SKATS 2023—2050

Metropolitan Transportation Plan

Adopted by the SKATS Policy Committee on
May 23, 2023

Cover Photos:

Upper Left: EV Charging Station, Stock Photo
Upper Middle: Keizer Roundabout, photo by Ron Cooper
Upper Right: Pedestrians, Downtown Salem, photo by Karen Odenthal
Left Middle: Rideshare, photo by Cherriots
Right Middle: Minto Island Pedestrian Bridge, photo by Karen Odenthal
Bottom: Bus and Traffic On Bridge, photo by Cherriots

The maps contained in the RTSP are for planning purposes only and reflect the best information available at the time of publication. They are subject to change and revision.

In memory of our co-worker Denise VanDyke.

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Metropolitan Transportation Plan (MTP)

2023 ~2050

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Salem-Keizer Area Transportation Study
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SKATS is the federally mandated metropolitan planning organization designated by the governor to develop an overall transportation plan and to allocate federal funds for the region.

The Policy Committee (PC) is an 8-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and make decisions on allocation federal transportation funds.

Project web site: **http://www.mwvcog.org/programs/transportation-planning/skats/planning-programs/regional-transportation-system-plan-rtsp/**

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Appendices*

* *Letters not currently assigned to appendices are reserved for future MTP updates.*

Chapter 1 - Introduction

How we plan to meet the transportation needs of the residents and businesses of the Salem-Keizer area by mid-century have implications on many facets of life. The appropriate investments can help build and sustain a vibrant economy, provide increased travel options where before they were limited, lead to an environment with clean air and streams, and result in a transportation system that is safe to use by all users. These investments should not negatively impact, nor result in any undue burdens, for any portion of the metropolitan area.

The metropolitan area covered in this Plan includes the cities of Salem, Keizer, and Turner, along with portions of unincorporated Marion and Polk Counties within the planning boundary of the *Salem-Keizer Area Transportation Study* (SKATS). The SKATS planning boundary stretches from Brooklake Road in the north, to Delaney Road in the south, and from approximately Joseph Street in the east to Oak Grove Road in the west (**Map 1-1**). The SKATS Policy Committee is the federally recognized *Metropolitan Planning Organization* (MPO) composed of officials from the jurisdictions listed above, plus the Salem Area Mass Transit District (SAMTD), the Salem-Keizer School District, and the Oregon Department of Transportation (ODOT). The Policy Committee oversees the distribution of federal surface transportation funds to projects and programs within this area. The projects and programs are proposed, owned, and operated by the local jurisdictions, as well as the SAMTD[1] and ODOT.

[1] Providing service as Cherriots within the planning boundary and Cherriots Regional outside it.

Map 1-1: SKATS Planning Boundary

One part of the federal requirements is for SKATS to periodically produce a long-range transportation plan. This update to the Metropolitan Transportation Plan (MTP)[2] covers a 27-year period, from 2023 until 2050, slightly longer than the usual 20-24 years of previous editions[3]. Updated every four years[4], the MTP is based on the currently adopted local comprehensive land use plans[5] and the most recent forecasts of population and employment. This is the second MTP to fully incorporate the *performance-based* planning paradigm from federal transportation legislation, which links the investments proposed with the regional and national goals[6].

Perhaps more than in previous plans, we start the process with much uncertainty about what *will* happen and much discussion about what *may* happen. News sources abound with stories of the possible changes that will take place by mid-century, and numerous pieces of legislation, at the national, state, and local level, have set 2050 as a target year. Before considering those possibilities, it is instructive to start the discussion with what has happened in the last twenty years, from the year 2000 onward. This discussion will be focused on changes that are important for decisions on transportation investments. Plus, as observed during the COVID-19 Pandemic, previous established trends can be shown to be not as permanent as once thought, and that many parts of the economy are rather brittle when faced with several shocks at once.

Finally, adding to the uncertainty are a set of federal, state, and local actions that will be adopted during the development of this Plan in 2022 and 2023. Taken as a whole, these regulations and actions could change local, state, and regional land use and transportation planning. But, as will be presented in **Chapter 2**, they will not be taken into full account until the next update to this Plan at the earliest due to time it takes to adopt the regulations, and then modify the existing plans[7].

A few transportation-related trends over the past 20 years

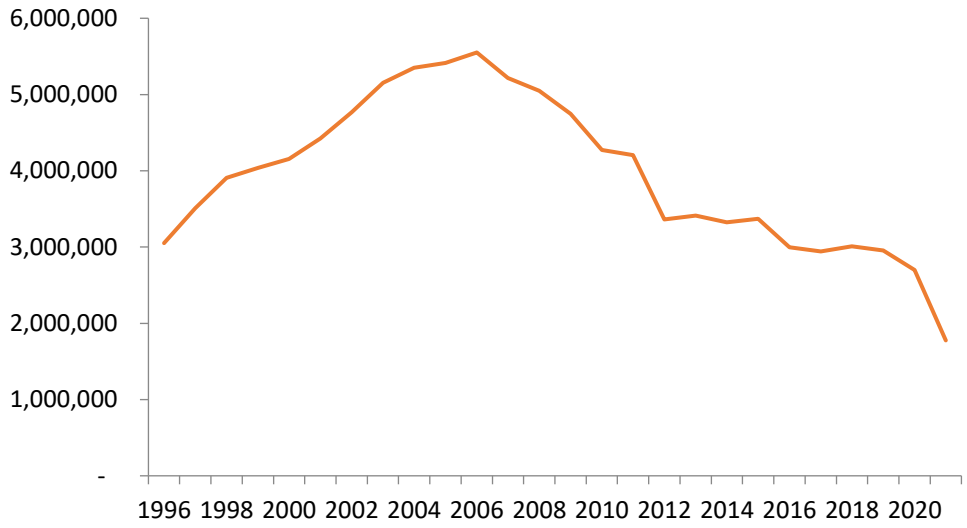
Between 2000 and 2020, the population in the Salem-Keizer area increased by 55,500, with 32,000 jobs being added[8]. It is estimated that between 2010 and 2020 17,420 people moved into Marion County from other parts of Oregon or from out of state and that 16,365 were born during that period[9]. The average age of a resident is now 38.9 (2019), up from 33.6 (2000). During that time, 19,400 new homes were built, 66 percent as single detached houses and 34 percent as multi-family[10]. Most of this development has

[2] The MTP was previously known as the Regional Transportation Systems Plan or RTSP from 1996 until 2022.
[3] Fun fact: The first MTP was adopted in 1996, 27 years ago from the scheduled May 2023 adoption.
[4] The previous MTP covered the years 2019 to 2043 and was adopted on May 28, 2019.
[5] The jurisdiction's Transportation System Plan is included as part of their Comprehensive Plan.
[6] As discussed in Chapter 2, this requirement was introduced with the passage of the Moving Ahead for Progress in the 21st Century (MAP-21) surface transportation act in 2012.
[7] The next update to this Plan is scheduled for adoption in 2027. Schedules for local plan updates are included in Chapter 2.
[8] Employment is for 2019 due to data delivery schedules.
[9] Note this is for Marion County as a whole.
[10] Search for building reports on the COG website at https://www.mwvcog.org/Documents

been located outside of the core areas of Salem, Keizer, and Turner, where larger tracts of undeveloped land exist. Typically, these developments are in areas not currently served by transit and require new, or expanded, road infrastructure. Recent work on updating the land use plans in Salem and Keizer has included a focus on increasing the housing choices and locating more of the new development closer to existing stores and transit routes. These documents will guide development over the coming years.

While only a few new roads were built, mostly in west and south Salem, there were more that were widened and expanded, often bringing the roads up to current design standards[11]. The decades long process of widening I-5 to six lanes took another step forward with the completion of the section between OR 22E and Kuebler Boulevard. Work has started on the section between Kuebler Boulevard and Delaney Street interchange.

The level of transit ridership on Cherriots increased in the early years of the century, decreased after 2006 (due in part to a bond levy to support operations that did not pass resulting in the end of Saturday service), plummeted during the Pandemic, and is slowly increasing toward pre-Pandemic levels since mid-2021 (even as the post-COVID economy makes staffing a challenge) (**Graph 1-1**)[12]. Service levels have changed as well, with a number of routes that run seven days a week, and a core network defined for 15-minute service during most of the day.



Graph 1-1: Yearly Unlinked Transit Trips 1996 - 2020 (Source: FTA National Transit Database)

Home delivery of goods has increased substantially since 2000, whether from online shopping, a grocery store or restaurant. This trend, which had been experiencing steady growth for twenty years, accelerated during the pandemic. The competition from online

[11] Which, depending on the right-of-way width and functional classification of the road, could include sidewalks, bike lanes, curbs, and gutters.
[12] The recent upturn in ridership in 2021 and 2022 is not reflected in the graph.

retailers, combined with other factors, has led some retail chains to reduce the number of their physical stores[13]. A number of larger chains have reduced their presence in Salem, including several located in downtown (e.g., Nordstrom, J.C. Penney's, and T.J. Maxx). Some of the companies have left the Salem market entirely, others have moved to a location outside of downtown Salem. These closings have resulted in proposals to redevelop the properties, with some moving from retail only to mixed use. Salem is currently working on defining portions of downtown Salem as a Climate Friendly Area ("Walkable Mixed Use Area") per recent State regulations.

Additional infrastructure for biking and walking has been installed throughout the area, primarily by adding sidewalks and bicycle lanes to existing roads. Two bridges for walkers and bikers now exist, one converted from the ex-Union Pacific Railroad bridge across the Willamette River at Union Street, and the other purpose built to link Minto Brown Island with Riverfront Park.

New travel options have been introduced, such as carsharing, ridesharing and bike sharing options starting in Salem and Keizer during the past 20 years. These have not reached the levels of ridership reported in other urban areas in the country, and there have been stumbles in their continued existence (let alone expansion), as both the initial carsharing and bike sharing operators are no longer offering services in Salem.

In the last 20 years the national economy has experienced the end of the dot com bubble, the Great Recession and subsequent housing bubble, and the COVID-19 pandemic and the recovery from 2021 onward. Along with the recovery have been supply chain issues, labor shortages in certain sectors, and inflation impacting consumer and businesses alike. Each recession has impacted the economy (global, national, state, and local) differently, but with the constants of job losses, businesses failing and added stress on workers and business owners. These have helped shape the retail offerings available, the amount of housing that has been built, and the type and location of jobs.

Finally, in the last twenty years there has been increasing discussion, and occasional action (mostly at the state and local level (e.g., Salem's *Climate Action Plan*), but increasingly at the federal level[14]), on the extent of the impact a changing climate will have on the life and livelihood of everyone on the planet. Most of the legislation has been passed in the last several years, with rulemaking still in progress or recently completed. It is too early to discern the effectiveness and impact of these actions.

The employment and population forecasts included in this Plan were made in 2022 and 2021 respectively. For each, there remains questions on how much the pandemic has delayed or accelerated some of the primary trends used in forecasting. For example, for

[13] But conversely, some online retailers have started to open physical stores, at least in larger metropolitan areas. It is possible this trend will come to Salem in the future.

[14] See: The National Blueprint for Transportation Decarbonization (2023): https://www.energy.gov/eere/us-national-blueprint-transportation-decarbonization-joint-strategy-transform-transportation

employment the questions revolve around labor force participation and whether enough workers are available for all the sectors (and how does automation play into this?). For population, it is likely that interstate migration has been affected by the pandemic and the aftermath. How long will that last, and will other events result in greater in-migration (or even outmigration)? The employment and population forecasts are updated regularly to address these and other concerns.

What trends are expected to continue?

The Population Research Center (PRC) at Portland State University provides population forecasts for the counties and cities within Oregon. The latest forecast is for the population in Marion and Polk counties to continue to increase through 2050[15]. During this period, the average age of a resident will increase, with implications on future employment levels and travel patterns. However, recent data from the U.S. Census Bureau estimates that the population of Oregon decreased between July 2021 and July 2022, primarily due to fewer people moving to Oregon from other states and thus not offsetting the number of deaths[16]. This will be closely watched as it has widespread ramifications.

Estimates of employment are provided by the Oregon Employment Department for the next 10 years and extrapolated out to the horizon year by staff in consultation with local planners. The forecast is for increasing number of workers within SKATS, primarily in the same industry sectors as today[17].

Table 1-1: Population and Employment within SKATS, 2000, 2020 and 2050 (Source: US Census Bureau, Population Research Center at Portland State University, Oregon Employment Department)

Year	Population	Employment
2000	216,195	92,462
2020	271,737	118,347
2050	333,870	149,176

The market share for online shopping is expected to continue increasing, as lower cost, increased selection and ease for the consumer attract more people to shop in this manner. This could provide more free time to people, with many discussions in the planning and economics literature as to how they would use it. At the very least, increased online shopping will lead to increased delivery vehicle travel within the urban area, and more long-haul trucks on the Interstates and highways. This would also likely continue the trend of existing 'brick and mortar' retail spaces being emptied as the businesses go bankrupt or pivots to a more online presence.

Carsharing, ridesharing and bike sharing are forecast to increase in the country as a whole, but how it plays out in Salem-Keizer depends on if and how well the services are

[15] PRC produced the forecasts for Marion and Polk counties in 2021. See **Appendix A** for more details.
[16] See; https://www.opb.org/article/2022/12/25/oregon-population-declines-state-budget-tax-revenue-concerns/
[17] See **Appendix A** for details.

offered and the interest of the public (which depends in part on demographics and the built environment). This is anticipated to be a rapidly changing industry, as new offerings and new technology are introduced to make these (or similar) more attractive to more people[18]. Reflecting this trend, SAMTD is planning for future multi-mobility hubs to facilitate using these options in conjunction with transit service.

Models of the long-term future climate in the area show an increase of rain in the mountains during winter with less snow and hotter temperatures year-round. The higher temperatures can stress the existing transportation infrastructure leading to increased needs for maintenance, rehabilitation, and earlier replacement, while more rain could lead to an increase in the number of flooding events[19].

These trends and others are interlinked and can either reinforce or inhibit travel decisions made by the public and businesses. Local policies can influence some of these to a degree, but not others. In addition to these, other trends, such as automation, increasing capabilities of computers and internet connections, and where and how people prefer to live (in addition to the cost of housing) will also have ramifications for investment decisions in the transportation infrastructure.

Which trends do we not know enough whether they will continue or not?

Population forecasts are based in part on people in an area having kids, and people outside of the area moving here. The number and age of the people moving into and out of the area is estimated based on historical trends. With the aging of the U.S. population in general, it is reasonable to ask whether the people moving here in the future will be representative of that population, or if they will skew older or younger. In a similar vein, in the U.S. as a whole, the age of childbearing is increasing. And the number of children born per female has been decreasing for decades[20]. These trends suggest that the population increase in the future will be slower than in the past, and that is reflected in the PRC forecasts post 2040. But it is also possible that in-migration increases due to the attractiveness of Oregon and the Salem area with respect to other parts of the country, or that there is out-migration increases due to the high cost of housing and increased attractiveness of other states.

In part, in-migration is due to the type and number of jobs available within the metropolitan area. These are, for the most part, influenced by state and local policies (both in Oregon and in other states) and investments, and the actions of consumers and businesses. The business sector is still changing and adapting to the COVID-19 pandemic,

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[18] Nationally there was a decrease in carsharing and ridesharing during the COVID-19 pandemic due to a combination of lost jobs, closed offices/work-from-home, desire not to be in shared spaces, and at least for carsharing, a decrease in options. It is possible that the pre-pandemic ridership level will not return, or that the services will morph post-pandemic.

[19] Fifth Oregon Climate Assessment, Oregon Climate Change Research Institute. https://blogs.oregonstate.edu/occri/oregon-climate-assessments/

[20] Nationally the fertility rate is currently 1.7, which is under the replacement rate of 2.1 (as of 2019 https://fred.stlouisfed.org/series/SPDYNTFRTINUSA).

with supply chain constraints, difficulty hiring workers (for some sectors), and changes in demand from consumers. How these modifications to "business as usual" pan out have implications for employment levels, regional (and state) economies, migration, and demand for travel. In particular, the public sector employs approximately 25 percent of all workers in the Salem metropolitan area. While a sizeable fraction of these are teachers that work at locations that are likely to be stable over the next 20+ years, how the various levels of government approach in-office work versus offering hybrid schedules will have an impact on travel demand and subsequently to the prioritization of projects[21].

Another consideration is the willingness of businesses to substitute capital for labor – along with the difficulty in finding laborers during and after the COVID-19 pandemic, there have been more offerings for automated devices to replace or supplement workers.

Since 2018, the number and variety of electric vehicles (EVs) available for purchase has increased, but still represent a small fraction of the total fleet, both in Oregon and the U.S. The state goal for 50,000 registered EVs within Oregon by 2020 was missed, in part due to a lack of options in all vehicle types, perceived lack of charging infrastructure, and cost[22]. With the passage of the Infrastructure Investment and Jobs Act of 2021 there is more funding from the Federal government for charging infrastructure. When this is coupled with more options for EV pickups and SUVs (two of the higher selling types of vehicles in the country), it is possible that sales will accelerate in the coming years[23]. Whether the State goal of 250,000 registered zero-emission vehicles by 2025, and at least 90 percent of new motor vehicles sold by 2035 will be met remains to be seen[24].

Past, Present and Future – Risk Management

The trends discussed above represent just some of the major ones that have and could influence the need for travel. The events that seem likely to occur in the next 20 years (e.g., another economic recession) and those that are possible but with a small probability of happening (e.g., the Cascadia Subduction Zone event) define the need to select projects that are viable under a range of possible futures. As stewards of the public's funds, it is imperative that they be used in a responsible manner.

Outline of the Plan

The Metropolitan Transportation Plan (MTP) addresses:

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[21] The Oregon Travel Study scheduled to take place in late 2023 to early 2024 will hopefully provide some data on what changes to travel have taken place since the 2020. The information will be used in the next update to this Plan.

22 By December 31, 2020, 33,579 EVs were registered in Oregon. By June 2021 it was 38,482, or approximately 1 percent of passenger vehicles. The goal of 50,000 EVs was reached in April 2022. By September 2022 there were 57,700 registered EV.

[23] Supply chain issues in 2022 likely dampened sales that year, as electronics and batteries were reported in short supply.

24 The State offers tax rebates for EVs priced under $50,000 and more rebates for lower-income households. No incentives are currently offered for e-bikes or e-scooters.

- the Policies and Regulations (**Chapter 2**) at the Federal and State level that lay the framework for the development of regional transportation infrastructure;
- the Goals and Objectives (**Chapter 3**) of the MTP are presented, as well as the performance measures and indicators that will be used to ascertain the progress toward meeting the goals (with additional information presented in **Appendix P**);
- the Existing System (**Chapter 4**), how it came to be, forces that have acted on the development over time, what it is composed of, and how the system is being used;
- the Needs / Gap Analysis (**Chapter 5**) details the existing gaps and/or needs that exist in the current transportation system. These are what need to be addressed to have a system that meets the goals presented in **Chapter 3**;
- the means and amount of funding (federal, state, and local) forecast to be available over the next 20 years (Financial - **Chapter 6**);
- the Proposed System (**Chapter 7**) that will meet the goals specified in **Chapter 3** while maintaining financial constraint, meeting the needs of the public and businesses in the area, and keeping the degradation of the natural and built environment to a minimum;
- the potential impacts of the proposed system to the natural and built environment (**Chapter 8**—Impacts); and
- the Outstanding Issues (**Chapter 9**) that remain to be addressed in future updates to this Plan.

Finally, the Plan has a number of appendices and companion documents that provide further information or address particular topics in greater detail. These include:

- The methodology and process to forecast Population & Employment (**Appendix A**) for the SKATS area over the next 20+ years;
- The process used to evaluate the projects for inclusion in this Plan is in **Appendix C**;
- The *SKATS Metropolitan Congestion Management Process* has been updated to address the performance-based planning requirements (as a separate document)[25];
- *The Salem-Keizer Metropolitan Area ITS Plan (adopted 2005, project list updated 2021, as a separate document)* which details the investments to be made in ITS (Intelligent Transportation System) equipment and procedures to help optimize travel and information sharing in the area: and
- *The SKATS Metropolitan Transportation Improvement Program (MTIP)* that provides the details on the programs and projects that were identified in previous editions to this Plan that have been selected to be implemented in the next four to six years[26].

[25] Reports available at: https://skats-mwvcog.hub.arcgis.com/pages/congestion-management
[26] See; https://www.mwvcog.org/programs/transportation-planning/skats/planning-programs/transportation-improvement-program-tip/

Chapter 2 – Policies and Regulations

This chapter contains an overview of the federal and state regulations that guide and shape transportation investments. The focus is on the federal regulations that the MPO must follow and the state rules that the member agencies and jurisdictions must abide. The major transportation planning documents are discussed.

Guiding the investments in transportation infrastructure requires a consistent set of policies and objectives to ensure that region-wide goals are met in an efficient and cost-effective manner. These policies and objectives must also take into account the federal, state, and local regulations for transportation that exist.

The Salem-Keizer Area Transportation Study (SKATS) is the designated Metropolitan Planning Organization (MPO) for the Salem urbanized area. The representatives of the cities of Keizer, Salem, and Turner; Marion and Polk Counties; the Oregon Department of Transportation; the Salem-Keizer School District; and the Salem-Keizer Are Mass Transit District comprise the SKATS Policy Committee, which is the decision-making board for the MPO.

The SKATS Metropolitan Transportation Plan (MTP) must be consistent with federal regulations and state transportation plans. The transportation systems plans (TSPs) for the local jurisdictions are also consistent with the state transportation plan, and provide the programs and projects contained in the SKATS MTP. A complete list of local and state plans consulted in preparation for this update are listed in **Appendix B**.

The development of the MTP represents a cooperative effort of the members of SKATS. The Plan currently requires unanimous approval by the SKATS Policy Committee for adoption. Adoption of this Plan represents:

- Endorsement by the affected jurisdictions of the level and location of transportation investments needed to adequately serve the land use patterns contained in the adopted local comprehensive plans and the expected growth in the region over the next 20 years;
- Endorsement of a set of 10-year regional priority improvements to the regional transportation system;
- Endorsement of the interrelated roles of the individual modal systems (roads, public transportation, bicycle, and pedestrian) as well as the region-wide goods movement, intermodal, and efficiency management systems;
- Endorsement of the definitions and functions of the transportation systems of regional significance;
- A commitment to cooperatively seek the necessary funding for the implementation of the investments called for in the Plan; and
- Fulfillment of federal and state requirements as a condition for the continued receipt of federal and state transportation funds.

The concept of the regional planning process outlining the "3C" concept is presented in this chapter. The federal, state, and local rules, policies, and regulations that guide and constrain transportation planning in the Salem-Keizer metropolitan area are then discussed.

The Regional Transportation Planning Process: The Three "C's"

This plan has evolved through a process that ensures that transportation planning activities affecting the overall regional system are continuing, comprehensive, and cooperative.

Continuing

The process is ongoing and produces a plan that is flexible and designed to incorporate periodic updates to respond to changing conditions, opportunities, and priorities in our community.

Comprehensive

Together with state and local transportation planning efforts, the process encompasses the entire transportation system needed to serve the land uses contained in the adopted local comprehensive plans in the region, as well as regional travel that enters and exits the area.

The planning process is both multimodal and intermodal in scope. It addresses concerns related to all the transportation modes—pedestrian, rail, aviation, transit, bicycle, and motorized vehicles—as well as the connectivity between them.

All the jurisdictions, agencies, and the public that own, operate, regulate, and use the various portions of our overall transportation system are included in the process.

The mobility needs of both people and goods on our transportation system are addressed by the planning process.

A forum to make decisions about adequate levels of mobility in the context of the effect on other important aspects of our overall quality of life such as environment, affordability, and community character is provided by the process.

Cooperative

The understanding that the region's political jurisdictions, governmental agencies, and the public are working together towards the same goal is embodied in the process. We need to develop a plan that addresses, and ultimately works, for all the members of our community.

This type of planning process enables a plan to emerge from the process of its development rather than dictating its design from the outset.

In addition to the three principles listed above, traditionally an additional four principles have been followed when developing the SKATS regional transportation plans. These are meant to ensure the Plan is consistent, coordinated, coherent, and cost-effective. These are described in more detail below.

Consistent

The regional planning process serves as a framework for the development of uniform databases (both current and future) and a common set of assumptions to be used in our estimations of future travel demand. This ensures that the various planning efforts all share a similar foundation.

The process provides a basis for the development of common goals and objectives as well as a common understanding of the problems we face and the opportunities we have available to meet those challenges. This ensures that we agree on and understand the details it will take to work through to solve the problems needed towards accomplishing the task.

Coordinated

The process ensures that the various planning activities and investments undertaken by the various jurisdictions fit together in terms of intent, timing, and effect.

The regional planning process is intended to provide a transportation system that is "seamless" in the service that it prevents situations where one entity seems to have no idea what another entity is doing; for example, a five-lane arterial in one jurisdiction suddenly turning into a two-lane residential street as it crosses the boundary into another jurisdiction.

Coherent

The planning process provides the mechanism by which all the various land use and transportation activities undertaken in the region make sense when seen as a complete whole and that our actions work together to complement and reinforce each other rather than working at cross purposes or canceling each other out.

Cost-effective

The cooperative process produces a blueprint for decisions and improvements that are prudent and cost-effective by maximizing the mobility available through existing facilities and leveraging as much benefit as possible from new transportation system investments.

Derived from this process, the integrated Metropolitan Transportation Plan provides the region with a coordinated blueprint of transportation investments and related activities over the next twenty years that can address the region's accessibility, mobility, and connectivity while also focusing on safety and environmental issues.

Federal Policies and Regulations

The federal government, acting through the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), provides the basic regulations that direct regional transportation planning in metropolitan areas in 23 CFR 450.300-340 and 49 USC 5303.[1] As part of the federal laws, areas over 50,000 in population are required to have a "Metropolitan Planning Organization" (MPO) to ensure that federal funds are allocated in a manner consistent with the '3C' process detailed above. An area with more than 200,000 in population is designated as a "Transportation Management Area" (TMA) and given additional responsibilities. SKATS was designated a TMA after the 2000 U.S. Decennial Census. Major federal legislation that affects transportation planning is presented in this section.

Federal Surface Transportation Acts

On November 15, 2021, the Infrastructure Investment and Jobs Act of 2021 (IIJA) was signed into law, which contains the Surface Transportation Reauthorization Act of 2021 (STRA21)[2] updating the previous law FAST (Fixing America's Surface Transportation) Act. This Act continues many of the programs and concepts that first appeared in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and that were extended in TEA-21 (Transportation Equity Act for the 21st Century), SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users), MAP-21, and FAST (see **Table 2-1** for a complete list).

Table 2-1: Federal Surface Transportation Legislation, 1991 - 2021

Year	Legislation
1991	Intermodal Surface Transportation Efficiency Act (ISTEA)
1998	Transportation Equity Act for the 21st Century (TEA-21)
2005	Safe, Accountable, Fair, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU)
2012	Moving Ahead for Progress in the 21st Century (MAP-21)
2015	Fixing America's Surface Transportation (FAST)
2021	Surface Transportation Reauthorization Act of 2021 (as part of the Infrastructure Investment and Jobs Act of 2021).

IIJA/STRA21 continues the MAP-21-introduced requirements to develop and track a set of performance measures, followed by rules from FHWA and FTA for implementing these measures.

[1] CFR stands for Code for Federal Regulations, and USC for United States Code.

[2] This marks the first time since the 1990s that a federal surface transportation act does not have an acronym-friendly name. STRA21 doesn't roll off the tongue and seems to be used infrequently at best. The IIJA is also referred to as the Bipartisan Infrastructure Law (BIL) or Build a Better America depending on context (not to be confused with *Build Back Better* which is proposed legislation.

Like the previous Acts, IIJA/STRA21 provides for the expenditure of the federal Highway Trust Fund revenues that represent a large portion of the funding used to sustain and improve the federal and state portions of the regional highway system.[3] It also requires the regional plan to address the following considerations:[4]

- Support economic vitality;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the system, across and between modes, for people and freight;
- Promote efficient system management and operations;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

The requirement to adopt an outcomes and performance-based planning paradigm was introduced in MAP-21. This continued in FAST Act and IIJA/STRA21. Seven national goals have been identified to drive investment and ensure a national surface transportation system that meets the needs of the country. The national goals are for:

- Safety improvement;
- Infrastructure conditions maintained in a state of good repair;
- Congestion reduction;
- System reliability;
- Freight movement and economic vitality;
- Environmental sustainability; and
- Reduced project delivery delays.

The FHWA and the FTA have developed a set of performance measures to track how State Departments of Transportation (DOT), transit districts, and MPOs are addressing the national goals. The federal regulations require the State DOTs, transit districts, and MPOs to set targets for each of the relevant performance measures. These are discussed in detail in **Chapter 3** and **Appendix P**.

[3] See Chapter 6 for a list of federal programs used for funding projects, and a discussion on the financial assumptions used in this Plan.
[4] From 23 USC 134 (h) (1). See: https://www.law.cornell.edu/uscode/text/23/134

In addition, guidance is being developed by both the FHWA and the FTA on the new programs that are included in IIJA, plus the direction the Administration is setting for addressing larger policy goals. Examples include the National Roadway Safety Strategy[5] and the Justice40Iinitiative[6].

Clean Air Act Amendments of 1990

Currently the SKATS area is designated as in attainment for carbon monoxide (CO) and ozone in relation to the federal NAAQS (National Ambient Air Quality Standards). (There was a time in 1991 when the SKATS area was designated non-attainment for CO and Ozone). The area is operating under a limited maintenance plan for CO that took effect on March 2, 2009. The Limited Maintenance Plan requires SKATS to develop an air quality conformity determination for each Plan and TIP update, but it does not require any regional air quality emissions modeling.

Title VI of the Civil Rights Act of 1964 and Environmental Justice

Title VI of the Civil Rights Act of 1964 prevents discrimination on the grounds of race, color, or national origin by agencies and organizations that receive federal funding.

The need to consider environmental justice is embodied in many laws and regulations including Title VI of the Civil Rights Act of 1964. The federal actions on Environmental Justice serve to reaffirm Title VI responsibilities by directing every Federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations" (Executive Order 12898 signed February 11, 1994).

Americans with Disabilities Act (ADA) of 1990

Prohibiting discrimination against people with disabilities is addressed by the Americans with Disabilities Act (ADA). The guidelines on access to public facilities and public transit are relevant to this Plan. Access to facilities includes the public right-of-way such as intersections, sidewalks, on-street parking, and street crossings. These standards are required for all new construction and alterations. There are also mandates regarding the accessibility of public transportation to persons with disabilities. These establish requirements for paratransit services that are comparable to mass transit service in an area. Local review and integration is required of the ADA Paratransit Plan with the Metropolitan Transportation Plan, as well as an annual update of the ADA Paratransit Plan.

Federal Water Pollution Control Act (aka "Clean Water Act")

The Clean Water Act is the primary law protecting water quality and the health of the nation's waterways. It is administered in Oregon by the Department of Environmental Quality (DEQ). Total maximum daily loads (TMDL) of pollutants are established for "impaired" waterways. Stormwater permits to minimize bacteria and other pollutant

[5] See: https://www.transportation.gov/nrss/usdot-national-roadway-safety-strategy
[6] Executive Order 14008, see: https://www.transportation.gov/equity-Justice40

runoff are required.

Endangered Species Act

A process for protecting threatened and endangered species and the habitats on which they depend is provided through this Act. Any activity that results in a 'taking' (killing) of a listed species or that adversely affects its habitat is prohibited. Any action that is expected to result in a taking or habitat destruction requires a permit and mitigation.

National Environmental Policy Act (NEPA)

NEPA applies to all federal agencies and projects or programs using federal funds. It requires the preparation of either Environmental Impact Statements (EIS) or Environmental Assessments (EA) which document the environmental effects of proposed agency actions depending on whether the action will have a significant impact on the environment or not.

National Historic Preservation Act of 1966

Protection and preservation of cultural or historic resources is specified in this law. The State Historic Preservation Office (SHPO) is responsible for administering the regulations associated with this Act in Oregon.

State Policies and Regulations

In addition to the Federal regulations, there are a set of State policies and regulations that address transportation, both directly and indirectly, that are relevant to the development of the SKATS long-range plan. These policies and regulations are for the cities and counties within SKATS, and direct how they will plan for future land uses and transportation systems. In addition, there are a set of State regulations that mirror federal ones, e.g., air quality and water quality.

Oregon Transportation Plan

The policies for the state's transportation facilities and services for the next 40 years are set forth in this document. The broad strategies the state has developed for implementing federal and state policies are outlined. There are separate documents that address individual mobility issues guided by the principles in the Oregon Transportation Plan. Relevant ones include the *Oregon Highway Plan* (last amended in 2015, scheduled for adoption in 2023), the *Oregon Freight Plan* (2017), the *Oregon Rail Plan* (2020), the *Oregon Bicycle and Pedestrian Plan* (2016), the *Transportation Safety Action Plan* (2021), the *Oregon Public Transportation Plan* (2018), and the *Transportation Options Plan* (2015).

Statewide Transportation Strategy

ODOT has examined all components of the transportation system in a state-level scenario planning project called the *Oregon Statewide Transportation Strategy* (2013). This looked at the movement of goods and people in Oregon and developed a set of strategies to reduce greenhouse gas (GHG) emissions. These reductions would be accomplished via a

variety of means including changes in urban land use patterns, vehicle and fuel technologies, and the transportation system. The Oregon Transportation Commission adopted an amendment in 2018 to include this as part of the Oregon Transportation Plan.

Housing Related

In 2019, the Oregon Legislature passed two bills, H.B. 2001 and H.B. 2003, that potentially will impact the future transportation system. H.B. 2001 directed jurisdictions to allow duplexes on existing single-dwelling lots. For larger cities, those with a population over 25,000, this requirement is expanded to include the 'missing middle' housing (duplexes, triplexes, quadplexes, cottage clusters, and townhouses) in areas zoned for residential. The changes to cities planning and zoning codes are due by June 30, 2022.

H.B. 2003 requires cities with a population over 10,000 to analyze every eight years the amount of housing needed for current and future residents. This is a Housing Needs Analysis (HNA). The bill also requires adoption of a Housing Production Strategy (HPS), which will detail how the city will promote the development of the needs identified in the HNA.[7]

The modifications to Keizer's and Salem's zoning and planning codes are scheduled for adoption in early 2022. It remains to be seen how much market demand there is for these types of development. The next update to this Plan will reflect these regulations more fully after they are adopted into code and implemented by developers in the area in the coming years.

Greenhouse Gas Emissions Related

In addition to the Statewide Transportation Strategy listed above, Oregon has passed several laws as part of the State's continuing efforts to address Greenhouse Gases (GHG). In 2007, H.B. 3543 was passed defining the statewide greenhouse gas reduction goals, which were codified in ORS 468A.205. The passage of H.B. 2001[8] and H.B. 2186 in 2009 and S.B. 1059 in 2010, set the direction for the state and metropolitan areas to address GHG reduction. The Department of Land Conservation and Development (DLCD) set GHG reduction targets for all the MPO areas in the state. A revised target for within SKATS was adopted by the Land Conservation and Development Commission (LCDC) in 2017, which is a reduction of 20 percent per capita by 2040 from 2005 levels.[9]

On March 10, 2020, Governor Brown signed Executive Order 20-04 which directed State Agencies to 'Take Actions to Reduce and Regulate Greenhouse Gas Emissions." Most relevant for this Plan, the Departments of Energy, Environmental Quality, Land Conservation and Development, and Transportation were directed to work together to ensure that Oregon meets the greenhouse gas targets. This has resulted in the creation of

[7] Slight modifications to the HPS are part of the revisions to the 2022 Transportation Planning Rule.
[8] Not to be confused with H.B. 2001 from 2019 discussed above.
[9] Values for years beyond 2040 have been proposed by DLCD as part of the update to Division 44 rules on Metropolitan Greenhouse Gases scheduled for adoption in May 2022.

the Climate Office within ODOT and using a 'climate lens' in developing project lists for the Statewide Transportation Improvement Program (STIP); and rule-making efforts by the Departments of Energy (ODOE), Environmental Quality (DEQ), and Land Conservation and Development (DLCD) to address aspects of greenhouse gas emissions that are within each departments purview. The modifications to the Transportation Planning Rule (TPR), discussed below, is one such effort. The Climate Protection Plan approved by the Environmental Quality Commission (which oversees DEQ) is meant to reduce greenhouse gas emissions from transportation fuels and natural gas by 90 percent by 2050.[10] These and other rules and regulations potentially will change transportation usage over the coming decades.

State Planning Goals

Oregon has adopted a series of statewide planning goals that are to be implemented through the comprehensive land use plans of each city and county in the state. These goals, and the plans which are adopted to implement these goals, address the manner in which the land, air, and water resources of the state will be used and determine the need for improved public facilities.

Goal 1, Public Involvement, specifies that the planning process should be open and accessible to the public.

Transportation Planning Rule

Goal 12 of the Statewide Planning goals (Transportation) is codified in the Transportation Planning Rule (OAR 660 et seq)[11]. Its intent is to promote viable alternatives to reduce dependency on the single-occupant vehicle. The TPR was substantially revised and expanded in 2020-2022 to reflect Governor Brown's Executive Order 20-04 to address climate change and provide for equitable communities. The changes to the rule focused on the cities and counties within metropolitan areas. Included are changes or additions to identify 'climate friendly area,' revise parking standards, and preparing for a greater percentage of the vehicle fleet to be electric vehicles.

The revised rule was adopted on July 21, 2022, by the Land Conservation and Development Commission, with tasks for the local jurisdictions to meet in the coming years[12]. The changes to the TPR will affect future updates to each of the local jurisdiction's Transportation System Plan (TSP), which could result in modifications to future project lists included in future updates to this Plan. In addition, it is now required that the jurisdictions within SKATS prepare a 'regional scenario plan' that shows how they will meet the GHG targets previously set[13]. The local TSPs will need to be updated to reflect these new rules.

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[10] See: https://www.oregon.gov/deq/ghgp/Pages/capandreduce.aspx

[11] https://oregon.public.law/rules/oar_chapter_660_division_12

[12] LCDC partially adopted the rules on May 20, 2022 to allow funding to be made available for the associated planning work.

[13] These requirements are in the rules for Division 44 on Metropolitan Greenhouse Gas Reduction Targets. See: https://oregon.public.law/rules/oar_chapter_660_division_44

State Conformity Rule

This rule is administered by the Department of Environmental Quality (DEQ). As stated in the rule, regional emissions must not contribute to worsening air quality or violations of EPA standards and that projects of regional significance must also demonstrate conformity. The State Conformity Rule is aligned with the EPA requirements.

While the area is currently designated as being in attainment for ozone and carbon monoxide and is operating under maintenance plans for carbon monoxide, selective individual projects must still undergo 'hot-spot' analysis as part of their environmental review process. This analysis is typically performed by the project sponsor or their consultant.

State Endangered Species Act

This is State's equivalent of the federal Endangered Species Act.

Other Regional Planning

There are other planning documents that guide aspects of the regional system that are either consistent with this Plan, and/or that inform the policies, programs, projects, and proposed expenditures of this Plan. A brief discussion is provided below of the major documents.

SKATS Documents

The *Salem-Keizer Metropolitan Area Intelligent Transportation System (ITS) Plan* was adopted in 2005 to ensure the area has a regional architecture for ITS related equipment. The architecture specifies what components are, or likely to be, implemented, and how they are interconnected with other devices and the various control centers and users of the services offered. The 2005 ITS Plan included a list of projects that the local jurisdictions, SAMTD, and ODOT were planning to implement in the future. Prior to each MTP update since 2009, this list has been reviewed by a working group and brought up-to-date to reflect projects that have been completed and others that are proposed[14]. This project list is included in the evaluation of projects for inclusion in this financially constrained Plan.

The *Congestion Management Process (CMP)* was first included in the MTP in 2003. Previously included as an appendix to this Plan, in 2019, it was moved to be a separate document. Included in the CMP are the methods used to identify vehicular congestion on the regional roads, the strategies used to address the congestion, and the evaluation methods to be used. Separately, reports of congestion (primarily travel time and identification of bottlenecks) have been provided in the *Regional Operational Characteristics Report (ROCR)* with revisions in 2022 to better align with the federal performance measures. The CMP and associated reports are available on the MWVCOG's

[14] Last reviewed in December 2021.

website.[15]

SAMTD Documents

- *Transit Asset Management Plan* (TAM Plan) – Documents the assets (fixed and vehicular) owned by Transit District, the metrics used to determine the condition of them, and the targets set to maintain a 'state of good repair.' Updated periodically by the Transit District. Most pertinent for this Plan, the TAM Plan is used to determine when vehicles in the fleet need replacement. Required as part of MAP-21 regulations.
- *Public Transportation Agency Safety Plan* (PTASP) – Describes how the Transit District integrates safety into their daily operations. Goal is "… to eliminate the human and fiscal cost of avoidable personal injury and vehicle accidents." This covers both the employees of SAMTD (drivers, mechanics, etc.) and the public using or interacting with the transit fleet. Targets are set for the federally required safety performance measures.
- *Long-Range Transit Plan* (LRTP) – In 2021, Salem Area Mass Transit District (SAMTD) started their first long-range planning effort to culminate in the *Long-Range Transit Plan* (2022) covering the routes within SKATS and the regional routes connecting to the smaller cities in Marion and Polk counties. Transit staff and SKATS staff have cooperated during the development of the LRTP and this Plan to ensure that they are consistent.
- *Coordinated Human Services – Public Transportation Plan* - This focuses on the programs and services that the Transit District offers for people with disabilities and seniors. Last adopted in 2016, it is scheduled for an update in 2023.

Local Plan Consistency Requirements

Just as the Metropolitan Transportation Plan must be consistent with federal and state policies and regulations, the transportation system plans (TSPs) produced by the local jurisdictions in the region must be consistent with this regional Plan. A list of the relevant locally adopted transportation plans that must be consistent with the SKATS Metropolitan Transportation Plan, and that provide most of the projects included in the MTP is illustrated in **Table 2-2**. While the guidance from the State is for local TSPs to be updated every 10 years, this depends on funding being available.[16] Often the local jurisdictions will apply for grants from the State to complete these updates.

The following principles of consistency between the local and regional plans are embodied in the MTP:

- All transportation projects in the local public facility plans must be consistent with the MTP, and improvements affecting the regional systems as defined in this Plan must be included in the MTP.

[15] See the Congestion Management tab on https://skats-mwvcog.hub.arcgis.com/
[16] This will likely change with the amendments to the TPR.

- All projects must demonstrate consistency with the adopted MTP prior to their inclusion in the region's Transportation Improvement Program (TIP).
- Local jurisdictions within the region must plan their local transportation systems to be consistent with the MTP requirements and to adequately serve the non-regional travel demand so as to not overburden the regional systems with local trips.

Local Transportation-Related Plans and Update Cycle

Table 2-2: Local Transportation Plans

Jurisdiction/Agency	Plan	Last Updated	Next Update
Keizer	Keizer Transportation System Plan	Major update: 2009. Revised 2014	2024-2026
Salem	Salem Transportation System Plan	Last amended January 13, 2020	2023-2026
Turner	Turner Transportation System Plan	Section 9.700 of Comprehensive Plan updated in 2011.	2023-2024
Marion County	Rural Transportation System Plan	Last adopted 2005. Partial update 2012.	TBD
Polk County	Transportation System Plan	Last adopted 2009	TBD
Salem Area Mass Transit District	Long-Range Transit Plan	Adopted 2022	TBD (Planned for every 5-7 years)
Salem Area Mass Transit District	Coordinated Human Services Public Transportation Plan	2016	2023

With the passage of revisions to the TPR, cities and counties will need to update their TSPs to address the new and revised requirements. The requirement in the revised TPR is for all local TSPs to be updated by 2029, with some jurisdictions, Keizer and Salem among them, to revise their TSP by June 30, 2027.

Chapter 3 – Goals

The focus in this chapter is on the Goals of the Plan and the relationship between the ten Goals and the federal planning factors, the national goals, and the federal performance measures.

Goals in a long-range plan are used to identify the high-level concepts that the proposed projects and programs are meant to address. The SKATS long-range plan has included a set of Goals for decades. The 1996 Regional Transportation System Plan (RTSP) included Goals, Objectives, and Policies for each of the mode-centric chapters (e.g., roadway, transit, aviation). By 2007 there were 222 Goals, Objectives, and Policies and due to the mode-centric structure of the earlier versions of the Plan, there was substantial redundancy in these statements related to the modes considered. In addition, they did little to help guide project definition and selection or to provide a means to track progress toward the outcomes envisioned by the goals.

With the adoption of the updated Plan in 2011, the existing Goals, Objectives and Policies were revised to simplify and consolidate them to a manageable number.[1] Reflecting the change in format of the long-range plan, these Goals are not specific to a particular mode but address characteristics that are desirable in the regional system as a whole. These Goals are based on the goals and objectives contained in the previous Plan and are influenced by the '3C' planning process and federal planning factors discussed below and in **Chapter 2.**[2]

Federal Planning Factors

As mentioned in **Chapter 2**, the federal surface transportation legislation, and the related federal planning regulations, contain a set of planning factors that all long-range transportation plans must consider as they are developed. A version of these planning factors has been included in the federal regulations since 1991, and the most recent revisions are:

- Support economic vitality;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the system, across and between modes, for people and freight;
- Promote efficient system management and operations;

[1] A tenth goal (Goal 9) was added during the 2019 Update. Explanatory statements were also added at that time.
[2] The planning factors are part of 23 CFR 450.306 (b), see: https://www.law.cornell.edu/cfr/text/23/450.306

- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

Due in part to the history of the planning factors, the existing Goals of the MTP align with them to a large degree. This is not a federal requirement, but in part due to the consolidation of goal statements that took place in 2011.

National Goals

With the passage of MAP-21 (Moving Ahead for Progress in the 21st Century) in 2012, the U.S. Department of Transportation (U.S. DOT) signaled a change in how surface transportation planning and programming would be conducted in the future. In an effort toward more transparency and increased accountability, MAP-21 required State DOTs, transit districts, and Metropolitan Planning Organizations (MPOs) to use an outcomes and performance- based planning paradigm when developing long-range plans and programming projects for funding in the TIP/STIP.[3] FAST (Fixing America's Surface Transportation) Act (2015) and the Infrastructure Investment and Jobs Act of 2021 (IIJA) continued these requirements. In 2018, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) provided final rules on the performance measures to be used to show progress toward meeting the national goals. The national goals are:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
- Infrastructure condition – To maintain the highway infrastructure asset system in a state of good repair;
- Congestion reduction – To achieve a significant reduction in congestion on the National Highway System (NHS);
- System reliability – To improve the efficiency of the surface transportation system;
- Freight movement and economic vitality – To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
- Environmental sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment; and
- Reduced project delivery delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process including reducing regulatory burdens and improving agencies' work practices.[4]

[3] See 23 CFR 450.306 (d), 23 CFR 450.324 (g) (3-4) and 23 CFR 450.326 (c-d)).
[4] See 23 USC 150 (b)

There is substantial overlap between the national goals and the Goals in the MTP, due in part to the national goals being written in consideration of the federal planning factors. The national goal for "Reduced project delivery delays" is more appropriate for consideration at the Transportation Improvement Program (TIP) level than for a document meant to cover 20 years.[5] Unlike the federal planning factors, there is not a requirement to *directly* integrate the national goals into the MTP. Instead, the national goals are associated with a set of performance measures that State Department of Transportation, Transit Districts, and MPOs must set targets for and document progress toward meeting.

National Goals and the Federal Performance Measures

Starting in 2012, FHWA and FTA were responsible for developing a set of performance measures for the national goals. This was a complex undertaking involving significant outreach and involvement with state DOTs, MPOs, and transit districts across the country as well as advocacy groups and the public. The performance measures have been established for the first six national goals listed above. The categories for the federal performance measures are:

- Road-Related Safety
- Bridge Conditions on the National Highway System (NHS)
- Pavement Conditions on the NHS
- System Performance of the NHS (addressing congestion, reliability, freight, and environmental)
- Transit State of Good Repair
- Transit Safety

ODOT, the Salem Area Mass Transit District (SAMTD), and SKATS established targets for the first reporting period (2018-2022) and are working on targets for the second reporting period (2022-2026).[6] The road safety, transit safety, and transit state of good repair performance measures require targets to be established each year. Targets for the remaining performance measures are set on a four-year cycle, occurring the year before the scheduled adoption of the MTP.[7]

MPOs such as SKATS can either set a numeric target for each of the performance measures, or they can support the target set by ODOT or SAMTD. SKATS is required to report the progress of these targets every four years as part of the MTP. This is documented in **Appendix P (Performance)**. Under current federal regulations, there are no penalties for the MPO if the target(s) are missed, whether set by the MPO or if supporting a target set by ODOT or SAMTD.

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[5] Subsequently, ODOT and the MPOs have worked out a process for a set of obligation targets with associated penalties and rewards. See the discussion in the Obligation Report available on the MWVCOG website.
[6] In addition, ODOT and the MPOs have developed a process for how targets will be set and documented this in *ODOT Coordination Process with MPOs in Setting Monitoring, and Reporting State Performance Measure Targets* (July 2020) [currently not available online].
[7] The timing is just a coincidence.

In addition to the federally required measures, the MTP includes a number of indicators that track the progress of transportation conditions and issues that relate to the goals and objectives of the MTP. This chapter of the MTP provides both an overview of the national and MTP goals, the national performance measures and associated targets, and the regional indicators. The information is also available on the MWVCOG website (search for 'performance measures'). A more detailed discussion is included in **Appendix P (Performance)** which provides a summary of the changes in the measures and indicators over the last four years.

The remainder of the chapter includes each of the Goals with their explanatory statement. Also listed are the associated Objective(s), Criteria(s), federal performance measure(s), regional indicator(s), federal goal, the federal planning factor, and the goal in the 2016 Oregon Transportation Plan (OTP).[8]

Goals provide the direction that the investments included in the Plan are meant to achieve. The Objectives provide a link between the criteria and performance measures that can be directed measured. The Criteria are used with a variety of data sources available to evaluate individual projects for whether they support a Goal or not. Currently the Criteria are evaluated qualitatively not quantitatively. The Federal Performance Measures use data collected by ODOT or SAMTD and are calculated on either a one, two, or four-year cycle depending on the reporting requirements. Regional Indicators were created for the 2011 RTSP and have largely been supplanted by the Federal Performance Measures.

[8] The Oregon Transportation Plan is currently being updated, with adoption either in late 2022 or 2023.

Goal 1

Accessibility and Mobility

The goals of the MTP are to have a Metropolitan Transportation System that is Designed to allow easy access to people and goods, and meet the mobility needs of the region for the next 20 years.

Accessibility is the ability for people to reach goods and services. Traditionally this would be via a network of roads, sidewalks, bike lanes, and transit routes. Recently, this has expanded to allow people to use telecommunication for similar means. Accessibility is often discussed along with the terms mobility and connectivity. Mobility refers to a person being able to move around the area and the quality of that movement (Are streets congested? Are sidewalks or bike facilities in place and in adequate condition? Is transit available and if so, frequent or infrequent?). Connectivity is how well the parts of the regional system are linked to each other within the system.

Objectives:

- Provide a multi-modal system
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:

- Enhances transit service of operations
- Reduces a gap in a regional system (bicycle, sidewalk, etc.)
- Increase access to employment center or jobs
- Addresses a bottleneck along a corridor

Federal Performance Measures:

- Truck Travel Time Reliability on the Interstate System
- Percent of Person-Miles traveled on the Interstate System that are reliable
- Percent of Person-Miles traveled on the non-Interstate National Highway System that are reliable
- Annual Hours of Peak Hour Excessive Delay per Capita
- Percent of Non-Single Occupant Vehicle Travel

Federal Goal:

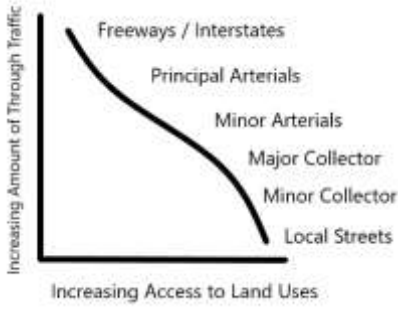
- System Reliability
- Congestion Reduction

Goal in the OTP[9]:

- Mobility and Accessibility

Federal Planning Factor:

- Increase the accessibility and mobility of people and freight.



[9] OTP is the Oregon Transportation Plan.

Regional Indicators:

- Regional Corridors with Sidewalks (miles, percent of total)
- Regional Corridors with Bicycle Facilities (miles, percent of total)
- Average Weekday (or Annual) Transit Ridership
- Number of Transit Hours of Service
- Regional Funds on Transportation System Management Projects in the last 10 years

Goal 2
Preservation

The goal of the MTP is to have a Metropolitan Transportation System that is preserved in good repair and replaced at the end of their useful life, as necessary, and maintained to be usable to protect the region's investment.

Preserving the system ensures that the funds spent to build it are not wasted. Prudent maintenance and repair extend the useful life, thus, delaying expensive reconstruction of facilities.

Objectives:
- Preserve the existing system

Criteria:
- Increases the miles of pavement in travel lane that are ranked "good"
- Increases the number of bridges that are ranked "good"

Federal Performance Measures:
- Percent of National Highway System (NHS) Bridges classified as in Poor Condition
- Percent of NHS Bridges classified as in Good condition
- Percent of Interstate pavements in Good condition
- Percent of Interstate pavements in Poor condition
- Percent of Non-Interstate NHS pavement in Good condition
- Percent of Non-Interstate NHS pavement in Poor condition
- Percent of revenue vehicles (by type) that exceed the useful life benchmark
- Percent of non-revenue vehicles (by type) that exceed the useful life benchmark
- Percent of facilities (by type) that are rated less than 3 on the TERM scale

Regional Indicators:
- None

Federal Goal:
- Infrastructure Condition

Goal in the OTP:
- Management of the System

Federal Planning Factor:
- Emphasize the preservation of the existing transportation system.

Goal 3

Safety and Security

The goal of the MTP is to have a Metropolitan Transportation System that is developed with the collaboration of state and local governments to enhance the safety and security of the regional system for all users and modes of travel.

Vehicular collisions cost the region in many ways: loss of life or injuries, damage to vehicles and/or infrastructure, time spent clearing the collision, time lost to other travelers. Security of the system includes ensuring there is resiliency to maintain operability during, and after an extreme event.

Objectives:

- Minimize the number of fatalities, injuries, and collisions associated with the regional systems
- Preserve the existing system
- Provide a multi-modal system
- Maximize the efficient use of the existing infrastructure
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:

- Increases the number of bridges that are ranked "good"
- Enhances transit service or operations
- Reduces a gap in a regional system (bicycle, sidewalk, etc.)
- Addresses freight movement impediment on a designated Critical Urban Freight Corridor
- Addresses a known safety location/issue
- Addresses a bottleneck along a corridor

Federal Performance Measures:

- Number of Fatalities
- Number of Serious Injuries
- Number of Non-motorized serious injuries
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
- Rate of Serious Injuries per 100 million VMT
- Transit related fatalities
- Transit related injuries
- Transit related safety events

Federal Goal:

- Safety

Goal in the OTP:

- Safety and Security

Federal Planning Factor:

- Increase the Safety and Security of the transportation system for motorized and non-motorized users.
- Increase the Security of the transportation system for motorized and non-motorized users.

- Percentage of NHS Bridges classified as in “Good” condition

Regional Indicators:

- None

Goal 4
Equitable

The goal of the MTP is to have a Metropolitan Transportation System that meets the needs for users of the regional transportation system: that the benefits and burdens of the transportation system are not disproportionately distributed.

In implementing the regional transportation system, no area of the region should receive either more than its fair share of infrastructure of services, nor should an area receive less. Additionally, no one area or population group should bear a disproportionate burden of any resulting negative impacts from infrastructure or services. The regional transportation system is a critical component in ensuring that all residents, regardless of age, sex, gender, income, or race have access to the opportunities and services they need to survive and thrive.

Objectives:
- Provide a multi-modal system
- Maximize the efficient use of the existing infrastructure
- Reduce the impact to the environment and natural systems
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:
- Increase access to employment center or jobs
- Project is likely to improve facilities in an Environmental Justice area

Federal Performance Measures:
- Total Emission Reduction for all Congestion Mitigation Air Quality (CMAQ) funded projects
- Percent of Non-Single Occupant Vehicle Travel
- Annual Hours of Peak Hour Excessive Delay per Capita

Regional Indicators:
- Regional Corridors with Sidewalks (miles, percent of total)
- Regional Corridors with Bicycle Facilities (miles, percent of total)
- Average Weekday (or Annual) Transit Ridership
- Number of Transit Hours of Service

Federal Goal:
- None

Goal in the OTP:
- None

Federal Planning Factor:
- None

Goal 5

Efficient to Use

The goal of the MTP is to have a Metropolitan Transportation System that is efficient to use: this refers to a system that provides the greatest benefit to the users of the system and does so with projects that are cost appropriate.

Building new roads and widening existing roads is expensive. The region should continue to promote, and fund, travel-demand options, system management techniques, and other cost-effective projects that increase the carrying capacity of the regional system.

Objectives:

- Provide a multi-modal system
- Maximize the efficient use of the existing infrastructure
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:

- Reduces a gap in a regional system (bicycle, sidewalk, etc.)
- Addresses freight movement impediment on a designated Critical Urban Freight Corridor
- Addresses a bottleneck along a corridor

Federal Performance Measures:

- Percent of Non-Single Occupant Vehicle (SOV) Travel (starts in 2022)
- Annual Hours of Peak Hour Excessive Delay per Capita (starts in 2022)
- Percent of Person-Miles traveled on the Interstate System that are reliable
- Percent of Person-Miles traveled on the non-Interstate National Highway System that are reliable
- Truck Travel Time Reliability Index for Interstate

Federal Goal:

- None

Goal in the OTP:

- None

Federal Planning Factor:

- Promote efficient system management and operation.

Regional Indicators:

- Regional Corridors with Sidewalks (miles, percent of total)
- Regional Corridors with Bicycle Facilities (miles, percent of total)
- Average Weekday (or Annual) Transit Ridership
- Number of Transit Hours of Service
- Regional Funds spent on Transportation Supply Management projects in the last 10 years

Goal 6
Multimodal

The goal of the MTP is to have a Metropolitan Transportation System that is multimodal and comprehensive, supportive of moving goods and people by the mode of their choice.

A multimodal system provides the residents of the area alternatives for their transportation needs, has the potential to decrease overall congestion, and to reduce pollutants. It also provides a measure of resiliency.

Objectives:
- Provide a multi-modal system
- Maximize the efficient use of the existing infrastructure
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:
- Enhances transit service or operations
- Addresses freight movement impediment on designated Critical Urban Freight Corridor
- Reduces a gap in a regional system (bicycle, sidewalk, etc.)

Federal Performance Measures:
- Percent of Non-Single Occupant Vehicle (SOV) Travel (starts in 2022)
- Annual Hours of Peak Hour Excessive Delay per Capita (starts in 2022)
- Percent of Person-Miles traveled on the Interstate System that are reliable
- Percent of Person-Miles traveled on the non-Interstate National Highway System that are reliable
- Truck Travel Time Reliability Index for Interstate

Regional Indicators:
- Regional Corridors with Sidewalks (miles, percent of total)
- Regional Corridors with Bicycle Facilities (miles, percent of total)
- Average Weekday (or Annual) Transit Ridership

Federal Goal:
- Freight Movement & Economic Vitality

Goal in the OTP:
- Economic Vitality

Federal Planning Factor:
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

- Number of Transit Hours of Service
- Regional Funds spent on Transportation System Management Projects in the last 10 years

Goal 7
Environment

The goal of the MTP is to have a Metropolitan Transportation System that is planned to minimize the impacts to the natural and built environment, including coordination with local government policies and plans.

Consider the impact(s) to the environment, natural systems and built environment to ensure that fresh air and water are available, that endangered and threatened species are able to remain in their habitats, and that historic and cultural resources are preserved for future generations. Consideration should be given to factors that reduce or mitigate the effect of the transportation system on the environment; examples may include air pollution, water pollution, stormwater, greenhouse gases, and noise pollution.

Objectives:
- Provide a multi-modal system
- Reduce the impact to the environment and natural systems
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:
- None

Federal Performance Measures:
- Total emissions reductions for carbon monoxide (CO)

Regional Indicators:
- Transit ridership
- Transit hours of service

Federal Goal:
- Environmental Sustainability

Goal in the OTP:
- Sustainability

Federal Planning Factor:
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

Goal 8
Financial

The goal of the MTP is to have a Metropolitan Transportation System that is developed and maintained with the funds available to the region.

The MTP is required by federal law to be financially constrained, meaning that the funds that have been identified as being 'reasonably anticipated' to be available over the next 20 years are what is used to fund the identified projects. It is also good fiscal policy to protect prior investments, meaning operating and maintaining the existing regional system in such a way as to protect the regional investment.

Objectives:
- Preserve the existing system

Criteria:
- None

Federal Performance Measures:
- None

Regional Indicators:
- None

Federal Goal:
- None

Goal in the OTP:
- Funding the Transportation System

Federal Planning Factor:
- None

Goal 9

Vibrant Regional Economy

The goal of the MTP is to have a Metropolitan Transportation System that invests in transportation infrastructure that supports a vibrant regional economy.

A regional economy requires a robust and comprehensive transportation system to ensure that goods can be delivered, workers can get to their jobs, and people, visitors, and tourists can access the services they need.

Objectives:

- Provide a multi-modal system
- Maximize the efficient use of the existing infrastructure
- Limits the increase in congestion during the peak hours along the regional corridors

Criteria:

- Enhances transit service or operations
- Addresses freight movement impediment on a designated Critical Urban Freight Corridor
- Reduces a gap in a regional system (bicycle, sidewalk, etc.)
- Addresses a bottleneck along a corridor
- Increase access to employment center or jobs

Federal Performance Measures:

- Annual Hours of Peak Hour Excessive Delay per Capita

Regional Indicators:

- None

Federal Goal:

- Freight Movement and Economic Vitality

Goal in the OTP:

- Economic Vitality

Federal Planning Factor:

- Support the Economic Vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Enhance Travel and Tourism

Goal 10
Involvement

The goal of the MTP is to have a Metropolitan Transportation System that is based from the result of an open and continuous dialog with the public, other stakeholders, local jurisdictions, and agencies within the SKATS area.

Given the importance of the transportation system on the region's economy and quality of life, it is vital to maintain as an inclusive and transparent dialog as possible amongst the regional partners and with the public. The means and methods of involving the public are documented in the SKATS Public Participation Plan.

Objectives:
- None

Criteria:
- None

Federal Performance Measures:
- None

Regional Indicators:
- None

Federal Goal:
- None

Goal in the OTP:
- Coordination, Communication and Cooperation

Federal Planning Factor:
- None

Chapter 4 ~ Existing System

The transportation system in the Salem-Keizer area is discussed in this chapter. A discussion on travel and terminology starts the chapter followed by a brief overview of the non-road modes and some of the general operational characteristics of the system. Five districts are defined to allow for easier presentation and discussion of the existing publicly funded transportation system.

The transportation infrastructure of today represents the investments made over the past 50 to 100 years. These investments are based on decisions made by the public and policymakers on how the area should grow and the transportation technology that was available at the time of the decision. These choices in infrastructure influence not only the travel patterns and modes used by the people and businesses in the Salem-Keizer area but also the investments in housing and business locations, which in turn drives demand for transportation infrastructure. Over time, as these investments are made, it becomes increasingly difficult to make substantial changes in either the location or type of transportation infrastructure or the built environment. Thus, it is important to make decisions based on how the community believes it should grow in the future rather than just react to an issue and provide a short-term solution.

A few terms and concepts that are important to understand travel are defined in the beginning of this chapter. These concepts include the difference between mobility and accessibility, why trips are made, and what constitutes regional travel. This is followed by an overview of the Salem-Keizer area and a discussion of the regional "non-road" (pipelines, railroads, aviation etc.) system and the regional road system. This is presented in two parts: the part of the infrastructure and services that are offered throughout the region and a more focused look at each of the Metropolitan Transportation Plan's five districts of the metropolitan area:[1]

1. Downtown Salem;
2. West Salem;
3. Keizer and North Salem;
4. East Salem; and
5. South Salem and Turner.

It is important to remember that while all modes are discussed, the Salem-Keizer Area Transportation Study (SKATS) has financial influence over only a portion of the infrastructure in the Salem-Keizer area. In particular, the focus for SKATS is on the regional infrastructure for which federal surface transportation funds may be allocated. To date, this has been limited mainly to roads classified as minor collector or above and the mass transit system. Other facilities, such as pipeline and telecommunications, are important to support or supplant travel; but SKATS has no voice in how these pieces of the regional system are expanded or maintained. In addition, **SKATS does not own,**

[1] These districts provide a convenient way of looking at the urban area but are in no means the only way.

operate, or maintain any of the systems discussed in this document. These are operated by the transit district, cities, counties, ODOT, or private businesses. SKATS' role, as discussed in Chapter 2, is to ensure that the regional system is built, operated, and maintained in a comprehensive, continuing, and cooperative manner.

Mobility v. Accessibility

People typically confuse the concepts of mobility and accessibility. Mobility is the ability to move, by any mode, from point A to point B. Accessibility is the "ability to reach goods and services." An example of a road with more mobility and less accessibility would be an Interstate or similar. A local street represents a road with less mobility and more accessibility (**Figure 4-1**). Many people want accessibility. That is, they want *access* to goods and services but often call for mobility solutions. Accessibility is essential for a person to meet many of life's requirements such as going to shop, to work, or to recreate. Many of these can be met with little or no mobility on the part of the individual. When mobility is involved, the choice of the mode used (auto, transit, walking, etc.) is influenced, in part, by the services that can be accessed by a particular mode and the amount of time available to the individual[2].

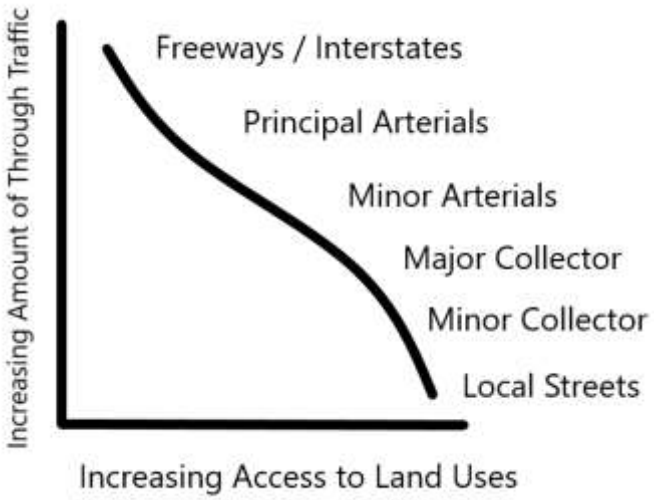


Figure 4-1: Relationship between Accessibility (X-axis) and Mobility (Y-axis)

Why Trips Are Made

When people travel, the resulting trips can be described with how, why, where, and when. "How" relates to the mode that is used for the trip. This may be walking, biking, taking a bus, or riding in a car as either the driver or as a passenger. The "why" describes the purpose of the trip: Is it to go to work, to the store, drop the kids off at school, or for recreational purposes? The "where" addresses the origin and destination for the trip

[2] And to be sure, there are many influences on how people travel.

along with the route. Finally, the "when" is the day of travel, the time the trip began, and the duration of the trip.

Each trip's "how, why, where, and when" is influenced by a number of factors including each other. The length of the trip influences the mode selected (the "how") as well as when the trip is made. How a trip is made reflects the modes available to the user both when the trip begins and when it ends. The time of day when a trip is made is often associated with the "why." For example, travel to work is often in the morning with a return trip late in the afternoon or early in the evening. Where people or goods are transported to reflects what is located there in addition to how the people or goods can be moved to that location.

And an increasingly popular way of accessing goods is to forego the travel yourself and have the goods travel to you. The rise of e-commerce for goods, foods, and services has been steadily increasing over the past several decades and spiked during the early COVID-19 months in 2020 with a slight reduction in 2021 and 2022 (but still higher than in 2019). This substitution of personal travel has meant a reduction in total trips, but the goods are still being delivered to the person's home.

Regional Travel

'Regionally significant' travel within the Salem-Keizer metropolitan area is addressed in this plan. 'Regionally significant' travel in a private vehicle is typically thought of as that occurring on major roads where the highest volumes and largest amount of goods movement takes place. These roads have functional classifications of either principal or minor arterials. While these are sufficient for vehicular travel, for other modes additional streets are included. The regional transit system typically uses the roads classified as minor arterial and above. However, in certain areas collectors may be used to provide a connection to neighborhoods or work locations. For pedestrians, significant travel includes the sidewalk network or other streets around a regional center or major employment or shopping area such as downtown Salem. For bicyclists, regional travel may include a combination of bike lanes on arterials and collectors, separated facilities, and local roads that have been designated as a bicycle boulevard or family-friendly bikeway (even if these do not preclude other modes). In the simplest form, these are streets that form a contiguous link between areas of interest while foregoing the high-speed, high volume vehicular traffic often associated with regional roads.

Map 4-1: SKATS Region

The Salem-Keizer Area[3]

The area addressed by this plan is illustrated in **Map 4-1**. The Salem-Keizer area is

[3] The area is based on the 2010 U.S. Census. Later in 2022 the U.S. Census Bureau will release updated 'urban area' definitions which will define the minimum extent for SKATS.

divided by the Willamette River and ringed by hills to the west and south. Only two bridges for motorized traffic cross the river (at Marion Street and Center Street in downtown Salem) resulting in congestion and significantly reduced connectivity between West Salem and the rest of the metropolitan area. An additional crossing is available for pedestrians and non-motorized vehicles at the Union Street Bridge. The hills traditionally constrained development and defined the transportation infrastructure and built environment that is seen today. Another constraint has been the two Urban Growth Boundaries that define the 20-year supply of buildable land for Salem-Keizer and for Turner. These have helped to limit the sprawl into the surrounding countryside that is so prevalent in other states.

The downtown Salem area is served by three full interchanges with Interstate 5 (Portland Road, Market Street, and Mission Street (Highway 22E)) and one limited interchange (Salem Parkway). The Salem Parkway interchange is about four miles away and is part of the Chemawa Road / Keizer interchange. Portland Road connects Interstate 5 with Highway 99E and provides access to downtown from the northeast. Market Street is at the extreme north edge of the downtown area, and its interchange is about two miles from downtown. Mission Street (Highway 22E) is at the extreme southern edge of the downtown area, and its interchange is about three miles from downtown. No main east-west streets in the downtown Salem area, such as Marion Street, Center Street, or State Street, have interchanges at Interstate 5. Keizer is served by the Chemawa Road, and to a lesser degree, the Brooklake Road interchanges.

Population growth in the Salem area has been constant since the end of the Second World War until the 21st Century, typically growing over 20 percent a decade. Since 2000, the growth rate has moderated to under 15 percent per decade. Growth has occurred mainly in the outer areas of the urbanized area where there is developable land. (For more information, ***see Appendix A.***)

Table 4-1: Population and Employment within SKATS (2000, 2010, 2020)

	Population	Employment
2000	214,593	92,462
2010	243,591	104,053
2020	271,737	118,347

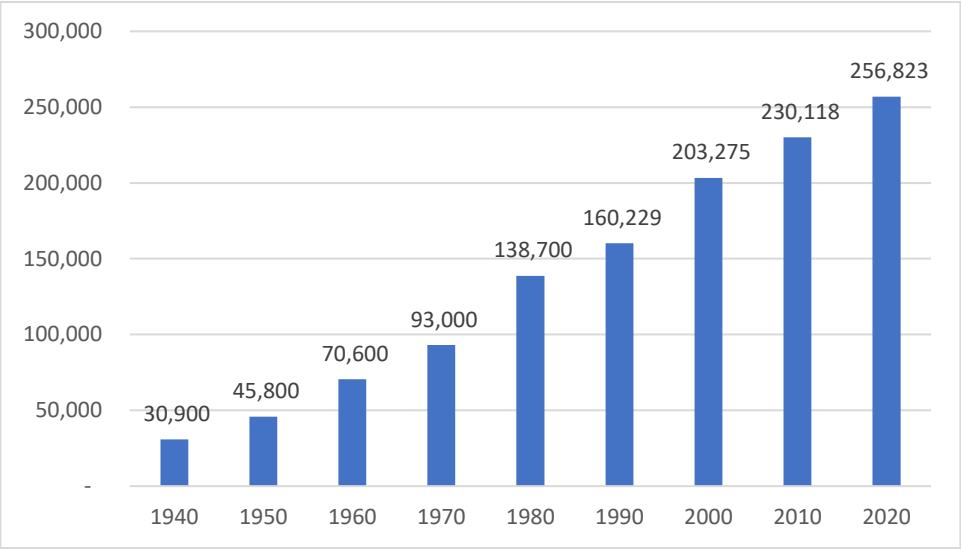


Figure 4-2: Population Growth in the Salem-Keizer urbanized area 1940-2020 (within the UGB since 1980)

The nature of employment (which sector a person is employed in) and the participation in the work force has been changing over the same time period. Decreases over the last 20 years have been noticeable in manufacturing with increases in health care, education, and 'transportation and warehousing.' Employment by government has increased, but it has decreased as a percent of the workforce with the retail sector experiencing a similar result.

The COVID-19 pandemic resulted in a large loss of jobs and closure of businesses in Spring of 2020; but since 2021, there has been a rebound and a noticeable lack of workers in many sectors, contributing to supply chain issues that continue into 2022.

One response to the COVID-19 pandemic was the rapid switch from work-at-an-office to work-from-home for many of the workers in sectors that have office workers. For several sectors, including finance, information technology, and government, that switch is morphing into a hybrid model (working from home several days a week) or even permanent work-from-home. The drop in vehicular congestion along the regional roads during the peak hours was noticeable in 2020 and 2021; however, there has been an increase in travel during the non-peak hours likely associated with errand running by the work-from-home workers.

Other changes since the start of COVID-19 have been the reduction in transit ridership (locally and nationally) and the slow recovery (due to multiple factors). As of December 2022, daily ridership on Cherriots is approximately 66 percent of ridership in 2019. Finally, there has been a rise in speeding on the roads in the region and serious injuries or fatalities from the resultant crashes.

It is too early to tell whether these trends, individually or in total, will become permanent

or transitory, fading back to the pre-COVID-19 patterns. They do have important ramifications for how and where investments should be made in the coming years.

Travel and Goods Movement – Regional Non-Road System

Apart from McNary Field, the Salem Railroad Station, the Salem Multimodal Station, and the city of Salem's water transmission pipelines, the infrastructure described in this section is privately owned, operated, and for the most part, privately funded. While public funds and grants have been used to implement projects on the lines owned by the railroads (primarily via *ConnectOregon*), for the most part, the jurisdictions in the area, as well as the State, had little say over where investment should be directed. The next section (*Regional Road System*) describes the infrastructure that have been traditionally funded with public funds.

Aviation

Aviation is typically used for either passenger travel or freight that has high value, low bulk, and is time dependent. Aviation services are provided at McNary Field in Salem, the Portland International Airport 55 miles to the north, and the Mahon Sweet Field in Eugene 66 miles to the south. Currently, no commercial passenger flights use the Salem airport despite repeated attempts by the city of Salem to attract an airline. The airport authority has reported that since 1948, over $10 million has been invested by the federal government in McNary Field. Recently, the city of Salem spent $500,000 for a mobile structure to supplant the current terminal to allow for commercial flights to resume. As part of *ConnectOregon II* (2008), the State provided $3.8 million for projects to the passenger terminal and runway. In 2023 the city of Salem approved funding to expand the terminal and to make it compliant for commercial passenger service. The Airport Master Plan (AMP) for McNary Field is currently being updated (last updated in 2012).

The total number of flights using McNary Field have been generally decreasing since the mid-1990s. There was a temporary increase between June 2007 and October 2008 when Delta Connection provided commercial passenger service. Flights since the mid-2010s include an increasing number of corporate and private jets using the airport for either business or pleasure trips. Salem is well positioned for easy access to recreational and other tourism-related activities within the mid-Willamette valley.[4]

Maritime

During the development of the Salem area in the 19th Century, the Willamette River allowed for the movement of large amounts of goods in a manner that was quicker and more efficient than that afforded over land. However, the zenith of such movement of goods and people was short lived. Maritime movement of goods and people have long

[4] See Salem Airport Strategic Business Plan, 2019, available at: https://www.cityofsalem.net/home/showpublisheddocument/134/637781816069900000

been supplanted by other modes that offer quicker service or better access to the developed area. While there have been requests in the past 30 years to dredge the Willamette to allow for commercial vessels to travel between Salem and Oregon City, the U.S. Army Corp of Engineers has not dredged the Willamette River above its confluence with the Yamhill River since 1977. In addition, with the Willamette River listed as critical habitat for Chinook salmon and steelhead trout, it is unlikely that any future proposals for dredging the Willamette River will be implemented.

Pipelines

Pipelines provide an economical way of transporting large quantities of gases or liquids over long distances.

Three regional pipeline systems are located within or near the SKATS planning area, transporting natural gas and petroleum products. Kinder Morgan Energy Partners (KMEP) transports petroleum products through the Willamette Valley in its pipeline, which traverses the southeast corner of the SKATS area. The Northwest Pipeline Corporation (NWP) operates an interstate natural gas pipeline that passes just east of the metropolitan area as it makes its way through the Willamette Valley. Finally, Northwest Natural Gas (NWNG) operates a system of high-pressure natural gas feeder pipelines that serve Salem-Keizer and several communities to the west. These pipeline facilities have an excellent safety record and have operated without incident. These pipelines are illustrated on **Map 4-2**. There are several smaller natural gas feeder pipelines serving residential and commercial users that are not shown.

The city of Salem owns and maintains two water transmission lines that traverse the city of Turner from the southeast to the northwest. These pipelines supply Salem and Turner with drinking water from the North Santiam River.

Railroads

Development of the railroads in Oregon from the 1880s increasingly supplanted the commercial movement of goods via the river. From the late 1880s until after the Second World War, railroads provided the primary means of moving goods and people into and out of the Salem area. Two north-south lines were constructed linking Salem with Portland and Eugene and thus to the rest of the west coast and the country. Today, these lines are operated by the Union Pacific (UP) Railroad and the Portland & Western (P&W) Railroad.

The UP line through the Salem-Keizer area consists of 14.4 route miles of mainline track and roughly parallels Interstate 5 as it enters from the north. It then runs southwesterly until reaching downtown Salem where the track is located along the eastern edge of downtown along 12th Street before continuing southeasterly toward Turner and out of the area. This is the main west coastline for UP, and, as a result, a significant number of trains (over 20) pass through Salem each day. The rail is in good condition, classified by

the Federal Railway Administration (FRA) as class 4 and allows freight trains to operate at 60 MPH north of Silverton Road and south of McGilchrist Street and 35 MPH between Silverton Road and McGilchrist Street. In addition, UP operates a rail yard to the southeast of downtown Salem.

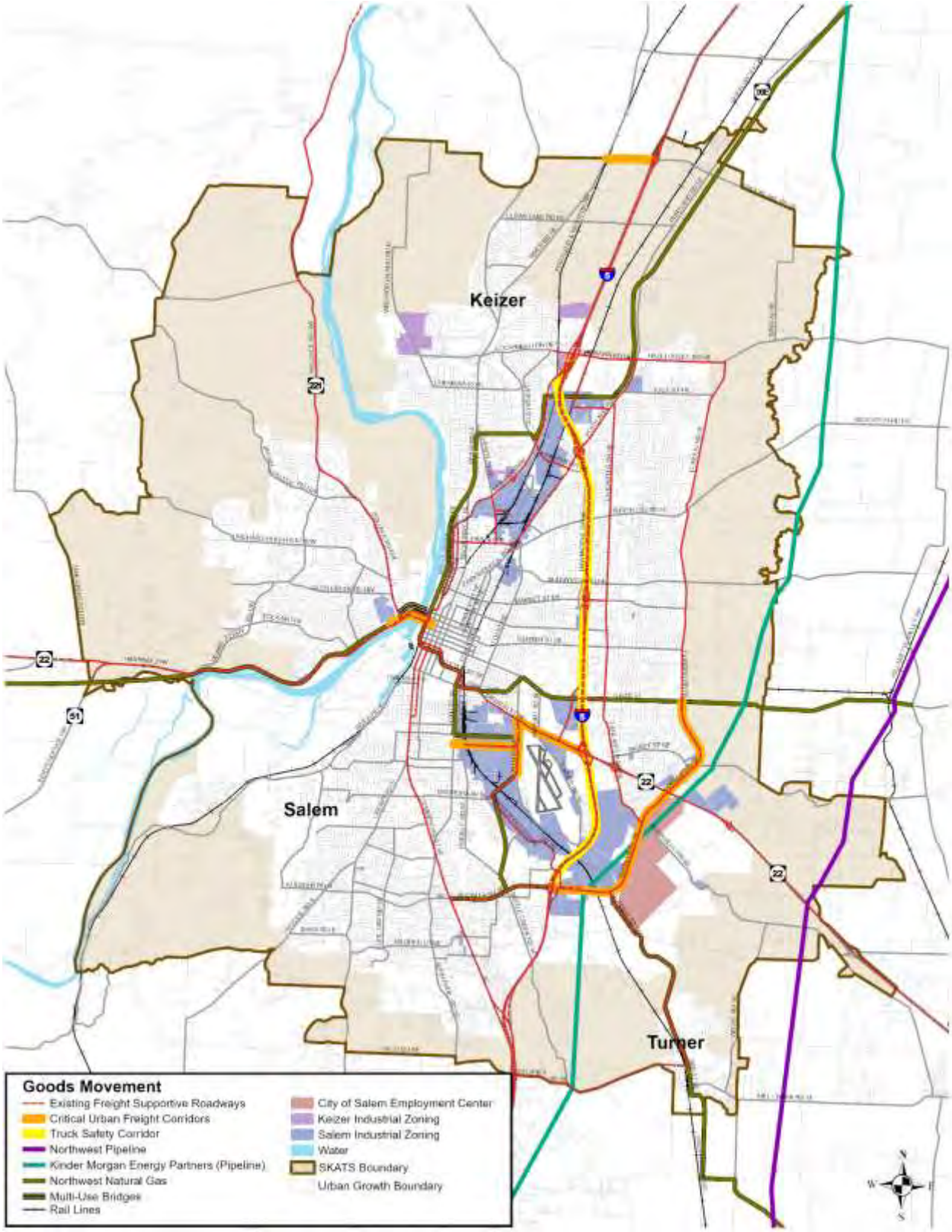
The UP line is also used by two passenger train services, Amtrak's *Coast Starlight* long-distance train and the Oregon- and Washington-funded *Cascades* corridor trains (currently operated by Amtrak). Prior to COVID-19, the *Coast Starlight* operated one train per day in each direction between Seattle and Los Angeles, and the *Cascades* offered two roundtrips per day between Portland and Eugene in Oregon with one train in each direction in the morning and evening. All of the passenger trains stop daily at the Salem Passenger Rail Station. This line is part of the federally designated *Pacific Northwest Rail Corridor*, for high-speed passenger rail. In the mid-1990s, ODOT purchased and renovated the Salem Passenger Rail Station using $2.4 million in Transportation Enhancement (TE) funding. ODOT also renovated the adjacent historic Salem Baggage Depot for use by Greyhound and other interurban bus service providers as the Salem Multimodal Station. It is no longer used by Flix/Greyhound as of October 2022[5]. The station is also served by Cherriots and Tillamook County Transit. Passenger rail service was curtailed during 2020 in response to COVID-19 but was restored by mid-2021. As of June 2022, there are two *Cascades* trains and one *Coast Starlight* each direction each day. Service is supplemented with *POINT* bus service (currently five each direction per day).

The second rail line is to the west of the UP line and runs along the western edge of downtown Salem next to Riverfront Park. Portland & Western's parent company, the Genesee & Wyoming, Inc., purchased the track from Keizer to Eugene from the Burlington Northern Santa Fe Railroad in 2002. The track is classified as class 2 north of Salem Parkway and south of Minto Island Road, and class 1 and 2 between those points by the FRA. These classifications limit the speeds of the P&W trains to 25 MPH north of Salem Parkway and south of Minto Island Road, and 10 MPH between those points. The line operates in the Front Street right-of-way from Norway Street to Division Street. As of 2010, P&W was operating up to six trains a day with more planned in the future as warranted by any expansion in the economy.

ODOT completed the *Oregon Passenger Rail Project* to identify the preferred alignment for future higher-speed passenger rail in the Willamette Valley and allow for projects to be eligible for future federal funds. The preferred alignment is the existing UP line used by the *Cascades* and *Coast Starlight.* The FRA signed a Record of Decision on the completed Tier 1 Final Environmental Impact Statement for this alignment in April 2021. This allows Oregon to compete for federal infrastructure grants to implement the identified projects to increase the capacity of the rail line to allow for additional passenger service in the future and minimize the impacts to UP's freight operations.[6]

[5] Greyhound was purchased by Flix in October 2021.

[6] See: https://www.oregon.gov/odot/RPTD/Pages/Passenger-Rail.aspx for the Final EIS and Oregon Passenger Rail Service Development Plan.



Map 4-2: Goods Movement

Telecommunications

The final piece of infrastructure is the telecommunications network including fiber optics, microwaves, wireless infrastructure, or copper wires.[7] Telecommunications are increasingly being used to send documents and information over large distances extremely quickly with relatively low cost. The increasing speed and capacity of this network, combined with the expanding capabilities of the computers and other devices using it, have allowed a burgeoning number of people and businesses to replace travel with internet use. Unfortunately, currently no data is available on the number of trips that are not made due to online shopping, telework, teleconference, or social networking.[8] It is also possible that people are replacing the trip they did not make with another one but for a different purpose such as teleworking during the day and driving out later for an errand.

Travel and Goods Movement – Regional Road System

The component of the regional transportation system that the public is most familiar with is the regional road system. Since the early decades of the 20th century the road system, and the vehicles that use it, has increased in importance for the movement of goods and people in, and through, the area. As the first state in the Union to levy a gasoline tax, Oregon has a long history of publicly funding new roads and modifications to existing ones. Combining "free roads," inexpensive gasoline, and vehicles that were affordable to many of the residents in the region has resulted in the region being crisscrossed with roads of various 'functional classifications.' These roads allowed, and to an extent required, that the land use development be more spread out than it was when automobiles were not the primary means of mobility.

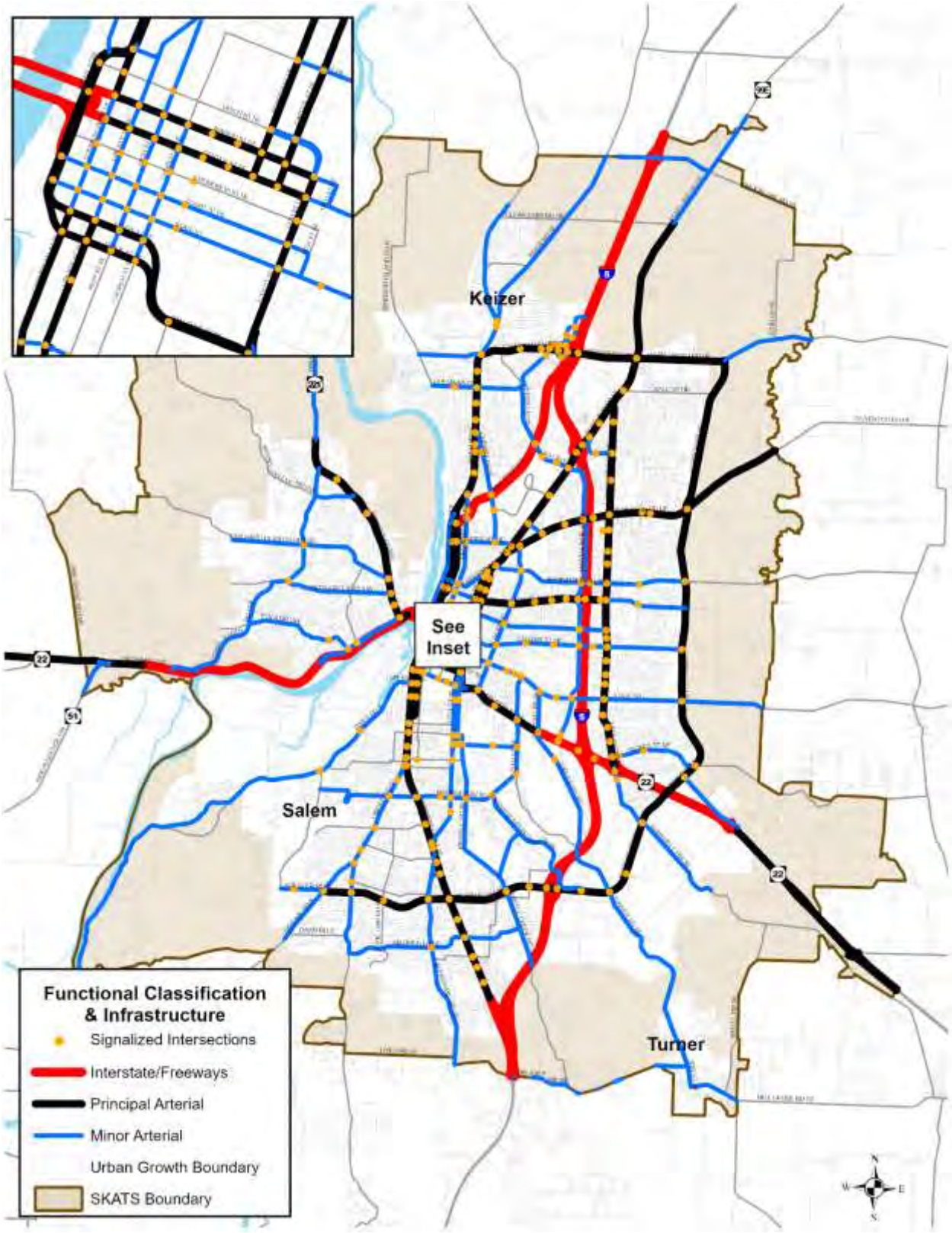
Functional Classification

A review of the functional classification of the roads will be completed in 2023 after the U.S. Census Bureau releases the urban area definitions. They will be included in the next update.

For the regional road system (**Map 4-3**) discussed in this plan, the federal functional classification system of principal and minor arterials, major and minor collectors, and local roads is used. The jurisdictions in the area use a slightly different classification scheme in their Transportation System Plans (TSP). Currently, the regional road system is defined by a series of roads classified as minor arterial and above (although federal funds may be used on roads classified as collector or higher). These roads facilitate regional movement that is the longer-distance travel within and through the Salem-

[7] Broadband internet also is recognized as important infrastructure in the Infrastructure Investment and Jobs Act of 2021.
[8] Although this is an item that will be explored with the forthcoming Oregon Household Travel Study in 2023.

Keizer area. This includes the state highways and Interstate 5 that connect the region with other parts of the state and the nation. The regional road system carries much of travel by freight, private vehicle, and transit. The Cherriots bus routes operate primarily on these roads. Many regional roads also have facilities to support the movement of bicyclists and pedestrians.



Map 4-3: Functional Classification of the Regional Roads

Not included in the regional system are the local roads, those classified as 'collector' and below. These serve mainly to move vehicles between the regional system and homes or individual properties. Typically, these streets are designed for low volumes of traffic moving slowly.

The total lane-miles by functional classification for the regional road system is illustrated in **Table 4-2.** Many of the roads with 'higher' functional classifications have been built to be usable by a variety of modes, not just motorized traffic but providing space for people bicycling and walking. However, roads that are below an arterial are more likely not to have sidewalks and bike lanes. This is especially true for roads that were built in the years between 1950 and 1990.

Table 4-2: Lane-Miles of Regional Roads (2014)[9]

	Miles
Interstate	63
Other Principal Arterials	72
Minor Arterials	120

Crashes

According to analysis by the CATT Lab[10], traffic incidents, either solely or in combination with other factors, account for 27 percent of the congestion in Marion and Polk Counties. Understanding where collisions occur, and why, is important not only to address congestion but to increase the safety of the regional system for all those that use it. While there are many factors leading to a collision, several are addressable via projects to alter the existing roadway, that strive to reduce the possibility of operator error or that inform the user of the presence of a collision or slowed/stopped traffic ahead.

ODOT's Crash Analysis and Reporting Unit provides SKATS with data on reported crashes that have occurred on state highways and local roads[11]. These data detail where, when, and how crashes occurred. While crash data is limited to those crashes over $1,500 in property damage value[12] or that involved a fatality or bodily injury, they are the best source currently available for analysis. The data also provides some information on non-injury collisions involving bicyclists and pedestrians; although, often these are not reported as they do not meet the minimum damage value specified in State law. More detailed reports, as well as yearly summaries are available on the web[13].

[9] In 2023 the functional classifications of the roads within the SKATS planning boundary will be reviewed as part of the process to use the latest data from the 2020 U.S. Decennial Census (data has been delayed until 2023).
[10] CATT Lab is the Center for Advanced Transportation Technology, located at the University of Maryland.
[11] These include vehicle-vehicle, vehicle-bicyclist, and vehicle-pedestrian crashes.
[12] The value was increased in 2017.
[13] See: https://www.mwvcog.org, search for crashes

The locations of the reported crashes, injuries, and fatalities in the SKATS area from 2016 to 2020[14] are illustrated in **Map 4-4**. A total of 17,794 collisions were reported in this time period, resulting in 83 fatalities, up from 17,833 and 61 respectively from 2012 to 2016. This includes seven persons killed while bicycling and 25 while walking, compared to one and 20 in the last period. There is considerable variation in these numbers for any one year, but the trend over the years from 2016 to 2020 has been an increase in crashes, injuries and fatalities, reflecting national trends. There have been 20 fatalities being recorded in 2020 alone. Based on preliminary data, it is expected that the number of fatalities in 2021 will be higher still (and 2022 seems on-track to surpass 2021). Typically, corridors with higher traffic volume have a higher number of crashes. Information for each district is discussed later in this chapter.

Table 4-3: Crashes, Injuries and Fatalities, SKATS Area 2016-2020 (Source: ODOT)

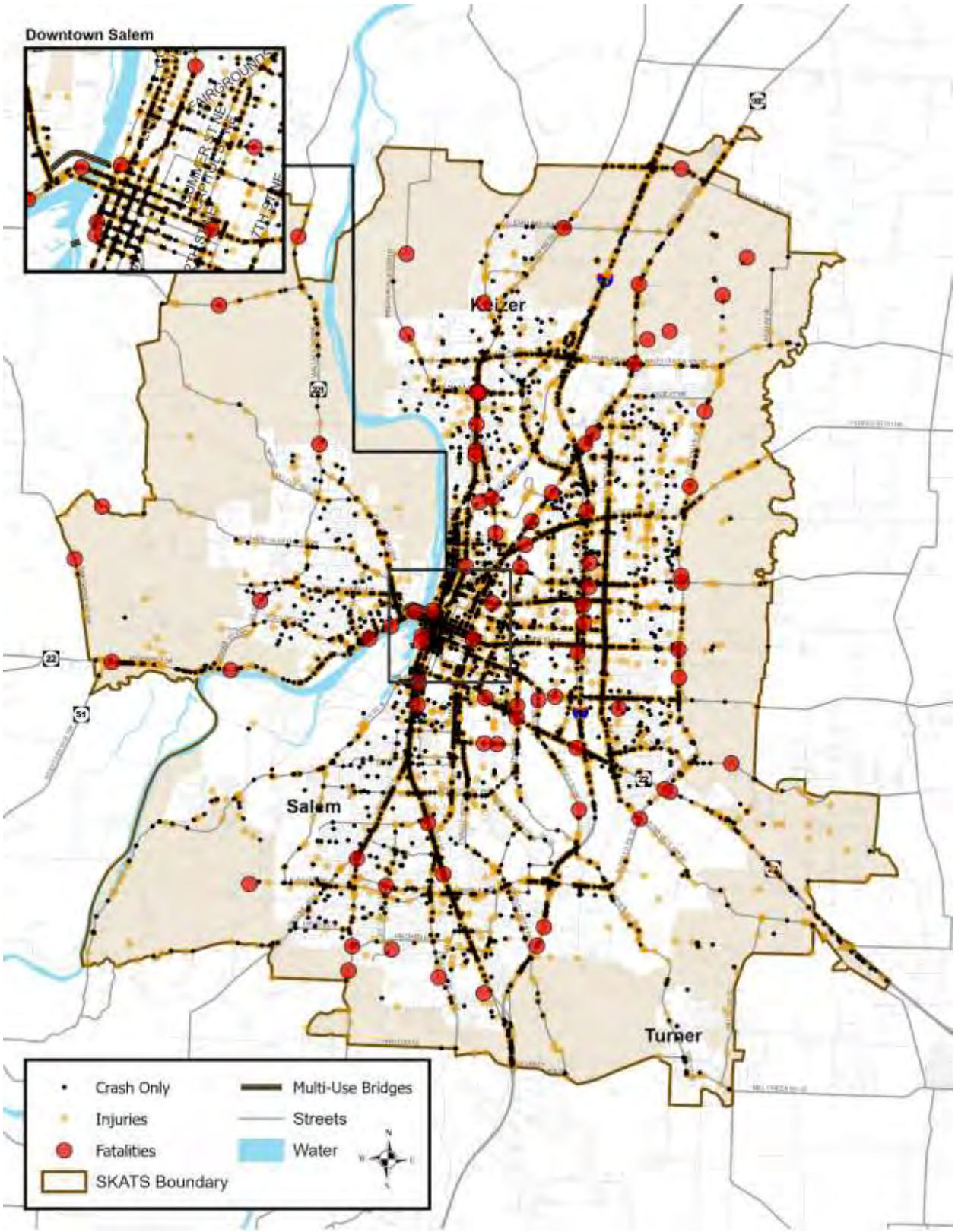
District	Crash Only	Non-Serious Injury Crash	Serious Injury Crash	Fatal Crash	Total Crashes
Downtown Salem	988	1,047	27	3	**2,075**
West Salem	527	646	35	11	**1,219**
Keizer	642	841	50	10	**1,543**
East Salem	3,248	4,848	236	40	**8,372**
South Salem	2,065	2,384	117	19	**4,585**
Total	**7,481**	**9,765**	**465**	**83**	**17,794**

Table 4-4: Fatalities and Serious Injuries by Mode, SKATS Area 2016-2020 (Source: ODOT)

	Serious Injury	Fatal Crash
Vehicle-Vehicle	408	51
Vehicle-Pedestrian	43	25
Vehicle-Bicyclists	14	7
Total	**465**	**83**

Further discussion of safety issues as they pertain to the proposed projects is presented in **Chapter 7** as part of the analysis of possible impacts of the projects.

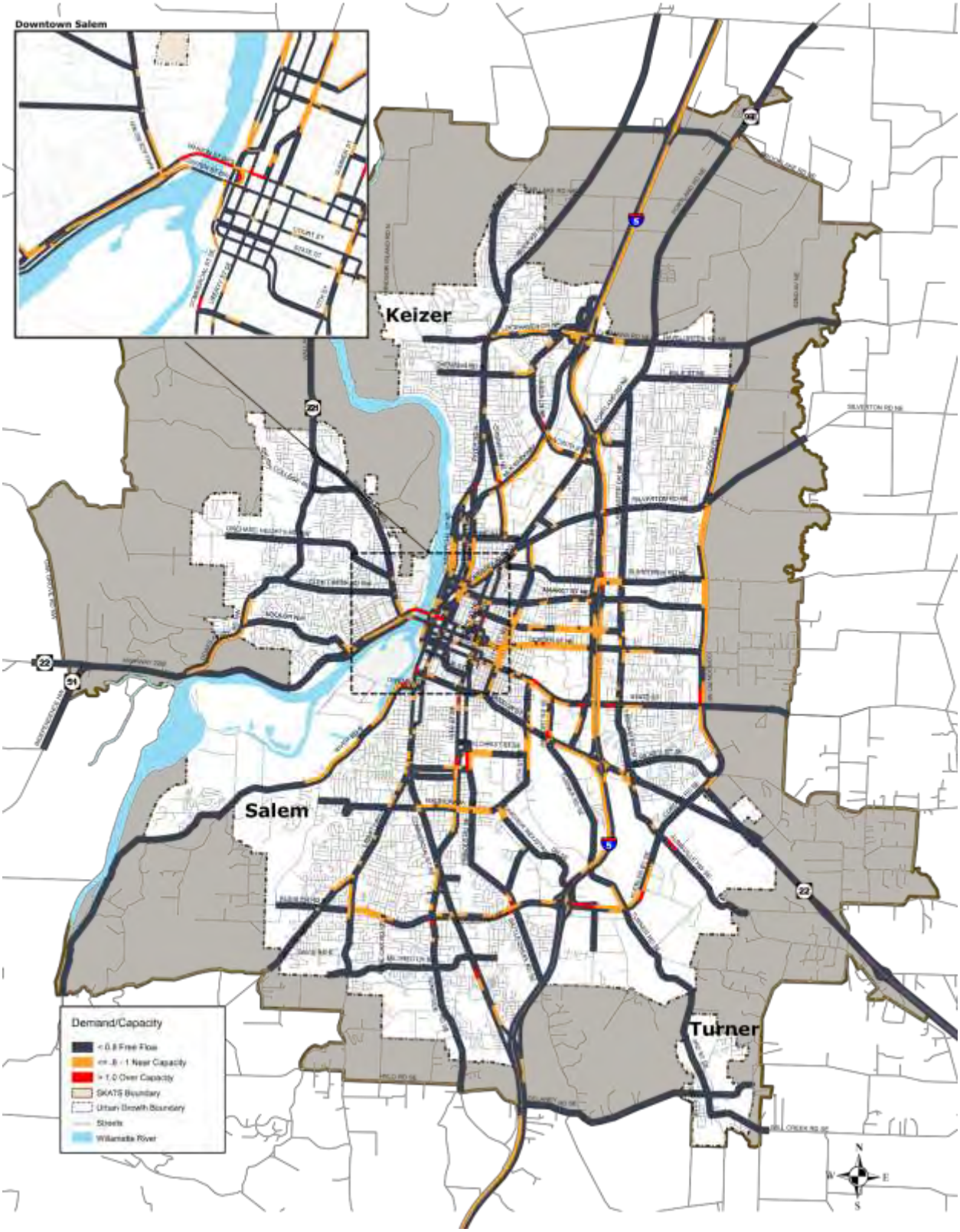
[14] Crash information is presented as 5-year summaries aligning this reporting with the federal safety performance measures.



Map 4-4: Crashes, Injuries, and Fatalities, SKATS 2016-2020 (Source: ODOT)

Vehicular Volume on the Roads

The regional road system is primarily used by privately owned and operated vehicles, i.e., automobiles, SUVs, and pickup trucks. The estimated p.m. peak (5:00-6:00 p.m.) demand to capacity ratio, in 2021, for travel on the regional system, is illustrated in **Map 4-5**. The data for this map is from the SKATS Regional Travel Demand Forecasting Model. As shown on the map, a number of links are congested and approaching their design capacity. This threshold is reached when the demand to travel on the segment is equal to the calculated capacity of the segment. The second threshold, which is defined as "approaching capacity deficient" is when this ratio is greater than 0.8 and less than 1.0. Approximately 16 percent of the road miles are nearing or above the above threshold. It is also apparent that much of the congestion is due to either bottlenecks or lack of parallel facilities (such as crossing the Willamette River).



Map 4-5: Volume to Capacity, 2021 PM Peak (5-6pm)

Transportation System Management

Vehicular congestion has recurring (e.g., bottlenecks) and non-recurring causes (e.g., weather-related). One way to address congestion is by investments in Transportation System Management (TSM) programs. TSM aims to increase the efficiency of the existing transportation system by addressing bottlenecks and flow problems inherent in the built facilities. Three TSM programs are on-going: the Regional Traffic Signal Control Center (described below), the Regional Park-and-Ride/Pool System, and the Regional Parking Management System. Twelve park-and-ride lots are located throughout the Salem-Keizer area in addition to three located outside the SKATS area. The park-and-ride lots within the SKATS boundary are illustrated on the maps that follow later in the chapter. Most of these parking lots are served by Cherriots. Three park-and-ride lots located outside the SKATS boundary serve those working in the SKATS area. The lot in Rickreall is served by Tillamook County Transportation District Route 70x, Cherriots Regional Route 50, and was expanded using *ConnectOregon* 3 funding in 2011.

According to data collected and analyzed by the CATT Lab at the University of Maryland, in Marion and Polk counties in 2019 27 percent of congestion is attributed to poor signal timing[15]. The Regional Traffic Signal Control Center (RTSCC) is in Salem City Hall and is operated by the Public Works Department. It is funded in part with federal funds from SKATS. The RTSCC controls most of the traffic signals in the region allowing for timing patterns to be reset from the center in response to traffic or incidents. The signals are connected to the RTSCC via fiber optics, copper wire, and/or wirelessly, called 'signal interconnects.' The signal interconnects also allow video and data from many of the controllers to flow back to the RTSCC for either display or use in analysis. One project implemented over the last decade has been to equip the signal controllers at key intersections with the necessary hardware to count traffic, and in most cases, to determine the classification (car, truck, etc.). This data is useful in understanding how traffic demand changes over time. It is also used in validating the travel demand model and can be used in other analysis such as determining crash rates when used with other data sources.

More information of the TSM (and other) strategies that are used or considered for future use within the Salem-Keizer area may be found in the *Congestion Management Process* document available on the MWVCOG's website.

Transportation Demand Management

Cherriots Transportation Options (previously known as Cherriots Trip Choice) provides

[15] CATT Lab is the Center for Advanced Transportation Technology. Their analysis used data collected by INRIX, a provider of travel time information. The analysis was funded by the Bureau of Transportation Statistics. See: https://congestion-causes.ritis.org/ For corridor specific results see the SKATS Congestion Management Process page at: https://skats-mwvcog.hub.arcgis.com/pages/congestion-management

Transportation Demand Management (TDM) services that assist people in accessing alternatives to driving alone to work. Among the services it provides are a regionwide carpool matching service, a vanpool referral service, and emergency ride home program. In addition, staff conducts outreach to employers to help them access and implement these programs. These programs are designed to inform people of the options that are available for making their daily trips, helping those that participate in them save time and money. The city of Salem supports these programs by offering preferential parking for carpools/vanpools at locations in the Salem downtown core. In 2014, Cherriots Trip Choice developed a master plan to guide their near- and medium-term development.

Transit service requires a network of continuous and comprehensive sidewalks to be effective. These allow for people to access transit. While the provision of sidewalks along the regional arterials is a matter of policy, there are still gaps in the system especially from those segments that were developed after World War II and before the recent policies mandating sidewalks came into effect. In addition, many of the local streets either do not have, or have inadequate, pedestrian infrastructure for the same reasons.

Bicycle

The regional bicycle system (***See Map 4-6***) includes the regional road system, a few off-street paths that provide crucial linkages, and lower-classified roads that support the connectivity for those bicycling. The lower volumes and speeds make local streets attractive to bicyclists, and several have been designated as either bicycle routes or family-friendly bikeways (which were known as 'bicycle boulevards'). While they allow for relatively long-distance travel by bicyclists, they are typically not as direct, and thus, result in longer travel both in distance and time than the bike lanes located along the arterials that are part of the regional system. While 70 percent (206 miles) of the defined network has been built, the remaining sections are those that require costly right-of-way acquisition, removal of on-street parking, or community consensus on the implementation. Filling in these missing sections is crucial to providing a continuous network that serves the same travel corridor used by motorized vehicles.

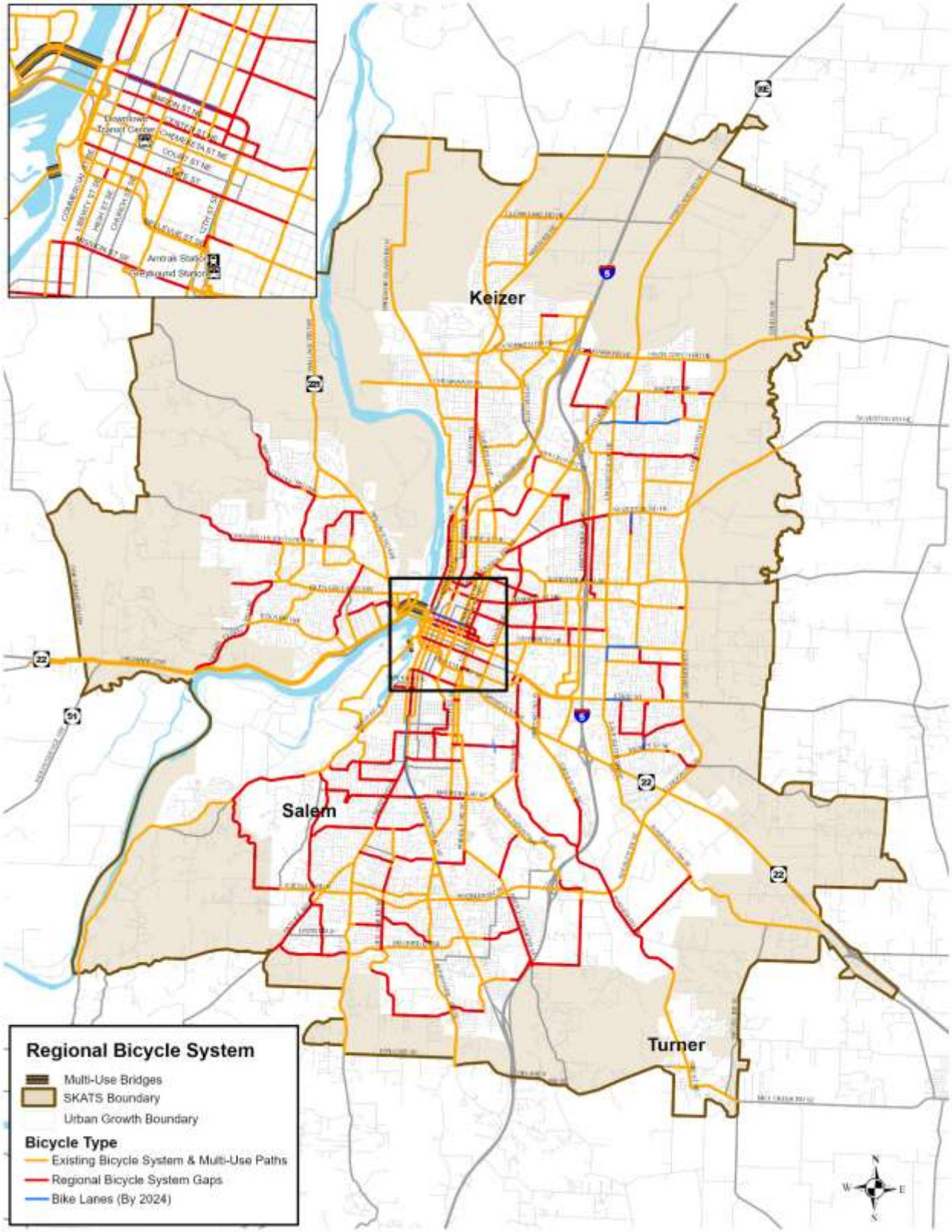
Over time, what has been thought as adequate facilities for bicycling has changed. Current best practice is for separated bike lanes, with a buffer between the bike lane and the rest of traffic. On High and Church Street in downtown Salem, the buffer is denoted only with paint and a few plastic wands at intersections. Other designs use more substantial, and safer, materials for the buffer, such as a concrete curb. These designs are likely to encourage more people to bicycle as they will feel safer.

During the summer of 2010, Salem designated its first 'bicycle boulevard' on Chemeketa Street from 24th Street to Commercial Street. Additional bicycle boulevards, currently referred to as "Family friendly bikeways," are in either the design or implementation stage.

Supportive infrastructure for bicyclists, such as racks and lockers, has been required by

zoning code in Salem and Keizer for some time. Cherriots and the other transit agencies serving Salem-Keizer have equipped their buses with racks that carry at least two bicycles in addition to providing bicycle parking at transit centers.

A bikeshare program (Ride Salem) was in operation in downtown Salem and west Salem until COVID-19 resulted in suspended operations. The firm subsequently shut down in 2022.



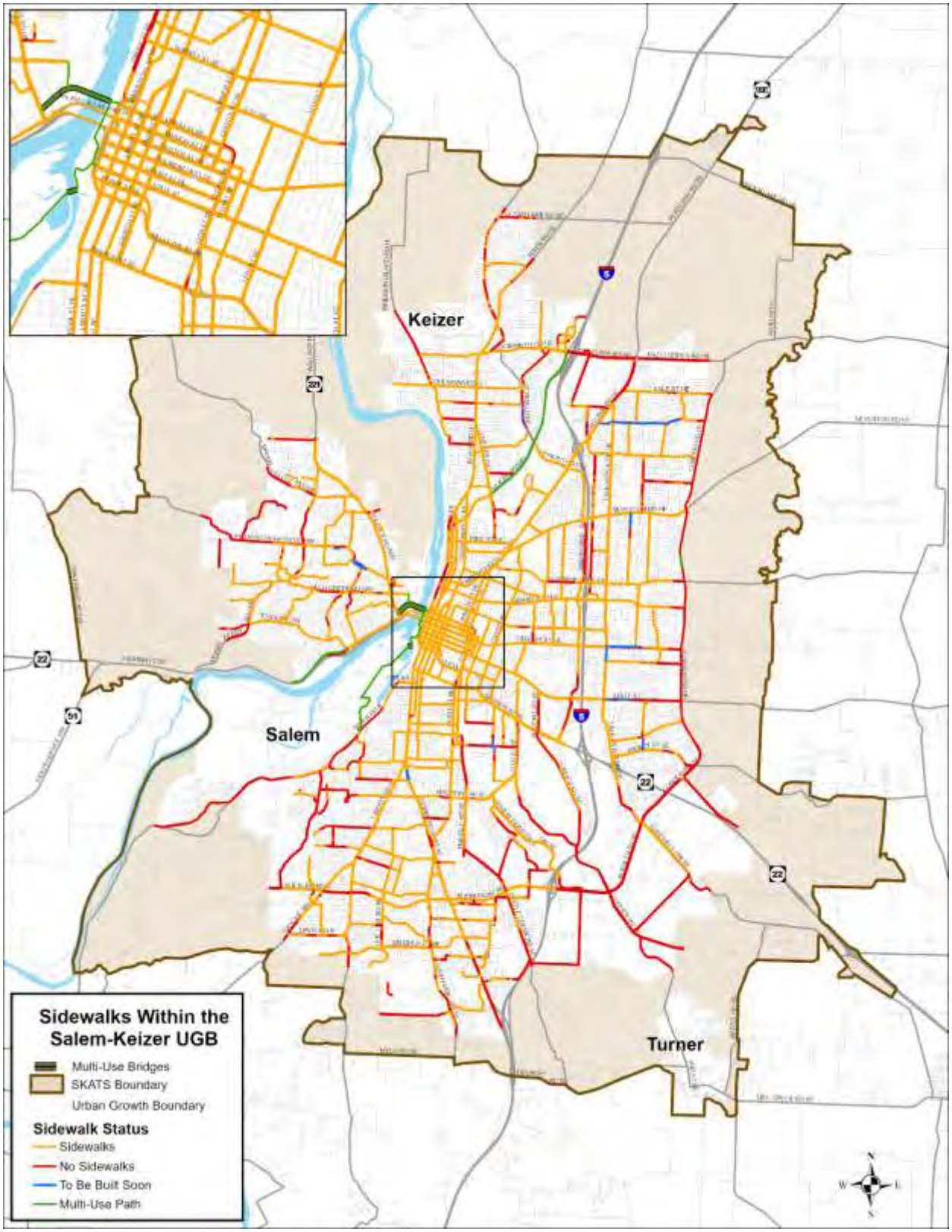
Map 4-6: Regional Bicycle System

Pedestrian

According to data from the U.S. Census Bureau, six percent of households within SKATS do not have a vehicle[16]. An incomplete sidewalk system impacts their ability to conduct their daily business, whether walking to the store, a job, or to access transit. And a complete sidewalk system, with properly constructed ramps compliant with the ADA requirements, allows everyone an opportunity to safely walk out of the flow of traffic.

Initially the 1996 SKATS Regional Transportation Systems Plan defined the Regional Pedestrian System along the roads in the areas with high pedestrian use, such as downtown Salem, the Capitol Mall area, Lancaster Mall (now Willamette Town Center), and around Chemeketa Community College. This system has been updated over time to include the major streets. Other areas are the existing and future transit centers in Keizer and West and South Salem. Design standards for each of the jurisdictions includes sidewalks on all functional classifications of roads.[17] There is approximately 327 miles of sidewalks along roads classified as collector and above within the Salem-Keizer Urban Growth Boundary. While there have been additional sidewalks built in the preceding years, as discussed in **Chapter 5**, there are approximately 143 miles of gaps in the sidewalk network that present challenges to people safely reaching their destinations. Shown in **Map 4-7** are the sidewalks that exist within Salem-Keizer as of 2020, and the projects to be constructed in the near-term that will add sidewalks or multi-use paths.

[16] From the 2021 American Community Survey data, table B08201, five-year summary.
[17] Except in circumstances where that is not possible.



Map 4-7: Sidewalks within Salem-Keizer UGB

Intra-Urban Public Transit

For transit to be considered as a viable option for daily travel, the system needs to offer frequent service (e.g., every 15 minutes or better) over many hours of the day and for (ideally) seven days a week. Reliability, in particular the on-time arrival of buses, is also a critical factor that influences whether a person will consider transit or not. The intra-urban public transit is the service offered within the Salem metropolitan area by the Salem Area Mass Transit District is marketed as *Cherriots*. Over the last ten years, there have been several revisions to the service offered in the Salem area often in response to either the reduction or increase in funding, and to community demand for service delivery modernization. Beginning in 2009, Cherriots has revised their service to increase frequency on the most heavily used routes while removing routes with very low ridership. It was hoped that this would provide a level of service that meets the needs for most of the people using it and would attract new riders.

This revised system is based on the "3C" model. Collector buses operating into the neighborhoods, come into Centers where passengers may transfer to Corridor buses to travel to another center or destination outside that area. Currently transit centers exist in downtown Salem, West Salem, and Keizer. A planned study had identified the location for a fourth center in south Salem, and negotiations with the property owner took place. However, due to being unsuccessful in reaching an agreement with the property owner, in late 2018 or early 2019, the Transit Board decided to reopen the locational analysis to locate an alternative location was in south Salem. Three locations have been identified and the Transit District is proceeding with final site selection and negotiations to be completed by 2023. Other major transit generators include Willamette Town Center, Chemeketa Community College, and the Capitol Mall area.

The Board of the Salem Area Mass Transit District approved the creation of a "Core Network," defining segments of the Cherriots network where they are committed to providing stable service. This network will be prioritized for frequent weekday service and 30-minute weekend service. The creation was to show the community where resources will be allocated in the event of future funding reductions.

In 2019. Cherriots began implementation of the recommendations from the '*A Better Cherriots'* study, increasing the number of service hours on weekdays and restarting Saturday service. The start of Sunday service was delayed by the COVID-19 pandemic until the Fall of 2021. Funding for these enhancements was made possible by H.B. 2017, which included a small employee payroll tax instituted state-wide. In 2022, with the cooperation of the Salem-Keizer School District, and the cities of Keizer and Salem, funding has been allocated for a pilot program to provide free bus passes to students under the age of 18.

While the introduction of expanded service should result in higher ridership, the COVID-19 pandemic disrupted the rollout, resulting in a pause in service in March and April of 2020, a reduction in frequency (and capacity for a few months as the number allowed on a bus was limited) after service resumed, and a decline in ridership as people either lost

their jobs, began working from home, or avoided enclosed areas (whether a bus or a store).

As shown in **Figure 4-3**, ridership in 2020 decreased substantially from 2019. Since mid-2020, ridership has slowly increased, but is still below the pre-pandemic levels. Shown in **Figure 4-4** is the ridership between 2019 and 2022, providing more detail on the drop and subsequent rebound of ridership. One bright spot is that the ridership on the weekends shows there is an untapped need for travel options on those days.

By the spring of 2023, Cherriots should finalize their e-fare implementation that will allow people to use cash, pre-paid tickets, or their phone/tap-enabled credit card to pay for a ride. Fare capping, which limits the amount a person will spend over a period of time (usually a day or a month), will ensure that people pay no more than what a daily or monthly pass would cost. Also coming in the next two or three years is real-time stop arrival information via an app, the Cherriots webpage, and a phone messaging service.

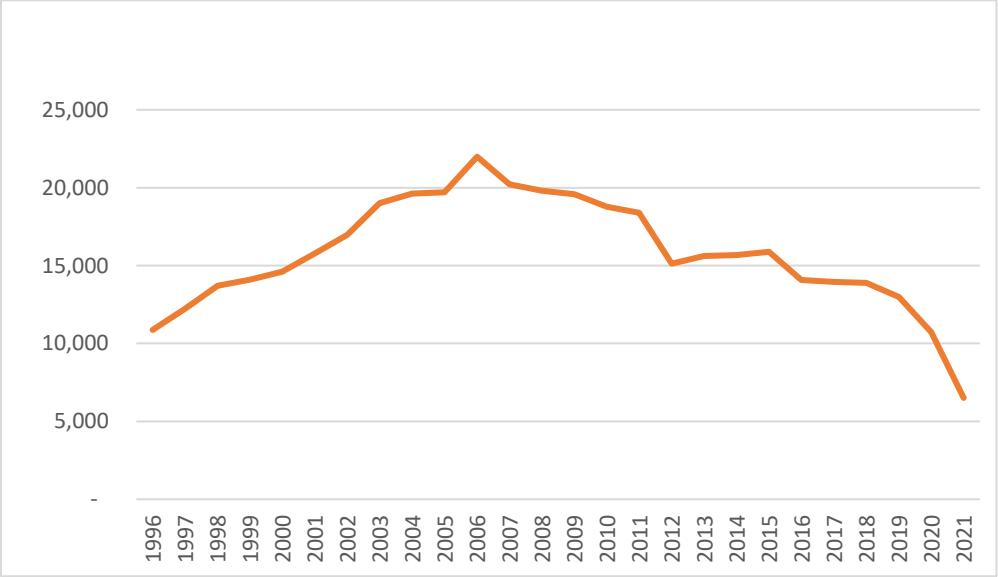


Figure 4-3: Average Weekday Unlinked Trips (Source: SAMTD Entry in the National Transit Database, FTA, 2021)

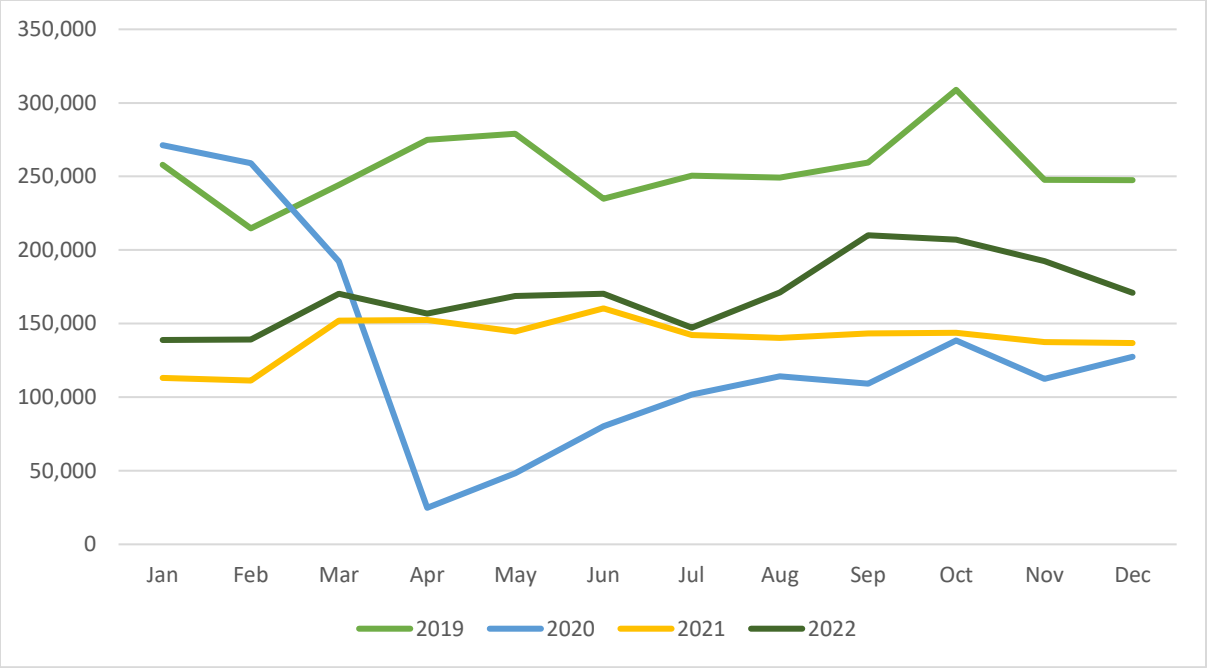
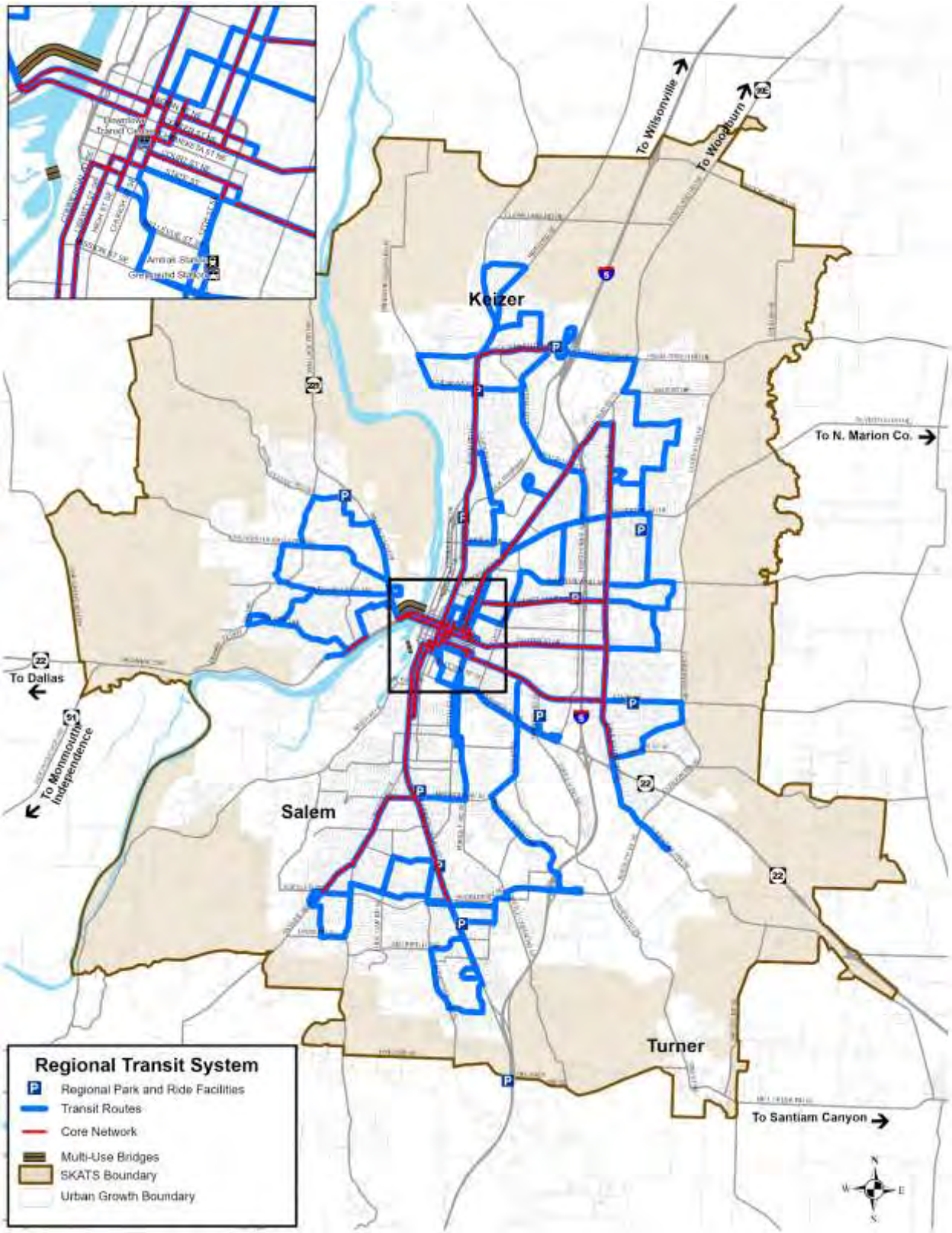


Figure 4-4: Weekday Transit Ridership by Month, 2019-2022 (SAMTD)



Map 4-8: Public Transit in Salem-Keizer as of 2022

The Salem Area Mass Transit District also provides "Cherriots LIFT," (previously known as CherryLift) which is complementary paratransit required by the Americans with Disabilities Act. Cherriots LIFT is only available within the Salem-Keizer Urban Growth Boundary, with service now available seven days a week. This service provides door-to-door service for people who have a physical or cognitive disability which prevents them from accessing traditional fixed-route bus service. Users must go through an application process to qualify to use the service, and trips must be booked at least 24-hours in advance. The Transit District provides 'travel training' to any Cherriots customer, no matter which service they choose to ride, to get them comfortable with how to ride the buses. Travel training reduces costs when a rider is able to use the Cherriots Local system rather than LIFT as Cherriots LIFT is five times more expensive to operate than regular Cherriots Local service. Travel training also increases independence and mobility for passengers. All buses purchased since 2002 are the low-floor variety, which makes access and egress easier and quicker.

