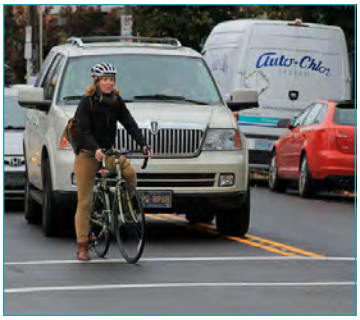
Proposed Amendments to the

Transportation System Plan

Initial Steps to Implementing the 2035 Comprehensive Plan

PROPOSED DRAFT – DECEMBER 2015






Planning and Sustainability Commission
Public Hearing March 8, 2016

DD → PD → Rec → A

Discussion Draft	Proposed Draft	Recommended Draft	Adopted Plan
October 2, 2015	December 18, 2015	Spring 2016	Fall 2016

December 2015
www.portlandoregon.gov/transportation

PBOT
PORTLAND BUREAU OF TRANSPORTATION

The Portland Bureau of Transportation is committed to providing equal access to information and hearings. If you need special accommodation, please call 503-823-7700, the City's TTY at 823-823-6868, or the Oregon relay service at 1-800-735-2900.

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A digital copy of this report and additional project background information can be found at https://www.portlandoregon.gov/transportation/68805.

How can I provide feedback to decision-makers?

You may testify about proposed changes to the Planning and Sustainability Commission (PSC) in the following ways:

Testify in person at the PSC public hearing. You may speak for 2 minutes to the Commission, and your testimony will be added to the public record. The TSP Stage 2 Project Public Hearings are scheduled to be held at:

1900 SW 4th Avenue, Room 2500, Portland, OR
Tuesday, March 8, 2016; 12:30 - 5:00 PM*
Tuesday, March 22, 2016; 5:00 – 9:00 PM*
**dates and times subject to change – check the Planning and Sustainability Meeting Calendar for updates and exact time https://www.portlandoregon.gov/bps/35452*

Testify in writing between now and March 22, 2016. Your full name and mailing address is required.

Email: *psc@portlandoregon.gov* with subject line "TSP Testimony"

U.S. Mail: Portland Planning and Sustainability Commission, TSP Testimony,
1900 SW 4th Ave., Suite 7100, Portland OR 97201

In January 2016, Bicycle Classifications and Street Design Classifications will be posted to the Map App and open for comment. *www.portlandmaps.com/bps/mapapp*, click on the "comments" form and provide your testimony.

Next Steps

Following the public hearing, the PSC will deliberate and vote on a recommendation to City Council. City Council will then hold additional public hearings and take formal public testimony on the PSC's Recommended Draft. The City Council may amend the Recommended Draft before they vote to adopt the plan. This will likely occur in Fall 2016.

Acknowledgements

Portland City Council

Charlie Hales, *Mayor*
Nick Fish, *Commissioner*
Amanda Fritz, *Commissioner*
Steve Novick, *Commissioner*
Dan Saltzman, *Commissioner*

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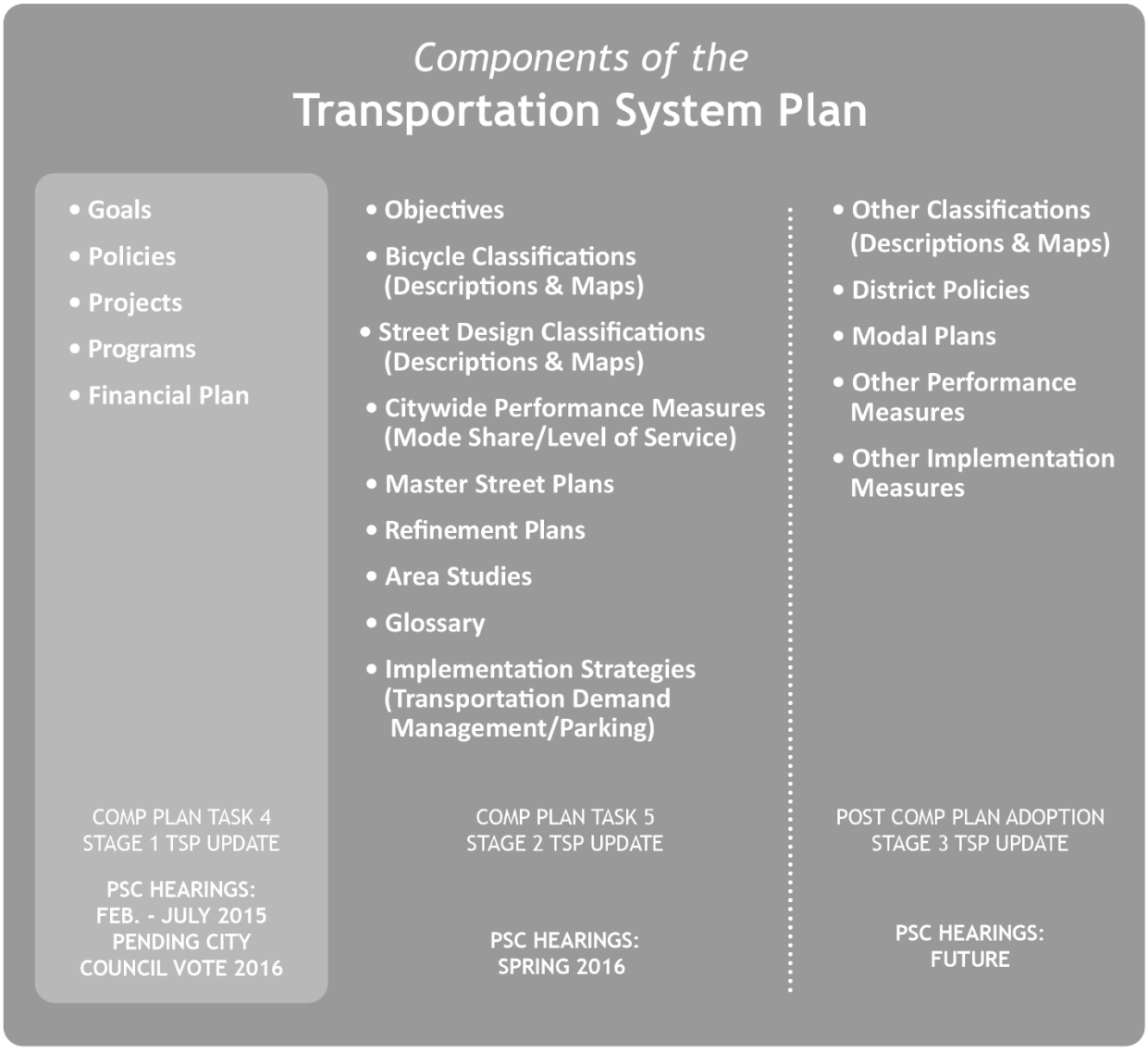
Table of Contents

I: Introduction

Project Summary

City of Portland is updating the City's Comprehensive Plan – the long-range plan for growth, change and improvements for the next 20 years. This stage of the Transportation System Plan (TSP) update is one of the early implementation projects of the Comprehensive Plan Update. These projects are tasks that cities need to complete as part of a 20-year comprehensive plan update (also called "periodic review") under Oregon's statewide planning program.

The Transportation System Plan (TSP, Ordinance No. 180871, 2007) is a long-range planning document comprising three volumes. Volume I includes Comprehensive Plan policies, projects and maps, as well as, elements required by the State Transportation Planning Rule (TPR) such as refinement plans, master plans, modal plans and strategies to implement the policies. Volumes II and III comprise background information/analysis and supplemental/reference materials, respectively, which will not be updated as part of the 2035 TSP. The graphic on the facing page illustrates the various components of the TSP Volume I. Items listed under Comp Plan task 4, namely, goals, policies, projects, programs and financial plan, were approved by the Planning and Sustainability Commission (PSC) following hearings in during the first half of 2015. The remaining components of the TSP are being updated in two subsequent phases, Stage 2 (2015/2016) and Stage 3 (2016/2017).



The current update, stage 2, of the TSP includes amendments to the TSP in order to implement policy direction from the Comp Plan and modifications to incorporate changes that were previously adopted by ordinance or resolution.

Elements included in this stage of the TSP Update are proposed for the following reasons:

- To address requirements in the Council-approved Periodic Review work plan
- To implement new directions in the proposed Comprehensive (Comp) Plan
- To remove existing language that is inconsistent with new directions in the Comp Plan
- To incorporate plans adopted by Council since the last TSP Update
- To support BPS Task 5 zoning projects

Stage One
Stage One was a part of the Comp Plan update, as outlined in Task 4 of the Periodic Review work plan. It includes new proposed transportation goals and policies, other policies that relate to transportation, major city projects and program lists, and a financial plan. This component of the TSP update was prepared with the Comp Plan update with the Bureau of Planning and Sustainability. The Planning and Sustainability Commission recommended approval in July 2015. City Council work sessions and hearings started in September 2015 and will go through winter 2016.

The Recommended Draft of the Comp Plan:
http://www.portlandoregon.gov/bps/article/541677

City of Portland TSP Projects & Citywide Programs List:
http://www.portlandoregon.gov/transportation/article/541398

TSP Financial Plan:
http://www.portlandoregon.gov/transportation/article/541411

Stage One Schedule of City Council Work Sessions and Hearings
Transportation Work Session held: November 3, 2015; 9:30 – 11:30 AM (City Hall)
Hearing held: November 19, 2:00 – 6:00 PM (City Hall)
Hearing held: December 3, 2015, 6:00 – 9:00 PM (Mittleman Jewish Community Center)
Hearing held: December 10, 2015, 6:00 – 9:00 PM (Parkrose High School)
Hearing: January 7, 2016, 6:00 – 9:00 PM* (Self Enhancement, Inc.)

*dates and times subject to change – check the Council Notable Meeting Calendar for updates:
http://www.portlandonline.com/auditor/index.cfm?c=26997&a=378306

Stage Two
Stage Two is also a part of the Comp Plan Update, as outlined in Task 5 of the Periodic Review work plan. Tasks in this stage of the TSP Update include modifying TSP objectives that are inconsistent with the proposed Comp Plan update, incorporating street classification changes, addressing performance measures, and additional or modified city code to implement the Comp Plan. The full list of Stage Two components is described below.

Stage Two Schedule*
Proposed Draft Released: December 18, 2015
Planning and Sustainability (PSC) Briefing: Tuesday, February 9, 2016; 12:30 - 5:30 PM
PSC Hearing: Tuesday, March 8, 2016; 12:30 - 5:00 PM
PSC Hearing: Tuesday, March 22, 2016; 5:00 – 9:00 PM
PSC Work Session + Vote: April 12, 2016; 12:30 – 4:30 PM
City Council Process: Spring/Summer 2016

*dates and times subject to change – check the Planning and Sustainability Meeting Calendar for updates https://www.portlandoregon.gov/bps/35452

Stage Three

Stage Three is not part of the Comp Plan Update. Upon completion of the 'Task 5' work, one final stage of the TSP update process will occur to update remaining sections of the TSP. Tasks identified for the next stage include addressing district-/geographic-specific guidance, incorporating other Council-adopted plans and ensuring full compliance with the Regional Transportation Plan.

Modal Plan Incorporation

The Pedestrian Master Plan was incorporated into the TSP in 2002. The Freight Master Plan was incorporated in 2007. Now the Bicycle Plan for 2030 (adopted in 2010) is being incorporated into the TSP. Bicycle classifications descriptions were changed and a new classification added. Additional objectives related to bicycles have been added. In addition, Bicycle Classification Maps updated to reflect the changes. A large number of bike projects were added to the Major City Wide Project and Programs List as a part of Stage One.

Why is this important?

The TSP is a part of the Comp Plan and also an implementation tool of the Comp Plan. This update amends portions of the TSP in order to be in alignment with the Comp Plan and incorporates previously adopted plans since the last update in 2007.

What is in the Proposed Draft?

The process to update the TSP is tied to the Comp Plan Update process. The Proposed Draft is the second in a series of drafts –preceded by the Proposed Draft and followed by the Recommended Draft– that will be developed in the run up to hearings with the Planning and Sustainability Commission and the City Council, who will ultimately approve the Adopted Plan. This Proposed Draft contains amendments to the existing TSP (adopted in 2007) and the proposed changes reference the 2007 TSP sections being modified. Project staff will restructure the proposed TSP amendments in a future draft to align with the Goals and Policies in the 2035 Comp Plan, which are scheduled to be adopted by City Council in 2016. Existing TSP Objectives (adopted in 2007), which are not addressed in this Proposed Draft, and are included for reference only, will be retained and no change is proposed as part of this stage of the TSP Update.

How to use this document

The full 2007 Adopted TSP is three volumes thick. Out of 80 sections in Volume 1 of the full TSP, just sixteen are included in this document because only sixteen sections include proposed updates at this stage. This document is divided into sixteen sections, one for each of the TSP sections that has proposed updates.

Each section contains alternating pages of staff commentary and proposed TSP amendments. Proposed TSP amendments are shown in track changes, meaning the proposed TSP amendment pages show original TSP content and anything added or removed. Anything underlined is something that has been added, any strikethrough or crossed-out content is proposed for deletion. In some places original content has been crossed-out, though alternative content has been added in its place. Please refer to the commentary pages for more information about why the changes are proposed.

The letters and numbers in parentheses in the section descriptions refer to the 2007 TSP Chapters and Maps. A link to the 2007 TSP in on the project website.

Section 1. Transportation Element (TE) Introduction
This section updated to reflect the 2035 Comp Plan, Climate Action Plan, the Portland Plan, and the 2014 RTP updates.

Section 2. Revised TSP Objectives (TE)
Changes to TSP objectives are proposed in this section to provide consistency with the 2035 Comp Plan and to incorporate recommendations from plans adopted by Council since 2007.

Section 3. Coordination and Involvement Objectives (TE 6.1-6.2)
Policies and objectives are updated and revised to reflect changes in the Comp Plan in Chapter 2: Public Involvement, Chapter 8: Public Facilities and Chapter 9: Transportation related to Public Involvement and Coordination.

Section 4. Bicycle Classification Descriptions (TE 6.7) and Other Bicycle Objectives (TE)
Section 5. Bicycle Classification Maps (TSP Maps 6.35-6.41)
Bicycle Classification Descriptions and Maps as well bicycle objectives updated to reflect the adopted Portland Bicycle Plan for 2030 (Resolution No. 36763) and subsequent adopted plans.

Section 6. Street Design Classification Descriptions (TE 6.11)
Section 7. Street Design Classification Maps (TSP Maps 6.35-6.41)
Street Design Classification Descriptions updated and revised to incorporate Civic Corridors, Neighborhood Corridors and City Greenways. Other language updated to reflect comp plan policies related to parking, to better reflect current guidelines and better differentiate between the classifications.

Section 8. South Waterfront & Water Avenue Area Classification Maps (TSP Maps 6.38/6.42)
The TSP Classification Maps updated to reflect street classification changes in the South Waterfront area as well as in the Water Ave and Clinton-to-the-River area in the Central Eastside as adopted in March 2012 (Ordinance No. 185208).

Section 9. Master Street Plan Descriptions and Maps (TE/Maps 11.11 and Chapter 11)
The Gateway, South Waterfront and Outer Southeast Master Street Plans updated to reflect adopted plans. Cully, Outer Powell and Division-Midway local street plans added to the Outer Southeast Master Street Plan.

Section 10. Performance Measures (TE 11.13)
Review the measures identified in the Periodic Review order, specifically the 'level of service' standard and 'mode share' targets contained in the 2007 TSP Policy 11.13 and 2007 TSP Chapter 15: System Performance.

Section 11. Glossary of Transportation Terms (TE)
The glossary was updated to reflect new terms and ensure alignment with the Comp Plan update and the 2014 RTP.

Section 12. Refinement Plans and Studies (TSP Chapter 4)
This section updated to reflect completed studies, updated descriptions for remaining plans, to reflect the 2014 RTP mobility corridors and add new studies identified through the Comp Plan process.

Section 13. Area Studies (TSP Chapter 12)
This section will be deleted. Completed area plans from the 2007 TSP and subsequent area plans are located on PBOT's website and a map of the area plans will be created.

Section 14. Transportation Demand Management (TDM) Code (Title 33, Title 17, Administrative Rule)
This section expands TDM standards for new development to reduce traffic and parking impacts on neighbors by increasing walking, bicycling, and transit use by residents and employees.

Section 15. Parking Code – Commercial Parking in Mixed Use Zones (Title 33)
The Bureau of Planning and Sustainability is re-writing the Commercial Zoning Section of Title 33 (33.130) as part of the Mixed-use Zoning Project. The draft code language provides allowances for Commercial Parking.

Section 16. Street Vacation Code (Title 17)
Proposed amendments to Title 17.84 will create approval criteria for street vacations. They are intended to provide the City Council with a basis for rendering decisions on street vacations that is similar to the former Comprehensive Plan Policy 6.21 ROW Opportunities.

II: Relationship to Comp Plan 2035

Early Implementation project of the Comprehensive Plan

This stage of the TSP update is one of the early implementation projects of the Comprehensive Plan Update. These projects are tasks that cities need to complete as part of a 20-year comprehensive plan update (also called "periodic review") under Oregon's statewide planning program. Among these tasks are to update street classifications, objectives, performance measures, transportation demand management, and update maps and policies to reflect and help implement the Recommended 2035 Comp Plan. These changes are the focus of this stage and update.

Comprehensive Plan Guiding Principals

The Comprehensive Plan sets five Guiding Principles, which encourage balanced, integrated multi-disciplinary approach in plans and investments that must comply with the Comp Plan. The TSP Update Project is consistent with the Guiding Principles because it supports an integrated approach to land use and transportation planning for the projected growth in population and jobs in Portland over the next 20 years.

Economic prosperity Support a low-carbon economy and foster employment growth, quality education and training, competitiveness, and equitably-distributed household prosperity.

Human health Avoid or minimize negative health impacts and improve opportunities for Portlanders to lead healthy, active lives.

Environmental health Weave nature into the city and foster a healthy environment that sustains people, neighborhoods, and wildlife. Recognize the intrinsic value of nature and sustain the ecosystem services of Portland's air, water, and land.

Equity Promote equity and environmental justice by reducing disparities, minimizing burdens, extending community benefits, increasing the amount of affordable housing, affirmatively furthering fair housing, proactively fighting displacement, and improving socio-economic opportunities for under-served and under-represented populations. Intentionally engage under-served and under-represented populations in decisions that affect them. Specifically recognize, address, and prevent repetition of the injustices suffered by communities of color throughout Portland's history.

Resilience Reduce risk and improve the ability of individuals, communities, economic systems, and the natural and built environments to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change, and economic shifts.

Comprehensive Plan Policies

This update to the TSP implements a number of policy directions from the Recommended Comp Plan.

Chapter 9: Transportation
The 2007 TSP along with the proposed amendments as part of Stage Two generally implements all of Chapter 9: Transportation. Several policies are highlighted because the policies led to specific amendments for this stage.

Policy 9.1 **Street design classifications**. Maintain and implement street design classifications consistent with land use plans, environmental context, urban design pattern areas, and the Neighborhood Corridor and Civic Corridor Urban Design Framework designations.

Policy 9.2 **Street policy classifications.** Maintain and implement street policy classifications for pedestrian, bicycle, transit, freight, emergency vehicle, and automotive movement, while considering access for all modes, connectivity, adjacent planned land uses, and state and regional requirements.

9.2.c. Designate district classifications that give priority to bicycle access and mobility in areas where high levels of bicycle activity exist or are planned, including Downtown, the River District, Lloyd District, Gateway Regional Center, town centers, neighborhood centers, and transit station areas.

Policy 9.4 **Use of classifications.** Plan, develop, implement, and manage the transportation system in accordance with street design and policy classifications outlined in the Transportation System Plan.

All three of these policies led to amendments to Street Design Classification Descriptions. Policy 9.2.c supported modifications to the Bicycle Classification Map to add Bicycle Districts per the adopted Bicycle Plan for 2030.

Policy 9.10 **Land use and transportation coordination.** Implement the Comprehensive Plan Map and the Urban Design Framework though coordinated long-range transportation and land use planning. Ensure that street policy and design classifications and land uses complement one another.

This policy led to amendments to Street Design Classification Descriptions.

Policy 9.20 **Accessible bicycle system.** Create a bicycle transportation system that is safe, comfortable, and accessible to people of all ages and abilities.

This policy led to bicycle classification description changes, a new classification, additional classifications on the bike map to also impalement the Bicycle Plan for 2030.

Policy 9.46 **Connectivity**. Establish an interconnected, multimodal transportation system to serve centers and other significant locations. Promote a logical, direct, and connected street system through street spacing guidelines and district-specific street plans found in the Transportation System Plan, and prioritize access to specific places by certain modes in accordance with policies 9.6 and 9.7.

A number of Master Street Plans were approved since the 2007 TSP update and incorporating the changes in this stage continues to meet the connectivity policy.

Policy 9.48 **Performance measures.** Establish multimodal performance measures and measures of system completeness to evaluate and monitor the adequacy of transportation services based on performance measures in goals 9.A. through 9.I. Use these measures to evaluate overall system performance, inform corridor and area-specific plans and investments, identify project and program needs, evaluate and prioritize investments, and regulate development, institutional campus growth, zone changes, Comprehensive Plan Map amendments, and conditional uses.

New performance measures proposed to meet this policy.

Transportation Demand Management

Providing residents and employees information and incentives to walk, bicycle, use transit, and otherwise reduce the need to own and use private vehicles can be one of the quickest, least expensive, and most effective strategies to achieve City goals and to prevent traffic and parking impacts. Transportation and parking demand management (TDM) programs can cost-effectively increase the modal share of walking, bicycling, and shared vehicle trips.

Policy 9.52 **Outreach**. Create and maintain TDM outreach programs that work with Transportation Management Associations (TMA), residents, employers, and employees that increase the modal share of walking, bicycling, and shared vehicle trips while reducing private vehicle ownership, parking demand, and drive-alone trips, especially during peak periods.

Policy 9.53 **New development**. Create and maintain TDM regulations and services that prevent and reduce traffic and parking impacts from new development and redevelopment. Encourage coordinated area-wide delivery of TDM programs. Monitor and improve the performance of private-sector TDM programs.

Policy 9.54 **Projects and programs.** Integrate TDM information into transportation project and program development and implementation to increase use of new multimodal transportation projects and services.

New TDM code in Title 17 and new Administrative Rules proposed to meet this policy.

Policy 9.55 **Curb Zone.** Recognize that the Curb Zone is a public space, a physical and spatial asset that has value and cost. Evaluate whether, when, and where parking is the highest and best use of this public space in support of broad City policy goals and local land use context. Establish thresholds to utilize parking management and pricing tools in areas with high parking demand to ensure adequate on-street parking supply during peak periods.

Curb zone language in this policy led to modifying Street Design Classification Definitions to reflect curb zone rather than on-street parking.

Chapter 8: Public Facilities

Components of Chapter 8: Public Facilities have also led to changes in the TSP especially as the policies relate to rights-of way, street vacations, funding and coordination. Several policies are highlighted because the policies led to specific amendments for this stage.

Policy 8.44 **Flexible design**. Allow flexibility in right-of-way design and development standards to appropriately reflect the pattern area and other relevant physical, community, and environmental contexts and local needs.

Delete objectives that require improvements be the same regardless of Pattern Area. .

Policy 8.45 **Corridors and City Greenways**. Ensure public facilities located along Civic Corridors, Neighborhood Corridors, and City Greenways support the multiple objectives established for these corridors.

New Street Design Classifications descriptions are proposed and updates to Street Design Classification maps.

Policy 8.48 **Right-of-way vacations**. Maintain rights-of-way if there is an established existing or future need for them, such as for transportation facilities or for other public functions established in Policies 8.38 to 8.41.

New code language in Title 17 to replace old policies support this new policy and parallel construction to previous Comp Plan Policy 6.21.

Chapter 3: Design and Development
The Centers and Corridor policies were incorporated into Street Design Classifications; while pattern area policy is reflected in a number of locations. Several policies are highlighted because the policies led to specific amendments for this stage.

Civic Corridors

Policy 3.49 **Integrated land use and mobility.** Enhance Civic Corridors as distinctive places that are models of ecological urban design, with transit-supportive densities of housing and employment, prominent street trees and other green features, and high-quality transit service and pedestrian and bicycle facilities.

Policy 3.50 **Design great places.** Improve public streets and sidewalks along Civic Corridors to support the vitality of business districts, create distinctive places, provide a safe, healthy, and attractive pedestrian environment, and contribute to quality living environments for residents.

Policy 3.51 **Mobility corridors.** Improve Civic Corridors as key mobility corridors of citywide importance that accommodate all modes of transportation within their right-of-way or on nearby parallel routes.

A Civic Corridor Street Design Classification Description was added and other Street Design Classification Descriptions modified to reflect these policies.

Policy 3.53 **Neighborhood Corridors.** Enhance Neighborhood Corridors as important places that support vibrant neighborhood business districts with quality multi-family housing, while providing transportation connections that link neighborhoods.

A Neighborhood Corridor Street Design Classification Description was added and other Street Design Classification Descriptions modified to reflect these policies.

City Greenways

Policy 3.61 **Connections.** Create a network of distinctive and attractive City Greenways that link centers, parks, schools, rivers, natural areas, and other key community destinations.

Policy 3.62 **Integrated system.** Create an integrated City Greenways system that includes regional trails through natural areas and along Portland's rivers, connected to neighborhood greenways, and heritage parkways.

Policy 3.63 **Multiple benefits.** Design City Greenways that provide multiple benefits that contribute to Portland's pedestrian, bicycle, green infrastructure, and parks and open space systems.

Policy 3.64 **Design.** Use design options such as distinctive street design, motor vehicle

diversion, landscaping, tree plantings, scenic views, and other appropriate design options, to create City Greenways that extend the experience of open spaces and nature into neighborhoods, while improving stormwater management and calming traffic.

A City Greenway Street Design Classification Description was added and other Street Design Classification Descriptions modified to reflect these policies. Modify objective related to diversion to implement Policy 3.64.

Pattern Areas

Portland has five distinct Pattern Areas. The development patterns and characteristics of these areas are influenced by the natural landscape and how and when these parts of the city were developed.

1. Rivers
2. Central City
3. Inner Neighborhoods
4. Western Neighborhoods
5. Eastern Neighborhoods

Each Pattern Area has unique physical, social, cultural, and environmental qualities that differentiate them and create their sense of place. To maintain and enhance the positive qualities and sense of place in each pattern area, it is desirable to have policies and regulations that respond to each area's unique natural and built assets.

The following policies identify key positive characteristics of each of Portland's Pattern Areas that are relevant to decisions related to future development in these areas. Area and neighborhood plans should be consulted for more detailed guidance on design priorities in different parts of the city.

Delete and/or modify objectives that require improvements be the same regardless of Pattern Area. (Note: Stage three update will include updates and modifications to geographic specific areas to also refer and address Pattern Areas.)

Chapter 2: Community Involvement
General policy direction that led to changes to TSP public involvement policies and objectives.

III: Public Involvement and Stakeholder involvement

What have we heard leading up to this project?

Portland Plan

During the Portland Plan process we heard a lot about flexible design, equity, mode share targets and the transportation hierarchy. These issues and direction were incorporated into Comp Plan policies.

Comprehensive Plan Policy

While developing the Working Draft for the Comprehensive Plan Policy Update, we heard the need for flexible standards, re-establishing connectivity to the natural environment and built environment, a decision-making matrix with built-in priorities for managing conflicting policies and goals, and integrating a historical retrospective. We heard that centers should be priority areas for investment to improve access; a new and more sophisticated approach to parking is needed that includes multiple strategies including management, pricing, incentives and technology; and corridors are not just connections between centers, but serve many objectives – economic, recreational, social and ecological. We also heard the following themes:

- Green hierarchy (now Transportation Strategy) – Avoiding exclusivity among modes, defining in detail how it will be applied, and recognizing that its application will be different in different areas.
- Freight – Recognizing the distinction between freight and movement of goods and avoiding creating conflicts with freight in applying a green hierarchy.
- Alternative mobility standards -- Before advancing the concept, expanding and clarifying measures and defining how system development charges (SDCs) would be allocated among modes.
- Equity -- Recognizing that the design of networks needs to be flexible to respond to differing needs among geographic areas, that avoiding gentrification needs to be considered when investing in infrastructure, and that investments should be focused on underserved areas.

A recurring theme we heard is that accommodating all transportation modes is critical in meeting the City's economic development goals and that a process is needed to resolve conflicts among modes, especially in the context of a Green Hierarchy (now Transportation Strategy). Another theme we heard is that not all roads need to serve all modes. Given the limitations to expansion of the existing transportation system, managing and maintaining that system was the highest transportation system priority we heard from our stakeholder involvement.

Comprehensive Plan Projects and Programs

PBOT received over 500 comments related to City-wide Projects and Programs. A majority were related to specific projects. Working with the community, a number of projects were re-scoped make them more competitive, while others moved up or down the financially constrained list. Ten City-wide programs were added; with three added due to public comment.

Transportation Expert Group

The Transportation Expert group was formed from the former Transportation and Access Policy Expert Group from the earlier Task 4 policy work. New members were recruited. The TEG has been meeting since January 2014 and will conclude as a formal group in December 2015. The group met monthly to work through issues and concerns, as well as took informational tours and received updates from other City-wide transportation policy projects, such as parking. Agendas, a roster of members, meeting notes and materials from these meetings are available on the project webpage at https://www.portlandoregon.gov/transportation/63715.

TEG input helped shape the evaluation criteria and led to establishment of a programmatic category to target funds to smaller projects. The TEG has also advised on how best to present succinct but comprehensive information to the public about the TSP. Among its suggestions, the TEG noted that the relationship of the TSP and other transportation-related projects (e.g., 2035 Comprehensive Plan, Our Streets, Two-Year Action Plan, TriMet service enhancements) needs to be better explained. It is also critical to explain that City transportation projects are part of a larger transportation system influenced and controlled by Metro, ODOT, and others.

The TEG has also reviewed policy changes to the Proposed Draft 2035 Comprehensive Plan and provided suggestions about the Bureau of Planning & Sustainability's process for soliciting and responding to input. TEG members had numerous comments on draft transportation policies which will be forwarded to the Planning and Sustainability Commission. Concerns with an initial draft transportation hierarchy are being considered in revisions to the initial proposal. As with the PEG, TEG members participated in an exercise designed to foster the application of equity considerations to TSP development.

Public Involvement Activities in this project

Along with the TEG, thirty-five outreach activities are planned for Fall 2015 including the district collations, other Task 5 public events, City modal committees, and interested groups and organizations. A list of public outreach and engagement events can be found on the project website at https://www.portlandoregon.gov/transportation/article/546394.

IV. Amendments to the Transportation System Plan

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 1: Introduction

Commentary

- This is the first revision of the introduction to the TSP since 2002.
- The new introduction reflects the recommended Comp Plan, Climate Action Plan, the Portland Plan, and the 2014 RTP updates.
- The previous version included an outline and summary of the document. The document will not be in the same order or chapter number in the next stages of development. Staff will add that type of information in 2016 once a full updated TSP is complete.
- Irrelevant or old information has been deleted and there are edits to some of the language.
- Assume the language will change over time and over the life of the updates, with final language in 2016, especially as it relates to the Regional Transportation Plan and the region as part of the Stage 3 update.
- All maps and graphics in the TSP are under review. New graphic design standards will be developed for the TSP and will be applied to all maps and graphics in a future draft.

Introduction

Portland is projected to add 140,000 new jobs and 260,000 new residents over the next 20 years. As Portland and the region grow, however, there is a continuing challenge to maintain the natural environment, economic prosperity, and overall quality of life. If in 2035 the percentage of people who drive alone to work remains the same as it is now (nearly 60 percent), traffic, carbon emissions ~~climate pollution~~, and household spending on vehicles and fuel will all worsen significantly. In order to accommodate this growth, our transportation system must provide Portlanders safer and more convenient ways to walk, bike, and take transit for more trips. The 2035 Transportation System Plan guides investments to maintain and improve the livability of Portland by:

- saving lives and reducing injuries to all people using our transportation system
- limiting traffic congestion so transit and freight vehicles can move more reliably
- reducing , carbon emissions ~~climate pollution~~ and promoting healthy lifestyles
- keeping more money in the local economy, as we spend less on vehicles and fuel
- creating great places

~~Portland is a vibrant and healthy city. As Portland and the region grow, however, there is a continuing challenge to maintain the natural environment, economic prosperity, and overall quality of life.~~

The Transportation System Plan is the 20-year plan to guide transportation policies and investments in Portland. The TSP meets state and regional planning requirements and addresses local transportation needs. Transportation planning that promotes active transportation modes is essential to preserving the City's '~~user-friendly' character~~ livability and for the protection of the natural environment Constructing significant amounts of new automobile capacity to accommodate growth is not ~~the answer~~ a desirable option because of the enormous costs and impacts. Adding more streets and parking lots divides neighborhoods, uses valuable land, encourages urban sprawl, and has negative environmental impacts. Alternative approaches, supporting a safer, more affordable and more complete multimodal transportation network must be used to ensure integrated, comprehensive solutions. The first TSP was adopted by Council in 2002 (Ordinance 177028).

The ~~TSP~~ Transportation System Plan helps implement the City's 2035 Comprehensive Plan in addition to the region's 2040 Growth Concept by supporting a transportation system that makes it more convenient for people to walk, bicycle, use transit, and drive less to meet their daily needs. The TSP also recognizes that the transportation system must help grow and sustain the City's economic health by accommodating the needs of businesses and supporting Portland's role in the international economy. ~~The TSP meets State and regional planning requirements and addresses local transportation needs for cost-effective road, transit, freight, bicycle, and pedestrian improvements.~~

Commentary

Elements of the Transportation System Plan (TSP)

Graphic: Relationship of the TSP to other plans

Additional Comp Plan policies in the TSP Document: After the Comp Plan has been adopted and the TSP reformatted, it is anticipated that Comp Plan policies will be physically located in the TSP document with relevant sub policies and objectives added. This will be refined in Stage 3 of the TSP update.

The 2035 TSP includes:

- Goals and policies that guide the maintenance, development and implementation of Portland's transportation system
- Objectives that further the implementation of the goals and policies
- A list of projects and City wide programs along with a financial plan that will accommodate 20 years of population and employment growth
- Master street plans and modal plans
- Strategies and regulations for implementation, including street classifications

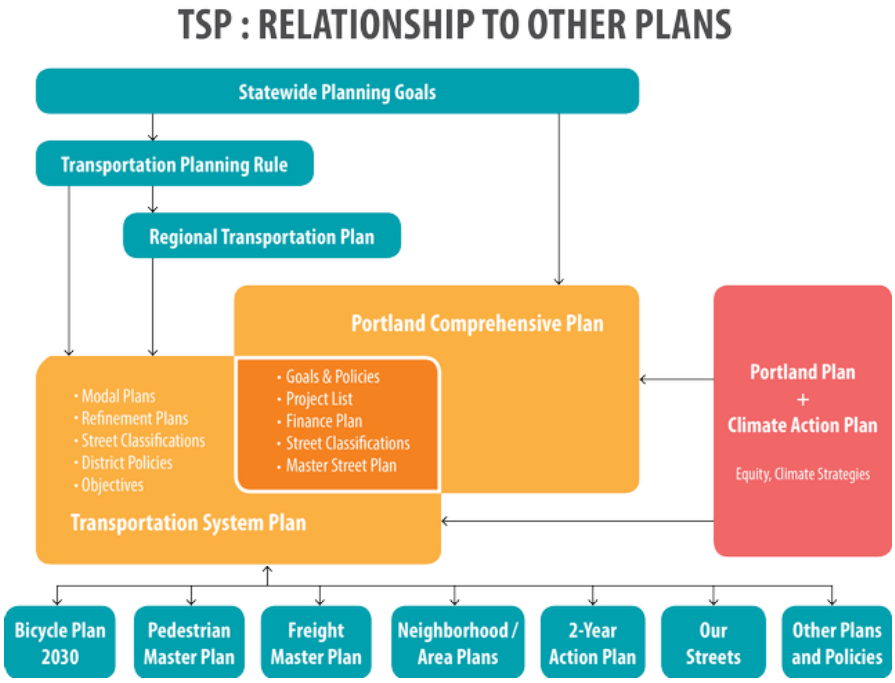
Elements of the TSP

The goals and policies, street classification descriptions and maps, the financial plan and the master street plan maps in the TSP are adopted as part of the Comprehensive Plan. The TSP will be adopted concurrently with the Comprehensive Plan, but published under a separate cover.

The current TSP update (Stage 2, 2015) is only updating certain components of the TSP in order to incorporate, reflect and implement the 2035 Comprehensive Plan update as well as reflect plans adopted since the 2007 TSP update.

For ease of use and transparency, transportation related policies from the 2035 Comprehensive Plan (2015) in Chapter 9 (Transportation), Chapter 3 (Urban Design), Chapter 4 (Development) and Chapter 8 (Public Facilities) will be included in this document at a later date. The TSP also includes additional sub-policies, geographic -specific policies, and objectives.

The TSP is both an implementation tool and a supporting document to the Comprehensive Plan. It contains the transportation element of the City's Public Facilities Plan, and the List of Significant Projects and City-wide Programs. The TSP also provides more detail than the Comprehensive Plan by including additional supporting information about transportation system conditions.



Commentary

Transportation System Plan updates

Regulatory Framework

State of Oregon goals, policies and regulations

Transportation System Plan Updates

In order to keep the TSP current and up-to-date with recent transportation planning and development activities, it is updated at regular intervals. The first two updates were not intended to include new policy initiatives. They were primarily technical in nature and included corrections, updates to project descriptions, updates on studies, and inclusion of new master street plans adopted as a part of planning efforts.

The first update was completed and adopted by City Council on October 13, 2004 (effective date, November 12, 2004; Ordinance Nos. 178815 and 178826).

The second update was completed and adopted by City Council on April 5, 2007 (effective date, May 5, 2007; Ordinance No 180871). While primarily technical in nature, this update also included new policy language to implement the City's Green Street Policy.

The Stage 2; 2015 update is a part of the City's Comprehensive Plan update and changes were made to implement the Comp Plan, as well as reflect adopted plans and classification changes since the last update in 2007. The Stage 3 of the update (2016) will incorporate regional information, update geographic policies and objectives, additional street classification changes, modal plans, other changes as identified, and reformat the document.

REGULATORY FRAMEWORK

The TSP addresses and complies with a number of State and regional goals, policies, and regulations, as summarized below.

State of Oregon

Statewide Planning Goals

Oregon has 19 goals that provide a foundation for the State's land use planning program. The TSP must comply with all applicable State goals. The two goals directly applicable to the TSP are Goal 11: Public Facilities Plan and Goal 12: Transportation.

Transportation Planning Rule

The Transportation Planning Rule (TPR) implements statewide planning Goal 12: Transportation. The TPR requires State, regional, and local jurisdictions to develop Transportation System Plans (TSPs) that comply with TPR provisions. These provisions include reducing vehicle miles traveled (VMT) per capita by 10 percent over the next 20 years, reducing parking spaces per capita, and improving opportunities for alternatives to the automobile.

Commentary

Regulatory Framework *(Continued)*

Regional – Metro goals, policies and regulations

Oregon Transportation Plan

The Oregon Transportation Plan (OTP) serves as the State's TSP. Regional and local TSPs must be consistent with the OTP.

Regional Metro

Regional Transportation Plan

First adopted by Metro in 1983, ~~on August 10~~with latest update in 2014, the Regional Transportation Plan (RTP) serves as the regional TSP. As such, the RTP:

- Is consistent with the requirements of the State TPR and OTP
- Implements the 2040 Growth Concept and Regional Framework Plan
- ~~Serves as the 20-year functional plan for transportation in the region~~
- Focuses on ~~streets~~ the regional transportation system ~~of regional significance~~
- Includes multimodal functional classifications and street design classifications
- Includes a list of major system improvements
- Includes a funding plan

Region 2040 Growth Concept

Metro adopted the 2040 Growth Concept as part of the Regional Urban Growth Goals and Objectives (RUGGOs) in 1995. The 2040 Growth Concept stated the preferred form of long-term regional growth and development, including the urban growth boundary (UGB), density, and open space protection. It also designates design types, such as central city, regional center, town center, and main street.

Regional Transportation Functional Plan

The Regional Transportation Functional Plan (first adopted in 2010, last updated in 2012; Ordinance No 10-1241B) implements the Goals and Objectives in section 2.3 of the RTP and the policies of the RTP, and replaces the regional parking policy of the Urban Growth Management Functional Plan (See RTFP Title 4: Regional Parking Management.) It provides policy basis and direction for local TSPs. The RTFP codifies requirements that local plans must comply with to be consistent with the Regional Transportation Plan. Therefore, its requirements are binding on cities and counties.

Urban Growth Management Functional Plan

Metro adopted the Urban Growth Management Functional Plan (UGMFP) in 1996 and updated it 2014 to implement regional goals and objectives adopted by the Metro Council as the Regional Growth Goals and Objectives (RUGGO), including the 2040 Growth Concept and the Regional Framework Plan. The UGMFP addresses the accommodation of regional population and job growth. Its requirements are binding on cities and counties.

Commentary

Regional Framework Plan

The Regional Framework Plan, adopted in 1997, identifies regional policies to implement the 2040 Growth Concept, preserving access to nature and building great communities for today and the future. The plan was amended in 2005 and 2010, and again in 2014 as part of the adoption of the Climate Smart Strategy.

Regulatory Framework *(Continued)*

City of Portland goals, policies and regulations

City of Portland

Comprehensive Plan

Portland's 2035 Comprehensive Plan guides land use development and public facility investment decisions between now and 2035. This guidance is intended to help make Portland more prosperous, healthy, equitable and resilient.

The Comprehensive Plan includes five elements that work together to accomplish this goal:

1. Vision and Guiding Principles
2. Goals and Policies
3. Comprehensive Plan Map
4. List of Significant Projects
5. Transportation policies, classifications and master street plans

Within the Comprehensive Plan and TSP, there are nine Transportation goals:

1. Safety
2. Transportation system for multiple goals
3. Great places
4. Environmentally sustainable
5. Equitable transportation
6. Positive health outcomes
7. Opportunities for prosperity
8. Cost effectiveness
9. Airport futures

Transportation related policies from the 2035 Comprehensive Plan (2015) are located in Chapter 9 (Transportation), Chapter 3 (Urban Design), Chapter 4 (Development) and Chapter 8 (Public Facilities). The TSP also includes additional sub-policies and geographic -specific policies and objectives.

Regulatory Framework *(Continued)*

City of Portland goals, policies and regulations

Chapter 9 policies are grouped in these subject areas:

- Designing and planning
- Land use, development, and placemaking
- Streets as public spaces
- Modal Policies
- Airport Futures
- System Management
- Transportation Demand Management
- Parking Management
- Finance, Programs and Coordination

Chapter 8: Public Facilities
- Funding
- Public Benefits
- Public Rights of Way
- Coordination
- Trails

Chapter 3: Urban Form
- Corridors
- Civic Corridors
- Neighborhood Corridors
- Transit Station Areas
- City Greenways
- Pattern Areas

Chapter 4: Development
- Design and Development of centers and corridors
- Off-site impacts

Portland Bureau of Transportation also using Comprehensive Plan Chapter 2: Community Involvement for its public involvement policies.

Regulatory Framework *(Continued)*

City of Portland goals, policies and regulations

Chapter 2 has seven goals and 38 policies.

Goals

- Community Involvement as a Partnership
- Social Justice and Equity
- Value Community Wisdom and Participation
- Transparency and Accountability
- Meaningful Participation
- Accessible and Effective Participation
- Strong Civic Infrastructure

Policies grouped in these major areas:

- Partners in decision making
- Community assessment
- Transparency and accountability
- Community involvement program
- Process design and evaluation
- Information design and development

Commentary

TSP Seven Outcomes

SEVEN OUTCOMES

Working with our partners at Metro, Bureau of Planning and Sustainability, and the Oregon Department of Transportation, with direction from the Portland Plan (2012), the Climate Action Plan (2010), Health Equity & the Transportation System Plan Report (2012), and from the Comprehensive Plan Update, PBOT staff developed an outcomes based approach to the TSP.

These seven outcomes directed policy choices as well as informed the development of criteria for selecting and prioritizing TSP Projects and Programs. The Transportation System Improvements Chapter contains details on the citywide project and programs process and evaluation.

These seven outcomes are**:**

1. Improve access to daily needs, such as jobs, schools, grocery stores, and health care
2. Reduce/eliminate transportation fatalities and injuries
3. Improve health by increasing walking and bicycling
4. Increase economic benefits, such as access to family wage jobs and freight access
5. Ensure disadvantaged communities benefit as much or more than non-disadvantaged communities
6. Reduce global warming pollution from transportation
7. Prioritize the most cost-effective projects

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Section 2: TSP Objectives

Commentary

This section contains proposed changes to Objectives in the Transportation System Plan (TSP) to provide consistency with the new proposed Comprehensive Plan. The adopted 2007 TSP reference numbers are shown to clarify which Objectives are proposed for amendment. Amendments are proposed for the following reasons:

- To provide consistency with Comp Plan direction:
  - Remove Objectives that are redundant with 2035 Comp Plan policies
  - Remove Objectives that are inconsistent with 2035 Comp Plan policies
  - Allowing diversion as a City Greenway design option.
  - Referencing Comp Plan Centers & Corridors in place of 2040 Growth Areas
- To update bureau name to Portland Bureau of Transportation
- To update the list of guidelines used in development and design of street projects.

Please note:

- **Adopted 2007 TSP Objectives not identified in the "Amendments to the TSP" Chapter (IV) of this Proposed Draft will be retained and are included in the back of this document for reference.**
- Additional changes to Objectives are proposed in other Sections of this report.
- The 2007 TSP Policies will be replaced with adoption of the 2035 Comp Plan Update.

Traffic Calming (Objective 6.13.D & F)

- B. Objective elevated to policy and replaced by new Comp Plan Policy 9.45
- D. PBOT has implemented new street designs to prioritize pedestrians and bicycle traffic, including neighborhood greenways, shared roadways and pathways, and traffic calming is often needed to maintain traffic volumes and speeds below established thresholds. The change allows diversion from local traffic streets as long as measures are taken to ensure resulting traffic volumes on nearby local streets are acceptable. This provides consistency with Comp Plan direction allowing "motor vehicle diversion" as a City Greenway design option.
- F. Reference Centers and Corridors and include "safe" and comfortable

Pedestrian Transportation (Objective 6.22.A & B)

- A. Objective elevated to policy and replaced by new Comp Plan Policy 9.16
- B. Reference Centers and Corridors

Congestion Pricing (Objective 6.34.C)

- C. Objective elevated to policy and replaced by new Comp Plan Policy 9.49

Environmental Sustainability in Transportation (Objective 11.8.A)

- A. Bureau name change to Portland Bureau of Transportation

Project Selection (Objective 11.9.A & D)

- A. Objective elevated to policy and replaced by new Comp Plan Policy 9.10
- D. Reference Centers and Corridors

TSP OBJECTIVES

Traffic Calming (Objective 6.13.D & F)

~~B. Use a combination of enforcement, engineering, and education efforts to calm vehicle traffic.~~

D. Implement measures on Local Service Traffic Streets that do not significantly divert traffic to other streets of the same classification, except when needed to give priority to pedestrians and/or bicycle traffic.

F. Reduce traffic speeds through enforcement and design in high density ~~2040 Growth Concept areas, including~~ main streets ~~and~~ Centers and Corridors, to levels that are safe and comfortable for bicyclists and pedestrians.

Pedestrian Transportation (Objective 6.22.A & B)

~~D. Promote walking as the mode of choice for short trips by giving priority to the completion of the pedestrian network that serves Pedestrian Districts, schools, neighborhood shopping, and parks.~~

E. Support walking to transit by giving priority to the completion of the pedestrian network that serves Comp Plan Centers and Corridors, transit centers, stations, and stops; providing adequate spacing and quality of crossing opportunities at transit stops; and planning and designing pedestrian improvements that allow adequate space for transit stop facilities.

Congestion Pricing (Objective 6.34.C)

~~C. Support experiments in equitable and efficient pricing of new motor vehicle transportation facilities.~~

Environmental Sustainability in Transportation (Objective 11.8.A)

A. Integrate best management practices into all aspects of the Portland ~~Office~~ Bureau of Transportation activities.

Project Selection (Objective 11.9.A & D)

~~A. Promote a compact urban form by supporting development in high-priority 2040 Growth Concept areas, including facilities and improvements that support mixed-use, pedestrian-friendly development and increase walking, bicycling, and transit use.~~

D. Provide and improve access to, between and within ~~activity~~ Comp Plan Centers and Corridors and develop safe routes to schools.

Commentary

Street Design and Right-of-Way Improvements (Objective 11.10.E & G)

- E. Update name of truck street design guide and add new design guidelines.
- G. Delete Objective 11.10. A, which is inconsistent with Comp Plan Policy 8.44 to allow flexibility in design and remove a barrier to newly approved residential street standards.

Street Design and Right-of-Way Improvements (Objective 11.10.E & G)

E. Use a variety of transportation resources in developing and designing projects for all City streets, such as the City of Portland's Pedestrian Design Guide, Bicycle Master Plan-Appendix A, NACTO Urban Bikeway Design Guide, NACTO Urban Street Design Guide, Portland Parks and Recreation Trail Design Guidelines, Designing for Truck Movements and Other Large Vehicles ~~Design Guide for Truck Streets~~, and City of Portland Green Street Policy and Design Guide for Public Street Improvements.

~~G. Include sidewalks on both sides of all new street improvement projects, except where there are severe topographic or natural resource constraints or when consistent with the Pedestrian Design Guide.~~

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Section 3: Community Involvement Objectives

- Policies and objectives deleted, modified and updated to reflect Comprehensive Plan Chapter 2, Chapter 8 and Chapter goals and policies.
- A number of the 2002 objectives were turned into Policies in Chapter 9 and Chapter 8 (9.61; 9.66; 8.46)
- Deleted all Explanation segments for consistency with document.
- Objectives A-R establish new PBOT-focused community involvement objectives.
- Added language to point to BPS Public Involvement Program/Workbook from BPS.
- Need to track the development and adoption of the BPS Public Involvement Workbook (early 2016).
- Added language from Internal PBOT Public Involvement Policies (est. 2015)
- PBOT's continued coordination internally to reflect and incorporate feedback on the Internal Public Involvement Policies from the bureau's Public Involvement Committee, plus working with an eminently hired Community Engagement Coordinator, may result in additional comments or changes to this language.
- Objective 6.1.Q was added from public comments received on the Discussion Draft.
- Staff will, per Discussion Draft comments received, add hyperlinks (including lists of relevant document subsections) to referenced documents, prior to final publication.

Community Involvement Objectives:

A. The Portland Bureau of Transportation (PBOT) will provide meaningful opportunities for equitable community involvement in shaping the plans, public policy and projects that support implementation of the Transportation System Plan.

B. Provide and document concerted efforts to engage those with the potential to be impacted by the plans, public policies or projects in order to evaluate and mitigate disparate burdens, especially for under-served and under-represented communities including Limited English Proficient (LEP) communities, communities of color, low-income populations and those traditionally underserved by transportation services.

C. Furnish opportunities for early and ongoing access to balanced information about plans, public policy and projects.

D. Keep interested parties, and those who may be impacted by particular decisions related to plan and project implementation, informed of direct and related engagement opportunities.

E. Engage and support community members who are traditionally under-represented in bureau projects, plans, and processes.

F. Provide funding that is adequate to carry out public involvement practices.

G. Foster a culture of public involvement across divisions within PBOT.

H. Ensure PBOT decision-making processes are clear, straightforward, and include mechanisms for public accountability, so that the public has the capacity to participate.

I. Ensure PBOT public documents are accessible, relevant, and informative.

J. Ensure public involvement and outreach practices, materials, and processes are culturally relevant.

K. Follow International Association for Public Participation (IAP2) Core Values.

L. Follow City of Portland Public Involvement Principles.

M. Follow Internal PBOT Public Involvement Policies.

N. Follow City of Portland Civil Rights Title VI Plan.

O. Follow the goals and policies of Chapter 2: Community Involvement of the City's Comprehensive Plan.

P. Follow Policy 8.6 Interagency Coordination from Chapter 8: Public Facilities and Services of the City's Comprehensive Plan.

Q. Refer to the Bureau of Planning and Sustainability Public Engagement Workbook for guidance on scoping for potential community impacts, identifying stakeholders, determining the right level of engagement, planning a community engagement process, tracking engagement, reporting results and evaluating the engagement and process.

R. Consider tools and strategies offered by Metro's Public Engagement Guide in Portland's transportation planning activities.

S. Foster consistency in community engagement approaches and implementation across the Bureau of Transportation.

~~Coordination and Involvement Policies~~

~~Policy 6.1 Coordination~~

~~Coordinate with affected state and federal agencies, local governments, special districts, and providers of transportation services when planning for and funding transportation facilities and services.~~

> ~~*Explanation: The State of Oregon's Transportation Planning Rule (TPR) and Metro's 2000 Regional Transportation System Plan (RTP) require the City to coordinate transportation system planning and other multi-jurisdictional transportation issues. Portland has had a coordination policy since 1992.*~~

~~*Objectives:*~~

~~A. Coordinate the funding and development of transportation facilities with regional transportation and land use plans and with public and private investments.~~

~~B. Participate in Metro's processes for allocating and managing transportation funds and resources to achieve maximum benefit with limited available funds.~~

~~C. Involve affected agencies, local governments, special districts, and transportation providers in updates of the Transportation System Plan (TSP)~~

~~D. Pursue opportunities to improve the transportation system, including grants, private/ public partnerships, and other non-traditional funding mechanisms.~~

~~Policy 6.2 Public Involvement~~

~~Carry out a public involvement process that provides information about transportation issues, projects, and processes to citizens, businesses and other stakeholders, especially to those traditionally underserved by transportation services, and that solicits and considers feedback when making decisions about transportation.~~

> ~~*Explanation: Transportation decision making should actively seek to include disenfranchised populations by making the process clear and straightforward and including mechanisms for public accountability.*~~

~~*Objectives:*~~

~~A. Involve community members who are traditionally under-represented in transportation planning activities.~~

~~B. Give consideration to Metro's Local Public Involvement Policy for Transportation Planning in Portland's transportation planning activities.~~

~~*Explanation: Metro adopted public involvement guidelines in July 1995 for transportation planning. Local jurisdictions must be consistent with these guidelines in developing their TSPs and any other projects or programs submitted to Metro for regional funding. The guidelines require local plan development to meet minimum standards for public involvement before the Metro Council takes action on the plan.*~~

City of Portland
Transportation System Plan

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Section 4: Bicycle Classification Descriptions and Other Bicycle Objectives

Commentary

This task includes adopting bikeway classifications in the TSP under Objective 6.7.A-D per the Council adopted Portland Bicycle Plan (PBP) for 2030, adopted in February 2010.

Objective 6.7.A. Major City Bikeways
Objective 6.7.B. City Bikeways

The phrase 'emphasizing the movement of bicycles' in the description of city bikeways is intended to support a connected bikeway network and bicycle mobility and access on these streets in a manner that is appropriate for the adjacent land use setting and is consistent with other adopted modal street classifications.

The language added for Major City Bikeways was developed by staff with assistance from the Joint Modal Committee and the individual modal advisory committees. The main changes are:

- Adding "only after performing careful assessments to determine potential impacts to the essential movement of all modes." This language aims to address the freight stakeholders' concerns that movement of vehicular traffic would not be considered during bikeway design.
- Adding "Where conditions warrant and where practical, Major City Bikeways should have separated facilities for bicycles and pedestrians." Initially, this language was only proposed for off-street paths. Stakeholders suggested that on some streets without sidewalks designated as Major City Bikeways, sidewalks may not be built in the near future and, as such, it should be clearly defined how bicyclists and pedestrians should behave in order to reduce conflicts.
- Adding "Build the highest quality bikeway facilities" was in response to comments received from the public about the desirability of protected bikeways on streets with high volumes of automobile traffic. That particular phrase was used as it is applicable also to shared roadways ("neighborhood greenways") and to off-street pathways. For those latter two facilities it reflects the recommendations of the Council-adopted Neighborhood Greenway Assessment Report as well as earlier community comment about the need to provide separate spaces for people bicycling and walking on shared pathways.

BICYCLE CLASSIFICATION DESCRIPTIONS

OBJECTIVES 6.7.A-D

A. Major City Bikeways

Major City Bikeways form the backbone of the city's bikeway network and are intended to serve high volumes of bicycle traffic and provide direct, seamless, efficient travel across and between transportation districts.

- Land Use. Major City Bikeways should support 2040 land use types.
- Improvements. Major City Bikeways should be designed to accommodate large volumes of bicyclists, to maximize their comfort and to minimize delays by emphasizing the movement of bicycles. Build the highest quality bikeway facilities. Motor vehicle lanes and on-street parking may be removed on Major City Bikeways to provide needed width for separated-in-roadway facilities where compatible with adjacent land uses and only after performing careful ~~assessments~~ analysis to determine potential impacts to the essential movement of all modes. Where improvements to the bicycling environment are needed but the ability to reallocate road space is limited, consider alternative approaches that include property acquisition, parallel routes and/or less desirable facilities. On Major City Bikeways developed as shared roadways, use all appropriate tools to achieve recommended performance guidelines. Where conditions warrant and where practical, Major City Bikeways should have separated facilities for bicycles and pedestrians.

B. City Bikeways

City Bikeways are intended to establish direct and convenient bicycle access to significant destinations, to provide convenient access to Major City Bikeways and to provide coverage within three city blocks of any given point.

- Land Use. City Bikeways should support 2040 land use types and residential neighborhoods.
- Improvements. City Bikeways emphasize the movement of bicycles. Build the highest quality bikeway facilities. Motor vehicle lanes and on-street parking may be removed on City Bikeways to provide needed width for separated-in-roadway facilities where compatible with adjacent land uses and only after taking into consideration the essential movement of all modes. Where improvements to the bicycling environment are needed but the ability to reallocate road space is limited, consider alternative approaches that include property acquisition, parallel routes and/or less desirable facilities. On City Bikeways developed as shared roadways, use all appropriate tools to achieve recommended performance guidelines.

Commentary

Objective 6.7.C. Local Service Bikeways

Local Service Bikeways
The PBP did not propose changes to the local service bikeway classification.

Bicycle Districts
Council resolved that PBOT staff address the policy changes recommended in the PBP for 2030 in the next update of the TSP. The Portland Bike Plan created language defining Bicycle Districts and proposed that the Downtown, River District, Lloyd District, and Gateway be classified as Bicycle Districts.

Metro's Regional Active Transportation Plan (2014) and the 2014 Regional Transportation Plan (RTP) added Regional Bicycle Districts to the region-wide bicycle network. The 2035 Comprehensive Plan recommends Policy 9.2.c. calling for designating "district classifications that give priority to bicycle access and mobility in areas where high levels of bicycle activity exist or are planned". The Bicycle Classification map shows the Gateway Regional Center, which is the one district outside the Central City that is a recommended bicycle district per the Portland Bicycle Plan for 2030.

Off-Street Paths
The PBP for 2030 recommends modifying bikeway classifications to introduce a functional hierarchy of bikeway routes. The Off-Street Path classification in the 2007 TSP is primarily a description of a facility type. The PBP recommended eliminating the Off-Street Path classification in favor of classifying non-motorized bikeways based on the function of each route.

Relationship to the Trails system and policies
The 2035 Comp Plan Update recommends eight "Trails" policies (Policies 8.50-8.57) and Public Trail Alignments map (Figure 8-2). TSP bicycle classification and pedestrian classification maps identify trails that are part of the citywide bikeway and pedestrian networks, focusing on trails that serve transportation purposes and calling them city bikeways (for bicycle classifications) and walkways and off-street paths (for pedestrian classifications), rather than trails. The detail for which bikeways are considered trails is found in The Portland Bicycle Plan, which refers to classified bikeways that are outside of the roadway as trails.

Portland Parks & Recreation identifies three trail types in its Recreational Trail Strategy (2006): regional trails, community connectors and local access trails. In the recreational trail strategy, trails are recognized as providing both transportation and recreational functions. Most of the trails in the Portland Bicycle Plan are shared with pedestrian and other non-motorized users, and are designated as Regional Trails in the Portland Parks & Recreation system, which include both off-street (paved and natural surface) and on-street trails. Trails are typically multi-use, often shared by bicyclists, pedestrians and other non-motorized users, but should provide physical separation of activities when needed and possible. In some instances, off-street trail routes may go through parks, in which case they would be using multi-use park paths for a segment. Responsibility for developing and maintaining a citywide trail system is shared between multiple bureaus, agencies, and the private sector.

C. Local Service Bikeways
Local Service Bikeways are intended to serve local circulation needs for bicyclists and provide access to adjacent properties.

- Classification. All streets not classified as City Bikeways or Off-Street Paths, with the exception of Regional Trafficways not also classified as Major City Traffic Streets, are classified as Local Service Bikeways.
- Improvements. Consider the following design treatments for Local Service Bikeways: shared roadways, traffic calming, bicycle lanes, and extra-wide curb lanes. Crossings of Local Service Bikeways with other rights-of-way should minimize conflicts.
- On-Street Parking. On-street parking on Local Service Bikeways should not be removed to provide bicycle lanes.
- Operation. Treatment of Local Service Bikeways should not have a side effect of creating, accommodating, or encouraging automobile through-traffic.

D. Bicycle Districts
Bicycle Districts are areas with a dense concentration of commercial, cultural, institutional and/or recreational destinations where the City intends to make bicycle travel more attractive than driving.

- Land Use. High density and mixed-use neighborhoods should be targeted as bicycle districts. Auto-oriented development should be discouraged in Bicycle Districts.
- Characteristics. The size and configuration of a Bicycle District should be consistent with the scale of bicycling trips. A Bicycle District includes the streets along its boundaries, except where the abutting street is classified as a Regional Trafficway.
- Improvements. All streets within a Bicycle District are important in serving bicycle trips. Appropriate bicycle facilities should be determined for each street based on the desired bicycling conditions and operations. Use the bikeway design and engineering guidelines to design streets within Bicycle Districts.

~~Off-Street Paths~~
~~Off-Street Paths are intended to serve as transportation corridors and recreational routes for bicycling, walking, and other non-motorized modes.~~

- ~~Connections. Use Off-Street Paths as convenient shortcuts to link urban destinations and origins along continuous greenbelts such as rivers, park and forest areas, and other scenic corridors, and as elements of a regional, citywide, or community recreational trail plan.~~
- ~~Location. Establish Off-Street Paths in corridors not well served by the street system.~~
- ~~Improvements. Use the Bikeway Design and Engineering Guidelines to design Off-Street Paths. Off-Street Paths should be protected or grade-separated at intersections with major roadways.~~

Commentary

Portland Bicycle Plan for 2030. Appendix B – Recommended Objectives.
Resolution #36763

This task includes adopting changes to objectives in the TSP per the Council-adopted Portland Bicycle Plan for 2030. These changes were recommended in Appendix B of the Portland Bicycle Plan and were already adopted by Council by Resolution #36763 on February 11, 2010.

