

CHAPTER 1: INTRODUCTION



Overview

The Hillsboro Transportation System Plan (TSP) is the guiding document for the City of Hillsboro's transportation investments over the next 20 years. It identifies the inventory and deficiencies of the existing transportation system; determines future needs in proportion with projected population and employment growth; presents plans, programs, and projects to address deficiencies and future needs; and identifies revenue and resources to implement the plans and projects.

The Hillsboro TSP is the guiding document for the City's transportation investments over the next 20 years.

The Hillsboro TSP is guided by the goals and policies set out in the Hillsboro Comprehensive Plan, which reflects the visions and values of our community. From a regulatory standpoint, the Hillsboro TSP serves as the transportation element of the Hillsboro Comprehensive Plan and fulfills the requirements outlined in Oregon Administrative Rule (OAR) Section 660 Division 12, known commonly as the Transportation Planning Rule (TPR). The TSP also implements the policies in the Metro Regional Transportation Plan (RTP) by meeting the guidelines established in the Regional Transportation Functional Plan (RTFP) that are found in Chapter 3.08 of the Metro Code.



The Hillsboro TSP, in conjunction with the Hillsboro Design and Construction Standards (DCS), is used daily to inform transportation and development decisions within the City. In the City's development application process, the Hillsboro Community Development Code (CDC) requires by reference to the adopted TSP that all necessary transportation infrastructure requirement that a development applicant might be responsible for delivering.

The TSP project list is the basis for selecting future transportation capital projects. The TSP's collector and arterial projects also comprise the Hillsboro component of the regional project list found in the Metro RTP. In addition, the TSP project list provides the candidate list of projects for future grant applications and partnership opportunities that may arise.

The 2040 TSP is an update built upon prior work. It took into account previously adopted plans and brought together updates to reflect the latest performance standards and state-of-transportation practice. In recent years, the TSP has been amended at regular intervals to incorporate the planning efforts of major growth areas such as AmberGlen, North Hillsboro, and South Hillsboro as well as the occasional spot amendment to reflect minor changes.

It is noteworthy that the Hillsboro TSP exceeds the minimum requirements of the TPR, which mandates planning infrastructure for the next 20 years of growth. It does so by assessing the multimodal needs of reasonable community buildout under current zoning rather than relying on a strictly 20-year forecast toward that buildout as established by Metro.

This TSP preserves the institutional knowledge of past planning processes. The TSP will be amended to respond to growth and regulatory changes until the next major update.

Notable Changes and Highlights

This Hillsboro TSP has a number of notable changes from the previous TSP as well as notable highlights. They include:

- **Updated Comprehensive Plan goals and policies** – The new Hillsboro Comprehensive Plan was adopted in 2017. It includes updated goals and policies that direct decision making for transportation system. The Comprehensive Plan was guided by the Hillsboro 2035 Community Plan. The Comprehensive Plan goals and policies are located in Chapter 2.
- **Demographic maps** – A series of 11 demographic maps were developed to provide information for equity considerations when evaluating transportation investment decisions. The demographic maps are located in Appendix B.

- **Relocation of typical cross sections to Hillsboro DCS** – Typical roadway design standards are located in the Hillsboro DCS; additional roadway standards for special plan areas are located in the Hillsboro CDC. In past TSPs, roadway design standards were included as part of the TSP document. For clarity, roadway standards have been excluded from this TSP. Users are directed to the DCS and CDC for the latest adopted standards.
- **Integrated multi-modal project list** – This TSP has one integrated project list for motor vehicle, pedestrian and bicycle projects, unlike the previous TSP where there were three separate lists. The project list is located in Chapter 6. It should be noted there are additional lists for intersection improvements, citywide programs and projects, and City cost obligations on partner projects.
- **Comprehensive update to Bicycle Plan and Transit Plan** – The Bicycle Plan and Transit Plan has undergone extensive overhaul in this TSP. The resulting plans represent the City’s vision for a complete and robust multi-modal transportation network that provides users options to travel with different modes. The Bicycle Plan and Transit Plan are located in Chapter 5.
- **Extensive intersection improvements list** – An exhaustive list of intersection improvements were developed as part of this TSP to understand the future needs at intersections. This provides the City and future development a clearer picture of necessary improvements. The Intersection Improvements List is in Chapter 6.
- **Detailed cost estimates** – This TSP undertook a detailed cost estimate exercise that incorporated the knowledge and data from recent development in the City’s growth areas such as South Hillsboro and North Hillsboro. The resulting cost estimates took into account the likely delivery mechanism and private or public construction cost, and integrated the Washington County Transportation Development Tax (TDT) procedures into the cost obligation and credit calculations. The cost estimates are part of the project lists in Chapter 6.