In 2009, Cherriots adopted a locally developed Coordinated Public Transit – Human Services Transportation Plan. It contains recommendations for enhancing mobility throughout Marion and Polk counties for all users. The latest update to the document occurred in 2016 and Cherriots staff hope to update in again in fiscal year 2023. A long-range plan for Cherriots Regional, formerly called CARTS (Chemeketa Area Regional Transportation System), was adopted by the SAMTD board in 2013, and a short-range service plan called the "CARTS Redesign" was completed in 2017. This plan for Cherriots Regional included a shift for most bus routes from demand-responsive transportation to fixed-route express service. One demand-responsive bus route remained, and it was redesigned to a deviated-fixed-route service in 2020, which serves three communities in Polk County. SAMTD has adopted (2022) a 20-year Long Range Transit Plan that covers both Cherriots Local and Cherriots Regional services. Recommendations from that planning document are discussed in Chapter 7 as appropriate ***(See Chapter 7 – Proposed System)***.

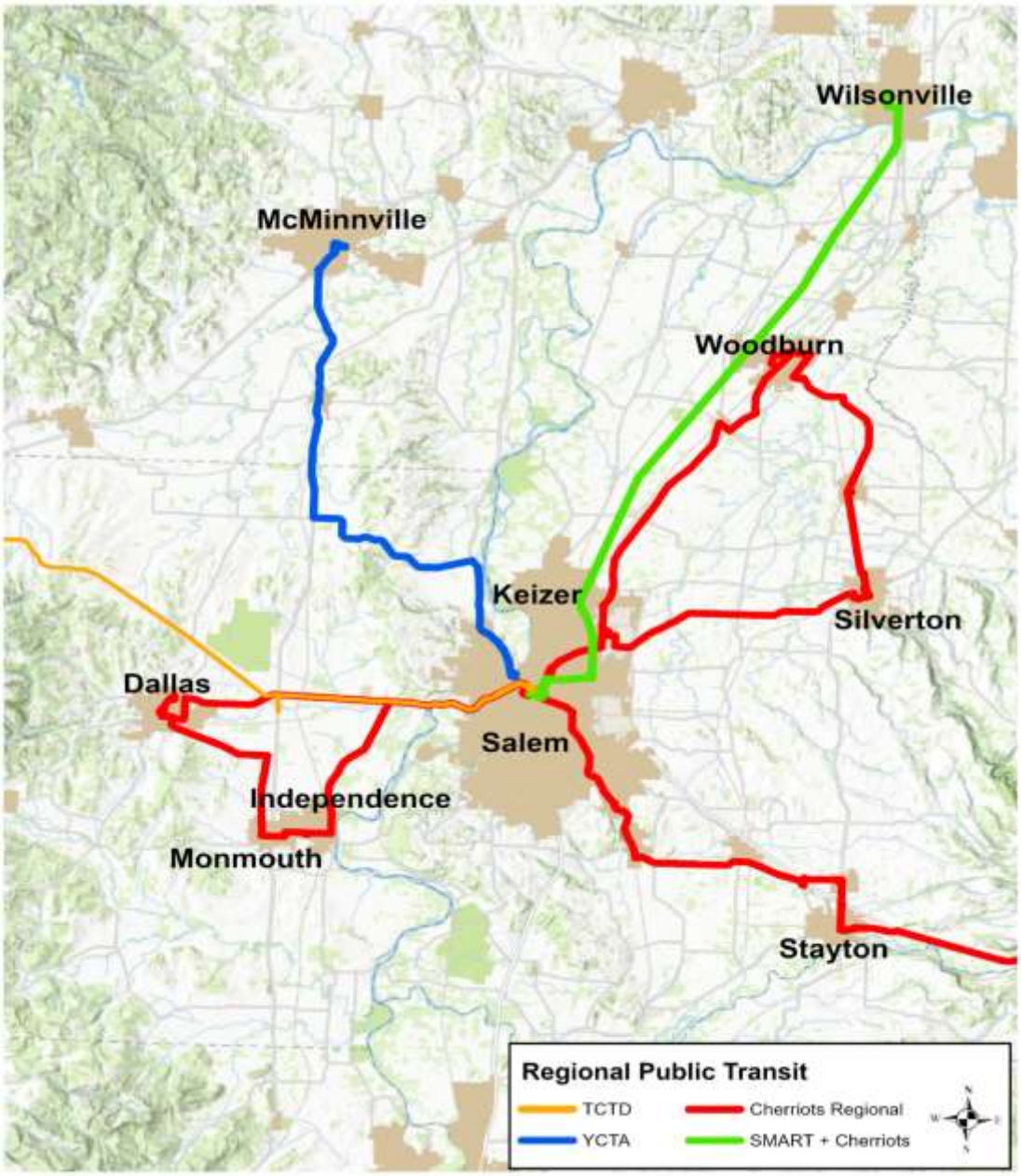
Marion-Polk MedLink is a Medicaid brokerage that was developed and implemented during the summer of 2003 for the residents of Marion and Polk counties. It provides transportation services for Medicaid-eligible clients for medically related transportation needs. Throughout the Salem-Keizer area, there are many small, client-oriented nonprofit organizations that provide transportation primarily for elderly and disabled individuals.

Inter-Urban Public Transit

In addition to the services offered by the Salem Area Mass Transit District, several other transit providers connect Salem with surrounding cities. Wilsonville's SMART (South Metro Area Regional Transit) provides service in the throughout the day from downtown Salem to the Wilsonville Transit Center. Connections are available to TriMet's WES (Westside Express Service) commuter rail service to Beaverton, which provides further

connections to other TriMet (the transit provider for the Portland Metropolitan area) bus and light rail services. This complements service that Cherriots offers along the same route for a total of sixteen trips per direction per day. In September 2022 Cherriots began a four-trips a day service from the Keizer Transit Center to Woodburn and on to the Wilsonville Transit Center.

Yamhill County Transit (YCT) connects McMinnville to the West Salem Transit Center with five round trips per day. Cherriots Regional, which is operated by the Salem Area Mass Transit District, has several routes that serve the smaller towns and cities in Marion and Polk Counties including Turner, which is part of the MPO, and connects to Cherriots service at the downtown Transit Center. Finally, a connection to Lincoln City via Spirit Mountain Casino from the Salem Amtrak Station and the Downtown Transit Center is offered by Tillamook County Transportation District (TCTD). The TCTD Route 60X offers three round trips per day from Salem to Lincoln City, seven days a week. Route 70X travels from Salem to the Spirit Mountain Casino and Grand Ronde on weekdays, with four round trips. **Map 4-9** shows these connections. Finally, SAMTD is applying for funding of a pilot project to provide bus service between Salem and Albany via Jefferson and Millersburg beginning in 2024.



Map 4-9: Regional Public Transit Connections (2022)

Long-distance bus service is offered by Flixbus[18], Shuttle Oregon (nee Mt. Hood Teleporter), and Cascades POINT. Flixbus operates eight buses daily along I-5 connecting Salem to Portland and California. Shuttle Oregon runs one round-trip six days a week between Bend/Central Oregon and Portland that stop in Salem. Finally, five weekday round-trip Cascades POINT (nee Amtrak Thruway) buses provide service between Eugene, Salem, and Portland running on I-5 that complements the *Cascade* passenger rail service.[19] All these services (except Shuttle Oregon) stop at the Salem Amtrak Station.

[18] Flix purchased Greyhound in October 2021.

[19] This is a reduction in service due to COVID. Prior to March 2020 there were six round-trip Cascade POINT buses.

Flixbus also stops at Chemeketa Street at Liberty Street.

Taxis, Car-share, and TNCs

Beyond the transit providers discussed above, the Salem-Keizer area has four taxi companies, an airport shuttle service, and numerous limousine services that provide the residents of the area with additional mobility options. Many of the latter two services are focused on facilitating travel to and from Portland International Airport (PDX). Since 2017, Transportation Network Companies (TNC), such as Lyft and Uber, have operated legally within Salem. Keizer also permits TNCs to operate within their city limits. Currently Turner, Polk County, and Marion County do not have any regulations on TNC operations in their jurisdictions.

Security and Resiliency[20]

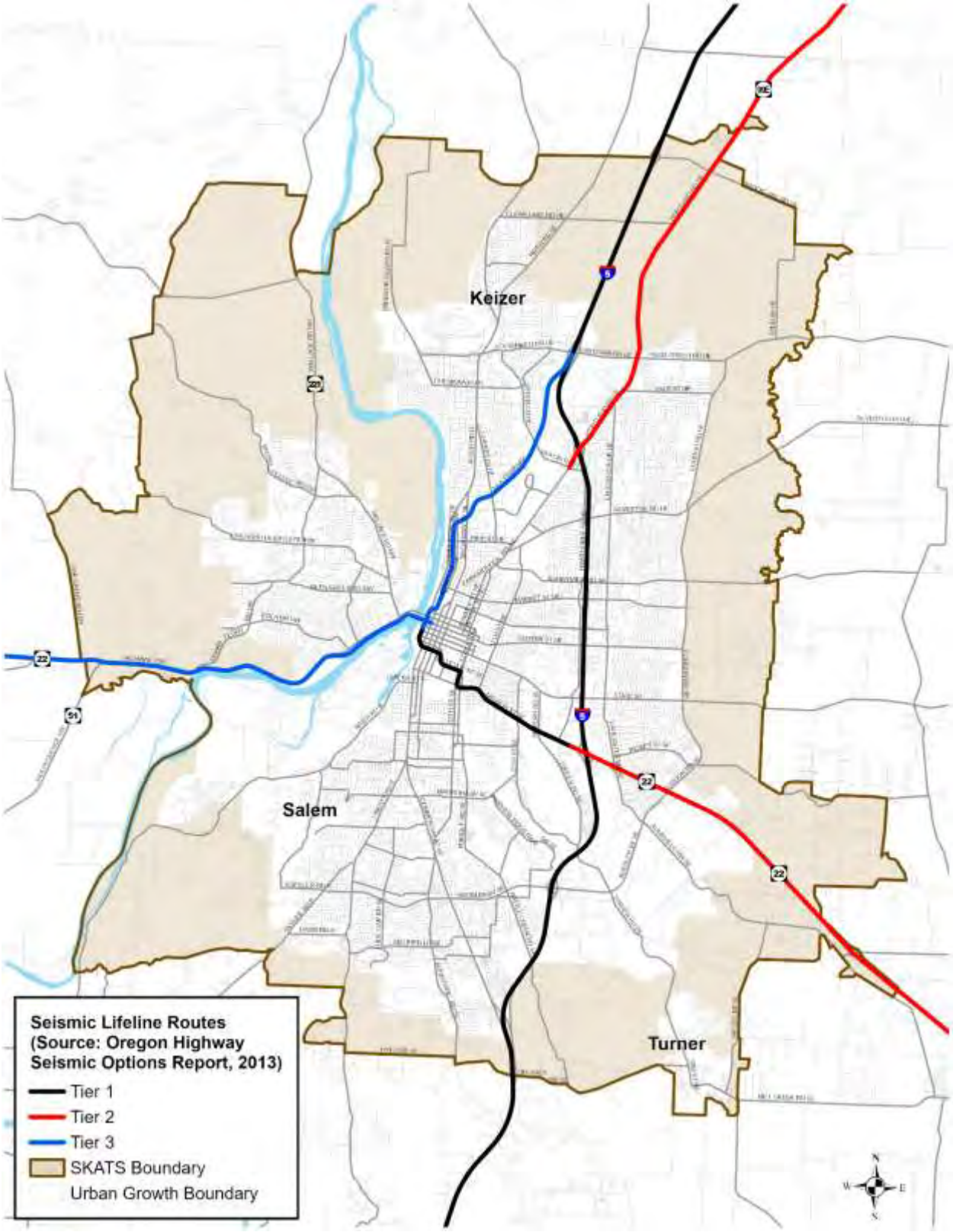
In the event of emergencies or natural disasters, it is important that as much of the transportation infrastructure remain functional to ensure that responders and assistance may reach the affected area. The State of Oregon has defined a number of "lifeline routes" to serve this function. (See, e.g., *Oregon Highways Seismic Options Report.*) The selection was based on the consideration of the likely outcomes from a major earthquake along the Cascadia Subduction Zone off the coast. These routes were assigned one of three tiers with Tier 1 representing those routes of highest importance from a statewide point-of-view to maintain connectivity between the areas. These routes are illustrated in **Map 4-10**. Marion and Center Street bridges are shown as Tier 3 routes. The Marion and Center Street bridges were not designed and constructed, and have not been modified, to survive a major Cascadia Subduction Zone event. In 2018, SKATS provided funding along with the city of Salem for an engineering study for a seismic retrofit of the Center Street bridge, so that it may remain operational after a major earthquake. The study led to construction that is scheduled to start in 2025 and is being paid for by ODOT.

In addition to seismic issues, other disruptions (traffic accidents, flooding, or other emergencies) to the operation of the Center Street or Marion Street bridges have substantial effects to traffic and the economy in the Salem-Keizer area and the mid-Willamette region. The existing two bridges are the only Willamette River crossings within the Salem-Keizer metropolitan area open for vehicular traffic. The next closest bridges are at Independence (approximately 11.5 miles southwest) and Newberg (approximately 23 miles north), with the result that traffic from a large area essentially has only one point to cross the Willamette River. When traffic incidents or other issues require closure of one or both bridges, traffic for emergency vehicles, passenger vehicles, public transportation, and freight is substantially disrupted due to the lack of alternate routes. It is very difficult to convert either of the current one-way bridges into two -way operation because of ramps and street grids on either side of the river. Lastly, in addition to its importance to the Salem-Keizer area, OR22 traffic across the two bridges includes

[20] For more on resiliency of the regional system, see Appendix R.

pivotal truck freight between I-5 on the east and the Oregon Coast on the west and provides access to recreational areas including the Oregon Coast, two of the state's major gaming casinos, and a growing number of wineries in Polk and Yamhill Counties.

Other considerations for roadways in the region include flooding due to heavy rain or blocked storm drains. Extreme weather resulting in higher water levels in the waterways in the region increases the scouring of bridge supports. As recently as 2012, a number of roads in downtown Salem had to be closed due to flooding; and the Winter Street bridge over Shelton Ditch was damaged. A replacement for this bridge was constructed in 2016. The flooding in January 2012 resulted in a few other bridges requiring repair or replacement. Increases in the amount and intensity of winter storms that bring rain to the Willamette Valley and the Cascades could result in increased damage to the bridges and roads in the region.



Map 4-10: Seismic Lifeline Routes (Source: ODOT 2013)

Discussion of Existing System

Following this overview of the major components of the regional transportation system, the next sections will address the specifics as they exist today (2022) in five districts of the region. (***See* Map 4-10.**) These districts have been defined for the use in this document and other planning work and do not represent any political or neighborhood boundaries. The maps provided for each district address existing *Bicycle, Transit,* and *Infrastructure* facilities. The first two show those facilities that support movement by bicycle or transit respectively, as well as some of the uses of the land that generate travel demand. The last one shows the location of the signals, roads, and bridges that provide the underlying base for supporting movement in the area.

Since 2015, a number of projects have been completed increasing the safety, efficiency, and options for the traveling public in the greater Salem area. **Table 4-5** lists a few of these. (***See the Current and Completed Projects in the Maps page of the MWVCOG website[21].***)

Table 4-5: Major Projects Completed Since 2015

Project	Location	Description
Delaney Road	Turner	Add sidewalks and bike lanes on Delaney Road from 3rd St. o 7th St
Liberty Street Interconnects	Salem	Extend signal interconnection north along Liberty St from Market St to Cherry St
Madrona Avenue	Salem	Realign and signalize the Madrona Avenue/Aviation Loop intersection with 25th Street. Rebuild Madrona Avenue to major arterial standards west of the railroad
Auburn Road	Unincorporated Marion County	Add bike lanes, curbs, and sidewalks from Lancaster Dr to Baldwin Av

[21] https://www.mwvcog.org

Map 4-11: Five Districts of the SKATS

District 1: Downtown Salem

Downtown Salem, which is illustrated in **Maps 4-11** through **4-14**, is the central point where many of the regional corridors converge. Comprised of the oldest parts of the city, it is situated on the Willamette River and is bounded by the two rail lines that transect the region. Many of the regional corridors pass through downtown Salem. Most roads have sidewalks, and several have bike lanes. In addition, the Chemeketa Street bicycle boulevard terminates in downtown. The Union Street Railroad Bridge, which was converted to pedestrian and bicycle use in 2009, links downtown to West Salem. A project is in the works to enhance the bicycling facilities along Union Street from Commercial Street to 12th Street, tying in with the Winter-Maple Family Friendly Bikeway

(which runs north to Salem Parkway and Keizer). The Peter Courtney Bridge which links Riverfront Park with Minto-Brown Island Park was completed in 2017.

Cherriots, SMART, and Cherriots Regional provide transit service to the downtown transit center linking it to other parts of Salem-Keizer, Wilsonville, and the surrounding towns and cities in Marion and Polk Counties. FlixBus stops at Liberty Street at Chemeketa. Service to the Salem Railroad Station is provided by the *Coast Starlight* long-distance train (Seattle to Los Angeles) and *Cascades* corridor service between Eugene and Vancouver, B.C. Both are operated by Amtrak. Daily, there is one round-trip long-distance train, two round-trip *Cascades* trains, and five round-trip Cascades POINT (nee Amtrak Thruway) buses.

In downtown, there are 28 bike lockers in six locations. In addition, there are four publicly owned parking garages ("parkades") with 2,553 parking spaces and three lots with an additional 387 spaces. There are also about 300 carpool and vanpool spaces. Parking is free between Front Street and Church Street and Trade Street to Marion Street in the main shopping area supported by the downtown merchants, and currently consists of 1,106 on-street parking spaces. For parking outside this area, there is a current hourly rate of $1.50 for on-street locations east of Church Street and west of 12th Street, and for the parkades outside the downtown parking district. The Capitol Mall area has several surface parking lots mainly for use by State employees. The Chemeketa Parkade has been equipped with a system to inform drivers of the number of free parking spaces (**Figure 4-2**). As part of the revisions to the Transportation Planning Rule (TPR), changes to the off-street parking requirements will likely be implemented before the next update to this Plan.

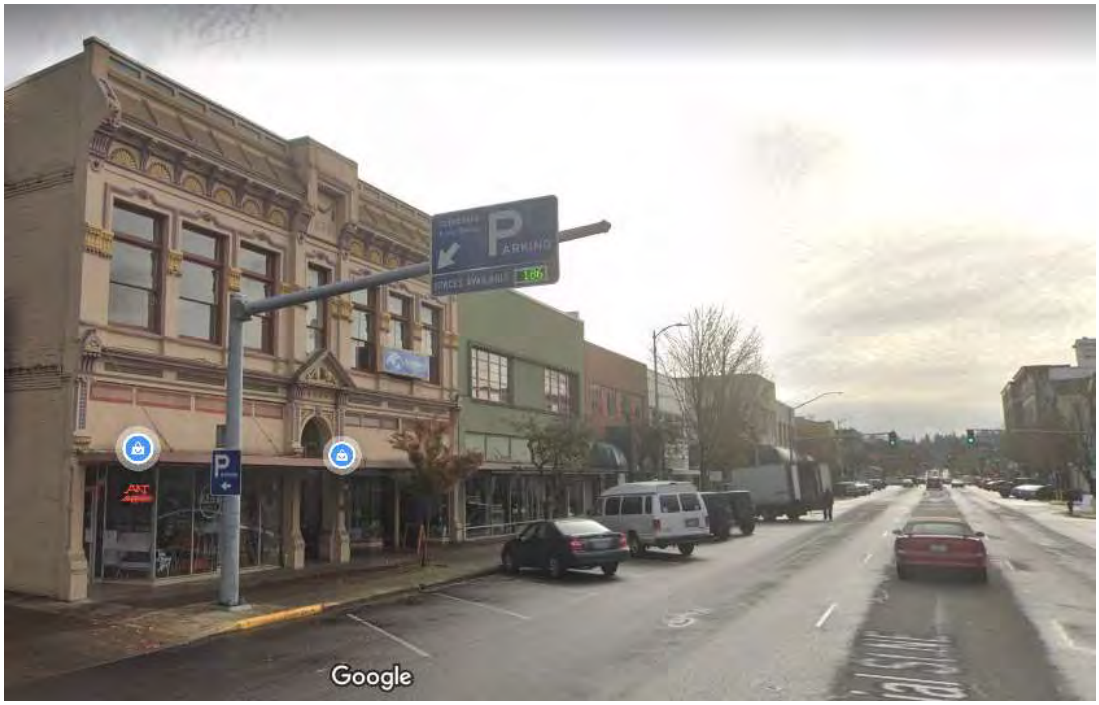


Figure 4-5: Chemeketa Parkade Parking Space Counter Sign (Google, 2020)

Not including the Willamette River Bridges, there are nine bridges along the regional corridors in the downtown area. These cross smaller tributaries of the Willamette River such as Mill Creek or Pringle Creek. In the last fifteen years, a number of these have had work done to repair or replace the bridge deck or scouring among the piers in the water. The latest is the bridge over Shelton Ditch on Winter Street, which was damaged during the flooding that occurred in January 2012.

In 2010, the city of Salem, ODOT Rail, and the Union Pacific Railroad began converting all the intersections along the UP's main line along the east side of downtown Salem to improve safety and be eligible for "quiet zone" designation – this will reduce the use of train horns when operating on that stretch. The quiet zone extends from Mill Street SE to Silverton Road NE. The quiet zone has been extended to three crossings of the Portland & Western Railroad.

Between 2016 and 2020 (the latest year data is available), there were 2,076 vehicle-vehicle crashes, vehicle-pedestrian crashes, and 36 vehicle-bicycle crashes in the downtown Salem area. There were two crash-related fatalities in this time period. The trend over the last five years has been for an increase in crashes with a slight decrease in vehicle-bicycle crashes. The four major streets in the area, (Marion, Center, Commercial, and Liberty) carry the highest volume of traffic in this district and had the highest number of crashes

Traffic congestion occurs in the a.m. and p.m. peaks along the roads leading to and from the Willamette River Bridges. Back-ups can extend on Commercial Street NE from Marion Street past Market Street. Broadway experiences much less frequent backups in the p.m. peak, often associated with a Portland & Western train. Traffic in 2020 and 2021 was reduced from the levels in 2019 due to the COVID-19 pandemic. While the amount of traffic has been trending upwards in 2021 and 2022 (from the 2020 lows), it remains to be seen how this changes as the State of Oregon reopens offices in the downtown/Capital Mall area.

A signal was installed at the intersection of Union Street and Commercial Street in 2017 along with modifications made to facilitate bicycle movement from the Union Street Bridge into downtown.

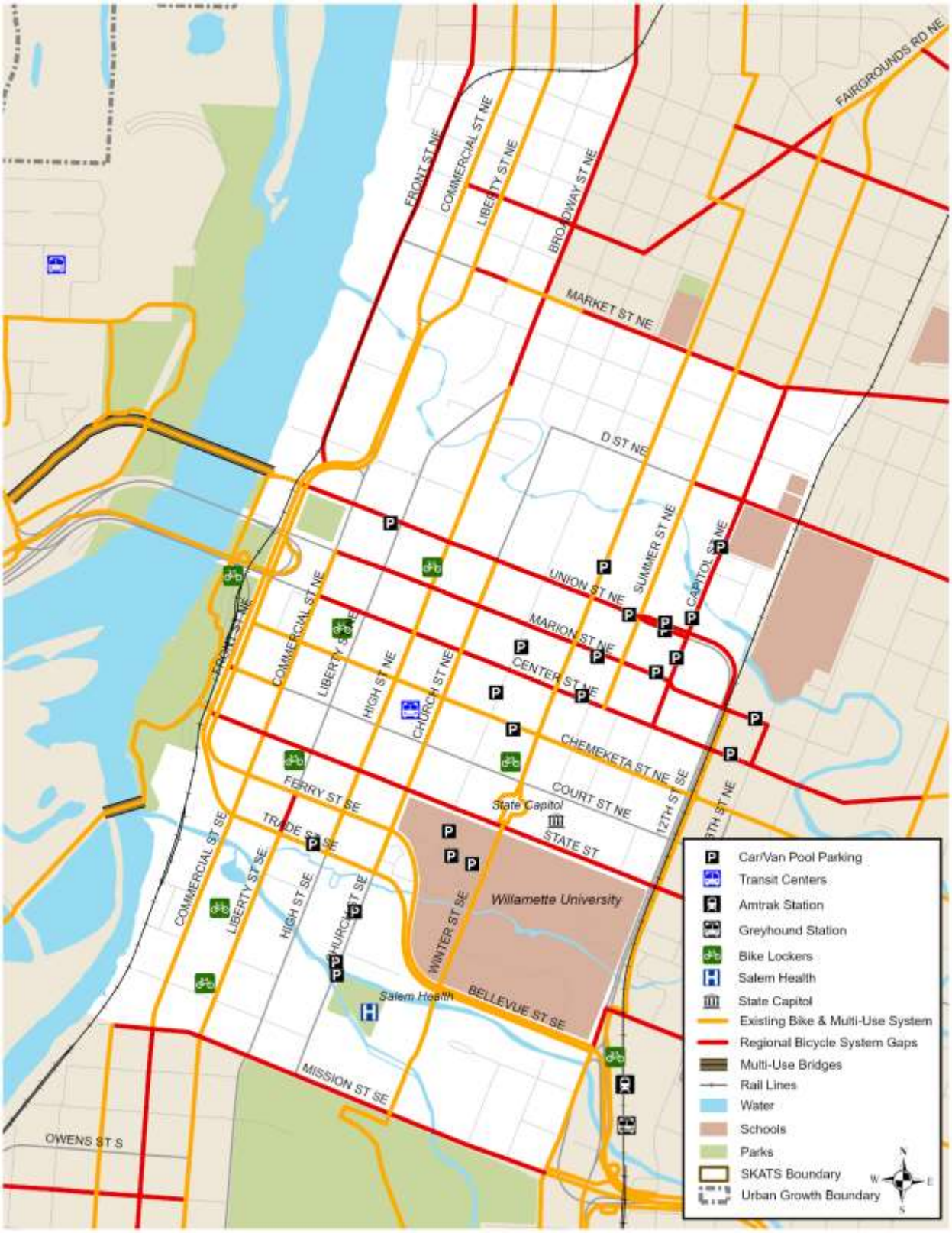
Flooding has occurred in the past in the areas near Mill and Pringle Creeks. In addition, past storms have resulted in scouring of bridge supports, requiring maintenance and sometimes replacement. Many of the locally owned bridges over Mill and Pringle Creeks are listed as vulnerable to seismic events.

The downtown/central business district of Salem is home to several major employers including the Truitt Brothers, State of Oregon, Salem Hospital, city of Salem, Marion County, Willamette University, and SAIF. In addition, there are numerous retail and service establishments catering to this group as well as people who travel to downtown for shopping or entertainment. Recent redevelopment has occurred along Broadway

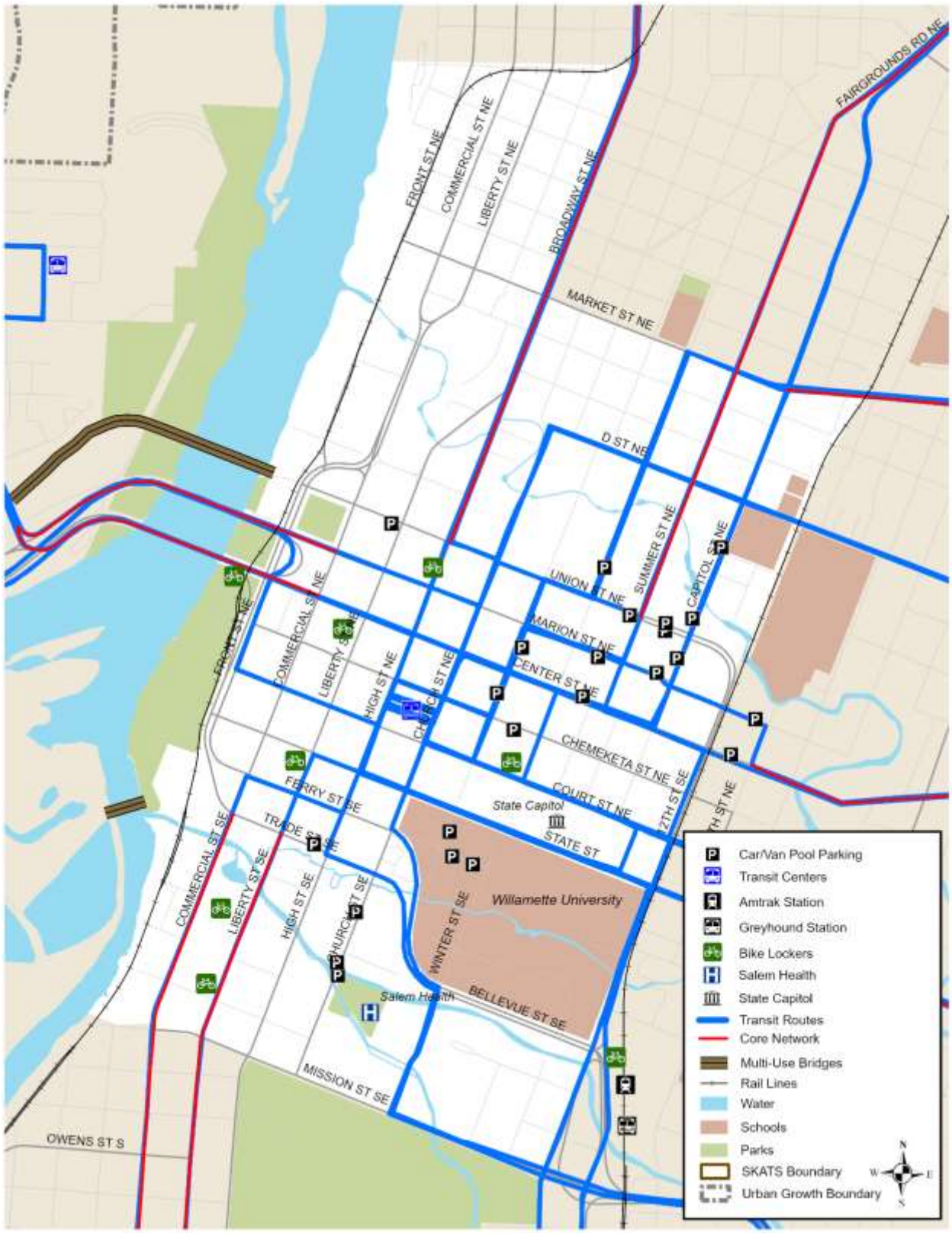
north of downtown. The Boise Cascade site in the southwest corner of downtown is being redeveloped to provide jobs and housing. In addition, the area bounded by Commercial Street, Division Street, and Mill Creek became the new home for the Salem Police Department in fall of 2020.

Table 4-6: Inflow/Outflow Counts of All Jobs in Salem CBD for All Workers in 2019 (U.S. Census Bureau)

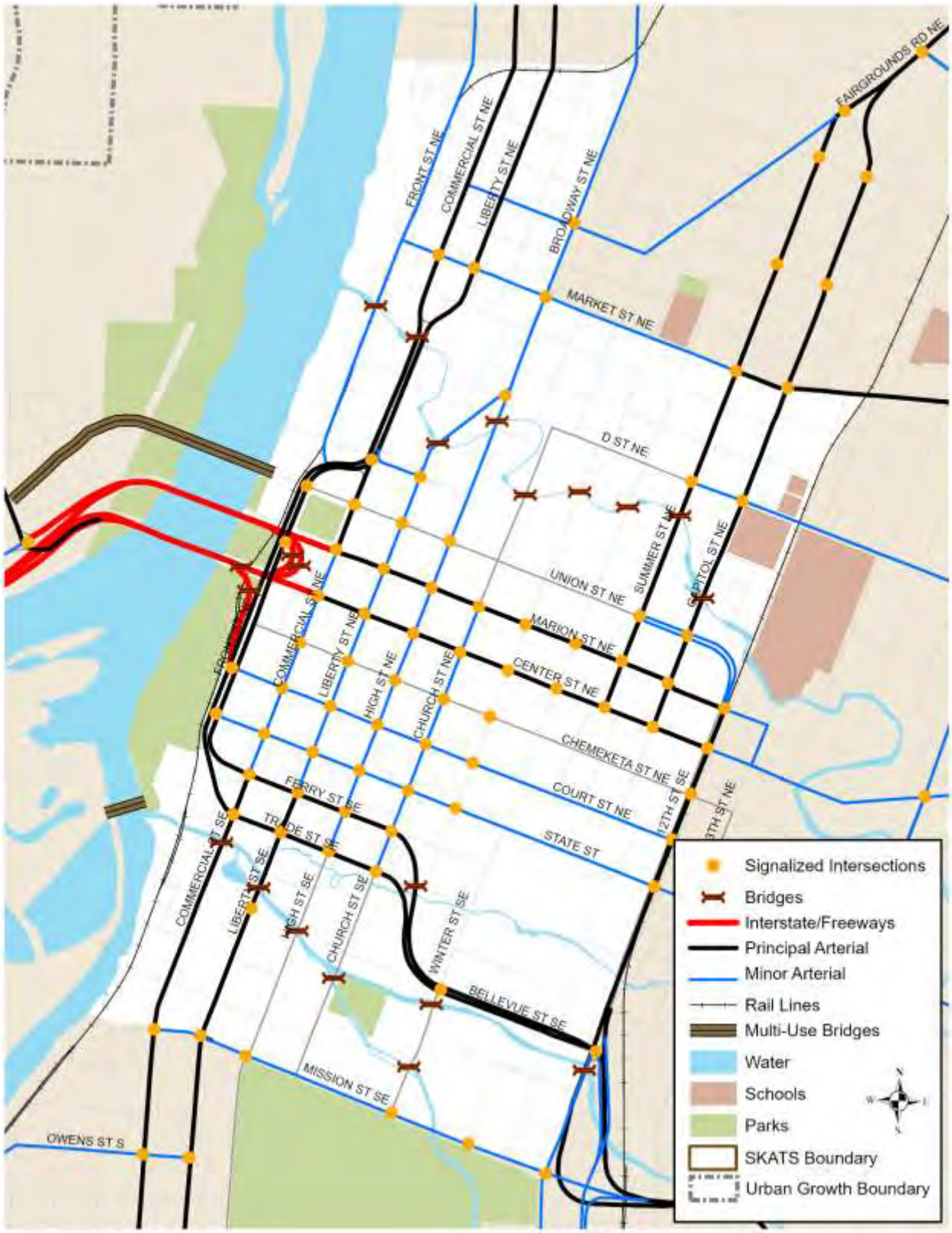
Worker Totals and Flows	Count	Percent
Employed in the Selection Area	33,382	100.0
Employed in the Selection Area but Living Outside	32,963	98.7
Employed and Living in the Selection Area	419	1.3
Living in the Selection Area	1,953	100.0
Living in the Selection Area but Employed Outside	1,534	78.5
Living and Employed in the Selection Area	419	21.5



Map 4-12: Downtown Salem Bicycle Facilities



Map 4-13: Downtown Salem Transit Network



Map 4-14: Downtown Salem Infrastructure

Map 4-15: Fatalities and Serious Injuries from Crashes in Downtown Salem, 2016-2020 (Source: ODOT)

District 2: West Salem

Wallace Road acts as the main thoroughfare for west Salem linking the Willamette River Bridges to the roads that access most of the housing in the area. The Rosemont interchange on Highway 22W also allows access to the residential areas and the Edgewater Street commercial district. The area's population of just over 27,888 (2017) works predominately on the eastern side of the Willamette River, whether that is in Salem-Keizer or outside the metropolitan area. As such, the volumes on the Willamette River Bridges are quite high. In 2019, the average daily volume was 95,976, up from 88,808 in 2006. There was a decrease with COVID-19 related stay-at-home orders, but traffic has rebounded in 2021 and 2022. (***See also Figure 5-6 in Chapter 5***) Highway 22 provides for the major east-west movement between the coast, the valley, and central Oregon with around five to six percent of the traffic being trucks carrying goods.

Currently the area is served by four bus routes – three circulating the neighborhood, and one that provides service to downtown from Capitol Manor via the West Salem Transit Center. The West Salem Transit Center provides connection between these routes as well as the Yamhill County Area Transit (YCAT) service to McMinnville that operates ten times a day (five each way). Transit operations in the area are hampered by the topography, settlement patterns (single family dwellings), and a road network that lacks sidewalks and does not provide multiple parallel routes.

Bicycle lanes are on many of the major roads; although, there are significant gaps. The terrain of West Salem results in roads with inclines that can be challenging to novice or occasional riders. An older, multi-use path runs along the northern edge of Highway 22W from Wallace Marine Park past the SKATS boundary west of Highway 51 and provides a connection to Rickreall and Dallas. The Union Street bicycle/pedestrian bridge connects from Wallace Road to downtown via Riverfront Park and provides an environment free from motorized vehicles. While sidewalks are present along segments of the regional roads in the area, they are usually not contiguous. In 2022, ODOT finished a project to upgrade the ramps along Wallace Road from Michigan City Lane to Edgewater Street to the current Americans with Disability (ADA) standards and install rapid rectangular flashing beacons at five crosswalks. Also included were pedestrian countdown signals, reflective back plates for signals, and repaving the road.

Until 2010, Highway 22W from the Willamette River Bridges to Highway 99W was designated by ODOT as a "Safety Corridor." The designation was removed after the number of crashes on that section declined. There were 1,219 total collisions including 11 fatalities between 2016 and 2020 (the latest data that is available) on the roads in this district. The top three crash locations in this time period were Wallace Road at Glen Creek Road, OR 22W at 52nd Avenue, and Wallace Road at Taggard Drive.

Employment in West Salem is concentrated in the southeastern section of the area located along Wallace Road and Edgewater Street. Typical employment is retail or service with some small-scale industrial uses west of Wallace Road and north of Edgewater Avenue. Employment elsewhere is limited with some schools but no large

employment centers. The majority of attached multi-dwelling housing is located along Wallace Road and in the 'Edgewater' district generally bounded by Rosemont Avenue, 8th Street, the remainder of the area is primarily single detached dwellings.

As shown in **Table 4-7**, over 93 percent of the people living within this area work in another part of Salem-Keizer or outside the area, and conversely, over 81 percent of those employed within West Salem live elsewhere. The existing orientation of the road network essentially funnels all traffic onto OR 22W or OR 221 (Wallace Road) and then across the Center and Marion Street bridges, resulting in capacity issues during periods of peak demand. Traffic across the bridges was increasing until 2020, when demand was reduced due to COVID-19 and the move to work-from-home for many employees. In 2021 and 2022 there has been an uptick in bridge traffic, but currently still less than in 2019. The Travel Time Index (TTI) between Wallace Road at Michigan City Lane and Marion Street at Summer Street for weekday AM and PM peak periods is shown in **Table 4-8.**[22]

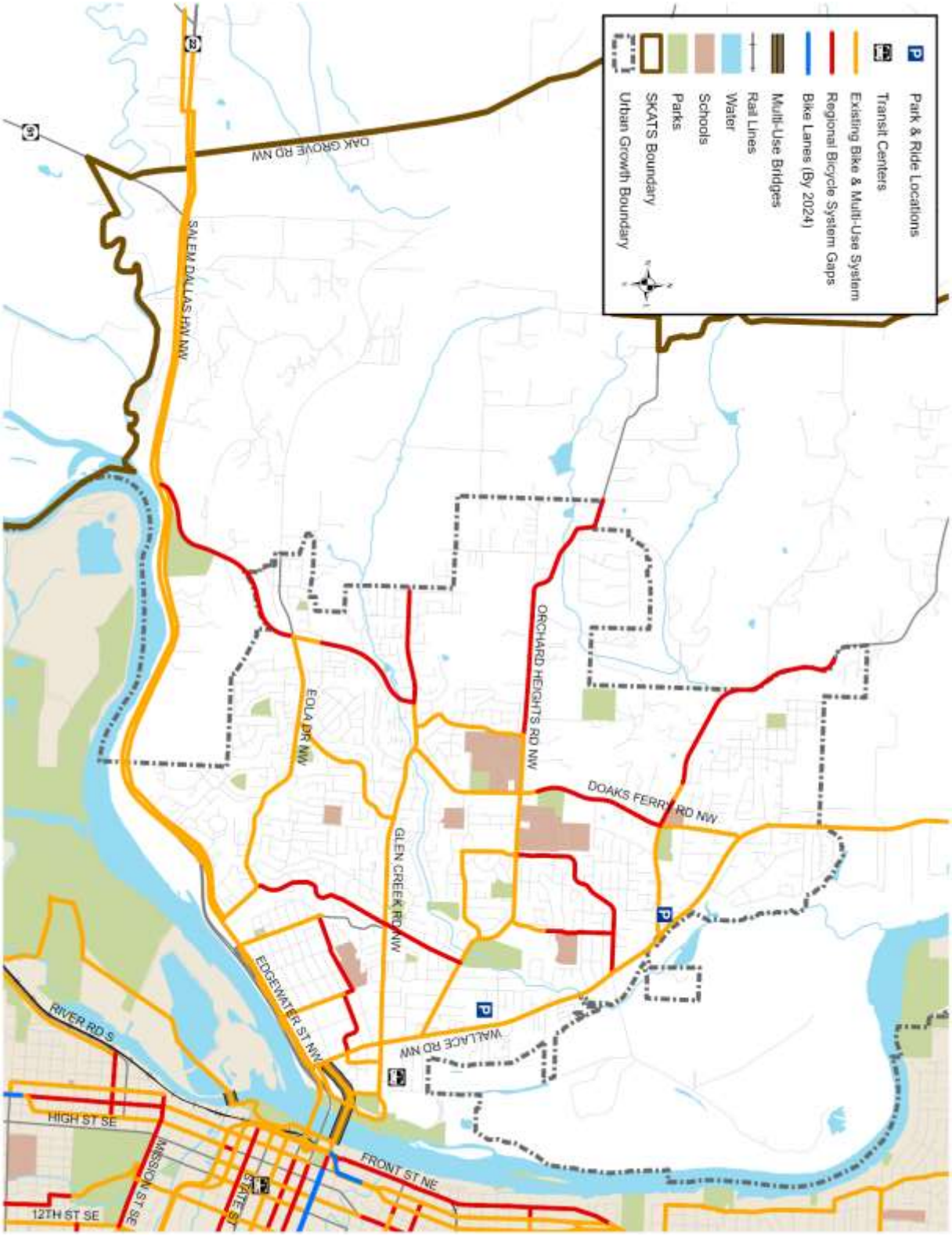
Table 4-7: Inflow/Outflow Counts of All Jobs in West Salem for All Workers in 2019 (U.S. Census Bureau)

Worker Totals and Flows	Count	Percent
Employed in the Selection Area	5,403	100.0
Employed in the Selection Area but Living Outside	4,411	81.6
Employed and Living in the Selection Area	992	18.4
Living in the Selection Area	14,328	100.0
Living in the Selection Area but Employed Outside	13,336	93.1
Living and Employed in the Selection Area	992	6.9

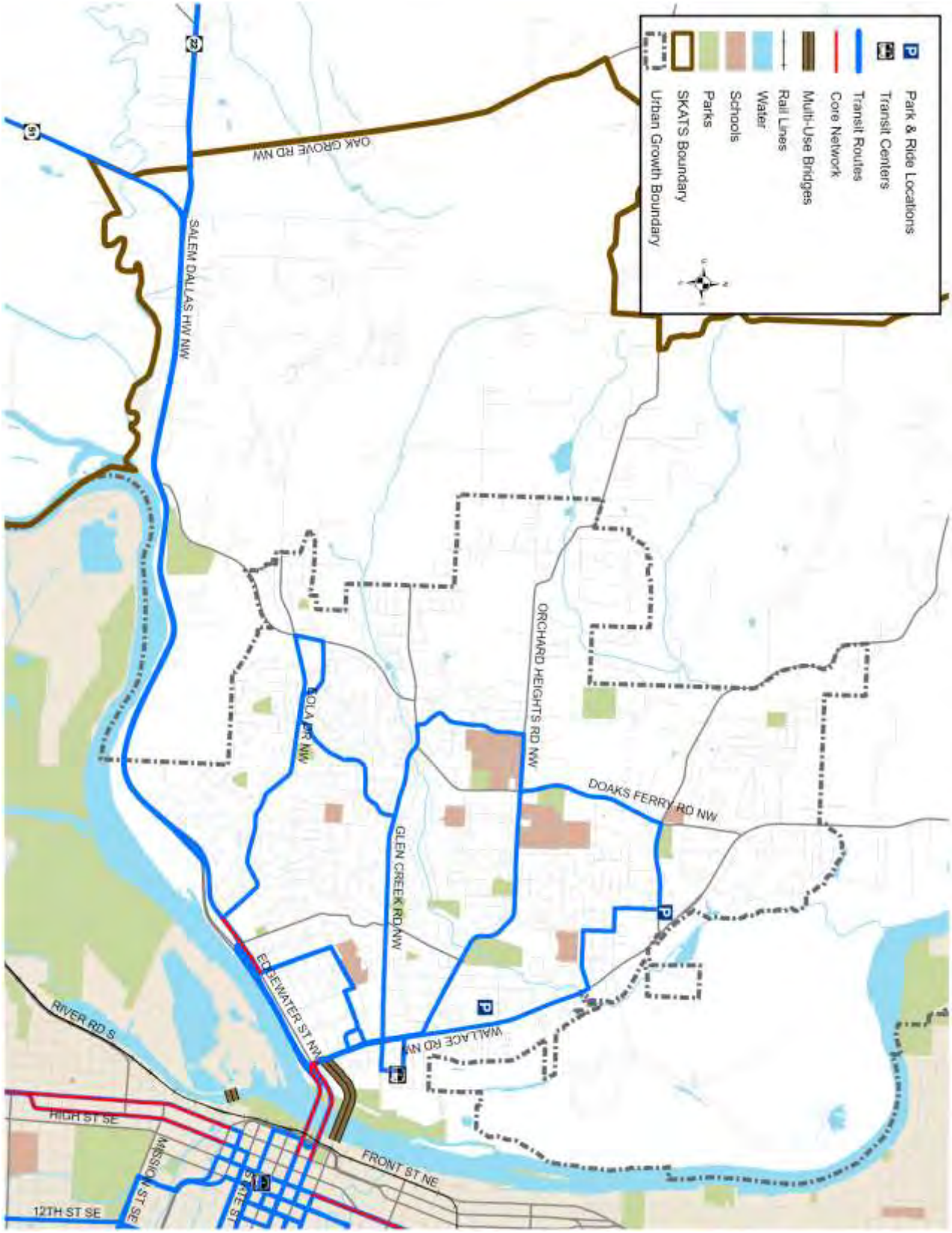
Table 4-8: Travel Time Index on the Wallace-Marion Corridor, Weekdays 2016-2022 (INRIX, RITIS)

Weekdays	2016	2017	2018	2019	2020	2021	2022
To Downtown AM (7a-8a)	1.27	1.3	1.24	1.22	1.06	0.99	0.95
To Downtown PM (5p-7p)	1.17	1.18	1.16	1.18	1.13	1.09	1.04
From Downtown AM (7a-8a)	1.01	0.98	0.98	0.97	0.99	1.01	0.97
From Downtown PM (5p-7p)	1.38	1.34	1.36	1.4	1.24	1.08	1.03

[22] Travel Time Index (TTI) is the ratio of peak period travel time to free-flow speeds. If it takes 15 minutes to travel a corridor in free-flow, a TTI of 1.27 means it would take just over 19 minutes. For more information on the TTI and other operational results on this corridor see: https://skats-mwvcog.hub.arcgis.com/pages/congestion-management

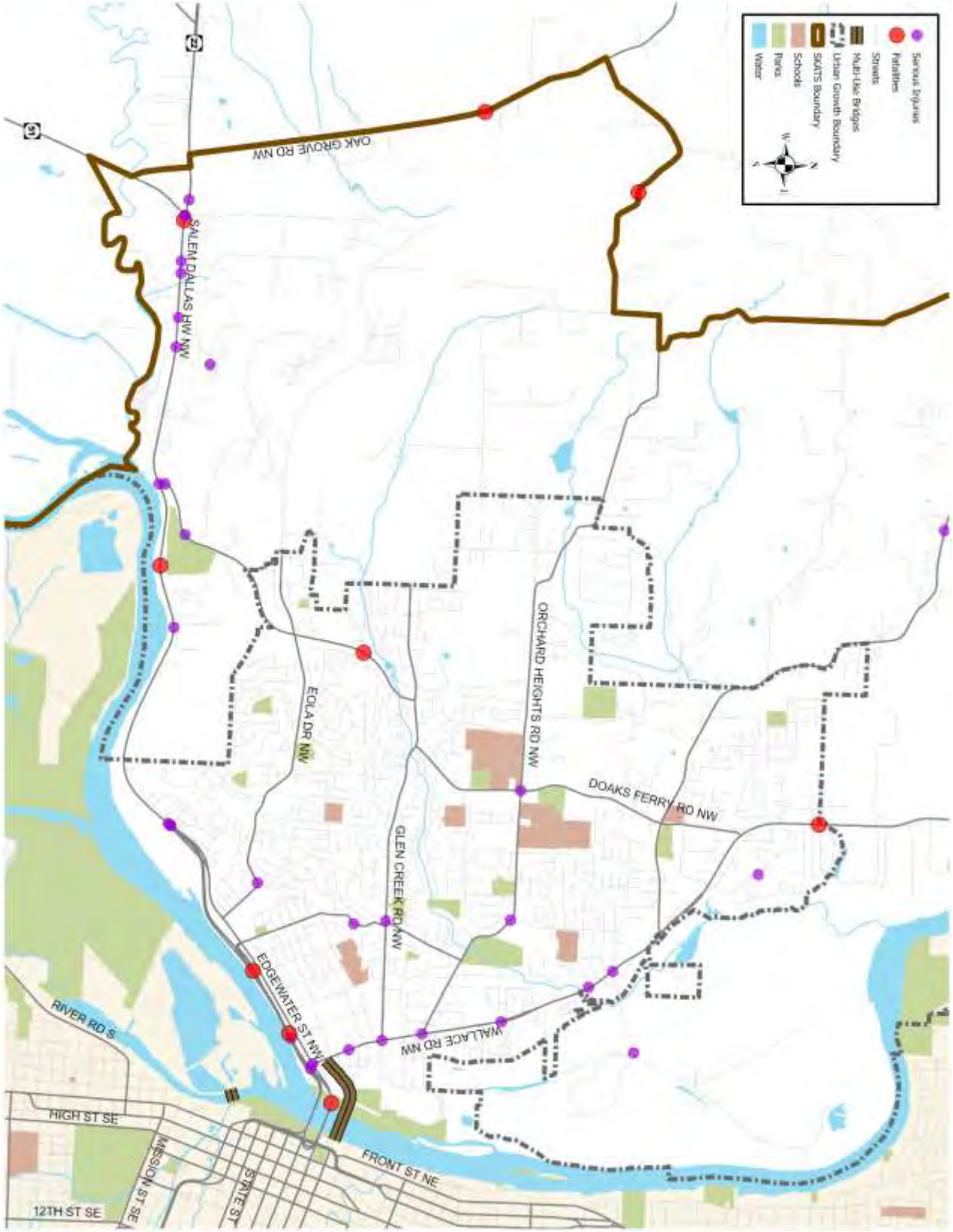


Map 4-16: West Salem Bicycle Facilities



Map 4-17: West Salem Transit Network

Map 4-18: West Salem Infrastructure



Map 4-19: Fatalities and Serious Injuries from Crashes in West Salem, 2016-2020 (Source: ODOT)

District 3: Keizer

River Road North and Cherry Avenue are the major roads connecting Keizer with Salem. Lockhaven Road and Chemawa Road provide for the east-west movement from River Road to an interchange at I-5. Salem Parkway runs northeast to southwest to provide additional capacity linking I-5 to central Salem along the southeastern boundary of Keizer.

Transit service is focused, for the most part, on the arterials. Opened in 2013, the Keizer Transit Center at Keizer Station provides a more customer friendly environment to wait and transfer to the buses. In addition, it includes a park-and-ride lot for commuters. Keizer is served by five routes including two that provide service to eastern Salem, one circulator, and two that go to downtown Salem.

Several roads on the regional system in this area have bike lanes and sidewalks, but there is also a significant gap in bicycle lanes along a crucial section – River Road between Chemawa Road and the southern limits of Keizer. The lack of continuous north-south streets results in bicyclists traveling out-of-direction to continue their journey. The Willamette Valley Scenic Bikeway uses Windsor Island Road, Shoreline Drive, Manbrin Drive, and Cherry Avenue as part of its path between Champoeg State Park (south of Wilsonville) and Eugene. Gaps in the sidewalk network, particularly on collector and local streets, have been identified by Keizer and will be constructed as funds are made available. Keizer also funded a study to determine where missing ADA compliant curb ramps were along the major streets. A study examined access to the Kroc Center in the Salem Industrial area from Keizer and how to safely move pedestrians and bicyclists across Salem Parkway to get there, as well as connecting to the larger bicycle system.

Along the eastern edge of the district is the Portland & Western Railroad. As of 2018, it operates up to six trains per day along the line. No rail sidings exist to service properties along the rail line in Keizer.

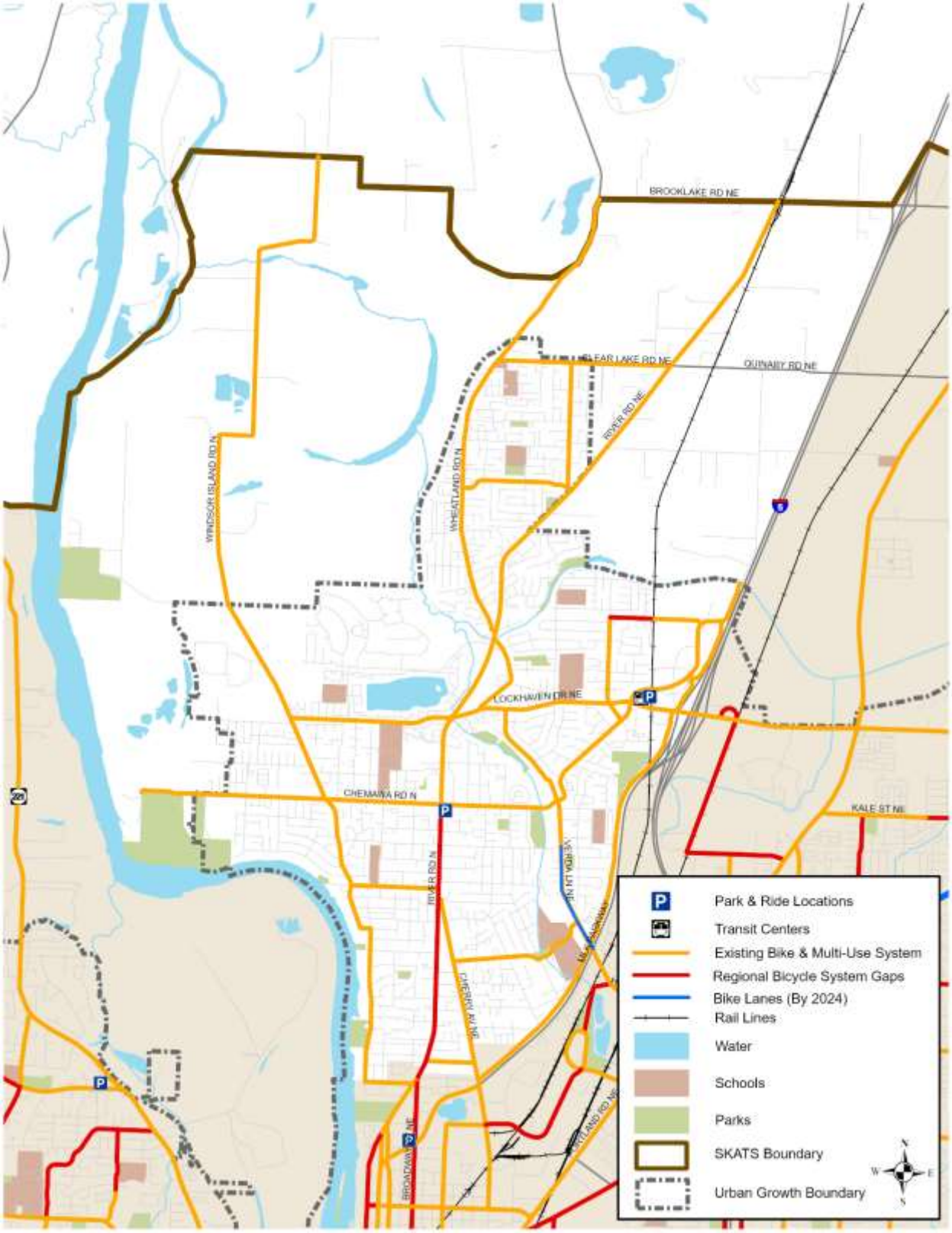
Within Keizer, there are no large generators of freight traffic, nor any large concentrations of employment in the area except for Keizer Station. Most of the land within Keizer is devoted to single detached dwellings with a limited industrial area mainly in the southeast quadrant. In 2019 Keizer adopted the River-Cherry Overlay District to create a mix of land uses in close proximity, that supports people walking and biking, as well as driving. There are many smaller businesses and office/retail centers located along River Road while Keizer Station has a number of big box retailers. Keizer Station is also home to the baseball stadium, which has events mainly in the summer months. The Keizer Little League Park generates heavy summer traffic.

Table 4-9: Inflow/Outflow Counts of All Jobs in Keizer for All Workers in 2019 (U.S. Census Bureau)

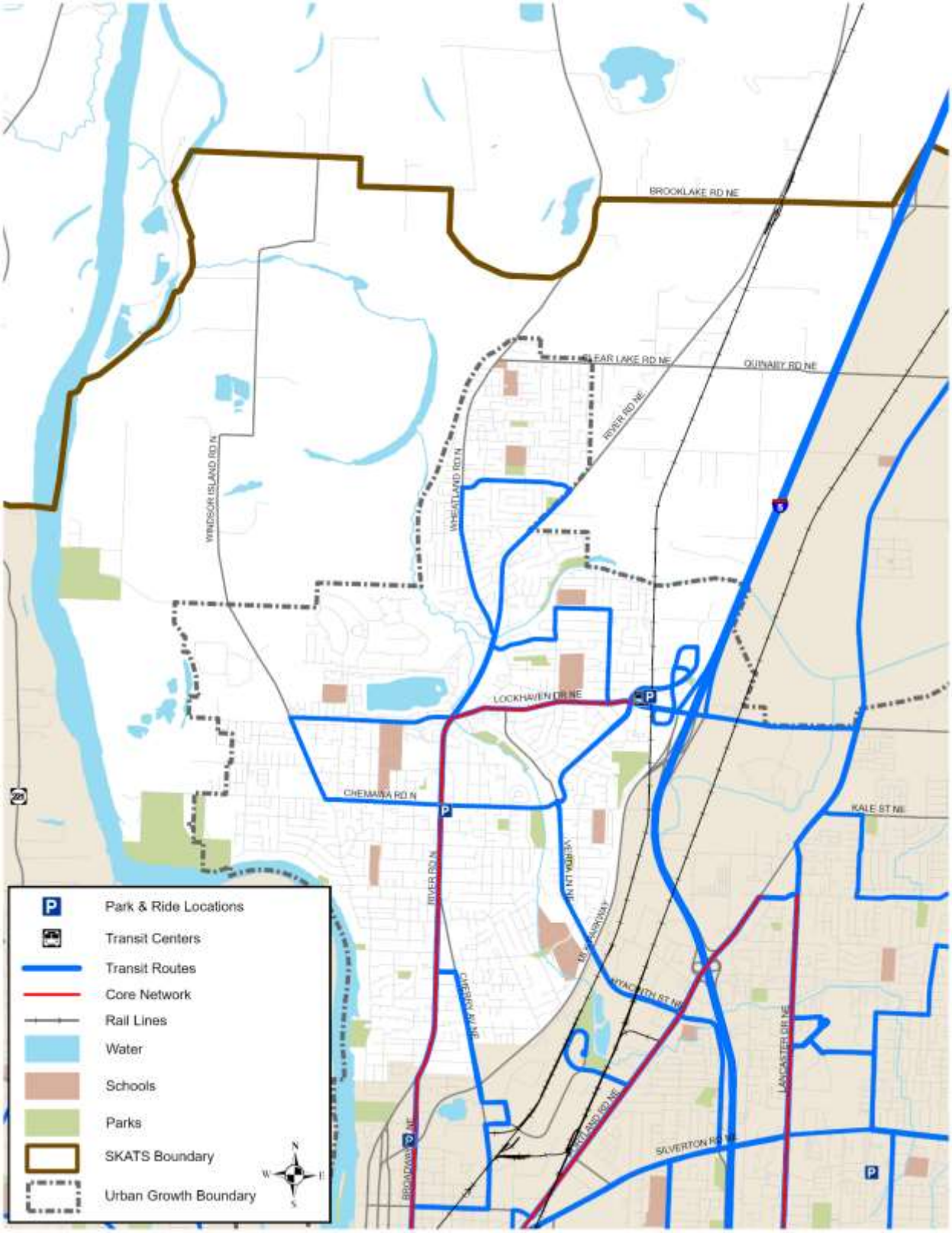
Worker Totals and Flows	Count	Percent
Employed in the Selection Area	8,641	100.0

Employed in the Selection Area but Living Outside	7,118	82.4
Employed and Living in the Selection Area	1,523	17.6
Living in the Selection Area	17,498	100.0
Living in the Selection Area but Employed Outside	15,975	91.3
Living and Employed in the Selection Area	1,523	8.7

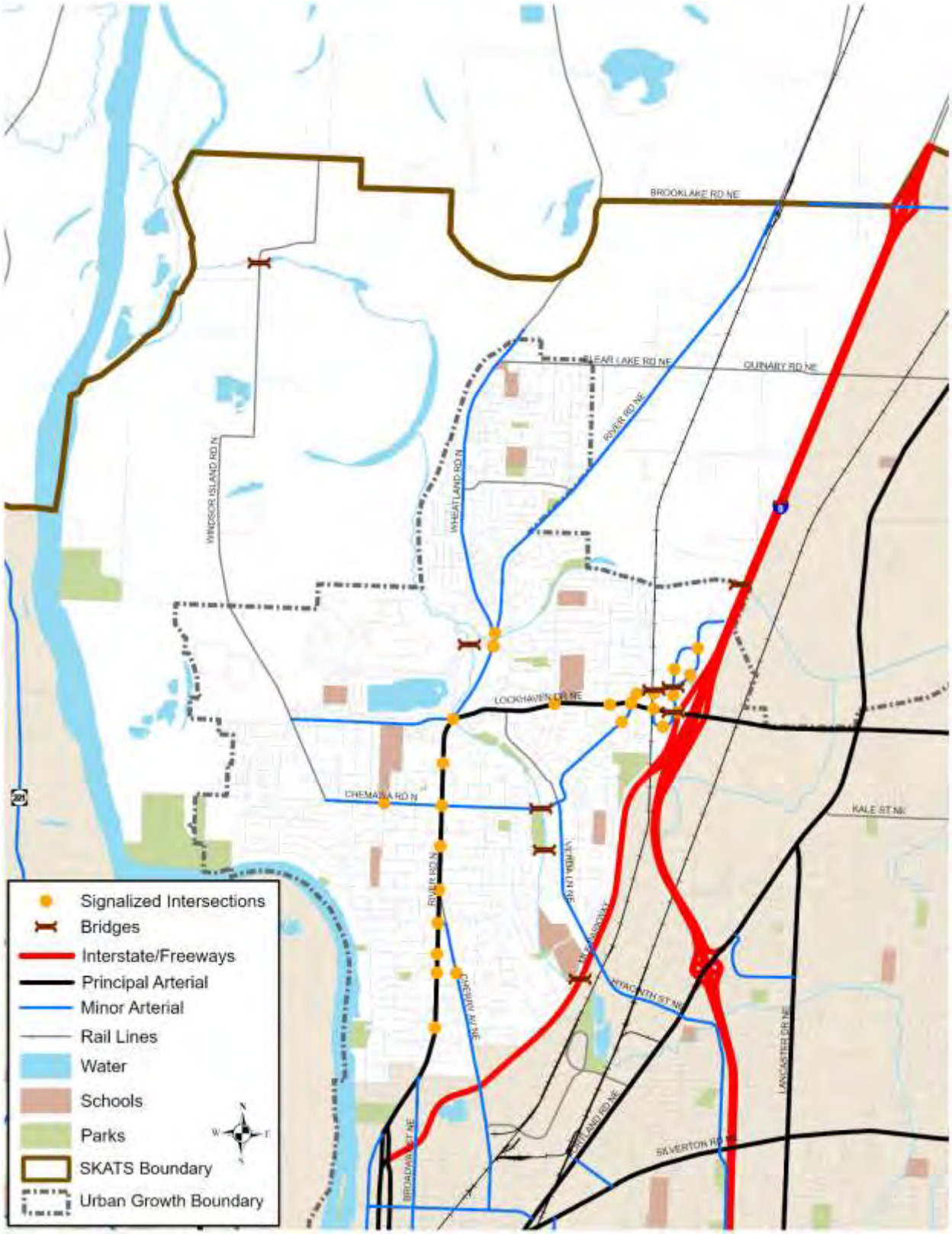
The majority of collisions in this area have been along River Road North from the southern city limits to Lockhaven Drive and along Lockhaven Drive/Chemawa Road between I-5 and River Road. From 2016 to 2020, there were 1,543 collisions, including 10 fatalities.



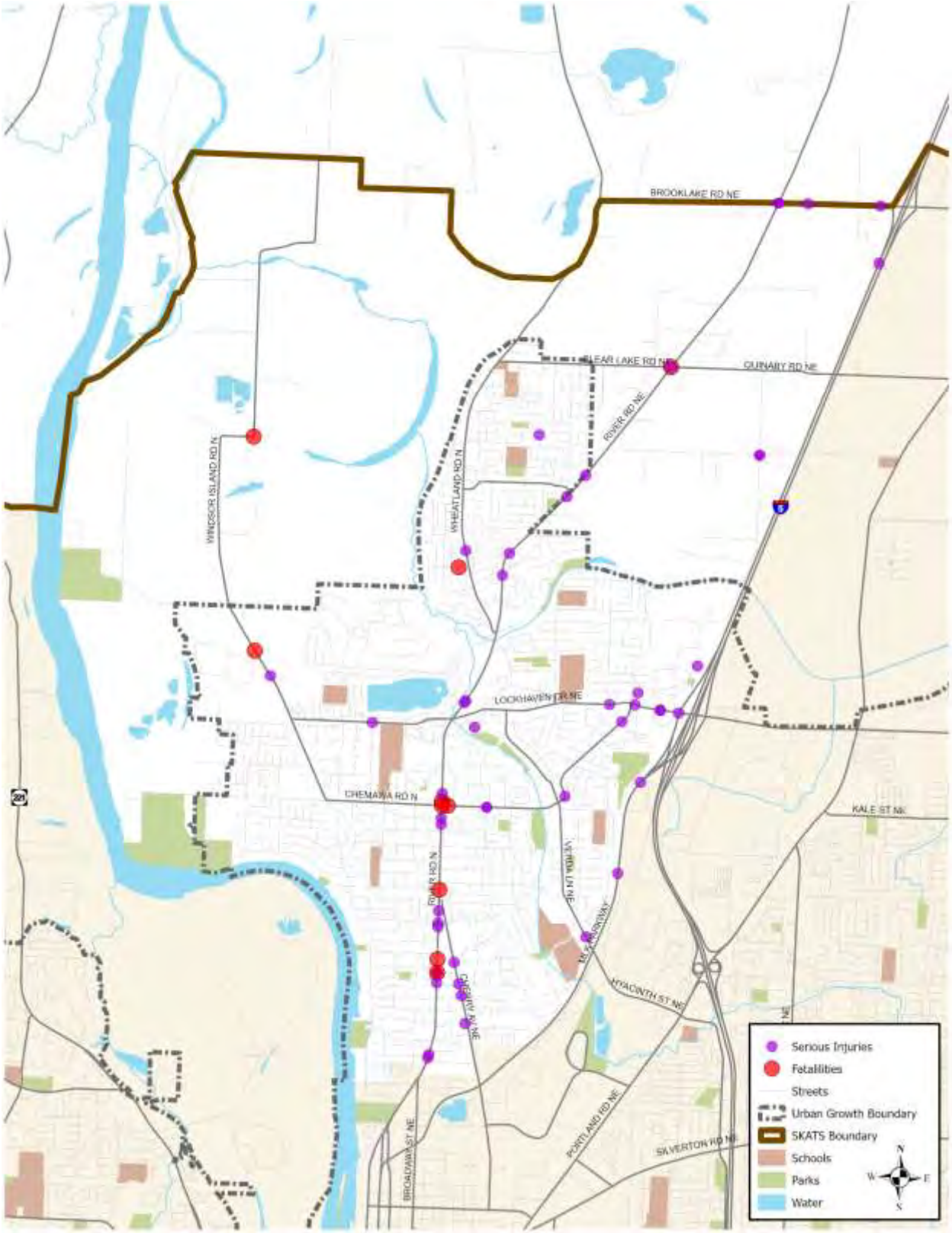
Map 4-20: Keizer Bicycle Facilities



Map 4-21: Keizer Transit Network



Map 4-22: Keizer Infrastructure



Map 4-23: Fatalities and Serious Injuries from Crashes in Keizer, 2016-2020 (Source: ODOT)

District 4: East Salem

There are several important north-south arterials in this district including the Commercial/Liberty couplet north of Division Street, the Summer/Capitol couplet, Hawthorne Avenue, Lancaster Drive, Cordon Road, and I-5. East-west movements are served by Silverton Road, Market Street, Center Street, State Street, and Mission Street/Highway 22E. Portland Road provides southwest to northeast movement. East-west movement is slightly curtailed by the presence of I-5, which limits connectivity for those biking or walking.

The Kuebler Boulevard/Cordon Road/Hazelgreen Road corridor is recognized as a regionally significant circumferential route around the Salem-Keizer Urban Area. The corridor is classified as a Parkway in the Salem Transportation System Plan and an Arterial in the Marion County Rural Transportation System Plan. Marion County has designated the portion of the corridor from State Highway 22E to the intersection with Hazelgreen Road as a Throughway, as provided in Oregon Revised Statute (ORS) 374.420, to facilitate the free flow of traffic around east Salem and Keizer. The corridor has two connections to I-5, at Kuebler Boulevard and Chemawa Road and functions as the emergency detour route when incidents close major regional facilities such as I-5, Portland Road, and Lancaster Drive. It provides a regional alternative to travel on I-5 and provides relief for commercial corridors such as Lancaster Drive.

This district currently is fairly well served by public transit. There are two major generators/attractors of transit trips: Chemeketa Community College and Willamette Town Center. In addition, there are two major park-n-ride locations: one on Airport Road and the other at Market Street and Hawthorne Avenue. The Airport Road facility was developed mainly for State workers to avoid parking in downtown Salem; but with the State not providing subsidized bus passes for employees, it remains to be seen how ridership will be impacted. The Market Street facility serves both downtown workers as well as those traveling north to Wilsonville or the Portland Area either by carpool or by the Cherriots/SMART 1X route. At Chemeketa Community College there is an existing space for several bus routes to meet. Future plans are for developing this, in cooperation with the College, into a facility on the scale of a transit center with the attendant amenities.

While there are roads with marked bicycle lanes and routes, there are also significant gaps in both the north-south and east-west movement. The region's first 'bicycle boulevard,' which extends along Chemeketa Street from 24th Street to 12th Street, provides a route that is slower paced and has less vehicular traffic than either State Street or Center Street to access downtown Salem. An additional bicycle boulevard has been designated following Winter Street north from downtown Salem to Cherry Avenue to provide a route to Keizer.

Both rail lines transect this district. A connection between them exists in the area near Salem Industrial Drive located between Salem Parkway, Portland Road, Cherry Avenue, and Hyacinth Street.

The main industrial sections are located within the Salem Industrial Area, which is bounded by Portland Road, Cherry Avenue, Salem Parkway, and extends north of Hyacinth across I-5 toward Indian School Road. This area has access to the two railroads, I-5 via Salem Parkway and Portland Road, and to the south via Salem Parkway. Additional industrial land is located off Hawthorne Avenue near State Street and in the Salem Business Campus located on Gaffin Road between Highway 22E and Cordon Road.

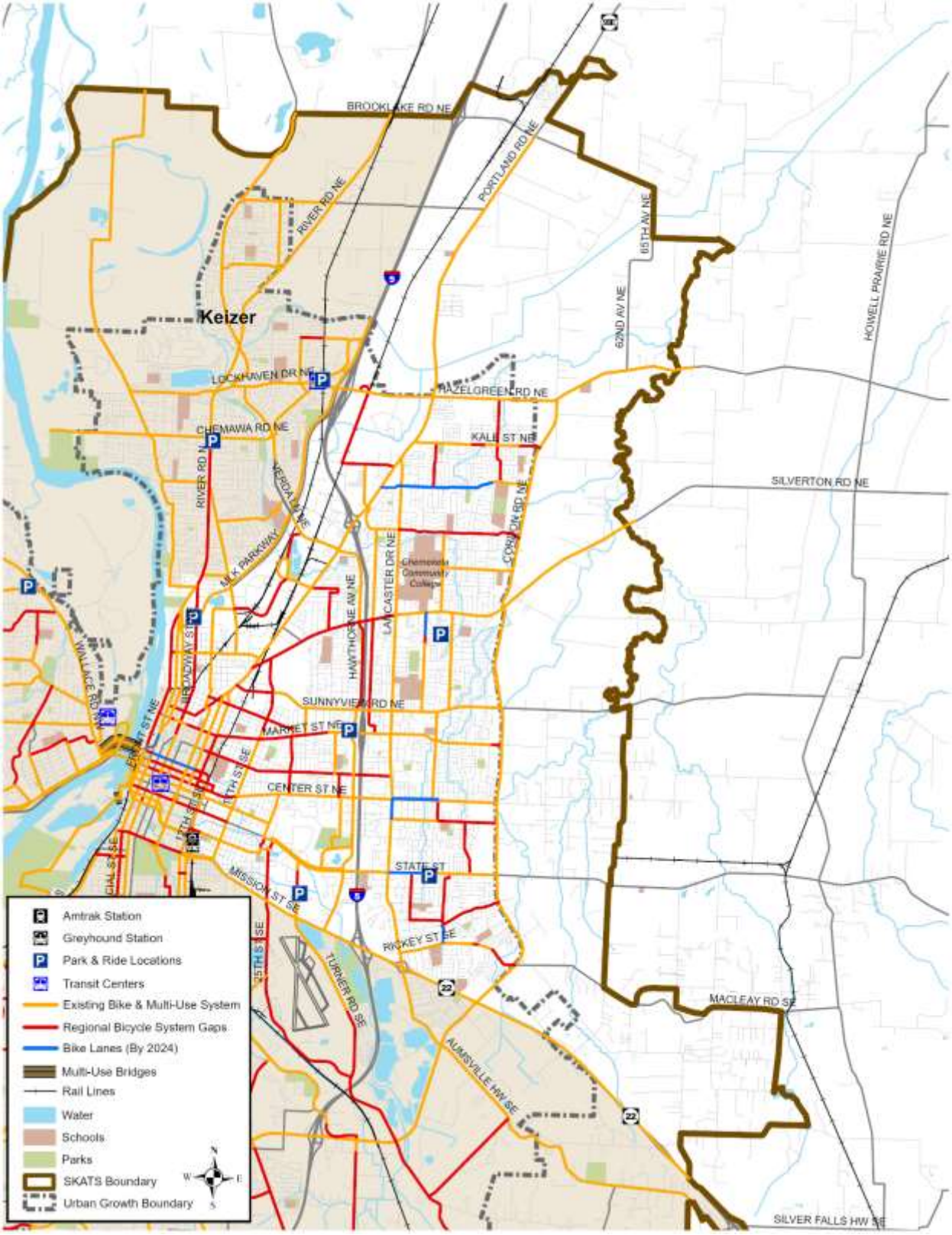
Major employment centers include the Willamette Town Center area, Chemeketa Community College, and the cluster of State offices along Airport Road. There is one correctional institution between State and Center Streets as well as the State Hospital. Lancaster Drive is home to a number of strip malls offering a variety of businesses between Mission Street/Highway 22E and Silverton Road. Lancaster Drive has a large number of curb cuts to allow access to the adjacent businesses. Most of these do not meet current standards and provide a walking environment that is unpleasant and unsafe. Marion County has been working to rebuild their portion of Lancaster Drive (due to the age and condition of the roadway) and is also consolidating curb cuts as feasible and ensuring that current standards are met. The majority of the remaining area is devoted to housing, predominately single detached dwellings.

Table 4-10: Inflow/Outflow Counts of All Jobs in East Salem for All Workers in 2019 (U.S. Census Bureau)

Worker Totals and Flows	Count	Percent
Employed in the Selection Area	45,996	100.0
Employed in the Selection Area but Living Outside	34,757	75.6
Employed and Living in the Selection Area	11,239	24.4
Living in the Selection Area	44,781	100.0
Living in the Selection Area but Employed Outside	33,542	74.9
Living and Employed in the Selection Area	11,239	25.1

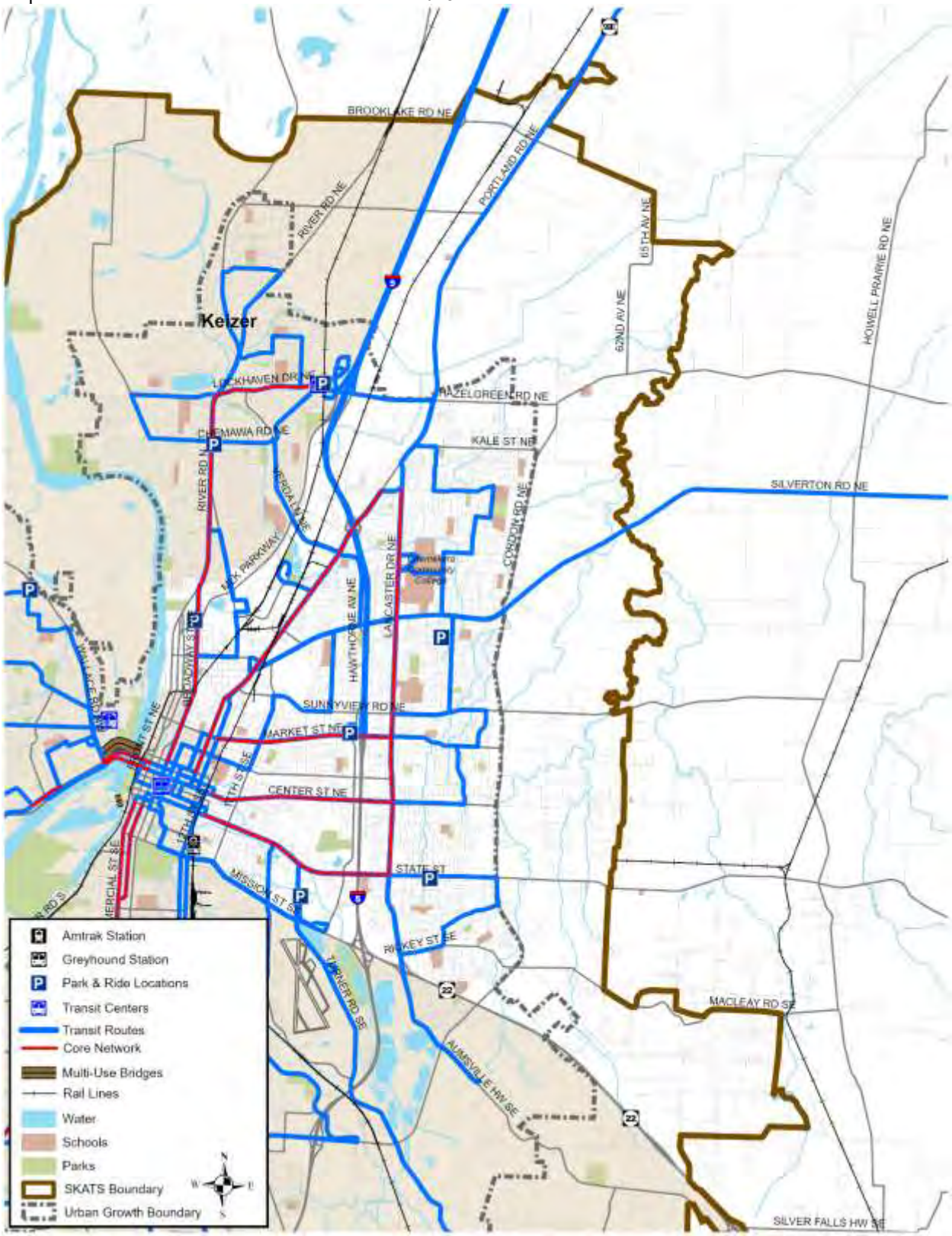
Flooding has occurred in the past in the areas near Mill and Pringle Creeks. In addition, past storms have resulted in scouring of bridge supports, requiring maintenance and sometimes replacement. Many of the locally owned bridges over Mill and Pringle Creeks are listed as vulnerable to seismic events.

This district has the most crashes in the metropolitan area with 8,372 occurring between 2016 and 2020, and 40 fatalities (double the next highest district total). The area has some of the intersections with the highest number of crashes in the region including Lancaster Drive at Sunnyview Road, Lancaster Drive at Market Street, and Lancaster Drive at Silverton Road. As shown in **Map 8-6**, these roads are within an identified Environmental Justice area.

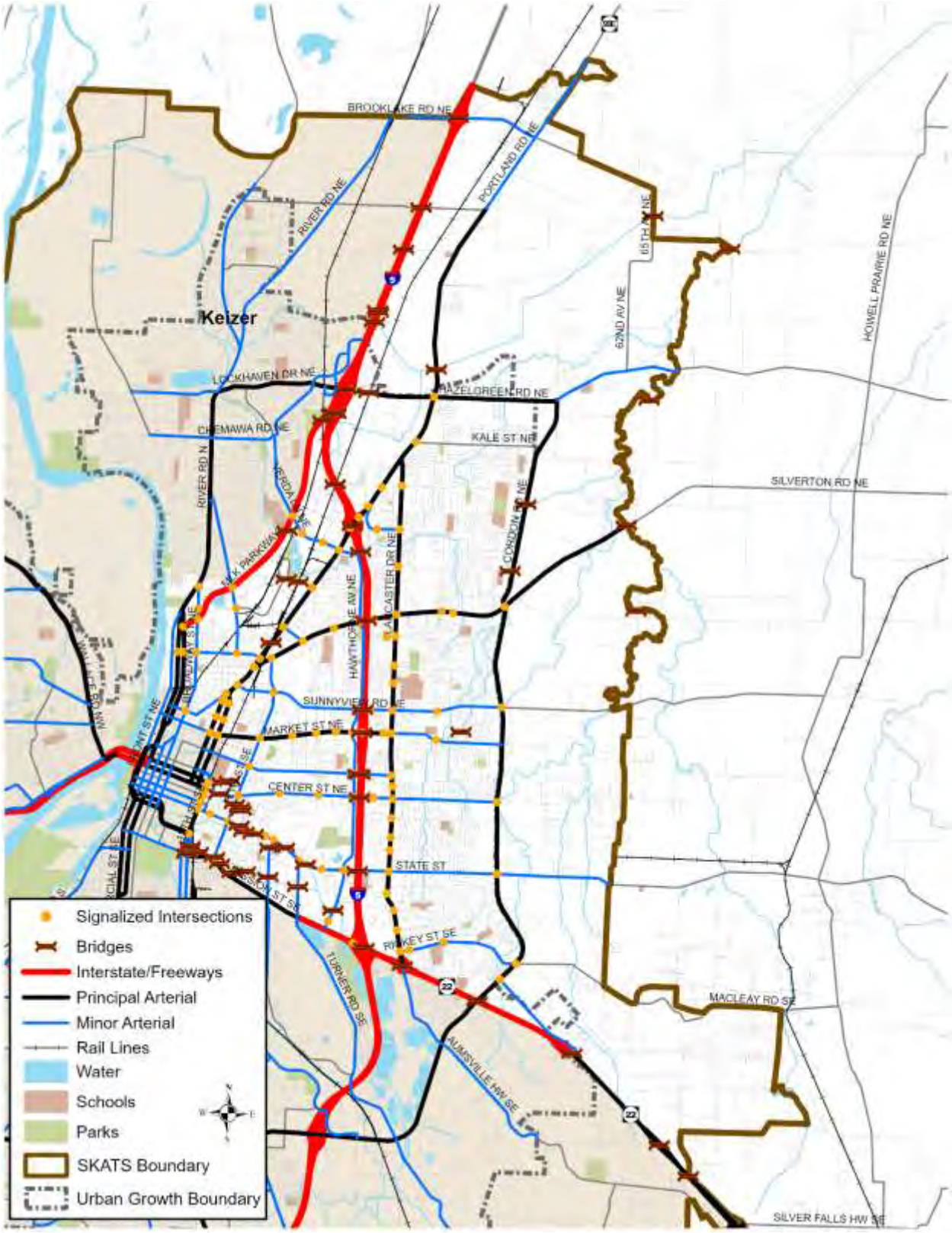


Map 4-24: East Salem Bicycle Facilities

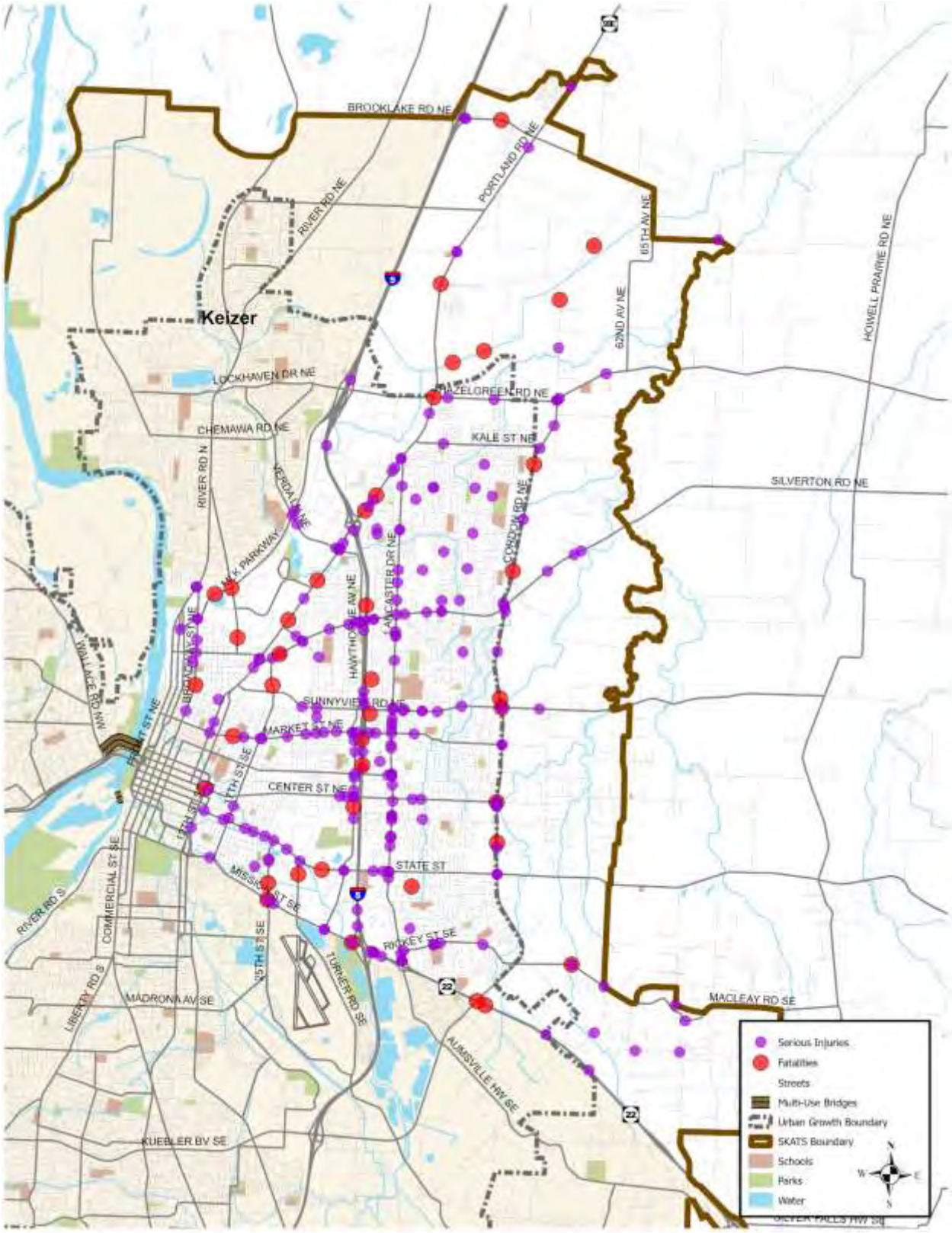
Map shows the transit network in east Salem as of 2018. Shown in red is the "core network".



Map 4-25: East Salem Transit Network



Map 4-26: East Salem Infrastructure



Map 4-27: Fatalities and Serious Injuries from Crashes in East Salem, 2016-2020 (Source: ODOT)

District 5: South Salem and Turner

River Road South, Liberty Street, Commercial Street, 12th/13th Streets, and Turner Road provide for the main north-south movement with 25th Street, I-5, and Cordon Road/Kuebler Boulevard serving traffic further east. Highway 22E, Madrona Avenue, and Kuebler Boulevard are the main east-west routes with the city of Salem slowly building another east-west route as development occurs in the southern part of the city along the Mildred/Fabry alignment. I-5 provides a connection for travel either north into the remainder of the Salem/Keizer area or beyond toward the Portland area or to the south to Albany, Corvallis, or Eugene. The south Salem area is connected to I-5 with interchanges at the south end of Commercial Street with a partial interchange and at Kuebler Boulevard with a full interchange. The city of Turner is connected to Salem via Turner Road and to I-5 via Delaney Road.

The district has several industrial areas including Fairview Industrial Park and the Mill Creek Corporate Center (MCCC), which is planned to mix distribution with industrial uses as it builds out in the future. Fairview Industrial and the MCCC have limited access to I-5 and Highway 22E. In addition, Fairview is adjacent to the Union Pacific Railroad, but like the MCCC, has no rail access. Outside of the MCCC, there are no large concentrations of employment, just smaller establishments located along Commercial Street, Liberty Road, and Mission Street.

Table 4-11: Inflow/Outflow Counts of All Jobs in South Salem for All Workers in 2019 (U.S. Census Bureau)

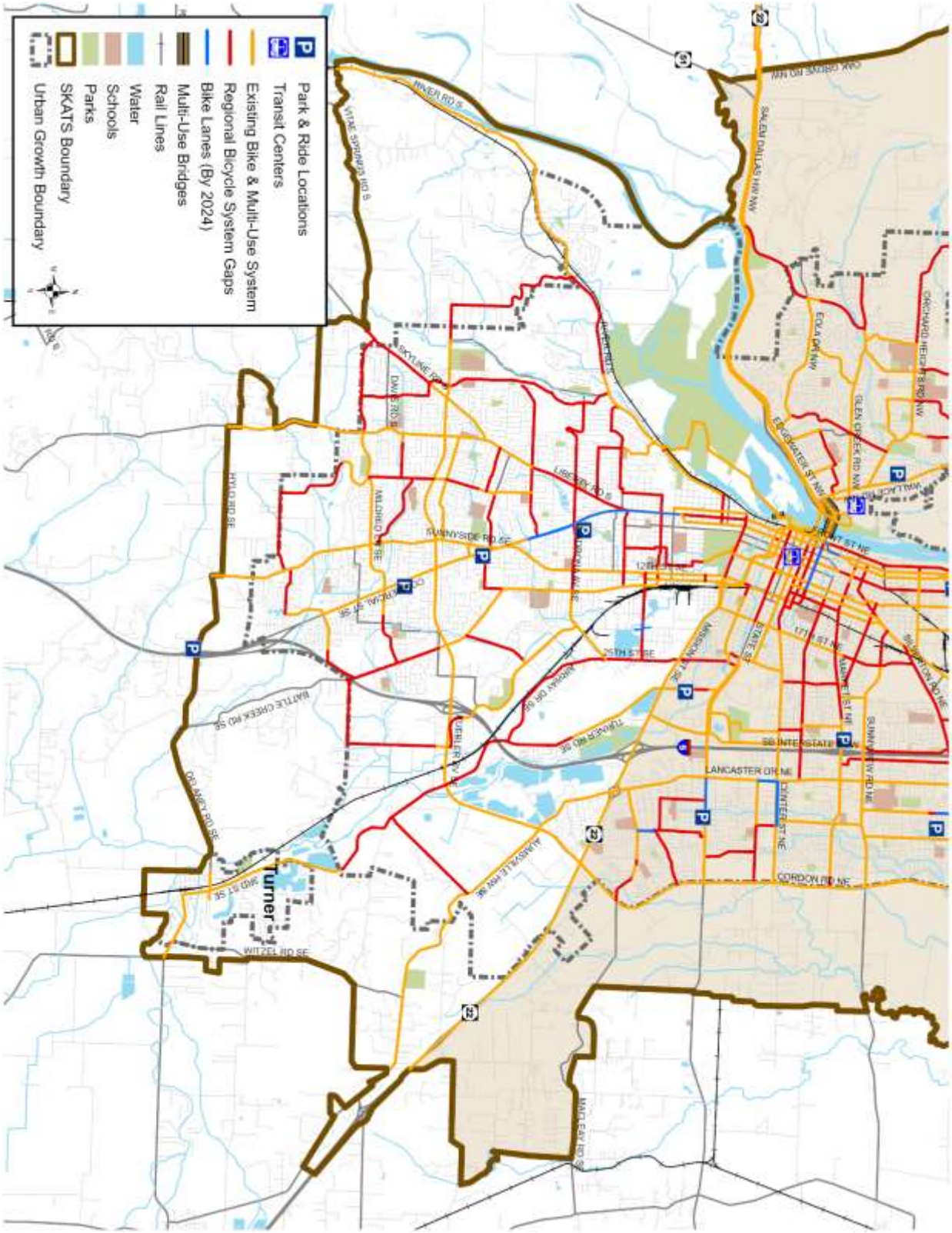
Worker Totals and Flows	Count	Percent
Employed in the Selection Area	36,395	100.0
Employed in the Selection Area but Living Outside	28,499	78.3
Employed and Living in the Selection Area	7,896	21.7
Living in the Selection Area	35,276	100.0
Living in the Selection Area but Employed Outside	27,380	77.6
Living and Employed in the Selection Area	7,896	22.4

The UP and P&W rail lines are in this district. The Union Pacific also has a rail yard located east of 12th Street to serve the needs of the region around Salem. McNary Field is owned and operated by the city of Salem to provide general aviation services. Currently, no commercially scheduled flights operate from the airport.

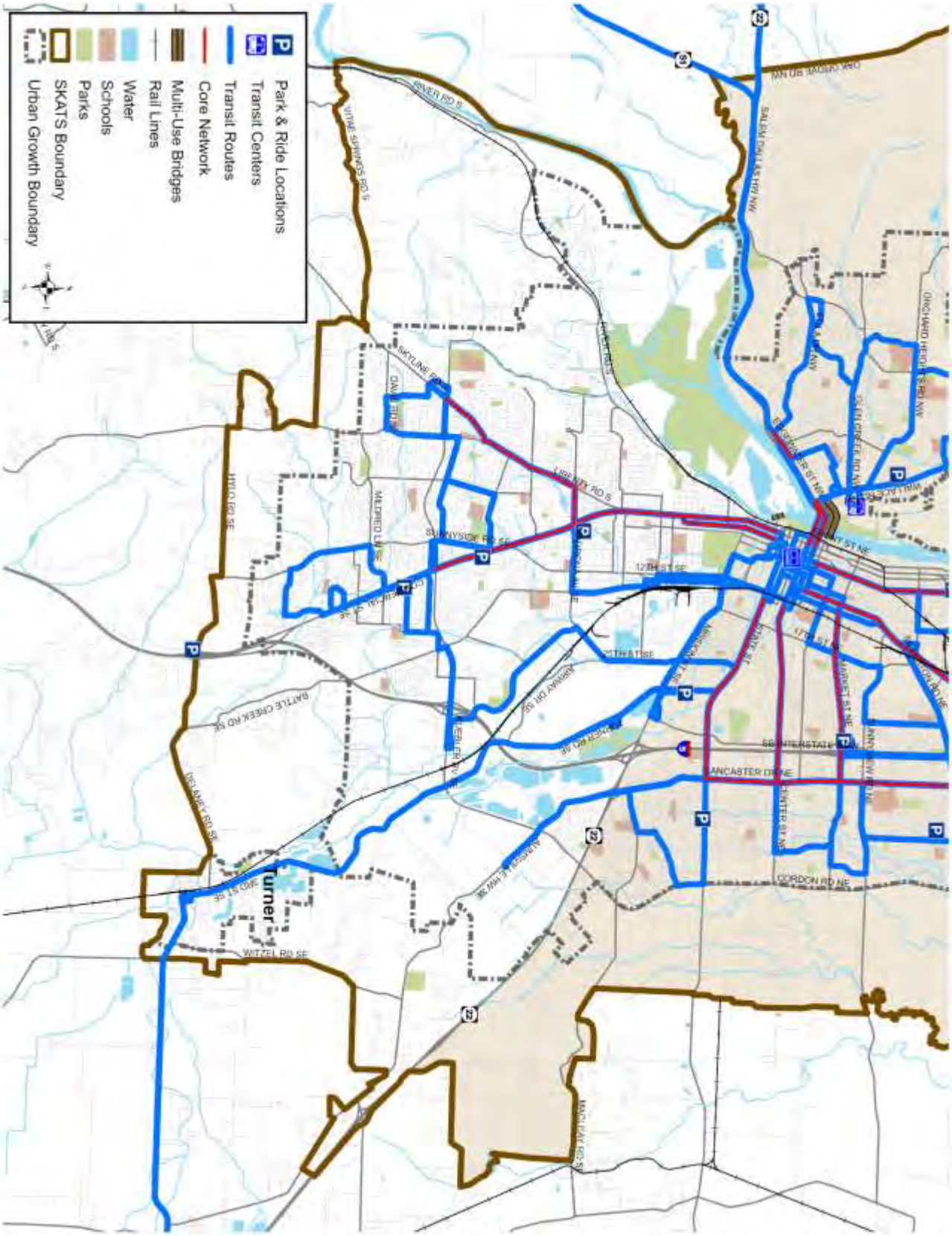
Flooding from major storms has taken place in the past in the area between 25th Street SE and 13th Street SE and McGilchrist Street SE to Mission Street. Landslides have occurred along River Road S that have closed the road for days or weeks.

Two issues reduce the attractiveness of bicycling in this area. First, the hilly terrain, especially in the western portion, inhibits many people from biking to their destination. Second, there is little straight-line connectivity to the road system (regional or not) to allow easy and continuous movement from one end to the other.

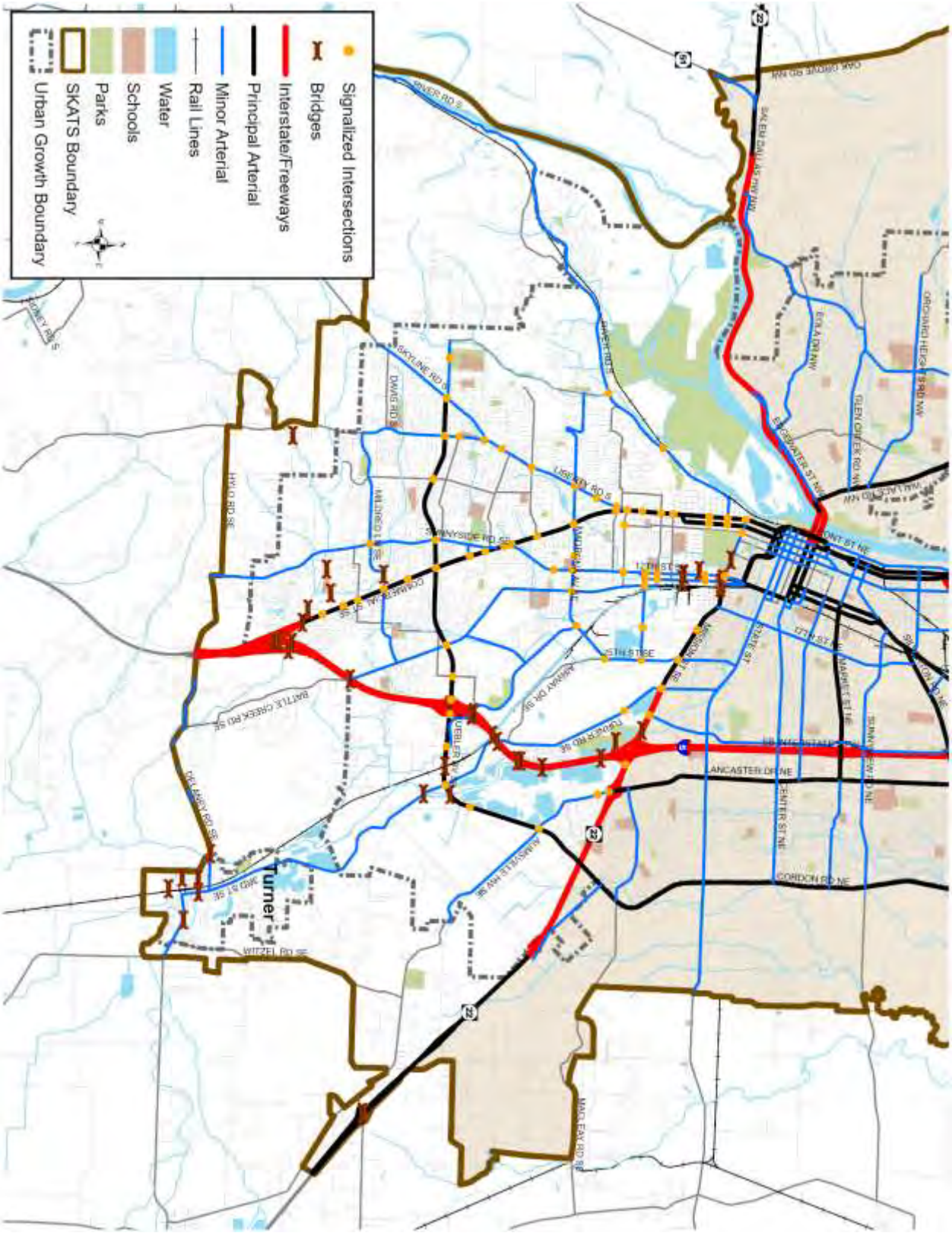
Of the 4,585 collisions between 2016 and 2020, the majority were vehicle-vehicle, and classified as non-serious injury or property damage only. There were 19 fatalities in this area. The top three crash locations were Commercial Street at Kuebler Boulevard, Commercial Street at Madrona Avenue, and Kuebler Boulevard at Turner Road.



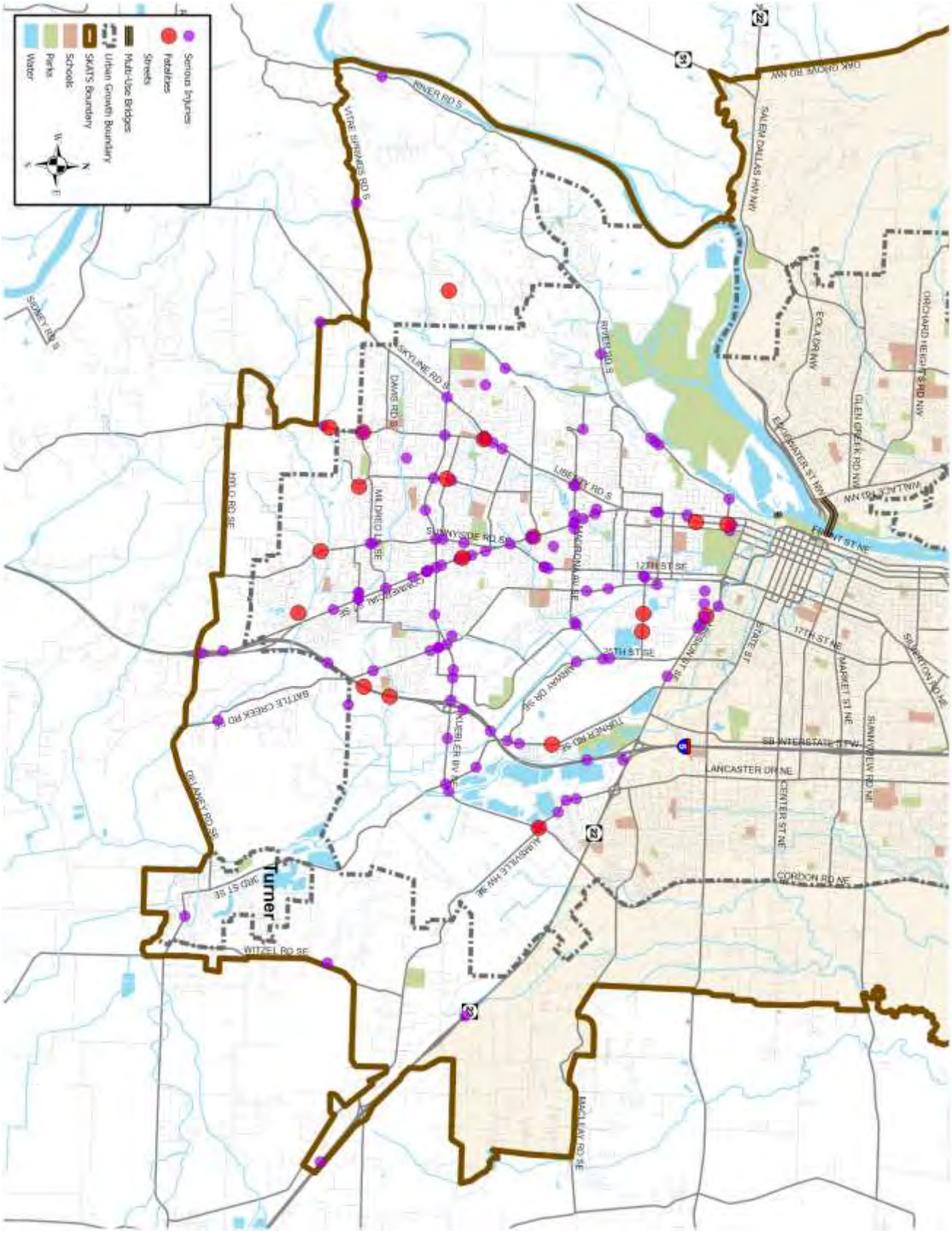
Map 4-28: South Salem Bicycle Facilities



Map 4-29: South Salem Transit Network



Map 4-30: South Salem Infrastructure



Map 4-31: Fatalities and Serious Injuries from Crashes in South Salem, 2016-2020 (Source: ODOT)

Chapter 5 – Needs, Gaps, and Deficiency Analysis and Identification

The transportation system within the Salem-Keizer area is not complete. Identification of the gaps in the system, and the identified needs are presented in this chapter. This will link the existing system with the projects proposed in Chapter 7.

As illustrated in the maps and discussion of **Chapter 4**, there are a variety of gaps and deficiencies in the existing regional system. These preclude the existing regional system from fully meeting the Goals and Objectives that were presented in **Chapter 3**. Identifying these gaps and deficiencies is the first step to addressing them with projects and programs that will allow the future regional system to meet the stated Goals and Objectives. These gaps and deficiencies are discussed in this chapter in preparation for the proposed package of projects and programs that is discussed in **Chapter 7**, linking the program of projects to the identified needs and the Goals of the Plan.

Identification of gaps and deficiencies of the regional transportation system come from many planning efforts. First, there are on-going system monitoring processes (such as the crash reporting, those associated with the Congestion Management Process [CMP], and the reporting required of local governments on road conditions as part of H.B. 2017) in place to identify areas with issues that degrade the safety or ability of the public to use the existing systems. Second, since the adoption of the Regional Transportation Systems Plan (RTSP) in 2019, there have been several planning studies for specific corridors undertaken by either ODOT or a local jurisdiction that examine needs and recommend solutions. Third, building upon the previous work to update the regional bicycle system (which identifies gaps as well as locations that may be hazardous for bicyclists) SKATS has completed an inventory of the presence of sidewalks (and gaps) along the regional corridors and streets served by Cherriots bus service. Fourth, updates to planning documents by other organizations, such as by ODOT to their *Oregon Freight Plan* (2017[1]), provide new information and analysis of their facilities and current and future needs. Finally, studies that are not primarily focused on transportation, such as forecasting the impact of seismic events, have been consulted to provide information on possible effects to the regional system. These sources help expand the understanding of the current system and identify the areas where there is either a missing component (such as sidewalk connectivity) or any facilities that may be at risk during an extreme event (such as an earthquake or flood).

Roads – Safety

The safety of all users of the regional transportation system is one of the top Goals of the MTP, especially reducing the number of fatalities and serious injuries. As illustrated in

[1] A small update is currently underway to be completed in late 2022, with a more complete update after adoption of the revised Oregon Transportation Plan and Oregon Highway Plan.

Figure 5-1, the annual number of fatalities from traveling on the region's roads has varied over the last 24 years, with five to 15 fatalities annually between 1993 and 2013 but increasing to between 16 to 21 annual fatalities from 2014 to 2020. The number of serious injuries per year has generally decreased from 1994 to 2011, increased from 2011 to 2016, and then decreased through 2020. Unofficial numbers for 2021 and mid-way through 2022 suggest an increase in fatalities and serious injuries, particularly for people walking. A similar increase has been noted elsewhere in Oregon and nationwide.

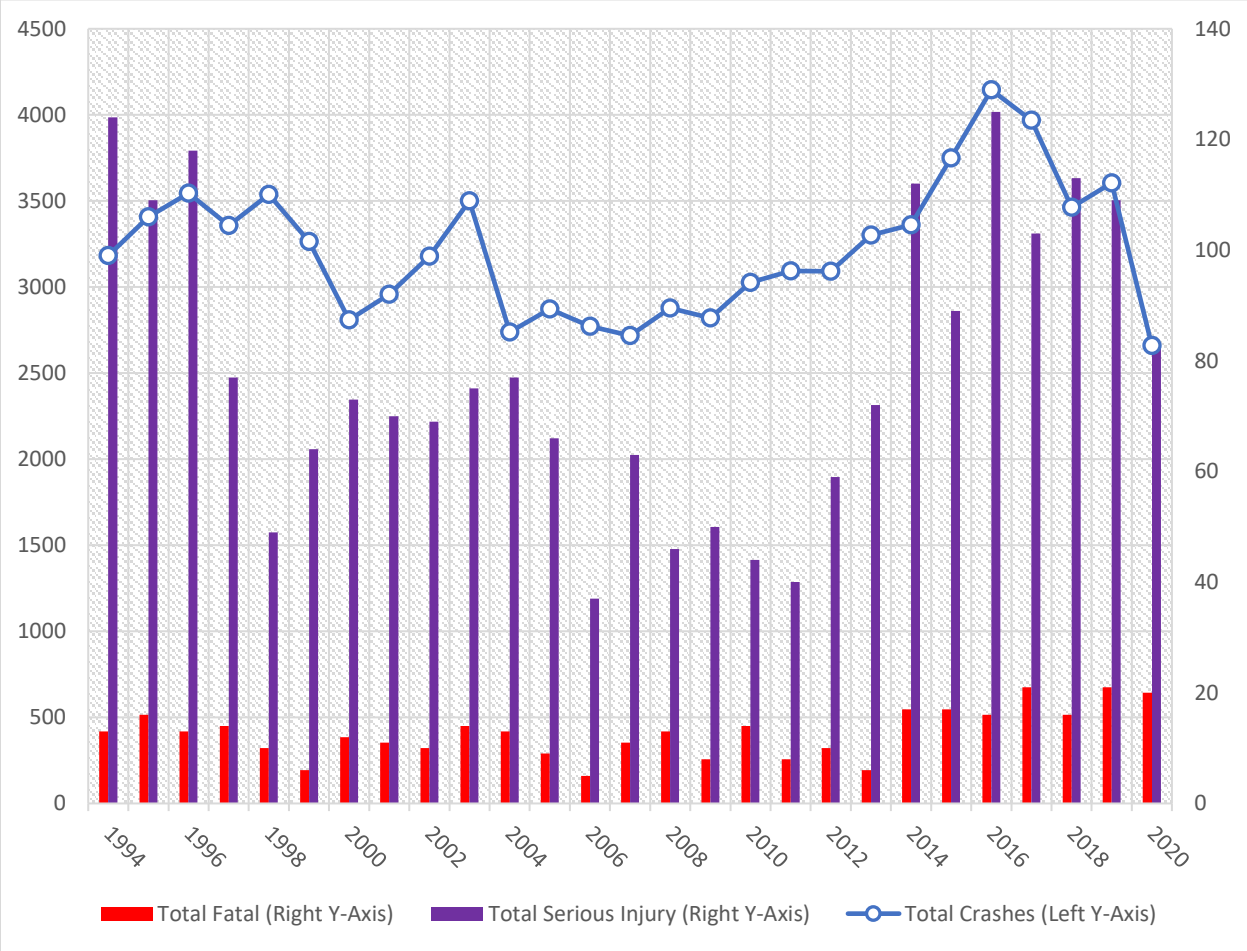


Figure 5-1: Crashes, Fatalities, and Serious Injuries within SKATS: 1994-2020 (Source: ODOT)

Shown in **Figures 5-2** and **5-3** are the fatalities and serious injuries crashes by mode for the same period. Since 2017, decreases in fatalities for people inside a vehicle have been offset by increases in fatalities of people walking or bicycling.

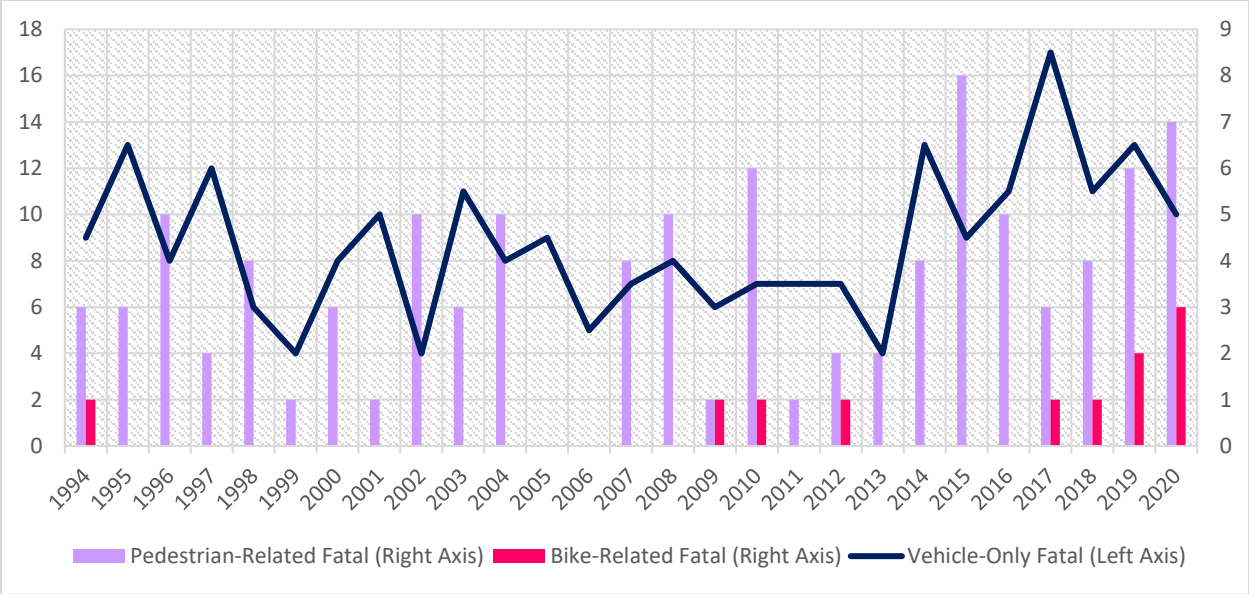


Figure 5-2: Fatalities for Pedestrians, Cyclists, and Drivers within SKATS: 1994-2020 (Source: ODOT)

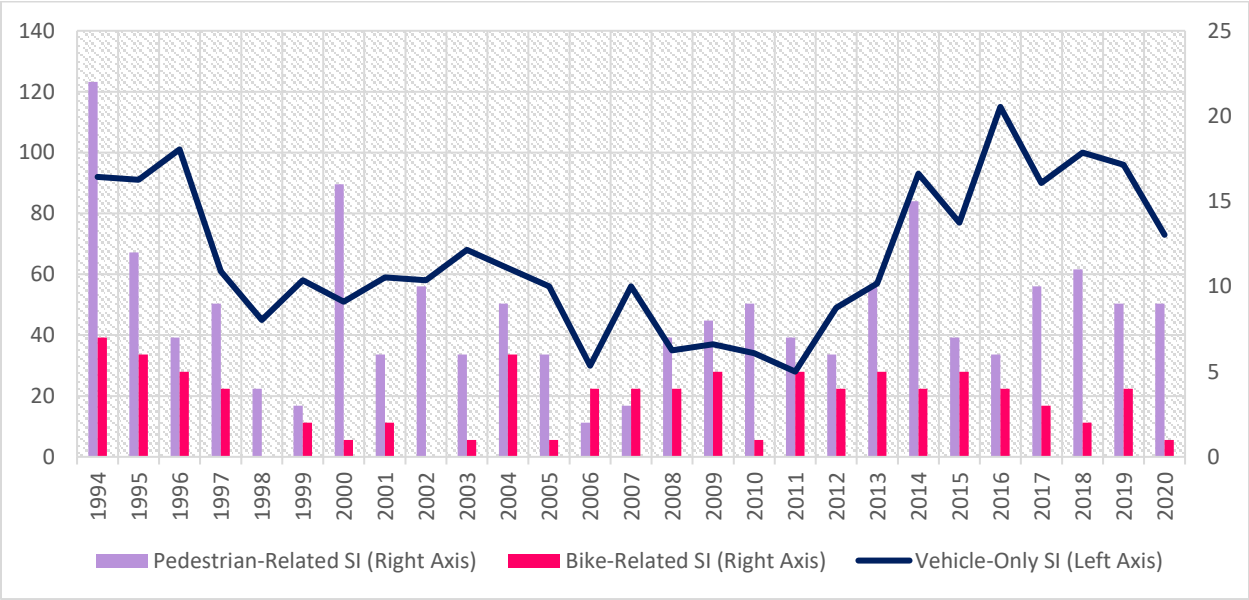


Figure 5-3: Serious Injuries (SI) for Pedestrians, Cyclists, and Drivers within SKATS: 1994-2020 (Source: ODOT)

Recent research on the cause of crashes attributes them primarily to the design of the roadway, and the signals and cues they provide to drivers about what is safe. Roads with wide, straight lanes can be seen by drivers as being more forgiving to errors, often leading to speeding and other risk taking. In addition, many roads have been built with little protection for other users of the facility, in particular bicyclists and pedestrians. The *Oregon Transportation Safety Action Plan* (TSAP) (2021) includes near-term Emphasis Areas to deter risky behaviors (e.g., impaired driving, unbelted, speeding, and distracted driving). Other Emphasis Areas include constructed or retrofitted

infrastructure; protecting vulnerable users (pedestrians, bicyclists, motorcyclists, and older users); improved systems which include law enforcement and emergency response, safety analysis, and education to planners and engineers; and commercial vehicle safety. The 2021 TSAP identifies implementation actions for each of the emphasis areas (see Chapter 6 of the TSAP) and uses the federal performance measures as one way of tracking progress.

ODOT develops an annual Highway Safety Improvement Program (HSIP). A significant program developed by ODOT is the ARTS (All Road Transportation Safety) program. The Oregon Transportation Commission (OTC) has allocated approximately $31 to $37 million per year to be used on all public roads (state and local), with projects selected by prioritizing their benefit-cost. ARTS funding has been allocated to numerous projects within SKATS since the inception of the program. In 2017, the Oregon Legislature set in statute the provision of state highway funds for Safe Route to School infrastructure projects.

At SKATS, safety projects have a high priority when considered for inclusion in the long-range plan and the Transportation Improvement Program (TIP). In support of on-going efforts to report and examine crash data supplied by ODOT and determine what efforts need to be emphasized in the future, a SKATS Metropolitan Transportation Safety Action Plan (MTSAP) was started in 2022. Future updates to SKATS MTP will include measures and projects identified in the MTSAP as appropriate.

As discussed in **Chapter 3** and **Appendix P,** SKATS is supporting ODOT's targets for the federal road safety performance measures. These targets are predicated on the assumption that programs such as ARTS and other safety projects will result in a lower number of crashes, especially those that result in a fatality or serious injury.

Crash data is used by the local jurisdictions as they identify areas for planning studies or as part of the work to define countermeasures and projects to reduce the risk of injury or death to the traveling public. Refer to the maps of *Fatalities and Serious Injuries from Crashes* presented in **Chapter 4** for an overview of where the most serious crashes have occurred in the region over the last five years.

Roads and Bridges – Preservation

The Regional Road System is composed of approximately 255 lane-miles of roadways with a functional classification of minor arterial or higher. No official estimate of the replacement value of these roads has been produced; however, protecting this sizeable investment is a goal and objective of this Plan, as it is typically much less costly to maintain a roadway or bridge than to completely replace it.