- Incorporate recommendations in Appendix B of the Portland Bicycle Plan for 2030 per Council Resolution #36763
- Pending issue: modifications may be need to reflect objectives for other modes, for example broaden objectives to include "active transportation" rather than only bicycling.

Objective 6.3 H-J. Transportation Education

Objective 6.13.G Traffic Calming

- Objective G. The term 'bicycle boulevards' was replaced with 'neighborhood greenways'

Objective 6.23.A-E Bicycle Transportation

Portland Bicycle Plan for 2030. Appendix B

Objective 6.3.H
Increase bicycle safety education, enforcement and outreach to encourage safe travel behavior of all modes and to increase bicycling in Portland.

Objective 6.3 I
Promote bicycling as safe and convenient transportation to and from school.

Objective 6.3 J
Continue and expand encouragement programs that provide services and equipment, support behavior changes, raise awareness, and provide incentives that increase bicycling in Portland.

Objective 6.13 G (Traffic Calming)
Use traffic calming tools and other available tools and methods to create and maintain sufficiently low automotive volumes and speeds on **neighborhood greenways** to ensure a comfortable cycling environment on the street.

Objective 6.23 A
~~Complete a network of bikeways that serves bicyclists' needs, especially for travel to employment centers, commercial districts, transit stations, institutions, and recreational destinations.~~
Form a citywide network of connected bikeways on streets including streets with low traffic speeds and low traffic volumes. Provide the highest degree of separation on busier streets to preserve access to common destinations. Accommodate cyclists of all ages and abilities.

Objective 6.23 B
Provide continuous bicycle facilities and eliminate gaps in the ~~bike lane system~~ bikeway network.

Objective 6.23 C
Install bicycle signage along bikeways where needed to define the route and/or direct bicyclists to a destination or other bikeway.

Objective 6.23 D
~~Increase bicyclist safety and convenience by making improvements, removing physical hazards such as dangerous storm gates and supporting changes to adopted statutes and codes that would enhance the safety of bicyclists.~~
Design bicycle facilities with safety and comfort as basic requirements to attract riders of all ages and skill levels.

Objective 6.23 E
Ensure that the health, social, economic, and environmental benefits of bicycling are accessible to all Portlanders regardless of race, ethnicity, age, economic status, geographical location or language spoken.

Commentary

Portland Bicycle Plan for 2030. Appendix B – Recommended Objectives.
Resolution #36763

Objective 6.23.A-E Bicycle Transportation

Language was added to Objective 6.23.J (shown in bold) in response to the following comment on the Discussion Draft:

- Connect bike-sharing to transit last-mile connections in addition to the uses mentioned.

Objective 6.26 A,E,F On-Street Parking Management

Language was added to Objective 6.26.F (shown in bold) in response to the following comment on the Discussion Draft:

- The Comp Plan has language suggesting consideration of parking for various types of bicycles. A variety of types should be reflected here as well.

Objective 6.23 F
Encourage the provision of showers and changing facilities for commuting cyclists, including the development of such facilities in commercial buildings and at '~~Bike Central~~' central locations.

Objective 6.23 G
~~-Increase the number of bicycle-transit trips.~~
Increase the number of multi-modal trips that include bicycling for at least one trip segment by improving and simplifying connections and transfers to transit.

Objective 6.23 H
Promote bicycling as safe and convenient transportation to and from school.

Objective 6.23 I
Provide bikeway system improvements that will serve key destinations, such as Metro 2040 centers and main streets, employment centers, commercial districts, transit stations, institutions, schools, and recreational destinations.

Objective 6.23 J
Support bike-sharing programs aimed at visitors, tourists, employees, and residents to increase access to bicycles and to provide last-mile connections from transit.

Objective 6.23 K
Maintain Portland's position as a national leader in the evaluation of bicycle improvements and ridership through on-going data collection and monitoring of changes to bicycling infrastructure and in riding behavior.

Objective 6.23 L
Support changes to remove institutional barriers in statutes, policies, and codes that discourage safe and efficient bicycle use.

Objective 6.26 A
Support land uses in existing and emerging regional centers, town centers, and main streets with an adequate supply of on-street parking spaces while emphasizing grouped bicycle parking in the street.

Objective 6.26 E
Provide and maintain public bicycle parking at high-demand locations in the Central City, neighborhood business nodes, cultural and recreational destinations, transit nodes and employment centers.

Objective 6.26 F
Ensure a highly functional and high quality design of bicycle parking installed in the public right of way **for a variety of bicycle types**.

Commentary

Portland Bicycle Plan for 2030. Appendix B – Recommended Objectives.
Resolution #36763

Objective 6.26 D-E On-Street Parking Management

Objective 11.10 F,R,S,T Street Design and Right-of-Way Improvements

Objective 11.12 F Maintenance

Objective 6.27 D
Support changes to regulations to ensure that all land uses provide an ample quantity of short- and long-term bicycle parking and end-of-trip facilities consistent with an increasing bicycle mode share.

Objective 6.27 E
Encourage owners of existing residential or commercial buildings to supplement and upgrade off-street long-term and short-term bicycle parking.

Objective 11.10 F
Provide planned bicycle facilities on designated alignments and in conjunction with street improvements, or develop equally safe and convenient alternative access for bicycles on parallel streets when the appropriate bikeway facility cannot be provided on the designated street. ~~because of severe environmental or topographical constraints, unacceptable levels of traffic congestion, or the need to retain on-street parking.~~

Objective 11.10 R
Require adequate right-of-way or easements where adequate space for planned bikeway and pedestrian facilities is not available.

Objective 11.10 S
Continue to test, evaluate, and implement appropriate innovative design treatments that improve operating conditions and safety for cyclists.

Objective 11.10 T
Utilize interim bicycle facility improvements where the preferred design treatment is not currently feasible.

Objective 11.12 F
Make improvements to the bicycle network, including removing physical hazards, and maintain the bicycle infrastructure in a timely and efficient manner.

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

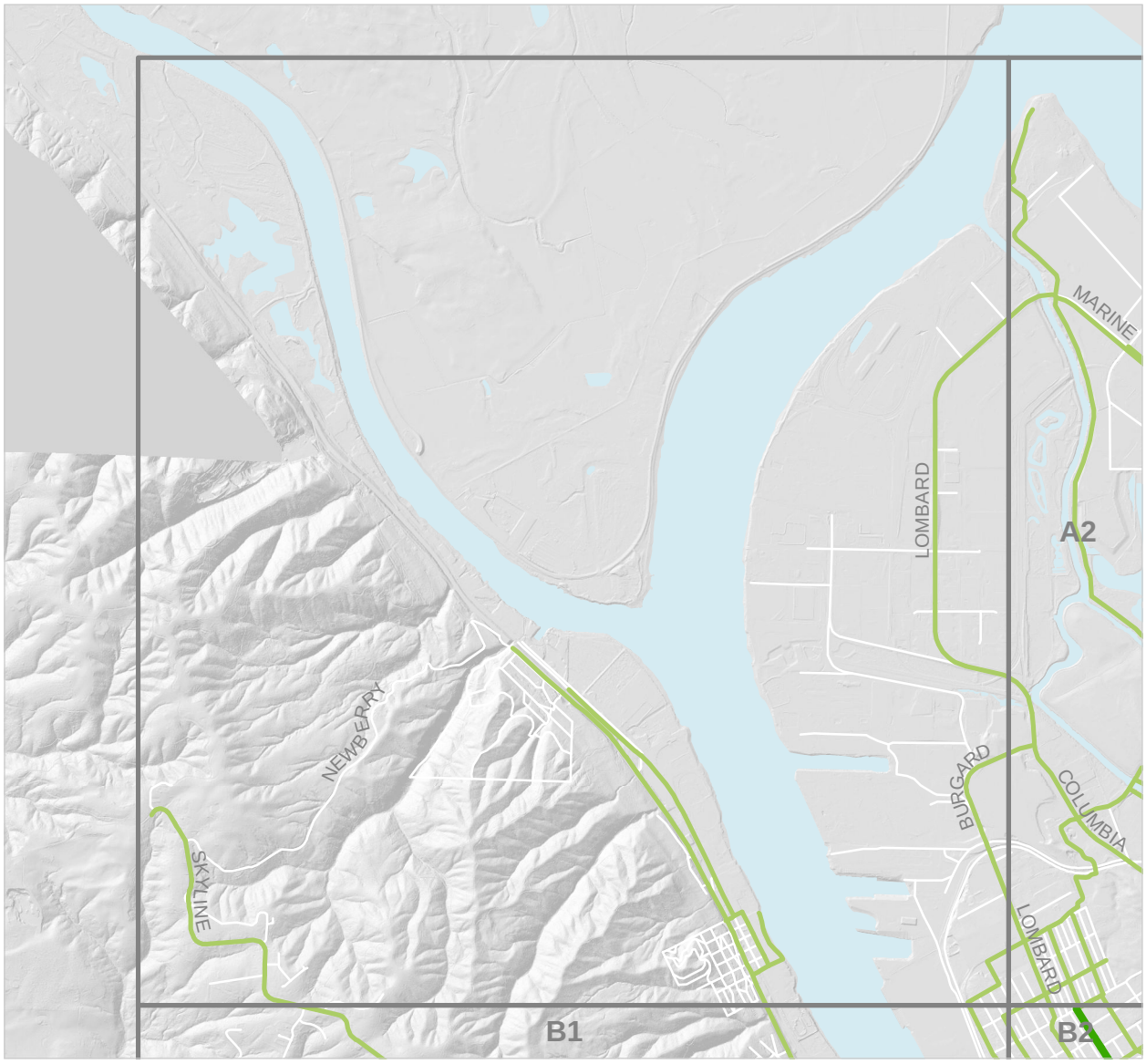
Section 5: Bicycle Classification Maps

Commentary

Bicycle Classification Maps

Bicycle Classifications are being updated to incorporate the recommendations of the Bicycle Plan for 2030 (adopted in 2010) as well as other plans adopted since the last TSP was adopted in 2007. Classification changes also reflect the recommended TSP Major Projects list for the current update, as well as any other funded, completed, or planned projects that impact classifications.

A new design standard for maps in the TSP is being developed. The Bicycle classification maps are a work in progress, and their design may evolve with subsequent iterations of the TSP.



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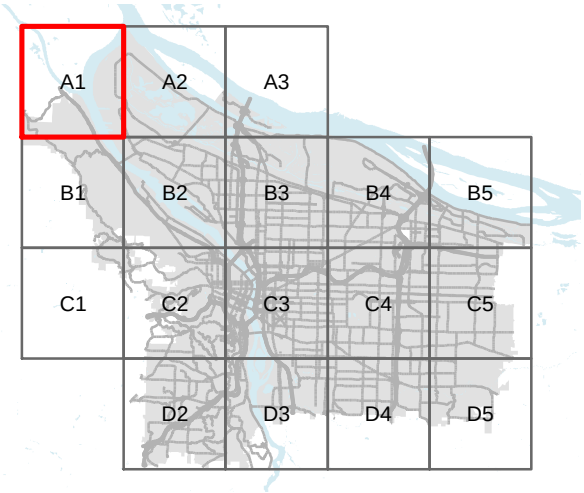
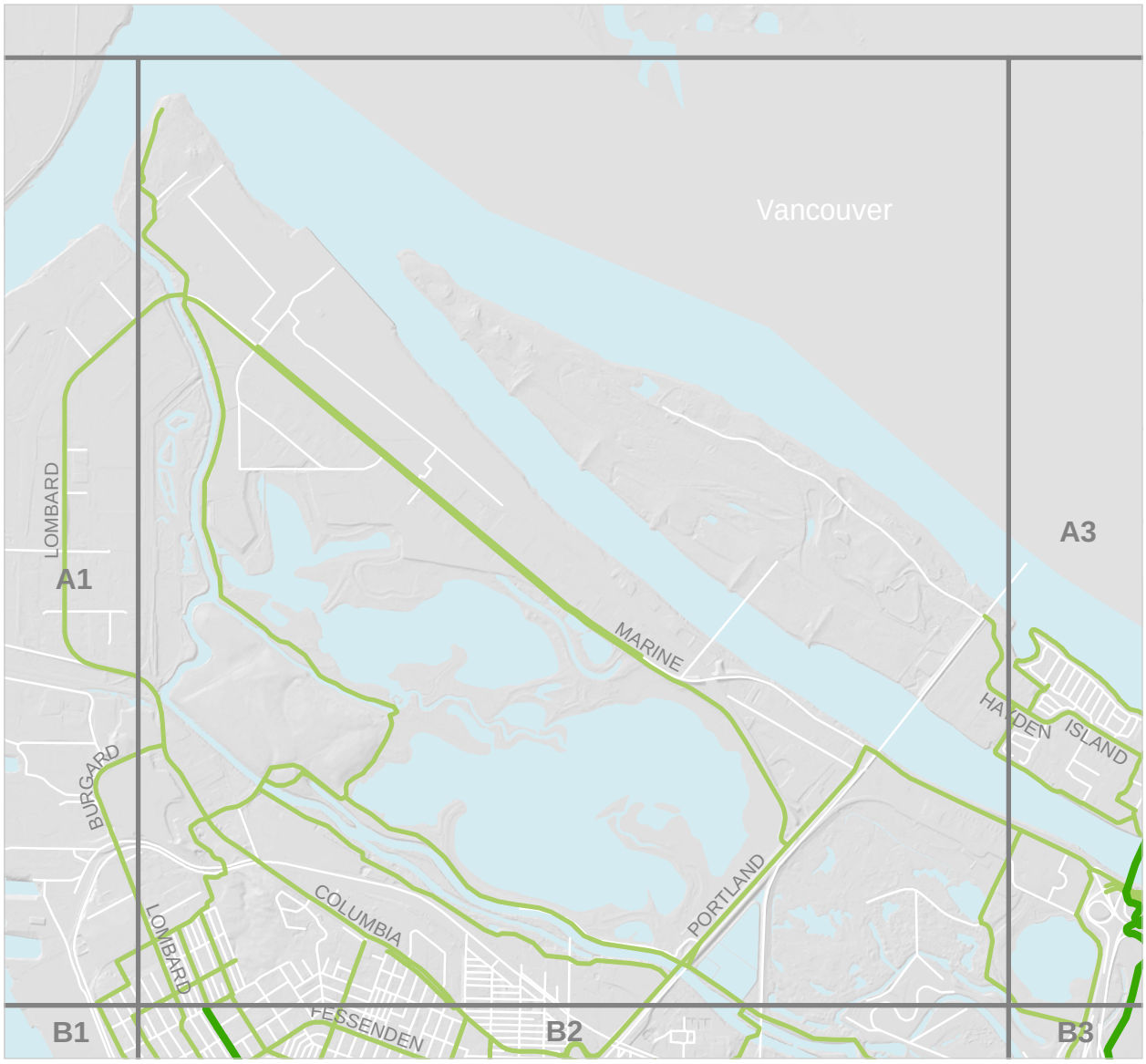
Bicycle Classification

- Major City Bikeway
- City Bikeway
- Local Service Bikeway





Bicycle Classification

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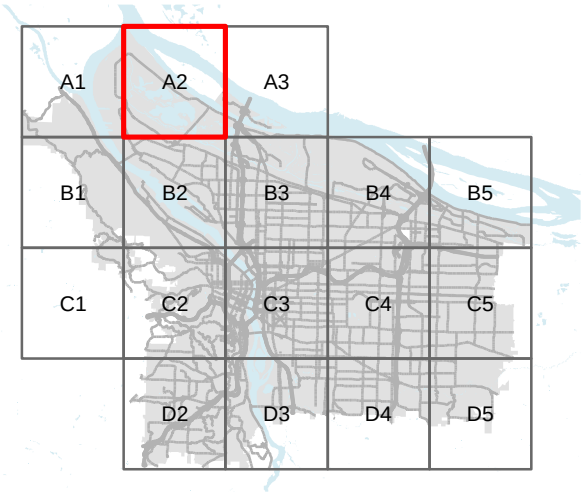

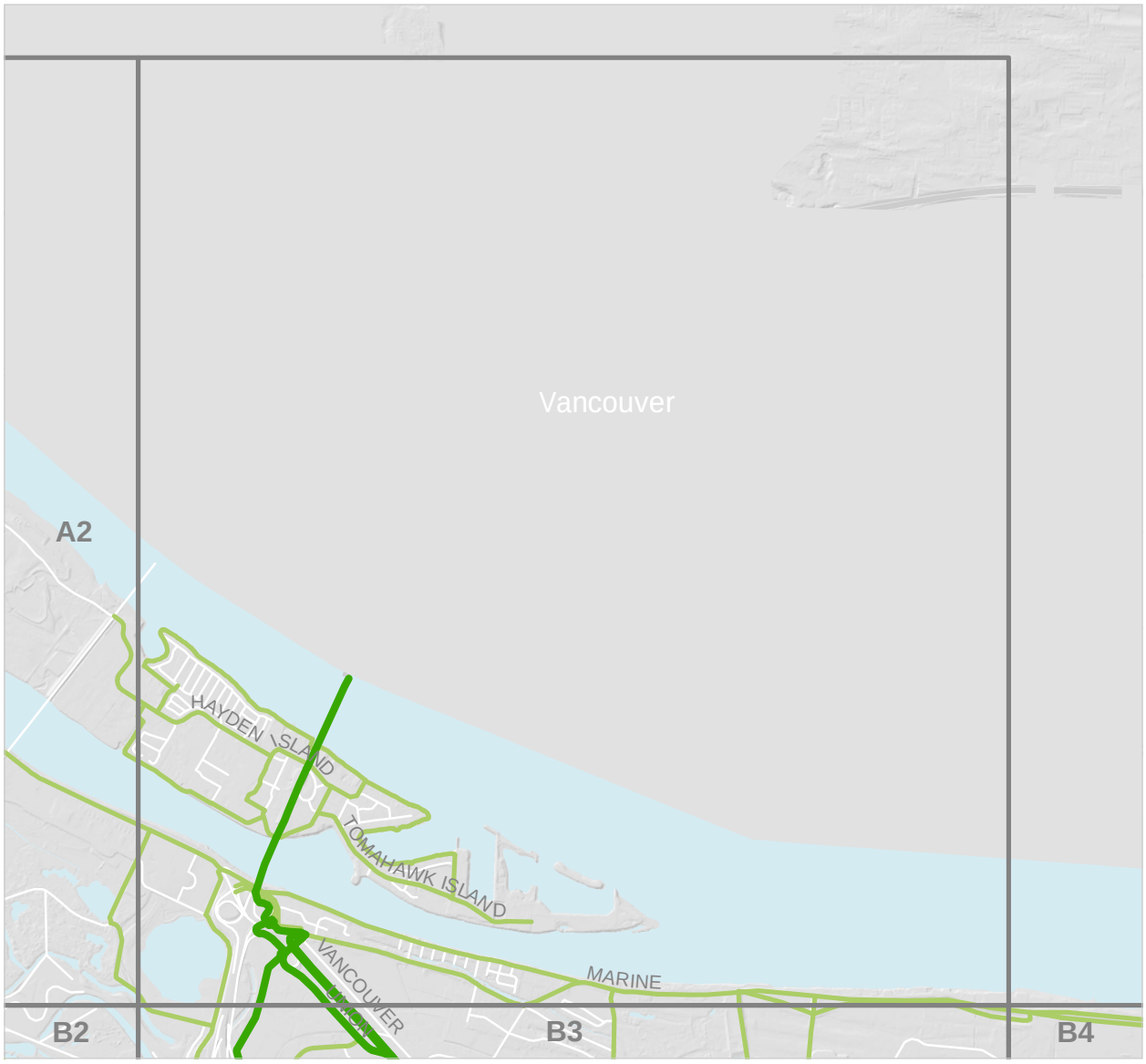

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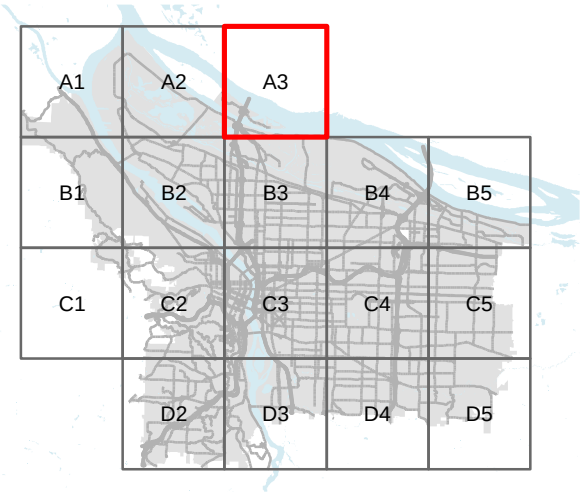

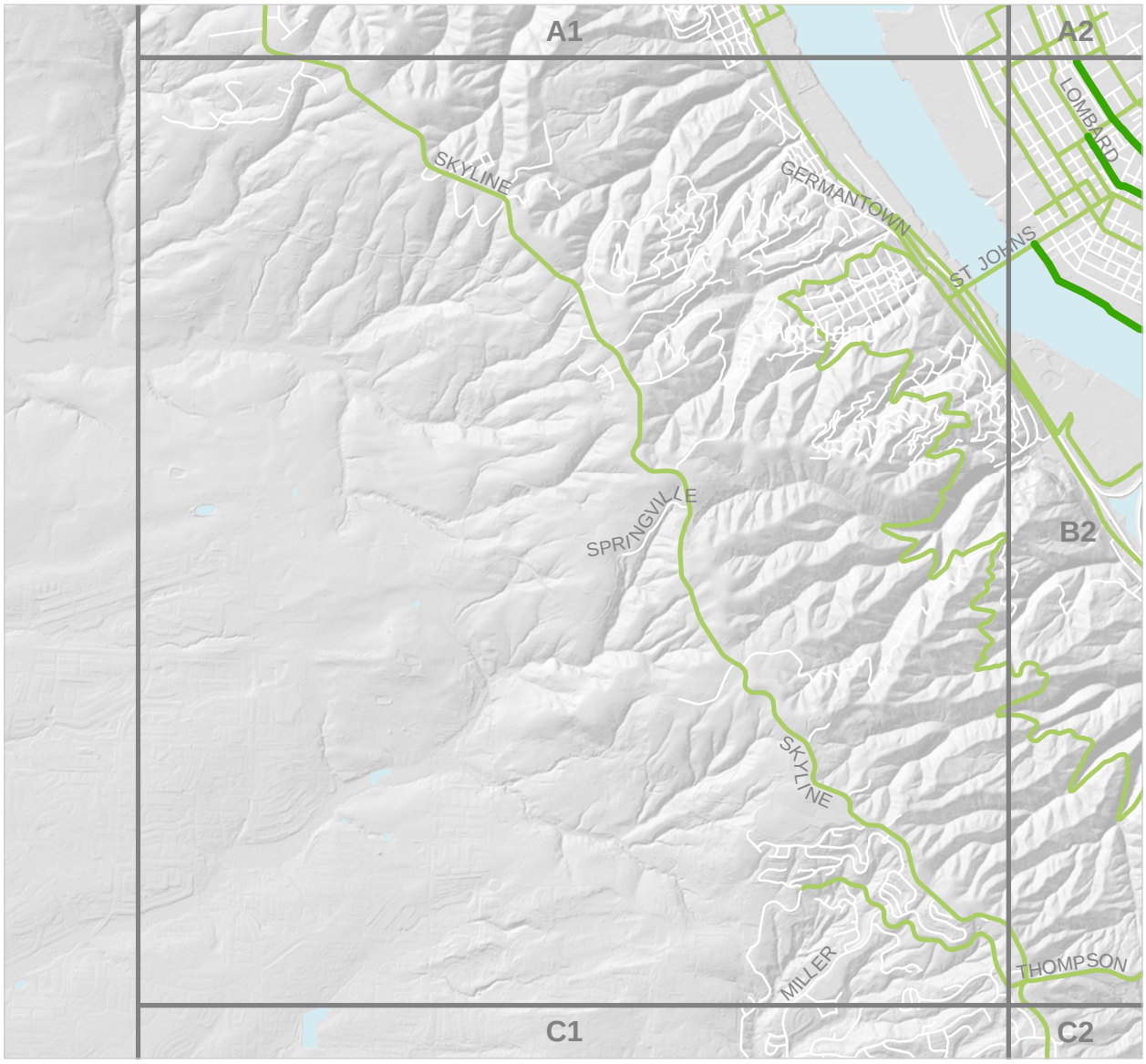

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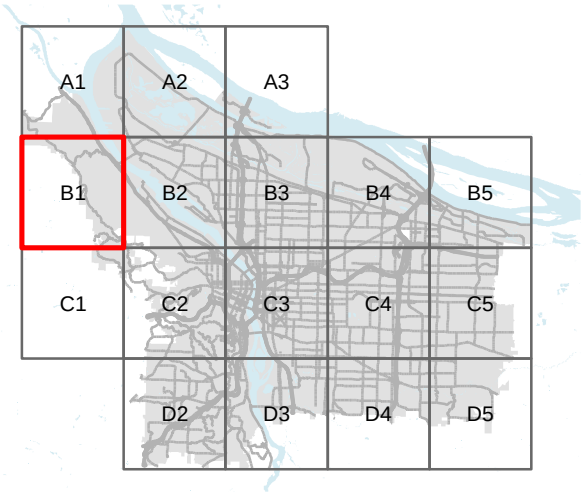

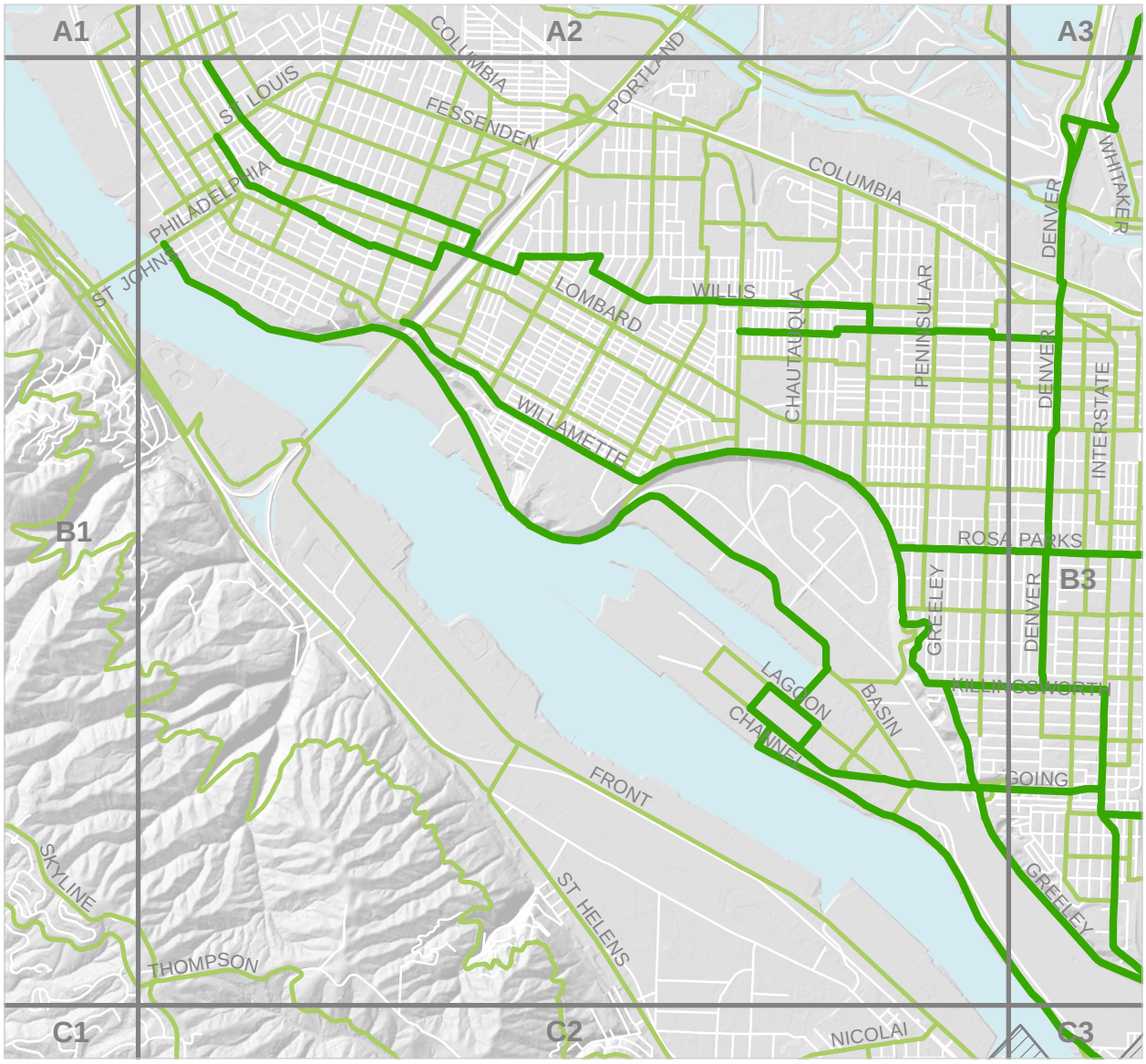

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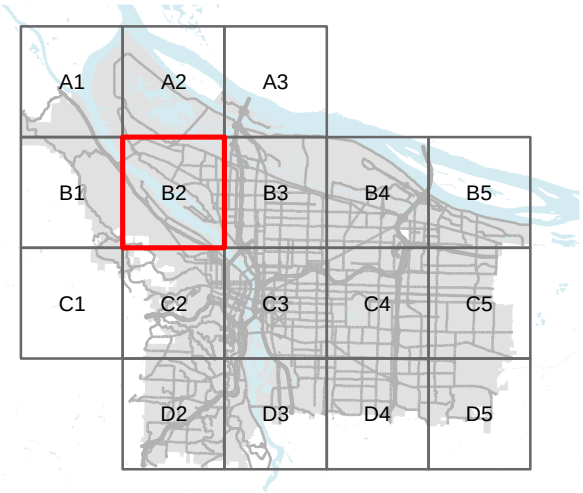

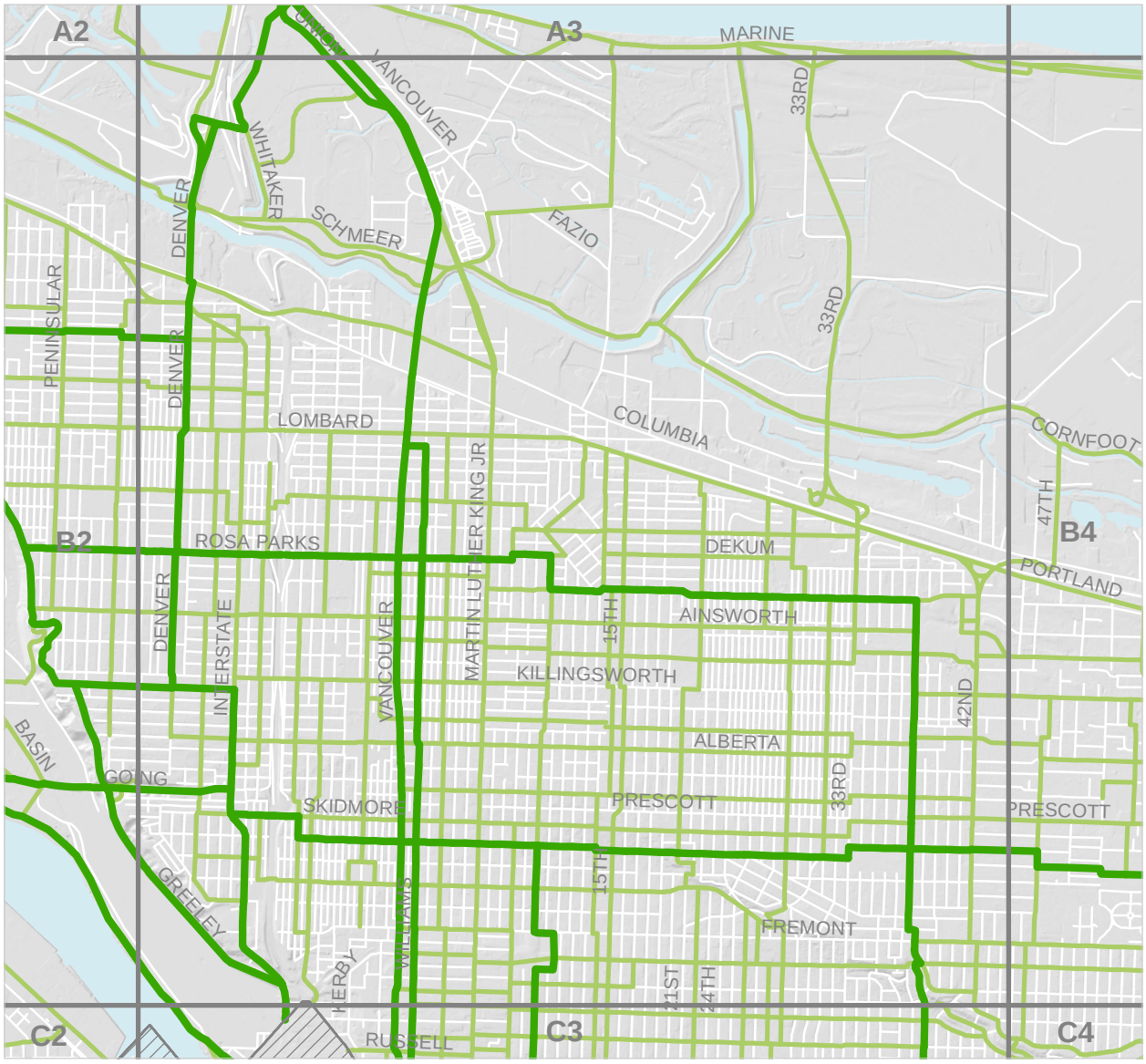

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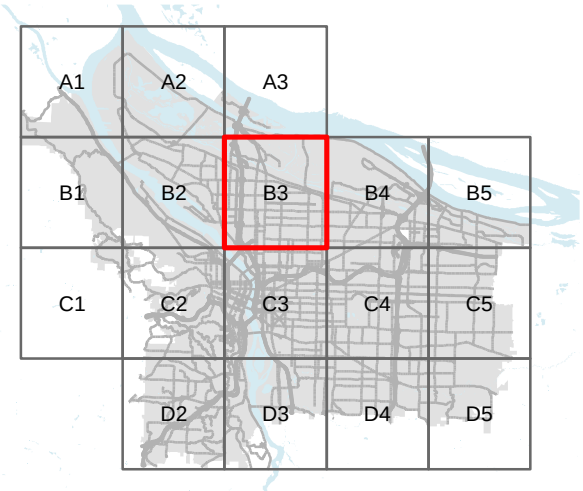

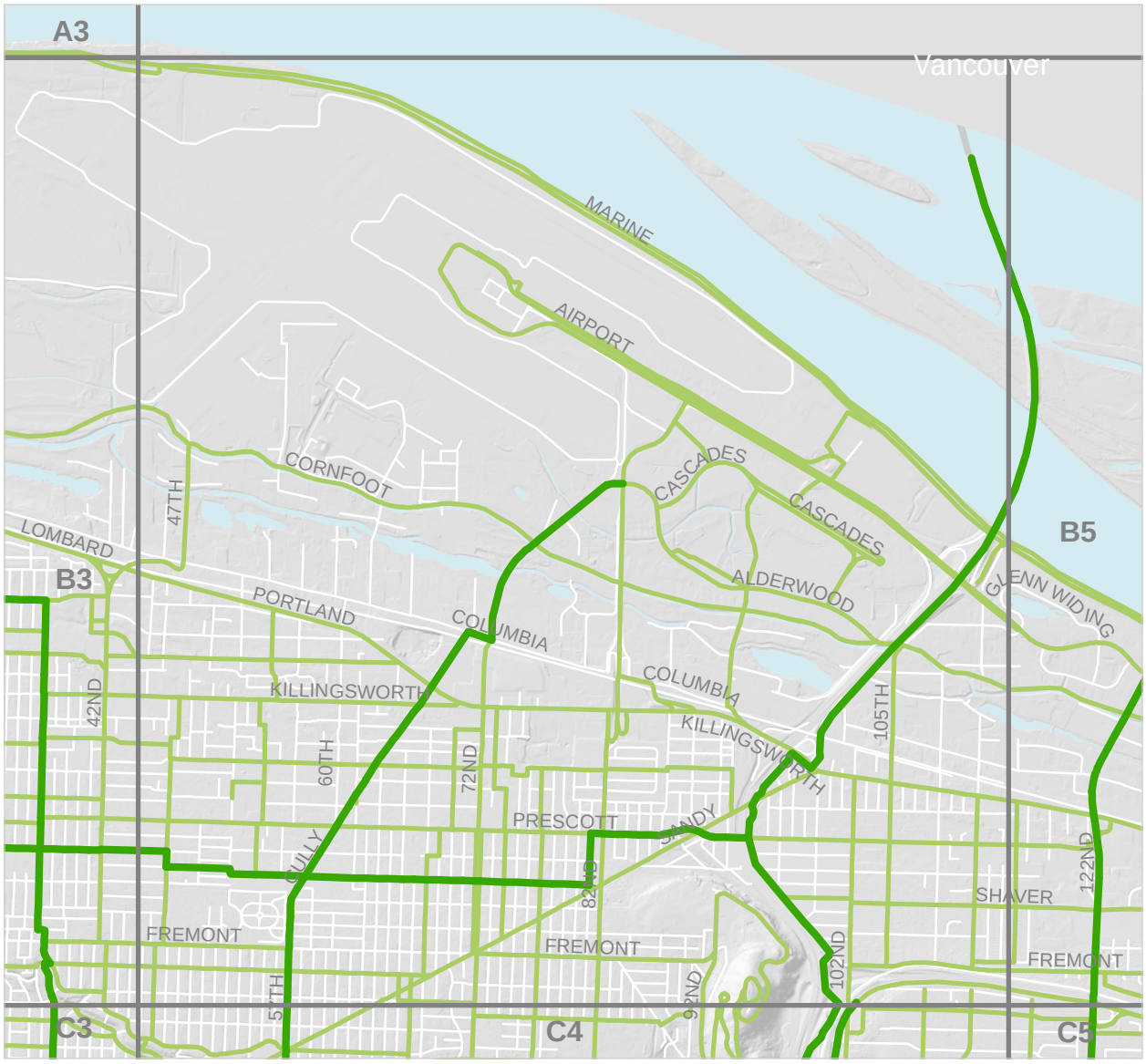

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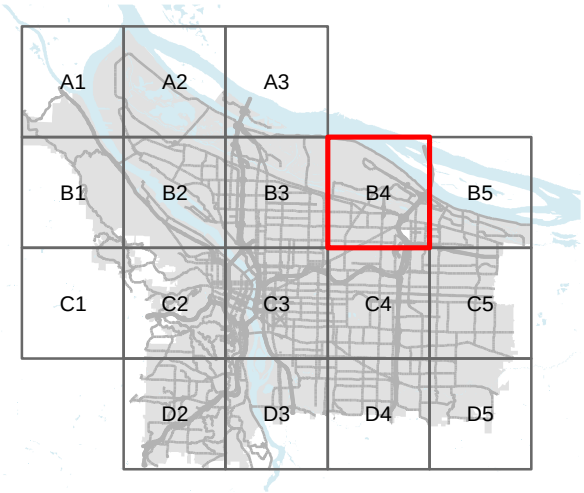

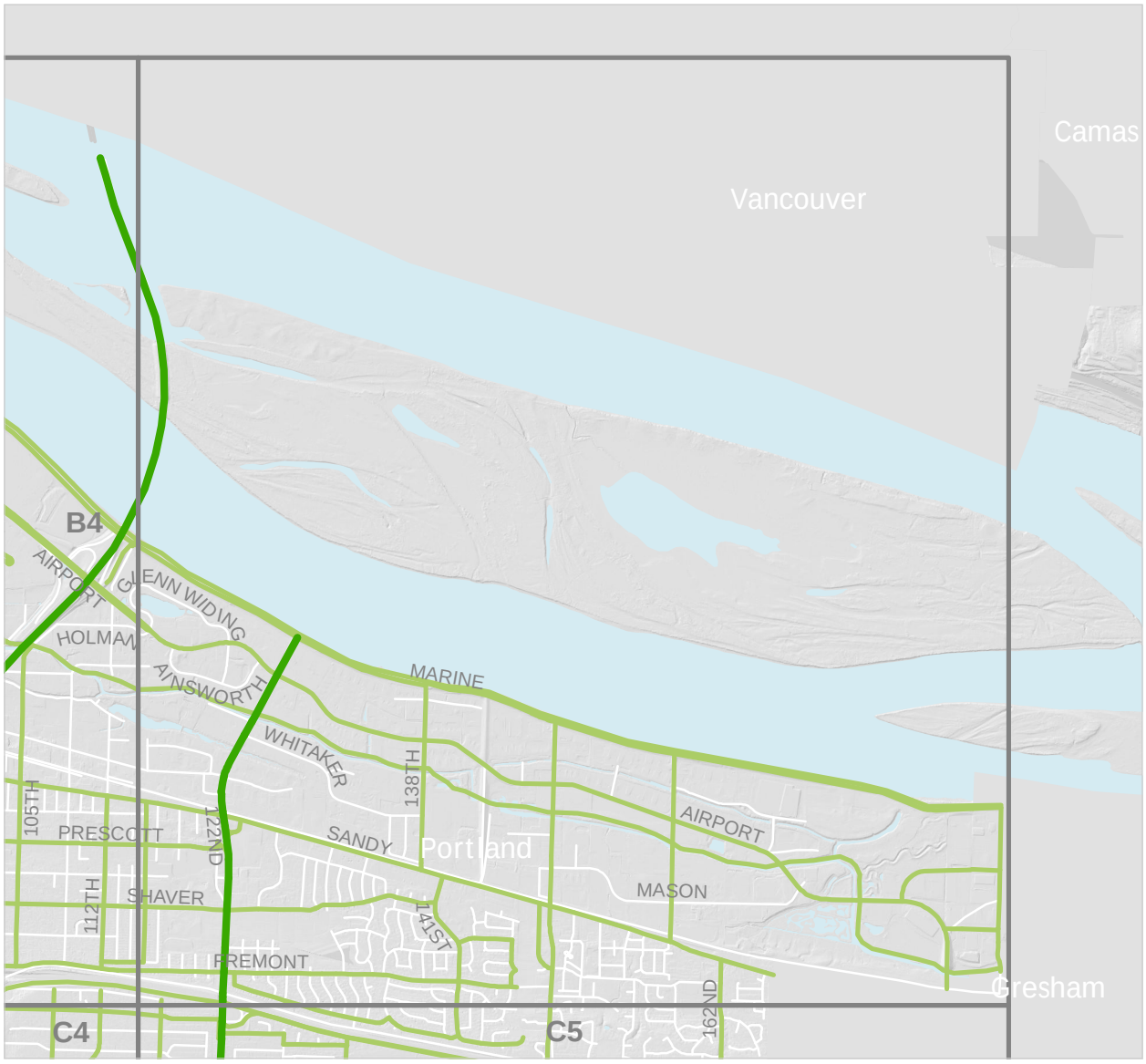

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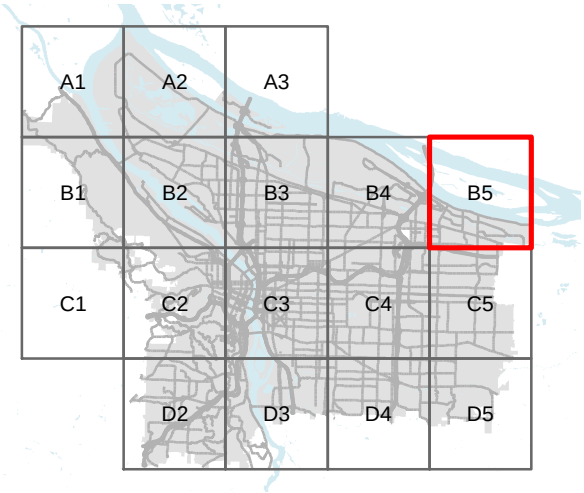

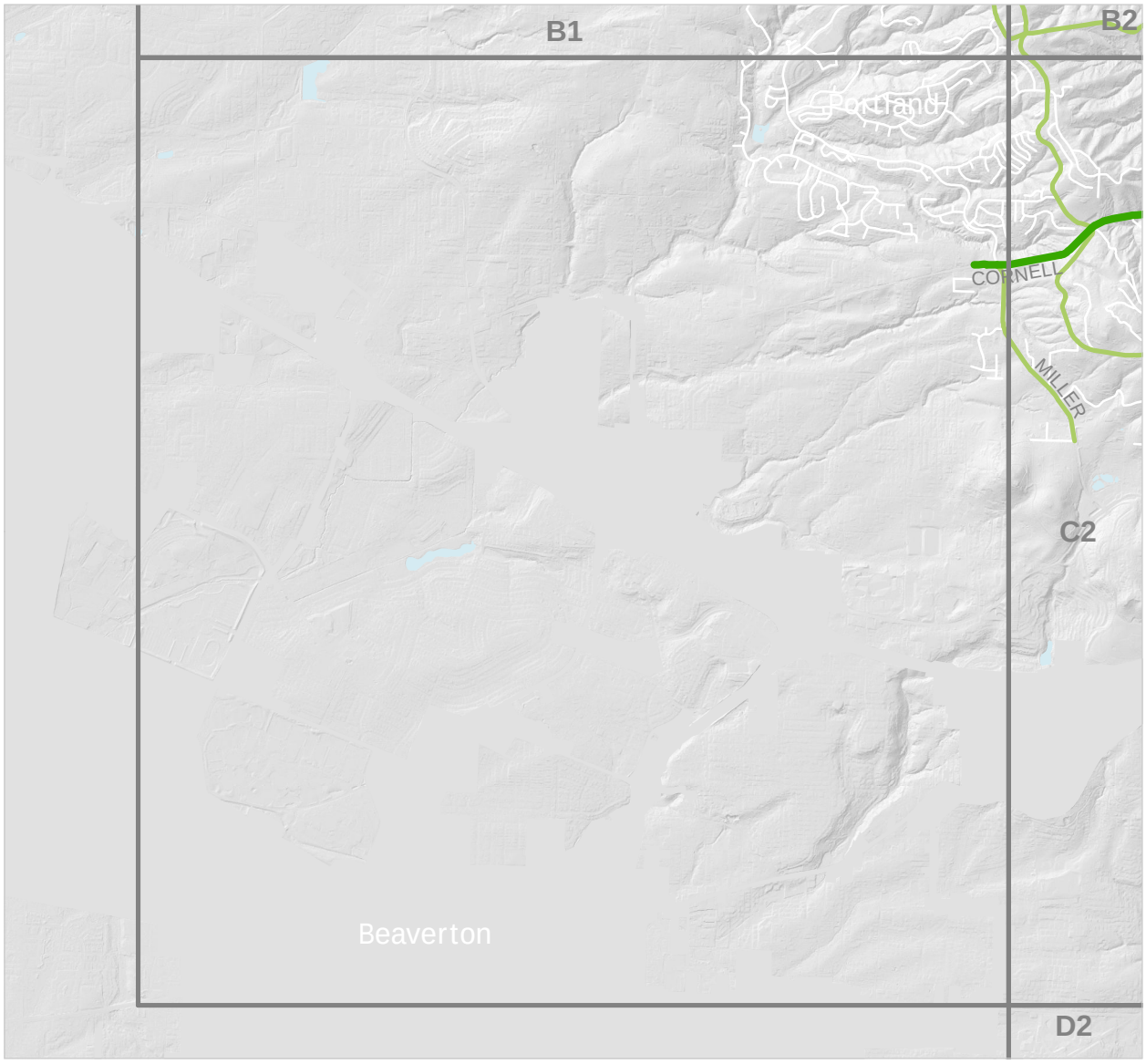

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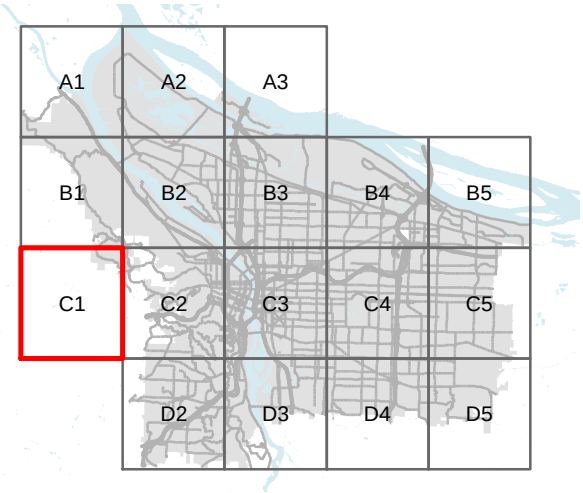

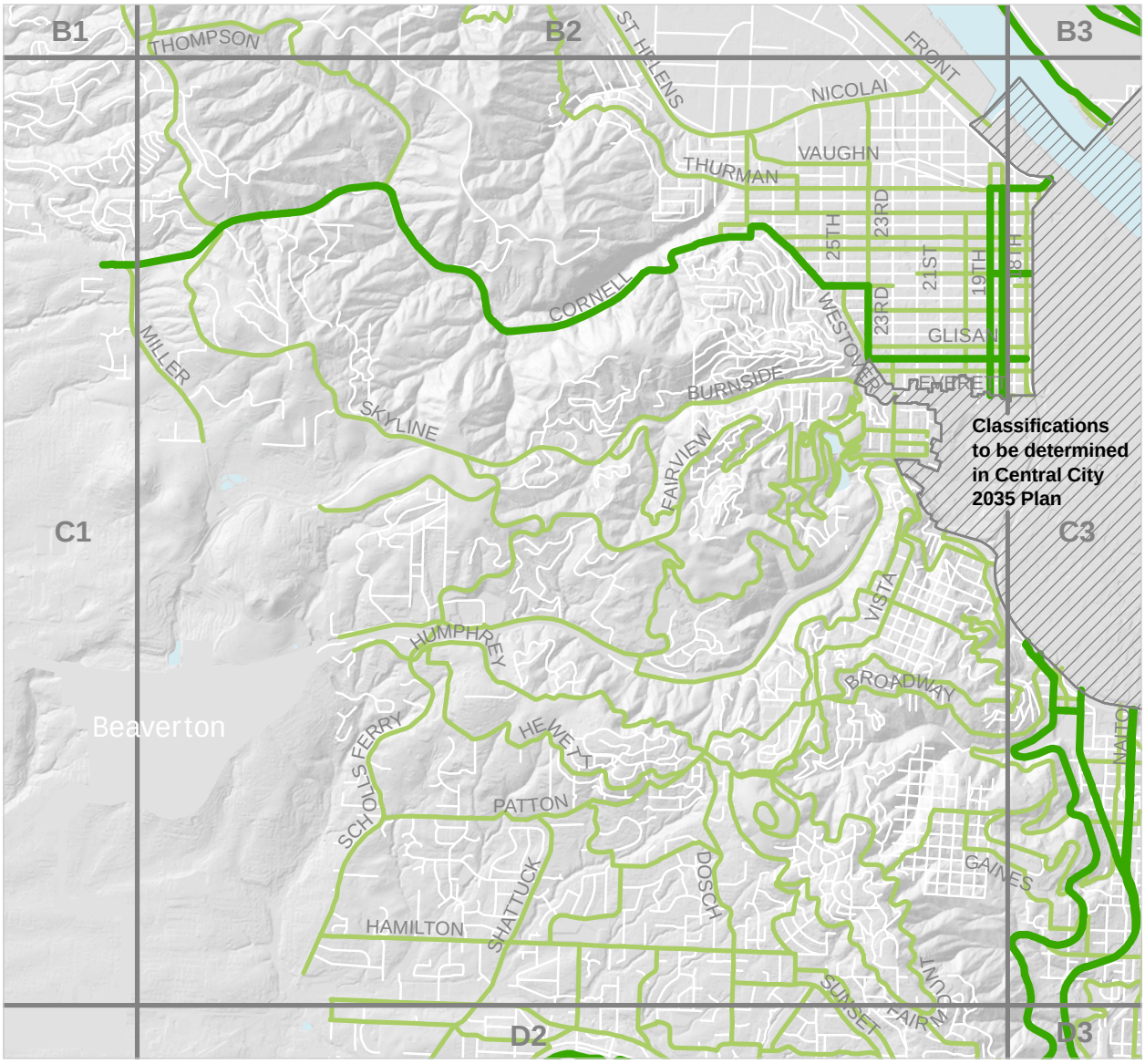

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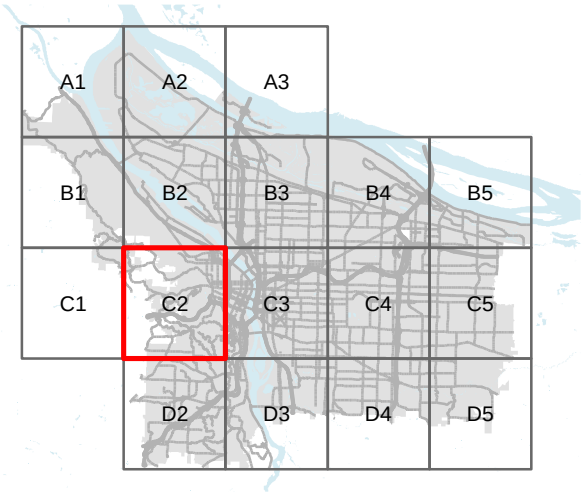

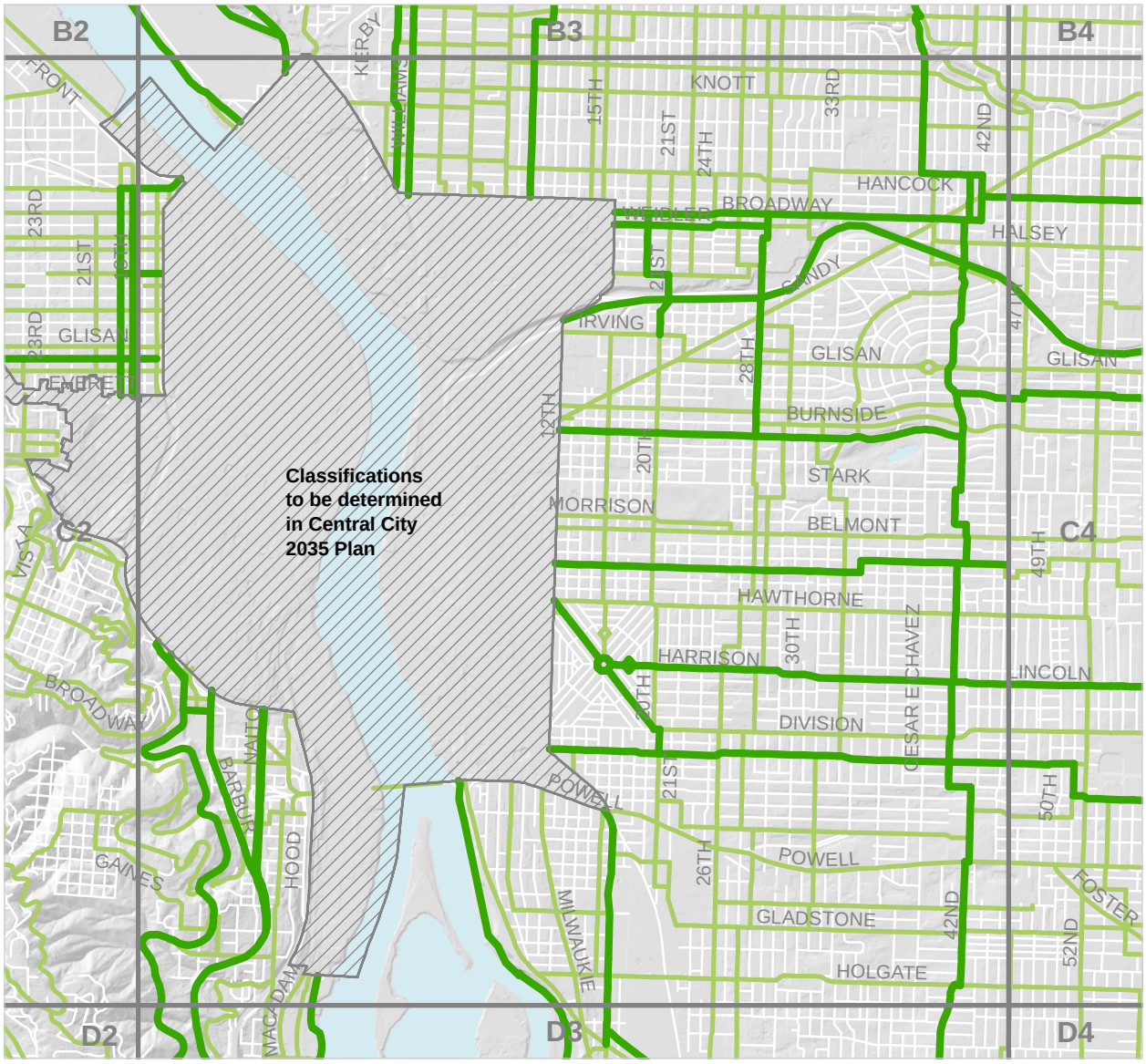

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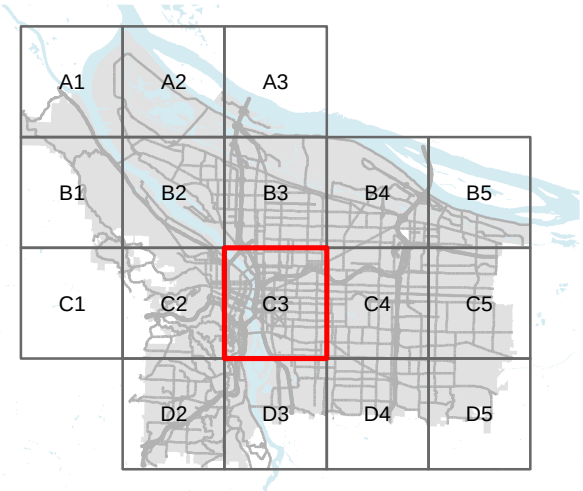

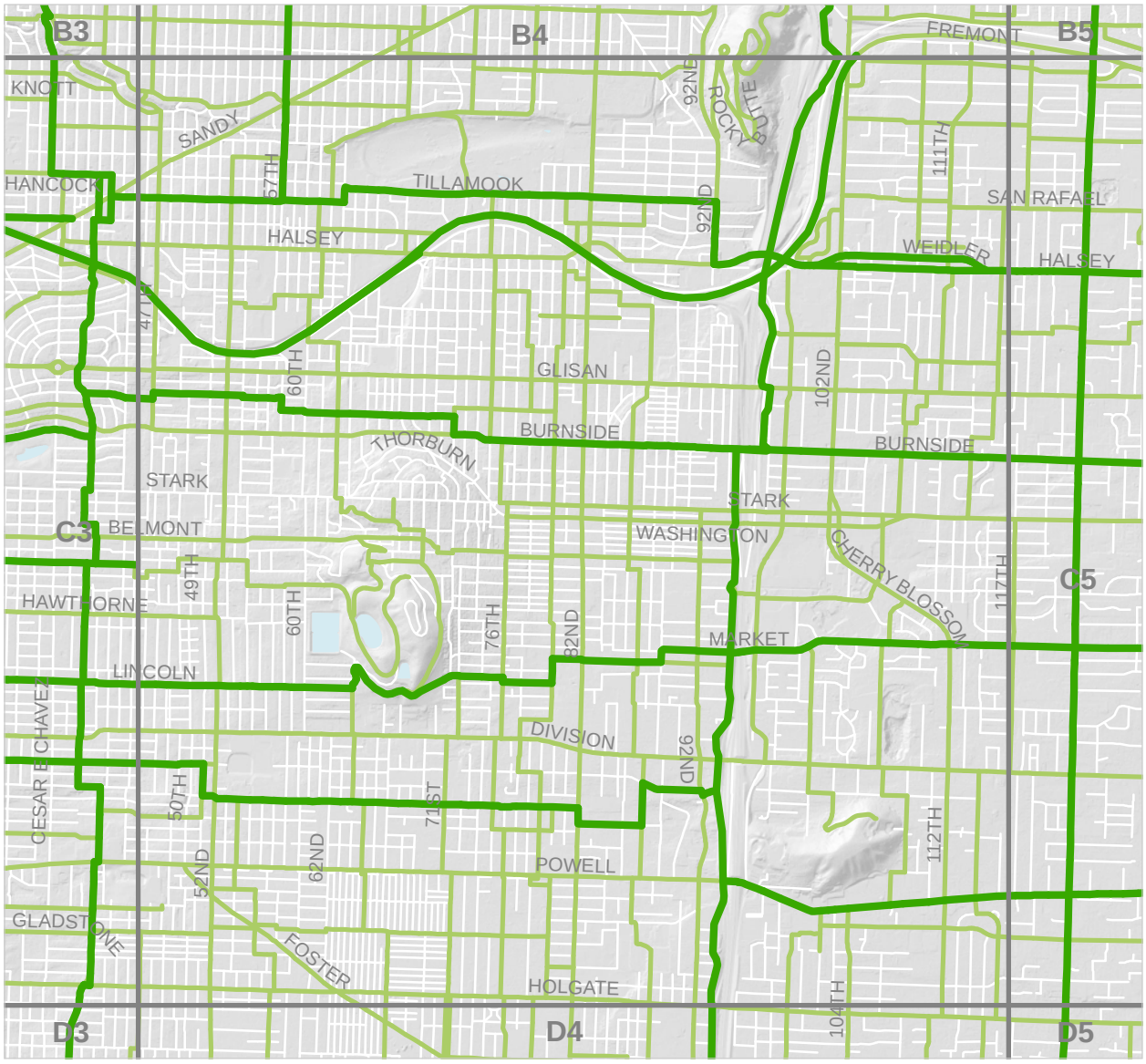

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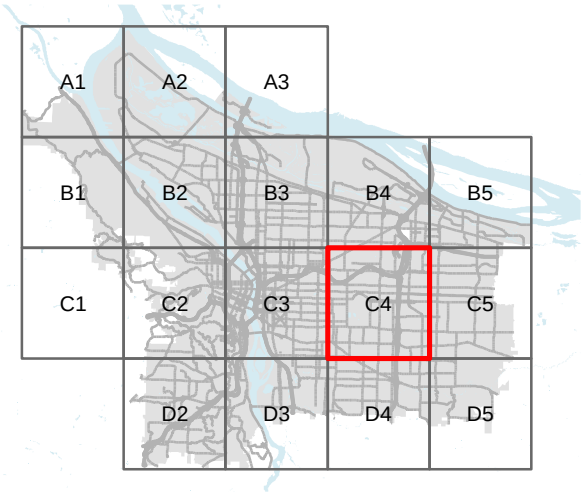

