

**CITY OF TIGARD, OREGON  
TIGARD CITY COUNCIL  
ORDINANCE NO. 16-11**

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 unanimous vote of all Council members present after being read by number and title only, this 28<sup>th</sup> day of June, 2016.

Carol A. Krager  
Carol A. Krager, City Recorder

APPROVED: By Tigard City Council this 28<sup>th</sup> day of June, 2016.

John L. Cook  
John L. Cook, Mayor

Approved as to form:

Justin W. Brown  
City Attorney

June 28, 2016  
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-72<sup>nd</sup> 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.