Regulatory Context

Development of the Hillsboro TSP was guided by Oregon Revised Statute (ORS) 197.712 and OAR Section 660 Division 12, the Department of Land Conservation and Development (DLCD) administrative rule commonly known as the TPR. ORS 197.712 requires that the TSP be based on currently adopted Hillsboro Comprehensive Plan land uses and that it support a transportation system that accommodates expected population and employment growth over a 20-year horizon resulting from implementation of the land use plan.

The TPR states that municipalities shall provide and encourage a safe, convenient, and economical transportation system and develop and maintain a TSP that considers all modes of travel, including automobiles, pedestrians, bicycles, transit, freight, rail, air, pipelines, and water. The City must assess local, regional and state needs and consider appropriate combinations of travel modes to avoid principal reliance upon any one transportation mode.

A TSP is also required to include a transportation financing program consisting of a list of planned transportation facilities and major projects, timing and rough cost estimates, policies for selecting projects, and an allowance for phasing of major improvements.

The Hillsboro TSP is consistent with transportation plans from other jurisdictions, including the Oregon Department of Transportation (ODOT), Metro, Washington County, and TriMet. A review of existing state, regional, and local plans and policies consisting the following documents was conducted. The plan and policy review memorandum is provided in Appendix A.

- Oregon Transportation Plan (updated 1999, 2006)
- Oregon Highway Plan (updated 2006)
- Oregon Bicycle and Pedestrian Plan
- Oregon Aviation Plan (2007)
- Oregon Resilience Plan (2013)
- ODOT Highway Design Manual
- Oregon Access Management Rules (OAR 734-051)
- TPR (OAR 660-012)
- 2015 - 2018 State Transportation Improvement Program (STIP)
- Metro Regional Framework Plan
- Metro 2040 Growth Concept
- Metro Urban Growth Management Functional Plan (UGMFP)
- 2014 Metro Regional RTP and RTFP
- Metro Climate Smart Strategy (2014)
- Regional High Capacity Transit Plan, 2035 Summary Report
- Metro Non-Single Occupancy Vehicle (SOV) Target Actions Study
- Metro Regional Trails and Greenways System (2014)
- Washington County TSP
- Washington County Road and Design Construction Standards

- TriMet Westside Service Enhancement Plan (2013)
- TriMet Pedestrian Network Analysis Project (2012)
- TriMet Coordinated Transportation Plan for Elderly and People with Disabilities (2012)
- TriMet 2015 Transit Investment Priorities



Hillsboro Transportation Planning Background

The City of Hillsboro adopted its first TSP under the modern TPR format in 1999. A substantial revision conducted in 2004 updated the existing conditions, modal system plans, project lists, and financing plan. Since 2008, the Hillsboro TSP has been amended regularly to reflect new Urban Growth Boundary (UGB) areas such as South Hillsboro and North Hillsboro, and major planning areas such as AmberGlen. In addition, a significant amount of transportation technical analysis has been completed for various targeted areas in the City in recent years. This Hillsboro TSP brings together the previously completed transportation planning efforts into one uniform document that is consistent with the current vision, policies, and regulatory requirements.

The Hillsboro TSP integrates the significant amount of technical analysis completed for various targeted areas in recent years.