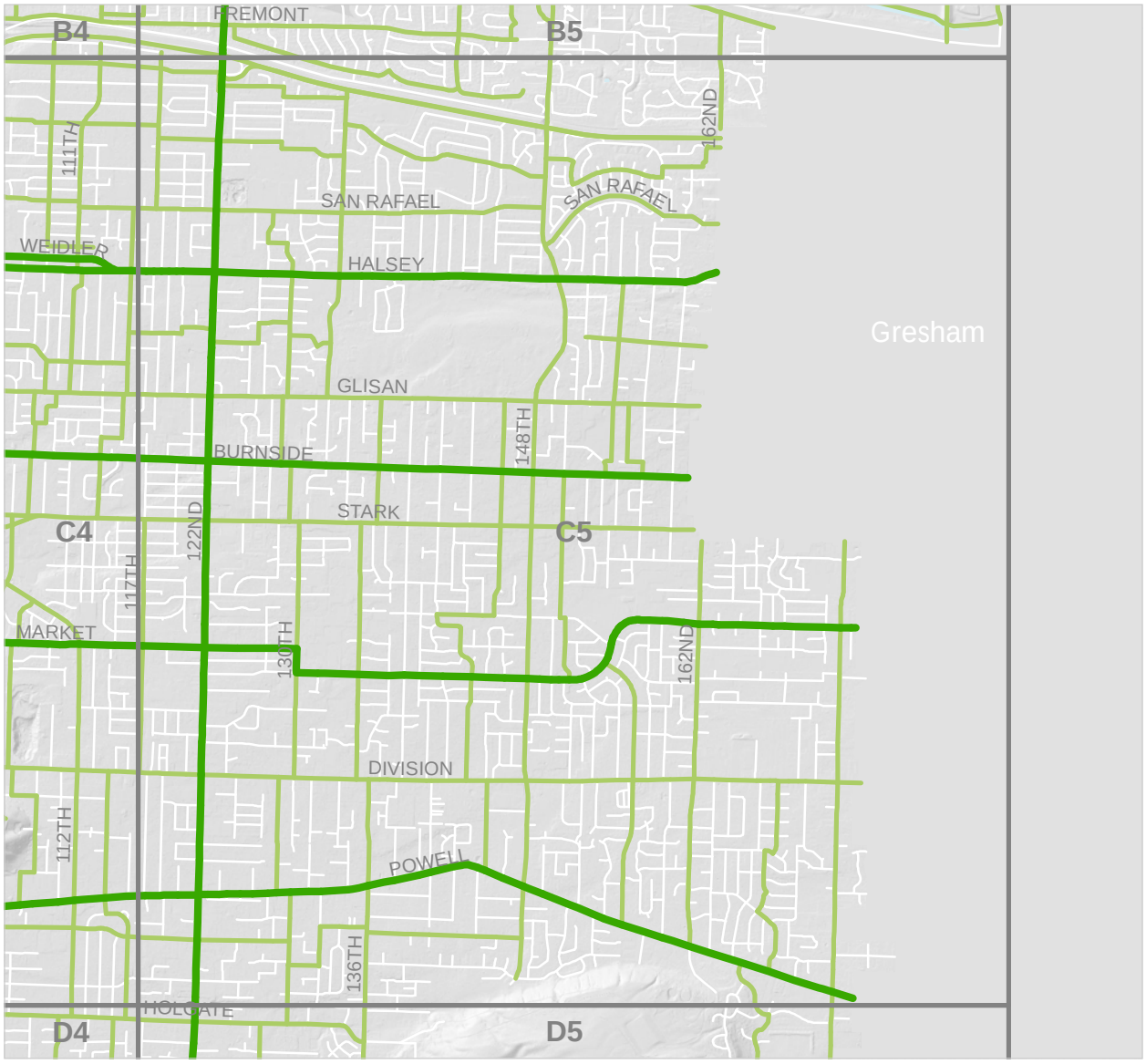

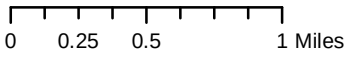

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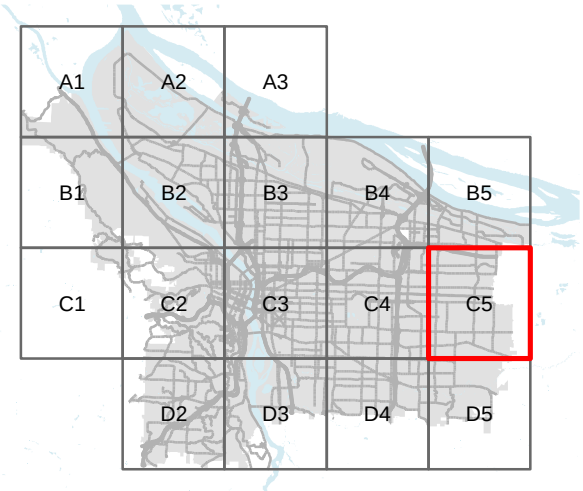

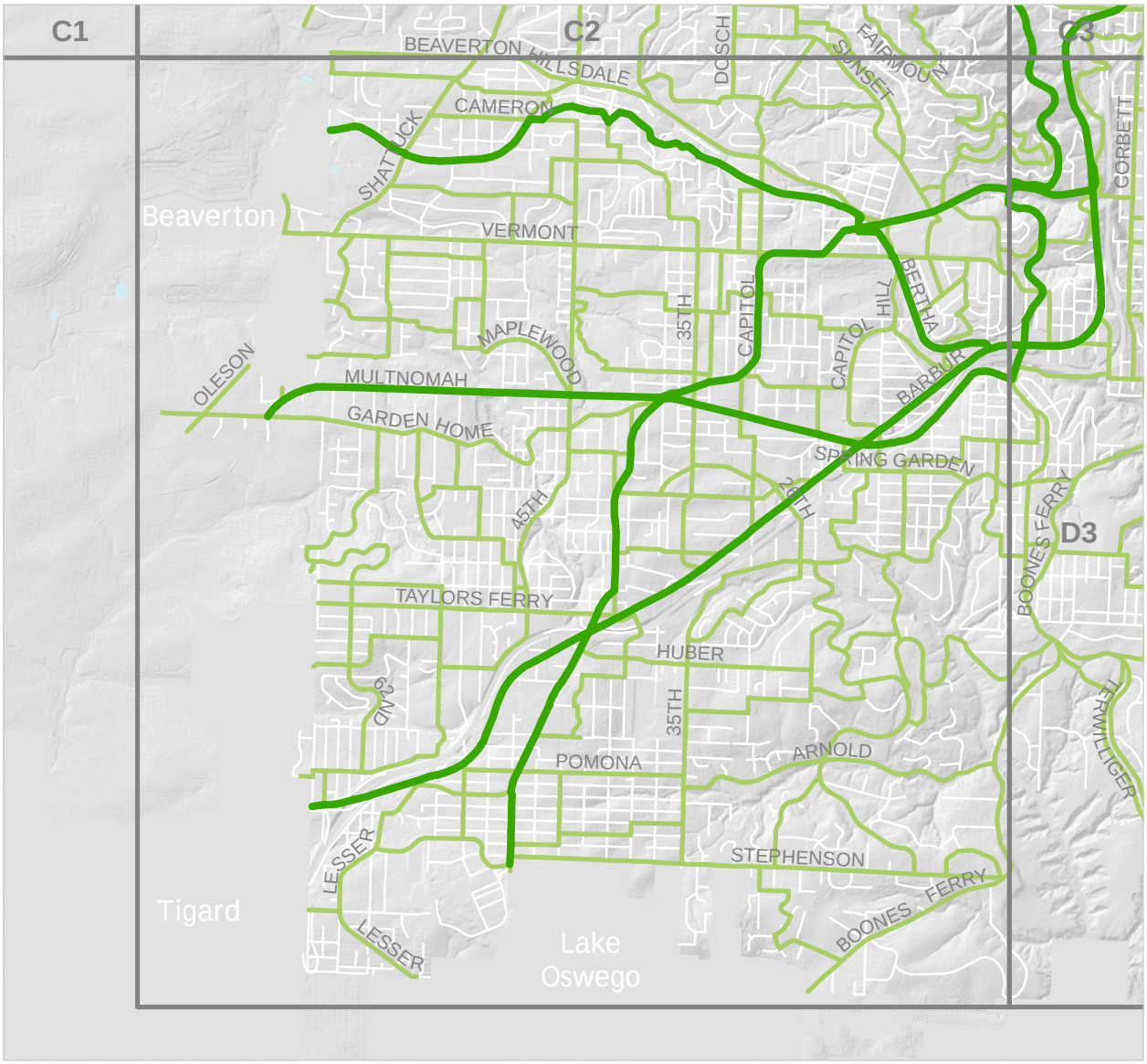

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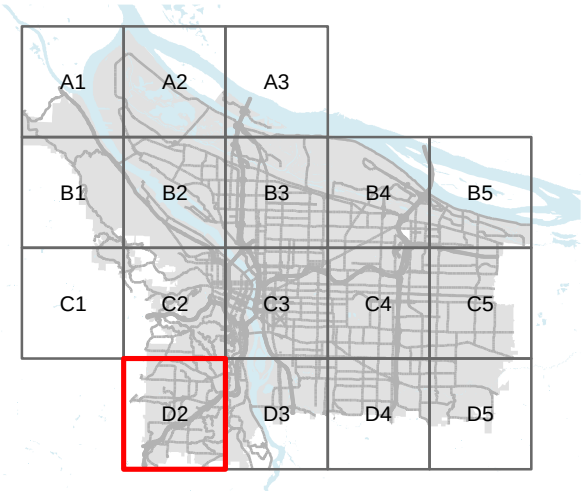

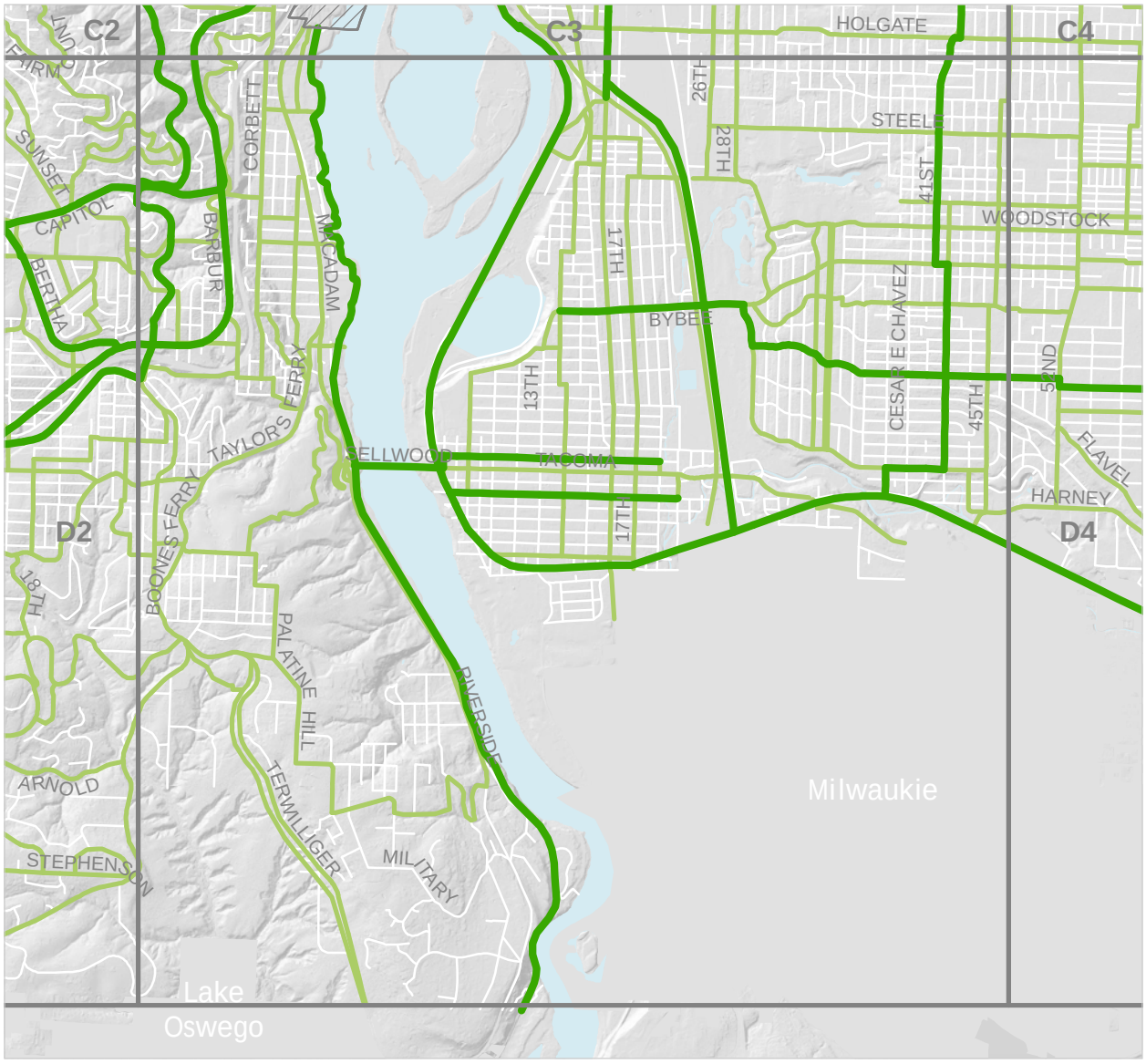

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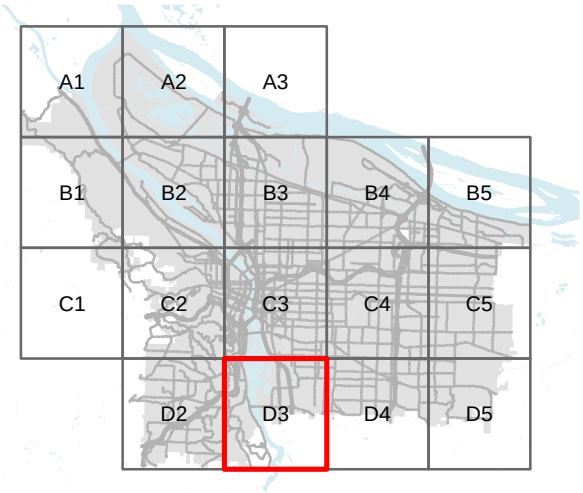

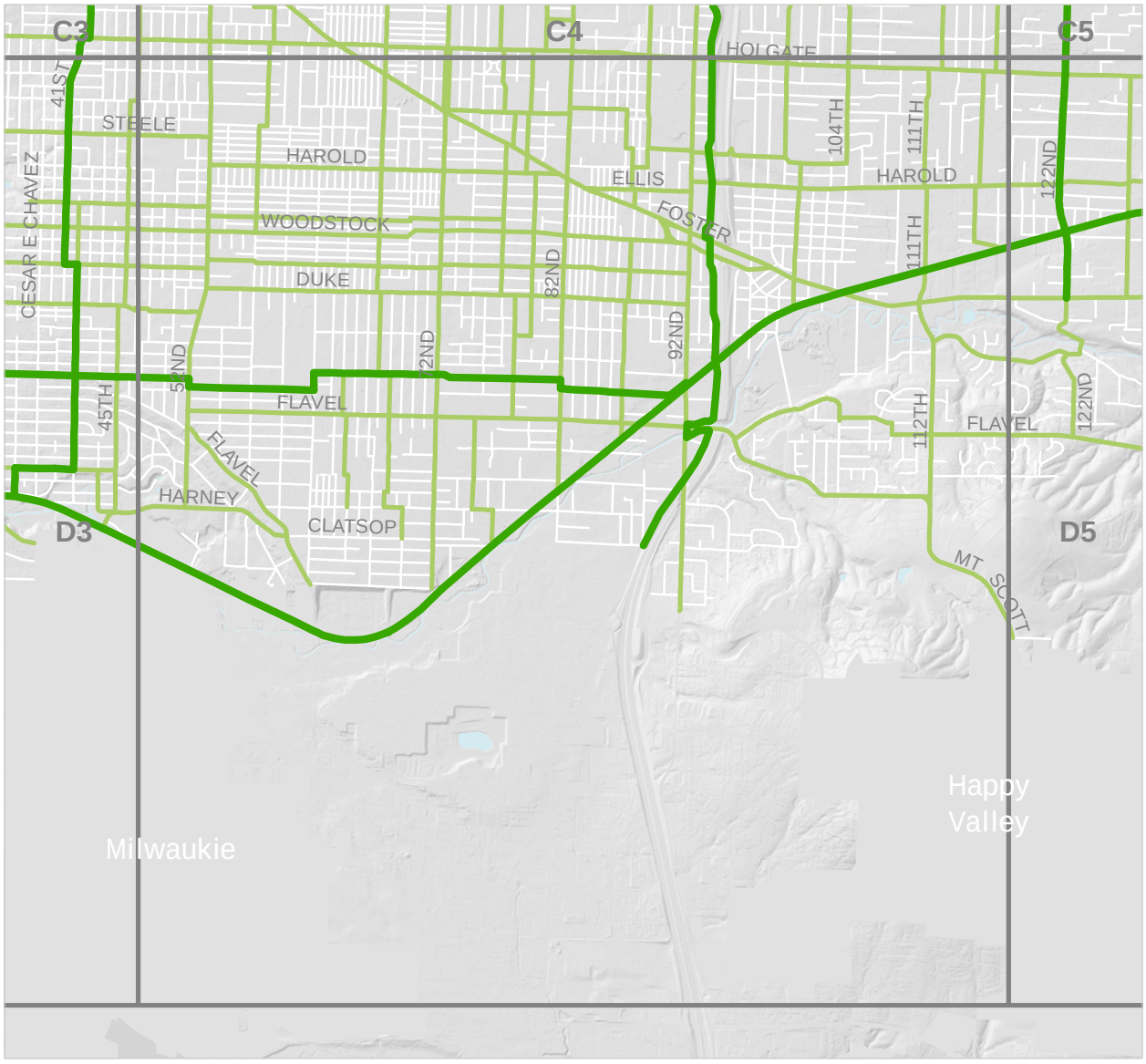

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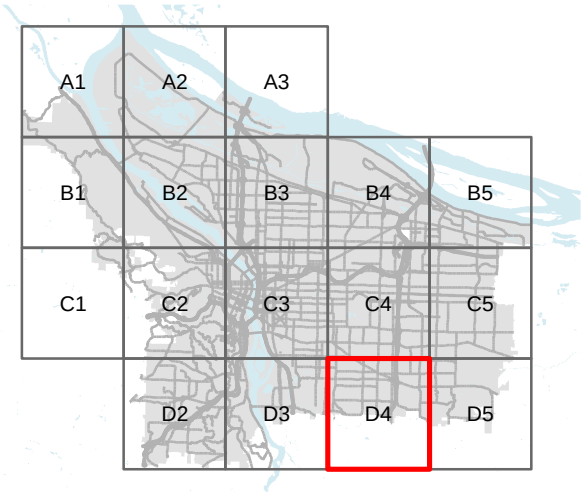

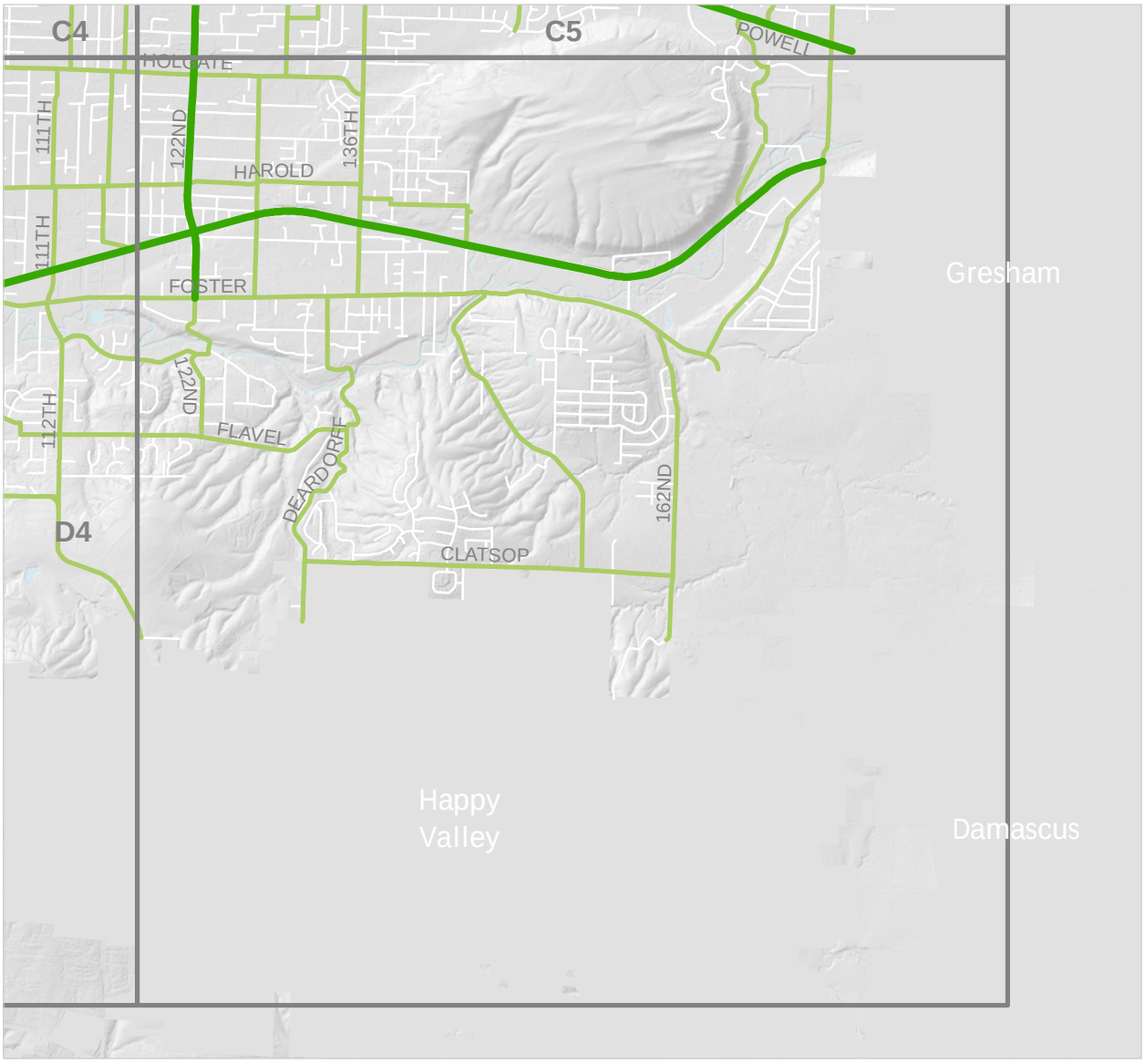

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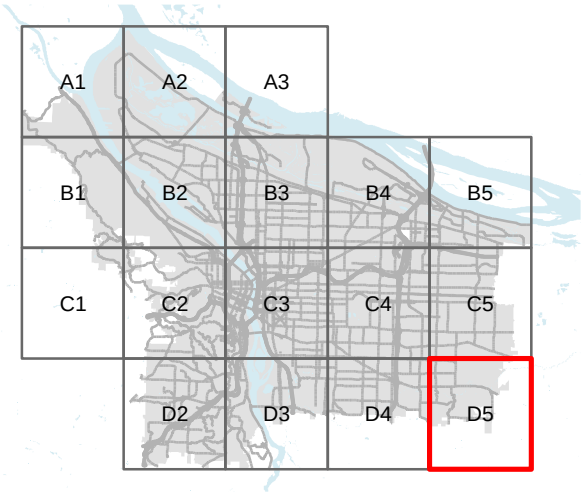


City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 6: Street Design Classification Descriptions

Commentary

Objective 6.11 Street Design Classification Descriptions

Policy 6.11 has been changed to **Objective 6.11,** because the relevant policy is now found in the Recommended Comprehensive Plan as Policy 9.1. The text has been revised to remove the reference to modal emphasis (which is mainly determined by the combination of modal street classifications) and to make clear that this design guidance is dependent on the adjacent land use context. Language was added to emphasize the need for a complete streets approach when possible, and guidance is offered on how to make decisions about allocation of right-of-way space where space is limited.

~~Policy~~ Objective 6.11 Street Design Classifications ~~Descriptions~~

Street Design Classification Descriptions provide general design guidance based on the current and planned land use context around the street. Whenever possible, a "complete streets" approach should be taken during street design to accommodate all necessary modes and functions, taking into account the modal classifications. Where right-of-way is limited and tradeoffs must be made, refer to the modal street classifications as well as Policy 9.6 (Transportation strategy for people movement) to help guide decision-making regarding allocation of right-of-way. If one or more modes are still unable to be accommodated in the available right-of-way, a "complete networks" approach should be used to ensure that those modes are still accommodated on parallel routes as a part of project design.
~~identify the preferred modal emphasis and design treatments for regionally significant streets and special design treatments for locally significant streets.~~

> ~~*Explanation: Street Design is a new set of street classifications created to achieve consistency with Metro's Regional Transportation Plan. The classifications are consistent with Metro's Regional Street Design Classifications, but have different names to better reflect Portland's existing street system. Eight maps show the street design classifications. One map is located with the policy associated with each of the eight transportation districts. The boundaries (termini) of street design classifications may change based on area plans that recommend new zoning patterns to better implement the 2040 Growth Concept. Transportation project design may also modify the street design termini based on more detailed information.*~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective A:

Civic Main Streets is a modification of the previous Regional Main Streets classification. It has been modified to reflect the Civic Corridors concept in the Urban Design Framework of the Recommended Comprehensive Plan. The proposed description adds “neighborhood centers” to the list of land use categories to reflect the new neighborhood centers identified in the Comprehensive Plan. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

A. **~~Regional~~ Civic Main Streets**

~~Regional~~ Civic Main Streets ~~are~~ serve people throughout the City and are designed to emphasize multimodal access to major activity centers.~~designed to accommodate motor vehicle traffic, with features that facilitate public transportation, bicycles, and pedestrians.~~

- Land Use. ~~Regional~~ Civic Main Streets are segments of Civic Corridors located within the Central City, Regional Centers, Town Centers, Neighborhood Centers, and other areas of intensive commercial activity.~~the Central City, Gateway regional center, station communities, and town centers, and along some main streets that have relatively high traffic volumes.~~ Development consists of a mix of uses that are oriented to the street.
- Lanes. ~~Regional~~ Civic Main Streets ~~usually~~ typically include two to four vehicle lanes, with additional turning lanes as needed.~~, such as turn lanes, or one-way couplets in some situations.~~ Lanes may be dedicated as transit-only or business-access-transit lanes if needed to improve transit speed and reliability.
- Width. Civic Main Streets generally feature a wider right-of-way than Neighborhood Main Streets and are more often able to provide the desired space for each mode and function.
- Function. Civic Main Streets should emphasize pedestrian access to adjacent land uses while also accommodating access and mobility for other modes.
- Curb zone. The curb zone along Civic Main Streets should emphasize access and place-making functions (such as parking, loading, transit stops, street trees, curb extensions, and street seats) to support adjacent land use and improve the pedestrian realm. The curb zone may be used for mobility functions if space is needed to provide bicycle facilities or provide turn lanes near intersections.
- Separation. Civic Main Streets have frequent street connections and support multimodal access to destinations. Sidewalks should be provided, and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should be separated from motor vehicle traffic.
- Design Elements. Civic Main Street design should typically include the following: wide sidewalks with a through pedestrian zone, a furnishing zone, and a frontage zone; closely-spaced pedestrian crossings; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; low vehicle speeds; medians and/or turn lanes as needed; and limited driveway access.
- ~~Design Elements. Regional Main Street design shall consider the following: low to moderate vehicle speeds; the use of medians and curb extensions to enhance pedestrian crossings where wide streets make crossing difficult; combined driveways; on-street parking where possible; wide sidewalks with pedestrian amenities such as benches, awnings and special lighting; landscape strips, street trees, or other design features that create a pedestrian buffer between curb and sidewalk; improved pedestrian crossings at all intersections and mid-block crossings where intersection spacing exceeds 400 feet; striped bikeways or wide outside lane; and vehicle lane widths that consider the above improvements.~~
- Design Treatment. During improvement projects, the preservation of existing vegetation, topography, vistas and viewpoints, driver perception, street lighting, and sight distance requirements should be considered.
- Utilities. Consider undergrounding or reducing the visual impact of overhead utilities along ~~Regional~~ Civic Main Streets.

Proposed TSP Amendment

~~*Explanation: Regional Main Street is equivalent to Metro's Regional Boulevard classification. Within Portland, these street segments are mapped based on existing zoning and map designations, the outcome of studies, and where logical transitions to Regional Corridors can occur.*~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective B:

Neighborhood Main Streets is a modification of the previous Community Main Streets classification. It has been modified to reflect the Neighborhood Corridors concept in the Urban Design Framework of the Recommended Comprehensive Plan. The proposed description adds “neighborhood centers” to the list of land use categories to reflect the new neighborhood centers identified in the Comprehensive Plan. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

B. ~~**Community**~~ **Neighborhood Main Streets**

~~Community~~ Neighborhood Main Streets ~~are~~ primarily serve surrounding neighborhoods and are designed to emphasize multimodal access to activity centers.~~designed to accommodate motor vehicle traffic, with special features to facilitate public transportation, bicycles, and pedestrians.~~

- Land Use. ~~Community~~ Neighborhood Main Streets are segments of Neighborhood Corridors located within the Central City, Regional Centers, Town Centers, Neighborhood Centers, and other areas of intensive commercial activity. ~~the Central City, Gateway regional center, station communities, and town centers, and along most main streets.~~ Development consists of a mix of uses oriented to the street.
- Lanes. ~~Community~~ Neighborhood Main Streets ~~may~~ typically include ~~up to four lanes~~two vehicle lanes with additional turning lanes as needed~~ with on-street parking~~, ~~Fewer than four vehicle lanes are typically appropriate in Community Main Streets designs, particularly to allow on-street parking.~~
- Width. Neighborhood Main Streets generally feature a narrower right-of-way than Civic Main Streets and may not be able to accommodate the full desired space for each mode.
- Function. Neighborhood Main Streets should emphasize pedestrian access to adjacent land uses while also accommodating access and mobility for other modes.
- Curb zone. The curb zone along Neighborhood Main Streets should emphasize access and place-making functions (such as parking, loading, transit stops, street trees, curb extensions, and street seats) as needed to support adjacent land use and improve the pedestrian realm. The curb zone may be used for mobility functions if space is needed to provide bicycle facilities or provide turn lanes near intersections.
- Separation. Neighborhood Main Streets have frequent street connections and support multimodal access to destinations. Sidewalks should be provided and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should generally be separated from motor vehicle traffic, though shared roadway facilities may be acceptable if traffic volumes and speeds are sufficiently low.
- Design Elements. Neighborhood Main Street design should typically include the following: wide sidewalks with a through pedestrian zone, a furnishing zone, and a frontage zone; closely-spaced pedestrian crossings; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; low vehicle speeds; medians and/or turn lanes as needed; and limited driveway access.
  ~~Design Elements. Community Main Street design shall consider the following: low vehicle speeds; the use of medians and curb extensions to enhance pedestrian crossings where wide streets make crossing difficult; combined driveways; on-street parking where possible; wide sidewalks with pedestrian amenities such as benches, awnings, and special lighting; landscape strips, street trees, or other design features that create a pedestrian buffer between curb and sidewalk; improved pedestrian crossings at all intersections and mid-block crossings where intersection spacing exceeds 400 feet; striped bikeways or wide outside lane; and vehicle lane widths that consider the above improvements.~~

- Design Treatment. During improvement projects, the preservation of existing vegetation, topography, vistas and viewpoints, driver perception, street lighting, and sight distance requirements should be considered.
- Utilities. Consider undergrounding or reducing the visual impact of overhead utilities along ~~Community~~ Neighborhood Main Streets.

~~*Explanation: Community Main Street is equivalent to Metro's Community Boulevard classification. Within Portland, these street segments are mapped based on existing zoning and map designations, the outcome of studies, and where logical transitions can occur to Community Corridor designs.*~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective C:
Civic Corridors is a modification of the Regional Corridors classification added to reflect the Urban Design Framework of the Recommended Comprehensive Plan. The proposed description adds “neighborhood centers” to the list of land use categories to reflect the new neighborhood centers identified in the Comprehensive Plan. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

C. **Civic Corridors**

Civic Corridors serve people throughout the City and are designed to emphasize multimodal mobility between major activity centers.

- Land Use. Civic Corridors are located primarily along major transit corridors and between Civic Main Street segments, connecting the Central City, Regional Centers, Town Centers, and Neighborhood Centers. Development consists of a mix of uses that are oriented to the street.
- Lanes. Civic Corridors typically include two to four vehicle lanes, with additional turning lanes as needed. Lanes may be dedicated as transit-only or business-access-transit lanes if needed to improve transit speed and reliability.
- Width. Civic Corridors generally feature a wider right-of-way than Neighborhood Corridors and are more often able to provide the desired space for each mode and function.
- Function. Civic Corridors emphasize mobility for all modes between major activity centers while also accommodating access to adjacent land uses along the corridor.
- Curb zone. The curb zone along Civic Corridors should typically emphasize mobility functions such as bicycle facilities or turn lanes near intersections. The curb zone may be used for access functions such as parking and loading if needed to support adjacent land use.
- Separation. Civic Corridors have frequent street connections. Sidewalks should be provided and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should be separated from motor vehicle traffic.
- Design Elements. Civic Corridor design should typically include the following: wide sidewalks with a through pedestrian zone, a furnishing zone, and a frontage zone; closely-spaced pedestrian crossings; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; low to moderate speeds; and medians and/or turn lanes as needed.

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective D:
Neighborhood Corridors is a modification of the Community Corridors classification added to reflect the Urban Design Framework of the Recommended Comprehensive Plan. The proposed description adds “neighborhood centers” to the list of land use categories to reflect the new neighborhood centers identified in the Comprehensive Plan. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

D. **Neighborhood Corridors**

Neighborhood Corridors primarily serve surrounding neighborhoods and are designed to emphasize multimodal mobility between activity centers.

- Land Use. Neighborhood Corridors are primarily located along transit corridors and between segments of Neighborhood Main Streets, connecting the Central City, Regional Centers, Town Centers, and Neighborhood Centers. Development consists of a mix of uses that are oriented to the street.
- Lanes. Neighborhood Corridors typically include two vehicle lanes with additional turning lanes as needed,
- Width. Neighborhood Corridors generally feature a narrower right-of-way than Civic Corridors and may not be able to accommodate the full desired space for each mode.
- Function. Neighborhood Corridors emphasize mobility for all modes between activity centers while also accommodating access to adjacent land uses along the corridor.
- Curb zone. The curb zone along Neighborhood Corridors should emphasize mobility functions such as bicycle facilities or turn lanes near intersections. The curb zone may be used for access functions such as parking and loading if needed to support adjacent land use.
- Separation. Neighborhood Corridors have frequent street connections. Sidewalks should be provided and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should be separated from motor vehicle traffic, though shared roadway bicycle facilities may be acceptable if traffic volumes and speeds are sufficiently low.
- Design Elements. Neighborhood Corridor design should typically include the following: wide sidewalks with a through pedestrian zone, a furnishing zone, and a frontage zone; closely-spaced pedestrian crossings; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; low to moderate speeds; and medians and/or turn lanes as needed.

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective E:

The proposed description for **Regional Corridors** clarifies that they primarily connect cities to one another. Language was removed regarding orientation of land use to help differentiate the role of Regional Corridors as compared to Civic or Neighborhood Corridors. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

E. **Regional Corridors**

Regional Corridors ~~are~~ serve people throughout the City and are designed to emphasize multimodal mobility between cities in the region.~~designed to include special amenities to balance motor vehicle traffic with public transportation, bicycle travel, and pedestrian travel.~~

- Land Use. Regional Corridors connect Regional, Town, and Neighborhood Centers to other cities in the region.~~are located primarily along major transit corridors and between Regional Main Street segments. Commercial and multifamily development should be oriented to the street where the Regional Corridor also has a transit designation.~~
- Lanes. Regional Corridors usually include two to four vehicle lanes. They occasionally have additional lanes in some situations, such as to allow turning movements. Lanes may be dedicated as transit-only or business-access-transit lanes if needed to improve transit speed and reliability.
- Width. Regional Corridors generally feature a wider right-of-way than Community Corridors and are more often able to provide the full desired space for each mode.
- Function. Regional Corridors emphasize mobility for all modes between cities while also accommodating access to adjacent land uses along the corridor.
- Curb zone. The curb zone along Regional Corridors should emphasize mobility functions such as bicycle facilities or turn lanes near intersections. The curb zone may be used for access functions such as parking and loading if needed to support adjacent land use.
- Separation. Regional Corridors can have moderately spaced street connections. Sidewalks should be provided and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should be separated from motor vehicle traffic.
- Design Elements. Regional Corridor design should typically include the following: sidewalks; pedestrian crossings where needed to serve transit stops or destinations; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; and medians and/or turn lanes as needed.
- ~~Design Elements. Regional Corridor design shall consider the following: moderate vehicle speeds; the use of medians and curb extensions to enhance pedestrian crossing where wide streets make crossing difficult or to manage motor vehicle access; combined driveways; on-street parking when feasible; buffered sidewalks with pedestrian amenities such as special lighting and special crossing amenities tied to major transit stops; landscape strips, street trees, or other design features that create a pedestrian buffer between curb and sidewalk; improved pedestrian crossings at signalized intersections; striped bikeways or wide outside lanes; and motor vehicle lane widths that consider the above improvements.~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective F:
The proposed description for **Community Corridors** clarifies that they primarily connect neighborhoods to one another. Language was removed regarding orientation of land use to help differentiate the role of Regional Corridors as compared to Civic or Neighborhood Corridors. Width, Function, and Curb Zone sections have been added to offer guidance on the access vs mobility functions of the street as a whole as well as the area alongside the curb. The Separation section discusses the desired level of separation between modes. Language regarding lane widths has been removed because the City of Portland has lane width standards for roadways that vary based on modal classifications, not street design classification.

F. Community Corridors

Community Corridors primarily serve surrounding neighborhoods and are ~~are~~ designed to emphasize multimodal mobility between neighborhoods.~~designed to include special amenities to balance motor vehicle traffic with public transportation, bicycle travel, and pedestrian travel.~~

- Land Use. Community Corridors connect Regional, Town, and Neighborhood Centers to surrounding neighborhoods.~~are located along transit corridors and between segments of Community Main Streets. Commercial and multifamily development should be oriented to the street where the street also has a transit designation.~~
- ~~Lanes. Community Corridors typically have two travel lanes, usually with on-street parking.~~ Lanes may be dedicated as transit-only or business-access-transit lanes if needed to improve transit speed and reliability.
- Width. Community Corridors generally feature a narrower right-of-way than Regional Corridors and may not be able to accommodate the full desired space for each mode.
- Function. Community Corridors emphasize mobility for all modes between neighborhoods while also accommodating access to adjacent land uses along the corridor.
- Curb zone. The curb zone along Community Corridors should emphasize mobility functions such as bicycle facilities or turn lanes near intersections. The curb zone may be used for access functions such as parking and loading if needed to support adjacent land use.
- Separation. Community Corridors have closely spaced street connections. Sidewalks should be provided and pedestrian and bicycle crossings should be signalized or improved with median refuge islands or curb extensions as needed to provide safety and comfort. Bicycle facilities should be separated from motor vehicle traffic, though shared roadway bicycle facilities may be acceptable if traffic volumes and speeds are sufficiently low.
- Design Elements. Community Corridor design should typically include the following: sidewalks; pedestrian crossings where needed to serve transit stops or destinations; separated bicycle facilities; way-finding; transit priority treatments as needed; vehicle lanes; and medians and/or turn lanes as needed.
- ~~Design Elements. Community Corridor design shall consider the need for the following: moderate vehicle speeds; the use of medians and curb extensions to enhance pedestrian crossing and to manage motor vehicle access; combined driveways; on-street parking; buffered sidewalks with pedestrian amenities such as special lighting and special crossing amenities tied to major transit stops; landscape strips, street trees, or other design features that create a pedestrian buffer between curb and sidewalk; improved pedestrian crossings at intersections; striped bikeways or wide outside lanes; and usually narrower motor vehicle lane widths than Regional Corridors.~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective G:
The Urban Throughways classification has been edited to emphasize mobility function rather than speed. A Function section has been added to define the mobility vs access emphasis of the street. Some design elements were added to reflect common safety elements. Connections was revised to describe interchange design and frequency of connections to emphasize the need for the least possible disruption to the underlying street network.

G. **Urban Throughways**

Urban Throughways are designed to emphasize long-distance mobility ~~provide high-speed travel~~ for ~~longer~~ motor vehicle, freight, and transit trips throughout the region.

- Land Use. Urban Throughways ~~emphasize motor vehicle travel and~~ connect major activity centers, industrial areas, and intermodal facilities. Adjacent land uses do not orient directly to Urban Throughways.
- Number of Lanes. Urban Throughways usually have four to six vehicle lanes, with additional lanes in some situations. Dedicated high-occupancy-vehicle, freight-only, or transit-only lanes may be provided to support more efficient use of Urban Throughways.
- Function. Urban Throughways exclusively serve a mobility function, with no local access provided along the street.
- Separation. Urban Throughways are completely divided, with no left turns. Street connections may occur at separated grades, with access controlled by ramps. Pedestrian and bicycle crossings should be provided on overpasses or underpasses, and pedestrian and bicycle facilities along the corridor should be provided on parallel pathways.
- Design Elements. Urban Throughway design typically includes vehicle lanes, pedestrian and bicycle crossings on overpasses or underpasses, parallel pathways for pedestrian and bicycle travel, clear sightlines, median barriers, shoulders, and motor vehicle lane widths that accommodate freight movement. Where appropriate, transit priority treatments should be used to enhance transit speed and reliability.~~ Urban Throughway design shall consider the need for high vehicle speeds, pedestrian crossings on overpasses, parallel facilities for bicycles, and motor vehicle lane widths that accommodate freight movement and high-speed travel.~~ Encourage the Oregon Department of Transportation to maintain a continuous landscape along Urban Throughways that reduces the visual impacts of the throughway on motorists and adjacent land uses.
- Dual Classification. A street with dual Urban Throughway and Urban Highway classifications should retain the operational characteristics of an Urban Highway and respond to adjacent land uses.
- Connections. A ramp that connects to an Urban Throughway is classified as an Urban Throughway up to its intersection with a ~~lower~~differently-classified street. An interchange between an Urban Throughway and a differently-classified street should be designed to safely accommodate all modes and provide the least possible disruption to the surrounding modal networks. Connections should be provided across Urban Throughways at closely-spaced intervals to provide greater street connectivity.

~~*Explanation: The Urban Throughway classification encompasses both of Metro's Throughway designs: Freeways and Highways.*~~

Commentary

Objective H:
The proposed **Urban Highways** description emphasizes separation of modes to improve safety and comfort, reflecting changes in design guidance and practice on Urban Highways since the last update of the TSP. The proposed description also refers to “curb zone” rather than “on-street parking,” reflecting a policy language shift in the Comprehensive Plan. Other edits were made so that this classification description better matches the format of other classifications.

H. **Urban Highways**

Urban Highways are designed to emphasize mobility ~~provide relatively high-speed travel~~ for motor vehicle, freight, and transit trips that traverse the region while also accommodating other modes and providing some local access.~~and also provide more localized access.~~

- Land Use. Urban Highways link major activity centers, industrial areas, and intermodal facilities. ~~and link to Major City Traffic Streets.~~ Adjacent land uses sometimes orient to the Urban Highway.
- Number of Lanes. Urban Highways usually consist of four travel lanes, with separate turning lanes in some locations. Dedicated high-occupancy-vehicle, freight-only, or transit-only lanes may be provided as needed to support efficient use of the roadway.
- Function. Urban Highways primarily serve a mobility function, with limited local access provided along the street.
- Curb zone. The curb zone along Urban Highways primarily serves mobility functions such as vehicle lanes or bike lanes. The curb zone may be used for access functions such as parking and loading at limited locations if needed to support adjacent land use.
- Separation. Urban Highways have limited street connections that may occur at same grade or separate grades. Pedestrian and bicycle crossings should be grade-separated or signalized, and pedestrian and bicycle facilities should be separated from motor vehicle traffic.
- Design Elements. Urban Highway design typically includes vehicle lanes, pullouts for bus stops, transit priority treatments, separated pedestrian and bicycle facilities, and improved pedestrian crossings located on overpasses, underpasses, or signalized at-grade intersections.

  ~~On-street parking is usually not included on Urban Highways, but may exist in some locations. Urban Highways include striped bikeways and sidewalks with optional buffering. Improved pedestrian crossing are located on overpasses, underpasses, or at same grade intersections.~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective I:
Urban Roads have been renamed **Industrial Roads** to clarify the intention of the classification and to reflect the "Industrial and River" pattern area in the new Comprehensive Plan, where most of these roads are located. Language has also been changed to emphasize the greater need for separation of vulnerable users from freight traffic on Industrial Roads. Freight signal priority is an emerging technology that has been called out as a design treatment. Wider turning radii and concrete paving were added to Design Elements because these are common design elements in industrial roadway design.

I. Industrial ~~Urban~~ Roads

~~Urban~~ Industrial Roads are designed to emphasize freight mobility while also accommodating other modes and providing local access.~~carry significant motor vehicle traffic while providing for some public transportation, bicycle travel, and pedestrian travel.~~

- Land Use. ~~Urban~~ Industrial Roads typically serve industrial areas and freight intermodal sites, with a significant percentage of trips being made by trucks. ~~Where Urban Throughways pass through residential or local commercial areas, an Urban Road designation may be appropriate.~~Adjacent land uses sometimes orient to the Industrial Road.
- Number of Lanes. ~~Urban~~ Industrial Road design typically includes two to four vehicle lanes, with ~~additional lanes in some situations.~~additional turning lanes as needed. Dedicated freight-only lanes or turn pockets may be provided as needed to support roadway efficiency.
- Function. Industrial Roads emphasize freight mobility while accommodating other modes and providing access to industrial sites and freight districts.
- Curb zone. The curb zone along Industrial Roads primarily serves mobility functions such as vehicle lanes or bike lanes. The curb zone may be used for access functions such as parking and loading at limited locations if needed to support adjacent land use.
- Separation. Industrial Roads have limited street connections that may occur at the same grade or separate grades. Pedestrian and bicycle crossings should be grade-separated or signalized, and pedestrian and bicycle facilities should be separated from motor vehicle traffic.
- Design Elements. Industrial Road design typically includes vehicle lanes, medians or center turn lanes where needed, limited driveway access, pullouts for bus stops, transit priority treatments, separated pedestrian and bicycle facilities, and improved pedestrian crossings located on overpasses, underpasses, or signalized at-grade intersections. Industrial Roads may also include design treatments that improve freight mobility, such as freight-only lanes, freight signal priority, and a wider turning radius at intersections.
- ~~Urban Road design shall consider the following: moderate vehicle speeds; few driveways; sidewalks; improved pedestrian crossings at major intersections; striped bikeways; center medians that manage access and control left-turn movements; and other design treatments that improve freight mobility, including motor vehicle lane widths that consider the above improvements.~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective J:
The Comprehensive Plan Update Urban Design Framework introduced the concept of **Enhanced Greenway Corridors** as part of a larger network of City Greenways. The exact alignments of many Enhanced Greenway Corridors have not yet been determined, but illustrative maps can be found in the Urban Design Framework. BPS and PBOT will work together to identify alignments and better define the desired design elements. The description emphasizes that these are routes that give priority to pedestrians and/or bicyclists but that design treatments can be very flexible and can be incorporated into a range of street types and land use contexts. The Enhanced Greenway Corridor classification is a dual classification, which means it is an overlay on top of another street design classification. This helps clarify that Enhanced Greenway Corridor design can be incorporated into street types ranging from a Civic Corridor to a Local Street.

J. Enhanced Greenway Corridors

Enhanced Greenway Corridors are designed to provide a network of scenic low-stress connections that prioritize walking and/or bicycling and often include natural features as well as innovative urban design and place-making elements.

- Dual Classification. Streets may have an Enhanced Greenway Corridor classification in addition to another street design classification. When developing or retrofitting these streets, incorporate Enhanced Greenway Corridor design elements within the corridor.
- Land Use. Enhanced Greenway Corridors connect parks, open spaces, and singular attractions throughout the City to each other and to surrounding neighborhoods via a network of scenic and low-stress walking and/or bicycling routes. They can run through a variety of different land use contexts, including residential neighborhoods, natural areas, industrial areas, and employment centers.
- Design Elements. Enhanced Greenway Corridor design can take many forms, and should use flexible design treatments appropriate to adjacent land use context. Design elements may include: neighborhood greenways; traffic calming; motor vehicle diversion; multi-use paths; wide sidewalks; boardwalks; trails; separated bikeways; broad-canopy trees and landscaping; scenic views; stormwater management; underground utilities; special lighting; and way-finding. Where appropriate, pedestrian and bicycle routes may use separate parallel routes or streets along a corridor.

K. Greenscape Streets

Greenscape Street designs are applied to arterials where natural or informal landscapes dominate the adjacent areas and the right-of-way, such as lower-density residential areas in wooded settings.

- Dual Classifications. Where streets have a Greenscape Street design designation and another street design designation, consider the natural characteristics of the street during the design and implementation of street improvements.
- Design Treatment. During improvement projects, consider the use of vegetated stormwater treatment techniques; minimizing impervious surfaces; preservation of existing vegetation, topography, vistas and viewpoints, driver perception, street lighting, and sight distance requirements. Vegetation may be landscaped or native, depending on the existing and desired character.

~~*Explanation: This new classification replaces the former Beautification Policy classification called Natural Design. It also includes reference to the City's green street policy efforts. Other street classifications that were on the Beautification Map are not now necessary, because their elements are incorporated into other current street design classifications. For example, streets that used to be classified as Parkways on the Beautification Map are now classified as Urban Throughways.*~~

Commentary

Objective 6.11 Street Design Classification Descriptions

Objective L:
The proposed language for **Local Streets** adds shared street design as an option in cases where sidewalks may not be necessary.

Objective M:
Multimodal Intersections are proposed for deletion because they are no longer needed to be consistent with the Regional Transportation Plan. All intersections should be designed as multimodal intersections other than some Urban Throughway interchanges. Having a special intersection-level classification is unnecessary.

L. Local Streets

Local Streets are designed to complement planned land uses and reduce dependence on arterials for local circulation.

- Land Use. Local Streets are multimodal, but are not intended for trucks (other than local deliveries) in residential areas. Local Streets are important for local circulation of trucks in commercial and industrial areas.
- Design. Local Street design typically includes ~~many connections with other streets~~frequent street connections, sidewalks, on-street parking, stormwater facilities, and planting of street trees and ground covers (where planting strips are included). A shared street design without sidewalks may be appropriate where traffic volumes are sufficiently low.
- Classification. All streets not classified as Urban Throughways, Urban Highways, Industrial Roads, ~~Regional and Community~~Civic Main Streets, Neighborhood Main Streets, Civic Corridors, Neighborhood Corridors, Regional Corridors, ~~and~~ or Community Corridors~~, Urban Roads, and Greenscape Streets~~ are classified as Local Streets for street design.

~~M. Multimodal Intersections~~

~~Multimodal intersections are designed to meet the needs of pedestrians and promote pedestrian, bicycle, and public transportation travel, while accommodating a significant amount of motor vehicle traffic.~~

- ~~Location. Multimodal Intersections are located where special attention should be given to accommodating pedestrians, bicycles, and public transportation.~~
- ~~Mapping. All intersections of Main Streets with other Main Streets, with Regional Corridors, and with Community Corridors are considered Multimodal Intersections, even though they are not shown on the street design maps. Multimodal Intersection design should also be considered at intersections along main streets and corridors and where there is significant pedestrian and transit activity.~~
- ~~Motor Vehicle Traffic. Manage motor vehicle traffic to limit negative impacts on other modes and on adjacent land uses.~~
- ~~Pedestrian Improvements. Pedestrian improvements should include wide sidewalks, special lighting, crossings at all legs of the intersection, and special crossing features where motor vehicle volumes are high.~~
- ~~Bicycle Improvements. Bicycle improvements should be designed to minimize conflicts and provide adequate bicycle crossings.~~

~~*Explanation: Multimodal Intersections are called 'Possible Boulevard Intersections' on Metro's Regional Street Design Map. Since Portland is not using the term 'boulevard' in its classifications, Multimodal Intersection better describes the emphasis on safety and convenience for pedestrians and bicyclists, as well as cars and other vehicles, at these intersections. Rather than mapping these intersections, Portland is describing where they are located and how they should be treated. In some cases, the need for special treatment of intersections is determined during the design phase of a project.*~~

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 7: Street Design Classification Maps

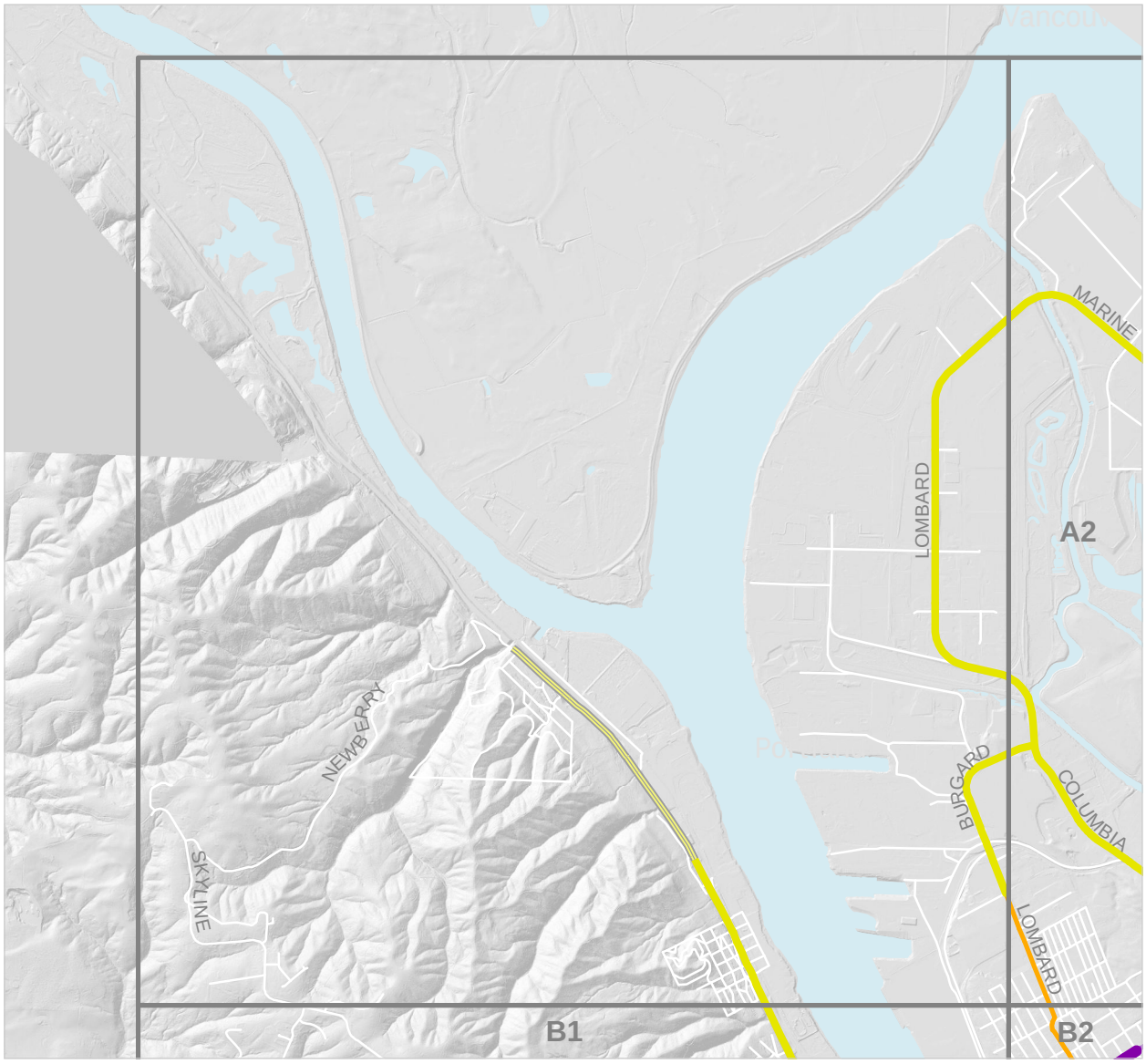
Commentary

Task: Street Design Classification Maps

The Street Design Classification Maps are being updated to reflect the Comprehensive Plan Update, which refers to Civic Corridors and Neighborhood Corridors and identifies their locations in the Urban Design Framework. The map also includes Civic Main Street and Neighborhood Main Streets, which cover existing main streets as well as anticipated future main streets based on center designations in the Comprehensive Plan.

Central City street classifications will be updated as part of the Central City 2035 Plan, which will amend the Comprehensive Plan after it is adopted. Therefore the Central City is not shown on this map.

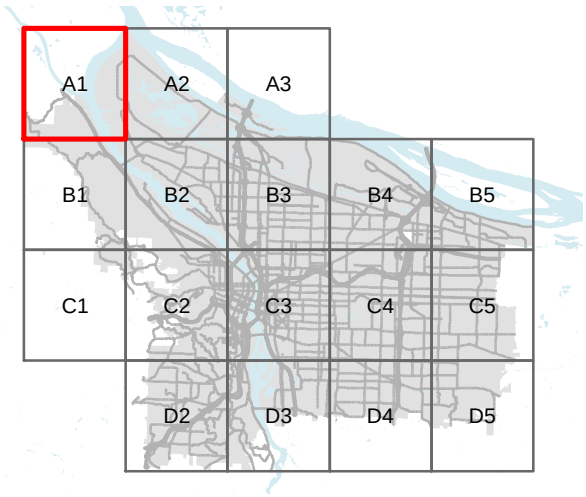
A new design standard for maps in the TSP is being developed. All maps will redesigned for continuity throughout the TSP, including the Street Design Classification map.

