail for getting to special events, concerts or a Timbers game. A light rail station downtown makes it more likely that people living there will have fewer cars and more people will find the area an attractive place to live. Since having a light rail station in the downtown will increase the desire to live there we can also expect the rents may increase which would help ensure that the compact, multi-family housing that we have been planning for will pencil out for developers. A light rail station makes sense in the downtown and people living there will help accommodate the city's expected growth, protect existing neighborhoods and create activity on downtown streets including economic activity for downtown businesses. A light rail station downtown will make it easier and more likely that people will work, shop and come without a car to events downtown, which makes the scarce parking on Main Street available for those who really need it.

In addition, the SW Corridor shared investment projects for bicycle and pedestrian improvements will support using active modes to access downtown. An accessible downtown is an active downtown. She summarized that the SW Corridor light rail line and shared investment program will support alternatives to personal vehicle use downtown which in turn supports the higher density options that we want for the area. Downtown will benefit from increased activity related to the light rail station and increased accessibility for residents, employers and visitors. A downtown light rail station offering rapid and reliable transit will help make downtown Tigard a more attractive place for people to live, work, play and shop.

Elise Shearer, 9980 SW Johnson Street, Tigard, OR spoke on the proposed ballot measure. She asked that council keep the ballot measure language as clear and simple as possible about a vote on light rail as well as answering requirements in the short statement. We know the SW Corridor is about a lot more projects than just light rail. That can be gone into within the explanatory statement and hopefully citizens will read the entire thing. Support for light rail coming into Tigard will allow the other contingent projects to be built. Without it, nothing will come into our city and we let down the five other communities currently driving through Tigard as well. Tigard is the hub of the SW Corridor wheel. If light rail is not built as a transportation alternative to relieve the traffic congestion which we deal with now (and will only get worse in the future) we let down future generations for whom we are entrusted to plan.

Tim Esau, 12247 SW 114th Terrace, Tigard, OR. Mr. Esau thanked the council for putting this measure together in the spirit of the ballot measure and the change to Charter Section 53. He said council knows what his activities were on that and he appreciated them seeking to fulfill the spirit of that Charter change. He has done the FOIA (Freedom of Information Act) records requests to follow up and appreciates the city putting out the statements as required in the Charter language. Pertaining to the ballot title he thought the succinct title statement is great. The city is pretty much hitting the points item by item but it is not clear what the amendments to land use, impacts to wetlands and impacts to industrial zone are. It does not say what they are just that they happen and he would like to see quantification or clarification on what that means. The ballot also states that no traffic lanes on Pacific Highway will be impacted yet the drawings still show it running down Pacific Highway, not necessarily in Tigard. He gets that it veers off but Pacific Highway runs all the way to Portland and it is disingenuous to say it doesn't run on Pacific Highway, when in fact it does, within the five mile range, or at least crosses it. He said council needs to be clear on that. While the impacts of 2 to 5 percent capacity reductions along the roadways are cited, there is language thrown in about adding capacity in Tigard and reducing it in Portland. That does not clarify the actual amounts and from his perspective looks like Tigard is trying to slant the ballot title in that regard.

His main concern is Portion A of the original Charter change where it states that the City of Tigard as a matter of public policy should oppose construction of new high capacity transit. That portion has not been clarified in any of the ordinances and the definition of oppose would be a good item to add to Section B. It seems to him that the city council does not know what "oppose construction" means because construction can cover many phases of planning, preparation, preliminary engineering, right of way access, etc., and he has yet to see any opposition on the part of the city to live up to the spirit of that part of the Charter.

Kevin Watkins, 11330 SW Viewmount Court, Tigard, OR said he was present to gather information in order to understand this process better. He is involved with the TTAC but is representing himself tonight. Transportation projects are sobering because there is a lot of uncertainty and they are very capital intensive. Now we are looking at a very large transportation project with huge amounts of capital, lots of lead time, and a lot of uncertainty now and well into the future. These are daunting challenges for all of us and Tigard citizens will need to grapple with this. He said the question cannot be dodged and he commended the council for taking this head on. His hope is that in the ballot measure council keeps a clear, straightforward focus and factual information. Focus on the task at hand so people can base their decision on factual information rather than misinformation. He said he is asked about this often and there is a great deal of interest in the community.

Robert Van Vlack, 15585 SW 109th Avenue, Tigard, OR. He said being a member of the Tigard Transportation Advisory Commission got him to do a lot of transportation reading and studying. He said there is information put out by an advisor talking about how light rail reduces auto capacity on the roads but other studies suggest the opposite. Light rail actually takes people off the buses and puts them onto light rail. He mentioned that while he understands the opportunities for redevelopment light rail in the downtown would bring such as multi-family housing. But he also sees that members of other communities - Tualatin, Sherwood and maybe even Newberg – are going to be travelling to downtown to catch the light rail. He does not know where all those cars will park. A huge influx of cars into downtown Tigard may create a larger problem than we have already.

Mayor Cook said the public would have more opportunities to provide input. They can email or send a letter to council or come and testify at the public hearing on June 28, 2016.