Each of the jurisdictions are responsible for operating and maintaining the roadways and bridges they own. To do this they primarily rely on State Highway Funds that are distributed by ODOT, but may also use local funds (e.g., transportation bonds funded with property taxes). However, due to the increasing efficiency of vehicles (which decrease

the amount of fuel sold[2]) and even considering that the state fuel tax has been raised 14 cents since 2009 (and could be raised another two cents by 2024 if ODOT meets the accountability targets, as specified in state law passed in 2017), the costs for preserving the road system continues to rise and use up the majority of fuel taxes received by the local jurisdictions. Add to this the increases in construction costs during periods of economic expansion along with general inflationary increases and the purchasing power available from the funds received from the fuel tax (and other sources) is diminished over time. This results in the jurisdictions either lowering their standards of acceptable conditions, deferring maintenance, or finding additional funds (or some combination of the three). This situation will likely be exacerbated in the future should vehicles become more efficient (if fossil-fuel powered) or not subject to the fuel taxes (in the case of electric vehicles[3]). ODOT estimates that to maintain current pavement conditions on the state highways and NHS, approximately $273 million per year is needed. Actual investment is lower, which will slowly reduce the percent of pavement rated as "Good" and increase the percent rated as "Poor". For bridges, to maintain current conditions $320 million per year is needed, or $539 million per year to meet the "desire state of good repair".[4]

Roads

Since MAP-21 (Moving Ahead for Progress in the 21st Century) was signed into law in 2012 and codified in the regulations finalized by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) in 2017, states and MPOs must monitor the condition on the bridges and pavement along the Interstate and non-Interstate National Highway System (NHS) and set performance measure targets. ODOT provides SKATS with updates for these values every two to four years, allowing for progress to be tracked over time. There are approximately **87 miles of roads** classified as part of the National Highway System (which includes the Interstate) within SKATS. The percent of the pavement on these roads that have been classified as "Good", "Fair" or "Poor" since 2012 are presented in **Table 5-1** and **Table 5-2**. This rating scheme is the one adopted by the FHWA as part of the regulations on the federal performance measures for pavement quality. This applies only to the through lanes of the NHS and is based on metrics that are captured during the inspection of the road: amount of rutting, amount of faulting, cracking percent and a measure of the roughness of the road[5]. The goal for most agencies that own and operate roads is to keep them in the "Fair" or "Good" categories. Once a road is classified as "Poor", it is more expensive to return it to "Good" or "Fair" as typically substantial reconstruction is required. As shown since 2012, most of Interstate-5 within SKATS is in Fair condition and none in Poor Condition.

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[2] Assuming a constant amount of travel per vehicle per year.

[3] As part of H.B. 2017, the State of Oregon is raising the registration fees for electric vehicles in 2019 and 2020 to ensure EV owners pay some fees for the upkeep of the transportation system.

[4] See Oregon Transportation Asset Management Plan, 2022 Executive Summary page 3 for pavement and page 4 for bridges.

[5] Note that only the roughness metric is used for the 2018-2022 reporting period and were shown in the tables in the 2019-2043 Regional Transportation Systems Plan. For this Update, the tables reflect the use of all the metrics.

Table 5-1: Pavement Quality of the Roads on the Interstate System in SKATS (2012-2020) Source: ODOT

Classified	2012	2014	2016	2018	2020
Good	42%	29%	31%	30%	59%
Fair	58%	71%	69%	70%	41%
Poor	0	0	0	0	0

Table 5-2: Pavement Quality of the Roads on the Non-Interstate National Highway System in SKATS (2012-2020) Source: ODOT

Classified	2012	2014	2016	2018	2020
Good	29%	21.1%	20.1%	13.2%	11.6%
Fair	71%	77.7%	73.2%	76.5%	76.9%
Poor	0.5%	1.2%	6.7%	10.3%	11.5%

As discussed in **Appendix P**, SKATS adopted a resolution to support ODOT's statewide targets for pavement condition in 2022. While there is no requirement for SKATS to meet the statewide targets, by agreeing to support ODOT's targets, the MPO must show how the projects selected for the MTP and the Transportation Improvement Program (TIP) will make progress toward the targets. Essentially, local or state funding spent on maintenance or for projects that involve infrastructure renewal (such as preservation or reconstruction) supports ODOT's target, should maintain or increase the number of miles of roads that are rated "Good," and limit the number of miles of roads that decrease to a "Poor" rating.

In addition to pavement conditions on the NHS, the local jurisdictions are required to report the condition of their roads (urban minor collectors and above) to ODOT every two years as part of the accountability requirements in H.B. 2017. The reports have been completed for 2019 and 2021 (**Tables 5-3** and **5-4**)[6]. These reports to ODOT may impact the investment decisions that the cities and counties make for their roads, both on and off the National Highway System.

Table 5-3: Miles of Pavement by Condition by Jurisdiction (2019 Report)

Jurisdiction	Good	Fair	Poor
Keizer	11	13	0
Salem	131	48	6
Turner	3	0	0

Table 5-4: Miles of Pavement by Condition by Jurisdiction (2021 Report)

Jurisdiction	Good	Fair	Poor
Keizer	12	12	0
Salem	129	51	0

[6] Data for Marion and Polk counties is excluded as they include area outside of SKATS. Summaries are available at: https://www.oregon.gov/odot/TAP/Pages/LocalAgencyCondition.aspx

Turner	2	1	0

Bridges

Bridges are also a vital component of the Regional Road System. All the bridges, whether state or locally owned, in Oregon are inspected every two years, providing up-to-date information on how well these resources are aging. Many of the bridges in the state, and within the SKATS area, were built more than 50 years ago and are nearing the end of their design life.

There are three parts to each bridge: the deck area – where vehicles are driven and people walk; the superstructure – which supports the deck and distribute the loads on the bridge to the substructure; and the substructure – which supports the deck area and superstructure and distributing the loads to the ground (see **Figure 5-4**). While all parts are necessary for a bridge to function, only the rating for the deck area is included as part of the new federal performance measures.

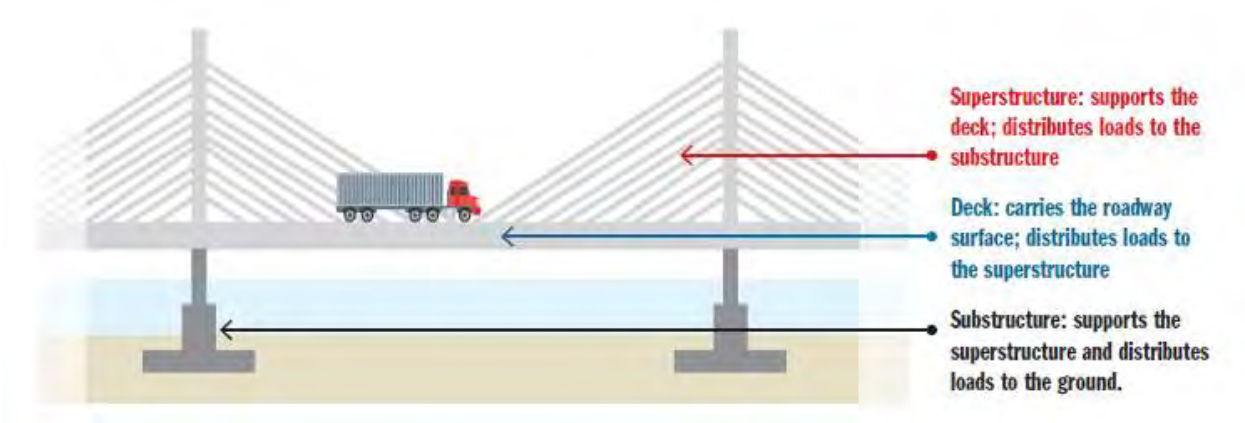

Figure 5-4: Components of a Bridge (Source: ODOT Bridge Condition Report 2017)

Statewide the percent of bridges that are rated as "Poor" is just under two percent, which is well under the threshold that FHWA has set (10 percent) for all bridges in a state not to exceed. However, as shown in **Figure 5-5,** there is a large percent of bridges that are currently rated "Fair" that are at the boundary (those with a National Bridge Inventory score of five) that will need to be maintained so they do not cross over to the "Poor" rating.

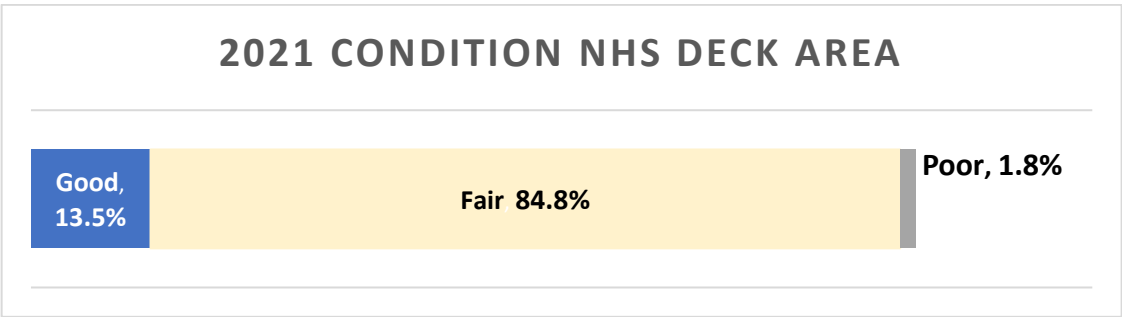

Figure 5-5: Condition of NHS Deck Area (2017) (Source: ODOT)

The data from 2009 to 2017 for all the bridges within SKATS located along NHS routes is illustrated in **Table 5-5**. In 2021, 85 percent of all bridges on NHS routes in SKATS were in "Fair" condition. As with the pavement ratings, the scheme was developed by FHWA as part of the federal performance measures for bridges[7]. Agencies endeavor to maintain the bridge decks at a "Fair" or "Good" rating. Once a bridge deck is rated as "Poor," it is much more expensive to rehabilitate to either "Good" or "Fair" quality.

Table 5-5: Bridge Deck Rating for All Bridges on NHS Routes in SKATS (2009-2020) Source: ODOT

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Good	29%	25%	25%	22%	22%	22%	12%	11%	8%	8%	8%	8%
Fair	58%	63%	62%	65%	65%	76%	86%	87%	89%	92%	92%	92%
Poor	13%	12%	12%	13%	13%	2%	2%	1%	3%	0.3%	0.3%	0.3%

The locally owned bridges on the NHS and their rating are presented in **Table 5-6**.

Table 5-6: Rating of Locally-owned bridges on the NHS in SKATS (Source: ODOT)

Location	Rating
Capitol/Mill Creek (N. of Union)	Good
Commercial/Pringle Creek (S. of Trade)	Good
Kuebler/Mill Creek (E. of Turner Rd)	Good
Silverton/Little Pudding River	Good
Summer/Mill Creek (S. of D St.)	Fair
Cordon/W. Fork Little Pudding River	Fair
NB 13th/Pringle Creek (Near RR Station)	Fair
SB 13th/Pringle Creek (Near RR Station)	Fair
Liberty/Pringle Creek (S. of Trade)	Fair
Commercial/Battle Creek (Near I-5 Ramps)	Fair
Kuebler/RR Tracks (W. of Turner Rd)	Fair

Again, SKATS has agreed to support ODOT's statewide targets for bridge condition in 2022, and the local jurisdictions are required to report the condition of their bridges to ODOT every two years as part of the accountability requirements in H.B. 2017. Bridge inspection will be coordinated by ODOT, as part of the existing program that examines each bridge in the state every two years. For bridges, there is a need to keep the bridge deck ratings in the 'Fair' category and not deteriorate into being rated 'Poor' which would require more costly repairs or replacement. According to ODOT's *State of the System Report* (2018), about half of the bridges owned by ODOT were built in the 1950s to 1970s, reaching the end of their design life[8]. As bridges near the end of their design life,

[7] See *FHWA Computation Procedure for the Bridge Condition Measures* FHWA-HIF-18-023 available at: https://www.fhwa.dot.gov/tpm/guidance/

[8] The 2018 edition of the report is the latest. See: https://www.oregon.gov/ODOT/About/Pages/State-of-the-System.aspx

more are considered structurally deficient. Shown in **Tables 5-7** and **5-8** are the condition reports for the three cities within SKATS for 2019 and 2021. As the reports for Marion and Polk counties include bridges outside SKATS, they are not listed.

Table 5-7: Bridges by Condition by Jurisdiction (2019 Report)

Jurisdiction	Good	Fair	Poor
Keizer	5	0	0
Salem	17	39	0
Turner	1	0	0

Table 5-8: Bridges by Condition by Jurisdiction (2021 Report)

Jurisdiction	Good	Fair	Poor
Keizer	5	0	0
Salem	15	41	0
Turner	1	0	0

Roads – Efficient Use

As discussed in **Appendix** A**,** the current forecasts for future population and employment estimates over 59,000 additional people and over 33,000 additional jobs within the SKATS boundary by 2050, which if existing patterns continue will result in an increased demand to travel for all modes of travel. And as more people move to the cities outside Salem and Keizer, we can expect more travel into the metropolitan area as they come for jobs, shopping, or services. To respond to this increased demand on the Regional Transportation System, our roads will need to be designed, operated, and used more efficiently in the future. Because most congestion traditionally occurred during the morning and evening commute times, the region has invested in promoting and encouraging employers and employees to use alternatives to traveling alone in a vehicle. For over 40 years, the Cherriots Transportation Options (nee Trip Choice, nee Cherriots Rideshare) has promoted ridesharing (carpools and vanpools), telework, biking, walking, and taking transit help to reduce the level of system-wide vehicular congestion. Encouraging employers to offer flexible schedules helps not just with the amount of traffic but allows employees to adjust their work times to better fit their daily needs. SKATS will continue to support the Cherriots Transportation Options program and encourage continued coordination with ODOT and the policies in Oregon's *Transportation Options Plan* (2015).

Another on-going investment using SKATS funds is the Regional Traffic Signal Control Center (RTSCC) operated by city of Salem staff. RTSCC staff can monitor the signals in the area and determine if signal timing plans are working or need adjustments. Investments in the RTSCCs over the years include cameras at most traffic signals for monitoring the system and interconnects to synchronize controllers as well as transfer data between signals and the control center. Not all the traffic signals in the Salem metropolitan area

are currently connected to the Regional Traffic Signal Control Center. These gaps have been identified, and projects have been proposed to either link the remaining signals to the center or upgrade the existing interconnects to fiber optic cables (**Table 5-9**). Other additions to the system such as pan-tilt-and-zoom cameras for traffic monitoring, adaptive traffic signal timing, and green-time extensions for buses are either in the Regional Intelligent Transportation System Plan or being discussed for implementation in the near future.

Table 5-9: List of Corridors with Identified Interconnect Projects (Source: Salem, 2017)

Project
Kuebler - Cordon
Salem Pkwy - Portland Rd - Chemawa
Mission - Lancaster - Rickey
Summer - Market - Court - High
12th Street
Liberty - Kuebler
Center - Hawthorne - Market
Wallace Rd
Glen Creek - Doaks Ferry - Orchard Heights

There are additional means to efficiently use the existing system that have not been utilized in the Salem metropolitan area, either at all or to the full extent possible, but that have been used in other urban area to minimize the amount of new roadway construction. Two examples are timed parking restrictions and reversible lanes. Timed parking restrictions would prohibit parking on a street during the rush hours to allow that space to be used by either all traffic or just transit, effectively increasing the capacity of the road without widening. There are operational issues to consider, such as locating the bicycle lane to the right of the parking area, but this could be used along the corridors in the areas around the Salem downtown where parking is permitted along the roads.

The second example is reversible lanes; these allow the existing capacity to be used in the direction of peak travel. Depending on the facility, other urban areas either use movable barricades or simply put lights above the lanes to demark the travel lanes.

Other means that the region can use to improve the efficient use of the regional system include investments in Cherriots transit service (see ***Transit*** section in this chapter), promoting the use of TripCheck.com to '*know before you go,*' and the use of private providers' travel information (such as Waze and in-vehicle traffic information) by the traveling public.

However, given the forecasted increase in traffic, the region will need to invest in more of these types of efficient systems. State and local planners will need to find the appropriate

mix of projects and programs, plus identifying others, to ensure that people and goods can efficiently move in, and through, the metropolitan area over the next 20 years.

It should be noted that it is possible that exogenous factors (at the state and national level) will play a larger role in the use of vehicles by the public and the interaction between vehicles and roadways. The development of connected and/or autonomous vehicles could increase the efficiency and carrying capacity of the existing system with moderate investments from the public sector. This is an area of rapid development, some inflated expectations, and will be monitored closely as the situation changes often. In 2018, the Oregon Legislature established an autonomous vehicle task force to develop legislative recommendations regarding testing autonomous vehicles on the roads and highways in Oregon for the 2019 Legislative session[9]. Additional work will be needed at the federal, state, and local levels to ensure the safe integration of autonomous vehicles onto the roadway system.

Roads – Congestion

Congestion along the regional roads decreases the air quality in the adjacent areas, increases the costs to businesses and commuters traveling in or through the area which negatively impacts the economic competitiveness of the Salem-Keizer area. Congestion occurs when the system is not operating efficiently or there are too many vehicles for the road.

SKATS monitors the traffic conditions of the regional system as part of the Congestion Management Process[10]. This includes continuously collecting traffic volumes at over 50 locations in the area, analyzing travel time along 15 corridors, and gathering transit ridership from Cherriots. These data streams are used to identify areas where recurring congestion is present. With this information, the owner/operator of the facility (ODOT or one of the local jurisdictions) has the data to conduct an in-depth planning study to further analyze the corridor and develop projects that attempt to address the congestion.

One area and issue within SKATS that has been extensively studied over the years is the high traffic volumes and vehicle congestion on the two state highway bridges that span the Willamette River connecting west Salem to downtown Salem. Related to that are multiple studies and projects to support active transportation and transit as alternatives to vehicles for crossing the river, and traffic analysis and projects to improve traffic flow in the area of the bridges.

Figure 5-6 shows the combined average weekday traffic volumes crossing the Marion Street and Center Street Bridges (which are part of Oregon Highway 22) over the Willamette River between 1980 and 2021. Traffic volumes increased by over 114 percent between 1980 and 2019 as housing and population grew in west Salem (estimated to be over 31,000 persons in 2020) while the majority of jobs and

[9] Although no legislation seems to have resulted from that session.

[10] The CMP is available as a separate document on the MWVCOG website. See also the congestion management tab on the SKATS Transportation Hub: https://skats-mwvcog.hub.arcgis.com/

retail/service opportunities in the area remain on the eastern side of the Willamette River. In addition to west Salem's growth, the population of the other cities in Polk County also substantially increased over the last 30 years; and Census data shows that a large percentage of workers in Polk County cross the bridges as part of their commute to jobs in Salem, Keizer, Marion County, or travel into Salem for shopping and other services. Due to these very high traffic volumes – amongst the highest volumes on any state road or interstate in Oregon, outside the Portland Metro area - traffic congestion, delay, and recurrent bumper-to-bumper traffic during peak traffic periods occur not only on the bridges themselves but also spill back onto arterials and state highways on both sides of the river in downtown Salem and west Salem.

The effect of two major events the past 20 years - the Great Recession (2007 – 2009) where Polk County unemployment was as high as 9 percent and the 2020 COVID-19 pandemic when many businesses closed and more people worked from home or traveled less –illustrate time periods when traffic increased decreased, as illustrated for those years in **Figure 5-6.** Traffic volume on the bridges peaked to a new high of 95,976 average weekday traffic (AWT) in 2019. There was a steep decrease in daily traffic in 2020 due to COVID; and there has been a rebound in 2021 as businesses reopened, vaccines became available, people traveled more, and residential development continued in west Salem.

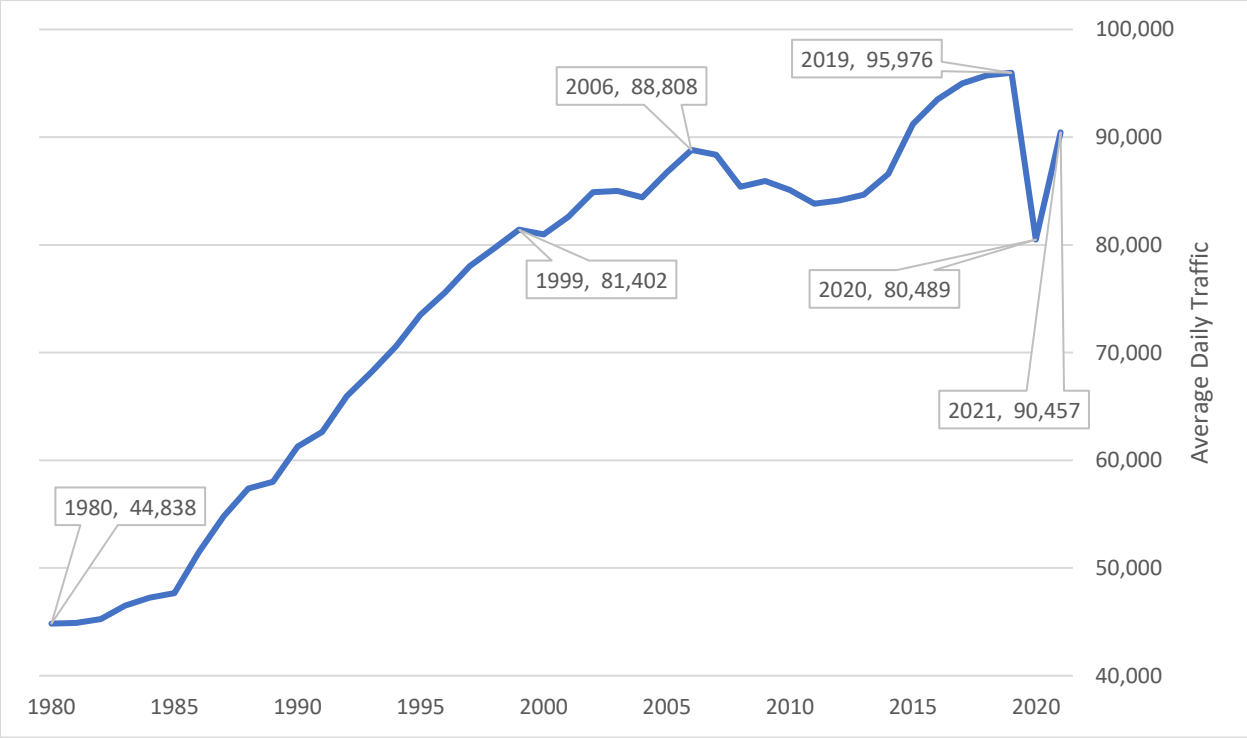

Figure 5-6: Travel Over the Willamette River, 1980-2021 (Average Weekday Traffic) Source: ODOT

Due to increasing traffic congestion on the bridges and their connecting infrastructure and the expectation that residential development in west Salem will continue in the future[11] - along with the need for a resilient transportation system[12] in the case of emergency events - multiple studies for adding a new bridge and/or adding capacity over the Willamette River have been undertaken and debated for over 50 years.

Between 1965 and 1988, there were five studies that examined locating a new bridge crossing over the Willamette River,[13] and each study contained a different recommendation for its location (with two studies recommending both a north and south bridge). The most recent effort to study a new bridge crossing was the *Salem River Crossing Project* and its Environmental Impact Statement (EIS). The draft EIS (2012) examined multiple corridor locations and designs for a new bridge and connecting roads. Work proceeded on refining and gaining consensus on a locally preferred alternative (LPA) for the final EIS that included a new bridge in the Pine Street NE corridor with connections on the west side to both Wallace Road and OR 22W. However, in 2019 the city of Salem determined it would not support the LPA and recommended the choice of the No-Build alternative to ODOT. Federal notice of the Record of Decision (ROD) for a No-Build alternative was published in the Federal Register on November 19, 2019.[14] Additional details about the Salem River Crossing are provided in Chapter 9 (Outstanding Issues) and in the Final EIS and Record of Decision for the *Salem River Crossing Project.*

The Draft EIS is far from the only effort in recent years to identify projects and strategies to reduce traffic demand, improve operations, and relieve congestion in this corridor. Others include:

- The *Bridgehead Engineering Study* (1998) analyzed concepts and alternatives for changes to the Marion Street and Center Street Bridge ramps. Two of those projects on the east side were completed: infrastructure and operation changes to the northbound and southbound Center Street off-ramps to Front Street NE, which has improved eastbound traffic flow on the Center Street Bridge.

- Over the last 20 years, the city of Salem and ODOT both completed multiple projects along Wallace Road NW (State Hwy 221) to improve traffic flow including: infrastructure changes at the Wallace Road and Edgewater Street intersection, construction of new local roads (Taggart Drive and Bartell Drive), access management of driveways (plus a median) along parts of Wallace Road, and widening the Wallace Road at Glen Creek Road intersection (2014).

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[11] The MTP's 2050 population forecast for west Salem is 40,701

[12] The Marion Street and Center Street bridges require a major seismic retrofit or replacement to withstand a major seismic event. A seismic upgrade for the Center Street bridge is currently under design, with construction scheduled in 2025.

[13] A summary of those studies is contained in the *Willamette River Crossing Capacity Study: General Corridor Evaluation (2002)* Appendix A (Chronology)

[14] Federal Register 63957, Vol. 84 No. 223 November 19, 2019

- To provide better pedestrian and bike facilities for crossing the river, the Union Street Railroad Bridge was converted to a bicycle and pedestrian bridge in 2009. Connecting paths (to Glen Creek Road and Wallace Road) on the west side were constructed. On the east side, a new traffic signal was constructed at Union Street at Commercial Street to assist pedestrians and bicyclists crossing Commercial Street. In addition, the Union Street Family Friendly Bikeway will begin construction in 2023 to provide safer and more accessible bicycle connections along Union Street to the Capitol Mall.

- The city of Salem's Urban Renewal Agency (URA) has done land-use studies in west Salem with the objective of increasing commercial development and employment in west Salem. Also, the city's URA is examined design options and feasibility for a grade-separated crossing of Wallace Road at 2nd Street.

- In 2018, the city of Salem's Congestion Relief Task Force examined infrastructure, system operations, and travel-demand management strategies to relieve traffic congestion in the core area of downtown Salem and west Salem including the bridges.[15] As of 2022, Salem has not yet implemented the recommendations.

- SAMTD has modified its transit system operations in West Salem including a 2-year pilot of a demand-response service from 2015 to 2017. Ultimately, on-demand service was not cost competitive with fixed-route service; fixed routes were restarted in 2017. Cherriots Regional Service has provided more frequent service between cities in Polk County and downtown Salem

- Salem's Transportation System Plan and this MTP includes new road (Marine Drive NW) that is parallel to Wallace Road with the objective of that a portion of traffic on Wallace Road will move to Marine Drive, particularly, for short local trips. Marine Drive also includes a separated bike facility. Funding for Marine Drive was approved in city of Salem's 2022 Capitol Improvement bond measure.

In addition to the crossing studies from 2002 and the Salem River Crossing EIS, there has also been several studies completed (and recommended projects constructed) with the objective of improving operations on Marion and Center Street bridges. The *Bridgehead Engineering Study* (1998) analyzed concepts and alternatives for changes to the bridge ramps. Two of those projects on the east side were completed (changes to the northbound and southbound off-ramps to Front Street). The city of Salem and ODOT worked together on projects along Wallace Road (Hwy 221) including changes to the Wallace Road at Edgewater Street, construction of local roads at Taggart Drive/Bartell Drive, moving signals from 7th Street to Taggert Drive, access management of driveways and medians along Wallace Road, and widening the Wallace Road at Glen Creek Road intersection in 2014. To provide better pedestrian and bike connections in the corridor, the Union Street railroad bridge was converted to a bicycle and pedestrian bridge in 2009, paths on the west side were constructed, and improvements along Union Street on the east side were constructed (new signal at Union Street at Commercial Street) or are

[15] Possible changes to the bridges were considered but not included in the city's recommendations.

funded (Union Street Family Friendly Bikeway). The city of Salem also examined land use and transportation studies in West Salem that could increase employment in West Salem and provide more local circulation (e.g., a 2nd Street grade-separated crossing).

In 2018, the city of Salem created a Congestion Relief Task Force to look at additional near-term options for reducing traffic congestion on the bridges. The Task Force recommended a list of short-term and medium-term projects, policies, and programs that may provide benefits at specific locations or to a limited number of users. These recommendations will be considered for inclusion in the financially constrained MTP after the city of Salem has adopted specific projects into the Salem Transportation System Plan and identified funding.

Other corridors that are congested include Lancaster Drive, Mission Street, the Trade Street/Ferry Street couplet, the Marion Street/Center Street couplet, River Road North, Commercial Street/Liberty Street couplet, and Wallace Road. The cause of congestion on these corridors is mostly when traffic demand on the system exceeds the road or intersection capacity; although, sometimes the cause is due to bottlenecks such as a reduction in the number of lanes, a change in speed, or a geometric condition (steep grades or an "S" curve). Other times, the cause is likely the lack of parallel facilities and/or adjacent land uses that attract or produce a significant addition of trips. For more information, reports for each of the CMP corridors is available on the SKATS Transportation Hub under the 'Congestion Management' tab[16].

The movement of goods and freight in, out of, and through the Salem metropolitan area is dependent on a reliable and efficient regional system. The *Oregon Freight Plan* (2017) identified locations in the Salem metropolitan area where road and rail conditions are detrimental to the efficient and reliable movement of goods and freight. Sections of the regional road system that have freight reliability reduced by delay are summarized in **Table 5-10**. Other areas identified include the Brooklake Interchange on I-5 due to the outdated design and high number of freight vehicles, and the section of I-5 from the Kuebler Interchange south past the SKATS boundary at the Delaney Interchange. ODOT has completed an Interchange Area Management Plan (IAMP) for Brooklake Road at I-5, and the next step is for Marion County to adopt any necessary land use changes (likely to be completed in 2023). The recommendations from the Brooklake at I-5 IAMP are discussed in Chapter 7. To address delays on I-5, ODOT is funding a project to widen I-5 between Kuebler Boulevard and Delaney Road.

[16] https://skats-mwvcog.hub.arcgis.com/pages/congestion-management

Table 5-10: Freight Highway Delay Areas (Source: Appendix I – Highway Inventories of Need, Oregon Freight Plan, 2017)[17]

Route	Start Milepost	End Milepost	Issue(s)	Tier (1-3)
I-5	244.4	248.6	Unreliability south of Salem	2
Ferry St SE	5.3 (Front St)	5.5 (Liberty St)	Delay on Ferry	3
OR 22 E	1.2 (west end of I-5 interchange)	7.9 (between Shaw Rd and Silver Creek Falls Hwy	Delay on OR 22 west of I-5	3
OR 99E	4.7 (Hood St)	4.9 (Division St)	Delay on 99E (Commercial St)	3

In early 2017, SKATS identified six segments (shown in **Table 5-11**), totaling a little over 9 miles in length, on the Regional Road System for designation as *Critical Urban Freight Corridors* (CUFC). These corridors are meant to represent near-term opportunities for improving the flow of freight traffic. Identification as a CUFC allows the roadway owner to apply for funds that are specifically set aside by FHWA for freight projects (INFRA – Infrastructure for Rebuilding America, nee FASTLANE). However, funding is competitive at the national level and thus not guaranteed.

Table 5-11: Critical Urban Freight Corridors (Within SKATS as of 2023)

Route	Start Point	End Point	Length (mi)
Center St Bridge	Commercial St	Rosewood Dr	0.70
OR 22E	I-5	25th St	1.18
25th St	OR 22E	Madrona Av	0.84
McGilchrist St	12th St	25th St	1
Kuebler Blvd	I-5	Aumsville Hwy	2.12
Cordon Rd/OR 22E Interchange	Aumsville Hwy	Gaffin Rd	0.97
Cordon Rd	Gaffin Rd	State St	1.34
Brooklake Road	NB I-5 Ramp	River Rd	0.81
Total			**8.96**

Intermodal facilities are needed to allow for freight to be moved from one mode to another (e.g., from truck to rail) allowing the shipper to utilize the most appropriate and cost-effective option. The *Oregon Freight Plan* (ODOT, 2017) identifies three intermodal connector roads within SKATS. These are illustrated in **Table 5-12**. In late 2022 an intermodal facility opened in Millersburg (located 20 miles south of Salem) to facilitate local businesses putting their products on trains bound for the ports at Seattle-Tacoma for shipment overseas among other locations.

[17] The tiers represent the priorities from highest (1) to lowest (3).

Table 5-12: Intermodal Connectors (Source: Oregon Freight Plan, 2017)

Road Name	Connecting Highway	Tier (1-3)
25th Street SE	OR 22 E	2
Salem Industrial Drive NE to Cherry Avenue	OR 99E Bus.	2
Brooklake Rd NW	I-5	2

There are four federal performance measures that are applicable to congested roadways:

- Percent of the person-miles traveled on the Interstate that are reliable;
- Percent of the person-miles traveled on the non-Interstate NHS that are reliable;
- Truck Travel Time Reliability Index; and
- Annual Hours of Peak Hour Excessive Delay per Capita (applicable to SKATS in 2022)[18].

Many of the congested locations have been noted, and projects have been proposed. The programs discussed in the *Roads-Efficient Use* section apply here as tools to reduce the amount of traffic on the region's roads at any one-time during the day.

Bicycle

The Regional Bicycle System was first defined in the 1996 RTSP. In many of the updates to the Plan since then additional segments are identified, often to align with changes that were made in a local transportation systems plan (TSP) or to reflect the construction of new roads or bicycle facilities (lanes, paths, and bridges). The original Regional Bicycle System was limited to mainly the arterials in the area. The number of miles designated as part of the Regional Bicycle System over the years are presented in **Table 5-13**.

Table 5-13: Regional Bicycle System - Miles Designated (1994 – 2022)

	1994	2002	2011	2015	2018	2022
Miles Defined	141	174	262.2	309.2	291	291
Miles Existing	72	110	190	197.3	205	206
Percent Realized	51%	63%	73%	64%	70.4%	70.8%

Since 1996, there has also been a change in how people and planners perceive bicycle facilities. Earlier, it was deemed desirable and sufficient to have the bicycle facilities on the major roads, which resulted in the creation of striped bicycle lanes along most of the arterials and some collectors in the area. In the early-2000s, studies were conducted nationally showing that many people felt uncomfortable using these on-street facilities due to the volume and/or speed of the motorized traffic. One solution was to create bicycle routes that used local streets where the volume and/or speed of the motorized traffic is lower. (This is similar, but much less expensive, to an earlier paradigm that advocated for the creation of a bicycle network that was totally separated from motorized vehicles). These have a variety of monikers such as 'bicycle boulevard,' 'family friendly

[18] For a complete discussion, see **Appendix P (Performance)**

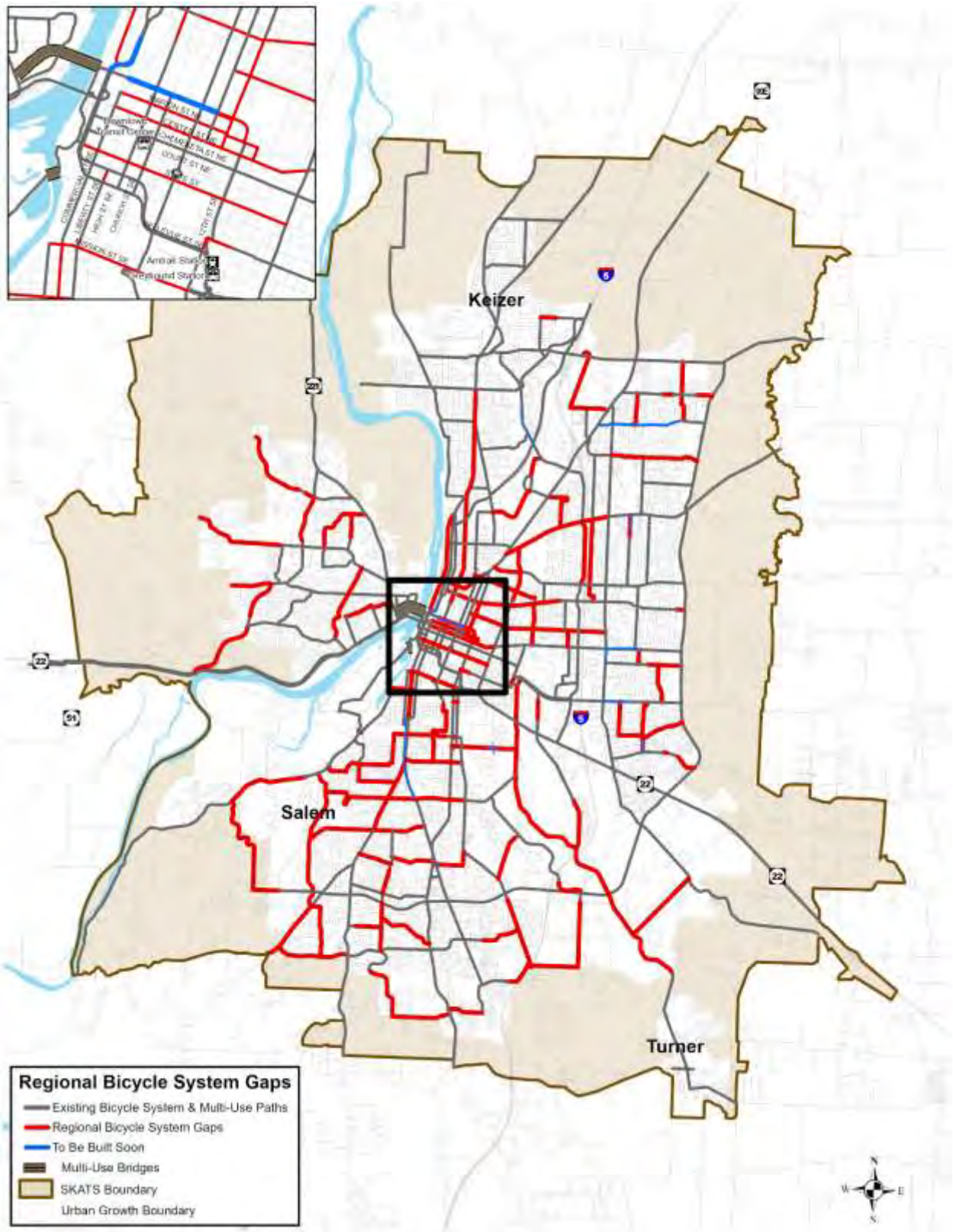
bikeways,' 'all ages and abilities (AAA) bikeways,' and 'neighborhood greenways. It was recognized that in some areas and locations these could not be implemented, such as in downtowns and along commercially oriented streets.

As many of the destinations people want to go to are located along the major roads (and these are typically the shortest paths between two locations), people who are bicycling need a safe way to reach these destinations. To meet this need, the city of Salem has begun to study and recommended facilities on the major roads that provide a degree of separation from motorized traffic, such as buffered bike lanes and cycle tracks. Salem added buffered bike lanes on High Street and Church Street in downtown Salem. A buffered bike lane is funded for Union Street using funds from SKATS and the city of Salem, and Salem's Commercial-Vista Corridor Project includes buffered bike lanes that received safety funds from ODOT. The region should continue to look for opportunities where buffered bike lanes meet the needs of bicyclists and fit with the adjacent land uses.

At the regional level, planning studies completed in the region, such as Salem's *Bike Walk Salem* (2012) and other Transportation System Plans identified locations where facilities are needed. The identified Regional Bicycle System is illustrated in **Map 5-1**, which also highlights gaps where facilities are currently lacking. The miles of gaps by jurisdiction are presented in **Table 5-14**. In addition to these gaps, there are locations where connections need to be improved, such as the crossing of Wallace Road to get to/from the Union Street pedestrian/bicycle bridge. Other barriers include travel along River Road North in Keizer, Lancaster Drive and other major regional roads, and crossing across these same roads as well as Salem Parkway. At many signalized intersections, there are no sensors to detect the presence of bicyclists, which can result in either long waits for the light to change, or risky and unsafe behavior to cross when there is a gap in the traffic flow.

Table 5-14: Regional Bicycle System Gaps (2022 by city limits)

Jurisdiction	Miles Defined	Miles Completed	Miles of Gaps
Salem	195	126	69
Keizer	23	21	2
Turner	2	2	0
Marion County	56	45	12
Polk County	15	12	3
Total	**291**	**206**	**85**



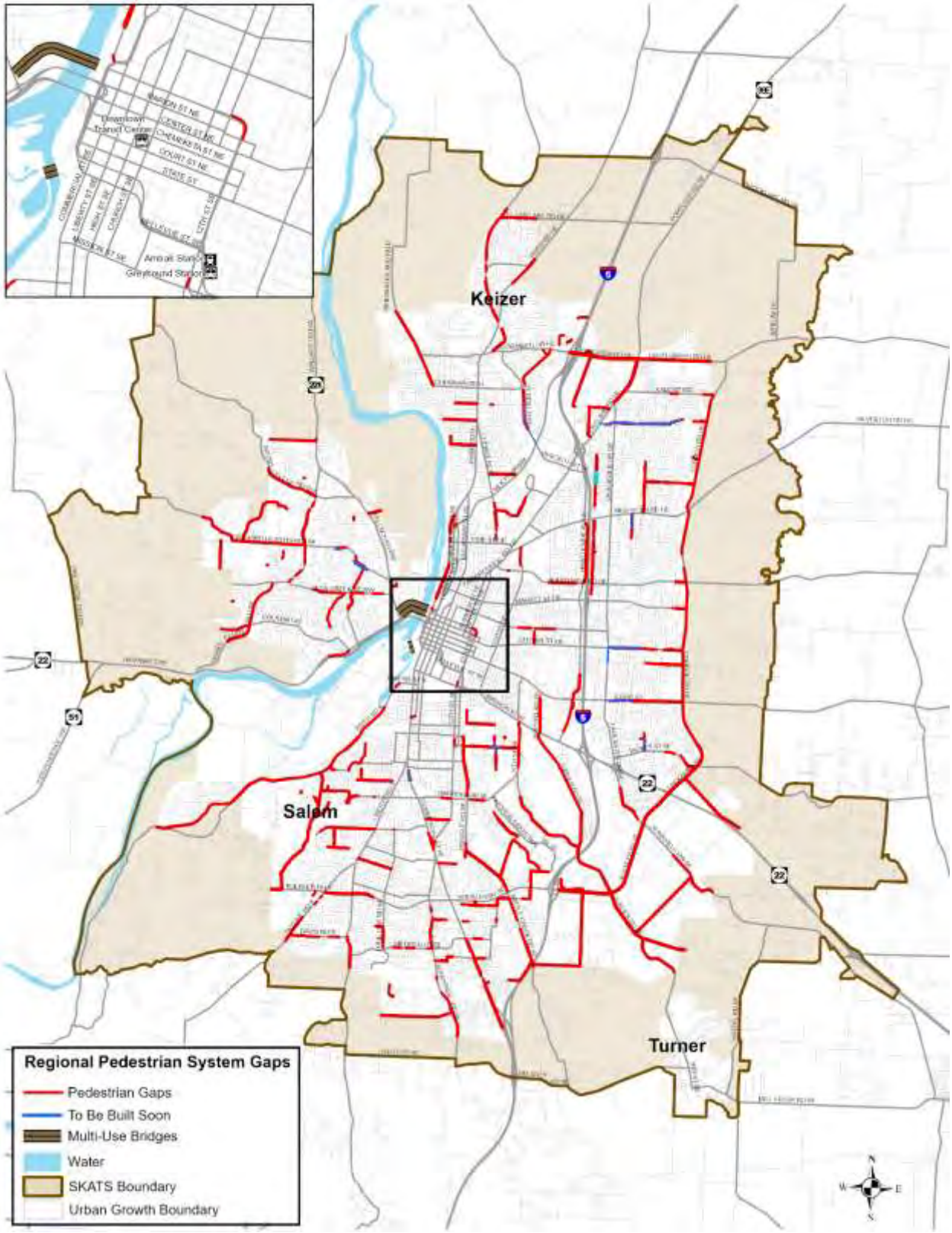
Map 5-1: Regional Bicycle System Gaps (2022)

Pedestrian

Initially the 1996 RTSP defined the Regional Pedestrian System along the roads in the areas with high pedestrian use, such as downtown Salem, the Capitol Mall area, Lancaster Mall (now Willamette Town Center), and around Chemeketa Community College. This system has been updated over time to include the major streets. Other areas included the existing and future transit centers in Keizer, west Salem and south Salem. To ensure accessibility for the public in the Salem metropolitan area, it is important to provide a network of contiguous and maintained sidewalks that link residential, recreational, and commercial areas. Properly constructed and maintained sidewalks also help link land uses to transit stops, which allow people using mobility assistance devices to get to bus stops along the Cherriots fixed-route service instead of calling for Cherriots LIFT.

Walking in a street without sidewalks, especially on medium or higher volume roads, is a safety issue. Many local and collector level roads -- and even arterial roads and sections of the state highway -- were initially built without sidewalks. Using streets without adequate sidewalks makes the journey to work, shopping, school, a transit stop, or anywhere else less convenient and less safe.

Over the last 25 years, sidewalks have been added to many of these roads in the SKATS urban area either as a requirement of adjacent development or using local, state, or federal funds to construct them. However, as of 2022 there are many roads in need of sidewalks; and constructing them usually requires purchasing right-of-way, designing and building storm water facilities along with the construction of curbs, sidewalks and bike facilities. The costs of adding sidewalks to bring roads up to current standards in urban areas is substantial. In 2020, there are complete sidewalks along 74 percent of the regional road system, with an additional 14 percent having partial (only one side) sidewalks. The areas where sidewalks are missing are presented in **Map 5-2**.

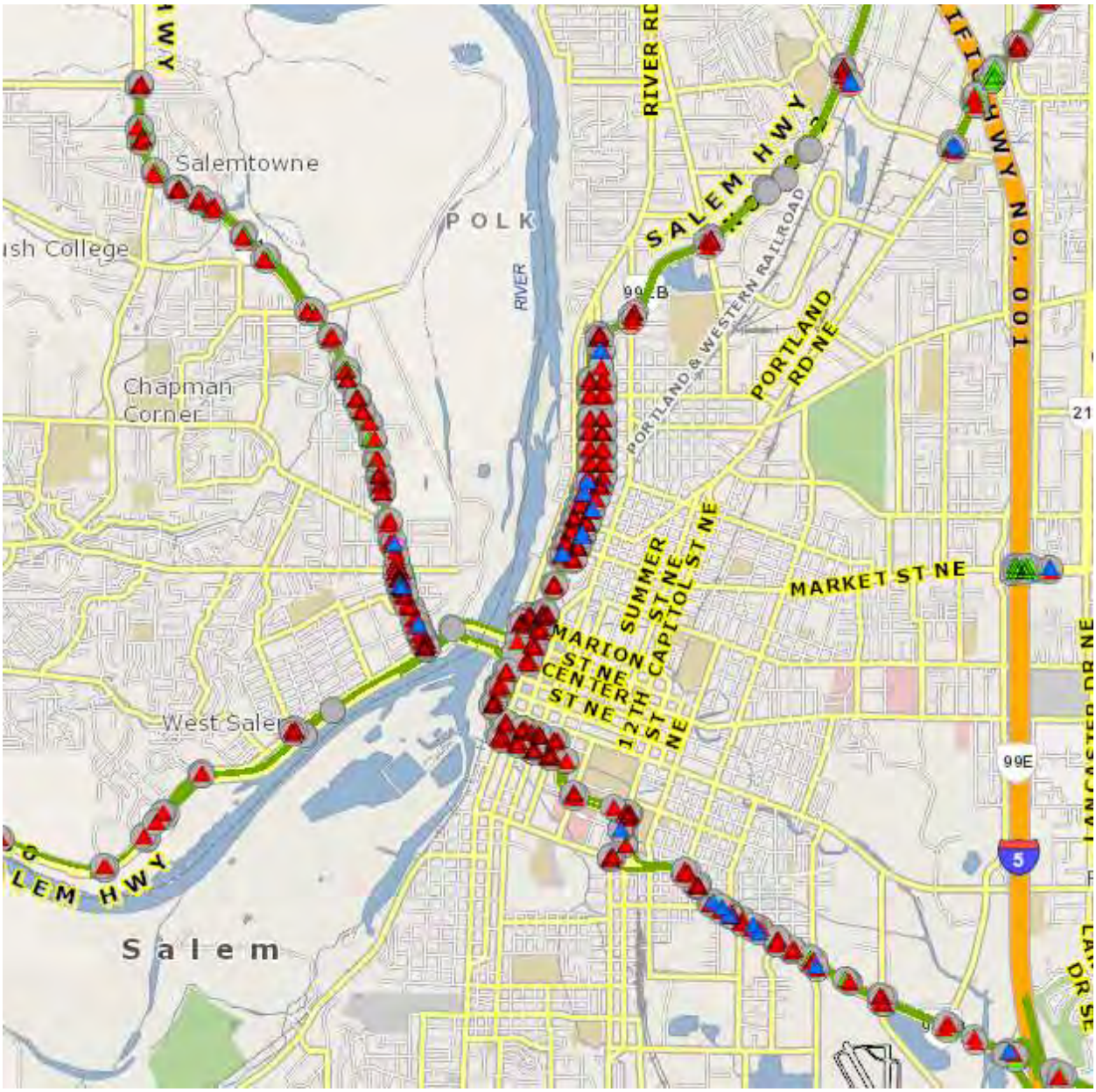


Map 5-2: Regional Pedestrian System Gaps (2020)

The American with Disabilities Act (ADA) was first enacted in 1990 with amendments made in 2008. The purpose of ADA is to ensure that everyone, regardless of capabilities is able "… to fully participate in all aspects of society…". The ADA is most noticeable in transportation projects with the requirements for properly designed ramps at intersections, driveways with sidewalks designed to work for both vehicles and pedestrians, and pedestrian call buttons within certain height, reach, and level landing standards to make them accessible. Properly designed and built ramps assist the elderly, people with disabilities, and everyone else to comfortably move between home, work, and shopping. SAMTD's move to a fleet of low-floor buses helps not only those with mobility issues, but those with strollers or wheeled bags.

In 2017, ODOT settled a lawsuit by agreeing to install $23 million in curb ramps and pedestrian crossing signals along the roads it operates statewide. ODOT has stated it will fix all non-compliant ramps in the state by 2032. In 2022 the Oregon Transportation Commission agreed to allocate $1 billion to address these needs. The locations where ramps at intersections are either missing or not compliant with the current ADA regulations along ODOT operated facilities in the Salem metropolitan area are illustrated in **Map 5-3**.

The jurisdictions in SKATS are also required to ensure that they update ramps, as necessary, when doing roadwork. In 2018, Marion County completed an inventory of curb ramps in the east Salem area outside the Salem city limits, as well as county-owned roads within other cities in Marion County (including city of Turner). In addition to locations with missing ramps, there were also many ramps that were either not functional or functional but not compliant to the latest ADA standards. The city of Keizer also has an ongoing program in its budget to replace ramps to make them ADA compliant. Work is on-going on the update to the city of Salem's ADA transition plan.



Map 5-3: Locations of ADA Ramp needs along ODOT Facilities (2022 screen capture from ODOT's TransGIS) Missing Ramps shown as blue triangles, red triangles represent ramps not compliant with ADA. Green triangles show location of ADA Compliant ramps.

Transit

Until 2017, the two main needs in relation to transit service within the Salem-Keizer area were the need to provide service on the weekdays beyond the 6 a.m. to 9 p.m. operating times and, offering service on the weekends and holidays. These two deficiencies made it difficult (or impossible) for many people to use Cherriots as a viable option to owning and operating a vehicle. Second, there are some areas within SKATS that do not have transit service; and it is unlikely that those areas will get service in the future.

As part of H.B. 2017 (which was signed into law in mid-2017), a dedicated stream of funds for operations became available to the transit districts and operators in Oregon. Cherriots has used their share of these funds to offer service on weekends and holidays and to provide additional weekday service earlier and later in the day. The revisions to the transit service began in September 2019, starting with extended weekday and Saturday service. As additional funds from H.B. 2017 were distributed, additional services, such as service on Sundays and holidays, were implemented (with a slight delay due to COVID-19 related issues). It remains to be seen whether the new funds will ensure that these services can be offered for the next 20+ years without additional funding streams.

An ongoing challenge for public transit is the cyclical need to replace significant numbers of their fleet once the vehicles reach the end of their useful life. This is typically 12 to 15 years for the larger buses, less for smaller vehicles used for Cherriots LIFT. Funding programs that are metered in smaller amounts on an annual basis, with the expectation that these funds will be spent within a year or two from allocation, do not provide a single source of funds sufficient to allow the purchase of large numbers of buses every few years. Larger purchases of buses is beneficial to the Transit District as it permits it to negotiate a better price from the vendor(s). Currently the Transit District has 71 buses that are used for Cherriots service, and an additional 42 smaller vehicles that are used for Cherriots LIFT and Cherriots Shop and Ride. As required by Federal regulations, SAMTD has prepared a *Transit Asset Management Plan (latest update in 2022)* that identifies their physical assets, such as buses, support vehicles, transit centers, and maintenance facilities and describes how they will maintain these over their expected lifetime and when they will be replaced (see **Chapters 6** and **7** for discussion on the cost and frequency of replacing buses).

On-time reliability is an issue that could impact ridership of Cherriots with increasing traffic on the region's roads. Currently there are intersections along busy corridors where the volume of traffic is enough to delay left-turns or buses going through an intersection. Solutions to this issue are being discussed with the local jurisdictions, primarily the city of Salem, include exploring the feasibility of implementing green-time extension, moving stops to the far side of an intersection and other methods to increase reliability. SAMTD will be rolling out a suite of ITS (Intelligent Transportation System) devices on their vehicles over the next several years that will make it easier to identify areas where it is difficult to maintain the desired bus schedule. This implementation will also make it possible to provide the rider with real-time information regarding bus arrival.

For several years, the Transit Board has planned for a transit center in South Salem. After a study an initial location was selected, and negotiations started with the property owner. These ended without an agreement and a second location study was undertaken. A new location was identified and negotiations are on-going with the property owner. This transit center would support the circulator and corridor concept that SAMTD has been implementing for some time. SAMTD has previously identified the need for a transit center/station serving East Salem. Currently, they are in discussions with Chemeketa

Community College on expanding and enhancing the collection of stops that serve the campus.

Seismic

Many of the roads, bridges and buildings in the Salem-Keizer area were built before there was an understanding of the geological conditions that exist under our feet. In the event of a major seismic event, many of these structures will be unsafe and/or unusable. The result will be facades or entire buildings and bridges that have collapsed (some into the roadway) and electrical wires that have fallen down and are creating a hazard, rendering the roads unpassable. As part of H.B. 2017, the Oregon Legislature included $60 million to fund seismic retrofitting of the Center Street bridge (part of Highway 22) over the Willamette River. Construction is slated to start in 2025. Other bridges in the area have been retrofitted as part of projects. ODOT has identified a few bridges on Interstate 5 along important freight corridors in the Salem area that need either retrofitting or rehabilitation. These are shown in **Table 5-15**. Additional information gathered from ODOT and the local jurisdictions provides a better understanding of the bridges in the SKATS area that will need work to meet seismic standards. Shown in **Map 5-4** is the seismic vulnerability of the bridges in the area.

Table 5-15: Bridges on Freight Corridors, Seismic Needs (Source: Oregon Freight Plan, 2017)

Bridge Location	Milepost	Need(s)
I-5 (NB) bridge over Commercial St SE	249.35	Retrofit
I-5 (SB) bridge over Commercial St SE	249.38	Rehabilitation
I-5 bridge over UP RR mail line	259.1	Rehabilitation
I-5 (NB) over Salem Parkway (NB)	259.95	Retrofit
I-5 (SB) over Salem Parkway (SB)	259.95	Retrofit
I-5 (NB) over Labish Bottom	261.12	Retrofit
I-5 (SB) over Labish Bottom	261.12	Retrofit

ODOT has also performed a planning level assessment of the bridges in the area to determine which are either vulnerable or potentially vulnerable to seismic events[19]. This did not include all local bridges but focused on those determined to be of highest priority from the point of view of economic recovery and emergency response. The results are presented in **Table 5-16** and **Table 5-17** respectively. These results would need to be confirmed with an engineering analysis of each bridge before any modifications are proposed. The lists are meant to provide an estimate of the magnitude of needs within SKATS.

[19] "Vulnerabilities of individual bridges included in this file are results of a planning level assessment based of an engineering algorithm that takes into account the Peak Ground Acceleration (PGA) from the Cascadia Subduction Zone Earthquake (CSZE) and the most important bridge characteristics (year of built, number of spans, maximum span length, superstructure type, substructure type, etc.)" This analysis is not meant to replace a more complete engineering analysis. ODOT, 2018.

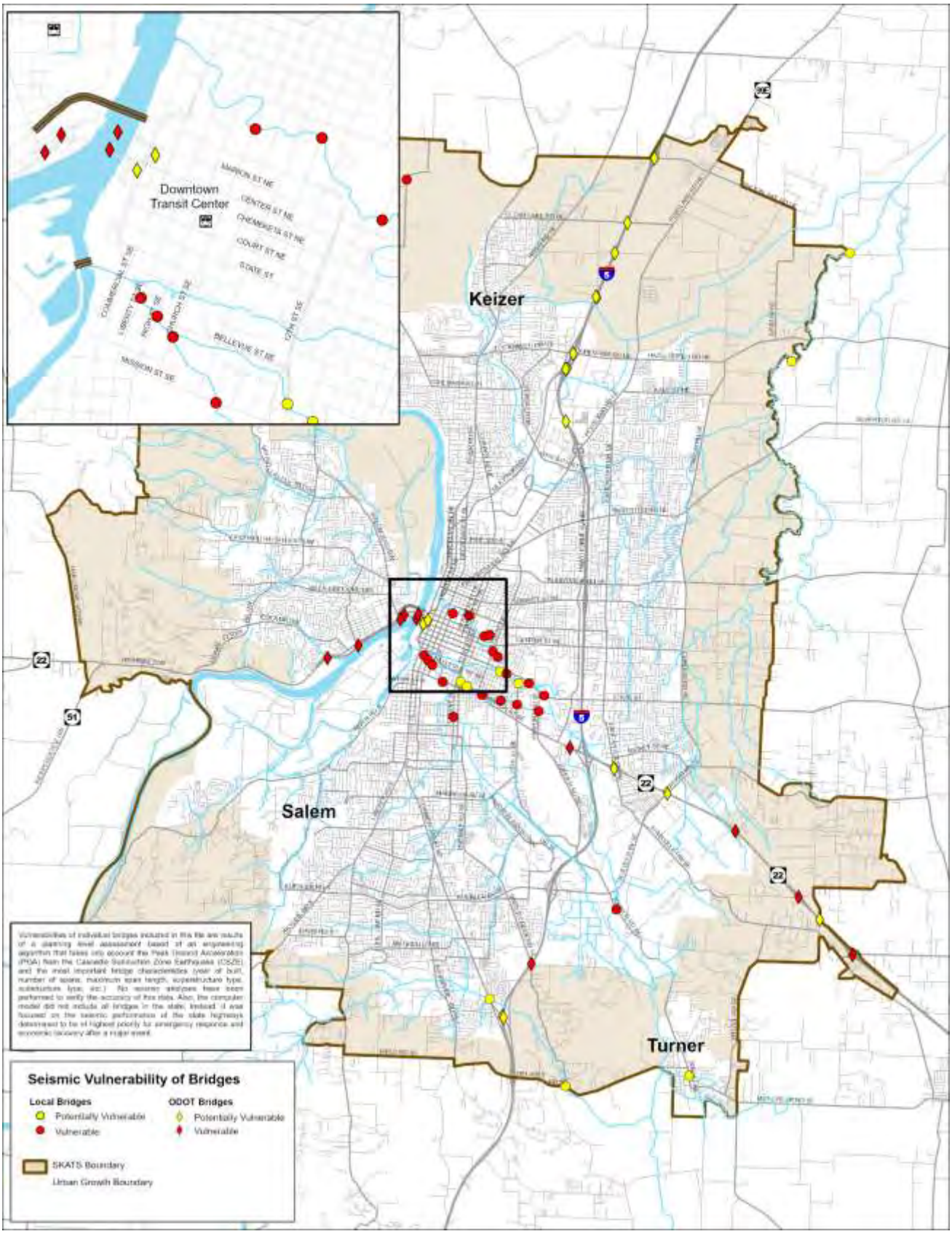
Table 5-16: Bridges that are Vulnerable to Seismic Events (Source: ODOT 2018)[20]

Carries	Crosses	Owner
12TH ST	PRINGLE CREEK	Local
14TH ST NE	MILL CREEK	Local
15TH ST NE	MILL CREEK	Local
17TH ST NE	MILL CREEK	Local
23RD ST SE	MILL CREEK	Local
25TH ST SE	SHELTON DITCH	Local
AIRPORT RD	SHELTON DITCH	Local
CHEMEKETA ST	MILL CREEK	Local
CHURCH ST NE	MILL CREEK	Local
CHURCH ST SE	PRINGLE CREEK/SHELTON	Local
FORD ST	SHELTON DITCH	Local
HIGH ST SE	PRINGLE CRK	Local
LEE ST	SHELTON DITCH	Local
LIBERTY ST SE	PRINGLE CREEK	Local
MISSION ST	PRINGLE CREEK	Local
RAVENA DRIVE	OVERFLOW CHANNEL	Local
STATE STREET	MILL CREEK	Local
STATE STREET	MILL CREEK	Local
SUMMER STREET NE	MILL CREEK	Local
TURNER RD	MILL CREEK	Local
WINDSOR ISLAND RD	OVERFLOW CHANNEL	Local
BATTLE CREEK ROAD	I-5	ODOT
MISSION ST	MILL CREEK	ODOT
OR 22E	DEER PARK DRIVE SE	ODOT
OR 22E	JOSEPH STREET	ODOT
OR 22E EB	OR 214	ODOT
OR 22W	OR 221	ODOT
OR 22W	OR 221	ODOT
OR 22W CON	WALLACE MARINE PARK	ODOT
OR 22W EB	WILLAMETTE RIVER	ODOT
OR 22W WB	OR 221	ODOT
OR 22W WB	WILLAMETTE RIVER	ODOT

[20] Updated to reflect the completion of the Silverton-Little Pudding project in 2022.

Table 5-17: Bridges with Potential Vulnerability to Seismic Events (Source: ODOT 2018)

Carries	Crosses	Owner
13TH ST EAST	SHELTON DITCH	Local
14TH ST SE	SHELTON DITCH	Local
21ST ST SE	MILL CREEK	Local
25TH ST SE	MILL CREEK	Local
66TH AVE	LITTLE PUDDING RIVER	Local
COMMERCIAL ST SE	BATTLE CREEK	Local
DEARBORN AVE N.E.	CLAGGETT CR	Local
DELANEY RD SE	BATTLE CREEK	Local
LABISH CENTER RD.	LITTLE PUDDING RIVER	Local
OAK KNOLL ROAD	SPRING VALLEY CREEK	Local
TURNER RD	MILL CREEK	Local
72nd Ave SE	OR 22E	ODOT
BROOKLAKE ROAD	I-5	ODOT
CHEMAWA ROAD	I-5	ODOT
CORDON ROAD	OR 22E	ODOT
I-5	Union Pacific RR	ODOT
I-5 NB	HWY 72	ODOT
I-5 NB	LABISH BOTTOM	ODOT
I-5 NB	COMMERCIAL STREET SE	ODOT
I-5 SB	OR 99E	ODOT
I-5 SB	HWY 72	ODOT
I-5 SB	LABISH BOTTOM	ODOT
LANCASTER DRIVE	OR 22E	ODOT
OR 22W EB	FRONT STREET	ODOT
PERKINS ROAD	I-5	ODOT
QUINABY ROAD	I-5	ODOT



Map 5-4: Seismic Vulnerability of Bridges within SKATS (Source: ODOT)

Non-Road Systems

Chapter 4 identifies other components of the transportation system, such as aviation, pipelines, and railroads. Gaps and deficiencies in these systems are not included in the discussion presented in this chapter as the funds available to SKATS for the most part cannot be spent on these facilities. Many of these systems are privately owned, and the respective companies are responsible for identifying investments to allow them to meet future needs.

ODOT has funded a study on improvements to passenger rail within the Willamette Valley between Portland and Eugene[21]. The preferred corridor is using the Union Pacific Railroad line through Salem, which is currently used for the *Cascades* corridor and *Coast Starlight* long-distance Amtrak service. As projects are developed from that study they will be included as appropriate in future updates to this Plan.

[21] See the *Oregon Corridor Investment Plan* on https://www.oregon.gov/odot/RPTD/Pages/Passenger-Rail.aspx

Chapter 6 - Financial

Summary

Included in this chapter are the two components of a financially constrained plan. First, a summary of the forecasted financial resources available to the jurisdictions and agencies within SKATS is presented. Following that are the estimated costs to operate, maintain, and preserve the existing system and the projected cost to implement the programs and projects identified (see **Chapter 7**). Financial constraint means that the cost to operate, maintain, and preserve the existing system plus the cost of the identified projects does not exceed the financial resources that are reasonably anticipated to be available to the jurisdictions and agencies in the MPO over the next 27years. This information is illustrated in **Table 6-14** (page 6-17) for road-related projects and in **Table 6-15** (page 6-18) for transit-related projects. **Financial constraint reflects the projects and cost estimates from the proposed project list as of January 31, 2023.**

Introduction

In the previous two chapters, an overview of the existing system (**Chapter 4**) has been provided along with the gaps and currently identified needs of the existing transportation infrastructure that prevent it from meeting the needs of the people and businesses in the Salem metropolitan area (**Chapter 5**). This chapter, and the next chapter, combine to provide a comprehensive look at what the future system will look like and how it could be funded. Under federal regulations, the long-range plan (i.e., this MTP) must be financially constrained. This means that the cost of the projects and programs proposed in the Plan may not exceed the amount of revenues that are *reasonably anticipated* to be available to the local jurisdictions, ODOT, SAMTD, and SKATS during the time frame of the plan.

SKATS' Role

As mentioned in **Chapter 2**, SKATS does not own, operate, maintain, or have any jurisdiction over any part of the regional transportation system. This is the province of the cities, counties, and other agencies in the area. SKATS' responsibility is limited to coordinated, comprehensive, regional transportation planning activities including development of a long-range regional transportation plan for the MPO area. Financial assumptions in this chapter were developed in cooperation with the local jurisdictions and other affected agencies such as the Oregon Department of Transportation (ODOT) and the Salem Area Mass Transit District (SAMTD).

Overview of Funding Sources

A variety of funding sources are available for the projects and programs identified in this Plan. These range from funds from the Federal government to local sources such as system development charges. These funding sources are typically limited either to a locale or by the type of project. Each of the funding sources available and the type of projects that are eligible will be discussed in this section. An overview of the sources of funding and their allowed uses is presented in **Table 6-1**.

Table 6-1: Funding Flexibility Matrix – General Guides for the Use of Transportation Funding

FUNDING SOURCES	TRANSIT			HIGHWAY					OTHER	
	Transit Operation	Capital Improvements	ADA/Elderly & Handicapped	Maintenance & Operations	Roadway Capacity	Bicycle	Pedestrian	Rideshare/TDM	Passenger Rail & Facilities	Freight Rail and Facilities
Federal										
FHWA-National Highway Performance Program (NHPP)	no	(a)	no	yes	yes	yes	yes	no	no	no
FHWA-National Highway Freight Program (NHFP)	no	no	no	no	yes	no	no	no	no	(j)
FHWA-Highway Safety Improvement Program (HSIP)	no	no	no	no	no	yes	yes	no	no	no
FHWA-Congestion Mitigation and Air Quality (CMAQ)	(h)	yes	no	(e)	(i)	yes	yes	yes	yes	(k)
FHWA – Carbon Reduction Program	no	yes	yes	(l)	(l)	yes	yes	yes	yes	no
FHWA – Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) [Formula funds]	no	yes	no	yes	no	no	no	no	no	no
FHWA-ODOT Surface Transportation Block Grant Program (STBGP)	no	yes	yes	yes	yes	yes	yes	yes	yes	no
FHWA-ODOT Transportation Alternative (TA) Set Aside	no	no	no	no	no	yes	yes	no	no	no
FTA - Metropolitan Transportation Planning (Section 5303)	no	no	no	no	no	no	no	no	no	no
FTA - Urbanized Area Program (Section 5307 and 5340)	yes	yes	yes	no	no	yes (b)	yes (b)	no	yes	no
FTA - Rural Area Program (Section 5311)	yes	yes	yes	no	no	yes (b)	yes (b)	no	no	no
FTA - Enhanced Mobility for Seniors and Individuals with Disabilities (Section 5310)	yes	yes	yes	no	no	yes	yes	no	no	no
FTA - Bus and Bus Facilities (Section 5339)	no	yes	yes	no	no	yes (b)	yes (b)	no	no	no
State										
State Highway Funds	no	no	no	yes	yes	yes	yes	(c)	no	no
Special Transportation Fund (STF) (d)	yes	yes	yes	no	no	no	no	no	no	no
State Transportation Improvement Fund (STIF)	yes	no	yes	no	no	no	no	no	no	no
Transit in Lieu Payments	yes	yes	yes	no	no	no	no	no	no	no
State Transit Tax	yes	yes	yes	no	no	no	no	no	no?	no
Regional										
SKATS STBGP-U	no	yes	yes	(e)	yes	yes	yes	yes	yes	no
SKATS TA-U Set Aside	no	no	no	no	no	yes	yes	no	no	no
Local										
Salem G.O. Bonds	no	no	no	yes	yes	yes	yes	no	no	no
Fuel Tax Revenue	no	no	no	yes	yes	yes	yes	no	no	no
Transportation System Development Charges (f) (g)	no	no	no	no	yes	yes	yes	no	no	no
Urban Renewal	no	yes	no	no	yes	yes	yes	no	no	no
Property Tax	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Transit Employer Tax (l)	yes	yes	yes	no	no	no	no	no	no	no

(a) May be used for construction of publicly owned intracity or intercity bus terminals servicing the NHS.
(b) FTA Section 5303 is dedicated for transit planning activities.
(c) Potential uses may include park-and-ride facilities only as part of eligible highway improvements projects.
(d) May be used for transit capital improvements and ADA/elderly & handicapped operations, cannot be used for transit system operations
(e) May be used for operations and infrastructure renewal but not maintenance.

(f) Limited to roadway capacity projects. Bicycle and pedestrian facility improvements may be included as part of roadway capacity projects.
(g) TSDCs are currently implemented by the cities of Keizer, Salem and Turner and Marion County.
(h) Funds may be used to start or expand transit service for the first three years only.
(i) Capacity projects are limited to HOT/HOV lanes, roundabouts, and left-turn/managed lanes.
(j) No more than 10 percent of yearly state apportionment may be used for freight intermodal or freight rail projects.
(k) Retrofit of diesel engines
(l) Currently not implemented by SAMTD but allowed starting January 2026.

Federal Funds

Federal transportation money distributed to the states comes from the federal Highway Trust Fund (HTF), which receives the federal excise taxes on motor fuels and various heavy truck related taxes. Currently, the taxes are 18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel. The money in the HTF is currently distributed 86 percent to highway projects and 14 percent to mass transit projects. The federal fuel taxes have not been raised since 1993 and have required Congress to transfer money over twelve times between 2008 and 2021, (totaling $272 billion) from the General Fund into the HTF to ensure solvency.[1] Additional transfers are likely in the future. Except for a few types of safety projects, all federal funds used in Oregon for roadway projects require a local match of at least 10.27 percent.[2] For transit projects, the match requirement varies between 10.27 and 50 percent depending on the funding source. Listed below are the major funding programs included in the Surface Transportation Reauthorization Act of 2021 that are likely to be used to fund projects within SKATS.[3] Competitive grant programs are not included in this list. The funding programs are split between those administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

Federal Funds for Highways, Roads, and Bridges

National Highway Performance Program (NHPP) – This program funds the construction of roads on the NHS and replacement or rehabilitation of on-system or off-system bridges. The rehabilitation, restoration, and resurfacing of the Interstate System is also eligible. Reconstruction is eligible if not adding capacity except for HOV lanes. Funds are received and programmed for projects by ODOT. None of the funds are sub-allocated to SKATS.

National Highway Freight Program (NHFP) – established under MAP-21, it aims to '… improve the efficient movement of freight on the National Highway Freight Network' (NHFN). The NHFN consists of the Interstate system, the Critical Urban Freight Corridors, and the Critical Rural Freight Corridors. Note that the *Oregon Freight Plan* has identified the segments of the NHFN that will receive these funds through 2020 and is being updated for adoption in early 2023. Funds are received and programmed by ODOT. None of the funds are sub-allocated to SKATS.

[1] See: https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/07.cfm (this is old pre-IIJA document)
[2] This is reduced from the national baseline of 20 percent due to the large quantity of federal lands within Oregon.
[3] The Surface Transportation Reauthorization Act of 2021 was part of the larger Infrastructure Investment and Jobs Act of 2021.

Highway Safety Improvement Program (HSIP) - Funds may be used for construction and operational projects to address safety issues with the target of reducing traffic fatalities and serious injuries on all public roads. These funds are usable on any public road or publicly owned bicycle or pedestrian pathway, trail, or Safe Routes to School activities. Funds are received and programmed by ODOT; none of the funds are sub-allocated to SKATS. However, ODOT uses a competitive process to award a portion of these funds for safety projects in local jurisdictions.

Surface Transportation Block Group Program (STBGP) - These funds are the most flexible available, as illustrated in **Table 6-1**. Road construction, ITS (Intelligent Transportation System) devices, travel demand management (TDM), and transit capital projects are among the eligible uses. With few exceptions, road-related projects must be located on roads classified as urban minor collector and above or rural major collector and above. SKATS receives a portion of Oregon's STBGP funds according to a formula that is based on population. ODOT's portion of Oregon's STBGP funds can be used anywhere in the state (including within SKATS).

Transportation Alternatives Program (TAP) – This is a set-aside of the STBGP funds. As part of the MAP-21 and FAST Acts, this combines Transportation Enhancements, Safe Routes to Schools, and Recreational Trails programs from SAFETEA-LU into one program. The funds can be used for construction, engineering, educational, or promotional activities. SKATS receives a small portion of Oregon's TAP funds. Received and distributed by ODOT and SKATS.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) - Funds from this program are available for projects in air quality non-attainment or maintenance areas. The funded projects are designed to contribute toward meeting national ambient air quality standards and for projects within SKATS must demonstrate that they will reduce vehicular emissions of carbon monoxide (CO). SKATS began receiving a portion of Oregon's CMAQ funds in 2016 based on a formula approved by the Oregon Transportation Commission (OTC).

Carbon Reduction Program – A new program as of 2021 focused on reducing the amount of carbon dioxide attributable to the surface transportation system. Funding is available for projects and programs from diesel engine retrofit to travel demand programs (e.g., Cherriots Transportation Options) to projects that facilitate and support walking, biking, transit, and shared rides. Funds are distributed via formula similar to STBGP to the three TMA (Transportation Management Areas) in Oregon.

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program – A new program as of 2021 with both formula and competitive grants available. The focus is on making the transportation infrastructure more resilient, able to continue operating or recovery rapidly from natural disasters and weather events. Within SKATS, the focus will likely be on severe storms and weather, flooding, wildfires, and earthquakes.

The funds received by SKATS are programmed to projects of regional importance via a process developed for the SKATS Transportation Improvement Program (TIP).[4] Projects are ranked according to how well they address the regional objectives presented in **Chapter 3** (among other considerations). The amount of federal funds that are forecast to be received by SKATS over the period covered by this Plan from STBGP, TAP, Carbon Reduction (CRP), and CMAQ programs is over $331 million, as illustrated in **Table 6-2**. Funds from the other federal programs (NHPP, NHFP, HSIP) may be used for projects within SKATS (primarily by ODOT), but this forecast does not assume a specific amount for the regional systems. An estimate of the amount of Federal funds received by Marion County that will be used within SKATS are also shown. The distribution of unobligated funds from other states that are received by ODOT is a new funding stream. There is a high variability of the amount distributed to ODOT from FHWA and the subsequent amount provided to SKATS. Estimates for likely future redistribution amounts were provided by ODOT and are included in the SKATS total shown below.

In August 2022, Salem received a federal RAISE (Rebuilding American Infrastructure with Sustainability and Equity) grant worth over $13.2 million for the McGilchrist project.

Table 6-2: Federal Funds Forecast for SKATS and Marion County2023-2050

	2023-2033	2033-2050	Total
FHWA – SKATS	$105,413,300	$256,279,600	$361,692,900
FHWA – Marion C.	$7,749,200	$18,512,700	$26,261,900
FHWA – RAISE (Salem)	$13,229,300	$0	$13,229,300

Federally Funded Programs for Public Transit

A smaller portion of the HTF is sent to local transit districts via programmatic and formulaic means overseen by the Federal Transit Administration (FTA). Most of these funds are for capital projects such as purchasing buses and constructing bus stops and maintenance facilities, or maintenance (preventative maintenance of the bus fleet). Because SKATS is designated as a Transportation Management Area (TMA), federal transit funds are restricted in use of operating the transit service. For transit districts in areas with a population of 200,000 or more, but that operate fewer than 100 buses in peak service, most of the operating expenses must come from non-federal sources of revenue, with only a portion of their 5307 Urbanized Area funds available for operations. The federal programs that are available to the Salem Area Mass Transit District (SAMTD) for use within SKATS are discussed below. ODOT Public Transportation division also receives many of these funds, which are distributed to public transit operators within Oregon including SAMTD. In addition, some of the FHWA funding programs discussed above may be used for public transit projects; SKATS has historically programmed some

[4] For more information, go to www.mwvcog.org and search for "TIP." An update to the SKATS TIP covering the years 2024 to 2029 will be adopted in May 2023.

of its federal funds for replacement buses, transit shelters, intelligent systems development, and transit planning

Urbanized Area Formula Grant (Section 5307) – Primarily used for capital expenses (including preventative maintenance). A limited percentage may be used for operations. This is largest source of federal transit funds received by SAMTD.

Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) - Consolidates Elderly and Disabled and New Freedom programs from SAFETEA-LU. This program provides funds to private non-profit and public organizations that provide transportation services to elderly and/or disabled persons. The funds can be used for capital, mobility management, and operating expenses.

Formula Grant for Rural Areas (Section 5311) - Funds from this program may be used for capital projects, operating, and administrative assistance of public transportation services in rural and small-urban areas.

Bus and Bus Facilities (Section 5339) - Used to fund the replacement, rehabilitation, and purchase of buses, vans, and related equipment and to construct bus-related facilities.

Metropolitan Transportation Planning (Section 5303) - Provides funds for multimodal transportation planning in urban areas.

The amount of federal transit funds forecast to be distributed to SAMTD from FTA that will be used within the SKATS boundary is illustrated in **Table 6-3**.

Table 6-3: Federal Funds Forecast for SAMTD 2023-2050

	2023-2033	2033-2050	Total
Total FTA	$79,151,300	$194,138,600	$273,289,900

State Funds

Funds collected from the State fuel and weight-mile taxes are limited by the Oregon Constitution for use within the road right-of-way. The revenue received is currently divided between the State, counties, and cities in a 60.05–24.38-15.57 split, respectively. Funds are distributed to counties based on vehicle registrations and to cities by their population. The State Constitution mandates that at least one percent of state fuel tax revenues be used by the recipient jurisdiction on bicycle and/or pedestrian projects. For the cities and counties, most of the State Highway Funds they receive is used to preserve, maintain and operate their existing transportation system because maintenance costs have been increasing faster than revenues distributed by the State. This reduces the amount of the State Highway Fund revenue available for capital projects. The amount of state highway funds distributed to the local jurisdictions within SKATS is illustrated in **Table 6-4**.

In 2019, ODOT was directed by the Oregon Legislature to consolidate the State Transportation Improvement Fund (STIF) and the Special Transportation Fund (STF) into one program. The merger of these two funds into the new STIF will be effective on July 1, 2023. Funding comes from a variety of sources, including a payroll tax of one-tenth of one percent on employees in Oregon, fees for ID cards, non-highway gas taxes, and cigarette taxes. The funds are distributed to transit districts and operators within the state primarily via a formula program, with a small percent awarded via a discretionary program. SAMTD also receives additional funds from the State, primarily as "In Lieu" payments, for their buildings and lands that are not subject to local property taxes. The amount that SAMTD is forecast to receive from the State is illustrated in **Table 6-4**.

Table 6-4: Forecast of State Highway and Transit Funds 2023-2050

	2023-2033	2033-2050	Total
State – Highway Funds	$247,262,900	$534,741,800	$782,004,700
State – Transit Funds	$213,291,100	$699,320,500	$911,611,600

Local Funds

In addition to the Highway Funds distributed to the cities and counties by the State, the jurisdictions within the SKATS boundary have other revenue sources to pay for the operation and maintenance of the current system and to fund capital projects to address system needs and gaps. The mix of revenue sources varies for each of the jurisdictions.

Transportation System Development Charges (TSDC) are levied when a residential or commercial development is built. These are used for projects that address the additional demands on the transportation system imposed by new trips generated by the development. By statute, they may not be used to maintain or operate the existing system or to pay for capital needs that pre-date adoption of the TSDC. Typically, the jurisdiction will identify the projects and the amount that can be covered in their TSDC regulations, which are updated periodically.

Developers of properties might be required to put in parts of the transportation infrastructure as a condition for that development. These can include sidewalks, half- or full-street improvements, traffic signals, etc. An estimate of the amount anticipated is included in the total shown below.

Salem has urban renewal districts and has used the revenue collected to fund transportation infrastructure within the districts. These define a specific area(s) within each city and dedicate the tax increment raised in them toward projects located in the district. Projects must be included in the applicable urban renewal plan and are not limited to transportation. Renewal districts are in existence for a limited time (20 years unless renewed) and have a limit on the amount of funds they can raise and spend.

Salem has used voter-approved General Obligation (GO) bonds to periodically fund a mixture of projects within their city limits that repair and expand the road system. These have used a 10-year time span to collect and fund the projects with the bonds being repaid via the property tax collected. The last GO bond was approved in 2022 providing approximately $150 million in funding for transportation projects. For use in demonstrating financial constraint, the working assumption is there will be two additional bonds during the time frame of this Plan.[5] Salem restricts the amount of bonds that are 'active' at one time to limit the annual property tax levy for debt not to exceed $2.42 per $1000 of assessed value. This necessitates coordination amongst the various city departments (Public Works, Library, Police, etc.). Only a portion of each bond has been used for capital projects on the regional system. The bond is also used to pay for larger maintenance projects and projects off the regional system. The estimate illustrated in **Table 6-5** includes only the portion of the forecasted bond revenues that would be used on roads that are part of the regional systems.

Polk County also has used voter-approved bonds in the past, mainly for maintaining the roads that they own, most of which are outside SKATS.

A significant source of funding for the Salem Area Mass Transit District (SAMTD) for the operation of their fixed-route and demand-response buses is property taxes on land within their service boundary. The last successful vote to increase funding for the district was in 1996, which established a new tax base and will account for less than 50 percent of the operating revenue available to the Transit District. Attempts to increase the base at the 2006 and 2008 elections were unsuccessful. Another local source of funds includes monthly transit passes and fares collected from passengers (**Table 6-5**)[6]. Beginning in 2026, SAMTD will be allowed to levy an employer tax as part of S.B. 1536 which was signed into law in 2018.[7] This tax is not included in the forecasts for this Plan update but may be included in future updates depending on the direction of the SAMTD Board.

Table 6-5: Local Funding for Roads and Transit 2023-2050

Funding Source	2023-2033	2033-2050	Total
Local – for Regional Roads	$254,328,900	$547,114,600	$801,443,500
Local – Transit	$257,913,000	$579,140,100	$837,053,100

Other Potential Funds Not Included in the Revenue Forecasts

Additional awarded funds periodically become available for projects within SKATS but are difficult to forecast due to their nature; especially, those associated with new or changed policies. This includes Federal earmarks (which were removed as an option with MAP-21 but have returned post-IIJA), competitive grant programs from FHWA or

[5] Assuming roughly 13 years between GO Bonds, these are in 2036 and 2049, both at $200 million non-inflated.
[6] The SAMTD Board recently stopped allowing and advertising on buses and transit stops.
[7] See: https://gov.oregonlive.com/bill/2018/SB1536/

FTA (e.g., RAISE and No-Lo),[8] and the Oregon Legislature directing funding to specific projects as part of legislative bills (such as H.B. 2001 and H.B. 2017),[9] or legislation changing the priorities for *Connect Oregon*. Additionally, any future decisions by the Oregon Transportation Commission (for example, where Federal Freight funds received by the Oregon will be spent), and the outcomes of Oregon's competitive programs (such as Safe Routes to School infrastructure and All Roads Transportation Safety (ARTS)) are not forecast beyond those projects that have already been awarded funds. These potential funding sources are not included in the forecasts; although, some of those funds could potentially be used for projects within SKATS. One-time funding increases, such as the American Recovery and Reinvestment Act (ARRA) [2009], are also not part of the future revenue forecast.

Summary of Forecasted Revenue

Summarizing **Tables 6-2** through **6-5**, the funds that are reasonably anticipated to be received by each of the SKATS members is illustrated in **Table 6-6**. This reflects the funding identified, including all grants and earmarks awarded by December 20, 2022.

In addition to these amounts, within the SKATS TMA area ODOT is forecast to have approximately $140 million available over the next 27 years for capital projects on the state system plus approximately $85 million for operations, maintenance, and preservation of the current state highway system. The sources for these are a combination of federal and state funds. Larger projects with higher costs, such as the seismic retrofit work on the Center Street Bridge, require direct action of the Oregon Legislature (as when a bill such as H.B. 2001 is signed into law that identifies projects to be funded) or the Oregon Transportation Commission. Funds for these types of projects are from across Oregon and assigned on a basis on a variety of factors.

Table 6-6: Summary of Forecasted Revenues by Funding Source 2023-2050 (Excluding ODOT)

	Reference	2023-2033	2033-2050	Total
FHWA – SKATS	Table 6-2	$105,413,300	$256,279,600	$361,692,900
FHWA – Marion C.	Table 6-2	$7,749,200	$18,512,700	$26,261,900
FHWA – RAISE: Salem	Table 6-2	$13,229,300	$0	$13,229,300
State Highway Funds - Locals	Table 6-4	$247,262,900	$534,741,800	$782,004,700
Local Funds for Regional Roads	Table 6-5	$254,328,900	$547,114,600	$801,443,500
Total - Roads		**$627,983,600**	**$1,356,648,700**	**$1,984,632,300**
FTA – SAMTD	Table 6-3	$79,151,300	$194,138,600	$273,289,900
State Transit Funds	Table 6-4	$213,291,100	$699,320,500	$911,611,600

[8] RAISE – Rebuilding America's Infrastructure with Sustainability and Equity, No-Lo is for transit purchases of No or Low emission vehicles.

[9] Specifically, the Oregon Legislature directed $60 million in funds as part of H.B. 2017 to fund seismic upgrades on the Center Street Bridge. The cost estimate of the upgrades is $99.7 million (for construction starting in 2025).

Local Funds Transit	Table 6-5	$257,913,100	$579,140,100	$837,053,100
Total - Transit		**$550,355,400**	**$1,472,599,200**	**$2,022,954,600**

Expenditures

The expenditures on the regional system by the local jurisdictions and agencies are for the operations, maintenance, and preservation of the existing system and modernization projects to address system needs and – in the case of transit – to build new facilities or replace their rolling stock that has reached or exceeded the end of their usable life. These are discussed and presented in this section.

Operations, Maintenance, and Preservation

These expenditures cover the day-to-day operations of the regional system, and the maintenance and preservation projects to keep systems in a state of good repair. Reports filed by the cities and counties as part of the requirements of H.B. 2017 provide more information on the condition of the locally owned roads and bridges (see **Chapter 5**). Information on the roads and bridges that are part of the National Highway System is collected by ODOT every two years and are part of the federally required performance measures discussed in **Chapter 3** and **Appendix P**.

SKATS Regional Programs

SKATS currently allocates a portion of the federal funds it receives to several on-going regional operational programs. These programs are the Rideshare and Transportation Demand Management (TDM) program managed by Cherriots Transportation Choice and the Regional Traffic Signal Control Center operated by the city of Salem. These address the efficient operation of the regional system (in concordance with several of the MTP Goals stated in **Chapter 3**). Another regional program that has been more recently added is funding the regional Safe Routes to School program. Additionally, funds are allocated to SAMTD for the replacement of transit buses when they have reached the end of their useful life, per the strategy outlined in SAMTD's *Transit Asset Management Plan* (approximately $25.6 million). Finally, the operation of the MPO is funded with federal funds, plus state and local match. The amount SKATS is forecast to fund these programs over the next 27 years is illustrated in **Table 6-7**.

Table 6-7: Expected Cost of Regional Programs, 2023-2050

Program	2023-2033	2033-2050	Total
Total	$26,969,600	$70,621,200	$97,580,800

Salem Area Mass Transit District

Operations and maintenance expenses for the Transit District are substantially different than those for the other members of SKATS. Within SKATS are two types of major services: a fixed-route service ("Cherriots") and a demand-response paratransit service ("Cherriots LIFT"). The Transit District also has a service for seniors and those with disabilities for shopping and medical appointments ("Cherriots Shop and Ride") and a

Shopper Shuttle for trips to dedicated stores. The Transit District also operates its regional service ("Cherriots Regional") between cities in Marion and Polk Counties, but funding for this is not included in **Table 6-8**.

The cost for SAMTD to operate their fixed-route Cherriots service and the demand-response Cherriots LIFT (including the costs for fuel, labor, insurance, maintenance, etc.), as well as for the supportive functions of dispatching buses, maintaining, and cleaning stops and buses, customer service, and general administration over the next 27 years, is approximately $1.88 billion (**Table 6-8)**. This estimate is for the level of service offered by the current fixed-route transit system as it exists today. The majority of this will be met with property taxes, STIF distributions from the state, and fare revenues, and to a lesser extent by the other fees collected by the Transit District. After subtracting the estimated cost of providing bus service, SAMTD will have approximately $145 million available for projects and renewing their bus fleet (plus any grants and/or earmarks they may receive, plus funds available from SKATS).

Table 6-8: Estimated Cost of Cherriots Service, 2023-2050

Program	2023-2033	2033-2050	Total
Bus Service	$506,758,000	$1,370,804,800	$1,877,562,800

ODOT and Local Jurisdictions

ODOT spends approximately $1,900,000 per year on operation and maintenance of its roadways within SKATS. While the funding is primarily from the State Highway Fund, there are also federal funds used, especially along I-5. Investments are based, in part, on the rankings from ODOT's management systems (such as pavement) that ODOT uses to track the condition of their facilities and assets. In addition, policy direction set by the Oregon Transportation Commission (OTC) – such as which facilities will be awarded federal Freight Funds – can influence expenditures as can legislative decisions made by the Oregon Legislature.

The OTC has adopted a policy that the preservation of the existing transportation system is its first priority and has directed that the majority of funds be used to that purpose statewide. Therefore, for state owned and operated highway facilities – which include Interstate 5, Highway 22, Highway 221 (Wallace Road), and Salem Parkway – it is assumed that the State will allocate the necessary financial resources to adequately maintain and operate these facilities based on the highway preservation policies established by the OTC. With the full implementation of the performance measures related to MAP-21 and FAST, it is possible that ODOT will need to spend more funds to meet the targets set for the various performance measures.

The cities and counties that own the majority of roads and bridges within SKATS spend their operations, maintenance, and preservation funds primarily on roads that are part of the regional system and to a lesser extent on the local roads that provide the final connection between the regional system and the neighborhoods. The local jurisdictions use State Highway Funds for these tasks. The estimated expenditures for operating,

maintaining, and preserving the regional system are presented in **Table 6-9**.

Table 6-9: Estimated Operations, Maintenance, and Preservation Expenditures on Regional Roads, 2023-2050

	2023-2033	2033-2050	Total
ODOT	$24,713,500	$60,616,100	$85,329,700
Local Jurisdictions	$226,145,800	$496,950,700	$723,096,500

Regional Modernization Projects – Road and Bridge Related

In addition to the cost of operating and maintaining the current system, the projects identified in **Chapter 7** and **Appendix I** are necessary to address some of the gaps in the existing regional system that were discussed in **Chapter 5**. The total estimated cost for the identified regional roadway capital projects (i.e., the project lists in **Chapter 7** and **Appendix I**), is over $2.2 billion (including ODOT projects). It should be noted that the cost is likely higher as not all projects are included if the planning studies are underway or if the projects have not been added into the appropriate local transportation systems plan. Also, in the last several years construction costs have exceeded general inflation. This introduces a level of uncertainty in the cost estimate.

The projects included in **Chapter 7** meet the fiscal constraint requirement of this plan for two reasons: First, adequate revenues have been identified for the maintenance and preservation of the regional system; and second, the estimated costs (in year of expenditure) for the capital projects included in this Plan are less than the estimated revenues for capital projects (See **Table 6-6** and **Table 6-10**). This project list was developed following the project selection process outlined in **Appendix C**. After subtracting the cost of the programs for operating and maintaining the current regional system and the cost to provide the regional programs that SKATS funds, in total, the agencies and local jurisdictions (excluding ODOT) within SKATS are forecast to have approximately $1.16 billion for roadway capital projects, as presented in **Table 6-14**

The estimated cost in Year of Expenditure (YoE) dollars by the type of project, and whether it is "committed" (to be built or funded within approximately the next five years) or "included" (to be built within the timeframe of this Plan and has priority to be funded with the money currently forecasted to be available) is presented in **Table 6-10**. The estimated costs (in YoE dollars) of the committed and included projects by jurisdiction are provided in **Table 6-11**. The project categories are described in more detail in **Chapter 7**. A complete list of the projects identified to be constructed over the next 20+ years is presented in **Table 7-2** in **Chapter 7**.

Table 6-10: Project Cost by Project Type and Category (Based on Evaluation Scores and Costs) [Excludes ODOT Projects][10]

	Committed	Included	Subtotal	Illustrative	Total
Road-Bridge	$195,722,300	$733,342,000	**$929,064,300**	*$436,966,000*	**$1,366,030,300**
ITS-Signals	$1,093,000	$4,765,000	**$5,858,000**	*$58,147,000*	**$64,005,000**
Bicycle-Pedestrian	$36,647,000	$165,776,000	**$202,423,000**	*$21,001,000*	**$223,424,000**
Transit	$12,391,000	$18,906,000	**$31,297,000**		**$31,297,000**
Total	**$245,853,300**	**$922,789,000**	**$1,168,642,300**	***$516,114,000***	**$1,684,756,300**

Table 6-11: Project Cost by Jurisdiction and Category (Based on Evaluation Scores and Costs) [Excludes ODOT Projects]

	Committed	Included	Subtotal	Illustrative	Total
Keizer	$5,013,300	$18,885,000	**$23,898,300**	*$16,674,000*	**$40,572,300**
Salem	$191,089,000	$765,415,000	**$956,504,000**	*$297,088,000*	**$1,253,592,000**
Turner	$0	$1,188,000	**$1,188,000**	*$0*	**$1,188,000**
Marion County	$37,360,000	$116,749,000	**$154,109,000**	*$202,352,00*	**$356,461,000**
Polk County					**$0**
SAMTD	$12,391,000	$20,552,000	**$32,943,000**	*$0*	**$32,943,000**
Grand Total	**$245,853,300**	**$922,789,000**	**$1,168,642,300**	***$516,114,000***	**$1,684,756,300**

ODOT Funding

Shown in **Table 6-12** are the estimates of project expenditure by Oregon on the state-highway system within SKATS. Determining which ODOT projects will be funded in the future is not as simple as for the local jurisdictions. First, many of the projects identified have current cost estimates in the tens of millions of dollars and compete for funding not just with other ODOT projects within SKATS, but within Region 2 and the rest of Oregon. Second, there is not an equivalent long-range plan that lays out state-wide projects over the next 27 years. Third, projects on the state highway system could be funded by means not available to the local jurisdiction, such as being included by the Oregon Legislature as part of a future transportation funding bill, or more of the funds available to ODOT could be allocated. Given that uncertainty, beyond the immediate next five to ten years the projects are listed as "ODOT TBD", to designate the possibility of any individual project being funded in the next 27 years, but without the certitude of the local projects. Historically, major projects have been completed over the past 20+ years through a combination of the funding options discussed above.

[10] As the Center Street Seismic Project is an ODOT project, it is not included in the Road-Bridge totals. Full funding is a priority and will be found from a combination of state and federal funds available to ODOT.

Table 6-12: Project Cost for ODOT Projects

Committed	Included	"TBD"	Total
$206,549,000	$3,909,000	$325,953,900	**$536,411,900**

Regional Modernization Projects – Transit Related

In addition to projects that are included in the totals shown in **Tables 6-10** and **6-11** (which are for physical structures such as transit centers), the Transit District will spend the remainder of their approximately $145 million that was identified for capital projects over the next 27 years to replace and expand their fleet of buses and other vehicles (**Table 6-13**). It is anticipated that SAMTD will receive grants and/or earmarks over the next 27 years, plus use approximately $25.6 million in funding from SKATS to do so.

Table 6-13: Estimated Cost for Transit Fleet Modernization Projects, 2023-2050

	Total
Transit Modernization	$261,615,000

Identifying Other Potential Funding (Not Included in This Plan)

The discussion in the previous sections of this chapter describes the sources of funds that are reasonably expected to be available to the jurisdictions and agencies in the region over the next 27 years to fund the operations, maintenance, and preservation of the regional system as well as fund capital projects. This results in a system that is presented in **Chapter 7**. As mentioned previously, this group of financially constrained projects does not include all projects that have been identified to address the needs that were discussed in **Chapter 5**. A more complete list of projects that have been identified during planning studies, but for which funding is currently not expected to be available over the next 27 years, which are labeled as "Illustrative", is provided in **Appendix I**.

To address all these needs, plus other needs that may develop over the next 27 years, additional levels of existing funding sources or new funding sources may be needed. A list of possible revenue sources include, but are not limited to:

- Local income tax
- Local property tax (GO Bonds)
- Local improvement districts
- Utility fees (street, streetlight, sidewalk, etc.)
- VMT (Vehicle Mile Tax) Fees
- Increased taxes on vehicle use (fuel, etc.)
- Increased fees on vehicles (registration, etc.)
- Dedicated Oregon Lottery Funds
- Tax increment financing
- Grants from the Federal or State government (e.g., RAISE)

- FTA 5309 Small Starts (competitive program)
- Tolling (roadway capital projects only)
- Public-Private Partnerships
- Revenues from carbon taxes

Additional transit operating funds could come from one, or more, of the following sources:

- Increased fares
- Employer Payroll tax (as used by TriMet and Lane Transit District, available after January 2026)
- Transit utility fee
- Local income tax
- Increased property tax
- Public-Private Partnerships
- Revenues from carbon taxes

The list of possible funding sources presented above is not meant to be exhaustive. It is possible that there are other solutions that have not been identified. In addition, there are limitations with each of the sources listed, either in the amount of funds that could be raised, in the applicability to within SKATS, or in the likelihood of being approved for implementation. For example, increases in local property taxes for transportation must compete with other services (such as parks and fire departments). VMT taxes (aka road usage charge or mileage collection system) are slowly being implemented in Oregon, and it is unknown whether they will add any revenue to the system. Increasing fuel taxes, whether at the federal, state, or local level tends to be unpopular unless it is dedicated to a defined list of projects. It is unknown how a local fuel tax would be received by those voting on such a proposal, but 14 cities and two counties in Oregon have successfully passed them.

Also, some of the possible funding sources (e.g., certain federal grants) may only be used on projects of a minimum cost, often in the tens of millions of dollars. As such, these sources are not appropriate for all types of projects. Some funds could be used to free up existing money used; for example, a streetlight utility fee would allow gas tax funds currently expended to be used on other projects.

For transit, as part of Senate Bill 1536, SAMTD can enact an employer payroll tax without a vote of the people of the area.[11] Local taxes for transit did not pass in the past two attempts that took place in the first decade of the 2000s.

[11] This ability will not be available until January 2026. The bill also changed the Transit Board from citizen-elected to Governor-appointed as the existing Board member terms expire. SAMTD has not stated whether they plan to use this option.

No matter the combination of funding sources, the region has a finite capacity to fund projects and operations, while still paying for other non-transportation related services (e.g., police, fire, schools, etc.).

Financial Constraint

Financial constraint reflects the projects and cost estimates from the proposed project list as of January 31, 2023.

Fiscal responsibility, as well as federal and state regulations, requires that the Plan exhibit "financial constraint." This means that the cost of the identified projects does not exceed the forecasted financial resources available over the period covered by this Plan. Funds from sources that have not been used in the last 20 years are not included in the financial forecasts. Nor are any new sources of funds currently forecast to be available, as these would require policy action by the jurisdiction that would use the funds.

Federal and state regulations additionally require the demonstration that adequate funding is expected to be available to maintain and operate the existing transportation facilities and services during the time frame of this Plan. This will help protect the investments made in previous years.

Projects that do not have reasonably anticipated funding identified or that increase the level of transit operations beyond the level existing in 2023 are not included in the financially constrained portion of this Plan. These projects are categorized as "Illustrative." While they are presented in **Appendix I**, they are not considered part of this Plan. Before any of the projects listed in **Appendix I** could be built, adequate funding would have to be identified and shown to be reasonably available over the timeframe of this Plan. This could include removing other projects from the "Included" list of projects.

A summary of the funds available and identified expenditures for the road-related projects that are part of the financially constrained Plan are presented in **Table 6-14**. The funds and expenditures for the transit-related projects are illustrated in **Table 6-15**.

Table 6-14: Financial Constraint for Road-related Expenditures (without ODOT projects)

Source	Revenue	Expenditure-O+M & Reg. Programs	Expenditures-Regional Capital	Residual
FHWA – SKATS	$361,692,900	$97,580,800	$264,112,100	$0
FHWA – MC	$26,261,900	$0	$26,261,900	
FHWA RAISE – CoS	$13,229,300	$0	$13,229,300	0
State Funds – Roads	$782,004,700	$723,096,500	$58,908,200	$0
Local Funds – Regional Roads	$801,443,500	$0	$801,443,500	$0
Total-Roads	**$1,984,632,300**	**$820,677,300**	**$1,163,955,000**	**$0**

Table 6-15: Financial Constraint for Transit-Related Expenditures

Source	Revenue	Expenditure-O+M	Expenditures-Capital	Residual
FTA – SAMTD	$273,289,900	Not Available Broken Out by Fund Type and Expenditure		
State Funds – Transit	$911,611,600			
Local – Transit	$837,053,100			
Total – Transit	**$2,022,954,600**	**$1,877,562,800**	**$294,557,700[12]**	**($149,165,900)***

* The revenue does not include the approximately $25.6 million in funding from SKATS for bus purchases (included in **Table 6-14** under O+M & Regional Programs). For financial constraint, SAMTD needs either to increase the time between bus replacements[13], reduce service or receive additional funding via a combination of federal grants/earmarks, and additional SKATS or SAMTD funding of roughly $5.5 million per year which is within the realm of possible given awards in recent years. In addition, there is the option for the employer tax beginning in 2026 to provide additional funding.

[12] This includes the cost of the projects identified (shown in Tables 6-10 and 6-11) and the vehicle replacement costs for the next 27 years.

[13] It is possible that battery electric buses will require less maintenance and have longer service lives than diesel or CNG powered buses. There has not been enough real-world use to date to determine if this is so.

Chapter 7 ~ Proposed System

The description of the current regional transportation system has been presented (**Chapter 4**), as well as the gaps and identified needs of the current regional transportation system (**Chapter 5**). In the last chapter (**Chapter 6**) a summary of the anticipated revenues available to the jurisdictions within SKATS, describing the amount of funds available for operating and maintaining the current system was presented. Included was a discussion of the amount of funds that could be used for capital improvement projects to provide a regional transportation system that aligns with the goals of this Plan.

The future transportation system needs to build upon the network of facilities that currently exist, reduce the existing gaps, address as many of the identified needs as possible, while providing the necessary infrastructure to support the planned development envisioned in the adopted comprehensive plans of the local jurisdictions. The future transportation system would support and reaffirm the Goals presented in **Chapter 3,** as well as being financially constrained as discussed in **Chapter 6**. Furthermore, as stipulated in the Federal regulations for regional transportation plans, the proposed system needs to be based on the currently adopted comprehensive plan for each of the jurisdictions in SKATS and the agreed upon forecasts for the area's population and employment (detailed in **Appendix A**) over the next 20+ years.

A regional transportation system that addresses these criteria will be discussed in this chapter. The focus will be on the parts of the system that are publicly funded, specifically, the road and public transit portions. Less attention will be paid to the privately funded portions such as pipelines[1]. The chapter begins with a brief summary of the population and employment forecast within SKATS. The remainder of the chapter describes the proposed system discussed in terms of four categories (Road-Bridge, Bicycle-Pedestrian, ITS-Signal and Transit) for the five districts introduced in **Chapter 4**.

Salem-Keizer in 2050

Federal regulations require that a long-range transportation plan, such as the SKATS MTP, have a horizon year at least 20 years in the future. The SKATS MTP has traditionally been prepared to cover a period of 24 years, to ensure that if any amendments are necessary before the next scheduled adoption for updating the MTP (which are required by Federal regulations to be completed every four years), that population and employment forecasts would cover a full 20-year timeframe.

Federal regulations further require that forecasts for population and employment in the Salem-Keizer region in 2050 used in this Plan be based on currently adopted comprehensive plans for the local jurisdictions. Population totals are supplied by the Population Research Center at Portland State University, and employment forecasts are

[1] Although portions of the road system within SKATS will be built or modified with private dollars as part of conditions for development.

based on information from the Oregon Employment Department. A forecast working group comprised of members of the SKATS Technical Advisory Committee (particularly land use planning staff from the cities and counties within SKATS) helped coordinate the allocations of the 2050 population and employment forecasts to ensure that they complied to the local Comprehensive Plans. The forecasted population and employment within SKATS for 2050 are illustrated in **Table 7-1**. Information presented in **Appendix A** describes the methods used and other additional details about the forecasts.

Table 7-1: Forecast SKATS Population and Employment (Source: Oregon Employment Department, Population Research Center at Portland State University)

	2020	2050
Population	271,737	333,870
Employment	118,347	149,176

As with any forecast, there is a measure of uncertainty in both the numbers and the timing. Numerous exogenous factors influence the population and amount of employment in the area. As seen during 2020 to early 2022, disruptions can occur swiftly, and the recoveries can be swift but uneven. Also, for this update a number of changes at the State and local level have been taken into account when allocating future population to specific areas. First, at the State level, new regulations require land formerly zone "Single Family" to allow duplexes by right. Also, triplexes, quadplexes, cottage clusters, and townhouses are now allowed in residential areas. Both Keizer and Salem updated their zoning codes by 2022 to address these regulations, but how they will play out is still an open question. Second, the local jurisdictions are working to address the new regulations stemming from the Climate Friendly and Equitable Communities rules that were adopted by the Land Conservation and Development Commission in 2022. As that work is on-going, any changes stemming from it will be reflected in the next update to this MTP.

All this is to say that the numbers presented and used in this Plan are subject to change in future revisions to this Plan. In particular, the Population Research Center will update their forecast for the twelve northwest Oregon counties (including Marion and Polk Counties) in 2025. Therefore, the included forecasts and allocations in this plan represent the best information available at the time they were produced.

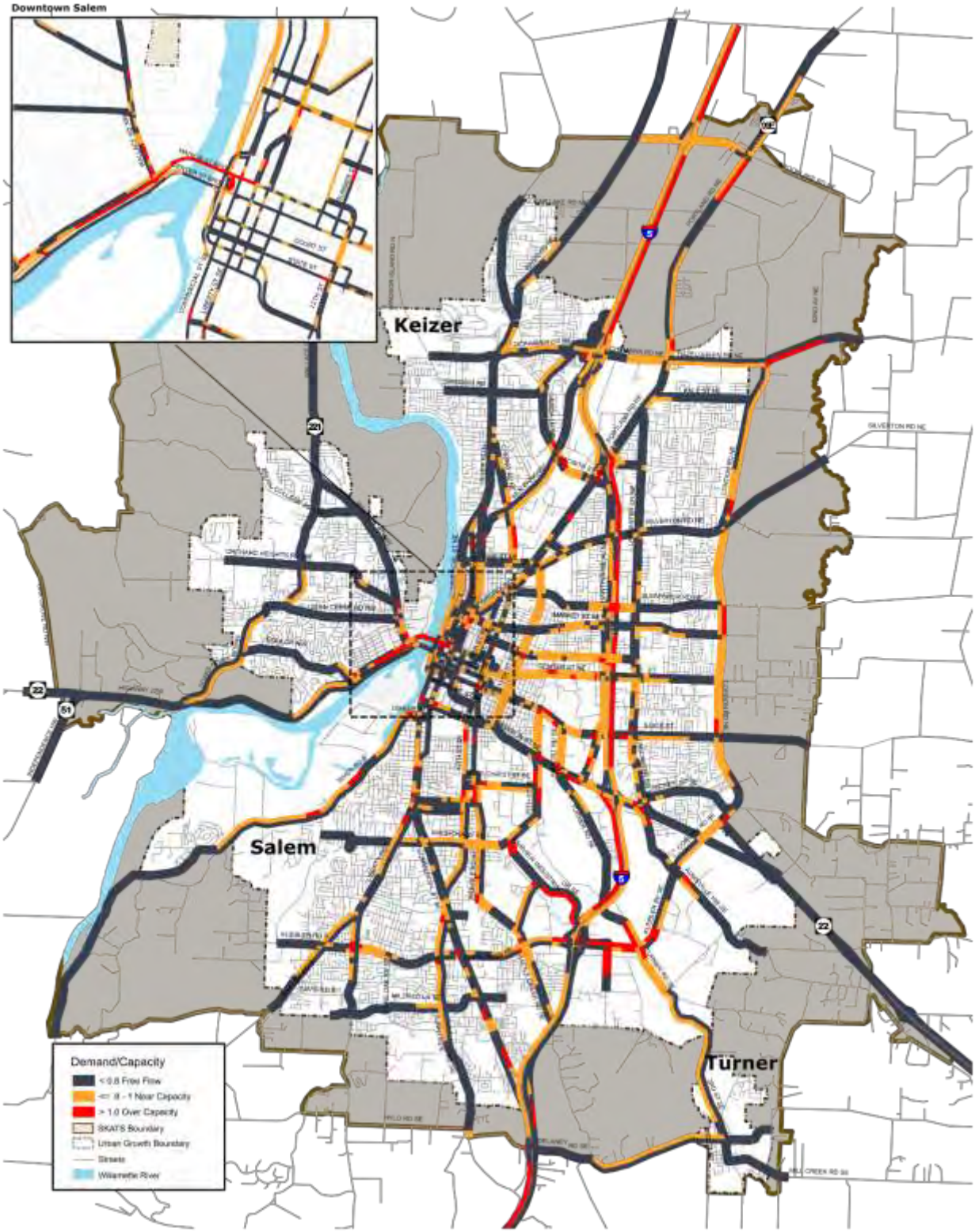
Addressing the Needs, Gaps, and Deficiencies of the Existing System

As discussed in **Chapter 5**, the current regional transportation system has a variety of identified gaps and deficiencies. These need to be addressed in order to improve the efficient movement of people and goods around and through the Salem-Keizer area and to make the system safer and enhance security of the regional system for all users and modes of travel. Finally, gaps (e.g., in the regional bicycle and sidewalk systems) that impede travel were identified. In addition to identifying projects to address these needs and gaps, there is also the requirement to keep the existing system in good repair.

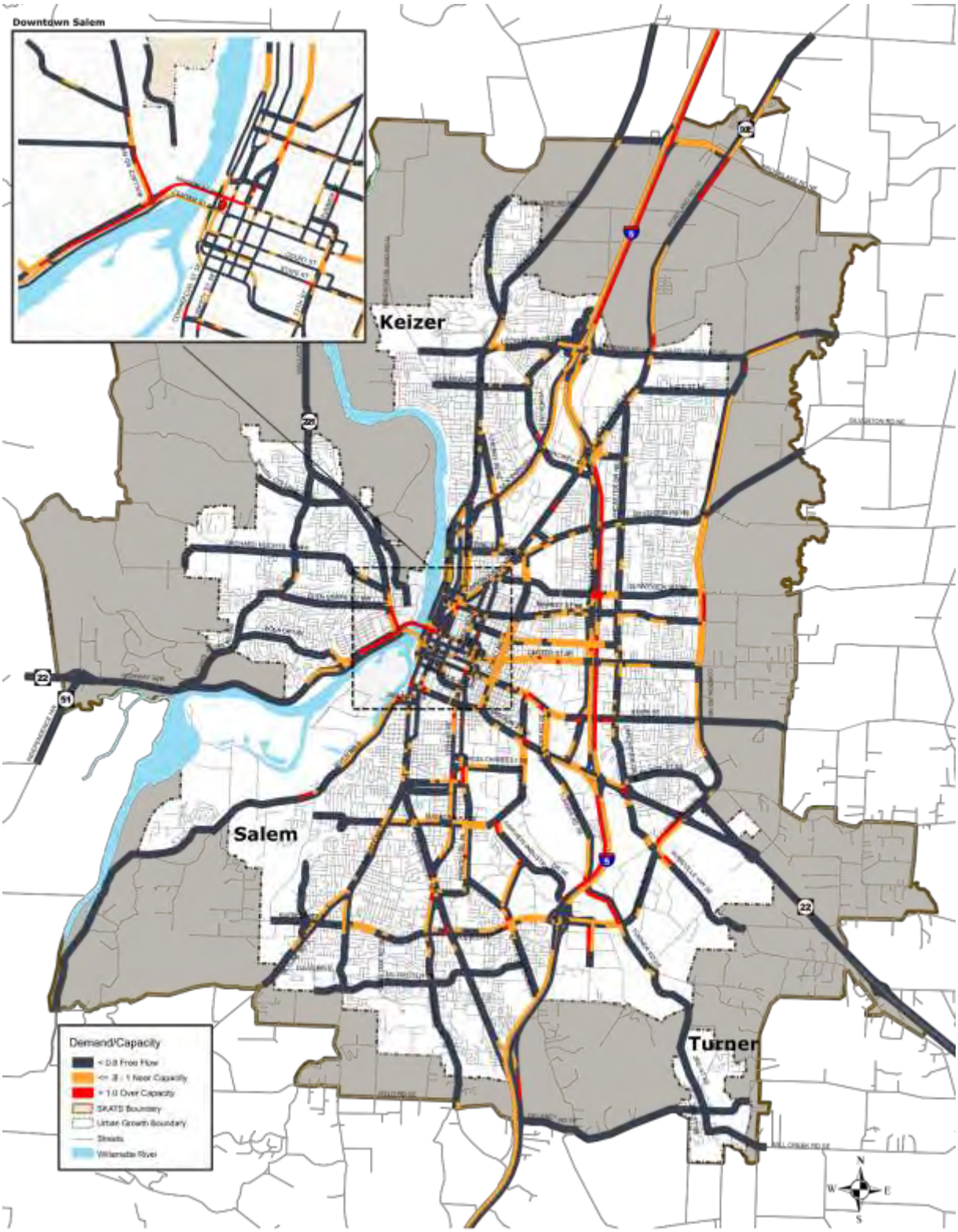
The projects selected and presented in this chapter are meant to address these needs, gaps, and deficiencies and allow for a greater amount of movement by people and goods via the mode that best meets their needs. Unfortunately, it is not always possible to remedy the existing deficiencies and gaps for a variety of reasons: neighborhood concerns about a project, environmental considerations, political issues, or lack of funding. While this plan addresses many of the deficiencies on the regional system, it must be realized that there will always be some gaps or needs that either have no feasible solution or that require further study before determining the appropriate solution(s) (***See Chapter 9 Outstanding Issues*** for a discussion on some of the major unresolved issues.).

Two model runs were completed for the 2050 horizon year using the forecasted population and employment shown in **Table 7-1**. The first model run assumes no projects are built, essentially showing how demand in 2050 would operate on the transportation system of today. The results are shown in **Map 7-1**. The second model run combines the 2050 population and employment forecasts with the proposed projects that are listed in **Table 7-3**. The result is illustrated on **Map 7-2**. This travel demand is calculated with the SKATS Regional Travel Demand Forecasting Model. The results shown are for the P.M. peak period (from 5 P.M to 6 P.M.). Comparing the results shown in these maps, with the base year demand shown in **Map 4-4 (**page 4-13 of **Chapter 4**), the number of roads where the demand to capacity is above 0.8 is much greater in both future scenarios. But there is a decrease in the number of roads with demand to capacity above 0.8 in the 2050 Build scenario compared to the 2050 No Build scenario. In 2021 base year, approximately 84 percent of the road miles have a demand to capacity ratio of less than 0.8. This number decreases to 66 percent for the 2050 No Build case but is approximately 76 percent for the 2050 Build case (which represents the Committed and Included projects in **Table 7-3**).

The remainder of this chapter is devoted to discussing the future transportation system and presenting the proposed projects that are part of this financially constrained plan.



Map 7-1: Demand to Capacity Ratio on Regional Roads in 2050 with No-Build Network (PM peak)



Map 7-2: Demand to Capacity on Regional Roads in 2050 with Proposed Projects (PM Peak)

Travel and Goods Movements - Future Regional Non-Road System

As discussed in **Chapter 5**, the components of the regional non-road system (i.e., aviation, maritime, pipelines, and railroads) are for the most part funded, operated, and owned by private entities. The expansion, maintenance, and operation of these components will likely be done in reaction to market forces or to meet the long-term strategic needs of the company involved with little to no input from SKATS or any of the local governments.

The portions of the non-road system that receive public funds (such as the airport and occasionally the railroads) do not involve the SKATS Policy Committee in the decision-making process. They typically receive funds from Federal or State agencies that are not required to coordinate or consult with the metropolitan planning organization of the area. Future projects to extend the capabilities of either the airport or the rail system, particularly regarding passenger travel, will be developed by Salem and ODOT, respectively.

The Airport Master Plan (AMP) for McNary Field was last adopted in 2012 and is currently being updated. Longer-term improvements call for lengthening the primary runway and eventual replacement of the airport terminal. Funding for these projects is provided primarily by the Federal Aviation Administration (FAA) with local match provided by the city of Salem. Current projects are to increase the size of the terminal and add features to make it more attractive for potential airlines to use for commercial service.

The *Oregon Rail Study* (*2010*) identified draft goals for rail service along the C*ascades* corridor to provide up to six round trips daily between Portland and Eugene, increase the on-time performance, increase the average train speed, and reduce the travel time between Portland and Eugene to two hours (comparable to current driving times). In 2013, ODOT received two Talgo trainsets to replace the trainsets on loan from the Washington DOT, which are used on the *Cascades* corridor. ODOT last updated the *State Rail Plan* in 2020, which addresses both freight and passenger rail operations throughout Oregon but does not identify specific projects. ODOT has recently completed a study on passenger rail serving the communities in the Willamette Valley with the final Environmental Impact Statement (EIS) adopted in 2021 along with a Record of Decision (ROD). The *Oregon Passenger Rail EIS* presents the modifications on the preferred alignment (the Union Pacific Railroad line which runs along the east side of downtown Salem) to allow for an increase in passenger rail service in the future.

Increases in passenger service will require more capacity on the Union Pacific rail line to address conflict points and congestions. According to ODOT's *Oregon State Rail Plan* (*2020*), the Union Pacific line is expected to grow by 40-50 percent by 2035; and the Portland & Western line is likely to increase from the current six trains a day. Funding for the *Cascades* service is provided by the States of Oregon and Washington, which currently contract with Amtrak to provide the service. In the future, it is possible that

another organization will be selected to run the trains. Providing additional passenger rail service will require additional funding.

Travel and Goods Movement - Future Regional Transit System

In September 2019, Cherriots revised their service within Salem-Keizer by lengthening their operating hours on weekdays and began offering service on Saturdays. Service on Sunday and select holidays started in September 2021, after being delayed due to the COVID-19 pandemic. This expansion in service was made possible by the funds distributed by the State of Oregon that are being collected from the employee tax levied statewide since July 2018.

Several capital projects, such as transit centers and bus purchases, are identified for funding by 2050. Over the next 27 years, it is anticipated that transit centers will be completed in south[2] and east Salem[3], providing equivalent functionality of the transit centers existing in west Salem and Keizer. Finally, during this period the Transit District will be able to maintain their buses and replace them when they are worn out following the targets set in their *Transit Asset Management Plan* (2022).

In December 2022, the first *Long Range Transit Plan* (LRTP) was completed by the Salem Area Mass Transit District. Covering their entire service area (Marion and Polk counties for the Cherriots Regional service, within the Salem-Keizer Urban Growth Boundary for Cherriots Local service), the plan provides an overview of possible service expansions and enhancements over the next 20 years. Within Salem-Keizer, the focus is on increasing frequency on the existing routes, adding more hours of service, and expanding service to areas that currently have no transit service. The factors for considering when to plan for and offer high-capacity transit is also presented, with the focus for this potential service along the defined Core Network (see **Map 7-3**). Additional service, whether for new or current routes, will require additional funding above that assumed available. In particular, as discussed in the LRTP, Cherriots has goals of providing 15-minute service on all the routes that are part of the Core Network, and 30-minute service on the 'standard' routes (see **Map 7-4** for the proposed system if additional funds are available). To provide this level of service will require approximately 13 additional vehicles and adding 91,000 annual service hours, costing $10 million and $9 million annually (2022 dollars) respectively[4]. This additional service is forecast to result in higher transit usage by 2050, both as a percent of trips and total number.

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[2] A location for the South Salem Transit Center (project B008) had previously been identified, but in 2019 the SAMTD Board decided to review that decision and restarted the process of selecting a location. After a second locational analysis, a site was selected at Commercial St SE and Wiltsey Rd SE in July 2022. Final negotiations are currently underway.

[3] The location for the East Salem Transit Center is likely to be located on the Chemeketa Community College campus. The exact layout and design will be completed at a later date.

[4] *Long Range Transit Plan*, Salem Area Mass Transit District, 2022 page 27. Currently not available on the Cherriots website. See the December 15, 2022 Board Agenda packet for the final draft.

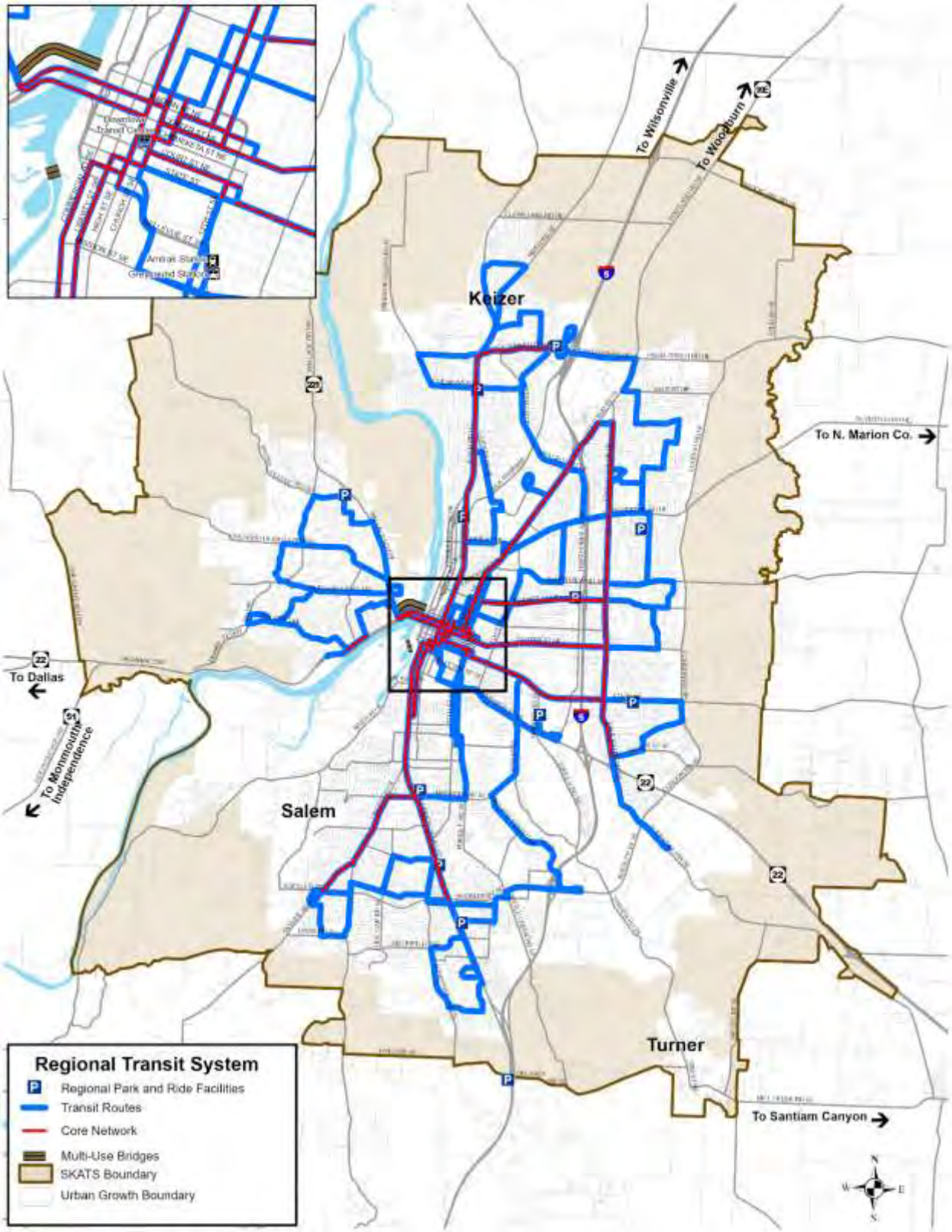
Beginning in 2026 SAMTD will be able to levy an employer-based transit tax (as Lane Transit District and TriMet currently do), but currently the SAMTD Board has not publicly stated whether this will take place or for how much[5]. This issue will be addressed in the 2027 Update to the MTP.

It is anticipated that the regional transit services that link Salem to other cities in the Willamette Valley will continue in the future. This includes services offered by Cherriots and SMART (South Metro Area Regional Transit) to Wilsonville, YCT (Yamhill County Transit) to McMinnville, TCTD (Tillamook County Transit District) to Grand Ronde, Tillamook, and the Coast, and Cherriots Regional (nee CARTS – Chemeketa Area Regional Transit System) service to the communities in Polk and Marion counties. Expanding the amount of service offered by these providers would require additional, and likely new, operating revenue sources. Any changes in the service will be reflected in future updates to this Plan. Intercity bus service offered by Flix/Greyhound is likely to remain as it is today and will grow or shrink as the company reacts to larger economic pressures. It is not clear how POINT bus service (previously known as Amtrak Thruway and funded by ODOT) will change over the next 27 years as it is not addressed in the *Oregon Rail Plan* or any other document that was consulted in preparing this Plan.