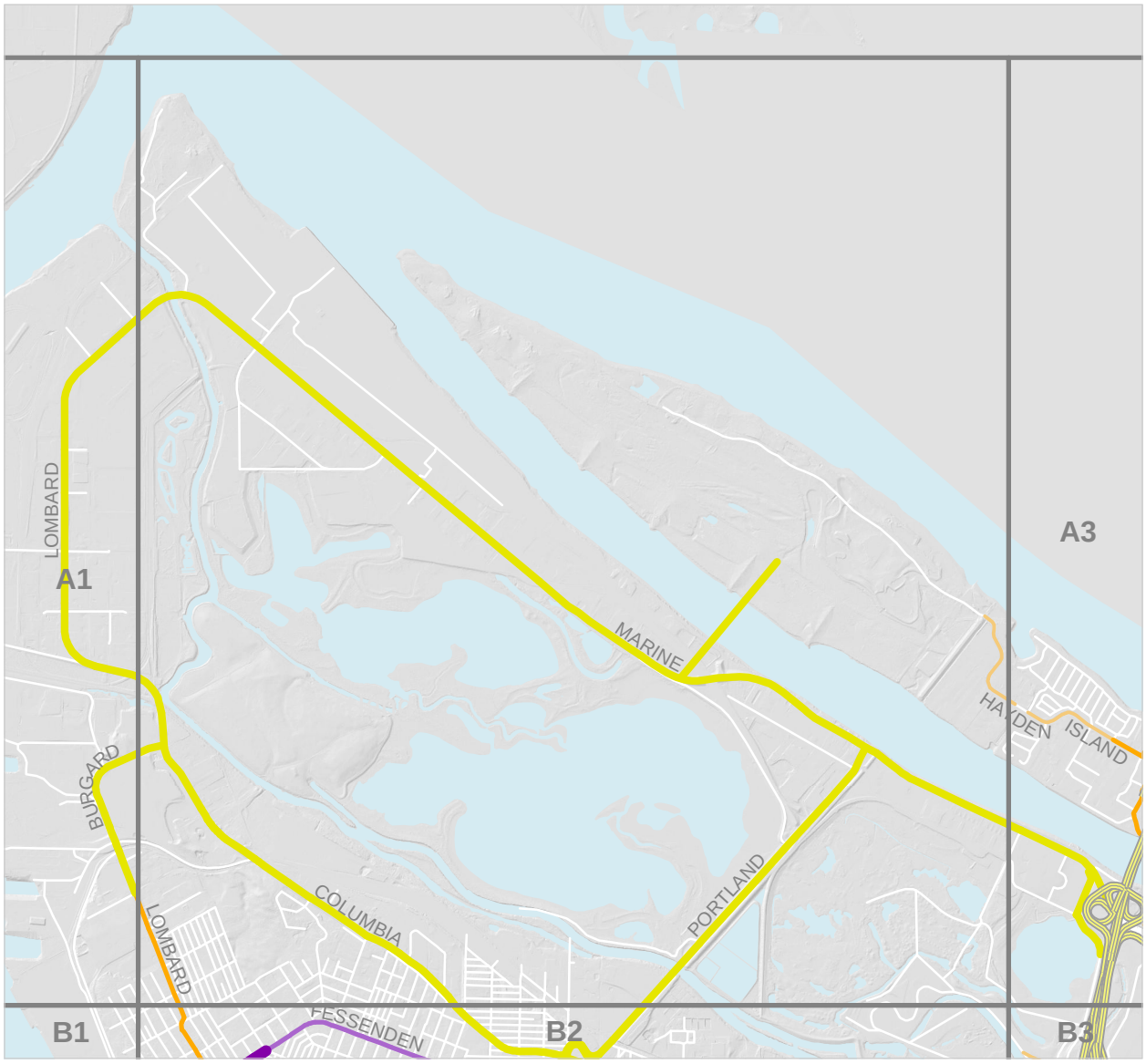


0 0.25 0.5 1 Miles

Street Design Classification

- Urban Throughway
- Urban Highway
- Industrial Road (formerly Urban Road)
- Civic Main Street (formerly Regional Main Street)
- Neighborhood Main Street (formerly Community Main Street)
- Civic Corridor (new classification)
- Neighborhood Corridor (new classification)
- Regional Corridor
- Community Corridor
- Local Streets

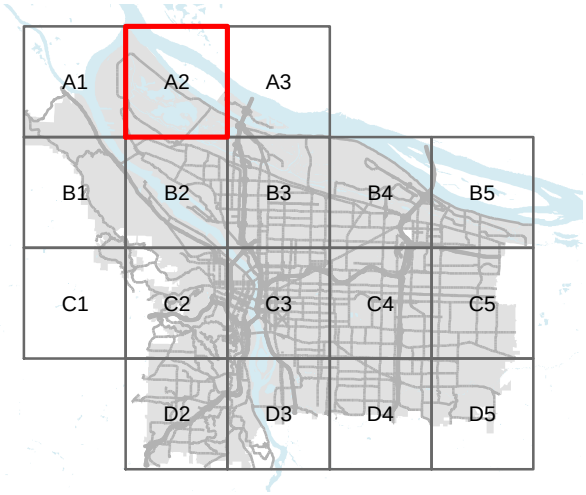


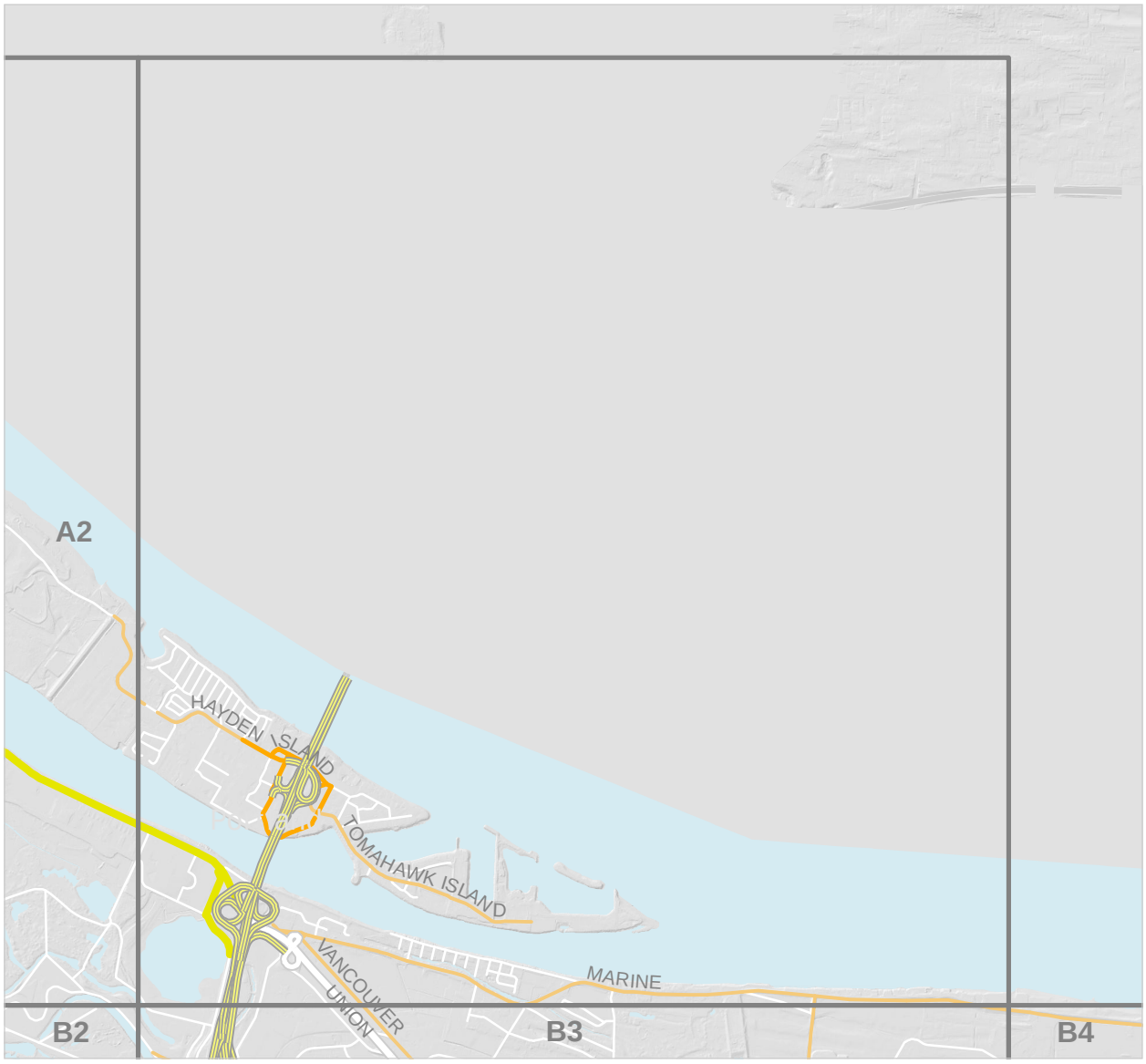


0 0.25 0.5 1 Miles

Street Design Classification

- Urban Throughway
- Urban Highway
- Industrial Road (formerly Urban Road)
- Civic Main Street (formerly Regional Main Street)
- Neighborhood Main Street (formerly Community Main Street)
- Civic Corridor (new classification)
- Neighborhood Corridor (new classification)
- Regional Corridor
- Community Corridor
- Local Streets





0 0.25 0.5 1 Miles

Street Design Classification

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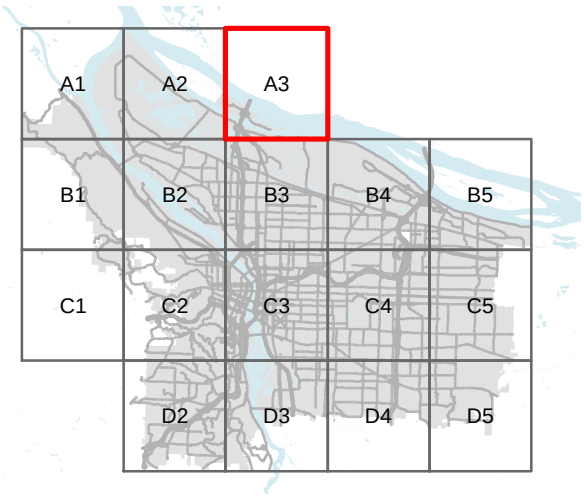

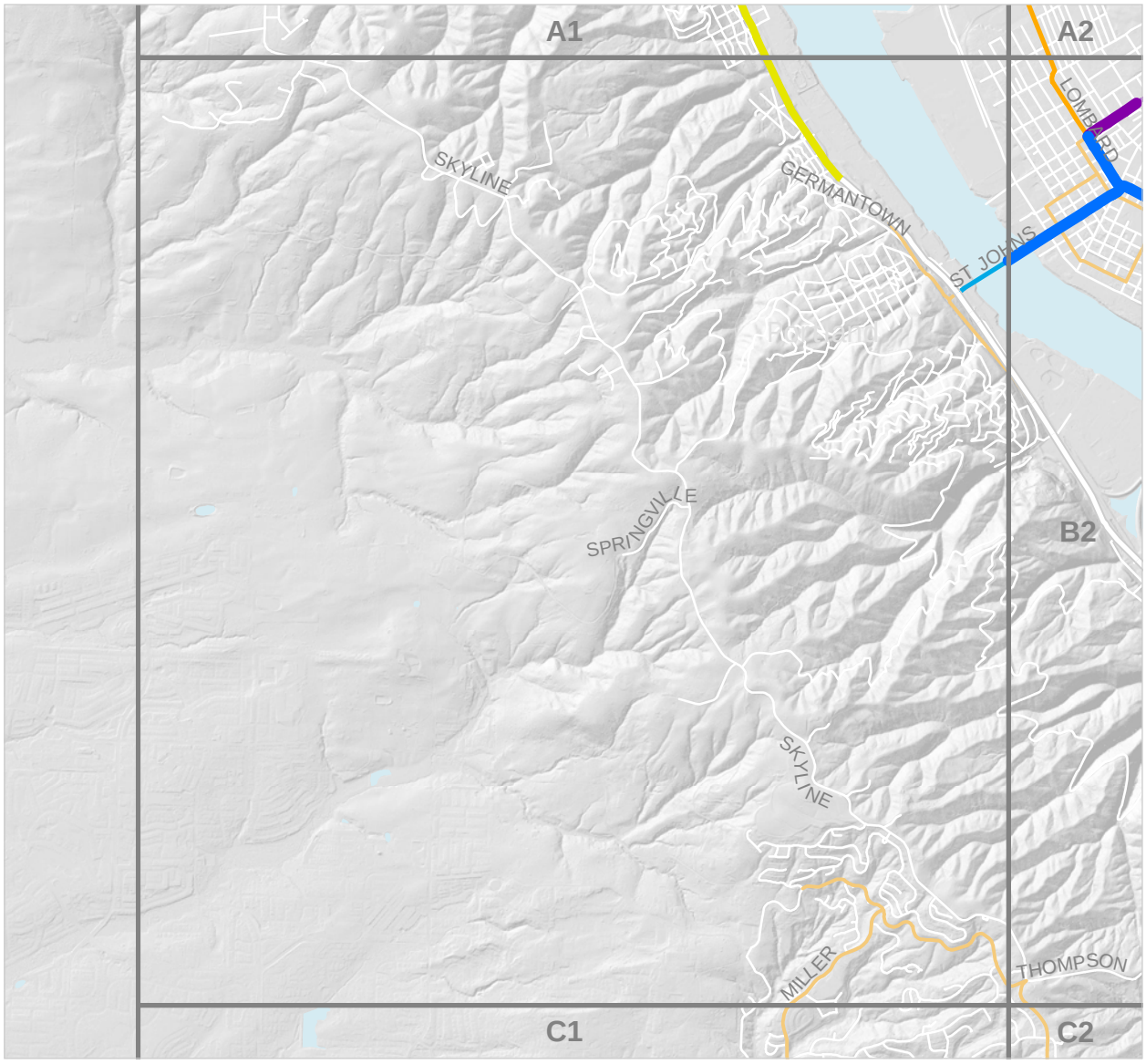

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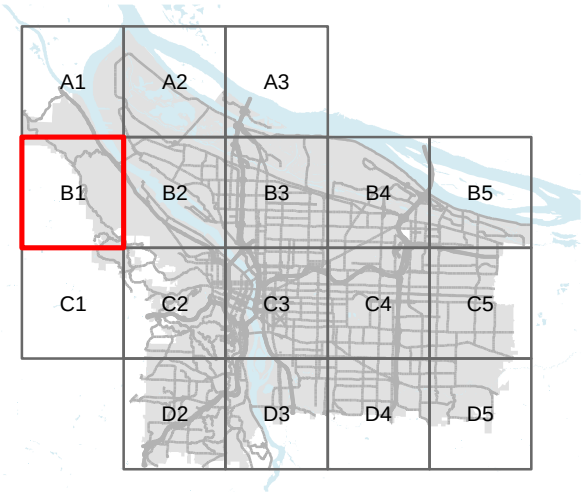

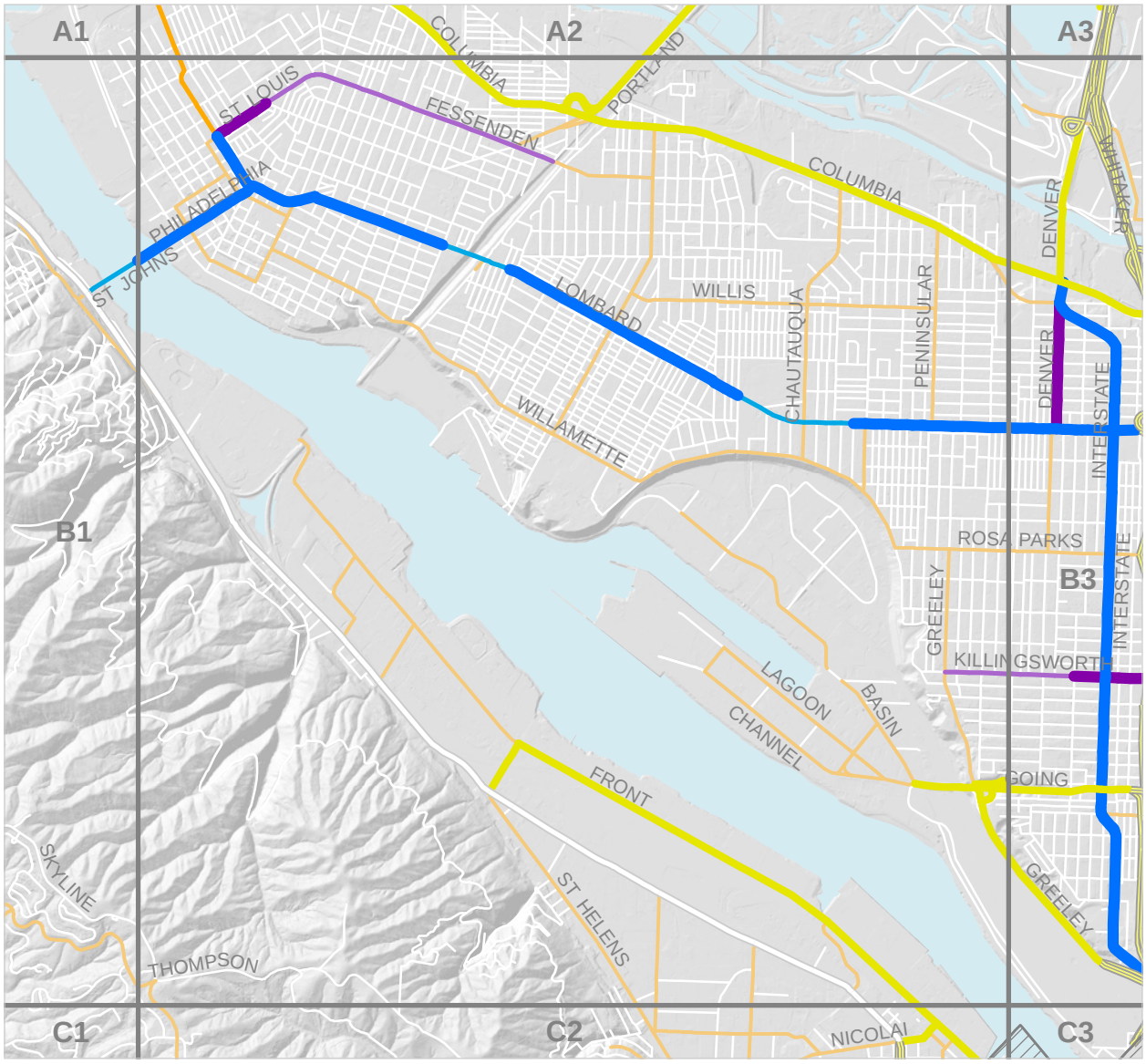

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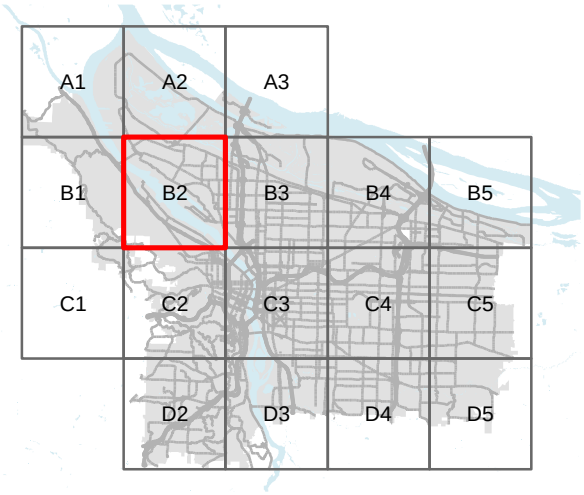

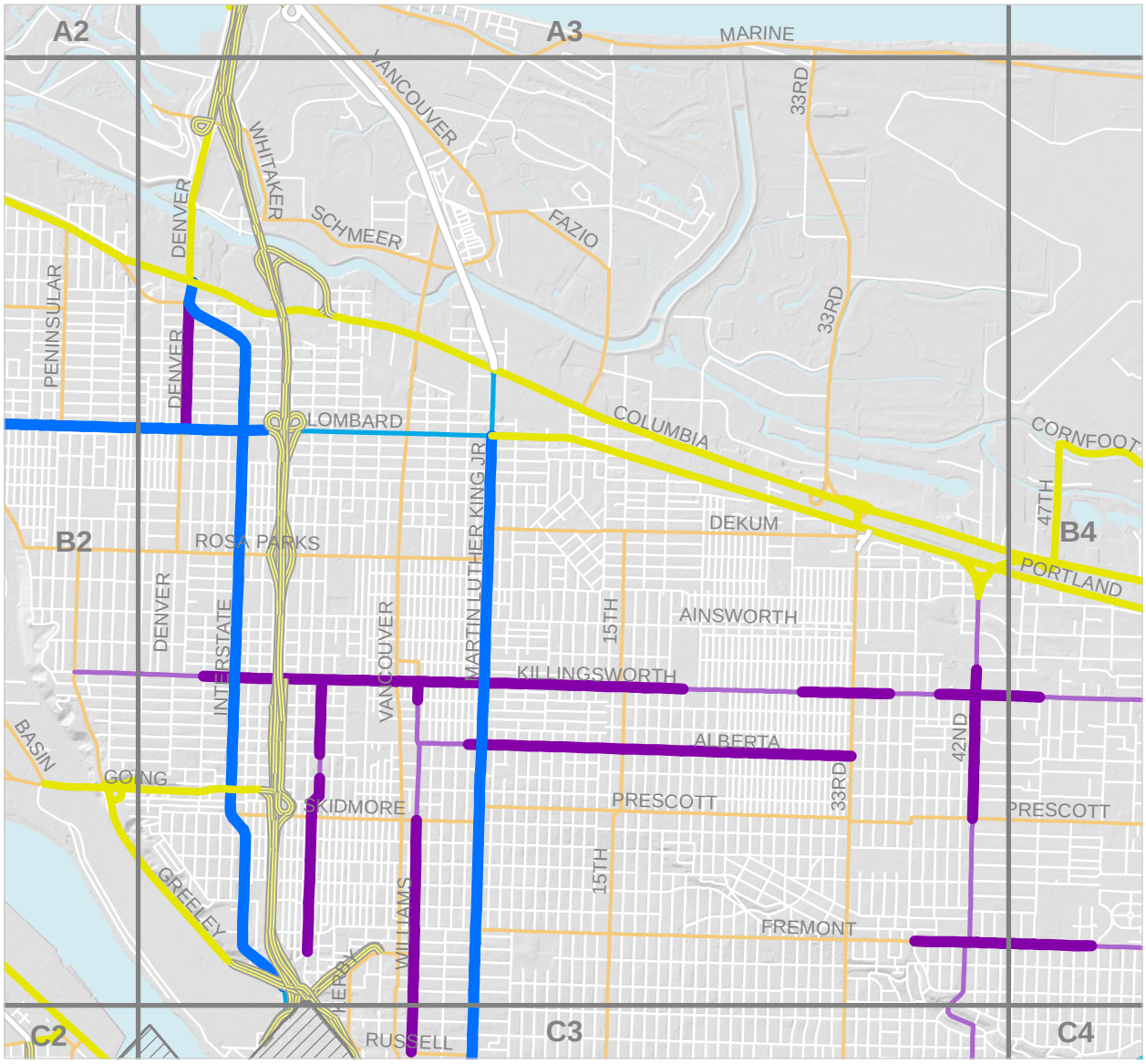

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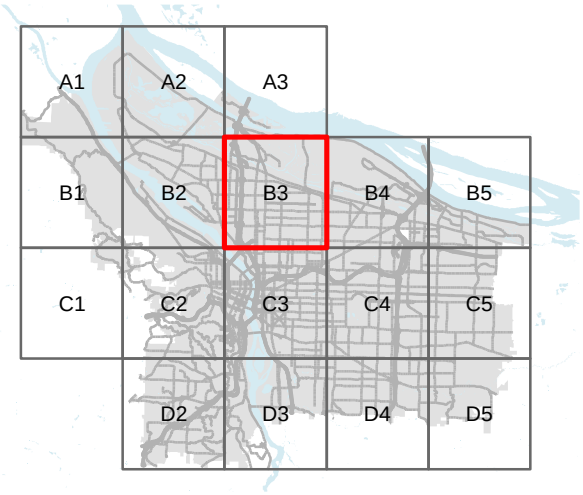

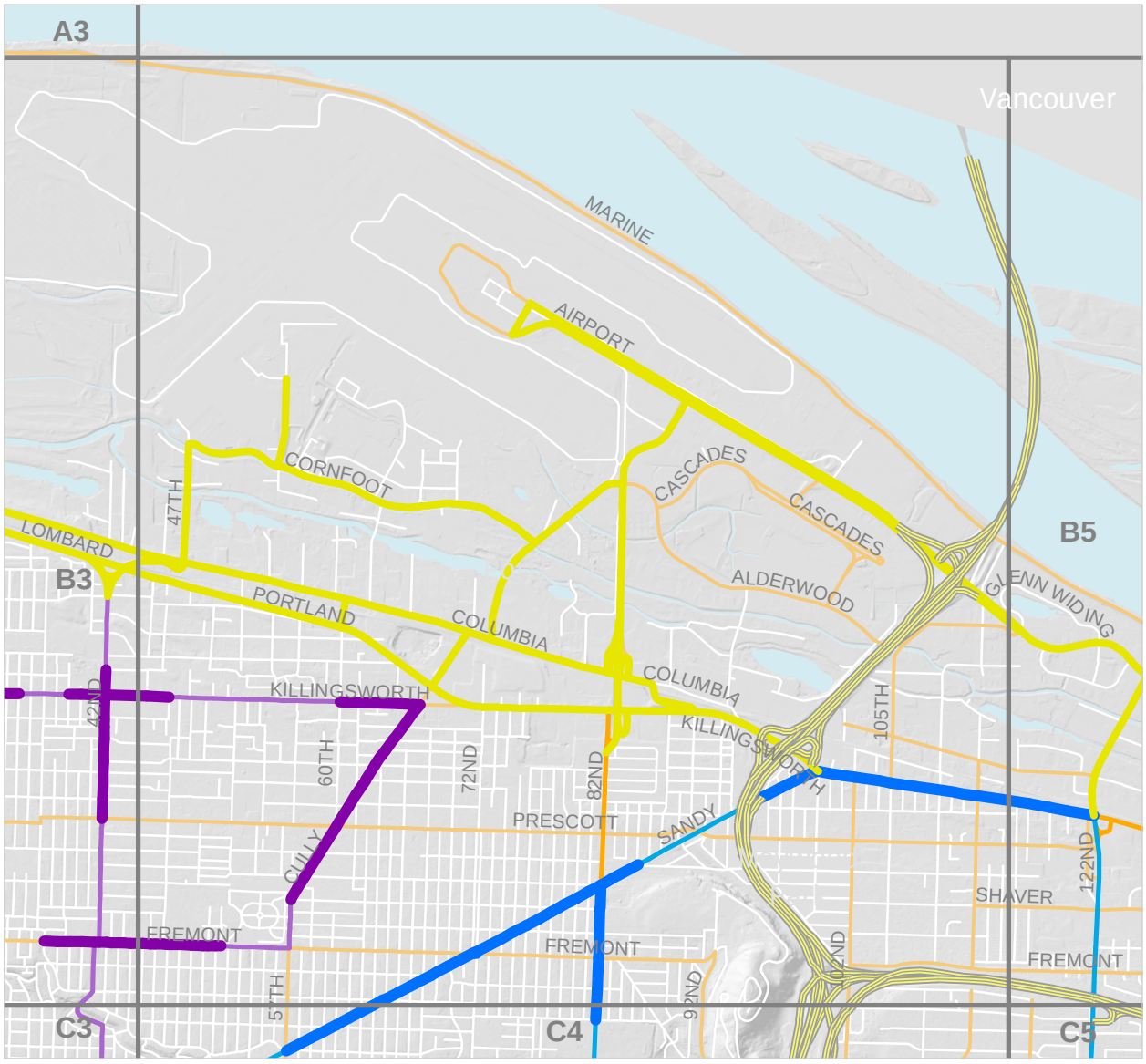

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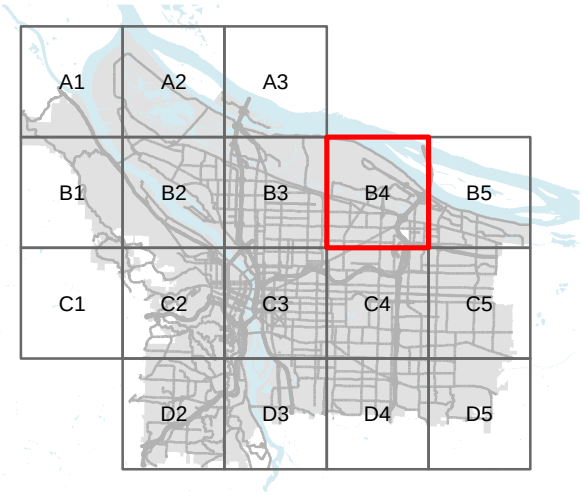

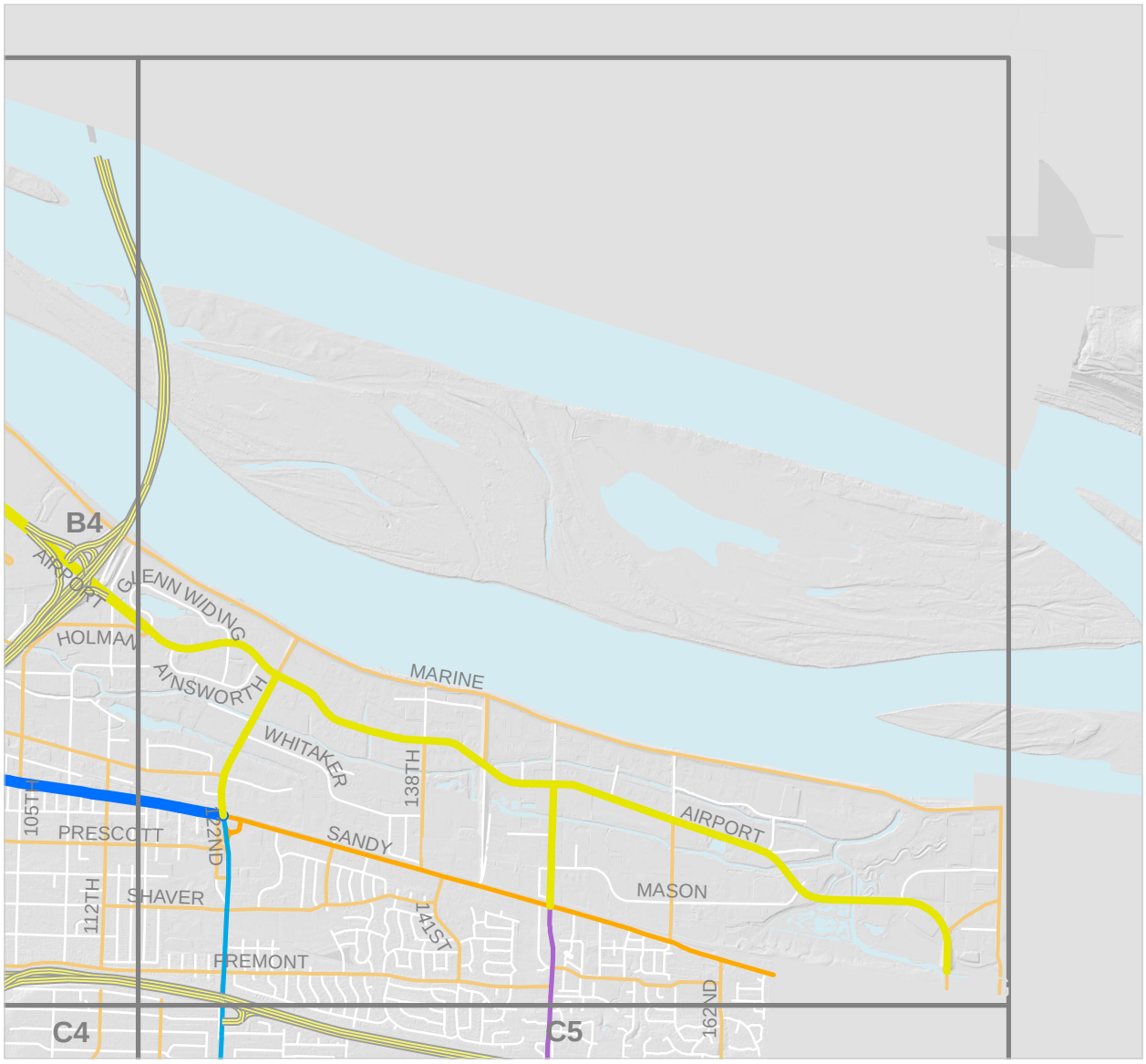

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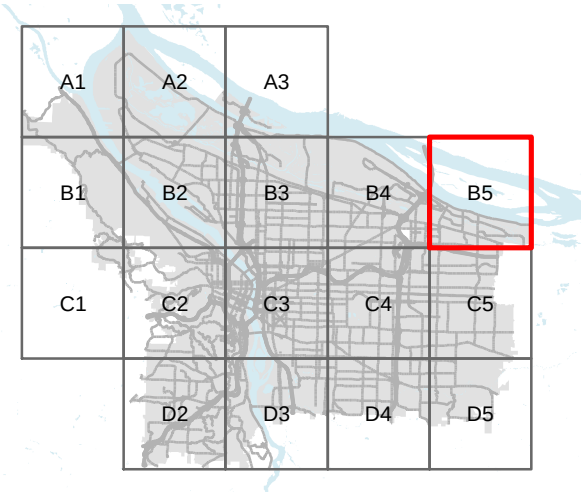

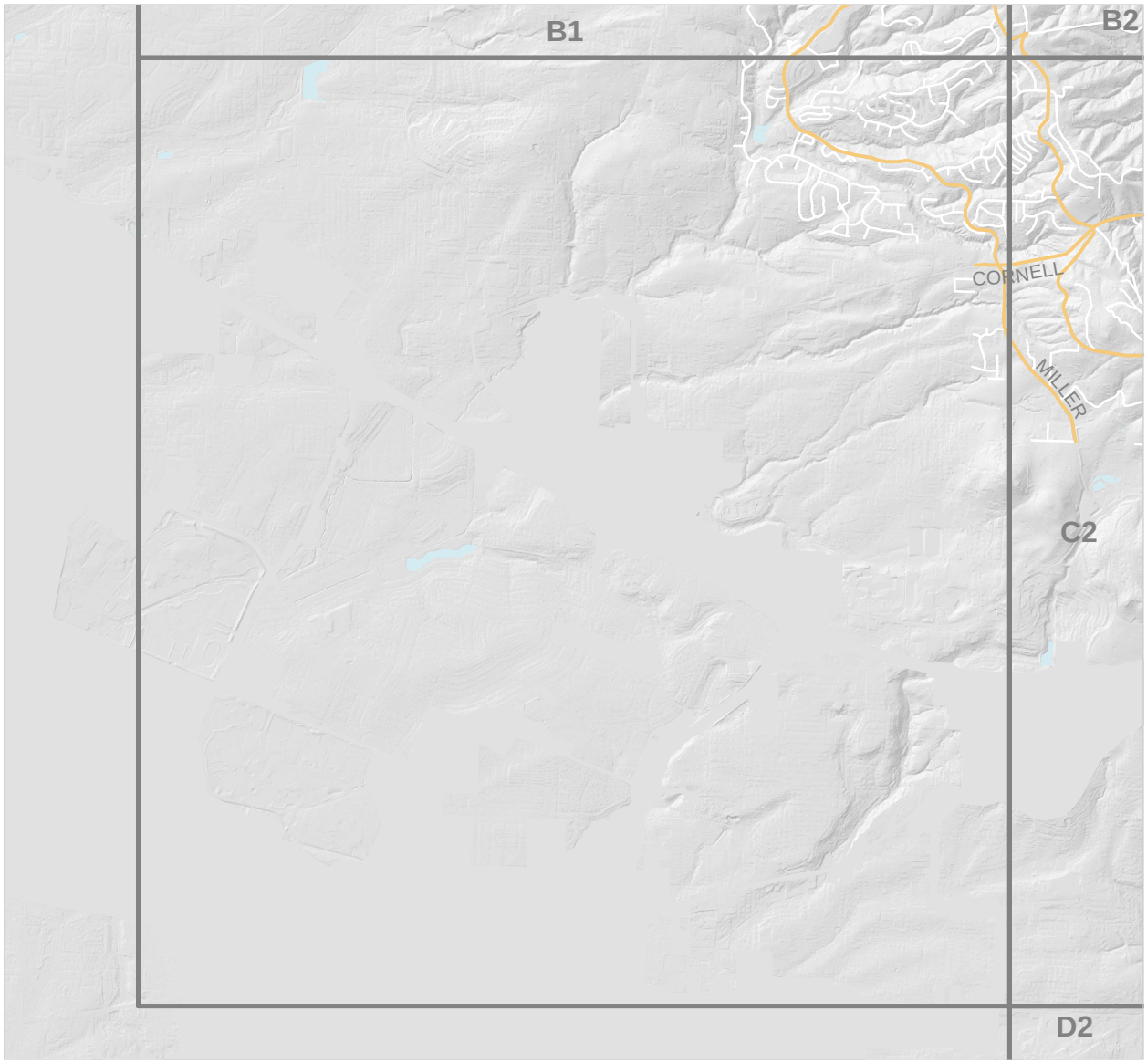

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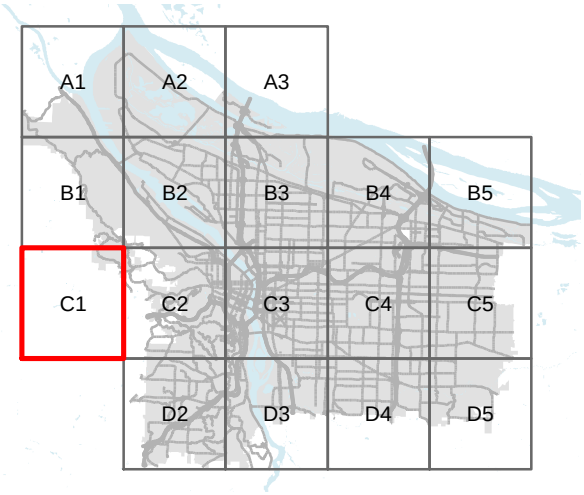

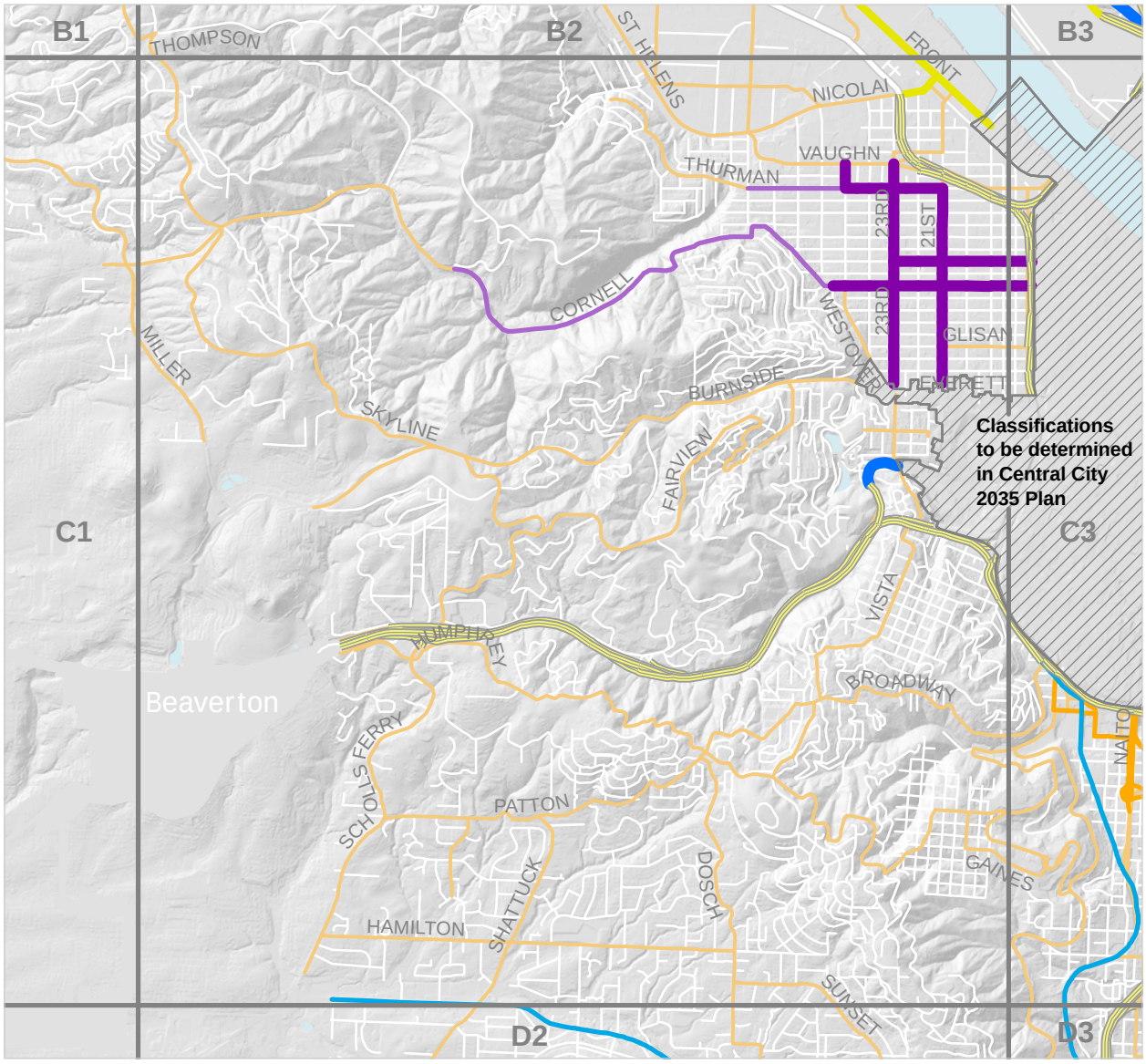

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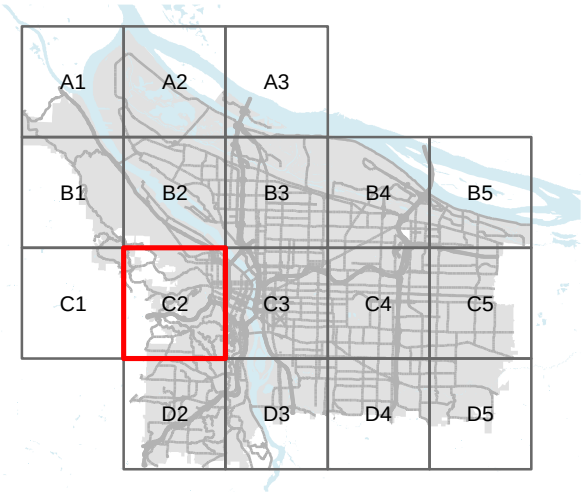

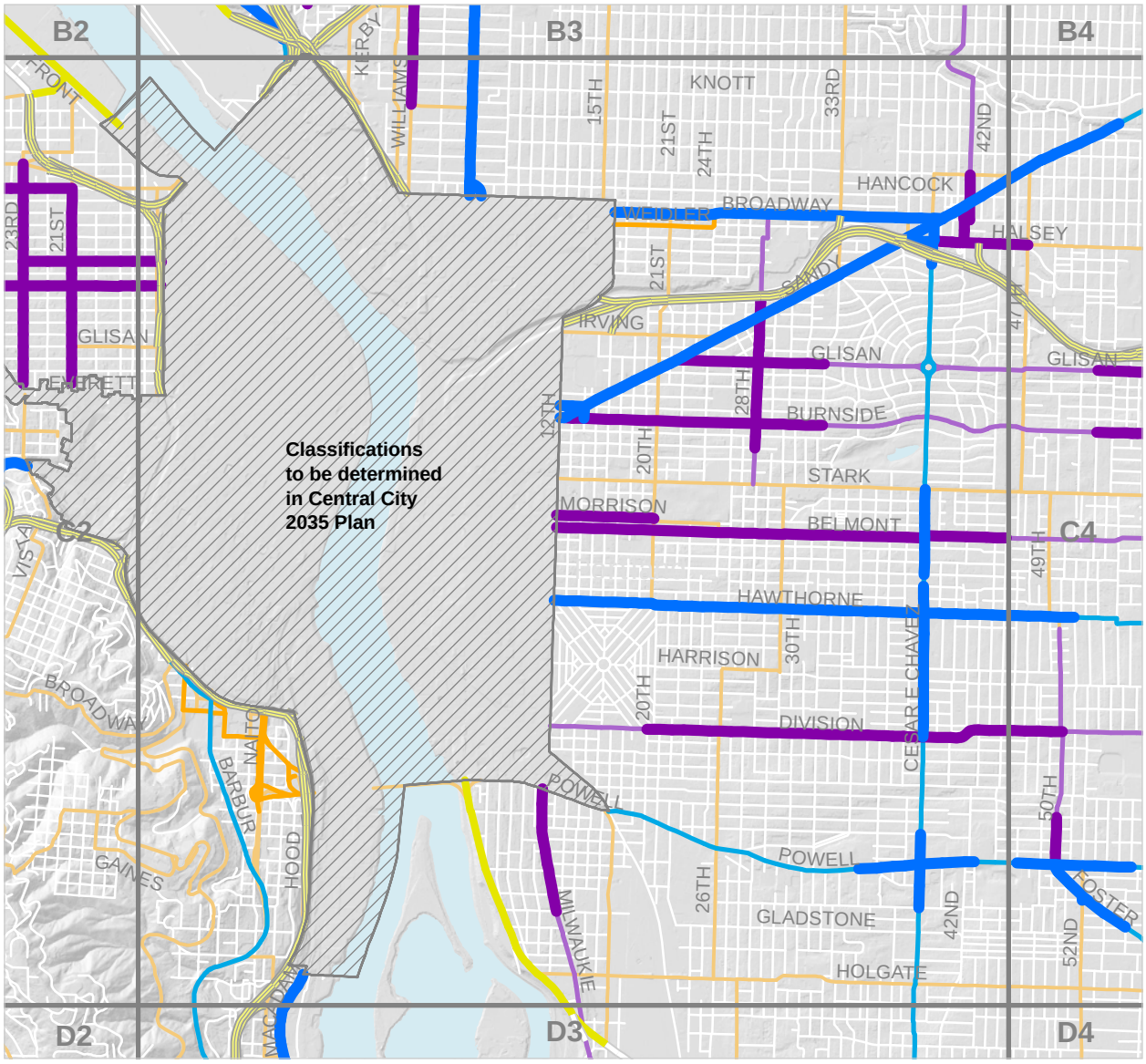

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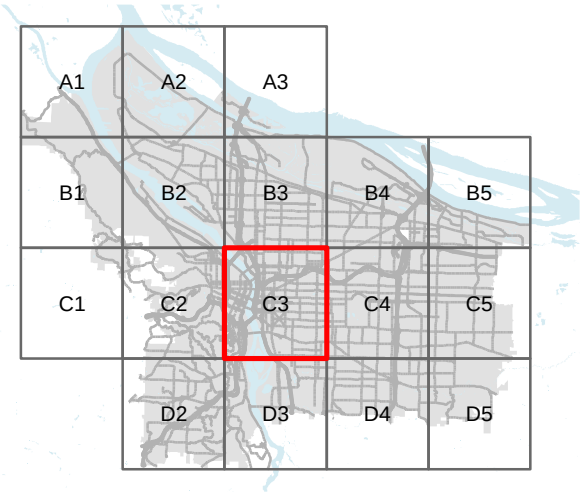

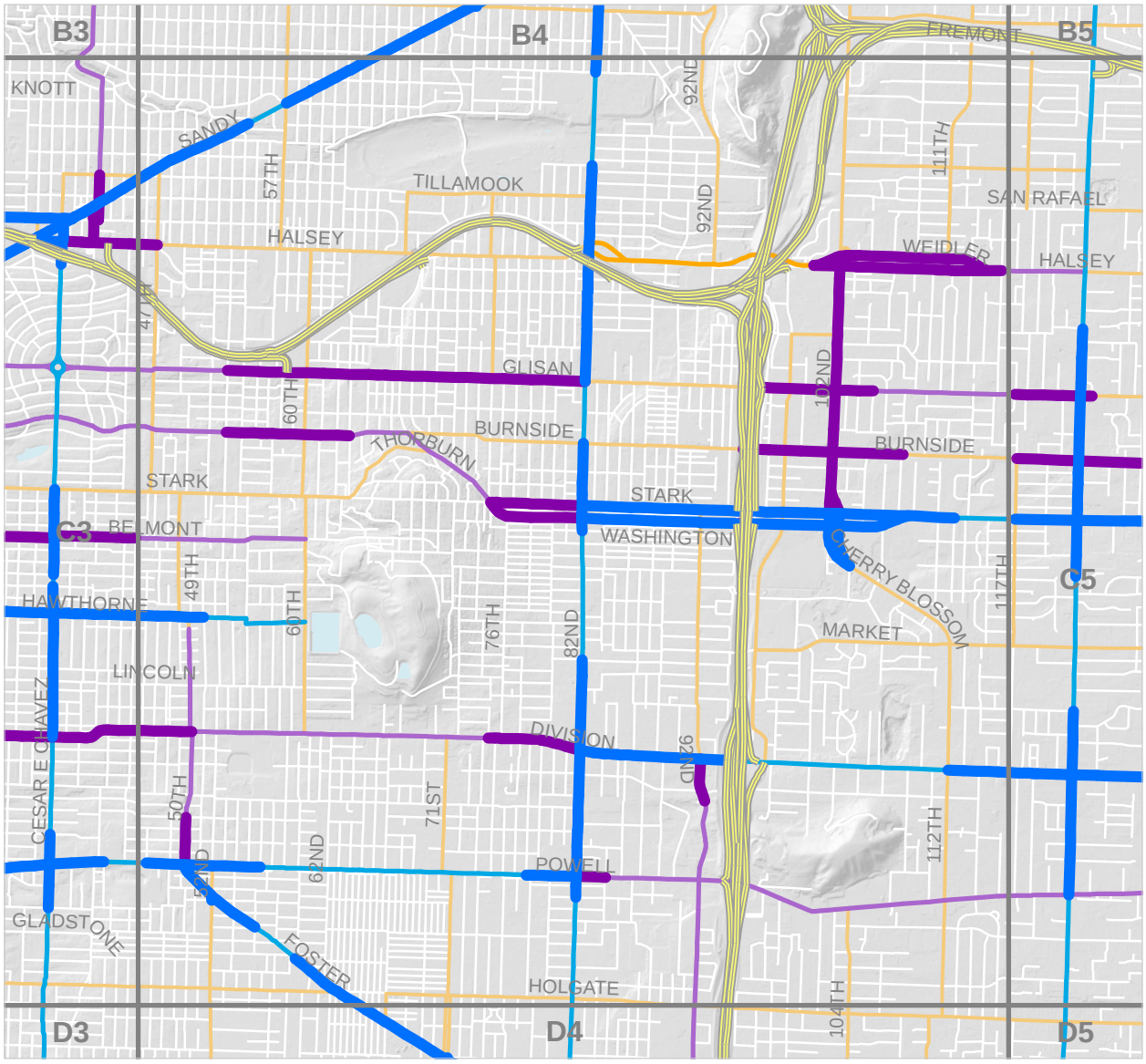

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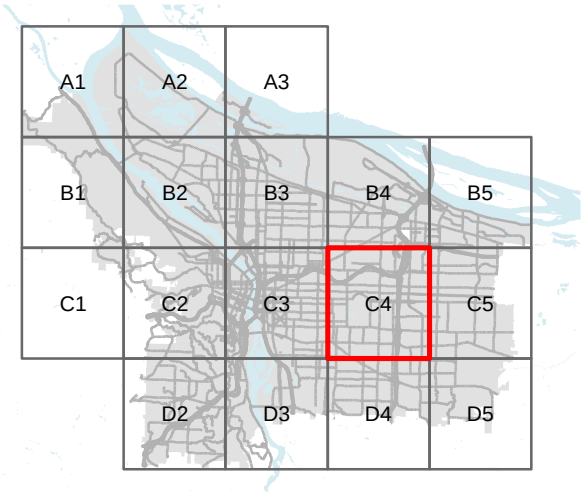

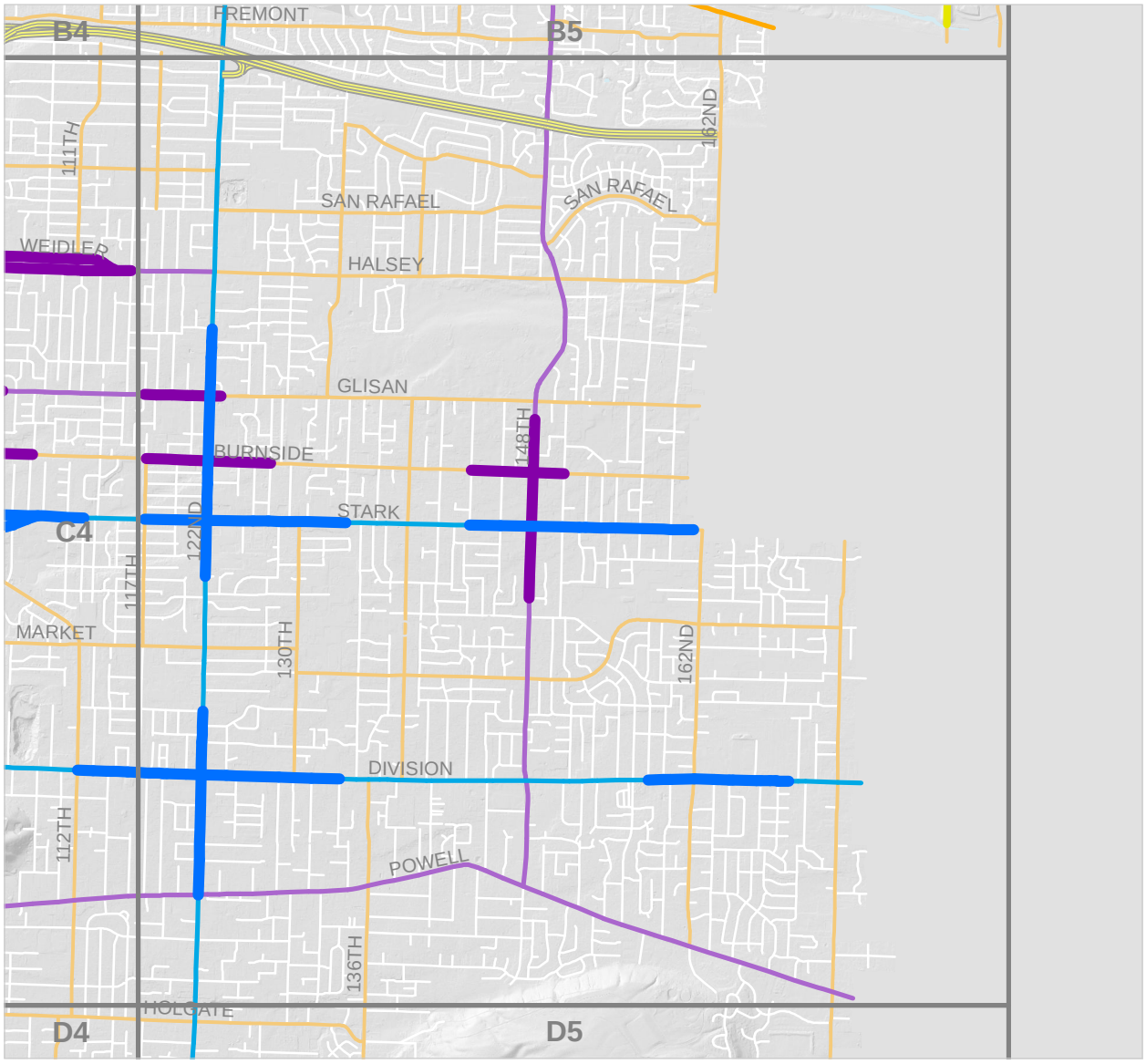

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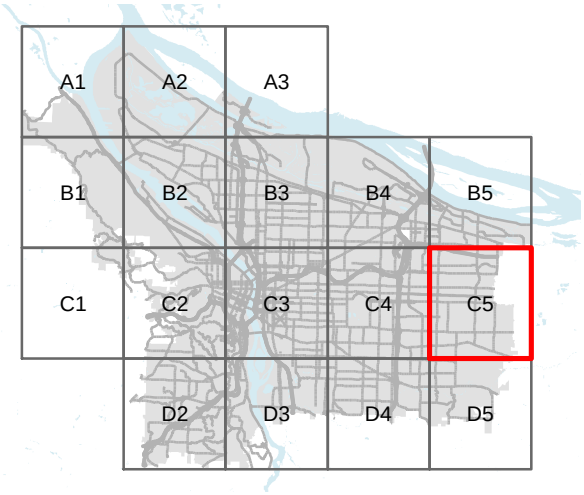

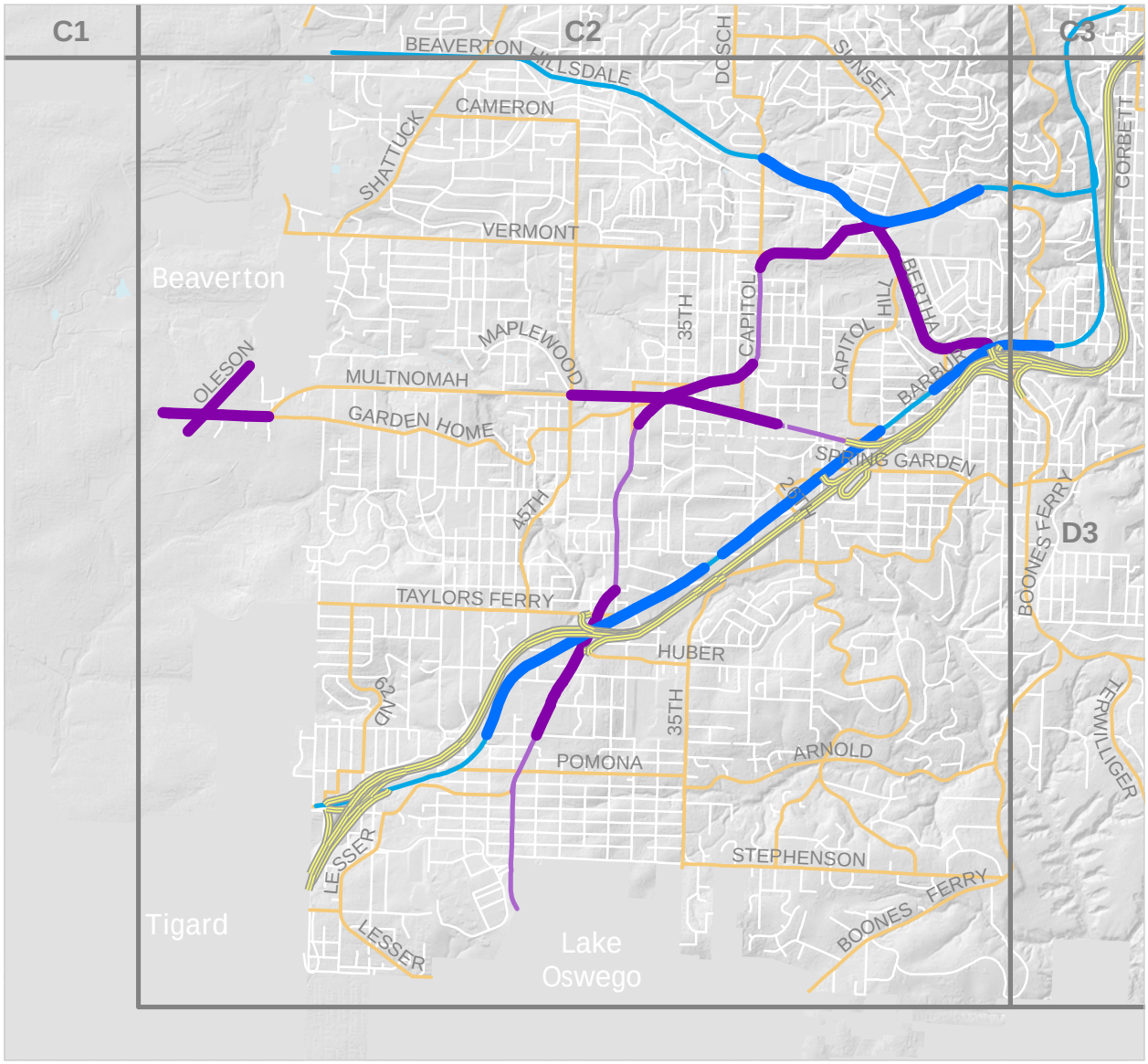

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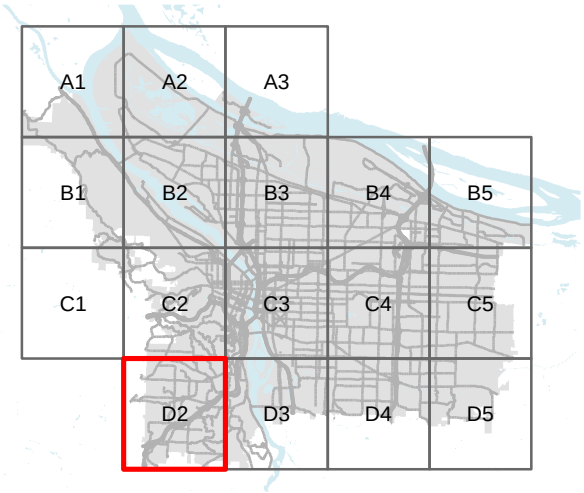

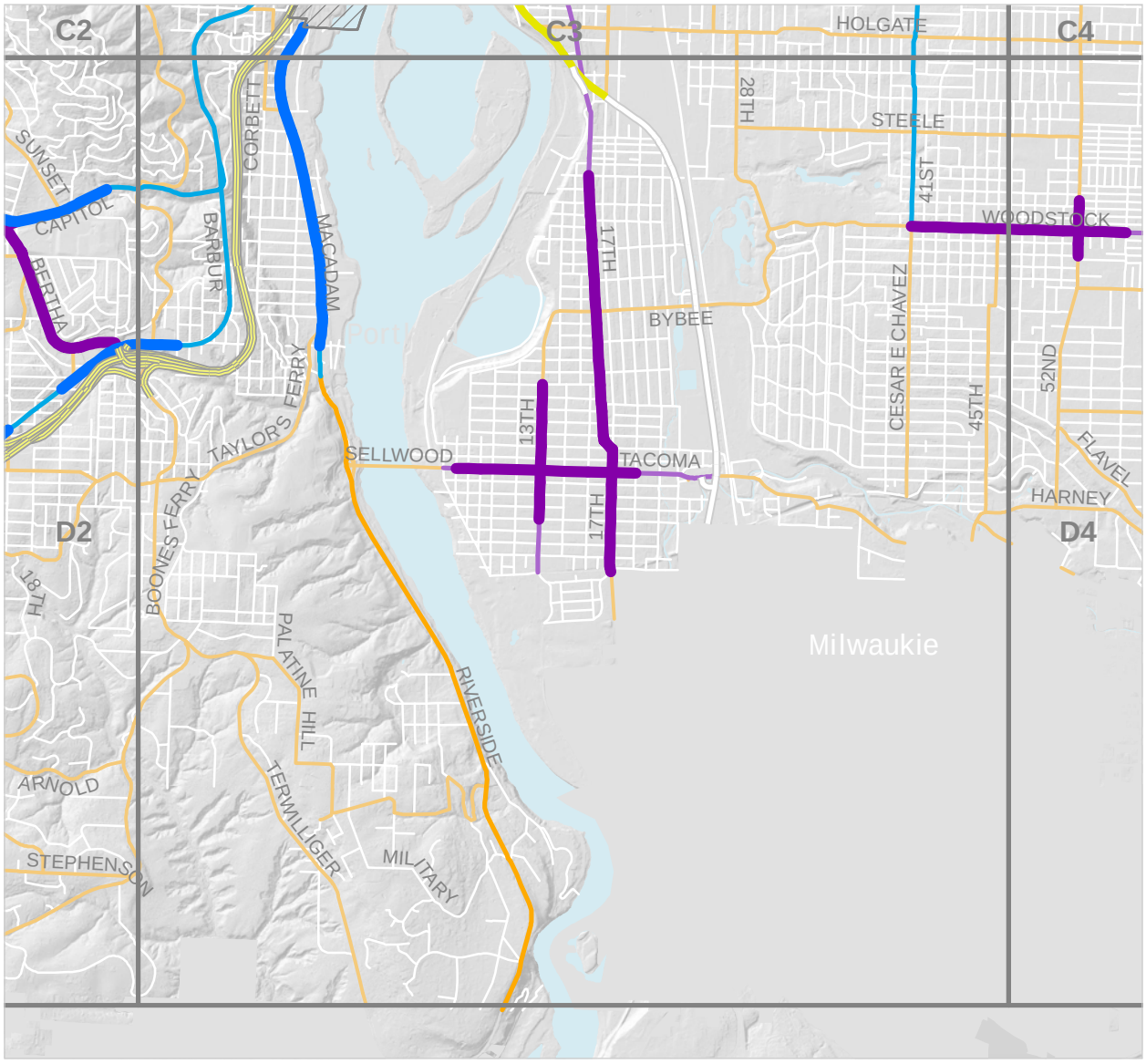

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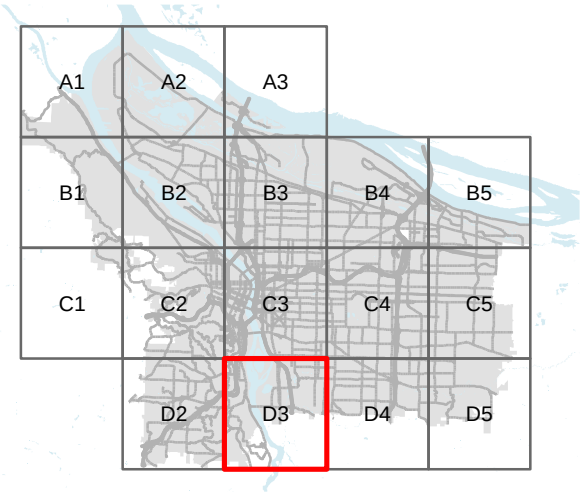