A selected summary of Hillsboro’s transportation planning efforts in recent years is as follows:

- **1979: Report on Transportation** – Predecessor to the modern TSP. Comprehensive citywide transportation master plan with planning horizon year 2000; completed in 1979 and adopted into the City Comprehensive Plan in 1980; city population was 26,000 at the time.
- **1992: Revision to Report on Transportation** – Update to the 1979 report; not adopted into Comprehensive Plan
- **1998: Westside Light Rail extension** – Light rail extension, now known as MAX Blue Line, to downtown Hillsboro opens.
- **1999: Transportation System Plan** – First “modern” format TSP according to TPR (OAR 660-012) requirements; planning horizon year 2020; city population was 65,000 at the time.
- **2004: Transportation System Plan Update** – Update to the 1999 TSP with focus on modal system plans and project lists; planning horizon year 2020.
- **2007: Evergreen and Helvetia Concept Plans** – Concept planning including transportation infrastructure for two newly-added UGB areas in the North Hillsboro industrial area.
- **2010: AmberGlen Community Plan** – Redevelopment plan for 606-acre regional center at the southern edge of Tanasbourne Town Center, which included substantial changes to land use and the transportation system, including proposed new high-capacity transit
- **2016: South Hillsboro Community Plan and Transportation Finance Plan** – 1,400-acre master-planned community south of Tualatin Valley Highway that is expected to include

about 8,000 homes and 20,000 residents at build-out; largest master-planned community in Oregon to date.

- **2017: Washington County Transportation Futures Study** – Countywide transportation study funded by the Oregon Legislature that looked at regional transportation needs and alternatives beyond the typical 20-year horizon of TSPs.

Project Process & Public Involvement

Project Process

The City's Comprehensive Plan was updated in its entirety and adopted in 2017. Transportation staff was closely involved in the Comprehensive Plan update to provide coordination and input in the transportation topic areas of the Comprehensive Plan. The Comprehensive Plan goals and policies related to transportation are presented in Chapter 2 of this TSP document.

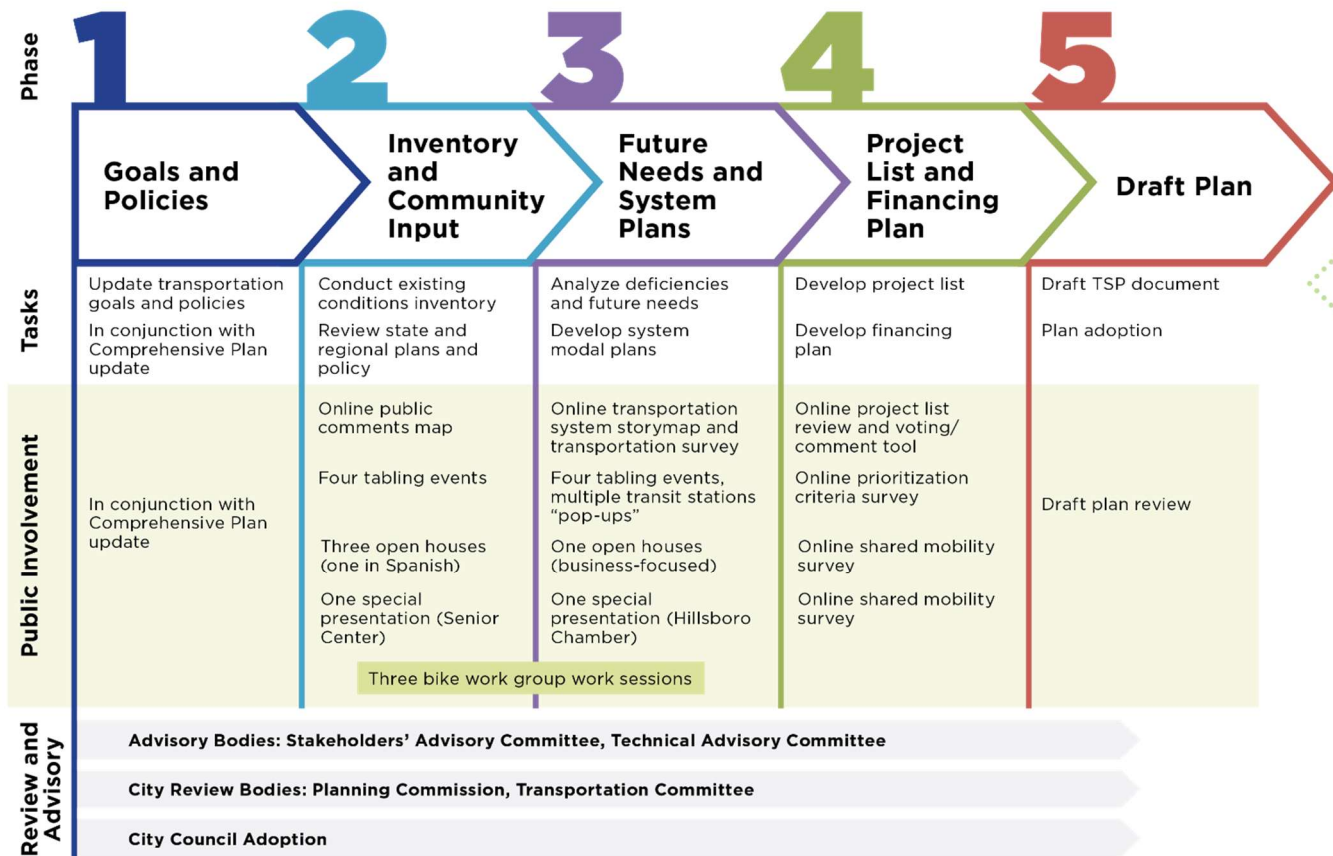
The TSP update was guided by an extensive public involvement process and two advisory committees which are described in more detail below. The development of the plan started with the previous TSP and subsequent amendments which included the various major growth areas and planning areas in the City. A significant amount of technical transportation analysis have been undertaken over the years by the City prior to the TSP update effort to understand the potential impact of different growth scenarios proposals. These analyses were incorporated into the development of the TSP.