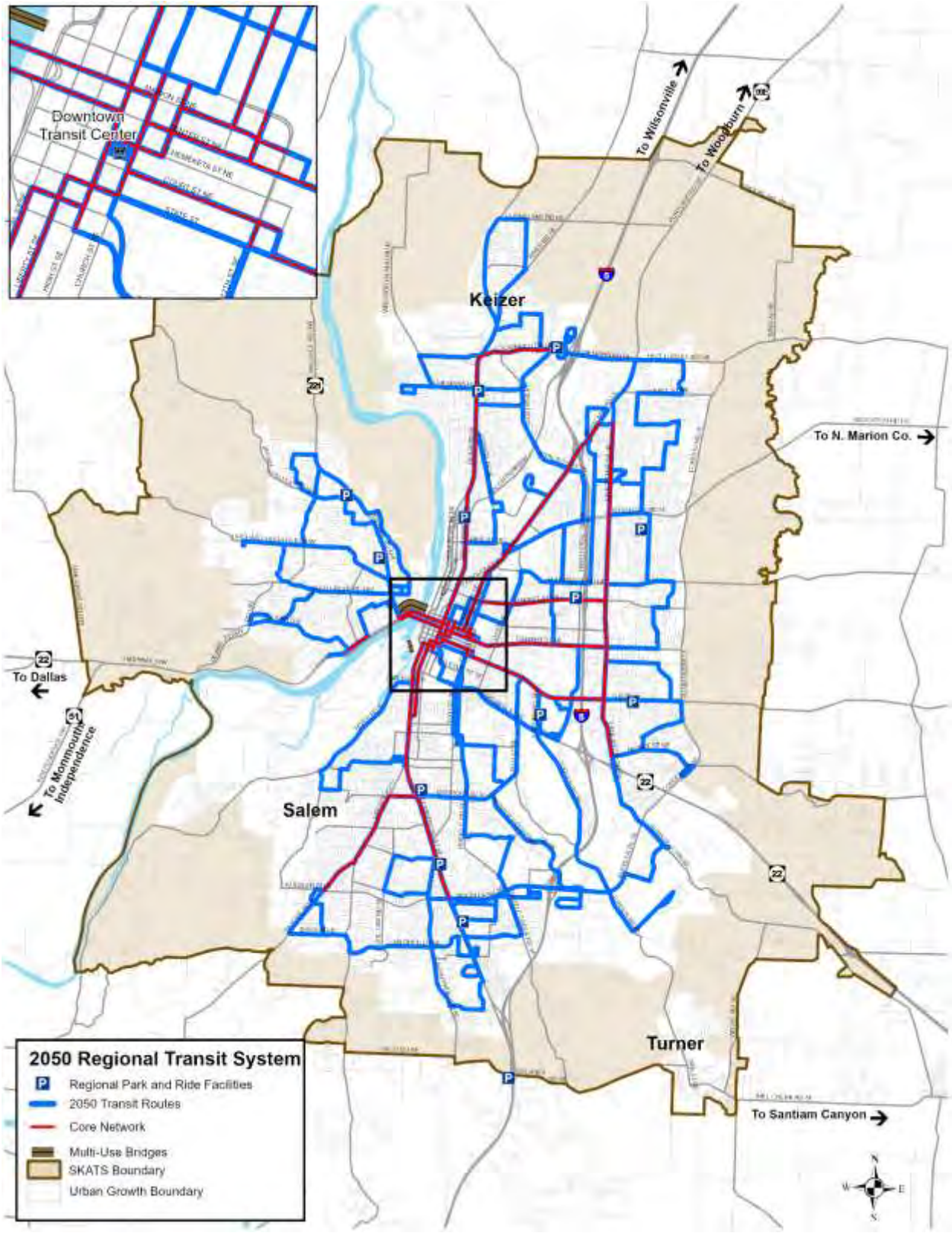
Both SKATS and ODOT currently provide funding for Transportation Demand Management (TDM) and Cherriots Transportation Options (nee Trip Choice (nee Rideshare). This arrangement ends in 2024, when SKATS will be funding these programs and ODOT will be funding ECO (Employee Commute Option) related programs and offering competitive rideshare grants[6].

5 The ability to levy an employer-based transit tax is from S.B. 1536 (2018), see: https://gov.oregonlive.com/bill/2018/SB1536/

6 The ECO rule will be written by the Department of Environmental Quality and expand the current program to the metropolitan areas outside of Portland. More information will be available by the next update to this Plan.



Map 7-3: Proposed Cherriots Local Transit Service with Identified Funding



Map 7-4: Proposed Cherriots Local Transit System if Additional Funds are Available

Travel and Goods Movement - Future Regional Road System

Over the next 27 years, the regional road system will look very similar to its current configuration. The number of *major* new roads scheduled to be built in the area is minimal. New roads will, for the most part, be local streets with a few collectors and minor arterials built or extended. The majority of projects identified for construction by 2050 address increasing the efficiency of the current system, whether that is by interconnecting the signals, rebuilding roads to 'urban standards' (aka complete streets) or addressing bottlenecks at intersections and other locations.

By the 2020s, most of the signals in the Salem-Keizer area will be interconnected and controlled by the Regional Traffic Signal Control Center (RTSCC). This should help address locations where the cause of congestion is attributable to 'poor signal timing.'[7] Interconnected signals will help keep signals synchronized so that traffic can better flow along a corridor. Additional video cameras are scheduled for installation at intersections within the urban area. These cameras will be used mainly to provide data to the signal controllers, but a number will also be able to provide traffic volume data to the RTSCC for further analysis and use. The RTSCC was expanded in 2013 to accommodate extra staff and newer equipment, and the software for controlling the signals was updated in 202x. No further changes are currently planned for the center.

Expansion of the existing bicycle network is planned to occur via a variety of projects. These include projects that bring existing roads without bike lanes up to current urban standards by adding bicycle lanes or buffered bicycle lanes. Other projects for bicyclists include building multi-use paths that are separated from the roads and designating corridors as a family-friendly bicycle route (nee 'bicycle boulevard'). Projects from the first three categories are illustrated and discussed by district in this chapter.

Since the 2019 update to this Plan, two bikeshare programs have started and been shut down, both providing service in downtown Salem. The COVID-19 pandemic and the uncertainty of the viability of any service with the current market and post-pandemic conditions is currently one of the larger roadblocks to starting a new service. These developments will be followed and the MTP updated as necessary. Transportation Network Companies (TNCs, i.e., Lyft and Uber) are currently licensed to operate in Salem and are available in other jurisdictions.

The recommended road projects presented in this chapter come from six sources:

- Projects from the SKATS MTP 2019-2043 (adopted in 2019) that had not been constructed.
- Salem's Transportation System Plan (as amended in 2016 including projects from studies such as the Central Salem Mobility Study and Bike/Walk Salem). An update is planned to begin in 2023.

[7] See SKATS Congestion Management Process (2022) for more information.

- Keizer's 2008 Transportation System Plan (revised in 2014).
- Marion County's 2005 Rural Transportation System Plan. An update is planned to begin in 2023.
- Turner's 1999 Transportation System Plan. An update is planned to being in 2023.
- ODOT's FY 2021 – 2024 State Transportation Improvement Program (STIP), the draft FY 2024 – 2027 STIP, and various planning studies conducted in the past 15-20 years.

As mentioned above, updates to many of the local transportation system plans (TSP) will be taking place between now and the next update to this Plan. In addition, the revisions to the Transportation Planning Rule introduces new requirements to the local TSPs that could change the projects included in the 2027 MTP Update.

In order to evaluate how the proposed projects correspond to the adopted goals of this plan, the project scoring process was updated for this MTP update. Nine criteria corresponding to the goals of the plan were used in the evaluation with extra weight (as decided by the SKATS Policy Committee) given to projects that increase safety (see **Appendix C** for more details on the scoring process). The SKATS Policy Committee used the results of the scoring process when they considered which projects to include in the project list that is illustrated in **Table 7-3**

The 189 projects[8] in the plan address both near-term and long-term needs of the urbanized area to provide the residents and businesses with an adequate level of accessibility. Additional projects that do not have funding identified are considered part of the "Illustrative List" and are presented in **Appendix I**. The projects in that appendix are ***not*** considered part of the financially constrained Plan; however, these projects may be reconsidered for inclusion in future updates of the MTP. Before any of the illustrative projects could be built using federal funds, funding sources would need to be identified. The Plan would then need to be amended; and the project added to the current SKATS TIP, as necessary.

Supporting Tourism and a Vibrant Regional Economy

Goal 9 of the MTP as discussed in **Chapter 3** acknowledges that visitors to the area, whether for business, personal, or tourism related reasons contribute to a diverse, vibrant regional economy. Salem and Keizer are located near destinations such as the wineries in the Willamette and Chehalem valleys, and convenient to the Oregon Coast and the Cascades Mountains. Other draws include the State Capitol, the State Fairgrounds, plus access to services and shopping offered by Salem Hospital, the Willamette Centre, and downtown Salem (including special events that take place such as World Beat).

In general, decisions on transportation investments within Salem are typically not predicated on tourism or visitor travel, although they can be supportive. Understanding the amount of travel directly related to tourists and/or visitors is difficult given the current data sources. Some transportation investments that have likely supported tourism include

[8] This includes 167 projects from the local jurisdictions and SAMTD, and 22 ODOT projects.

the Union Street and Minto-Brown Island bridges, linking three parks adjacent to downtown Salem.

One proposed project that will likely drive tourism related trips higher is the proposed casino on Confederated Tribes of the Siletz Indians trust property just northwest of the Portland Road interchange with I-5. From the Environmental Assessment document completed for the proposed Siletz Salem Gaming Facility, The Innovation Group documents that there are 25 hotels with 2,166 rooms available within Keizer and Salem[9]. There are seven hotels within Salem and Keizer that offer meeting spaces, the largest being the Salem Convention Center with attached Grand Hotel[10].

Classifying Projects

This MTP continues the classification of projects into five categories: Road-Bridge, ITS-Signal, Bicycle-Pedestrian, Transit, and Other. It should be noted that most projects contain a multi-modal safety element in their design, but this MTP does not have a separate safety category. For example, a project classified as a "road" project – whether or not it adds a travel lane for vehicles - may have as some of its key components adding curb, gutters, sidewalks and bikelanes, and a mid-block crossing to a road that lacks most or all of those components. Adding the sidewalks, bikelanes, and crossing provides additional safety benefits to users, but the project is listed as a road project. Even projects whose primary aim is for improving safety (such as installing a mid-block crossing for pedestrians or adding reflectors on signal backplates) are classified as a "bicycle-pedestrian" project or "ITS-Signal" project, respectively. As such, while there is not a separate category for safety projects in this plan, many of the projects in this plan have improving safety for the users of the transportation system as one of their key objectives.

The classifications used for projects are briefly discussed below.

Road-Bridge

Many of the bridges in the Salem-Keizer area are either reaching the end of their design life or need to be updated to meet new seismic and environmental standards (see **Map 5-3** for seismic vulnerability). The projects identified will either replace an existing bridge with a new one or will reconstruct the necessary parts of the bridge to lengthen its lifetime of service and to meet the newer regulations. Seismic standards are designed to increase the survivability of a bridge in the event of an earthquake. Environmental regulations address the accessibility of streams to spawning fish. Culverts and bridge spans must be designed to allow for fish to swim upstream unimpeded to reach spawning grounds.

[9] The proposed casino would be located off Portland Road north of the interchange with I-5. On page 225 of the Siletz Environmental Assessment (page 66 of the Innovation Group report contained withing the EA) is the information on hotels. Available at: https://siletzsalemcasinonepa.com/. See the sidebar on the website for the Draft EA document.

[10] Page 219 of the EA, page 60 of the Innovation Group report.

This category includes a wide variety of projects such as widening or building a new road, or that otherwise involve new pavement within right-of-way. When roads are built or reconstructed, bicycle lanes, sidewalks, curbs, and gutters are installed as a matter of course, unless conditions preclude them.

Included are projects that add significant capacity, either to an existing road or by constructing a new road. These projects must conform to the requirements and procedures specified in the Congestion Management Process (available as a separate document). These procedures dictate the steps required for projects that add or subtract significant capacity to or from an existing road or construct new roads to alleviate congestion in a corridor.

There are 107projects categorized as "Road-Bridge", as illustrated in **Table 7-2** below, followed by general descriptions of these classifications.

Table 7-2: Classes of Road-Bridge Projects[11]

	Count	Percent
Urban Standards w/ Center Turn Lane	33	31%
Urban Standards	27	25%
Turn Lanes	17	16%
Adding Capacity	4	4%
New Road	7	7%
Intersection	5	5%
Other	5	5%
Safety	2	2%
Bridge-related	4	4%
Reconstruction	3	3%

Bridge-related – These bridges on the regional system have been identified to be replaced or upgraded. No extra travel lanes are added as part of these replacements.

Adding Capacity – These projects add travel lanes to existing roads. Primarily these projects are along I-5.

New Road – These includes projects that extend existing roads (e.g., Verda Lane NE, Mildred Lane SE), or create new roads (e.g., Marine Drive NW, the backage roads along Highway 22 W).

Other – Projects include converting one-way streets to two-way, access management along a road.

[11] Several projects fit into multiple classes.

Reconstruction –Projects for reconstructing roads where the pavement or roadbed has degraded beyond simple fixes.

Safety – Projects whose sole purpose is safety including adding rumble strips, warning signs and/or pedestrian crossings beacons. It must be noted that many of the road, signal, and pedestrian-bicycle projects improve safety for users as well, but are not classified as such.

Turn Lanes – These projects add a turn-lane or turn pockets at an intersection or along a segment of a corridor (such as when a minor road T-intersects a road with higher functional classification).

Intersections – Projects are adding turn lanes and through lanes to intersections, or otherwise have more modifications compared to "Turn Lanes" projects. It also includes development of two new interchanges: Highway 22W at Highway 51 (Polk County) and Highway 22E at Cordon Road (Marion County).

Urban Standards – These projects add sidewalks, bicycle lanes, and/or gutters or other stormwater handling facilities to an existing road. The modifications could either be within the existing right-of-way or some right-of-way may be needed. They don't add additional through travel lanes that increase capacity but may include turn pockets, as needed.

Urban Standards w/ Center Turn Lanes – Similar to "Urban Standards" but includes continuous center turn lanes and/or a median to more efficiently address traffic issues.

Bicycle-Pedestrian

Projects that add facilities for bicyclists or pedestrians, whether in the right-of-way or not, are included in this category. If the facilities being built are within the existing right-of-way, and no other work on the road is taking place, the project will be put in this category. These projects include providing sidewalks along arterials, constructing bulb-outs at intersections, and constructing multi-use paths. There are 60 proposed projects in this category. These proposed projects will reduce the extent of the gaps in the regional sidewalk system by 59 miles, or approximately 41 percent, and fill in 34 miles of gaps in the regional bicycle system, which is approximately 40 percent.

ITS-Signals

ITS (Intelligent Transportation System) projects utilize technological means to provide the users and operators of the transportation system with information on its operation, as well as to facilitate the operation and functioning of the system. These projects are employed to increase the efficiency of the existing and planned system. They can also address the safety and security of the system.

Also included in this category: new or updated signal installations and interconnecting signals. New signals are installed at intersections where traffic signal warrants indicate a

need for a signal. Traffic signal interconnect projects link existing or new signals in a corridor to the Regional Traffic Signal Control Center. By connecting to this center, the signals can be optimized to allow for better timing of the signals as well as reacting to incidents. This should allow traffic to move without the stop-and-go nature that might otherwise result. There are eight ITS-Signal projects proposed for construction in the next 27 years.

Transit

Transit projects in the MTP include developing new transit centers and modifying the existing transit centers or maintenance facilities. There are three projects that add or enhance transit facilities in this plan.

Other

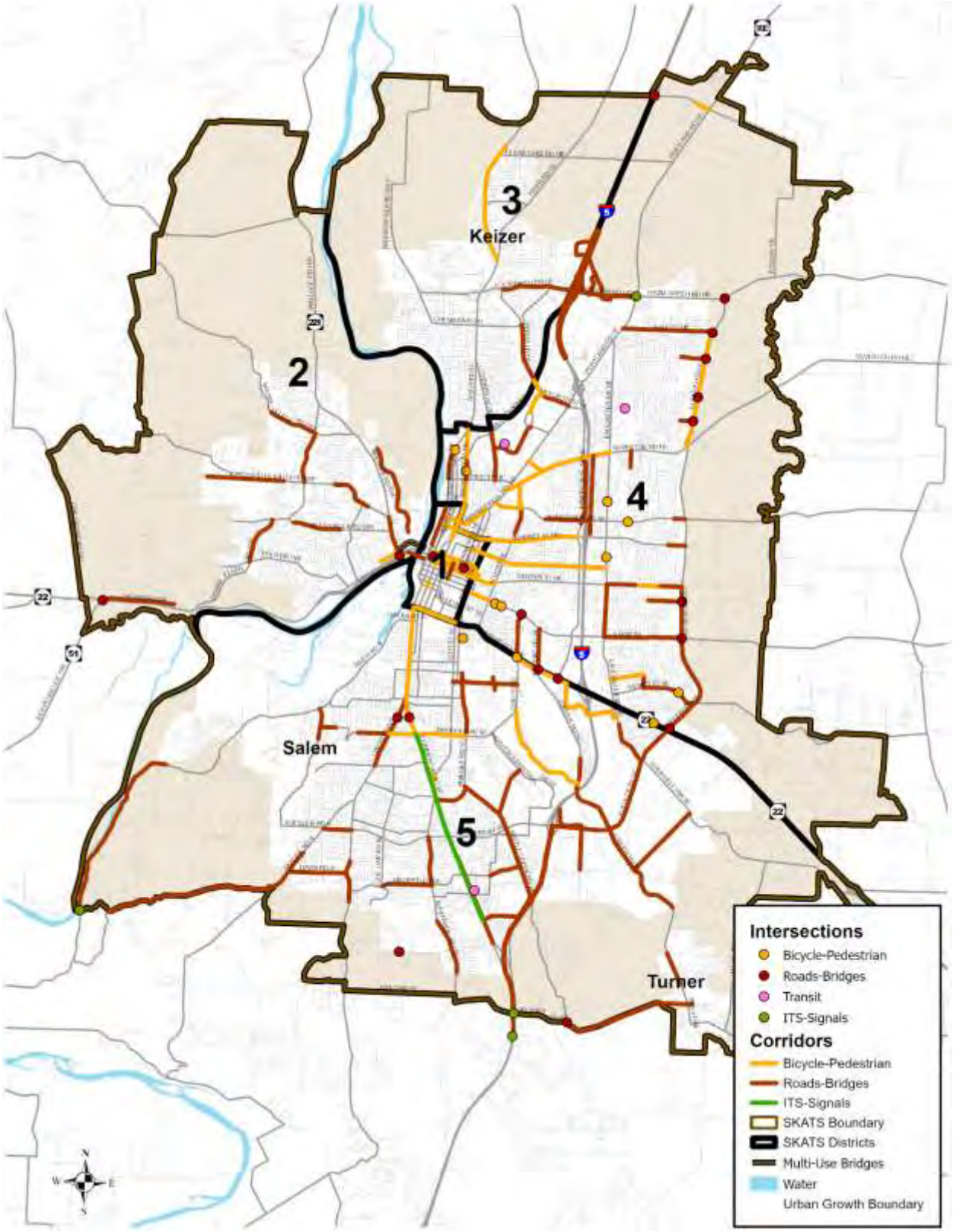
Those projects that do not fit into the previous four categories are placed into the "Other" category. No projects are in this category.

Discussion of Proposed Projects by Districts

The remainder of this chapter describes projects in each of the five districts of the region. This is not meant to be an exhaustive discussion of every project in each district but rather to provide descriptions of some key projects. The locations of the projects are illustrated in the maps, and the descriptions are provided in the project list (**Table 7-3**).

The district maps provide a visual way of distinguishing the project category (by color) and the jurisdiction that will "own" it (by the first letter in the project code: for example, Salem projects follow the format S*nnn*, where "n" is a number from 0 to 9). For a complete list of the proposed projects, see **Table 7-3** at the end of the chapter.

Following the discussion by districts is a discussion of the ODOT projects that have been identified within SKATS.



Map 7-5: Recommended Projects within SKATS

District 1: Downtown Salem

In downtown Salem, a number of projects are proposed for construction over the next 24 years (**Map 7-6**). ODOT has recently finalized a planning study for a project (O034) that was identified in H.B. 2017 (passed in 2017). The study is to determine what seismic upgrades can be made to the Center Street bridge over the Willamette River, which is part of the state highway route OR 22, to bring it up to current seismic standards. As part of H.B. 2017, the Oregon Legislature set aside $60 million toward the identified upgrades. Additional funding has been identified as preliminary engineering work has been completed. Bid opening will be in 2025 and construction is currently scheduled to be completed by 2027.

Several projects identified in the Bike/Walk Salem (2010) study or the Central Salem Mobility Study (2012) are recommended. Bike lanes or other bike facilities will be installed on a number of downtown streets (e.g., Union Street). Intersection modifications will be made to reduce the length that pedestrians need to cross or to address the turning movement for vehicles.

Map 7-6: Downtown Salem

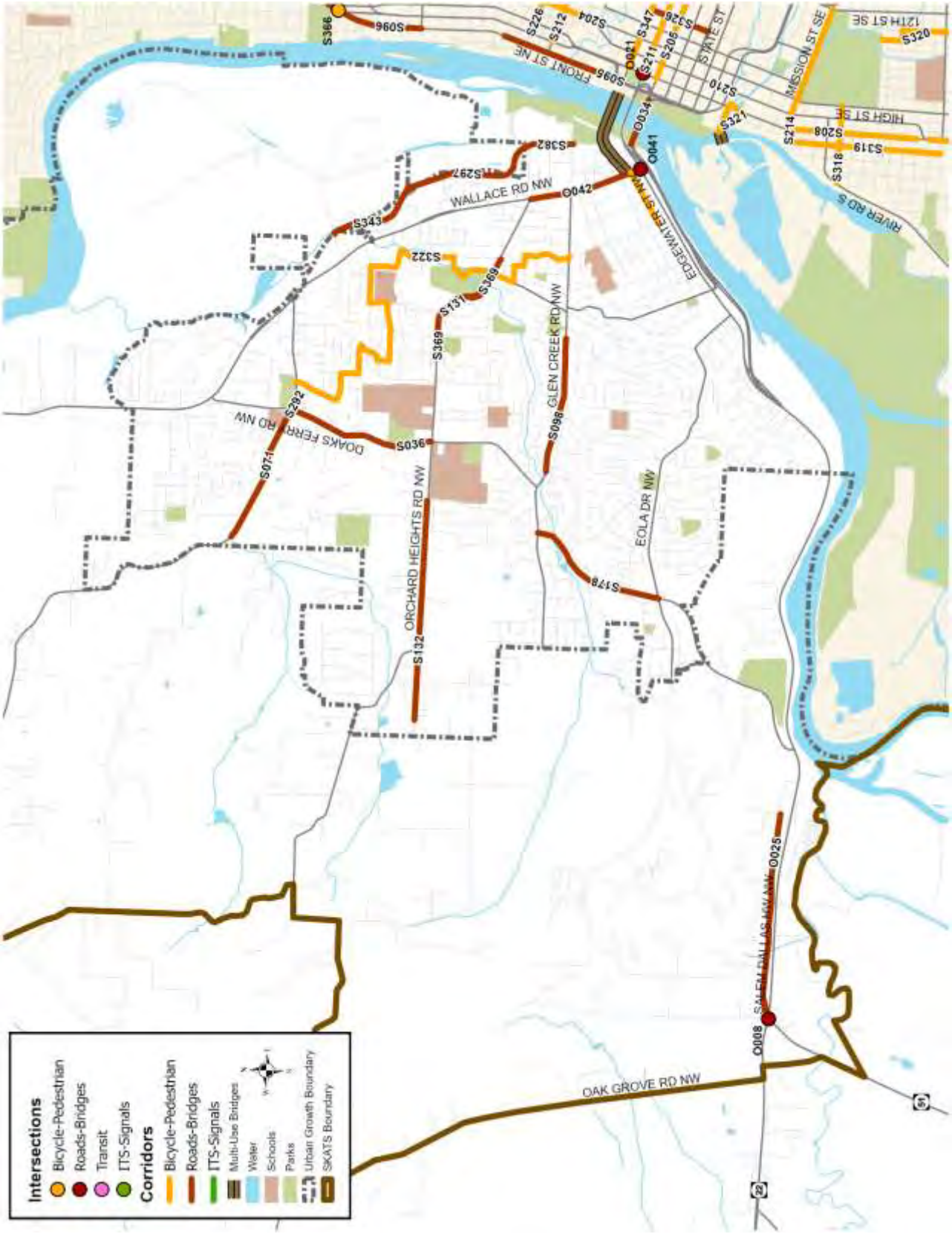
District 2: West Salem

One of the final projects proposed from the *Bridgehead Engineering Study* (*1998*) left to be completed is to revise the geometry of the off-ramp from Highway 22W bridge to Wallace Road (S160).

A new collector, Marine Drive, is planned to connect from approximately Hope Avenue NW in the north, south to Glen Creek Road.

The area surrounding the Highway 22W – 51 intersection was the focus of the Highway 22 W Expressway Management Plan study that identified projects that would address safety and capacity issues along that section of the highway. Funding is available to initiate development of improvements identified in the plan. The portion of Highway 22W from Doaks Ferry Road to the Willamette Bridges will be studied as part of an Expressway Management Plan in the future. Projects identified in this study will be considered for inclusion in future MTP updates or amendments.

Other projects provide for newer signals and protected pedestrian crossing of Wallace Road and bringing several roads up to urban standards.



Map 7-7: West Salem

District 3: Keizer

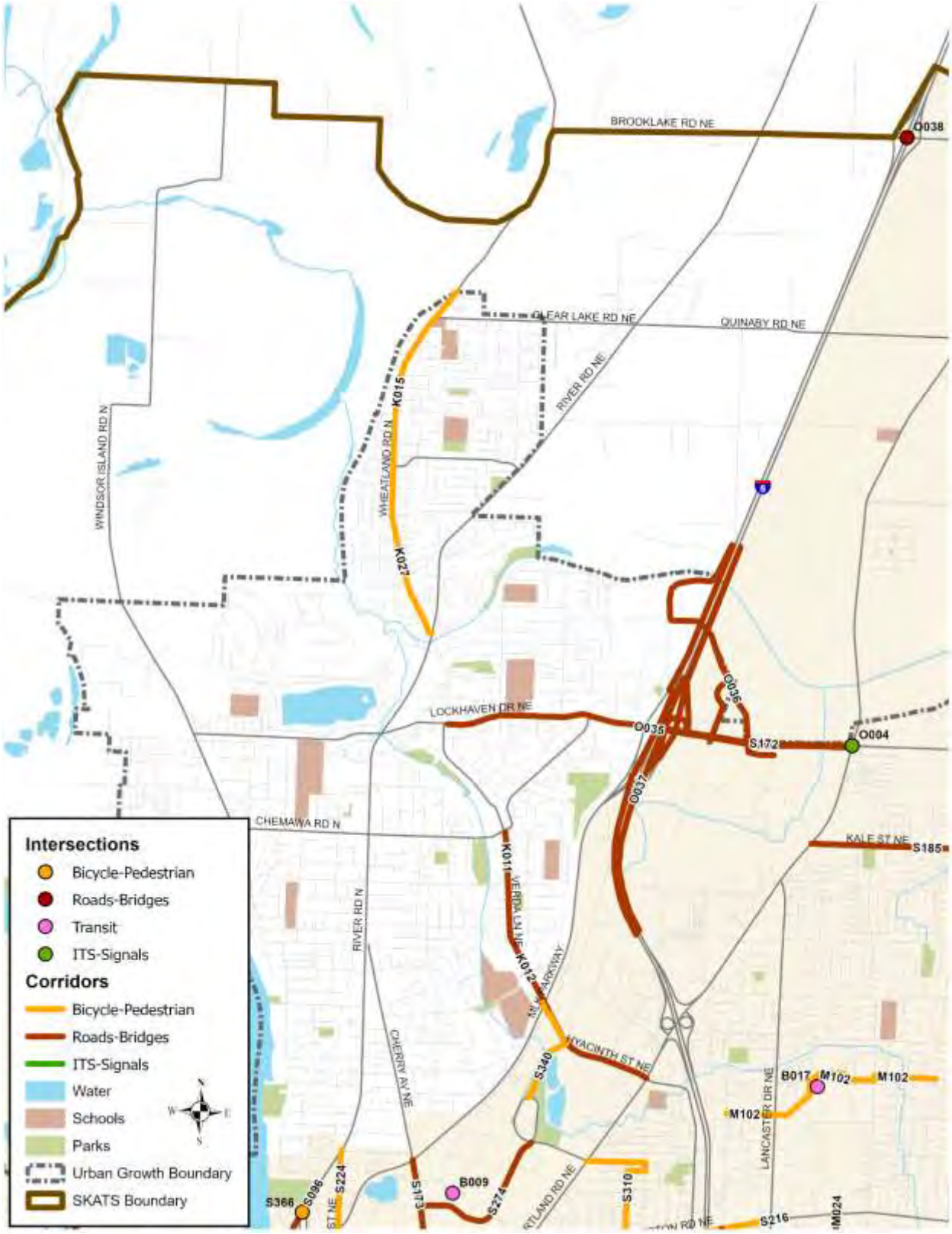
Over the next 20 years, several road projects are proposed that will address capacity and safety issues on the roads in Keizer. These projects are located along three corridors: River Road North, Lockhaven Drive, and Verda Lane.

The projects along River Road include modifying the intersection with Lockhaven Drive to provide more capacity for west-bound to south-bound turning movements (K024), moving the intersection at Manzanita Street south (K021) which will align with the proposed Verda Lane extension (K022), as well as provide more space at the intersection with Wheatland Road, where a second northbound left-turn lane will be added (K022).

The intersection at Verda Lane will be modified to restrict north-south movements to reduce cut-through traffic in the neighborhood to the south of Lockhaven (K023).

The projects on Verda Lane are located along the proposed extension of Verda Lane from Lockhaven Drive to River Road North (K022), which will partially follow the existing right-of-way of Trail Avenue north of Harmony Drive. The intersections at either end of this extension will be modified as described above.

Several projects are located outside of Keizer on Brooklake Road given the importance of this road and interchange to allow access to the northern Keizer. The Brooklake Interchange with I-5 is identified as an Outstanding Issue and projects identified in the Brooklake/I-5 IAMP will be funded and constructed by ODOT as funds are available after adoption of the IAMP by the Oregon Transportation Commission.



Map 7-8: Keizer

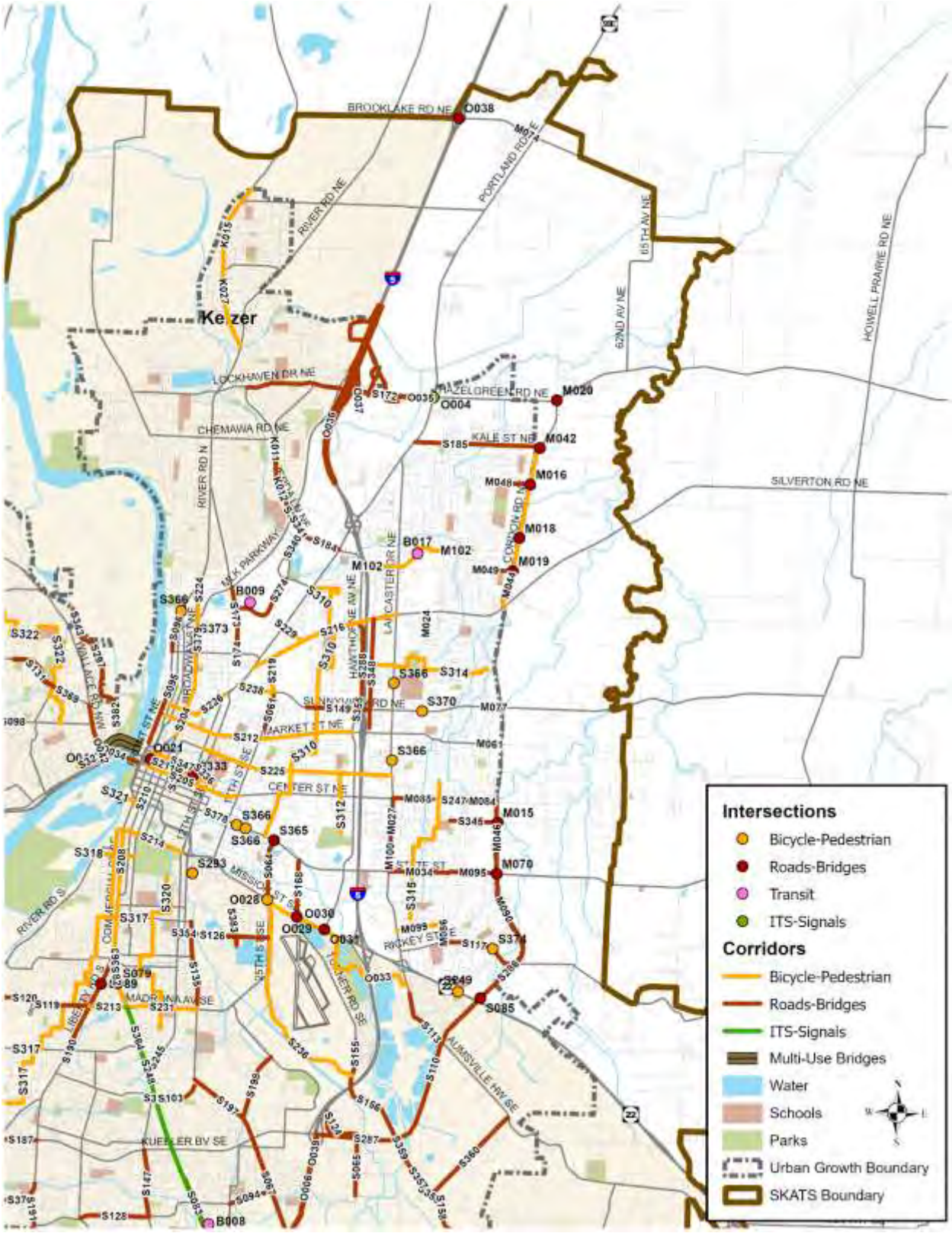
District 4: East Salem

This area contains the largest number of projects proposed in the Plan including several along Cordon Road. The long-term goal of Marion County and Salem is to complete the Kuebler Boulevard/Cordon Road/Hazelgreen Road corridor as a limited access facility with four travel lanes, turn lanes where appropriate, and a separated multi-use path. To achieve this goal, several projects are identified in this Plan to add turn lanes at various intersections along Cordon Road, realign and signalize the Cordon Road/Hazelgreen Road intersection, and interconnect the signals along Cordon Road with the Regional Traffic Signal Control Center (RTSCC). Other projects along Cordon Road include widening the segments from Highway 22E to Caplinger Road and from State Street to Center Street to four lanes with turn lanes where appropriate, and a separated multi-use path, and building an interchange with Highway 22E replacing the current overpassing. These projects are intended to protect and maintain Cordon Road and Hazelgreen Road's function as part of a circumferential route around the Salem area (see ***Chapter 9 – Outstanding Issues***).

Along Lancaster Drive there are projects to add or replace traffic signals at a number of intersections and to interconnect the signals to the RTSCC.

Other projects in the area are designed to bring the roads up to current multimodal standards by providing sidewalks, curbs/gutters or bioswales, and bicycle lanes. These are on roads owned and operated by both Salem and Marion County. Examples include Hawthorne Avenue and 45th Avenue.

Paths to connect the Kroc Center with Hyacinth Street and then northward toward Keizer were identified in the Kroc Center Study and included in this Plan.



Map 7-9: East Salem

District 5: South Salem and Turner

Many of the projects in this area are driven in part by continuing large-scale developments in the Mill Creek Industrial Park and the proposed future interchange at Highway 22E. The Kuebler Boulevard/Cordon Road/Hazelgreen Road corridor is envisioned to be a limited access facility with four travel lanes and turn lanes, where appropriate. Projects call for widening Kuebler Boulevard to four lanes from Turner Road to Highway 22E, along with revising several of the existing intersections to accommodate higher levels of motorized traffic. These projects are intended to protect and maintain Kuebler Boulevard's function as part of a circumferential route around the Salem area (see ***Chapter* 9 – *Outstanding Issues***).

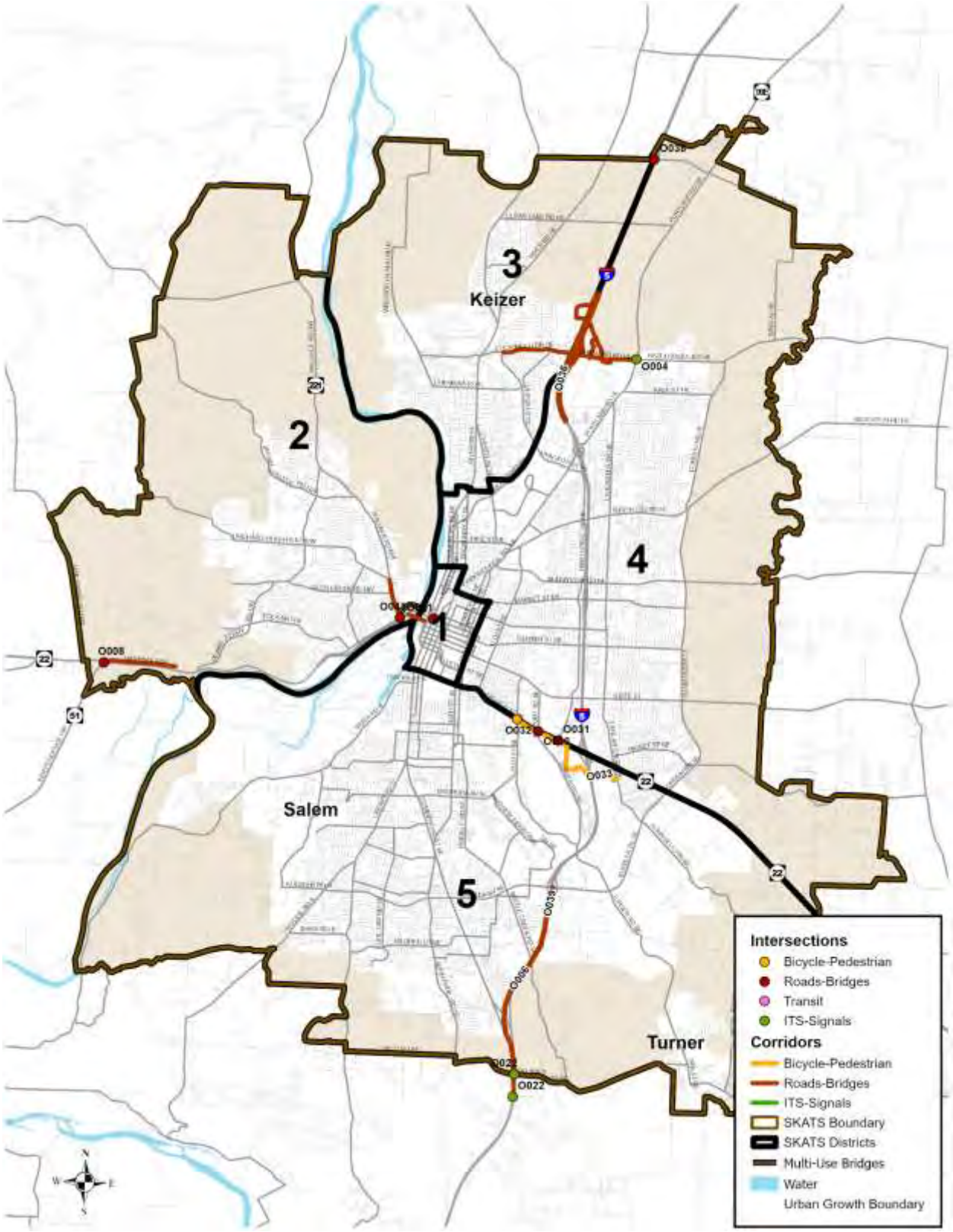
Other projects to build new roads in the area are focused on bringing the existing roads up to what is currently considered as minimally acceptable for multi-modal mobility. Signal interconnect projects along 12th / 13th Streets, Madrona Avenue, and Commercial Street will ensure that all the existing signals in the area are connected to the RTSCC.

The South Salem Transit Center will be constructed at the Commercial at Wiltsey location identified from their study.

Map 7-10: South Salem

ODOT Projects

The projects identified on the portion of the regional road system that is owned and operated by ODOT are shown in **Map 7-11**. While the projects that have funding identified and are either in the current TIP or proposed for the upcoming TIP have been shown in the previous set of maps at the district level, due to the manner in which projects are funded by ODOT, there is a set of projects not shown. As discussed in **Chapter 6**, funding for projects further out than five years or so is not guaranteed, nor is there a document that provides a list of when a particular project will be funded and constructed. Expensive projects (such as the Center Street bridge seismic rehabilitation project) require funding from acts of the Oregon Legislature. Others use federal grants (e.g., INFRA and FASTLANE) to supplement the other federal and state funds being used. But there has been consistent pattern of projects *eventually* being funded and constructed. As such, and to recognize this unique status, the majority of ODOT projects within SKATS are labeled as "ODOT TBD".



Map 7-11: ODOT Projects 2023-2050

Committed and Included Projects

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
City of Keizer								
Committed								
K012	Verda Ln NE: Dearborn Av NE to Southern City Limits	Widen to 3 lanes, add bike lanes and sidewalks	Verda Ln NE from Dearborn Dr NE to Keizer's southern city limits	Roads-Bridges	2024	$4,074,800	$5,013,306	10-20 yrs
Included								
K011	Verda Ln NE: Chemawa Rd NE to Dearborn Av NE	Widen to 3 lanes, add bike lanes and sidewalks. Westside portion to be completed by development by December 2022.	Verda Ln NE from Dearborn Dr NE to Chemawa Rd NE	Roads-Bridges	2031	$2,200,000	$4,700,522	10-20 yrs
K015	Wheatland Rd Multimodal Project - Phase 1	Construct refuge medians, street lighting, buffered bike lanes, and a multi-use path. See second phase in K027.	Wheatland Rd N from Aldridge Dr N to Jays Dr	Bicycle-Pedestrian	2028	$6,709,744	$9,399,942	0-5 yrs
K020	Wheatland Rd / River Rd Intersection	Add second northbound left-turn lane and protected left-turn signal phase. Lengthen outside southbound through lane.	Wheatland Rd @ River Rd	Roads-Bridges	2040	$1,100,000	$2,676,193	0-10 yrs
K027	Wheatland Rd Multimodal Project - Phase 2	Construct refuge medians, street lighting, buffered bike lanes, and a multi-use path. See K015 for phase 1.	Wheatland Rd N from Aldridge Dr NE to River Rd N	Bicycle-Pedestrian	2030	$3,200,000	$4,783,765	0-10 yrs
City of Salem								
Committed								
S079	Commercial SE & Ratcliff Drive SE	Construction of sidewalks along east side of Commercial St SE between Ratcliff Dr SE and Vista St SE, and new signal at Ratcliff Dr SE.	Commercial St SE at Ratcliff Dr SE	Roads-Bridges	2026	$4,500,000	$5,907,872	10-20 yrs
S082	Commercial St SE: Ratcliff Dr SE to Vista Av SE	Add curbs, gutters and sidewalks where missing along this segment of Commercial Street SE.	Commercial St SE: Ratcliff Dr SE to Vista Av SE	Roads-Bridges	2026	$1,803,000	$3,729,227	0-5 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S126	McGilchrist St SE: 12th St SE to 25th St SE	Reconstruct to a 3-lane standard from 12th to 22nd, and to a 4-lane standard (with eastbound lanes) from 22nd the 25th. Add or revise signals at 5 intersections, realign 22nd and widen both 22nd and 25th in the vicinity of McGilchrist. See S316. Work on/at 22nd separately funded (STIP 21887) see S383. RAISE grant awarded in 2022 for $13,229,320. Part of the 2022 GO Bond.	McGilchrist St SE: 12th St SE to 25th St SE	Roads-Bridges	2025	$16,760,000	$16,760,000	0-10 yrs
S135	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, stormwater treatment, streetlights, and sidewalks. Includes four pedestrian crossing near transit stops. Part of the 2022 GO Bond.	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	Roads-Bridges	2030	$19,220,000	$19,220,000	0-5 yrs
S297	Marine Drive NW: Harritt Dr NW to Cameo St at 5th Av NW	Construct a new collector street to the east of Wallace Rd along alignment determined by the flood plain. Uses a special Salem TSP cross section with two travel lanes, new curb, sidewalk on westerly side, 12-foot multi-use path on the easterly side, stormwater treatment, and streetlights. Includes connector streets at Beckett St and 5th Av and improvements to Harritt Dr NW. Sections may be constructed by developers depending on timing of development vs. funding for city construction. See also S343 and S382. In the 2022 GO Bond.	New alignment for Marine Dr NW from Harritt Dr NW to Cameo St at 5th Av NW	Roads-Bridges	2027	$23,530,000	$23,530,000	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S321	Pringle Creek Path: Civic Center to Riverfront Park.	Construct a pedestrian bridge crossing of Pringle Creek under the Commercial street bridge, construct a new path along Pringle creek from Commercial Street under the existing railroad bridge to the Riverfront Park. Includes creek overlooks and art wall. From 2022 Salem GO Bond.	Pringle Creek Path from Riverfront Park to Civic Center	Bicycle-Pedestrian	2030	$5,300,000	$5,300,000	0-5 yrs
S336	Union St Bikeway - Phase 2 Summer St NE to 12th St NE	Build buffered bike lanes on Union Street from Summer St NE to 12th St curve and end at Marion St. Requires adjustment to curb extensions. From Central Salem Mobility Study (2012). See also S311 for Phase 1, S298 for the signal at Commercial St, and S347 for Phase 1B. Part of the 2022 GO Bond Package.	Union St NE from Summer St NE to 12th St NE	Bicycle-Pedestrian	2028	$4,300,000	$4,300,000	0-5 yrs
S347	Union St Bikeway: Phase 1B	Phase 1B includes curb extensions at the intersection of Liberty St NE and Union St NE, and the design and construction of enhanced bicycle facilities on Union St NE between Commercial St NE and Summer St NE. See also S298, S311, and S336.	Union St NE between Commercial St NE and Summer St NE	Bicycle-Pedestrian	2023	$3,799,405	$4,525,152	0-5 yrs
S348	Fisher Rd NE - Silverton Rd NE to East/West Curve	On Fisher Rd NE from Silverton Rd NE to the East/West curve, construct to collector street standrads, including new curb, sidewalks, bike lanes, stormwater treatment, and streetlights. Includes a traffic signal replacement at Sunnyview Road and pedestrian crossings at Beverly Av and Devonshire Av. Part of the Salem 2022 GO Bond.	Fisher Rd NE from Silverton Rd NE to the East/West curve.	Roads-Bridges	2027	$27,650,000	$27,650,000	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S354	Replace Railroad and McGilchrist St culverts on West Fork Pringle Creek	Replace Union Pacific Railroad and McGilchrist St culverts on West Fork Pringle Creek. From the Pringle Creek Basin Plan, project PC-01C. In FY2023 CIP.	UP RR line and McGilchrist St at West Fork Pringle Creek	Roads-Bridges	2024	$2,500,000	$3,075,799	0-5 yrs
S355	Hawthorne Av NE at Sunnyview Rd NE	Design and construction of modification to the northwest and southeast quadrants of the intersection of Hawthorne Ave NE at Sunnyview Rd NE to align the northbound and southbound left-turn pockets and add a new northbound right-turn pocket. This project would require minor widening of the southeast quadrant to accommodate the new right-turn lane. The project would also overlay the approaches, restripe the new lane configuration and relocate traffic signal poles in the NW and SE quadrants	Hawthorne Av NE at Sunnyview Rd NE	Roads-Bridges	2025	$2,530,000	$3,215,428	0-5 yrs
S357	Turner Rd SE: Mill Creek Bridge to Deer Park Dr SE	Design and construction of full-street improvements from Mill Creek bridge to Deer Park Rd SE	Turner Rd SE: Mill Creek Bridge to Deer Park Dr SE	Roads-Bridges	2024	$1,223,850	$1,505,727	0-5 yrs
S358	Turner Rd SE at Gath Rd SE and Deer Park SE	Design and construction of improvements to realign Turner Rd SE at Gath Rd SE / Deer Park Dr SE and add SB and WB left-turn lanes.	Turner Rd SE at Gath Rd SE and Deer Park SE	Roads-Bridges	2025	$6,079,930	$7,727,105	0-5 yrs
S359	Turner Rd SE: Kuebler Blvd SE to Mill Creek Bridge	Design and construction of full-street improvements on Turner Rd SE for 1500 linear feet from Kuebler Blvd SE to the Mill Creek bridge and 500 linear feet from Turner Rd SE north of Kuebler Blvd SE. Work also includes signal modifications and 1000 linear feet of half-street improvements on the south side of Kuebler Blvd SE from Turner Rd Se to the Mill Creek bridge.	Turner Rd SE: Kuebler Blvd SE to Mill Creek Bridge	Roads-Bridges	2023	$4,698,730	$5,596,263	0-5 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S360	Deer Park Dr SE Modifications	Construct full-street improvements from Aumsville Hwy SE to Turner Rd SE. Work includes one travel lane in each direction, left-turn pockets, curbs, and sidewalks.	Deer Park Dr SE from Aumsville Hwy SE to Turner Rd Se	Roads-Bridges	2023	$5,733,540	$6,828,738	0-5 yrs
S362	Hilfiker Ln SE at Commercial St SE	Design, RoW, and construction to widen the approaches on Hilfiker Ln SE to allow a left-turn lane and bike lanes in both directions. Replace traffic signal.	Hilfiker Ln SE at Commercial St SE	Roads-Bridges	2023	$4,486,900	$5,343,970	0-5 yrs
S363	Commercial St SE: Oxford St SE to Winding Way SE	Design and construct buffered bike lanes and pedestrian crossings along this stretch.	Commercial St SE: Oxford St SE to Winding Way SE	Bicycle-Pedestrian	2023	$2,144,590	$2,554,241	0-5 yrs
S364	Commercial St SE: Madrona Av SE to Robins Ln SE - Signal Improvements	Design and construct upgrades at signalized intersections on Commercial St SE from Madrona Av SE to Robins Ln SE.	Commercial St SE: Madrona Av SE to Robins Ln SE	ITS-Signals	2024	$773,750	$951,960	0-5 yrs
S365	State St at 25th St SE Intersections Improvements	Design and construct intersection modifications to improve pedestrian visability and reduce traffic incidents.	State St at 25th St SE	Roads-Bridges	2024	$648,730	$798,145	0-5 yrs
S366	Pedestrian Island and Crossing Safety Improvements Package	Design and construct crossing modifications on State St at 21st SE; Lancaster Dr NE at Weathers St NE and River Rd N at Riveria Dr NE.	State St at 19th St SE and 21st SE; Lancaster Dr NE at Weathers St NE and Wolverine St NE; and River Rd N at Riveria Dr NE.	Bicycle-Pedestrian	2024	$1,424,360	$1,752,418	0-5 yrs
S367	Downtown Signal Upgrades	Design and construct upgrades at signalized intersections at various locations within downtown bordered by State St, Capitol St NE, Union St NE, and Commercial St NE.	Various locations within downtown bordered by State St, Capitol St NE, Union St NE, and Commercial St NE.	ITS-Signals	2023	$118,360	$140,969	0-5 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S369	Orchard Hts Rd NW Modifications	Design and construct modifications along the south side of two segments of Orchard Hts Rd NW, from Snowbird Dr NW to Schoolhouse Ct NW, and from Chapman Hill Dr to Westhaven Av NW. Modifications include constructing missing curb, sidewalks, and widening Orchard Hts Nw to provide a pedestrian median island at Parkway Dr NW and WB left-turn pocket from Orchard Hts Rd Nw to Parkway Dr NW.	South side of two segments of Orchard Hts Rd NW, from Snowbird Dr NW to Schoolhouse Ct NW, and from Chapman Hill Dr to Westhaven Av NW. Orchard Hts Nw at Parkway Dr NW and Orchard Hts Rd Nw to Parkway Dr NW.	Roads-Bridges	2025	$2,312,440	$2,938,926	0-5 yrs
S370	Sunnyview Rd NE at Hollywood Dr NE Pedestrian Crossing	Design and construct a new median island crossing at Sunnyview Rd NE at Hollywood Dr NE with street lighting, improved crosswalk and ramps.	Sunnyview Rd NE at Hollywood Dr NE	Bicycle-Pedestrian	2023	$175,930	$209,535	0-5 yrs
S373	Broadway St NE at Locust St NE Pedestrian Crossing	Design and construct a new median island crossing of Broadway St at Locust St NE, with street lighting, improved crosswalk, and ramps.	Broadway St NE at Locust St NE	Bicycle-Pedestrian	2023	$161,570	$192,432	0-5 yrs
S374	Macleay Rd SE and Caplinger Rd SE Pedestrian Crossing	Design, RoW, and construction of a new crossing with pedestrian island, lighting, and new sidewalk on west side of Macleay Rd SE from 150 linear feet south of Periwinkle Dr SE to 100 linear feet west of Gaffin Rd SE and the south side of Caplinger Rd Se from Macleay Rd SE to 750 linear feet easterly to connect to existing sidewalk.	West side of Macleay Rd SE from 150 linear feet south of Periwinkle Dr SE to 100 linear feet west of Gaffin Rd SE and the south side of Caplinger Rd SE from Macleay Rd SE to 750 linear feet easterly to connect to existing sidewalk.	Bicycle-Pedestrian	2023	$2,320,000	$2,763,157	0-5 yrs
S375	Portland Rd NE at Hazelgreen Rd NE Intersection	Developer funded modifications that may include NB double left-turn lanes and an additional WB receiving lane.	Portland Rd NE at Hazelgreen Rd NE	Roads-Bridges	2023	$1,000,000	$1,191,016	0-5 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S376	Lone Oak Rd SE at Rees Hill Rd SE	Design and RoW acquistion for intersection modifications that include a lengthened left-turn lane and an acceleration lane on Rees Hill Rd SE.	Lone Oak Rd SE at Rees Hill Rd SE	Roads-Bridges	2025	$1,350,000	$1,715,742	0-5 yrs
S377	Davis Rd S: Skyline Dr S to Liberty Rd S	Urban upgrade of the existing road to add new curb, sidewalks, bikelane, stormwater treatment and streetlights with pedestrian crossings. Adds a new traffic signal at Davis Rd S at Liberty Rd S. From the 2022 Salem GO Bond.	Davis Rd S: Skyline Dr S to Liberty Rd S	Roads-Bridges	2028	$7,600,000	$7,600,000	0-5 yrs
S378	State St: 13th St NE to 17th St NE Bike Lanes and Pavement	Pavement rehabilitation and striping reconfiguration to one travel lane in each direction with a center turn lane and bike lanes. Includes a pedestrian crossing at 15th St andstreetscape features. Also includes a new traffic signal at the 17th St intersection. From the 2022 Salem GO Bond. See S217 for portion east of 17th.	State St: 13th St NE to 17th St NE	Bicycle-Pedestrian	2028	$12,950,000	$12,950,000	0-5 yrs
S379	Broadway: Pine St N to Tryon St N	Add "flashing yellow arrow" to left turn signals and convert 4 lane roadway to a 3 lane roadway with a center turn lane to increase safety and improve traffic flow. Add bike facilities via ARTS funds. See S204 and S380.	Broadway: Pine St N to Tryon St N	Roads-Bridges	2023	$2,000,000	$2,382,032	0-5 yrs
S383	McGilchrist St SE at 22nd St SE	Realign 22nd St SE at McGilchrist St SE to make a four-leg intersection and install a new traffic signal to increase traffic flow. See S126 for remaining work on McGilchrist St SE.	McGilchrist St SE at 22nd St SE	Roads-Bridges	2023	$9,925,000	$9,925,000	0-5 yrs
Included								
S036	Doaks Ferry Rd NW: Brush College Rd NW to Orchard Heights Rd NW	Widen to 3 lanes where appropriate with curbs, bikelanes and sidewalks. Improves intersection at Orchard Hts. Developer contribution expected.	Doaks Ferry Rd NW from Brush College Rd NW to Orchard Hts Rd NW	Roads-Bridges	2030	$6,200,000	$12,823,741	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S061	17th St NE: Norway St NE to Sunnyview Rd NE	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	17th St NE: Norway St NE to Sunnyview Rd NE	Roads-Bridges	2035	$1,791,000	$4,961,598	0-20 yrs
S064	25th St SE: State St to Helm St SE	Add bike facilities and turn pockets as needed.	25th St SE: State St to Helm St SE	Roads-Bridges	2045	$2,654,000	$6,456,923	0-20 yrs
S065	36th Av SE: Kuebler Bv SE to Langley St SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	36th Av SE: Kuebler Bv SE to Langley St SE	Roads-Bridges	2032	$889,000	$2,234,224	0-10 yrs
S067	Battle Creek Rd SE: Kuebler Bv SE to Wiltsey Rd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks. Likely developer funded or built.	Battle Creek Rd SE: Kuebler Bv SE to Wiltsey Rd SE	Roads-Bridges	2030	$3,520,000	$8,290,238	0-10 yrs
S071	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lines	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks.	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lines	Roads-Bridges	2035	$3,756,000	$8,846,061	10-20 yrs
S083	Commercial St SE: Baxter Rd SE to I-5 Interchange	Widen to major arterial standards, including 4 travel lanes, left turn lanes at selected locations, curbs, gutters, sidewalks, and bike lanes.	Commercial St SE: Baxter Rd SE to I-5 Interchange	Roads-Bridges	2040	$7,329,000	$23,882,087	10-20 yrs
S085	Cordon Rd SE & Hwy 22	Construct interchange with recommended signalized intersections and lane configurations. From Cordon Road Interchange Study and the OR 22E Facility Plan.	Cordon Rd SE at OR 22E	Roads-Bridges	2038	$30,000,000	$64,098,023	10-20 yrs
S087	Croisan Creek Rd S: River Rd S to Heath St S	Widen to collector standards by adding curbs, bikelanes & sidewalks	Croisan Creek Rd S from River Rd S to Heath St S	Roads-Bridges	2040	$2,770,000	$9,026,249	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S094	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE	Extend Fabry Rd SE eastward from Reed Ln SE to Battle Creek Rd SE. This along with the westward extension of Mildred Ln SE will provide an east/west minor arterial connection south of Kuebler Bv SE from Battle Creek Rd SE to Skyline Rd. Developer funded partially or fully.	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE	Roads-Bridges	2025	$3,930,000	$7,617,544	0-10 yrs
S095	Front St N: Norway St NE to Division St NE	Rebuild Front Street to a modified minor arterial standard and aligning the railroad tracks down the center. Construct wide travel lanes as well as curbs, gutters, and sidewalks. The project includes the reconstruction of Mill Creek Bridge.	Front St N: Norway St NE to Division St NE	Roads-Bridges	2040	$4,000,000	$13,034,295	0-20 yrs
S096	Front St N: River Rd N to Norway St N	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Front St N: River Rd N to Norway St N	Roads-Bridges	2025	$3,650,000	$5,636,546	0-10 yrs
S098	Glen Creek Rd NW: Crescent Dr NW to Westfarthing Way NW	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks.	Glen Creek Rd NW: Crescent Dr NW to Westfarthing Way NW	Roads-Bridges	2037	$2,617,000	$7,736,247	0-10 yrs
S103	Hilfiker Ln SE: Commercial St SE to Pringle Rd SE	Construct extention of Hilfiker Lane SE to Hillrose Street SE and reconstruct both Hilfiker and Hillrose to collector standards, with two travel lanes, turn pockets, curbs, gutters, sidewalks, and bike lanes. A portion of the project will likely be developer funded.	Hilfiker Ln SE from Commercial St SE to Pringle Rd Se	Roads-Bridges	2025	$3,866,000	$7,740,778	0-10 yrs
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	Widen to four travel lanes, paved or raised median, bike lanes, curbs, gutters and sidewalks, improvements to the bridge over Mill Creek. Developer funds the NB portion, only Salem portion is shown.	Kuebler Blvd from Turner Rd SE to Hwy 22 overpass	Roads-Bridges	2030	$7,500,000	$11,211,949	10-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S113	Lancaster Dr SE: Cranston St SE to Kuebler Bv SE	Realign curves and widen to 2 travel lanes plus a center turn lane with curbs, gutters, sidewalks, and bike lanes.	Lancaster Dr SE: Cranston St SE to Kuebler Bv SE	Roads-Bridges	2025	$6,300,000	$8,006,796	0-10 yrs
S117	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE	Widen to collector standards, including 2 travel lanes, curbs, gutters, sidewalks, and bike lanes where designated.	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE	Roads-Bridges	2035	$4,059,000	$7,616,249	0-20 yrs
S119	Madrona Av S: Biegler Lane S to Liberty Rd S	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Madrona Av S: Biegler Lane S to Liberty Rd S	Roads-Bridges	2050	$650,000	$2,930,516	0-20 yrs
S120	Madrona Av S: Croisan Creek Rd S to Elderberry Dr S	Widen to an interim 2 travel lanes with curbs, gutters, sidewalks and bike lanes.	Madrona Av S: Croisan Creek Rd S to Elderberry Dr S	Roads-Bridges	2040	$2,203,000	$7,178,638	0-20 yrs
S124	32nd Av SE & Trelstad Ave SE: East of I-5 to 36th Av SE signal at Kuebler Bv SE	Widen to minor arterial standards, including 2 travel lanes, left turn pockets where needed, curbs, gutters, sidewalks, and bike lanes.	32nd Av SE & Trelstad Ave SE: I-5 to 36th Av SE signal at Kuebler Bv SE	Roads-Bridges	2045	$2,600,000	$10,634,159	0-20 yrs
S128	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Roads-Bridges	2032	$3,356,000	$8,434,259	0-10 yrs
S131	Orchard Heights Rd NW: Parkway Dr NW to Snowbird Dr NW	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks. NEW *** Reconstruct northside of the road to include stormwater, bike and pedestrian facilities. See Sxyz for sidewalks on southside.	Orchard Heights Rd NW: Parkway Dr NW to Snowbird Dr NW	Roads-Bridges	2037	$1,600,000	$3,002,217	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S132	Orchard Heights Rd NW: Titan Dr NW to UGB	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks. Include realignment of Orchard Heights Rd west of BPA power lines. Developer funded.	Orchard Heights Rd NW: Titan Dr NW to UGB	Roads-Bridges	2040	$2,779,000	$9,055,577	0-20 yrs
S137	Robins Lane, east of Commercial St. SE	Connect Robins Lane to Battlecreek Rd with a new collector street alignment.	Robins Ln SE, east of Commercial St SE, to Battcreek Rd	Roads-Bridges	2030	$2,517,000	$5,927,991	0-10 yrs
S143	Skyline Rd S: Maplewood Dr S to Mildred Lane S	Widen to minor arterial standards including 2 travel lanes, a center turn lane, curbs, gutters, sidewalks and bike lanes.	Skyline Rd S: Maplewood Dr S to Mildred Lane S	Roads-Bridges	2040	$2,535,000	$8,260,485	0-20 yrs
S147	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE	Roads-Bridges	2040	$4,520,000	$14,728,754	0-20 yrs
S148	Sunnyside Rd S: Pawnee Circle SE to the UGB	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Sunnyside Rd S: Pawnee Circle SE to the UGB	Roads-Bridges	2050	$3,784,000	$17,060,113	0-20 yrs
S155	Turner Rd SE: 2100 feet south of Cascade Gateway Park to Airway Dr SE	Project to include bike lanes, drainage, paved shoulder on one side, and curb, gutter and sidewalk on the other.	Turner Rd SE: 2100 feet south of Cascade Gateway Park to Airway Dr SE	Roads-Bridges	2045	$3,984,000	$15,270,333	0-20 yrs
S156	Turner Rd SE: Airway Dr SE to Kuebler Blvd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	Turner Rd SE: Airway Dr SE to Kuebler Blvd SE	Roads-Bridges	2050	$5,131,000	$23,133,044	0-20 yrs
S158	Turner Rd SE: Gath Rd SE to UGB	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Turner Rd SE: Gath Rd SE to UGB	Roads-Bridges	2050	$3,502,000	$15,788,720	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S168	Airport Rd SE: State St. to Mission St.	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters, and sidewalks	Airport Rd SE from State St to Mission St SE	Roads-Bridges	2040	$2,242,000	$7,305,722	0-20 yrs
S172	Chemawa Rd NE: I-5 to Portland Rd NE	Widen to 4 lanes plus center turn lane, bike lanes, curbs, gutters and sidewalks.	Chemawa Rd NE from I-5 to Portland Rd NE	Roads-Bridges	2035	$2,511,000	$6,956,210	0-20 yrs
S173	Cherry Av NE: BNRR to Dr. MLK Jr Parkway NE	Widen to 5 lanes with 4 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes	Cherry St NE from RR to Dr. MLK Jr Parkway NE	Roads-Bridges	2040	$5,523,000	$17,997,103	0-20 yrs
S174	Cherry Av NE: Johnson St NE to Pine St NE	Widen to an interim 3-lane configuration, with 2 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes	Cherry St NE from Johnson St NE to Pine St NE	Roads-Bridges	2040	$1,604,000	$5,226,752	0-20 yrs
S176	Croisan Scenic Wy S: Joplin Rd S to Croisan Creek Rd S	Extend Croisan Scenic Way S southward connecting with a section already built near Madrona Avenue S, then continuing southward and westward intersecting with Croisan Creek Road S just south of River Rd S.	Croisan Scenic Way S from Joplin Rd S to Croisan Creek Rd S	Roads-Bridges	2050	$5,806,000	$26,176,273	0-20 yrs
S177	Doaks Ferry Rd NW: Eola Dr NW to UGB	Widen to an interim 3-lane, minor arterial standard, with 2 travel lanes, center turn lane, bike lanes, curbs, gutters and sidewalks. Include all necessary realignments and intersection modifications.	Doaks Ferry Rd NW from Eola Dr NW to UGB	Roads-Bridges	2050	$5,759,000	$25,964,374	0-20 yrs
S178	Doaks Ferry Rd NW: Glen Creek Rd NW to Eola Dr NW	Widen to an interim 3-lane, minor arterial standard, with 2 travel lanes, center turn lane, bike lanes, curbs, gutters and sidewalks. Include all necessary realignments and intersection modifications.	Doaks Ferry Rd NW from Glen Creek Rd NW to Eola Dr NW	Roads-Bridges	2035	$3,423,000	$9,482,718	0-20 yrs

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S184	Hyacinth St NE: Dr. MLK Jr Parkway NE to Portland Rd NE	Widen to major arterial standards, including 4 travel lanes and a center turn lane with curbs, gutters, sidewalks, bike lanes and intersection modifications.	Hyacinth from Dr. MLK Jr Parkway to Portland Road	Roads-Bridges	2038	$3,448,000	$10,529,171	0-20 yrs
S185	Kale St NE: Portland Rd NE to Cordon Rd NE	Add a center turn lane, bike lanes, curbs and sidewalks in missing sections as development occurs.	Kale St NE: Portland Rd NE to Cordon Rd NE	Roads-Bridges	2030	$3,894,000	$9,171,076	0-20 yrs
S187	Kuebler Bv SE: Skyline Rd S to Liberty Rd SE	Widen to 4 lanes, curbs, sidewalks, bikelanes, center turn lane or median	Kuebler Blvd S from Skyline Rd S to Liberty Rd SE	Roads-Bridges	2040	$1,127,000	$3,672,413	0-20 yrs
S189	Liberty Rd S & Salem Heights Av S	Add northbound and southbound left turn lanes, bike lanes	Liberty Rd S at Salem Heights Ave S	Roads-Bridges	2040	$1,705,000	$5,928,606	0-20 yrs
S190	Liberty Rd S: Commercial St SE to Browning Av SE	Widen to 4 travel lanes, center turn lanes or raised medians, curbs, gutters, sidewalks, and bike lanes.	Liberty Rd S: Commercial St SE to Browning Av SE	Roads-Bridges	2050	$10,347,000	$49,778,966	0-20 yrs
S191	Liberty Rd S: Holder Ln SE to South UGB	Widen to an interim 3-lane urban standard, with 2 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes.	Liberty Rd S: Holder Ln SE to South UGB	Roads-Bridges	2035	$1,822,000	$5,047,477	0-20 yrs
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters, and sidewalks. Additional lanes may be required in the vicinity of the Kuebler Bv intersection.	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Roads-Bridges	2032	$6,163,000	$15,488,778	0-20 yrs
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters, and sidewalks. Half street modifications to be built by developers as Sustainable Fairview is built-out.	Reed Rd SE from Battle Creek Rd SE from Strongl Rd SE	Roads-Bridges	2028	$1,778,000	$3,026,585	0-10 yrs

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S199	River Rd S: Croisan Creek Rd S to UGB	Widen to minor arterial standards where topography allows, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at various intersections.	S. River Rd.: Croisan Creek to UGB	Roads-Bridges	2040	$9,800,000	$24,629,243	0-20 yrs
S204	Broadway St NE: Liberty St NE to Dr. MLK Jr Parkway	Add bike facilities. The portion from Dr. MLK Jr Parkway to Pine St NE is funded with ARTS funds is $1.4 million. This includes a turn pocket. See also S379 and S380	Broadway St NE: Liberty St NE to Dr. MLK Jr Parkway NE	Bicycle-Pedestrian	2035	$2,000,000	$3,632,886	0-20 yrs
S205	Center St NE: Commercial St NE to 17th St NE	Add bike facilities	Center St NE: Commercial St NE to 17th St NE	Bicycle-Pedestrian	2040	$690,000	$1,850,439	0-20 yrs
S208	Commercial St SE: Mission St SE to Superior St SE	Add bike facilities	Commercial St SE: Mission St SE to Superior St SE	Bicycle-Pedestrian	2030	$155,000	$300,437	0-10 yrs
S210	Liberty St: Trade St SE to E St NE	Add bike facilities	Liberty St: Trade St SE to E St NE	Bicycle-Pedestrian	2037	$179,000	$435,490	0-20 yrs
S211	Marion St NE: 13th St NE to Commercial St NE	Add bike facilities	Marion St NE: 13th St NE to Commercial St NE	Bicycle-Pedestrian	2040	$426,000	$1,142,445	0-20 yrs
S212	Market St NE: Commercial St NE to Hawthorne Av NE	Add bike facilities	Market St NE: Commercial St NE to Hawthorne Av NE	Bicycle-Pedestrian	2048	$2,131,000	$7,409,888	0-20 yrs
S213	Madrona Av SE: Liberty Rd S to Commercial St SE	Add bike facilities	Madrona Av SE: Liberty Rd S to Commercial St SE	Bicycle-Pedestrian	2030	$341,000	$660,962	0-10 yrs
S214	Mission St SE: 12th St SE to Commercial St SE	Add bike facilities.	Mission St SE: 12th St SE to Commercial St SE	Bicycle-Pedestrian	2045	$146,000	$460,554	0-20 yrs
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	Add bike facilities	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	Bicycle-Pedestrian	2045	$2,033,000	$6,413,050	0-20 yrs
S219	17th St NE: Sunnyview Rd NE to Silverton Rd NE	Add bike facilities	17th St NE from Sunnyview Rd NE to Silverton Rd NE	Bicycle-Pedestrian	2035	$310,000	$706,782	0-10 yrs
S224	Broadway St NE: Dr. MLK Jr Parkway NE to River Rd N	Add bike facilities	Broadway St NE: Dr. MLK Jr Parkway NE to River Rd N	Bicycle-Pedestrian	2045	$83,000	$261,822	0-20 yrs
S225	D St NE: Lancaster Dr NE to Summer St NE	Add bike facilities	D St NE: Lancaster Dr NE to Summer St NE	Bicycle-Pedestrian	2042	$2,646,000	$7,572,096	0-20 yrs

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S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Commercial St NE	Add bike facilities	Fairgrounds Rd NE/Hood St NE: Summer St NE to Commercial St NE	Bicycle-Pedestrian	2038	$162,000	$335,072	0-20 yrs
S229	Lana Av NE: Portland Rd NE to Silverton Rd NE	Add bike facilities	Lana Av NE: Portland Rd NE to Chemeketa Community College	Bicycle-Pedestrian	2040	$57,000	$152,862	0-20 yrs
S231	Madrona Av SE: Pringle Rd SE to Commercial St SE	Add bike facilities	Madrona Av SE: Pringle Rd SE to Commercial St SE	Bicycle-Pedestrian	2045	$925,000	$2,917,890	0-20 yrs
S236	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SE	Add bike facilities	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SE	Bicycle-Pedestrian	2045	$2,216,000	$8,493,739	0-20 yrs
S238	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE	Add bike facilities	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE	Bicycle-Pedestrian	2035	$500,000	$1,139,972	0-20 yrs
S245	12th St SE: Ibsen St SE to Commercial St SE	Add sidewalks for the west side of the street.	12th St SE: Ibsen St SE to Commercial St SE	Bicycle-Pedestrian	2040	$1,000,000	$2,068,345	0-20 yrs
S247	Center St NE: Mitchel St NE to Cordon St NE	Add sidewalks. See S346.	Center St NE: Mitchel St NE to Cordon St NE	Bicycle-Pedestrian	2038	$8,000,000	$15,506,451	0-20 yrs
S248	Commerical St SE: Winding Way SE to Lansford Dr SE	Add sidewalks	Commerical St SE: Winding Way to Landsford	Bicycle-Pedestrian	2040	$8,000,000	$16,546,763	0-20 yrs
S249	Bike/Ped overpass of Hwy 22 between Lancaster Dr and Cordon Rd	Construct a pedestrian overpass of Highway 22 connecting a residential area to the south to a shopping center and two schools to the north. Salem has an overcrossing from Bill Riegel Park to Miller E.S. in their plans.	Overpass of Hwy 22 between Lancaster Dr and Cordon Rd	Bicycle-Pedestrian	2033	$3,495,000	$9,073,451	0-10 yrs
S274	Salem Industrial Dr Improvement	Widen half the street to collector standards, with sidewalks, curbs, gutters and bike lanes where designated.	Salem Industrial Dr NE from Cherry Av NE to Bill Frey Dr NE	Roads-Bridges	2030	$3,000,000	$7,065,544	0-10 yrs
S286	Cordon Rd: Highway 22 E to Caplinger Rd SE	Widen to 4 lanes, plus center turn lane or left turn lanes at selected locations, curbs, gutters, sidewalks and bike lanes.	Cordon Rd SE from Highway 22 E to Caplinger Rd SE	Roads-Bridges	2035	$3,390,000	$9,391,299	10-20 yrs

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S287	Kuebler Blvd SE: I-5 to Turner Rd SE	Widen to 4 travel lanes, paved or raised median, bike lanes, curbs, gutters and sidewalks. This project includes turn lanes at Turner Rd SE and bridge modifications over the railroad.	Kuebler Blvd SE: I-5 to Turner Rd SE	Roads-Bridges	2030	$13,400,000	$31,559,430	10-20 yrs
S288	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE	Widen to 2 travel lanes with center turn lane where needed. Add curbs, gutters, sidewalks, bicycle lanes, and modify intersection approach to Silverton Rd NE and Sunnyview Rd NE. Project scope is to do interim minor arterial projects using a modified cross section (46 feet curb to curb in a 64 foot ROW) with construction to major arterial standards within 400 feet of intersections with Silverton Rd and Sunnyview Ave. Project includes some intersection realignment on the south side of Sunnyview to line up with new cross section. See also S364 for Hawthorne Ave at Sunnyview Rd project.	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE	Roads-Bridges	2040	$9,810,000	$28,073,417	0-10 yrs
S292	Brush College Rd NW: Pedestrian Project	Construct missing section (approximately 850 feet) of sidewalk on north side of Brush College Rd NW to Doaks Ferry Rd NW to provide access to Brush College Elementary school from the west.	Brush College Rd NW: From Doaks Ferry Rd NW running 850 feet southwest.	Bicycle-Pedestrian	2027	$4,600,000	$6,238,450	0-20 yrs
S293	Hines St SE Railroad Crossing Pedestrian Facilites	Construct sidewalks on Hines St SE at the Union Pacific railroad crossing, including relocating rail switching equipment, crossing arms, and connect to existing sidewalks.	Hines St SE at Union Pacific railroad crossing.	Bicycle-Pedestrian	2045	$1,500,000	$5,049,160	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	Enhance the corridor for bicycle travel between the Capitol Mall and Keizer/Kroc Center. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects).	Winter St NE from Court St NE to Norway St NE; Norway St NE from Winter St NE to 5th St NE; Cottage St NE/Maple Av NE from Norway St NE to Bilier Av NE; Salem Industrial Dr NE from its western terminus to north of Anunsen St NE; Claggett Creek Path from B	Bicycle-Pedestrian	2030	$186,000	$360,525	Unfunded
S310	State St to Kroc Center Bike Corridor	Enhance corridor for bicycle travel between the State St in central east Salem and the Kroc Center. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects)	24th St NE from State St to Center St NE; 23rd St NE from Center St NE to Ellis Av NE; Ellis Av NE from 23rd St NE to Park Av NE; Park Av NE from Ellis Av NE to Market St NE; Park Av NE from Market St NE to Sunnyview Rd NE; Florence Av NE/Chester Av NE fr	Bicycle-Pedestrian	2035	$1,095,000	$2,496,538	0-20 yrs
S312	Geer Community Park to Hoover Elementary School Bike Corridor	Create a corridor for bicycle travel between Geer Community Park and Hoover Elementrary School. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Illinois Av NE/Vinyard Av NE from Monroe Av NE to D St NE	Bicycle-Pedestrian	2035	$72,000	$164,156	0-20 yrs
S314	McKay Park East/West Bike Corridor	Create a corridor for bicycle travel connecting to McKay Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding one section of the corridor (covered in other projects)	Beverly Av NE from Fisher Rd NE to Coral Av NE; Beverly Av NE/Phipps Ln NE/Carolina Av NE from Lancaster Dr NE to eastern terminus of Carolina Av NE; McKay Park Connector from Phipps Ln NE to Hollywood Dr NE; San Francisco Dr NE from Hollywood Dr NE to Wa	Bicycle-Pedestrian	2035	$116,000	$264,473	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S315	Four Corners Elementary School and Auburn Elementary School Bike Corridor	Create a corridor for bicycle travel between the Four Corners Elementary School and Auburn Elementary School. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Elma Av SE/Donalyn Ln SE/Deana St SE/Monroe Av SE/45th Av SE/Barker St SE/45th Pl SE/Mitchell St SE from Glendale Dr SE to Dean St SE	Bicycle-Pedestrian	2040	$189,000	$506,859	0-20 yrs
S317	Sprague HS to South Salem HS Bike Corridor	Create a corridor for bicycle travel between Sprague HS and South Salem HS. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Justice Way Ct S/Joplin St S/Camellia Dr S/Barrett St S from Croisan Scenic Wy S to Browning Av S; Browning Av S from Barrett St S to Neelon Dr S; Crestview Dr S/Ewald Av S from Browning Av S to Stanley Ln S; Stanley Ln S from Ewald Av S to Madrona Av S;	Bicycle-Pedestrian	2035	$376,000	$857,259	0-20 yrs
S318	Bush's Pasture Park to River Road Bike Corridor	Create a corridor for bicycle travel between the Bush's Pasture Park and River Road S. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Miller St S from River Rd S to High St SE	Bicycle-Pedestrian	2027	$43,000	$75,612	0-5 yrs
S319	Saginaw St Bike Corridor	Create a corridor for bicycle travel between Mission St and Rural Av, bypassing the Commercial/Liberty couplet. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Saginaw St S/Mission St SE from Rural Av SE to Commercial St SE	Bicycle-Pedestrian	2030	$93,000	$180,262	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S320	Clark Creek Park/South Village Park Bike Corridor	Create a corridor for bicycle travel between the Clark Creek Park and South Village Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Yew St SE/Berry St SE/Electric St SE/Summer St SE from Leffelle St SE to Vista Av SE; Clark Creek Park Connector from Vista Av SE to Norwood St SE; Norwood St SE/Hulsey Av SE/Morningside St SE/Peck Av SE from Clark Creek Park to Harris Av SE; South Villag	Bicycle-Pedestrian	2030	$200,000	$387,661	0-10 yrs
S322	Orchard Heights Park / Brush College Park Bike Corridor	Create a corridor for bicycle travel between Orchard Heights Park and Brush College Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Lupin Ln NW/Larkspur Ln NW/Karen Wy NW from Parkway Dr NW to Glen Creek Rd NW; Parkway Dr NW from Lupin Ln NW to Orchard Heights Rd NW; Orchard Heights Park Access Road from Orchard Heights Rd NW to northern terminus; Orchard Heights Park/Hope Av Connecto	Bicycle-Pedestrian	2040	$263,000	$705,312	0-20 yrs
S323	2nd St NW Bike Corridor - Phase 1	Design and reconstruction of 2nd St NW, phased from Gerth Av NW to Wallace Rd NW. Phase 1 is between Patterson St NW to Wallace Rd NW. From the Salem CIP. See also S344. Previously $5.93 million has been allocated to this project.	2nd St NW from Patterson St NW to Wallace Rd NW	Bicycle-Pedestrian	2024	$2,400,000	$2,952,767	0-10 yrs
S324	25th St South of Mission St Bike Corridor	Create a corridor for bicycle travel along 25th Av SE. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects). See S221.	25th St SE from Madrona Av SE to Mission St SE	Bicycle-Pedestrian	2035	$3,300,000	$6,607,493	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S326	Cottage St - Convert to two-way	Convert to two-way with sharrows. From the Central Salem Mobility Study (2012).	Cottage St NE from Court St NE to Union St NE	Roads-Bridges	2036	$700,000	$1,648,627	0-20 yrs
S333	Summer St NE & Marion St NE Intersection Modifications	Remove southbound right-turn movement from shared lane and remove fourth westbound lane east of Summer St and start it as an add lane for the southbound right-turn movement. From the Central Salem Mobility Study (2012).	Summer St NE at Marion St NE	Roads-Bridges	2035	$120,000	$273,593	0-10 yrs
S340	Kroc Center Pathway	Build a bicycle/pedestrian connection between Hyacinth St NE and Bill Frey Dr, including a bridge over Claggett Creek. Cost estimate is for the most expensive option (concrete path and bridge).	Between Hyacinth St NE and Bill Frey Dr.	Bicycle-Pedestrian	2036	$1,800,000	$3,972,795	0-20 yrs
S341	Hyacinth St Multi-Use Path	Build a bicycle/pedestrian path along the south side of Hyacinth St NE between Salem Parkway and Salem Industrial Drive NE.	Hyacinth St NE between Salem Parkway and Salem Industrial Dr NE	Bicycle-Pedestrian	2036	$550,000	$1,213,910	0-20 yrs
S342	Bike/Pedestrian Bridge over Dr. MLK Jr Parkway	Build a bridge over Dr. MLK Jr Parkway to separate bicycle and pedestrian travel from motorized vehicles. Would include connections to the existing multi-use path along Dr. MLK Jr Parkway and to the proposed multi-use path along Hyacinth St NE (see S340).	Dr. MLK Jr Parkway at Verda Dr NE/Hyacinth St NE	Bicycle-Pedestrian	2050	$3,500,000	$12,170,159	0-20 yrs
S343	Marine Dr NW: Harritt Dr NW to River Bend Rd NW	Construct a collector from the Harritt Dr NW extension to River Bend Rd NW. Road will include one lane in each direction, center turn pockets as necessary and facilities for bicycles and pedestrians. See also S297 and S382.	Marine Dr NW from Harritt Dr NW to River Bend Rd NW	Roads-Bridges	2045	$8,110,000	$19,730,838	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
S345	Auburn Rd NE: Baldwin Av NE to Cordon Rd NE	Widen to collector standards, add bike lanes, drainage and sidewalks. Continuation of M071. Was M011. Developer funded.	Auburn Rd: Baldwin Dr to Cordon Rd	Roads-Bridges	2030	$2,000,000	$4,136,691	0-20 yrs
S372	Pedestrian Crossing Program	Design and construct pedestrian safety crossings. Locations determined annually based on opportunites or identified crossing safety issues.	TBD	Bicycle-Pedestrian	2023	$975,000	$1,161,241	0-5 yrs
S382	Marine Dr NW: 5th Av NW to Glen Creek Rd	Construct a new collector from the 5th Av extension to Glen Creek Rd NW. Road will include one lane in each direction, center turn pockets as necessary, facilities for bicycles and pedestrians, and appropriate stormwater treatment. See also S297 and S343.	From 5th Ave NW extesnion to Glen Creek Rd NW to the west of the park.	Roads-Bridges	2038	$17,000,000	$32,951,208	0-20 yrs
City of Turner								
Included								
T008	Delaney Road at Turner Road	Add sidewalks, bicycle lanes, and a right turn lane to Delaney Road east of Turner Road extending approximately 340 feet, connecting to the existing sidewalks and bicycles lanes at 2nd St. SE.	Delaney Road east of Turner Road	Roads-Bridges	2032	$744,450	$1,187,561	0-10 yrs
Marion County								
Committed								
M015	Cordon Rd NE & Auburn Rd NE	Add traffic signal and widening of intersection for lane channelization on Auburn Rd. Developer funded	Cordon Rd at Auburn Rd	Roads-Bridges	2025	$1,300,000	$1,652,196	0-10 yrs
M016	Cordon Rd NE & Hayesville Dr NE	Add northbound left turn lane, ARTS funds	Cordon Rd at Hayesville Dr	Roads-Bridges	2022	$610,000	$775,261	0-5 yrs
M023	Delaney Rd: Bridge over Battle Creek	Replace bridge, realign intersection at Battle Creek Road and at Parrish Gap Rd. STIP key 21896	Delaney Rd bridge over Battle Creek	Roads-Bridges	2028	$4,900,000	$6,864,601	Unfunded

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
M024	Hollywood Dr: Salem City Limits to Silverton Rd NE	Widen to collector standards and add new signal at Hollywood Dr at Silverton Rd. (combined with M032).	Hollywood Dr from Salem City Limits to Silverton Rd	Roads-Bridges	2022	$3,150,000	$4,003,398	0-5 yrs
M027	Lancaster Dr NE: Center St to Monroe St NE	Reconstruct road, including sidewalk, ADA and access modifications. (see M100 for second part)	Lancaster Dr from Center St to Monroe St	Roads-Bridges	2022	$2,625,000	$3,336,165	0-5 yrs
M030	Sidewalk construction: various locations (set 1)	Construct sidewalks at various locations - $300,000 per year, or used as match for grants for sidewalk projects.	TBD	Bicycle-Pedestrian	2028	$1,500,000	$2,101,408	0-5 yrs
M034	State St: Lancaster Dr NE to 46th Av	Widen to 2 travel lanes plus a center turn lane with curbs, gutters, sidewalks, and bike lanes. Scaled down from 4+CTL. See Mxxx.	State St from Lancaster Dr to 46th Av	Roads-Bridges	2026	$5,452,000	$7,157,715	0-10 yrs
M042	Cordon Rd NE & Kale St NE	Add left turn refuge on Cordon Rd at Kale St. ARTS funded.	Cordon Rd at Kale St	Roads-Bridges	2022	$565,000	$718,070	0-5 yrs
M070	Cordon Road SE & State St	Modify the intersection to upgrade the signal, add NB & SB travel lanes, NB right turn lane, EB & WB travel lanes. Assume 50 percent developer funded.	Cordon Road SE & State St	Roads-Bridges	2028	$3,000,000	$4,484,780	0-5 yrs
M085	Center St: Lancaster Dr to 45th Pl (3-lane interim)	Widen to include 3-lane section with center turn lane, sidewalks and bike lanes on the north side. Stormwater mitigation as required. Was S171, see also M084.	Center Street from Lancaster Drive to 45th Place	Roads-Bridges	2024	$3,483,500	$4,285,818	0-5 yrs
M086	Connecticut St: Bike and Pedestrian	Design bike and pedestrian path on west-side. PE Phase in 2020, construction in 2024.	Connecticut St: Macleay Rd to Rickey St	Roads-Bridges	2024	$1,296,000	$1,594,494	0-5 yrs
M088	Marion County Curve Warning Signs	Upgrade and install new curve warning (chevron) signs on curves where warranted (Vitae Springs Rd, Orville Rd and River Rd South)	Segments of Vitae Springs Rd, Orville Rd and River Rd South	Roads-Bridges	2022	$300,000	$357,305	0-5 yrs

Included

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
M018	Cordon Rd NE & Ward Dr NE	Add northbound left turn lanes	Cordon Rd at Ward Dr	Roads-Bridges	2035	$1,000,000	$1,758,415	10-20 yrs
M019	Cordon Rd NE & Herrin Rd NE	Add left turn refuge	Cordon Rd at Herrin	Roads-Bridges	2035	$1,000,000	$1,758,415	10-20 yrs
M020	Hazelgreen Rd at Cordon Rd NE / 55th Ave	Realign, add turn lanes and signal or roundabout	Cordon Rd at Hazelgreen Rd and 55th Ave	Roads-Bridges	2030	$4,500,000	$6,727,169	0-10 yrs
M022	Delaney Rd: Battle Creek SE to Turner	Widen road to county arterial standards	Delaney Road from Battle Creek to Turner	Roads-Bridges	2030	$5,500,000	$8,222,096	0-10 yrs
M031	Sidewalk construction: various locations (set 2)	Construct sidewalks at various locations - $300,000 per year, or used as match for grants for sidewalk projects.	TBD	Bicycle-Pedestrian	2033	$1,500,000	$2,471,793	0-10 yrs
M044	Cordon Rd NE: Silverton Rd NE to Kale St NE	Separated multi-use path	Cordon Rd from Silverton Rd to Kale St	Bicycle-Pedestrian	2040	$1,400,000	$2,895,684	Unfunded
M046	Cordon Rd SE: Center Rd NE to State St SE	Construct to Parkway standards with 4 travel lanes, center turn lane and multi-use path including required signal modifications. Partially developer funded.	Cordon Rd from State St to Center St	Roads-Bridges	2030	$7,000,000	$10,464,486	0-10 yrs
M048	Hayesville Dr NE: Fuhrer Dr NE to Cordon Rd NE	Widen to collector standards. See also M073.	Hayesville Dr from Fuhrer Dr to Happy Rd	Roads-Bridges	2045	$2,800,000	$6,812,126	Unfunded
M049	Herrin Rd NE: Middle Grove Dr NE to Cordon Rd NE	Widen to collector standards, replace bridge	Herrin Rd from Middle Grove to Cordon Rd	Roads-Bridges	2040	$2,800,000	$5,791,367	Unfunded
M058	Pedestrian Treatments: various locations (set 3)	Construct sidewalks, ADA facilities, pedestrian crossings at various locations - used as match for grants for pedestrian projects.	TBD	Bicycle-Pedestrian	2043	$1,500,000	$3,419,915	10-20 yrs
M059	Pedestrian Treatments: various locations (set 4)	Construct sidewalks, ADA facilities, pedestrian crossings at various locations - used as match for grants for pedestrian projects.	TBD	Bicycle-Pedestrian	2039	$1,500,000	$3,003,406	0-20 yrs
M061	Swegle Rd NE: City limits to Cordon Rd NE	Widen to minor arterial standards, including 2 travel lanes plus a center turn lane with curbs, gutters, sidewalks and bike lanes.	Swegle Rd from Salem City Limits to Cordon Rd	Roads-Bridges	2045	$1,500,000	$3,649,353	Unfunded

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
M062	Turner Rd SE: Val View Dr SE to Turner UGB	Widen to minor arterial standards adding turn lanes where needed, bike lanes, curbs, gutters, and sidewalks. Partially developer funded. See T007	Turner Rd from Val View Rd to the northern boundary of the Turner UGB	Roads-Bridges	2045	$4,200,000	$10,218,190	Unfunded
M074	Brooklake Rd NE Pedestrian Enhancements	On the north side of Brooklake Rd, provide sidewalks, add seating areas, lighting and landscaping.	Brooklake Rd NE: from Pueblo Av NE to approximately OR 99E	Bicycle-Pedestrian	2025	$1,000,000	$1,270,920	Unfunded
M077	Sunnyview Rd NE: Walker Rd NE to Cordon Rd NE	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Sunnyview Rd NE from Walker Rd NE to Cordon Rd NE	Roads-Bridges	2045	$1,100,000	$2,676,193	Unfunded
M082	ITS - Overheight Warning System	Add two overheight warning systems and turn arounds on River Rd S before low clearence railroad bridges.		ITS-Signals	2027	$2,300,000	$3,119,225	0-5 yrs
M084	Center St NE: Greencrest Dr NE to Cordon Rd NE	Widen to major arterial standards, including bikelanes, sidewalks, curbs and gutters as necessary. Was S171.	Center St NE from Greencrest St NE to Cordon Rd NE	Roads-Bridges	2038	$5,000,000	$10,341,727	Unfunded
M090	Cordon Road: Caplinger Road to State Street	Construct to county parkway standards with 4 travel lanes, center turn lane and a multi-use path including required signal modifications at the intersections.	Cordon Road from Caplinger Road to State Street	Roads-Bridges	2038	$3,600,000	$6,977,903	0-20 yrs
M093	Small Bridge Replacement	Replace small bridges at locations to be determined after further study.	TBD	Roads-Bridges	2031	$1,500,000	$2,471,793	0-20 yrs
M095	State Street: 46th Avenue to Cordon Road	Widen to three travel lanes adding center turn lane with curbs, gutters, sidewalks and bike lanes. Joint project with Salem (see Sxxx).	State St. from 46th Ave to Cordon Road	Roads-Bridges	2030	$7,700,000	$12,283,191	Unfunded
M099	Macleay Rd: Lancaster Dr. to Connecticut Ave	Construct sidewalks and bicycle lanes.	Macleay Rd from Lancaster to Connecticut Ave	Bicycle-Pedestrian	2040	$2,800,000	$5,791,367	Unfunded
M100	Lancaster Dr NE: Monroe St NE to State St	Reconstruct road, including sidewalks, ADA and access modifications. See M027 for first part of project.	Lancaster Dr NE from Monroe St NE to State St	Roads-Bridges	2026	$3,300,000	$4,332,439	0-5 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
M102	Chemeketa CC East/West Bike Corridor	Create a corridor for bicycle travel connecting to Chemeketa Community College. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding one section of the corridor (covered in other projects). Was S313.	Cooley Dr NE from Fisher Rd NE to Chemeketa CC West Transit Station; Chemeketa Cross Campus Path from Cooley Dr NE to Satter Dr NE; Satter Dr NE from 45th Av NE to 47th Av NE	Bicycle-Pedestrian	2040	$48,000	$128,726	0-20 yrs
ODOT								
Committed								
O006	I-5 Phase IV: Kuebler Interchange to Delaney Rd. (SB Phase)	Widen I-5 southbound from Battlecreek Road to Delaney Road. Pave the existing section southbound and northbound. Replace a bridge over Commercial Street NB off-ramp. Rebuild and realign the SB Delaney Road off-ramp. Create concept level designs for replacing Battle Creek Road over-crossing bridge. Add broadband along the segment. Design and Right-of-Way for both directions. See also O039 for NB project.	I-5 from Kuebler Interchange to Delaney Rd Interchange	Roads-Bridges	2024	$50,000,000	$61,515,976	0-5 yrs
O025	Backage Roads (OR 22W)	Develop backage roads to the north of OR 22W corridor between the revised alignment of Doaks Ferry Rd. and OR 51. Cost represents amount available for planning and other stages. Listed in the TIP/STIP (key number 13188). Was P003.	North of OR 22W between the revised alignment of Doaks Ferry Rd. and OR 51	Roads-Bridges	2027	$8,200,000	$13,512,468	0-5 yrs
O034	Center St Bridge - Seismic Updates	Seismic updates to the Center Street Bridge based on the Seismic Study (2019). Funded by Oregon Legislature via HB 2001 for $60 million.	Center Street bridge over the Willamette River	Roads-Bridges	2025	$100,000,000	$131,286,043	0-5 yrs
Included								

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
O021	Commercial St NE & Marion St Bridge	Restripe the through/right lane to a right-turn only lane giving 2 right-turn only lanes onto the bridge. Add curb extensions on the south side of the intersection and improve the northwest corner to facilitate truck turning movements.	Commercial St at Marion St NE	Roads-Bridges	2027	$165,000	$352,539	0-10 yrs
O039	I-5 from Kuebler Bv Interchange to Delaney Rd Interchange - Phase 2 NB	Widen I-5 to three lanes between Kuebler Boulevard and Delaney Road interchange ramps. Design and RoW were part of Phase 1 (O006). Phase 2 focuses on the NB lanes and the Battle Creek Road over-crossing bridge.	I-5 from Kuebler Boulevard Interchange to Delaney Road Interchange	Roads-Bridges	2029	$12,600,000	$18,234,341	0-10 yrs
O041	Wallace Rd NW & Edgewater St NW (BHES)	Increase radius of westbound bridge ramp to Wallace Road NW, provide an additional westbound entrance lane from bridge onto Edgewater Road NW, and bridge ramp lanes, and close Musgrave Lane NW. Alternative access would be provided to impacted businesses. Was S160	Wallace Rd NW at Edgewater Rd NW	Roads-Bridges	2030	$1,681,000	$3,959,060	0-10 yrs
O042	Wallace Rd NW: Edgewater St NW to Orchard Heights Rd NW	Address safety issues through construction of a raised median with turn pockets to serve businesses. Pedestrian and bicycle facilities will be included. Was S163.	Wallace Rd NW from Edgewater Rd NW to Orchard Hts Rd NW	Roads-Bridges	2040	$1,196,000	$3,897,254	0-20 yrs
ODOT TBD								
O004	Chemawa/Hazelgreen & Portland Rd NE	Upgrade signal and interconnect	Chemawa Rd NE / Hazelgreen Rd NE at Portland Rd NE	ITS-Signals		$180,000	$296,615	Unfunded
O008	Hwy 22 and 51 interchange	Construct an interchange at the OR22W and OR51 intersection. Year to be built is a placeholder based on the OR22W EMP to allow for YoE estimates. No funding is currently available (2022)	OR 22 W and OR 51	Roads-Bridges	2038	$25,000,000	$71,542,858	Unfunded

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
O010	ITS - En-Route Traveler Information System - Phase II-III	Deploy Dynamic Message Signs and city/county/state websites to notify motorists of incidents and other traveler information. Multiple phase project.		ITS-Signals		$2,083,000	$3,908,511	Unfunded
O027	I-5: Delaney Road to Albany	Widen I-5 from Delaney Road interchange south to Albany. Add an additional lane in each direction. Cost estimate is for development work only. Project is in the SKATS area only at ramps for the Delaney Road interchange.	I-5 from Delaney Road interchange south to Albany city limits	Roads-Bridges		$3,000,000	$4,068,554	Unfunded
O028	Mission St @ 25th St: Turn Lane	Add a WB right turn lane with storage lane. From OR 22E Facility Plan.	Mission St at 25th St	Roads-Bridges	2037	$350,000	$747,810	Unfunded
O029	Mission St at Airport Road: EB Turn Lanes	Install EB right turn with storage lane on Airport Road. Improve the North/South geometry of the intersection. From the OR 22E Facility Plan.	Mission St at Airport Road	Roads-Bridges	2037	$850,000	$1,816,111	Unfunded
O030	Mission St at Airport Rd: EB Turn Lane	Add EB left turn with storage lane (resulting in dual lefts). From the OR 22E Facility Plan.	Mission St at Airport Rd	Roads-Bridges	2037	$350,000	$747,810	Unfunded
O031	Mission St at Hawthorne Av: WB Turn Lane	Add a WB right turn with storage lane on Hawthorne Av. From OR 22E Facility Plan.	Mission St at Hawthorne Av	Roads-Bridges	2037	$350,000	$747,810	Unfunded
O032	Mission St at 25th St: Pedestrian Refuge	Add a pedestrian refuge island on west leg of the intersection. From the OR 22E Facility Plan.	Mission St at 25th St	Bicycle-Pedestrian	2037	$250,000	$534,150	Unfunded
O033	Mission St (OR 22E) Corridor Multi-Use Path	Construct a separated multi-use path paralleling Mission St (OR 22E) from 25th St to Lancaster Dr. Preliminary proposal is for a path would follow Mission St to Turner Rd, go south until Cascade Park to a trail that goes under I-5 linking to Lancaster Dr. From the OR 22E Facility Plan.	Mission St to Turner Rd to off-street path to Lancaster Dr	Bicycle-Pedestrian	2037	$475,000	$1,014,885	Unfunded

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
O035	Chemawa / I-5 Phase 1 - Lockhaven/Chemawa Limited Widening	Projects from the Chemawa / I-5 IAMP for Phase 1 including widening Lockhaven Road from I-5 to the Verda Lane extension (see K0xx) and widening Chemawa Road from I-5 to Portland Road (OR99E).	Lockhaven Road from I-5 to the Verda Lane extension and Chemawa Road from I-5 to Portland Road.	Roads-Bridges		$42,000,000	$64,858,882	Unfunded
O036	Chemawa / I-5 Phase 2 - Tepper / 35th / Indian School Road Extensions	Projects from the Chemawa / I-5 IAMP for Phase 2, including realignment of 35th Street, realignment of Indian School Road, adding auxiliary lanes on I-5 between Portland Road and Chemawa Road, lengthen the NB and SB ramps from Chemawa Road to I-5, and build an overcrossing of I-5 at Tepper Drive and construct East Tepper Drive from I-5 to a new intersection with Chemawa Road.		Roads-Bridges		$80,000,000	$123,540,728	Unfunded
O037	Chemawa / I-5 Phase 3 - Chemawa Partial Cloverleaf	Projects from the Chemawa / I-5 IAMP for Phase 3. Build NB Partial cloverleaf interchange of I-5 and Chemawa Road on the eastside.		Roads-Bridges		$12,000,000	$18,531,109	Unfunded
O038	Brooklake at I-5 Short-term projects	Placeholder for short-term projects from the Brooklake/I-5 IAMP (2022) Traffic signals at I-5 ramp terminals. Re-grade ramp terminals. Lengthen and widen I-5 off-ramps (increase to two-lanes) Traffic signal and turn lane on Brooklake Road at Huff Avenue		Roads-Bridges	2030	$7,400,000	$11,062,456	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
O040	Brooklake Rd at I-5: Interchange Replacement	Rebuild/replace the current interchange on I-5 at Brooklake Road to a tight diamond configuration per the Preferred Alternative from the Brooklake/I-5 IAMP (2022). Includes signalization of the ramp terminals, reconstructing the ramps to match grades, lengthened, and add lanes for turning movements. Dual WB lanes, separate LT lanes, single EB lane, with new bicyclist and pedestrian facilities. Widen Brooklake Road to five lanes between Huff Avenue and I-5 SB ramp, including a new signal at Huff Av. Widen and extend Huff Avenue north and south of Brooklake Road to provide access to the current properties. See also O038 for projects that could be accomplished in the short-term.	Brooklake Road at I-5	Roads-Bridges	2040	$59,800,000	$123,687,054	Unfunded
SAMTD								
Committed								
B008	South Salem Transit Center	Design and construct a Transit Center with 6 - 10 bus bays, park and ride lot with 40 to 100 spaces, driver's break-room, indoor passenger waiting area with restrooms and other customer amenities, bicycle facilities, energy efficiency features and opportunities for commerical development.	Northeast corner of the Commercial St SE at Wiltsey SE intersection.	Transit	2025	$9,750,000	$12,391,471	0-10 yrs
Included								
B003	ITS - Transit Signal Priority	Implement signal priority along corridors with High Frequency Transit.	Intersections along High Frequency Transit Corridors	ITS-Signals		$175,000	$328,367	Unfunded

RTSP ID	Project Name	Project Description	Project Location	Project Type	Year to be Built	Cost ($)	YoE $	Project Priority
B005	ITS - Real-time Transit Arrival Information	Provide real-time arrival and departure info to transit users. Data at selected bus stops and electronically to users via apps, etc.	Transit centers and select bus stops	ITS-Signals	2023	$800,000	$1,318,290	Unfunded
B009	Paratransit Facility	Design and construct a dispatch and administration facility for the district's paratransit contractor. This will eliminate using operating funds to pay lease costs for these functions.	Del Webb Maintenance and Dispatch Facility, Salem	Transit	2015	$3,184,200	$5,247,122	0-10 yrs
B017	East Salem Transit Center	Build a transit center in east Salem at Chemeketa Community College to replicate the service offered by transit centers in Keizer, south Salem and west Salem. Currently a placeholder until a planning study provides the details.	Chemeketa Community College campus	Transit	2028	$9,750,000	$13,659,155	0-20 yrs

Chapter 8 ~ Impacts

The proposed projects are examined for their potential impacts to the existing cultural, historic, and environmental resources in the Salem-Keizer area. An environmental justice analysis of the proposed projects is presented.

Well-designed and implemented transportation projects minimize the negative impacts on the people, businesses, and resources of a region whether these are environmental, historic, and cultural resources while maximizing the positive impacts to society and the environment. Positive impacts include making travel more convenient or safer, making businesses more accessible, reducing traffic congestion or emissions, encouraging people to be more active, or restoring environmental conditions along a corridor. Negative impacts include disruption to an environment, bisecting a community, increasing stormwater runoff, health impacts from pollution, or reducing accessibility or connectivity to a neighborhood.

The potential impacts that may arise from the construction, maintenance, and operation of the regional system as proposed in **Chapter 7** are presented in this chapter. These potential impacts include how the projects could affect the environmental, historic, and cultural resources in the area; result in increased or decreased emissions of pollutants; whether the projects provide a burden or benefit to communities of concern; or address or exacerbate the congestion along the regional corridors. Possible economic impacts are not considered.

The chapter begins with a discussion of why this analysis is being performed. Then a brief discussion of each of the six categories (Cultural Resources, Environmental Resources, Historic Resources, Environmental Justice, Air Quality, and Travel time/congestion) that is analyzed regarding potential impacts followed by the analysis for the categories. The chapter ends with methods of reducing possible impacts, and failing that, to mitigating their effect on the resources in the area.

Why Examine Potential Impacts?

Numerous federal and state goals, laws, and regulations stipulate that the potential impacts that would result from the construction of a project be considered during the planning and development phase. These goals, laws, and regulations are described in **Chapter 2** including the Infrastructure Investment and Jobs Act of 2021 (IIJA) and the Clean Air Act. Each requires a different level and type of analysis such as comparing the location of the projects regarding the natural and cultural resources identified in the region. Each regulation requires a different action based on the results of the analysis. For the federal 20-year transportation plans required of MPOs, the primary level of analysis is to compare projects with resource maps to allow for early identification and modification of the project's scope to avoid potential impacts. In cases where changing the project's scope is not feasible, activities need to be developed that will minimize any

possible impact or to implement mitigation processes to offset the loss caused by the project. This 27-year plan also considers the impacts at a regional scale for Environmental Justice, Air Quality, and travel time.

Project-level analysis is not performed nor a requirement for this Plan. (Project-level analysis would be conducted once funding has been secured for a project, and the preliminary design and environmental analysis is started.) The analyses presented in this chapter is consideration of the operation of the regional system as a whole as well as identifying where proposed projects may potentially impact a resource due to proximity. In most cases, understanding the area and the environment in which the proposed project will be located can help the planners and engineers design a better solution that does not impact the resources in the area.

Types of Potential Impacts

In this chapter, six categories of potential impacts of a project have been considered: Cultural Resources, Environmental Resources, Historic Resources, Environmental Justice, Air Quality and Travel time/vehicular congestion. These represent the resources that are either legislatively mandated to be analyzed (e.g., environmental resources) or that are commonly used when discussing transportation projects (e.g., travel time/congestion).

Projects can have different impacts on each of the categories considered in this analysis. For example, a project that results in widening a road to add turn lanes or additional travel lanes may temporarily reduce congestion along a roadway segment, which decreases the travel time for people using that route in a vehicle. However, the same project could result in increased runoff into a local stream reducing the habitability of that stream unless appropriate mitigations are developed for the project. Finally, widening the road could disturb cultural resources or impact the people and businesses in the area in harmful ways (such as encouraging speeding or increasing emissions).

The MTP includes many types of projects identified as being necessary to meet the future multi-modal mobility needs of the region's residents and businesses. For a complete discussion of the project categories included in the MTP, see **Chapter 7**. A complete list of the financially constrained projects is available in **Table 7-3**. These types of projects have different potential impacts on the natural environment ranging from slight or none to (at the extreme level) habitat destruction. Obviously, the impact potential is dependent on the location of the project to the resource and the specifics of the project. In an area with sensitive habitats, even a generally benign project may have more of an impact than in an area with no sensitive habitats. The general impact potential of project types regarding cultural, historical, and environmental resources is presented in **Table 8-1**. These are the potential impacts from when a project is constructed. They do not reflect the impacts resulting from the operation of the facility.

Table 8-1: Project Types and Impact Potential on Cultural, Historic and Environmental Resources

Project Type	Impact Potential
Bridge – New or Replacing	High
New Road	High
Widen Existing Road (add travel lanes)	Medium
Widen Intersection	Medium
Add Turn Lanes / Center Lane	Medium
Adding Sidewalks	Medium
Adding Bicycle Lanes	Medium
Adding Bicycle Lanes (striping)	Low
Signals & Interconnects	Low
Purchasing Buses	Low

Methods Used and Analysis of Projects

Cultural, Historical, and Environmental Resources

Data describing the cultural, historical, and natural resources within SKATS were collected from a variety of sources including city, county, state, and federal resource agencies. The data were in the form of maps, plans, assessments, and GIS layers covering one or more of the resources of interest. There are more data sources available describing the natural resources in the area, particularly, fish and water resources, that are subject to national laws such as the Endangered Species Act or the Clean Water Act than for historical resources.

If possible, the data gathered from the resource agencies was entered into a geographical information system (GIS) along with information on the locations of the proposed projects in the MTP. The GIS was used to perform a spatial analysis that displays where a project intersects or is within a given distance of a feature such as a waterway. For projects where the work is performed in one location, such as modifying an intersection or reconstructing a bridge, a distance of 0.05 mile (264 feet) was used for the analysis. For "corridor" projects or where the modification is longer than an intersection or bridge span, such as reconstructing a road to include a center-turn lane, a GIS *intersection* was performed, which shows where the projects cross the resources being considered. When comparing the corridors with the wetland's coverage, an *intersection* was not performed[1]; instead, a GIS *proximity buffer* was used to determine whether the project was within 0.009 mile (50 feet) of a wetland[2].

<u>Cultural</u>
The potential impact of projects on the cultural resources of the area, specifically

[1] This is due to an artifact of how the GIS coverage was created.
[2] Wetlands defined as "wetland channels" were included in the analysis.

archeological sites, is complicated by the lack of information and data that may be shared in a public discourse. The State Historic Preservation Office (SHPO) considers the locations of sites of archeological interest to be sensitive due to the possibility of disturbance to the sites. Because of this, individual projects will need to perform the necessary studies during their development. No region-wide analysis is currently possible.

Historic

Following the analysis described above, three proposed projects (or portions of a project) will be built in an established historic district. One is for adding bicycle facilities. The other two are for pedestrian facilities. None of these are likely to require additional right-of-way. The locations of the historic districts and buildings within SKATS and the projects proposed in this Plan are presented in **Map 8-1**. For this analysis, only projects on the National Register of Historic Places were used. In addition to the national list, there are list of historic buildings and landmarks maintained by the State of Oregon and each of the jurisdictions. Also, the impact to buildings older than 50 years old need to be considered and evaluated even if they are not on any of the lists. This work is typically complete once the project is closer to implementation. For more information on the specific locations of historic districts, buildings, or properties including impacts from a proposed project, contact the local jurisdiction.

Environmental

The environmental resources considered for this analysis include the following:

1. critical and essential salmon habitat[3];
2. the waterways designated in the 2022 303(d) list for not meeting the Clean Water Act that is maintained by the Oregon Department of Environmental Quality (DEQ), and
3. wetlands in the area, as defined in the wetland inventories[4].

Based on this analysis, it was determined that 114 of the 189 (60 percent) projects have a potential direct or indirect impact on one or more to the natural resources of interest (***See* Table 8-2.**). The locations of the projects along with the 303(d) streams and critical habitats in the area are illustrated in **Map 8-2**. There are several projects that have potential impacts on more than one resource. Typically, waterways that are listed as critical habitat for steelhead trout and Chinook salmon are also listed as essential habitat as well. In addition, some features have multiple projects potentially impacting them. One hundred thirteen projects (60 percent) included in the financially constrained plan potentially cross or are within 0.009 miles (50 feet)[5] of a wetland identified in the various Wetland Inventories (***See* Map 8-3.**). Note that since the 2019 update, there has been and increase in the amount of land identified as either a wetland or having hydric soils. The

[3] Data from NOAA Fisheries and Oregon Department of State Lands on the habitat for Chinook Salmon and Steelhead Trout (Salmonid).

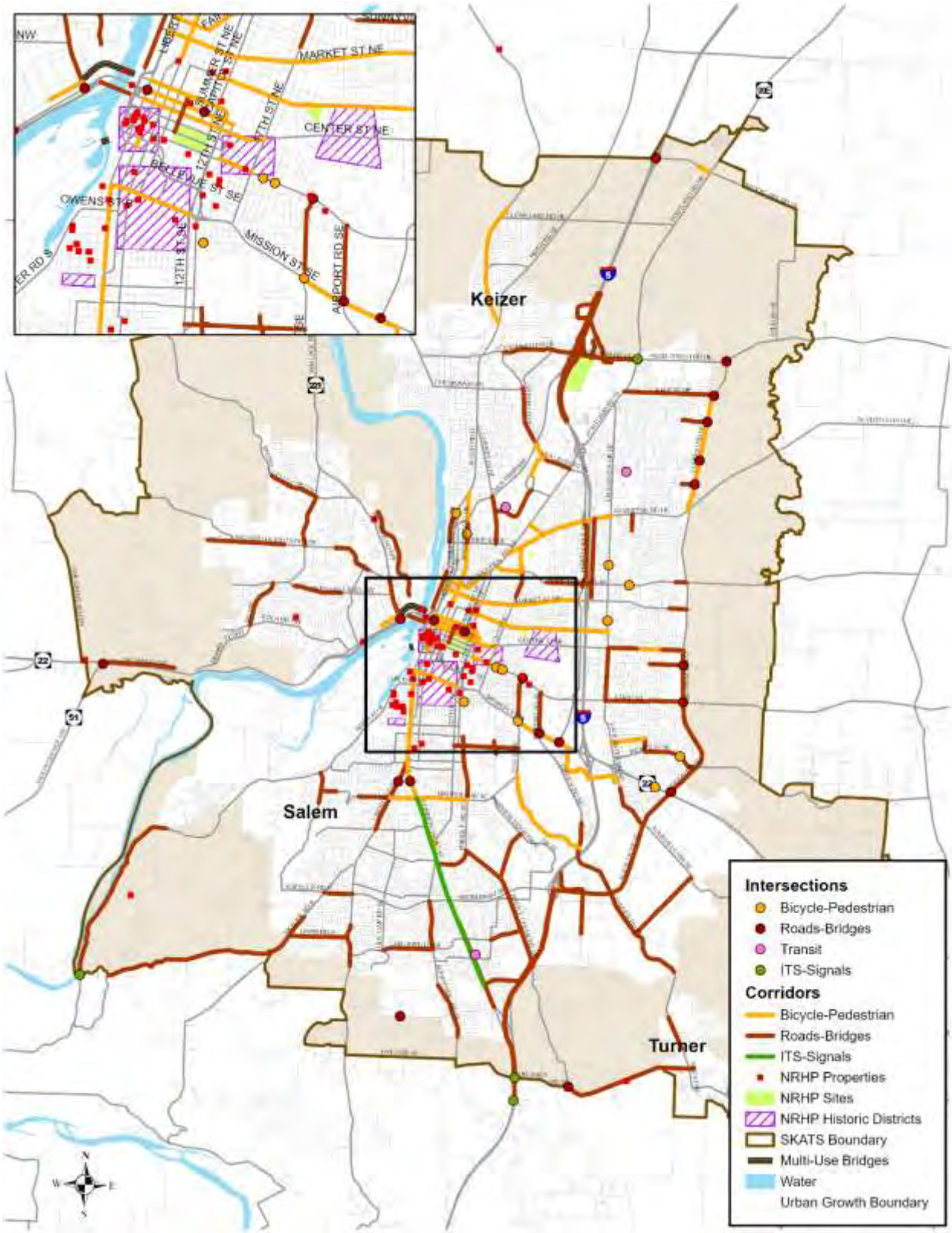
[4] Data from the Oregon Department of State Lands and the Local Wetland Inventory.

[5] Analysis in previous MTPs used a value of 26 feet (0.005 miles). This has been revised based on comments from resource agency staff.

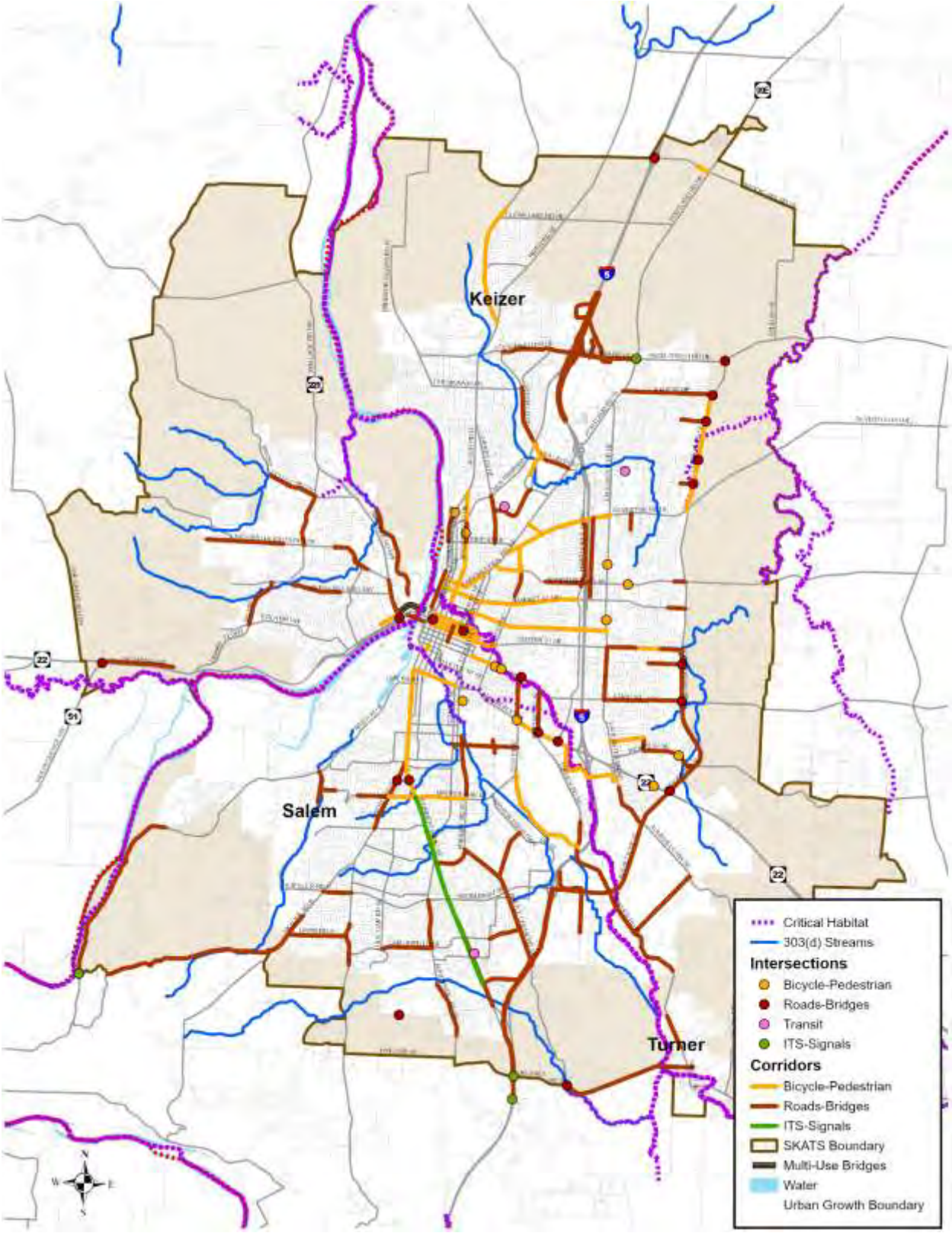
number of projects with potential impacts by the project type is illustrated in **Tables 8-3** to **8-6.**

Table 8-2: Number of Projects with Potential Impacts by Project Type

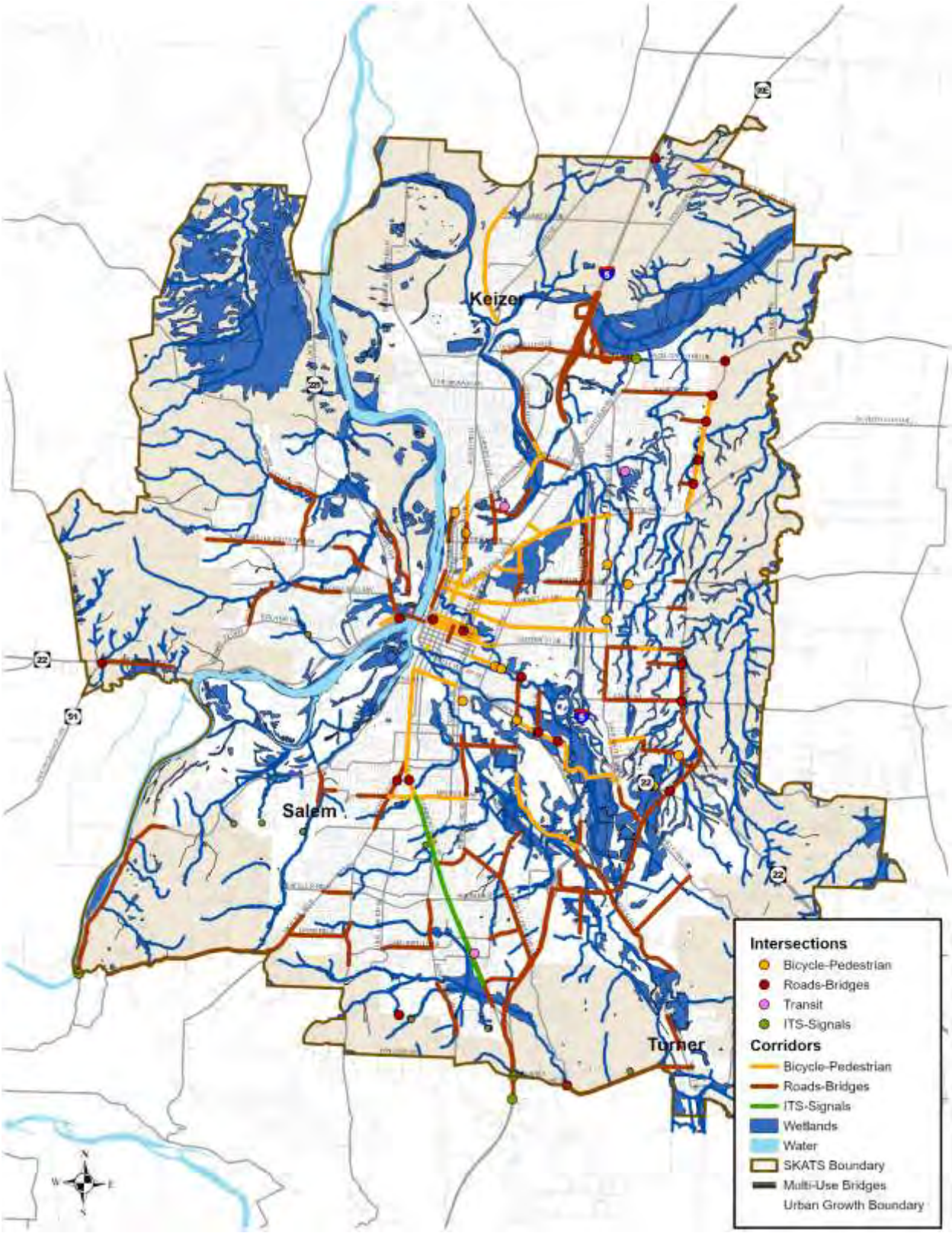
Project Type	Number of Potential Impacts
Road-Bridge	88
ITS-Signals	3
Pedestrian-Bicycle	22
Transit	1



Map 8-1: Historic Properties and Proposed Projects



Map 8-2: Project Location and 303(d) Streams and Critical Habitats



Map 8-3: Proposed Projects and Location of Wetlands and Wetland Channels

Table 8-3: Projects with Potential Impacts

RTSPKey	Project Name	Critical Habitat	303D	Historic	Wetland
B017	East Salem Transit Center				X
M015	Cordon Rd NE & Auburn Rd NE				X
M018	Cordon Rd NE & Ward Dr NE				X
M019	Cordon Rd NE & Herrin Rd NE	X			X
M022	Delaney Rd: Battle Creek SE to Turner				X
M023	Delaney Rd: Bridge over Battle Creek		X		X
M027	Lancaster Dr NE: Center St to Monroe St NE				X
M034	State St: Lancaster Dr NE to 46th Av				X
M044	Cordon Rd NE: Silverton Rd NE to Kale St NE				X
M046	Cordon Rd SE: Center Rd NE to State St SE				X
M049	Herrin Rd NE: Middle Grove Dr NE to Cordon Rd NE				X
M061	Swegle Rd NE: City limits to Cordon Rd NE				X
M062	Turner Rd SE: Val View Dr SE to Turner UGB				X
M082	ITS - Overheight Warning System				X
M084	Center St NE: Greencrest Dr NE to Cordon Rd NE				X
M085	Center St: Lancaster Dr to 45th Pl (3-lane interim)				X
M086	Connecticut St: Bike and Pedestrian				X
M088	Marion County Curve Warning Signs				X
M090	Cordon Road: Caplinger Road to State Street				X
M095	State Street: 46th Avenue to Cordon Road				X
M099	Macleay Rd: Lancaster Dr. to Connecticut Ave				X
M100	Lancaster Dr NE: Monroe St NE to State St				X
O004	Chemawa/Hazelgreen & Portland Rd NE				X
O006	I-5 Phase IV: Kuebler Interchange to Delaney Rd. (SB Phase)				X
O008	Hwy 22 and 51 interchange				X
O025	Backage Roads (OR 22W)				X
O028	Mission St @ 25th St: Turn Lane				X
O029	Mission St at Airport Road: EB Turn Lanes				X
O030	Mission St at Airport Rd: EB Turn Lane				X
O031	Mission St at Hawthorne Av: WB Turn Lane				X
O032	Mission St at 25th St: Pedestrian Refuge				X
O033	Mission St (OR 22E) Corridor Multi-Use Path				X
O034	Center St Bridge - Seismic Updates				X
O035	Chemawa / I-5 Phase 1 - Lockhaven/Chemawa Limited Widening				X

Table 8-4: Projects with Potential Impacts (cont.)