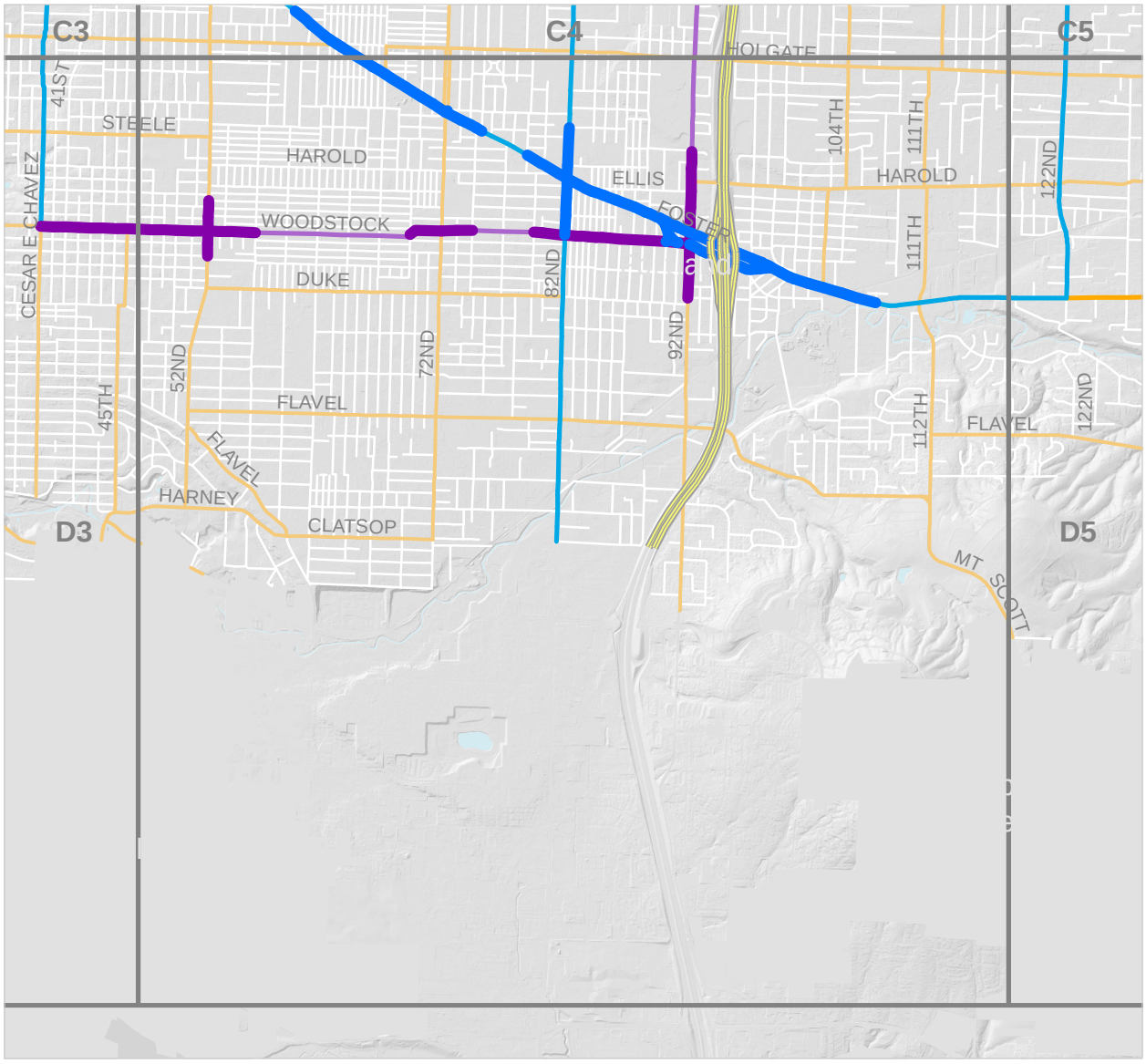

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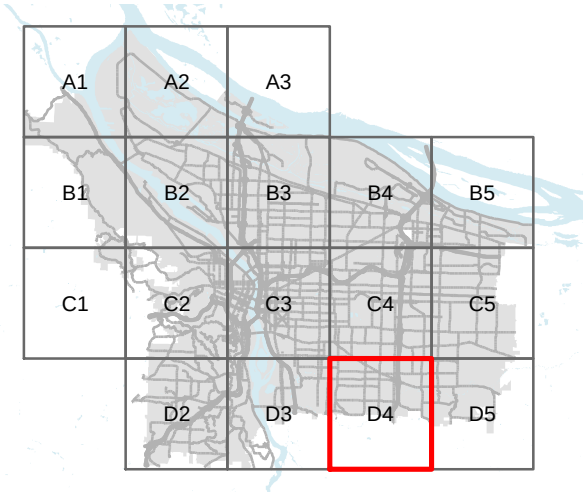

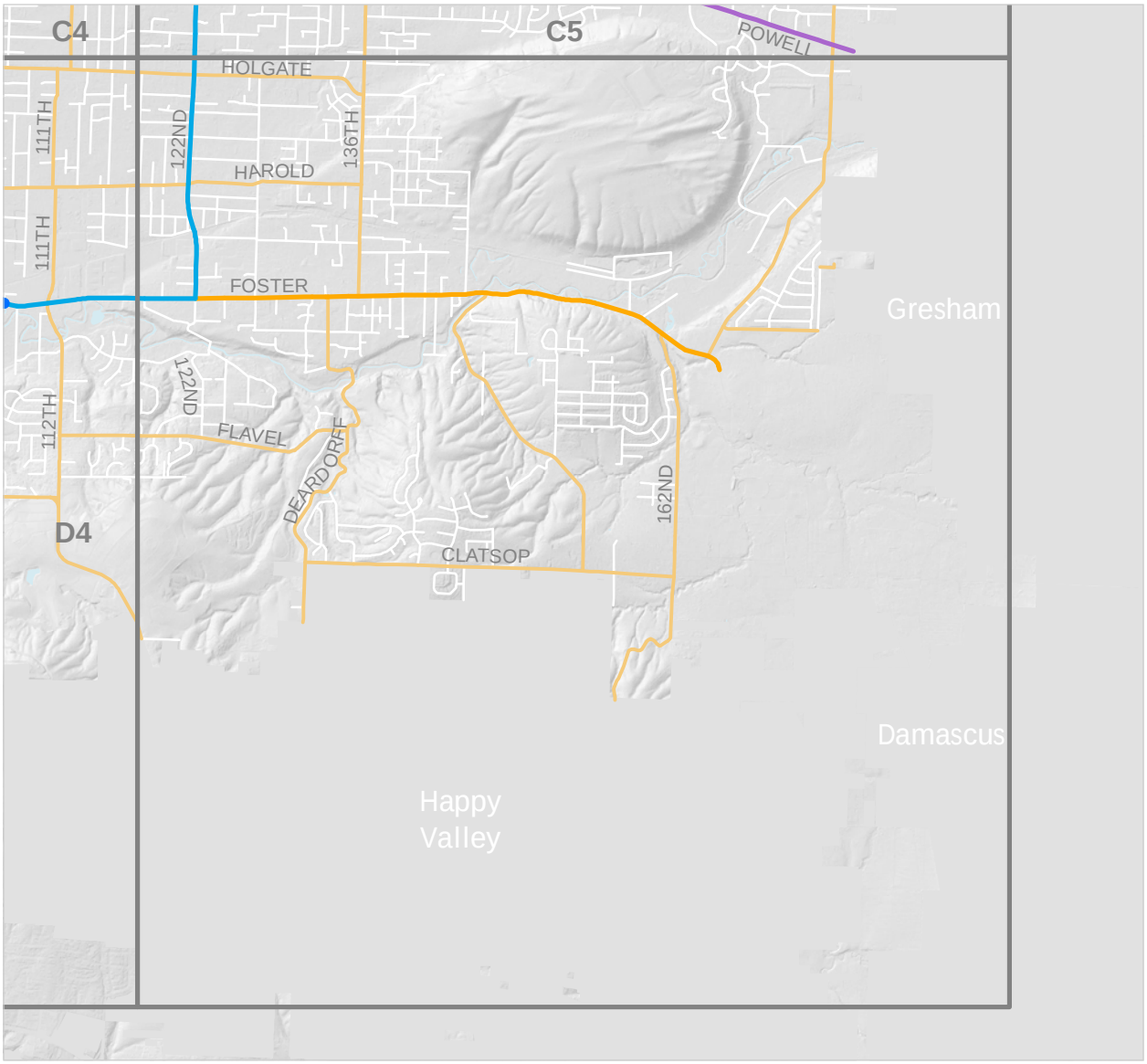

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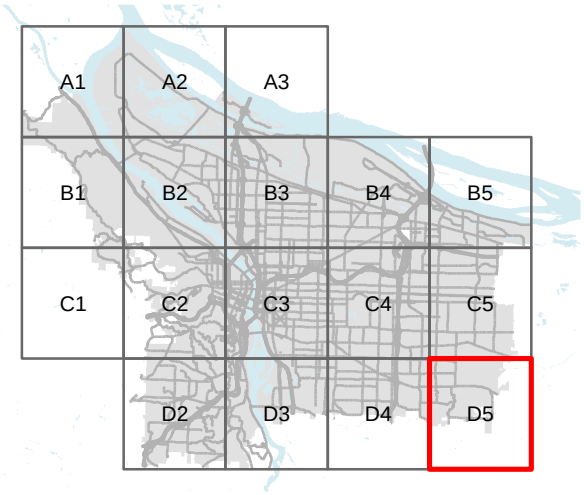


City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 8: South Waterfront and Water Avenue Area Classification Maps

Commentary

The TSP Classification Maps are being updated to reflect the Ordinance number 185208, adopted in March 2012, which changed street classifications in the South Waterfront area as well as in the Water Ave and Clinton-to-the-River area in the Central Eastside. These changes have legally already taken effect, but we need to make the changes in the published TSP and online maps such as Portland Maps and PBOT's internal GIS. **This is not part of Task 5**, since it has already been approved by City Council by ordinance.

A new design standard for maps in the TSP is being developed. All maps will redesigned for continuity throughout the TSP, including the South Waterfront & Water Avenue Realignment Classification maps.

(Refer to map amendments in Exhibit A of Ordinance 185208 - Amend the Transportation System Plan, part of the Portland Comprehensive Plan, to include updated street segment classifications, project list descriptions and project alignments on transportation system improvement maps to implement the Land Use Final Order for the Portland-Milwaukie Light Rail Project, http://efiles.portlandoregon.gov/Record/4773969/File/Document)

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 9: Master Street Plans

Commentary

- This chapter was updated to reflect previously adopted Master Street Plans and previously adopted local street plans.

- South Waterfront, Gateway, Cully, Outer-Powell, Division-Midway and Tryon-Stephens were added or updated.

- Maps were updated and added to reflect the adopted changes and will be amended in the TSP.

- Gateway and South Waterfront were adopted by ordinance; therefore have been binding, but are now incorporated into the document.

- Cully, Outer-Powell, Division-Midway and Tryon-Stephens were adopted by resolution and will be adopted by ordinance at the end of the update process.

INTRODUCTION

Background

The purpose of the master street plans is to increase the efficiency of the transportation system through increased street connectivity and a finer mesh of pedestrian and bikeways. A dense grid of streets helps spread local vehicle trips more evenly over the local street network and reduces congestion on the arterial system. Studies show that improved local street connectivity improves arterial system capacity by as much as 25 percent.

Studies show that distance is one of the most important factors in mode choice. The lack of a dense grid of streets and pedestrian/bicycle connections results in out-of-direction travel that is particularly discouraging to potential pedestrians and bicyclists. The result is increased use of the automobile for trips to nearby ~~(as the crow flies)~~ destinations. Trips need to be relatively short and direct to encourage travel on foot or by bicycle.

Good street connectivity improves emergency response times. Police, fire, and ambulance services can reach their destinations more quickly because there is less out-of-direction travel. Multiple access routes can reduce travel times and provide access options if one route is blocked.

Good local street connections can reduce traffic volumes on other streets by spreading traffic over a denser network. With more intersections, traffic also moves more slowly because side street traffic and stop signs discourage drivers from speeding.

As properties are subdivided and developed, access needs are met primarily through new streets. The City's local street network has grown over time, as outlying areas became more urbanized or older areas are redeveloped. In the past, development was not always required to address connections to adjacent areas as well as internal circulation. The result has been large areas of the City with poor connectivity, particularly in newer areas where the counties previously regulated development.

Commentary

State Requirements

State Requirements

Street connectivity must be part of transportation system plans (TSPs) and adopting Ordinances. The Oregon Administrative Rule for State Land Use Goal 12, Transportation, Section 660-012-0020, Elements of Transportation Systems Plans, requires:

> A road plan for a system of arterials and collectors and standards for the layout of local streets and other important non-collector street connections.... The standards for the layout of local streets shall provide for safe and convenient bike and pedestrian circulation necessary to carry out OAR 660-012-045(3)(b).

The State Transportation Planning Rule (TPR) states that the intent of the requirement is to provide guidance on the spacing of future extensions and connections along existing and future streets that are needed to provide reasonably direct routes for bicycle and pedestrian travel. -The rule referenced above goes on to state:

> On-site facilities shall be provided which accommodate safe and convenient pedestrian and bicycle access from within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half mile of the development. Single-family residential developments shall generally include streets and accessways. Pedestrian circulation through parking lots should generally be provided in the form of accessways.

The TPR also states that local jurisdictions should establish their own standards or criteria for providing streets and accessways consistent with the intent stated above. This may be accomplished through standards for spacing of streets or accessways, and standards for excessive out-of-direction travel. The TPR defines 'safe and convenient' access as being:

- Reasonably free from hazards
- Meeting the needs of cyclists and pedestrians, considering destination and length of trip

Metro Requirements

Metro Requirements

~~The Metro Council adopted~~ a new ~~the Urban Growth Management Functional Plan (UGMFP) in 20101996. Functional plans are an important regional policy tool that may contain both recommendations and requirements for changes in local comprehensive plans. The UGMFP contains specific requirements for street connectivity in Title 6: Regional Accessibilit~~

~~This title has subsequently been superceded by the Regional Transportation Plan (RTP), which the Metro Council adopted on August 10, 2000.~~

The Regional Transportation Function Plan (RTFP), adopted in 2010 (Ordinance 10-1241B) and updated in 2012 ~~RTP~~ requires jurisdictions to implement two types of street plans:

1. Conceptual street plans that:

Map contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development
Identify appropriate connections to adjacent areas

- Demonstrate opportunities to extend and connect to existing streets, provide direct public right-of-way routes, and limit the potential of cul-de-sac and other closed-end street designs

Metro Requirements Continued

2. A street map for new residential or mixed-use development that will require construction of a new street(s) that:

   - Responds to and expands on the conceptual street plan map
   - Provides for street connections no further apart than 530 feet, except where prevented by barriers such as topography, railroads, freeways, pre-existing development, or water features where regulations do not allow construction of or prescribe different standards for streets
   - Provides bicycle and/or pedestrian connections when full street connections are not possible, no further apart than 330 feet, except where prevented by barriers as noted above
   - Limits the use of cul-de-sac or closed street systems
   - Includes street cross-sections

~~Conceptual street plans must be adopted as part of local jurisdictions' comprehensive plans. Policy 11.11, Street Plans, in Goal 11B (Chapter 2 of the TSP) includes the objective and map for each master street plan.~~

Commentary

Areas Meeting Connectivity Requirements

Existing Master Street Plans

Southwest and Far Southeast

Areas Meeting Connectivity Requirements

Many areas of Portland meet the RTP connectivity standards or are not required to have master street plans. The district maps in Chapter 2 of the TSP (Maps 11.11.9-11.11.16) show these areas. Areas not required to meet connectivity standards include industrial sanctuaries, open space, and protected environmental areas. In Portland these are areas zoned IG1, IG2, IH, OS, and p.

Existing Master Street Plans

Southwest and Far Southeast

The City completed master street plans for the Southwest and Far Southeast transportation districts in June 2001. These two master street plans satisfy the State and regional requirements to identify the location and type of new local street connections. The methodology and criteria used to develop the plans are described briefly below. The SW and Far SE Master Street Plan – Final Report and Recommendations contains quarter-section level maps and tables that detail the recommended connections. The report identifies three objectives to be met:

- Reduce the uncertainty in the development review process regarding when and where new street connections will be an issue.
- Provide for better coordination of the local street system development.
- Comply with the mandates of the State Transportation Planning Rule and Regional Transportation Plan for street connectivity.

The Southwest and Far Southeast master street plans were developed through a number of steps, with mapping associated with each step:

Commentary

Southwest and Far Southeast Master Street plan steps

Step One

- Define blocks in the study area that meet the spacing standard.
- Define areas being excluded (areas where streets are complete or underway; parcels zoned as park, open space, or industrial; religious or educational institutions).

Step Two

- Define remaining areas that have development or redevelopment potential (land value greater than improvement value; different Comprehensive Plan and zoning designations; two-acre or larger parcels).
- Define development constraints (street spacing not met, but parcels don't meet development potential).

Step Three

- Define blocks with barriers to connectivity (environmentally constrained).

Step Four

- Group the remaining areas into focus areas.

Step Five

- Define locations of new connections.
- Determine specificity of connections – specific points or along a block face).
- Apply type of connection – street or pedestrian/bicycle.

The plan's recommendations include information about the location, level of alignment specificity, type of connection, barriers, presence of environmental zones, traffic impacts, field notes, and comments from the public or technical staff.

While the master street plans identify a number of future connections, the absence of a connection does not mean a connection is not needed or feasible. All areas within the study areas are still subject to relevant policy and spacing standards.

Commentary

Area-Specific Master Street Plans:

- Maps included on the following Proposed Amendment pages are new to the TSP. Previously adopted maps are within the existing TSP.

Areas Not Covered by Master Street Plans

Area-Specific Master Street Plans

Street plans have been completed, but not adopted into the Comprehensive Plan, for other areas of the City over the past several years. Although they are not specifically intended to meet the

State and regional requirements, they do function as master street plans. These plans cover the following areas:

- Gateway Regional Center
- Airport Way (Columbia Corridor)
- Bridgeton (Northeast district adjacent to Marine Drive)
- South Portland (west end of the Ross Island Bridge)
- South Waterfront ~~North Macadam~~ (Central City)
- River District (Central City)
- Cully Local Street Plan
- Division-Midway Neighborhood Street Plan
- Tryon-Stephens Headwaters Neighborhood Street Plan

Each plan or study is summarized below, along with maps derived from the original documents. ~~The street plans are included under Policy 11.11 as part of the City's Comprehensive Plan. The maps have been modified for inclusion in Chapter 2, Goal 11B, of the TSP.~~

Areas Not Covered by Master Street Plans

Master Street plans have not been completed for all or parts of the North, Northeast, Far Northeast, Southeast, Northwest, and Central City districts. Other areas were excluded from the Southwest and Far Southeast Master Street Plans: the east light rail corridor (102nd to the city limits, NE Glisan to SE Stark), the Hillsdale town center, and the West Portland town center. Master Street plans for these areas will be completed as refinement plans of the TSP. Until such plans are completed, the location and implementation of new street and pedestrian/bicycle connections will be governed by Title 17: Public Improvements, and Title 33: Planning and Zoning, requirements in City Code. Title 17 regulations govern developing or redeveloping sites that do not include a land division, and Title 33 regulations govern developing or redeveloping sites that do include a land division. The spacing standards in each title are 530 feet for full street connections and 330 feet for pedestrian/bicycle connections where full street connections are not feasible.
~~Policy 11.11, Street Plans, in Chapter 2 of the TSP contains maps of the areas where master street plans have not yet been completed. Master street plans are not required for any parts of these areas that meet the connectivity standards.~~

SOUTH WATERFRONT DISTRICT STREET PLAN, CRITERIA AND STANDARDS

South Waterfront plan and development plan updated and adopted in 2009.

SOUTH WATERFRONT DISTRICT STREET PLAN, CRITERIA AND STANDARDS

Background

In 1996, the Portland City Council accepted the City Engineer's Report titled North Macadam District Street Plan, which identified and classified a street system for the North Macadam District. On January 20, 2003, City Council adopted amendments to the Central City Plan and updated the District's special design guidelines and the zoning code. At the same time, City Council changed the North Macadam District name to South Waterfront District (the District). By authority of the City Engineer under Title 17 City Code, the South Waterfront Street Plan, Criteria and Standards was amended in 2007 providing updated design criteria and standard details for the District's public rights-of-way. The 2009 document update amends the North District (the area south of Sheridan St and north of Gibbs St) rights-of-way alignment and standards to accommodate future light rail and property development, as well as expanded streetcar service and bicycle and pedestrian infrastructure.

The South Waterfront District of the Central City of Portland lies along the Willamette River and south of downtown. The district boundaries are the River, Interstate 5, the Marquam Bridge and SW Hamilton Court. Adopted City policy envisions this as a mixed-use neighborhood with significant residential development along the River and commercial development focused along transit corridors. With just over one mile of River frontage the District contains approximately 140 acres. Some land is developed or being developed and some land is vacant land or has redevelopment potential.

The primary development constraint in the District is transportation access to and from regional highway and transit systems. The South Waterfront Plan of January 20, 2003 includes a vision, policies and an Urban Design Plan that promotes high density housing and commercial development with a full range of businesses that contribute to the region's job growth. The vision also includes frequent public connections to the river, limiting the size and amount of surface parking lots, and integrating development and services.

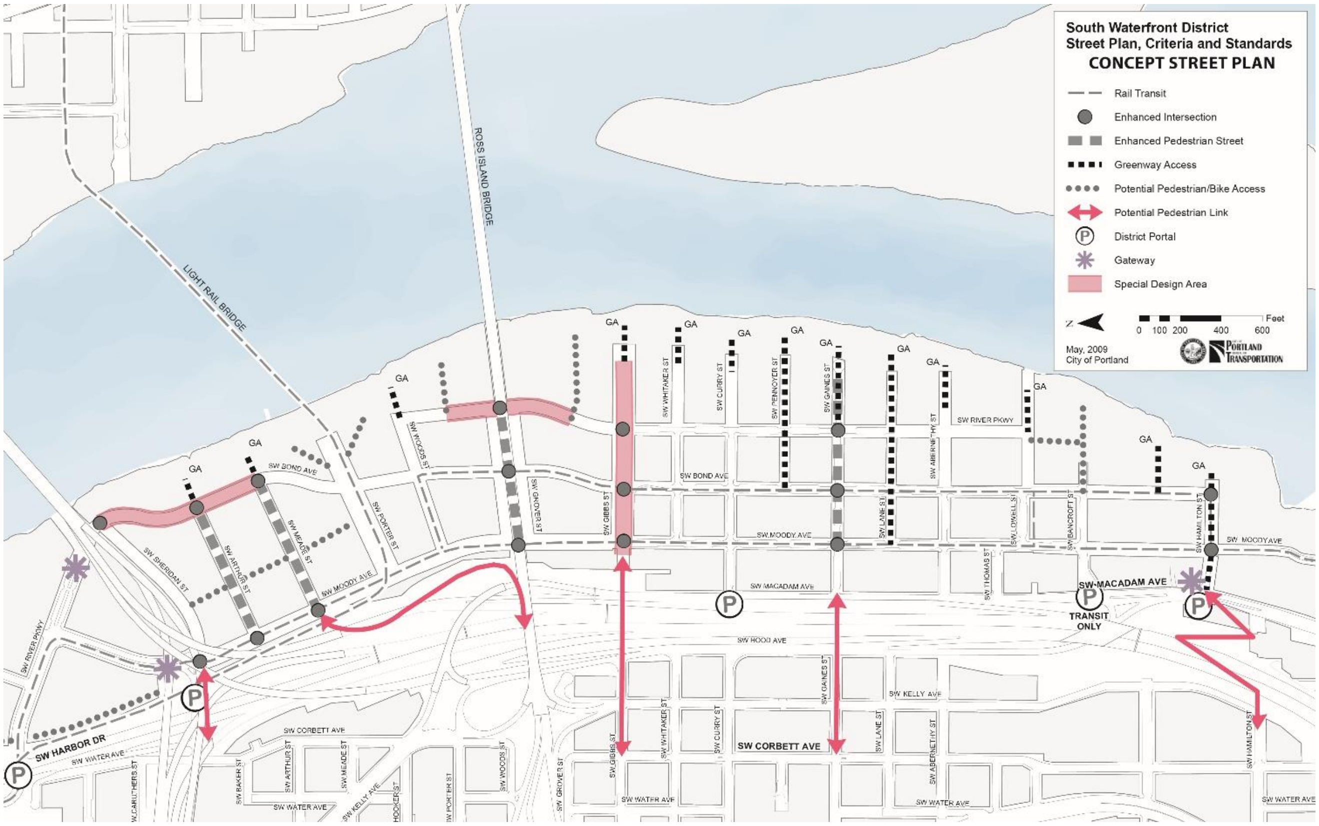
Commentary

SOUTH WATERFRONT DISTRICT STREET PLAN MAP

A new design standard for maps in the TSP is being developed. All maps will be redesigned for continuity throughout the TSP, including the Master Street Plan maps.

As of September 2015 PDC and PBOT are working together on refinements to the South Waterfront street plan, specifically around the location and deign of portions of SW Bond Avenue that has not been developed yet.

Since the adoption of the plan a number of infrastructure improvements such as parks and roads have been implemented that could alter the map. During this stage of the update the map as adopted in 2009 will stay in the document as is. Future updates will reflect current/updated street grid and infrastructure improvements.


South Waterfront District
Street Plan, Criteria and Standards
CONCEPT STREET PLAN
Rail Transit
Enhanced Intersection
Enhanced Pedestrian Street
Greenway Access
Potential Pedestrian/Bike Access
Potential Pedestrian Link
District Portal
Gateway
Special Design Area
N
0 100 200 400 600 Feet
May, 2009
City of Portland
Portland Transportation
ROSS ISLAND BRIDGE
LIGHT RAIL BRIDGE
SW MACADAM AVE
SW CORBETT AVE
SW HARBOR DR
TRANSIT ONLY
SW MOODY AVE
SW BOND AVE
SW RIVER PKWY
SW HOOD AVE
SW KELLY AVE
SW WATER AVE

SOUTH WATERFRONT DISTRICT STREET PLAN CONTINUED

In 1998 the North Macadam District Street Design Standards and Criteria Plan: Transportation Report considered and analyzed South Waterfront's limited access and adjacency to I-5 and Ross Island Bridge ramps. The analysis included the three district portal intersections: River Parkway and Harbor Drive (north), Curry and Macadam (center) and Bancroft and Macadam (south). The analysis was based on the District's 20-year goals for accommodating 10,000 jobs and 3,000 housing units and a 30 percent mode split. The housing goal has since been increased to 5,000 units.

Conclusions were:

- Bancroft and Macadam portal improvements would accommodate traffic growth and transit access at acceptable levels of service. South Waterfront (North Macadam District) became part of the Central City in 1988.

- Moving the central portal from Gibbs to Curry and improving the Curry and Macadam intersection would better accommodate traffic operation, growth and access from I-5 to the District.

- As the District's growth nears 10,000 jobs and 5,000 housing units, portal access will degrade and as a result function at a marginally acceptable level.

- River Parkway and Harbor Drive would operate at acceptable levels although backups on I-5 and Naito Parkway could interfere with operations on a more frequent basis in the future.

The 1998 transportation analysis demonstrated that while the District will experience increased congestion over time, the portal capacity with the identified portal improvements and increased transit service should continue to provide acceptable levels of service to the District and the regional transportation system.

Since the 1998 report, plans for portal improvements have been altered. Through the South Portal Study, conducted in 2006, the recommended south portal shifted south to Hamilton St and Macadam. In addition, the planned central portal improvements at Curry have been scaled back and north portal improvements at River Parkway and Harbor Drive have been added. In fact, in 2009 the Portland Bureau of Transportation updated the technical analysis through the North Macadam Transportation Development Strategy (resolution no. 36696 adopted April 8, 2009). The report identified multi-modal project priorities and a funding strategy to guide project implementation necessary to support continued development of the urban renewal area, including portal improvements.

SOUTH WATERFRONT DISTRICT STREET PLAN CONTINUED

The 2007 update of the South Waterfront District Street Plan, Criteria and Standards primarily responded to development in the Central District and completion of infrastructure projects, including the Portland Streetcar extension to Lowell St and the Portland Aerial Tram to Oregon Health Sciences University. Transportation studies, such as the 2004 South Waterfront District Transportation Improvements Evaluation and 2006 South Portal Study had also been completed. Major updates included changes to the street lighting design standards, certain street furniture standards, and the modification of the street plan based on the recommendations of the South Portal Study and the new Greenstreet Policy (resolution no. 36500 adopted in April of 2007). Other changes included modest refinements to various street dimensional standards developed through preliminary engineering and construction of these streets and to refinements of various performance criteria. Overview South Waterfront

2009 Update
Since the 2007 update, the City of Portland has endorsed the locally Preferred Alternative (LPA) for the Portland to Milwaukie Light Rail alignment. This alignment extended light rail south into the North District and include bus service and streetcar utilizing the same alignment. In addition, the OHSU Schnitzer Campus master plan and the North Macadam Transportation Development Strategy report, with a prioritized list of multi-modal projects and a funding strategy, have been completed. These activities generated the need to refine and update various elements of the Street Plan. Major updates include changes to the street alignments and designations in the Concept Street Plan Map, updates of some street widths in the Right-of-WayWidth Map changes to street descriptions in the Street Classification and Function Table, and adjustments to the Standard Street Sections.

Specific changes made to the Concept Street Plan map are as follows:

- Bond Ave extends north through the District.
- Bond Ave is one-way northbound through the District.
- Moody Ave is one-way southbound for vehicular traffic through the District; and one-way southbound for streetcar south of Woods St.
- Moody Ave remains two-way streetcar north of Woods St.
- Moody Ave includes a two-way bike path along the west-side to minimize bike/streetcar interactions.
- The grades of Moody Ave and Porter St are raised to a level consistent with the Willamette River Crossing Partnership findings necessary for light rail.
- Porter St carries light rail, streetcar and bus in two directions only; private vehicles are not accommodated on this street.
- River Pkwy (south of the Marquam Bridge) terminates at Woods St.
- Alignments are adjusted for local east-west streets north of Gibbs St.
- "Special Design Area" beneath the Ross Island Bridge has been relocated to reflect the location of the potential active-use park. Grover St is aligned on either side of the Ross Island Bridge.

SOUTH WATERFRONT DISTRICT STREET PLAN CONTINUED
North Macadam Street Plan deleted and replaced by South Waterfront District Street Plan

~~The North Macadam Street Plan was developed by the Portland Office of Transportation (PDOT) and accepted by City Council as part of the City Engineer's report on November 12, 1996 (see North Macadam District Planning, Chapter 12). Planning efforts continued to refine regulations and guidelines developed for North Macadam. On November 13, 2002, City Council passed Resolution 36111 and Ordinance 177082 adopted the South Waterfront (previously North Macadam) Plan, Zoning Code, and Design Guidelines.~~

~~As part of Council's adopting actions, the Office of Transportation was directed to~~

> ~~work with Environmental Service, Planning, Portland Development Commission and other relevant agencies to update the Street Plan for North Macadam, including updates to the Transportation Element of the Comprehensive Plan, the street plan maps, street standards and street plan principles, to be consistent with the policies and Transportation Concept of the North Macadam Plan, and return to City Council for review and acceptance no later than January 20, 2003.~~

~~On February 26, 2003, PDOT issued an "Interim South Waterfront Street Plan" to address the immediate need of an updated street plan with the acknowledgement that additional work was needed to address street standard details, allow for community review, and solicit advice from the Design Commission.~~

~~In response to the Portland-Milwaukee Light Rail Project, the re-aligment of Water Avenue, the Clinton the the River Project and the North Macadam Transportation Development Strategy, a revised South Waterfront District Street Plan was adopted in November 2009 by Resolution 36753. The new plan and revsioins to projects were adopted by Ordiance 185208 in 2011.~~

SOUTH WATERFRONT DISTRICT STREET PLAN CONTINUED
North Macadam Street Plan deleted and replaced by South Waterfront District Street Plan

~~Street Plan, Criteria and Standards~~

~~The South Waterfront District Street Plan, Criteria and Standards document was accepted by City Council on October 29, 2003. The document includes a Right-of-Way plan that focuses on the Willamette River, land use and open space network. It creates a balanced multimodal transportation system with east/west streets providing pedestrian circulation and service access while north/south streets provide transit, pedestrian, bike and vehicular mobility within the district. East/west streets are comprised of local and enhanced pedestrian streets that are regularly spaced and provide convenient access from north/south streets to businesses and residences.~~

~~Frequently spaced Enhanced Pedestrian Streets provide additional sidewalk widths and pedestrian-scale street lighting. East/west streets also extend to the river through green accessways to provide connectivity throughout the district.~~

~~The document also includes street plan principles, such as block sizes of no less than 200 feet and no greater than 500 feet, to promote a walkable and accessible pedestrian environment. The block system will also provide an opportunity to appropriately distribute traffic throughout the District consistent with new street classifications~~.

~~Street Classifications~~

~~The South Waterfront District Street Plan, Criteria and Standards document includes new street classifications for many of the existing and new streets in the District. All streets are classified based on the seven different street classifications in the Transportation Element of the Comprehensive Plan. Enhanced Pedestrian Streets and Green Accessways describe the look of certain streets rather than their function. The streets also have a classification within the Pedestrian classification system of the Transportation Element of the Comprehensive Plan.~~

Commentary

GATEWAY REGIONAL CENTER STREET PLAN

Working with PDC the Gateway Master Street Plan was updated in the Central area in 2009. It was adopted by Ordinance which made the changes binding. The TSP document has not been updated since 2007. The new language and the map reflect the adopted Central Gateway Street Plan.

Although the Gateway Master Street Plan was updated through a public process, it has been difficult to get new streets in the district. PDC is working with City bureaus on an Action Plan in Gateway to help address some of these issues.

GATEWAY REGIONAL CENTER STREET PLAN

Background

The 2040 Growth Concept identifies the Gateway regional center as the only regional center in Portland. Planning for Gateway began with the Outer Southeast Community Plan and continued with the Opportunity Gateway Concept Plan and Redevelopment Strategy. City Council accepted Opportunity Gateway in February 2000 (Resolution No. 35867). The Outer Southeast Community Plan resulted in a plan district and transit-supportive zoning

The Central Gateway portion of the Gateway District Master Street Plan was amended in 2009. This amendment was based on a recommendation in the Central Gateway Redevelopment Strategy, which was adopted by the Portland Development Commission in August 2007. The Central Gateway Redevelopment Strategy concluded that the street plan for Central Gateway should be updated, with the goal of increasing connectivity in Central Gateway, providing greater certainty to developers about street requirements and opening up parcels to redevelopment.

Street Connectivity

A discontinuous network of streets and sidewalks, high volumes of through-traffic, and underutilized property characterize Gateway regional center. Access to the transit stations in Gateway's northwest corner and at 102nd and Burnside is problematic. Discontinuous streets discourage walking and bicycling, resulting in significant out-of-direction travel for all modes.

Increasing street connectivity would disperse trips among many alternate routes, thereby reducing congestion, shortening trip lengths, and increasing the mode split for alternatives to the automobile.

GATEWAY REGIONAL CENTER STREET PLAN CONTINUED

Concept Plan Map

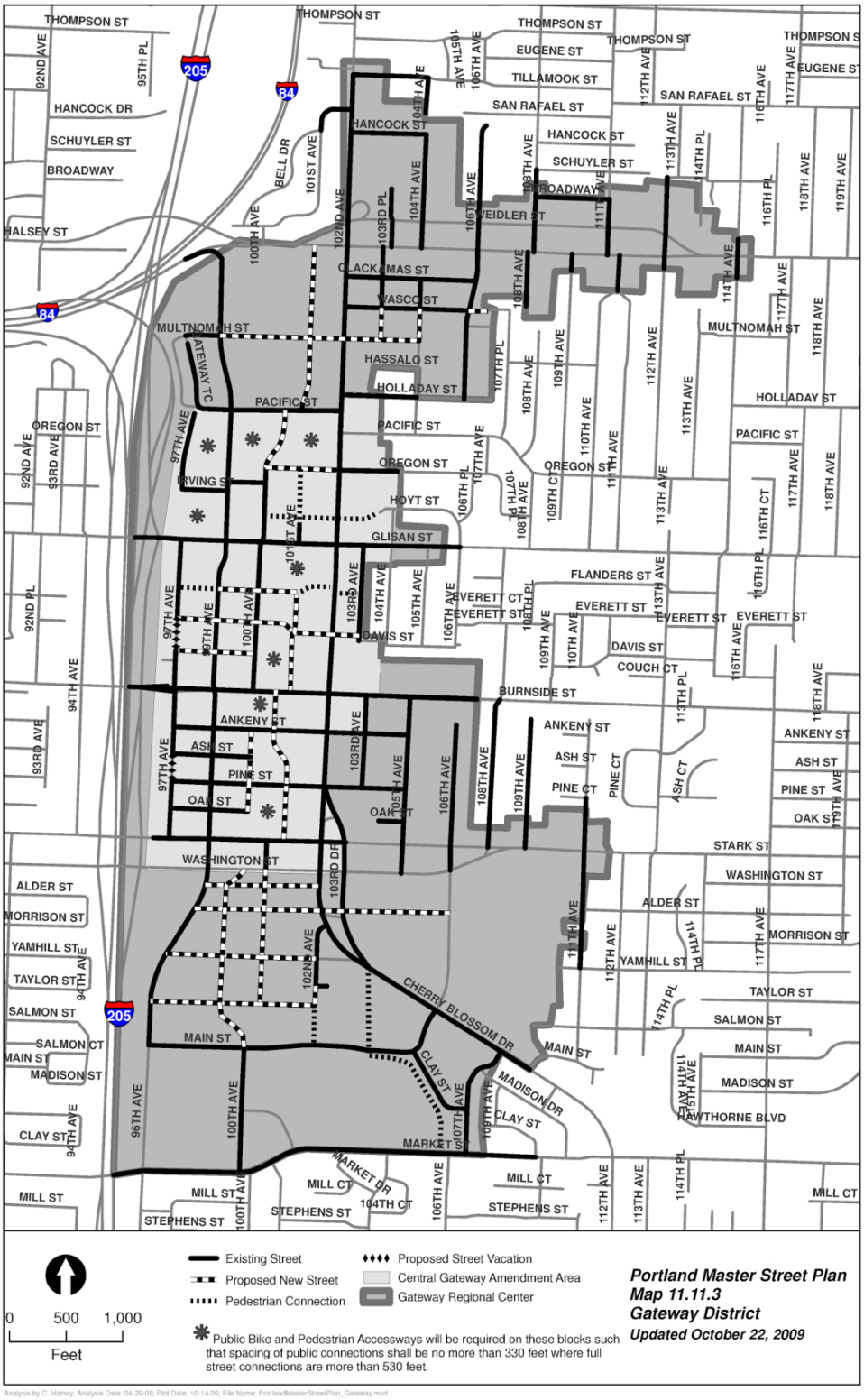
The Opportunity Gateway Concept Plan and Redevelopment Strategy is intended to serve as the 'appropriate vision' for the redevelopment of Gateway as a regional center. The concept plan map is a picture of the regional center's redevelopment potential and build-out in 2019. While the plan map affixes buildings and parks to specific locations, the reality is that new construction will appear somewhat differently. While new streets and connections are identified, they are also subject to change to respond to development opportunities. The Opportunity Gateway report states: "It is rigid enough to be a statement of what is and is not desirable in the Regional Center, and flexible enough to be useful even as redevelopment circumstances change." The map graphically depicts the vision described in the report.

The concept plan map calls for a traditional block configuration, which will help unify the regional center's character. Some of the proposed new connections would greatly change existing circulation patterns. Northeast Multnomah between Fred Meyer's and Mervyn's at the Gateway Shopping Center is shown as a fully functional street, intended to help disperse traffic associated with the transit center. In the southern part of the regional center, several new public streets are shown in the Mall 205 and Plaza 205 properties, breaking up what are now large expanses of parking. Pedestrian pathways connect important routes and destinations where full streets are not possible or appropriate, such as between SE 105th and the Adventist Medical Center.

As the major north-south arterial, 102nd Avenue is the spine of the district and is targeted for improvements for all modes. Changes to 99th Avenue would allow it to act as an additional north-south carrier, improving access for development projects and creating a new local identity the length of the district. Major east-west streets (Stark/Washington, Halsey/Weidler, Burnside, and Glisan) will continue to carry significant volumes of through-traffic. Better local north-south street connections will link the two main large shopping areas together, and improved connectivity will be provided within each of these shopping areas.

GATEWAY REGIONAL CENTER STREET PLAN CONTINUED

A new design standard for maps in the TSP is being developed. All maps will redesigned for continuity throughout the TSP, including the Master Street Plan maps.


THOMPSON ST
HANCOCK DR
SCHUYLER ST
BROADWAY
HALSEY ST
MULTNOMAH ST
HASSALO ST
HOLLADAY ST
PACIFIC ST
OREGON ST
IRVING ST
HOYT ST
GLISAN ST
FLANDERS ST
EVERETT ST
EVERETT CT
DAVIS ST
COUCH CT
BURNSIDE ST
ANKENY ST
ASH ST
PINE ST
OAK ST
STARK ST
WASHINGTON ST
ALDER ST
MORRISON ST
YAMHILL ST
TAYLOR ST
SALMON ST
MAIN ST
MADISON ST
CLAY ST
MARKET
MILL ST
MILL CT
STEPHENS ST
CHERRY BLOSSOM DR
MADISON DR
MARKET DR
HAWTHORNE BLVD
Existing Street
Proposed New Street
Pedestrian Connection
Proposed Street Vacation
Central Gateway Amendment Area
Gateway Regional Center
Public Bike and Pedestrian Accessways will be required on these blocks such that spacing of public connections shall be no more than 330 feet where full street connections are more than 530 feet.
0 500 1,000
Feet
Portland Master Street Plan
Map 11.11.3
Gateway District
Updated October 22, 2009

GATEWAY REGIONAL CENTER STREET PLAN CONTINUED

Central Gateway Street Plan 2009

The Central Gateway Master Street Plan revision was developed to provide flexibility for connections while maintaining larger parcels for redevelopment, recognizing existing parcel lines, provide connections on the local network without altering the district or neighborhood collectors and to foster redevelopment in the City's only regional Center. Criteria was established for consideration in the proposed plan. Other goals of the plan included aligning streets on parcel boundaries for shared investment in right-of-way improvements; consider common or multiple parcel ownership; minimize parcel impacts and maintain reminder parcels; preserve some large parcels or contiguous ownership parcels; discourage cut-through traffic while providing access; discourage off-set intersections; consider potential spacing of crosswalks or signals.

With these criteria and goals, a revised street plan for Central Gateway was developed. The revised street plan provided needed multi-modal connections within the Central Gateway area without changing the function of the major traffic streets and collectors surrounding the area, such as 102nd Ave., Glisan, Burnside, and Stark.

Characteristics of the revised street plan:
East-west connections between 97th Ave. and 102nd Ave. on Flanders St. and Davis St. North-south connection on 100th Ave. between Oak St. and Burnside and also between Oregon St. and Pacific St.

North–south connection on 101st Ave. between Stark St. and approximately Flanders St., improving multi-modal access to the light-rail station on 102nd and Burnside.
Internal connection on Oregon St. approximately Hoyt St., Coach St., and 101st Ave.

Vacating portions of 97th Ave. to allow developable parcels near I-205. This would continue to allow multi-modal access to the parcels.

Maintaining existing large parcels for development and redevelopment while also providing public bicycle and pedestrian access ways. Large parcels would have the option to have public bike and pedestrian access ways on the site rather than full streets, as was required in the prior master street plan. Public bike and pedestrian access ways will be required on certain blocks such that spacing of public connections shall be no more than 330 feet where full street connections are more than 530 feet. Additionally, pedestrian connections would be required throughout Central Gateway.

Because large parcels were maintained for development and redevelopment, the revised street plan does not include some of the proposed streets that were in the previous in the street plan for the Gateway District. These include:

GATEWAY REGIONAL CENTER STREET PLAN CONTINUED

Extension of Oregon St. between 97th Ave. and 98th Ave. However, the revised street plan proposes to keep the Irving St. alignment as existing between 97th Ave. and 100th Ave., whereas the prior plan showed this segment as vacated.

Full street connection of Hoyt St. between 97th Ave. and 104th Ave.

Full street connection of roughly the Davis St. alignment between 97th Ave. and 103rd Ave. The revised street plan proposes that some portions of the alignment would be full street while other portions would be pedestrian connection.

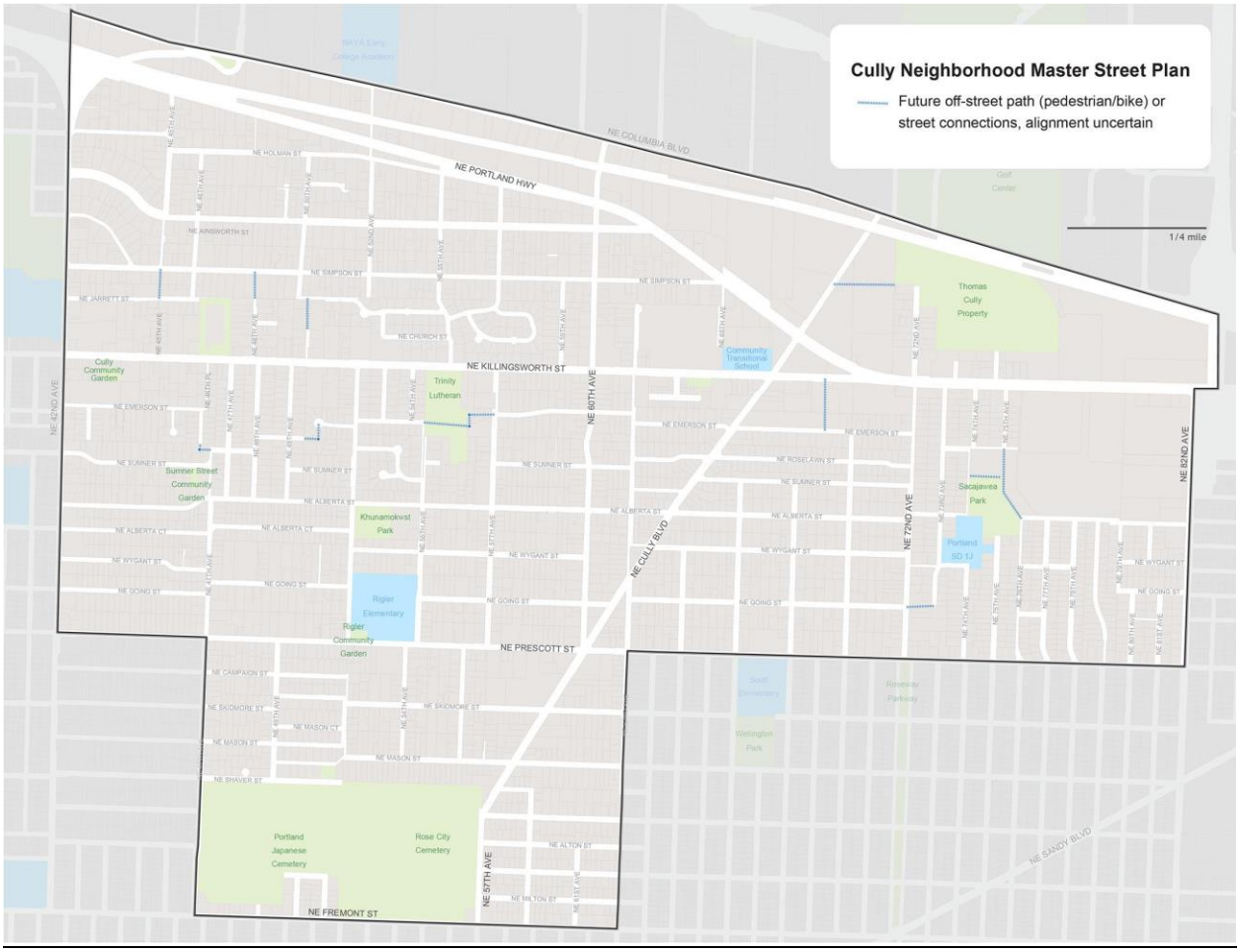
Extension of 101st Ave. between Washington St. and Pacific St. The revised street plan proposes a mix of full streets and pedestrian connections on some portions of the 101st Ave. alignment. Other portions of the alignment would not have connections. Unlike as in the prior plan, the revised street plan does not intend for 10st Ave. to become a neighborhood collector. Rather, 99th Ave. would be a through street, with 100th Ave. also providing significant connectivity.)
Extension of 100th Ave. between Oak St. and Washington St. (The revised street plan does not include any connectivity at this location. Vehicles, pedestrians, and bicycles could access the area from connections at 97th Ave., and 101st.

Commentary

Cully Neighborhood Local Street Plan (2012)
A new design standard for maps in the TSP is being developed. All maps will redesigned for continuity throughout the TSP, including the Master Street Plan maps.

Cully Neighborhood Local Street Plan (2012)

The Cully Commercial Corridor and Local Street Plan was adopted by Resolution 36952 in August 2012. Its development was funded by a Transportation Growth Management Grant from the Oregon Department of Transportation. Its recommendations were also influenced by the Portland Plan (April 2012) which had recommendations related to alternative right of way improvements, developing new options for unimproved rights-of-way and accelerating the creation of safe pedestrian connections. The Cully Neighborhood Local Street Plan identified new street or pedestrian/bicycle connections to improve street connectivity and address gaps in transportation networks.



FAR SOUTHEAST PORTLAND MASTER STREET PLAN

FAR SOUTHEAST PORTLAND MASTER STREET PLAN

Study Area

The Far Southeast Portland Master Street Plan includes nearly all of the Far Southeast Transportation District, from I-205 east to the City limit, and from Burnside south to the City limits. Some portions of this area are excluded from the plan: the Gateway regional center because a street plan already exists, and Burnside light rail station areas (102nd to 162nd, NE Glisan to SE Stark), where master street plans will be completed as part of TSP refinement plans.

Land Use

The Far Southeast is predominantly in residential use, with interspersed commercial/retail uses. Commercial/retail uses are located in strip commercial development along arterials such as 122nd and Division or in malls such as Mall 205 or the San Rafael Shopping Center. Institutions, such as colleges, hospitals, and schools, can create barriers, but offer limited opportunities for street connections. Cemeteries and parks also occupy significant tracts of land in the district. There are only a few pockets of industrial uses, principally near the Lents town center.

Zoning

The Far Southeast Master Street Plan Study area includes virtually all of the various City commercial zones, except some designed specifically for the Central City. The area includes nearly all the residential zones, excluding only the most dense zones. The employment and industrial zoning currently in place is confined primarily to the southern edge of the district. Significant tracts of open space zoning exist, with Powell Butte the largest. Environmental overlays are applied to areas with steep slopes and near streams and wetland areas, principally in the southeast portion of the district.

FAR SOUTHEAST PORTLAND MASTER STREET PLAN CONTINUED

2040 Focus Areas - deleted

Area Character

Terrain and the density of development largely determine the area's character. Some less developed areas display a rural appearance, with open fields and large out-buildings. The majority of the district has a more suburban appearance, with large tracts of single-dwelling homes on medium to large lots. Some areas display a more urban character, with smaller lots and buildings closer to the street. Steep slopes with numerous streams and gullies are located in the southern portion of the area, along Johnson Creek and in Pleasant Valley.

Long-term county stewardship, along with recent population growth, has resulted in relatively few public streets in some areas, and large redevelopable parcels of land. Many of the area's local service streets and collectors are not fully improved. The lack of sidewalks results in a street system that is not particularly pedestrian friendly. The lack of public streets contributes significantly to out-of-direction travel patterns, and very wide major arterials carry many local trips as well as through-trips.

Issues and Constraints

Barriers (such as terrain, streams, and existing development) will continue to limit a connected street system, including bicycle/pedestrian accessways, in Far Southeast Portland. With expected increases in the number of households and dwelling units in the area, however, completion of the local street system will be needed even more to provide multimodal access to areas of new development and from those areas to neighborhood activity centers, transit, and arterials.

~~*2040 Focus Areas*~~

~~The regional 2040 Growth Concept identifies a number of design types in Far Southeast Portland: the Gateway regional center (including two light rail stations); the Lents town center; the light rail station communities at 122nd, 148th, and 162nd; and main street segments on Division and 122nd. The master street plan developed for Gateway through the Opportunity Gateway process is described later in this chapter. The vast majority of the area in the Lents town center east of I-205 meets connectivity standards or is in industrial zoning. A master street plan for the light rail corridor will be the subject of a refinement plan for the TSP. The main street areas are included in the Far Southeast District Master Street Plan.~~

Commentary

Outer Powell Blvd Conceptual Plan Design (2012)

Outer Powell Blvd Conceptual Plan Design (2012)

The City of Portland Bureau of Transportation, in coordination with the Oregon Department of Transportation (ODOT), developed a conceptual design plan for Outer SE Powell Blvd. from the I-205 to SE 174th Ave (city limits). This stretch of SE Powell Blvd is designated State Highway No. 26. Therefore, ODOT has jurisdiction along SE Powell Blvd.

The plan addressed the needs for Outer Powell Blvd in a 20-year time frame. The plan identified improvements and right-of-way width needs that will allow Outer SE Powell Blvd to serve vehicle traffic movement while also improving the safety, accessibility and the aesthetic environment for pedestrians, cyclists and transit riders. The Outer Powell Blvd Conceptual Plan Design was adopted by Resolution 36931 in February 2013.

A component of the plan was improving local connectivity around Powell Blvd. A Local Streets and Access-ways Report identified additional connections in the area.

Six types of connections were identified in the Local Streets and Accessways Report.

Separated In-Roadway Bicycle Facilities. Facilities that separate the bicycle travel lane from the motor vehicle lane with striping or a physical barrier. Examples are a standard bike lane, buffered bike lane, and cycle track.

Bicycle Boulevards/Advisory Bike Lanes. Facilities on low traffic volume streets where through movements of bicycles is given priority over motor vehicles Advisory bike lanes include dashed bike lane striping and single motor vehicle lane. Vehicles are allowed to enter bike lanes to pass each other.

Pedestrian and Bicycle Pathways. These facilities are outside of the roadway right-of way and fully separated from the roadway.

Street Connections. New local streets built to City standards. Sidewalks accommodate pedestrian travel and bike travel share the roadway with vehicles.

Pedestrian and Bicycle Crossings. Two types of crossings were identified. The first type is provided by the existing traffic signals. New signals were not recommended. The second crossing type is shown at generally desired locations between signalized intersections. Specific design treatments were not determined (e.g. pedestrian refuge island, HAWK signal, etc.)

Potential Street Realignment. Opportunities to realign existing streets through future redevelopment. The objective is to align intersections on opposite sides of Powell Boulevard to improve pedestrian crossings or access to transit stops.

Commentary

Division-Midway Neighborhood Street Plan

Tryon-Stephens Headwaters Neighborhood Street Plan

Division-Midway Neighborhood Street Plan

(Adopted by Resolution No. 37157 October 15, 2015)

The Portland Bureau of Transportation (PBOT), in partnership with the Portland Bureau of Planning and Sustainability and Oregon Department of Transportation (ODOT), developed the Division-Midway Neighborhood Street Plan. The Division-Midway Neighborhood Street Plan was developed to help improve local street and pathway connectivity in several East Portland neighborhoods. The project area is centered on SE Division Street, a designated "Main Street" in the Metro Region 2040 Growth Concept Plan and the study area was bounded by SE 112th Ave, SE 148th Ave, SE Stark and SE Holgate and includes portions of the Hazelwood, Mill Park, Centennial and Powellhurst Gilbert neighborhoods.

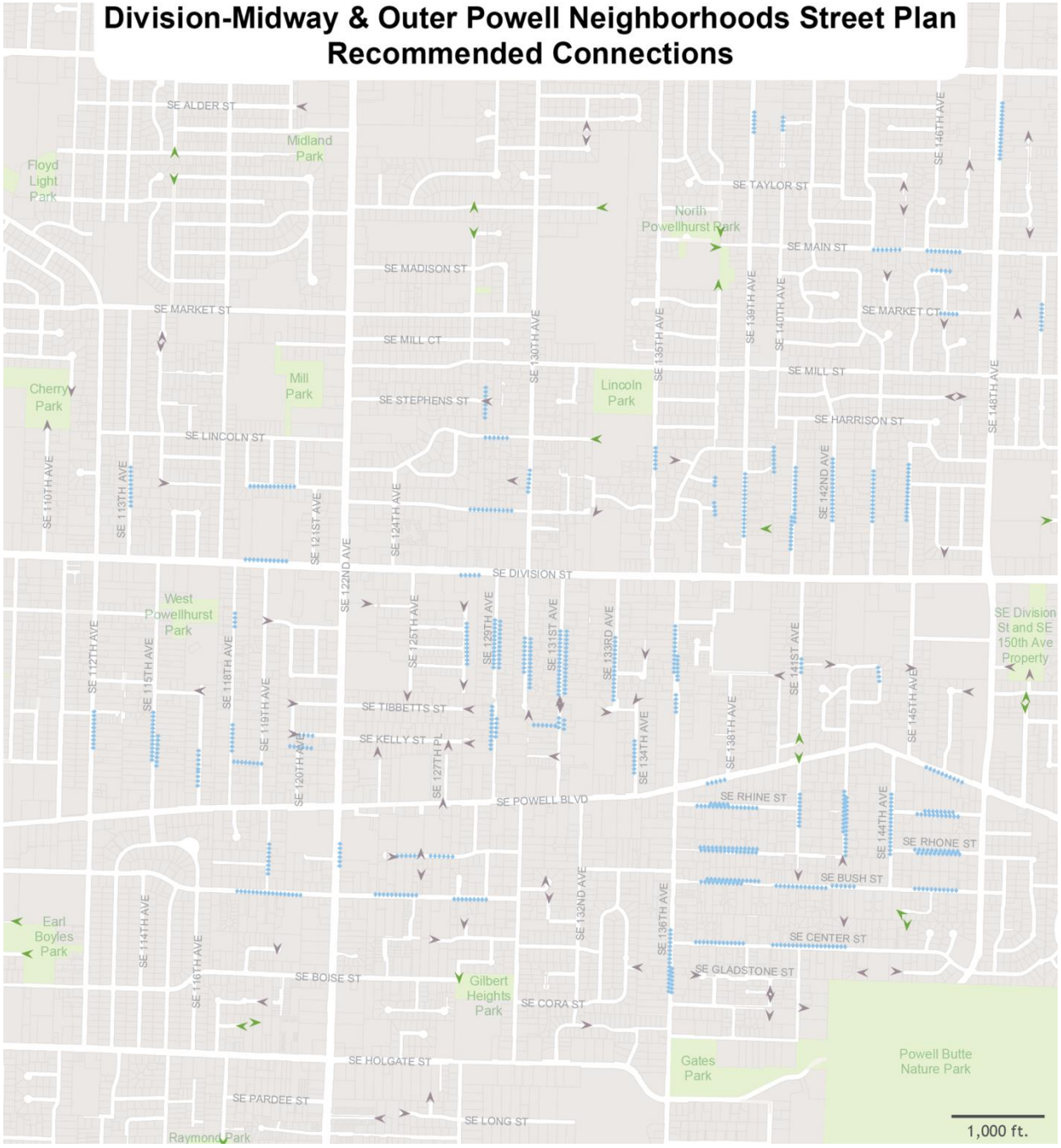
Goals and Objectives: The overall goal is to develop a Neighborhood Street Plan that can better increase street connectivity and multi-modal travel options within the project area. Objectives:

- Establish a more connected local street and path network
- Create safer walking and bicycling routes to neighborhood destinations, transit and the regionally designated SE Division Main Street
- Define the range of options for improving local streets, including use of Portland Street By Street design options.
- Inform future improvements to be built over-time by property owners, developers and the City.

The Street Plan identified implementation methods for introducing new street and pathway connections and options for improving deficient local streets. The plan recommended adding New Future Public Connections across Existing Private Property.

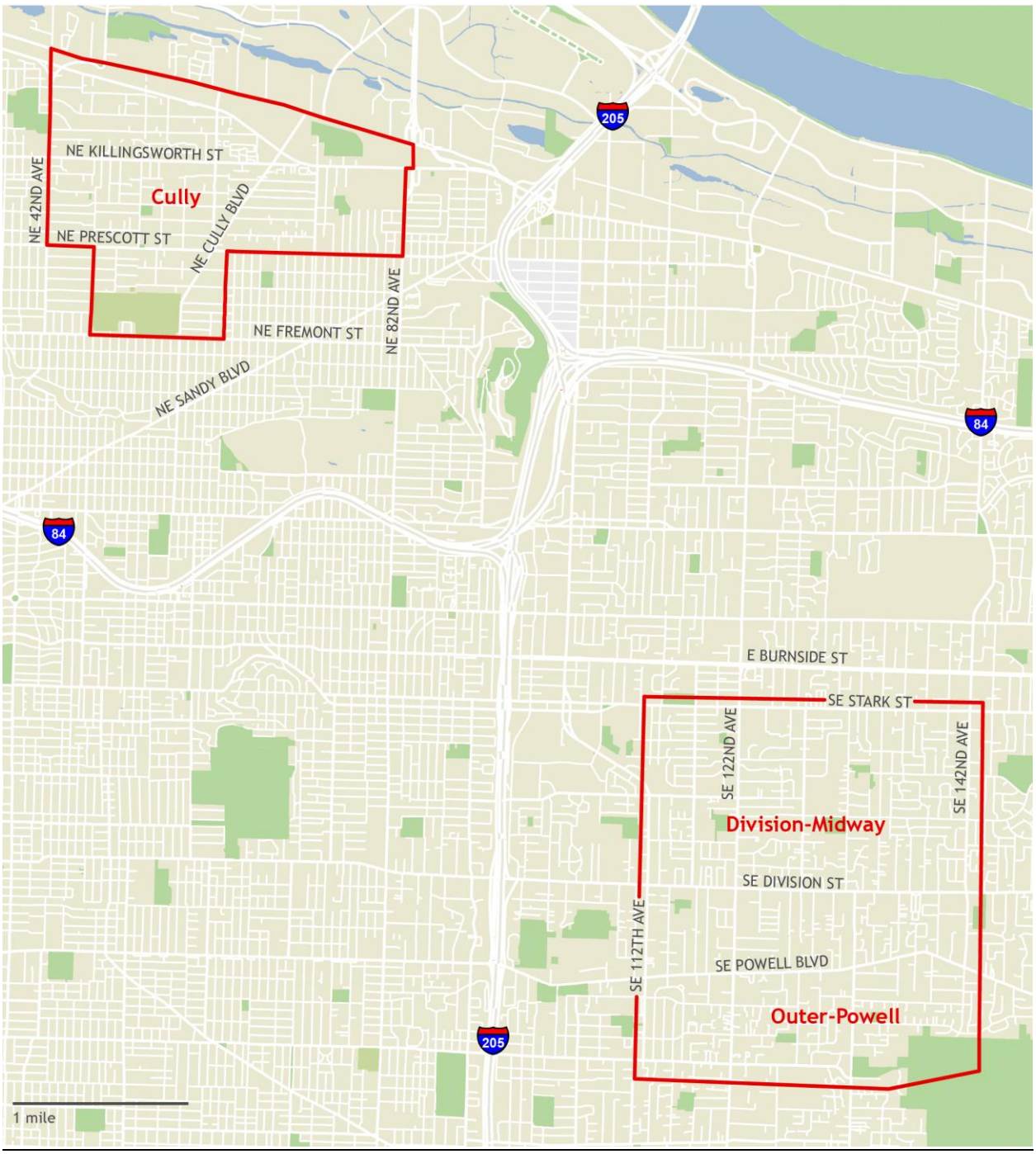
Commentary

A new design standard for maps in the TSP is being developed and all maps will redesigned for continuity throughout the TSP, including the Master Street Plan maps.