In addition, existing data and inventory of the City's transportation infrastructure and services formed the foundation in the development of various modal system plans and projects. Future needs analysis included identifying the deficiencies and improvements needed to bring the transportation system to adopted mobility and design standards.

System plans were developed to reflect each modal network to meet the needs and goals of the community. Finally, projects and cost estimates were developed to implement the system plans and bring them to realization over the coming years.

The TSP update process is summarized in **Figure 1-1**.

Figure 1-1 Project and Public Involvement Process



Public Involvement

Public involvement was an integral part of the Hillsboro TSP update. A Public Involvement Plan was established and approved by the City’s Public Engagement Committee (PEC), an advisory body to the City’s Planning Commission, to guide the public involvement process. The public involvement and outreach process for the Hillsboro TSP included two advisory committees and one work group, community outreach special events and targeted engagements, updates and information dissemination via traditional mailings and digital channels, such as email lists and websites, feedback invitations at various stages of the update process, and work sessions with the Hillsboro Planning Commission, Transportation Committee, and City Council throughout the development of the plan.

The two advisory committees and one work group were:

- A Stakeholders’ Advisory Committee (SAC) brought together residential community members, business representatives, and local stakeholders to provide guidance and

input throughout the TSP update. The SAC met a total of seven times included twice for the Hillsboro Comprehensive Plan update and five times for the TSP update.

- A Technical Advisory Committee (TAC) brought together partner agency staff from Washington County, ODOT, TriMet, Metro, Port of Portland, City of Beaverton, and Westside Transportation Alliance, who helped guide the TSP update and ensure consistency with partner agency plans and policy. The TAC met a total of seven times included twice for the Hillsboro Comprehensive Plan update and five times for the TSP update.
- An ad-hoc, bicycle-specific work group brought together community members interested in the bicycle element of the TSP to assist in developing the Bicycle Plan. The bicycle work group met a total of three times.



Four phases of engagement were completed from 2018 to 2020. Phase 1 was used primarily to gather open-ended comments prompted by the “Where in Hillsboro does transportation need the most love?” Responses from this phase were sorted and reviewed and used to guide the development of the system plans in Phase 2. For the second phase, staff developed an online open house tool to share the individual modal (such as transit, walking, biking) plans along with preliminary analysis to provide an opportunity to comment if the draft plans reflected the needs identified in Phase 1. Phase 3 was about specific projects, allowing the public to see the draft project list developed from Phase 2 through another interactive online map. The map displayed the location of each project, the projected funding source, and icons indicating which modes were specifically benefitting from the investment. Finally, Phase 4 focused on the effort to prioritize these investments. The goal of Phase 4 outreach was to understand how to community would rank the project list. Which projects or areas of the City deserved implementation first? The final engagement phase was cut short due to impacts from COVID-19 limiting the number of in-person events and the communication outlets that would have been used to promote interaction with the final survey.