RTSPKey	Project Name	Critical Habitat	303D	Historic	Wetland
O036	Chemawa / I-5 Phase 2 - Tepper / 35th / Indian School Road Extensions			X	X
O037	Chemawa / I-5 Phase 3 - Chemawa Partial Cloverleaf			X	X
O038	Brooklake at I-5 Short-term projects				X
O039	I-5 from Kuebler Bv Interchange to Delaney Rd Interchange - Phase 2 NB				X
O041	Wallace Rd NW & Edgewater St NW (BHES)				X
O042	Wallace Rd NW: Edgewater St NW to Orchard Heights Rd NW				X
S036	Doaks Ferry Rd NW: Brush College Rd NW to Orchard Heights Rd NW				X
S061	17th St NE: Norway St NE to Sunnyview Rd NE				X
S064	25th St SE: State St to Helm St SE				X
S065	36th Av SE: Kuebler Bv SE to Langley St SE				X
S067	Battle Creek Rd SE: Kuebler Bv SE to Wiltsey Rd SE				X
S071	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lines				X
S083	Commercial St SE: Baxter Rd SE to I-5 Interchange				X
S085	Cordon Rd SE & Hwy 22				X
S087	Croisan Creek Rd S: River Rd S to Heath St S				X
S094	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE				X
S095	Front St N: Norway St NE to Division St NE				X
S098	Glen Creek Rd NW: Crescent Dr NW to Westfarthing Way NW				X
S103	Hilfiker Ln SE: Commercial St SE to Pringle Rd SE				X
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass				X
S113	Lancaster Dr SE: Cranston St SE to Kuebler Bv SE				X
S117	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE				X
S120	Madrona Av S: Croisan Creek Rd S to Elderberry Dr S				X
S124	32nd Av SE & Trelstad Ave SE: East of I-5 to 36th Av SE signal at Kuebler Bv SE				X
S126	McGilchrist St SE: 12th St SE to 25th St SE				X
S131	Orchard Heights Rd NW: Parkway Dr NW to Snowbird Dr NW				X
S132	Orchard Heights Rd NW: Titan Dr NW to UGB				X
S137	Robins Lane, east of Commercial St. SE				X
S147	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE				X
S148	Sunnyside Rd S: Pawnee Circle SE to the UGB				X
S149	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE				X

Table 8-5: Projects with Potential Impacts (cont.)

RTSPKey	Project Name	Critical Habitat	303D	Historic	Wetland
S155	Turner Rd SE: 2100 feet south of Cascade Gateway Park to Airway Dr SE				X
S156	Turner Rd SE: Airway Dr SE to Kuebler Blvd SE				X
S158	Turner Rd SE: Gath Rd SE to UGB				X
S168	Airport Rd SE: State St. to Mission St.				X
S172	Chemawa Rd NE: I-5 to Portland Rd NE				X
S173	Cherry Av NE: BNRR to Dr. MLK Jr Parkway NE				X
S174	Cherry Av NE: Johnson St NE to Pine St NE				X
S178	Doaks Ferry Rd NW: Glen Creek Rd NW to Eola Dr NW				X
S185	Kale St NE: Portland Rd NE to Cordon Rd NE				X
S190	Liberty Rd S: Commercial St SE to Browning Av SE				X
S191	Liberty Rd S: Holder Ln SE to South UGB				X
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE				X
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE				X
S204	Broadway St NE: Liberty St NE to Dr. MLK Jr Parkway NE				X
S205	Center St NE: Commercial St NE to 17th St NE				X
S212	Market St NE: Commercial St NE to Hawthorne Av NE				X
S213	Madrona Av SE: Liberty Rd S to Commercial St SE				X
S214	Mission St SE: 12th St SE to Commercial St SE				X
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE				X
S219	17th St NE: Sunnyview Rd NE to Silverton Rd NE				X
S225	D St NE: Lancaster Dr NE to Summer St NE				X
S236	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SE				X
S238	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE				X
S245	12th St SE: Ibsen St SE to Commercial St SE				X
S247	Center St NE: Mitchel St NE to Cordon St NE				X
S248	Commercial St SE: Winding Way SE to Lansford Dr SE				X
S249	Connecticut Ave SE Bike/Ped overpass of Hwy 22 between Lancaster and Cordon				X
S274	Salem Industrial Dr Improvement				X
S286	Cordon Rd: Highway 22 E to Caplinger Rd SE				X
S287	Kuebler Blvd SE: I-5 to Turner Rd SE				X
S288	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE				X
S292	Brush College Rd NW: Pedestrian Project				X
S297	Marine Drive NW: Harritt Dr NW to Cameo St at 5th Av NW				X
S323	2nd St NW Bike Corridor - Phase 1				X

Table 8-6: Projects with Potential Impacts (cont.)

RTSPKey	Project Name	Critical Habitat	303D	Historic	Wetland
S340	Kroc Center Pathway				X
S343	Marine Dr NW: Harritt Av NW to River Bend Rd NW				X
S345	Auburn Rd NE: Baldwin Av NE to Cordon Rd NE				X
S354	Replace Railroad and McGilchrist St culverts on West Fork Pringle Creek				X
S355	Hawthorne Av NE at Sunnyview Rd NE				X
S357	Turner Rd SE: Mill Creek Bridge to Deer Park Dr SE				X
S359	Turner Rd SE: Kuebler Blvd SE to Mill Creek Bridge				X
S360	Deer Park Dr SE Modifications				X
S364	Commercial St SE: Madrona Av SE to Robins Ln SE - Signal Improvements				X
S365	State St at 25th St SE Intersections Improvements			X	
S366	Pedestrian Island and Crossing Safety Improvements Package	X		X	X
S369	Orchard Hts Rd NW Modifications				X
S379	Broadway: Pine St N to Tryon St N				X
S382	Marine Dr NW: 5th St NW to Glen Creek Rd				X
S383	McGilchrist St SE at 22nd St SE				X

Environmental Justice[6]

The Federal Highway Administration (FHWA) defines the following three fundamental environmental justice (EJ) principles[7]:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects including social and economic effects on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

[6] **Appendix E** provides a more complete discussion of the Environmental Justice evaluation completed, including how this analysis was considered as part of the project selection process.

[7] Department of Transportation Environmental Justice Strategy (March 2, 2012) https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/dot_ej_strategy/index.cfm

As part of the process to ensure that a minority or low-income population will not be unduly burdened by the projects proposed in this Plan, the following analysis was conducted. The proposed projects were compared to two socio-demographic characteristics:

- percent of the population below the poverty level; and
- the percent of the population that is minority.

The U.S. Census Bureau reports this information at the census tract level for the Salem-Keizer area.

Definition of Environmental Justice (EJ) Population Areas

For each of the characteristics of interest, the regional average was computed using data from the American Community Survey (ACS) for the years 2016 to 2020 the latest available that covers the entire area. Census tracts are used as the geographic building block to identify the location of minority and low-income population for the EJ analysis. Minority populations include people who are Black/African American, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and Native Hawaiian and other Pacific Islander, or any combination of two or more races. Low-income populations for this analysis are defined as those living below the poverty level as determined by the U.S. Census Bureau. The poverty level is based on multiple criteria including income level and family size and composition (age of head of household and number of children)[8].

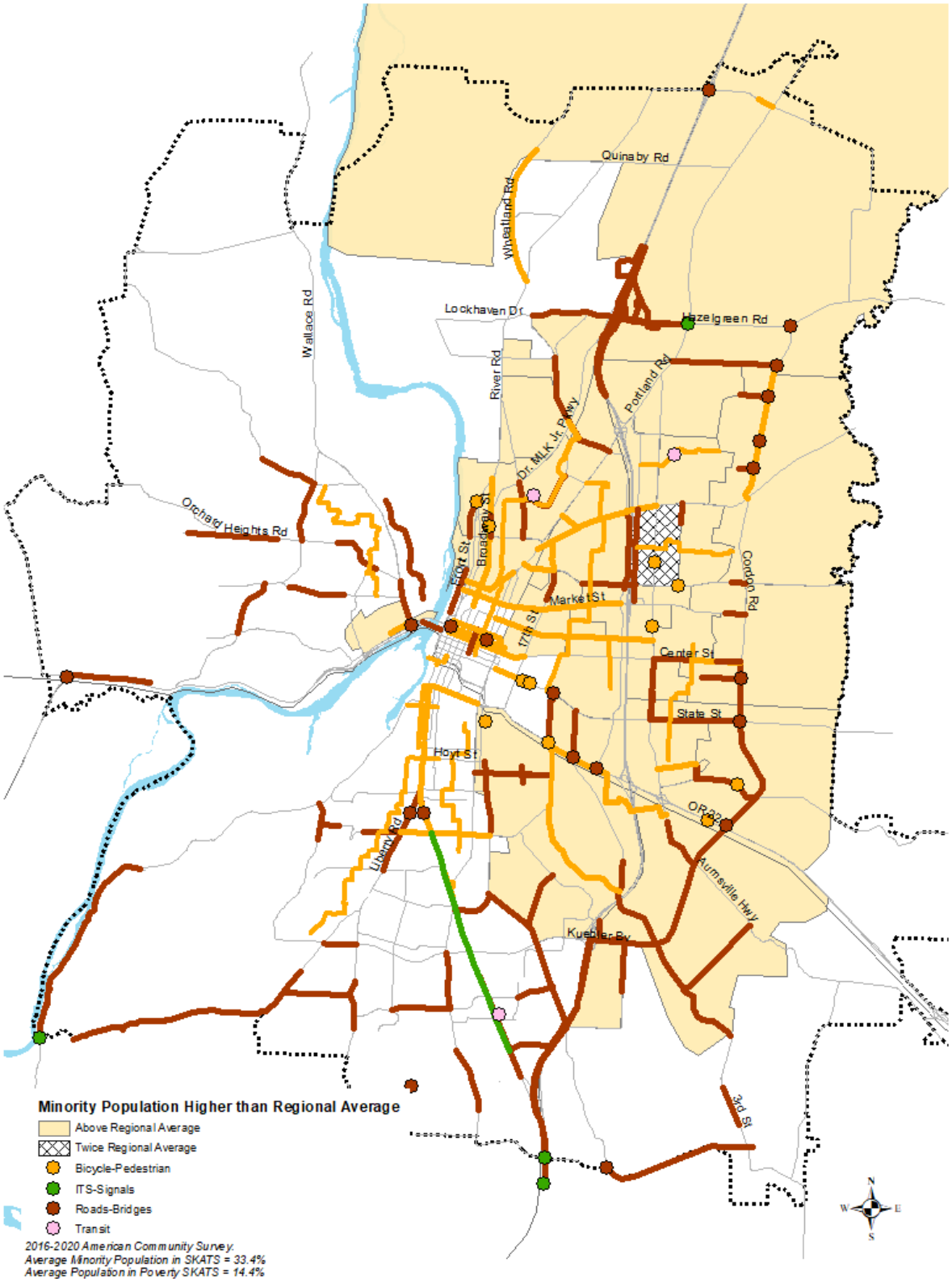
The regional average within SKATS for the low-income population is 14.4 percent; and the regional average of the minority population is 33.5 percent, from the 2016-2020 American Community Survey data.

EJ populations were determined first by selecting census tracts with twice the regional average of either minority population or low-income populations. This resulted in six census tracts. Second, the average population density within the Salem-Keizer Urban Growth Boundary was determined and is 5.03 persons per acre. Census tracts with a population density higher than the average, in addition to being above or near the regional average in either minority or low-income populations were also included. This resulted in another 14 tracts. These resulting 20 census tracts are the areas with the largest and greatest concentration of low-income and minority populations and are considered as the EJ areas for analysis. This is a revised definition from that used four years ago and results in a smaller geographic area; however, it is also considered a better representation of the populations of concern.

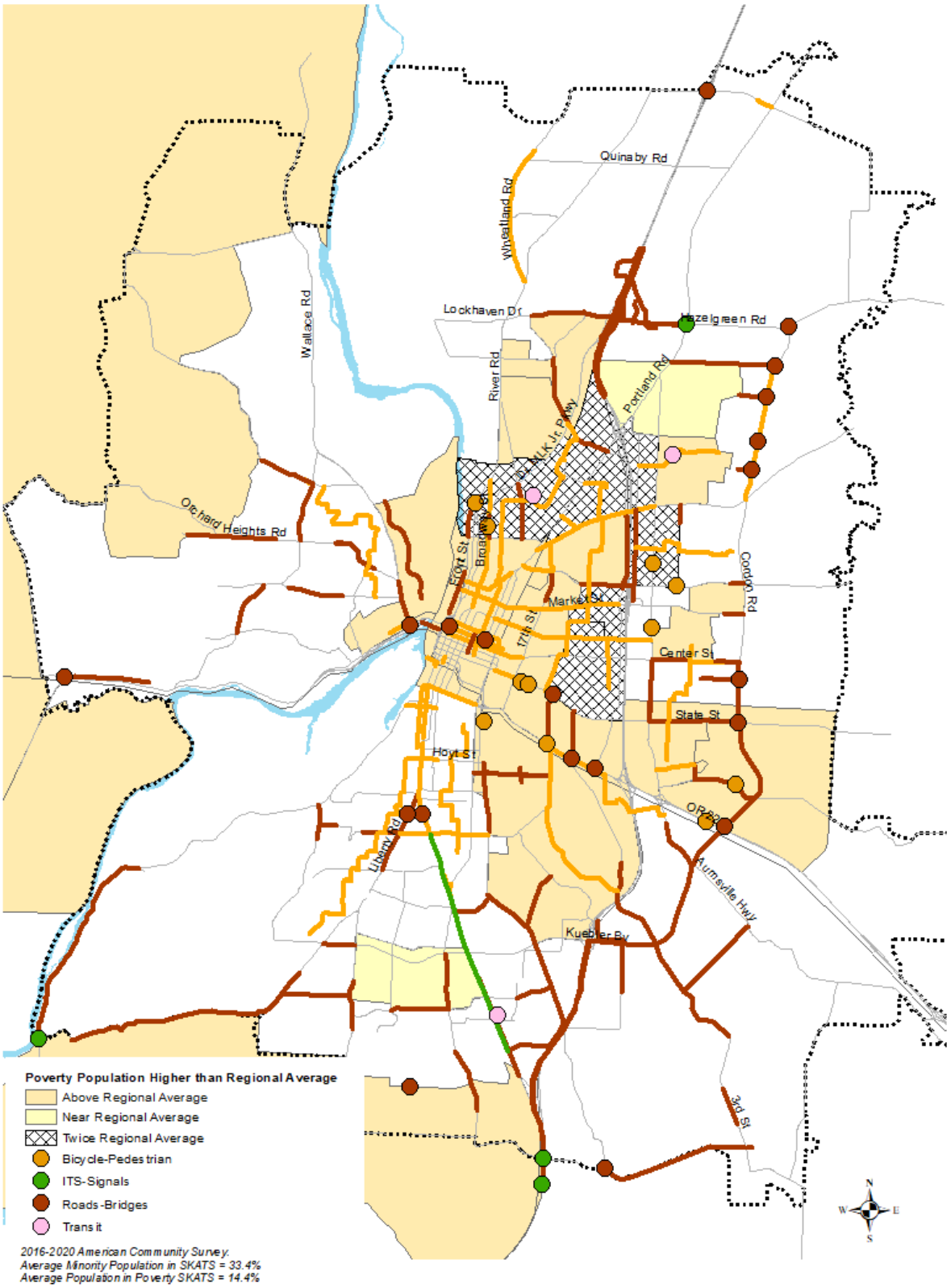
[8] Poverty is determined for individuals and families, in 2020 an individual in poverty had annual income of less than $13,171, and a family of four less than $26,496 See the *Demographic Profile of Transportation Disadvantaged Population in the SKATS Area* (2022) for more details. Available at: https://www.mwvcog.org/programs/transportation-planning/skats/reports-and-data/

For reference, the percent minority population and percent low-income populations are shown in **Maps 8-4** and **8-5**, respectively. Also shown on the maps are the location of projects in the 2023-2050 MTP that have a geographic component. The shading for the Census Tracts on the maps is broken into three intervals based on census tract values of below average, at or near average, and above average. The middle interval aligns with the average within SKATS making it easier to see which areas fall clearly above and below the regional average. Any tract with a value twice the regional average is marked with hatching. As with all census data, there are margins of errors associated with the estimates. For this tabular summary and associated maps, the percentage rates do not factor in those margins of error[9].

[9] As provided by the data in the American Community Survey



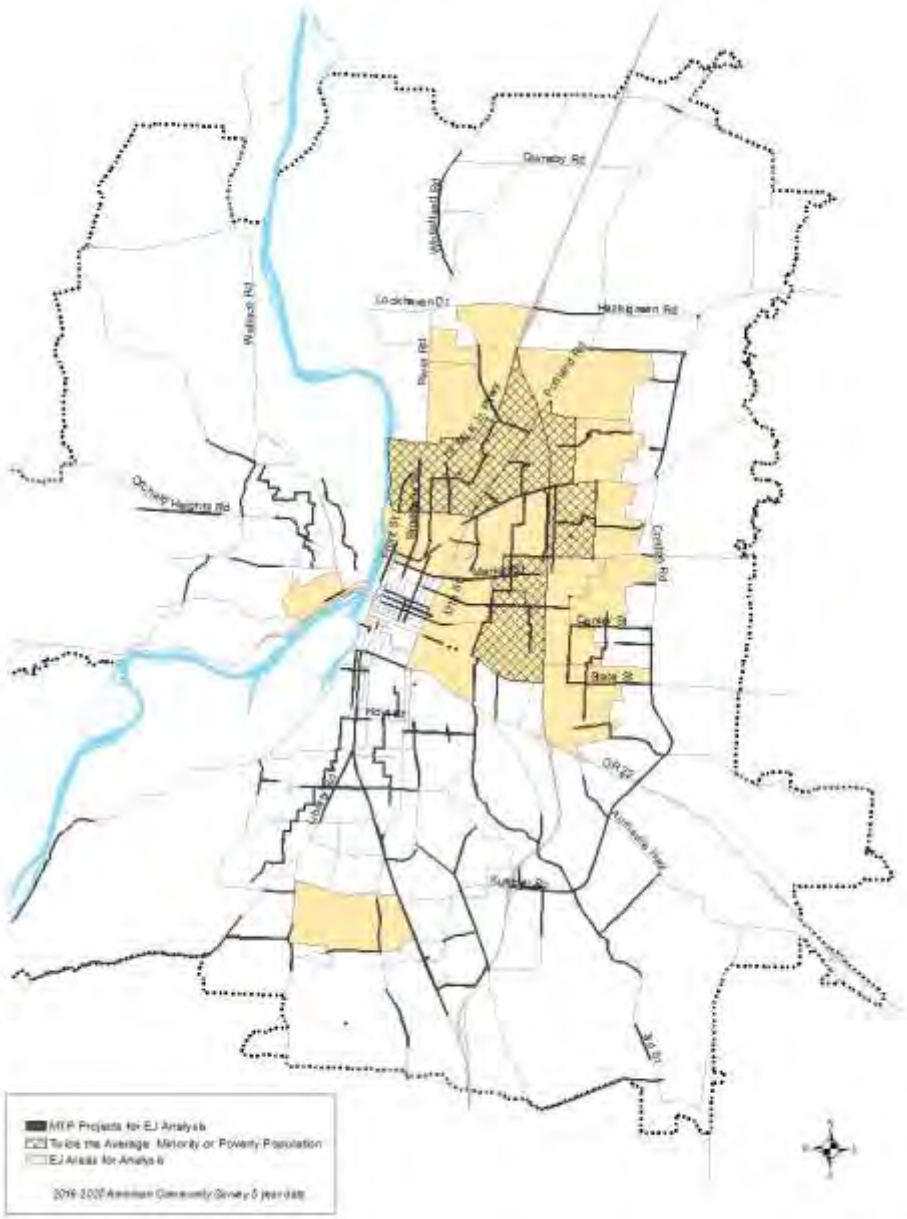
Map 8-4: Minority Population in SKATS



Map 8-5: Low Income Population in SKATS

Spatial Analysis of Benefit and Burden

As described previously, the EJ areas for analysis were determined by a combination of population density and above average populations rates. For the spatial analysis, projects with a geographical location were mapped over these EJ areas consisting of 20 census tracts.. EJ population areas with the MTP projects overlaid are illustrated in **Map 8-6**. Using the GIS, the financially constrained projects were overlaid to determine if they were in or out of the EJ population area. A project was considered inside the EJ population area if at least half of its length or area fell within. The result of this analysis is presented in **Table 8-7** and **8-8**. As illustrated in the table, 35 percent of the projects are located in an EJ population area.



Map 8-6: EJ Population Areas and Projects

Table 8-7: Projects Inside an EJ Population Area (only projects that have a geographic location and are mappable)

Type of Project	Project Costs	Percent of Total Cost	Number of Projects	Percent of all MTP projects
Bicycle-Pedestrian	$88,258,000		25	
ITS-Signals	$0		0	
Roads-Bridges	$222,956,300		29	
Transit	$18,906,000		2	
Total	**$330,120,300**	**29%**	**56**	**35%**

Table 8-8: Projects Outside an EJ Population Area (only projects that have a geographic area and are mappable)

Type of Project	Project Costs	Percent of Total Cost	Number of Projects	Percent of all MTP projects
Bicycle-Pedestrian	$101,842,000		28	
ITS-Signals	$4,071,000		2	
Roads-Bridges	$703,636,000		71	
Transit	$12,391,000		1	
Total	**$821,940,000**	**71%**	**102**	**65%**

Shown in **Table 8-7** and **Table 8-8** is the distribution of projects by type and whether they are within or outside of an EJ population area (for those projects in the MTP that have a geographic component) respectively. The number of projects located in EJ population areas is approximately half the number of projects outside of EJ population areas. Estimated project costs are also summarized in the table and the percent reflects the cost of the mappable projects to the total cost of the projects in the two tables, $1,152,060,000 (there are approximately $16.8 million in projects that are not mappable).

The EJ areas shown in **Map 8-6** contain approximately 39 percent of the population within SKATS and six percent of the land area. The finding of this analysis is that the EJ areas of low-income and/or minority residents are receiving a share of program and project investments that is approximately the same as their share of the population. [It should be noted that a more detailed EJ analysis and outreach for projects proposed to get committed funding is done during the update of the SKATS Transportation Improvement Program (TIP).]

Environmental Justice with Transit Service

The Salem Area Mass Transit District (SAMTD) is also required to consider environmental justice within its provision of service areas, and to conduct an equity analysis when considering proposed major service changes. MWVCOG includes transit

projects in its environmental justice review when they are physically located projects, for example transit centers or bus stop amenities. SAMTD's Title VI and equity analysis considers access and service areas.

Air Quality

Currently the SKATS area is designated as "attainment" for ozone. In addition, the SKATS area is operating under a Limited Maintenance Plan for carbon monoxide (CO). This requires SKATS to demonstrate conformity but no longer requires emission analysis at the regional level for CO to be performed. There has been discussion that the U.S. Environmental Protection Agency (EPA) may enact stricter regulations regarding ozone in the future. If so, this may require SKATS to resume regional emissions analysis for this pollutant. These developments will be followed and addressed in future Plan updates, as needed.

In accordance with Federal regulations, SKATS has prepared a document detailing the *Air Quality Conformity Determination* for this Plan. It is available under a separate cover (http://www.mwvcog.org search for "AQCD") and as an appendix to the final MTP (**Appendix Y**).

Travel time/Congestion

Except for a few very large projects, the impact of a single roadway project on the operation of the regional system is difficult to quantify. In addition, the impact of some types of projects on the operations of the transportation system cannot be adequately calculated with the current travel demand modeling software. For example, a project to interconnect the traffic signals along a corridor to synchronize the controller clocks for efficient traffic progression (with the result that that platoons of vehicles do not have to stop at each intersection) has been shown to reduce fuel consumption and vehicular emissions while at the same time decreasing travel time and measures of congestion along a corridor. However, quantifying this efficiency improvement as part of the travel demand model is difficult.

Measures which include only that portion of the roadway system that is part of the Interstate or National Highway System (NHS) (which are required federal performance measures) are as follows:

- Percent of the Person Miles Traveled on the Interstate that are Reliable (LOTTR)
- Percent of the Person Miles Traveled on the non-Interstate NHS that are Reliable (LOTTR-Non-Interstate)
- Truck Travel Time Reliability on the Interstate (TTTR)
- Annual Peak Hour Excessive Demand per Capita (PHED)

The federal performance measures provide a snapshot of how I-5 and the non-interstate NHS performed in 2021. As illustrated in **Table 8-9**, I-5 was considered reliable 100

percent of the time, and the non-interstate NHS was reliable for 85.2 percent of the year. Truck travel time was also reliable for the 2021 (values closer to 1.0 are reliable). The Annual Peak Hour Excessive Delay per capita (PHED) value represents the estimated hours in the year that a traveler is delayed above the certain threshold. This value only applies to roads that are part of the NHS[10].

Table 8-9: Performance on the Regional System

Measure	Value	Year
LOTTR – Interstate	100%	2021
LOTTR – Non-Interstate	85.2%	2021
TTTR	1.22	2021
PHED	6.8 hours	2021

Strategies for Minimizing Impacts

The population of the SKATS area is expected to increase by 33 percent by 2050 placing pressure on land uses and transportation systems throughout the region. The region needs to continue to use and refine strategies and activities to minimize the impact of transportation projects on the environment, whether built or natural. Given that budgets for transportation planning, construction, and maintenance are restricted, it would benefit the jurisdictions of the region to continue to support and enhance existing policies or strategies and develop new ones that reduce use of automobiles and encourage use of mass transit, carpooling, walking, bicycling, and telecommuting. Many of these strategies (e.g., carpool and vanpools) are discussed in **Chapters 4** and **7** and are promoted in the SKATS area, as well as the surrounding area, by the Cherriots Transportation Options, which is administered by the Salem Area Mass Transit District.

Avoid, Reduce, Mitigate

One of the most effective ways to reduce planning, construction, and maintenance costs; benefit the environment; and manage complex regulatory issues is to consider options at the outset that can reduce or eliminate environmental impacts and thus regulatory requirements. The Clean Water Act requires that those jurisdictions or agencies proposing projects focus first on avoiding impacts to water resources that may impact wetlands, streams, or rivers. Considering location and landscape features early in project scoping and design can reduce the negative effects of construction activities and ultimately the use of a given facility whether street, road, or bridge. Thoughtful planning to reduce erosion and sedimentation, impervious surface and other infiltration impediments, and wetland and stream impacts can eliminate the need for permits saving time, money, and environmental degradation.

The five strategies discussed below are designed to mitigate the impact that transportation projects might have on environmental resources during development.

[10] Composed of the roads that are Interstate or Principal Arterials as shown in **Map 4-3** in **Chapter 4**.

Strategy 1: Enhance Wetland Banking

When impacts are unavoidable, there are several ways to improve the value of project mitigation. Traditionally, mitigation has been on a project-by-project basis to replace the same type of resource that was impacted by the development. Two resources that have been mitigated in the past in the SKATS area are wetlands and streams. As of 2006, three private wetland mitigation banks serve the Salem area. It may be beneficial for the SKATS region to develop wetland or conservation banks to be used for public and or private development mitigation as the area develops. The first step in determining the desirability of banking is to calculate the scale and type of development and the commensurate need for mitigation over the next several decades. Then, a determination of the number of credits that are likely to be coming online during that period and their anticipated costs will be made. If the number of credits required is equal to or greater than the number of credits available at the existing banks, it may be in the region's interest to develop a regional mitigation bank for all future projects.

Strategy 2: Establish stream bank mitigation banking

If construction or development may impact a stream, the project owner must coordinate with the Department of State Lands and/or U.S. Army Corp of Engineers staff to determine whether permitting is necessary. The jurisdiction/agency or developer is then required to maintain that section for five years. One possible downfall of this policy is that it can create 150-foot pockets of restored but isolated habitat that are adjacent to degraded riparian segments. Salem has taken the approach wherein a broader range of mitigation needs can be met by restoring the city's streams at key sites. Salem staff has stated that most city stream impacts cannot be mitigated elsewhere.

Traditional wetland banks, run by the private sector under the direction of DSL, offer credits that can be purchased from a landowner who has restored a wetland on his/her private property. The purchase of these credits offsets or compensates for wetlands destroyed within the project area. The Salem stream banking system is similar; but instead of the restoration activities taking place outside the city, the mitigation credits would be purchased from the city. The restoration investment would be made on riparian areas in the city limits.

The city of Salem has implemented a stream mitigation bank program within its city limits in 2015. The first credits were released in February 2016 by DSL.

Strategy 3: Consider Conservation Banking

Thus far, there are few opportunities for conservation banking in Oregon. ODOT has developed a program in which they hope to mitigate for a variety of resources on several high value sites they have purchased throughout the state. At present, they are developing methods for valuing credits and creating the "currency" for these banks, a challenging endeavor. It would be wise for the jurisdictions in the SKATS region to

explore possible collaboration with ODOT and certainly to explore the model that ODOT is developing. Once again, the jurisdictions within the region need to collectively assess their anticipated growth and mitigation need and make a cost/benefit analysis.

Strategy 4: Wildlife Connectivity

Over the past decade, there have been many innovative approaches taken in constructing transportation systems to prevent negative effects on wildlife. Transportation planners have teamed with wildlife researchers to develop structures that help terrestrial wildlife cross roads, ranging from overpasses and underpasses to open-bottom culverts that function much like natural streambeds. In the SKATS area, as in much of Oregon, transportation agencies are systematically removing barriers to fish migration. However, according to the Oregon Department of Fish and Wildlife, the Salem-Keizer area will be hampered in providing wildlife habitat connectivity so long as there is no detailed species and habitat inventory for the metropolitan area. Such an inventory can help the region prioritize key habitats and natural areas and identify linkages and corridors to wildlife migration for both large and small species. State and federal wildlife management agencies encourage transportation planners to consult with them early and throughout project planning to identify the need for accommodating wildlife movement and avoid other impacts to habitat.

Strategy 5: Stormwater

Minimizing or mitigating the effects that stormwater and associated run-off from surface transportation facilities is one of the factors identified by the Federal Highway Administration for consideration when developing a metropolitan transportation plan. This ties in with Clean Water Act regulations that limit the amount of pollutants that can be discharged into a water body. Each jurisdiction in Oregon is required to address a number of federal and state regulations when designing and implementing roadway projects. Work undertaken by the jurisdiction often involves coordination with other entities such as watershed councils to determine the amounts and ways of reducing stormwater runoff. Efforts often include building stormwater retention facilities closer to the project to allow for filtration by plants and soaking into the ground.

Chapter 9 ~ Outstanding Issues

The identified gaps presented in Chapter 5 will not be completely addressed with the proposed system of projects discussed in Chapter 7. Partially this is due to a lack of funding. Presented in this chapter is a discussion of the Outstanding Issues that will remain after the proposed projects are completed.

The projects identified in this Plan address many, but not all, of the regional transportation issues facing the Salem-Keizer area over the next 27 years. Some issues are not fully addressed by these projects. The reasons for this are:

- The nature of these issues is very complex and further analysis is required to adequately understand the underlying travel demand contributing to the issues;
- Several potential approaches might be useful, either alone or in combination;
- A project may be identified; however, there may not be sufficient funding available over the next 27 years. (See the Illustrative List in **Appendix I** for the projects that are not included in the 2023-2050 MTP);
- Restrictions on certain funds preclude their use except for a particular project (for example, Federal funds for Congestion Mitigation and Air Quality (CMAQ) are only for projects that address either improvement to the air quality or to reducing vehicular congestion in the region. (For a complete See **Table 6-1** in **Chapter 6**);
- No consensus solutions are currently identified to address these issues, and additional public deliberation and input is required before a preferred alternative can be selected and included in the Plan; and
- Several of these issues are the subjects of current ongoing planning studies, and as such, do not have any currently recommended solutions.

Outstanding issues that were identified in the preceding chapters, along with some broader issues facing the region, are summarized in this chapter. In addition to those regional transportation issues discussed below, the local jurisdictions and transit district will focus on transportation issues that will be addressed as part of a local TSP or as part of specific study processes associated with updating local comprehensive land use plans.

Future Regulations

As discussed in **Chapter 2**, laws and regulations, at both the Federal and State level, guide the actions of SKATS, the transit district, and the cities and counties within SKATS. New laws and regulations at both levels of government occur on regular basis, addressing existing or new issues. With the passage of the Infrastructure Investment and Jobs Act of 2021 in November 2021, new programs and funding streams were created. Regulations and guidance on these have yet to be written, and will clarify what is expected from the MPOs, DOTs, and transit districts.

Climate Related

The State of Oregon has passed a series of legislations to approach addressing greenhouse gases, starting with HB 3543 in 2007 to reduce them by 75 percent by 2050. The passage of HB 2021 and HB 2186 in 2009 and SB 1059 in 2010 set the direction for the state and metropolitan areas to address greenhouse gas reduction. The Land Conservation and Development Commission (LCDC) approved greenhouse gas reduction targets for all MPO areas in Oregon and revised the targets in 2017 (to a 20 percent per capita reduction by 2040 from 2005 levels). More recently in February 2020, Governor Brown issued Executive Order 20-04 that directed four state agencies[1] to cooperatively work toward reducing climate pollution (aka greenhouse gas emissions).

As part of the response to this Executive Order, the Department of Land Conservation and Development (DLCD) set up a historically diverse "Climate Friendly and Equitable Communities" rulemaking advisory committee to provide feedback in the development of new and the revision of existing rules. One outcome of that process is the requirement for the cities and counties within the boundary of each MPO to develop a plan to address greenhouse gas emissions and to show that it would meet the target set for the area. Efforts by the local jurisdictions to meet this requirement include conducting a study to determine possible "Climate Friendly Areas", modifying their Comprehensive Plan to include the findings, preparing a "Regional Scenario Plan" to show how the reduction targets could be met, and finally, updating their Transportation System Plan (TSP) to include the projects identified. The TSPs for the affected jurisdictions within SKATS are scheduled to be completed by the end of 2027. The next MTP Update will include these projects as appropriate.

In December 2022, the Environmental Quality Commission, which oversees the Department of Environmental Quality, voted to adopt the Advanced Clean Cars II rules which phase out the sale of fossil fueled vehicles in Oregon by 2035. These rules have also been adopted by the States of California and Washington. Infrastructure and support for the existing fleet of fossil fueled vehicles will still be in place after 2035[2].

In 2020, the Salem City Council adopted the goals to reduce GHG emissions citywide by 50 percent in 2035 from 2016 levels, and to be carbon neutral by 2050. To realize these goals, the city of Salem has developed a Climate Action Plan (CAP) that lists actions to be taken to reduce greenhouse gas emissions and increase resiliency to the effects of climate change. The CAP was accepted by the City Council in February 2022. As part of the work in developing the CAP, analysis showed that 53 percent of the GHG emissions are from transportation[3].

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[1] Oregon Departments of Energy, Environmental Quality, Transportation, and Land Conservation and Development, and their respective Commissions.

2 See: https://www.oregon.gov/deq/about-us/eqc/Pages/121922.aspx

[3] See: https://www.cityofsalem.net/community/natural-environment-climate/climate-action-plan-for-salem

The SAMTD is planning on developing a Climate Action Plan in the near-term, and ODOT has one covering actions to be undertaken from 2021 to 2026[4].

At the Federal level, the Federal Highway Administration (FHWA) is currently reviewing the public comments to a Notice of Proposed Rule Making for a performance measure covering the tailpipe emissions of greenhouse gases on the National Highway System (NHS). The final rule will likely not be published until after the adoption of this Update.

Funding

As discussed in the preceding chapters and especially in **Chapter 6** (Finance), the region faces uncertain revenues in the future when compared with the increasing and continuing need for roadway operation, maintenance, and capital funding. State highway funds have increased as a result of House Bill (HB) 2017 (enacted in 2017) providing funds to the local jurisdictions for operation and maintenance of the existing road system; however, costs of materials and labor for maintenance could outpace the increase in state revenues. Indeed, in the years since the start of the COVID-19 pandemic, construction costs have outpaced the earlier estimates, requiring additional funds to be allocated to the projects under construction. This is due to several factors including, but not limited to, a shortage of labor, an increase in the cost of materials, and supply chain issues.

The Federal fuel tax has not been increased since 1993, and the Highway Trust Fund remains solvent only because Congress has repeatedly transferred funds from the federal government's General Fund. The revenue forecast in this MTP assumes a growth in federal funds (with a total of $361 million of federal funds allocated to SKATS over the period of this Plan) but eventually it will be up to the U.S. Congress to determine the amount of federal funds distributed to states and MPOs. This MTP makes the reasonable assumption that several voter-approved bonds will be available to the city of Salem over the lifetime of the Plan; if they are not passed, less revenue with be available for both the local and regional roadways that are owned by Salem. In summary, implementation of the projects identified in the plan are tied to funding decisions at the federal, state, and local level.

Another significant funding issue concerns changes to the vehicle fleet, federal and state legislation or regulations, and transportation revenues. As vehicles become more fuel efficient or don't require any gasoline or diesel, it will have major impacts to the amount of revenues collected from the federal and state fuel taxes. Over the next several decades, we likely will see considerable changes in the vehicle fleet and its fuel efficiency. Oregon's fleet is expected to include more electric vehicles and hybrids as more models are provided by manufacturers and charging locations becomes more generally available. With HB 2017, the Oregon Legislature provided incentives to the public for purchasing electric vehicles. Fuel efficiency of vehicles under the federal CAFE (corporate average fuel economy) standards will increase to 49 miles per gallon (MPG) for model year 2026

[4] See: https://www.oregon.gov/odot/Programs/Pages/Climate-Action-Plan.aspx

passenger cars and light trucks[5], further reducing the amount of funds captured by fuel taxes.

Recognizing that revenues from Oregon's fuel tax would not keep up with needed revenues, Oregon was first in the nation to pilot a vehicle miles traveled tax in 2007 and the first to pass legislation in 2013 for a permanent road use charge system. The current implementation (OReGO) is a voluntary system. In addition, tolling is being planned for the Portland area (on sections of I-5 and I-205) which may start a longer-term change to more tolling on roads in Oregon. These ongoing and simultaneous changes to fleets, efficiency standards, and alternative ways to collect revenues will have a profound impact in the amount of revenues available for transportation.

The uncertainty in future funding impacts all the jurisdictions in the area including the Salem Area Mass Transit District (SAMTD). When the SKATS MPO was designated as a Transportation Management Area (TMA) in 2002, SAMTD lost the ability to use a significant percentage of its federal transit funds to support operation of their buses. Instead, SAMTD must use the federal funds it receives primarily on capital expenses such as purchasing new buses or constructing bus shelters and transit centers, as well as preventive maintenance. Only a limited amount of its federal funds can be used for operations. To expand service (i.e., operations), previously SAMTD had to rely on local funds which required voter approval. New state funding (from HB 2017) from the new employee payroll tax can be used for operations, allowed SAMTD to expand its weekday service hours and begin resuming service on the weekends starting in 2019 for Saturday service and in 2021 for Sunday service. Over the long-term, to keep or expand SAMTD's services, it remains to be seen if the state payroll tax will keep pace with increases in operating costs. Beginning January 2026, SAMTD will have the ability to implement an employer payroll tax but has yet to formally state whether this option will be pursued, nor for what amount. It is anticipated that before the next update to this Plan, SAMTD will decide on this issue.

Safety

Information on crashes involving a motor vehicle (whether with another vehicle, pedestrian or bicyclist) within Oregon is collected and provided by ODOT's Crash Analysis and Reporting Unit[6]. Data is available for the Salem-Keizer area from 2007 to 2020. While the data showed a decrease in crashes and fatalities between 2007 and 2014, the trend has since been increasing. And anecdotally, as official data is not yet available, this trend has continued into 2021 and 2022. A similar pattern of increased fatalities has been recorded in other parts of Oregon and nationally.

At the state level, ODOT has put more resources to address safety and adopted a new Transportation Safety Action Plan (TSAP) in 2021. The TSAP provides the long-term

[5] See: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy

[6] Crash information comes from reports submitted by police and the drivers. It is likely that the number of crashes is underreported, especially those that do not involve fatalities and/or police response.

vision of zero deaths and life-changing injuries and provides goals policies and strategies to work toward this vision. The long-term elements of the Plan provide guidance to policy-makers, planners, and designers about how to proactively develop a transportation system with fewer fatalities and serious injuries. The TSAP also includes a near-term component in the form of Emphasis Areas (EA) and actions. Each year, ODOT also develops an annual Transportation Safety Performance Plan that identifies problems, establishes performance goals, and lists the program and projects to implement. ODOT also continues to provide engineering and construction funding through its ARTS (All-Roads Transportation Safety) program.

Improving safety has been a top priority of the local jurisdictions in SKATS as well as the SKATS Policy Committee. In the last 20 years, the local jurisdictions and ODOT have constructed dozens of projects to improve safety for users of all modes (drivers, pedestrians, and bicyclists) with a significant contribution coming from the discretionary funds available through SKATS. These include everything from improved signals, medians, speed humps, permanent radar speed signs, rumble strips, Rectangular Rapid Flash Beacons (RRFBs) for intersection and mid-block crossings; many new sidewalks and off-street paths, sidewalk corner bulb outs, a modern roundabout (in Keizer), buffered bike lanes, green lanes for bicyclists and bike-only signals, and many other projects. To address an increase in pedestrian crashes and fatalities, the city of Salem completed a Pedestrian Safety Study in 2018 with citywide strategies and site-specific improvements. Salem is implementing a "Safe Crossing Program" – an objective, request-driven process for implementing new pedestrian crossings. The city of Keizer maintains a Traffic Safety-Bikeways-Pedestrian Committee to make recommendations on projects and practices that improve safety.

SKATS is involved in each of the aforementioned areas: working with ODOT on safety policies and safety targets, coordinating with the local jurisdictions on safety committees and planning, and working with the jurisdictions on advancing projects in the SKATS TIP and MTP that improve safety. Most of the emphasis by SKATS has been on the engineering side of safety; however, beginning in 2018, SKATS has started to coordinate with state and local agencies about partnerships on the educational side of safety. One effort has been the implementation of a Safe Routes to School program. Finally, a *Metropolitan Transportation Safety Action Plan (MTSAP)* is currently being developed with completion in late 2023, portions which will be included in the 2027 MTP Update as appropriate.

Pedestrian and Bicycle

Providing safe and convenient pedestrian facilities along and across the regional road system is supported by the policies of this Plan. SKATS has always allocated a significant portion of its available funds in the SKATS TIP to sidewalk or urban upgrade projects that add sidewalks to streets and provide safer crossings (see earlier section on Safety), especially streets near schools and along transit routes. However, because many areas within SKATS were initially built with roads that lacked sidewalks, there is still a large portion of arterials and collectors that lack basic sidewalks.

Improving connectivity and safety for bicyclists within SKATS is a continuing aim in this Plan. Over the last two decades, individual bike projects and street upgrades have added many miles of bike lanes and bike facilities to the regional system. However, similar to the discussion on sidewalks, many of the older road segments were not initially constructed with bike lanes or even shoulders outside the travel lanes to accommodate bicycles. Several portions of the designated Regional Bicycle System within SKATS cannot currently accommodate the addition of dedicated bike lanes or even widened outside travel lanes without either significant right-of-way purchase or a reduction of the number travel lanes. Two examples are River Road North from Chemawa Road to Shangri-La Street and Liberty Road South from Commercial Street to Browning Avenue. Impediments to the addition of bicycle facilities on these segments range from safety concerns to the financial cost of acquiring the necessary right-of-way to outright community opposition. At other locations, crossing intersections and traveling or making turns alongside traffic poses hazards to the bicyclist. Finding satisfactory solutions to all these issues will require additional time and study and remains a continuing issue in the regional transportation planning process.

Goods Movement

The movement of goods, whether through the region, or destined for a business or home within SKATS, has been increasing as the population and economy grow. The COVID-19 pandemic accelerated trends of online shopping, with the associated home delivery of the goods. However, more than any other topic discussed in this Plan, the movement of goods is typically regarded as confidential business information such that the businesses involved do not share the data they collect. Other than a few high-level data sources, information on the where, when, and why of goods movement within SKATS is lacking. And the sources available provide an incomplete picture. For example, while larger trucks are accounted for in some data sources, the delivery vans that are ubiquitous as part of the e-commerce trend are not. How these are being impacted, or themselves impacting, traffic on the region's roads is unknown. The need for additional information regarding the quantity and type of goods being moved in and around the area, as well as a more thorough identification of freight-critical routes and associated problem areas, is an issue that needs to be addressed.

Further, it has been identified that the region needs a comprehensive and coordinated approach toward the movement of freight, mainly by truck, into and through, the area. Ensuring that large trucks can efficiently and safely convey their cargo is a priority for the economy at all levels, local, regional, state, and national.

Resiliency & Seismic

A transportation system is never more important than when a disaster strikes and emergency responders need to access the affected area. However, as described in **Chapter 5,** ODOT has identified many state-owned and local jurisdiction bridges along important routes that are vulnerable or potentially vulnerable to seismic events. In addition, other routes could be blocked due to collapsed buildings or power lines that

have fallen onto the roadway.

In general, additional study needs to be done on how the transportation system (beyond bridges) will operate during and after major storms, disruptions, and other events (see ***Appendix R – Resiliency*** for further discussion).

Rail

Intercity passenger rail service can provide a viable alternative to automobile travel over medium to longer-distances, be it for commuting or for shopping/recreation trips. ODOT completed the *Oregon Passenger Rail Project* to identify the preferred alignment for future higher-speed passenger rail in the Willamette Valley and allow for projects to be eligible for future federal funds. The preferred alignment is the existing Union Pacific Railroad (UP)line used by the Amtrak *Cascades* and *Coast Starlight.* The Federal Railroad Administration (FRA) signed a Record of Decision on the completed Tier 1 Final Environmental Impact Statement for this alignment in April 2021. This allows Oregon to compete for federal infrastructure grants to implement the identified projects to increase the capacity of the rail line to allow for additional passenger service in the future and minimize the impacts to UP's freight operations.[7]

Another issue is to examine the potential and feasibility of intercity passenger rail service for commuters along the I-5 corridor between the Salem-Keizer area and the Portland Metropolitan area to the north and Corvallis/Albany to the south. This would focus on the people commuting between the metropolitan areas for work and offer a different type of service than is offered by the current *Cascades* corridor service. Two routes are available to the north. One follows the route of Amtrak's passenger trains by using the UP line to the east of I-5 to Oregon City and then to Union Station in Portland. The second option is to use the Portland &Western (ex-BNSF) line that runs to the west of I-5 from Keizer to Wilsonville where it would connect with Tri-Met's Westside Express Service (WES) commuter rail service linking Wilsonville and Beaverton[8]. Discussion of the need for this type of service initially took place in early 2000s. over the past decade, there have been bills introduced to the Oregon Legislature to study extending the WES from Wilsonville to Salem. To date, no bill has passed out of committee.

The States of Oregon and Washington, along with the Province of British Columbia, have been studying the possibility of "Ultra-high-speed rail" connecting Vancouver, B.C. to Portland, Oregon[9]. This would provide options for travelers between the larger urban areas within the Cascadia megaregion beyond driving, flying, or the current rail offerings. Patterned after the high-speed rail systems in use in other countries, the travel time would be competitive with flying. The Washington Legislature allocated $4 million for additional analysis and identified $150 million for matching federal funds should the opportunity arise in the next six years (until 2028). The corridor is not planned to extend

[7] See: https://www.oregon.gov/odot/RPTD/Pages/Passenger-Rail.aspx for the Final EIS and Oregon Passenger Rail Service Development Plan.
[8] The Keizer Transit Center is adjacent to this line.
[9] https://wsdot.wa.gov/construction-planning/search-studies/ultra-high-speed-rail-study (2021)

past Portland, but could still provide benefits to Salem and the surrounding area.

Other outstanding issues that cannot be fully addressed by this document include the preservation of industrial land that is currently capable of being served by rail and the reduction of land-use conflicts near existing rail lines.

The two railroad lines in Salem are both privately owned and operated. The plans for future service and expansion of these lines are not available. The main impact to the other transportation modes would be from either longer trains and/or increased frequency of trains.

Transportation System Efficiency Management

Improving mobility in regional transportation corridors where the physical and political impediments to adding right-of-way are high is identified as an "outstanding issue" in this MTP Update. Exploring the feasibility of ways to increase the efficiency and capacity of the existing infrastructure needs to move beyond the cursory look that typically takes place in planning studies.

Public Transportation

Public transportation faces a variety of obstacles over the next twenty years to provide the services that people depend on for their day-to-day lives. For a variety of reasons, ridership has been decreasing since a high in 2008. This trend is seen in both nationally and at the local level with Cherriots ridership. The COVID-19 pandemic accelerated this trend in 2020 and ridership has yet to return to the level it was in 2019. This is due to a mix of staffing issues, a hesitancy of some of the population to be in enclosed spaces, and an increase in the use of telework and hybrid work schedules.

Compounding this situation is the possible impacts from a wider presence and adoption of shared rides (via Transportation Network Companies (TNC) such as Lyft and Uber), and bike/scooter/car share services.

On the upside, there is a recognition at the State level of the need to support transit as one of the tools to address climate goals and to ensure more people can get to jobs and services, no matter their circumstances.

ADA/Elderly and Handicapped-Related Services

The district is currently meeting the demand for ADA (Americans with Disabilities Act)/Elderly and Handicapped services. But in the future with an aging population, the need for these services is likely to grow faster than available funding. Offering these services costs much more than fixed-route bus service, with cost per trip three to five times as much. As a result, the district will likely have to pursue additional funding. Cherriots currently provides training and assistance to users of this service to allow them to use the fixed-route Cherriots bus routes.

Intercity Bus Service

The existing intercity bus service (Cherriots Regional) connects the Salem-Keizer urban area with cities in Polk and Marion Counties provides a baseline of service. Expanding this service to provide more trips each day and to other cities and towns in the area to better serve the population has been recently evaluated by SAMTD with a small increase that began in 2019 using Statewide Transportation Improvement Funds (STIF). To go beyond this amount will require additional funds to be available. The Transit District has developed other plans in the past few years to look at intercity transportation needs over the next 20 years.

The plans of other providers of intercity bus service, either publicly operated (e.g., Yamhill County Transit) or privately operated (e.g., FlixBus) is unknown and outside of the influence of SKATS.

Future Mobility

With a few exceptions, many of the urban arterials in the area have reached their ultimate physical width. Expanding would result in displacement of existing businesses and/or residents, and would be expensive as well. As the population within SKATS continues to increase, the area will need to consider using techniques other than road widening to provide for the area's mobility. In the last 10 years, there has been the development and investment in what is termed "New Mobility." This spans from people using mobility-as-a-service options (e.g., bike share, taxi/car share) to the development of autonomous vehicles.

Within the timeframe of this Plan, an increasing amount of "connected vehicle" infrastructure will likely be put in place. This infrastructure provides information to the vehicle regarding the traffic and road situation (e.g., whether there is a crash ahead), as well as gathering data from the vehicle on the traffic flow and other pertinent information. Whether vehicle to vehicle (V2V) or vehicle to infrastructure (V2I), the process has already started, and both the public and private sectors are involved, working toward ensuring the interoperability of such devices.

Around the world many larger cities and regions are experiencing an increase in travel via "mobility as a service." Beyond the traditional travel by public transit and taxi, carsharing and bike sharing operations are providing options to the public that weren't available, or even possible, 10 years ago. These services are facilitated by the increases in the capabilities of smartphones, wireless data networks and, to a degree, the increase in people living, working, or visiting denser urban areas. Whether these services expand from their current meager offerings in Salem remains to be seen.

Autonomous vehicles (AVs) have progressed from vehicles with rudimentary capabilities to ones that are being tested on the streets around the world. Full-scale deployment is still (likely) years away; but during the time frame of this Plan, they are predicted to be available at the very least to fleet owners such as taxi companies and transit operators.

These technologies have the possibility to change the way that people use and interact with the transportation system. This could result in the need for a different set of funding

priorities, depending on how successful or not they are with the public.

EV Infrastructure

With the passage of the Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act in 2022, federal attention and funding is being made available to planning for and installing infrastructure that support battery electric vehicles (BEV). ODOT has released the Transportation Electrification Infrastructure Needs Analysis (TEINA)[10] to determine where to place EV chargers along ODOT routes. Infrastructure is also being put into place by a variety of private enterprises, primarily at destinations, but also along major highways. The role the local jurisdictions will play in this endeavor, beyond providing for their own fleets, is still being discussed.

Roads

Willamette River Crossing Capacity

As discussed in **Chapter 5**, the two downtown bridges (Center Street and Marion Street) that are part of OR22 that provide the principal crossings of the Willamette River between Marion and Polk Counties. The next nearest bridges over the Willamette River are located in Independence (10 miles to the south) and Newberg (25 miles to the north). Included in **Chapter 5** is a graph showing the growth of traffic on Center Street and Marion Street from 1980 to 2021 and a discussion of the congestion issues. Over the decades, there have been multiple planning studies on whether, where, and how to provide additional capacity (primarily vehicular capacity) across the Willamette River within the SKATS boundary, particularly, in the area between Lockhaven Drive to the north to Kuebler Boulevard to the south.

The most recent planning studies have been the *Willamette River Crossing Capacity Study* (2000) and the *Salem River Crossing Study* (2006 – 2019). The Willamette River Crossing Capacity Study (2000) identified the Tryon/Pine Corridor as the preferred location for the eastern terminus of a new bridge across the Willamette.

The *Salem River Crossing Study* began in 2006. As part of the initial study work, 17 crossing concepts along 10 potential alignments were analyzed. After analysis of these concepts, the project's Oversight Team directed the project team to focus on three major corridors (with a combined eight Build alternatives) for analysis in the Draft Environmental Impact Statement (EIS):

- No Build Alternative, aka Alternative 1.
- Existing Bridges crossing location – where Alternative 2A & 2B are located.
- Hope Avenue to Tryon Avenue crossing location – where Alternative 3 is located.
- Hope Avenue to Pine Street/Hickory Street crossing location – where Alternatives 4A, 4B, 4C, 4D, and 4E are located.

These Build alternatives evolved from an iterative process of engineering, planning, and

[10] See: https://www.oregon.gov/odot/Programs/Pages/TEINA.aspx

environmental analysis combined with review and comment by project stakeholders and public input. Through this iterative process, concepts were eliminated from consideration, new concepts were analyzed, and concepts refined and revised. Extensive analysis of the alternatives in the Draft EIS were completed and documented, which was released for public review on April 12, 2012. Public hearings were conducted, and the public review ended on June 18, 2012. The project Oversight Team preliminarily selected DEIS Alternative 4D as the preferred alternative. After many meetings, Salem City Council rejected Alternative 4D as the preferred Alternative and proposed a scaled-down version (similar to DEIS Alternative 4A) referred to as the "Salem Alternative." On February 14, 2014, the Oversight Team voted to advance the "Salem Alternative" as the preferred alternative for the project.

To abide by Oregon land-use law, an Urban Growth Boundary (UGB) amendment would be needed to expand the boundary by approximately 35 acres in Polk County to include a portion of the new bridge and part of the planned local street (Marine Drive).
In October 2016, there was a joint public hearing for expanding the UGB and other needed ordinances by all the affected jurisdictions (Marion County, Polk County, city of Salem, and city of Keizer). The city of Salem passed its ordinance in December 2016. However, Salem's ordinance was appealed to Oregon's Land Use Board of Appeals (LUBA), whose final order in August 2017 denied the majority of the appeal but did find three issues that the city needed to address. The Salem City Council held a work session in January 2019 and a public hearing in February 2019, both heavily attended by members of the public. The Salem City Council eventually decided not to address the LUBA remand and to support the No-Build alternative. In the Final EIS/Record of Decision, FHWA, in concurrence with conclusions reached by ODOT, selected the No-Build Alternative. The FEIS/ROD was signed on September 5, 2019 and published in the Federal Register on November 19, 2019.

Following its decision in February 2019, members of Salem City Council (including councilors who opposed the Salem Alternative and supported the No-Build as the Local Preferred Alternative) stated that they are willing to continue to examine projects to relieve congestion on the bridges and possibly re-look at a new bridge crossing at another location. Polk County's Commissioners sent a letter to ODOT saying they do not accept the outcome of a "no build" alternative and intend to explore river crossing alternatives.

Listed in **Chapter 5** are past and future strategies and construction projects to improve traffic flow on the bridges and connecting arterials. Near-term projects such as construction of Marine Drive NW and the Union Street Family Friendly Bikeway could help reduce some traffic on Wallace Road and the bridges. Expansion of local and regional transit service could also help to reduce vehicle trips over the bridges.

However, in the absence of a new bridge within SKATS and unless there is a significant shift in the travel demand and patterns in the region, it is expected that the number of trips traveling across the bridges will increase due to local and regional population growth, concomitant with more traffic congestion and increased travel delays for drivers,

and that the peak periods of congestion will expand during the mornings and evenings. Some of the operational, travel-demand management and other recommendations from the city of Salem's Congestion Relief Task Force Action Plan could be implemented during the timeframe of this SKATS MTP; but they will provide relatively minor congestion relief on the Marion and Center Street Bridges and connecting arterials. Furthermore, there remain barriers to people using active transportation – particularly crossing Wallace Road NW- that needs to be overcome so that bicycling and walking between west Salem to downtown is more convenient and safer.

The Willamette River Crossing Capacity Study of 2000 also recommended further study of an additional bridge in the Kuebler/Doaks Ferry area to the south of the existing bridges and the consideration of a "beltline" highway around the Salem-Keizer area. Currently, there is neither the funding nor consensus regarding a future bridge in the Kuebler corridor. For these reasons, they are not included as specific projects in this plan but are identified as components of a future vision of the area that will continue to draw attention over time.

Kuebler-Cordon-Hazelgreen Circumferential Route

Kuebler Boulevard, Cordon Road, Hazelgreen Road, and Chemawa Road form a circumferential route around the Marion County portion the Salem-Keizer area. This route also functions as the emergency bypass route when incidents close major facilities such as I-5, Portland Road, Lancaster Drive, or other regional roads. It is critical that this route retain its functionality as a beltway for moving goods and people through the urban area in the most efficient and expedient manner. Toward this end, Marion County and Salem are working toward interconnecting the signals along the corridor to optimize progression and generally limiting future access to street connections to those that support regional movement. A study began in 2021 to study this corridor to provide recommendations on future projects, including the intersections, the provision of additional capacity and providing for safe travel for all modes. The study will conclude after adoption of this Update and projects will be considered, as funding is available, for inclusion in the 2027 MTP Update.

I-5 Interchanges at Brooklake Road and Chemawa Road

These facilities are congested, and recent developments in the area are expected to place additional demands on the interchanges. Interchange Area Management Plans (IAMPs) have been completed for both interchanges that identified the severity of the expected problems and evaluated and recommended a set of preferred solutions. The Chemawa/I-5 was completed in 2011 and has been adopted into the affected jurisdictions TSP and/or Comprehensive Plan as appropriate. No funding has been identified for these projects.

The Brooklake/I-5 IAMP was completed in 2022 and was adopted by the Oregon Transportation Commission in March 2023. The interchange connecting Brooklake Road and I-5 is currently controlled with stop signs on the off-ramp approaches. In addition,

the geometry of the bridge results in short sightlines leading to safety issues. As the area's businesses develop and more residents of the northern part of the SKATS area (particularly Keizer residents) utilize this interchange to access I-5 heading north or south for jobs or shopping, the ability of the existing facility to adequately meet the mobility needs while satisfying safety goals will be diminished. Funding for these projects has yet to be identified.

OR 22 West (OR 51 to Willamette River Bridges)

This section of Highway 22 in West Salem has been the focus of study mainly due to safety and congestion issues. Increasing development in West Salem and Polk County – as well as increases in through trips – will increase travel demand and exacerbate safety issues on this section of Highway 22. An Expressway Management Plan (EMP) was completed in 2010 for the section of Highway 22 from Greenwood Road to Doaks Ferry Road. Projects from this EMP are listed in this MTP, but complete funding has not been identified. ODOT is currently finishing design work on the interchange and backage roads, and will be looking for funding to complete these projects. Work on the second half of the corridor (from Doaks Ferry Road to the Willamette Bridges) was put on hold by ODOT until the Salem River Crossing EIS was completed.

Oregon Alternative Mobility Targets

As part of the Oregon Highway Plan, ODOT has developed and adopted, via the Oregon Transportation Commission, a set of mobility targets that apply to ODOT owned and operated facilities. These mobility targets are meant to ensure that an acceptable and reliable level of mobility is maintained on the state highway system. In certain cases, as projects are implemented on the state roads that result in the mobility targets not being met, alternative mobility targets may need to be adopted to reflect the unique situation in that area. In such cases, ODOT would develop a package of investments that would result in the level of mobility meeting the alternative standards. Previously there has been discussion on the need for a set of targets specific to the ODOT-owned/operated roads within SKATS. Any further work on this would wait until after the Oregon Transportation Plan (OTP) and Oregon Highway Plan (OHP) have been updated, when the state-wide targets will likely be reviewed and, as necessary, modified to reflect the current regulations.

Lancaster Drive

Lancaster Drive is the main north-south corridor in eastern Salem providing connections to businesses, educational institutions, and homes. Daily traffic volumes on segments of Lancaster Drive are among the highest in the SKATS area. Unfortunately, the number of crashes is also among the highest in the region as several intersections on Lancaster are consistently in the annual list of top ten crash locations. Complicating this is the shared ownership of Lancaster Drive by Marion County and city of Salem. Over the years, the

city and county have constructed improvements to address capacity and safety issues such as medians to reduce conflict points, extra turning lanes for capacity, better traffic signals, reflectorized backing plates for signals, and pedestrian crossing lights. The city and county should consider a future planning study to address the safety, congestion, and land use issues that exist along the corridor.

Lasting Impacts from the COVID-19 Pandemic

It is perhaps too early to know what the long-term changes will be to travel, work, and shopping from the COVID-19 pandemic. There were short-term boosts to the number of people working from home, and using grocery/shopping delivery services, that have a direct impact on the transportation system. There also was an initial substantial decrease in transit ridership, that is slowly being reduced. And unfortunately, during the pandemic that was an increase in traffic fatalities that has continued as the economy has reopened.

Appendix A – SKATS Population and Employment Forecasts

Introduction

The Salem-Keizer Area Transportation Study (SKATS) is required by federal regulations to update the Metropolitan Transportation Plan (MTP) every four years. As part of that work, a population forecast is needed that extends to at least a 20-year planning horizon. SKATS Technical Advisory Committee (TAC) members and staff formed a land-use working group which met to provide input and develop a 2050 population and employment forecast for within SKATS by jurisdiction. Forecasts are developed on the best available local information which includes a parcel level land use inventory, building permit information, census data, data from Salem and Keizer's housing needs analysis and economic opportunity analysis studies, local current comprehensive plans, official population forecasts, and input from local planning staff.

Information in this appendix provides historical context and of population and employment trends as well as the specific SKATS forecasts. The Transportation Management Area (TMA) boundary is designated as the official planning area of SKATS, encompassing the cities of Salem, Keizer, Turner, and some unincorporated county lands in both Marion and Polk Counties (**Figure A-1**). As the boundary is unique, many statistics are not available for SKATS alone. For this reason, historical and summary data by counties, cities, and UGBs are also presented to give context. The Salem-Keizer Urban Growth Boundary (UGB) alone represents approximately 95 percent of the population of SKATS, and 50 percent of its area.

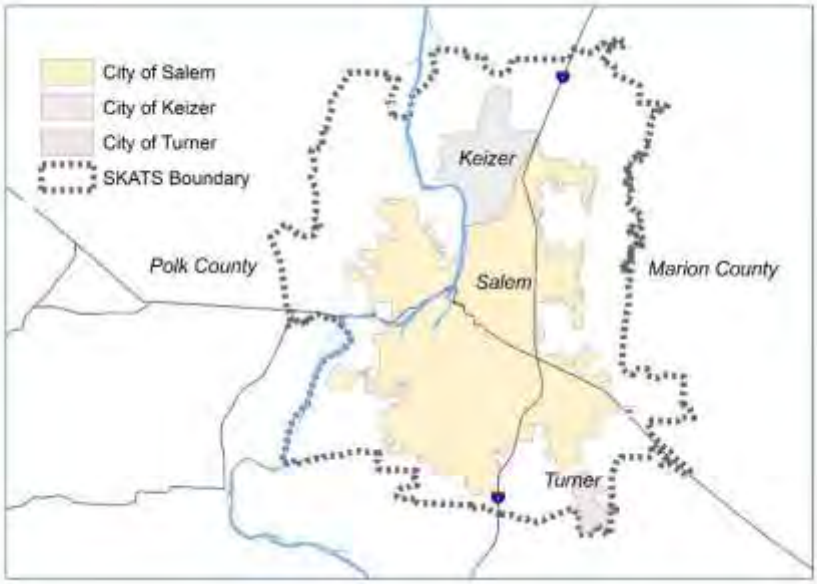


Figure A-1: SKATS Area

The contents of this appendix include:

- Population trends for the State of Oregon and Marion and Polk Counties
- Population trends for the Salem-Keizer Urban Area
- The Population Research Center (PRC) forecast program and resulting target numbers
- Housing Forecasts for Keizer, Salem, Turner, and county lands inside SKATS
- Employment trends for the State of Oregon and Marion and Polk Counties
- Employment trends for within SKATS
- Oregon Department of Employment forecasts and resulting SKATS target numbers
- Employment Forecasts for Keizer, Salem, Turner, and county lands inside SKATS

State and County Population Growth

To give some context about state and regional growth, census population data for 2000, 2010 and 2020 for Marion and Polk Counties and the state of Oregon is shown in **Table A-1 and Figure A-2**. Growth since 1990 for Marion and Polk Counties combined was 56 percent or approximately 155,000 people. The average annual growth rate is higher than the state average.

Area	April 1, 1990 Census Population	April 1, 2000 Census Population	April 1, 2010 Census Population	April 1, 2020 Census Population	Total Population Change 1990 to 2020	Percent Increase 1990 to 2020	Average Annual % 1990 to 2020
Marion County	228,483	284,834	315,335	345,920	117,437	51%	1.7%
Polk County	49,541	62,380	75,403	87,433	37,892	76%	2.5%
Marion & Polk	278,024	347,214	390,738	433,353	155,329	56%	1.9%
Oregon State	2,842,321	3,421,399	3,831,074	4,237,256	1,394,935	49%	1.6%

Table A-1: Population Over Time 2000 to 2020 (Source: US Census Bureau)

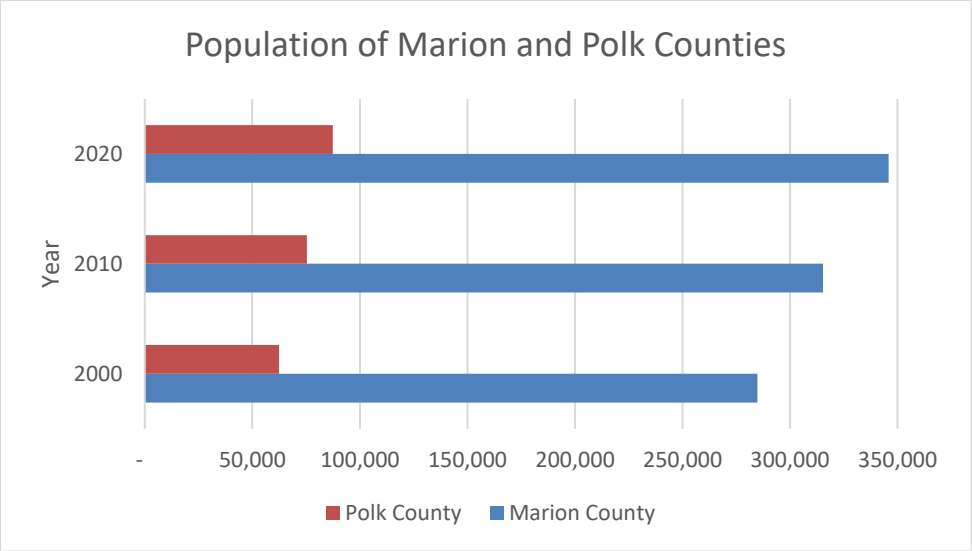


Figure A-2: Population of Marion and Polk Counties (Source: US Census Bureau)

The Population Research Center also estimates migration, births, and deaths at the county level on an annual basis. Net migration and natural increase both contribute to the population increase in Marion and Polk Counties as illustrated in **Table A-2**.

Area	July 1, 2021 Estimate	April 1, 2020 Census	Numeric Change April 2020 to July 2021	Percent Change April 2020 to July 2021	Average Annual Change since Census	Births* 2020-21	Deaths* 2020-21	Natural Increase 2020-21	Net Migration 2020-21
Marion	347,182	345,920	1,262	0.4%	0.3%	4,780	4,044	736	526
Polk	88,916	87,433	1,483	1.7%	1.4%	1,053	986	67	1,416
State	4,266,620	4,237,256	29,364	0.7%	0.6%	49,915	51,318	-1,403	30,767

Table A-2: Annual Population Change by Type (Source: Portland State University, Population Research Center)

Salem-Keizer Urban Growth Boundary Area

Historical population growth in the Salem-Keizer Urban Growth Boundary (UGB) from 1950 to 2020 is presented in **Table A-3**. Prior to the creation of SKATS and the UGB in the 1970s, planning studies referenced the population of the Salem urbanized area, which included the city of Salem plus the surrounding closely settled unincorporated areas that met certain criteria of population size and density. Planning documents from the 1970s and 1980s provided historical population values and the urbanized area population numbers in **Table A-3** are a reasonable equivalent to the Salem-Keizer UGB. The 2000 population estimate for the Salem-Keizer UGB was calculated in May 2001 using data from 2000 census block data. The 2010 and 2020 population estimate for the Salem-Keizer UGB was similarly calculated from 2010 census block data.

The average annual growth rate calculated over the decades is a good reflection of the cycles of economic growth. During the economic recession in the 1980s, Salem-Keizer's annual average population growth rate dropped to 1.5 percent, rebounding during the 1990s when the rate increased to 2.4 percent per year. The decade of 2000 to 2010 had a Salem-Keizer average growth rate of 1.2 percent as the great recession which began the end of 2007 was a contributing factor to slower growth. The average annual growth after 2010 is 1.1 percent, the low growth reflective of the post-recession recovery period. The city of Turner was added to the SKATS planning area as part of the Transportation Management Area boundary expansion adopted by the SKATS Policy Committee in 2002. The populations of the three cities of Keizer, Salem, and Turner are also included in **Table A-3** as reference. Figure **A-3** illustrates the historical growth of only the Salem-Keizer UGB.

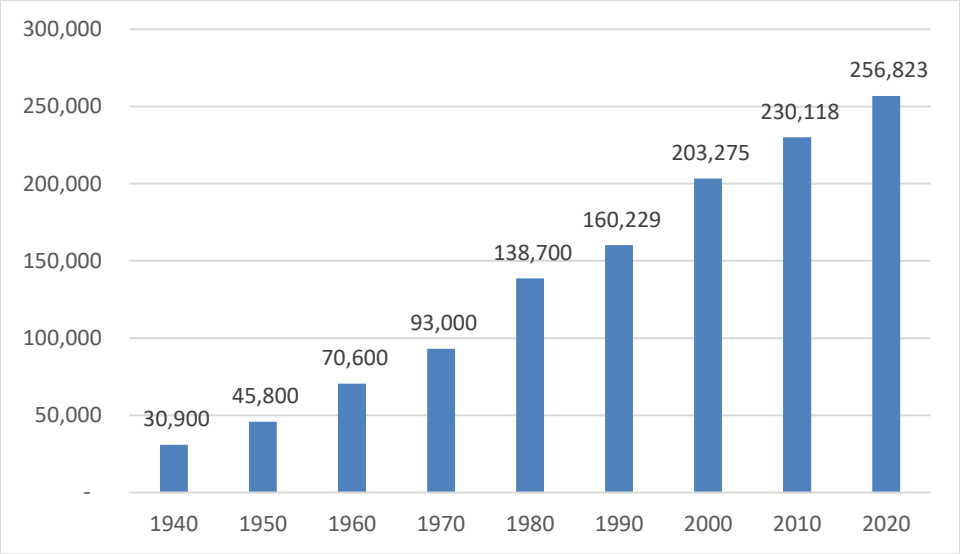
Historical Population Growth - Urban Growth Boundary								
Year	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2020**
Geography[1]	Salem UA	Salem UA	Salem UA	UGB	UGB	UGB	UGB	UGB
Population	45,800	70,600	93,000	138,700	160,230	203,275	230,118	256,823
Decade	**1940-1950**	**1950-1960**	**1960-1970**	**1970-1980**	**1980-1990**	**1990-2000**	**2000-2010**	**2010-2020**
UGB Growth each period	48%	54%	32%	49%	16%	27%	13%	12%
Salem-Keizer UGB AAGR[2]	4.0%	4.4%	2.8%	4.1%	1.5%	2.4%	1.2%	1.1%
Historical Population Growth - Cities								
Year	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2020**
City of Salem	43,140	49,142	68,296	89,233	107,786	136,924	154,637	175,535
City of Keizer[4]		5,288	11,405	18,592	21,884	32,203	36,478	39,299
City of Turner	610	770	846	1,116	1,281	1,199	1,854	2,454

[1] Salem UA = Salem Urbanized Area, UGB = Salem-Keizer Urban Growth Boundary

[2] AAGR = Average Annual Growth Rate

[4] Keizer incorporated in 1982. Earlier years are Keizer CDP.

Table A-3: UGB Population Growth Over Time (Source: US Census Bureau)



Source: Census Bureau

Figure A-3: Population within the Salem-Keizer UGB (or equivalent) from 1940 to 2020 (Source; US Census Bureau)

Building permit activity provides a good visual indicator of cycles of growth. **Figure A-4** charts annual permits by housing type within the Salem-Keizer UGB from 1980 to 2021. The area experienced a low of 129 building permits in 1985, and construction peaked in the mid-1990s. The recession and financial crisis that began in 2007 is reflected in a drop of permits issued over the period from 2007 to 2012. In 2021, total permits were 940 for the year.

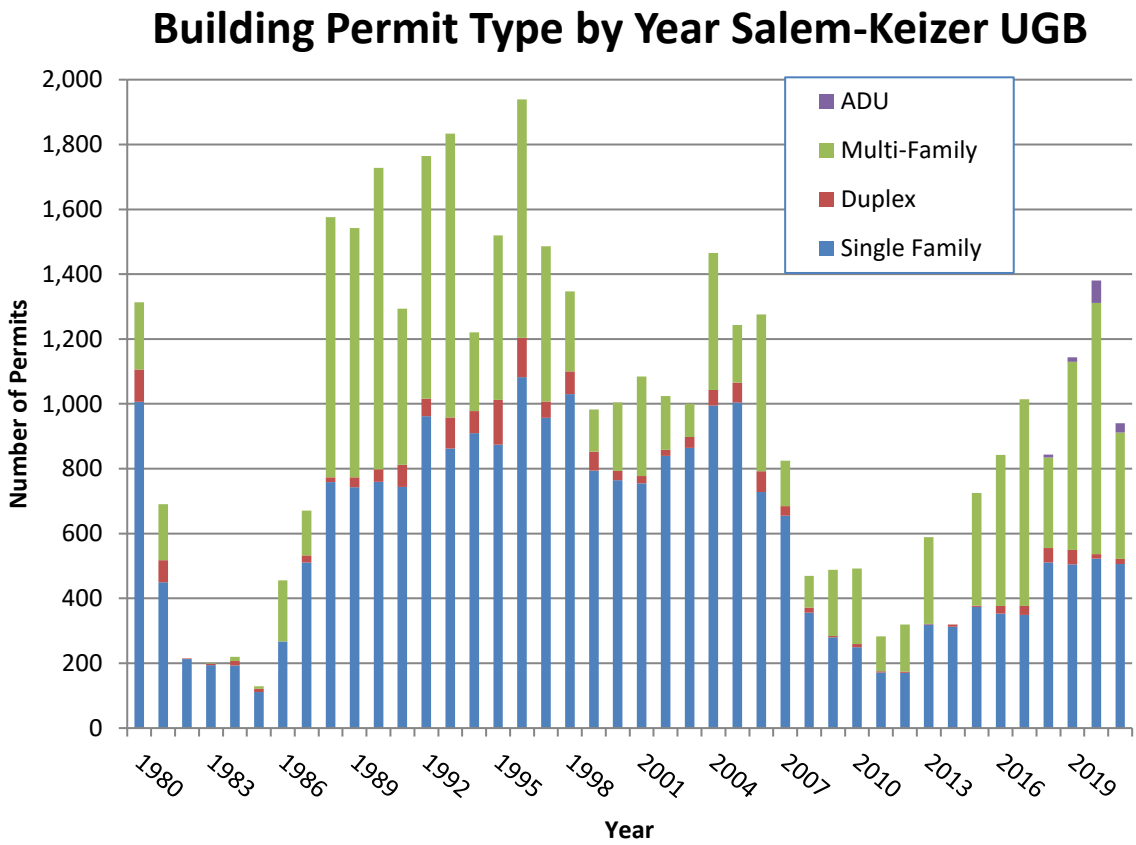


Figure A-4: Building Permits by Type by Year within the Salem-Keizer UGB (Source: MWVCOG)

Salem-Keizer UGB Population Forecast Methodology

The Oregon State Legislature passed HB 2253 in 2013 requiring Portland State University's Population Research Center to issue forecasts by urban growth boundaries for the entire state on a rotating basis in a four-year cycle. Forecasts for Marion and Polk Counties were finalized in June 2021. This provided a Salem-Keizer UGB number for a target population forecast (2050), split between Salem and Keizer, and Polk and Marion counties. PRC also provided forecast numbers for Turner's UGB. These target numbers account for the majority of the population within SKATS. A forecast for the remaining area of county land outside the UGB and inside SKATS is described later in this appendix.

A forecast working group comprised of members of the TAC helped coordinate and inform the 2050 population and employment forecasts and allocations. The population target for the Salem-Keizer UGB is 315,313 for the year 2050.

Since the last update to the long-range plan, the city of Salem has adopted the *Our Salem* Comprehensive Plan update after a three-year process, the city of Keizer updated a Housing Needs Analysis in 2021 and enacted the River-Cherry Overlay District in their

zoning, and the city of Turner completed a Housing Needs analysis and applied for an Urban Growth Boundary expansion. Information and underlying data from these three projects have been incorporated into the forecasts for the MTP. Federal regulations require the MPO to base its MTP update on the latest available estimates and assumptions for population and land use.[1]

Keizer

The city of Keizer completed a Housing Needs Analysis (HNA) in 2019 and updated and finalized findings in 2021. The analysis included the implementation of its River-Cherry overlay district. The HNA had a forecast horizon year of 2041 and examined historic densities as well as potential higher future housing density, especially within the overlay district to accommodate the city's needed growth. As part of the HNA land use efficiencies were evaluated and higher future densities were assumed for all housing development types. It was concluded that within the city there is a demand of 2,061 new dwelling units, a capacity of 1,679 units and resulting deficit of 396 housing units by 2041. As Keizer and Salem share an urban growth boundary, the conclusion of Keizer's 2021 HNA was the unmet housing need would be accommodated within the shared UGB with Salem.

Extending the forecast horizon another nine years to 2050 for the MTP planning horizon would increase that housing deficit to a total of approximately 800 units. At the present, Keizer has not begun an application process to expand the UGB in the vicinity of the Keizer city limits. Given the unique shared nature of the UGB, for these forecasts it is assumed that the projected deficit to 2050 will also be accommodated within the shared UGB.

Based on the 2021 HNA work, estimated capacity exists for 1,679 housing units based on vacant and partially vacant unconstrained land, re-developable properties (land with a less intensive residential use to a higher density use), and accessory dwelling unit (ADU) potential. The forecast for the MTP will assume that all that available capacity will be built by 2050. In addition, for the nine years of the extended forecast from 2041 to 2050, it is assumed another 25 accessory dwelling units (ADUs) will develop (this is the same assumption as used in the HNA), for a total of 1704 units built by 2050. This reflects all of Keizer's existing housing capacity and an additional 25 ADUs which will not require additional buildable land. **Table A-4** summarizes the forecast units and population growth for Keizer.

[1] 23 CFR 450.324 (e) "The MPO, the State(s), and the public transportation operator(s) shall validate data used in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update."

	Persons	Housing Units
2041 HNA Housing capacity		1679
Likely ADUs (based on HNA assumptions, 2041 to 2050)		25
2050 Housing unit forecast for MTP		1704
Population Growth based on 1704 Housing Units (2020 to 2050)*	4618	
Forecast Growth for Keizer (2020 to 2050) from PSU	6731	
Population accommodated elsewhere in UGB	-2113	
Approximate Housing units accommodated elsewhere in UGB		813

* 2.71 persons per household, 2015–2019 American Community Survey from HNA

Table A-4: Keizer Housing and Population Forecast

These potential 1,704 units were allocated in GIS in Keizer trying best to match the buildable land inventory in the Housing Needs Analysis, use the housing density from the Housing Needs Analysis, and where:

- Existing SF development on lots larger than 15,000 sq ft were viewed in GIS, if there is reasonable access to the lot, a subdivision/infill was assumed for additional units.
- Multi-family land larger than ½ acre with a current use of single family, is assumed to have redevelopment potential to a higher density use of multi-family.
- Two large undeveloped mixed-use properties in the RCOD were assumed to develop as multi-family and at a high density.
- With the expectation that the RCOD will accommodate higher density development, several locations regardless of the existing use were selected for potential redevelopment for a total of 256 multi-family units at a high density.

This initial housing unit distribution was reviewed by city staff, and totals were summarized to the TAZ level for use in the travel demand model. The 1,704 units results in a population growth of 4,618 (based on 2.71 persons per household). The 2050 Population Research Center (PRC) forecast number for Keizer is higher than the forecast that results from the capacity of 1,704 housing units. Therefore, the final population table totals have been adjusted to reflect the housing short fall as documented in Keizer 2021 Housing Needs Analysis and extended to the 2050 horizon year. The difference in population is shifted to the Salem portion of the UGB with the additional units added to Salem's forecast. Summary totals are in **Table A-5**.

Population Census 2000	Population Census 2010	Population Census 2020	Forecast Population 2050	Total Increase Population	Housing Unit growth
32,203	36,478	39,309	43,927	4,618	1,704

Table A-5: Keizer UGB Area Only, Summary Table

Salem

The *Our Salem* update to the Comprehensive Plan concluded in July 2022 with its adoption by the city council. The project entailed a great deal of public outreach at many points during the four-year project with the public, neighborhood associations, community organizations and stakeholder groups. For example, parcel specific proposed changes to Salem's comprehensive plan map and zoning map were available in online maps, and public testimony was heard at both the Planning Commission and City Council regarding new zones and anticipated growth.

Additionally, work was done by SKATS in 2021 on behalf of the *Our Salem* project in phase two of the project, running four base scenarios and two preferred alternatives in the travel demand model based on proposed future development patterns. These scenarios were generated by city staff and their consultant to reflect the changes in the proposed comprehensive plan designations. After public comment on the initial scenarios a final preferred alternative was selected by the city. For this MTP update, the data from the final preferred alternative was used as the basis for the Salem portion of the SKATS forecast. This data was created and provided at a Transportation Analysis Zone (TAZ) level as future growth in single-family and multi-family units. There are approximately 318 zones that cover the city of Salem.

The final preferred alternative data was reviewed by Salem and SKATS staff for its integration into the MTP forecast with adjustments to align the forecast horizon years between the plans. In GIS, related data was mapped including the forecasts by TAZ, recent large land use actions, administrative boundaries, aerial photos, and underlying land uses to help in the review. The main adjustment to the city's final preferred option was a reduction of total housing units, as the current forecast for the city of Salem from the Population Research Center is lower than that used for the city's original housing needs analysis work. The adjustment in data by TAZs also incorporated the 2,113 in population from the Keizer's forecast as referenced above. **Table A-5** summarizes the growth in housing units and subsequent population increase to the 2050 horizon year.

Census 2020	PRC Forecast 2050	Revised Forecast 2050**	Population Increase 2020-50	Allocated SF Units	Allocated MF Units	Total Units	Population Increase***
217,514	269,273	271,386	53,872	10,049	10,672	20,721	53,874

** Shift of Keizer population growth
***S1101 Households and Families 2020 ACS 5-Year estimates, Average Household size 2.6 for city of Salem

Table A-6: Salem Housing and Population Forecast

Specific changes from the 2021 *Our Salem* Final Preferred Alternative Data (see **Figure A-4**):

- TAZ 431, 434 and 345: Staff from Salem's Public Works gave input that the utility service (water/sewer) in this area has limitations and would not likely be available in the near term. The units were reduced here with the assumption that development will happen primarily on a small amount of existing platted vacant lots
- TAZ 137: In the Kale Road development many houses have been built over the last 1 ½ years in this subdivision. The forecast for single family houses was adjusted to reflect the remaining platted vacant lots and the recently approved multi-family development.
- TAZ 41: During the final approval stage of *Our Salem*, the proposed multi-family comprehensive plan map designation was removed after the public comment period; therefore, the forecast for multi-family units was removed.
- TAZ 388: Recent land use actions in 2021 and 2022 of subdivisions covering approximately half of the TAZ give an accurate number of future building lots as well as a more accurate estimate of the capacity for the remaining unplatted vacant land; therefore, the estimate for SF future units was lowered.
- TAZs 147, 45, 50, 411, 426: These zones have the largest forecast totals, geographic size, and amount of vacant and underdeveloped land available (large parcels with a single house). Though land is available for development in these areas, city staff lowered the single-family forecast in these five areas, based on the goals and targets from *Our Salem* in which new development is desired near downtown Salem and corridors with frequent transit service and of multi-family or higher density development. The single-family forecast was reduced by an equal percentage over all five for a reduction of approximately 480 single family units. Any multi-family forecasts in these TAZs remained unchanged.

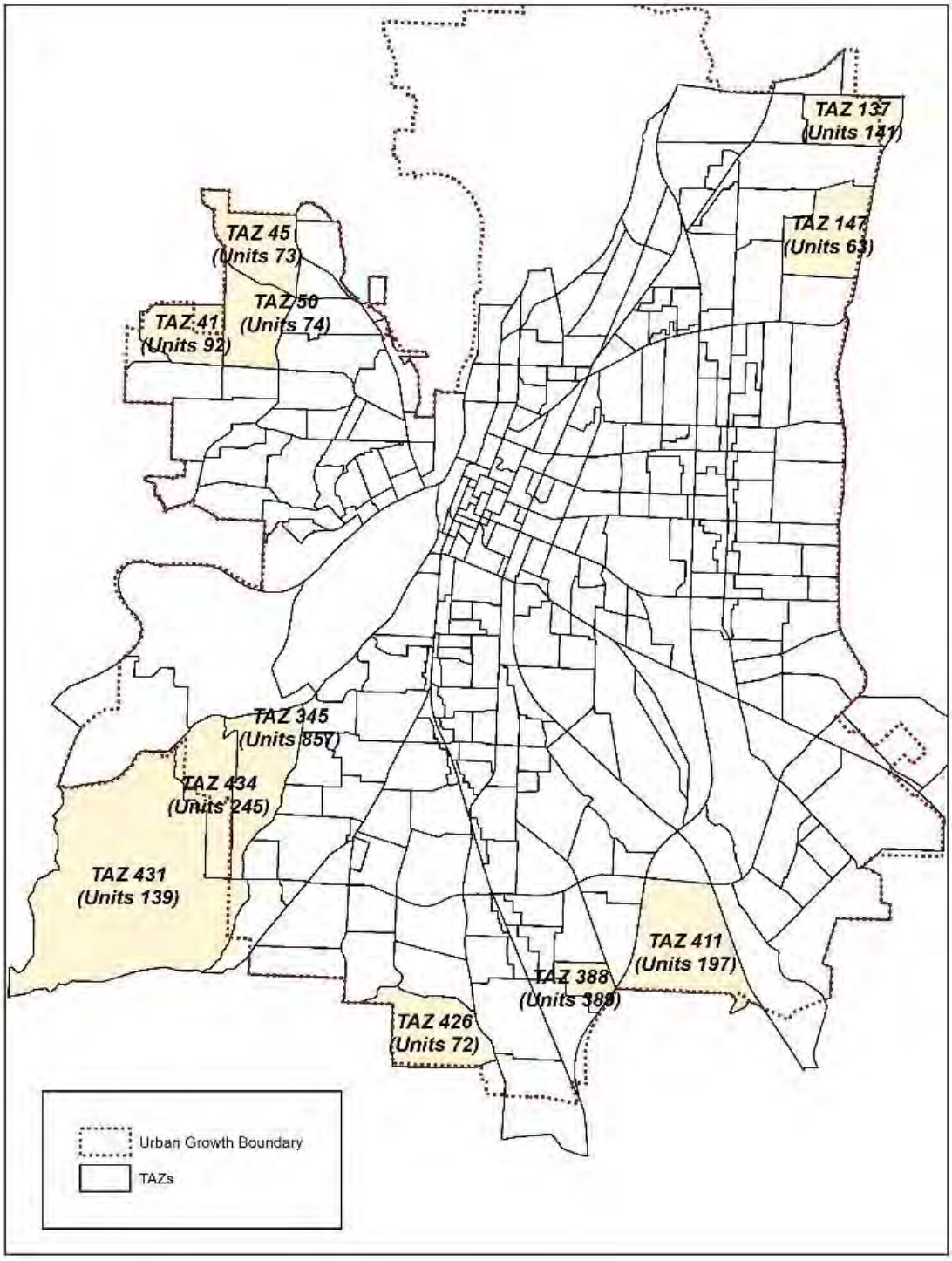


Figure A-5: Map of TAZs with changed Housing Units from the Our Salem plan

Finally, Portland Research Center (PRC) provides population forecasts for the Salem-Keizer urban growth boundary, the separate Keizer and Salem portions, and by county (Marion and Polk). The *Our Salem* project included detailed work to estimate anticipated development on proposed comprehensive plan map changes by neighborhood around the city. Housing forecasts were based on that work. It was assumed that the resulting population split between Marion and Polk Counties based on housing units from the *Our Salem* work was a more accurate representation of potential future growth, than that of the split provided by PRC. The resulting population split is shown in **Table A-6**.

Area	Census 2010	Census 2020	Population Increase 2020-50*	Population Forecast 2050
Salem UGB area	193,640	217,514	53,873	271,387
East Salem (Marion Co)	167,499	186,146	44,538	230,684
West Salem (Polk Co)	26,141	31,368	9,335	40,703

*Based on housing units, 2020 ACS 5-Year estimates, Average Household size 2.6

Table A-7: Salem Population Split within the UGB

Turner

Turner's recent Housing Needs Analysis and Buildable Land Inventory work in 2021 determined the city has 49 acres of vacant, unconstrained land that allows residential development, which would result in 189 units.[2]

The analysis also determined that 507 new housing units are needed by 2041 to meet its anticipated population growth. This determination was made after analyzing development trends, looking at projected need, and factoring in efficiencies and accommodations for future growth. To meet their housing shortfall, the city has applied for an Urban Growth Boundary expansion of 49 acres of residential land to the east of the current boundary, which was approved by the Marion Board of Commissioners in August 2022. This expansion will accommodate development of 308 additional units on the expansion area, for a total of 497 for Turner. An additional anticipated 10 ADUs meets their 2041 target of 507 housing units.

Turner's Housing Needs Analysis work was based on the most recent forecast from the Population Research Center which match those of the MTP. Turner's work is based on a forecast horizon of 2041. Extending the forecast to a 2050 time period requires additional growth of approximately 43 additional housing units. As this is forecasting growth to the year 2050 on land that has not yet begun a development process or plan, with many other unknown variables, these 43 additional needed units are assumed to be accommodated in this same future development area and elsewhere in Turner by

[2] Exhibit 4, Draft Turner UGB Amendment Justification and Finding

increased density or infill. This was considered reasonable by staff. It is possible that duplex or triplex units may be included in new construction depending on market demand, new units with built-in ADU capacity, or infill development of ADUs of existing residential units. As the HNA work for projected future development was easily assigned to the two TAZs areas that cover the City of Turner for input into the SKATS travel model. **Table A-8** shows the forecast units and resulting population increase from the HNA work, and **Table A-9** shows the resulting population.

	Persons	Housing Units
2041 HNA Housing capacity		189
2041 HNA Housing deficit and UGB expansion		308
Total needed units 2041 (HNA)		507
Population Growth 2020 to 2050, forecast for MTP	1420	550

Table A-8: City of Turner Housing and Population Forecast

Census 2010 Population	Census 2020 Population	Forecast Population 2050	Total Increase Population	Housing Unit growth
1,854	2,454	3,874	1,420	550

Table A-9: Turner UGB Summary Table

Marion County

The area that lies outside of the Salem-Keizer UGB and inside of the SKATS boundary has a population of 12,460 people determined from the 2020 Decennial census. The Marion County portion is 10,587, and the Polk County portion is 1,873. The population for this specific area can be accurately determined every 10 years from the decennial census, as statistics are available at a very small, detailed level in a layer that can be geographically selected and summarized.

There are no population forecasts specific to these areas, as they do not match a typical boundary such as a county or urban growth area. In consultation with Marion County planning staff, it was decided to estimate future development based on available residential buildable land in combination with applying an average of housing developed each year. SKATS has over 20 years of geocoded housing permit history, the average number of annual building permits for this specific area of Marion County is 23 per year. The target number of housing units was calculated at 690 (23 units * 30 years, from 2020 to 2050).

Using GIS, future housing units were allocated to lots that met the county development

standards, generally these were existing vacant lots greater than two acres in size, or larger lots with a residence that could subdivide and allow additional units in Rural Residential designated zones. County planning staff indicated there has been very little interest in ADUs in this area of the county and therefore a very small number of 15 ADUs were added to the forecast period (approximately one every other year). The result of the GIS exercise allowed for 619 housing units on land that met development criteria plus 15 ADUs. Resulting in a future population of 12,343.

Polk County

In Polk County, the area outside of the Salem-Keizer UGB and inside of SKATS has a 2020 population of 1,873, from the decennial census. Similar to the steps for Marion County, GIS future housing units were allocated to lots that met the county development standards, generally these were existing vacant lots greater than 5 acres in size, or larger lots with a residence that could subdivide and allow additional units in Rural Lands designated zones. A very small number of 15 ADUs were added to the forecast period (approximately one every other year). The result of the GIS exercise allowed for 158 housing units on land that met development criteria plus 15 ADUs. Resulting in a future population of 2,340.

Table A-10 summarizes both Marion and Polk County's forecast data.

Area	Census 2010	Census 2020	Forecast Housing Units	Persons per House-hold*	Population Increase from HH Units	Population forecast 2050
Marion	10,156	10,587	634	2.77	1,756	12,343
Polk	1,463	1,873	173	2.70	467	2,340
Total	11,619	12,460	807		2,223	14,683

*S1101 2020: ACS 5-Year estimate by county

Table A-10: Marion and Polk County Population Forecast

Summary

Table A-11 includes the forecast numbers for all the jurisdictions within the SKATS boundary[3].

Area	Census 2010	Census 2020	Forecast 2050	Population Increase 2020-50	Allocated HH units
Salem-Keizer UGB Total	230,118	256,823	315,313	58,490	22,425
Keizer area (inside UGB)	36,478	39,309	43,927	4,618	1,704
Salem area (inside UGB)	193,640	217,514	271,386	53,872	20,721
Turner UGB	1,854	2,454	3,874	1,420	550
Remaining SKATS areas	11,619	12,460	14,683	2,223	807
Marion County	10,156	10,587	12,343	1,756	634
Polk County	1,463	1,873	2,340	467	173
Total SKATS population	243,591	271,737	333,870	62,133	23,782

2000/2010 numbers from RTSP Appendix A, updated from GIS
2020 numbers from census redistricting file, by census blocks
2050 Forecast data from the Population Research Center, June 2021, for Salem, Keizer, and Turner
Final numbers reflect a shift of housing within the shared UGB
2050 Forecast outside of the UGB determined with estimated housing units.

Table A-11: Summary Table Population and Forecast

Figure A-6 uses a dot density pattern to represents the forecast units by single family or multi-family type. Each dot represents four units, and approximately half of all future units are forecast to be multi-family. Given the variation in size of the TAZs, this is a proportional representation of development and allocation of units.

[3] 2020 Population numbers were summarized from the 2020 Census Redistricting file (PL94-171) in GIS. This allows for population summaries for areas other than city limits, for example in this table the urban growth boundaries, the SKATS boundary, and the unincorporated portions of Polk and Marion counties that fall within the SKATS MPO boundary. The Census provides populations by city limits that may differ slightly from redistricting numbers. For consistency, the redistricting file in GIS was used for all calculations.

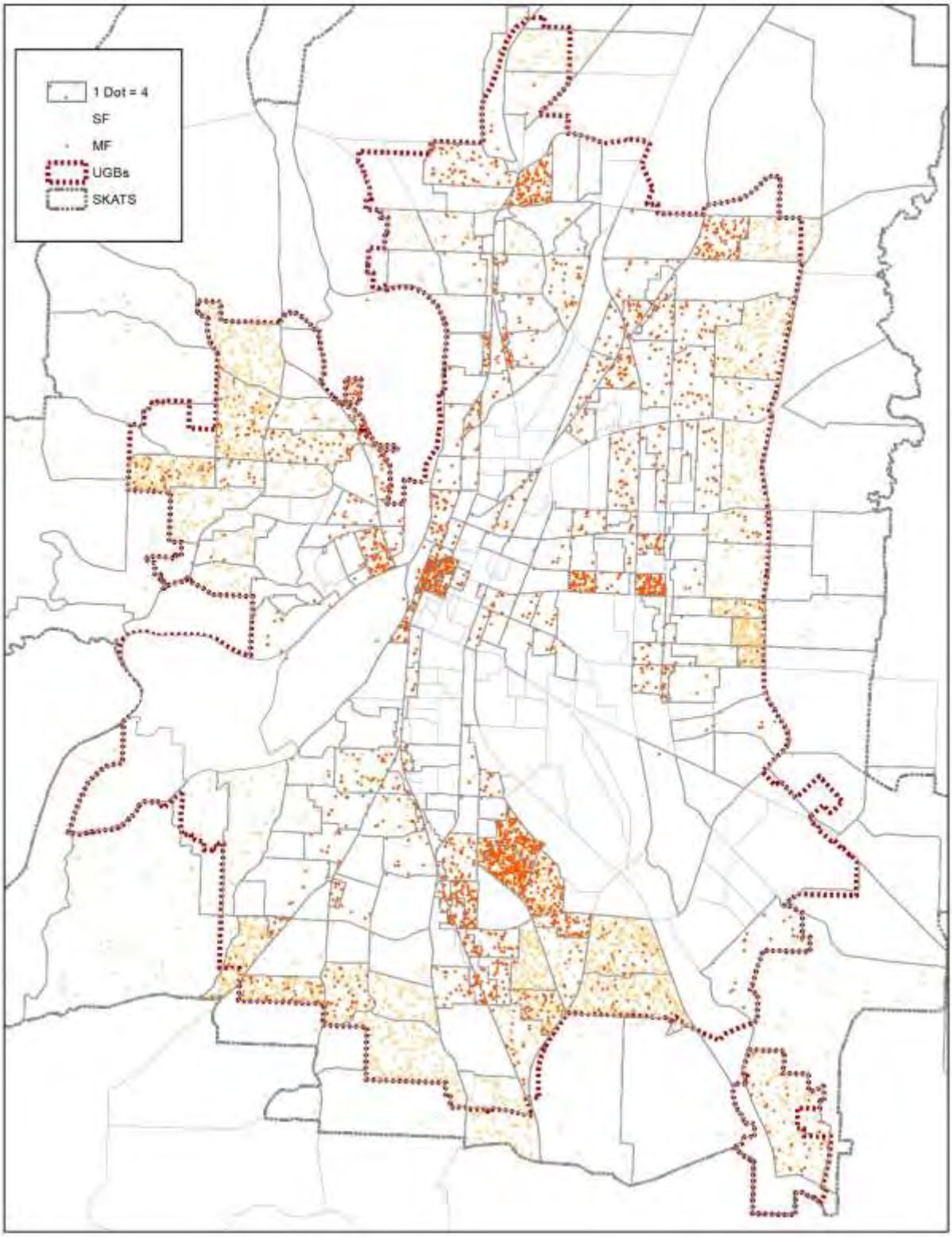
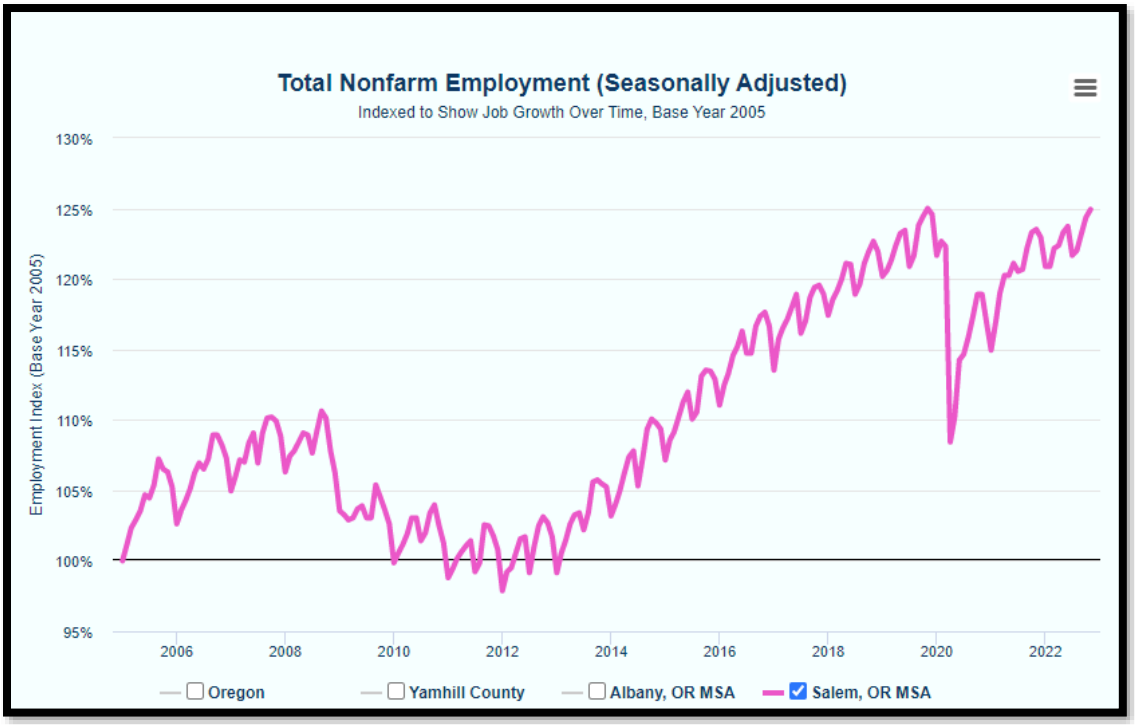


Figure A-6: Representation of Forecast Units by Type by TAZ

Marion and Polk County Employment

Two sources of employment data are available from the State of Oregon Employment Department (OED). The first is data from the Current Employment Statistics (CES) program. The Salem MSA consists of Polk and Marion Counties together and is a reasonable indicator of the employment trends of the Salem-Keizer urban area, as approximately 70 percent of all employment in both counties is within the urban area. Current Employment Statistics is a survey of employers that provides a good measure of the number of payroll jobs in nonfarm industries. **Figure A-7** shows employment growth over time, using 2005 as a base year index for the Salem MSA area. The dip in employment during the recession (2020-2012) and the beginning of the covid pandemic (2020) stand out from the overall growth since 2005.



Salem MSA consists of Marion and Polk Counties

Figure A-7: Total Employment Job Growth Compared to Base Year 2005 (Source: Oregon Employment Department)

The second set of data from OED is the quarterly census of employment and wages (QCEW) by industry of "covered" employment (workers covered by unemployment insurance) for all counties in the state[4]. The employment data comes from the unemployment insurance tax reports submitted quarterly by employers subject to

[4] Non-covered employment includes the self-employed; services performed by a person in the employ of a son, daughter, or spouse; realtors and insurance sales employment that are based solely on commission; service performed by certain part-time, irregular, and emergency employees of state or local government; service performed by elected officials; certain categories of agricultural workers; and other specialized employment. See OLMIS for more info.

employment law. QCEW is similar to CES data, however this data is available in a GIS format which allows for summary by geographies other than the county level. Marion and Polk County employment from 1976, along with bars reflecting periods of economic recession are illustrated in **Figure A-8**.

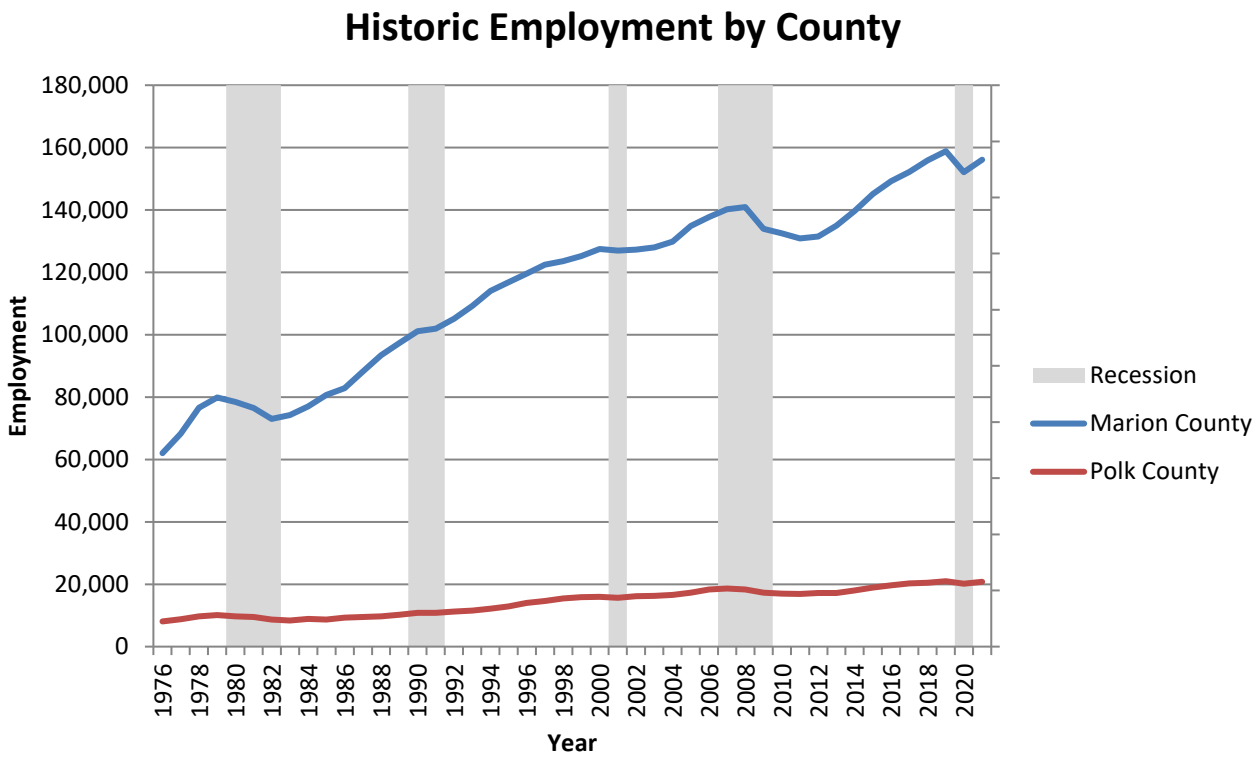
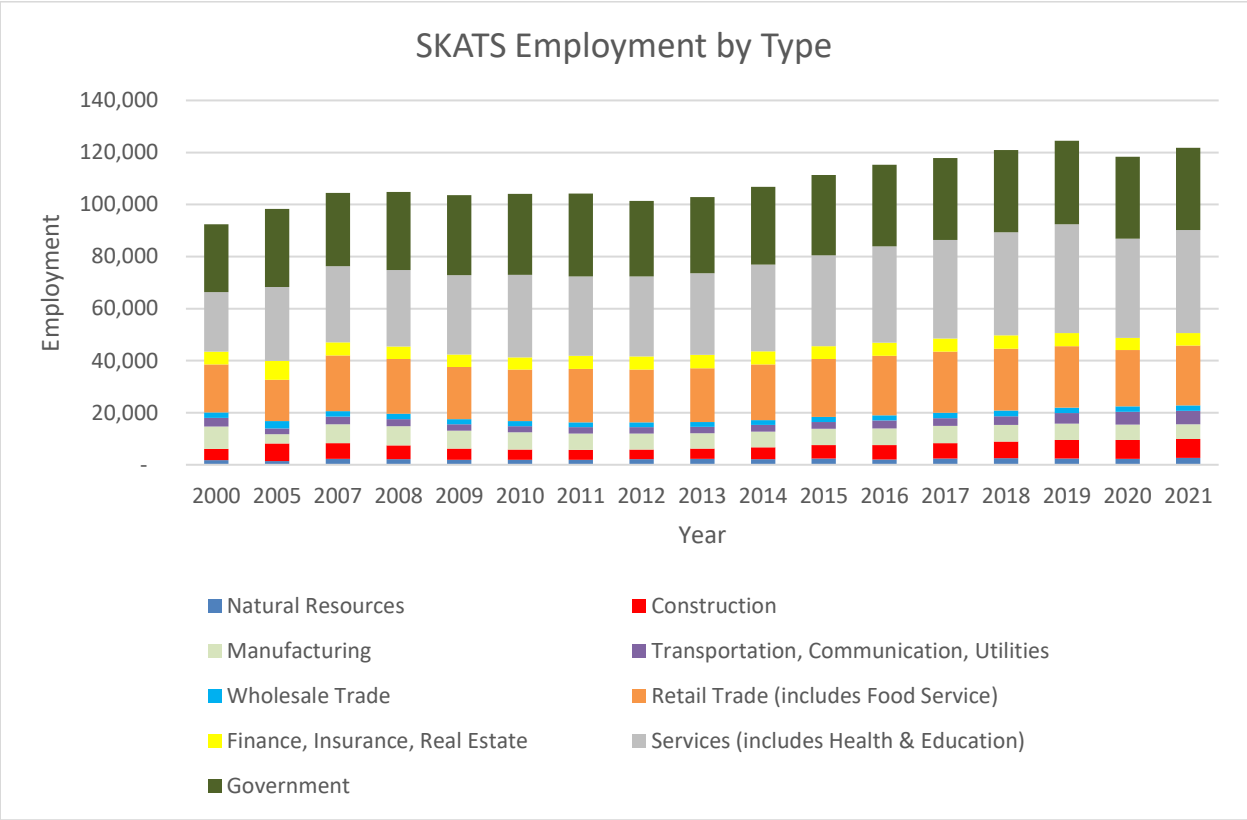


Figure A-8: Historic Employment by County (Source: Oregon Employment Department)

SKATS Employment

QCEW data for the Salem-Keizer area was obtained from Oregon Employment Department in a geocoded format that makes it possible to summarize specifically by the SKATS boundary area, rather than by county. Shown in **Figure A-9** is the annual average covered employment by major sectors inside SKATS. Employment dips are visible in 2012 with the recession, and again in 2020 with the covid pandemic. The gaps years in data were those that the MWVCOG did not collect the data.



Data not collected by MWVCOG for all years.

Figure A-9 SKATS Employment 2000 to 2021 (Source: Oregon Employment Department)

Employment Forecast Methodology and Control Total

Accurately predicting the economic future is a challenge over a long horizon. There are few sources for long range employment forecasts, and none for small geographic areas. The SKATS subcommittee reviewed a variety of local information, data and reports to best determine a forecasting approach. The approach agreed on was to match the rate of growth of the population to estimate future employment. Employment projections were calculated by taking 2021 covered employment and applying population forecast growth rates to create target 2050 estimates. The base year 2021 was chosen over 2020, as employment was so severely affected in the short term by the beginning of the covid pandemic. Employment data in 2021 rebounded sufficiently enough to not skew the base conditions for the travel model. Shown in **Table A-12** are the employment totals for 2021, the resulting employment forecast for 2050 and the resulting employment increase.

Current Employment and 2050 Forecast

Area	Employment 2021	Forecast** Emp. 2050	Employment Increase 2021-50
Keizer area (inside UGB)	8,053	9,859	1,806
Salem area (inside UGB)	109,141	133,611	24,470
Total Salem-Keizer UGB	117,194	143,470	26,276
Turner area	637	780	143
Remaining SKATS areas	4,024	4,926	902
Marion County	3,155	3,862	707
Polk County	869	1,064	195
Total SKATS employment	121,855	149,176	27,321

2021 Employment is covered employment from the Oregon Department of Employment
** Employment growth mirrors population growth, maintaining Population/Employment ratio consistency

Table A-12 Current and Forecast Employment

As part of the update to *Our Salem*, the City of Salem developed employment forecast by TAZ as part of the modeling for their update. This work was directly incorporated into the forecast allocation. For Keizer, Turner and the county lands employment was allocated in the land use inventory in GIS. In GIS, the inventory identified tax lots as developed, vacant, partially vacant, or likely to redevelop based on size and zoning. Taxlots that allowed mixed use (housing and employment) were identified for either future housing or future employment, or a mix of both. Some taxlots were excluded based on environmental constraints such as slope or water. Based on the employment type, the number of employees were estimated using the densities in **Table A-13**. All final forecasts were reviewed by staff.

Employment Types	Density for vacant lots	Density for partially vacant lots
Commercial Mix	27.1	18.1
Government Mix	35	23
Industrial Mix	12.8	8.5
Industrial-Commercial Mix	15.4	10.3
Office	35	23
Retail	27	18
Service	31	21
Ag/Industrial (Keizer)	12.8	8.5
Residential Mix	0.5	n/a

Table A-13 Employment Types and Corresponding Densities

Keizer Employment

Employment densities were applied to vacant, partially vacant and potentially redevelopable taxlots by their employment type to calculate employment totals in GIS. Similar to the housing forecast, a total possible number of employees were calculated based on the available land. Keizer Station was considered a special forecast with future jobs estimated on the remaining vacant pads available for development. Of those properties considered partially vacant or redevelopable, only the most likely to develop (based on accessibility and lot usage) were included in the forecast period. The final forecasts were reviewed on maps by Keizer's staff for any further reductions of modifications.

The employment forecast is listed in **Table A-14**. Total employment in Keizer is forecast to grow from 8,053 to 9,859 by 2050.

	2021	2050
Keizer Total Employment	**8,053**	**9,859**

Table A-14 Keizer UGB only, Employment Forecast

Salem Employment

Similar to the housing forecast, the data from the final preferred alternative from the *Our Salem* update was used as the basis for the Salem portion of the SKATS employment forecast. This data was created and provided at a Transportation Analysis Zone (TAZ) level as future growth over 10 employment categories.. There are approximately 318 TAZ zones that cover the city of Salem.

The final preferred alternative data was reviewed by Salem and SKATS staff for its integration into the MTP forecast with adjustments to align the forecast horizon years. The main adjustment to the city's final preferred option was a reduction of total employment as the 2050 forecast (based on underlying Portland Research Center population growth rates) is lower than that used for the city's original work. Final employment forecasts were reviewed by city of Salem staff for any further exclusions or modifications. The resulting employment forecast is shown in **Table A-15**.

	2021	2050
Salem Total Employment	**109,141**	**133,611**

Table A-15 Salem UGB only, Employment Forecast

Employment Allocation for Turner and Remainder of SKATS

The forecast for the city of Turner, and the area outside of the Salem-Keizer UGB was also developed with input from local staff. The employment forecasts target number for each geography was calculated by using the population forecast growth rate. Employment growth for Marion County is 707. Polk County is 195, and Turner is 143 as illustrated in **Table A-16**. In GIS, commercial and industrial taxlots were identified as vacant and partially vacant, and employment densities were applied to determine potential employment. The allocation was reviewed by planning staff.

	2021	Target employment 2050	Increase 2021-2050
Turner	637	780	143
Marion County	3,155	3,862	707
Polk County	869	1,064	195

Table A-16 Employment Forecasts Turner, and Marion and Polk Counties

A final step not shown here takes the employment allocated in GIS for Keizer, Turner and county land and merges it with the City of Salem *Our Salem* forecast data into employment types by transportation analysis zones (TAZs) for input into the travel model.

Appendix B – Bibliography

Contained within this appendix is a list of all the plans and documents used as resources for the development of this plan. Documents that informed the discussion of each chapter and appendix are presented.

Federal Documents

- MAP-21 (2012)
- FAST Act (2016)
- Infrastructure Investment and Jobs Act of 2021 (2021)
- Congestion Management Process (CMP) guidance documents
- Performance-based Planning guidance documents
- Intelligent Transportation System (ITS) guidance documents
- U.S. DOT Climate Action Plan, August 2021

State Plans

Oregon Department of Transportation

- Oregon Transportation Plan (Update underway for adoption in 2023)
- Oregon Highway Plan (1999, 2015) [Updated planned for 2023]
- Oregon Bicycle and Pedestrian Plan (2016)
- Oregon Public Transportation Plan (2018)
- Oregon Rail Plan (2020)
- Oregon Freight Plan (2017) [Minor update in process, 2022]
- Oregon Transportation Options Plan (2015)
- Oregon Transportation Safety Action Plan (2022)
- Oregon Statewide Transportation Strategy (2013)
- Oregon STS Implementation Plan (202x)
- Climate Action Plan (2021)
- Adaption Vulnerability/Risk Assessment and Operational Roadmap (2021)
- Transportation Asset Management Plan (2022)
- Final Environmental Impact Statement and Record of Decision for the Oregon Corridor Investment Plan (2021) [*Cascades* passenger rail]
- Transportation Electrification Infrastructure Needs Analysis (2021)

Other

- *The Oregon Resilience Plan*, Report to the 77th Legislative Assembly, Oregon Seismic Safety Policy Advisory Commission, February 2013.

State Regulations

Oregon Department of Land Conservation and Development

- Transportation Planning Rule (2022 update)

Local Plans

- Keizer
  - Keizer Transportation System Plan (2008 Update w/ 2014 revisions)
  - Keizer Comprehensive Plan (20xx)
  - Keizer Housing Needs Analysis (2019)
- Salem
  - Salem Transportation System Plan (20xx Update)
  - *Our Salem* (2022)
  - Salem Comprehensive Plan (2022)
  - Salem Bike/Walk Plan (2012)
  - Salem Stormwater Master Plan (2000) and basin updates (2019)
  - Salem Park Master Plan (20xx)
  - Salem Tree Canopy Assessment Report (2019)
  - Salem Climate Action Plan (2021)
  - Salem Airport Strategic Business Plan (2019)
- Turner
  - Turner Transportation System Plan (1999, Update planned for 2023)
- Marion County
  - Marion County Transportation System Plan (2005, Update planned for 2023)
  - Brooks Hopmere Community Plan (2019 or 2020)
- Polk County
  - Polk County Transportation System Plan (2008 Update)
- Salem Area Mass Transit District
  - Long-Range Regional Transit Plan (2022)
  - Human Services – Public Transit Plan (2016)
  - Better Cherriots (20xx)
  - Transit Asset Management Plan (2019)
  - Transit Safety Plan (2020)

Supporting SKATS Plans

- Metropolitan Intelligent Transportation Systems (ITS) Plan (2005 – project list updated 2021)
- Congestion Management Process (2022)
- Public Participation Plan (2021)
- Consultation Process for … (2021)
- Regional Transportation Safety Action Plan (in development)
- Metropolitan Transportation Improvement Program (2023 – in development)

Chapter & Appendix

Chapter 1 – Introduction

- Fifth Oregon Climate Assessment, Oregon Climate Change Research Institute. 2021 https://blogs.oregonstate.edu/occri/oregon-climate-assessments

Chapter 8 and Appendix E

- Data from USDA on access to grocery stores, etc.

Appendix R

- The 'resilience triangle' is from Wang, Y., Bartlett, S.F., and Miles, S.B. *Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub.* Oregon Department of Geology and Mineral Industries, August 2012. Quoted in the *Oregon Resilience Plan* (2013).
- Heat-related reading:
    - https://www.theverge.com/2021/7/5/22559961/heat-roads-washington-oregon-climate-infrastructure
    - https://www.fastcompany.com/90651986/extreme-heat-is-becoming-more-frequent-and-our-infrastructure-is-going-to-need-to-adapt
    - https://www.wweek.com/news/city/2021/07/14/this-is-the-hottest-place-in-portland/
- Deploying Transportation Resilience Programs in State DOTs, TRB 2021
- U.S. DOT Climate Action Plan, August 2021
- *City of Salem Natural Hazards Mitigation Plan*, Oregon Partnership for Disaster Resilience, June 2012
- *Investing in Transportation Resilience: A Framework for Informed Choices*. National Academies of Sciences, Engineering, and Medicine 2021. Washington, DC: The National Academies Press. https://doi.org/10.17226/26292.

Appendix C – Project Evaluation Process

As part of the update to the SKATS Regional Transportation Systems Plan (RTSP) to cover the years 2019 to 2043, the project evaluation process was reviewed. With the passage of MAP-21 (Moving Ahead for Progress in the 21st Century) in 2015, a new requirement was introduced for state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) to use an outcomes-based performance-based planning and programming approach in developing their long-range plans and short-range improvement programs. Federal regulations require all long-range plans and transportation improvement programs (TIPs) adopted or amended after May 27, 2018, to use these methods (see 23 CFR 450.300 et seq). The 2019-2043 RTSP was the first update since this requirement took effect. The projects selected for the long-range plan and the TIP must demonstrate that they help our area make progress on the performance measure targets, which in the case of SKATS is to support ODOT's targets for safety, pavement and bridge condition, system performance, and SAMTD's targets for transit state of good repair and transit safety, and to make progress on the targets set by SKATS for two system performance measures (see **Appendix P** for more information). In addition, the project evaluation process was revised to reflect this requirement and to better capture the link between the Goals of the Metropolitan Transportation Plan (MTP) and the projects. This revised process was used for the 2019-2043 RTSP update and has been modified to reflect the criterion selected by the SKATS Policy Committee at their August 23,2022 meeting for use in the 2023-2050 MTP update.

Criteria for Project Evaluation

The most straightforward way of showing how the plan's goals are used in the project selection process is to develop evaluation criteria for each goal in the MTP, these are shown in **Table C-1**. All projects are also required to have a recent cost estimate (in line with Goal 8) and be in a local transportation systems plan (TSP) or equivalent or from a planning study, and thus have some previous public exposure and comment (Goal 10 – Public Involvement).

For all but the safety criterion, scoring is "1" if the project meets the criteria, and "0" otherwise. For the safety criterion, the Policy Committee directed that projects that provide facilities to increase the safety of vulnerable users (people walking, biking, etc.) be given a score of "2", other safety projects a score of "1", and if the project does not address a safety location or issue a score of "0".

Table C-1: Project Criteria and Associated Goal(s)[1]

	Criteria	Goal(s) Addressed
1	Increases the miles of pavement in travel lane that are ranked "good"	2
2	Increases the number of bridges that are ranked "good"	2, 3
3	Enhances transit service or operations	3, 6
4	Reduces a gap in a regional system	1, 5, 6, sometimes 3
5	RESERVED FOR FUTURE USE	
6	Addresses freight movement impediment on designated CUFC	3, 5, 9
7	Increase access to employment center or jobs	1, 4, 9
8	Project improves transportation options in an EJ Area	4
9	Addresses a known safety location/issue	3
10	Addresses a bottleneck along a corridor	1, 3, 5

Weighting the Projects

At their August 2022 meeting, the SKATS Policy Committee, after discussing the options for weighting the projects proposed for inclusion in the SKATS 2023-2050 Metropolitan Transportation Plan, directed staff to use a weighting scheme that shows the focus and intent of projects in the region to support the Goals of the MTP. This weighting scheme follows the weighting used in the SKATS 2019-2043 RTSP. The Policy Committee assigned a weight to each of these as illustrated in **Table C-2** below.

Table C-2: Criteria and Weights used for Evaluating Projects

Criteria	Weight / Multiplier
Safety	4
Enhancing Transit Service or Operations	3
Reducing a Gap in a Regional System	3
Addressing a Bottleneck	3
Contiguous to adjacent project from another jurisdiction	1
All other criteria[2] (each)	1

The revised evaluation calculation was applied to the 263 projects that were initially identified to be considered for the SKATS 2023-2050 MTP[3]. The results were used along with the reasonably anticipated revenue available to each jurisdiction and SKATS (as discussed in **Chapter 6 – Finance**) along with the estimated project cost to develop an initial financially constrained project list. The process used to develop this list is

[1] The criteria are in the same order as the objectives listed on the evaluation sheets.

[2] All Other Criteria: Increases miles of pavement in travel lane(s) ranked "Good"; Increases the number of bridges that are ranked "good"; Addresses freight movement impediment on designated Critical Urban Freight Corridors; Increases access to regional employment center or jobs; Project is likely to improve facilities in an Environmental Justice area.

[3] Projects listed in the Project Database as either "Committed", "Included", "Illustrative", or "Proposed".

presented in the remainder of this appendix, with the final table of projects shown in **Table 7-3**.