Division-Midway & Outer Powell Neighborhoods Street Plan
Recommended Connections
SE ALDER ST
Midland Park
Floyd Light Park
SE TAYLOR ST
North Powellhurst Park
SE MAIN ST
SE MADISON ST
SE MARKET ST
SE MARKET CT
SE MILL CT
SE MILL ST
Mill Park
Lincoln Park
Cherry Park
SE STEPHENS ST
SE HARRISON ST
SE LINCOLN ST
SE 110TH AVE
SE 113TH AVE
SE 121ST AVE
SE 122ND AVE
SE 124TH AVE
SE 130TH AVE
SE 135TH AVE
SE 139TH AVE
SE 140TH AVE
SE 142ND AVE
SE 146TH AVE
SE 148TH AVE
SE DIVISION ST
West Powellhurst Park
SE 112TH AVE
SE 115TH AVE
SE 118TH AVE
SE 119TH AVE
SE 120TH AVE
SE 125TH AVE
SE 129TH AVE
SE 131ST AVE
SE 133RD AVE
SE 141ST AVE
SE 145TH AVE
SE Division St and SE 150th Ave Property
SE TIBBETTS ST
SE KELLY ST
SE 127TH PL
SE 134TH AVE
SE 138TH AVE
SE POWELL BLVD
SE RHINE ST
SE 144TH AVE
SE RHONE ST
SE BUSH ST
SE 132ND AVE
SE 136TH AVE
Earl Boyles Park
SE 114TH AVE
SE 116TH AVE
SE CENTER ST
SE GLADSTONE ST
SE BOISE ST
Gilbert Heights Park
SE CORA ST
SE HOLGATE ST
Gates Park
Powell Butte Nature Park
SE PARDEE ST
SE LONG ST
Raymond Park
1,000 ft.

Commentary

A new design standard for maps in the TSP is being developed and all maps will redesigned for continuity throughout the TSP, including the Master Street Plan maps.


NE KILLINGSWORTH ST
NE 42ND AVE
Cully
NE PRESCOTT ST
NE CULLY BLVD
NE 82ND AVE
NE FREMONT ST
NE SANDY BLVD
205
84
84
E BURNSIDE ST
SE STARK ST
SE 122ND AVE
SE 142ND AVE
Division-Midway
SE DIVISION ST
SE 112TH AVE
SE POWELL BLVD
Outer-Powell
205
1 mile

Commentary

Tryon-Stephens Headwaters Neighborhood Street Plan (2015)

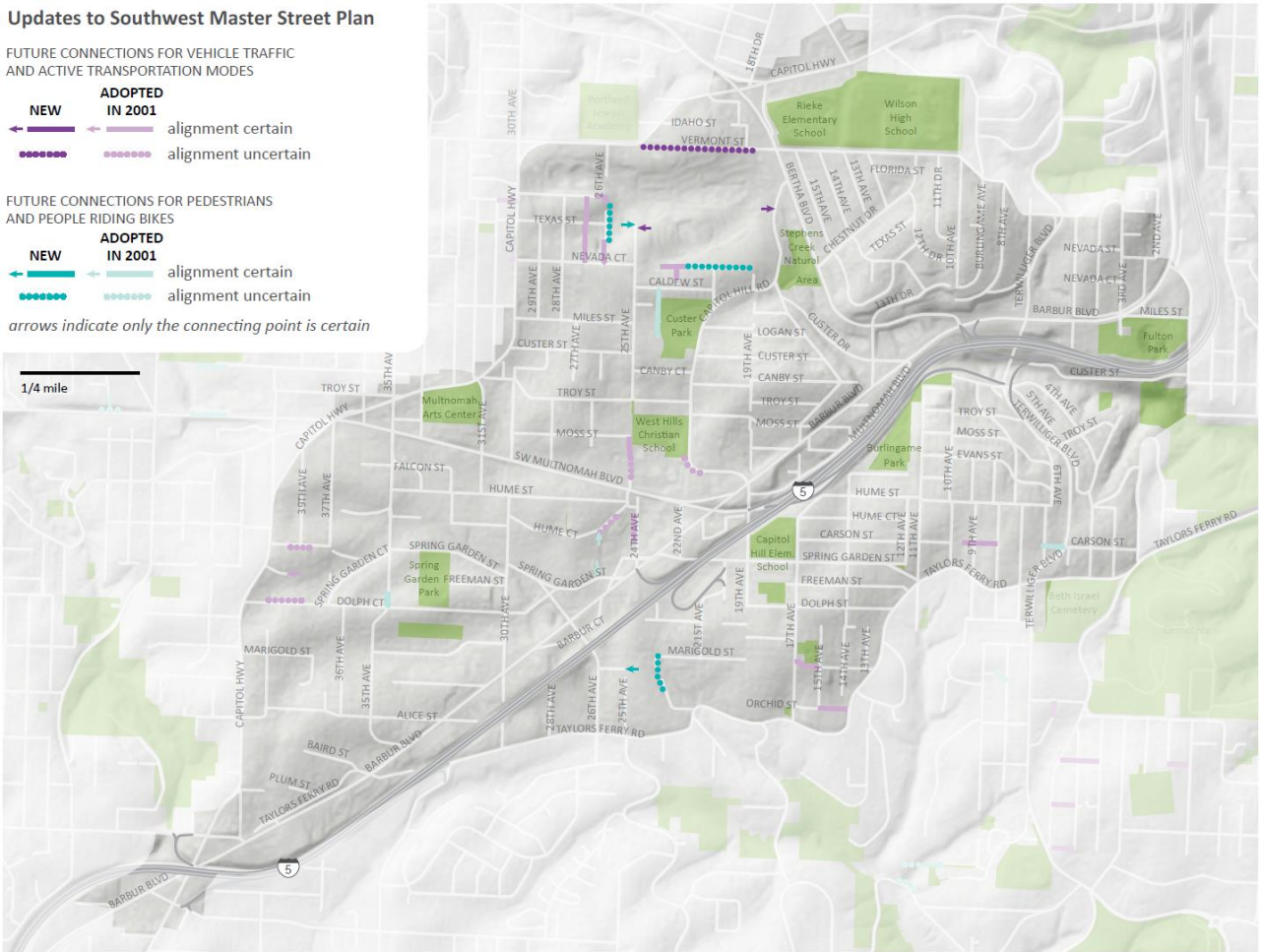
A new design standard for maps in the TSP is being developed. All maps will redesigned for continuity throughout the TSP, including the Master Street Plan maps.

Tryon-Stephens Headwaters Neighborhood Street Plan

(Adopted by Resolution No. 37162, November 2015)

The Portland Bureau of Transportation (PBOT) and the Portland Bureau of Environmental Services (BES) developed the Tryon-Stephens Headwaters Neighborhood Street Plan to create a strategy to complete the transportation network and stormwater system within the study area. The Tryon-Stephens plan provides a strategy for enhancing neighborhood access to local destinations by looking comprehensively at street and drainage issues. The Tryon-Stephens Street Plan sets a framework for tailoring improvements to individual streets based on the adjacent land use, street character, and natural setting.

The plan recommends modifying the City of Portland's Southwest Master Street Plan (2001) to add future local street/pathway connections in two locations within the study area, as shown on the following map (page 52 of the Tryon-Stevens plan). Recommended new connections are in the Hillsdale neighborhood linking SW Nevada Court to SW Vermont Street between SW 26th Avenue and Capitol Hill Road, and in the Markham Neighborhood linking SW Marigold Street between SW 23rd and SW 26th Avenues.



Commentary

This section (North Macadam District) is redundant and is replaced by the South Waterfront Street Plan earlier in this chapter.

~~North Macadam District Street Plan~~
~~Background~~

~~The North Macadam District boundaries are the Willamette River, I-5, the Marquam Bridge, and SW Hamilton Court. The district comprises approximately 128 acres, most of which is a largely undeveloped area that needs significant transportation improvements as it develops into a mixed-use neighborhood. As part of the Central City, the North Macadam District is included in the Central City Transportation Management Plan (CCTMP), adopted by City Council on December 6, 1996 (Ordinance No. 169535).~~

~~The North Macadam District was historically an industrial area, with large areas devoted to ship and barge building, warehousing, and manufacturing. Most of these uses are now gone. The North Macadam Urban Renewal Plan, adopted by City Council on August 11, 1999 (Ordinance No. 173651), furthers and encourages redevelopment of the area.~~

~~City Council accepted the North Macadam Street Plan on November 13, 1996 as part of the City Engineer's report and recommendations on streets in the district. The plan is intended to "assure an urban form emerges in the North Macadam District that supports high-density development and increases the access and mobility opportunities for pedestrians, transit patrons and bicyclists."~~

~~Street Connectivity~~

~~The existing street system is a remnant of an industrial road and access network that connected various uses and functions within large areas of industrial development, with no defined circulation system. Much of the area lacks streets; where streets do exist, the network is fragmented and incomplete. The development of the I-5 freeway in the early 1960s further isolated the area, and limited road access opportunities occurred only on the north and south ends of the district.~~

~~Additions to the existing street grid system will significantly improve connectivity and distribution for internal auto trips and auto trips either beginning or ending in North Macadam. New pedestrian facilities - including sidewalks, new pedestrian/bicycle accessways to the Willamette Greenway, and at least one new pedestrian and bicycle bridge across I-5 will greatly enhance local circulation and access. These pedestrian and bicycle improvements will also improve access to transit service and increase mode split for alternatives to the automobile.~~

Commentary

This section (North Macadam District) is redundant and is replaced by the South Waterfront Street Plan earlier in this chapter.

~~Concept Plan Map~~

~~The North Macadam District Street Plan map provides a balanced transportation system that uses three primary multimodal streets for north and south travel and extends the existing grid from the west, eastward to the Willamette River. Each street serves a specific function and provides choices for pedestrian, bike, and transit mobility and access throughout the district. The plan also provides opportunities for even traffic distribution within the district, using integrated traffic control techniques such as narrow travel lanes, curb extensions, traffic circles with public art, and rotaries to avoid shortcuts and through-traffic on local streets.~~

~~Southwest Bancroft, Gibbs, Sheridan, and Moody provide multimodal access into the district. Southwest Bond and Moody (realigned to meet Bond) provide the major north-south auto and transit access through and within the district. Southwest River Parkway provides pedestrian-oriented north-south access within the district, from SW Lowell to SW Moody, via SW Sheridan. In the southern half of the district, SW Moody continues to serve local north-south auto access, from SW Gibbs and back to SW Macadam, south of Bancroft.~~

~~East-west streets north of the Ross Island Bridge extend between SW Moody and SW River Parkway, providing local access. South of the Ross Island Bridge, SW Gibbs, Curry, and Gaines extend between SW Macadam and River Parkway, providing local access and access to SW Macadam for non-local trips. Southwest Abernethy also connects with SW Macadam. The east-west streets are extended east from SW River Parkway via pedestrian and bicycle accessways to the Willamette Greenway, providing additional local access and access to the Greenway Trail.~~

~~Planning for North Macadam continues, including a revised street concept map.~~

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Section 10: Performance Measures

Commentary

Purpose: Review key performance measures in the Transportation System Plan (TSP) and recommend revisions consistent with comprehensive plan policies and performance targets in other adopted plans. There are two stages to this task:

TSP Stage 2: Review the measures identified in the Periodic Review order signed with the State of Oregon. They include:

- "The City might also consider a system of modal preferences or desired mode splits as part of its street classification scheme."
- "…the City might adopt alternatives to the "Level of Service" standard for characterizing the adequacy of existing and proposed transportation facilities…"

As part of stage 2 we are also proposing performance targets for:

- Vehicle Miles Traveled (VMT) per person
- Climate Pollution, also known as Greenhouse gas emissions
- Car-Free and Low-Car New Multi-Family Households

TSP Stage 3: Evaluate other system performance measures for inclusion in the TSP including mode share pattern and central city subareas, safety, traffic, and person throughput or capacity.

We also anticipate evaluating alternative performance measures as part of an analysis of locations that PBOT and ODOT agree are projected to exceed the Interim Regional Mobility Policy by 2035. See the "Projected ODOT Hot Spot Locations" in the "Refinement Plans and Studies" Section 12 for more details.

The performance measure recommendations in this section are intended to implement, Policy 9.48 Performance Measures in the 2035 Comprehensive Plan Recommended Draft.

Add to the TSP performance targets from the Portland Plan, the 2015 Climate Action Plan, the Bicycle Plan for 2030, and the Comprehensive Plan Growth Scenarios Report, for Mode Share Targets Mode Share and Vehicle Miles Traveled Per Person Targets, Car-Free and Low-Car New Multifamily Households Target and Climate Pollution (Greenhouse Gas Emissions).[1]

Achieving the non-SOV mode share target is critical to achieving several citywide goals, including:

- Traffic: volumes, congestion, and delay would rise sharply on both City and ODOT facilities if trip growth is not primarily by transit, bicycling, and walking;
- Equity: low and moderate income residents and employees are the least able to afford expensive vehicle, fuel, insurance, and parking costs.
- Opportunity Access: lower and moderate income and disadvantaged residents benefit most from transit, bicycling, and walking improvements that provide safe and convenient access to jobs, schools, and other daily needs;
- Climate: achieving Climate Action Plan targets depend on achieving a 70% commute mode share by 2030;
- Health: increasing physical activity to decrease health problems depends on significantly more people walking and bicycling to meet daily needs.

[1] Comprehensive Plan Growth Scenarios Report, July 2015, page 62. The Portland Plan, April 2012, page 121. Comprehensive Plan Growth Scenarios Report, July 2015, page 65.

OBJECTIVES 11.13.G-I *(new)*

G. By 2035, reduce the number of miles Portlanders travel by car to 11 miles per day on average and 70 percent of commuters walk, bike, take transit, carpool, or work from home at approximately the following rates:
    - Transit 25%
    - Bicycle 25%
    - Walk 7.5%
    - Carpool 10%

H. By 2025, increase the percentage of new mixed use zone building households not owning an automobile from approximately 13% (2014) to 25%, and reduce the percentage of households owning two automobiles from approximately 24% to 10%.

I. By 2035, reduce Portland's transportation-related carbon emissions to 50% below 1990 levels, at approximately 934,000 metric tons.

Commentary

We are conducting regional travel demand modeling and analysis to test which policies and/or investments may help us achieve commute and daily non-SOV mode share targets.

PBOT, BPS, and TriMet recently negotiated a letter of agreement to collaborate to improve pedestrian and bicycle access to transit, and transit service frequency and reliability in areas projected to experience high residential and job growth. We anticipate this collaboration improving performance.

Comments on TSP Amendment performance targets on page 3:

- The targets could be used as approval criteria for development review, e.g. Transportation Demand Management plans and parking management plans.
- Initial modeling results show the combination of comprehensive plan land use projections and Transportation System Plan investments and policies closer to achieving 2035 daily targets than commute targets. Additional analysis is being conducted to determine the actions needed to achieve commute mode share targets by 2035.
- Plan district and/or traffic district and Central City subarea targets will be evaluated in TSP stage 3 in 2016.
- We will consider whether to develop a "work at home" mode share target.
- To achieve the "Car-Free New Multi-family Households Target" we will likely need to require new development to provide Transportation Demand Management financial incentives and implement paid on-street parking in many centers and corridors.

Level of Service (TRN 10.27) Update

PBOT received multiple public comments supporting shifting from a vehicle-based level of service (LOS) standard to a multimodal standard.

PBOT Development Permitting and Transportation Planning are collaborating to update our basis of counting trips and travel mode associated with development types. New methodology will set a progressive foundation in acknowledging and appropriately assigning development impacts regarding pedestrian, bicycle, transit, and motor vehicle trips and relate them to Level of Service, system-based, and traffic impact analyses. The update, scheduled to occur in 2016, is projected to produce a multimodal traffic impact analysis and mitigation methodology for use in development review. It will occur in coordination with, though outside of, the Transportation System Plan update.

TSP Table 11.1/Interim Regional Mobility Policy

The region has an Interim Regional Mobility Policy in the 2014 RTP (Table opposite page). Portland will work with Metro, ODOT, and DLCD to determine whether or not to adopt the Interim Regional Mobility Policy as a replacement of TSP *Table 11.1 Performance Measures for Regionally Significant Streets Deficiency Thresholds and Operating Standards* for compliance with the Regional Transportation Functional Plan.

TSP Table 11.1 Performance Measures for Regionally Significant Streets Deficiency Thresholds and Operating Standards (replace with interim Regional Mobility Policy)

Interim Regional Mobility Policy
Deficiency Thresholds and Operating Standards

Location	Standard	Standard	
	Mid-Day One-Hour Peak [A]	PM 2-Hour Peak [A] 1st Hour	PM 2-Hour Peak [A] 2nd Hour
Central City Regional Centers Town Centers Main Streets Station Communities	.99	1.1	.99
Corridors Industrial Areas Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	.90	.99	.99
I-84 *(from I-5 to I-205)*	.99	1.1	.99
I-5 North *(from Marquam Bridge to Interstate Bridge)*	.99	1.1	.99
OR 99E *(from Lincoln Street to OR 224 interchange)*	.99	1.1	.99
US 26 *(from I-405 to Sylvan interchange)*	.99	1.1	.99
I-405 [B] *(I-5 South to I-5 North)*	.99	1.1	.99
Other Principal Arterial Routes I-205 [B] I-84 (east of I-205) I-5 (Marquam Bridge to Wilsonville) [B] OR 217 US 26 (west of Sylvan) US 30 OR 8 (Murray Boulevard to Brookwood Avenue) [B] OR 212 OR 224 OR 47 OR 213	.90	.99	.99

A. The demand-to-capacity ratios in the table are for the highest two consecutive hours of weekday traffic volumes. The mid-day peak hour is the highest 60-minute period between the hours of 9 a.m. and 3 p.m. The 2nd hour is defined as the single 60-minute period, either before or after the peak 60-minute period, whichever is highest.

B. A corridor refinement plan is required in Chapter 5 of the RTP, and will include a recommended mobility policy for each corridor.

Commentary

Upcoming performance measures work (TSP stages 2 and 3)

Over the last year PBOT, BPS, and agency partners have been modeling system and intersection performance based on updated comprehensive plan land use designations and updated Transportation System Plan (TSP) projects and policies.

The model results include mode share, VMT, GHG, and traffic volumes. We are in the process of modeling the land use designations and transportation investments and policies recommended by the Planning & Sustainability Commission.

After receiving the new Regional Travel Demand Model results, we intend to conduct post processing to more fully reflect potential mode share changes from Transportation Demand Management changes and bicycle network investments.

Initial model results and post processing indicate that the PSC-recommended land use designations and transportation investments are moving us closer to the 70% citywide non-SOV commute mode share target in the Portland Plan and the Climate Action Plan. However, current model results indicate we will not achieve the target without additional actions.

PBOT is evaluating additional performance measures for system planning, corridor planning, and development review. The topics below may become TSP amendment proposals following additional work and public review.

- Safety: PBOT's Vision Zero work may produce a recommended safety performance measure, or safety evaluation criteria.

- Traffic: Current modeling work may produce one or more recommended traffic performance metrics to improve transit and freight travel times and reliability and to maintain system capacity.

- Person Capacity and/or Throughput: PBOT will explore person capacity and/or throughput as a system and/or corridor performance measures.

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Section 11: Glossary of Transportation Terms

Commentary

Glossary of Transportation Terms

- **Section was updated to reflect new terms and have alignment with the Comp Plan update and the 2014 RTP.**

GLOSSARY OF TRANSPORTATION TERMS

The Transportation System Plan uses clear, everyday language as much as possible. Words and terms in the Glossary have the specific meaning stated below when used in the Comprehensive Plan and TSP, unless the context clearly indicates another meaning. Words not included in this Glossary are defined by their dictionary meaning, or in some cases, by their meaning in state or federal law.

Access
The ability to approach or make use of transportation facilities, parks and open space, public infrastructure, or businesses and services that are open to the public. Good access means within close proximity (up to ½ mile) that is free from physical barriers for those with limited mobility.

Access Management
Measures regulating access to streets, roads, and highways from public roads and private driveways. Measures may include, but are not limited to, restrictions on the siting of interchanges, restrictions on the type and amount of access to roadways, and use of physical controls (such as signals and channelization, including raised medians) to reduce impacts of approach road traffic on the main facility.

Accessibility
The ability to move easily from one mode of transportation to another mode or to a destination. Accessibility increases when the number and quality of travel choices increases. Accessibility is affected by the mix of land uses and the travel alternatives available.

Accessway
A type of right-of-way, either public or private, that is primarily to provide pedestrian and bicycle linkages consistent with connectivity needs, but may be used for vehicle access to parking or for emergency vehicles. Accessways are typically short in length and are used where full street connections are not needed and/or are not physically feasible.

Active Transportation
Transportation that involves physical activity, including walking, biking and using transit.

Activity Center
A cluster of uses that collectively generates many trips (e.g., school and park, neighborhood commercial district). An activity center can be a single use that generates many trips (e.g., stadium, large commercial outlet, large institution).

Americans with Disabilities Act (ADA) of 1990
Civil rights legislation enacted by Congress that mandates the development of a plan to address discrimination and equal opportunity for disabled persons in employment, transportation, public accommodation, public services, and telecommunications.

Area Permit Parking Program
A Portland Bureau of Transportation program to ensure that on-street parking associated with commercial, industrial, institutional development or large events will not spill over into adjacent residential neighborhoods. The program allows residents and firms a limited supply of permits for on-street parking and restricts on-street parking for other potential users.

Arterial
Any street that is not a Local Service Traffic Street according to the traffic classification maps in the Transportation Element of the Comprehensive Plan. Arterials include Regional Trafficways, Major City Traffic Streets, District Collectors, Neighborhood Collectors, and Traffic Access Streets.
Also: A class of street. Arterial streets interconnect and support the throughway system. Arterials are intended to provide general mobility for travel within the region. Correctly sized arterials at appropriate intervals allow through trips to remain on the arterial system thereby discouraging use of local streets for cut-through travel. Arterial streets link major commercial, residential, industrial and institutional areas. Major arterials serve longer distance through trips and serve more of a regional traffic function. Minor arterials serve shorter, more localized travel within a community. As a result, major arterials usually carry more traffic than minor arterials. Arterial streets are usually spaced about one mile apart and are designed to accommodate bicycle, pedestrian, truck and transit travel.

Attractor
A use that, by its nature, draws large numbers of people to it for special events or regular activities. Regional attractors include uses such as sports arenas and convention centers.

Auto-Oriented Development
Development that is either: 1) auto-related (such as gas stations and auto repair shops) or 2) auto-accommodating (by its design attracts primarily customers and employees arriving by automobile, such as drive-in restaurants).

Benchmark
A specific target or goal to be achieved in a specific timeframe. Benchmarks are used to determine the attainment of performance indicators and performance measures (defined below).

Bicycle
A vehicle having two tandem wheels, a minimum of 14 inches in diameter, propelled by human power, upon which a person or persons may ride. A three-wheeled adult tricycle is considered a bicycle. In Oregon, a bicycle is legally defined as a vehicle. Bicyclists have the same right to the roadways and must obey the same traffic laws as the operators of other vehicles.

Bicycle Boulevard
A street with low traffic volumes where the through movement of bicycles is given priority over motor vehicle travel. *(Source: Portland Bicycle Master Plan*)(see City Greenway)

Bicyclist
Person riding a bicycle.

~~**Bike Central**~~
~~A public or private facility that provides a variety of bicycle services, such as bicycle parking, bicycle repair, sale of bicycles and equipment, showers, and changing rooms.~~

Bike Share
Bike ~~sharing~~ Share is an innovative transportation program that provides users access to bicycles on a short-term basis for one-way travel within a designated service area.

Carpool
A motor vehicle carrying two or three (depending on the context) or more people, usually commuting on a regular or semi-regular basis.

Car Sharing
An organization consisting of a group of individuals who share a fleet of cars. The purchase or lease of vehicles, fuel costs, maintenance and repair costs is borne by the organization.

Centers
Places with concentrations of commercial and community services, housing, gathering places, and transit connections. Centers provide services to surrounding neighborhoods and are intended to be enhanced as places because they are a focus of housing and job growth. There are four types of centers with varying functions, levels of activity, and scales and intensities of development:
· Central City: Corresponds to the Central City plan district, which serves as the region's premier center, anchoring an interconnected system of centers.
· Gateway Regional Center: Corresponds to the Gateway plan district, East Portland's largest center, which is intended to be enhanced as an employment and community service hub within the area and region.
· Town Centers: Large centers that serve a broad area of the city and have an important role in accommodating growth. They provide a full range of commercial and community services, high-density housing, mid-rise commercial and mid-rise mixed-use buildings (typically up to five to seven stories in height), are served by high-capacity transit connections, and have a substantial employment component. Town Centers provide housing opportunities for enough population to support a full-service business district.

· Neighborhood Centers: Centers that primarily serve adjacent neighborhoods and provide opportunities for additional housing and low- to mid-rise commercial and mixed-use buildings (typically up to three to five stories in height). They provide a range of local commercial and community services and transit connections. Neighborhood Centers provide housing opportunities for about half the population needed to support a neighborhood business district.

~~**Central City**~~
~~A design type designated in Metro's 2040 Growth Concept. The 2040 Growth Concept designation and Portland's Central City boundaries are co-terminus. The Central City has the highest density development of all the design types, with the most diverse mix of land uses and the greatest concentration of commerce, offices, and cultural amenities.~~
~~*(Source: 2000 RTP)*~~

~~**Central City Bus Circulator**~~
~~Bus route(s) that operates as a shuttle to provide local access to destinations within a defined geographic area, such as the Central City.~~

~~**CCTMP**~~
~~The adopted transportation system plan for the Central City. The CCTMP is reviewed and updated separately from the Transportation System Plan.~~

City Greenway
A system of distinctive pedestrian- and bicycle-friendly green streets and trails, enhanced by lush tree canopy and landscaped stormwater facilities that support active living by expanding transportation and recreational opportunities and making it easier and more attractive to reach destinations across the city. City Greenways are a network that includes the following types of infrastructure:

1. Enhanced greenway corridors are distinctive green streets with extensive tree canopy and landscaped stormwater facilities that provide connections between major centers, schools, parks, natural areas, and the rivers.
2. Trails are often located along rivers or through natural areas, providing pedestrian and bicycle connections.
3. Heritage parkways are iconic streets or segments of streets with elements such as linear parkways, scenic views, and distinctive landscaping or street design.
4. Neighborhood greenways are an extensive network of streets with low volumes of motor vehicle traffic that are prioritized for bicycles and enhanced for pedestrians, working in conjunction with the rest of the City Greenways system to extend the system into all neighborhoods.

Collector of Regional Significance
As designated in the 2000 Regional Transportation Plan, a route that connects the regional arterial system and the local system by collecting and distributing neighborhood traffic to arterial streets. Collectors of regional significance have three purposes: 1) They ensure adequate access to the primary and secondary land use components of the 2040 Growth Concept; 2) They allow dispersion of arterial traffic over a number of lesser facilities where an adequate local network exists; 3) They help define appropriate collector level movement between jurisdictions. *(Source: 2000 RTP)*

Collector street
A class of street. Collector streets provide both access and circulation between residential, commercial, industrial and agricultural community areas and the arterial system. As such, collectors tend to carry fewer motor vehicles than arterial streets, with reduced travel speeds. Collector streets are usually spaced at half-mile intervals, midway between arterial streets. Collectors may serve as bike, pedestrian and freight access routes, providing local connections to the arterial street network and transit system. While the focus for collectors has been on motor vehicle traffic, they are developed as multi-modal facilities that accommodate bicycles, pedestrians and transit.

Complete Streets
Complete streets provide accessibility to all users of the right-of-way regardless of age, ability, or mode of transportation. They are designed and operated to make better places and to enhance safe access for all modes, including people walking and bicycling, those using a mobility device, motorists, and transit users.

Congestion
A condition characterized by unstable traffic flows that prevents movement on a transportation facility at optimal legal speeds.

Corridor
Corridors (2040 design type) – A type of land use that is typically located along regional transit routes and arterial streets, providing a place for somewhat higher densities than is found in 2040 centers. These land uses should feature a high-quality pedestrian environment and convenient access to transit. Typical new developments would include rowhouses, duplexes and one to three-story office and retail buildings, and average about 25 persons per acre. While some corridors may be continuous, narrow bands of higher-intensity development along arterial streets, others may be more nodal, that is a series of smaller centers at major intersections or other locations along the arterial that have high quality pedestrian environments, good connection to adjacent neighborhoods and transit service.
~~A 2040 Growth Concept design type that emphasizes a high-quality bicycle and pedestrian environment and convenient access to public transportation, but will not be as intensively planned as station communities. *(Source: 2000 RTP)*~~

Corridor as defined in the Comprehensive Plan is an area that may be a single major street, or a broad mobility corridor that provides connections for a range of transportation modes (transit, pedestrians, cyclists, freight, motor vehicles, and so forth), not necessarily on the same street. There are three types of corridor:

- Civic Corridor: These are a prioritized subset of the city's most prominent transit and transportation streets. They connect centers, provide regional connections, and include segments where commercial development and housing are focused. Civic Corridors are intended to continue their important transportation functions while providing livable environments for people, and evolving into distinctive places that are models of ecological design.
- Neighborhood Corridor: Main streets that connect neighborhoods with each other and to other parts of the city. They support neighborhood business districts and provide housing opportunities close to local services, amenities, and transit lines. They are streets that include a mix of commercial and higher-density housing development. They have less intense development and transportation function than Civic Corridors.
- Freight Corridor: Primary routes into and through the city that support Portland as an important West Coast hub and a gateway for international and domestic trade. These facilities are integral to the growth of traded sector businesses such as manufacturing, warehousing, and distribution industries.

Curb Zone
The area of public right-of-way adjacent to the curb that can be used for a wide variety of mobility and access functions, including but not limited to vehicle lanes, bike lanes, curb extensions, transit platforms, street trees, loading zones, on-street parking, bike corrals, and street seats.

~~**Cycle Track**~~
~~Bicycle lanes that are physically separated from motor vehicle and pedestrian travel A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk.~~

Early Bird Parking
Parking that is provided to encourage its use primarily by commuters. Typically, the pricing strategy is to offer a lower all-day rate if the parker arrives before a certain time in the morning.

Emergency Response Vehicles
Vehicles employed in responding to emergencies. Examples of emergency response vehicles include fire apparatus, ambulances, and police cars.

Employee Commute Options (ECO) Rule
~~Part of House Bill 2214, which was adopted by the 1992 Oregon Legislature. The rule directs the Environmental Quality Commission to institute an employee trip reduction program. The rule is designed to reduce 10 to 20 percent of commuter trips for all businesses employing 50 or more persons.~~

ECO
DEQ ECO program required employers with more than 100 employees to provide commute options to employees designed to reduce the number of cars driven to work in Portland and surrounding areas.

Environmental Impact Statement
An environmental assessment required by the National Environmental Protection Act for "any major Federal action that may significantly affect the environment."

~~**Exceptional Habitat Quality**~~
~~For transportation planning purposes,~~
~~1) Riparian-associated wetlands protected with environmental zones;~~
~~2) Locally or regionally rare or sensitive plant communities;~~
~~3) Important forest stands contributing multiple functions and values to the adjacent water feature habitats of sensitive, threatened or endangered wildlife species; or~~
~~Habitats that provide unusually important wildlife functions, such as (but not limited to) a major wildlife crossing/runway or a key migratory pathway.~~

Freight
Raw and bulk materials and products that require value-adding or warehousing.

Freight Intermodal Facility
An intercity facility where freight is transferred between two or more modes (e.g., truck to rail, rail to ship, truck to air, etc.).

Frequent Service (Trimet)
Bus or MAX Light Rail transit service that runs every 15 minutes or better most of the day, every day.

Functional Plan
A limited-purpose, multijurisdictional plan for an area or activity having significant districtwide impact on the orderly and responsible development of the metropolitan area. A Functional Plan serves as a guideline for local comprehensive plans consistent, with ORS 268.390.

Goals
The broadest expressions of a community's desires. Goals give direction and are concerned with the long term; they often describe ideal situations.

Goods
Finished products, commodities, and wares ready for the final consumer.

Green Infrastructure
Public or private assets — either natural resources or engineered green facilities — that protect, support, or mimic natural systems to provide stormwater management, water quality, public health and safety, open space, and other complementary ecosystem services. Examples include trees, ecoroofs, green street facilities, wetlands, and natural waterways.

Green Street
A green street is a street with a landscaped street-side planter or bioswale that captures stormwater runoff from the street and allows it to soak into the ground as soil and vegetation filter out pollutants. A green street is not the same as a City Greenway, though a City Greenway may include green street elements.

~~**Green Street**~~
~~A street that:~~
- ~~Handles stormwater on site through use of vegetated facilities;~~
- ~~Creates attractive streetscapes that enhance neighborhood livability by helping to calm traffic by introducing park-like elements into neighborhoods; and~~
- ~~Serves as an urban greenway segment that connects neighborhoods, parks, recreation facilities, schools, and main streets.~~

High-capacity Transit
High-capacity transit is public transit that has an exclusive right of way, a non-exclusive right of way, or a combination of both. Vehicles make fewer stops, travel at higher speeds, have more frequent service, and carry more people than local service transit such as typical bus lines. High-capacity transit can be provided by a variety of vehicle types including light rail, commuter rail, streetcar, and bus.

High-Occupancy Vehicle (HOV)
Any vehicle carrying two or more persons, including the driver. An HOV could be a transit bus, vanpool, carpool, or any other vehicle that meets the minimum occupancy requirements. Consistent with federal regulations, motorcycles (with or without passengers) are considered HOVs.

Home-Based Work Trip Attractions
The trips made by commuters from their homes to their places of work.

Infrastructure
Necessary municipal or public services, provided by the government or by private companies and defined as long-lived capital assets that normally are stationary and can be preserved for a significant number of years. Examples are streets, bridges, tunnels, drainage systems, water and sewer lines, parks, pump stations and treatment plants, dams, and lighting systems. Beyond transportation and utility networks, Portland includes buildings, green infrastructure, communications, and information technology as necessary infrastructure investments that serve the community. See also Public facility.

Intelligent Transportation Systems (ITS)
The application of a broad range of commutations-based information, control and electronics technologies to improve the efficiency and safety of the transportation systems.

Local Improvement District (LID)
A method that allows a group of property owners to share the cost and benefits of public improvements.

Locally Preferred Alternative
The option selected by local jurisdiction(s) following completion of a Draft Environmental Impact Statement (DEIS).

Main Street
Neighborhood shopping areas along an arterial street or at an intersection that have a unique character that draws people from outside the adjacent neighborhood. ~~A 2040 Growth Concept design type that usually features mixed-use storefront-type development. Two or more main streets in a relatively small area serve the same urban function as town centers, but are located in a linear pattern along a limited number of bus or light rail transit corridors. Main streets feature street designs that emphasize pedestrian, public transportation, and bicycle travel.~~ ~~*(Source: 2000 RTP)*~~

Metro
The regional government and designated metropolitan planning organization (MPO) of the Portland region. It is governed by a seven-member elected Metro Council and is responsible for regional transportation planning activities, such as the preparation of the ~~2000~~ Regional Transportation Plan and the planning of regional transportation projects, including light rail.

~~**Minimize**~~
~~Usually defined to mean reduce to the least possible amount; the word is used in the Central City Transportation Management Plan (CCTMP) to mean manage or control, taking into consideration any other concerns.~~

Mixed-Use Areas
Compact areas of development that include a mix of uses, either within buildings or among buildings, and include residential development as one of the potential components.

Multimodal Mixed-Use Area (MMA)
The Multimodal Mixed-Use Area (MMA) is an ODOT designation applied by local governments to downtowns, town centers, main streets or other areas inside Urban Growth Boundaries where the local government determines there is: high quality connectivity to and within the area by modes of transportation other than the automobile; a denser level of development of a variety of commercial and residential uses than the surrounding areas; a desire to encourage these characteristics through development standards and an understanding that increased automobile congestion within and around the MMA is accepted as a potential trade-off.

Mobility
The ability to move people and goods from place to place, or the potential for movement. Mobility improves when the transportation network is refined or expanded to improve capacity of one or more modes, allowing people and goods to move more quickly toward a destination.

Mode Split
The percentage of trips taken by each of the possible modes of travel (motor vehicle, transit, bicycle, walk). Mode split does not refer to the number of trips. For example, the number of trips by a particular mode may increase, but the percentage of trips by that mode may stay the same or be reduced if there is also growth in the overall number of trips for other modes.

Motor Vehicle Level-of-Service (LOS)
A qualitative measure describing operational conditions within a traffic stream. A level-of-service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. LOS ratings of 'A' through 'F' describe the traffic flow characteristics on streets and highways and at intersections, as shown on the following table:

LOS	Traffic Flow Characteristics
A	Virtually free flow; completely unimpeded
B	Stable flow with slight delays; reasonably unimpeded
C	Stable flow with delays; less freedom to maneuver
D	High density, but stable flow
E	Operating conditions at or near capacity; unstable flow
F	Forced flow; breakdown conditions
Greater than F	Demand exceeds roadway capacity, limiting volume that can be carried and forcing excess demand onto parallel routes and extending the peak period

(Sources: 1985 Highway Capacity Manual [A through F]; Metro [greater than F])

Multimodal
Having a variety of modes available for any given trip, such as being able to walk, ride a bicycle, take a bus, or drive to a certain destination. In a transportation system, multimodal means providing for many modes within a single transportation corridor.

National Ambient Air Quality Standards (NAAQs)
Air quality standards for a variety of pollutants.

Neighborhood
For the TSP classification system, a neighborhood is an area bounded by Major City Traffic Streets, District Collectors, and/or Neighborhood Collectors.

Neighborhood Greenway
Neighborhood greenways are an extensive network of streets with low volumes of motor vehicle traffic that are prioritized for bicycles and enhanced for pedestrians, working in conjunction with the rest of the City Greenways system to extend the system into all neighborhoods.

Neighborhood Corridor
Main streets that connect neighborhoods with each other and to other parts of the city. They support neighborhood business districts and provide housing opportunities close to local services, amenities, and transit lines. They are streets that include a mix of commercial and higher-density housing development. They have less intense development and transportation function than Civic Corridors.

Objectives
These are specific statements that carry out a plan in the short term. Objectives help assess incremental progress toward achieving the broader purposes expressed in goals and policies.

Obstruction
Something that hinders from passage, action, or operation.

~~**Offset Rule**~~
~~Rule adopted by the Oregon Department of Environmental Quality and approved by the federal Environmental Protection Agency in 1990. The rule allows the parking lid of 43,914 spaces to be increased by up to 1,370 spaces, provided that emission offset measures are implemented and an approved contingency plan is in place. Offsets may include alternative work hours, carpooling, and transit subsidies.~~

~~**Opticom**~~
~~A signal preemption system for emergency response vehicles or transit vehicles.~~

Oregon Department of Transportation (ODOT)
State agency that oversees and maintains the State highway system, under the guidance of the Oregon Transportation Commission.

Oregon's Statewide Planning Goals
The 19 goals that provide a foundation for the State's land use planning program. The 19 goals can be grouped into four broad categories: land use, resource management, economic development, and citizen involvement. Locally adopted comprehensive plans and regional transportation plans must be consistent with the statewide planning goals.

~~**Owl Service**~~
~~Transit service provided during the late evening and early morning hours (12:30 a.m. to 5 a.m.).~~

Paratransit
On-demand non-fixed route service that serves special transit markets, including disabled populations unable to use regular transit service. Other examples include demand-responsive (e.g., dial-a-ride) and contracted fixed-route service.

Park-and-Ride Facility
A parking lot or structure in association with a light rail station, transit stop, or transit transfer point. Generally, park-and-rides should provide access to regional route service for areas not directly served by transit. Bicycle and pedestrian access, as well as parking and storage for bicycles, should be considered in locating new park-and-ride facilities.

Pattern Areas
Five primary geographies in Portland that have differing physical characteristics, needs, and assets. Each of these areas has unique topographies and natural features, patterns and types of development, street and other infrastructure characteristics, and histories that have shaped their urban form. The five primary Pattern Areas are:
· Central City: This area corresponds to the Central City plan district and is also a major center.
· Inner Neighborhoods: This area includes inner portions of the city that originally developed during the streetcar era, prior to World War II. It includes a large part of the city east of the Willamette River, extending roughly to 82nd Avenue, and also the inner westside "flats," located between the river and the West Hills.
· Western Neighborhoods: This area includes the West Hills (Tualatin Mountains) and areas to the west.
· Eastern Neighborhoods: This area includes eastern portions of the city, mostly located east of 82nd Avenue and largely annexed to Portland in the 1980s and 1990s.
· River: This area includes the land along the Willamette and Columbia Rivers and the Columbia Slough

Peak Period~~-Hour~~
The period of the day during which the maximum amount of travel occurs. Peak periods in Portland metro area are generally defined as 7-9 AM and 4-6 PM. ~~Either of the two weekday rush-hour time periods: 7 a.m. to 9 a.m. and 3:30 p.m. to 5:30 p.m.~~

Peak Period Pricing
A transportation management tool that applies market pricing principles to roadway use. Peak-period pricing imposes user surcharges or tolls on congested facilities during peak traffic periods and may allow a reduced price for high-occupancy vehicle (HOV) use.

Pedestrian
A person on foot, in a wheelchair, or in another health-related mobility device.

Performance Indicator
A term that describes a characteristic of the transportation system in order to measure progress towards a specific goal.

Performance Measure
A method used to assign a value to a performance indicator. Performance indicators measure change over time, and the performance measure is a specific activity or physical change that can be measured.

Policies
The choices made to carry out goals in the foreseeable futures. Policies should be specific enough to help determine whether or not a proposed project, program, or course of action will advance community values expressed in goals.

Port of Portland
A public agency that owns and maintains five marine terminals, four airports, and seven business parks in the three-county area. The Port is governed by a nine-member commission appointed by the governor.

Protected Bike Lane
Bicycle lanes that are physically separated from motor vehicle and pedestrian travel. A protected bike lane is an exclusive bicycle facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A protected bike lane is physically separated from motor traffic and distinct from the sidewalk, using vertical elements such as physical curbs or flexible delineators.

Public Facility
Any facility, including buildings, property, and capital assets, that is owned, leased, or otherwise operated, or funded by a governmental body or public entity. Examples of public facilities include sewage treatment and collection facilities, stormwater and flood management facilities, water supply and distribution facilities, streets, and other transportation assets, parks, and public buildings. See also Infrastructure.

Refinement Plans
Amendments to the Transportation System Plan. Refinement Plans resolve, at a systems level, determinations on function, mode, or general location that were deferred during the transportation system planning process because the detailed information needed to make those determinations was not available during that process. *(Source: TPR)*

Regional Center (Metro)
Compact, specifically defined areas where high density growth and a mix of intensive residential and commercial land uses exists or is planned. regional centers are to be supported by an efficient transit-oriented, multi-modal transportation system. ~~A design type designated in Metro's 2040 Growth Concept. After the Central City, regional centers have the region's highest development densities, the most diverse mix of land uses, and the greatest concentration of commerce, offices, and cultural amenities. They are very accessible by both automobile and public transportation, and have streets that are oriented to pedestrians. Gateway is the only regional center in Portland.~~ ~~*(Source: 2000 RTP)*~~

Regional Transportation Functional Plan (RTFP)
A regional functional plan regulating transportation in the Metro region, as mandated by Metro's Regional Framework Plan. The plan directs local plan implementation of the Regional Transportation Plan.

Regional Transportation Plan (RTP)
The 20-year transportation plan developed by Metro to guide transportation in the region. The RTP is the region's transportation system plan that is required by the Transportation Planning Rule.

Rideshare
A motor vehicle carrying two or more people for any trip purpose, including work, shopping, etc., but not on a regular schedule.

Right-of-Way (ROW)
A public ~~or private~~ area that allows for the passage of people or goods. Right-of-way includes passageways such as freeways, streets, bicycle and pedestrian off-street paths, and alleys. A public right-of-way is one that is dedicated or deeded to the public for public use and is under the control of a public agency.

Shared Residential Street
Shared residential street is a low-traffic street where all modes of travel mix within the paved roadway.

Shared roadway bikeway
Shared roadway bikeway is a facility type identified in the Portland Bicycle Plan for 2030, used on lower volume roadways where bicycles mix with motor vehicles

State Implementation Plan (SIP)
State plan for achieving air quality goals to ensure compliance with the requirements of the federal Clean Air Act.

Station Community
Areas generally within a ¼ to ½ mile radius of a light rail station or other high capacity transit stops that are planned as multi-modal, mixed use communities with substantial pedestrian and transit supportive design characteristics and improvements. ~~A 2040 Growth Concept design type located along light rail corridors and featuring a high-quality pedestrian and bicycle environment. Station communities are designed around the transportation system to best benefit from the public infrastructure. They include some local services and employment, but are primarily residential developments oriented toward the Central City, regional centers, and other areas that can be accessed by rail for most services and employment. *(Source: 2000 RTP)*~~

Streetcar
Fixed guide-way transit service mixed in traffic for locally oriented trips within or between higher density mixed-use centers.

Street Tree
A tree growing within the public right-of-way between the travel lanes and the property line.

Sustainable
Methods, systems, or materials that will not deplete nonrenewable resources or harm natural cycles.

Town Center
Areas of mixed residential and commercial land uses that serve tens of thousands of people. ~~A 2040 Growth Concept design type that functions as a local activity area and provides close access to a full range of local retail and services within a few miles of most residents. Town centers do not compete with regional centers in scale or economic diversity, but they will offer some specialty attractions of regional interest. Town centers have excellent multimodal access and connections to regional centers and other major destinations. *(Source: 2000 RTP)*~~

Traffic Calming
Roadway design strategies to reduce vehicle speeds and volumes, prevent inappropriate through traffic and reduce motor vehicle travel speeds while also ~~aimed at~~ improving traffic safety and neighborhood livability. Traffic calming strategies provide speed bumps, curb extensions, planted median strips or round and narrowed travel lanes~~. measures include, but are not limited to, traffic-slowing devices. Examples of other traffic calming measures are traffic diverters, curb extensions, and medians.~~

~~**Traffic-Slowing Devices**~~
~~Devices that slow emergency response vehicles as well as general traffic. Speed bumps and traffic circles are the only traffic-slowing devices currently used.~~

Trails
Designated routes on land or water that provide public access for recreation or transportation purposes, like walking and bicycling. Trails are often located along rivers, through natural areas, or along rail or highway rights-of-way, with connections to and through neighborhoods.

Transit Center
A location where a number of bus and/or high-capacity transit vehicles stop. Generally, transit centers contain waiting areas, transit information, and timed transfer opportunities.

Transit-Oriented Development
A mix of residential, retail, office, and other uses and a supporting network of streets, bikeways, and pedestrianways oriented to a light rail station or transit service and the pedestrian network. Transit-oriented development should include high-density residential development near transit service to support the neighborhood commercial uses and have a lower demand for parking than auto-oriented land uses.

Transit station areas:
Areas within a half-mile of light rail and other high-capacity transit stations. Some transit station areas are located within centers or civic corridors and are subject to policies for those types of places.

Transportation Demand Management (TDM)
Actions taken to change travel behavior in order to improve the performance of transportation facilities, reduce the need for additional road capacity, and reduce impacts on residential neighborhoods. Examples include encouraging the use of alternatives to single-occupant vehicles (SOVs), ridesharing and vanpools, parking management, and trip-reduction ordinances.

Transportation Disadvantaged
Individuals who have difficulty obtaining transportation because of their age, income, disability, or who are transit dependent for other reasons.

Transportation District
For TSP purposes, one of the eight Transportation Districts identified: Central City, North, Northeast, Far Northeast, Southeast, Far Southeast, Northwest, and Southwest.

Transportation Facilities
Any physical facility that moves or assists in the movement of people or goods, but excluding electricity, sewage, and water systems. *(Source: TPR)*

Transportation Management Association (TMA)
Groups of businesses or institutions that develop TDM measures in order to reduce the need for commuter and visitor parking. Measures may include carpool-matching services, transit subsidies, shuttle vans, or encouraging alternatives to the automobile.

Transportation Planning Rule (TPR)
The implementing rule of Statewide Planning Goal 12 dealing with transportation, as adopted by the State Land Conservation and Development Commission (LCDC). Among its provisions, the TPR requires reducing vehicle miles traveled (VMT) per capita by 15 percent in the next 30 years, reducing parking spaces per capita by 10 percent in the next 20 years, and improving opportunities for alternatives to the automobile.

Transportation System Management (TSM)
Strategies and techniques for increasing the efficiency, safety, or level-of-service of a transportation facility without increasing its size. Examples include, but are not limited to, traffic signal improvements, traffic control devices (including installing medians, channelization, access management, and ramp metering), incident response, targeted traffic enforcement, preferential transit measures, and restriping for high-occupancy vehicle lanes.

Transportation System Plan (TSP)
A plan for one or more transportation facilities that are planned, developed, operated, and maintained in a coordinated manner to supply continuity of movement between modes and within and between geographical and jurisdictional areas.

TriMet
Tri-County Metropolitan Transportation District, the transit agency for most of Clackamas, Multnomah, and Washington Counties.

Trip
A journey made by any mode between an origin and a destination. Trips can be categorized as follows:

- Regional trip – A trip that has neither trip origin nor destination within the Portland metro area.
- Interregional trip – A trip that has one trip end within the Portland region and the other trip end outside the Portland region.
- Interdistrict trip – A trip that starts in one Transportation District and ends in another Transportation District.
- Intradistrict trip – A trip that starts and ends within the same Transportation District.
- Non-local trip –A trip that extends beyond the length of the functional purpose described in a street's classification description.

Trip End
The origin or destination point of a journey.

2040 Growth Concept
A concept for the long-term growth management of our region, developed by Metro. It describes the preferred form of regional growth, including where growth should be clustered, what the appropriate densities are for various land use design types, and which areas should be protected as open space. The 2040 Growth Concept was adopted as part of the Regional Urban Growth Goals and Objectives (RUGGOs) in 1995. *(Source: 2000 RTP)*

~~**Regional Transportation Functional Plan (RTFP)**~~
~~A regional functional plan regulating transportation in the Metro region, as mandated by Metro's Regional Framework Plan. The plan directs local plan implementation of the Regional Transportation Plan.~~

~~**2014 Regional Transportation Plan (RTP)**~~
~~The 20-year transportation plan developed by Metro to guide transportation in the region. The RTP is the region's transportation system plan that is required by the Transportation Planning Rule.~~

Urban Growth Management Functional Plan (UGMFP)
A regional functional plan with requirements binding on cities and counties in the Metro region, as mandated by Metro's Regional Framework Plan. The plan addresses accommodation of projected regional population and job growth, regional parking management, water quality conservation, and limits on retail uses in employment and industrial areas.

Volume-to-capacity (v/c) Ratio
A measure of potential roadway capacity. A ratio expressing the relationship between the existing or anticipated volume of traffic on a roadway and the designed capacity of the facility.

Vehicle Miles Traveled (VMT) per Capita
Miles driven in automobiles per person on average. The Transportation Planning Rule requires a 10 percent reduction of VMT per capita within 20 years of adoption of a Transportation System Plan, and an additional 5 percent reduction within 30 years of adoption of the TSP. The VMT per capita reductions mean that individuals will, on average, travel less by automobile than previously but, because the population will continue to grow, it does not mean an overall reduction in the amount of miles driven.

~~**Woonerf**~~
~~A type of street design where multiple modes of travel mix in a shared space. Typically, the street carries relatively low volumes of auto traffic and travel speeds are very low. In concentrated shopping areas, woonerf design would focus on pedestrian movement.~~

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 12: Refinement Plans and Studies

Commentary

A list of refinement plans in this section was added at the beginning of the section for ease of review.

Dates of studies will be updated in the next draft.

A table with deleted, current and future studies with dates and funding will be provided as an appendix in the next draft.

Willamette Cove Shoreline Trail (deleted, now listed on the Major Projects List)

Lake Oswego to Portland Transit and Trail Study (deleted, trail project listed on TSP Project list)

RTP PLANS AND STUDIES

Minor Refinement Plans

~~Banfield Freeway~~

Northeast Portland Highway (modified)

~~Macadam/Highway 43 9~~

Major Refinement Plans

Highway 99E (McLoughlin Boulevard)/224 Corridor (this encompasses RTP Mobility Corridor 10: Portland Central City to Milwaukie) (renamed)

Interstate 205 (also RTP Mobility Corridors 7 - Tualatin to Oregon City, 8 -Oregon City to Gateway, and 9 - Gateway to Clark County) (renamed)

~~I-5 North from I-84 to Clark County~~

Hayden Island Access

North Willamette River Crossing (modified)

Powell Boulevard/Foster Road (modified)

Portland Central City to Tigard (RTP Mobility Corridor #2 – Southwest Corridor) (renamed and modified)

RTP Studies

~~Columbia Slough Greenway Trail Study~~

Interstate 205 Ramp Study

West Portland/I-5 Access and Crossings Study

Barbur Boulevard Crossings

~~Willamette Cove Shoreline Trail~~

Central City Pedestrian Enhancements Study (modified)

~~Tualatin/Portland Commuter Rail Extension Study~~

~~Portland to Milwaukie Light Rail Transit Study~~

~~Lake Oswego to Portland Transit and Trail Study~~

RTP Preferred System Studies

~~I-84/Banfield Trail~~

~~I-84/I-205/Tillamook Multi Use Connector Study~~

Third Track Connector Study

~~Union Station Multi Modal Center Study~~

~~Central Eastside Truck Access Study~~

~~Lower Sandy Boulevard Circulation Study~~

PORTLAND PLANS AND STUDIES

Refinement Plans

Central City Transportation Management Plan (CCTMP) Update (modified)

MAX Light Rail Corridor Master Street Plan

Citywide Master Street Plans (modified)

Studies

ODOT District Highways Evaluation

~~Brooklyn Rail Yard Access Study~~

~~East Burnside Pedestrian Access Improvements~~

Portland Central City Loop (RTP Mobility Corridor#4) (new name)

Brooklyn Neighborhood River Access

~~Inner Powell/Ross Island Bridgehead Access and Circulation Study~~

Inter-jurisdictional Arterial Improvements Coordination

NE Glisan Street Transportation and Streetscape Study (modified)

~~Marquam Hill/Terwilliger Parkway Traffic Calming and Neighborhood Access Study~~

NEW CITY OF PORTLAND STUDIES

Columbia Corridor Access Study

Other Agency Common Priority Projects in Portland

Growing Transit Communities Investment Plan

Enhanced Transit Corridors

Pleasant Valley Area Need and Feasibility Analysis

Industrial Lands Access Study

Pedestrian Master Plan

Southwest In Motion

Portland Central City Truck Loading and Parking Plan

Citywide All-Modes Needs Analysis

Projected ODOT "Hot Spot" Locations

Hayden Island

Cordon Pricing

Broadway Weidler Corridor Plan Update

Lombard Corridor Transportation and Streetscape Plan

Northwest District Street Decoupling Feasibility Study

Commentary

- Refinement Plans are defined in the Transportation Planning Rule (TPR) and the Regional Transportation Plan (RTP).
- This chapter was updated to reflect plans and projects that have been completed, are no longer needed or required. Others have been modified to reflect new data and information.
- New plans and studies were added reflecting the update to the TSP Project and City Wide Programs list and the Comprehensive Plan.

INTRODUCTION

The State Transportation Planning Rule (TPR) defines a refinement plan as an amendment to a transportation system plan (TSP) that resolves, at the system level, the function, mode, or general location of a transportation project that was deferred during development of the TSP. A refinement plan is necessary when the detailed information required to address a transportation need could not be determined during the TSP process.

In the context of Portland's TSP, studies are similar to refinement plans; however, they may not necessarily address a transportation capacity need or their feasibility may not yet be determined. Studies are intended to address issues that have a transportation component identified by the community or other entities.

Metro's 2010 and 2014 ~~2000~~ Regional Transportation System Plan (RTP) identified Mobility Corridors and describes a number of ~~refinement~~ plans and includes a number of studies for Portland to conduct to assist with the implementation of the Mobility Corridors. ~~on its preferred list of projects~~. The City has also identified refinement plans and studies through the Comprehensive Plan update and TSP process. This chapter lists (not in order of priority) the refinement plans and studies that either Metro or the City will undertake over the life of the TSP. In some cases, the Oregon Department of Transportation (ODOT) will be the lead agency.

~~Plans and studies completed since the last TSP update in 2002 during over the life of the TSP will be listed at the end of this chapter and will be on the City's website and available as hard copies.~~ The previous TSP contained Chapter 12: Area Plans which was a summary of plans competed. This chapter was deleted as part of the 2035 TSP update. All plans are available on the City's website. ~~will be listed at the end of this chapter.~~

Commentary

Mobility Corridor No. 5 in RTP is not listed in Table 5.1 Mobility Corridors Recommended for Further Refinement Plans) of the RTP—consider removing

RTP PLANS AND STUDIES

Relating to the Regional Transportation Plan

The 2014 update to the Regional Transportation Plan highlighted seven "Mobility Corridors" throughout the region in which further refinement studies were needed. Of these seven corridors, parts of four corridors were within Portland City limits (RTP Mobility Corridors 2, 4, 8, and 9). The refinement plans in this section address the need for further study as identified in the Regional Transportation Plan.

Minor Refinement Plans

The purpose statement for each regional refinement plan and study is taken from the RTP

~~Banfield Freeway~~

~~***Purpose:*** *Develop transportation strategies to alleviate congestion in the Banfield corridor.*~~

~~Significant investments in transit and highway capacity were made in the Banfield corridor in the 1980s. Further improvements are needed to provide an adequate level of access to the Central City from eastside Portland and east Multnomah County. Additional highway capacity would result in unacceptable physical, environmental and social impacts. The plan should consider the following transportation approaches in this corridor:~~

- ~~Use a coordinated system of traffic management measures to mitigate infiltration on to adjacent parallel corridors.~~
- ~~Improve light rail headways to keep pace with travel demand in the corridor.~~
- ~~Improve bus service along adjacent corridors to keep pace with travel demand, including the possible use of express and non-peak service.~~
- ~~Consider additional feeder bus service and park-and-ride capacity along the eastern portion of the light rail corridor to address demand originating in east Multnomah and north Clackamas Counties.~~
- ~~Develop transportation system management (TSM) strategies for the Gateway regional center to mitigate spillover effects on the regional center.~~

Commentary

The 2006 Freight Master Plan includes a list of improvements directly addressing issues raised here. Many of the bulleted items have been funded, accomplished or are in the process of being accomplished. Two big projects completed: East End Connector complete, St Johns Truck Strategy. Mobility Corridor No. 16/17 in RTP is not listed in Table 5.1 Mobility Corridors Recommended for Further Refinement Plans) of the RTP--consider removing

Northeast Portland Highway

Purpose: *Refine long-term improvements to consider additional TSM and access management.*

Freight movement in the future will rely more heavily on NE Portland Highway (US Highway 30 bypass). This route links the Rivergate marine terminals and Portland Airport terminals to industrial destinations throughout the region. It includes Killingsworth and Lombard Streets from I-205 to Martin Luther King (MLK), Jr. Boulevard, and Columbia Boulevard from MLK Jr. Boulevard to N Burgard.

Although NE Portland Highway appears to have adequate capacity to serve expected 2020 demand, a number of refinements are needed in the corridor. The plan should consider the following transportation approaches:

- Improve NE Portland Highway as a strategy to address Banfield corridor and east Marine Drive congestion.
- Develop a long-term strategy to serve freight movement between Highway 30 and Rivergate.
- Implement access management measures along NE Portland Highway.
- Implement and refine identified Columbia corridor changes to address corridor needs of NE Portland Highway from Rivergate to I-205.
- Consider grade separation at major intersections.
- Streamline the NE Portland Highway connection from the Lombard/Killingsworth section to Columbia Boulevard, with an improvement transition point at MLK, Jr. Boulevard.
- Improve the Columbia Boulevard interchange at I-5 to provide full access to NE Portland Highway.
- Construct capacity and intersection improvements between 82nd Avenue and I-205.

The additional work done through the refinement plan will be based on the Columbia Corridor Study, the St. Johns Truck Strategy, and the environmental assessment for the 'East End Connector' transportation project.

Since 2007, two major improvements to the corridor have been completed: the East End Connector and the St. Johns Truck Strategy.

Commentary

Lake Oswego to Portland Transit Project Refinement Phase completed in 2012—not a corridor identified in RTP, delete.

~~***Macadam/Highway 43***~~

~~***Purpose:*** *Develop a long-term strategy for high-capacity transit, including phasing of future trolley commuter service between Lake Oswego and Portland, frequent bus service, and bicycle safety improvements.*~~

~~Although there is heavy travel demand along Macadam/Highway 43 between the Central City and Lake Oswego, physical and environmental constraints preclude major roadway expansion. A long-term strategy for high-capacity transit is needed to link the Central City to southwest neighborhoods and the Lake Oswego town center. As high-capacity transit is evaluated in the corridor, the following approaches should be considered:~~

- ~~Interim repairs to maintain the Willamette Shore Trolley excursion service~~
- ~~Frequent bus service from the Central City to Lake Oswego~~
- ~~Streetcar commuter service or commuter or light rail to provide a high-capacity travel option during congested commute periods~~
- ~~Transportation demand management~~
- ~~Bicycle safety improvements south of the Sellwood Bridge~~

Commentary

Mobility Corridor No. 10 in RTP is not listed in Table 5.1 Mobility Corridors Recommended for Further Refinement Plans of the RTP.