The community engagement strategy evolved along with project phasing. Outreach activities, communication channels, and interactive tools were developed parallel to the completion of written policy products, plan maps, and analysis. The goal was that community members could receive information about the stage of plan development, comment on the work that was completed, and guide the direction of the next phase. This strategy created multiple feedback

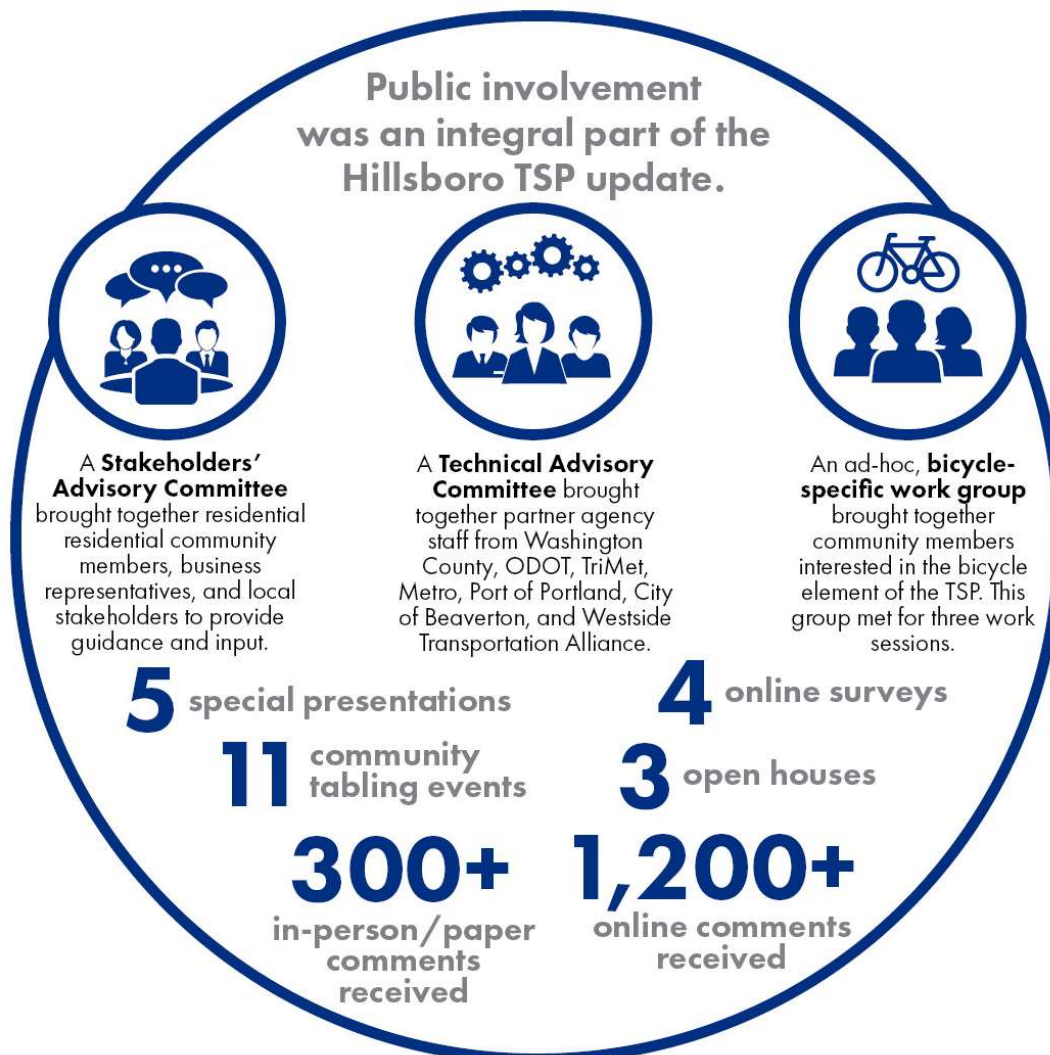


loops and opportunities to check-in, allowing input at multiple parts of the planning process rather than just at the beginning or end.