Determining an Initial Draft Financially Constrained Project List

After the projects have been evaluated and then scored using the weighting scheme, the next step is to determine which projects could be included in the financially constrained project list for the SKATS 2023-2050 MTP. The methodology used is similar to the process used in previous updates to the RTSP but uses the weighed evaluation score discussed above. This is a multi-step process where the projects for each SKATS member are first considered using the identified funds available to that jurisdiction or agency (i.e., Keizer funds are used for Keizer projects), and then SKATS funds are used for the remaining projects as available.

> It should be noted that this methodology is used ***solely*** as a matter of expedience; in no way is it implied that a specific project is guaranteed to receive any of federal funds that SKATS may receive in the future. It is also not meant to imply that a project must be funded only by a local funds. The specifics of funding a particular project is decided when the project is closer to implementation (either when it enters a local jurisdiction's Capital Improvement Program or the SKATS Transportation Improvement Program (TIP).

The process used by SKATS staff is outlined below:

1) Filter the project list for a particular jurisdiction (e.g., Marion County).
2) Sort the resulting table by the evaluation score (highest to lowest).
3) Sort the table to ensure the projects identified by the jurisdiction are a priority or are part of the included list.
4) Sum the project cost for projects (from highest evaluation score to lowest) until the total cost are equal to or less than the forecasted revenue for that jurisdiction. This summation is for groups of projects with the same evaluation score.
    a. If all the projects with the same evaluation score can be funded given the jurisdiction's forecasted revenue, they are designated as "Funded." If the amount of revenue available will only cover a portion of the projects with the same evaluation score, then all the projects that fall into this category are designated as "On the Bubble."
        i. Determination of which of these projects should be funded will take place at the next stage.
    b. All the remaining projects, i.e., those with evaluation scores that are lower than those projects "On the Bubble," are initially designated as "Below the Bubble."
5) Repeat for each jurisdiction.
6) After completing this for each jurisdiction, all the projects in the "On the Bubble" list are sorted by score and funds allocated. Discussion with TAC members ensure that highest priority projects receive funds first.
7) The resulting project list is reviewed by the TAC and Policy Committee, and any modifications are made as necessary.

An illustration of this is provided below (**Figure C-1**). In this example, the jurisdiction has 30 projects with a total estimated cost of $45 million. The forecast for the funds that the jurisdiction will have reasonably available over 20 years is $10 million. Using this information and following the methodology outlined above, the five projects shown in green (with scores of 7 or 8) are considered "Funded." The 15 projects with a cost of $15 million and a score of 5 are all "on the bubble." Since all 15 projects received the same score from the evaluation of how they meet the criteria, they are all considered equal. Another method of determining which is most important must be used, or in this case, additional funds must be used (such as regional funds).

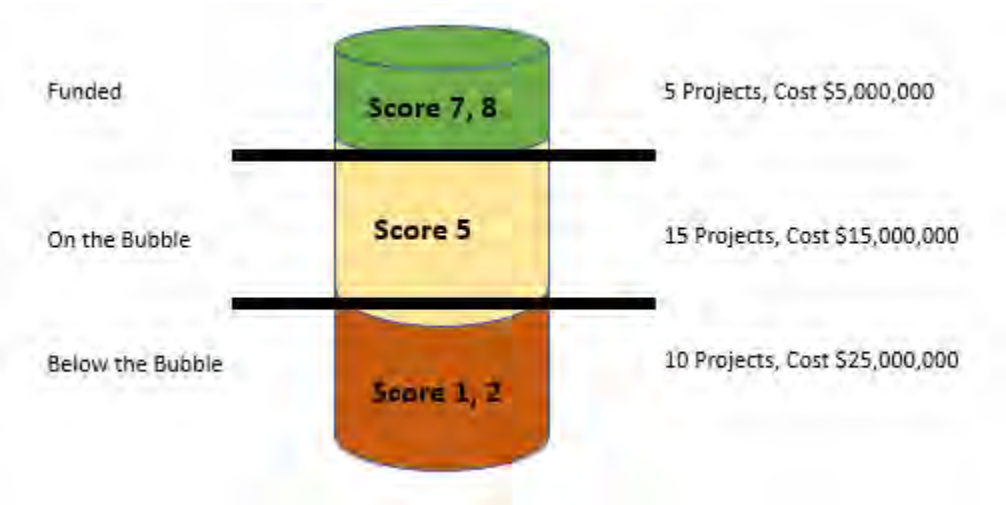


Figure C-1

For this update to the MTP, the process outlined above was followed with the initial results provided to the TAC members for their review to ensure that projects that are a local priority are included. This process was iterative, with a review by the Policy Committee of the results. Due to recent cost escalations, fewer projects were included in the financially constrained project list than the 2019-2043 RTSP. In total, there are 167 local projects and 22 ODOT projects, in the financially-constrained project list as shown in **Table 7-3**. There are 74 projects classified as "illustrative" (see **Appendix I**).

How the Criteria are Used to Evaluate Projects

The following documents how evaluation for each criterion is completed. Projects are compared to the characteristics of each criterion using the notes below.

- *Increases miles of pavement in travel lane(s) that are ranked "Good."*
  - Replaces travel lane pavement rated less than "Good" (Fair or Poor)
    - The assumption is that unless a road was paved recently, the pavement quality would be "Fair" at best.
  - Considers projects on all roads to align with HB 2017 reporting requirements
  - Further analysis needs to be done to determine existing pavement quality.
- *Increases the number of bridges that are ranked "Good."*

    - Replaces the bridge deck that is rated "Fair" or "Poor"
    - From *Baseline Performance Period Report (2018)* "A bridge can only move from poor to good condition if it is replaced. Repairing can move a bridge from poor to fair.
    - Consider projects on all roads to align with HB2017 data reporting requirements.
- *Enhances transit service or operations.*
    - If a project is not located along a transit route but provides information to the rider or to operations (such as automated vehicle location (AVL) devices for stop announcements and/or real-time arrival).
    - Located along a transit route and provides some benefit either for operations or for access to the stops.
        - This includes building sidewalks linking to the route or along the route.
- Operations can be helped by adding turn lanes and/or signals to allow better traffic flow. *Reduces (or completes) a gap in the defined regional system.*
    - A gap is one that has been identified in **Chapter 5** for either the regional bicycle system, regional pedestrian system, or regional signal interconnect system. Gaps have not been identified for the regional road system (except for known extensions of minor arterials and above) or the regional transit system.
- *Addresses freight movement impediment on the designated Critical Urban Freight Corridor (CUFC)*
    - The Critical Urban Freight Corridors have been defined and are shown in **Chapter 4** on **Map 4-2** and **Table 5-10** in **Chapter 5**.
- *Increases access to regional employment center or jobs*
    - Currently regional employment centers are defined as:
        - Salem CBD + Capital Mall area
        - Mill Creek Corporate Center
        - Salem Industrial area
        - Fairview Industrial area
    - Maps of employment clustering were used to define where high concentration of jobs are located.
- *Addresses a safety location/issue*
    - Safety locations will be/are defined by the number of crashes at an intersection or along a corridor. Locations with fatalities and/or serious injuries could be prioritized in future iterations.
    - TAC members were asked to consider which projects are meant to focus on safety issues/locations.
    - Process may be revised in future updates to the MTP as additional analyses is completed as part of the Metropolitan Transportation Safety Action Plan.
    - Projects receive a "2" if they include features that are likely to increase the safety of vulnerable users (e.g., sidewalks, bike facilities, etc.) and a "1" if the project otherwise addresses a safety location/issue,
- *Address a bottleneck along a corridor*
    - Bottlenecks are defined for freight in Chapter 5 and from the process described in the CMP.

        - Bottlenecks are currently limited to the regional road system used for CMP monitoring and analysis.
        - The list of bottlenecks will be consulted for the most congested locations.
- *Project is likely to improve transportation facilities within an EJ area*
    - EJ areas are defined as part of the Transportation Disadvantaged Report
    - "Likely to Improve" means a project provides new facilities, fixes a gap, is oriented toward a known safety issue/location.

Appendix D ~ Definitions

This appendix includes many of the acronyms that are related to transportation planning. An attempt has been made to spell out all acronyms as they are used in the document. In addition, for many of the terms used, additional detail is provided.

Transportation Planning Acronyms and Terms

ADA: *Americans with Disabilities Act.* Federal legislation defining the responsibilities of and requirements for transportation providers to make transportation accessible to individuals with disabilities.

ADT: *Average Daily Traffic*.

AQCD: *Air Quality Conformity Determination*. The process to assess the compliance of any transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.

Attainment Area: An area considered to have air quality that meets or exceeds the U.S. Environmental Protection Agency (EPA) health standards used in the Clean Air Act. Nonattainment areas are areas considered not to have met these standards for designated pollutants. An area may be an attainment area for one pollutant and a nonattainment area for others.

AVL: *Automatic Vehicle Location*. Typically used in transit buses, provides a mechanism to determine the location of each equipped bus. This information can be used to implement real-time transit arrival information at stations and on the web.

Bikeway: A facility designed to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities; they may be designed and operated to be shared with other travel modes.

BIL: *Bipartisan Infrastructure Law*. One of the many terms used for the Infrastructure Investment and Jobs Act of 2021. ***See IIJA***.

BBA: *Build a Better America*. One of the many terms for portions of the Infrastructure Investment and Jobs Act of 2021. ***See IIJA***.

BUILD: *Better Utilizing Investments to Leverage Development.* Federal discretionary grants program. Replaced TIGER in Federal Fiscal Year 2018. (***See TIGER***) Replaced by RAISE in 2021. (*See RAISE)*

CAAA: *Clean Air Act Amendments*. The original Clean Air Act was passed in 1963, but the national air pollution control program is actually based on the 1970 version of the law. The 1990 Clean Air Act Amendments are the most far-reaching revisions of the 1970 law.

The 1990 Clean Air Act is the most recent version of the 1970 version of the law. The 1990 amendments made major changes in the Clean Air Act.

CAC: *Citizen's Advisory Committee*.

C/AV: *Connected and Autonomous (Automated) Vehicle*

CBD: *Central Business District*.

CETAS: *The Collaborative Environmental and Transportation Agreement for Streamlining.* A group comprising of resource agencies facilitated by ODOT that is no longer in service.

CFA: Climate Friendly Areas. Defined as part of the process from the CFEC rulemaking.

CFEC: Climate Friendly and Equitable Communities.

CMAQ: *Congestion Mitigation and Air Quality Improvement Program*.

CMP: *Congestion Management Program*. Systematic process for managing congestion. Provides information on transportation system performance and finds alternative ways to alleviate congestion and enhance the mobility of people and goods, to levels that meet state and local needs. Initially known as the Congestion Management System, the term was changed in the SAFETEA-LU legislation. The requirement was extended to all MPOs with a population of 200,000 or more. Provided as a separate document.

CNG: *Compressed Natural G*as.

CO: *Carbon Monoxide*. Pollutant covered under the Clean Air Act.

CO_2: *Carbon Dioxide.* Also abbreviated as CO2.

CRP: *Carbon Reduction Program*. One of the new programs introduced in IIJA, focused on providing funds for projects that reduce transportation-related carbon dioxide emissions.

CTPP: *Census Transportation Planning Package*.

DEQ: *Department of Environmental Quality* (State of Oregon).

DLCD: *Department of Land Conservation & Development* (State of Oregon).

EIS: *Environmental Impact Statement*. Report developed as part of the National Environmental Policy Act requirements, which details any adverse economic, social, and environmental effects of a proposed transportation project for which federal funding is being sought. Adverse effects could include air, water, or noise pollution; destruction or disruption of natural resources; adverse employment effects; injurious displacement of people or businesses; or disruption of desirable community or regional growth.

EMME: Computerized Transportation Modeling Software. Software that is used for planning the urban and regional transportation of people through transportation demand modeling and network analysis and evaluation. Often referred to by the version of the software, e.g., EMME/2 and EMME 4.

EMP: *Expressway Management Plan*.

EJ: *Environmental Justice.* The concept of environmental justice, derived from Title VI of the Civil Rights Act of 1964 and other civil rights statutes, was first put forward as a national policy goal by presidential Executive Order 12898 issued in 1994. It directs "each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

EPA: *Environmental Protection Agency*.

EPRS: *Enhanced Passenger Rail Service*.

FAST: *Fixing America's Surface Transportation.* Five-year federal surface transportation legislation from 2015-2020. Extended by Continuing Resolution through FY 2021. Replace by IIJA. Successor to MAP-21. Essentially a continuation of MAP-21 in terms of policy and funding level. (***See also ISTEA, TEA-21, SAFETEA-LU, MAP-21, and IIJA.***)

FASTLANE: *Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies.* Grants distributed by the Federal Highway Administration for freight related projects. Created with the passage of FAST, for the Federal Fiscal Years 2016 to 2020. Replaced by INFRA in 2017. ***(See INFRA)***

FFY: *Federal Fiscal Year*. Runs from October 1st until September 30th of the following year.

FHWA: *Federal Highway Administration*.

FRA: *Federal Railroad Administration*.

FTA: *Federal Transit Administration*.

GHG: *Greenhouse gases.* Including CO_2, methane (CH_4) among others.

GIS: *Geographic Information System*. Computer software that allows for analysis and display of geographically referenced information. Examples include ESRI's ArcMap and the open-source program QGIS.

HOV: *High-Occupancy Vehicle (carpool, train, bus, etc.)*.

HSIP: *Highway Safety Improvement Program*

HTF: *Highway Trust Fund*. Repository of most of the revenue collected from federal gas tax, diesel tax, tax of truck tires and other revenue sources for use in funding surface transportation projects.

IGA: *Intergovernmental Agreement*.

Illustrative: Refers to a project that may be included in the RTSP if additional funding were available. Projects on the "illustrative" list are not included in any determination of air quality conformity and need the RTSP to be amended to include them.

IIJA: *Infrastructure Investment and Jobs Act of 2021.* Federal act that includes the *Surface Transportation Reauthorization Act of 2021* and funding for other infrastructure items, such as broadband internet and drinking water. There are many monikers used for this Act or portions of it, including: BIL, BBA, and IIJA. Successor to FAST, continuing many of the policies and funding programs. Introduced several funding programs for climate change and resiliency. There is approximately $1.2 trillion available for the entire bill. (***See also ISTEA, TEA-21, SAFETEA-LU, MAP-21, and FAST***)

INFRA: *Infrastructure for Rebuilding America*. Federal discretionary program that replaced **FASTLANE** in 2017. (***See FASTLANE).***

ISTEA: *Intermodal Surface Transportation Efficiency Act*. Signed into law in 1991, valid 1991 to 1997. Federal legislation that provides funding and regulations for transportation planning using federal funds in metropolitan areas. Legislative initiative by the U.S. Congress that restructured funding for transportation programs. ISTEA authorized increased levels of highway and transportation funding from FY 92-FY 97 and increased the role of regional planning commissions/MPOs in funding decisions. The Act also required comprehensive regional and statewide long-term transportation plans and places an increased emphasis on public participation and transportation alternatives. (***See also TEA-21, SAFETEA-LU, MAP-21, FAST, and IIJA.***)

ITS: *Intelligent Transportation System*. The application of advanced technologies to improve the efficiency and safety of transportation systems. SKATS Regional ITS Architecture Plan provides the regional guiding document for implementing ITS projects within the Salem-Keizer metropolitan area.

Land Use: Refers to the manner in which portions of land or the structures on them are used, i.e., commercial, residential, retail, industrial, etc.

Land Use Plan: A plan that establishes strategies for the use of land to meet identified community needs.

LOAC: *Local Officials Advisory Committee*.

LOS: *Level of Service*. A qualitative assessment of a road's operating conditions used by transportation officials which reflects the relative ease of traffic flow on a scale of A to F, with free-flow being rated LOS-A and congested conditions rated as LOS-F.

Metropolitan Planning Area (MPA): The geographic area in which the metropolitan transportation planning process required by 23 U.S.C. 134 and section 8 of the Federal Transit Act (49 U.S.C. app. 1607) must be carried out.

MAP-21: *Moving Ahead for Progress in the 21st Century.* Signed into law 2012, valid from 2012 to 2014. This was the federal surface transportation legislation that replaced SAFETEA-LU. Unlike the legislation that came before it, MAP-21 was a two-year bill, running from 2012 to 2014. It introduced performance measures to track investments and outcomes on the national system. Many of the funding programs were reformed or removed with the enactment of MAP-21. Replaced by the FAST Act in 2015. (***See also ISTEA, TEA-21, SAFETEA-LU, FAST, and IIJA***.)

MPO: *Metropolitan Planning Organization* (such as SKATS).

1) Regional policy body, required in urbanized areas with populations over 50,000, and designated by local officials and the governor of the state. Responsible in cooperation with the state and other transportation providers for carrying out the metropolitan transportation planning requirements of federal highway and transit legislation.
2) Formed in cooperation with the state, develops transportation plans and programs for the metropolitan area. For each urbanized area, a Metropolitan Planning Organization (MPO) must be designated by agreement between the Governor and local units of government representing 75 percent of the affected population (in the metropolitan area) including the central cities or cities as defined by the Bureau of the Census, or in accordance with procedures established by applicable State or local law (23 U.S.C. 134(b)(1)/Federal Transit Act of 1991 Sec. 8(b)(1)). (FHWA2).

MTP: *Metropolitan Transportation Plan*. The current moniker for the federally required 20+ year transportation plan. Previously RTSP. (***See RTSP)***

MWACT: *Mid-Willamette Valley Area Commission on Transportation.*

MWVCOG: *Mid-Willamette Valley Council of Governments*.

NAAQS: *National Ambient Air Quality Standards*.

NEPA: *National Environmental Policy Act of 1969*.

NHPP: *National Highway Performance Program*

NHS: *National Highway System*.

NO_2: *Nitrogen Dioxide*. Also abbreviated as NOX, oxides of nitrogen, a pollutant covered under the Clean Air Act.

O & D: *Origin and Destination*.

ODOT: *Oregon Department of Transportation*.

OHP: Oregon Highway Plan. One of the modal plans that implements the policies of the OTP. Produced by ODOT.

OMAP: *Oregon Medical Assistance Program*.

OTP: *Oregon Transportation Plan*. This is a long-range policy-oriented transportation document produced by ODOT.

Paratransit: Comparable transportation service required by the American Disabilities Act for individuals with disabilities who are unable to use fixed route transportation systems.

PC: *Policy Committee*. Committee that represents the legal embodiment of the SKATS MPO. Determines policy direction and allocation of federal funds received by the MPO. Comprised of representatives from the local jurisdictions and organizations.

P & E: *Population and Employment*.

PEA: *Planning Emphasis Area*. Defined by the Federal Highway Administration as focus areas for MPOs and state DOTs to consider when making places and funding programs and projects.

PIP: *Public Involvement Plan*. Superseded by the Public Participation Plan (PPP).

PL: *Metropolitan Planning Funds* (federal money provided to the MPO). These are the primary source of funding for metropolitan planning designated by the FHWA.

PM-2.5: *Particulate Matter (less than 2.5 micrometers).* Pollutant covered under the Clean Air Act.

PM-10: *Particulate Matter (less than 10 micrometers)*. Pollutant covered under the Clean Air Act.

PMT: *Project Management Team*

PPP: *Public Participation Plan*. Document that details the public involvement process for the plans developed by SKATS (i.e., RTSP and TIP). Replaces the PIP and is required by federal legislation, SAFETEA-LU.

PROTECT: *Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation.* One of the new programs introduced in IIJA. Funding is available as both a formula and competitive grant.

RAISE: *Rebuilding American Infrastructure with Sustainability and Equity.* Grant program from US DOT that replaced BUILD in 2021. (***See BUILD***)

RBS: *Regional Bicycle System*. One component of the regional transportation network.

ROCR: *Regional Operational Characteristics Report.* Previously a printed document, this is moving to a dedicated web page.

RTSP: *Regional Transportation Systems Plan*. Moniker used for the long-range (20+ year) plan identifying all transportation modes in an urban area. Required by federal transportation legislation. (***See MTP).***

SAFETEA-LU: *Safe Accountable Fair Efficient Transportation Equity Act – A Legacy Act for Users*. Signed into law in August 2005, valid 2005 to 2009. Federal legislation that provides funding and regulations for transportation planning using federal funds in metropolitan areas. (***See also ISTEA, TEA-21, MAP-21, FAST, and IIJA.***)

SAMTD: *Salem Area Mass Transit District.* Provides public transportation in the Salem-Keizer urban area. Locally known as "Cherriots." Also uses the acronyms SKT and SKTD.

SIP: *State Implementation Plan for Air Quality*.

SKATS: *Salem-Keizer Area Transportation Study*. The metropolitan planning organization for the Salem-Keizer-Turner urban area.

SKTD: *Salem Keizer Transit District*. Provides public transportation services in the Salem-Keizer urban area. Locally known as "Cherriots." Also uses the acronym SKT and SAMTD.

SOV: *Single-Occupant Vehicle*.

SPR: *State Planning and Research*.

SRTS: *Safe Routes to School*.

SSSP: *System Safety and Security Plan*

STBGP: *Surface Transportation Block Grant Program.* Federal-aid highway funding program that funds a broad range of surface transportation capital needs, including many roads, transit, sea and airport access, vanpool, bike, and pedestrian facilities. Renaming of STP with the passage of FAST.

STBGP-U: *Surface Transportation Block Grant Program – Urban*. (***See STBGP***)

STIF: *State Transportation Investment Fund.*

STIP: *Statewide Transportation Improvement Program*. A staged, multi-year, statewide, intermodal program of transportation projects, consistent with the statewide transportation plan and planning processes as well as metropolitan plans, **TIP**s, and processes.

STP: *Surface Transportation Program*. Federal-aid highway funding program that funds a broad range of surface transportation capital needs, including many roads, transit, sea and airport access, vanpool, bike, and pedestrian facilities.

STP-U: *Surface Transportation Program – Urban*. Federal funding program. (***See STP***.)

SRTA: *Surface Transportation Reauthorization Act of 2021.* Part of IIJA, with over $350 million available over five-years from Federal Fiscal Year (FFY) 2022 until FFY 2026*.* Also referred to as the Bipartisan Infrastructure Law (BIL).

TA: Transportation Alternative set aside program. Federal funding program for alternative modes.

TAC: *Technical Advisory Committee*. Committee composed of staff members from the member jurisdictions and agencies of SKATS. Provides oversight on technical matters to SKATS staff.

TAM: *Transit Asset Management.* Requirement for transit agencies to create and maintain a TAM plan describing how they will manage, maintain and replace their infrastructure. Commonly pronounced as the "TAM Plan".

TAZ: *Transportation Analysis Zone*. Used to partition an area into smaller, more manageable geographic areas to facilitate determining the traffic demand when modeling.

TCM: *Transportation Control Measure*.

TDM: *Transportation Demand Management*. Programs designed to reduce demand for transportation through various means, such as the use of transit and of alternative work hours.

TDP: *Transit Development Program*.

TEA-21: *Transportation Equity Act for the 21st Century*. Signed into law in June 1998, valid 1998 to 2003. Authorized in 1998, TEA-21 authorized federal funding for transportation investment for fiscal years 1998-2003. Approximately $217 billion in funding was authorized, which was used for highway, transit, and other surface

transportation programs. (***See also ISTEA, SAFETEA-LU, MAP-21, FAST, and IIJA.***)

TGM: *Transportation & Growth Management*. Joint **ODOT/DLCD** grant program.

TIGER: *Transportation Investment Generating Economic Recovery.* Federal discretionary grants program created with the 2009 Recovery Act. Funds were distributed through Federal Fiscal Year 2017. (***See BUILD.)***

TIP: *Transportation Improvement Program*. A document prepared by a metropolitan planning organization that lists projects to be funded with **FHWA/FTA** funds for the next one- to three-year period.

TMA: *Transportation Management Area*.

1) All urbanized areas over 200,000 in population, and any other area that requests such designation.
2) An urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the **MPO** (or affect local officials), and officially designated by the Administrators of the **FHWA** and the **FTA**. The TMA designation applies to the entire metropolitan planning area(s). (23 CFR 500)

TMA: *Transportation Management Association*. None currently exist within Salem-Keizer

TOD: *Transit Oriented Development*.

TPR: *Transportation Planning Rule* (implementing State Land Use Goal 12). Many sections were revised to respond to Executive Order 20-04 (which focused on addressing climate change) and codified in 2022.

TSM: *Transportation Systems Management*. These are programs designed to optimize the use of the existing transportation infrastructure.

TSP: *Transportation Systems Plan*. Long-range transportation plan identifying and guiding transportation projects in an area. Each city, county, and MPO produces a TSP. Frequency of updates depend on the individual jurisdiction or organization.

UGB: *Urban Growth Boundary*. A UGB is a legal boundary that separates rural areas from urban areas. UGBs are designed to encourage development in existing urban areas and preservation of land outside the boundary. Each city or metropolitan area in Oregon has an UGB defined.

UPWP: *Unified Planning Work Program*. Produced yearly, it discusses the projects the MPO will work on during a particular year.

Urbanized Area: Area that contains a city of 50,000 or more population plus incorporated surrounding areas meeting size or density criteria as defined by the U.S.

Census.

USDOT: *United States Department of Transportation*. FHWA and FTA are part of this department.

V/C: *Volume/Capacity Ratio*. Common output from travel demand modeling software, this provides the ratio of the demand, or volume, on a roadway segment to the defined carrying capacity of that segment. This ratio provides another means of determining how the regional road network is operating. Ratios above 1.0 are considered to represent gridlock. It also represents that the demand will likely 'spread out' into the surrounding hours of the day.

VHD: *Vehicle Hours of Demand*

VHT: *Vehicle Hours of Travel*

VISUM: Computerized Transportation Modeling Software. Software that is used for planning the urban and regional transportation of people through transportation demand modeling and network analysis and evaluation.

VMT: *Vehicle Miles of Travel*.

WaMUAs: Walkable, Mixed Use Areas – nomenclature used by Salem and Keizer instead of CFA. See *CFA* and *CFEC*.

WFH: *Work from Home*

WTW: *Welfare to Work*.

Appendix E – Environmental Justice Analysis

Background

The concept of environmental justice, derived from Title VI of the Civil Rights Act of 1964 and other civil rights statutes, was first put forward as a national policy goal by presidential Executive Order 12898 issued in 1994. It directs "each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Drawing from this framework, the U.S. Department of Transportation[1] established three principles to ensure nondiscrimination in federally funded activities:

- Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects — including social and economic effects — on minority populations and low-income populations.
- Ensure full and fair participation by all potentially affected communities in transportation decision-making processes.
- Prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

The direction from FHWA is to conduct environmental justice analysis to mitigate disproportionately high and adverse effects of current planned transportation investments. This directive is the result of negative effects, both direct and indirect, that past planning and infrastructure development has had on low income and minority populations.

The Federal Highway Administration and the Federal Transit Administration have renewed their commitments to assure that environmental justice is carried out in the programs and strategies they fund including the transportation planning activities of metropolitan planning organizations like SKATS.

SKATS Approach to Environmental Justice

SKATS strives to incorporate fairness and equity into its transportation planning and programming. The 2023-2050 Metropolitan Transportation Plan (MTP) was developed to be consistent with the SKATS 2021 Public Participation Plan (PPP). The PPP identifies several strategies to involve traditionally underserved segments of the population in the transportation planning process through outreach activities during the development of the plan and in the public comment period. In addition to public outreach, SKATS has a

[1] Department of Transportation Environmental Justice Strategy (March 2, 2012) https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/dot_ej_strategy/index.cfm

multi-part approach to addressing environmental justice in the MTP, as part of project selection, Geographic Information System spatial analysis, and outreach.

Definition of Environmental Justice (EJ) population areas

SKATS uses census tracts as the geographic building block to identify the location of minority and low-income populations for environmental justice analysis. Minority populations include people who are Black/African American, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and Native Hawaiian and other Pacific Islander, or any combination of two or more races. Low-Income populations for this environmental justice analysis are defined as those living below the poverty level as determined by the U.S. Census Bureau. The poverty level is based on multiple criteria including income levels and family size and composition (age of head of household and number of children)[2].

The regional average within SKATS for the low-income population is 14.4 percent; and the regional average of the minority population is 33.5 percent, from the 2016-2020 American Community Survey data.

EJ populations were determined first by selecting census tracts with twice the regional average of either minority population or low-income populations. This resulted in six census tracts. Second, the average population density within the Salem-Keizer Urban Growth Boundary was determined and is 5.03 persons per acre. Census tracts with a population density higher than the average, in addition to being above or near the regional average in either minority or low-income populations were also included. This resulted in another 14 tracts. These resulting 20 census tracts are the areas with the largest and greatest concentration of low-income and minority populations and are considered as the EJ areas for analysis. This is a revised definition from that used four years ago and results in a smaller geographic area; however, it is also considered a better representation of the populations of concern.

Demographic Data

The diversity of the population within SKATS is shown in **Table E-1**, Hispanics are the largest component of the minority population at 25 percent.

[2] Poverty is determined for individuals and families, in 2020 an individual in poverty had annual income of less than $13,171, and a family of four less than $26,496. See the *Demographic Profile of Transportation Disadvantaged Population in the SKATS Area* (2022) for more details. Available at: https://www.mwvcog.org/programs/transportation-planning/skats/reports-and-data/

Table E-1: Racial and Ethnic Profile of the SKATS Area (Source: 2016-2020 ACS, Table B03002)

Total SKATS	**White alone**	**Minority and/or Hispanic**		*Hispanic*		*Black*	*American Indian and Alaska native*	*Asian*	*Pacific Islander*	*All other races, or 2 or more races*
276,588	181,384	95,204		68,297		2,577	2,063	7,003	3,334	11,930
	66%	34%		25%		1%	1%	3%	1%	4%

Outreach

Evaluating census data helped to augment the public outreach process. The areas with the highest percentage of low-income or minority populations are in East Salem. Due to the timing and overlap of the Transportation Improvement Program (TIP) and MTP updates, a joint kick-off public outreach approach was taken at the beginning of the MTP with the launch of a **SKATS Transportation Hub** website. This website features information about both the short- and long-range plans, update schedules, the role of the MPO, how to get involved and a sign-up widget to join an email list. The website has a translate option, and it hosted a survey on transportation issues and needs that was offered in both English and Spanish.

To promote the SKATS Transportation Hub site, 20,000 postcards were mailed in March 2022 to households with 7,500 of the postcards targeted to Environmental Justice areas (low-income and/or minority populations). To identify those neighborhoods, census data was used and census tracts with a poverty rate greater than 30 percent and Hispanic population greater than 45 percent were selected. The Hispanic population is the largest minority population in the Salem-Keizer area. Households within these identified census tracts received approximately 40 percent of the total mailers, with the balance distributed over the remaining SKATS geographic area. Postcards had information in both Spanish and English.

In September 2022 as the draft project list became available, additional targeted outreach by email and phone was conducted with approximately 20 organizations representing communities in East Salem, and communities of color, resulting in presentations and meeting attendance by staff.

Project Selection Criteria Approach

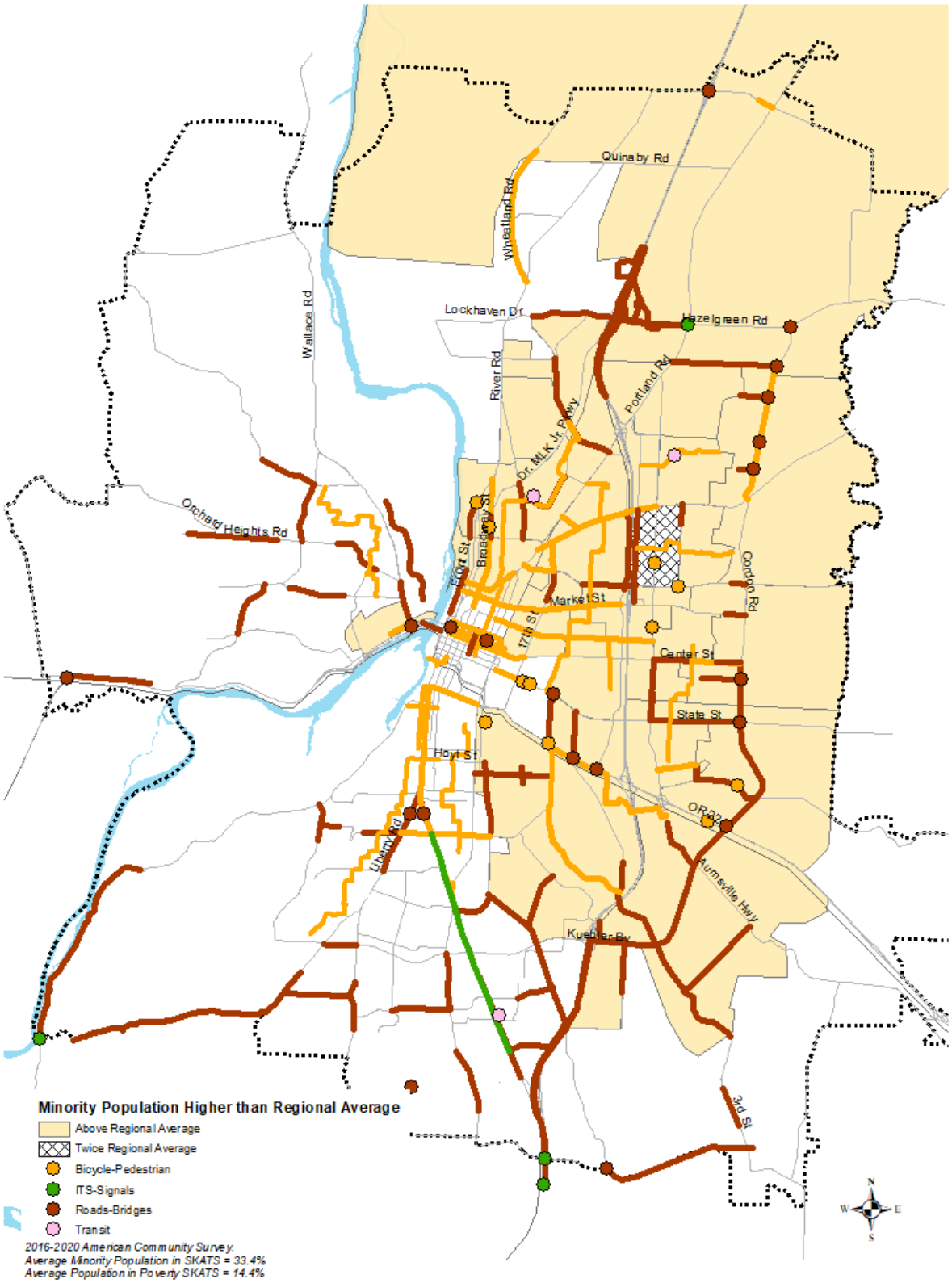
The first EJ assessment took place mid-plan development in the construction of the draft project list. A five-step process was developed for project evaluation and selection which included applying evaluation criteria to all potential projects, an initial list of over 250 projects. Nine criteria factors that reflected the goals and objectives of the MTP were applied, and each project was assigned a value of "1" to each criterion the project address

or a value of "0" to the criterion the project does not address. The safety criterion was revised for this update to give higher preference to projects that increase the safety of vulnerable users by assigning a value of "2" to those projects. A criterion is specifically included to reflect whether a project is in a census tract with higher than average minority populations or higher than average low-income communities. Projects were scored, evaluated, reviewed, and ranked for final review and inclusion by the Policy Committee. As the MTP is financially constrained, not all draft projects are included in the final adopted plan. Projects rank higher that meet more criteria. In this way, EJ considerations factored into the selection and inclusion of projects.

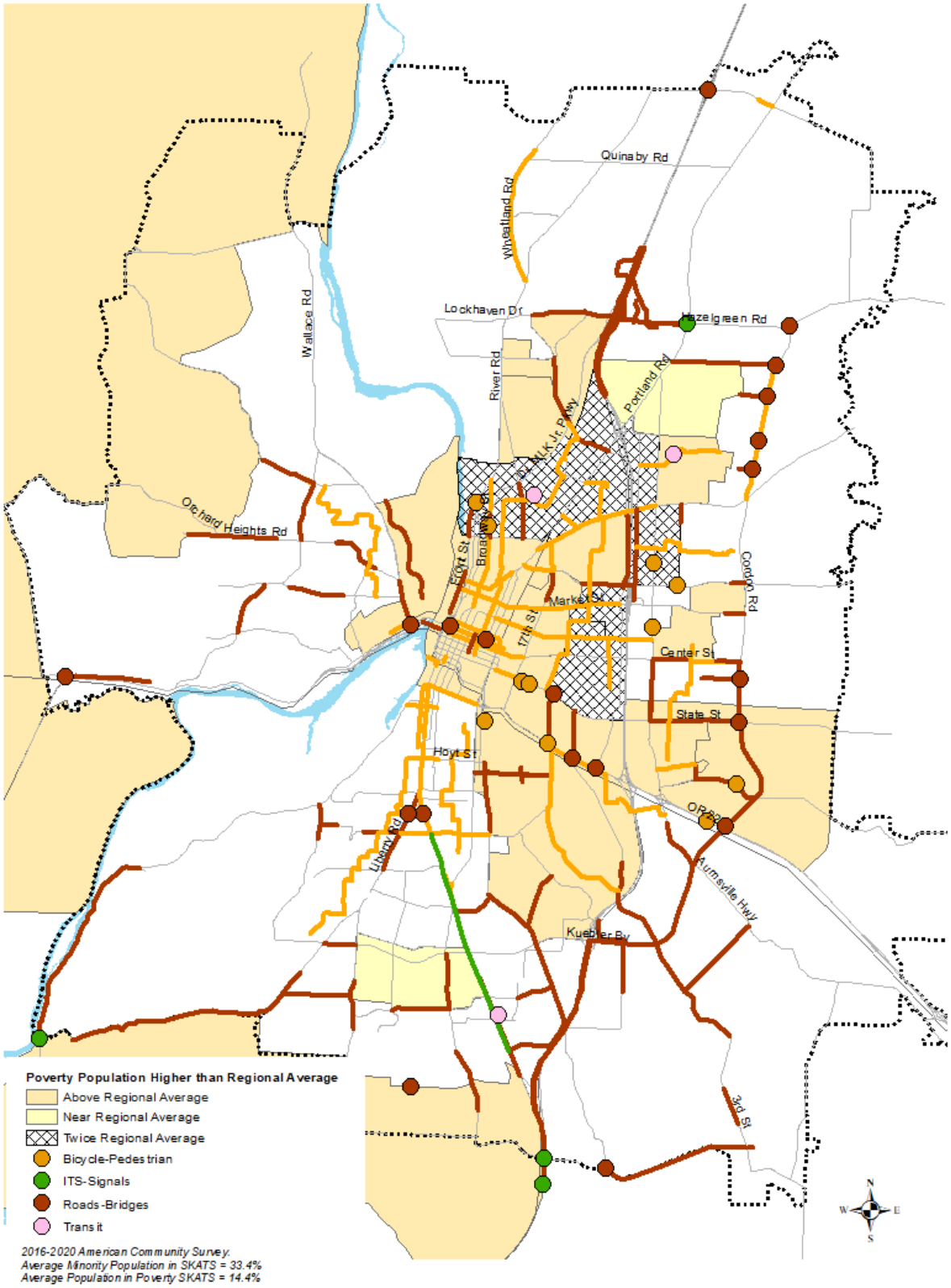
Spatial Analysis Approach

Secondly, environmental justice analysis is conducted as a spatial analysis using Geographic Information Systems (GIS) mapping tools. In GIS, the final list of projects (those with a geographic location specified) were evaluated to ensure federal transportation investments are proportionally funded and equitably located in areas with higher than average minority and low-income populations, determined to be EJ analysis areas.

For reference, the following two maps (**Map E-1** and **Map E-2**) show minority and low-income populations by census tract within SKATS. Also mapped are the location of all projects in the 2023-2050 MTP that have a geographic component. The shading for the census tracts on the maps shows indicates at or near the average, above average and twice the average. The middle interval aligns with the average for SKATS making it easier to see which areas fall clearly above the regional average. As with all census data, there are margins of errors associated with the estimates. For this tabular summary and associated maps, the percentage rates do not factor in those margins of error.



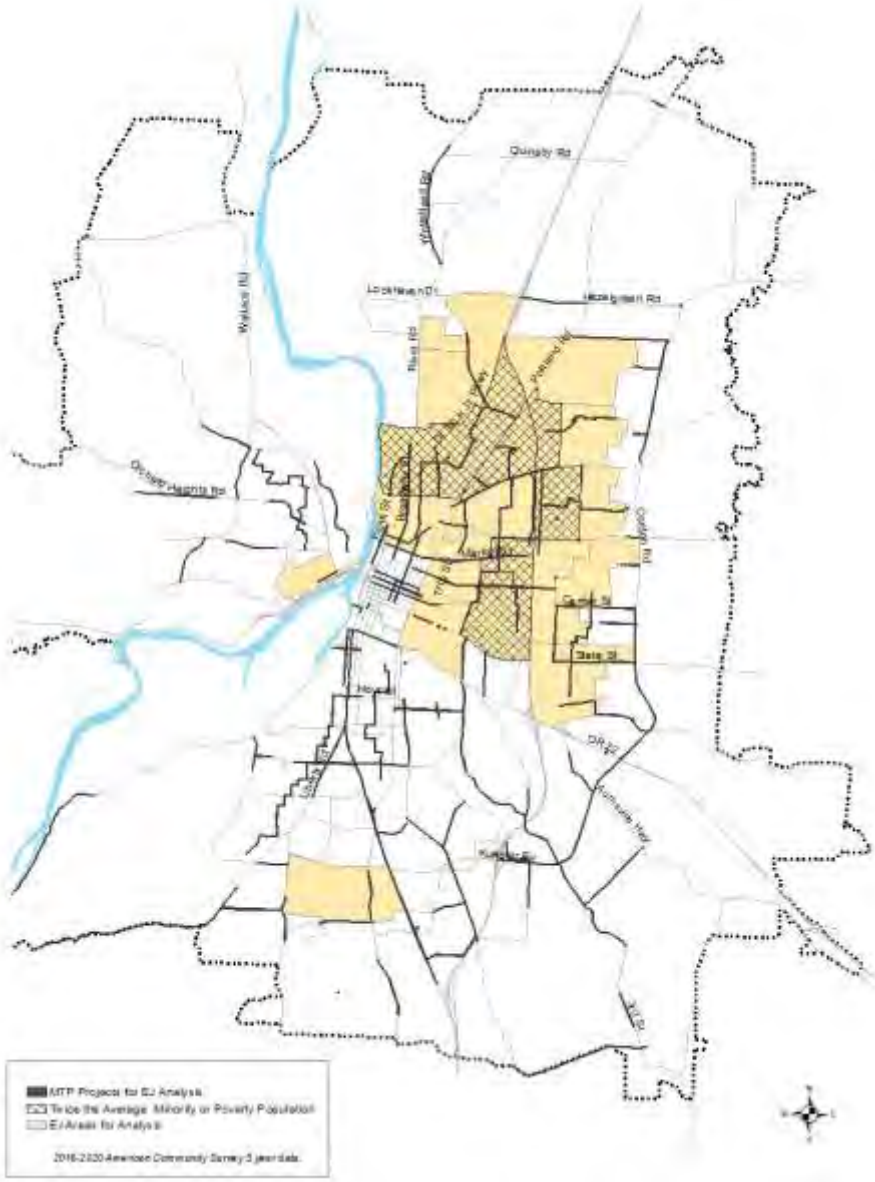
Map E-1: Minority Population in SKATS, with MTP Projects that can be Mapped



Map E-2: Low Income Population in SKATS, with MTP Projects that can be Mapped

Benefit and Burden Analysis Spatial Analysis

As described previously, the EJ areas for analysis were determined by a combination of population density and above average populations rates. For the spatial analysis, projects with a geographical location[3] were mapped over these EJ areas consisting of 20 census tracts. ODOT projects were excluded. Highlighted in **Map E-3** (in yellow) are the EJ population analysis areas with the MTP projects overlaid in black.



Map E-3: EJ Population Areas for Analysis and MTP Projects that can be Mapped (ODOT excluded)

[3] Not all projects have a geographic location and thus are not mappable. Also, planning study areas are not shown on the maps, and for this analysis ODOT projects were excluded.

In GIS, projects were overlaid to see if they fell in or out of the EJ population area. A project was considered inside if at least half of its length or area fell within. The results of this spatial analyses show the distribution of projects in GIS by type and whether they fall within or outside of an EJ population area (for those projects in the MTP that have a geographic component). ODOT projects were excluded. As shown in **Table E-2**, The number of projects located in EJ population areas is 35 percent. The EJ population represents 39 percent of the SKATS population, and six percent of the land area of SKATS. Estimated project costs of only mapped projects and excluding ODOT projects are also summarized. Projects located in EJ areas amount to 29 percent of the total estimated dollars**.** Unmapped projects total approximately $16.8 million.

Table E-21 Project Distribution in EJ Areas

Projects Falling Inside an EJ population Area*

Type of Project	Total Project Cost	Percent of Cost	Number of Projects	Percent of Projects	Percent of population	Percent of land area
Bicycle-Pedestrian	$ 88,258,000		25			
Roads-Bridges	$222,956,306		29			
Transit	$18,906,000		2			
Total	$ 330,120,306	29%	56	35%	39%	6%

***MTP projects that could be mapped, ODOT projects excluded**

As shown in **Table E-3**, The number of projects located in non-EJ population areas is 71 percent. The non-EJ population represents 61 percent of the SKATS population and 94 percent of the land area of SKATS. Estimated project costs of only mapped projects (and excluding ODOT) are also summarized. Projects located outside EJ areas amount to 71 percent of the total estimated dollars.

Table E-32 Project Distribution Non-EJ Area

Projects Falling Outside an EJ population Area*

Type of Project	Total Project Cost	Percent of Cost	Number of Projects	Percent of Projects	Percent of population	Percent of land area
Bicycle-Pedestrian	$101,842,000		28			
Roads-Bridges	$703,636,000		71			
Transit	$12,391,000		1			
ITS-Signals	$4,071,000		2			
Total	$821,940,000	71%	102	65%	61%	94%

***MTP projects that could be mapped, ODOT projects excluded**

The finding of this analysis is that population areas of low-income and minority residents are receiving approximately the same proportion of the number of projects overall, these projects reflect a smaller dollar amount than the percent of EJ population, but by geographic size the EJ area receives a proportionally larger number of projects. It should be noted that a more detailed analysis and outreach for projects proposed to get committed funding is done during the update of the SKATS Transportation Improvement Program (TIP).

Conclusion

SKATS' multi-phased approach to environmental justice has been designed to cover a wide breadth of analysis. Outreach efforts are employed and are regularly re-evaluated and improved to increase communication to low-income and minority populations at all phases of the plan development. Environmental justice considerations were incorporated into the project scoring, evaluation and selection for the finalized project list. Spatial analysis using GIS looked at physical project location and spending distribution in the community. This analysis found that SKATS' population areas of low-income and minority residents do not receive a greater share of the burdens from program and project investments relative to the area wide distribution. As all projects are assumed to improve safety conditions, the benefits of new projects are proportionally distributed over EJ and non-EJ communities comparable to their respective percent of populations.

Illustrative List of Projects

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
City of Keizer								
Illustrative								
K002	Chemawa Interchange	Add eastbound dual right-turn lanes to southbound ramp. Add westbound dual left-turn lanes to southbound ramp. Add southbound receiving lane to ramp. Cost reflects Keizer's obligation, majority paid by ODOT. See also K026 and Chemawa / I-5 IAMP related projects.	Chemawa Interchange with I-5	Roads-Bridges	2035	$550,000	$1,137,590	0-10 yrs
K021	River Rd at Manzanita St Intersection Realignment	Move intersection approximately 250 feet to the south. Reconstruct McNary Estates Dr and Manzanita St approaches. Construct separate westbound through and right-turn lanes. Likely built as development occurs, at least partially developer funded.	River Rd at Manzanita St and McNary Estates Dr	Roads-Bridges	2030	$2,700,000	$5,768,822	0-10 yrs
K022	Verda Ln Extension	Extend Verda Ln from Lockhaven Dr to River Rd. Construct with sidewalks, gutters and bike lanes. Connects to the revised River Rd / Manzanita St intersection (K021), and revised Lockhaven Dr / Verda Ln intersection (K023). Developer driven in conjunction with the surrounding property.	Verda Ln from Lockhaven Dr to River Rd.	Roads-Bridges	2030	$2,075,000	$4,433,447	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
K023	Lockhaven Dr / Verda Ln Intersection	Signalize the intersection of Lockhaven Dr and Verda Ln. Restrict north/south through movements on Verda Ln at Lockhaven Dr. Develop in conjunction with the Verda Ln extension (K022). Developer driven in conjunction with the surrounding property.	Lockhaven Dr at Verda Ln	Roads-Bridges	2030	$400,000	$854,640	0-20 yrs
K024	River Rd at Lockhaven Dr Intersection Modifications	Convert westbound approach to dual left-turn lanes, a single through lane, and a separate right-turn lane. Convert east/west split phasing to a more conventional protected left-turn phasing. Upon redevelopment of adjacent properties, implement access management measures for those driveways within the influence area of the signalized intersection.	River Rd at Lockhaven Dr	Roads-Bridges	2035	$500,000	$1,034,173	0-10 yrs
K026	On-Ramp to I-5 and Dr. MLK Jr Parkway	Widen the existing on-ramp from Chemawa Road to I-5 (SB) and Dr. MLK Jr Parkway (SB) from one lanes to two lanes. Requires coordination with ODOT. From the Keizer TSP (2014). See also K002. Cost reflects Keizer's contribution.	Chemawa Road on the on-ramp to southbound I-5 and southbound Dr. MLK Jr Parkway	Roads-Bridges	2035	$360,000	$769,176	0-20 yrs
City of Salem								
Illustrative								
S025	12th/13th St SE (Mission and Hoyt)	Traffic signal upgrade and interconnect (Mission and Hoyt)	12th and 13th St SE between Mission St SE and Hoyt St SE	ITS-Signals	2030	$1,150,000	$2,378,597	0-10 yrs
S027	25th Av SE: Mission St SE to Madrona St SE	Traffic Signal Interconnect	25th Ave SE from Mission St SE to Madrona Ave SE	ITS-Signals	2030	$150,000	$310,252	0-10 yrs
S033	Macleay Rd SE & Cordon Rd SE	Add left turn pockets on both eastbound and westbound approaches to Cordon Rd SE	Cordon Rd SE @ Macleay Rd SE	Roads-Bridges	2040	$411,000	$1,339,274	Unfunded

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
S046	Lancaster Dr SE: Hagers Grove Rd SE to Cordon Rd SE	Traffic signal interconnect	Lancaster Dr SE from Hagers Grove St SE to Cordon Rd SE	ITS-Signals	2025	$200,000	$400,454	0-10 yrs
S050	Madrona Av SE: Pringle Rd SE to Fairview Industrial Dr SE	Traffic signal interconnect	Madrona Ave SE from Pringle Rd SE to Fairview Industrial Dr SE	ITS-Signals	2030	$100,000	$235,518	0-20 yrs
S068	Broadway & Hood	Design and construction to replace the existing signal, add vehicle detection and pedestrian facilities, and update the controller cabinet and equipment. Work also includes construction of an eastbound left-turn pocket on Hood St NE.	Broadway @ Hood EB approach on Hood	Roads-Bridges	2025	$1,500,000	$1,906,380	0-5 yrs
S072	Byers St S to Deer Run S: Viewcrest Rd S to end of roadway	Widen to minor arterial standards including 2 travel lanes, turn lanes where appropriate, curbs, gutters, sidewalks and bike lanes.	Byers St S to Deer Run S: Viewcrest Rd S to end of Rdway	Roads-Bridges	2047	$1,977,000	$5,476,872	0-20 yrs
S076	Center St NE & 17th St NE	Widen Center St NE approaches to the intersection to add turn lanes	Center St NE at 17th St NE	Roads-Bridges	2040	$2,732,000	$8,902,424	Unfunded
S115	Liberty St & Pringle Creek	Bridge rehabilitation - scour and footing work	Liberty St SE at Pringle Creek	Roads-Bridges	2040	$1,300,000	$4,236,146	0-20 yrs
S129	Mildred Ln SE: Liberty Rd S to Skyline Rd S	Extend Mildred Ln SE westward to connect to Skyline Rd S creating an east-west minor arterial roadway south of Kuebler Bv.	Mildred Ln SE: Lone Oak Rd S to Skyline Rd S	Roads-Bridges	2028	$6,600,000	$12,792,822	10-20 yrs
S130	New Minor Arterial Street: Deer Run Av to River Rd S	Construct a new minor arterial street connection in the vicinity of Homestead Rd NW extending from Deer Run Av S to River Rd S.	New Minor Arterial Street: Deer Run Av to River Rd S	Roads-Bridges	2048	$3,271,000	$13,820,084	0-20 yrs
S149	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE	Install roundabout at Park Av NE, traffic signal at Lansing Av NE, and curbs, gutters, and sidewalks from Evergreen Avenue NE to Bryam Street NE.	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE	Roads-Bridges	2040	$2,466,000	$8,035,643	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
S153	Ten traffic signals at unspecified locations	10 signals in years 0 to 10	Unspecified	ITS-Signals	2033	$5,000,000	$8,239,309	0-10 yrs
S154	Ten traffic signals at unspecified locations	10 signals in years 10 to 20	Unspecified	ITS-Signals	2043	$5,000,000	$11,399,716	Unfunded
S188	Liberty Rd S & Madrona Av S	Widen intersection by adding northbound and southbound pockets on Liberty.	Liberty Rd S at Madrona Ave S	Roads-Bridges	2035	$2,728,000	$8,064,380	0-20 yrs
S196	Owens St SE: Liberty Rd S & Commercial St SE	Revise intersections to increase turning movement capacity to and from Commercial Street SE and Liberty Street SE.	Owens St SE from Libery Rd SE to Commercial St SE	Roads-Bridges	2045	$4,306,000	$16,504,531	0-20 yrs
S237	Croisan Creek Rd S: Heath St S to Kuebler Bv S	Add bike facilities. S087 for continuation.	Croisan Creek Rd S: Heath St S to Kuebler Bv S	Bicycle-Pedestrian	2040	$7,700,000	$16,994,736	0-20 yrs
S264	ITS - Metropolitan Video Deployment - Phase I	Add video cameras at intersections and other critical locations. See S264 and S265.	Hwy 22, Lancaster Dr, Commercial St, Kuebler Blvd/Cordon Rd, Salem Pkwy, I-5	ITS-Signals	2027	$1,960,000	$4,187,738	0-5 yrs
S265	ITS - Metropolitan Video Deployment - Phase II	Add video cameras at intersections and other critical locations. See S264 and S265.	River Rd N, Hawthorne Ave, Center St, Portland Rd	ITS-Signals	2035	$1,008,000	$2,792,457	0-10 yrs
S266	ITS - Metropolitan Video Deployment - Phase III	Add video cameras at intersections and other critical locations. See S264 and S265.	Wallace Rd, Chemawa Rd, Silverton Rd, Market St, Broadway St, 25th St, State St, 12th/13th St, Turner Rd, Liberty Rd S	ITS-Signals	2042	$1,000,000	$3,477,188	Unfunded
S268	ITS - Advanced Rail Warning System	Deploy RR crossing detection equipment. Info to be sent to 911 and NWTOC	Along UP and P&W rail lines in downtown Salem	ITS-Signals	2045	$190,000	$728,254	0-20 yrs
S270	ITS - Downtown Salem Parking Management	Provide real-time parking information in Salem's downtown. Message signs will be used to inform motorists. Installed at Chemeketa Parkade (2018-19?). Using hand readers for enforcement.	Downtown Salem	ITS-Signals	2035	$448,000	$1,241,092	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
S273	Portland Rd Interconnect	Signal interconnect on Portland Rd from Lana Av to Bill Frey Dr	Portland Rd NE from Lana Av NE to Bill Frey Dr NE	ITS-Signals	2030	$375,000	$883,193	0-20 yrs
S277	ITS - Adaptive Signal Timing Project	Deploy adaptive signal timing on selected corridors with the highest levels of congestion and the most fluctuation in volumes. Salem is upgrading their signal software to accommodate adaptive signals. ODOT has a project along Mission St that will be installed at three to five intersections.	TBD	ITS-Signals	2040	$1,400,000	$4,562,003	0-20 yrs
S290	Gaffin Rd SE	Widen Gaffin Rd to minor arterial standards from Cordon Rd east to western border of the Salem Renewable Energy and Technology Center.	Gaffin Rd SE from Cordon Rd SE to SRETC	Roads-Bridges	2032	$5,300,000	$11,697,676	0-20 yrs
S331	Convert Court St NE to two-way	Convert Court St NE from High St NE to 12th St NE to two-way. Includes modification of the traffic signals. Does not include bicycle facilities, which are provided by adjacent roads. From the Central Salem Mobility Study (2012). In FY2023 CIP for the Commercial St NE to High St NE section.	Court St NE from High St NE to 12th St NE	Roads-Bridges	2040	$850,000	$2,279,526	0-20 yrs
S332	Convert State St to two-way	Convert to State St to two-way including modifications to the traffic signals and adding bike lanes. Requires modifications to curb extensions. From the Central Salem Mobility Study (2012).	State St from Church St to 12th St	Roads-Bridges	2043	$1,400,000	$4,138,611	0-20 yrs

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
S334	Convert High St & Church St to two-way	Consider converting these two roads to two-way traffic with bike lanes. Requires modification to the traffic signals and curb extensions. Decision to proceed based on success of additional bike facilities in downtown and impacts to access in/out of transit mall. From the Central Salem Mobility Study (2012).	High St from Trade St SE to Marion St NE. Church St from Trade St SE to Marion St NE	Roads-Bridges	2050	$3,000,000	$11,131,408	0-20 yrs
S335	Cottage St - Curb Extensions	Add curb extensions to Cottage St.	Cottage St from State St to Marion St NE	Roads-Bridges	2035	$1,200,000	$2,735,932	0-20 yrs
S350	Replace Ditch Culverts along Turner Rd	Replace ditch culverts along Turner Road east of Salem Airport. From Mill Creek Basin Plan, project MC-01G.	Turner Road east of Salem Airport.	Roads-Bridges	2028	$890,000	$1,330,485	Unfunded
S351	Replace Winter St Bridge over Mill Creek	Replace the Winter Street bridge over Mill Creek. 75' roadway width. From the Mill Creek Basin Plan, project MC-01B	Winter Street at Mill Creek	Roads-Bridges	2033	$3,203,000	$5,632,204	Unfunded
S352	Replace 17th St Bridge over Mill Creek	Replace the 17th Street bridge over Mill Creek. 65' roadway width. From the Mill Creek Basin Plan, project MC-01D.	17th St at Mill Creek	Roads-Bridges	2033	$3,914,000	$6,882,437	Unfunded
S353	Airway Drive - Raise between I-5 and Middle Fork Pringle Creek	Raise 1400 feet of Airway Drive from I-5 to the Middle Fork of the Pringle Creek. Note: Cost is for total project including a culvert and flood storage. From the Pringle Creek Basin Plan, project PC-01A.	Airway Drive from I-5 to the Middle Fork of the Pringle Creek.	Roads-Bridges	2033	$8,778,048	$15,435,454	Unfunded
S380	Broadway: Liberty St N to Pine St N	Add bike facilities after pavement reconstruction. See also S204 and S379	Broadway: Liberty St N to Pine St N	Roads-Bridges	2035	$10,000,000	$17,584,153	0-20 yrs
S381	State St: 17th St to 24th St	Add bike facilities after pavement reconstruction. See also S217.	State St: 17th St to 24th St	Roads-Bridges	2045	$10,600,000	$10,600,000	0-20 yrs

Marion County

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
Illustrative								
M017	Cordon Rd NE & Swegle Rd NE	Add traffic signal and turn lanes or roundabout on Swegle	Cordon Rd @ Swegle	Roads-Bridges	2030	$3,000,000	$4,484,780	0-20 yrs
M026	Lancaster Dr NE & Winema Pl NE	Add traffic signal. Developer funded.	Lancaster Dr at Winema Pl	ITS-Signals	2030	$1,500,000	$2,242,390	0-10 yrs
M029	River Rd NE & Brooklake Rd NE	Signalize and realign intersection. Assume 50 percent developer funded. Project extent and modifications to the intersection and approaches to be determined as part of a future study.	River Rd NE at Brooklake Rd	Roads-Bridges	2030	$5,000,000	$7,474,633	10-20 yrs
M037	Blossom Dr NE: City Limits to Portland Rd NE	Widen to collector standards	Blossom Dr from Salem City Limits to Portland Rd	Roads-Bridges	2045	$1,000,000	$4,090,061	Unfunded
M038	BNSF RR Bridge over River Rd S	Replace bridge and realign road	P&W (nee BNRR) bridge over River Rd S, SW of Halls Ferry Rd	Roads-Bridges	2045	$3,000,000	$12,270,184	Unfunded
M039	Brooklake Rd N & Huff Ave	Add traffic signal and turn lanes. Assume 50 percent developer funded.	Brooklake Rd at Huff Ave	Roads-Bridges	2032	$5,000,000	$7,976,098	0-20 yrs
M040	Center St NE & 45th Av NE	Install traffic signal	Center St at 45th Ave	ITS-Signals	2035	$1,500,000	$2,637,623	Unfunded
M041	Center/Hampden/Fruitland: Cordon Rd NE to 63rd Av NE	Add bike lanes	Center/Hampden/Fruitland from Cordon Rd to 63rd Ave	Bicycle-Pedestrian	2050	$1,400,000	$4,006,400	Unfunded
M043	Cordon Rd NE: Center St NE to Sunnyview Rd NE	Construct to Parkway standards with 4 travel lanes, center turn lane and westside multi-use path, includes upgrade to signal at Sunnyview Rd NE	Cordon Rd from Center St to Sunnyview Rd	Roads-Bridges	2035	$10,000,000	$17,584,153	0-20 yrs
M045	Cordon Rd SE & Pennsylvania Av SE	Install traffic signal, or channelize and limit left turns	Cordon Ave at Pennsylvania Ave	ITS-Signals	2045	$1,500,000	$3,649,353	Unfunded
M051	Lancaster Dr NE & Monroe Av NE	Add traffic signal.	Lancaster Dr @ Monroe Ave	Roads-Bridges	2040	$2,000,000	$4,136,691	Unfunded
M052	Lancaster Dr NE & State St	Capacity increasing projects to add additional turn lanes. Developer funded.	Lancaster Dr at State St	Roads-Bridges	2045	$2,500,000	$6,082,256	Unfunded
M053	Lancaster Dr NE & Portland Rd NE	Safety related projects and/or signalize.	Lancaster Dr @ Portland Rd	Roads-Bridges	2050	$2,500,000	$7,154,286	Unfunded

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
M055	MacLeay Rd SE: Arabian Av SE to Cordon Rd SE	Widen to minor arterial standards	MacLeay Rd from Arabian Ave to Cordon Rd	Roads-Bridges	2050	$2,000,000	$5,723,429	Unfunded
M060	Skyline Rd S & Vitae Springs Rd S	Realign intersection	Skyline Rd at Vitae Springs Rd	Roads-Bridges	2050	$2,500,000	$7,154,286	Unfunded
M063	Vitae Springs Rd S: River Rd S to Orville Rd S	Realign, widen and pave road	Vitae Springs Rd from River Rd S to Orville Rd	Roads-Bridges	2050	$2,800,000	$8,012,800	Unfunded
M066	ITS - Flood Warning System	Deploy monitoring system on roadways subject to high water and alert motorists		ITS-Signals	2040	$1,400,000	$2,895,684	Unfunded
M067	ITS - Slide Monitoring System	Deploy a system to monitor frequent slide locations and alert motorists		ITS-Signals	2040	$800,000	$1,654,676	Unfunded
M068	ITS - Isolated Intersection Safety Warning System	Deploy devices to warn motorists of high crash intersections		ITS-Signals	2040	$840,000	$1,737,410	Unfunded
M069	Kuebler Bv S: Croisan Creek Rd S to Viewcrest Dr S	Widen to collector standards, including 2 travel lanes, left turn lanes where necessary, curbs, gutters, sidewalks and bike lanes where designated. Developer funded.	Kuebler Bv S: Croisan Creek Rd S to Viewcrest Dr S	Roads-Bridges	2050	$2,100,000	$6,009,600	Unfunded
M076	Viewcrest Rd S: Kuebler Bv S to Byers St S	Widen to collector standards including 2 travel lanes, a center turn lane, curbs, gutters, sidewalks and bike lanes.	Viewcrest Rd S: Kuebler Bv S to Byers St S	Roads-Bridges	2050	$2,800,000	$8,012,800	Unfunded
M078	Hazelgreen Road Projects	Widen to interim 2 travel lanes with center turn lane where needed. Add curbs, gutters, sidewalks and bikelanes.	Hazelgreen Rd NE from western City Lmits to Cordon Rd NE	Roads-Bridges	2045	$8,000,000	$19,463,218	Unfunded
M081	Lancaster Dr: Upgrade Signals	Upgrade signals at Lancaster Dr and Cooley. See also M028 and M080.	Lancaster Dr at Cooley	ITS-Signals	2030	$1,000,000	$1,494,927	0-5 yrs
M091	Cordon Road at Center Street: Intersection Modifications	Modifications to the intersection including upgrading the signal. Assumes 50 percent developer funded. M046 has roadway modifications.	Cordon Road at Center Street	Roads-Bridges	2030	$1,000,000	$1,494,927	0-10 yrs

RTSP ID	Project Name	Project Description	Project Location	new Project Type	YtbB	Cost	YoE $	Project Priority
M092	Cordon Road at Silverton Road: Intersection Modifications	Modifications to the intersection including upgrading the signal, adding through lanes and realignment.	Cordon Road at Silverton Road	Roads-Bridges	2030	$4,500,000	$7,178,488	0-10 yrs
M094	Brooklake Road: River Road to Huff Avenue	Widen to two lanes each direction with turn lanes. Assume 50 percent is developer funded	Brooklake Road: River Road to Huff Avenue	Roads-Bridges	2035	$4,000,000	$7,505,542	0-20 yrs
M096	Silverton Road: Cordon Road to Little Pudding River/SKATS Boundary	Widen to four lanes (two each direction) with turn lanes.	Silverton Road: Cordon Road to Little Pudding River/SKATS Boundary	Roads-Bridges	2040	$5,600,000	$11,582,734	Unfunded
M097	Center St: Lancaster Dr to 45th Pl	Complete widening of street to a five-lane cross section, with sidewalks and bike lanes on south side (Phase 1a). Stormwater mitigation as required. Joint project with Salem (see Sxxx, M098 and Mzzz).	Center St: Lancaster Dr to 45th Pl	Roads-Bridges	2033	$2,500,000	$4,119,655	Unfunded
M098	Center St: 45th Pl to City Limits	Complete widening of street to a five-lane cross section, with sidewalks and bike lanes on south side (Phase 1a). Stormwater mitigation as required. Joint project with Salem (see Sxxx, M097 and Mzzz).	Center St: 45th Pl to City Limits	Roads-Bridges	2033	$1,500,000	$2,471,793	Unfunded
M101	Cordon Rd NE: Sunnyview Rd NE to Silverton Rd NE	Construct to county parkway standards with 4 travel lanes, center turn lane and westside multi-use path and signal modification at Sunnyview Rd.	Cordon Rd NE from Sunnyview Rd to Silverton Rd	Roads-Bridges	2035	$12,000,000	$21,100,984	0-20 yrs

Appendix J ~ Federal, State, and Regional Goals

The National Goals set forth in MAP-21 (Moving Ahead for Progress in the 21st Century) and continued in FAST (Fixing America's Surface Transportation) Act are meant to provide guidance to the State Department of Transportations (DOTs), Mass Transit Districts and Metropolitan Planning Organizations (MPOs) as they develop their long-range transportation plans and short-term program of projects. It is instructive to consider how the Goals for the SKATS Metropolitan Transportation Plan (MTP) aligns with both the National Goals as well as the Goals established by the Oregon Department of Transportation (ODOT). **Table J-1**, shown below, presents the three sets of goals and how they align. Note that there is not always a direct linkage between each of the National, State and Regional goals.

Table J-1: National, State and Regional Goals

National	State	SKATS
System Reliability	Goal 1 – Mobility and Accessibility	Accessibility and Mobility
Congestion Reduction	Goal 1 – Mobility and Accessibility	Accessibility and Mobility
Infrastructure Condition	Goal 2 – Management of the System	Preserved in Good Repair
Freight Movement & Economic Vitality	Goal 3 – Economic Vitality	Economic Vitality Multimodal and Comprehensive
Environmental Sustainability	Goal 4 – Sustainability	Minimize impact(s) to natural and built environment
Safety	Goal 5 – Safety and Security	Safety and Security
Reduce Project Delivery Delays	Goal 6 – Funding the Transportation System	
	Goal 7 – Coordination, Communication & Cooperation	Open and Continuous Dialog
		Equitable for all users
		Efficient to Use
		Developed with Funds Available to the Region

To further explore how the National Goals influence the long-range planning process, presented in **Table J-2** are the corresponding regional objective to each of the National Goals. The regional objectives begin the tying of measuring how the

region is accomplishing the goals. The objectives provide the structure for the underlying indicators and performance measures.

Table J-2: National Goals, Regional Goals and Objectives

National Goal	MTP Goal	MTP Objectives
System Reliability	Meet accessibility needs	Limit the increase in congestion during peak hours along the regional corridors
Congestion Reduction	Multimodal and Comprehensive	Limit the increase in congestion during peak hours along the regional corridors Provide a multi-modal system
Infrastructure Condition	Preserved in good repair	Preserve the existing system
Freight Movement & Economic Vitality	Accessible Multimodal and Comprehensive Economic Vitality	Limit the increase in congestion during peak hours along the regional corridors Provide a multi-modal system
Environmental Sustainability	Minimize impact(s) to natural and built environment	Reduce the impact(s) to the environment and natural systems
Safety	Safety and Security	Minimize the number of fatalities, injuries and collisions associated with the regional system
Reduce Project Delivery Delays		
	Equitable for all users	
	Efficient to Use	
	Developed with Funds Available to the Region	
	Open and Continuous Dialog	

As part of MAP-21, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) were directed to develop performance measures for use by the DOTs, Mass Transit Districts and MPOs to track progress in meeting the National Goals. The connection between these and the Goals and Objectives of the MTP are shown in **Table J-3**, along with the indicators that have been developed to track the Regional Goals and Objectives.

Table J-3: Regional Goals and Objectives, Federal Performance Measures and Regional Indicators

MTP Goal	Objective	Federal PM	Regional Indicator
Meet accessibility (and mobility) needs	Limit the increase in congestion during peak hours along the regional corridors	Truck Travel Time Reliability on the Interstate System Annual Hours of Peak Hour Excessive Delay per Capita (Started 2022) Percent of Non-Single Occupant Vehicle Travel (Started in 2022)	
Multimodal and comprehensive	Provide a multi-modal system		Regional Corridors with Sidewalks (Miles and Percent of Total) Regional Corridors with Bicycle Facilities (Miles and Percent of Total) Average Weekday (or Annual) Transit Ridership Number of Transit Hours of Service Regional Funds Spent on TSM Projects in the Last 10 Years
Preserved in good repair	Preserve the existing system	Percent of NHS Bridges classified as in Poor Condition Percent of NHS Bridges classified as in Good Condition Percent of Interstate Pavements in Good Condition Percent of Interstate Pavements in Poor Condition Percent of Non-Interstate NHS Pavements in Good Condition	

		Percent of Non-Interstate NHS Pavements in Poor Condition Transit State of Good Repair (multiple measures related to facilities) Transit State of Good Repair (transit fleet by vehicle type)	
Safety and Security	Minimize the number of fatalities, injuries and collisions associated with the regional system	Number of Fatalities Number of Serious Injuries Number of non-motorized fatalities and non-motorized serious injuries Rate of Fatalities per 100 million VMT Rate of Serious Injuries per 100 million VMT	
Equitable			
Efficient	Maximize the efficient use of the existing infrastructure		
Minimize impact(s) to natural and built environment	Reduce the impact to the environment and natural systems	Total emissions reductions for CO	
Financial Responsible			
Open and Continuous dialog			
Economic Vitality			

Linking Federal Planning Factors to the SKATS MTP

The planning factors to be considered in developing the SKATS MTP are defined in 23 CFR 450.306 (b). They are listed below with a brief discussion of how they are included in the SKATS 2023-2050 MTP.

(1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

a. A new goal was included in a previous RTSP to "Invest[s] in transportation infrastructure that supports a vibrant region economy".

b. The goal is referenced in the project evaluation and selection process with most of the criteria used.
c. The majority, if not all, of the funding for projects and programs in this MTP, and past MTPs (RTSPs), supports this goal.

(2) Increase the safety of the transportation system for motorized and non-motorized users;
a. Safety of the users of the regional system is a long-standing goal of the MTP.
b. This goal is directly referenced in the project evaluation and selection process in the criterion "Addresses a known safety location/issue".
c. Projects that increase the safety of the traveling public are given the highest weight.
d. Safety issues are identified and discussed in Chapter 4 (Existing Systems) building on work from the Regional Safety Plan and issues identified by SAMTD.
e. Near-term tracking of the safety on the regional system is provided by the federal performance measures, as covered in **Appendix P** (Performance)."

(3) Increase the security of the transportation system for motorized and non-motorized users;
a. Security of the transportation system is a long-standing goal of the MTP.

(4) Increase accessibility and mobility of people and freight;
a. Meeting the accessibility and mobility needs is a goal of the MTP.
b. The project evaluation and selection process includes several criteria that address this goal ("Enhances transit service or operations", "Reduces a gap in a regional system", "Addresses freight movement impediment on designated CUFC", "Increase access to employment center or jobs", and "Addresses a bottleneck along a corridor").
c. Near-term tracking of the mobility for people and freight is captured by the federal performance measures as discussed in **Appendix P** (Performance).

(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
a. The MTP has a goal to "Minimize the impacts to the natural and built environment". Consistency between transportation improvements and land use development is established by using the latest Comprehensive Plans from the member jurisdictions and reviewing the State's Plans and Policy documents.

(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
a. Developing a multimodal and comprehensive transportation system is a goal of the MTP.

b. Several criteria used in the project evaluation and selection process support this, “Enhances transit service or operations”, “Addresses freight movement impediment on designated CUFC”, “Addresses a known safety location/issue” and “Addresses a bottleneck along a corridor”. In addition, the Policy Committee gives extra weight to projects that connect segments of a system together to fill in an identified gap.

(7) Promote efficient system management and operation;

a. Efficient use is a goal of the MTP
b. Many of the criteria used in the project evaluation and selection process support this goal.
c. There are many on-going programs identified in the MTP that support this goal.
d. The SKATS Congestion Management Process and the Salem Metropolitan Intelligent Transportation System Plan both detail strategies and programs that are meant to increase the efficiency of the existing regional transportation system. These documents are guided by the Goals of the MTP and provide more specificity on the topics they cover.
e. Near-term targets for this are covered in the Performance Report (**Appendix P**) and the federal performance measures.

(8) Emphasize the preservation of the existing transportation system;

a. Preserving and maintaining the existing investments is a goal of the MTP.
b. Two criteria in the project evaluation and selection process support this goal, “Increases the miles of pavement in travel lanes that are ranked ‘good’” and “Increases the number of bridges that are ranked ‘good’”.
c. Near-term tracking and targets for the preservation of the transportation system, both roads and transit, is captured by the federal performance measures discussed in **Appendix P** (Performance).

(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and

a. Discussions on resiliency are included in **Chapter 5** and **Appendix R**. The need to mitigate stormwater was discussed in **Chapter 8**.
b. Many of the projects that widen or reconstruct a road will include stormwater mitigation measures as part of the local jurisdiction’s compliance with federal and/or state regulations. Every effort is made to include such attributes in the project descriptions included in **Chapter 7** (Proposed System) and in **Appendix I** (Illustrative Projects).
c. Federal performance measures provide for near-term tracking and targets of improving the reliability of the transportation system. See **Appendix P** (Performance) for more details.

(10) Enhance travel and tourism.

a. The Purpose of the Plan is to provide a 20-year roadmap of investments to address the above nine planning factors which will enhance the ability of people and goods to travel within SKATS. Projects are not explicitly developed or proposed to address Tourism-based needs, but are addressed by the investments in the regional systems that supports safe and efficient travel. Providing a complete, connected and safe multimodal network is the first step in enhancing the level of travel within and through the Salem-Keizer area, supporting all manner of tourist activities.

The Goals of the MTP were used to inform the project selection process. Thus, the projects that are included in the Plan reflect the federal planning factors to the extent feasible.

How the SKATS 2023 – 2050 MTP Meets 23 CFR 450.324 (f)

23 CFR 450.324 (f) The metropolitan transportation plan shall, at a minimum, include:

(1) The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;

Current demand is shown in Chapter 4 with Map 4-5 and discussed on page 4-17. Future year demand is shown in Chapter 7 with Maps 7-1 and 7-2 and discussed on page 7-3.

(2) Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., pedestrian walkways and bicycle facilities), and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.

The existing facilities are discussed in Chapter 4 and the proposed projects in Chapter 7.

(3) A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d).

The federal performance measures and targets are in Appendix P. The performance measures are presented with in Chapter 3 with the associated Goals. In Appendix J is the crosswalk between federal, state, and SKATS goals and the performance measures.

(4) A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including -

(i) Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and

Appendix P has the performance report showing the targets from the first performance reporting period (2018-2022) and the results as reported by ODOT and the Salem Area Mass Transit District. For all performance measures except roadway safety, the targets were met. There was a local, state, and national increase in crashes, injuries, and fatalities on the roads from 2018 to 2022, and thus the targets were not met.

(ii) For metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

Not applicable as the MTP does not consider multiple scenarios.

(5) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;

Operational and management strategies are identified in the projects and programs of the MTP and are considered in the SKATS Congestion Management Process which is a supporting document. Discussion is included in Chapter 4, 5, 7, and 9 of the MTP.

(6) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide.

The SKATS CMP is used to identify which types of projects and/or programs would be appropriate for the CMP corridors or at a regional level. The projects and programs are included in the funding of the future system and are discussed in Chapter 7. Results from the CMP are also used when evaluating projects for inclusion in the financially constrained project list (see Appendix C).

(7) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system.

Assessment of the proposed projects is presented in Chapter 7. Outstanding issues, those needs that are not addressed by the financially constrained project list due to a variety of reasons, are discussed in Chapter 9.

(8) Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate;

Chapter 7 contains a discussion of the future transit network operated by SAMTD within SKATS. Intercity service by SAMTD is considered, but is not included in the financially constrained MTP beyond the level today, as additional funds would be necessary to provide the service. The future service of the private operators, and other public transit providers that connect Salem-Keizer to other communities is not explicitly considered due to either confidentiality issues or lack of published plans.

(9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity regulations (40 CFR part 93, subpart A). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;

The financially constrained project list is presented in Chapter 7 (Table 7-3) with information on what the project is, where it is located, when it is anticipated to be built, and how much it is currently estimated to cost.

(10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;

Chapter 8 contains a discussion of the potential impacts of the proposed projects, and possible mitigation activities to be carried out. The chapter is reviewed by staff from the Federal, State, Tribal, and Local resource agencies.

(11) A financial plan that demonstrates how the adopted transportation plan can be implemented.

(i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

See Chapter 6 for details, specifically tables 6-14 for road-related and 6-15 for transit-related expenditures.

(ii) For the purpose of developing the metropolitan transportation plan, the MPO(s), public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under § 450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

ODOT led an effort in 2021-2022 to develop long-range forecasts of the federal and state funds available through 2051. SKATS staff worked with local jurisdictions and SAMTD to forecast the

funds available to them from local sources through 2050. The results are presented in Chapter 6.

(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.

Included in Chapter 6 is a list of possible funding streams that the local jurisdictions (including SAMTD) could use in the future. It is not currently assumed that any of these options will be used, thus there is no discussion of appropriateness or strategies to ensure availability. If this situation changes in the future, updates to the MTP will be revised to reflect the new funding streams.

(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect "year of expenditure dollars," based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

As part of the ODOT led effort to forecast future Federal and State funds, an inflation rate was agreed to by the group. This has been used in producing cost estimates for the projects by the year of construction and for forecasting the revenue available. All projects and programs using Federal, State, Local, or private funds that are on the regional system have been included.

(v) For the outer years of the metropolitan transportation plan (*i.e.,* beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

This option was not used.

(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.

While a maintenance area, there are no applicable TCMs in use within SKATS.

(vii) For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

Illustrative projects are listed in Appendix I.

(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (*i.e.,* by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

(12) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g).

Current pedestrian and bicycle facilities are listed/shown in Chapter 4. Proposed projects that add pedestrian and/or bicycle facilities are listed/shown in Chapter 7.

Appendix O: Outreach and Public Involvement

Included in this Appendix is a compilation of the outreach activities undertaken by SKATS staff in support of the development of the 2023-2050 Metropolitan Transportation Plan (MTP) and the comments that were received. The material is structured as follows:

1. Public Engagement Plan for the SKATS 2023-2050 MTP
2. Outreach activities during plan development (January 2022 – Feb/Mar 2023)
    a. Notification of the Plan update to partners and the public
    b. Results from the survey conducted in March 2022
    c. Targeted Outreach October 2022
    d. Summary of Comments November 2022, Policy Committee meeting
    e. All comments from January 2022 – Feb/Mar 2023
3. Outreach activities during the public comment period (Feb/Mar – May 2023)
    a. Notification of Public Comment Period
    b. List of events attended
    c. Summary of Comments May 2023, Policy Committee meeting
    d. Comments received at the Open House
    e. Comments received via email during the public comment period
    f. Comments received via online map during public comment
4. Consultation Activities
    a. Cultural, Historic and Environmental agencies
    b. Air Quality conformity related
5. Transportation Hub Site – screen captures
6. Brochures
7. Report of Survey Results March 2022
8. Summary of comments from online map October 2022
9. Comments from the PC meeting November 2022
10. Comments from Directory Sadie Carney, with Responses/Changes

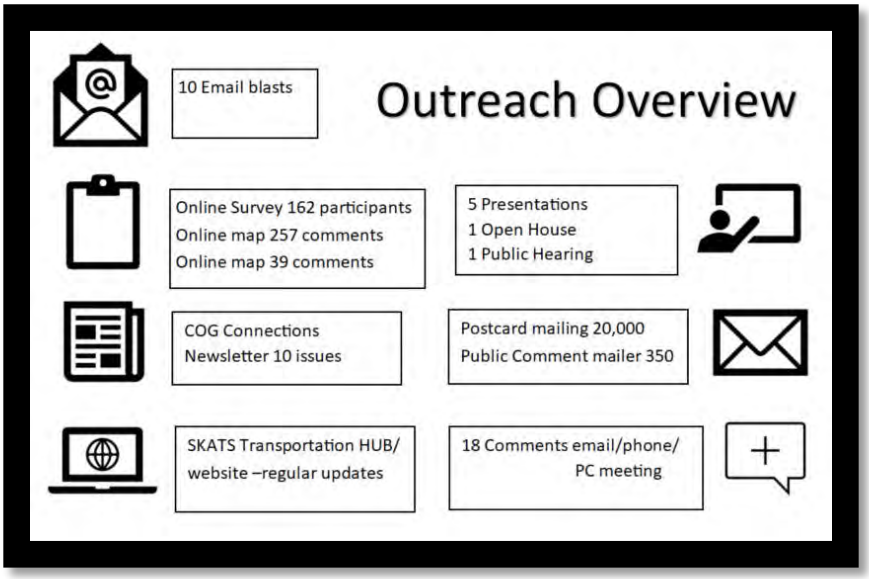


Figure 1: Overview of Outreach and Results

Public Engagement Plan for the 2023-2050 Metropolitan Transportation Plan (MTP)

Background

The Salem-Keizer Area Transportation Study's (SKATS) Metropolitan Transportation Plan (MTP) provides a comprehensive, long-range look at transportation issues in the Salem-Keizer region, including list of programs and projects that address the region's transportation needs. Transportation needs include a discussion of the needs of today plus the identified needs based on projections of population, employment and land-use within the communities over the next 20+ years. The plan includes an estimate of future revenues for transportation projects as well as project costs. Projects included in the plan address mobility and safety needs, as well as multi-model enhancements to the regional system.

The MTP is updated every four years. The current update cycle begins in January 2022 and runs until the scheduled adoption at the May 23, 2023 SKATS Policy Committee meeting. Important to the plan development is input from the public, and this outreach and participation brief summarizes the many opportunities available to the public.

In 2021, the SKATS Public Participation Plan (PPP) was updated which serves as a guide to ensure an ongoing opportunity for broad-based public participation in the development and review of regional transportation plans, programs, and projects. The list and table below show the outreach activities and steps used by SKATS to solicit public input.

Activities and Events:

- Presentations (in-person or virtual) to Neighborhood Associations, the Transit Board, the Active Transportation Network, and other local/service organizations and groups.
- As requested, presentations to our local jurisdiction's city councils, county commissions, and boards.
- Participate in any shared and available public events with our local jurisdictions.
- Information and available materials posted on the MWVCOG website on a dedicated webpage, and the MWVCOG Facebook page.
- MWVCOG *COG Connections* ezine.
- Printed MTP brochure and SKATS Transportation Process brochure distributed locally.
- An online map that allows individual to submit comments on draft projects under consideration for inclusion in the MTP.
- Interested parties email contact list of approximately 250 contacts.
- Mailings (physical) to contacts list of approximately 300 people or organizations.
- Press releases
- Official 30-day public review period: **March 28, 2023 – April 28, 2023**
- Public Hearing of the SKATS Policy Committee (public testimony welcome): **May 23, 2023**

The table below shows the status of outreach activities. Some activities have taken place, many are on-going, and some show the anticipated date of the events as the draft plan come closer to completion.

Program	Outreach Highlights	Status
MTP - Kick off	•Interested parties mailing and email list •Website update •MWVCOG newsletter and COG Connections •Facebook Postings •Online Public Survey (March 2022)	January 2022
MTP - Development	•Presentations to Associations and Community groups •Interested parties email list •Notices & updates posted on website •Draft chapters, maps and materials available on website •Monthly TAC and PC meetings •Online maps with comment feature •Brochures distributed	January 2022 – January 2023
MTP - Draft	•Interested parties mailing and email list •Materials posted on website •Press Releases •Brochures/Flyers •Community meetings •Open house •Share on social media	February – May 2023
MTP - Adoption	•Respond to public comments •Draft documents posted on website •Public hearing before adoption May 23, 2023	May 23, 2023

Schedule of MTP Content Review:

The Technical Advisory Committee and the Policy Committee are scheduled to review on average one chapter or component of the MTP each month at their regularly scheduled meetings. Policy Committee (PC) meetings are held the fourth Tuesday of the month at noon, and Technical Advisory Committee (TAC) meetings are held the second Tuesday of the month at 1:30 pm both at the MWVCOG offices located at 100 High Street SE in Salem. Both are available via Zoom. Agendas and materials are posted one week before the

meeting on the MWVCOG website. The agenda posting will include the materials under review of the MTP.

Shown on the following page is the scheduled timeline for content review on a chapter-by-chapter basis until the plan adoption in 2023. Both committees are open to the public, and there is a standing public comment time on the Policy Committee agenda at the start of their noon meeting.

Anticipated Schedule of chapters and draft MTP

January 2022:
- TAC: Review Schedule
- PC: Review Schedule

February 2022:
- TAC: Review Goals, Recent legislation and policies (Chapters 2, 3 and Appendix J)
- PC: Review Goals, Recent legislation and policies

March 2022:
- TAC: Review Project Evaluation Process (App. C)
- PC: Review Project Evaluation Process (App. C)
- **Public**: Mailer to 5-20k households directing to webpage with short survey and info on MTP and TIP updates.

April 2022:
- TAC: Continue discussion on Goals and/or project evaluation criteria as necessary
- PC: Continue discussion on Goals and/or project evaluation criteria as necessary

May 2022:
- TAC: Review Existing System Chapter
- PC: Review Existing System Chapter

June 2022:
- TAC: Review Needs and Gap Analysis Chapter
- PC Review Needs and Gap Analysis Chapter

July 2022:
- TAC: Review Population and Employment forecasts (App. A)
- PC: Review Population and Employment forecasts (App. A)

August 2022:
- TAC: No MTP related items currently scheduled
- PC: No MTP related items currently scheduled

September 2022:
- TAC: Review Financial Chapter (dependent on long-range financial forecast from ODOT)
- PC: Review Financial Chapter

October 2022:
- TAC: Project Evaluation
- PC: Project Evaluation
- Public: Review and comment on the proposed projects (Dates TBA, likely start in late-September to mid-October)

November 2022:
- TAC: Review Future System and Impact Chapters, Environmental Justice (App. E), and Regional Performance Report (App. P – dependent on data from ODOT)

- PC: Review Future System and Impact Chapters, Environmental Justice (App. E), and Regional Performance Report (App. P – dependent on data from ODOT)

December 2022:

- TAC: Review Outstanding Issues Chapter
- PC: **No meeting unless required**

January 2023:

- TAC: Review first draft, focus on Introduction Chapter, Executive Summary, and appendices
- PC: Review first draft, focus on Introduction Chapter, Executive Summary, and appendices

February 2023:

- TAC: Review draft MTP and draft AQCD
- PC: Review draft MTP and draft AQCD

March 2023:

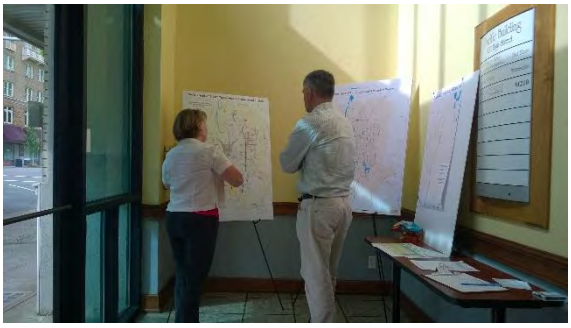
- TAC: Review Public Review Draft MTP and draft AQCD and recommend for release
- PC: Release Public Review Draft MTP and draft AQCD [March 28]

April 2023:

- **Public** Review Draft Period. Ends April 28, outreach efforts and events TBA.

May 2023:

- TAC: Review public comments and recommend adoption
- PC: Public Hearing and adoption of the MTP and AQCD [May 23]
- **Public: Public Hearing**



SKATS's public meetings and open houses are conducted in facilities that are accessible to persons with disabilities. SKATS provides services or accommodations upon request to persons with disabilities, language translation, and people who need a sign language interpreter at public meetings. To make requests for a sign language interpreter, communication aid or language translation assistance, the public may call Lori Moore at 503-540-1609, or email at lomoore@mwvcog.org 72 hours in advance of the meeting to accommodate their request. Hearing impaired please call Oregon Telecommunication Relay Service, 7-1-1.

Staff is always looking for opportunities to participate in open houses or public presentations that are happening with the local jurisdictions. To share ideas, feedback and outreach opportunities, please contact Kim Sapunar at ksapunar@mwvcog.org 503-540-1611.

For More Information

Contact Ray Jackson at:

rjackson@mwvcog.org or

503-540-1607

To be added to our mailing list:

Notification of the Plan update to partners and the public

The kickoff to the MTP was announced via a variety of channels, including:

- SKATS mailed postcards to 20,000 households within SKATS with emphasis on identified Environmental Justice areas (low-income and/or minority populations). To identify those neighborhoods, census data was used and census tracts with a poverty rate greater than 30% and Hispanic population greater than 45% were selected. The Hispanic population is the largest minority population in the Salem-Keizer area. These identified census tracts received approximately 40% of the total mailers, with the balance distributed over the remaining SKATS geographic area. Postcards had information in both Spanish and English.
- Emails sent to the SKATS *Interested Parties* email list, of which there are 230 as of March 1, 2022, with a second email sent on March 30 to remind and announce the extension of the survey.
- Press releases sent to our media contact list.
- Announcements in 2 editions of the COG Connections.
- Notification placed on the MWVCOG website in three locations (front page, MTP Update page, and TIP Update page).
- A post on the MWVCOG Facebook page.
- Information sent to SKATS partners and included in their email or social media messages, if possible.
    - City of Turner
    - Cherriots Twitter
    - City of Keizer
    - City of Salem, City's Neighborhood Associations contact list
- Mention on *Keizer Times* online edition on March 24.
- Mention on BreakfastOnBikes, a local transportation-oriented blog.

Figure O-2 Postcard Mailer

Results from the survey conducted in March 2022

As part of the update to the SKATS Metropolitan Transportation Plan (MTP), an online survey was created to gather public input on some of the challenges and issues they face while traveling within Salem-Keizer. The survey was available online at the SKATS ArcHub (https://skats-mwvcog.hub.arcgis.com/) from March 4, 2022, until April 8, 2022. Originally the survey was to be open until March 31, but a decision was made to extend it to align with publication of a notice in the *Keizer Times*.

Activity, Engagement and Results to the Website/Survey

There are several tracking mechanisms to see how the ArcHub website and survey were accessed. From March 3 until April 3, there were 480 views overall to the ArcHub site (this can include repeat visitors and multiple interactions on the website). It is a general indicator to show the level of activity. Most activity occurred after the postcard was mailed and email/newsletter/postings went up or were reposted.

A Google Analytics account allowed for tracking the source link to the ArcHub website with a total of 399 unique and new visitors from March 4 until April 8. Of the 399 unique users to the website, **162 chose to complete the survey**. In the table below, most of the traffic resulted from the postcard. Outreach via Facebook was second highest; and our emails, newsletter post, and webpage also generated interest. In general, those who receive our social media, newsletter, and email information are already interested in what we do, so their response rates are higher.

Table O-1: Source of website traffic

Source of website traffic	Unique users	Number of users
Direct (postcard)	56%	224
Facebook	16%	64
Email/newsletter	12%	46
MWVCOG website	3%	12
Instagram	2%	8
Twitter	1%	2
other (searches)	7%	27
Keizer Times (online)	4%	16

The postcard did generate interest to the website site; although, at a relatively low rate with approximately 224 ArcHub website visits out of 20,000 postcards resulting in a 1.1 percent response rate. The intent for the postcard was to reach out to the community that usually does not respond to SKATS. To get an indication of geographic area, the survey asked for home zip code. This is the distribution of those who responded.

Table O-2: Responses to the Online Survey by Zip code

Zip Code	Number	Percent	Location
97303	34	21.7%	Keizer
97304	32	20.4%	West Salem
97301	26	16.6%	Central/East Salem
97302	22	14.0%	South Salem
97306	18	11.5%	South Salem (south of Kuebler)
97305	11	7.0%	Northeast Salem
97392	8	5.1%	Turner
97317	5	3.2%	Southeast Salem
97383	1	0.6%	East of SKATS

The ArcHub website has a language translation option, in addition to directions in Spanish for the translate option. The survey was available in Spanish and English. One open-ended comment was in Spanish.

A full summary of the survey answers and responses are summarized in a report at the end of this appendix, of 162 respondents, including 100 open-ended responses regarding transportation in the Salem-Keizer area. The open-ended responses have been grouped by general subject and are in no particular order. Finally, four comments were received by email or phone and are included on the final page.

Targeted Outreach October 2022

Over the months of September, October, and November, the evaluation and ranking of projects for inclusion into the MTP took place. In addition to hosting an online map which allows comments, staff conducted targeted outreach by email and phone (if possible) to 18 community groups and organizations to promote the opportunity for comment on draft projects as well as an opportunity to discuss the MTP and TIP in general.

Groups contacted:

- CaPES: Community and Partners of East Salem
- Enlace
- La Casita
- Mano a Mano
- Salem-Keizer NAACP
- Micronesian islander Organization
- Chemawa Indian School
- NW Senior and Disability Service
- Latino Business Alliance
- Hallman Neighborhood Family Council
- Salem Leadership Foundation
- Latinos Unidos Siempre
- The Northwest Hub
- The Boys and Girls Club
- The Boys and Girls Club Keizer
- Family Building Blocks
- Center 50+
- Blind Skills

The outreach resulted in shared email information with several organizations and these events:

- Participated in Enlace cross-culture community event with a table October 2022
- Presentations scheduled for five Community Action Team meetings:
    - N2 North Salem, March 8, 2023
    - CaPES: Community and Partners of East Salem, March 16, 2023
    - Keizer United, March 20, 2023
    - South Salem Connect, March 21, 2023
    - Edgewater CPT, March 23, 2023

Summary comments November 2022, Overview to the Policy Committee

Minutes excerpt from the November 22, 2022 Policy Committee meeting:

Agenda Item C. Public Comment

Sarah Deumling, accompanied/supported by Ray Quisenberry, 350 Salem, provided comments to the Policy Committee to follow new Oregon Administration Rules adopted by the Land Conservation and Development Commission to reduce vehicle miles traveled (VMT) by 30 percent and make non-fossil fuels-powered modes of transportation more accessible. Ms. Deumling's comments are ***attached*** to these draft minutes.

Chair Cathy Clark explained that an e-mail from Laurie Dougherty (***attached to the minutes***) was received just prior to the meeting regarding prioritizing safety in the SKATS area.

Phil Carver, 350 Salem, summarized written comments that he provided (***attached to the minutes***) regarding global temperature changes/impacts since 1980. He urged the Policy Committee to incorporate state goals and targets for GHG (greenhouse gases) and VMT reductions; adopts goals to increase trips by walking, cycling and transit; prioritize investments in transit, walking and cycling; postpone road expansions; and make investments that promote development in walkable, mixed-use areas.

Agenda Item F. SKATS 2023-2050 MTP: Project Evaluation and List

Mr. Jackson requested that PC members review the draft project list and propose modifications to the list. If the Policy Committee approves the list, it will be incorporated into the draft 2023-2050 MTP. In order to keep to the schedule for the MTP, if Policy Committee members feel the need for additional review and discussion related to the list, a special meeting date will need to be arranged in December.

Kim Sapunar provided an overview of the comments received from the public to date.[1] The majority of comments summarized here were received through the online map of draft MTP projects, 257 individual comment entries were given, of which 10 were "General Comments." Comments were widely distributed over most of the projects. The 257 comments were provided by 20 individual commentors. In addition to comments, participants could "vote" for projects they liked. There were 127 projects that received at least one vote, the top scores were seven votes for: S212 Market St NE: Commercial St NE to Hawthorne Av NE, and 5 votes for: S320 Lower Leffelle/Clark Creek Park/South Village Park Bike Corridor.

Marion County Commissioner Colm Willis commented that he is comfortable with the Marion County projects proposed. Maria Hinojos-Pressey suggested three projects that she would like to see raised in priority:

[1] Public comments received were attached to the memorandum included in the agenda package for this item.

- M058 - Pedestrian treatments (3) at locations that are yet to be determined during a 10-year timeframe;
- M059 – Pedestrian treatments (4) at locations that are yet to be determined during a 10-year timeframe; and
- K022 - Verda Lane Extension.

She thought that staff have done a good job of balancing community needs and priorities. Councilor Trevor Phillips doesn't see the need for a special meeting in December.

Chair Cathy Clark commented that the Keizer projects appear to align with the interconnectivity needs of Keizer on a multi-modal scale. Polk County Commissioner Lyle Mordhorst would like to the see the original proposed list as compared to the list presented today. Ray Jackson responded that he will provide PC members with the requested information.

<u>The full set of comments from the online map are attached to the end of this appendix.</u>

Comments from January 2022 – Feb/Mar 2023

Table 3: Comments from the Public (From Kick-off to Public Review Period)

Date	Person	Venue	Remark	Consideration	Reference
2/22/2022	Nick Fortey	Email/ spoke at PC meeting	Goal language	Spoke/Provided to PC Feb 22, 2022	A-1
3/25/2022	Kenneth Stearns	phone	Support bike projects	Provided to PC April 26, 2022	A-2
3/14/2022	Fran Holman	email	Support Transit	Provided to PC April 26, 2022	A-3
3/14/2022	Mr. VanSchepen	phone	Road condition	Provided to PC April 26, 2022	A-4
4/1/2022	Sandra Kelley	phone	Fisher Rd lack of sidewalks	Provided to PC April 26, 2022	A-5
9/27/2022	Nick Fortey	Email/ spoke at PC meeting	Congestion management plan	Spoke/Provided to PC Sept 27, 2022	A-6
11/22/2022	Phil Carver	Email/spoke at PC meeting	Project priority and GHG reduction	Spoke/Provided to PC Nov 22, 2022	A-7
11/1/2022	David Cox	Email	Cordon Rd and Bridge across the Willamette	Provided to PC Nov 22, 2022	A-8
10/7/2022	Jim Scheppke	email	Structure of voting for projects on the map	Provided to PC Nov 22, 2022	A-9
11/10/2022	Victor Dodier for SCAN	email	Draft projects	Provided to PC Nov 22, 2022	A-10
11/22/2022	Laurie Dougherty	email	Support projects for safety	Provided to PC Nov 22, 2022	A-11
3/22/2022	Nick Fortey	Spoke at PC meeting	Criteria for project evaluation	Spoke to PC March 22, 2022	A-12
11/22/2022	Sarah Deumling	Public comment PC meeting	Prioritize GHG reduction	Spoke at PC Nov 22, 2022	A-13

A-1 Nick Fortey

Written version of comments delivered today at Policy Committee meeting (2-25-22) by Nick Fortey, West Salem Neighborhood Association:

Chair Clark and members of the Policy Committee:

My name is Nick Fortey, and I am chair of the West Salem Neighborhood Association Transportation and Infrastructure Committee.

We would like to offer a few comments on the Metropolitan Transportation Plan's goals and objectives as you consider updates. In addition to limiting the increase in congestion and improving mobility and accessibility, we would urge goals and objectives also consider and include:

- Reducing travel times
- Increasing reliability of the system
- Improving signal operations and coordination to facilitate safe and efficient movements, increase use of travel time information
- Increasing crossing opportunities and improve connectivity for people walking, biking, micro-mobility, and using transit

Our second focus on increasing safety and security on the network. We would urge you to look beyond objectives on minimizing fatalities, injuries, and collisions and instead focus reactively and proactively. Reactively by reducing the most severe crash outcomes and then focusing proactively on reducing risk on the transportation system so we frame the safety issue and move solutions further up the process of development.

Finally, we would ask for a separate focus on improving the delivery of projects on the system, in particular a focus on short-term "wins" even if the full solution cannot be implemented for some time.

~----------~

A-2 Kenneth Stearns

March 25, 2022, by phone

Phone call received by Kenneth Stearns. He received a postcard in the mail.
He lives in West Salem and bikes to work most every day to the Chemawa Indian School in NE Salem – about 10 miles. He has an interest in bicycle facilities and wanted to say that he generally supports bicycle facility projects. He participated in the survey online.

A-3 Fran Holman

Monday, March 14, 2022 10:52 AM, by email

To: SKATS

Subject: Re: Comments on South Salem Transit Station Plan

Hello Kim,

I'm all for a Public Transit Station in South Salem. There are so many new apartments, small condos and small houses off Davis Road opposite Crossler School particularly.

Red Leaf Drive - near us - crosses Davis and continues uphill with many more apartments.

We have a nicely renovated Secor Park in our area - and thankfully, no bathrooms there! It would be inundated and an ideal place for transients otherwise! Perhaps the Transit Station would have bathrooms.

I'm all for more public transport, too, by the way. I'd definitely use it more as I get older. Good for all, though, considering the pollution of cars and the price of gas.

Thanks for all you do...

Sincerely,

Fran Holman

P.S. I'm a native Londoner, so it's no wonder I feel this way!

From: Frances Holman

A-4 Mr. VanSchepen

Monday, March 14, 2022 11:55 AM, by phone

Subject: FW: Phone message - SKATS inquiry

I called Mr VanSchepen, who received one of the postcards we sent. Please add the following to the TIP's public involvement comments:

His concern was with the condition of the roads in Salem, mentioning in particular the poor condition of Skyline Road and Broadway Street (north of Market) and needing to swerve his vehicle to avoid these potholes, which could be a safety issue His view is that keeping our roads in good condition should be our a top priority for the funds we have.

Mike

A-5 Sandra Kelley

April 1, 2022 by phone

Sandra Kelley lives at the Providence Senior apartments on 3524 Fisher Road (north of Silverton Road). She received one of the postcards from SKATS and called the MWVCOG. Her comment is about Fisher Rd NE, with particular concern about the lack of sidewalks on Fisher from Silverton Road to Devonshire Ave. Devonshire is where the Walmart and Mega Food stores are located and people she knows walks on Fisher along the side of the road (along dirt and gravel strips) to shop at those stores, which makes traveling to those stores hazardous.

She wasn't specific about this being about the TIP or Plan, except she did mention that "$20 million" available that is mentioned about the TIP in the postcard.

A-6 Nick Fortey

From: Nick Fortey <fortey.nick@gmail.com>
Sent: Tuesday, September 27, 2022 10:37 AM
To: SKATS <SKATS@MWVCOG.ORG>; Odenthal, Karen <kodenthal@mwvcog.org>; Sapunar, Kim <KSapunar@mwvcog.org>
Subject: Policy committee meeting - comments for today's meeting - West Salem Neighborhood Association

Karen and Kim,

Please see our written comments for today's Policy Committee Meeting:

My name is Nick Fortey and I reside at 2165 Turnage Street NW in Salem. I am the transportation and infrastructure chair for the West Salem Neighborhood Association and I want to offer comments on Item D: SKATS Congestion Management Process.

As you may be aware, the West Salem Neighborhood Association has two major corridors, Highway 22 and Wallace Road and the performance of those facilities and the crossing over the Willamette and the subsequent connections through downtown have emerged as major issues to our neighborhood. As such, a robust and effective congestion management process carries a lot of importance with us.

We have several suggestions and recommendations on the policy which we feel will substantively strengthen outcomes and the enhancement of a robust, multimodal transportation system for the region.

Under Table 3 we would request additional measures – we think these are essential to draw out the multimodal nature of travel and solutions as well as to focus in on segments where there is a significant issue and where focused attention can deliver cost-effective solutions:

> Percent of facilities where speeds are less than 60% of free flow speeds: this would help focus attention on those segments where there is identified reduction of speeds from "typical" and show the extent of congestion
>
> Average speeds over key commute hours (7-8 am, 8-9 am, 4-5 pm, 4-6 pm): identifies segments which experience long-periods of congestion during typical commute periods
>
> We also believe non-auto use and options need to have substantially expanded measures; these are vitally important to deliver a complete and coordinated system that addresses travel needs by all users:
>
> > Number of employers enrolled in transportation management associations
> >
> > Number of active vanpools
> >
> > Number of active carpools
> >
> > Non-SOV (single occupancy vehicle) mode share

A-7 Phil Carver

From: Phil Carver – by email
Date: November 17, 2022 at 2:59:53 PM PST
To: MWVCOG <MWVCOG@mwvcog.org>, "Jaffe, Mike" <MJaffe@mwvcog.org>, Salem City Council <citycouncil@cityofsalem.net>
Cc: Laurie Dougherty, Bob Cortright
Subject: 350 Salem OR comments for 11/22/2022 meeting of SKATS Policy Committee

Greetings to the Policy Committee and MWVCoG Staff,

Below are our comments for the Nov. 22, 2022 meeting of the SKATS Policy Committee. Thanks to Bob Cortright for major help in drafting. Several other members helped draft these comments and 350 Salem's comments on the long range planning survey on the SKATS website.

Thanks for the opportunity to submit written and oral comments.

Phil Carver, Co-coordinator 350 Salem OR

Comments to SKATS Policy Committee
Regarding Transportation Plans
350 Salem OR
Nov. 17, 2022

Summary
We urge SKATS to alter its short and long term plans to be consistent with the Land Conservation and Development Commission's (LCDC's) rule on Climate Friendly and Equitable Communities. This rule enshrines a 30 percent reduction in vehicle miles traveled (VMT) for metropolitan areas like SKATS. As noted in the rule this significant change in land use and transportation plans is needed to reduce greenhouse gas (GHG) emissions. SKATS needs to immediately change plans and investments to focus on actions that we know are needed and will be effective in reducing emissions. The policies of the U.S., the State of Oregon and many Oregon cities are aligned to reduce GHG emissions. SKATS must align as well.

Plan for and Invest in a Low Carbon Future
Our plans reflect our vision of the future we want to achieve. Currently, SKATS plans largely ignore GHG emissions and assume that our transportation future through 2050 will be much as it has been in the past. It assumes continued roadway expansion to serve increased driving and expanded car-dependent development. This vision is contrary to state goals, rules and plans which make clear our need to plan for significant reductions in per capita VMT (30%) to successfully reduce greenhouse gas emissions. Accomplishing this level of VMT reduction requires that SKATS not facilitate further urban/suburban sprawl.

Instead, SKATS must plan for a future where most new jobs and housing are in highly walkable, compact mixed-use neighborhoods. Independent trends, such as more internet shopping and telecommuting prompted by the Covid 19 pandemic are also reducing the need for vehicle travel. SKATS needs to remake streets so that walking, transit, and cycling are safe and convenient. It's

time for SKATS to realign and redirect its planning efforts to match the future we know we need to achieve.

See below regarding the roles and prospects for local, state and national governments in stabilizing the climate.

Recommendations
Accordingly, we recommend the SKATS Policy Committee should direct that the 2050 Metropolitan Transportation Plan and other SKATS planning projects:

- Acknowledge and incorporate state goals and targets for GHG and VMT reduction
- Adopt goals for tripling the share of trips within the region made by walking, cycling and transit
- Prioritize investments in transit, walking and cycling that make these modes safe and convenient, only add lanes if required for pedestrian or bike safety
- Postpone all road expansion projects until we have a plan that meets emissions goals and targets
- Make investments that promote development in walkable mixed use areas and along the core Cherriots transit network
- Acknowledge that roadway expansion projects to reduce traffic congestion are ineffective. They encourage people to live far from jobs, schools and other common destinations. Such investments are counter-productive because they induce additional traffic and promote car-dependent development.

While much planning will be done within the region over the next 3-4 years, SKATS need not wait to start moving in the right direction. Salem's adopted land use plans include many new areas for mixed-use development and apartments. Salem is in the process of implementing its climate action plan, as are many other cities around the world. Cherriots plans major expansions in its transit service for 2026 with new funding. The recently passed Salem infrastructure bond measure has many pedestrian, transit and bike projects that move us meaningfully in the right direction to reduce VMT and emissions. Yet these types of projects are not prioritized for early construction in the SKATS plans.

Accordingly, SKATS should prioritize projects that move us towards the future we want and need to achieve. Continuing with business-as-usual has a high cost: it shifts the burden for reducing emissions to the future. This increases the damages from climate change and makes reductions more expensive. It also wastes money on roadway expansions that will not be needed.

Please see also 350 Salem's detailed comments on the 2050 plan from the website survey.

Electric Vehicles
While electric vehicles (EVs) will be part of the solution to personal vehicle emissions, they are not a panacea. The turnover of vehicles is too slow to accomplish the reductions needed between now and 2050. It won't be until 2030 or 2035 that most new personal vehicles are EVs. There are many 20 year old vehicles on Oregon streets. Major reductions by 2035 are needed to stave off the worst elements of climate disasters.

The Future of National and Oregon Climate Change Policies

Political momentum at the state and federal level to reduce GHG emissions has increased substantially in the past two years. In 2022 Congress passed and the president signed the Inflation Reduction Act. This law has many measures to reduce GHG emissions.

This November Tina Kotek was elected governor for 2023 to 2027. Of the three candidates she was the only one with a policy focus on reducing GHG emissions. For at least the next four years, policies of the Oregon Department of Transportation and the Department of Land Conservation and Development and their respective commissions will continue their focus on reducing state GHG emissions. As noted in LCDC's Climate Friendly and Equitable Communities rule, local governments have a unique role in achieving Oregon's GHG emission reductions.

As climate related disasters increase, political momentum in Oregon and the U.S. will grow. In the past few years Oregon and the western U.S. have seen unprecedented wildfires, heat waves and droughts. Massive floods in the U.S. have increased and threaten Oregon and the West in the future. Sea level rise of three to ten feet by 2100 is likely, especially if GHG emissions are not greatly reduced. Greater storm surge and at least one foot of rise are guaranteed, even if emissions reduction goals are met. All of these types of disasters are reduced by reducing GHG emissions.

While climate change is a global problem, the U.S. and other wealthy countries emit most of the GHGs or purchase the products made in developing countries. Almost all countries are working to keep the cumulative global average air temperature increase to less than 2 degrees Celsius. The temperature has already risen by 1.2 degrees since the mid 1800s, an increase unprecedented in the last 8,000 years.

By attaining the two degree target we can avoid the worst kinds of global catastrophes. To do so requires a major shift from business as usual, especially in the U.S. SKATS needs to do its part in helping to solve the most critical crisis of the 21st century. If we don't come together to solve this crisis, the alternative is too horrific to contemplate.

A-8 David Cox

From: david* COX – by email
Sent: Tuesday, November 1, 2022 3:53 PM
To: SKATS <SKATS@MWVCOG.ORG>
Subject: Re: Give Comments until November 15th!

My comments are about projects not on the list. but in my opinion, should be.

First - The Cordon Rd projects do not have a "logical termini" on the northern end. These improvements on Cordon Rd should go from I-5 on the southern end to I-5 on the northern end. Those are the only real "logical termini."

Second - There is nothing here about another bridge across the Willimatte. That's a mistake. Not only should the 3rd bridge be included in this plan but at least the location and preliminary design work for the 4th bridge (north of town) and the 5th bridge (south of town) should be also be included here.

Thank you for this opportunity to comment. I would be very interested to hear your response to these comments.

David Cox

A-9 Jim Scheppke

From: Jim Scheppke – by email
Sent: Friday, October 7, 2022 11:17 AM
To: SKATS <SKATS@MWVCOG.ORG>
Subject: Re: Comment on draft projects now!

Hey SKATS: I am troubled by the fact that people can "heart" a project but they can't do the opposite. You should have a heart and a thumbs down! I sense a little bias here.

Jim

A-10 Victor Dodier for SCAN

From: Victor Dodier - by email
Sent: Thursday, November 10, 2022 15:56
To: Jackson, Ray <RJackson@mwvcog.org>
Subject: comments on the Long Range 2023-2050 Transportation Improvement Plan

The South Central Association of Neighbors (SCAN) Transportation Committee reviewed projects listed in the Salem Keizer Long Range Transportation Improvement Plan (2023-2050) that are within the SCAN area. The committee's proposed comments were discussed and approved for submission at the November 9, 2022 SCAN Board meeting. SCAN submits the comments below:

Project S320 - Lower Leffelle / Clark Creek Park / South Village Park Bike Corridor

The City of Salem implemented signage for the segment of the bike corridor between Lower Leffelle and Clark Creek Park in 2021. The remainder of the bike corridor should be implemented earlier than 2030.

Project S214 - Mission St SE: 12th St SE to Commercial St SE

The project should be implemented sooner. 2045 is much too long to wait for a bicycle-pedestrian improvement. The City should consider separated bike lanes on Mission St SE rather than shared multi-use sidewalk.

Project S199 - River Rd S: Croisan Creek Rd S to UGB

The City should consider improving the access road on the west side of the railroad tracks as a separated bicycle and pedestrian path to Minto Brown park.

Project S318 - Bush's Pasture Park to River Road Bike Corridor

The intersection of Miller St. and Commercial St SE should have enhanced safety improvements.

Project S319 - Saginaw St Bike Corridor

This project is partially signed today. The project should be completed sooner.

Project S317 - Sprague HS to South Salem HS Bike Corridor

The project should be done sooner. Today's kindergartners will graduate before 2035.

General comment on bicycle corridors.

There should be better east-west bicycle corridor connectivity. For instance, a bike corridor on Hoyt Street going east to Summer Street would connect to the Lower Leffelle / Clark Creek Park route. Going farther east, the route would connect to the path on Berry Street.

Victor Dodier

SCAN President

A-11 Laurie Dougherty

From: Laurie Dougherty – by email
Sent: Tuesday, November 22, 2022 10:46 AM
To: Jaffe, Mike MJaffe@mwvcog.org; citycouncil@cityofsalem.net; tphillips@cityofsalem.net; Virginia Stapleton vstapleton@cityofsalem.net
Subject: Public Comment: SKATS Policy Committee Long Range Plan

Chair Clark, SKATS Policy Committee, and Staff,

My Name is Laurie Dougherty. I live in Salem and am a Co-Coordinator of 350 Salem OR, local chapter of international climate justice network 350.org.

Co-Coordinator Phil Carver submitted comments for 350 Salem OR that focus on the urgency of climate change and the need to reduce emissions from vehicle traffic.

Here I want to focus on safety for pedestrians, bicyclists, people with disabilities, children and the elderly. Safety is important in its own right, to protect lives and health. Safety is also important for achieving climate goals. People will drive less if it is safe and convenient to do so. Salem, through its climate action plan and Our Salem Comprehensive Plan, is moving toward mixed use neighborhoods that encourage walking and biking. The Oregon Department of Land Conservation and Development is moving in the same direction. SKATS needs to get on board with road and intersection design that prioritizes the mobility needs of people who are not in cars.

Adding more lanes to already busy streets will only induce more traffic at higher speeds, increasing the danger for all users. I submitted a written comment with the link to a recent article from Bloomberg City Lab: "US Traffic Safety Is Getting Worse, While Other Countries Improve."

The article states, "US roadways have grown more deadly during the last two decades (including during the pandemic), especially for those outside of cars. Last year saw the most pedestrians killed in the US in 40 years, and deaths among those biking rose 44% from 2010 to 2020."

In looking at why US roads have become more dangerous, the article points to "policy decisions that elevated fast car travel and automaker profits over roadway safety. Other countries made different choices, and they've saved lives as a result." Some policies are national, but others are well within the purview of local and regional jurisdictions. "Build slower streets"; create neighborhoods that reduce car dependency; use traffic calming measures including roundabouts, road diets, and cameras to catch speeders.

SKATS must reorient its planning to focus on the intertwined goals of climate protection and safety.

Thank you.

A-12 Nick Fortey

March 22, 2022 Policy committee meeting, Public comment

Nick Fortey, West Salem Neighborhood Association Transportation and Infrastructure Chair, provided testimony referencing Agenda Item E. SKATS MTP: 1 Criteria for Use in the Project Evaluation Process, Mr. Fortey made suggestions related to changes/additions to some of the proposed project evaluation criteria for Safety (number 9 in Table 2 of Agenda Item E) and Environmental Justice (EJ) (number 8).

In addition to addressing a known safety location, Mr. Fortey asked that priority be made for fatalities and serious injury reduction along with identifying high risk areas. Regarding equity, Mr. Fortey asked that the Policy Committee consider some broader criteria, including individuals with disabilities, seniors above 70, single parents, those who are rent burdened, and zero car households. He also would like criteria to look not only impacts to EJ areas but also benefits to EJ areas such as increase accessibility and increased travel choices.

A-13 Sarah Deumling

Sarah Deumling

Comments to SKATS Policy Committee re:
Transportation Plans
November 22, 2022

My name is Sarah Deumling. I own a residence in West Salem and a residence and sawmill/wood products business in Polk County in addition to being a member of 350 Salem. I am very concerned that the focus of SKATS transportation planning is still stuck in the 1950s when we increasingly urgently need to rethink how we get around in order to quickly reduce fossil fuel emissions to prevent the worst effects of climate change. We can and we must but it is nigh on to impossible without the leadership of groups like SKATS. I urge you to get with the program, to follow the new LCDC rules, to work with all due haste to reduce VMTs by 30% and to make non-fossil fuel modes of transportation more accessible, more convenient and safer.

Many of us are more than ready to accept - or embrace - any perceived inconveniences in order to ensure that we and future generations have an abundant and livable future in Oregon. The catch is that it is almost impossible to do this on a scale that makes a difference without LEADERSHIP and that means YOU!

In closing I would like to share an anecdote. Though a fifth generation Oregonian I have many friends and relatives in Germany who, due to the war in the Ukraine, are facing a major curtailment in supplies of fossil fuel, particularly natural gas, as winter approaches. In the last few months the citizens of that country have reduced their use of natural gas by 40% - voluntarily!!! - by being smart, creative and willing to adjust for the common good. I'm convinced that we are also capable of rising to the challenge for the sake of the future. Please lead us with all due haste in this direction, put yourselves on the right side of history and future generations will thank you.

Notification of Public Comment Period March to May 2023

Public comment for the MTP was announced via a variety of channels, including:

- Mailed postcards to 350 on SKATS mailing list
- Emails sent to the SKATS *Interested Parties* email list, of which there are approximately 254 subscribers:
    - 3/29/2023
    - 4/4/2023 – open house
    - 4/10/2023 – open house
    - 4/18/2023 with video links
    - 5/2/2023
    - 5/14/2023
- Press releases in Spanish and English sent to our media contact list.
- Announcements in editions of the COG Connections.
- Notification placed on the Transportation Hub page and MWVCOG website in three locations (front page, MTP Update page, and TIP Update page).
- Posts on the MWVCOG Facebook page.
- Information sent to SKATS partners and included in their email or social media messages, if possible.
    - City of Turner
    - Cherriots
    - City of Keizer
    - City of Salem, City's Neighborhood Associations contact list
    - City of Salem communications team
- Public Service Announcements to Keizer TV and Salem CCM (cable tv systems)
- Brochures in Spanish and English, at Salem Main Library
- Video explaining the MTP posted on YouTube

Meetings and presentations March to May 2023

Presentations to five Salem Leadership Foundation groups, providing a brief introduction of MPOs and the MTP, TIP, Safety Plan, and Household Study. The groups were informed of upcoming transportation planning updates and how they could participate. During the Question & Answer portion, the attendees commented on local issues (sidewalks, safety) and clarification of what SKATS can actually do.

Table O-4: Outreach Prior to Public Comment Period

Date	Organization	Attendees
3/8/2023	North Neighbors N2	22
3/16/2023	Community and Partners of East Salem - CAPES	22
3/20/2023	Keizer United	29
3/21/2023	South Salem Connect - SSC	14
3/23/2023	Edgewater Partners	10

- On site Open House on April 11, 2023, 14 attendees

Summary of Comments/Consideration – March 28 to May 23, 2023 - Policy Committee and Public Hearing

Comments received on the draft MTP (released for review on March 28, 2023) are summarized below, and complete comments received through May 15, 2023, follow.

a. Open House held on April 11, 2023. Eight written comments submitted. Discussion over the 1.5 hours at the Open House included the cost of projects and what the proposed projects are meant to accomplish.
   i. Supportive of projects adding walking and/or biking facilities
   ii. Not support of capacity increasing projects
b. Five comments were received by email. Three were focused on the proposed projects and/or the draft document.
   i. Supportive of projects adding bicycle facilities and increased safety.
   ii. Not supportive of projects increasing vehicular capacity
c. Online Interactive Map - 39 comments were received, and 36 projects received "likes."
   i. Generally, the comments received were supportive of projects that improve safety by providing facilities for bicyclists and pedestrians.
d. Comments on the pre-public review draft document were received from Sadie Carney, the SAMTD Board representative on the SKATS Policy Committee. They are **attached at the end of this appendix.**
   i. These covered most of the chapters of the document. Many of these were suggestions on clarifying the writing to be more understandable to the layperson. Comments also addressed the clarifying statements of several of the Goals, and the need for a more robust Environmental Justice analysis.
e. One member of the public spoke during public comment of the May 23, 2023, Policy committee, she stated her support of comments by Phil Carver previously submitted to not support capacity increasing projects, or the Hwy 51/22 interchange, and in support of projects that increase safety for pedestrians and cyclists.

In overall summary, comments generally reflected two themes. The majority of comments received were in support of projects that included walking and biking facilities, and safety improvements. Most of the comments received also were not supportive of projects that would increase vehicular capacity and increase greenhouse gasses. <u>There were no comments from the public on the document itself, only on the projects included in the plan</u>.

At the May 23, 2023, Policy Committee, all comments were included in the agenda and discussion and deliberation included:

- An appreciation by the PC members for the comments submitted by the public and a desire to acknowledge their input and interest.
- An acknowledgement that the PC has the authority to make changes to the plan as they discuss public input. Staff did not recommend removing any projects based on input received, as local jurisdictions determine and submit projects to the plan, though the PC may make changes if desired.

- A desire to maintain the comments and the spirit of the input received so far and keep this public input pertinent to the ongoing work of SKATS.
- A discussion of the public input received over the plan's development from the kickoff phase in March 2022 and the project evaluation phase in November 2022.
- Discussion of changes made in the evaluation criteria to better reflect priorities for the safety of vulnerable users walking and biking in the system.
- With regard to capacity increasing projects, a discussion of the road/bridge project types broken out by a more detailed description of their specific modification. This was shown in a pie chart during the staff presentation by Ray Jackson, based on the data of Table 2 in Chapter 7. Very few projects included in the plan increase vehicular capacity.

After deliberation, the Policy Committee voted to adopt the 2023-2050 MTP, as amended with updated language of changes as outlined in attachment 9 of the agenda, with an additional change to reflect an error in a table in Chapter 6, and to include in Appendix R links to the stormwater plans for the local jurisdictions (if available).

Comments received at the April 11, 2023, Open House

Comments from the Open House on April 11, 2023, and follow up emails, many comments were for both the MTP and TIP

Table O-5: Comments from the April 11, 2023 Open House

Person	Remark	Date Provided to PC	Consideration	Both MTP/TIP
Laurie Dougherty	No new traffic lanes, build traffic calming	4/23/23	Provided to the PC prior to the Public Hearing.	yes
anonymous	On Broadway St, no crossings between Hood and Highland Elementary, No signal	4/23/23	Provided to the PC prior to the Public Hearing.	yes
Ray Quisenberry	Salem is working on a climate action plan and just recently voted to begin a Vision Zero Plan. Adding lands and widening roads do not comply with either goal. We need to stop being so card centric and plan for a safter cleaner future. Do not widen any roads. Make the system safer for peds and bikes.	4/23/23	Provided to the PC prior to the Public Hearing.	yes
Gary Pullman	Curious as to why the bike/ped to inter combustion behemoth ratio is so small. What is the time frame about lower speeds/much smaller electric vehicle accommodations?	4/23/23	Provided to the PC prior to the Public Hearing.	yes
Anonymous	Cancel the Hwy 22/51 interchanges in light of climate change. We must drive less – not more (+faster). I come south on Oak Grove and turn left (east) to Salem each time – We can make it work without an interchange. If really necessary a traffic light going west @ rush hour would work.	4/23/23	Provided to the PC prior to the Public Hearing.	Primarily for the MTP
Anonymous	No new roads or road widening. We must learn to drive less and slower. EO 20-04 etc. Climate change. Only bike/ped/public transit improvements – incentives. We want our grandchildren to have as lovely an Oregon as we had – me in the 1950's	4/23/23	Provided to the PC prior to the Public Hearing.	yes
Lynn Takata	How to advocate for route change, increase frequency, change to route of D Street to go by the high school	4/23/23	Provided to the PC prior to the Public Hearing.	general

			Provided SAMTD contact info.	
Ted Burney	Interested in transit planning, and safe routes to schools	4/23/23	Provided to the PC prior to the Public Hearing. Provided SAMTD staff contact info.	general

From: Sapunar, Kim
Sent: Wednesday, April 12, 2023 12:00 PM
To: laurie dougherty
Subject: Union street

Hello Laurie,

Thank you for attending our Open House yesterday. I wanted to follow up with you about the Union Street Family Friendly Bike way. We just heard from the city that they have received the notice to proceed, and will go to construction in this year. The bond measure is the main funding source and therefore the two phases that we have in the long range plan will all be brought forward and built at once. A signal in included in the plans at Union and Liberty.