Major Refinement Plans

Major refinement plans are necessary when a transportation need exists, but the mode, function, and general location of a transportation improvement have not been determined, and a range of actions must be considered before identifying a specific project or projects.

Highway 99E (McLoughlin Boulevard)/224 Corridor (encompasses RTP Mobility Corridor 10: Portland Central City to Milwaukie)

Purpose: *Develop a traffic management plan for SE McLoughlin Boulevard from the Ross Island Bridge to I-205.*

Long-term improvements are needed in this corridor to preserve access between the Central City and Clackamas County, provide access to the Clackamas regional center, and support downtown development in the Milwaukie town center. The recently completed South/North light rail study demonstrated a need for high-capacity transit service in this corridor. Both highway and high-capacity transit service are needed over the 20-year plan period to keep pace with expected growth in this part of the region. This refinement plan should include rapid bus transit service, or its equivalent, in the short term and light rail in the long term. Transportation improvements should address the following approaches:

- Implement access management measures throughout the corridor, including grade separations at intersections along Highway 224 between Harrison Street and I-205.
- Discourage spillover traffic from McLoughlin and Highway 224 onto Tacoma Street, 17th Avenue, Johnson Creek Boulevard, 34th Avenue, and Lake Road.
- Monitor and mitigate spillover traffic from McLoughlin and Highway 224 onto other local collectors.
- Consider a reversible high-occupant vehicle (HOV) lane or peak-period priced lane between Ross Island Bridge and the intersection with Harold Street.
- Expand highway capacity to a total of three general-purpose lanes from Harold Street to
  I-205, and consider reversible HOV or peak-period pricing for new capacity.
- Provide a more direct transition from McLoughlin to Highway 224 at Milwaukie in order to orient long trips and through-traffic onto Highway 224 and northbound McLoughlin.
- Provide improved transit access to the Milwaukie and Clackamas regional centers.
- Provide improved pedestrian and bicycle access. Include active transportation component to the plan.

Commentary

Mobility Corridors Nos. 7, 8 & 9 in RTP is listed in Table 5.1 Mobility Corridors Recommended for Further Refinement Plans of the RTP.

Interstate 205 (also RTP Mobility Corridors 7 - Tualatin to Oregon City, 8 - Oregon City to Gateway, and 9 - Gateway to Clark County)

Purpose: *Develop a traffic management plan from I-5 to Clark County.*

Improvements are needed in the I-205 corridor to address existing deficiencies and expected growth in travel demand in Clark, Multnomah, and Clackamas Counties. The refinement plan should address the following needs and opportunities:

- Provide for some peak-period mobility for longer trips.
- Preserve freight mobility from I-5 to Clark County, with an emphasis on connections to Highway 213, Highway 224, and the Sunrise corridor.
- Maintain an acceptable level of access to the Oregon City, Clackamas, and Gateway regional centers and the Sunrise industrial area.
- Maintain acceptable levels of access to Portland Airport, including air cargo access.
- Use the physical configuration of highway improvements to shape urban form in the City or urban reserve area.
- Provide improved pedestrian and bicycle access. Include active transportation component to the plan.

The plan should consider the following potential transportation changes:

- Auxiliary lanes from Airport Way to I-84 east
- Express lanes, peak-period pricing, or HOV lanes as strategies for expanding capacity
- Relative value of specific ramp, overcrossing, and parallel route improvements
- An eastbound HOV lane from I-5 to the Oregon City Bridge
- A truck climbing lane south of Oregon City
- Rapid bus service from Oregon City to Gateway
- Extension of rapid bus service north from Gateway into Clark County
- Light rail
- Refinements to 2040 land use assumptions for this area to expand potential employment in the area and improve the jobs/housing imbalance
- Reevaluation of the suitability of Beavercreek as an urban reserve area, based on the ability to provide a transportation infrastructure that can adequately serve that area

Metro is dividing the I-205 refinement plan into two segments. The first segment stretches from Highway 224 north to Vancouver and includes the current work being done through the South Transit Corridor Study and the transit part of the I-5 Trade Corridor Study. The second segment is south from Highway 224 and is completely outside Portland's boundaries.

Commentary

Completed. The NE Quadrant plan addressed many of these things. Additionally, the CRC study was relevant to fulfilling this need.

~~***I-5 North from I-84 to Clark County***~~

~~***Purpose:*** *Develop improvements to address freight mobility and access needs.*~~

~~The I-5 corridor is a heavily traveled route that will experience additional traffic growth. Improvements are needed to facilitate freight movement and growing travel demand from Clark County. The RTP contains capacity projects that will have significant impacts on adjacent neighborhoods. As improvements are evaluated for this refinement plan, the following elements should be addressed:~~

- ~~HOV lanes and peak-period pricing~~
- ~~Transit alternatives from Vancouver to the Central City~~
- ~~Maintaining acceptable level of access to the Central City from Portland neighborhoods and Clark County~~
- ~~Maintaining off-peak freight mobility, especially to marine, rail, and truck terminals in the area~~
- ~~Maintaining an acceptable level of access to freight intermodal facilities and to the NE Portland Highway~~
- ~~Interchange improvements at Columbia Boulevard to provide freight access to NE Portland Highway~~
- ~~Additional Interstate Bridge capacity~~
- ~~Actions to reduce through-traffic on Martin Luther King, Jr. Boulevard and Interstate to facilitate main street redevelopment~~

~~The Portland/Vancouver I-5 Transportation and Trade Partnership completed its Strategic Plan in 2004. The details of that effort are summarized in Volume 2 under Chapter 12 Amendments. The next phase of the study will further refine recommendations identified in the Strategic Plan.~~

Hayden Island Access

In coordination with regional, state and federal partners, develop and evaluate access options to Hayden Island from Marine Drive. Access would include Pedestrian, Bike, Transit, Auto and Freight to support the Hayden Island plan.

Commentary

Not completed. Modeling was done to see what the impact of a North Willamette Crossing would be, however a crossing north of the St. Johns bridge failed to prove its worth; very few trucks were diverted to the new bridge instead of continuing through the heart of the St. Johns neighborhood and across the St. Johns bridge.

North Willamette River Crossing

Purpose: *Study the need for a new bridge from US Highway 30 to Rivergate.*

Analysis for the RTP showed a strong demand for travel between NE Portland Highway from the Rivergate industrial area and Highway 30/St Helens Road on the west side of the Willamette River. The St. Johns Bridge currently carries this traffic, but has limitations and will not be adequate in the long term to carry freight and other traffic. The St. Johns Truck Strategy recommends a number of changes to balance freight mobility needs with the vitality of the St. Johns town center. The Truck Strategy provides an interim solution to demand in the corridor and does not attempt to address long-term access needs to Rivergate and Highway 30. The refinement plan should incorporate the following:

- Building on the St Johns Truck Strategy, recommendations to provide adequate freight and general access to Rivergate, while considering potentially negative impacts on the future development of the St. Johns town center
- The potential for a "streamlined" northeast Portland connection from I-205 to Rivergate
- A long-term management plan for the St. Johns Bridge if the plan recommends a new crossing

Since 2007, preliminary traffic modeling has been done to show how a new Willamette River crossing north of St Johns would impact truck volumes through the neighborhood. As a part of the St Johns Truck Strategy, access improvements have been made within the St. Johns neighborhood to facilitate freight access.

Additional analysis should look at a new pedestrian/bicycle bridge across the Willamette from Kelley Point to Sauvie Island, a new pedestrian/bicycle path to the North Portland Railroad Bridge, and additional analysis related to the need for a motor vehicle bridge.

Powell Boulevard/Foster Road

Purpose: *Resolve outstanding transportation issues in the Pleasant Valley, Damascus and south Gresham areas.*

The Powell Boulevard/Foster Road Corridor represents both a key transportation challenge and an opportunity to meet 2040 regional land use goals. The Powell/Foster Corridor is a top priority among corridors requiring refinement plans. Despite policy changes to level-of-service standards that permit greater levels of congestion, significant multimodal improvements will be needed in order to continue to serve transportation needs of the communities and industrial areas in southeast Portland and Gresham. The corridor is also critical to providing access to the planned growth areas in Pleasant Valley, along with Damascus and Springwater that have recently been added to the Urban Growth Boundary. In addition, the corridor is constrained by significant topographical and environmental features.

As a result of the findings from Phase 1 of the Powell Boulevard/Foster Road Corridor Plan, which was completed in 2003, specific multimodal projects have been identified that address transportation needs on Powell Boulevard between inner SE Portland and Gresham, and on Foster Road west of Barbara Welch Road. System level decisions for transit service were also made for the corridor.

Several outstanding transportation problems in the Pleasant Valley, Damascus and south Gresham areas, require additional planning work before specific multimodal projects can be developed and implemented. The Phase 2 plan should be closely coordinated with concept plans for Damascus and the Springwater area, in order to incorporate the updated land use and transportation assumptions. It should examine the following transportation solutions and strategies:

- Determine the appropriate cross-section on Foster Road between Barbara Welch Road and Jenne Road and the project timing, to meet roadway, transit, pedestrian and bike needs.

- Explore the possibilities for potential new street connection improvements in the Mount Scott area that reduce local travel demand on Foster Road and improve access to the Pleasant Valley area.

- Develop conceptual designs and determine right-of-way for an improvement and extension of SE 174th Avenue between Powell Boulevard and Giese Road, or another new north-south roadway in the area, to accommodate travel demand and improve access to Pleasant Valley. The alignment should consider engineering feasibility, land use and environmental effects, safety, and overall costs.

- Further define the three-lane Highland Drive and Pleasant View Drive option that was recommended as part of Phase 1. This option needs to address design, operational, and safety-related issues.

- Work with local jurisdictions to provide for access management on arterials serving Pleasant Valley and Damascus.

- Address other regional north-south transportation needs identified by the Damascus Concept Plan and Springwater concept planning effort. Further evaluate alignment issues, engineering cost estimates, and right-of-way impacts of future roadway projects north of Damascus that are identified as part of the concept planning effort.

Since 2007, Gresham and Multnomah County submitted an application for a TGM grant to study the issues identified above; if the grant is approved, the City of Portland has agreed to contribute to complete its portion of the study. Additionally, the Metro East Metro Connection plan explored some of the Powell/Foster concerns.

Commentary

Mobility Corridor No. 2 in RTP is not listed in Table 5.1 Mobility Corridors Recommended for Further Refinement Plans of the RTP—reference RTP for how this refinement plans description can be updated.

Portland Central City to Tigard (RTP Mobility Corridor #2 – Southwest Corridor)~~*Barbur/Interstate 5*~~

Purpose: *Identify needed improvements for motor vehicles, trucks, bicycles, pedestrians, and high-capacity transit travel in the Barbur/I-5 corridor from I-405 to the north Tigard interchange.*

This corridor provides access to the Central City and to neighborhoods and commercial areas in the inner southwest quadrant of the region. Barbur Boulevard is designated in the RTP as a multimodal facility with potential light rail or rapid bus service, and also serves a regional role for motor vehicle, bicycle, and pedestrian systems. I-5 in this corridor is designated as a Main Roadway route for freight and a Principle Arterial for motor vehicles, extending southward beyond the region.

Even with priority system improvements, segments of both Barbur Boulevard and I-5 in this corridor experience significant congestion and poor service levels, especially from the Terwilliger interchange northward. However, ~~rapid bus service~~ high-capacity transit along Barbur and other expanded bus services are expected to experience promising ridership levels. Significant localized congestion occurs along the intersecting street segments of Bertha, Terwilliger, and Capitol Highway/Taylors Ferry. Broad street cross-sections, angled intersections, and limited signalized crossing opportunities along Barbur create traffic safety hazards and inhibit walking to local destinations and access to transit services.

The I-5 right-of-way presents a substantial barrier to local street system connectivity, contributing to congestion at the limited number of crossing points. The relatively steep freeway grade presents a safety hazard and contributes to significant roadway noise impacts on adjacent neighborhoods. The corridor is also located in the vicinity of several significant natural resource areas, including the Stephens Creek, Fanno Creek and Tryon Creek watersheds.

Several recent planning studies and actions will provide guidance for future transportation analyses and refinement planning. The South Portland Circulation Study report provides a circulation concept for the Ross Island bridgehead area and Naito Parkway. The Barbur Boulevard Streetscape Plan provides guidance for pedestrian and streetscape improvements. The Barbur Concept Plan also provides guidance. ~~The Barbur Boulevard Streamline Project recommends near-term improvements for transit operations and bus stop amenities.~~ The West Portland Town Center Study recommends various transportation improvements for this area. The City did not adopt or act upon this study, but some portions may be useful for future considerations.

The adoption of the Southwest Community Plan and Comprehensive Plan (SWCP) and Zoning Map resolved many land use issues in the broader area surrounding the corridor. However, a 'Barbur envelope' has been delineated for a future land use and transportation planning process. This area includes a relatively narrow band of properties along Barbur between Miles Street and the City boundary and in the general area of the West Portland town center. Until the plan for this area is completed, the SWCP identifies the town center designation as conceptual only; the exact designation for the area could change as a result of further study.

Transportation solutions in the corridor should consider the following approaches:

- Combined land use and transportation alternatives within the 'Barbur envelope' area, and resulting transportation and livability benefits and impacts
- Regional and local transit services and facilities, and the appropriate transit vehicle type to serve the Barbur corridor within the RTP planning horizon
- Possible new locations or relocations for I-5 on-ramps and off-ramps and street connections across the freeway right-of-way
- Opportunities for new or improved local street connections to Barbur, including locations for possible signalized intersections and reconfiguration of angled intersections for safe, multimodal access
- Facilities to improve bicycle and pedestrian safety along Barbur and access to transit services and local destinations
- Traffic management and intelligent transportation system improvements along the corridor
- Potential mainline freeway improvements, including possible southbound truck climbing lanes and traffic and truck noise mitigation
- Special attention to the Barbur/Capitol/Taylors Ferry intersection and local street connectivity improvements in the West Portland area
- Coordination with previous planning studies and recommendations from the South Portland Circulation Study, Barbur Boulevard Streetscape Plan, and Barbur Boulevard Streamline Project

Commentary

Columbia Slough Greenway Plan has been developed (delete)

RTP Studies

~~*Columbia Slough Greenway Trail Study*~~

~~***Purpose:*** *Determine the feasibility of constructing a multi use path of regional significance from Kelly Point Park to Blue Lake Park (2000-2005).*~~

~~In 2002, Limited segments of the Columbia Slough Trail have been completed, including some recently developed by the Bureau of Environmental Services (BES). Significant links are missing. This study would look at potential alignments, consider environmental and physical constraints, and determine where grade separation may be needed when the trail crosses rights-of-way.~~

Interstate 205 Ramp Study

Purpose: *Evaluate and recommend improvements to I-205 ramps at SE Powell and SE Division to eliminate confusing intersections that direct drivers to frontage roads ~~(2000-2005).~~*

Based on adopted policy, the City designed the freeway ramp and collector-distributor road system on either side of the I-205 freeway to operate so Powell Boulevard on the west side of I-205 and Division on the east side of I-205 provide a continuous route from Portland to Gresham. This design was intended to take automobile and truck traffic off the more transit-oriented Division Street west of I-205 and use Division east of I-205, in combination with the more auto-oriented Powell Boulevard west of I-205, for the bulk of trips between the two centers.

The current design of the ramp termini reflects this policy intent. There has been recent interest, however, in revisiting the turn restrictions and physical restrictions imposed by the policy and design. ODOT and the City have agreed to analyze the type of improvements that might be necessary to remove the turn restrictions at SE 92nd and Powell Boulevard and allow for more balanced turn movements throughout the interchange area.

West Portland/I-5 Access and Crossings Study

Purpose: *Identify possible new connections over I-5 to serve motor vehicles, pedestrians, and bicycle travel ~~(2000-2005).~~*

Because of the barrier effect of I-5 and SW Barbur, the existing street pattern in the vicinity of the West Portland town center/Barbur transit center is incomplete, particularly in the north-south direction. This 'wall' limits connections between cultural, institutional, recreational, and commercial facilities such as Woods Memorial Park, Multnomah Village, the Multnomah Center, Gabriel Park, Jackson Middle School, Capital Hill Library, Holly Farm Park, PCC-Sylvania, and Markham Elementary School. Topography presents a challenge to making additional connections in the vicinity of the transit center.

I-5 Crossing
The existing pedestrian/bicycle connection across I-5 ramps down from the transit center, crosses I-5 on a pedestrian bridge, then ramps down to SW Willard at 40th. The West Portland Town Center Study (December 1997) recommended enhancing the existing pedestrian bridge crossing by reconfiguring the park-and-ride lot, providing a new local street crossing in the vicinity of the transit center, and potentially capping a portion of I-5. In addition, sidewalk improvements are needed on local streets south of I5 to improve connections to the existing pedestrian bridge.

Local Street Connectivity
Southwest Barbur and I-5 create barriers at the north and south ends of the West Portland town center. Only Capitol Highway and the pedestrian bridge at the transit center cross I-5 in the vicinity of the town center, resulting in a local street network with missing links. Potential locations for local street crossings of I-5 are:

- Replacing the existing pedestrian/bicycle bridge over I-5 with a pedestrian-oriented, local street connection on the 39th/40th alignment, connecting to 40th at Wilbard Street and
  to SW 35th
- Constructing a new local street that extends SW 48th Avenue south on a new bridge structure to SW Huber Street and then connects to an extension of SW Alfred Street
- Constructing a bicycle/pedestrian bridge between the Ash Creek and Crestwood neighborhood and the West Portland Park neighborhood in the vicinity of the Dickinson Street corridor, south of Markham School

Land Use

- Relocating ramps in this area will create developable land and new land use potential.

This study may be incorporated into the Barbur/I-5 refinement plan (described earlier in this chapter), which identifies many of the issues described here.

Commentary

Markham School Pedestrian/Bicycle Overpass is identified in the TSP.

Barbur Boulevard Crossings

Existing commercial areas along the west side of Barbur and south of I-5 are relatively inaccessible by pedestrians. Barbur presents a barrier to pedestrian access because of wide paved areas, limited crossing opportunities, and relatively high traffic volumes and speeds. Safer and more convenient pedestrian circulation is needed to support commercial uses, access transit service, and support a future town center.

Additional study is needed to determine the need and feasibility of new connections, within the context of the additional land use and transportation analysis being conducted as part of the Barbur and I-5 corridor refinement plan.

Commentary

The Willamette Cove Shoreline Trail is part of what is now the North Portland Greenway Trail, which has a concept plan. There are five segments of North Portland Greenway Trail in TSP list. Delete.

The CCTMP planning work and Central City Multimodal Safety project will identify pedestrian improvements. MMA work also identified some improvements.

Willamette Cove Shoreline Trail

~~***Purpose:*** *Evaluate the feasibility of a multi use trail from Cathedral Park to Swan Island and from Swan Island to the Steel Bridge (2000-2005).*~~

~~Willamette Cove is on the North Portland peninsula near St. Johns. With nearly one-half mile of riverfront, it is one of the last remaining semi natural shorelines in the Portland Harbor. The property is at the southern anchor of the Peninsula Crossing Trail, a 3.5mile pedestrian trail that connects the Willamette and Columbia Rivers. The City of Portland recently completed a master plan for the redevelopment of the 27-acre Willamette Cove site as a natural area park.~~

Central City Pedestrian Enhancements Study

Purpose: *Identify needed pedestrian improvements to address locations lacking pedestrian crossings, difficult bridge crossings, and access over freeways in the Central City* ~~*(2000-2005).*~~

The Central City Transportation Management Plan's (CCTMP) pedestrian policies and text note that the degree of pedestrian access is increased when the pedestrian network is "comprehensive in coverage, easily accessible, and without significant barriers and obstacles that would prevent its use." The pedestrian enhancements study should:

- Identify gaps and deficiencies in the pedestrian network
- Examine 'no pedestrian crossing' locations and identify appropriate measures to improve access
- Examine the need for underpasses and the potential for alternative pedestrian crossing opportunities
- Identify pedestrian access improvements to and across Willamette River bridges
- Identify pedestrian access improvements across I-5, I-84, and I-405
- Identify connections to and from surrounding neighborhoods
- Identify locations where pedestrian crossings need improvements and/or signal modifications
- Identify reconfigurations of ramp intersections to provide continuous sidewalks on both sides of SE Grand and SE Martin Luther King, Jr.

<u>With the pending completion of the Central City Multimodal Safety project, many pedestrian access improvements in the Central City will be identified.</u>

Commentary

This concept was examined in the Oregon Passenger Rail project. The improvements described in the refinement plan were rejected by the Oregon Passenger Rail project. Delete.

~~*Tualatin/Portland Commuter Rail Extension Study*~~

~~***Purpose:*** *Evaluate the extension of commuter rail service from Tualatin to Union Station via Lake Oswego and Milwaukie (2011-2020).*~~

~~This project would use existing railroad tracks: the Tillamook branch from Tualatin and the Southern Pacific tracks in Portland. The line would extend from Tualatin, through Lake Oswego and Milwaukie, and through eastside Portland before crossing the Willamette and ending at Union Station.~~

~~*Portland to Milwaukie Light Rail Transit Study*~~

~~***Purpose:*** *Identify possible light rail route alignment from the Portland Transit Mall. (2005-2010)*~~

~~Further study has been identified in the 2004 South/North Land Use Final Order (LUFO) Amendment adopted by Metro Council (Resolution No. 03-3372) for two areas within Portland. The LUFO identifies a study area for a possible light rail route alignment from the downtown Portland Transit Mall at SW Lincoln Street and SW 5th Avenue eastward along SW Lincoln Street and an extension of SW Lincoln to I-5. This area is immediately adjacent to the extension of the Portland Transit Mall to just south of SW Harrison.~~

~~Further study has also been identified for a section of land south of SE Tacoma Street and generally north of Highway 224, between McLoughlin Boulevard, east to the Tillamook Branch railroad line. The purpose of this study is to address issues of concern identified by the City of Milwaukie (Resolution 02-2003).~~

Commentary

A Draft EIS was completed in 2010, before the project was abandoned. A shorter segment down to Johns Landing is in TSP. http://www.oregonmetro.gov/lake-oswego-portland-transit-project. Trail is listed on the TSP Major Projects List.

~~*Lake Oswego to Portland Transit and Trail Study*~~

~~***Purpose:*** *Develop and evaluate transit and trail alternatives in the Lake Oswego to Portland corridor and select one or two preferred alternatives to advance into the federal environmental analysis process.*~~

~~In the Lake Oswego to Portland corridor, Highway 43 serves as the primary north/south route for cars, buses and trucks between Lake Oswego and Portland. Existing traffic volumes on Highway 43 create substantial congestion in the peak hours. Substantial roadway improvements and tolling for Highway 43 have been ruled out in earlier studies. Multiple studies have recommended consideration of transit along the existing Willamette Shoreline right-of-way. Given the public ownership of the railroad right-of-way within the corridor, transit alternatives, including, but not limited to streetcar service, are being studied.~~

~~The purpose is to develop a community-supported transit project that meets future travel demand in the Lake Oswego to Portland corridor and supports local and regional land use plans. The project will accomplish several objectives:~~

- ~~Provide improved transportation access to and connectivity among significant destinations and activity centers.~~
- ~~Minimize traffic and parking related impacts to neighborhoods.~~
- ~~Support and enhance existing neighborhood character in an environmentally sensitive manner.~~
- ~~Leverage investment in the existing transit system to cost-effectively increase riders in the corridor and across the system.~~
- ~~Support transit-oriented economic development in Portland and Lake Oswego.~~
- ~~Support community goals related to transportation, land use and development.~~
- ~~Increase mobility.~~
- ~~Provide additional transportation choices in the corridor.~~
- ~~Provide access for persons with disabilities.~~
- ~~Be part of an integrated multimodal transportation system.~~
- ~~Anticipate future needs and impacts and not preclude future expansion opportunities.~~

Commentary

I-84/Banfield Trail was fulfilled by the completion and adoption of the Sullivan's Gulch Trail Concept Plan in July 2012

I-84/I-205/Tillamook Multi Use Connector Study, this is Phase II of the Sullivan Gulch Trail Concept Plan (I-205 to 122nd). Delete.

~~The purpose of the pedestrian and bicycle trail is to provide a connection between the Willamette River Greenway trail at the north end and the Lake Oswego town center at the south which will:~~

- ~~Significantly improve the access, safety and quality of experience for cyclists, pedestrians and persons with disabilities.~~
- ~~Create a connected, high-quality facility that is compatible with the transit alternative and which makes bicycling and walking a viable transportation and recreation choice.~~
- ~~Enhance the value of the existing transportation system by successfully integrating the bicycle and pedestrian trail.~~
- ~~Be compatible with and serve the needs of surrounding neighborhoods.~~
- ~~Connect and improve access to important pedestrian and bicycle destinations in the corridor.~~

RTP Preferred System Studies

The RTP project list includes the following studies only in the 2020 Preferred System. There is no timeframe associated with these studies.

I-84/Banfield Trail

~~***Purpose:*** *Study the feasibility of a multi use path from the Eastbank Esplanade to I205 bike lanes.*~~

~~A feasibility study is needed to determine whether a bicycle path could be constructed along I-84 between the Eastbank Esplanade and the I-205 bike lanes. The study would need to determine the path's location (adjacent to the heavy rail line, above the gulch, or a combination of the two) and access points to the path. Since the path will likely involve private (railroad) property, a public involvement component will be needed.~~

~~*I-84/I-205/Tillamook Multi Use Connector Study*~~

~~***Purpose:*** *Study the feasibility of a connection from I-84/122nd Avenue to I-205.*~~

~~This study would consider the feasibility of a bicycle path connection between the existing path on I-84 (that has its western terminus at 122nd) and I-205. The terminus with I-205 would link to a future path identified in the I-84/Banfield Trail study discussed above. Topography and heavy rail lines would limit alignment alternatives. Topography and a limited number of east-west streets would also limit access points.~~

Commentary

I-5 Train Capacity Corridor Study listed many improvements (largely for freight rail), many of which have been implemented. Oregon Passenger Rail project is underway and is looking at improvements to passenger rail north of Union Station. Expected completion: winter 2015/16.

Portland Union Station Multimodal Conceptual Engineering Study complete: www.portlandoregon.gov/transportation/article/262556

Third Track Connector Study

Purpose: *Study additional rail capacity to address growth in high-speed rail and commuter rail from North Portland to Vancouver, Washington.*

The 1999 Commuter Rail Feasibility Study evaluated the feasibility of regional commuter rail service operating on the existing freight rail lines. ODOT and the Washington Department of Transportation will jointly conduct a new Rail Capacity Analysis as part of the ongoing I-5 Transportation and Trade partnership. This study will examine possible commuter rail service between Portland and Vancouver/Woodland, and Portland and Camas/Washougal. It will consider the feasibility of commuter rail service on entirely new, separate, passenger-only rail lines for intercity passenger trains (including high-speed rail) and commuter rail trains. Potential ridership and infrastructure costs will also be examined. The study will likely find that a third rail line would be inadequate and two parallel passenger rail lines would be more feasible.

~~*Union Station Multi Modal Center Study*~~

~~***Purpose:*** *Identify improvements to meet additional transportation needs to Union Station.*~~

~~Union Station is a highly accessible intermodal facility, with passenger connections between public and private bus systems and passenger rail. Motorists, pedestrians, transit riders, and bicyclists can also access the station. Light rail and bus service will be expanded in the future, and NW Sixth will be extended north to NW Northrup. Improvements for Union Station area would focus on:~~

- ~~Preserving access to and from Union Station for all modes of travel, including bus, light rail, passenger rail, motor vehicles, walking, and bicycles~~
- ~~Further developing Union Station as an intermodal passenger terminal~~

Commentary

Done. Central Eastside Street Plan (done in 2010). SE Quadrant Plan (draft plan is going to city council).

BES recently completed a project in this area that built large bioswales in the big triangular spaces left over from the street grid intersecting with Sandy. A median with ped/bike crossing where Sandy, Pine, and 9th come together. Delete.

~~*Central Eastside Truck Access Study*~~

~~***Purpose:*** *Evaluate circulation to improve connections in the Central Eastside to the regional traffic network and reduce conflicts with non-industrial land uses.*~~

~~The Central Eastside is an important industrial job base for the Central City, particularly for warehousing, distribution, and incubator industrial activities. Commercial vehicle access and circulation to and within the district must be maintained and enhanced. Areas of concern include access to and from I-5, SE Powell Boulevard, the Ross Island Bridge, and 'southern triangle' area. Circulation in the Central Eastside needs to be managed to minimize conflicts between trucks, automobiles, bicycles, pedestrians, and transit and to minimize conflicts between industrial, retail, and residential activities.~~

~~*Lower Sandy Boulevard Circulation Study*~~

~~***Purpose:*** *Realign blocks to improve circulation in the Stark to Burnside area.*~~

~~The CCTMP identified a strategy to "consider modifying Sandy Boulevard from E Burnside to SE Stark to eliminate excess street area, realign city blocks, and improve routes and street design for pedestrians and bicyclists."~~

PORTLAND PLANS AND STUDIES

Refinement Plans

Central City Transportation Management Plan (CCTMP) Update

Purpose: *Update the CCTMP, including subarea access and circulation studies as needed (~~2000-2005~~).*

City staff must review and update the CCTMP's policies, objectives, district strategies, and street classifications every five years. The review is limited to City Council directives, street reclassifications, new programs, policy amendments, land use changes, and legal issues, and must include a citizen involvement component. The CCTMP street classifications were updated as part of the TSP process to make them consistent with RTP classifications.

MAX Light Rail Corridor Master Street Plan

Purpose: *Complete the master street plan for areas between NE Glisan and SE Stark, east of the Gateway regional center ~~(2000-2005).~~*

The RTP requires local jurisdictions to develop "conceptual new street plan maps" for "contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development." The maps are intended to provide guidance to property owners and developers, as well as more certainty to nearby residents. The street plans should identify street connections to adjacent areas in a manner that promotes a convenient and well-connected street system. The street plans should show extensions to existing streets, new street connections to provide adequate connectivity, and a reliance on through-streets rather than closed street designs.

Because the MAX light rail corridor has unique connectivity needs, it was not included in the Far Southeast Street Master Plan study. A higher level of street connectivity is desirable in dense, mixed-use areas to access multiple destinations and disperse vehicle traffic throughout the area. High levels of pedestrian activity also warrant a more densely spaced street grid to facilitate movement and attain high mode split targets for alternatives to single-occupant vehicles.

Citywide Master Street Plans

Purpose: *Complete master street plans for the following districts: Southeast, Far Northeast, North, Northeast, and Northwest ~~(2000-2005)~~*

The ~~2000~~ 2014 RTP requires local jurisdictions to develop "conceptual new streets plan maps" for "contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development. The maps are intended to provide guidance to property owners and developers as well as more certainty to nearby residents. The street plans must identify street connections to adjacent areas in a manner that promotes a convenient and well-connected street system. The street plans must show extensions to existing streets, new street connections to provide adequate connectivity, and reliance on through streets rather than closed street designs.

Areas of the City without adopted street plans must be analyzed to determine where adequate connectivity does not exist. Some areas, such as inner Southeast, have high levels of street connectivity that exceed regional standards. Other districts, such as Northwest, exhibit high street connectivity near the Central City, but poor connectivity in outlying areas where topography and industrial zoning may preclude connectivity. At a district level, the Far Northeast exhibits the lowest levels of connectivity for areas not covered by an adopted street plan.

Commentary

A new bike-ped bridge has been constructed in place of the old one as a part of the PMLR project. Additional access improvements identified in Bicycle Master Plan.

Studies

ODOT District Highways Evaluation

Purpose: *Assess the long-term design and functional needs of state highways inside the City.*

The City and ODOT are both interested in transitioning district highways within the City limits to Portland's jurisdiction and management. These may include Sandy Boulevard, NE/SE 82nd Avenue, N/NE Lombard, NE/SE Martin Luther King, Jr. Boulevard, and NE/SE Grand Avenue. Many of these highways have changed roles over time, as parallel state routes and limited-access highways were constructed. These district highways formerly served as through-routes, but now provide more local circulation and commercial access functions.

The City's interest in assuming jurisdiction is based on land use (implementing 2040 main street development); development review (giving one agency permit authority for buildings, driveways, etc.); street design (incorporating multimodal features, more calmed traffic), and operations (implementing signalization, parking control, etc.).

The City must evaluate the significant cost implications of assuming jurisdiction for these district highways. Many of the highways need reconstruction or are not built to the level of urban standards the City desires. Jurisdiction also includes a long-term responsibility for maintenance and operations.

~~*Brooklyn Rail Yard Access Study*~~

~~***Purpose:*** *Identify pedestrian and bicycle improvements.*~~

~~This idea was generated in the TSP workshop for the Southeast Transportation District and is also identified in the Brooklyn Neighborhood Plan (1991) concept plan. The Brooklyn yards contain numerous rail lines and associated activities that create a substantial barrier to pedestrian and bicycle access across the Brooklyn neighborhood. An existing pedestrian bridge over the tracks is in disrepair. The Brooklyn Neighborhood Plan envisions a new bicycle and pedestrian bridge over the rail lines for access to the park and high school from the east side of the neighborhood at approximately SE Lafayette.~~

Commentary

East Burnside Pedestrian Access Improvements:
The High Crash Corridor program has done extensive planning and implementation work in this corridor and has made it more pedestrian-friendly. Delete.

Portland Central City Loop:
This refinement plan pertains to a mobility corridor in table 5.1 Mobility Corridors Recommended for Future Corridor Refinement Plans of the Regional Transportation Plan. The refinement plan name was changed to be consistent with the Metro RTP.

~~***East Burnside Pedestrian Access Improvements***~~

~~***Purpose:*** *Analyze East Burnside between 12th and 39th for improvement of transitpedestrian access to commercial and residential areas.*~~

~~The Pedestrian Master Plan identifies the need for a plan for East Burnside between 12th and 39th to identify transportation improvements that will increase walking opportunities and provide streetscape improvements to enhance the main street character of this corridor.~~

Portland Central City Loop (RTP Mobility Corridor#4) ~~***Interstate 5/Interstate 405 Inner Freeway Loop Study***~~

Purpose: *Evaluate the current and future operations, design, and proposed improvements of the I-5/I-405 freeway loop in the Central City, and consider alternative design concepts.*

The purpose of this study is to develop alternative design concepts for the inner freeway loop, addressing issues such as regional mobility; freight movements; access needs of Central City districts; minimization of physical barriers and impacts on the river; potential local street network improvements; and the role of alternative modes. The analysis should also evaluate changes to the transit system and the possible implications for land use in the district.

Numerous studies have evaluated the service capabilities of various existing segments of the inner freeway loop (such as the Greeley-Banfield segment and the Eastbank segment) and have recommended potential improvements. The freeway loop has not been evaluated as a whole system, however. Several recent planning activities indicate the need to evaluate the function and design of the entire inner freeway loop, given emerging land use and transportation objectives. These planning activities include the I-5 Transportation and Trade Partnership, the South Portland Circulation Study, the Rose Quarter Urban Design Plan and Development Strategy, the Lloyd District Development Strategy, and the Central Eastside Development Opportunity Strategy.

Commentary

Inner Powell Streetscape Plan was adopted in 2008. Multiple studies such as Central Eastside Street Plan and SE Quadrant Plan have looked at changes to east end of Ross Island Bridge and none have recommended pursuing any changes.

Brooklyn Neighborhood River Access

Purpose: *Study pedestrian and bike access from the Brooklyn neighborhood to the Willamette River.*

The 1991 Brooklyn Neighborhood Plan identifies improved access to the riverfront as a longstanding neighborhood priority. Objective 6A1 of the plan states: "Re-establish Brooklyn's access and historic link to the Willamette River."

McLoughlin Boulevard creates a barrier that separates the neighborhood from the river. Existing access from the neighborhood to the river is via the lower-level ramps at the Ross Island Bridge, where steep terrain limits easy access, or via Holgate Boulevard, where pedestrians can cross at a stoplight, but can reach the river only by descending a bramble-covered bank. Haig Park is undeveloped parkland between the river and McLoughlin Boulevard, south of the SE Franklin Street alignment and north of the SE Haig Street alignment.

The neighborhood concept plan identifies a pedestrian overpass bridging McLoughlin as a way to provide river access. A recent study investigated alternative crossing locations of McLoughlin Boulevard and access routes to the Springwater Trail, and provided rough cost estimates. That study may be detailed enough to identify a preferred alternative for an improvement project. The next step would be to determinate if the project responds to a transportation need rather than a recreational need to qualify it for inclusion in the TSP. Because the preferred alternative may impact private property and existing business operations, a City Council hearing on the report's acceptance is also recommended.

~~*Inner Powell/Ross Island Bridgehead Access and Circulation Study*~~

~~***Purpose:*** *Study access and circulation alternatives to the east ramps of the Ross Island Bridge, including local circulation and pedestrian and bicycle access, and create a streetscape plan between the bridge and SE 50th Avenue.*~~

~~This study has many elements that could be conducted as part of other recommended TSP studies (such as the I-5/I-405 Inner Freeway Loop Study or the Brooklyn Neighborhood River Access) or could be undertaken independently. It involves two basic issues that should be evaluated together: improving the access route to the Ross Island Bridge from the Central Eastside Industrial District (CEID) and reducing the pedestrian barrier effect created by the current design of the inner segment of Powell to SE 21st Avenue.~~

~~The Central Eastside Transportation Study (1990) presented several concepts for improving the current traffic and truck access route from the CEID to/from the Ross Island Bridge. Further investigation may identify other alternatives. During its most recent review of I-5 southbound access alternatives from the Central Eastside, City Council indicated a preference to improve~~

~~access to I-5 southbound via the Ross Island Bridge rather than support construction of the Water Avenue ramp.~~

~~The inner segment of Powell Boulevard is a significant barrier for pedestrians, and its highway design may not be compatible as an edge to the neighborhood to the south. There are no protected at-grade crossings of Powell between the bridge and Milwaukie and between Milwaukie and SE 26th Avenue. The streetscape portion of the study should address the aesthetic environment and pedestrian crossing improvements at Powell Park and Cleveland High School, Creston Park and Creston Schol and SE Milwaukie, SE 17th, and SE 39th Avenues.~~

Interjurisdictional Arterial Improvements Coordination

Purpose: *Develop a coordinated street improvement plan for arterial streets that transcend jurisdictional boundaries.*

This study would look at streets that cross jurisdictional lines, to identify changes in traffic volumes and traffic origins/destinations and to monitor how the streets' classifications conform with their function and levels of regional traffic. Significant traffic growth is expected on streets that connect to other jurisdictions with planned population and/or employment growth. Evaluate pedestrian and bicycle access, mobility and improvements, especially where meeting jurisdictional boundaries.

Metro designates collector-level streets as part of the regional street system when a network of higher-classified streets is not present or lacks adequate capacity to carry regional traffic. Designated in the RTP as 'collectors of regional significance', these streets connect the regional arterial system and the local collector system and distribute neighborhood traffic to arterials. They have three purposes: 1) ensure adequate access to the primary and secondary land use components of the 2040 Growth Concept, 2) allow dispersion of arterial traffic over a number of lesser facilities where an adequate local network exists, and 3) define appropriate collector-level movement between jurisdictions.

The RTP designates some district and neighborhood collectors in Portland as collectors of regional significance. Examples of Portland streets that have this designation and extend beyond Portland boundaries are SW Taylors Ferry, SW Terwilliger, SE 52nd, SE 112th, SE Johnson Creek, and NW Cornell.

Commentary

The TSP includes a project to add bike lanes, but implementation would be difficult without further study.

NE Glisan Street Transportation and Streetscape Study

***Purpose**: Identify transportation and streetscape improvements that address commercial, pedestrian, bicycle, safety and neighborhood livability needs.*

Northeast Glisan been NE 67th and 82nd Avenues has been designated a main street in the Region 2040 Growth Concept. The TSP designated this segment of Glisan as a Community Main Street for street design purposes. The TSP contains one project, bike lanes, for NE Glisan.

Currently, this segment of Glisan stretches between two light rail stations at 60th and 82nd. The land use and zoning pattern is storefront commercial, consistent with its main street designation. NE Glisan has the potential to be a thriving commercial district with multimodal connections. Barriers that prevent Glisan from realizing its potential include heavy automobile use as an alternative to I-84 during peak travel times; difficult pedestrian crossings and inadequate sidewalks and large curb cuts, missing bike lanes, intermittent on-street parking, and a lack of street trees.

Glisan St was given a road diet between 62nd and 81st avenues, improving pedestrian crossing conditions. However, nothing has yet been done on this stretch specifically for bicycle safety.

Commentary

The study was completed as part of the Marquam Hill Traffic Calming Plan Project #1 (2007) and Project #2 (2012).

~~***Marquam Hill/Terwilliger Parkway Traffic Calming and Neighborhood Access Study***~~

~~***Purpose**: Evaluate traffic calming and traffic mitigation aimed at reducing institutional traffic.*~~

~~The Portland Aerial Tram Final Recommendations and Report identified a study to be included in "Tier 1" implementing actions. The study description states,~~

> ~~Initiate a community outreach and design process for evaluating traffic calming and traffic mitigation solutions aimed at reducing institutional traffic along routes accessing Marquam Hill facilities, including those identified in the Marquam Hill Plan. Emphasis should be placed on maintaining neighborhood access within the Homestead neighborhood.~~

~~Within the Marquam Hill and Terwilliger Parkway project list identified as mitigation for the aerial tram a number of traffic calming and traffic mitigation projects were identified. These projects all have a common theme, which is to mitigate impacts associated with Marquam Hill institution traffic on local neighborhood streets, and to encourage this institutional traffic to use appropriate routes travelling to and from Marquam Hill destinations. Given the number of projects that are related to this issue, it is important to plan these projects in an integrated manner, working with affected residents and property owners.~~

~~The following potential projects were identified as part of the Portland Aerial Tram project:~~

- ~~MH-1 Homestead Drive/6th Avenue/Gaines Street Connection~~
- ~~MH-2 Marquam Hill Traffic Calming – Condor Avenue, Hamilton Street, Homestead Drive, Bancroft Street~~
- ~~MH-6 US Veterans Drive/Sam Jackson Park Road Intersection Improvements~~
- ~~TP-4 Terwilliger Parkway Intersection Improvements – Campus Drive, Condor Lane, Homestead Drive~~

Commentary

Completed Projects since 2007 TSP Update

New City of Portland Studies

New City of Portland studies were identified as part of the Comprehensive Plan process.

~~Kenton Line Access Study~~
Columbia Corridor Access Study

This study would identify priority connectivity needs for all modes along and across the Kenton rail line in Northeast Portland. North south access points across the railroad are currently limited to few locations, are substandard for all modes, and include several deficient bridges. If Union Pacific double-tracks the Kenton railroad line, north south access could be significantly impacted for freight, transit, bicyclists, pedestrians, and drivers. Traffic analysis has also indicated significant and growing freight delay along Columbia Blvd, improved pedestrian and bicycle access to transit is also needed to support a proposed bus line along Columbia Blvd. The study would identify key connectivity needs for all modes, and develop a proposal to work with Union Pacific, other public sector agencies, and private sector organizations to ensure ongoing connectivity needs are met.

Other Agency Common Priority Projects in Portland
This project is needed in order to collaborate with ODOT, the Port, Portland Parks and Recreation, and TriMet to identify common priority projects for the 2018 RTP. The 2018 RTP is proposed as a "major update." The City did not evaluate other agency proposed projects within Portland for the 2014 RTP, or the 2035 TSP update. This collaborative study, or three separate studies, would identify projects that the City and one or more of the other agencies agree should be advanced as priority projects in the 2018 RTP. The study will refine project evaluation criteria based on RTP and TSP adopted outcomes.

Growing Transit Communities Investment Plan

This project will identify corridors within the City of Portland where the development of compact, transit oriented communities would be stimulated by targeted investments that support a high level of access to fast, reliable, and frequent transit service. It will then identify and prioritize the specific infrastructure, program and policy investments that are most needed in those corridors to produce the level and type of growth and mode shift targeted by the City and the region. The study will then develop funding and implementation strategies for the improvements. The project will result in an investment plan that will be a model for other jurisdictions in the region. It will be incorporated into future updates of the Transportation System Plan and the Regional Transportation Plan. This project is funded.

Enhanced Transit Corridors
This study will identify corridors needing higher transit capacity to accommodate projected growth and to support TSP outcomes including prosperity, equity, safety, and climate. The study will identify the general types of improvements needed in each corridor. The result will be projects for the next RTP and/or TSP.

This study will focus on frequent transit corridors within the City of Portland where projected population and employment growth and associated transit demand is expected to overwhelm the ability of conventional transit service to meet the demand. On the highest priority corridors, the project will determine the additional transit capacity needed to meet future demand, and will identify strategies and investments needed to improve transit operations enough to support that higher capacity. The study will consider "enhanced transit" strategies such as span of service, vehicle technology, longer span of service, higher capacity vehicles, proof-of-payment fare systems, headway-based operations, and enhanced transit signal priority. This study will build and expand on the Growing Transit Communities investment plan.

The study will evaluate multiple corridors, and will result in at least two enhanced transit projects (one in East Portland and one in “Inner Ring” neighborhoods).

The studies will:

- Involve PBOT, BPS, Trimet, Metro.
- Evaluate and select the viable transit corridor for even more frequent or higher levels of service, preferably consistent with FTA Small Starts criteria.
- Be mode neutral and will evaluate a small number of corridors based on projected ridership, development potential, relationship to existing transit, sustainability of operational costs, new funding mechanisms (including new value capture mechanisms), and linkage to affordable housing and other Portland Plan equity objectives.
- Build from and relate to sidewalk and bike projects identified in the TSP, with an effort to use those projects as a local match.
- The result will be to recommend inclusion of at least one East Portland and at least one Inner Ring project for inclusion in the 2018 RTP. Prioritize East Portland project funding and timing.

Project-Specific Objectives:

- East Portland Project
  - Create enhanced next generation north-south transit service in East Portland, above and beyond the frequent service improvements currently contemplated with the 2015 Trimet Service Improvement Plans. Evaluate opportunities in Gateway, and on 82nd, 122nd, 148th and 162nd.
  - The project will examine the employment location and commute patterns of east Portland residents, and evaluate ways to improve transit access to jobs in the Columbia/Airport Way corridors and elsewhere in the region from east Portland.
  - Project timing: 5-10 years

- Inner Ring Project
  - Portland Streetcar will be a partner.
  - Create enhanced next generation higher capacity transit service in Inner Ring corridors projected to experience high levels of residential and/or job growth sufficient to exceed projected transit capacity, frequency, and reliability.
  - The project will build from analysis completed with the 2009 Streetcar System Concept Plan, and subsequent economic impact studies. Gather projected ridership and traffic data for corridors such as Grand/MLK, Division, Macadam, Sandy, Burnside/Stark, Broadway, 18th/19th, Belmont/Hawthorne, and Vancouver/Williams. Identify 2-3 corridors for further evaluation.
  - The project will examine transit demand, traffic and travel patterns in the highest demand corridors, and evaluate ways to improve transit frequency and reliability, from origins to destinations.
  - Project timing: 11-20 years.

Pleasant Valley Area Need and Feasibility Analysis
This study will conduct a high-level needs and feasibility analysis for several projects from the 2007 TSP and the 2014 RTP in the Pleasant Valley area. These projects include retrofits of Jenne Road, 174th Avenue, Barbra Welch Road, and Foster Road, as well as the extension of 174th Ave as proposed by the City of Gresham. The study will use updated transportation modeling from Metro and current population and employment growth projections to re access the need for these project as well as the identified solutions. The study will also access the feasibility of projects that call for new or widened roadways with full pedestrian and bicycle facilities along environmentally constrained corridors.

Industrial Lands Access Study
This study will identify, evaluate and prioritize potential industrial lands transportation access investments and revenue sources following adoption of the 2035 Comprehensive Plan and 2035 TSP.

Commentary

Citywide All-Modes Needs Analysis

Study needs to be defined.

Pedestrian Master Plan
The Pedestrian Master Plan established a 20- year framework for improvements that will enhance the pedestrian environment and increase opportunities to choose walking as a mode of transportation. The Pedestrian Master Plan Update includes a review of the City's pedestrian policies, pedestrian street classifications, pedestrian design guidelines, a list of capital projects and a set or recommended funding strategies.

Southwest In Motion
Develop a 5- year active transportation strategy for all of Southwest Portland. It will incorporate projects from the updated TSP project list, the Portland Bicycle Plan for 2030, the Barbur Concept Plan, the Southwest Corridor Plan, the SW Urban Trails Plan, the Barbur Concept Plan, and community-led Platinum Bicycle Facility Strategy in Southwest Portland. This project is funded.

Portland Central City Truck Loading and Parking Plan
This project will develop a comprehensive truck loading and parking strategy for the Central City to increase efficiency of the on-street loading system, increase compliance with City loading regulations, and balance commercial loading and parking needs with other uses in the public right-of-way. This project will recommend strategies and street design options applicable to the Central City. This project is funded.

Citywide All-Modes Needs Analysis

Projected ODOT "Hot Spot" Locations
This analysis would identify plan-level solutions for locations with safety and/or projected capacity problems on or near State Highways. The study will also evaluate alternative performance measures.

Through modeling and analysis, PBOT and ODOT have identified multiple locations with potential safety and/or projected capacity problems. The agencies have agreed that PBOT will analyze potential alternative performance measures. After analyzing the locations based on the results of the alternative performance measure work, PBOT will recommend whether and what types of solutions are appropriate for each location.

Hayden Island
In coordination with regional, state and federal partners, develop and evaluate access options to Hayden Island from Marine Drive. Access would include Pedestrian, Bike, Transit, Auto and freight to support the Hayden Island Plan.

Commentary

NEW FOR PROPOSED DRAFT 12/18/15

Cordon Pricing

Study the implementation of a cordon pricing system within Central Portland. While the scope of the study would include the effectiveness of drawing various different boundaries, one boundary studied should include from I-205 to Skyline Blvd, Columbia River south to the southern City limits. Due to federal regulations, the interstates themselves would not be tolled, but vehicles would be tolled upon exiting the interstates to enter the cordon area. The study scope would include:

- Boundaries
- Pricing level
- Payment collection strategies
- Projected impacts on VMT, GHG, congestion, transit loads, mode share, etc.
- Possible use of funds, including mitigating impacts

Broadway Weidler Corridor Plan Update

Update the 1996 Broadway Weidler Corridor Plan and extend the study area so it includes the corridor from the Willamette River to Hollywood Town Center. This will be a comprehensive corridor study assessing the full range of transportation needs and prioritizing solutions. Areas of focus include pedestrian and bicycle safety and access, transit speed and reliability, traffic management, business district vitality, streetscape environment, freight access, traffic signals and crossings, access management, and parking management. This study will be coordinated with the ODOT Rose Quarter Interchange Project currently under development.

Lombard Corridor Transportation and Streetscape Plan

This collaborative study with ODOT will develop a transportation and streetscape plan for N/NE Lombard St from N Woolsey Ave to NE Martin Luther King, Jr Blvd. Areas of focus include pedestrian and bicycle safety and access, transit speed and reliability, traffic management, business district vitality, streetscape environment, freight access, traffic signals and crossings, access management, and parking management. The plan will also include a concept plan and feasibility assessment for reconfiguration of the Lombard/I-5 interchange to improve safety and circulation for all modes.

Northwest District Street Decoupling Feasibility Study

This study will assess the feasibility of decoupling the Everett/Glisan St and 18th/19th Ave couplets within the NW District. These streets are classified as Local Service Traffic Streets in the Transportation System Plan, and community members have questioned whether the streets are appropriate as one-way couplets. This study will examine the costs, benefits, and overall feasibility of decoupling, taking into account the needs of all modes of transportation.

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 13: Area Studies

Commentary

- **This chapter is being deleted from the TSP.**
- This chapter is a list and summary of past planning projects. Last updated in 2007. With plans on the internet and in PBOT library, this chapter is redundant. It is not required and takes up too much space.
- Recommend deleting the chapter and lists and have a discussion in the introduction of the TSP about other planning projects that inform the TSP, transportation planning and project development.
- Confirm that all plans and projects are on the website and in the library. Indicate that information on the web.
- Make sure all plans since 2007 (or event before) are on website and library – SW Trails Plan for example is not on the web.

~~This chapter summarizes the approach and findings of the following area studies:~~

- ~~Burnside Transportation and Urban Design Plan~~
- ~~Central Eastside Development Opportunity Strategy~~
- ~~Columbia Transportation Corridor Study~~
- ~~Division Green Street/Main Street~~
- ~~Eastside Streetcar Alignment Study~~
- ~~Eastside Transit Alternative Analysis~~
- ~~Foster Road Transportation and Streetscape Plan~~
- ~~Freight Master Plan~~
- ~~Hollywood and Sandy Plan~~
- ~~I-5 Transportation and Trade Partnership~~
- ~~Killingsworth Improvements Planning Project~~
- ~~Lents Town Center Business District Transportation Plan~~
- ~~North Macadam District Planning~~
- ~~Northwest District Plan~~
- ~~Opportunity Gateway Concept Plan~~
- ~~Pleasant Valley Plan District~~
- ~~Portland Aerial Tram Study~~
- ~~Powell/Foster Corridor Transportation Plan~~
- ~~Red Electric Trail Planning Study~~
- ~~Russell Street Improvements Planning Project~~
- ~~St. Johns/Lombard Plan~~
- ~~St. Johns Truck Strategy~~
- ~~South Portland Circulation Study~~
- ~~Swan Island Trails Action Plan~~
- ~~Tacoma Main Street Plan~~
- ~~Transportation System Plan for the Urban Pockets of Unincorporated Multnomah County~~
- ~~West Portland Town Center Transportation Plan~~
- ~~2004 South/North Land Use Final Order Amendment~~
- ~~2040 Centers Transportation Strategies and Mode Split Targets Project~~

City of Portland
Transportation System Plan

Proposed Draft
December 18, 2015

Section 14: Transportation & Parking Demand Management

Commentary

Transportation and Parking Demand Management, also known as TDM, encompasses a variety of strategies to encourage more efficient use of the existing transportation system by reducing reliance on the personal automobile. This is achieved by encouraging people through education, outreach, financial incentives, and pricing to choose other modes, share rides, travel outside peak times, and telecommute, among other methods. Effective transportation demand management also incorporates management of parking supply and demand. TDM strategies help reduce traffic congestion, reduce the amount of money that must be spent to expand transportation system capacity, improve air quality, and ensure road capacity is available for those who need it most.

For example, employers can provide a reduced cost transit pass to employees, increasing transit use, reducing traffic congestion, and saving employees the cost of driving and parking. Apartment building property managers can provide tenants transit or bikeshare incentives, increasing the number of car-free households and reducing neighborhood parking and traffic impacts.

Transportation demand management and parking demand management are complementary, synergistic strategies. Doing a good job with one helps the other succeed; doing a good job with both can significantly improve the economic and environmental benefits for both residents and businesses. See page 16 for an update on the link between the Centers and Corridors Parking Project and TDM.

According to recent modeling work by the City, a strong and effective TDM program is one of the most important current strategies to moving toward meeting our traffic, access, and climate goals.

The focus of Portland's current TDM upgrade is to **improve the effectiveness of transportation and parking demand management requirements for mid-to-large scale development.**

In collaboration with the Bureau of Planning and Sustainability's comprehensive plan implementation projects, this TDM upgrade will:

1) Clarify and standardize performance-based requirements to reduce traffic and automobile parking demand at campuses and institutions, primarily those sites owned and managed by organizations with properties in the proposed **Campus Institutional Zones** and other large institutions;
2) Clarify and standardize performance-based requirements to reduce traffic and auto parking demand from development covered by **conditional use permits and master plans**;
3) Establish new standards to reduce traffic and auto parking demand from mixed-use development over certain thresholds, specifically those covered by the proposed **Mixed Use Zones** project;
4) Establish new standards to reduce traffic and auto parking demand from development in **Central City Plan District mixed use and employment zones** over certain thresholds.

This proposal **distinguishes between discretionary and by-right permits**, allowing by-right applicants to choose a pre-approved TDM plan or to develop a custom plan. Discretionary permits tend to cover larger or more sensitive sites, and are thus more likely to result in a custom TDM plan.

PBOT is proposing to establish a new section in Title 17, 17.106, "Transportation and Parking Demand Management," to standardize Transportation and Parking Demand Management Plan requirements (see next page). The zoning code, Title 33, will establish TDM plan thresholds and reference 17.106. Administrative details would be included in a new administrative rule developed and adopted in 2016.

17.106 Transportation and Parking Demand Management

17.106.010 Purpose.
Providing residents, employees, and visitors information and incentives to walk, bicycle, ride transit, carpool, and otherwise reduce the need to own and use automobiles can be a relatively quick, inexpensive, and effective strategy to achieve city goals and prevent traffic and parking impacts. Requiring transportation and parking demand management (TDM) is intended to prevent, reduce, and mitigate the impacts of development on the transportation system, neighborhood livability, safety, and the environment while reducing transportation system costs.

17.106.020 Required Elements of a Transportation and Parking Demand Management Plan.
A TDM Plan shall include, at a minimum, the following elements:

A. Site and proposed development descriptions; baseline information and analysis, including proposed auto and bicycle parking;
B. Performance Targets;
C. TDM Strategies likely to achieve the performance targets;
D. Automobile parking demand reduction strategies;
E. Performance Monitoring plan;
F. Ongoing participation and Adaptive Management plan;

17.106.030 Approval Required.
The TDM Plan, approved in writing by the Portland Bureau of Transportation, is required prior to development approval.

17.106.040 Ongoing Participation.
The development shall be required to commit to ongoing participation in the TDM Plan in its deeds, Codes, Covenants, and Restrictions.

17.106.050 Enforcement and Penalties.
It shall be a violation of this Chapter for any entity or person to fail to comply with the requirements of this section or to misrepresent any material fact in a document required to be prepared or disclosed by this Chapter. Any building owner, employer, tenant, property manager, or person who fails, omits, neglects, or refuses to comply with the provisions of this Chapter shall be subject to a civil penalty of up to $1,000 for every 7 day period during which the violation continues.

17.106.060 Administrative Rule Authority.
City Council authorizes the Director of the Bureau of Transportation to adopt administrative rules for Transportation and Parking Demand Management consistent with City codes Title 33 and Title 17.

17.106.070 Fees.
The City may charge fees for Transportation and Parking Demand Management goods and services provided, including but not limited to application review, incentives and education, performance monitoring, adaptive management, and compliance and enforcement.

Commentary

In general, TDM plans will be required for development:

- In Campus Institutional Zones (discretionary TDM plans);
- In Mixed Use Zones (pre-approved TDM plans);
- In Central City Plan District office employment zones (pre-approved TDM plans);
- Requiring approval(s) that currently specify a transportation or parking management plan.

For proposed Title 33 code amendments, please see the Campus Institutional Zoning Update Project draft proposal (https://www.portlandoregon.gov/bps/63692), the Mixed Use Zones Project draft proposal (https://www.portlandoregon.gov/bps/63621), and the Central City 2035 project (https://www.portlandoregon.gov/bps/article/304042).

In addition, BPS and PBOT will develop amendments updating other sections in Title 33 which currently reference transportation or parking demand management to ensure consistency of TDM plan requirements.

Below is a general TDM update timeline.

2015-16	2016	Future
Proposed Draft (this document) **Code Changes** (Title 33 and Title 17 changes) • Campus & Institution • Mixed Use Zones • Central City residential and employment sites • Standardize language in Title 33 sections that have transportation and parking demand management references • Add TDM section to Title 17 **Thresholds** (Title 33 changes) • Number of units or parking spaces • Square footage **Administrative Rule** • Council authorization	**Planning & Sustainability Commission on Proposed Draft and City Council hearings on Recommended Draft** **Administrative Rule** • Develop detailed language **Implementation Preparation** • Clarify staff roles & responsibilities, including who is eligible to provide TDM services • Develop and publicly review fee proposal • Enhance tracking and reporting system • Develop promotional materials • Ensure staffing	**2017** **Implementation** • Test application and review process • Develop applicant forms and information • Train staff and frequent applicants • Consider expanding TDM plan requirements to multifamily residential zones **2018** **Refinement** • Consider expanding TDM plan requirements to large commercial development outside Central City. • Performance reporting • Applicant and neighborhood feedback • Adjustments as needed

Another view of the flow from high level to specific details is shown on page 6.

Commentary

TDM Plan Development Process

High Level ("Trees")	Medium Level ("Shrubs")	Details ("Groundcover")
TSP Stage 1	TSP Stage 2	Implementation
Comprehensive Plan and Transportation System Plan establish the policy support for TDM (goals, policies, objectives). City Council is holding public hearings on these elements in December 2015 and January 2016.	Title 33 (zoning code) establishes the type and size of development requiring a TDM plan. Title 17 establishes TDM plan required components. Planning & Sustainability Commission hearings start in February 2016.	Administrative Rule establishes details for TDM plans, such as service provider options, performance targets and multimodal financial incentive levels. Administrative rule development and stakeholder engagement initiated in 2016.

Who might provide each TDM service?