Across the four phases of outreach, staff hosted over 25 in-person open houses, presentations, and tabling events. Each phase of outreach included a separate online survey. In all, the TSP process received over 275 in-person comments and over 1,200 online public comments. Results of the engagement were shared with City departments, advisory groups, committees, and elected officials. Public comments were also used to inform other ongoing transportation-related work such as Capital Improvement Program and Safe Routes to School.

The TSP public involvement process is summarized in **Figure 1-2**. A copy of the Public Involvement Plan, detailed description of each phase of outreach, and a complete list of public comments received are provided in **Appendix B**.

Figure 1-2 Public Involvement as Part of the TSP Update



Plan Area

Since the last major TSP update in 2004, assumptions about the City's future boundaries have changed substantially. More than 3,000 acres of land have been brought into the UGB that were not part of the 2004 TSP. These areas include the 1,400-acre South Hillsboro master plan area and the 1,100-acre North Hillsboro industrial area. These areas are reasonably likely to be within Hillsboro's jurisdiction by 2040. Local streets will come under the City's jurisdiction if these areas are annexed into the City. It should be noted that the 550-acre Jackson East area and the Witch Hazel Village South area are not part of this TSP update.

The Hillsboro TSP identifies plans and projects for the areas within the current city limits and the aforementioned adjacent UGB areas that are reasonably expected to be annexed by 2040. Certain areas in unincorporated Washington County outside the Hillsboro city limits are shown in select modal system plans for continuity and information purpose. Areas in the Urban Reserve, Rural Reserve and Undesignated Reserve are not part of the TSP.

Senate Bill 122 Areas

Senate Bill (SB) 122, which was passed in 1993 and later codified in ORS 195, created a mechanism for cities to determine the providers of long-term public services to urban areas. Under SB 122, providers of future services for the Aloha-Reedville community are divided along school district lines between the cities of Hillsboro and Beaverton, with Hillsboro ultimately providing future services to unincorporated areas within the Hillsboro School District (Reedville) and Beaverton to areas within the Beaverton School District (Aloha), should the communities decide to pursue annexation in the future. In this TSP, certain analysis took into account the SB 122 areas to ensure future continuity and compatibility in the transportation system. The recommended modal system plans and project list, however, do not include the SB 122 areas as they are not under Hillsboro jurisdiction.

House Bill 4078 Areas

An expansion to the regional UGB proposed by Metro was finalized under House Bill (HB) 4078, which was passed in 2014. The bill expanded the UGB and defined 50-year urban and rural reserves and undesignated land areas in Washington County. This TSP identifies plans and projects within the UGB as defined by HB 4078.

The TSP study area is illustrated in **Figure 1-3**.