The focus of the project will include upgrading Union Street with new road striping to provide dedicated bike lanes, vehicle parking pockets, enhanced green space, and public transit stops. Additionally, the intersection of Union Street NE and Liberty Street NE will be improved to include a traffic signals and bulb out corners to improve safety for both bicycles and pedestrians.

Let me know if you have other questions,

Kim

From: Laurie Dougherty – by email
Sent: Wednesday, April 12, 2023 12:25 PM
To: Sapunar, Kim <KSapunar@mwvcog.org>
Subject: Re: Union street

Thank you, Kim. That's good news. I appreciated the chance to talk with you and other SKATS people yesterday.

---Laurie

From: Sapunar, Kim
Sent: Wednesday, April 12, 2023 1:38 PM
To: Gary Pullman – email
Subject: MTP project list

Hello Gary,

Thank you for attending the Open House yesterday. I have attached a PDF version of the projects in the long-range plan as we talked about last night. The order of the projects is by jurisdiction, and then separated by committed and included status. Committed projects would be build sooner than the included projects. Let me know if you have any questions,

Thanks

Kim

From: Sapunar, Kim
Sent: Wednesday, April 12, 2023 2:12 PM
To: Lynn Takata - email
Subject: Transit planning info

Hi Lynn,

Thank you for attending our Open House yesterday. I reached out to Cherriots, and they suggest contacting Chris French as the best person to take comments and field questions regarding routes, route changes and frequency of service. Call the main telephone number and ask for Chris: 503-588-2424.

Let me know if you have other questions.

Thanks,

Kim

From: Sapunar, Kim
Sent: Wednesday, April 12, 2023 2:20 PM
To: Ted Burney - email
Subject: Transit Information

Hi Ted,

Thank you for attending our Open House yesterday. I reached out to Cherriots, and they suggest contacting Chris French as the best person to take comments and field questions regarding routes, route changes and frequency of service. Call the main telephone number and ask for Chris: 503-588-2424.

Our Safe Routes to School coordinator here at SKATS is Beth Schmidt, she can be reached at email: BSchmidt@mwvcog.org.

ODOT's Regional Transit Coordinator for Region 2A - North Coast/Willamette Valley is Arla Miller, at Arla.Miller@odot.oregon.gov

Let me know if you have other questions.

Thanks,

Kim

Comments received during the public comment period March 28 – May 15, 2023

Table O-6: Comment Received During the Public Comment Period

Date	Person	Venue	Remark	Date Provided to PC	Consideration	Reference	Both MTP/TIP
4/4/2023	Pamela Schmidling	email	Street light at Ratcliff Dr. and Commercial SE	4/25/23	Provided to the PC prior to the Public Hearing.	D-1	yes
4/10/2023	Francis Lombardi	email	Photo on postcard mailer	4/25/23	Provided to the PC prior to the Public Hearing. Photo will be revised in future outreach materials	D-2	yes
4/18/2023	Alex Brown	Email	Comments on projects and bike safety	5/23/23	Provided to the PC prior to the Public Hearing.	D-3	MTP
5/14/2023	Phil Carver for 350.org Salem	Email	Comments on road projects in MTP and climate impacts Copy of letter to the OTC on Hwy 22/51	5/23/23	Provided to the PC prior to the Public Hearing.	D-4 D-5	MTP
5/15/2023	Laurie Dougherty	Email	Safety as a priority for projects	5/23/23	Provided to the PC prior to the Public Hearing.	D-6	MTP

D-1 Pamela Schmidling

From: P and D Schmidling – by email

Sent: Monday, April 3, 2023 4:08 PM

To: SKATS <SKATS@MWVCOG.ORG>

Subject: Public Comment Period

I would like to see the street light at Ratcliff Dr. and Commercial SE. What a nightmare for the retirement citizens.

Chair of MNA,

Pamela Schmidling

From: SKATS
Sent: Tuesday, April 4, 2023 9:14 AM
To: 'P and D Schmidling'
Subject: RE: Public Comment Period
Dear Pamela,

Thank you for your comment. All comments received will be provided to our Policy Committee for their consideration as they review the draft transportation plans. We appreciate your feedback.

Sincerely,

Kim Sapunar

D-2 Francis Lombardi

From: Francis Lombardi – by email
Sent: Sunday, April 9, 2023 15:43
To: Jackson, Ray <RJackson@mwvcog.org>
Subject: Recent mailed flyer

Hello,
Just received SKATS flyer in the mail.
I don't know who was responsible for this but the photo on the front side shows 2 bicyclists that are not wearing helmets and one of them is clearly under the age to be required wearing one.

Better modeling please.

Regards

Francis Lombardi
From: Jackson, Ray
Sent: Monday, April 10, 2023 08:02
To: Francis Lombardi
Subject: RE: Recent mailed flyer
Hi,

Thanks for the comment. We'll use a different image in future flyers.

Regards,

Ray

D-3 Alex Brown

From: Alex Brown – by email
Sent: Tuesday, April 18, 2023 2:59 PM
To: Sapunar, Kim <KSapunar@mwvcog.org>
Subject: SKATS open house follow up

Hi Kim,

Thanks for speaking with me at the transportation open house last week. I am interested in Salem improving safety for bicyclists primarily through extension and improvement of bike lanes. My main issue is that every project that would make things safer is only part of the long term plan which seems too far away and prone to similar delays/lack of funds in the future. I don't want to be biking around for the next 7+ years before seeing safety improvements.

Below are the details on several key improvement areas that would make biking safer around town. I added some comments on the SKATS long term project map and the recent City of Salem safety survey map. If there are other ways I should communicate the importance of these projects please let me know.

1. 17th Street north of Market Street to Sunnyview - the bike lane ends here forcing bicyclists into traffic. 17th Street is a wonderful north-south connector and could be better with this extension. Project S061 would address this perfectly.
2. Sunnyview west of 17th to Fairgrounds - the bike lane ends and would be safer if extended. The industrial park in this area has space for a bike lane. Project S238 would address this perfectly.
3. Sunnyview - project S149 would improve safety but is only on the long term plan 7+ years away from reality
4. Fisher Rd NE - Project S348 would help me get to a grocery store safely by bicycle. There is currently no shoulder and bikes must share the road with drivers who are not always expecting me to be there. Same timing feedback, why is this not possible until 2030 or later?
5. Market Street - currently not safely usable for bicyclists at all. Project S212 will help but not for a long time.
6. Hood/Fairgrounds - bike lane only exists for 2-3 blocks before ending. Project S226 is needed but not planned for a long time.
7. State/Kroc bike corridor - Project S310 sounds great, but same thing on timing, this is only on the long term plan
8. Downtown - the pedestrian safety zones prohibit wheels on the sidewalks, but navigating downtown on bike other than Chemeketa and High/Church streets is difficult. Marion, Center, and Liberty streets are not safe for bicyclists. Projects S211, S205, and S347 will all help with this but they are only on the long term plan.
9. Commercial St NE - downtown this is a sharrow in all lanes but the markings need repainted. Drivers approach a bicyclist in the left lane at high speed and seem to be annoyed but this is the best way to reach the library. SImilar situation for Liberty St leaving the library. The library is one of the only places left in the world truly open for everyone and getting there should be safe for all, not just drivers. Project S210 should be extended for Liberty Street between Mission St and Union St.
10. Lancaster Drive - Bike lanes exist but I do not use them for fear of being hit by a vehicle. These lanes need to be separated from the high speed and sometimes reckless drivers on Lancaster.
11. Airport Road - bike lane in parts but not others. The Pringle creek crossing is only the width of the vehicle lane and dangerous for bicyclists.

Positive feedback - High St/Church St bike lanes are great examples of protecting bicyclists. The Chemeketa /12th St. bike signal is wonderful. The 17th Street bike lane is great except the part where it ends mentioned above.

Thank you very much,
Alex Brown

From: Sapunar, Kim
Sent: Tuesday, April 18, 2023 3:17 PM
To: Alex Brown - email
Subject: RE: SKATS open house follow up

Hi Alex,
Thank you for attending our Open House, and especially for taking the time to follow up with your comments in email. All comments are presented to our Policy Committee for their consideration.

Thank you,
Kim

D-4 350.org Salem

350 Salem Oregon
Comments to SKATS
cc: Salem City Council
Phil Carver, Co-coordinator

Regarding the draft 2050 Metropolitan Transportation Plan (MTP)
May 14, 2023

350 Salem objects strongly to the emphasis of the draft MTP on expanding capacity of existing roadways. Study after study shows that road widening does not significantly reduce traffic congestion. After a short time people will move or otherwise change their pattern of driving in ways that fill up the increased roadway capacity.

The benefits of temporary congestion relief are much smaller than the enormous costs to taxpayers without even considering the environmental costs of air pollution and climate disasters. Amazingly, the 2050 MTP is rife with reverence to the myth that capacity reduces congestion. While some uninformed Oregon residents may still hold these false beliefs, it is unbecoming for a professional document.

A Policy Brief prepared by National Center for Sustainable Transportation at University of California-Davis[1] states:

> Traffic congestion has traditionally been addressed by adding additional roadway capacity via constructing entirely new roadways, adding additional lanes to existing roadways, or upgrading existing highways to controlled-access freeways. Numerous studies have examined the effectiveness of this approach and consistently show that adding capacity to roadways fails to alleviate congestion for long because it actually increases vehicle miles traveled (VMT).
>
> An increase in VMT attributable to increases in roadway capacity where congestion is present is called "induced travel".

A March 2023 study[2] concluded:

> Generated traffic [induced travel] has three implications for transport planning. First, it reduces the congestion reduction benefits of road capacity expansion. Second, it increases many external costs. Third, it provides relatively small user benefits because it

[1] https://ncst.ucdavis.edu/research-product/increasing-highway-capacity-unlikely-relieve-traffic-congestion

[2] https://www.vtpi.org/gentraf.pdf

> consists of vehicle travel that consumers are most willing to forego when their costs increase.

These two studies have numerous references and provide sound rebuttal to studies promoting capacity expansion as a method of congestion relief. These two studies note that the benefits of increased flexibility for peak-time travel from capacity expansions are likely much smaller than the cost of these projects.

The large majority of the planned spending in the 2050 draft MTP is for expanding capacity. The justification below in the MTP has been fully refuted by these studies.

> Comparing the results shown in these maps, with the base year demand shown in Map 4-4 (page 4-13 of Chapter 4), the number of roads where the demand to capacity is above 0.8 is much greater in both future scenarios. But there is a decrease in the number of roads with demand to capacity above 0.8 in the 2050 Build scenario compared to the 2050 No Build scenario. In 2021 base year, approximately 84 percent of the road miles have a demand to capacity ratio of less than 0.8. This number decreases to 66 percent for the 2050 No Build case but is approximately 76 percent for the 2050 Build case (which represents the Committed and Included projects in Table 7-3). (MTP page 7-3, emphasis added)

Induced demand is not included in this forecast. The reduction in congestion will likely be much less than forecasted. The benefits are likely well below the costs of these projects. In other words, expanding roadway capacity in the MTP will not reduce congestion. Instead it would just allow for more vehicle miles traveled (VMT) at similar levels of congestion – but with **greatly increased levels of** greenhouse gas (**GHG) emissions** and other air pollutants.**.**

As an example, Polk County's population grew as a percentage at nearly twice Marion County's from 2000 to 2022 (42.5% vs. 21.9%).[3] This has resulted in increased congestion on Salem's Willamette River bridges during morning and evening rush hours. The proposed solution was an impossibly expensive third bridge that would have given Polk County residents near-freeway access to Wilsonville.

This would not have relieved congestion at the river for very long. Soon the Polk County population would have grown faster than jobs there. This would have made the peak-time river crossings just as congested at rush hour again, but with much more VMT. The Salem City Council was fully justified in its In 2019 approval of the no-build alternative for the third bridge.

With the climate crisis fully upon us, increases in VMT and GHG emissions from the 2050 MTP are a dire threat to health and safety.

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[3] https://sos.oregon.gov/blue-book/Pages/local/county-population.aspx

On October 12, 2020, City Council adopted two Greenhouse Gas emissions reduction goals:

- By 2035 – Reduce Salem's GHG emissions by 50% (from the baseline year of 2016)
- By 2050 - Salem is a carbon neutral city

The draft 2050 MTP in total, and the Salem portion of the plan in particular, are totally inconsistent with these goals. These goals are not aspirational or just nice to have. Cities around the world have been leaders in reducing GHG emissions. Failure of cities and other governments to achieve similar goals will make the 2020 Labor Day fires seem mild in comparison. We are currently seeing a "Firmageddon" of true firs in central and eastern Oregon. Douglas firs in the Cascades and Coast Range are threatened if we do not achieve these goals.

Portland Oregon adopted its first climate action plan in 1993. Multnomah County later adopted its own action plan. The most recent update[4] stated:

> The past 26 years of climate planning and carbon mitigation efforts have driven local carbon emission 19% below 1990 levels as of 2018 (most recent data available, tracked at the county level). These reductions place Portland and Multnomah County on the forefront of communities internationally in achieving real carbon emissions reductions. The reductions to date are especially impressive given the growth of 39% more people and 36% more jobs during the same time period, meaning per capita emissions in Multnomah County have been reduced by 42% since 1990.

Salem got a later start in climate action. It must accelerate its plans to reduce VMT

An egregious example of magical thinking is below from the MTP at page 9-12.

> Kuebler Boulevard, Cordon Road, Hazelgreen Road, and Chemawa Road form a circumferential route around the Marion County portion of the Salem-Keizer area. This route also functions as the emergency bypass route when incidents close major facilities such as I-5, Portland Road, Lancaster Drive, or other regional roads. **It is critical that this route retain its functionality as a beltway for moving goods and people through the urban area in the most efficient and expedient manner.** [emphasis added] Toward this end, Marion County and Salem are working toward interconnecting the signals along the corridor to optimize progression and generally limiting future access to street connections to those that support regional movement. A study began in 2021 to study this corridor to provide recommendations on future projects, including the intersections, the provision of additional capacity and providing for safe travel for all modes. The study will conclude after adoption of this Update and projects will be considered, as funding is available, for inclusion in the 2027 MTP Update.

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[4] https://www.portland.gov/bps/climate-action/documents/2015-climate-action-plan-final-progress-report-2020/download (page 13)

There is absolutely no need (emergency, movements of goods or otherwise) for an expanded circumferential route around the Marion County portion of the Salem-Keizer area. This route does not connect any substantial population center to jobs, schools or shopping. If built, the four lane bypass route would just encourage drivers to drive farther to save a few minutes of travel time due to the high speed of the planned ring road. This would vastly increase VMT and GHG emissions. It would not increase safety.

It is highly unlikely there will be sufficient funds for this project. In particular the Salem portion of MTP calls for a four-lane interchange at Highway 22 and Cordon Rd.[5] The Oregon Dept. of Transportation does not support this project concept as appropriate for state transportation needs. Instead of a starry-eyed vision of an eventual four-lane ring-road on the eastside of Salem, the City and Marion County should support a near term project for an appropriately wide new two-lane bridge for Cordon Rd over Highway 22 with separated bike lanes. The current 55 MPH bridge has no room for bikes of any type and is highly dangerous.

Thank you for the opportunity to comment. We have also attached our April 4, 2023 comments on the Rickreal to Doaks Ferry freeway-style interchange.

From: Sapunar, Kim
Sent: Monday, May 15, 2023 9:31 AM
To: Philip Carver - email
Subject: FW: Public Comment 2050 MTP

Dear Phil,

I have received your attached letters for the Policy Committee and thank you for your comments. They will be included in the May 23rd agenda packet.

If you have any questions, please let me know.

Thanks

Kim Sapunar

[5] MTP Salem's list of "included projects" for 2038 has "S085 Cordon Rd SE & Hwy 22- Construct interchange with recommended signalized intersections and lane configurations" for a "current cost" of $30 million. This is likely a gross underestimate of the cost.

D-5 350.org Salem

April 4, 2023

To: Oregon Department of Transportation % ODOT.STIP@odot.oregon.gov
Oregon Transportation Commission

From: Phil Carver, Bob Cortright, 350 Salem OR

Subject: DRAFT STIP PROJECT 13188: OR22: Rickreall to Doaks Ferry

The proposed $11 million for preliminary engineering and right-of-way acquisition for a new interchange and related roadways at this location should not be included in the 2024-27 STIP. ODOT should instead - consistent with the Governor's Climate Action Plan (EO 20-04) - re-engage with stakeholders to plan an affordable, achievable set of safety and operational improvements for this area that will avoid inducing increased vehicle travel and greenhouse gas emissions and cost less than this very expensive proposal.

The proposed interchange project would violate Executive Order 20-04

EO 20-04 directs that state agencies -including ODOT and OTC - to use whatever authority and discretion they possess to take actions that help implement state goals to reduce GHG emissions.[1]

This project violates EO 20-04 because ODOT has neither evaluated GHG impacts of this project nor considered actions that would address transportation needs without increasing GHG emissions. The proposed interchange would significantly increase capacity for single occupant vehicle commuting between Independence and the Salem-Keizer area, which would induce additional VMT and greenhouse gas emissions. However, ODOT has neither evaluated GHG impacts of the proposed project nor considered actions to address transportation needs in a manner that would help achieve GHG emission reduction goals. As outlined below there are a range of actions within ODOTs authority that could substantially improve safety and operations without inducing additional emissions and at an affordable cost.

ODOT and the OTC have “authority and discretion” vested by law to implement other solutions to address transportation needs in this area. As the owner and manager of the state highways in question (Highway 22 and 51) ODOT has broad authority to manage and plan modifications or improvements within the right-of-way, and to fund and coordinate supporting actions by other agencies.

[1] Specifically Section 3 of EO 20-04 says: “State agencies shall use any and all authority and discretion vested in them by law to help facilitate achievement of Oregon’s GHG emission reduction goals
… and “…to the full extent allowed by law agencies shall consider and integrate … GHG emission reduction goals into their planning, budgets, investments, and policy making decisions.

There are affordable, low-cost safety and operational improvements that can adequately address transportation needs in this area; and implementation of such improvements is required by the Oregon Highway Plan

The Major Improvements Policy in the Oregon Highway Plan (Policy 1G and Action 1G.1) directs that ODOT defer major improvements to the state highway system in favor of minor and modest operational and safety improvements to address transportation needs. Action 1G.1 applies to project and planning and to adoption and amendment of the Statewide Transportation Improvement Program (STIP).

Policy 1G: Major Improvements

It is the policy of the State of Oregon to maintain highway performance and improve safety by improving system efficiency and management before adding capacity. ODOT will work in partnership with regional and local governments to address highway performance and safety needs.

Action 1G.1

Use the following priorities for developing corridor plans, transportation system plans, the Statewide Transportation Improvement Program, and project plans to respond to highway needs. Implement higher priority measures first unless a lower priority measure is clearly more cost-effective or unless it clearly better supports safety, growth management, or other livability and economic viability considerations. Plans must document the findings which support using lower priority measures before higher priority measures.

1. *Protect the existing system.* The highest priority is to preserve the functionality of the existing highway system by means such as access management, local comprehensive plans, transportation demand management, improved traffic operations, and alternative modes of transportation.
2. *Improve efficiency and capacity of existing highway facilities*. The second priority is to make minor improvements to existing highway facilities such as widening highway shoulders or adding auxiliary lanes, providing better access for alternative modes (e.g., bike lanes, sidewalks, bus shelters), extending or connecting local streets, and making other off-system improvements.
3. *Add capacity to the existing system*. The third priority is to make major roadway improvements to existing highway facilities such as adding general purpose lanes and making alignment corrections to accommodate legal size vehicles.
4. *Add new facilities to the system*. The lowest priority is to add new transportation facilities such as a new highway or bypass.

A range of alternative actions are available for addressing transportation needs in this area that would do so in a manner that is consistent with EO 20-04 and reducing climate emissions. These include:

Expand transit service focusing on commute service between Independence and downtown Salem by increasing frequency and improving service on Cherriots Regional

Route 40X (the Polk County/Salem Express) with 15 or 20 minute service in the morning and evening commute hours.

Provide commute incentives and alternatives for Independence residents - Work with the state and other major employers in the Salem-Keizer area to provide incentives for Independence area commuters to use transit, share rides, and adopt flexible work schedules to reduce peak hour commutes.

Improve safety for afternoon commuters to Independence by:

- Lowering the speed limit on Highway 22 in the vicinity of the 51 intersection to 45 mph
- Installing a roundabout or a smart traffic signal[2] at the Highway 51 intersection. ODOT is planning to install roundabouts on several nearby intersections.[3]
- Widening the Highway 22 left turn lane to provide additional separation from through lanes and add lighting in the intersection area to improve visibility.
- Improving the left turn lanes from Highway 22 to South Oak Grove Road and Greenwood Road to provide additional capacity for afternoon peak hour left turns to access Highway 51.
- Make improvements that encourage western Independence area residents to use the Highway 99W interchange for the afternoon commute home.
- Restrict 52nd and 55th to right-in and right out only and instead provide for a "J" turn via a U turn at Oak Grove Road[4]

The interchange proposal should also be rejected because it is an unaffordable solution that cannot be implemented any time soon

This project is also excessively expensive. ODOT has declined 350 Salem's request to provide a cost estimate for this project and has prepared only a high-level estimate for the interchange itself of $25-40 million dollars. This estimate apparently does not include the cost of extensive "access roads" that would be constructed as part of the project. Past practice suggests that ODOT's initial "high-level" estimates dramatically underestimate actual project costs. Funding for highway projects is extremely limited and likely to decline in the future as cars become more efficient and gas tax revenue declines. This means the project is unlikely to be built anytime soon and that the cost of this project is highly disproportionate to the benefits to the traveling public at large.

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[2] A "smart traffic signal" would provide for left turns from Highway 22 to Highway 51 that activates in the afternoon peak (or in other peak travel conditions). The signal would stop eastbound traffic on Highway 22 to allow these left turns. This would include advisory or warning lights for approaching traffic when the left turn signal is activated. At other times of the day, when traffic is light, the existing condition would remain in place.

[3] ODOT is planning to construct roundabouts at the following nearby intersections: Highway 22 at Kings Valley Highway (5 miles west of Highway 51); Highway 99W at Clow Corner (5 miles southwest) and on Highway 18 at Lafayette Highway (19 miles north)

[4] See NCHRP 650 https://onlinepubs.t Highway 22 at Perrydale Roadrb.org/onlinepubs/nchrp/paths/ruralintersections.pdf

Conclusion

A new interchange at Highway 51 would induce additional travel and commuting from Independence to Salem that will increase rather than reduce vehicle miles traveled (VMT) and greenhouse gas emissions contrary to state goals and Executive Order 20-04. EO 20-04 is a new requirement that ODOT **must** comply with. To comply with this executive order, ODOT should reconsider the need for this project and consider and select an affordable solution that improves safety <u>that is consistent with meeting GHG reduction goals.</u>

In order to comply with EO 20-04, ODOT needs to go back to the drawing board and consider actions and alternatives within its authority and discretion that would implement and be consistent with EO 20-04 and to comply with the OHP , including the various actions and alternatives identified above.

From: Steve Dobrinich
Sent: Wednesday, April 26, 2023 2:33 PM
To: Robert Cortright
Cc: Phil Carver
Subject: RE: Public Comment on Draft SKATS 24-29 TIP

Hi Bob-
Thanks for the message. We'll add the letter to the public comments and make sure it's included with the meeting
materials for the May TAC and Policy Committee meetings.
-Steve

D-6 Laurie Dougherty

From: Laurie Dougherty – by email
Sent: Monday, May 15, 2023 5:17 PM
To: SKATS <SKATS@MWVCOG.ORG>; vstapleton@cityofsalem.net; JWarncke@cityofsalem.net; tphillips@cityofsalem.net
Subject: Comment on SKATS 2050 Metropolitan Transportation Plan

Hello SKATS policy makers,

Thank you for the opportunity to comment on the 2050 Metropolitan Transportation Plan.

I would like to know how the information from the SKATS Safety Survey will be integrated with SKATS transportation plans. I took the survey and made several comments and suggestions. I don't have a car and am particularly concerned with safety for pedestrians, bicyclists, and people with disabilities and mobility challenges. More resources must be allocated to traffic calming, intersection safety, and protected bicycle infrastructure.

Safety is important in its own right. Safety is also an important factor in reducing greenhouse gas emissions from motor vehicles. People need to feel safe in order to use alternate modes of travel. SKATs is wedded to the perceived need to increase capacity for cars. This will only induce more traffic and faster traffic, making Salem area streets more dangerous for everyone. Salem is implementing a Climate Action plan and a Comprehensive Plan that encourage walkable, bikeable, mixed use neighborhoods with good access to public transit. In order for these efforts to succeed Salem needs safe streets.

Laurie Dougherty

Salem

From: SKATS
Sent: Tuesday, May 16, 2023 8:44 AM
To: Laurie Dougherty - email
Subject: RE: Comment on SKATS 2050 Metropolitan Transportation Plan

Dear Ms. Dougherty,

Thank you for your comment on the 2050 MTP. All comments received will be provided to our Policy Committee for their consideration as they review the draft transportation plans. We appreciate your feedback.

Regards,

Kim Sapunar

Comments received via online map during public comment period

(39 comment entries received)

Table O-7: Comments Received via the Online Map during the Public Comment Period

Comments	Name	Project
This is an elementary school with young kids walking to school and traffic going 40+. Build it. Safety first!!		Brush College Rd NW: Pedestrian Project
High traffic and a lot of industrial traffic		Cordon Rd: Highway 22 E to Caplinger Rd SE
I have never seen a pedestrian or a bicyclist in this area? There are a lot of immediate safety issues we can address		Salem Industrial Dr Improvement
This makes total sense for future development which in turn will bring in a tax revenue and jobs		McGilchrist St SE: 12th St SE to 25th St SE
Excellent project for future growth		Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass
This is a must do project for our school age children and the area. High traffic just makes it very dangerous		Verda Ln NE: Dearborn Av NE to Southern City Limits
$9million?! This is insane! Send this money to our schools! This is awaste of money!	Andrew Prince	Orchard Heights Rd NW: Titan Dr NW to UGB
Nobody rides bikes half the year. and when the weather breaks, I only see two to five bicycles EVER! Why would we spend near a million dollars on this? The road is there already, and the drivers are courtious at present. Spend the money on Police or	Andrew Prince	Orchard Heights Park / Brush College Park Bike Corridor
Haven't seen a person on a bike since last NOVEMBER (YOU KNOW, BECAUSE YOU CAN'T RIDE A BIKE HALF THE YEAR IN OREGON)!	Andrew Prince	Market St NE: Commercial St NE to Hawthorne Av NE
Stop "improving" streets by widening them. That creates a more hostile bike/ped environment and encourages higher speeds.		Orchard Heights Rd NW: Parkway Dr NW to Snowbird Dr NW
Every turn pocket you install just means that cars behind do not have to slow down and cars exiting the businesses have a more difficult time entering the street.		Wallace Rd NW: Edgewater St NW to Orchard Heights Rd NW

Install signalized crossings, tighten curb radii and drop the speed limit to 25.	Mike De Blasi	Verda Ln NE: Chemawa Rd NE to Dearborn Av NE
No. Streets should stop being "improved" to induce car travel.		Hayesville Dr NE: Fuhrer Dr NE to Cordon Rd NE
This should never have been enlarged and the speed limit should be 25. I am also upset that the hoses in the new subdivision all have their back facing the street. This could have been a better neighborhood if they faced the street.		Kale St NE: Portland Rd NE to Cordon Rd NE
Do not widen Lockhaven or Chemawa. They've already been made a autoist nightmare. It's time to shrink them and make them more bike/ped/transit friendly. This will allow better connect between the School and Keizer and not induce more car travel.	Mike De Blasi	Chemawa / I-5 Phase 1 - Lockhaven/Chemawa Limited Widening
This would be a HUGE improvement for south Salem Bike safety. There have been many times I have almost be hit or passed illegally on the left on Fairview Ave trying to bike this route, Fairview Ave NEEDS a bike lane.	Sarah N	Clark Creek Park/South Village Park Bike Corridor
This will be a great improvement. I use the 17th Street bike lane all the time as a great North-South connector, but the bike lane ending here is frustrating and puts me in a dangerous position. Thank you for extending this bike lane.	Alex Brown	17th St NE: Norway St NE to Sunnyview Rd NE
Good project. The two block bike lane on Hood/Fairgrounds ends quickly and there are street parked cars that push bicyclists into the lane. This will be a helpful safety upgrade.	Alex Brown	Fairgrounds Rd NE/Hood St NE: Summer St NE to Commercial St NE
Yes! This short section of Sunnyview by some industrial lots is a critical bike route connector. It is dangerous riding in the road here and this will make bicyclists safer. Thank you for adding this!	Alex Brown	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE
A Silverton road bike lane would be a great improvement, I support this.	Alex Brown	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE
Lancaster Drive bike lanes need to be protected to be usable. Many bicyclists	Alex Brown	Lancaster Dr NE: Center St to Monroe St NE

avoid these lanes because they are unprotected next to aggressive traffic.		
This will be a great downtown connection for my neighborhood in NE Salem.	Alex Brown	Center St NE: Commercial St NE to 17th St NE
This will help make downtown Salem more accessible by bike, good move.	Alex Brown	Marion St NE: 13th St NE to Commercial St NE
Disagree with Kathy, Salem needs to become more bike friendly and that means multiple routes. Every street is open to cars, why should bicyclists who are helping reduce traffic and carbon emissions be limited by car-only-focused infrastructure?	Alex Brown	25th St SE: State St to Helm St SE
I ride my bike on this road and the Pringle Creek crossing is dangerous, forcing bicyclists into a 40mph zone. I welcome the addition of a bike lane here.	Alex Brown	Airport Rd SE: State St. to Mission St.
This is a great improvement, I highly support these upgrades.	Alex Brown	State St to Kroc Center Bike Corridor
Biking on Market Street is currently not safely possible and it makes for some inconvenient bike routes. I fully support this project and would love to see more details.	Alex Brown	Market St NE: Commercial St NE to Hawthorne Av NE
A bike lane is much needed here, there is no shoulder and cars do not care to wait for bicyclists. Thank you for adding this bike lane, it will make me much safer!	Alex Brown	Fisher Rd NE - Silverton Rd NE to East/West Curve
This will be a huge improvement. We walk our dogs and have no choice but to walk in the bike lane on Sunnyview which feels unsafe.	Alex Brown	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE
With this connection south of Mission St., prioritize this over the Airport Road improvements for biking.	Kathy A. Lincoln	25th St South of Mission St Bike Corridor
This is a good route from Keizer to downtown Salem for bicycling , and would be much safer with designated bike lanes.	Kathy A. Lincoln	Broadway: Pine St N to Tryon St N
High priority. This will help reduce traffic on local streets. Build this project before expanding capacity on Commercial, Kuebler, other streets in the area.	Kathy A. Lincoln	South Salem Transit Center

Should be high priority. Busy road, lots of speeding. Reduce the speed limit here.	Kathy A. Lincoln	Wheatland Rd Multimodal Project - Phase 2
What happened to plans for this several years ago? Should already have some ROW purchased? EIS done?	Kathy A. Lincoln	Marine Dr NW: 5th St NW to Glen Creek Rd
I don't know that this route is used by bicyclists much. Low priority.	Kathy A. Lincoln	Airport Rd SE: State St. to Mission St.
This route not used by bicyclists, much. Low priority. Or chose between this street and Airport Road., as an alternative route for bikes.	Kathy A. Lincoln	25th St SE: State St to Helm St SE
High priority. Also consider lowering speed limit.	Kathy A. Lincoln	Wheatland Rd Multimodal Project - Phase 1
Should be high priority. It has been planned for a LONG time!	Kathy A. Lincoln	Verda Ln NE: Dearborn Av NE to Southern City Limits
A necessary upgrade for this corridor for pedestrians and cyclists, as well as making it safer for drivers, residents, and businesses along corridor.		Market St NE: Commercial St NE to Hawthorne Av NE

The Online map "votes" on the draft projects
36 projects received at least One vote

Table O-8: Projects that Received at Least One "Like"

Project#	Project	Vote
S288	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE	2
S212	Market St NE: Commercial St NE to Hawthorne Av NE	2
S219	17th St NE: Sunnyview Rd NE to Silverton Rd NE	2
O033	Mission St (OR 22E) Corridor Multi-Use Path	2
S320	Clark Creek Park/South Village Park Bike Corridor	2
S036	Doaks Ferry Rd NW: Brush College Rd NW to Orchard Heights Rd NW	1
S094	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE	1
S103	Hilfiker Ln SE: Commercial St SE to Pringle Rd SE	1
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	1
S126	McGilchrist St SE: 12th St SE to 25th St SE	1
S286	Cordon Rd: Highway 22 E to Caplinger Rd SE	1
K012	Verda Ln NE: Dearborn Av NE to Southern City Limits	1
S292	Brush College Rd NW: Pedestrian Project	1
S061	17th St NE: Norway St NE to Sunnyview Rd NE	1
S149	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE	1
S168	Airport Rd SE: State St. to Mission St.	1
S173	Cherry Av NE: BNRR to Dr. MLK Jr Parkway NE	1
S174	Cherry Av NE: Johnson St NE to Pine St NE	1
S205	Center St NE: Commercial St NE to 17th St NE	1
S211	Marion St NE: 13th St NE to Commercial St NE	1
S214	Mission St SE: 12th St SE to Commercial St SE	1
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	1
S225	D St NE: Lancaster Dr NE to Summer St NE	1
S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Commercial St NE	1
S229	Lana Av NE: Portland Rd NE to Silverton Rd NE	1
S236	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SE	1
S238	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE	1
S348	Fisher Rd NE - Silverton Rd NE to East/West Curve	1
S378	State St: 13th St NE to 17th St NE Bike Lanes and Pavement	1
M102	Chemeketa CC East/West Bike Corridor	1
S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	1
S310	State St to Kroc Center Bike Corridor	1
S314	McKay Park East/West Bike Corridor	1
S317	Sprague HS to South Salem HS Bike Corridor	1
S322	Orchard Heights Park / Brush College Park Bike Corridor	1
S324	25th St South of Mission St Bike Corridor	1

Consultation activities

Timeline summary of activity:

- February 16, 2022, letter to The Confederated Tribes of Grand Ronde
- February 16, 2022, letter to The Confederated Tribes of Siletz Indians
- April-June 2022 – confirmation of contacts
- January 31, 2023, Draft chapter on Impacts sent to 10 agencies (below)
- February 22, 2023, responses from team (below)

Consultation Overview:

a. Cultural, Historic and Environmental agencies
b. Air Quality conformity related.

Federal, State, Tribal, and Local agencies that are involved in the cultural, historic, or environmental (primarily rivers, wetlands, and endangered species were sent a draft of Chapter 8 (Impacts) on January 31, 2023, for review (see **Table O-9** below). Previously, in April-June of 2021, the same agencies were contacted to confirm staff contacts and for which parts of the process they wished to be contacted as part of the update to the MTP, TIP and the Consultation document (see *Consultation Process….* for more details). Responses were due February 22, 2023. Comments are listed below.

Table O-9: Resource Agencies Contacted for Consultation

Resource Category	Agency
Natural Resources	National Marine Fisheries Service (NMFS)
Natural Resources	U.S. Fish and Wildlife Service (USFWS)
Environmental Protection	U.S. Army Corps of Engineers (USACE)
Natural Resources	Oregon Department of Fish and Wildlife (ODFW)
Environmental Protection	Oregon Department of Transportation (ODOT) Environmental R2
Land Use Management	Oregon Division of State Lands
Tribes	Confederated Tribes of Siletz Indians
Tribes	Confederated Tribes of the Grand Ronde Community in Oregon
Historical Preservation	Oregon State Historic Preservation Office (SHPO)

Actions taken

- The comments from Oregon Department of State Lands (DSL) resulted in using different layers for wetlands and hydric soils in the analysis. Data sources were updated.
- The comments from Oregon DSL resulted in changes in wording as suggested.
- The comment from Oregon Fish and Wildlife (ODFW) led staff to review the new regulations on fish passage and the website on wildlife connectivity areas. The fish passage regulations are more appropriate to projects nearing construction. Future updates to the MTP will check whether any wildlife connectivity areas have been defined within SKATS.

Original Email

From: Jackson, Ray <RJackson@mwvcog.org>
Sent: Tuesday, January 31, 2023 4:23 PM
Subject: Consultation on Potential Impacts for Projects in the SKATS MTP

Hello,

Last year I contacted you regarding your interest in reviewing and commenting on our long-range (20 year) transportation plan (the Metropolitan Transportation Plan, or MTP. For the long-range plan, SKATS, the Metropolitan Planning Organization for Salem-Keizer, is required by federal law (23 CFR 450.316(e) and 23 CFR 450.324) to contact resource agencies as part of the development of the plan. The outreach is to solicit feedback on the potential impacts to the cultural, environmental, and historic resources in the Salem-Keizer area from the proposed projects in the long-range plan. Given the time frame for the plan, this is not meant to be a detailed analysis for each individual project but to be performed at the proverbial 30,000-foot level.

Attached is the draft chapter of the MTP describing the potential impacts for your review and comment. To reduce your burden in reviewing the document, I've listed below where the methodology and results are for each of the different resources:

- The methodology for historic properties is page 4 and the associated map on page 6.
- For environmental the methodology is on page 4 and the map for 303(d) streams and critical habitats on page 7 and the map for wetlands and wetland channels on page 8.
- Pages 9 – 11 contain a summary table of the projects and their potential impacts.
- Environmental Justice analysis and results on pages 11 – 16.
- Discussion of strategies for minimizing impacts is on pages 18 – 20.

If you have any questions on this process, or if you have comments on the methodology, data sources or results, please contact me. I would like your comments on the draft chapter and potential impacts by **February 22, 2023.** This document is still a working draft, with the expectation to release it for the required 30-day public review and comment in March with adoption on May 23, 2023.

Regards,

Ray

==========

Comments Received

From: Dean, Benny A Jr. CIV USARMY CENWP (USA)
Sent: Thursday, February 23, 2023 10:26
To: Jackson, Ray <RJackson@mwvcog.org>
Subject: RE: Consultation on Potential Impacts for Projects in the SKATS MTP

Good Morning Ray,

I had an opportunity to take a look and I don't have any comments at this time as the approach gives a good outline of what resources may be in the region.

Have a wonderful morning!

~Benny

Benny A. Dean Jr.

Project Manager

Regulatory Branch, Portland District

U.S. Army Corps of Engineers

From: STACK Joseph P * ODFW
Sent: Tuesday, February 21, 2023 10:59
To: Jackson, Ray <RJackson@mwvcog.org>
Subject: RE: Consultation on Potential Impacts for Projects in the SKATS MTP

Hey Ray,

I wanted to update you on a few documents that could be beneficial as this plan is developed. ODFW updated our Fish Passage administrative rules in December 2022, and they took effect January 1, 2023. I've attached a link to these new rules below to make sure these changes are addressed in the plan. Additionally, ODFW has been working on a new document highlighting Priority Wildlife Connectivity Areas being created by the Oregon Connectivity Assessment and Mapping Project. This is still in draft format, but I think the agency hopes to get it out later this year. The goal of this product is to direct efforts for future acquisitions, restoration, and conservation.

https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=2988

Cheers,

Joe

Joe Stack

Regional Habitat Biologist

Oregon Dept of Fish and Wildlife

South Willamette Watershed District

From: BROWN Jevra * DSL
Sent: Thursday, February 2, 2023 12:02

To: Jackson, Ray <RJackson@mwvcog.org>
Subject: RE: Consultation on Potential Impacts for Projects in the SKATS MTP

Great Ray,

That is about where I thought we landed with the wetlands inventory usage and datasets.

Please have your analyst review the LWI GIS Data Description to be sure they are including all aquatic resource feature classes (wetlands, PWs, artificial features, streams, waterbodies).

RE SWI layers, see How to configure document

Notes on underlying datasets:

Most recent soils still Oregon SSURGO STATSGO Soils Compilation – 2017, https://spatialdata.oregonexplorer.info/geoportal/details;id=c61a2af4802e4295876bc32228161366 (then configure for SWI)

NHD updates often, but we have not for SWI since the 2021 (and USGS NHD moving to new dataset & structure entirely from now forward so we shall see.) (needs to be configured for SWI)

NWI – I don't know of and doubt there has been updates within this project area, and again, SWI not updated since the 2021 version. (SWI integrated entire mapping (current, not "historic" etc.)

Best of luck,

Jevra Brown, Aquatic Resource Planner

Department of State Lands

Checking for wetlands and waters? – Use the STATEWIDE WETLANDS INVENTORY

From: Jackson, Ray <RJackson@mwvcog.org>
Sent: Thursday, February 2, 2023 11:43 AM
To: BROWN Jevra * DSL
Subject: RE: Consultation on Potential Impacts for Projects in the SKATS MTP

Hi Jevra,

Thanks for the correction for the mitigation wording. I'll make that edit for the public review draft.

For the analysis we were using a 2019 NWI/SWI coverage and old LWI. Our GIS analyst is looking at the 2021 SW coverage to see if there are changes within SKATS and if so, rerun the analysis.

Regards,

Ray

From: BROWN Jevra * DSL
Sent: Thursday, February 2, 2023 09:15

To: Jackson, Ray <RJackson@mwvcog.org>
Subject: RE: Consultation on Potential Impacts for Projects in the SKATS MTP

Hi Ray,

Thank you for asking for our review.

There is one statement on page 8-19:

Strategy 2: Establish stream bank mitigation banking

Currently, the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers require that when a project impacts a stream, the project owner (either the jurisdiction/agency or a private developer) must restore the adjacent 150-foot section of stream. The jurisdiction/agency or developer is then required to maintain that

This seemed incorrect so I double checked with one of our mitigation specialists, Grey Wolf, who used to work for City of Salem. Her reply:

1) Is this statement true? No – it should be removed from the transportation plan. We [DSL/Corps] don't have any such rules. Salem-Keizer could replace it with general language such as "if construction/development may impact a stream, the project owner (although I'm not keen on this term) must coordinate with DSL [/Corps] staff to determine whether permitting is necessary."

Otherwise the discussion was at that 30,000 ft level you mention, very general and generally correct. I know we discussed wetland mapping in the past. I believe we came to a comfortable agreement on how you (the team) were using the mapping in your analysis. Frankly I can't remember where we settled and whether any part of the study area used the statewide wetlands inventory. I am assuming (wondering) that the term "wetland channels" referenced SWI/NWI mapping or are there such features on the LWI? I think it does not matter at this level because whether the features are wetlands or waters they still potentially will require permitting and mitigation if they are impacted.

Best,

Jevra Brown, Aquatic Resource Planner

Department of State Lands

Air Quality

ODOT Environmental staff arranged an Interagency Consultation (IAC) between SKATS staff and staff of the U.S. Environmental Protection Agency (EPA), Oregon Department of Environmental Quality (DEQ), ODOT, Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) to discuss the draft Air Quality Conformity Determination for the draft MTP and the project list. The draft AQCD and project list were

provided to the IAC members more than three weeks before the scheduled meeting on February 15, 2023. Comments received at the meeting are listed below:

Attendees – Federal State Agency Representatives

- Natalie LILJENWALL - ODOT
- Ned Conroy – FTA
- Jasmine Harris – FHWA (Not present, but sent questions beforehand)
- Karen WILLIAMS - DEQ
- Claudia Vaupel - EPA
- John MAHER – ODOT Only there to introduce Jessica
- Jessica Virrueta - ODOT STIP
- Dan Fricke, ODOT Region 2 SKATS Liaison (outgoing)
- Brandon Williams, ODOT Region 2 SKATS Liaison (incoming)
- Hope DERRICKSON - ODOT
- Thomas Parker - FHWA Oregon environmental lead
- Daniel Burgin? Listed in the TEAMS attendees, but I don't recall being present

Attendees – SKATS Staff

- Karen Odenthal: TIP Coordinator (outgoing)
- Steve Dobrinich: TIP Coordinator (incoming)
- Ray Jackson: MTP & AQCD Lead

Agenda

- Review the project lists for the SKATS 2023-2050 MTP and 2024-2029 TIP for the exempt/non-exempt category assigned by SKATS staff
- Clarification of whether projects are exempt/non-exempt
- Feedback on the draft AQCDs for the MTP and TIP
- Other Issues

The question sent by SKATS staff prior to the meeting:

One question for the IAC members is on the TIP projects, from Karen:

Here is the list of proposed SKATS FY 2024-2027 TIP projects, plus a couple that have illustrative years. I added a tab for exempt projects. It is unclear if KN 13188, OR22: Rickreall Rd to Doaks Ferry Rd NW is exempt or non-exempt. The description: "Evaluation of corridor safety improvements, undertake environmental investigations to reach NEPA classification, develop design to design acceptance package (DAP), conduct ROW and utility surveys, and purchase ROW." There is no construction phase funded at this time. I recommend asking the consultation group whether we should consider it exempt or non-exempt.

Notes:

- There was discussion on Center Turn Lanes (CTL) and whether these add capacity to a road and why SKATS staff considers them non-exempt (Reasoning is, if AQ

modeling was performed, the presence of a CTL results in the modification of the capacity for the link. This would need to be known to be included in the model). **The group agreed** to consider projects with CTLs as non-exempt.

- Discussed the questions that Jasmine had sent before the meeting, clarified the descriptions for several of these projects (see below for details – answers were also emailed to the group prior to the meeting due to Jasmine's absence).
- OR22W Rickreall to Doaks Ferry – As shown above, SKATS staff had a question of whether a project or a phase should be used for purpose of exempt/non-exempt determination. The project has funding for PE/ROW but not Construction. **The group agreed** to consider this as non-exempt as it will eventually lead to a construction project, and this will not require a subsequent AQCD.
    - Natalie mentioned that she considers a project that is going to NEPA to be non-exempt.
- SKATS staff mentioned that they will encourage project submissions to include more information on the actual project, especially for the TIP. "Improvements" is too vague and does not adequately explain what is proposed to be built.
- No comments were received for the AQCD documents themselves. Ray asked the group to **review the draft AQCDs and provide any comments by March 28, 2023.**
- At the end, the members of the IAC agreed to the designations of the TIP projects as provided, with the modification for the OR22W Rickreall to Doaks Ferry project to be considered as non-exempt. **Those voting in favor were: Ned (FTA), Thomas (FHWA), Claudia (EPA), Karen Williams (DEQ). Natalie concurred for ODOT.**

Questions prior to the SKATS AQCD IAC

Clarifications from Janelle (Marion County Public Works) ----

1. Hollywood Dr: Salem City Limits to Silverton Rd NE - M024 - Widen to collector standards and add new signal at Hollywood Dr at Silverton Rd. (combined with M032).
    a. **Construct bicycle and pedestrian improvements and add left turn refuge and signal at intersection with Silverton Road to increase safety. (Marion County PW)**
2. Lone Oak Rd SE at Rees Hill Rd SE - S376 - Design and RoW acquistion for intersection modifications that include a lengthened left-turn lane and an acceleration lane on Rees Hill Rd SE.
    a. **Basically, this is a new intersection being built associated with development. Lone Oak is a collector street in Salem TSP. Development is required to build it. The actual intersection is in Marion County. Due to sight distance, Marion County is requiring an acceleration lane so cars turning off of Lone Oak onto Rees Hill eastbound have room to get up to speed since this is a 55 mph county**

road. City is participating because Marion County requirements require off-site acquisition to accommodate the length of the turn lane. (Salem PW)

3. Cordon Road at Center Street: Intersection Modifications – M091 - Modifications to the intersection including upgrading the signal. Assumes 50 percent developer funded. M046 has roadway modifications.
    a. **Modifications will be necessary to accommodate upgrading the signal and adding travel lanes. (Marion County PW)**
4. Delaney Rd: Battle Creek SE to Turner - M022 - Widen road to county arterial standards
    a. **Widens the roadway from existing 22' width to meet AASHTO standards for pavement width (remains 2 travel lanes) and accommodate the large percentage of truck traffic, while also provide standard shoulder widths to increase safety for pedestrians, and bicycles. (Marion County PW)**
    b. **Note: This project is outside of the SKATS AQ Boundary**

Questions from Jasmine ---

1. Have any of the projects in the MTP or TIP list been determined exempt or nonexempt previously through the IAC process?
    a. **Maybe. The local projects in the TIP have not changed since the last update. There are new ODOT projects in the TIP. The Exempt/NonExempt determination was made for (all/some of?) those in 20xx.**
    b. **The MTP projects have never been reviewed by the IAC for Exempt/NonExempt status – it was never a question/request before.**
2. There are several projects listed as nonexempt, please confirm that the classifications is accurate for all of them. Some seem to fall under exempt, see examples below: McGilchrist St SE: 12th St SE to 25th St SE; Final design and construction for McGilchrist Complete Street project to improve safety for all users and reduce flooding.

    Project includes center turn lane which adds capacity. If we were performing AQ conformity modeling that would be non-exempt as it would be included in the model.

    Center St.: Lancaster Dr. to 45th Pl. NE; Design the interim and long-term widening of Center St. east of Lancaster Dr. to 45th Pl NE, and construction of the interim improvements on the north side including center turn lane, bike lanes and sidewalks to increase safety. Update existing crossing located at Center St. & 45th Pl NE.

    Project includes center turn lane which adds capacity. If we were performing AQ conformity modeling that would be non-exempt as it would be included in the model.

3. Delaney Rd: Battle Creek Bridge; Replace the existing bridge on Delaney Road over Battle Creek. Project includes various intersection and roadway improvements to

improve traffic flow and safety. Didn't this project already go through the AQCD process already, and handled as a nonexempt project? Or is this a different project? Are the "various intersection and roadway improvements" at the immediate entrances to this bridge? Will this project increase traffic, or simply smooth traffic flow?

a. **It is likely this project was reviewed as part of the previous update to the TIP.**
b. **Project is outside of the SKATS AQ boundary.**

4. One project was flagged as "unknown," pending the IAC discussion seems like this project could be exempt. OR22: Rickreall Rd to Doaks Ferry Rd NW; Evaluation of corridor safety improvements, undertake environmental investigations to reach NEPA classification, develop design to design acceptance package (DAP), conduct ROW and utility surveys, and purchase ROW.
   a. **Discussion with the IAC was to address these projects in the TIP when only one phase is funded. Is the E/NE determination on the project or the phase?**

Email to alert resource agencies of update to the MTP and TIP, and to solicit feedback on the *Consultation Process ...* document (April – June 2021):

Hello,

I am a planner with SKATS, the Salem-Keizer Area Transportation Study, which is the federally recognized Metropolitan Planning Organization (MPO) for the Salem-Keizer urbanized area.

We are in the process, or will soon start, to update three of our documents: The *Consultation Process to be Used in the Update of the RTSP and TIP*; the Regional Transportation Systems Plan (RTSP – our long-range transportation plan), and the Transportation Improvement Program (TIP – our short-range program of projects).

The RTSP and TIP will be updated beginning in late 2021 and early 2022, with adoption by the SKATS Policy Committee of both documents in Spring 2023. The RTSP is the long-range transportation plan for the Salem-Keizer area, covering a 20-year period and is required to be financially constrained. The TIP covers a four-year period, listing the projects that will receive federal funds or will be built on the regional system.

The first document we are updating is the *Consultation Process*, with a planned adoption later in 2021. Documented in the *Consultation Process* are the processes SKATS staff will use for contacting and consulting with local jurisdictions, tribal governments and resource agencies during the updates to the RTSP and TIP. This document is required under federal regulation (23 CFR 450.316(e)).

Please review the *Consultation Process* (draft attached) and provide any comments or suggestions on the process identified and presented in the document. I want to point your attention to the tables that list the key decision points in the updates of the RTSP and TIP where input is solicited and used to refine the draft documents (shown in Table 5 on page 8-9 for the RTSP and Table 6 on page 10 for the TIP).

I would appreciate that any comments, corrections or suggested edits to the *Consultation Process* document be submitted by **June 18th**.

The second request is to please provide any updated information on whether and how you would like to be contacted during the updates to the RTSP and TIP. These contact points mirror those shown in Table 5 and 6, for developing the long-range plan these are:

1) Kick-off for developing the long-range plan, includes review of the Goals and Objectives.
2) Develop an initial list of projects that meet the needs of the area and address the stated Goals and Objectives.
3) Reviewing the potential Cultural, Historic and Environmental impacts of these projects. [Note: This review is done at a high-level realizing this is a 20-year plan and the project could change in scope. It is mainly done to identify issues that would be addressed before a project is constructed. See 23 CFR 450.324 (g) for the more information).
4) Developing high-level concepts for potential mitigation methods to address any impact identified.
5) Reviewing the Public Review Draft of the RTSP.

For the TIP, there are three steps where review and comment is solicited from the public and interested parties.

1) Kick-off for updating the TIP.
2) Developing the draft list of projects.
3) Reviewing the Public Review Draft of the TIP.

I would appreciate that this information be submitted by **June 18th**. If you are not the appropriate person for this type of review, please pass it along to your colleague.

Finally, for representatives of resource agencies, if you agency has any data that can be shared, especially as shapefile for use in GIS, that will allow us to compare the proposed projects in the transportation plans with either State conservation plans or maps (23 CFR 450.324 (g) (1), or inventories of natural or historic resources (23 CFR 450.324 (g) (2), please let me know and we can determine the best way of getting the data.

If you have any questions regarding the updates to the SKATS documents, please contact me.

Email sent January 31, 2023 to solicit comment on the draft Chapter 8.

Hello,

Last year I contacted you regarding your interest in reviewing and commenting on our long-range (20 year) transportation plan (the Metropolitan Transportation Plan, or MTP. For the long-range plan, SKATS, the Metropolitan Planning Organization for

Salem-Keizer, is required by federal law (23 CFR 450.316(e) and 23 CFR 450.324) to contact resource agencies as part of the development of the plan. The outreach is to solicit feedback on the potential impacts to the cultural, environmental, and historic resources in the Salem-Keizer area from the proposed projects in the long-range plan. Given the time frame for the plan, this is not meant to be a detailed analysis for each individual project but to be performed at the proverbial 30,000-foot level.

Attached is the draft chapter of the MTP describing the potential impacts for your review and comment. To reduce your burden in reviewing the document, I've listed below where the methodology and results are for each of the different resources:

- The methodology for historic properties is page 4 and the associated map on page 6.
- For environmental the methodology is on page 4 and the map for 303(d) streams and critical habitats on page 7 and the map for wetlands and wetland channels on page 8.
- Pages 9 – 11 contain a summary table of the projects and their potential impacts.
- Environmental Justice analysis and results on pages 11 – 16.
- Discussion of strategies for minimizing impacts is on pages 18 – 20.

If you have any questions on this process, or if you have comments on the methodology, data sources or results, please contact me. I would like your comments on the draft chapter and potential impacts by **February 22, 2023.** This document is still a working draft, with the expectation to release it for the required 30-day public review and comment in March with adoption on May 23, 2023.

Transportation Hub website

Figure O-3 Hub website Home Page

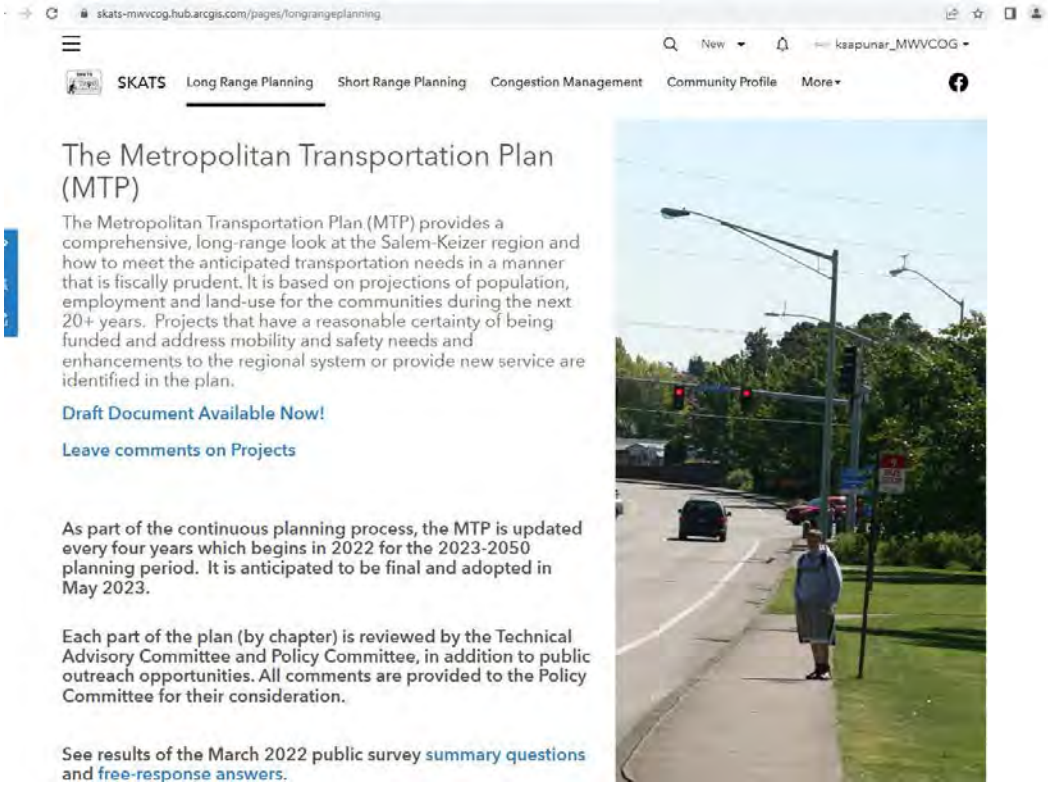


Figure O-4 Hub website MTP page

Brochures

How can I learn more?

Want more details? You may view the entire contents of the Metropolitan Transportation Plan and Air Quality Conformity Determination by visiting our website at: **www.mwvcog.org**.

Need a Speaker? Learn more about projects in the Regional Transportation System Plan by scheduling a presentation for your business or community organization.

Public Comment Period: The public comment period runs from April 1, 2023 until May 12, 2023. Additional comments will be taken at the Public Hearing.

Have a Comment on the Draft Plan? Email them to skats@mwvcog.org or call 503-540-1607.

SKATS is committed to fully comply with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all its programs and activities. For more information, or to obtain a Title VI Complaint Form, see our Website at: www.mwvcog.org or call 503-588-6177

Salem-Keizer Area Transportation Study/
Mid-Willamette Valley Council of Governments
100 High St SE , Suite 200
Salem OR 97301-3667

We'd like to hear from you!

Public Hearing
Policy Committee Meeting
May 23, 12:00 Noon

Open House
April 11, 4:30-6:00

MWVCOG Offices
100 High St SE, Suite 200
Salem, Oregon 97301

And Online via Zoom

SALEM-KEIZER AREA TRANSPORTATION STUDY (SKATS)

Proposed Update to the 2023—2050 Metropolitan Transportation Plan (MTP)

The Metropolitan Transportation Plan (MTP) for the Salem-Keizer area is being updated by the Metropolitan Planning Organization (MPO) for the Salem area. The MTP is the guiding document for regional transportation investments over the next 20+ years in the greater Salem area.

Developed by the Salem-Keizer Area Transportation Study (SKATS) with the cooperation of Keizer, Salem, Turner, Marion and Polk Counties, ODOT, Salem-Keizer School District and the Salem Area Mass Transit District, the MTP reflects the priorities for investment in the road, bicycle, pedestrian, and transit systems that allow residents to access jobs, shopping, and recreational opportunities, and for goods to move through the area.

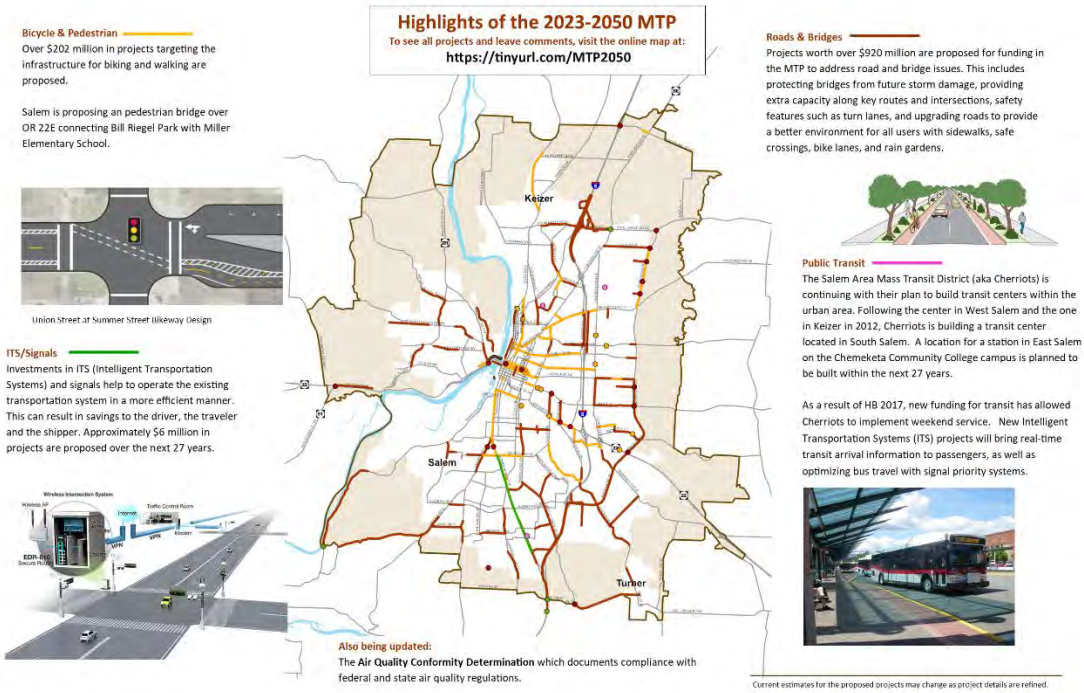
Updated every four years, the document features:

- Discussion of the projects proposed for inclusion in the Plan, their cost and impact on the urban area.
- Up-to-date financial projections and cost estimates in "year-of-expenditure" dollars.
- Forecasts for the region's population and employment out to 2050.
- Goals and objectives that are measurable by a set of indicators.

Financial Constraint and Cost Estimates

The MTP is required to be financially constrained. This means that the projects identified in the Plan must have funding that is either identified or is "reasonably anticipated" to be available during the lifetime of the plan.

Figure O-5 Brochure Page 1



Highlights of the 2023-2050 MTP
To see all projects and leave comments, visit the online map at:
https://tinyurl.com/MTP2050

Bicycle & Pedestrian
Over $202 million in projects targeting the infrastructure for biking and walking are proposed.

Salem is proposing an pedestrian bridge over OR 22E connecting Bill Riegel Park with Miller Elementary School.

Union Street at Summer Street Bikeway Design

ITS/Signals
Investments in ITS (Intelligent Transportation Systems) and signals help to operate the existing transportation system in a more efficient manner. This can result in savings to the driver, the traveler and the shipper. Approximately $6 million in projects are proposed over the next 27 years.

Roads & Bridges
Projects worth over $920 million are proposed for funding in the MTP to address road and bridge issues. This includes protecting bridges from future storm damage, providing extra capacity along key routes and intersections, safety features such as turn lanes, and upgrading roads to provide a better environment for all users with sidewalks, safe crossings, bike lanes, and rain gardens.

Public Transit
The Salem Area Mass Transit District (aka Cherriots) is continuing with their plan to build transit centers within the urban area. Following the center in West Salem and the one in Keizer in 2012, Cherriots is building a transit center located in South Salem. A location for a station in East Salem on the Chemeketa Community College campus is planned to be built within the next 27 years.

As a result of HB 2017, new funding for transit has allowed Cherriots to implement weekend service. New Intelligent Transportation Systems (ITS) projects will bring real-time transit arrival information to passengers, as well as optimizing bus travel with signal priority systems.

Also being updated:
The **Air Quality Conformity Determination** which documents compliance with federal and state air quality regulations.

Current estimates for the proposed projects may change as project details are refined.

Figure O-6 Brochure Page 2

¿Necesita más información?

Obtenga más información y agregue sus comentarios a través de nuestro mapa interactivo en el siguiente enlace : www.mwvcog.org

¿Cómo compartir sus preferencias y comentarios?

- agregando comentarios a un mapa interactivo en nuestro sitio web: www.mwvcog.org, o
- a través de un correo electrónico a rjackson@mwvcog.org, o
- llamando a Ray Jackson al 503-540-1607, o
- Enviándolos por correo a MWVCOG 100 High St SE # 200, Salem OR 97301
- asistiendo a las reuniones del Comité de Política el 1 de abril o el 12 de mayo

Si necesita asistencia especial o servicios de traducción para asistir a la reunión o Audiencia Pública, por favor notifique a Lori Moore al 503-540-1600 por lo menos 72 horas antes de la fecha de la audiencia.

SKATS se ha comprometido a cumplir plenamente con el Título VI del Acta de Derechos Civiles de 1964 y los estatutos y reglamentos relacionados en todos sus programas y actividades. Para obtener más información, o para obtener un formulario de quejas del Título VI, visite nuestro sitio web: www.mwvcog.org o llame al 503-540-1609.

¡Denos su opinión!

Audiencia Pública

Reunión del Comité de Política SKATS
23 de Mayo 12:00
En línea vía Zoom

Casa Abierta a la Comunidad
11 de abril, 4:30-6:00
MWVCOG
100 High St SE, #200
Salem, Oregon 97301

Salem-Keizer Area Transportation Study/
Mid Willamette Valley Council of Governments
100 High St SE , Suite 200
Salem OR 97301-3667

SALEM-KEIZER AREA TRANSPORTATION STUDY (SKATS)

Actualización de la Propuesta para el Plan de Transporte Metropolitano 2023-2050 (MTP)

El Plan de Transporte Metropolitano (MTP) se preparó a través de los esfuerzos de cooperación de los funcionarios y representantes electos de las ciudades de Salem, Keizer, y Turner, los condados de Marion y Polk, el Distrito Escolar Salem-Keizer, el Distrito de Transporte Colectivo para el Área de Salem, y ODOT. El MTP incluye proyectos nuevos y aprobados anteriormente en el sistema regional de carreteras para aliviar la congestión de tráfico actual y futura, mejorar la seguridad, el tránsito de apoyo, uso compartido de automóviles, y los viajes en bicicleta y peatonales. Además, los fondos federales de transporte son proporcionados para el reemplazo de autobuses y servicios de transporte para personas con discapacidad, los programas regionales de vehículos de uso compartido y gestión de demanda y el centro de control de señales de tráfico regional.

El documento se actualiza cada cuatro años y presenta:

- Amplia discusión de los proyectos propuestos para su inclusión en el Plan y su costo e impacto en el área urbana.
- Proyecciones financieras y estimaciones de costos actualizadas en dólares del "año de gastos".
- Pronósticos de población y empleo de la región hasta el 2050.
- Metas y objetivos medibles a partir de una serie de indicadores.

Restricciones financieras y estimaciones de costos

El MTP debe estar restringido financieramente. Esto significa que los proyectos identificados en el Plan deben contar con fondos que se identifiquen o estén "razonablemente anticipados" para que estén disponibles durante la vida útil del plan.

Figure O-7 Brochure in Spanish Page 1

Aspectos destacados de la MTP 2023-2050

Para ver todos los proyectos y dejar comentarios, visite el mapa en línea en:
https://tinyurl.com/MTP2050

Aceras, carriles de bicicletas

Se proponen más de $202 millones en proyectos dirigidos a la infraestructura de bicicletas y caminar.

Una alta prioridad en el Plan de Sistemas de Transporte de la Ciudad de Salem son tanto Union Street como el sendero para bicicletas de Winter-Maple, cada una de las cuales se incluye como proyectos por fases en el MTP.

Union Street at Summer Street Bikeway Design

ITS / Señales

Las inversiones en ITS (Sistema de Transporte Inteligente) y las señales ayudan a operar el sistema de transporte existente de una manera más eficiente. Esto puede generar ahorros para el conductor, el viajero y el transportista. Aproximadamente $6 millones de dólares en proyectos se han propuesto para los próximos 27 años.

Keizer

Salem

Turner

Carreteras y Puentes

Se proponen proyectos por un valor de más de $920 millones de dólares para financiamiento en el MTP para abordar problemas de carreteras y puentes. Esto incluye proteger los puentes de daños por tormentas futuras, proporcionar capacidad adicional a lo largo de rutas e intersecciones claves, características de seguridad como carriles de viraje y mejorar las carreteras para brindar un mejor ambiente para todos los usuarios con aceras, cruces seguros, carriles para bicicletas y jardines de lluvia.

Transito

El Distrito de Tránsito Masivo del Área de Salem (Cherriots) continúa con su plan para construir centros de tránsito dentro del área urbana. Después de la construcción de los centros de tránsito en West Salem y en Keizer en el 2012, Cherriots está buscando construir un centro de tránsito en South Salem. Se estudiará, determinará y construirá un lugar para una estación en East Salem dentro de los próximos 27 años.

Como resultado de HB 2017, los nuevos fondos para el tránsito permitirán a Cherriots implementar el servicio limitado de fin de semana. Los nuevos proyectos de Sistemas de Transporte Inteligente (ITS) proporcionaran información de llegada del tránsito en tiempo real a los pasajeros, así como la optimización del viaje en autobús con señal de sistemas prioritarios.

También se está actualizando:

La Determinación de Conformidad de la Calidad del Aire (AQCD) que documenta el cumplimiento de las normas federales y estatales de calidad del aire.

Las estimaciones actuales para los proyectos propuestos pueden cambiar a medida que se refinan los detalles del proyecto.

Figure O-8 Brochure in Spanish Page 2

Figure O-9 Tri-fold Brochure Page 1

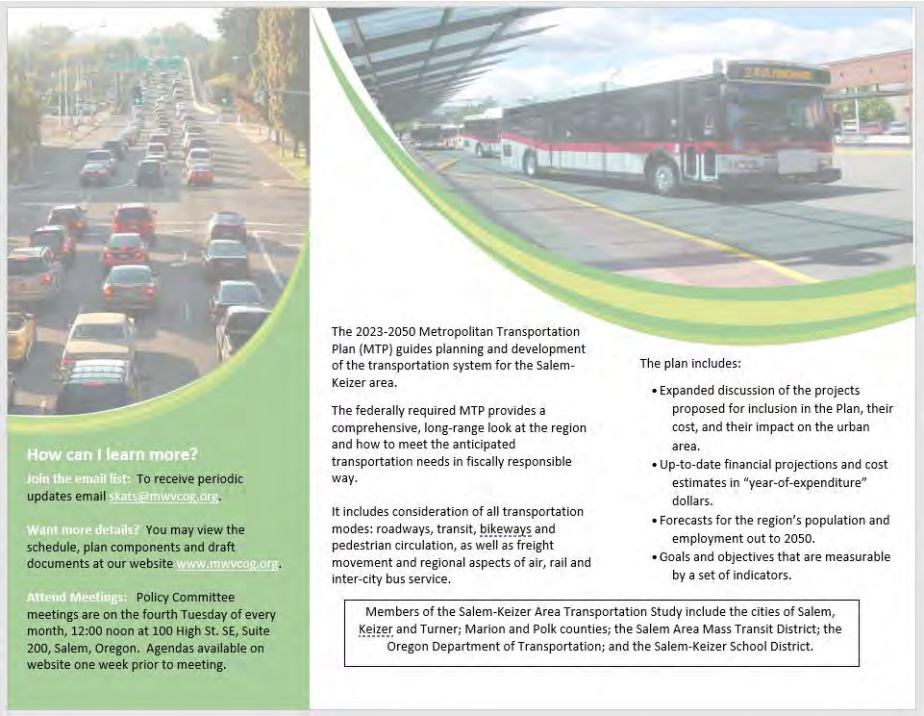


Figure O-10 Tri-fold Brochure Page 2

¡QUEREMOS ESCUCHARTE!

El plan está ahora en desarrollo, y los borradores de los capítulos están disponibles para su revisión en nuestro sitio web. ¡Los comentarios son bienvenidos!

Se espera que el período de comentarios formales comience en abril del 2023, con la adopción del plan previsto para mayo del 2023.

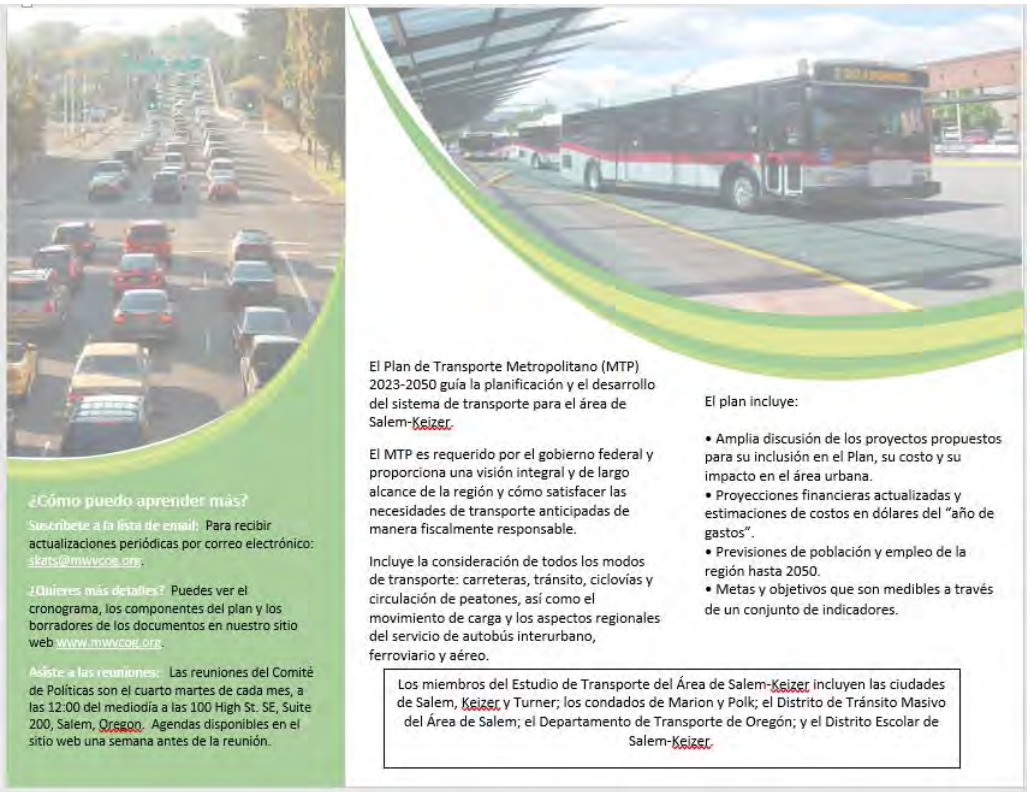
Para más información:
Salem-Keizer Area Transportation Study
https://skats-mwvcog.hub.arcgis.com/
Mid-Willamette Valley Council of Governments
100 High St SE, Suite 200
Salem, OR 97301
www.mwvcog.org
Ray Jackson, Phone: 503-540-1607
Email: rjackson@mwvcog.org

Salem-Keizer Area

Plan de Transporte Metropolitano (MTP)

Actualización 2023-2050

Figure O-11 Trifold Brochure in Spanish Page 1



¿Cómo puedo aprender más?

Suscríbete a la lista de email: Para recibir actualizaciones periódicas por correo electrónico: skats@mwvcog.org.

¿Quieres más detalles? Puedes ver el cronograma, los componentes del plan y los borradores de los documentos en nuestro sitio web www.mwvcog.org.

Asiste a las reuniones: Las reuniones del Comité de Políticas son el cuarto martes de cada mes, a las 12:00 del mediodía a las 100 High St. SE, Suite 200, Salem, Oregon. Agendas disponibles en el sitio web una semana antes de la reunión.

El Plan de Transporte Metropolitano (MTP) 2023-2050 guía la planificación y el desarrollo del sistema de transporte para el área de Salem-Keizer.

El MTP es requerido por el gobierno federal y proporciona una visión integral y de largo alcance de la región y cómo satisfacer las necesidades de transporte anticipadas de manera fiscalmente responsable.

Incluye la consideración de todos los modos de transporte: carreteras, tránsito, ciclovías y circulación de peatones, así como el movimiento de carga y los aspectos regionales del servicio de autobús interurbano, ferroviario y aéreo.

El plan incluye:

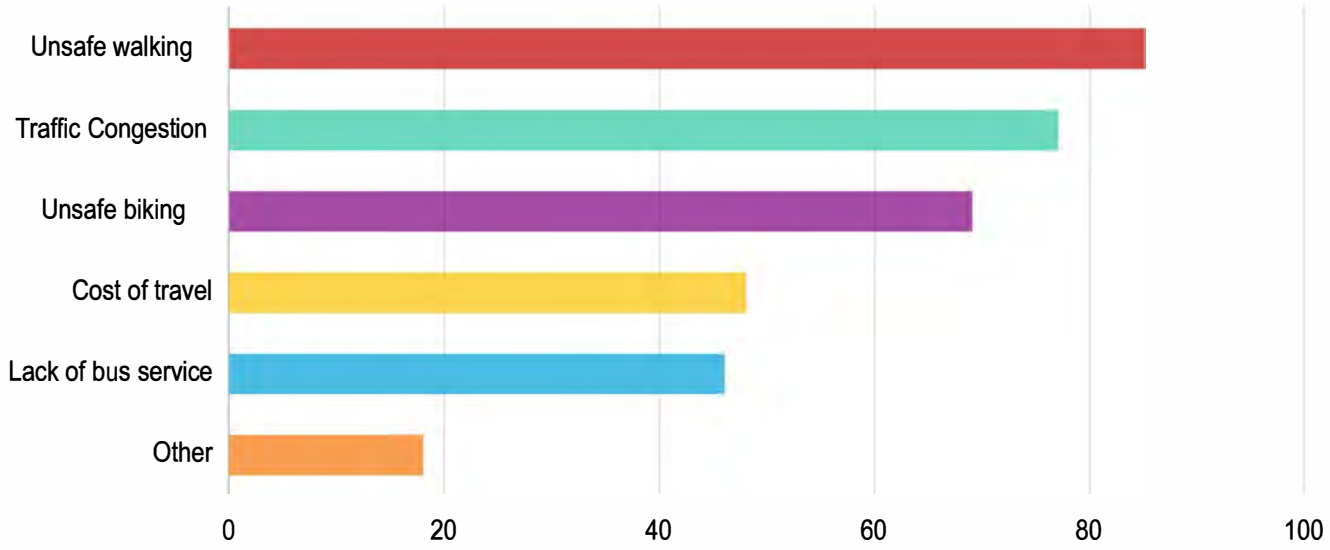
- Amplia discusión de los proyectos propuestos para su inclusión en el Plan, su costo y su impacto en el área urbana.
- Proyecciones financieras actualizadas y estimaciones de costos en dólares del "año de gastos".
- Previsiones de población y empleo de la región hasta 2050.
- Metas y objetivos que son medibles a través de un conjunto de indicadores.

Los miembros del Estudio de Transporte del Área de Salem-Keizer incluyen las ciudades de Salem, Keizer y Turner; los condados de Marion y Polk; el Distrito de Tránsito Masivo del Área de Salem; el Departamento de Transporte de Oregón; y el Distrito Escolar de Salem-Keizer.

Figure O-12 Trifold Brochure in Spanish Page 2

MTP Public Survey

What are the challenges you face in day-to-day travel?



Answers	Count	Percentage
Unsafe walking conditions (e.g. lack of sidewalks, streetlights, etc.)	85	52.47%
Traffic Congestion	77	47.53%
Unsafe biking conditions (e.g. lack of bike lanes, close to high-speed traffic, etc.)	69	42.59%
Cost of travel (e.g. price of fuel, bus fare, destination parking, etc.)	48	29.63%
Lack of convenient bus service or no available bus service	46	28.4%
Other	18	11.11%

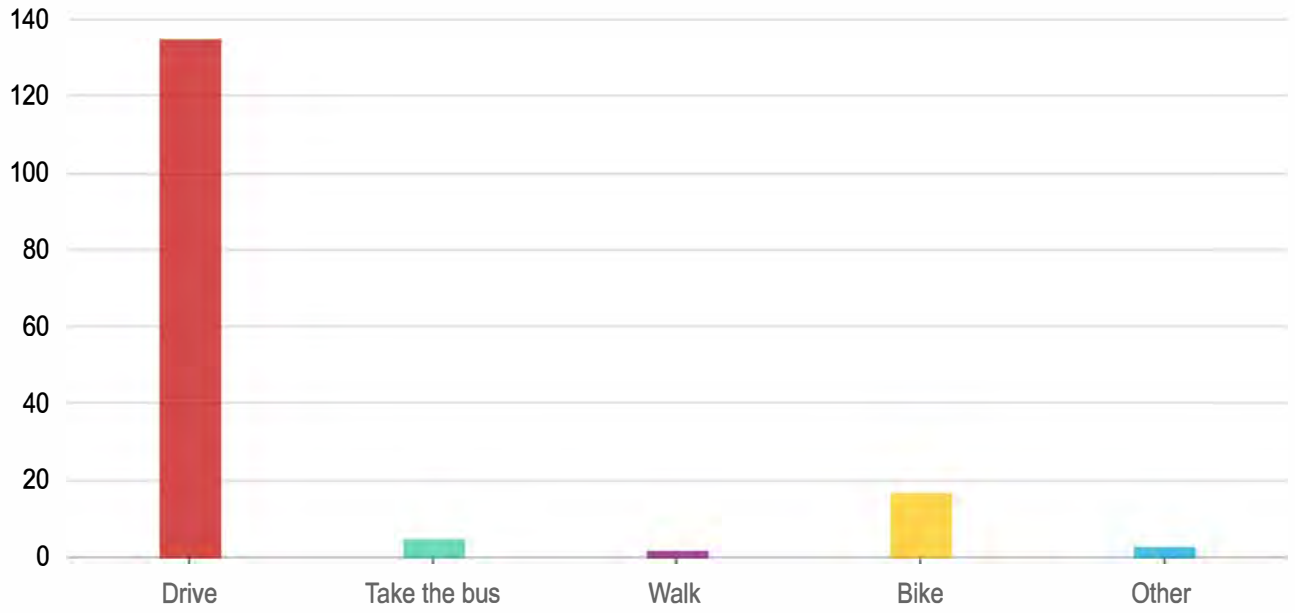
Answered: 159 Skipped: 3

Other

Response	Count
zoning means that absolutely EVERYTHING is a prohibitive distance from where I live	1
While driving in car, other drivers excessively speeding and tailgating.	1
West Salem Intersections with Wallace/Hwy 22 areas	1
We need another bridge.	1
Unsafe drivers, especially on Wallace road in business area, orchard heights to bridge. Speed limits e lsewhere need to be reduced so people slow down and drive more carefully.	1
Too many idiots	1
The biking and walking conditions aren't just unsafe but the development, especially in Keizer and par ts of Salem mean that everything is spaced too far apart.	1
Speeding vehicles in neighborhood streets do to short cuts	1
No fast transit options to Portland or Eugene- Why are we such an isolated capital city	1
Narrow roads when cars are parked on both sides of the road	1
Lack of pedestrian controlled crosswalks on Chemawa near public library and city offices.	1
Lack of a third bridge across the Willamette river to West Salem	1
I live on a non- county road off of State St east. This street is at the east end of a purposed improvem ent on State St near the mushroom plant property. The North side of State needs HELP too. My street is unsafe!	1
I have to ask but were the planners high when they designed the interchange for the downtown bridge that take you across the river?? That's the worst interchange design but there are others	1
excessive noise pollution, poor air quality	1
Deteriorating road surfaces	1
Because of auto-dependent development, everything is farther apart and less walkable.	1

Answered: 17 Skipped: 145

How do you travel most often within Salem-Keizer?



Answers	Count	Percentage
Drive	135	83.33%
Take the bus	5	3.09%
Walk	2	1.23%
Bike	17	10.49%
Other	3	1.85%

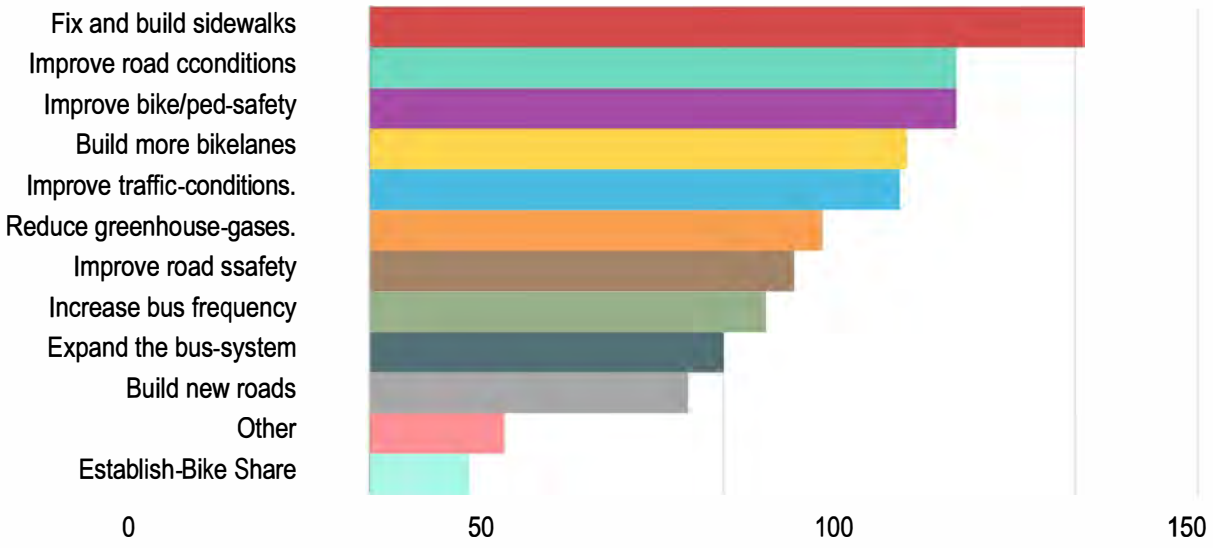
Answered: 162 Skipped: 0

Other

Response	Count
Friends drive me or Cherriots Shop & Ride	
We need another bridge.	1
Walk and Drive	1

1

Thinking specifically about transportation in the Salem-Keizer area, what are the most important transportation issues you would like your local government leaders to do something about?



Answers	Count	Percentage
Fix and build more sidewalks and pedestrian paths	101	62.35%
Improve road conditions (fix potholes and repave streets)	83	51.23%
Improve bicycle and pedestrian safety	83	51.23%
Build more bicycle lanes, bike paths, and neighborhood bike routes	76	46.91%
Improve traffic conditions (fix traffic congestion and bottlenecks)	75	46.3%
Reduce greenhouse gas emissions (from vehicle use)	64	39.51%
Improve road safety	60	37.04%
Increase the frequency of bus service	56	34.57%
Expand the bus system to more areas in Salem-Keizer	50	30.86%

Build new roads and/or widen existing roads and intersections	45	27.78%
Other	19	11.73%
Establish/support a bike share system	14	8.64%

Answered: 161 Skipped: 1

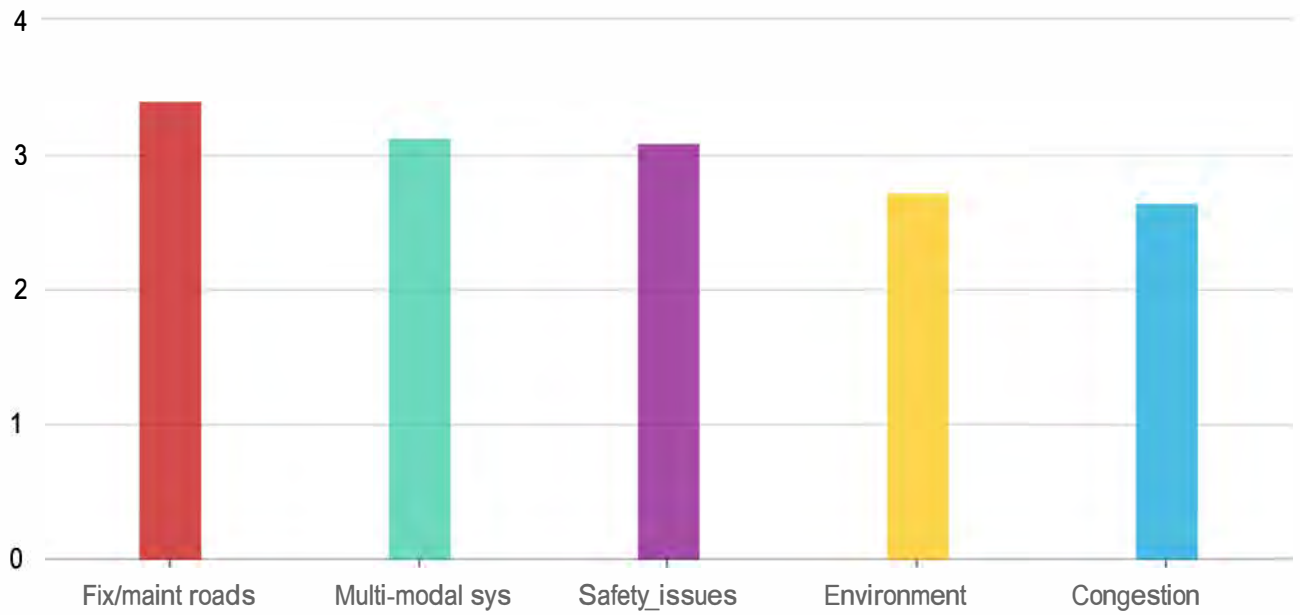
Other

Response	Count
West Salem Bridge!!!!!! Buy the land NOW!!!!	1
We need fast transit and more public transportation options	1
We need another bridge.	1
Traffic noise	1
Third bridge across the Willamette river to West Salem	1
Speed mitigation in neighborhoods!	1
Reduce speeding, unsafe driving & more concern for pedestrian crossing intersections	1
Incentives to help cut down on harmful diesel and "straight-piping" emissions, which don't get as much attention as CO2 emissions, but are nonetheless emissions that are very harmful to human health.	1
Give us another bridge to help relieve downtown traffic and better connect Salem and Keizer to the other side of the Willamette River.	1
Get unlicensed drivers off the streets	1
Do not build projects such as Marine Drive in West Salem which introduce fast moving vehicle traffic into an area where all traffic is local and is pedestrian and bike friendly.	1
Dedicated bus lanes through river road in Keizer, this would allow rapid bus service that could put pace cars and provide a reliable network	1

Connecting service to outer areas such as the coast, downtown portland, Detroit. A tie in to tourism! Work with Travel Salem to decrease car travel while increasing local tourism.	1
Car Bridge	1
build more roundabouts	1
Build another bridge over the Willamette River	1
Build a new bridge over the willamette to / from west salem !!!!	1
Add sidewalks and bike paths on Wheatland Road North in Keizer. Add a second turn lane to the sout hbound Interstate 5 on-ramp from Chemawa Road.	1
Add a train service instead of congesting the road more. This service connects Salem & Kaizer with P ortland.	1

Answered: 19 Skipped: 143

What are your priorities for spending federal transportation dollars that the Salem-Keizer area receives?

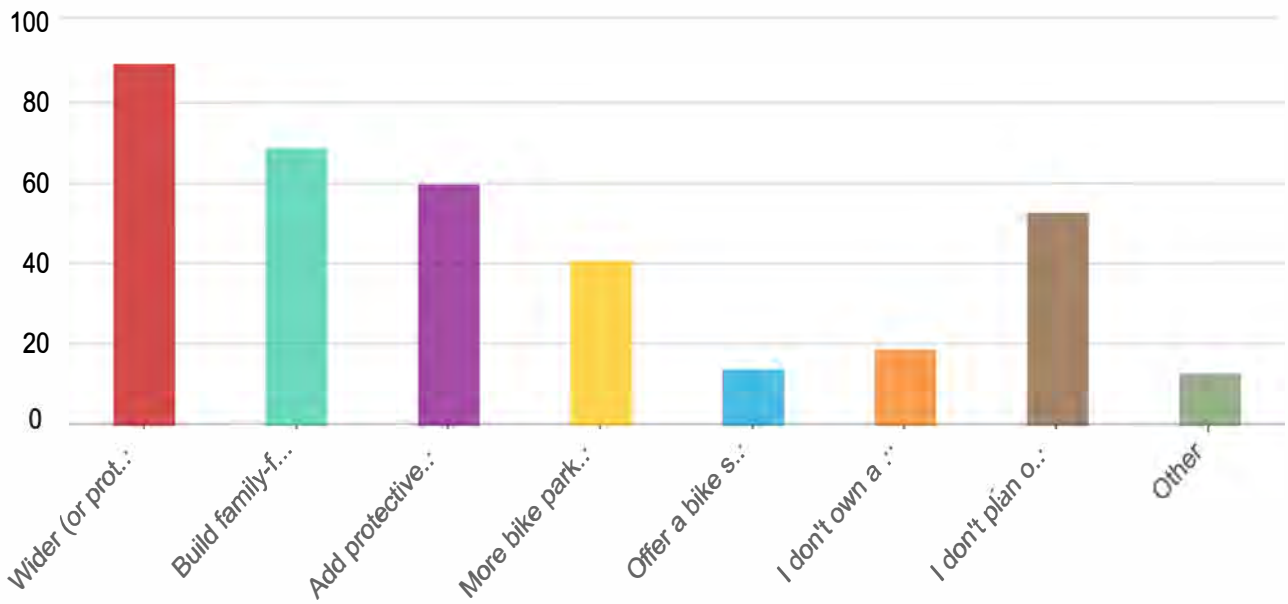


Rank	Answers	1	2	3	4	5	Average score
1	Fix and maintain the existing roads, bridges, sidewalks, etc.	23.53% 36	27.45% 42	20.26% 31	23.53% 36	5.23% 8	*3.41*

2	Provide a multi-modal system (increase bus service, more sidewalks and bike lanes)	20.92% 32	24.18% 37	14.38% 22	28.1% 43	2.42% 19	*3.13*
3	Address safety issues or locations	15.69% 24	18.95% 29	33.99% 52	21.57% 33	9.8% 15	*3.09*
4	Reduce the impact to the environment	18.3% 28	15.69% 24	16.99% 26	18.3% 28	30.72% 47	*2.73*
5	Address peak hour congestion	21.57% 33	13.73% 21	14.38% 22	8.5% 13	41.83% 64	*2.65*

Answered: 153 Skipped: 9

What would encourage you to bike more often?



Answers	Count	Percentage
Wider (or protected) bike lanes along high traffic streets	90	55.56%
Build family-friendly bike routes on low traffic streets	69	42.59%
Add protective crossings (flashing lights) to assist bicyclists cr ossing high traffic streets	60	37.04%

More bike parking at destinations	41	25.31%
Offer a bike share service	14	8.64%
I don't own a bike	19	11.73%
I don't plan on biking	53	32.72%
Other	13	8.02%

Answered: 158 Skipped: 4

Other

Response	Count
We need another bridge. Stop asking us to ride bikes.	1
The strodes are atrocious. From SE Salem I'm either riding on Kuebler with 60mph traffic or going up Liberty with no bike lanes at all.	1
Surgery to repair bone deposits. In other words, I am disabled and need more attention to disabled as sess issues.	1
Stop increasing car capacity	1
Reduce car parking availability, especially off-street. Development must be people-oriented, walkable and compact. Require covered bike parking at businesses.	1
physical limitations prevent me from riding a bike	1
More walking/bike paths in a green space, water routes.	1
Mixed use planning that would allow local groceries and pharmacies	1
I would have preferred wider bike lanes on some roads heading out of town when I was a bike rider. I consider myself too old (74) to safely ride a bike.	1
Electric bike subsidies (biking in the South and West hills is a lot on a regular bike)	1
Bicycle safety!!!!!!!! I would ride every day IF I could feel safe riding when it's darker in the winter.	1

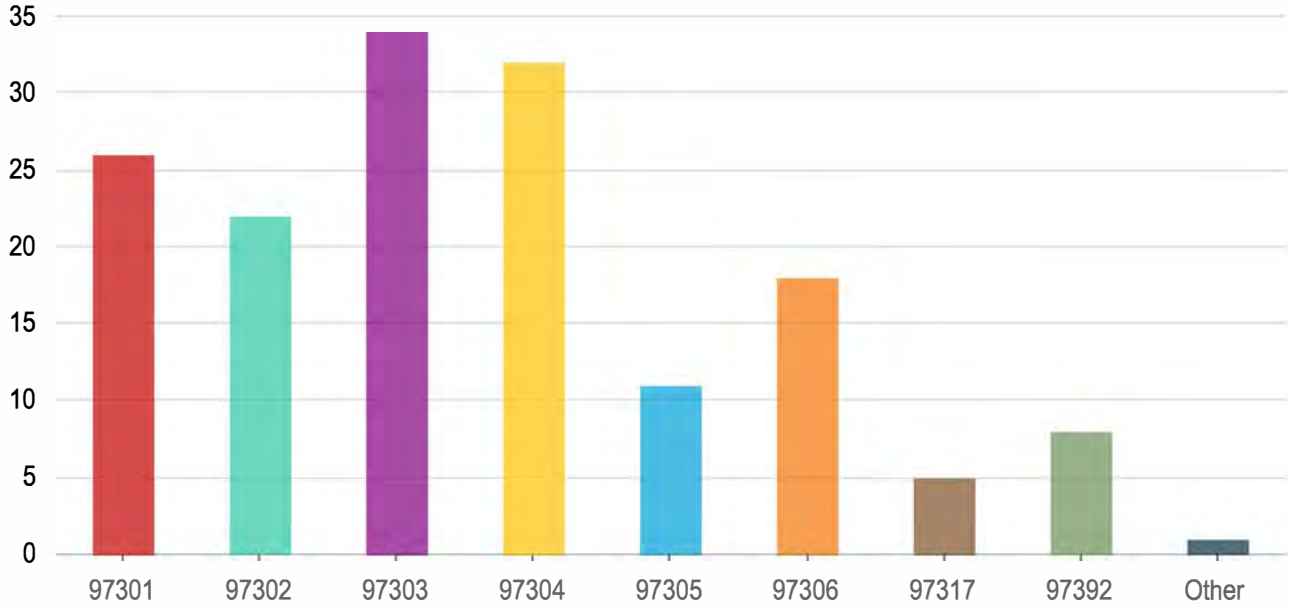
Better destinations.	1
A maker space where I can repair my bike and mobility scooter and charging stations at transit center s.	1

Answered: 13 Skipped: 149

What other comments about transportation in Salem-Keizer would you like to share?

Answered: 101 Skipped: 61

Please tell us your zipcode



Answers	Count	Percentage
97301	26	16.05%
97302	22	13.58%
97303	34	20.99%
97304	32	19.75%
97305	11	6.79%
97306	18	11.11%
97317	5	3.09%
97392	8	4.94%
Other	1	0.62%

Answered: 157 Skipped: 5

	What other comments about transportation in Salem-Keizer would you like to share?
	Open responses to the question, generally summarized by subject - 100 in total
	Bike and Pedestrian responses:
1	There are not sidewalks on busy roads and yet the school district has deemed that children can walk home. Generally the lack of sidewalks is disheartening
2	Sidewalks on "old, narrow, hilly and windy" streets that currently are arterials. Example: Cascade DR NW Salem. I am sure there are more in West and South Salem which school children use daily. They walk on shoulder areas that are sometimes less than 2 ft. wide.
3	I ride my bike around Salem every day in order to save money. I cannot see the same concern for local, state and federal EXPENDITURES of OUR TAX MONEY!!!! You spend like you have unlimited resources. BUILD BACK BETTER IS A RAT HOLE OF OVERSPENDING!!!! PLEASE LISTEN TO OUR CONCERNS!!
4	We need better pedestrian and bike infrastructure, lower speed limits and road diets to make it safe and efficient to not drive everywhere!
5	In addition to the ideas in this survey, we could really use additional crosswalks with flashing lights on long blocks, like the ones on Commercial in South Salem.
6	More family friendly biking and walking paths would be great. Similar to Salem parkway bike path.
7	Please finish the sidewalks on Delaney east of 3rd street. Pedestrians are forced into traffic where cars are using excessive speed.
8	Sidewalks are desparately needed on on Cascade Dr. between 8th St and Glen Creek. The safety of students walking to Walker Middle Schools on Cascade is a big conern to me.
9	More walking/bike paths in a green space, water routes.
10	Cycling, cycling, cycling!
11	Una gran mayoría de la infraestructura para el ciclista actual se halla en el casco histórico de la ciudad. La creación y el mejoramiento de los caminos de acceso desde otros barrios que no se obstaculizan por vehículos queda fundamental. Cuanto más agilizada sea la ruta más usable será para todos.
	Translation: A large majority of the infrastructure for the current cyclist is found in the historic center of the city. The creation and improvement of access roads from other neighborhoods that are not hindered by vehicles is essential. The more streamlined the route, the more usable it will be for everyone.
12	Much of the existing biking infrastructure is good but much of the road debris such as glass ends up in the bike lanes. More frequent street sweeping would be greatly appreciated. Additional bike lanes, or completing existing ones along busy streets would be very helpful. 17th and Center St. or Mission and Commercial St. for example where the bike lane just ends.
13	I would LOVE to be able to bike safely across town to work. But when the bike lanes are narrow, faded, or entirely missing, it's not safe. If we have more of these implemented - wider bike lanes, traffic lights/lanes just for bikes - I have no doubt more people would bike around Salem. Same with the bus system - I live in North Salem, and if I wanted to get to work on 12th St, it would take me an hour and a bus transfer. No thanks. I know space in downtown is tight and people probably wouldn't be a fan of adding a bike lane (or moving parking into the street to provide a bike lane buffer), so let's add more lanes and lights for bikes around the border of downtown, then a small tram or street car to carry you around inside downtown.
14	The lack of sidewalks in established neighborhoods is appalling. Please build safe routes for people to walk and bike for their short in town trips.
15	It feels really unsafe to walk in most places due to high traffic volumes and speed. I would love to be able to bike and walk around my city with my family. It just feels too scary. Please make more pedestrian friendly!!

16	The storm grates are not bicycle friendly. Road cleaners leave debris in bike lanes. Some bike lanes end suddenly, like SE Lancaster to Kuebler. Cyclists hate long detours that take extra time and energy, when cars get the most direct routes. There's only so much you can do though, bicycles in general need a design upgrade. More places that teach bicycle maintenance like the HUB downtown would be good, it should be taught in highschools.
17	*More crosswalks on busy streets to make it safer state st is one *More Sidewalks on roads without sidewalks Easier to walk or get around without a car :)
18	When adding bike parking at destinations, they should be as secure as possible from theft, especially EBikes. Otherwise biking won't be viable for errands. I was unable to rank my priorities because I have a touch screen. They are as follows: 1) safety issues; 2) multi-modal system; 3) environment; 4) fix/maintain roads; 5) address congestion.
19	Bikes are better than cars
20	Fix the sidewalks especially the main sidewalks going to community parks. Like the west side of 19th going to Englewood park from Market st. It's not safe to walk or bike or wheelchair friendly. Widening the old streets that barely fir 2 cars at a time.
21	I love biking and would like to do more of it throughout Salem but safety is a huge concern as I have almost been hit a few times when I had the right of way. There are many other cities in Oregon that have successful bike infrastructure like in Corvallis that could be utilized in Salem better. My top project to vote for is the McGilchist improvements.
22	There are bike lanes, but many people park in them, leave their waste management cans in them, and they are not cleared with the sweepers very well. Also, would love to see bike thru-lane streets designated to get across the city. There are some in Portland where cars can go on them, but only for a few blocks (neighborhood travel) before there is a bike-only barrier preventing cars from using them as commute routes. We can have 1 or 2 that run east and west, and 1 or 2 that run north and south.
23	I'd like to see more people biking because they want to similar to the Amsterdam transportation model.
24	I would REALLY LIJE to have a paved bike trail from RiverFront Park along the river to Keizer Rapids. Similar to that in Eugene.
25	South Lancaster drive bike lanes are broken and unsafe, need a fix bad. Also, the bicycle tool stations downtown are a stupid waste of money, they are uncovered, get rained on, rusty, broken, and any tools left get stolen.
26	Dedicated bike lanes, especially on major thoroughfares like Wallace Road in West Salem (mirroring the style used on the Salem Parkway). Additionally, building a bike infrastructure similar to Portland. I bike 20 miles a day to and from work and having every intersection and road being constructed/redesigned to imagine a safer cycling environment would boost the amount of users and lessen the amount of vehicles on the road. One very dangerous intersection that comes to mind is the end of the Salem Parkway bike path and Chemawa Road; no way for a bicycle to continue eastbound Chemawa Road from the bike path and cars always feel they have the right of way due to no biking infrastructure planning in that area. Happy to share more thoughts: 405-306-3385
27	Too much emphasis on biking. Just look at the fatalities in Portland! Also, many of us cannot bike (age or disability) south spending is biased toward younger people. The prioritize question above did not work on my android - I picked the highest priority and it auto-populatwd the rest. Please don't count these answers!
28	Thank you for this survey! Walking is easier along streets with sidewalks and quieter streets. Commercial Street SE is currently challenging to cross at intersections of Fairview Ave. SE (due to traffic not waiting for pedestrians) and Boice St. SE. Ratcliff Dr. SE would be easier to walk on with a sidewalk. I don't currently bicycle outdoors because of unsafe traffic conditions. Wish a few other drivers weren't going so fast and could slow down for pedestrians/bicyclists. Thank you for your consideration!

	Bridge responses:
1	ALL traffic from West Salem to the East side is FUNNELED directly through downtown Salem on the congested Center street bridge. We NEED a third four lane bridge across the Willamette river to address this.
2	Build another bridge
3	Please build Salem's 3rd bridge. It will improve redundancy in our transportation system and reduce the useless miles people have to drive to get from west Salem to Keizer.
4	Expansion of the West Salem bridge needs to be addressed or Stop all building in West Salem until sufficient infrastructure is provided!!
5	Concerning this question: What are your priorities for spending federal transportation dollars that the Salem-Keizer area receives? Drag to change the order, with highest priority (#1) on top and lowest priority (#5) on bottom....if I could remove my 4 and 5 I would. They are not priorities when it comes to transportation. BUILD ANOTHER BRIDGE that can carry cars across the river. Stop with the bridges that cross the river and carry no cars. I drive to Wilsonville every day. Every day I see the 1X Cherriots bus. If I don't see 2 people riding, I swear that bus is empty. A total waste of resources. On my commute sometimes I see someone riding a bike. One guy riding a bike. Cold, wet, dark commute. Most reasonable people are not interested in getting to work this way. Stop asking us to ride bikes. Respectfully, Joe Wade
6	Give us a DAMNED BRIDGE!!!! I won't bike, my neighbors don't bike. People that DO bike can't represent more than 2%-3% of the population, and we live in a DEMOCRACY! Majority wins! I will never bike anywhere. No plans on owning one. If our current bridge fails. Commerce will fail from West Salem to the coast! If Russia or China show up on our shores, and our military can't get there in a hurry, Will we be worried about the 5 people that want to ride to work in this entire city, or tanks and troops arriving on our shores. How ridiculous we are to worry about public transport and bikers. GIVE OREGONIANS A BRIDGE!
7	Do not spend another penny on bicycle improvements. Stand at the corner of Winter and Bellevue at 5:00 p.m. on a weekday and you will see the problem. Bridge traffic backed up to 12th Street. That would be 2 miles of back up, only to get worse. Buy the land and right of way for the new West Salem bridge.
8	Build a car bridge across the river
9	To construct Marine Drive in West Salem.
10	West Salem Bridge congestion is an issue with over 40K residents. This is a continued issue for decades but more pressing now than ever. Need a bypass from parkway to HWY22. Need Marion and Center street bridges structurally modified. Both are failing.
11	Additional bridge to West Salem. West Salem is growing and congestion on the bridge is increasing if there is an accident on or near the bridge, traffic comes to a halt.
12	Please address the need for another bridge to West Salem
13	Wallace Rd has become a nightmare to get onto during peak hours. The bridge congestion just keeps getting worse

14	Please stop shoving off the bridge problem . This has been ignored by every city council in salem for 50 years. Is it going to take a situation like Pennsylvania before something is done about it?? You can't keep citing environmental concerns whilst allowing the homeless population to live on the banks and have mass amounts of garbage floating by. You can't build a walking bridge to minto brown in record time in a natural protected habitat and still keep saying for decades that it's not environmentally sound. BS!
15	Build the next bridge across the Willamette'
16	Another bridge is needed.
17	BUILD THE BRIDGE There have been studies done, $$ spent and with the growth in West Salem it is imperative to build another bridge. Salem is becoming a commuter city to Portland. The traffic coming and going on Wallace street is impossible to deal with during peak travel times 7-9 am and 3:30-5:30 pm. Plus the weekend flow of traffic in and out of our wine country doesn't reduce that traffic in the weekend in the summer. We need another bridge NOW
18	Discussions about another bridge have been on and off again since the 60's. This area has exploded and will continue to grow. DO SOMETHING ABOUT CROSSING THE WILLAMETTE RIVER. Motorized vehicles sitting in stop and go traffic are not good for the environment. Get them to their destination by building another bridge.
19	Do something about congestion on bridge between downtown and wedt Sslem.

	General suggestions and Roadway comments:
1	I live far out west. Nothing to bike to. I try to avoid peak hours, but congestion is a problem when it takes 20 minutes to drive 8 miles. Nearest grocery store is over 3 miles away and I would not likely bike to it.
2	Keizer doesn't have enough dedicated staff to apply for grants. The TSP is woefully out of date. And the tax rate is too low for the city to build the necessary infrastructure for alternative transportation. If Keizer doesn't address these problems, they should not get any more funding for street projects, especially those designed to move cars faster.
3	The angled parking spaces downtown Salem are a fright! Often impossible to see behind you before backing out into traffic, especially if the vehicle blocking the visual path is taller than mine.
4	A 4 way stop or light at the top of the hill of Alder and Verda lane. This area gets highly congested during school hours. I live off of Claxter rd and difficult to turn into Verda lane during these times, or difficult to turn onto Verda lane from Alder st
5	reduce speed limits of motorized vehicles to increase safety, decrease noise; add speed bumps to slow traffic and flashing lights at pedestrian/bike crossings for safety; and traffic circles to replace stops
6	Excessive emphasis on driving convenience. In-town speeds are too high. Cars always have the shortest, most direct routes while peds & bikes have to take the most circuitous ones in order to get across streets, etc.. Need more disincentives to driving (tolls, higher gas tax, paid parking , etc.). More roundabouts and fewer full-stop traffic signals would reduce congestion, backup and need for turn lanes. Prefer to walk or bike but unable to get to much of the city easily or safely so need to drive too much.
7	Consider your bias in phrases like "improve traffic conditions" - improve for whom? If you make it easier to drive fast, you make it less comfortable and safe for people who might walk or bike.
8	For being a capitol city the bus system and public transportation seems far behind what it should be.
9	Please fix the potholes; this city has the worst pothole problem-they are Everywhere and are Bad- this should be fixed before most anything else, it makes driving in this city a horrible experience and hurts driver's cars, making them wear much faster and driving, car maintenance, etc. more expensive for individuals.
10	Silverton Rd. From Hawthorne Rd. to Fairgrounds Rd. needs to be widened. With a left turn (transition lane) added. This is a dangerous street, that needs to be addressed!
11	I would like Salem-Keizer to take the next step in investing in its existing infrastructure with an eye towards longevity, safety, and being community/neighborhood oriented. This includes improving non-driving transportation options, like better sidewalks, street lights, bicycle paths, and more robust transit. I would also like to see thoughtful road and transportation design to direct commuters to main roads while deemphasizing secondary streets, including road diets, more pedestrian crossings, etc. It would be great for Salem to be a "whole" city as it relates to transportation.
12	The Netherlands does things right for bikers, walkers, and traffic control. I know this probably seems like a silly resource, but the YouTube channel "Not Just Bikes" is full of great ideas that Salem-Keizer could adopt. Also, PLEASE reconsider zoning laws that isolate single-family homes from shopping, nature, and services. Getting people to switch to non-motor transportation is the ONLY way to truly reduce traffic and its attendant congestion (and carbon emissions). Cars should be for out-of-town trips, not the post office or one's favorite restaurant. Build infrastructure that supports and incentivizes that!
13	Widen Cordon Rd to four lanes between Turner Rd and Silverton Rd

14	Salem has increased density so existing roads are crowded- with 2 or more people trying to work bus does not cut it need to my door transportation to lug equip . Sure bus is important but I see few riding them and with young children or babysitting strollers, various items bus is too cumbersome. Empty buses are not good for the environment either. Important to have some mass transit but expanding it is more practical when we have high rises like China. Even in Beijing the roads are way crowded even with mass transit. Our downtown and Keizer crossing would be #1- inconvenient to get around in and #2- hurt the downtown as with crowded roads few want to venture out of their neighborhood unless have to. The building and running of close to empty buses would be bad for environment. Portland's mass transit is dirty and when taking it to suburbs sometimes dangerous. Yes have to have some mass transit and I support it but now roads and bridges are needed to support growth.
15	Our area clearly has legacy challenges that make needed changes difficult, such as significant stretches of streets built without sidewalks in an era when walkability hadn't even entered the vocabulary, and narrow widths on minor arterials that make bike lanes and even safe sidewalks challenging to retrofit. But when I look at the 17 TIP projects, I don't see clear evidence for effective prioritization. Several of these are suburban/exurban projects, such as sidewalks and bike lanes on State and Center west of Cordon, which I don't have a problem with, except that I fail to understand how they were prioritized over, for example, the Sunnyview project, which is located in a more densely-populated area with significantly more pedestrian and bicycle traffic. Clear articulation of how and why projects are prioritized would go a long way toward my trust in current plans, and my ability as a citizen and taxpayer to evaluate them in an informed way.
16	I frequently bike from Keizer to Salem along Front Street. It is narrow in some places, has no bike lanes, and has the railroad tracks which are tricky on a bike. I would love to see that area re-vitalized. If it were safer to bike/walk in that area, the old warehouses and cannery could be re-developed into an attractive and productive commercial/retail area with restaurants looking out at the river, etc. A little like Bend's Old Mill District. A first step would be to invest in the transportation network there. Work out something with the railroad, similar to how the 12th Street sidewalk downtown along the State office buildings.
17	I really think you should consider installing more roundabouts. Like, how about one on Chemawa Road where the entrance to the Chemawa School is?
18	Less cars = improved quality of life
19	I have an adult child with a disability who cannot drive. The lack of other reliable, comprehensive transportation options in Salem-Keizer is preventing them from living independently.
20	Service needs to better serve those who are at a socioeconomic disadvantage, ie: graveyard employees at Walmart. With the current bus schedules, they have to arrive early to work by more than 2 hours and then because the employer only provides part time shifts, the employee has no bus service to get home for several more waiting hours. I also would like to see a conversation happening with Travel Salem and tourism stake holders. Bikes, Scooters! Also, how do people with disabilities get some of this allocated to their needs. Biking immediately excludes someone in a wheelchair. The survey is far from inclusive.
21	Please fix our non-county suburban streets. Its unsafe and a bad look for our county.

22	Our strodes are basically race tracks for some drivers. They are far too fast with modified exhaust at all hours of the day and night. Our communities lack pedestrian friendly areas.
23	Slow folks down. Find ways to reduce speeds and save lives.
24	I do not want a third bridge. New developments such as a south Salem transit center should be located on already degraded areas, but not take out housing. A good example is the new police station located on old Honda dealership property. The homeless population probably does deter some people from using the bus system.
25	Fix roads. Add turn lanes and capacity to reduce congestion . Finish bike Ped system
26	Failure to address congestion leads to speeding traffic on residential streets, no Police Department or City Council is addressing this!
27	We often go on neighborhood walks and sometimes drive to different parts of Salem just to have a different neighborhood and add variety. Just in the past few months, we've seen 5 trees cut down in our neighborhood for the sole purpose of fixing a small piece of sidewalk. One of these trees looked to be at least 50 years old! We are regularly dismayed and sad when we see that an entire tree gets cut down to change the sidewalk so that it is not as buckled. Having also lived in Portland, we have seen that is it possible to both accommodate beautiful, large growing trees while making sidewalks that take the roots into account (such as with a slope). This would maintain more green spaces in neighborhoods, help decrease heat during the summer, and maintain property values. We think it would be valuable to have a training session for city and county staff on how to "think bigger" and try fixing sidewalks without needing to remove the trees!
28	I think that lighting systems on the roadways also need to be updated especially in neighborhoods. Some neighborhoods don't even have lighting or sidewalks.. I think a lot of side walks and bike lanes on main roadways need to be widened for safety too.
29	Fix the congestion fir DRIVERS. Do NOT add to congestion by expanding bicycles lanes!
30	Add sidewalks and bike paths to Wheatland Road North in Keizer. Add a second turn lane to the southbound Interstate 5 on-ramp from Chemawa Road in Keizer. Program all crossswalk signals in Keizer to only give pedestrians a walk sign upon the first cycle of the traffic signal. A pedestrian is going to be killed. Move the east/west crosswalk at River Road North and Sam Orcutt Way to the north side of the intersection.
31	We need more sidewalks in Keizer and we need traffic calming measures like speed tables put into place on Chemawa NE to encourage more traffic on Lockhaven and River.
32	More planning along the ideals of 8-80 cities and 15 minute cities. Allow and even encourage tactical urbanism.
33	First, Keizer isn't a real partner. The city leaders don't believe in human caused Climate change. They don't believe making walkable/bikeable communities is important. They may say it is but it's lip-service. Until Keizer is forced to change, they won't. Next, stop accommodating car drivers from the neighboring cities. Why does Salem have to make it easy for people from Dallas, Stayton or Albany to drive here? Tell ODOT that we do not want to see another cent spent on wider/new roads/highways. Any money must now be spent on maintaining the existing infrastructure and reducing the number of highway & road lanes (tear down the Rt22 overpass by the rail station, narrow Rt 22 from Salem to Stayton, South Commercial, etc.). BUILD A COMMUTER RAIL LINKING SALEM TO ALBANY AND PORTLAND. Lower speed limits to 20 on streets and 30 everywhere else. Finally, get rid of parking minimums at commercial/industrial development, especially at the edges. This forces people to drive

34	Traffic congestion and timing of traffic lights are an issue for me. Example is the traffic backup at Liberty going into Commercial at Roth's Market. Need to have light change more frequently to allow traffic to enter Commercial. Improvements east of Lancaster are badly needed, such as State Street and Center Street. With lots of apartments and a population that would more frequently walk or bike, need street widening, sidewalks and bike paths. Additions of flashing pedestrian crossings is great! Such as on Portland Rd and at Library. On a separate note, the recent flyer sent out gave some frustrating project information. My attempt to view projects at skats-mwvcog.hub.arcgis.com, as directed, required a login and password. I finally found the projects at mwvcog.org.
35	Eliminate free parking
	Light Rail / Tram
1	We need better and faster transit options to Portland and Eugene. Why don't we have a rail system?
2	Increase light rail options for valley transportation. More than just the Amtrak Cascade. Add a light rail stop in the Keizer area
3	Trams or dedicated lanes would be extremely helpful. A trolley bus service would be more economical and reduce emissions
4	Unfortunately the only airport in the area is PDX. Either develop Salem airport or add train service between Salem and PDX similar to BART connecting Oakland & San Francisco Airport. Or, NJ Transit connecting EWR & JFK (via PENN). Or, SEPTA connecting PHL to the city.

	Greenhouse Gases and Climate Change
1	Regulate emissions from large trucks and diesel engines Regulate sound from large trucks and modified car exhaust Reduce carbon emissions Make city and parks more walkable Less pavement and more green space
2	1) First and foremost by a huge margin - dramatically work to eliminate green house gas emissions as rapidly as it is physically possible to do so. Note that I did -not- say "reduce" or to balance these efforts. We are now in the early stages of cataclysmic climate change. We cannot now stop that. We can only soften the path to a drastically different future. The time to act was 50 years ago. We have ZERO time to waste. This includes making it vastly easier to own, share, maintain, park, and use electric vehicles. AND making it more difficult to use fossil fueled vehicles. Create all manner of incentives to encourage the immediate shift to electric vehicles, mass transit, bicycles, walking, and other alternate modes of transportation. 2) A distant second though still important, encourage work from home and solutions that do not involve transport at all. 3) Safety improvements and moving away from the grid layout system. More roundabouts, island and traffic calming devices.
3	Most greenhouse gas emissions in Salem come from vehicular traffic. SO we need to get people out of cars that consume fossil fuel.
4	53% of Salem's greenhouse gas emissions come from transportation. So in order to meet the Salem City Council's goal of cutting emissions in half by 2035 and get to net zero by 2050 we must get people out of their cars and lower Vehicle Miles Travelled in Salem. There is no other way. That being the case, every proposed transportation project must be viewed through a "Climate Lens" and you must ask yourself: "Will this project lower VMT or increase VMT." Projects that increase VMT should not be considered if we are serious about the maintaining a livable planet for our children and grandchildren.
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7	Climate change is catastrophic. Project a positive image of working together, helping each other, building community by engaging in mass transit, biking, walking, carpooling.

	Transit
1	Please consider making Cherriots service free to riders. I would love my property tax dollars to go towards this. I would ride the bus more if it was free. The hassle of digging up $1.60 in change for what is often a short ride is not worth it so often I will drive, bike, or stay home. I strongly believe more people would ride the bus if it was free, and in addition to helping them out it reduces other traffic issues and helps the environment. Free rides during COVID could be a good case study for the cost of such a program, along with ridership numbers if they existing. Thank you for communicating the existence of this survey via mailers.
2	I don't know whether the buses used for public transportation are fuel-efficient or environmentally low-impact. If they are not, I would like to see that improvement, especially if bus transportation is to be increased by adding more routes, etc. Salem/Keizer should be setting an example in public transportation for other municipalities to emulate in terms of lowering our carbon footprint.
3	I see busses going up and down the streets of Salem and rarely do I see more than a dozen riders on board. I would propose smaller busses that could more easily converted to electric and thus saving the citizens of Salem money.
4	I would like to take my kayak on the bus out to mill city or packsaddle. SAMTD's rules are oppressive. In other countries they have racks on top of the bus. Next Adventure packs a bunch of kayaks on top of a van for community trips. These activities would help keep kids out of JDH. Telling kids they cannot ride electric scooters and bring them on the bus is a hostility equates to peeing in the wind. The excuses made about safety are fallacies. Also, the canyon is being left out by SAMTD. I left the advisory group due to the open hostility from staff.
5	I would really like to be able to travel to and from Jefferson by bus.
6	Better shelter for us riders at downtown transit center. Waiting 15-45 minutes for a bus with very little space to be out of the rain is terrible. There is also a sign you've put up that says slippery when wet. Make it a nice environment for us who wait! Can the machines that take $bills be updated to take older bills? So often myself and others try many times for our money to be accepted. This takes a lot of time at transit and stops.
7	I would like to see later bus hours again.