TDM plan review	City
Establish project in tracking system	City
Provide education & information materials	City
Provide multimodal financial incentive	City, other public agency, Transportation Management Association (TMA), building manager, or other City-certified organization
Conduct employee/resident surveys	City, other public agency, Transportation Management Association (TMA), building manager, or other City-certified organization
Work with building to ensure compliance, and implement adaptive management plan if performance falls below targets	City, other public agency, Transportation Management Association (TMA), building manager, or other City-certified organization
Conduct enforcement, if building fails to participate	City
Produce annual TDM program reports	City

Draft TDM Administrative Rule Outline

TRN - xx.xx Transportation and Parking Demand Management Standards for Development

1. Purpose
2. Required Elements of a Transportation and Parking Demand Management Plan
3. Performance Targets
4. Site Improvements
5. Education & Information
6. Multi-modal Financial Incentives
7. Transportation Coordinator/Service Provider
8. Ongoing Participation
9. Performance Monitoring
10. Adaptive Management
11. Compliance & Enforcement
12. Approval Criteria (if needed)
13. Fees

Commentary

Outstanding Questions: There are several outstanding questions which will be decided in 2016, including those below. Decisions on these elements are likely to be incorporated into the Administrative Rule and/or Pre-Approved TDM Plan. We welcome comments on the following:

- **Service delivery**: who should provide TDM services, such as delivery of transit passes and bikeshare membership benefits, to residents and tenants/employees in buildings with a TDM plan? Options include City staff, Transportation Management Associations (TMA's), and organizations certified by the City;
- **TDM Plan Duration**: Should the TDM plan requirements be in effective for 10 years, 20 years, 30 years, life of building?
- **Ongoing participation**: How to ensure the TDM plan requirements run with the property, regardless of ownership?
- **Performance Targets**: What are the appropriate mode share and auto ownership performance targets for different areas of the city? Areas with different zoning designations, land use and transportation characteristics, described as "pattern areas" in the comprehensive plan, chapter 3.
- **Site Improvements**: Should site improvements, such as bikeshare stations or lockers and showers, be required? If so, do they belong in Title 33 or the TDM Pre-Approved Plan?
- **Multimodal Financial Incentive**: What elements should be required in a Multimodal financial incentive, e.g. bike and walk bucks as an option to a transit pass? What is the optimum amount and duration for a financial incentive?
- **Responsible Party**: Who should be responsible for employee multimodal incentives, the building owner/manager or the employer?
- **Affordable Housing**: Should qualified affordable housing projects be required to have a TDM plan? To provide multimodal financial incentives to tenants? What methods could we use to reduce costs to building owners while providing multimodal incentives to residents of affordable housing projects? Affordable housing tenants tend to have lower automobile ownership rates and to be more transit dependent, so would disproportionally benefit from receiving multimodal incentives. The intent would be to reduce overall housing + transportation costs for building management and residents.
- **Transportation System Development Charges:** Can projects providing multimodal financial incentives receive a credit on their TSDC charges?
- **Adaptive Management**: Should buildings that consistently fall below performance targets be required to expand multimodal financial incentives to improve performance? If so, under what circumstances?
- **Compliance and Enforcement**: PBOT prefers working with building owners to ensure they have the resources they need to be successful. How should we establish an effective "compliance" program to limit enforcement to only those buildings that choose not to meet the ongoing participation requirement?
- **TDM for Existing Buildings:** Is there a method to fund TDM programs for existing buildings, particularly low income building residents?
- **Relationship to Parking Requirements:** We received multiple comments requesting that we integrate parking and TDM requirements. How do we best do so?
- **Fees**: Should the City charge one larger, up-front fee at the time of development review for application review and ongoing performance monitoring, or a smaller fee at the time of development review (only for application review) plus a small fee each time performance reports are reviewed and if adaptive management, compliance and enforcement are required?

Commentary

Draft TDM Pre-Approved Plan for By-Right Development (The Outstanding Questions on prior commentary page will be addressed and specific details determined with development of the administrative rule in 2016)

1. Application Information
Applicant(s): _____
Contact Information: _____
Development Site Address or Location: _____
Site tax account numbers: _____

2. Project Description (focus on the topics below; form will be revised to meet BDS needs)
Project Description (include site and building square footage by use, number of residential units, proposed auto parking stalls, proposed short term and long-term (secure) bike parking and parking types, other bicycle facilities): _____
Approvals Required: _____

3. Performance Targets
The project shall achieve the following performance targets:

- Area-specific mode share targets provided by the City, based on Portland's adopted 70% citywide non-SOV mode share target, modified to reflect land use patterns and travel options, pro-rated over time.
    - Commute Non-Auto Mode Share (employment only)
    - Daily Non-Auto Mode Share (residential only)
- Auto Ownership (residential only) target could average ~ 30% and will reflect land use patterns, projected growth, and available travel options)

Regular monitoring to gather data and track ongoing participation:

- Frequency and duration of monitoring (every year, 5 years, etc.)

4. Site Improvement: Building owner (select one or encouraged) to implement one or more physical site improvements. The intent is to offer incentives for building owners to build improvements, including the following, which go above and beyond minimum code requirements:

- Transit supportive plaza
- Bike sharing station
- Carpool and carshare vehicles

Commentary

5. Education & Information Requirement

- Offer every new resident within x weeks of move-in the opportunity to order free PBOT-approved TDM materials to tenants at move-in and to employees at hire. Information includes but is not limited to transit schedules and system maps; bicycle infrastructure information and maps; building bicycle facilities; pedestrian infrastructure and maps; carpool and car sharing resources.
- Deliver information and conduct conversations with participants about transportation choices and information requested.
- Send personalized follow-up communications with targeted messaging based on materials ordered and/or conversations to continue reinforcing transportation choices.
- Offer an order form reminder to all new residents that have not ordered transportation information.
- Send 2-4 newsletters highlighting community events, active transportation opportunities, and healthy living information.
- Continue quarterly communications promoting transportation choices to participants who elect to continue to receive.
- Conduct at least two guided walks highlighting the active transportation network and neighborhood amenities that support healthy living for the building residents and/or in collaboration with other buildings in the area. Alert building residents about the clinic.
- Conduct at least two guided bicycle rides highlighting the active transportation network and neighborhood amenities that support healthy living for the building residents and/or in collaboration with other buildings in the area. Alert building residents about the clinic.
- Conduct at least two bicycle repair, safe riding, and/or trip planning clinics in the building and/or in collaboration with other nearby buildings. Invite building residents to the clinics.

6. Advertising Requirement (discuss whether or not this would produce results)
Provide PBOT-approved advertising for no-car and low-car households on building website and any other building advertising.

7. Transportation Coordinator/Service Provider
Building owner shall engage a PBOT-certified service provider or PBOT to conduct transportation management activities. Please identify your service partner:

__ PBOT
__ Other

If Other please document the company or organization's expertise to provide this service.

7. Multimodal Incentive Requirement
Building owner(s) shall offer financial incentives to new residents and/or employees (pro-rated by full-time equivalency) equal to the value of a TriMet pass for at least the first one – six (to be determined) month(s) of their tenancy/employment. Each new resident or employee shall be offered a choice to use this multimodal incentive for one or more of the following:

- TriMet pass
- Portland Streetcar pass
- Portland Bikeshare membership and/or use credits
- Bicycle & Walk Bucks (for use to purchase bicycling and walking gear)

8. Automobile Parking

Building owner(s) shall "unbundle" the cost of any automobile parking from leases so that end users pay the area market price, or a minimum of $__ per (day/week/month) for an automobile parking stall.

Commentary

9. Performance Reporting
Building owner(s) shall provide a performance report on the schedule in section 3, above, meeting the minimum requirements in TRN 10.xx (administrative rule section covering questions to be asked, when survey will be done, survey response rate, etc.)

10. Adaptive Management
If the building does not meet one or more of the performance targets in section 3, the building owner(s) agrees to the following until PBOT-verified Performance Reporting shows the building meeting all performance targets: extend multimodal incentives equivalent to 50% of the current TriMet retail annual pass cost to all current residents and employees (pro-rated to full-time equivalency). The building owner(s) may choose to provide an annual performance report in non-required years.

11. Ongoing Participation
Building owner(s) agree to ongoing funding to meet the requirements of this plan and TRN 10.xx (administrative rule section covering by right TDM plans) for 20 years from building certificate of occupancy. TDM plan ongoing participation shall be recorded on the title with the county in which the building is located.

12. Enforcement
Building owner(s) acknowledges and accepts the enforcement provisions for a TDM Plan in Title 17.106.060, Enforcement and Penalties.

13. Signature and date blocks

Commentary

Centers & Corridors Parking and Transportation Demand Management

Portland's Centers and Corridors Parking Project has recommended an expanded residential permit parking system as a tool to better manage parking in mixed use areas and surrounding residential neighborhoods. City staff worked with a Stakeholder Advisory Committee throughout 2015 to develop the project recommendations.

The committee recommended capping the number of permits issued in each permit area, to ensure that parking does not become completely saturated, and to provide enhanced TDM services in areas that opt-in to the permit system. The committee also recommended factoring the cost of TDM services into the base price of a parking permit (in addition to the cost of administration and enforcement) and to develop an escalating fee structure, where the 2nd permit issued to the same address costs more than the 1st, etc. The additional revenue would be dedicated to providing TDM services in the area, with a focus on residents and businesses that do not have access to permits, either because they are outside the permit area, or because no permits are available because the cap has been reached. Staff anticipates bringing the recommendations to City Council in early 2016.

How Does Portland TDM Compare With Other Cities and Counties?

To inform our work on TDM proposals, City staff researched TDM best practices in other US cities and counties. The chart below summarizes key elements of other agencies' programs. These charts are a high level overview lacking implementation details. The first chart summarizes other agency requirements for new multi-family and mixed use development.

TDM Requirements Summary - Residential						
Agency	Incentive Duration	Incentive Amount	Service Provider	Fee	CC&R/ Deed	Performance Monitoring
Portland, OR						
Arlington County, VA	One time at initial occupancy	$70	Municipality	Annual review		X
Berkeley, CA	Ongoing for building life	$100/year	TMA			X
Boulder, CO	3 years	up to $120/month	Developer			X
Contra Costa County, CA	Ongoing for building life	$100/year	Property Owner		X	X
Pasadena, CA	Ongoing for building life	Specified by applicant	Property Owner	Initial and annual review	X	X
Redmond, WA	One time at initial occupancy	$117	Owner or TMA		X	X
Rockville, MD	Specified by applicant	Specified by applicant	Developer	Initial	X	X
Santa Monica, CA	Ongoing for building life	$55-$110/month	TMO/A	Annual review		X

The second chart, below, summarizes other agency requirements for new employment development.

TDM Requirements Summary - Employer						
Agency	Incentive Duration	Incentive Amount	Service Provider	Fee	CC&R/ Deed	Performance Monitoring
Portland, OR						
Arlington County, VA	One time at initial occupancy	$70	Municipality	Annual review		X
Bellevue, WA	Ongoing for building life	$15/month	Property Owner		X	X
Berkeley, CA	Ongoing for building life	$100/year	Employer or TMA			X
Boulder, CO	3 years	up to $120/month	Employer			X
Cambridge, MA	life of special permit	Specified by applicant	TMA			X
Contra Costa County, CA	Ongoing for building life	$100/year	Property Owner		X	X
Pasadena, CA	Ongoing for building life	Specified by applicant	Property Owner	Initial and annual review	X	X
Rockville, MD	Specified by applicant	Specified by applicant	Developer	Initial	X	X
Sacramento, CA	Specified by applicant	$50-$100/month	Employer			X
Santa Monica, CA	Ongoing for building life	$55-$110/month	TMO/A	Annual review		X

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Section 15: Parking Code Amendment—Commercial Parking in Mixed Use Zones

Commentary

The Portland Bicycle Plan for 2030 (adopted by City Council, Resolution #36763) recommends changes to Parking objectives in the TSP. The proposed changes to 6.26 and 6.27 are listed in **Section 4: Bicycle Classifications and Objectives** of this Proposed Draft.

Section 6: Street Design Classifications also proposes some policy guidance for parking provision on streets with various street design classifications.

There are several ongoing tasks that relate to parking policy and management:

- The Mixed-use Zones Project is overhauling all commercial zones in Title 33, and expanding allowances for commercial parking. *This is part of the Comp Plan Task 5 work.*
- The Central City Parking Policy update is overhauling the Meter District Policy and the portions of Title 33 that address parking in private developments. It will incorporate work from the three Central City Quadrant Plans. *This is not part of the Comp Plan Task 5 work.*
- The Centers and Corridors Parking Project will revise the existing Area Parking Permit Program, and develop a new residential parking permit program. *This is not part of the Comp Plan Task 5 work.*

TSP STAGE 2 (COMP PLAN TASK 5) ITEM

1) Mixed-use Zones Project

BPS is leading this project as part of the Comp Plan periodic review work and is completely re-writing the commercial zoning chapter of Title 33 (33.130). All of the commercial zones allow residential use, and are referred to colloquially as mixed-use zones. The number of commercial zones will be reduced from 9 to 4 (CM1, CM2, CM3, and CE), and as a result other chapters of the zoning code that refer to these zones will need to be updated to contain the correct reference. This includes 33.266, *Parking and Loading*. The following changes to chapter 266 are proposed:

- Exempting sites with less than 7,500 square feet of site area from minimum parking requirements, unless the site has more than 30 dwelling units.
- Allowing commercial parking outright in CM2, CM3, and CE, if the parking is in a structure, and allowing commercial parking outright on surface parking lots, if the parking was constructed as parking accessory to another use. Standalone surface parking lots are prohibited.
- Adding a maximum parking entitlement for multi-family residential developments proximate to frequent transit (1.35 stalls per unit).
- Clarifying minimum parking buy-downs related to bike share.
- Allowing required residential parking to be located within 500 feet of the site with some limitations.

The proposed code language will be advanced to the Planning and Sustainability Commission in as part of the Mixed Use Zones Project, which is also part of Task 5 of the Comp Plan Update.

(Refer to proposed Mixed Use Zones Project Title 33 changes)

Commentary

The following three parking tasks are being advanced <u>outside the TSP Update</u> process (Periodic Review Task 5).

1) Revisions to Area Parking Permit Program (APPP)

This task will modify the existing Area Parking Permit Program to allow:

- limits on the number of permits issued to residents, and
- limits on the total number of permits issued in an APPP zone.

This task will amend City Code Title 16.20.850, which defines the terms of each APPP zone's Supplemental Plan. The current code language allows limits to be placed only on employee and guest permits.

2) Residential Parking Permit Program

This amendment will create a new type of parking permit program, to supplement the existing APPP. The proposal ties the management of on-street parking to the adjacent land use, using zoning as the basis. Limits on the number of permits as described in #1 above will also be applicable. This program will require amendments to Title 16.

Code amendments for #1 and #2 are expected to be before City Council in spring 2016.

3) Central City Parking Update

This project has two main components: changes to on-street parking management and changes to off-street parking regulations.

Changes to on-street parking are expected to focus on developing performance standards that inform hourly meter rates adopted by City Council in each year's fee structure. This will require a major overhaul of the Meter District Policy (BCP-TRN 3.102), and possible changes to the Transportation Fee Schedule (BCP-TRN 3.450). This is not a periodic review requirement.

Changes to off-street parking will require a substantial re-write of the Central City Plan District in the zoning code (33.510.261 – 267). Emerging concepts include:

- Reducing the number of parking sectors from the current 26;
- Instituting maximum parking entitlements for residential development in the Central City where they are not already in place;
- Relaxing accessory use restrictions to encourage more shared/commercial parking;
- Granting equal parking entitlements to new and existing buildings ("Preservation Parking" – existing buildings often have a lower entitlement in the current code)

The Central City parking code amendments will follow Central City 2035 through Planning and Sustainability Commission and City Council in spring and summer 2016.

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Section 16: Street Vacation Code

Commentary

Street Vacation Approval Criteria

The 1980 Comprehensive Plan Policy 6.21 Right-of-Way Opportunities included a list of factors to consider prior to vacating public streets and returning them to private ownership. Title 17.84 lays out a number of requirements and procedures to vacate streets. The process requires Planning and Sustainability Commission review and City Council approval of street vacations. The existing Title 17 process does not specify any basis for the decision of the City Council, other than that the vacation be in the public interest. As a matter of practice, when street vacations are proposed, the Planning and Sustainability Commission (PSC) and the City Council often make reference to Comp Plan and TSP policies when deliberating whether to approve street vacations. The existing street vacation objectives under TSP Policy 6.21, with the list of evaluative factors, is proposed for deletion as part of the Recommended Comprehensive Plan (August 2015). The Recommended Comp Plan is under review by City Council with hearings in December 2015 and January 2016.

A new Policy 8.48 (Right-of-Way Vacations) is recommended as part of the 2035 Comprehensive Plan (Recommended Plan) to replace the former TSP Policy (6.21). The proposed amendments to Title 17.84 in this chapter will implement the new Right-of-Way Vacations Policy by creating approval criteria for street vacations. The criteria are intended to provide the City Council with basis for rendering decisions on street vacations that is similar to the Comprehensive Plan policies used now.The criteria are intended to assure that the Council retains broad authority to hold onto public streets when there is any anticipated need for them to provide transportation functions, utility functions, stormwater functions, and temporary community uses.

This includes, in 17.84.025(A)(5), the need to maintain and extend an interconnected street system. 17.84.025(A)(5) makes reference to another existing Title 17 section, 17.88.040 Through Streets, which is where the specific requirements for interconnected streets are found. Generally, 17.88.040 requires that there be connected streets no further apart than every 530 feet, and connections for bicycles and pedestrians no further apart than every 330 feet. Exceptions to the rule allowed based on land use, existing development, topography, natural resources and other area specific factors.

Clarification is also added to an existing list in 17.84(B)(4) of the kinds of conditions the City Council may impose when approving a street vacation. This change makes it clear that conditions may include improvements that benefit bicyclists and pedestrians beyond sidewalks and curbs.

<u>As part of the City Council review process and in order to include temporary community uses as a use to consider and possibly preserve as part of a street vacation, PBOT will request that Policy 8.48 Right of way vacations be modified to also include **Policy 8.42, Community uses.**</u>

TSP Objectives 6.21.A-E. Right-of-Way Opportunities

Policy 8.48 Right-of-way vacations. Maintain rights-of-way if there is an established existing or future need for them, such as for transportation facilities or for other public functions established in Policies 8.38 to ~~8.41~~ 8.42.

~~**Objectives 6.21.A-E. Right-of-Way Opportunities**~~

~~A. Evaluate opportunities and the existing and future need for a bikeway, walkway, or other transportation use or potential for use as a stormwater management facility when considering vacation of any right-of-way.~~

~~B. As a condition of street vacation, require pedestrian and bicycle facilities if needed, with first preference for dedicated right-of-way and, secondarily, through a public walkway and bikeway easement.~~

~~C. Acquire or control parcels of land that may be needed in the future for any transportation or transportation-related stormwater management purpose when the opportunity arises through sale, donation, or land use action.~~

~~D. Preserve existing and abandoned rail rights-of-way and examine their potential for future rail freight, passenger service, or recreational trail uses.~~

~~E. Consider the need for maintaining right-of-way for other infrastructure needs.~~

Commentary

Title 17

17.84.010 - 17.84.020 [No Change]

17.84.025.A

17.84.010 - 17.84.020 [No Change]

17.84.025 Approval Criteria and Conditions for Vacating Streets

A. The Council, upon hearing a petition to vacate a street, may approve the petition, approve the petition in part, or deny the petition. The Council will base its decision on the following approval criteria:

1. The area proposed to be vacated is not presently needed, and is not identified in any adopted plan as needed in the future, for public services, transportation functions, utility functions, stormwater functions, view corridors and/or viewpoints. Consider temporary community uses.

2. The vacation does not prevent the extension of, or the retention of public services, transportation functions, utility functions, stormwater functions, view corridors and/or view points. Consider temporary community uses.

3. Public services, transportation functions, or utilities can be extended in an orderly and efficient manner in an alternate location;

4. The vacation does not impede the future best use, development of, or access to abutting property;

5. The area of the vacation is not presently, or will not in the future be, needed as part of an interconnected system of public streets that is generally consistent with the street connection and bicycle/pedestrian spacing requirements in section 17.88.040 Through Streets.

Commentary

17.84.025.B

17.84.030 - 17.84.060 [No Change]

B. When approving, or approving in part, a petition to vacate a street the Council may make reservations or conditions. Reservations or conditions may pertain to:

1. The maintenance and use of underground public utilities or service facilities in the portion vacated;

2. Limitations on use of the area above and adjacent to underground utilities or service facilities;

3. Moving at petitioner's expense the utility or service facilities either below, on or above the surface;

4. Construction, extension or relocation of sidewalks and curbs, multi-use paths, trails, or other similar pedestrian or bicycle facilities;

5. Grading or pavement extensions;

6. Dedication for street use or other area in lieu of the area to be vacated;

7. Replat; and

8. Any other matter of like or different nature relating to the vacated area and remaining or relocated street area adjacent to petitioner's property, or area dedicated in lieu of the vacation area.

17.84.030 - 17.84.060 [No Change]

Adopted TSP Objectives Organized by 2035 Comprehensive Plan

How to use this section

The Objective language contained in this section is not proposed for revision as part of the *Proposed Draft* of the Transportation System Plan (TSP) Update. These Objectives were adopted by City Council as part of the last update to the TSP by Ordinance No. 180871 on May 4, 2007.

This section is for reference only to provide the complete list of Objectives proposed to be retained with this update of the TSP. In the 2007 TSP, the Objectives were organized by Comprehensive (Comp) Plan goals and policies. Now that the 2035 Comp Plan goals and policies are recommended, these Objectives will be organized according to the new Comp Plan Structure as show in the table above. The 2007 TSP ID is referenced in the above table to provide a clear link to the previously adopted TSP structure. Any Objective proposed for revision can be found in the "Amendments to the TSP" section (Chapter IV) of this *Proposed Draft*.

2035 Comprehensive Plan Section	2007 TSP Policy Item	2007 TSP ID
Community Involvement (2.5-2.7/2.16-2.22)	Public Involvement	6.1-6.2
Public Rights-of-way (8.37-8.49)	Street Design and Right-of-Way Improvements	11.10
	Environmental Sustainability in Transportation	11.8
	Maintenance	11.12
	Right-of-Way Opportunities	6.21
Design and Planning Street Classifications (9.1-9.9)	Street Classification Descriptions	6.4
	Traffic Classification Descriptions	6.5
	Transit Classification Descriptions	6.6
	Bicycle Classification Descriptions	6.7
	Pedestrian Classification Descriptions	6.8
	Freight Classification Descriptions	6.9
	Emergency Response Classification Descriptions	6.10
	Street Design Classification Descriptions	6.11
Modal Policies (9.16-9.39)	Pedestrian Transportation	6.22
	Bicycle Transportation	6.23
	Public Transportation	6.24
	Transit-Oriented Development	6.19
	Truck Mobility	6.30
	Truck Accessibility	6.31

	Multimodal Freight System	6.29
	Multimodal Passenger Service	6.33
	Regional Trafficways	6.32
	Emergency Response	6.14
System Management (9.44-9.50)	Transportation System Management	6.15
	Traffic Calming	6.13
	Access Management	6.16
	Regional Travel Patterns Policies	6.12
	Connectivity	6.20
	Street Plans	11.11
	Performance Measures	11.13
	Congestion Pricing	6.34
	Travel Management	6.28
Parking Management (9.54-9.60)	Parking Management	6.25
	On-Street Parking Management	6.26
	Off-Street Parking	6.27
Finance, Programs, and Coordination (9.61-9.66)	Transportation Education	6.3
	Project Selection	11.9
To be addressed in Stage 3	District Policies	6.35-6.41

Community Involvement (2.5-2.7/2.16-2.22)

Community Involvement

(Refer to Section 3: Community Involvement for proposed revisions to adopted Objectives)

Public Rights-of-Way (8.37-8.49)

Street Design and the Right-of-Way Objectives

Make changes to public rights-of-way that are consistent with their street classifications and descriptions in the Transportation Element of the Comprehensive Plan.

Consider the needs and safety of all users of a planned facility in its design and during the construction process.

Ensure that transportation facilities are accessible to all people and that all improvements to the transportation system (traffic, transit, bicycle, and pedestrian) in the public right-of-way comply with the Americans with Disabilities Act of 1990.

When changes to a right-of-way are proposed, consider the overall capacity impacts to the immediately affected street, as well as potential areawide capacity impacts.

Include improvements that enhance transit operations, safety, and travel times in projects on existing or planned transit routes.

Improve streets within Freight Districts and on truck-designated streets to facilitate truck movements.

Construct local residential streets to minimize pavement width and total right-of-way width, consistent with the operational needs of the facility and taking into account the needs of both pedestrians and vehicles.

Encourage the beautification of the City by incorporating appropriate streetscape elements along regionally designated streets and along other City-designated arterials, in conjunction with the Urban Forestry Program.

Encourage the formation of local improvement districts (LIDs) for the construction of transportation infrastructure, which may include streets, curbs, or other structures; pedestrian or bicycle facilities; drainage; and street trees.

Continue to explore cost-effective methods to finance local street improvements, including green streets projects.

Consider and minimize impacts on the natural environment and watershed health, consistent with the City and regional response to the Endangered Species Act, the City's Green Streets Policy and stream crossing design guidelines in the Green Streets handbook, in the planning, design, and development of transportation projects.

Consider the desired character of the area, including neighborhood livability, in the design and development of transportation projects.

Develop standards and incentives to encourage Green Streets projects in private development, redevelopment and enhancement projects wherever technically and economically feasible.

Use Metro street design guidelines (Creating Livable Streets: Street Design for 2040, November 1997 and Green Streets, July 2002) as a resource in developing and designing projects for streets on the regional system.

(Refer to Section 2: Revised TSP Objectives for proposed revisions to Objective 11.10.E & G and refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Environmental Sustainability Objectives

Continue to reuse and recycle office and construction materials and equipment, compost leaves, and separate street debris.

Maintain equipment and facilities to minimize air, water, and noise pollution.

Use environmentally safe products.

Minimize runoff and erosion in all ground-disturbing activities, including construction, excavation, landscaping, and trench work.

Use alternative energy sources to power equipment whenever feasible.

Incorporate sustainable and Green Street design solutions for streets and other transportation projects.

(Refer to Section 2: Revised TSP Objectives for proposed revisions to Objective 11.8.A)

Maintenance Objectives

Consider the potential impacts of maintenance obligations and life-cycle costs in the development of transportation projects and programs.

Incorporate retrofitting or removing impervious surfaces and culverts identified in the region's fish passage and watershed management programs into maintenance activities for the transportation system.

Use best management practices to address environmental impacts of maintenance activities.

Pursue strategies for new sources of revenues for maintenance of the transportation system.

Coordinate capital improvement program development with ongoing maintenance needs in addition to preservation and rehabilitation projects.

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Design and Planning (9.1-9.9)

Street Classification Descriptions

Classification descriptions and designations are used to determine the appropriateness of street improvements and to make recommendations on new and expanding land uses through the land use review processes.

Classification descriptions are used to describe how streets should function for each mode of travel, not necessarily how they are functioning at present.

All of a street's classifications must be considered in designing street improvements and allocating funding. While a proposed project may serve only one classification, improvements should not preclude future modifications to accommodate other classifications of the street.

When the existing use of a street does not comply with its classification, no additional investments should be made that encourage that inappropriate use.

Designate new streets within a land division site as Local Service Streets for all modes unless otherwise designated through a concurrent or subsequent Comprehensive Plan amendment to the Transportation Element.

Designate new streets within Pedestrian Districts and Freight Districts as Local Service Streets unless otherwise designated through a Comprehensive Plan amendment to the Transportation Element.

Traffic Classification Descriptions

Regional Trafficways are intended to serve interregional district movement that has only one trip end in a transportation district or to serve trips that bypass a district completely.

- Land Use/Development. Regional Trafficways should serve the Central City, regional centers, industrial areas, and intermodal facilities and should connect key freight routes within the region to points outside the region. Encourage private and public development of regional significance to locate adjacent to Regional Trafficway interchanges.
- Connections. Regional Trafficways should connect to other Regional Trafficways, Major City Traffic Streets, and District Collectors. A ramp that connects to a Regional Trafficway is classified as a Regional Trafficway from its point of connection up to its intersection with a lower-classified street.

- Buffering. Adjacent neighborhoods should be buffered from the impacts of Regional Trafficways.
- Dual Classification. A street with dual Regional Trafficway and Major City Traffic Street classifications should retain the operational characteristics of a Major City Traffic Street and respond to adjacent land uses.

Major City Traffic Streets are intended to serve as the principal routes for traffic that has at least one trip end within a transportation district.

- Land Use/Development. Major City Traffic Streets should provide motor vehicle connections among the Central City, regional centers, town centers, industrial areas, and intermodal facilities. Auto-oriented development should locate adjacent to Major City Traffic Streets, but should orient to pedestrians along streets also classified as Transit Streets or within Pedestrian Districts.
- Connections. Major City Traffic Streets should serve as primary connections to Regional Trafficways and serve major activity centers in each district. Traffic with no trip ends within a transportation district should be discouraged from using Major City Traffic Streets.
- On-Street Parking. On-street parking may be removed and additional right-of-way purchased to provide adequate traffic access when consistent with the street design designation of the street. Evaluate the need for on-street parking to serve adjacent land uses and improve the safety of pedestrians and bicyclists when making changes to the roadway.

Traffic Access Streets are intended to provide access to Central City destinations, distribute traffic within a Central City district, provide connections between Central City districts, and distribute traffic from Regional Trafficways and Major City Traffic Streets for access within the district. Traffic Access Streets are not intended for through-traffic with no trip ends in the district.

- Land Use/Development. Traffic Access Streets serve Central City land uses. Solutions to congestion problems on Traffic Access Streets must accommodate the high-density pattern desired in the Central City.
- Connections. Connections to adjoining transportation districts should be to District or Neighborhood Collectors. Intersections of Traffic Access Streets and streets with higher or similar classifications should be signalized, where warranted, to facilitate the safe movement of traffic along each street as well as turning movements from one street to the other.
- Access. Reduction in motor vehicle congestion is given less priority than: supporting pedestrian access and enhancing the pedestrian environment; maintaining on-street parking to support land uses; accommodating transit; or accommodating bicycles. Access to off-street parking is allowed.
- Right-of-way Acquisition. Acquisition of additional right-of-way to reduce congestion is discouraged.

District Collectors are intended to serve as distributors of traffic from Major City Traffic Streets to streets of the same or lower classification. District Collectors serve trips that both start and end within a district.

- Land Use/Development. District Collectors generally connect town centers, corridors, main streets, and neighborhoods to nearby regional centers and other major destinations. Land uses that attract trips from the surrounding neighbor-hoods or from throughout the district should

be encouraged to locate on District Collectors. Regional attractors of traffic should be discouraged from locating on District Collectors.

- Connections. District Collectors should connect to Major City Traffic Streets, other collectors, and local streets and, where necessary, to Regional Trafficways.
- On-Street Parking. Removal of on-street parking and right-of-way acquisition should be discouraged on District Collectors, except at specific problem locations to accommodate the equally important functions of traffic movement and vehicle access to abutting properties.

Neighborhood Collectors are intended to serve as distributors of traffic from Major City Traffic Streets or District Collectors to Local Service Streets and to serve trips that both start and end within areas bounded by Major City Traffic Streets and District Collectors.

- Land Use/Development. Neighborhood Collectors should connect neighborhoods to nearby centers, corridors, station communities, main streets, and other nearby destinations. New land uses and major expansions of land uses that attract a significant volume of traffic from outside the neighborhood should be discour-aged from locating on Neighborhood Collectors.
- Connections. Neighborhood Collectors should connect to Major City Traffic Streets, District Collectors, and other Neighborhood Collectors, as well as to Local Service Streets.
- Function. The design of Neighborhood Collectors may vary over their length as the land use character changes from primarily commercial to primarily residential. Some Neighborhood Collectors may have a regional function, either alone or in concert with other nearby parallel collectors. All Neighborhood Collectors should be designed to operate as neighborhood streets rather than as regional arterials.
- On-Street Parking. The removal of on-street parking and right-of-way acquisition should be discouraged on Neighborhood Collectors.

Local Service Traffic Streets are intended to distribute local traffic and provide access to local residences or commercial uses.

- Land Use/Development. Discourage auto-oriented land uses from using Local Service Traffic Streets as their primary access.
- Classification. Streets not classified as Regional Trafficways, Major City Traffic Streets, District Collectors, or Neighborhood Collectors are classified as Local Service Traffic Streets.
- Connections. Local Service Traffic Streets should connect neighborhoods, provide local circulation, and provide access to nearby centers, corridors, station areas, and main streets.
- Function. Local Service Traffic Streets provide local circulation for traffic, pedestrians, and bicyclists and (except in special circumstances) should provide on-street parking. In some instances where vehicle speeds and volumes are very low (for example, woonerfs and accessways), Local Service Traffic Streets may accommodate both vehicles and pedestrians and bicyclists in a shared space.

Transit Classification Descriptions

Regional Transitways are intended to provide for interregional and interdistrict transit trips with frequent, high-speed, high-capacity, express, or limited service, and to connect the Central City with all regional centers.

- Land Use. Development with a regional attraction (e.g., shopping centers, arenas) are encouraged to locate adjacent to Regional Transitways to reduce traffic impacts on adjoining areas and streets. Locate high-density development within a half-mile of transit stations on Regional Transitways, with the highest densities closest to the stations.
- Access to Transit. Transit stations should be designed to accommodate a high level of multimodal access within a half-mile radius of the station. Use feeder bus service to access Regional Transit stations. Use park-and-ride facilities to access Regional Transit stations only at ends of Regional Transitways or where adequate feeder bus service is not feasible.
- Improvements. Use transit-preferential treatments to facilitate light rail and bus operations. Consider the use of access management measures to reduce conflicts between transit vehicles and other vehicles. Where compatible with adjacent land uses, right-of-way acquisition or parking removal may occur to accommodate transit-preferential measures and improve access to transit.
- Transfer Points. Provide safe and convenient transfer points with covered waiting areas with transit route information, benches, trash receptacles, enhanced signing, lighting, and telephones.
- Bus Stops. Buses providing local service along Regional Transitways should have more frequent stop spacing, similar to stop spacing along Major Transit Priority Streets.
- Dual Classification. A street with a dual Regional Transitway and Major Transit Priority Street classifications should retain the operational characteristics of a Major Transit Priority Street and respond to adjacent land uses.
- Connections. A ramp that connects to a Regional Transitway is classified as a Regional Transitway up to its intersection with a lower-classified street.

Major Transit Priority Streets are intended to provide for high-quality transit service that connects the Central City and other regional and town centers and main streets.

- Land Use. Transit-oriented land uses should be encouraged to locate along Major Transit Priority Streets, especially in centers. Discourage auto-oriented develop¬ment from locating on a Major Transit Priority Street, except where the street is outside the Central City, regional or town center, station community, or main street and is also classified as a Major City Traffic Street. Support land use densi¬ties that vary directly with the existing and planned capacity of transit service.
- Access to Transit. Provide safe and convenient access for pedestrians and bicyclists to, across, and along Major Transit Priority Streets.
- Improvements. Employ transit-preferential measures, such as signal priority and bypass lanes. Where compatible with adjacent land use designations, right-of-way acquisition or parking removal may occur to accommodate transit-preferential measures or improve access to transit. The use of access manage-ment should be considered where needed to reduce conflicts between transit vehicles and other vehicles.
- Transfer Points. Provide safe and convenient transfer points with covered waiting areas, transit route information, benches, trash receptacles, enhanced signing, lighting, and telephones.

Limited transit service should stop at transfer points and activity centers along Major Transit Priority Streets.

- Dual Classification. Streets with dual Regional Transitway and Major Transit Priority Street classifications should retain the operational characteristics of Major Transit Priority Streets, and development should orient to the street.
- Bus Stops. Locate bus stops to provide convenient access to neighborhoods and commercial centers. Stops should be located relatively close together in high-density and medium-density areas, including regional and town centers and along most main streets, and relatively farther apart in lower-density areas. Passenger amenities should include shelters and route information.

Transit Access Streets are intended for district-oriented transit service serving main streets, neighborhoods, and commercial, industrial, and employment areas.

- Land Use. Encourage pedestrian- and transit-oriented development in commercial, institutional, and mixed-use areas along Transit Access Streets.
- Access to Transit. Provide safe and convenient pedestrian and bicycle access to transfer points and stops and along Transit Access Streets.
- Transfer Points. Provide bus shelters, safe and convenient pedestrian crossings, and transit information at transfer points.
- Improvements. Employ transit-preferential measures at specific intersections to facilitate bus operations where there are significant bus delays. Applicable preferential treatments include signal priority, queue jump lanes, and curb extensions.
- Bus Stops. Locate stops closer together in neighborhood commercial areas and somewhat farther apart in other areas along Transit Access Streets. Passenger amenities, including covered waiting areas, are appropriate along Transit Access Streets.

Community Transit Streets are intended to serve neighborhoods and industrial areas and connect to citywide transit service.

- Land Use. Encourage pedestrian- and transit-oriented development in commercial, institional, and mixed-use areas along Community Transit Streets.
- Transit Service. Community Transit Streets typically carry feeder bus service, mini-bus, or demand-responsive services. Demand-responsive service may include service that is tailored to areas (e.g., industrial areas) that have unusual transit service needs. The size and type of transit vehicle should be appropriate to the needs of the land uses served.
- Pedestrian and Bicycle Access. Provide safe and convenient pedestrian and bicycle access along Community Transit Streets and to transfer points and stops.
- Improvements. Community Transit Streets are typically used for access by bicyclists, pedestrians, and drivers to reach neighborhood destinations. Parking removal or the acquisition of additional right-of-way should not be undertaken to enhance transit service on Community Transit Streets, except at specific locations to correct unsafe transit operations or accommodate access to transit.
- Transfer Points. Provide covered waiting areas and transit information at transfer points.
- Bus Stops. Locate stops closer together in neighborhood commercial areas and farther apart in other areas along Community Transit Streets.

Local Service Transit Streets are intended to provide transit service to nearby residents and adjacent commercial areas.

- Land Use. Transit operations on Local Service Transit Streets should give preference to access for individual properties and to the specific needs of property owners and residents along the street.
- Classification. Streets not classified as Regional Transitways, Major Transit Priority Streets, Transit Access Streets, or Community Transit Streets are classified as Local Service Transit Streets.
- Function. Local Service Transit Streets may be used for paratransit service, end loops for regularly scheduled routes, and may carry school buses.
- Bus Stops. Locate stops along Local Service Transit Streets based on Tri-Met service standards.

Transit Stations are locations where light rail vehicles or other high-capacity transit vehicles stop to board and unload passengers.

- Locations. Locate Transit Stations on Regional Transitways to provide direct and convenient service to regional and town centers and major trip generators along the transitway. Station locations are conceptual. Actual locations should be used for regulatory purposes such as measuring distances.
- Passenger Facilities. Provide safe and convenient covered waiting areas and easy transfer to other transit services. Provide transit information and access for pedestrians and bicyclists. Transit Stations should have a full range of passenger services, including route information, benches, secure bicycle parking, trash receptacles, enhanced signing, lighting, and telephones.
- Transit Station Spacing. Place Transit Stations along Regional Transitways with light rail service or other high-capacity transit service at intervals of approximately one-half mile. In high-density areas in the Central City, consider closer station spacing of three to four blocks.

Intercity Passenger Rail provides commuter and other rail passenger service.

- Station Spacing. Stations are typically located one or more miles apart, depending on overall route length.

Passenger Intermodal Facilities serve as the hub for various passenger modes and the transfer point between modes.

- Connections. Passenger Intermodal Facilities connect inter-urban passenger service with urban public transportation service and are highly accessible by all modes.

Bicycle Classification Descriptions

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Pedestrian Classification Descriptions

Pedestrian Districts are intended to give priority to pedestrian access in areas where high levels of pedestrian activity exist or are planned, including the Central City, Gateway regional center, town centers, and station communities.

- Land Use. Zoning should allow a transit-supportive density of residential and commercial uses that support lively and intensive pedestrian activity. Auto-oriented development should be discouraged in Pedestrian Districts. Institutional campuses that generate high levels of pedestrian activity may be included in Pedestrian Districts. Exceptions to the density and zoning criteria may be appropriate in some designated historic districts with a strong pedestrian orientation.
- Streets within a District. Make walking the mode of choice for all trips within a Pedestrian District. All streets within a Pedestrian District are equal in importance in serving pedestrian trips and should have sidewalks on both sides.
- Characteristics. The size and configuration of a Pedestrian District should be consistent with the scale of walking trips. A Pedestrian District includes both sides of the streets along its boundaries, except where the abutting street is classified as a Regional Trafficway. In these instances, the land up to the Regional Trafficway is considered part of the Pedestrian District, but the Regional Trafficway itself is not.
- Access to Transit. A Pedestrian District should have, or be planned to have, frequent transit service and convenient access to transit stops.
- Improvements. Use the Pedestrian Design Guide to design streets within Pedestrian Districts. Improvements may include widened sidewalks, curb extensions, street lighting, street trees, and signing. Where two arterials cross, design treatments such as curb extensions, median pedestrian refuges, marked crosswalks, and traffic signals should be considered to minimize the crossing distance, direct pedestrians across the safest route, and provide safe gaps in the traffic stream.

Pedestrian-Transit Streets are intended to create a strong and visible relationship between pedestrians and transit within the Central City.

- Land Use. Pedestrian-Transit Streets respond to significant public investments in public transportation, including light rail, the transit mall, and streetcar, and enhance the pedestrian environment adjacent to high-density land uses.
- Improvements. Improvements should include wide sidewalks to accommodate high levels of pedestrian traffic, urban design features that promote pedestrian activity, and visual signals to motor vehicles to recognize the priority of pedestrian and transit vehicles.

City Walkways are intended to provide safe, convenient, and attractive pedestrian access to activities along major streets and to recreation and institutions; provide connections between neighborhoods; and provide access to transit.

- Land Use. City Walkways should serve areas with dense zoning, commercial areas, and major destinations. Where auto-oriented land uses are allowed on City Walkways, site development standards should address the needs of pedestrians for access.

- Improvements. Use the Pedestrian Design Guide to design City Walkways. Consider special design treatment for City Walkways that are also designated as Regional or Community Main Streets.

Off-Street Paths are intended to serve recreational and other walking trips.

- Function. Use Off-Street Paths as short cuts to link urban destinations and origins along continuous greenbelts such as rivers, park and forest areas, and other scenic corridors, and used as elements of a regional, citywide, or community recreational trail plan.
- Location. Establish Off-Street Paths in corridors not well served by the street system. On existing rights-of-way that are not developed or likely to be developed in the near future, Off-Street Paths may be designated where needed to complete the pedestrian system.
- Improvements. Use the Pedestrian Design Guide to design Off-Street Paths. Design Off-Street Paths as separated facilities that accommodate pedestrians and may accommodate other non-motorized vehicles.

Local Service Walkways are intended to serve local circulation needs for pedestrians and provide safe and convenient access to local destinations, including safe routes to schools.

- Land Use. Local Service Walkways are usually located in residential, commercial, or industrial areas on Local Service Traffic Streets.
- Classification. All streets not classified as City Walkways or Off-Street Paths, with the exception of Regional Trafficways not also classified as Major City Traffic Streets, are classified as Local Service Walkways.
- Improvements. Use the Pedestrian Design Guide to design Local Service Walkways.

Freight Classification Descriptions

Freight Districts are intended to provide safe and convenient truck mobility and access in industrial and employment areas serving high levels of truck traffic and to accommodate the needs of intermodal freight movement.

- Land Use. Support locating industrial and employment land uses that rely on multimodal freight movement in Freight Districts.
- Function. Freight District streets provide local truck access and circulation to industrial and employment land uses.
- Connections. In Freight Districts, streets not classified as Regional Truckways or Priority Truck Streets are classified as Freight District streets. Freight Districts connect individual properties to Priority Truck Streets.
- Design. Freight District streets should be designed to facilitate the movement of all truck types and over-dimensional loads, as practicable.

Regional Truckways are intended to facilitate interregional and movement of freight.

- Land Use. Support locating industrial and employment land uses with high levels of truck activity near Regional Truckway interchanges.
- Function. Provide for safe and efficient continuous-flow operation for trucks.

- Connections. Provide Regional Truckway interchanges that directly serve Freight districts and connect to Priority Truck Streets and other streets with high levels of truck activity. A ramp that connects to a Regional Truck Street is classified as a Regional Truck Street up to its intersection with a lower-classified street.
- Design. Design Regional Truckways to be limited access facilities and to standards that facilitate the movement of all types of trucks.

Priority Truck Streets are intended to serve as the primary route for access and circulation in Freight Districts, and between Freight Districts and Regional Truckways.

- Land Use. Support locating industrial and employment uses that generate high truck activity on corridors served by Priority Truck Streets.
- Function. Priority Truck Streets accommodate high truck volumes and provide high-quality mobility and access.
- Connections. Priority Truck Streets connect Freight Districts to Regional Truckways.
- Design. Priority Truck Streets should be designed to facilitate the movement of all truck classes and over-dimensional loads, as practicable. Buffer adjacent residential uses from noise impacts, where warranted.

Major Truck Streets are intended to serve as principal routes for trucks in a Transportation District.

- Land Use. Commercial and employment land uses that generate high levels of truck activity should locate along Major Truck Streets.
- Function. Major Truck Streets provide truck mobility within a Transportation District and access to commercial and employment uses along the corridor.
- Connections Major Truck Streets connect Transportation district-level truck trips to Regional Truckways. Trucks with no trip ends within a Transportation District should be discouraged from using Major Truck Streets.
- Design. Major Truck Streets should accommodate all truck types, as practicable.

Truck Access Streets are intended to serve as access and circulation routes for delivery of goods and services to neighborhood-serving commercial and employment uses.

- Land Use. Support locating commercial land uses that generate lower volumes of truck trips on Truck Access Streets.
- Function. Truck Access Streets provide access and circulation to land uses within a Transportation District. Non-local truck trips are discouraged from using Truck Access Streets.
- Connections. Truck Access Streets should distribute truck trips from Major Truck Streets to neighborhood-serving destinations.
- Design. Design Truck Access Streets to accommodate truck needs in blanance with other modal needs of the street.

Local Service Truck Streets are intended to serve local truck circulation and access.

- Land Use. Local Service Truck Streets provide for goods and service delivery to individual commercial, employment, and residential locations outside of Freight Districts.
- Function. Local Service Truck Streets should provide local truck access and circulation only.

- Connections. All streets, outside of Freight Districts, not classified as Regional Truckways, Priority Truck Streets, Major Truck Streets, or Truck Access Streets are classified as Local Service Truck Streets. Local Service Truck Streets with a higher Traffic classification are the preferred routes for local access and circulation.
- Design. Local Service Truck Streets should give preference to accessing individual properties and the specific needs of property owners and residents along the street. Use of restrictive signage and operational accommodation are appropriate for Local Service Truck Streets.

Railroad Main Lines transport freight cargo and passengers over long distances as part of a railway network.

Railroad Branch Lines transport freight cargo over short distances on local rail lines that are not part of a rail network and distribute cargo to and from mail line railroads.

Freight Facilities include the major shipping and marine, air, rail, and pipeline terminals that facilitate the local, national, and international movement of freight.

Emergency Response Classification Descriptions

Major Emergency Response Streets are intended to serve primarily the longer, most direct legs of emergency response trips.

- Improvements. Design treatments on Major Emergency Response Streets should enhance mobility for emergency response vehicles by employing preferential or priority treatments.
- Traffic Slowing. Major Emergency Response Routes are not eligible for traffic slowing devices in the future. Existing traffic slowing devices may remain and be replaced if necessary.

Minor Emergency Response Streets are intended to serve primarily the shorter legs of emergency response trips.

- Classification. All streets not classified as Major Emergency Response Streets are classified as Minor Emergency Response Streets.
- Improvements. Design and operate Minor Emergency Response Streets to allow access to individual properties by emergency response vehicles, but maintain livability on the street.
- Traffic Slowing. Minor Emergency Response Streets are eligible for traffic slowing devices.

Street Design Classification Descriptions

(Refer to Section 6: Street Design Classification Descriptions for proposed revisions to classification descriptions)

Modal Policies (9.16-9.39)

Pedestrian Transportation Objectives

Improve the quality of the pedestrian environment by implementing pedestrian design guidelines to ensure that all construction in the right-of-way meets a pedestrian quality standard and by developing special design districts for Pedestrian Districts and main streets.

Increase pedestrian safety and convenience by identifying and analyzing high pedestrian collision locations; making physical improvements, such as traffic calming, signal improvements, and crossing improvements in areas of high pedestrian use; and supporting changes to adopted statutes and codes that would enhance pedestrian safety.

Develop a citywide network of pedestrian trails that increases pedestrian access for recreation and transportation purposes and links to schools, parks, transit, and shopping as well as to the regional trail system and adjacent cities.

(Refer to Section 2: Revised TSP Objectives for proposed revisions to Objective 6.22.A & B)

Bicycle Transportation Objectives

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Public Transportation Objectives

Support light rail transit and bus connections as the foundation of the regional transit system, with completion of the system to connect all regional centers, downtown Vancouver, major attractions, and intermodal passenger facilities as a high priority for the region.

Base decisions about light rail transitway alignments and their connections to other regional facilities on individual corridor studies.

Expand primary and secondary bus service to meet the growing demand for work and non-work trips, operate as the principal transit service for access and mobility needs, help reduce congestion, and support the economic activities of the City.

Implement transit-preferential measures on Major Transit Priority Streets to achieve travel times competitive with the automobile and to improve service reliability.

Consider the use of alternative forms of transit, including vanpools and dial-a-ride in low-density areas and other forms of transit such as water taxis.

Locate major park-and-ride lots only where transit ridership is increased significantly, vehicle miles traveled are reduced, transit-supportive development is not hampered, bus service is not available or is inadequate, and the surrounding area is not negatively impacted.

Develop streetcar lines in Portland to connect new or redeveloping neighborhoods to employment opportunities and other destinations, including shopping, education, and recreation.

Support a public transit system and regional transportation strategies that address the special needs of the transportation disadvantaged and provide increased mobility options and access.

Transit-Oriented Development

Consider the existing or planned availability of high-quality transit service when adopting more intensive residential, commercial, and employment designations.

Focus medium-density and high-density development, including institutions, in transit-oriented developments along transit lines.

Require commercial and multifamily development to orient to and provide pedestrian and bicycle connections to transit streets and, for major developments, provide transit facilities on a site or adjacent to a transit stop.

Examine the benefits of limiting drive-through facilities in existing or planned areas of high-intensity development and high levels of pedestrian, bicycle, and transit activity when planning studies are being done for these areas.

Freight Transportation Objectives

Prioritize transportation investments in the freight street network that improve connections between Freight Districts and Regional Truckways.

Accommodate truck travel on designated truck streets through improvements to facility design and operations that address the dimensional needs of trucks.

Encourage through-truck traffic to use Regional Truckways, Priority Truck Streets, and Major Truck Streets for mobility and Truck Access Streets and Local Service Truck Streets to access local destinations.

Develop and implement street connectivity plans for Freight Districts to improve truck circulation and access to industrial land uses.

Develop and implement a signage plan for designated truck routes and major freight destinations.

Designate and maintain preferred routes to accommodate over-dimensional freight movement.

Employ intelligent transportation system measures to reduce delays and improve travel time on Regional Truckways, Priority Truck Streets and Major Truck Streets.

Evaluate and improve locations where inadequate roadway design creates barriers for truck access in Freight Districts and on designated truck streets.

Upgrade bridges to remove load limits and vertical clearance restrictions on designated truck streets.

Use public-private collaboration to identify and implement measures to minimize delays and improve safety at at-grade rail freight crossings.

Provide adequate off-street loading areas for larger employment, commercial and multi-family developments.

Manage supply, operations, and demand of on-street truck loading spaces to ensure efficient, reliable and safe loading and unloading activities.

Implement design guidelines for truck streets that meet the dimensional needs of trucks, particularly for Freight Districts, while balancing the needs of other transportation modes in the right-of-way.

Multimodal System Objectives

Support a well-integrated freight system that includes truck, rail, marine, air, and pipeline modes as vital to a healthy economy.

Coordinate with private and public stakeholders to identify improvement and funding strategies for multimodal freight mobility needs.

Participate with interjurisdictional partners in the development of corridor plans, master plans, and regional facility plans that impact freight mobility.

Address freight access and mobility needs when conducting multimodal transportation studies or designing transportation facilities.

Work with community stakeholders to minimize adverse impacts of freight activity on the environmental and residential and mixed-use neighborhoods.

Intercity Passenger Service Objectives

Support continuation of Union Station as the multimodal transportation hub, serving as the primary passenger rail and intercity bus terminal in the Portland metropolitan area and providing direct connections among passenger rail, light rail, streetcar, intracity buses, taxis, and airport shuttle buses.

Support continuation of Portland International Airport as the multimodal passenger air facility hub by encouraging direct connections for all modes, including light rail transit, buses, taxis, and airport shuttles.

Support development of passenger transfer facilities in existing and emerging regional centers.

Support commuter rail service where it will reinforce the 2040 Growth Concept and is an efficient alternative to the automobile.

Support expansion of Northwest Corridor passenger rail service between Eugene, Portland, Seattle, and Vancouver, B. C. by incremental improvements in speed, frequency, and station facilities, in cooperation with the States of Oregon and Washington and the Province of British Columbia.

Regional Trafficways Objectives

Regard the City's Regional Trafficway system within Portland to be substantially complete, except for safety or other improvements to existing facilities that increase their efficiency.

Oppose extension of a new circumferential freeway north of US 26 into the City and through Forest Park.

Emergency Response Objectives

Use the emergency response classification system to determine whether traffic-slowing devices can be employed.

Use the emergency response classification system to guide the routing of emergency response vehicles.

Use the emergency response classification system to help site future fire stations.

System Management (9.44-9.50)

System Management Objectives

Reduce and manage automobile travel demand and promote transportation choices before considering the addition of roadway capacity for single-occupant vehicles.

Employ transportation system management measures, including coordinating and synchronizing signals and intersection redesign, to improve mobility and safety for all modes of travel.

Design, build, and operate the transportation system so that it can be safely navigated by all users.

Traffic Management Objectives

Manage traffic on Neighborhood Collectors and Local Service Streets consistent with the land uses they serve and to preserve and enhance neighborhood livability.

Encourage non-local traffic, including trucks, to use streets of higher traffic and truck classifications through design, operations, permitting, and signing.

Implement measures on Neighborhood Collectors that do not result in significant diversion of traffic to streets of lower classification.

Work with ODOT to manage the location, spacing, and type of road and street intersections on Regional Trafficways, St. Helens Road, Lombard east of Interstate 5, and McLoughlin, and develop access management plans for other City streets as needed to ensure the safe and efficient operation of these facilities.

Provide local access to arterials, while minimizing conflicts with through-traffic.

Ensure that access management measures do not adversely impact any transportation mode, consistent with the classifications of the street where these measures are applied.

(Refer to Section 2: Revised TSP Objectives for proposed revisions to Objective 6.13.D & F and refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Connectivity and Street Plan Objectives

Provide interconnected local and collector streets to serve new and redeveloping areas and to ensure safe, efficient, and convenient pedestrian, bicycle, and vehicle access with preference for public streets over private streets.

Create short blocks through development of frequent street connections in mixed-use areas of planned high-density development.

Provide convenient and safe bicycle and pedestrian connections to transit routes, schools, and parks, as well as within and between new and existing residential developments, employment areas, and other activity centers where street connections are not feasible.

Use large-scale Green Streets as a means of connecting neighborhoods, using the right-of-way efficiently, and enhancing neighborhood livability.

Develop conceptual master street plans for areas of the City that have significant amounts of vacant or underdeveloped land and where the street network does not meet City and Metro connectivity guidelines.

Ensure that new residential development and development in zones that allow a mix of uses include street plans that are consistent with master street plans, extend and connect to adjacent areas, and meet connectivity objectives.

Identify opportunities to extend and connect streets, provide direct public right-of-way routes, and limit the use of cul-de-sac and other closed-end street designs.

Provide full street connections with spacing of no more than 530 feet between connections, except where prevented by barriers such as topography, railroads, freeways, or environmental constraints. Where streets must cross over protected water features, provide crossings at an average spacing of 800 to 1,200 feet, unless exceptional habitat quality or length of crossing prevents a full street connection.

Provide bike and pedestrian connections at approximately 330-foot intervals on public easements or rights-of-way when full street connections are not possible, except where prevented by barriers such as topography, railroads, freeways, or environmental constraints. Bike and pedestrian connections that cross protected water features should have an average spacing of no more than 530 feet, unless exceptional habitat quality or length of crossing prevents a connection.

As the South Waterfront District develops, provide connectivity for all modes of travel by developing the streets and accessways as shown on Map 11.11.1.

As the western half of the Bridgeton neighborhood develops, provide connectivity for all modes of travel by developing the streets as shown on Map 11.11.2.

As the Gateway regional center redevelops, provide additional connectivity for all modes of travel as shown on Map 11.11.3.

As the Airport Way vicinity continues to develop, use the Airport Way Secondary Infrastructure Plan as a guide to provide connectivity for all modes of travel by developing streets as shown on Map 11.11.4.

Continue to provide connectivity in the River District for all modes of travel by developing public and private streets as shown on Map 11.11.5.

As the Southwest District develops, provide connectivity for all modes of travel by developing streets as shown on Map 11.11.6.

As the Far Southeast District develops, provide connectivity for all modes of travel by developing streets as shown on Map 11.11.7.

As the street system is modified around the west end of the Ross Island Bridge, provide enhanced connectivity for all modes as shown on Map 11.11.8.

Preserve street connectivity in areas of the City that meet the standards of this policy and its objectives as shown on Maps 11.11.9 through 11.11.16.

Improve connectivity in the St. Johns town center by implementing the St. Johns Master Street Plan as shown on Map 11.11.17.

Improve and preserve connectivity in the Northwest District by implementing the Northwest District Master Street Plan as shown on Map 11.11.18.

Establish a network of streets in Multnomah County Unincorporated Urban Pockets to provide connectivity for all modes of travel as shown on Maps 11.11-19 A through C.

(Refer to Section 9: Master Street Plans for proposed revisions)

Performance Measures Objectives

Maintain acceptable levels of performance on the regional transportation system, consistent with Table 11.1, in the development and adoption of, and amendments to, the Transportation System Plan and in legislative amendments to the Comprehensive Plan Map.

Use level-of-service as one measure to evaluate the adequacy of transportation facilities in the vicinity of sites subject to land use review.

Use alternatives to the level-of-service measure to determine the adequacy of the transportation system in areas that exhibit the following characteristics:

- A mix of land uses, including residential
- A mode split consistent with targets established for the area
- Maximum parking ratios
- Adequate existing street connectivity

In areas identified by Metro that exceed the level-of-service in Table 11.1 and are planned to, but do not currently, meet the alternative performance criteria, establish an action plan that does the following:

- Anticipates growth and future impacts of motor vehicle traffic on multimodal travel in the area
- Establishes strategies for mitigating the future impacts of motor vehicles

- Establishes performance standards for monitoring and implementing the action plan

Develop performance measures to track progress in creating and maintaining the transportation system.

Establish mode split targets in 2040 Growth Concept areas within the City, consistent with Metro's targets for these areas.

(Refer to Section 10: Performance Measures for proposed revisions)

Regional Congestion Management Objectives (Regional Travel Patterns and Congestion Management)

Direct interregional traffic to use Regional Trafficways and Regional Transitways, and manage these facilities to maximize their existing capacity.

Minimize the impact of interregional and long intraregional trips on Portland neighborhood and commercial areas, while supporting the travel needs of the community.

Manage traffic on Neighborhood Collectors that Metro designates as Collectors of Regional Significance so they maintain their function as distributors of traffic between Major City Traffic Streets or District Collectors and Local Service Streets, rather than function primarily for regional traffic movement.

Use the TSP refinement plan process to determine specific projects and actions to meet needs in identified transportation corridors.

Support pricing strategies that are based on the environmental and social costs of motor vehicles.

In cooperation with Metro and other jurisdictions, choose corridors to implement market-based pricing where high-quality transportation alternatives to driving exist.

Travel Management Objectives

Develop neighborhood-based programs to promote and support multimodal strategies and trip reduction strategies and programs.

Meet the access and mobility needs of businesses and employees in key employment and regional centers with customized alternative transportation programs that result in reduced congestion and improved air quality.

Support and encourage the growth of car sharing among City residents and businesses through actions that expand the supply of car sharing vehicles at convenient locations and actions that increase the demand for car sharing services.

Require institutions to regulate parking facilities, first to provide short-term parking for visitors and, second, to minimize the amount of employee parking through demand management measures such as carpooling, ridesharing, flexible work hours, telecommuting, parking management, and employer-subsidized transit passes.

Require institutions to mitigate excessive parking impacts on residential areas.

Require institutions and other large employers to participate in programs to reduce single-occupant automobile trips.

Parking Management (9.54-9.60)

Parking Management Objectives

Implement measures to achieve Portland's share of the mandated 10 percent reduction in parking spaces per capita within the metropolitan area over the next 20 years.

Consider transportation capacity and parking demand for all motor vehicles in the regulation of the parking supply.

Develop parking management programs and strategies that improve air quality, reduce congestion, promote alternatives to the drive-alone commute, and educate and involve businesses and neighborhoods.

On-Street Parking Management Objectives

Maintain existing on-street parking in older neighborhoods and commercial areas where off-street parking is inadequate, except where parking removal is necessary to accommodate alternatives to the automobile.

Support carpooling in commercial districts by providing convenient, affordable, and adequate on-street spaces.

Develop and maintain on-street parking meter districts to provide for customer turnover, reduce on-street parking use by commuters, efficiently allocate parking among diverse users, encourage the use of alternatives to the automobile, and provide a funding source for transportation projects within the districts.

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Off-Street Parking Objectives

Consider eliminating requirements for off-street parking in areas of the City where there is existing or planned high-quality transit service and good pedestrian and bicycle access.

Encourage the redevelopment of surface parking lots into transit-supportive uses or development or to include facilities for alternatives to the automobile.

Limit the development of new parking spaces to achieve land use, transportation, and environmental objectives.

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Finance, Programs, and Coordination (9.61-9.66)

Transportation Education and Encouragement

Publicize activities and the availability of resources and facilities that promote a multimodal transportation system.

Implement educational programs that recognize the need for developing and maintaining a multimodal transportation system that supports the movement of freight as well as people.

Encourage walking by developing education programs for both motorists and pedestrians and by supporting and participating in encouragement events for pedestrians.

Develop and implement education and encouragement plans aimed at youth and adult cyclists and motorists.

Increase public awareness of the benefits of walking and bicycling and of available resources and facilities.

Develop a strong school curriculum and program on transportation safety and travel choices with emphasis on environmental consequences, neighborhood livability, personal safety, and health.

Educate citizens and businesses about Green Streets and how they can serve as urban greenways to enhance, improve, and connect neighborhoods to encourage their support, demand and funding for these projects.

(Refer to Section 4: Bicycle Classifications & Objectives for proposed revisions recommended by the Portland Bicycle Plan for 2030)

Project and Program Selection Objectives

Address existing deficiencies or hazards by improving pedestrian, bicycle, and vehicular safety.

Use good resource management and minimize or reduce negative impacts to the natural environment.

Improve access to existing and emerging employment and industrial areas.

Promote street connectivity for all modes, especially in areas where identified deficiencies exist, to support desired urban form and travel patterns.

Address area-wide needs, including access and mobility, environmental protection, Green Street design and quality urban design, in a comprehensive approach to project selection.

Increase the efficiency and effectiveness of the system by wise application of available financial, capital, and human resources.

Develop the transportation system consistent with and supportive of community values.

(Refer to Section 2: Revised TSP Objectives for proposed revisions to Objective 11.9.A & D)

Funding Objectives

Participate in Metro's processes for allocating and managing transportation funds and resources to achieve maximum benefit with limited available funds.

Pursue opportunities to improve the transportation system, including grants, private/public partnerships, and other non-traditional funding mechanisms.