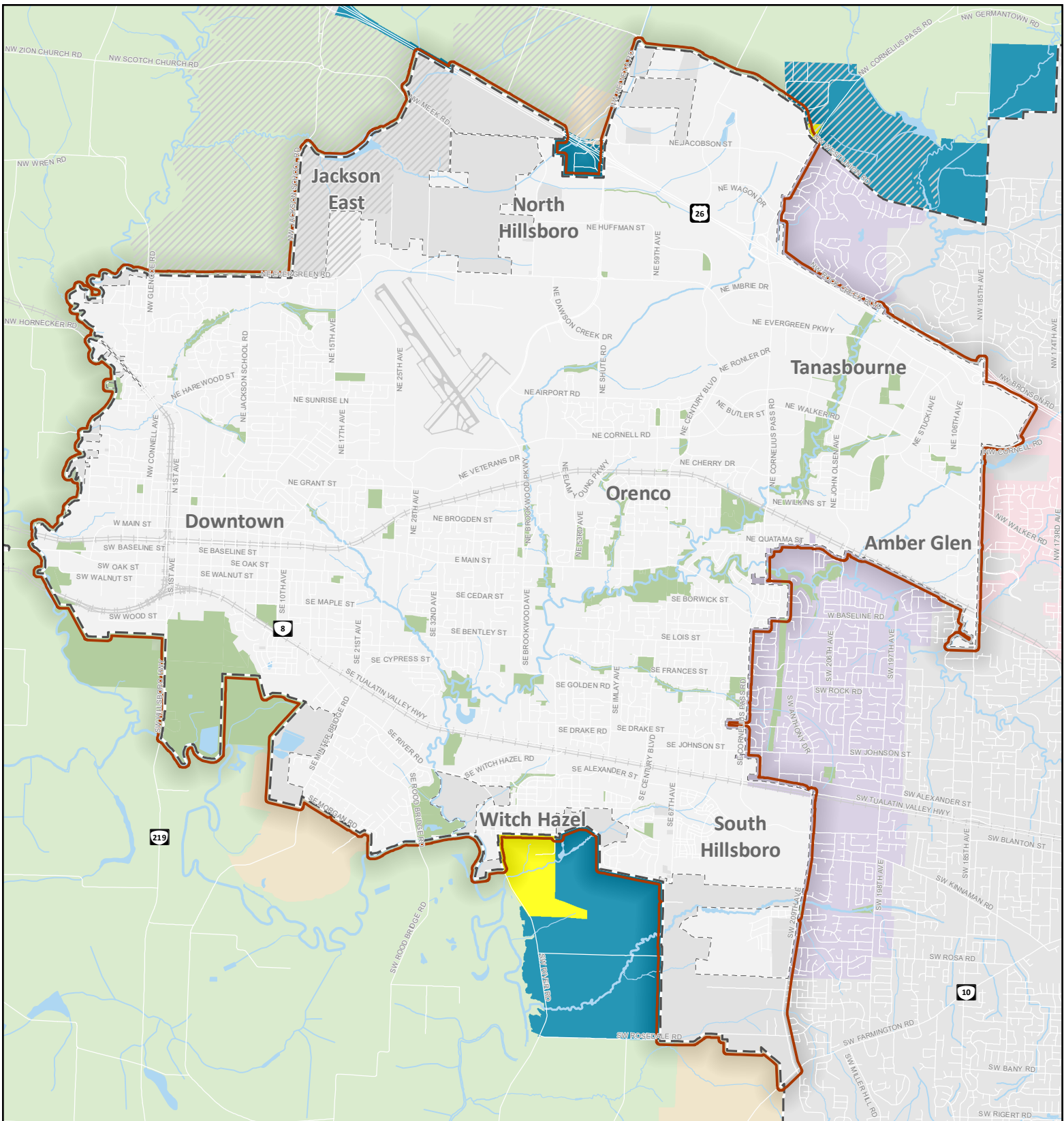













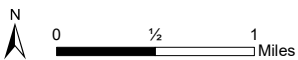


Figure 1-3 TSP Plan Area

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|---|---|---|
|  TSP Plan Area |  Urban Reserves (2018) |  Senate Bill 122 Areas |
|  City Limits (2020) |  Rural Reserves (2018) |  City of Beaverton |
|  Urban Growth Boundary (2018) |  Undesignated (2018) |  Water Bodies |
|  Unincorporated Washington County |  House Bill 4078 Amendment |  Parks and Open Spaces |
|  2018 UGB Expansion | | |



Data Source: City of Hillsboro, Washington County, Metro RLIS
Last Edited: 2/18/2022

Document Organization

The Hillsboro TSP is composed of the main document and a volume of supporting technical appendices. The main document is organized into the following chapters:

- Chapter 1 Introduction**
- Chapter 2 Goals and Policies**
- Chapter 3 Existing Conditions and Inventory**
- Chapter 4 Future Needs Assessment**
- Chapter 5 Transportation System Plans**
- Chapter 6 Project List and Financing Plan**
- Chapter 7 Beyond TSP**

The technical memoranda and information prepared during the development of the TSP, including the detailed data and analysis that informed the final plan, and other related documents are included in the appendices. It should be noted that in some instances, information developed and provided in the appendices were later superseded by additional information or decisions in the development of the TSP. Where data or information differ, the TSP main document supersedes the appendices. The list of appendices items are as follows:

- Appendix A Plans and Policies Review**
- Appendix B Public Involvement Summary**
- Appendix C Demographic Maps**
- Appendix D Intersection Worksheets**
- Appendix E TAZ Land Use Assumptions**
- Appendix F Adopted Locally Preferred Alignments**
- Appendix G Transportation Safety Action Plan (2017)**
- Appendix H Transportation Communications Plan (2017)**
- Appendix I Projects Cost Estimate Memo and Detailed Project List**
- Appendix J Financing Plan Memo**



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