Project#	Project	Comments	Name
	General Comment	I noticed that Keizer has no projects. But it's not from a lack of need.	Mike De Blasi
	General Comment	Never will ride public transit, neither will my Wife, Daughter, Mother and Father. We have cars. I feel my tax dollars are going towards mobile housing for drug induced homeless. Nobody feels safe in public transit. I have no clue why I pay for it.	Andrew Prince
	General Comment	It appears that the local road planners are busily working to make climate change worse.	Doug Parrow
	General Comment	Infrastructure for transit vehicles, pedestrians and cyclists should be the top priority for every transit corridor. And transit corridors should be the top priority for this plan.	Bill Dixon
	General Comment	Evaluate projects for climate impacts. Do not widen roads which leads to higher speeds, induces more traffic, reduces safety & increases greenhouse gas emissions. Prioritize traffic calming, sidewalks, bike lanes, intersection safety, transit access.	350 Salem OR
	General Comment	Priority should be given to public transport, bike lanes, and pedestrian access. Please do not fund widening roads for the purpose of additional lanes of cars and increasing the amount of vehicles pollution and traffic in Salem.	Spencer
	General Comment	Many of these projects are to facilitate car travel. With climate change, budget constraints and quality of life all pointing to compact development that doesn't require a car you are pushing to spend billions on cars.	Mike De Blasi
	General Comment	Get rid of current street/road hierarchy and replace with residential, mixed use and high speed. Then build the 1st two to NACTO standards and the last to AASHTO standards. The last should have minimal development and curb cuts.	Mike De Blasi
	General Comments	Many of these projects are to facilitate car travel. With climate change, budget constraints and quality of life all pointing to compact development that doesn't require a car you are pushing to spend billions on cars.	Mike De Blasi
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Project#	Project	Comments	Name
B003	ITS - Transit Signal Priority	We need to give transit a leg up on traffic in order to make it reliable and more attractive to riders with other choices, i.e., people who drive single occupant vehicles everywhere. This project would be a great advantage for buses.	Ted Stonecliffe
B003	ITS - Transit Signal Priority	Important! Move up timeline.	350 Salem OR
B005	ITS - Real-time Transit Arrival Information	The younger generation expects on-demand information about products they buy online. It's the same with public transit. Riders want to know when their bus is going to be there so they don't have to wait in the rain or bad neighborhood too long.	Ted Stonecliffe
B008	South Salem Transit Center	This is a great project needed for South Salem for too long. This would allow for more neighborhood buses and enable transit to expand more to the neighborhoods of south Salem. Right now, there are too many places without transit service altogether.	Ted Stonecliffe
B008	South Salem Transit Center	Consider branch library at this location.	Jim Scheppke
B009	Paratransit Facility	Cherriots is required by the ADA to provide paratransit, but is not compensated for the high cost of providing the service. Dollars saved from not having to lease an offsite facility would save money over the years.	Ted Stonecliffe
B017	East Salem Transit Center	This hub of transit activity is the second most active for Cherriots in terms of daily ridership today. There needs to be more of a formal space for riders to transfer buses and wait in sheltered spaces.	Ted Stonecliffe
B017	East Salem Transit Center	Consider branch library at this location.	Jim Scheppke
K002	Chemawa Interchange	Not needed.	350 Salem OR
K011	Verda Ln NE: Chemawa Rd NE to Dearborn Av NE	Two lanes only.	350 Salem OR
K011	Verda Ln NE: Chemawa Rd NE to Dearborn Av NE	Two lanes only. You can put in a bus turnout if you must. Lower the speed limit to 25 mph .	Mike De Blasi
K015	Wheatland Rd Multimodal Project - Phase 1	We support this project. Cost seems very high.	350 Salem OR
K020	Wheatland Rd / River Rd Intersection	Not needed.	350 Salem OR
K020	Wheatland Rd / River Rd Intersection	Consider a roundabout. Keizer already has experience with this.	Joe Tilman
K022	Verda Ln Extension	Two lanes only.	350 Salem OR
K026	On-Ramp to I-5 and Salem Parkway	Not needed.	350 Salem OR
M015	Cordon Rd NE & Auburn Rd NE	Just because the developer is paying for it today doesn't mean it's not a long term gov't liability. No yo this project.	Mike De Blasi
M015	Cordon Rd NE & Auburn Rd NE	No widening.	350 Salem OR
M016	Cordon Rd NE & Hayesville Dr NE	Not needed.	350 Salem OR
M017	Cordon Rd NE & Swegle Rd NE	Add roundabout.	350 Salem OR

Project#	Project	Comments	Name
M018	Cordon Rd NE & Ward Dr NE	Not needed.	350 Salem OR
M019	Cordon Rd NE & Herrin Rd NE	Not needed.	350 Salem OR
M020	Hazelgreen Rd at Cordon Rd NE / 55th Ave	Add roundabout.	350 Salem OR
M022	Delaney Rd: Battle Creek SE to Turner	Not necessary. Two lanes only. Add bike lanes.	350 Salem OR
M022	Delaney Rd: Battle Creek SE to Turner	Upgrading this road will be of huge benefit to many people, since it leads to I-5 from Turner and surrounding communities.	Linda Hansen
M022	Delaney Rd: Battle Creek SE to Turner	I'd be happy with just getting this restripped more often. Very difficult at night with the rain.	Lyndsay Benthin
M024	Hollywood Dr: Salem City Limits to Silverton Rd NE	Two lanes only.	350 Salem OR
M034	State St: Lancaster Dr NE to 46th Av	No widening of any local roads, especially not to FIVE LANES!	350 Salem OR
M034	State St: Lancaster Dr NE to 46th Av	I don't like this project, but if it is built, keep speeds to 30mph, include new traffic signals, HAWK signal crossings, or at the very least RRFB crosswalks w/ ped. refuge islands to make it safe for pedestrians and bicycles to cross State Street..	Ted Stonecliffe
M037	Blossom Dr NE: City Limits to Portland Rd NE	Two lanes only. Add bike lanes and sidewalks.	350 Salem OR
M042	Cordon Rd NE & Kale St NE	Not needed.	350 Salem OR
M043	Cordon Rd NE: Center St NE to Sunnyview Rd NE	Two lanes only, especially for $16.3m.	350 Salem OR
M046	Cordon Rd SE: Center Rd NE to State St SE	Two lanes only.	350 Salem OR
M048	Hayesville Dr NE: Lancaster Dr NE to Cordon Rd NE	Two lanes only.	350 Salem OR
M049	Herrin Rd NE: Middle Grove Dr NE to Cordon Rd NE	Two lanes only.	350 Salem OR
M052	Lancaster Dr NE & State St	No capacity increases anywhere. Reduce VMT!	350 Salem OR
M053	Lancaster Dr NE & Portland Rd NE	This project is needed for transit buses to serve this area. Cherriots Route 3 - Portland Rd can't turn left from Lancaster Dr to Portland Rd without a traffic signal. This would provide access to transit to many low-income people in this area.	Ted Stonecliffe
M055	MacLeay Rd SE: Arabian Av SE to Cordon Rd SE	Two lanes only.	350 Salem OR
M060	Skyline Rd S & Vitae Springs Rd S	Not needed.	350 Salem OR
M061	Swegle Rd NE: City limits to Cordon Rd NE	Two lanes only.	350 Salem OR
M062	Turner Rd SE: Val View Dr SE to Turner UGB	Two lanes only.	350 Salem OR
M062	Turner Rd SE: Val View Dr SE to Turner UGB	While it would be nice to have this section redone, it is of higher priority for safety reasons to improve Delaney to Battlecreek.	Linda Hansen
M063	Vitae Springs Rd S: River Rd S to Orville Rd S	Does not need paving -- increases runoff.	350 Salem OR
M066	ITS - Flood Warning System	Move up timeline.	350 Salem OR
M068	ITS - Isolated Intersection Safety Warning System	Two lanes only.	350 Salem OR
M069	Kuebler Bv S: Croisan Creek Rd S to Viewcrest Dr S	Two lanes only.	350 Salem OR

Project#	Project	Comments	Name
M070	Cordon Road SE & State St	No new travel lanes needed.	350 Salem OR
M074	Brooklake Rd NE Pedestrian Enhancements	Bike lanes on both sides.	350 Salem OR
M076	Viewcrest Rd S: Kuebler Bv S to Byers St S	Two lanes only.	350 Salem OR
M077	Sunnyview Rd NE: Walker Rd NE to Cordon Rd NE	Two lanes only.	350 Salem OR
M078	Hazelgreen Road Projects	Speed limits need to be reduced to 30mph and a traffic signal at 49th Ave in order to make this street safe for pedestrians, bicycles, and transit users. Would like to see sidewalks built to Portland Rd too.	Ted Stonecliffe
M078	Hazelgreen Road Projects	Two lanes only.	350 Salem OR
M084	Center St NE: Greencrest Dr NE to Cordon Rd NE	Two lanes only.	350 Salem OR
M086	Connecticut St: Bike and Pedestrian	Separated path only.	350 Salem OR
M088	Marion County Curve Warning Signs	Provide wide bike lanes	
M090	Cordon Road: Caplinger Road to State Street	No parkways! Two lanes only.	350 Salem OR
M092	Cordon Road at Silverton Road: Intersection Modificatio	No new lanes.	350 Salem OR
M094	Brooklake Road: River Road to Huff Avenue	Two lanes only.	350 Salem OR
M095	State Street: 46th Avenue to Cordon Road	Two lanes only.	350 Salem OR
M096	Silverton Road: Cordon Road to Little Pudding River/SKA	Two lanes only.	350 Salem OR
M097	Center St: Lancaster Dr to 45th Pl	Two lanes only.	350 Salem OR
M098	Center St: 45th Pl to City Limits	Two lanes only.	350 Salem OR
M099	Macleay Rd: Lancaster Dr. to Connecticut Ave	Move up on the timeline.	350 Salem OR
M101	Cordon Rd NE: Sunnyview Rd NE to Silverton Rd NE	No parkways. Two lanes only	350 Salem OR
O025	Backage Roads (OR 22W)	Not needed.	350 Salem OR
O027	I-5: Delaney Road to Albany	I-5 widening not needed	350 Salem OR
O028	Mission St @ 25th St: Turn Lane	Not needed.	350 Salem OR
O029	Mission St at Airport Road: EB Turn Lanes	Not needed.	350 Salem OR
O030	Mission St at Airport Rd: EB Turn Lane	Not needed.	350 Salem OR
O031	Mission St at Hawthorne Av: WB Turn Lane	Not needed.	350 Salem OR
O033	Mission St (OR 22E) Corridor Multi-Use Path	Move up timeline.	350 Salem OR
O035	Chemawa / I-5 Phase 1 - Lockhaven/Chemawa Limited V	Not needed.	350 Salem OR
O036	Chemawa / I-5 Phase 2 - Tepper / 35th / Indian School R	Not needed.	350 Salem OR
O037	Chemawa / I-5 Phase 3 - Chemawa Partial Cloverleaf	Not needed.	350 Salem OR
O038	Brooklake at I-5 Short-term projects	Not needed.	350 Salem OR
O039	I-5 from Kuebler Bv Interchange to Delaney Rd Intercha	Major bottleneck for evening commuters when it drops to two lanes in this section. Would love to see three lanes to maintain flow.	Lyndsay Benthin
O039	I-5 from Kuebler Bv Interchange to Delaney Rd Intercha	Not needed.	350 Salem OR
S025	12th/13th St SE (Mission and Hoyt)	Why do traffic signals cost $1.6m. Yikes!	350 Salem OR

Project#	Project	Comments	Name
S033	Macleay Rd SE & Cordon Rd SE	Not needed.	350 Salem OR
S036	Doaks Ferry Rd NW: Brush College Rd NW to Orchard H	No local street widening. Bike lanes and sidewalks okay.	350 Salem OR
S061	17th St NE: Norway St NE to Sunnyview Rd NE	Bike lane only.	350 Salem OR
S064	25th St SE: State St to Helm St SE	Bike lanes only. No turn pockets.	350 Salem OR
S065	36th Av SE: Kuebler Bv SE to Langley St SE	Two lanes only.	350 Salem OR
S067	Battle Creek Rd SE: Kuebler Bv SE to Wiltsey Rd SE	Two lanes only.	350 Salem OR
S068	Broadway & Hood	Left turn pocket not needed.	350 Salem OR
S071	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lin	Two lanes only.	350 Salem OR
S071	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lin	This is a waste at this point in time. Bikers only bike half the year. Traffic is just fine as is. It's a waste of money.	Andrew Prince
S072	Byers St S to Deer Run S: Viewcrest Rd S to end of road	Two lanes only.	350 Salem OR
S076	Center St NE & 17th St NE	Not needed. Lower VMT!	350 Salem OR
S079	Commercial SE & Ratcliff Drive SE	Use bond measure funds.	350 Salem OR
S083	Commercial St SE: Baxter Rd SE to I-5 Interchange	This project is not needed especially for $14m.	350 Salem OR
S085	Cordon Rd SE & Hwy 22	Bike/ped bridge only.	350 Salem OR
S087	Croisan Creek Rd S: River Rd S to Heath St S	Two lanes only.	350 Salem OR
S094	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE	Two lanes only with bike lanes and sidewalks.	350 Salem OR
S095	Front St N: Norway St NE to Division St NE	Two lanes only. Add bike lanes.	350 Salem OR
S096	Front St N: River Rd N to Norway St N	Two lanes only.	350 Salem OR
S098	Glen Creek Rd NW: Crescent Dr NW to Westfarthing Wa	Two lanes only.	350 Salem OR
S103	Hilfiker Ln SE: Commercial St SE to Pringle Rd SE	Two lanes only.	350 Salem OR
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	The idea of a four lane bypass (Kuebler-Cordon Rd) around east Salem is a bad idea. I will only increase traffic and will encourage the City of Salem to expand the Urban Growth Boundary east of Cordon Rd. encouraging urban sprawl development.	Philip H Carver
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	We concur with Phil Carver's comment.	350 Salem OR
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	Stop widening roads along the periphery. You're only encouraging and subsidizing edge development that is car centric. Bike lanes and sidewalks are useless if you have a high speed and traffic corridor. Spend money on transit.	Mike De Blasi
S113	Lancaster Dr SE: Cranston St SE to Kuebler Bv SE	Two lanes only.	350 Salem OR
S117	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE	There is a lot of multi-family housing planned for this area and much of that is for lower income households. Public transit would be able to serve these easily with the proposed improvements.	Ted Stonecliffe
S117	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE	Two lanes only.	350 Salem OR

Project#	Project	Comments	Name
S119	Madrona Av S: Biegler Lane S to Liberty Rd S	Two lanes only.	350 Salem OR
S120	Madrona Av S: Croisan Creek Rd S to Elderberry Dr S	Two lanes only	350 Salem OR
S124	32nd Av SE & Trelstad Ave SE: East of I-5 to 36th Av SE s	Two lanes only.	350 Salem OR
S128	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Would this project include a crossing at the Springwood/Sawgrass intersection? This would improve a walk path for students to/from Sumpter Elementary.	Victor Lippert
S128	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Would be OK in order to have sidewalks on both sides along with protected bike lanes but trave and turn lanes should be 10 ft. wide (rather than the usual 11 ft.) to discourage excessive speeding in this section as well as otherson Mildred-Fabry.	Michael Hughes
S128	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Two lanes only.	350 Salem OR
S129	Mildred Ln SE: Liberty Rd S to Skyline Rd S	This extension of Mildred Ln is necessary to accommodate new developments, but I would prioritize improvements that are not on the edge of the urban growth boundary. Why encourage development on the borders when there are vacant lots in downtown?	Ted Stonecliffe
S129	Mildred Ln SE: Liberty Rd S to Skyline Rd S	Two lanes only with sidewalks and bike lanes.	350 Salem OR
S130	New Minor Arterial Street: Deer Run Av to River Rd S	Not needed, especially for $8m.	350 Salem OR
S131	Orchard Heights Rd NW: Parkway Dr NW to Snowbird D	Two lanes only.	350 Salem OR
S132	Orchard Heights Rd NW: Titan Dr NW to UGB	Two lanes only.	350 Salem OR
S132	Orchard Heights Rd NW: Titan Dr NW to UGB	Waste of money. No bikers up here. If their are, they only bike half the year, This is a ridiculous cause for bonds.	Andrew Prince
S135	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	This is a corridor served by public transit where many people with disabilities live. The current lack of sidewalk infrastructure make it unsafe for walking. Pedestrian crossings will drastically improve safety at transit stops as well.	Ted Stonecliffe
S135	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	Isn't this in the Salem bond measure? Two lanes only.	350 Salem OR
S135	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	Consider roundabout at Fairview Ave. Possibly replace lights at McGilchrist with roundabout, as well.	Joe Tilman
S137	Robins Lane, east of Commercial St. SE	Two lanes only.	350 Salem OR
S143	Skyline Rd S: Maplewood Dr S to Mildred Lane S	Two lanes only.	350 Salem OR
S147	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE	Would be OK in order to have sidewalks on both sides along with protected bike lanes but trave and turn lanes should be 10 ft. wide (rather than the usual 11 ft.) to discourage excessive speeding (very few drive the speed limit on Sunnyside)..	Michael Hughes
S147	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE	Two lanes only.	350 Salem OR
S148	Sunnyside Rd S: Pawnee Circle SE to the UGB	Two lanes only; no new left turn pockets.	350 Salem OR

Project#	Project	Comments	Name
S155	Turner Rd SE: south of Cascade Gateway Park to Airway	Bike lanes on both sides.	350 Salem OR
S156	Turner Rd SE: Airway Dr SE to Gath Rd SE	Two lanes only.	350 Salem OR
S156	Turner Rd SE: Airway Dr SE to Gath Rd SE	Bike lanes, please! So often we have bikers here and dealing with the turn to Turner and the hill it’s a struggle to slow and weave around bikes and vehicles enough.	Lyndsay Benthin
S158	Turner Rd SE: Gath Rd SE to UGB	Two lanes only.	350 Salem OR
S158	Turner Rd SE: Gath Rd SE to UGB	More and more traffic along this road. Would be very beneficial to upgrade!	Linda Hansen
S163	Wallace Rd NW: Edgewater St NW to Orchard Heights R	Move it up; don't delay safety.	350 Salem OR
S163	Wallace Rd NW: Edgewater St NW to Orchard Heights R	I may see one bike rider on this stretch daily. They are homeless. I'm not in favor or enabling the homeless so that they can continue to steal from West salem Residents. This only makes it easier. We don't take kindly to them over here. t	Andrew Prince
S168	Airport Rd SE: State St. to Mission St.	Two lanes only.	350 Salem OR
S172	Chemawa Rd NE: I-5 to Portland Rd NE	Chemawa Rd needs work but not by turning it into a 4 lane road. It needs sidewalks, protected bike lanes & slower speeds and trees. Make the intersection a traffic circle with lower speeds.	Mike De Blasi
S172	Chemawa Rd NE: I-5 to Portland Rd NE	Two lanes only. Improve safety for students.	350 Salem OR
S173	Cherry Av NE: BNRR to Salem Parkway NE	More than a wider street, a separated grade crossing of the railroad tracks is needed. Trains regularly block traffic for over 15 minutes here due to the switching yard close by.	Ted Stonecliffe
S173	Cherry Av NE: BNRR to Salem Parkway NE	Two lanes only.	350 Salem OR
S174	Cherry Av NE: Johnson St NE to Pine St NE	Two lanes only.	350 Salem OR
S176	Croisan Scenic Wy S: Joplin Rd S to Croisan Creek Rd S	Not needed.	350 Salem OR
S177	Doaks Ferry Rd NW: Eola Dr NW to UGB	Two lanes only.	350 Salem OR
S177	Doaks Ferry Rd NW: Eola Dr NW to UGB	This road dosn't need more than 2 lanes. Please don't waste potentially $14m on this	Spencer
S178	Doaks Ferry Rd NW: Glen Creek Rd NW to Eola Dr NW	Two lanes only.	350 Salem OR
S184	Hyacinth St NE: Salem Parkway NE to Portland Rd NE	Two lanes only.	350 Salem OR
S185	Kale St NE: Portland Rd NE to Cordon Rd NE	Two lanes only.	350 Salem OR
S187	Kuebler Bv SE: Skyline Rd S to Liberty Rd SE	Keep at two lanes.	350 Salem OR
S188	Liberty Rd S & Madrona Av S	Not needed.	350 Salem OR
S189	Liberty Rd S & Salem Heights Av S	This project should be completed by 2030 to accommodate growing traffic not only on Liberty but on Salem Heights, which is experiencing significant population growth.	Bill Dixon
S189	Liberty Rd S & Salem Heights Av S	Turn lanes not needed.	350 Salem OR

Project#	Project	Comments	Name
S190	Liberty Rd S: Commercial St SE to Browning Av SE	Two lanes only.	350 Salem OR
S191	Liberty Rd S: Holder Ln SE to South UGB	Two lanes only.	350 Salem OR
S196	Owens St SE: Liberty Rd S & Commercial St SE	Not needed.	350 Salem OR
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Two lanes only.	350 Salem OR
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Stop building roads to accommodate cars on the periphery. You're subsidizing edge development at the expense of compact development.	Mike De Blasi
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Traffic has already increased substantially, arguably due to Costco's move. Is Cherriots going to add a route in this area, if so, are you planning pullouts?	Joe Tilman
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	This is currently a particularly popular bicycle commute path due to the wide shoulders and low-ish traffic count (most of the day). A separated bike path might be preferable to a bike lane, given increasing traffic counts.	Joe Tilman
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Has the possibility of a roundabout at Reed Road been considered? Possibly at Hilfiker, too.	Joe Tilman
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Leslie Middle School is just outside the extent of this work, and speeding in vicinity of the school is an issue – traffic calming measures need to be considered along this entire route.	Joe Tilman
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	This is a very narrow dangerous street for bicycles and pedestrians. It needs to be upgraded for all of the development planned around the Fairview Master Planned development to be walkable and to accommodate future public transit.	Ted Stonecliffe
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	This is a very narrow dangerous street for bicycles and pedestrians. It needs to be upgraded for all of the development planned around the Fairview Master Planned development to be walkable and to accommodate future public transit.	Ted Stonecliffe
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	Would be good to have sidewalks on both sides along with protected bike lanes but trave and turn lanes should be 10 ft. wide (rather than the usual 11 ft.) to discourage excessive speeding.	Michael Hughes
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	Two lanes only.	350 Salem OR
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	Consider a roundabout at both ends.	Joe Tilman
S199	River Rd S: Croisan Creek Rd S to UGB	This project should be completed by 2030.	Bill Dixon
S199	River Rd S: Croisan Creek Rd S to UGB	Two lanes only. Bike/ped improvement needed urgently.	350 Salem OR
S199	River Rd S: Croisan Creek Rd S to UGB	Make bike lanes continuous and wide. No "share the road" markings.	Peter Bergel
S204	Broadway St NE: Liberty St NE to Salem Parkway NE	No turn pockets. Bike lanes are urgent.	350 Salem OR
S204	Broadway St NE: Liberty St NE to Salem Parkway NE	Bike Lanes please! Busy road. Get yelled at for riding on the sidewalks, but risk your life in the road	Spencer

Project#	Project	Comments	Name
S205	Center St NE: Commercial St NE to 17th St NE	Urgent! Move up timeline.	350 Salem OR
S208	Commercial St SE: Mission St SE to Superior St SE	Urgently needed.	350 Salem OR
S210	Liberty St SE: Trade St SE to E St SE	Urgent! Move up timeline.	350 Salem OR
S211	Marion St NE: 13th St NE to Commercial St NE	Urgent! Move up timeline.	350 Salem OR
S212	Market St NE: Commercial St NE to Hawthorne Av NE	please define "add bike facilities". What will that entail?	Grace Sherry
S212	Market St NE: Commercial St NE to Hawthorne Av NE	Urgent! Move up the timeline.	350 Salem OR
S212	Market St NE: Commercial St NE to Hawthorne Av NE	Urgent! Move up the timeline.	350 Salem OR
S212	Market St NE: Commercial St NE to Hawthorne Av NE	Second the prior comment. Please move up the timeline for this update	Spencer
S213	Madrona Av SE: Liberty Rd S to Commercial St SE	Urgent! Move up timeline.	350 Salem OR
S214	Mission St SE: 12th St SE to Commercial St SE	Please prioritize this sooner. This is an important corridor for many Willamette students and Salem Health employees. Riding on narrow, highly trafficked sidewalks is not adequate.	Ian Curtis
S214	Mission St SE: 12th St SE to Commercial St SE	Urgent! Move up timeline.	350 Salem OR
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	Urgent! Move up timeline.	350 Salem OR
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	We desperately need bike lanes on this stretch of road. So dangerous for bikes, especially considering the disrepair some of the sidewalks are in.	Spencer
S217	State St: 12th St SE to 25th St SE	Urgent! Move up the timeline.	350 Salem OR
S219	17th St NE: Sunnyview Rd NE to Silverton Rd NE	Urgent! Move up timeline.	350 Salem OR
S224	Broadway St NE: Salem Parkway NE to River Rd N	Urgent! Move up the timeline.	350 Salem OR
S225	D St NE: Lancaster Dr NE to Summer St NE	Urgent! Move up the timeline.	350 Salem OR
S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Comm	Urgent! Move up the timeline.	350 Salem OR
S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Comm	2038? Please reconsider the timeline on this. This is stretch of area that can be dangerous to ride in due to lack of bike lane	Spencer
S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Comm	Why would you wsit 15 years to put in bike facilities but spend $$$ on car travel earlier? We need to make our streets safer for bicyclists NOW.	Mike De Blasi
S229	Lana Av NE: Portland Rd NE to Silverton Rd NE	Urgent! Move up timeline.	350 Salem OR
S231	Madrona Av SE: Pringle Rd SE to Commercial St SE	Urgent! Move up timeline.	350 Salem OR
S233	River Rd S: Croisan Creek Rd S to UGB	Urgent! Move up timeline.	350 Salem OR
S236	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SI	Urgent! Move up timeline.	350 Salem OR
S237	Croisan Creek Rd S: Heath St S to Kuebler Bv S	Urgent! Move up timeline.	350 Salem OR
S238	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE	Urgent! Move up timeline.	350 Salem OR
S245	12th St SE: Ibsen St SE to Commercial St SE	Move up timeline.	350 Salem OR
S247	Center St NE: Mitchel St NE to Cordon St NE	Urgent! Move up timeline.	350 Salem OR
S248	Commerical St SE: Winding Way SE to Lansford Dr SE	Move up timeline.	350 Salem OR
S249	Connecticut Ave SE overpass of Hwy 22	Move up timeline.	350 Salem OR

Project#	Project	Comments	Name
S274	Salem Industrial Dr Improvement	Never put bike lanes on one side of the road. Two lanes only.	350 Salem OR
S274	Salem Industrial Dr Improvement	I agree with Phil Carver's comment	Mike De Blasi
S286	Cordon Rd: Highway 22 E to Caplinger Rd SE	Two lanes only.	350 Salem OR
S287	Kuebler Blvd SE: I-5 to Turner Rd SE	$18m for a project that increases emissions and is not needed.	350 Salem OR
S288	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE	Two lanes only, especially for $18.6m.	350 Salem OR
S290	Gaffin Rd SE	Two lanes only. Add bike lanes and sidewalks.	350 Salem OR
S292	Brush College Rd NW: Pedestrian Project	We support this. Cost seems very high.	350 Salem OR
S293	Hines St SE Railroad Crossing Pedestrian Facilites	Move up timeline.	350 Salem OR
S297	Marine Drive NW: Harriett Dr to Cameo Street	23 million? Things are fine the way they are. The only people that use this are the homeless (which will just set up tents on the wider road. There are no traffic issues right now except the homeless blocking access to boaters trying to access ramp.	Andrew Prince
S297	Marine Drive NW: Harriett Dr to Cameo Street	In the bond measure it stated Marine drive would go from Riverbend to Glencreek. Only building from Harriet to Cameo will not help traffic.	Barb
S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	I live just off of Capitol and am either forced to bike in the road or on the sidewalk when going home. We need a safe space for cyclists going to work, school, or do business along this corridor.	Ian Curtis
S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	I don't bike, neither do my family. Why do my tax dollars go to people that will drive their cars at least 5 months per year? These biking people have automobiles that they use.	Andrew Prince
S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	Move up timeline.	350 Salem OR
S310	State St to Kroc Center Bike Corridor	Move up timeline.	350 Salem OR
S312	Geer Community Park to Hoover Elementary School Bik	Move up timeline.	350 Salem OR
S313	Chemeketa CC East/West Bike Corridor	Move up timeline.	350 Salem OR
S314	McKay Park East/West Bike Corridor	Move up timeline.	350 Salem OR
S315	Four Corners Elementary School and Auburn Elementar	Move up timeline.	350 Salem OR
S317	Sprague HS to South Salem HS Bike Corridor	Adjust route so it follows Doughton instead of the super steep hill on Bonham/Nohlgren. Aligns better with Winona to the south too.	Eric Leaming
S317	Sprague HS to South Salem HS Bike Corridor	"shared lane markings" are a joke. They do not in any way substitute for bike lanes - preferably lanes that are separated from motor vehicle traffic.	Peter Bergel
S317	Sprague HS to South Salem HS Bike Corridor	Move up timeline.	350 Salem OR
S317	Sprague HS to South Salem HS Bike Corridor	Move up timeline.	350 Salem OR
S318	Bush's Pasture Park to River Road Bike Corridor	Again: "shared lane markings" do no good at all. Not even when they are new and then they wear off and are not repainted in a timely way. This should never be a substitute for a real bikeway.	Peter Bergel

Project#	Project	Comments	Name
S319	Saginaw St Bike Corridor	Move up timeline.	350 Salem OR
S320	Lower Leffelle/Clark Creek Park/South Village Park Bike	Move up timeline.	350 Salem OR
S321	Pringle Creek Path: Civic Center to Riverfront Park.	Move up timeline.	350 Salem OR
S322	Orchard Heights Park / Brush College Park Bike Corridor	Not a majority of the population ride bicycles, and when they do, it's for only half the year. This is ridiculous.	Andrew Prince
S322	Orchard Heights Park / Brush College Park Bike Corridor	Move up timeline.	350 Salem OR
S324	25th St South of Mission St Bike Corridor	Move up timeline.	350 Salem OR
S326	Cottage St - Bike Facilities	Move up timeline.	350 Salem OR
S331	Convert Court St NE to two-way	Move up timeline. Include bike lanes.	350 Salem OR
S334	Convert High St & Church St to two-way	Move up timeline.	350 Salem OR
S334	Convert High St & Church St to two-way	Move up timeline.	350 Salem OR
S340	Kroc Center Pathway	This is a great project because it creates a shorter connection to the Kroc Center and Salem Industrial Dr businesses and social services for people riding Cherriots Route 11 from NE Salem or Keizer.	Ted Stonecliffe
S340	Kroc Center Pathway	Move up timeline.	350 Salem OR
S341	Hyacinth St Multi-Use Path	Move up timeline.	350 Salem OR
S342	Bike/Pedestrian Bridge over Salem Parkway	This would be a great safety improvement for bicycle and pedestrian traffic that needs to cross MLK Jr Parkway. No one likes walking across five lanes of 60 mph traffic even when they have the walk signal. Great idea!	Ted Stonecliffe
S342	Bike/Pedestrian Bridge over Salem Parkway	Move up timeline.	350 Salem OR
S345	Auburn Rd NE: Baldwin Av NE to Cordon Rd NE	Two lanes only.	350 Salem OR
S346	Center St NE: Greencrest Dr NE to Cordon Rd NE	Two lanes only.	350 Salem OR
S347	Union St Bikeway: Phase 1B	Traffic light needed at Liberty and Union.	350 Salem OR
S347	Union St Bikeway: Phase 1B	Liberty@Union looks like a prime candidate for a roundabout.	Joe Tilman
S348	Fisher Rd NE - Silverton Rd NE to East/West Curve	Two lanes only.	350 Salem OR
S355	Hawthorne Av NE at Sunnyview Rd NE	Not needed.	350 Salem OR
S360	Deer Park Dr SE Modifications	Not needed.	350 Salem OR
S364	Commercial St SE: Madrona Av SE to Robins Ln SE - Sign	Upgrade to pedestrian scramble.	350 Salem OR
S367	Downtown Signal Upgrades	Move up timeline.	350 Salem OR
S369	Orchard Hts Rd NW Modifications	No widening.	350 Salem OR
S375	Portland Rd NE at Hazelgreen Rd NE Intersection	No new lanes needed.	350 Salem OR
S376	Lone Oak Rd SE at Rees Hill Rd SE	No "acceleration lanes" anywhere! You've got to be kidding!!	350 Salem OR
S377	Davis Rd S: Skyline Dr S to Liberty Rd S	No widening.	350 Salem OR
S380	Broadway: Liberty St N to Pine St N	Move up timeline.	350 Salem OR
S381	State St: 17th St to 24th St	Improve sidewalks. Move up timeline.	350 Salem OR

Project#	Project	Comments	Name
S382	Marine Dr NW: Cameo to Glen Creek Rd	17MILLION? INSANE! Leave it as it is. The only people down there are homeless and fishermen launching there boats! This is not a high traffic area that we need to spend mons on. Zero traffic problems. Who came up with these proposals to waste money?	Andrew Prince

Chapter 1

Page #	Paragraph	Comment	Clarification	Response
1	1	How we plan to meet the transportation needs of the residents and businesses of the Salem-Keizer area by mid-century influences equity, area economy, an environment with clean air and streams, a transportation system that is safe to use by all. Transportation investments should not negatively impact any population or the metropolitan area.	Suggested rewrite of the first paragraph	Rewritten
1	1	transportation	replace "accessiblity" in first	
1	1	Transportation access influences our economy, environment, clean streams and air....		All covered by the first entry
1	1	equitable outcomes throughout the community.		
1	1	any population or portion	replace "portion"	
1	2	break into two sentences for readability.	Break the first sentence of	Revise for clarity.
3	2	Do these sentences agree?	Regarding the last two	
5	1	Looking ahead, all of the Salem CBD will be designated mixed use as a result of CFEC - acknowledge?	Last sentence about redeveloping properties to include residential on top of commercial/retail.	Salem CBD is zoned Commercial, which already allows housing. Mixed use zoning has height limitations, and likely will be used in other parts of Salem. Salem is working on defining the downtown as a CFA.
5	3	And notably, an increase in transit service in the last two years to include weekend service. I see now that this doesn't fit the overall context, but if travel options do not include transit, let's just say "carsharing, ride sharing, and bike sharing..."		Revise to clarify the intent is new options. Increasing transit service was discussed on the previous page.
5	4	Might want to shorten sentences. Or perhaps we don't need this level of detail!		Revise for clarity.
5	5	What about the Salem Climate Action plan - local discussion as well.		Revise sentence to reference Salem CAP
5	6	Might want to reframe. This feels pointed at former Gov Brown, and not the pandemic. Also, schools closed temporarily and are now reopened.		Update to reflect 2023 not late 21/early 22
7	2	May want to mention the transit district shift toward multi-mobility hubs as opposed to straight up transit centers - this is part of the vision, embracing the multi-modality.	Discussion of carsharing etc.	Revise to include Cherriots mobility hub concept
7	5	or: Which trends will continue?	Suggested section title	Revise as suggested

7	6	and lengthening? like, we are having kids over a bigger number of years? Or are people carrying babies for over 40 weeks?		By lengthening, I meant child births are taking place over a longer span of years. Remove the words in quotes as I can't think of how to clarify this.
8	2	Except for Goal 9 and the investment of federal stimulus dollars and subsidies for things like semiconductors! Not sure this feels 100% accurate.	Referring to the degree of control state/local	Revise to reflect economic incentives play a role.
8	2	Hoping to make decisions on factors like community health as opposed to the commute patterns of car-dependent - this seems to point to the latter		

Chapter 2

Page #	Paragraph	Comment	Clarification	Response
1	3	this was already in the intro	Listing of who is part of the	
2	9	replace citizens with community members - do a find all and replace, please		Revise to public or "community members" as appropriate, page 2-2 (2x), 5-20
3	8	The legacy nature of projects that get into and stay in the TIP does not make these statements feel accurate - re: planning "C's"		All projects go through the project prioritization process at each update.
10	6	some strategies - the inclusions in the plan are not comprehensive and are indexed off data that is not overall useful in reaching SKATS or community priorities.		
10	6	Future reports? All reports? These reports? Confuse.		Revise to "Reports are available …"

Chapter 3

Page #	Paragraph	Comment	Clarification	Response
5	2	should also consider safety of bike lanes, sidewalk width, well lit transportation pedestrian facilities. define frequent as 15 m headways	Goal 1 clarifying statement	We don't have data on whether a facility is 'well lit' or not. Sidewalk width may be available.
8	1	Need to create consistency between safety and safety - Goal 3 and project selection criteria. Should defer to project selection criteria definition and parameters		Need clarification on the comment
10	2	This is not equity	Goal 4 clarifying statement	Discuss with PC?
12	2	It is remarkable to me that this does not include transit as a mention - tranist utilization is hands down one of the greatest efficiency measures availalble	Goal 5 clarifying statement	Increasing the carrying capacity includes more frequent buses.

12	3	this should include transit prioritization on exsiting facilities and dedicated lanes, queue jumping,	Goal 5 objective: Maximize the efficient use of the existing infrastructure	Transit prioritiztation and queue jumps are two strategies in the CMP that would "maximize the existing infrastructure"
13	1	If your indicator is full buses, but your objectives don't include anything that fill up buses - you are having a mismatch	Goal 5 regional indicator: Average Weekday Transit	
16	5	Why wouldn't we want to use transit ridership as an indicator?	Goal 7 regional indicators	Revise to add transit ridership and hours of service.
18	2	Seems like parking congestion would be a good economic sign, as well as tranportation congestion - free flow traffic at high speed would be the opposite of economically supportive.	Goal 9 clarifying statement	
18	5	Doesn't really make sense?	Goal 9 Federal Performance Measures	It is a Federal Performance Measure, so the wording is obtuse.
19	2	Should focus on equity . oversampling communities that are currently underrepresented.	Goal 10 clarifying statement	Which has been done in the outreach mailings

Chapter 4

Page #	Paragraph	Comment	Clarification	Response
2	graph	Should there be an additional item in here for bike and pedestrian facilities?		Most bike/ped facilities are co-located with the streets listed.
6	4	Double check.	Current transit ridership v 2019	Revise to include the dates for comparison
14	4	should we specify that this is "vehicle collisions - only"	Discussion on ODOT provided crash data	Add footnote to clarify that crashes include veh-veh, veh-bike, veh-ped. Vehicles include motorcycles.
15	1	We should include detail on whether or not higher speed roads have a higher number of crashes and fatalities as well. Assume they do.		Check if data is available
15	table 4-3	Serious EJ issue!	RE: Number of crashes in east Salem	Further analysis could be from the MTSAP
18	map	Can we add this map at a higher resolution so it can be viewed at an enlarged scale and understood? Very grainy and pixelated.		To be addressed in the final version

19	1	Can we note that something like dedicated bus lanes and transit prioritization in general can be part of a Transportation System Management program, but are not currently included in our plan?	Discussion of transportation system management	Add pointer to the CMP for more TSM/TDM options.
20	2	Transit service REQUIRES the support of a network of continuous and comprehensive sidewalks to be successful.	Discussion on supportive infrastructure for transit	Revise as requested
20	3	Bicycle facilities, like pedestrian infrastructure availability, is an EJ issue. People without access to a vehicle, or with limited vehicle access should be recognized and supported by future development of this system. Need to use census data and access/limited access used to call out where and how the current system is deficient.		Gaps in the bicycle network are noted in Chapter 5. Further analysis can be added to future updates to the MTP.
23	1	Wow - our pedestrian system plan is almost 30 years old? When do we update this? Can we specify?		Revise "Initially …". Add new sentence that it has been updated over time
23	1	This section needs to recognize the disproportionate impact that lack of pedestrian facilities has on people who do not have access to a vehicle. It should also call out which areas of the five are most impacted by lack of pedestrian facilities. Finally, it would be great if we could correlate pedestrian deaths to sidewalk availability.		Revise to include discussion on percent of zero veh HHs in SKATS, need for sidewalks for their daily travel, etc.
25	1	I think it would be useful to call out what makes transit successful in this section: safe and accessible stops, high frequency, reliable travel times, seven day a week service, extended service hours. Without investments that support those success measures, we cannot expect that transit will be a good option for people and we will continue to see increases in congestion and travel time as people continue to rely on SOV.		Revise to include suggested discussion
27	graph	2020 was the worst	Graph for ridership in April	
29	1	Might want to add that Cherriots LIFT is only available within the Salem Keizer UGB - since every map has that. It's not the entire SKATS service area.		Revise to include suggestion, and hours of service limitations.
29	2	A what? A shirt? A shift?		Correct to read "Shift"
33	2	We could help decrease flood events that impact our roads by de-channelizing the streams and creeks! If we heal our water systems, nature won't be so harsh on us! :)		Salem has a number of projects (some included in the MTP) to reduce stormwater impacts by addressing streams.
33	2	Can we also talk about what regions of the planning area are most impacted by flooding? Again, I think this may be an EJ issue.		Flood areas are shown in map R-1.
36	1	should add mention of the addition of the Peter Courtney bridge, and how much pedestrian traffic it attracts!		The bridge is mentioned on page 4-37, the ped/bike counters died in 2022.

36	1	Worth noting that pedestrian crossings are available at many, but not all intersections, and what percent of the walk signals are automatic (versus by request). Should also note speed limits on roads downtown, and that several are one way, including the Commercial Liberty couplet, and what number of lanes are available for vehicle travel on those facilities. - maybe reference to the widest (most lanes) section.		
37	2	is, not are		Revise as corrected. Also adding date to the statement.
37	3	should say if the parkades are also free parking.		This is addressed further in the paragraph. Three parkades are free.
40	map	two requests: can we indicate location of parkades on these maps and would it be possible to use a GIS layer to show everything that is a parking lot?		Parkades are available, I don't think there is a parking lots layer.
40	map	RU kidding? Is this REALLY in our BIKE system?? Never in a million years would I try to ride my bike on one of those swirly ramps.	Bike path along OR 22E/Mission St at 12th	
42	map	We need two kinds of signalized - those that change automatically, and those that require peds to use the "beg button".		That data is not available. Most signals within downtown Salem automatically provide a walk signal. Outside it typically requires the user to press a button.
44	2	Add that transit service provision is challenging in some (many?) areas of West Salem due to past infrastructure investments - lack of sidewalks and narrow, winding roads. - assume this was part of the post 1950's build out. This adds to bridge congestion, difficulty to serve with current transit models. Reliance of west salem residents on SOV as a result. another transit success limiter to call out is the disconnected grid. that should actually be a call out throughout the document - so people understand the challenges, but also what is necessary to fix (ped and bike routes that offer greater connectivity!)		Revise to include it is difficult to provide service due to topography, built environment, and the roads.
44	4	How many people have to die to become a safety corridor again? Is 11 dead people in four years a good number?? I think we could add this statistic (how ODOT determines a safety corridor = number of dead people) if available.		https://www.oregon.gov/ODOT/Safety/Pages/Roadway.aspx
45	table 4-8	I don't know what these units are, nor what SB-EB-NB-WB mean - can we unpack? looking at the footnote below - can we just give these in minutes? instead of this decimal representation?		Revise the footnote to explain EB/WB/SB/NB. The existing footnote discusses how to interpret the Travel Time Index

57	2	Mention dangerous pedestrian conditions related to the multiple curb cuts that intersect the sidewalks in this area.	Discussion of Lancaster Dr	Revise to discuss curb cuts and that Marion County is rebuilding portions to current standards.
57	4	Census demographics might indicate that this is an EJ area. Worth noting if so.		Revise to include "As shown in Map 8-x, these roads are within an identified Environmental Justice area."

Chapter 5 no comments

Chapter 6 no comments

Chapter 7 no comments

Chapter 8

Page #	Paragraph	Comment	Clarification	Response
1	2	include health impacts in negative impacts		health could be included in both categories
2	4	may temporarily reduce congestion		Revise as suggested
2	4	and encourage faster driving speeds, leading to an increase of serious crash related injuries		Revise to read "Finally, widening the road could disturb cultural resources, encourage faster driving speeds, increase the time for pedestrians to cross the street, and impact the people and businesses in the area in harmful ways (e.g., noise, air pollution).
11	1	This EJ analysis is a little underwhelming - I think there needs to be more ownership recognition of past harm, the role transportation planning and investment has played, acknowledgment of the racist history of planning, acknowledgment of the higher crash and fatality rates in EJ communities, acknowledgment of negative health impacts, cost of living related to transportation in areas that are not adequately provided with sidewalks for transit service, and admission that the definition of EJ that we are using is indexed on the federal poverty level, not an accounting of "low income" areas.		

11	2	low income and poverty level are not the same thing - noticing a disconnect with the below characteristics.		Granted. Federal EJ is for Low-income populations. We'll add info on the income level used for the analysis. Also will be clarified in Appendix E
11	4	Say what this is in $$		Revise to add poverty level used in EJ analysis
14	Map	Not low income - in poverty		Align map title with analysis
16	1	Wow. This is so sad! Really shows prioritization of the status quo and a furthering of inequitable planning outcomes.		Revise to add "...currently x % pop lives in EJ areas…" for more context
18	2	I don't think the existing strategies minimize impacts to EJ communities, and don't think we should say that we should continue to support them.		

Chapter 9

Page #	Paragraph	Comment	Clarification	Response
2	2	it was a "historically diverse rulemaking advisory committee" - not a working group	RE: CFEC	Revise to reflect
2	2	I don't think this is all CFEC metro areas - just Salem, Keizer, and Eugene (in addition to Metro, which is already required.)		Revise to add "… (only for the three largest metropolita areas)…"
4	2	Tolling has also been shown as effective in reducing SOV and trips. Encourages use of public transportation.		
4	4	Need to mention the shift in project selection criteria related to safety.		Discussed in Appendix C.
4	4	Need to mention the possible significant undercount here - as I recall, there is no requirement and indeed no mechanism for cyclists and pedestrians to report injury or accidents that are not reported by drivers (and police?). This includes under-reporting related to uninsured drivers, which has income and equity implications.		Revise to clarify where the reports come from and what is not included.
7	3	Mention proximity to Keizer Transit Center.		Revise to include possible stop at KTC and need for a new Salem stop if using P&W line.
8	4	Primarily related to decreases in service related to lack of funding.		
13	2	What is this word?	Backage	Backage roads are those behind the developed land, not adjacent to the primary road as frontage roads are.

13	4	crashes AND fatalities, it seems, based on the map	Fatalities are high, but not the highest. Portland Road has 9 v 8? Need to confirm via GIS
14	1	Sidewalks on Lancaster are not safe, due to the number of curb cuts for strip mall and business entrances.	Clarify to state that work remains to improve the safety for all users along Lancaster.

Appendix P – Performance Report

This Appendix provides an overview of the federal performance measures, a summary of the past targets and the results for the 2018 – 2022 reporting period, and the targets for the 2022 – 2026 reporting period.

Introduced in 2012 with the passage of the Moving Ahead for Progress in the 21st Century (MAP-21) Act and continued in subsequent federal surface transportation legislation (Fixing America's Surface Transportation [2015] and the Infrastructure Investment and Jobs Act of 2021) is a move to using a performance-based approach to planning and programming. Performance management and performance-based planning and programming increases the accountability and transparency of the federal-aid program and provides for a framework to support improved investment decision making through a focus on performance outcomes for key national transportation goals. This process helps to ensure the most efficient and effective investment of federal transportation funds.

The federal rules established a set of national performance measures to track the progress made at state department of transportation (DOTs), mass transit districts, and metropolitan planning organizations (MPOs) as they plan and program their investments in regional and state transportation systems[1]. These measures are meant to relate the investments made with the national goals that were identified by the U.S. Congress in MAP-21[2]. The federal rulemaking process for these performance measures was completed in 2018. SKATS has worked closely with the Oregon Department of Transportation (ODOT) and the Salem Area Mass Transit District (SAMTD) to incorporate these federal performance measures into state and regional transportation planning and provide useful performance barometers of the regional transportation system.

As required by federal transportation planning regulations (23 CFR 450.324 (f) (3)), the Metropolitan Transportation Plan (MTP) needs to include "a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with §450.306(d)." This requirement is satisfied by this appendix and the discussion presented in **Chapter 3 (Goals)** that provides the linkage between the Goals of the MTP and the federally required performance measures[3]. The requirement to include "a system performance report … evaluating the condition and performance of the transportation system with respect to the performance targets …" (23 CFR 450.324 (f) (4) is met by the discussion in the "The Performance Measures and Results for the 2018 – 2022 Reporting Period" section starting on page P-8.

[1] See 23 CFR 450.306 (d), 23 CFR 490, 49 U.S.C. 5326(c), and 49 U.S.C. 5329(d).
[2] See the discussion in Chapters 2 and 3.
[3] Appendix J provides a crosswalk between the national goals and the goals of the MTP.

In this appendix is an overview of the choices for setting targets, the targets set or accepted by SKATS for the 2022-2026 reporting period, the results from the 2018-2022 reporting period, and more discussion on each of the performance measures.

Target Setting Choices

For most of the federal performance measures, two options are available for setting targets[4]. Either SKATS can "agree to plan and program projects" to support the target(s) set by ODOT or SAMTD; or SKATS can commit to a quantifiable target that is specific to the metropolitan planning area.

If SKATS decides to "accept and support" the target for a performance measure set by ODOT or SAMTD, this means that SKATS will:

- Work with ODOT or SAMTD to identify portions of the regional system that are below the thresholds for each performance measure.
- Include in the MTP and TIP programs or projects that will contribute toward meeting the target for each performance measure.
- Include in the TIP a discussion of how the projects included will assist in making progress toward the target for each performance measure.

If SKATS decides to develop a region-specific quantifiable target for a performance measure, this means SKATS will:

- Work with ODOT or SAMTD to establish the baseline conditions for the performance measure.
- Develop programs or projects that will contribute toward meeting the target.
- Document in the TIP the projects or programs that are being funded to meet the target for that performance measure.
- Work with ODOT or SAMTD to track the progress toward meeting the target and report in each MTP update.

[4] The exceptions are the Annual Peak Hour Excessive Delay per capita and the Percent of Non-Single Occupant Travel performance measures. SKATS-specific targets are required as a state-wide value does not make sense.

Targets for the Performance Measures

The federal performance measures are listed in **Table P-1**, along with the frequency of updating. For most of the performance measures the targets are set every four years (2022-2026, 2026-2030 …), while the road safety, transit safety, and transit state of good repair performance measures are set yearly for the upcoming year. For this reporting period (2022-2026), two additional performance measures apply to MPOs with a population between 200,000 and one million that are either non-attainment or a maintenance area for air quality.

For this update to the MTP, the SKATS Policy Committee has chosen to support the following targets set by ODOT for:

- Road Safety
- Bridge
- Pavement
- System Performance (Travel Time Reliability, Freight Movement, and Total Emissions Reductions for all CMAQ funded projects)

And the targets set by the SAMTD for:

- Transit State of Good Repair
- Transit Safety

In consultation with ODOT, targets specific to SKATS have been set for[5]:

- Annual Peak Hour Excessive Delay per Capita
- Percent of Non-Single Occupant Vehicle (SOV) Travel

In July 2022, the FHWA published a proposed rule for a performance measure on the tailpipe emissions of carbon dioxide on the National Highway System. This measure will be considered after the final rule is published in 2023.

Shown in **Tables P-2** to **P-5** are the targets set for each of the performance measures for the 2022-2026 reporting period.

[5] This was at the August 23, 2023 SKATS Policy Committee meeting.

Table P-1: Federally Required Performance Measures

Performance Measure	Target Due	
	ODOT	SKATS
Roadway Safety		
- Serious injuries per vehicle mile travelled - Fatalities per vehicle mile travelled - Number of serious injured - Number of fatalities - Number of fatalities and serious injuries for non-motorized users	Targets updated every year	180 days after ODOT submittal
Pavement and Bridge Condition		
Pavement - Percentage of pavements of the Interstate System in Good condition - Percentage of pavements of the Interstate System in Poor condition - Percentage of pavements of the non-Interstate NHS in Good condition - Percentage of pavements of the non-Interstate NHS in Poor condition **NHS Bridge** - Percentage of NHS Bridges Classified as in Good condition - Percentage of NHS Bridges Classified as in Poor condition	October 1, 2022 (four- year cycle)	180 days after ODOT submittal
Performance of the National Highway System[6]		
Travel Time Reliability - Percent of the Person-Miles traveled on the Interstate System that are reliable - Percent of the Person-Miles traveled on the non-Interstate NHS that are reliable **Freight Movement** - Truck Travel Time Reliability Index **Congestion and Air Quality Improvement Program (CMAQ)** - Total Emissions Reduction for all CMAQ funded projects - Annual Hours of Peak Hour Excessive Delay Per Capita (new for 2022) - Percent of Non-SOV Travel (new for 2022)	October 1, 2022 (four-year cycle)	180 days after ODOT submittal
Transit Asset Management (TAM – State of Good Repair)		
- Percent of revenue vehicles (by type) that exceed the useful life benchmark (ULB) - Percent of non-revenue service vehicles (by type) that exceed ULB - Percent of facilities (by type) that are rated less than 3 on the TERM scale - Percent of track segments that have performance restrictions	Targets updated every year	180 days after SAMTD submittal
Transit Safety		
- Total number of reportable fatalities and rate per total unlinked passenger trips by mode - Total number of reportable injuries and rate per total unlinked passenger trips by mode - Total number of reportable events and rate per total vehicle miles by mode	Yearly by July 20	180 days after SAMTD submittal

[6] While a performance measure for Greenhouse Gases was included in the original legislation, and FHWA developed rules for the implementation, they were revoked in 2017. In July 2022 FHWA released new Proposed Rules for a Greenhouse Gas related measure. This table will be revised after the proposed rule is finalized.

Summary of the Performance Measures Targets for 2022 – 2026 Reporting Period

Table P-2: Road Safety Targets from the Oregon Traffic Safety Action Plan (2021 TSAP ES.3 p.9, ODOT)

Report Year	Base Period	Fatalities	Fatality Rate (per 100 million VMT)	Serious Injury	Serious Injury Rate (per 100 million VMT)	Non-motorized Fatalities and Serious Injuries
2021 Base	2014-2018	448	1.48	1,739	5.03	257
2022 Target	2015-2019	444	1.46	1,722	4.98	254

Table P-3: Road Safety Targets for 2023 (ODOT discussion with MPOs, 2022)

Report Year	Base Period	Fatalities	Fatality Rate (per 100 million VMT)	Serious Injury	Serious Injury Rate (per 100 million VMT)	Non-motorized Fatalities and Serious Injuries
Baseline	2016-2020	488.0	1.37	1783	4.99	259
2023 Target	2016-2020	488.0	1.37	1783	4.99	259

Table P-4: Targets for Pavement and Bridge Measures 2022-2026, ODOT

Performance Measure	Base Line 2022	Two-year target 2024	Four-year target 2026
Percentage of Pavements of the Interstate System in Good Condition	57.7%*	50.0%	50.0%
Percentage of Pavements of the Interstate System in Poor Condition	0.2%*	0.5%	0.5%
Percentage of Pavements of the Non-Interstate NHS in Good Condition	33.5%	30.0%	30.0%
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	2.9%	5.0%	5.0%
Percentage of NHS Bridges Classified as in Good Condition	13.5%	11.4%	10.0%
Percentage of NHS Bridges Classified as in Poor Condition	1.8%	2.4%	3.0%
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	78%	78%	78%

Table P-5: Targets for System Performance Measures 2022-2026, ODOT

Performance Measure	Base Line 2022	Two-year target 2024	Four-year target 2026
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	78%	78%	78%
Truck Travel Time Reliability (TTTR) Index	1.45	1.45	1.45
Annual Hours of Peak Hour Excessive Delay Per Capita (PHED) [SKATS only]	7.0 hrs	7.0 hrs	7.0 hrs
Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel [SKATS only]	24.0%	23.2%	22.7%
Total Emission Reductions: CO	92.25	46.13	92.25

Table P-6: Targets for Transit Safety (2022 and 2023), SAMTD

Mode of Transit Service	Fatalities[7]	Injuries	Safety Events[8]	System Reliability[9]
Fixed Route Bus	0	3	1.0 / 100,000	9,000 miles
Demand Response	0	2	1.0 / 100,000	3,000 miles

[7] For fatalities and injuries, the targets are for total number of reportable events
[8] Rate per total vehicle revenue miles
[9] Mean distance between major mechanical failures

Table P-7: Transit State of Good Repair Targets (Source: SAMTD)

#	Reporting Category	Asset Inventory	Detail	Type	TAM Targets
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	35 ft.	Diesel	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	40 ft.	Diesel	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	35 ft.	CNG	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	40 ft.	CNG	No more than 10% above CPC ULB
1	Rolling Stock/ Rural	Fixed Route Bus (BU)	32 ft.	Diesel/hybrid	No more than 10% above CPC ULB
1	Rolling Stock/ Rural	Fixed Route Bus (BU)	33 ft.	Diesel	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Paratransit Service (CU)	22-24 ft.	Gas	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Paratransit Service (VN)	15 ft.	Gas	No more than 10% above CPC ULB
2	Equipment	Non-Revenue Service Vehicle	Utility Non-Revenue Service	Maintenance Pickups	No more than 10% above CPC ULB
2	Equipment	Non-Revenue Service Vehicle	Staff Non-Revenue Vehicles	Supervisor vehicles and pool cars	No more than 10% above CPC ULB
3	Facilities	DW Maintenance Operations Facilities	All systems and components	SAMTD-Owned Facilities	100% at 3.0 or above on TERM scale
3	Facilities	DW Operations Facilities	All systems and components	SAMTD-Owned Facilities	100% at 3.0 or above on TERM scale
3	Facilities	Keizer Transit Center/ Layover	All systems and components	SAMTD-Owned Facilities	100% at 3.0 or above on TERM scale
3	Facilities	Downtown Transit Center/ Layover	All systems and components	SAMTD-Owned Facilities	100% at 3.0 or above on TERM scale

The Performance Measures and Results for the 2018 – 2022 Reporting Period
Performance measures cover both roadway and transit usage. A summary of each of the measures is provided below. Data for the measures is collected by ODOT and SAMTD. Calculations for target setting and evaluation follow the procedures specified in the federal regulations[10]. Shown for each performance measure are the results from the most recent performance reporting period. For the performance measures with yearly reporting, multiple years will be shown if the data is available.

[10] For links to all the regulations, see: https://www.fhwa.dot.gov/tpm/about/statutes.cfm#national

Roadway-related Safety

The five roadway-related safety performance measures cover all the roads in the state, and due to the variability of crashes year-to-year, the targets are for a five-year rolling average. These measures are:

1) The number of fatalities
2) The rate of fatalities per 100 million vehicle miles traveled
3) The number of serious injuries
4) The rate of serious injuries per 100 million vehicle miles traveled
5) The number of non-motorized fatalities and non-motorized serious injuries

Many of the projects included in the MTP and the Transportation Improvement Program (TIP) have a component to address safety for one or more of the users of the facility (e.g., drivers, bikers, walkers, transit users). Additional programs, such as Safe Routes to Schools and Cherriots Transportation Options, include funding for outreach to educate and inform people of the risks in traveling and safe options. Finally, a *Metropolitan Transportation Safety Action Plan* is being developed to provide a framework for identifying corridors and potential projects and/or programs to increase the safety for all users of the transportation system within SKATS[11].

Targets are set each year taking into consideration values for a baseline of the most recent five-year period with data available.

Table P-8: Oregon 2018 Safety Performance Target Assessment (FHWA)[12]

Measure	2014-2018 Target	2014-2018 Actual	2012-2016 Baseline	Met Target?	Better than Baseline?	Met or made significant progress?
Number of Fatalities	350.0	449.2	390.2	No	No	No
Rate of Fatalities	0.890	1.238	1.116	No	No	No
Number of Serious Injuries	1,461.0	1,736.8	1,655.8	No	No	No
Rate of Serious Injuries	4.300	4.796	4.742	No	No	No
Number of Non-Motorized Fatalities and Serious Injuries	229.0	257.6	252.8	No	No	No

[11] Development of the MTSAP is currently on-going, with adoption in late 2023.
[12] From: https://www.fhwa.dot.gov/tpm/reporting/state/state.cfm?state=Oregon

Table P-9: Oregon 2019 Safety Performance Target Assessment (FHWA)

Measure	2015-2019 Target	2015-2019 Actual	2013-2017 Baseline	Met Target?	Better than Baseline?	Met or made significant progress?
Number of Fatalities	343.0	474.8	410.6	No	No	No
Rate of Fatalities	0.830	1.304	1.150	No	No	No
Number of Serious Injuries	1,432.0	1,785.4	1,685.0	No	No	No
Rate of Serious Injuries	4.24	4.902	4.726	No	No	No
Number of Non-Motorized Fatalities and Serious Injuries	225.0	251.6	252.0	No	**Yes**	No

Table P-10: Oregon 2020 Safety Performance Target Assessment (FHWA)

Measure	2016-2020 Target	2016-2020 Actual	2014-2018 Baseline	Met Target?	Better than Baseline?	Met or made significant progress?
Number of Fatalities	328.0	488	448.4	No	No	No
Rate of Fatalities	0.780	1.372	1.236	No	No	No
Number of Serious Injuries	1,368.0	1,774.0	1,739.0	No	No	No
Rate of Serious Injuries	4.06	4.97	4.802	No	No	No
Number of Non-Motorized Fatalities and Serious Injuries	215.0	257.8	257.8	No	No	No

Pavement and Bridge Condition
There are four performance measures for tracking the condition of the pavement on the Interstate and non-Interstate National Highway System (NHS)[13].

1) Percent of Pavement on the Interstate rated "Good"
2) Percent of Pavement on the Interstate rated "Poor"
3) Percent of Pavement on the non-Interstate NHS rated "Good"
4) Percent of Pavement on the non-Interstate NHS rated "Poor"

There are two performance measures for the deck condition of NHS bridges.

1) Percent of bridge decks on the NHS rated "Good"
2) Percent of bridge decks on the NHS rated "Poor"

The targets for the six performance measures are set every four years, for the mid-point (two years) and end-point (four years) of the performance reporting period. Targets may be adjusted at the mid-point review.

Most of the work in the maintenance and preservation of the roads and bridges is focused on ensuring that the majority of the pavement or bridge deck is at the 'fair' condition. Once a facility is rated 'poor' it is usually only by reconstruction that the rating can be improved. SKATS has, and will in the future, funded projects that involve the reconstruction of a road or bridge, but funding for yearly maintenance or preservation work has typically not been funded.

[13] The NHS is composed of the Interstates and Principal Arterials.

Table P-11: Pavement and Bridge Results (ODOT)

Performance Measure	Base Line 2018	Two-Year Condition 2020	Two-Year Target 2020	Four-Year Target 2022	Actual 2022	Met Target?
Percentage of Pavements of the Interstate System in Good Condition[14]		64.4%		35.0%	57.7%*	Y
Percentage of Pavements of the Interstate System in Poor Condition		0.2%		0.5%	0.2%*	Y
Percentage of Pavements of the Non-Interstate NHS in Good Condition	63.9%	65.9%	50.0%	50.0%	33.5%	N?
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	6.6%	6.6%	10.0%	10.0%	2.9%	Y
Percentage of NHS Bridges Classified as in Good Condition	12.4%	13.2%	11.4%	10.0%	13.5%	Y
Percentage of NHS Bridges Classified as in Poor Condition	1.9%	1.9%	2.4%	3.0%	1.8%	Y

[14] Note the factors used in second performance period have increased, thus the ratings between the first and second performance period are not directly comparable. Also, there was no requirement for a two-year target in the first performance period.

Performance of the National Highway System (NHS)
There are six performance measures evaluating the system performance of the NHS (which includes the Interstate system) that apply to SKATS for the second performance reporting period onward (2022 through 2025)[15]. Each of these performance measures will be evaluated every four years, and new targets set reflecting the trends of what has happened, and the projects programmed to take place during the reporting period. Targets may be adjusted at the mid-point of the performance reporting period.

The six performance measures are:

1) Percentage of person-miles traveled on the Interstate that are reliable
2) Percentage of person-miles traveled on the non-Interstate NHS that are reliable
3) Truck travel time reliability on the Interstate
4) The total emission reductions from Congestion and Air Quality Program (CMAQ) funded programs and projects for Carbon Monoxide
5) The annual hours of peak hour excessive delay per capita (new for 2022), and
6) Percent of non-single occupancy vehicle (SOV) travel (new for 2022).

Travel time reliability is a measure of the recurrence of congestion along I-5 and the principal arterials in the area that comprise the NHS. Higher reliability means less delays to people and goods.

The emissions reductions from CMAQ funded projects is simply calculated from the projects that are included in the latest TIP that use CMAQ funds. Projects from the MPOs are aggregated for the statewide target.

Peak hour excessive delay is another measure of congestion and may be correlated with the reliability measures. Percent of non-SOV travel provides a glimpse at how well other modes, include carpooling, are used for traveling to work. These two measures did not apply to SKATS for the 2018-2022 performance reporting period.

[15] Proposed rules for a performance measure on tailpipe greenhouse gases is being developed by the Federal Highway Administration, but as of this writing, the final rule has not been published.

Table P-12: System Performance Results 2018-2022 (ODOT)

Performance Measure	Base Line 2018	Two-Year Condition 2020	Two-Year Target 2020	Four-Year Target 2022	Actual 2022	Met Target?
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	80.9%	83.8%	78.0%	78.0%	78%	Y
Percent of the Person-Miles Traveled on the non-Interstate NHS that are Reliable		87.9%		78.0%	78%	Y
Truck Travel Time Reliability (TTTR) Index	1.39	1.37	1.45	1.45	1.45	Y
Total Emission Reductions: CO	3618.44	95.83	584	1167	92.25	N

Transit Safety
The transit safety performance measures are for the two types of services offered by SAMTD:

1) Fixed Route Bus
2) Demand Response

The performance measures are:

1) Fatalities, number of reportable events
2) Injuries, number of reportable events
3) Number of Safety Events (rate per total vehicle revenue miles)
4) System Reliability (mean distance between major mechanical failures)

As part of these rules SAMTD developed a Public Transportation Agency Safety Plan (PTASP) and set targets for the performance measures. The PTASP is updated periodically, with the latest is scheduled for fall/winter 2022. Results for 2021 and 2022 are shown in **Tables P-13** and **P-14**.

Table P-13: Transit Safety Results for 2021 (SAMTD)

Mode of Transit Service	Fatalities	Injuries	Safety Events	System Reliability
Fixed Route Bus	0	9	0.37	-
Demand Response	0	2	0	-

Table P-14: Transit Safety Results for 2022 (SAMTD)

Mode of Transit Service	Fatalities	Injuries	Safety Events	System Reliability
Fixed Route Bus	0	13	0.21	15,000
Demand Response	0	0	0.2	9,000

Transit Asset Management
The Federal Transit Administration (FTA) developed a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The FTA Final Rule for Transit Asset Management (49 USC 625) established four performance measures for transit districts.

1) Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
2) Equipment: The percentage of non-revenue service vehicles (by type) that exceed the ULB.
3) Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
4) Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile[16].

Targets are set and submitted each fiscal year. There is no penalty for missing a target and there is no reward for attaining a target. In addition, SAMTD has developed a Transit Asset Management (TAM) plan as required by required by federal regulations. Updates to the TAM plan are anticipated every three years to ensure the latest information is available for decision making on rolling stock and facilities.

[16] SAMTD does not operate a track system; therefore, this measure does not apply.

Table P-15: SAMTD Yearly State of Good Repair Performance Targets for 2022

SAMTD TAM Yearly Performance 2022							
#	Reporting Category	Asset Inventory	Detail	Type	2020 Performance	2021 Performance	TAM Targets
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	35 ft.	Diesel	0%	0%	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	40 ft.	Diesel	0%	0%	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	35 ft.	CNG	0%	0%	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Fixed Route Bus (BU)	40 ft.	CNG	20%	26%	No more than 10% above CPC ULB
1	Rolling Stock/ Rural	Fixed Route Bus (BU)	32 ft.	Diesel/hybrid	0%	33%	No more than 10% above CPC ULB
1	Rolling Stock/ Rural	Fixed Route Bus (BU)	33 ft.	Diesel	16%	33%	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Paratransit Service (CU)	22-24 ft.	Gas	51%	66%	No more than 10% above CPC ULB
1	Rolling Stock/ Urban	Paratransit Service (VN)	15 ft.	Gas	20%	42%	No more than 10% above CPC ULB
2	Equipment	Non-Revenue Service Vehicle	Utility Non-Revenue Service	Maintenance Pickups	28%	100%	No more than 10% above CPC ULB
2	Equipment	Non-Revenue Service Vehicle	Staff Non-Revenue Vehicles	Supervisor vehicles and pool cars	25%	100%	No more than 10% above CPC ULB
3	Facilities	DW Maintenance Operations Facilities	All systems and components	SAMTD-Owned Facilities	100%	100%	100% at 3.0 or above on TERM scale
3	Facilities	DW Operations Facilities	All systems and components	SAMTD-Owned Facilities	100%	100%	100% at 3.0 or above on TERM scale
3	Facilities	Keizer Transit Center/ Layover	All systems and components	SAMTD-Owned Facilities	100%	100%	100% at 3.0 or above on TERM scale
3	Facilities	Downtown Transit Center/ Layover	All systems and components	SAMTD-Owned Facilities	100%	100%	100% at 3.0 or above on TERM scale

Appendix R – Resiliency of the Regional System

Resiliency is called out in the federal transportation planning regulations (23 CFR 450.300 et seq) as one of the factors to be considered in the planning process undertaken by Metropolitan Planning Organizations (MPOs), specifically to "Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation" (23 CFR 450.306 (b) (9)). And with the passage of the Infrastructure Investment and Jobs Act of 2021, additional focus has been put on the resiliency of the nation's transportation system with new funding programs identified.

Beyond the federal requirement, working to improve the resiliency of the regional system ties into several of the Goals of this Plan, including Goal 1 Accessibility and Mobility, Goal 3 Safety and Security, and Goal 9 Vibrant Regional Economy. As the transportation system provides the conduits for the movement of people and goods, disruptions can impact the local economy and cut off people from needed services and connections. Long-term disruptions may influence residents and businesses to move to another location, or out of the area.

Action on increasing the resiliency of the transportation system includes efforts outside the influence of SKATS, such as the watershed master plans for Salem that identify ways of reducing, or slowing, the amount of stormwater that is in the waterways within the region after a storm. This can help prevent flooding of downstream areas.

Presented in this appendix is a brief introduction to resiliency in the context of transportation, the type of events that could disrupt travel within Salem-Keizer, and a discussion on implementing a more resilient transportation system. The discussion will be at a high-level, with the specifics of the proposed projects left to the descriptions in **Chapter 7** (Proposed System) and **Appendix I** (Illustrative Projects).

Brief Introduction to Resiliency

Resilience "means the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions[1]." The amount of time it takes a system to recover from a shock (e.g., an earthquake) to the same level of service before the shock is a measure of its resiliency. One way of visualizing the resiliency of a system, is the 'resilience triangle' (**Figure R-1**)[2].

[1] From U.S. DOT's Climate Action Plan (2021), quoting the U.S. Global Change Research Program's Fourth National Climate Assessment and CEQ Instructions for Preparing Draft climate Action Plans under Executive Order 14008.
[2] See *The Oregon Resilience Plan*, 2013 for more information, available at: https://www.oregon.gov/gov/policies/Pages/oregon-resiliency-reports.aspx .

Figure R-1: Resilience Triangle (after Wang, Bartlett, and Miles (2012) in The Oregon Resilience Plan, 2013) (Time is on the x-axis)

The shock can be characterized by the predictability of the event, the timing (whether it occurs abruptly, rapidly or is planned/predictable), the impact (severe, high, and low), and the duration of the resulting disruption (minutes to months, possibly years). The shocks can also be defined as man-made (a crash, an act of terrorism, etc.) or natural events (storms, earthquakes, etc.). Some of the shocks that could affect the operation of the regional transportation system are shown in **Table R-1**. The list is presented in estimated order of the likelihood of the event taking place.

Table R-1: Possible Shocks Affecting Operation of the Transportation System

Event Type	Predictable?	Timing	Impact	Duration
Maintenance Project	Y	Planned	Low – High	Hours – Weeks
Traffic Incident/Crash	N	Abrupt	Low – High	Minutes - Hours
Cyberattack	N	Abrupt	Low – Severe	Varies
Flooding	Y – short term	Rapid	Low – High	Hours – Weeks
Extreme Heat	Y – short term	Rapid	Low – High	Days – Weeks
Snow/Ice	Y – short term	Rapid	Low - High	Hours – Weeks
Landslide/Mudslide	N	Abrupt	Low – Severe	Hours – Weeks
Earthquake	N	Abrupt	Low - Severe	Varies
Volcanic Event	N	Abrupt	Low – Severe	Varies

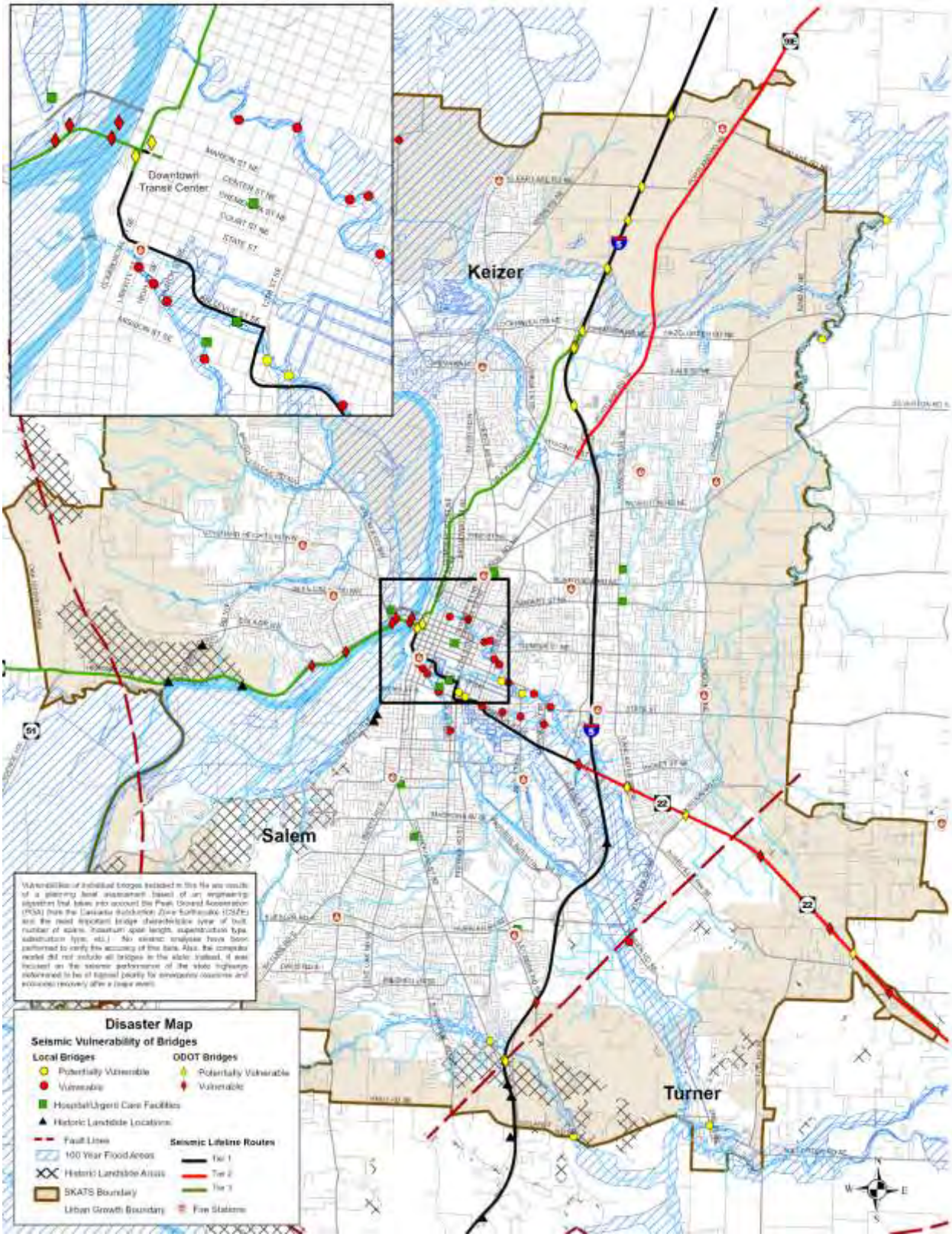
The recovery time for each type of shock will vary, and thus will have a different resilience triangle. The goal is to reduce the amount of time for each of the shocks to minimize the effects on region.

While the shocks are listed individually in the table, often several take place at the same time. For example, a heavy snow event could lead to increased number of traffic crashes, plus the loss of power to traffic signals. And shocks that happen outside the Salem-Keizer area could have ripple effects leading to a disruption in larger regional traffic patterns or wide-spread loss of power.

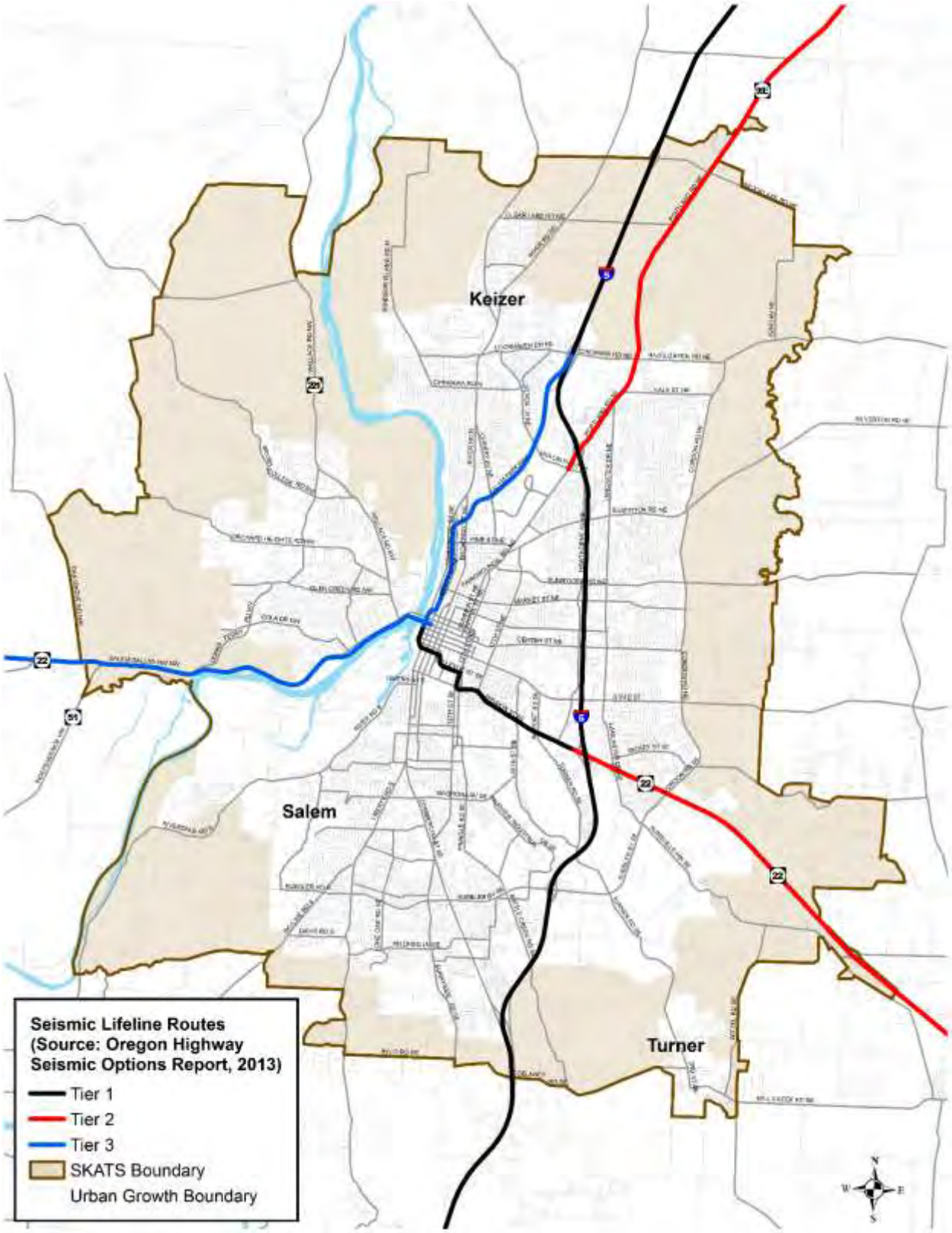
Identification of Critical Infrastructure

Ensuring the entire transportation system within SKATS is resilient to all possible shocks will not be easy, inexpensive, or completed overnight. And while important, resiliency is just one of the many criteria that is used to evaluate a project. Prioritization of investments are needed to ensure that critical routes are addressed first, and preferably, that they address multiple needs. Shown in **Map R-1** are some of the known potential areas of concern, covering bridges that are vulnerable during a seismic event, the location of landslide areas and fault lines, and where services for responding to emergencies are located[3]. At the state level, ODOT has designated three classes of "lifeline" routes for the state highway system. This classification helps ODOT prioritize investments to the routes, and in particular the bridges along them, in an attempt to ensure that a portion of the state highway system will remain open after a shock (or at least bounce back quickly). These routes are shown in **Map R-2**.

[3] For other hazard mapping see: https://gis.dogami.oregon.gov/maps/hazvu/



Map R-1: Disaster Map (Sources: ODOT Bridge, ODOT, FEMA)



Map R-2: State Highway System Seismic Lifeline Routes (Source: ODOT)

While a similar effort has yet to be completed for the locally owned facilities within the metropolitan area, the initial focus could be on the regional system plus those parts that connect to important services, such as the Salem Hospital and other urgent care facilities.

Discussed in the next sections are some of the efforts underway in making the transportation system more resilient.

Bridges and Culverts

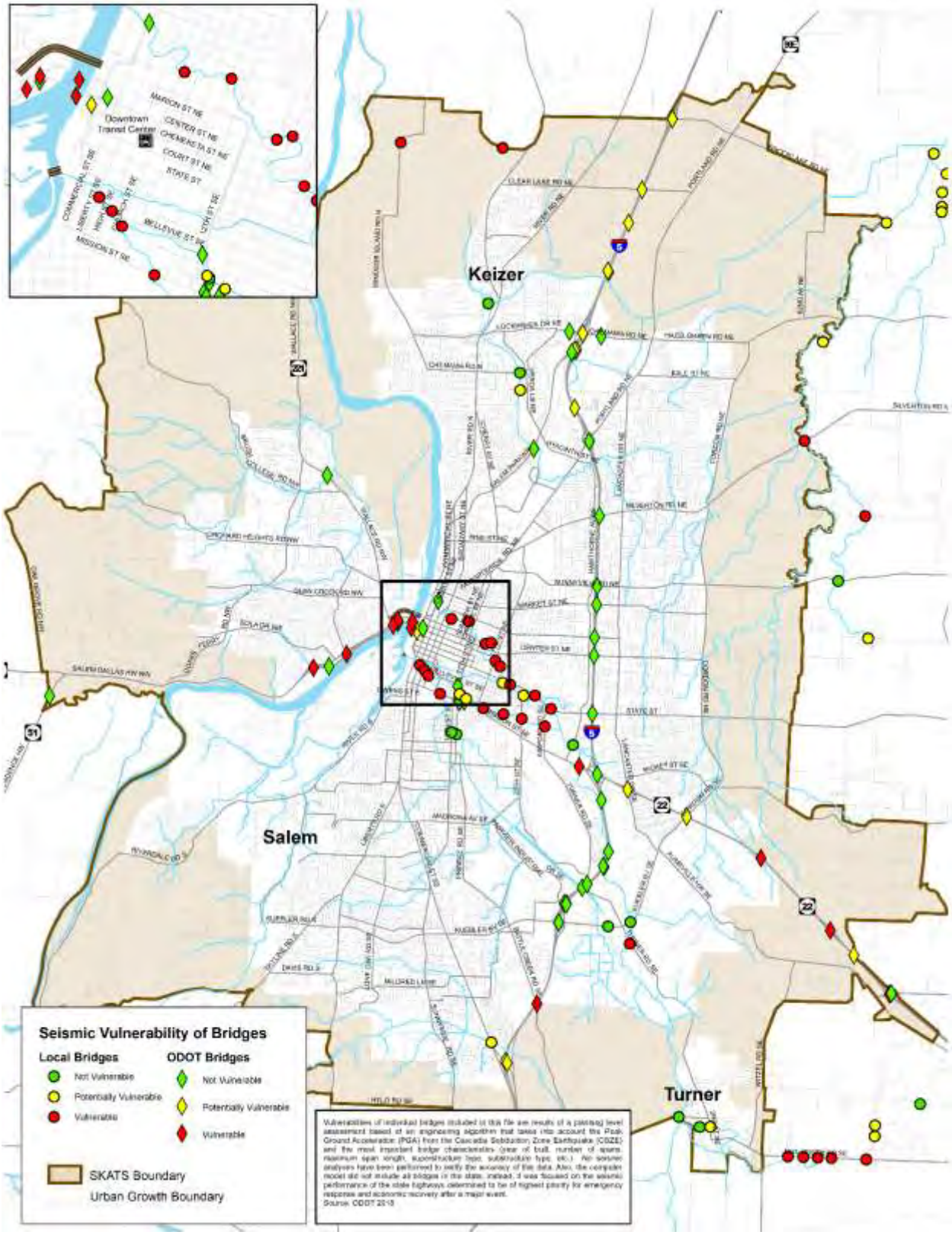
The Issue

Two events that could affect bridges and culverts are flooding and an earthquake. Increased precipitation could lead to scour of the bridge piers that are in the waterway, lodge debris against or under the bridge, or crest the bridge deck if there is sufficient flooding. Earthquakes stress the bridge laterally through ground movement and could result in a non-serviceable bridge. ODOT inspects the bridges within the state on a regular schedule, checking for issues and determining which bridges are structurally deficient. The seismic vulnerability of the bridges within SKATS (as of 2022) is shown in **Map R-3**. Most of the bridges that are identified as 'vulnerable' are locally owned. The condition of the bridges within SKATS, including those identified as structural deficient and obsolete, are shown in **Map R-4**.

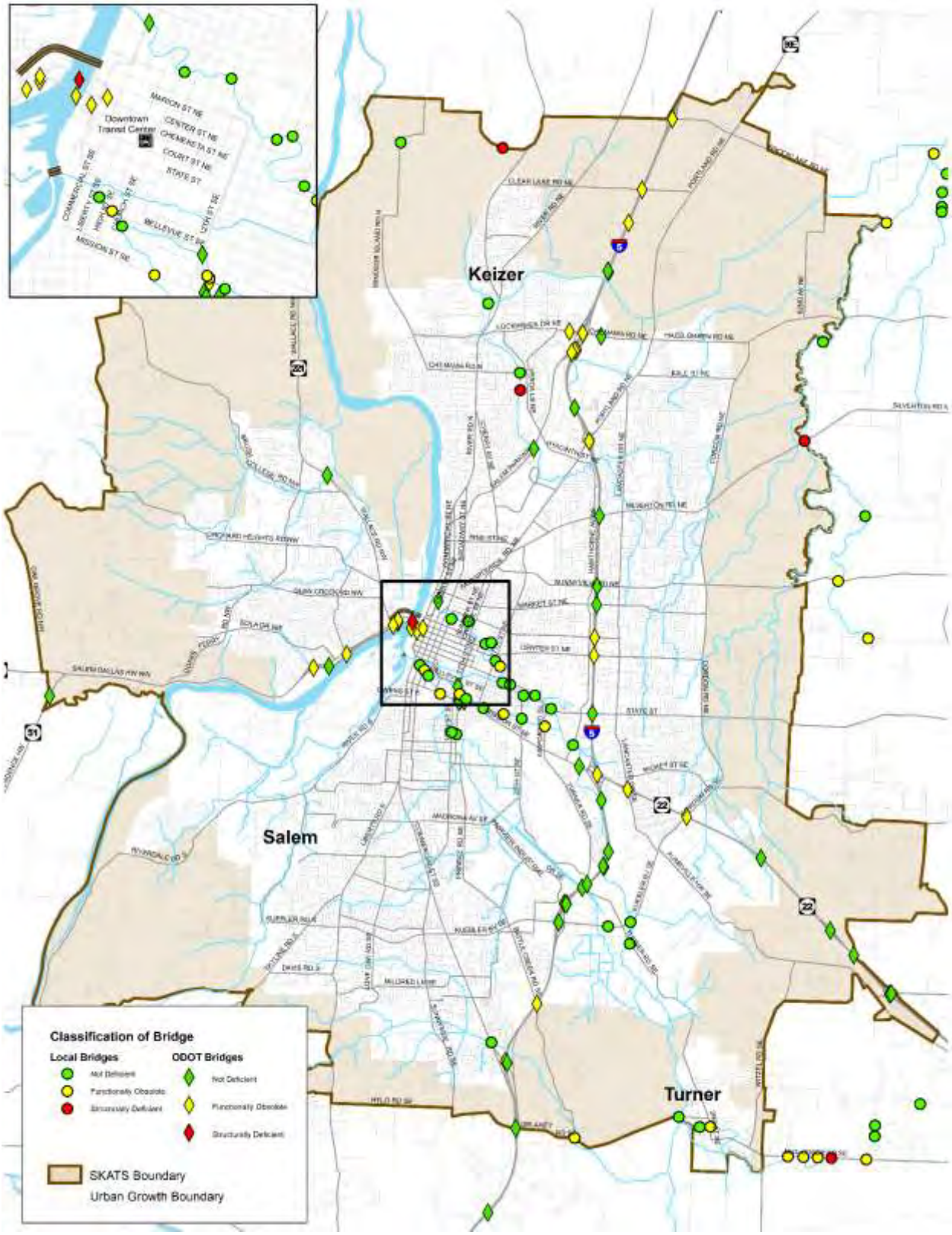
What is Being Done or Planned

As work is done on bridges in the area, seismic upgrades are included. When a bridge is replaced, or a new bridge built, they are required to meet the current seismic standard. In addition, culverts have been identified for replacement to increase the amount of water that can flow through them. This work also supports fish and other aquatic life if the previous culvert was too small for passage.

The largest project currently underway to update a bridge to current seismic standards is for the Center Street Bridge. Construction for this project is scheduled to go out to bid in 2025 with construction in 2027, with possible disruptions to the flow of traffic from west Salem into downtown Salem during the construction period. The work is being done to increase the probability that at least one of the bridges over the Willamette River remains serviceable after a major earthquake. Also included in the scope is an update to the traffic plan for the using the bridge in emergency as a two-way facility which will be developed in coordination with the city of Salem.



Map R-3: Seismic Vulnerability of Bridges in SKATS (Source: ODOT 2018)



Map R-4: Bridges in SKATS, Classified by Condition (Source: ODOT)

Roadways

The Issue

Improving the resiliency of the regional roadway system is more nuanced. Many of the shocks to the system can be addressed by the removal of the item (snow, debris, etc.), adequate maintenance of the roadway surface and storm drain, provision of safe-to-use facilities for all modes, provision for dealing with stormwater, and backer plates at signalized intersections with retroreflectivity. Switching to LEDs for the lights at a traffic signal allow for the possibility of including a battery backup due to their decreased energy consumption.

What is Being Done or Planned

Many of the recent roadway projects off the regional system have included bioswales or rain gardens in their designs. These solutions work to address not just the stormwater issues, but also contain and capture the pollution that is in the runoff, such as oil and brake dust from vehicles. Other projects include installing gutters and storm drains on roads where they do not currently exist. Keizer and Salem each have a Stormwater Master Plan that addresses the collection and removal of stormwater from the public Right-of-Way.[4]

Areas that are prone to landslides and mudslides have been fairly well defined, and mitigation measures are in place at many of them. Further work is required at a few locations (e.g., River Road South) and further study may be required for slow-moving landslides that might have been missed.

Maintenance of the system will likely become even more important as extreme weather events stress the pavement and other components in ways that could be outside their design parameters.

Finally, many Safety-related projects will also be beneficial during storms by increasing the visibility of signals, the road lanes, and/or items in the roadway.

Transit

The Issue

It is important to ensure some level of public transit service is available after a major event. Transit service is typically along the major roads in the metropolitan area and impacts to the roads will result in impacts to the transit service (and sometimes vice versa). The

[4] See: Salem: https://www.cityofsalem.net/community/household/water-utilities/stormwater/stormwater-master-plan-update
Keizer: https://www.keizer.org/media/Departments/Public%20Works/Environmental%20and%20Technical/Permit%20Documents/SWMP%20Document%20Final_v2021.pdf

transit district has defined a core network where service will be kept if in the future the financial situation requires reducing service. In addition, they have defined snow routes for times when snow or ice make certain roads impassable or unsafe.

After an earthquake, or other major disruption, transit service will likely be limited based on the ability to get buses into and out of the Del Webb maintenance yard (in Northeast Salem), and to refuel/recharge the buses. Currently the transit district has a fleet that uses biodiesel, compressed natural gas (CNG), and (starting in 2023) electricity. There are currently two CNG refilling stations in the area; so, if both are inoperable, transit service would likely be reduced. Charging stations that support electric transit vehicles are currently limited but should become more prevalent as the market for EV heavy trucks expands.

The operation of the paratransit and demand-response service after a major event should be reviewed by transit staff to determine to what extent these services will be impacted.

Funding Resiliency Projects

With the passage of the Infrastructure Investment and Jobs Act of 2021[5], new federal funding sources were made available. These are the PROTECT (Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation) program and the Healthy Streets program. Healthy Streets is a competitive grant program focused on making pavements "cool" and using porous materials and expanding the tree cover along the streets. These are meant to reduce the amount of stormwater runoff and help with urban heat island and air quality.

The PROTECT program (23 CFR 1.176) is more encompassing with the goal of making the existing transportation infrastructure more resilient to natural disasters. Funding is both via a formula and for competitive grants.

[5] The IIJA was signed into law on November 15, 2021. See: https://www.congress.gov/bill/117th-congress/house-bill/3684/text

Appendix Y

Air Quality Conformity Determination

For the SKATS 2023-2050 Metropolitan Transportation Plan

Healthy Air

Following passage of the federal Clean Air Act Amendments in 1990, the Salem-Keizer area was designated as a non-attainment area for the carbon monoxide (CO) and 1-hour ozone (O_3) national ambient air quality standards (NAAQS). However, monitoring data since that time has shown that pollutant levels are decreasing.

Carbon Monoxide Status

Previously, the CO monitor for the SKATS region was located at Market Street and Lancaster Drive. The CO monitor had been located there in the past to ensure that measurements were being made in the location of highest CO concentrations prior to a re-designation effort. No violations of the carbon monoxide standard were recorded between 1984 and 2003, and the last exceedance was in 1993[1]. Based on this history of clean air, the Oregon Department of Environmental Quality (DEQ) removed the CO monitor in 2006 and developed a Carbon Monoxide Limited Maintenance Plan for the SKATS region, which was submitted to the US Environmental Protection Agency (EPA) in 2007 and went into effect March 2, 2009[2]. As an area with a limited maintenance plan, SKATS is no longer required perform a regional emissions analysis for CO but still must demonstrate conformity as discussed below.

Ozone Status

Effective June 15, 2005, EPA formally designated the entire state of Oregon "attainment" for the 1-hour ozone NAAQS.

Federal and State Regulations

The U.S. Congress approved amendments to the Clean Air Act (CAAA) on November 15, 1990. Shortly thereafter, urban air sheds were designated on the basis of design values as compared to the national ambient air quality standards. The area encompassed by the SKATS boundary was designated as a non-attainment area for carbon monoxide (CO) and ozone (O_3).

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation (USDOT) issued the final rule for CAAA conformity on November 24, 1993 (40 CFR Parts 51 and 93), which included rules for regional emissions analyses of transportation improvement programs (TIPs) and transportation plans in the interim period before approval of a revised State Implementation Plan (SIP). The State of Oregon's Environmental Quality Commission adopted *Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act* (hereafter referred to as the Transportation Conformity), OAR 340-20-

[1] An exceedance of the standard is when the level of the pollutant is observed to be exceeded more than once in a year.

[2] Salem-Keizer Area Carbon Monoxide Limited Maintenance Plan, State Implementation Plan Volume 2 Section 4.57, June 4, 2007 Oregon Department of Environmental Quality. (EPA Approval is located at 73 FR 79655.)

710 through 340-20-1080, in March 1995. The rule was last revised in 2010 under OAR 340-252-0010 to 340-252-0230, Transportation Conformity.

The transportation conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans (SIPs) and establishes the criteria and procedures for determining whether or not they do conform. Conformity means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

Since 1993, EPA finalized several amendments to the transportation conformity rule. The first set of amendments was published on August 7, 1995 (60 FR 40098), a second set on

November 14, 1995 (60 FR 57179), and a third set on August 15, 1997 (62 FR 43780). In particular, the third set of rules increased the flexibility of demonstrating conformity for areas not required to submit SIP, such as SKATS (see next section for details).

In 1997, EPA revised the primary ozone standard from the 1-hour to an 8-hour standard. On April 30, 2004, EPA finalized the rules (69 FR 23951) that revoked the 1-hour ozone standard one year after the effective date of 8-hour ozone nonattainment designations. In accordance with EPA's April 30, 2004 final rule, conformity for the 1-hour standard will no longer apply in existing 1-hour nonattainment and maintenance areas once the standard and corresponding designations are revoked.

On July 1, 2004, new transportation conformity amendments were finalized (69 FR 40004) that: include criteria and procedures for the new 8-hour ozone and fine particulate matter (PM2.5) national ambient air quality standards (NAAQS); address conformity requirements for 1-hour non-attainment areas that are in attainment of the 8-hour ozone standards (such as SKATS); contain conformity rules that implement the March 2, 1999 court decision when conformity lapses occur; and include a few miscellaneous revisions to clarify the existing regulation and improve implementation.

On December 22, 2006, the DC Court of Appeals struck down the 8-hour ozone standard, stating that EPA had violated the Clean Air Act in relaxing the limits. Later decision by the court clarified the ruling, and the State of Oregon is still designated as attainment for ozone.

In 2008, EPA modified federal rules to require states to adopt only parts of the conformity rules as state regulations. Passages that pertain to Oregon-specific conditions, such as those describing interagency consultation and any requirements that are more restrictive than federal minimum standards were required to be retained as states rules. In response to the federal changes, in February 2010 the Oregon Environmental Quality Commission repealed state rules that simply duplicated federal measures, allowing the federal measures to govern. The changes to the state conformity rules were submitted to EPA and were approved in 2012 as a revision to the State Implementation Plan.

Transportation Conformity as it Applies to the SKATS Area

According to federal rules, while areas with approved limited maintenance plans are not required to perform a regional emission analysis, they are required to demonstrate conformity of the transportation plans as stated in 40 CFR part 93, subpart A. These requirements, and how SKATS is meeting them in regard to the SKATS 2023-2047 MTP, are presented below. A more detailed discussion is presented in ***AQCD Appendix 1***.

a.) Transportation plans and projects provide for timely implementation of SIP transportation control measures (TCMs) in accordance with 40 CFR 93.113;

1. There are no TCMs identified in the SIP for the SKATS area.

b.) Transportation plans and projects comply with the fiscal constraint element per 40 CFR 93.108;

1. As required by federal regulations, the SKATS 2023-2050 MTP is financially constrained, containing only those projects that funds are identified for or 'reasonably expected' to be available over the time frame of the plans.
2. The financial constraint assumptions developed for the SKATS 2023-2050 MTP are shown on pages 6-16 to 6-17 of the document.

c.) The MPO's interagency consultation procedures meet applicable requirements of 40 CFR 93.105;

1. The equivalent State Rule is OAR 340-252-0060.
2. A draft of this document was circulated to ODOT, EPA, Oregon DEQ, FHWA, and FTA prior to adoption. The draft was sent to the group on January 17, 2023. In addition, a document explaining the reasons for updating the MTP was included.
3. An interagency consultation was held on February 15, 2023 to discuss the MTP project list and the draft AQCD document. Questions about the projects were addressed and meeting notes are attached in **Appendix 3** The list of projects included in the SKATS 2023-2050 MTP are attached as **Appendix 4**.
4. No comments were received during the Public Review period.

d.) Conformity of transportation plans is determined no less frequently than every four years, and conformity of plan amendments and transportation projects is demonstrated in accordance with the timing requirements specified in 40 CFR 93.104;

1. The previous conformity determination for the SKAT 2019-2043 RTSP was adopted on May 28, 2019 and conformed by USDOT on March 2, 2020.

e.) The latest planning assumptions and emissions model are used as set forth in 40 CFR 93.110 and 40 CFR 93.111;

As of March 2, 2009, SKATS is not required to perform regional emissions modeling as part of the conformity process. Thus, no emissions modeling was performed as part of this MTP update.

f.) Projects do not cause or contribute to any new localized carbon monoxide or particulate matter violations, in accordance with procedures specified in 40 CFR 93.123; and

1. Projects included in the SKATS 2023-2050 MTP that are required to perform hot spot analysis will have this conducted by the project sponsors during the appropriate phase of the project.

g.) Project sponsors and/or operators provide written commitments as specified in 40 CFR 93.125.

1. Project sponsors and operators will conform to the CAA requirements.

AQCD Appendix 1: Supplemental Conformity Checklist

Response to the applicable conformity criteria and procedures as they apply to the amended SKATS 2023-2050 MTP, as per State of Oregon conformity rules (OAR 340-252-0010 et seq.), is made in the following text. This checklist is provided to assist in the state and federal review of this conformity determination and the consultation requirements of OAR 340-252-0060.

1. Conformity Requirements

40 CFR 93.014: Frequency of Conformity Determinations

A new transportation plan must be found to conform before the plan is approved by the MPO or accepted by USDOT. The conformity determination for the current SKATS plan (2019-2043 RTSP) was adopted on May 28, 2019 and was approved/acknowledged by USDOT on March 2, 2020 (***see letter in Appendix 2***). The conformity determination marked the beginning of the four-year cycle of conformity for the RTSP.

A new TIP must be demonstrated to conform before the TIP is accepted by USDOT, and the TIP must be updated no less frequently than every four years. The current MTIP, FY 2021-2026, was adopted on May 26, 2020, amended on August 24, 2021, and conformed by USDOT on October 28, 2021 (***see letter in Appendix 2***). The conformity determination marked the beginning of the four-year cycle under federal rules.

OAR 340-252-0060 and 40 CFR 93.105: Consultation

Federal, state, and local interagency consultation are required before making conformity determinations. See the response to OAR 340-252-0060 and 40 CFR 93.112 below for details of the consultation carried out for this conformity determination.

The Salem-Keizer Area Transportation Study (SKATS) MPO is the lead agency responsible for making the conformity determination for the RTPs and TIPs, RTP amendments, TIP amendments, performing transportation modeling, regional emissions analyses, and preparing and distributing the draft and final documents. The MPO is the agency responsible for assuring the adequacy of the interagency consultation. The SKATS Technical Advisory Committee (TAC) is designated under this regulation as the standing committee for the purposes of consultation on air quality. Members of the SKATS TAC include representatives of the City of Salem, City of Keizer, City of Turner, Marion County, Polk County, Salem Area Mass Transit District, Salem-Keizer School District, Oregon Department of Land Conservation and Development, Oregon Department of Transportation, Oregon Department of Environmental Quality, and FHWA. This committee currently meets monthly. The meetings are open to the public.

As described in more detail in the response to OAR 340-252-0060 and 40 CFR 93.112 below, MPO staff conferred with TAC members, consulted other state and federal agencies on development of the conformity determinations, and provided public notices on the TIP Update and conformity determination. This conformity determination is based on processes developed

in 2007 during the conformity determination of the 2031 RTSP and FY 08-FY 11 TIP, and that had been used for all subsequent updates and amendments to the SKATS RTSP and TIP.

40 CFR 93.106: Content of Transportation Plans

The SKATS 2023-2050 MTP describes the recommended and fiscally constrained transportation system up to the 2050 horizon year. Chapter 7 and Appendix A of the MTP documents the employment and population projections and land use allocations by jurisdiction to 2050. The population forecasts are developed by the Population Research Center at Portland State University and allocation was coordinated with the local jurisdictions through a Land Use Subcommittee of the TAC for use in the MTP, TIP, and conformity determinations. The projections for the population and employment in the area were made for the new horizon year of 2050.

The highway and transit projects described within the MTP are divided into "Recommended" and "Illustrative" categories (***see Table 7-3*** *and* ***Appendix I***). All projects are sufficiently identified by description and location to ensure adequate modeling of capacity, routes, and speeds. Transit operations described in Chapter 4 of the MTP reflect the system as of early 2023, which includes service on weekday evenings, Saturdays, and Sundays as part of the additional funding available from ODOT. As such, the Plan recommends continuation of this level of transit service where existing demand exists, and future service increases in service coverage, types, and frequencies including projects such as the bus replacement, and ITS applications.

See additional information in response to 40 CFR 93.110 below.

40 CRF 93.108: Fiscal Constraints for the Transportation Plans and TIPs

The financial constraint assumptions developed for the amended SKATS 2023-2050 MTP are documented on pages 6-16 to 6-18.

2. Criteria and Procedures for Determining Conformity

40 CFR 93.109: General

In order to demonstrate conformity of a transportation plan and/or TIP, specific criteria listed in OAR 340-252-0110 through 340-252-0200 (40 CFR 93.110 through 93.119) must be addressed. These criteria include using the latest planning assumptions and the latest emissions model and undertaking interagency consultation and public involvement. Responses to the criteria are listed below.

As of June 15, 2005, the SKATS area is not required to show conformity for HC and NOx, the precursors to ozone; and from March 2, 2009, is operating under a limited maintenance plan for Carbon Monoxide (CO), and thus not required to perform regional emissions modeling for CO.

40 CFR 93.110: Latest Planning Assumptions

This criteria states that the conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination. Key assumptions include population and employment forecasts for the 454 transportation analysis zones (TAZs) over which the transportation network of the 2023-2050 MTP is defined. This conformity analysis uses the most current projections of 2022 to 2050 population and employment as prepared by SKATS and reviewed by the SKATS TAC (see response to 40 CFR 93.106). Allocations were made to transportation analysis zones in consultation with the individual jurisdictions and coordinated with the SKATS Land Use Subcommittee. Housing, population, and employment forecasts and allocations reflect local development, redevelopment, and infill plans for mixed-use nodes, known projects currently in the planning process, and the availability of vacant, buildable land by current plan designation.

Transit service is assumed to change during the life of the MTP. Current transit service is a mix of corridors with frequent service and connector-like service with less frequent service, with service on Saturdays and Sundays. There is a central transit center in downtown Salem where the majority of bus routes meet, and smaller transit stations in West Salem and Keizer, with a third in the planning stages for South Salem (construction is likely in the next two years). Longer term, an additional transit station is planned for East Salem at a location on the Chemeketa Community College campus. The Transit District reviews fares every two years and links them to an expected farebox rate of return but keeps the increases as small as possible and retain discounts for bus passes. In September 2022 fares for people under 18 years old were set to zero under a partnership with the cities of Keizer and Salem. It is hoped to keep this in place after the initial year trial period. A soon-to-be-implemented project will allow for eTickets and fare capping.

Salem Area Mass Transit District's website and staff provided historical and current ridership numbers. Cherriots ridership grew from 2.7 million trips in 1990 to over 4.3 million in 2000, increasing further to over 5 million riders for the first time in 2003 and peaked at 5.54 million in 2006. Ridership since 2006 have shown decreases every year, which can be partially attributable to service cuts (including removing Saturday service in 2009), fare increases, the regional/national economy (either the Great Recession in 2007-2010 or cheap fuel in 2014 onwards). Ridership in 2021 (the latest available from the National Transit Database) was approximately 1.8 million trips, which represent the impact of the COVID-19 pandemic and reduced service. The introduction of Sunday service in September 2021 had little impact on total ridership[3].

There are no required TCMs for the SKATS area.

40 CFR 93.111: Latest Emissions Model

As of March 2, 2009, SKATS is not required to perform regional emissions modeling as part of the conformity process. Thus, no modeling was performed as part of this amendment.

[3] In the fall of 2022, SAMTD introduced free fares for riders under the age of 18. This resulted in increasing ridership in the last three months of 2022 compared to 2021.

OAR 340-252-0060 and 40 CFR 93.112: Consultation

The SKATS MPO must make conformity determinations according to the interagency consultation procedures in OAR 340-252-0060 and according to the public involvement procedures established in OAR 340-252-0060 and 23 CFR Part 450.

Based on consultation conducted for the SKATS FY 04-FY 07 TIP amendment in December 2004, it was agreed that early consultation via e-mail was preferred by the MPO and state and federal agencies. This has been followed for all the subsequent consultations to date.

For this update, a draft copy of the AQCD and the project list was sent to air quality staff specialists at FHWA, FTA, EPA, ODOT and DEQ on January 17, 2023 for review. An interagency consultation with staff from the aforementioned agencies took place on February 15, 2023, focusing primarily on the project list. See **Appendix 3** for the meeting notes. The draft copy of the AQCD and appendices were available for public review and comment during the public review period of the SKATS 2023-2050 Metropolitan Transportation Plan (MTP) which took place between March 28, 2023 and May 12, 2023. The public could download the draft AQCD from the Mid-Willamette Valley Council of Governments website or read a copy at the Salem Public Library or the Keizer Community Library. The availability of the document was discussed, and the contents briefly summarized at each of the public involvement events that took place (please see **Appendix O** of the SKATS 2023-2050 MTP for a complete list). Adoption of this document by the SKATS Policy Committee took place on May 23, 2023**.**

40 CFR 93.113: Timely Implementation of TCMs

There are no TCM requirements in the SKATS non-attainment area.

40 CFR 93.114: Currently conforming transportation plan and TIP

The SKATS 2019-2043 RTSP was adopted on May 28, 2019 and conformed on March 2, 2020 (***see USDOT letter included in AQCD Appendix 2***). The FY 2021-2026 TIP was adopted on May 26, 2020, amended on August 24, 2021, and conformed by USDOT on October 28, 2021.

Only one conforming transportation plan or TIP may exist in an area at any time; conformity determinations of a previous transportation plan or TIP expire once the current plan or TIP is found to conform by DOT.

40 CFR 93.115: Projects from a Plan and TIP

Projects in the TIP are either drawn from the RTSP or are consistent with the policies and purpose of the plan and will not interfere with other projects specifically within the plan. Typically, TIP projects not in the RTSP are pavement rehabilitation/resurfacing projects.

AQCD Appendix 2

- U.S. DOT Air Quality Conformity Determination, SKATS 2019 – 2043 Regional Transportation Systems Plan dated March 2, 2020

AQCD Appendix 3

- Meeting notes from the Interagency Consultation that took place on February 15, 2023.

AQCD Appendix 4

- List of projects in the SKATS 2023 – 2050 Metropolitan Transportation Plan (Excel format)

U.S. DEPARTMENT OF TRANSPORTATION

Federal Highway Administration
Oregon Division
530 Center Street, Suite 420
Salem, Oregon 97301
503-399-5749

Federal Transit Administration
Region 10
915 Second Avenue, Room 3142
Seattle, Washington 98174-1002
206-220-7954

March 2, 2020

Reply to: HDA-OR
FTA-TRO-10

Appendix 2

Mr. Mike Jaffe
Transportation Program Director
Salem Keizer Area Transportation Study
100 High Street SE, Suite 200
Salem, OR 97301

Dear Mr. Jaffe:

The Clean Air Act Amendments of 1990 (CAAA) require that transportation plans, programs, and projects cannot create new National Ambient Air Quality Standards (NAAQS) violations, increase the frequency or severity of existing NAAQS violations or delay the attainment of the NAAQS. The U.S. Department of Transportation (USDOT) is required to make a transportation conformity determination in non-attainment and maintenance areas as outlined in 40 CFR 93.104 and 23 CFR Part 450. The CAAA requires States and Metropolitan Planning Organizations (MPOs) to demonstrate, through the conformity process, that the transportation program as a whole is consistent with the State Implementation Plan (SIP). Transportation conformity ensures that Federal funding and approval are given to those transportation activities that are consistent with air quality goals and do not worsen air quality or interfere with the purpose of the SIP.

Salem, Oregon was designated nonattainment for carbon monoxide (CO) on March 3, 1978 (43 FR 9028). On June 24, 1980, the United States Environmental Protection Agency (EPA) approved the State of Oregon's control strategy for the Salem CO nonattainment area (45 FR 42275). Upon enactment of the 1990 Clean Air Act Amendments, the Salem area was designated nonattainment by operation of law and identified as "not-classified" (56 FR 56818). Oregon submitted a CO limited maintenance plan and redesignation request to EPA on August 9, 2007. EPA approved the plan and redesignation request on December 31, 2008; effective March 2, 2009 (73 FR 79655). The Salem-Keizer urbanized area is currently designated as attainment for CO with an approved limited maintenance plan that demonstrates continued attainment of the NAAQS.

The Salem-Keizer Area Transportation Study (SKATS) Policy Committee adopted the 2019-2043 Regional Transportation System Plan (RTSP) on May 28, 2019. The RTSP was developed by SKATS to meet both State and Federal planning requirements for long-range planning, and included a conformity analysis that indicated that the air quality conformity requirements have been met.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) find that the 2019-2043 RTSP conforms to the Oregon Conformity SIP in accordance with the Transportation Conformity Rule. This determination is made based on our review of the SKATS conformity analysis and documentation sent to our offices on May 29, 2019 and in subsequent communications. As part of this determination, EPA Region 10, Oregon Department of Environmental Quality and Oregon Department of Transportation were provided an opportunity to comment through the interagency consultation process pursuant to the Transportation Conformity Rule. The comments received by the interagency consultation review team were satisfactorily addressed by SKATS.

This letter constitutes the FHWA's and the FTA's joint air quality conformity determination for the SKATS 2019-2043 RTSP. If you have any questions, please contact Rachael Tupica of FHWA at 503-316-2549 or Jeremy Borrego of FTA at 206-220-7956.

Sincerely,

PHILLIP A DITZLER Digitally signed by PHILLIP A DITZLER Date: 2020.03.02 10:42:13 -08'00'

Phillip A. Ditzler
Oregon Division
FHWA Division Administrator

LINDA M GEHRKE Digitally signed by LINDA M GEHRKE Date: 2020.03.02 10:16:54 -08'00'

Linda M. Gehrke
Region 10
FTA Regional Administrator

cc:

FTA	Jeremy Borrego, Transportation Program Specialist
FHWA	Rachael Tupica, Senior Planner
EPA	Karl Pepple, Environmental Protection Specialist
ODOT	Dan Fricke, Senior Transportation Planner
	Natalie Liljenwall, Environmental Engineer
ODEQ	Rachel Sakata, Air Quality Planner
	Jeffrey Stocum, Technical Manager
	Wes Risher, Mission Inventory Analyst

Appendix 3

SKATS AQ IAC

February 15, 2023

Virtual Meeting via Teams

Attendees – Federal State Agency Representatives

- LILJENWALL Natalie Natalie.LILJENWALL@odot.oregon.gov
- Ned.Conroy@dot.gov
- Jasmine Harris jasmine.harris@dot.gov Not present, but sent questions beforehand
- WILLIAMS Karen * DEQ Karen.WILLIAMS@deq.oregon.gov
- Vaupel, Claudia Vaupel.Claudia@epa.gov
- MAHER John D John.D.MAHER@odot.oregon.gov Only there to introduce Jessica
- Jessica Virrueta ODOT STIP
- Dan Fricke, ODOT Region 2 SKATS Liaison (outgoing)
- Brandon Williams, ODOT Region 2 SKATS Liaison (incoming)
- DERRICKSON Hope Hope.DERRICKSON@odot.oregon.gov
- thomas.w.parker@dot.gov FHWA Oregon environmental lead
- Daniel Burgin ? Listed in the TEAMS attendees, but I don't recall being present

Attendees – SKATS Staff

- Karen Odenthal: TIP Coordinator (outgoing)
- Steve Dobrinich: TIP Coordinator (incoming)
- Ray Jackson: MTP & AQCD Lead

Agenda

- Review the project lists for the SKATS 2023-2050 MTP and 2024-2029 TIP for the exempt/non-exempt category assigned by SKATS staff
- Clarification of whether projects are exempt/non-exempt
- Feedback on the draft AQCDs for the MTP and TIP
- Other Issues

The question sent by SKATS staff prior to the meeting:

One question for the IAC members is on the TIP projects, from Karen:

Here is the list of proposed SKATS FY 2024-2027 TIP projects, plus a couple that have illustrative years. I added a tab for exempt projects. It is unclear if KN 13188, OR22: Rickreall Rd to Doaks Ferry Rd NW is exempt or non-exempt. The description: "Evaluation of corridor safety improvements, undertake environmental investigations to reach NEPA classification, develop design to design acceptance package (DAP), conduct ROW and utility surveys, and purchase ROW." There is no construction phase funded at this time. I recommend asking the consultation group whether we should consider it exempt or non-exempt.

Notes:

- There was discussion on Center Turn Lanes (CTL) and whether these add capacity to a road and why SKATS staff considers them non-exempt (Reasoning is, if AQ modeling was performed, the presence of a CTL results in the modification of the capacity for the link. This would need to be known to be included in the model). **The group agreed** to consider projects with CTLs as non-exempt.
- Discussed the questions that Jasmine had sent before the meeting, clarified the descriptions for several of these projects (see below for details – answers were also emailed to the group prior to the meeting due to Jasmine's absence).
- OR22W Rickreall to Doaks Ferry – As shown above, SKATS staff had a question of whether a project or a phase should be used for purpose of exempt/non-exempt determination. The project has funding for PE/ROW but not Construction. **The group agreed** to consider this as non-exempt as it will eventually lead to a construction project, and this will not require a subsequent AQCD.
    - Natalie mentioned that she considers a project that is going to NEPA to be non-exempt.
- SKATS staff mentioned that they will encourage project submissions to include more information on the actual project, especially for the TIP. "Improvements" is too vague and does not adequately explain what is proposed to be built.
- No comments were received for the AQCD documents themselves. Ray asked the group to **review the draft AQCDs and provide any comments by March 28, 2023.**
- At the end, the members of the IAC agreed to the designations of the TIP projects as provided, with the modification for the OR22W Rickreall to Doaks Ferry project to be considered as non-exempt. **Those voting in favor were: Ned (FTA), Thomas (FHWA), Claudia (EPA), Karen Williams (DEQ). Natalie concurred for ODOT.**

Questions prior to the SKATS AQCD IAC

Clarifications from Janelle (Marion County Public Works) ----

1. Hollywood Dr: Salem City Limits to Silverton Rd NE - M024 - Widen to collector standards and add new signal at Hollywood Dr at Silverton Rd. (combined with M032).
    a. **Construct bicycle and pedestrian improvements and add left turn refuge and signal at intersection with Silverton Road to increase safety. (Marion County PW)**
2. Lone Oak Rd SE at Rees Hill Rd SE - S376 - Design and RoW acquistion for intersection modifications that include a lengthened left-turn lane and an acceleration lane on Rees Hill Rd SE.
    a. **Basically, this is a new intersection being built associated with development. Lone Oak is a collector street in Salem TSP. Development is required to build**

it. The actual intersection is in Marion County. Due to sight distance, Marion County is requiring an acceleration lane so cars turning off of Lone Oak onto Rees Hill eastbound have room to get up to speed since this is a 55 mph county road. City is participating because Marion County requirements require off-site acquisition to accommodate the length of the turn lane. (Salem PW)

3. Cordon Road at Center Street: Intersection Modifications – M091 - Modifications to the intersection including upgrading the signal. Assumes 50 percent developer funded. M046 has roadway modifications.
    a. **Modifications will be necessary to accommodate upgrading the signal and adding travel lanes. (Marion County PW)**
4. Delaney Rd: Battle Creek SE to Turner - M022 - Widen road to county arterial standards
    a. **Widens the roadway from existing 22' width to meet AASHTO standards for pavement width (remains 2 travel lanes) and accommodate the large percentage of truck traffic, while also provide standard shoulder widths to increase safety for pedestrians, and bicycles. (Marion County PW)**
    b. **Note: This project is outside of the SKATS AQ Boundary**

Questions from Jasmine ---

1. Have any of the projects in the MTP or TIP list been determined exempt or nonexempt previously through the IAC process?
    a. **Maybe. The local projects in the TIP have not changed since the last update. There are new ODOT projects in the TIP. The Ex/NEx determination was made for (all/some of?) those in 20xx.**
    b. **The MTP projects have never been reviewed by the IAC for Ex/NEx status – it was never a question/request before.**
2. There are several projects listed as nonexempt, please confirm that the classifications is accurate for all of them. Some seem to fall under exempt, see examples below: McGilchrist St SE: 12th St SE to 25th St SE; Final design and construction for McGilchrist Complete Street project to improve safety for all users and reduce flooding.

    Project includes center turn lane which adds capacity. If we were performing AQ conformity modeling that would be non-exempt as it would be included in the model.

    Center St.: Lancaster Dr. to 45th Pl. NE; Design the interim and long-term widening of Center St. east of Lancaster Dr. to 45th Pl NE, and construction of the interim improvements on the north side including center turn lane, bike lanes and sidewalks to increase safety. Update existing crossing located at Center St. & 45th Pl NE.

    Project includes center turn lane which adds capacity. If we were performing AQ conformity modeling that would be non-exempt as it would be included in the model.

3. Delaney Rd: Battle Creek Bridge; Replace the existing bridge on Delaney Road over Battle Creek. Project includes various intersection and roadway improvements to improve traffic flow and safety. Didn't this project already go through the AQCD process already, and handled as a nonexempt project? Or is this a different project? Are the "various intersection and roadway improvements" at the immediate entrances to this bridge? Will this project increase traffic, or simply smooth traffic flow?
    a. **It is likely this project was reviewed as part of the previous update to the TIP.**
    b. **Project is outside of the SKATS AQ boundary.**

4. One project was flagged as "unknown," pending the IAC discussion seems like this project could be exempt. OR22: Rickreall Rd to Doaks Ferry Rd NW; Evaluation of corridor safety improvements, undertake environmental investigations to reach NEPA classification, develop design to design acceptance package (DAP), conduct ROW and utility surveys, and purchase ROW.
    a. **Discussion with the IAC was to address these projects in the TIP when only one phase is funded. Is the E/NE determination on the project or the phase?**

Appendix 4

RTSP Key	Project Name	Description	2050 Category	YoE_2023	AQ Category	Within SKATS AQ Boundary
B003	ITS - Transit Signal Priority	Implement signal priority along corridors with High Frequency Transit.	Included	$328,000	Exempt	Yes
B005	ITS - Real-time Transit Arrival Information	Provide real-time arrival and departure info to transit users. Data at selected bus stops and electronically	Included	$1,318,000	Exempt	Yes
B008	South Salem Transit Center	with 40 to 100 spaces, driver's break-room, indoor passenger waiting area with restrooms and other customer amenities, bicycle facilities, energy efficiency features and opportunities for commerical development.	Committed	$12,391,000	Exempt	Yes
B009	Paratransit Facility	Design and construct a dispatch and administration facility for the district's paratransit contractor. This will eliminate using operating funds to pay lease costs for these functions.	Included	$5,247,000	Exempt	Yes
B017	East Salem Transit Center	Build a transit center in east Salem at Chemeketa Community College to replicate the service offered by transit centers in Keizer, south Salem and west Salem. Currently a placeholder until a planning study provides the details.	Included	$13,659,000	Exempt	Yes
K011	Verda Ln NE: Chemawa Rd NE to Dearborn Av NE	Widen to 3 lanes, add bike lanes and sidewalks. Westside portion to be completed by development by December 2022.	Included	$4,701,000	Non-Exempt	Yes
K012	Verda Ln NE: Dearborn Av NE to Southern City Limits	Widen to 3 lanes, add bike lanes and sidewalks	Committed	$5,013,306	Non-Exempt	Yes
K015	Wheatland Rd Multimodal Project - Phase 1	Construct refuge medians, street lighting, buffered bike lanes, and a multi-use path. See second phase in K027.	Included	$9,400,000	Exempt	Yes
K027	Wheatland Rd Multimodal Project - Phase 2	Construct refuge medians, street lighting, buffered bike lanes, and a multi-use path. See K015 for phase 1.	Included	$4,784,000	Exempt	Yes
M015	Cordon Rd NE & Auburn Rd NE	Add traffic signal and widening of intersection for lane channelization on Auburn Rd. Developer funded	Committed	$1,652,000	Exempt	Yes
M016	Cordon Rd NE & Hayesville Dr NE	Add northbound left turn lane, ARTS funds	Committed	$775,000	Exempt	Yes
M018	Cordon Rd NE & Ward Dr NE	Add northbound left turn lanes	Included	$1,758,000	Exempt	Yes
M019	Cordon Rd NE & Herrin Rd NE	Add left turn refuge	Included	$1,758,000	Exempt	Yes
M020	Hazelgreen Rd at Cordon Rd NE / 55th Ave	Realign, add turn lanes and signal or roundabout	Included	$6,727,000	Exempt	Yes
M022	Delaney Rd: Battle Creek SE to Turner	Widen road to county arterial standards	Included	$8,222,000	Exempt	No
M023	Delaney Rd: Bridge over Battle Creek	Replace bridge, realign intersection at Battle Creek Road and at Parrish Gap Rd.	Committed	$6,865,000	Exempt	No
M024	Hollywood Dr: Salem City Limits to Silverton Rd NE	Widen to collector standards and add new signal at Hollywood Dr at Silverton Rd. (combined with M032).	Committed	$4,003,000	Exempt	Yes
M027	Lancaster Dr NE: Center St to Monroe St NE	Reconstruct road, including sidewalk, ADA and access modifications. (see M100 for second part)	Committed	$3,366,000	Exempt	Yes
M030	Sidewalk construction: various locations (set 1)	Construct sidewalks at various locations - $300,000 per year, or used as match for grants for sidewalk projects.	Committed	$2,101,000	Exempt	Yes

M031	Sidewalk construction: various locations (set 2)	Construct sidewalks at various locations - $300,000 per year, or used as match for grants for sidewalk projects.	Included	$2,638,000	Exempt	Yes
M034	State St: Lancaster Dr NE to 46th Av	Widen to 4 travel lanes plus a center turn lane with curbs, gutters, sidewalks, and bike lanes.	Committed	$7,158,000	Non-Exempt	Yes
M042	Cordon Rd NE & Kale St NE	Add left turn refuge on Cordon Rd at Kale St. ARTS funded.	Committed	$718,000	Exempt	Yes
M044	Cordon Rd NE: Silverton Rd NE to Kale St NE	Separated multi-use path	Included	$2,896,000	Exempt	Yes
M046	Cordon Rd SE: Center Rd NE to State St SE	Construct to Parkway standards with 4 travel lanes, center turn lane and multi-use path including required signal modifications. Partially developer funded.	Included	$10,464,000	Non-Exempt	Yes
M048	Hayesville Dr NE: Fuhrer Dr NE to Cordon Rd NE	Widen to collector standards. See also M073.	Included	$6,812,000	Non-Exempt	Yes
M049	Herrin Rd NE: Middle Grove Dr NE to Cordon Rd NE	Widen to collector standards, replace bridge	Included	$5,791,000	Non-Exempt	Yes
M058	Pedestrian Treatments: various locations (set 3)	Construct sidewalks, ADA facilities, pedestrian crossings at various locations - used as match for grants for pedestrian projects.	Included	$3,420,000	Exempt	Yes
M059	Pedestrian Treatments: various locations (set 4)	Construct sidewalks, ADA facilities, pedestrian crossings at various locations - used as match for grants for pedestrian projects.	Included	$3,003,000	Exempt	Yes
M061	Swegle Rd NE: City limits to Cordon Rd NE	Widen to minor arterial standards, including 2 travel lanes plus a center turn lane with curbs, gutters, sidewalks and bike lanes.	Included	$3,649,000	Non-Exempt	Yes
M062	Turner Rd SE: Val View Dr SE to Turner UGB	Widen to minor arterial standards adding turn lanes where needed, bike lanes, curbs, gutters, and sidewalks. Partially developer funded. See T007	Included	$10,218,000	Non-Exempt	No
M070	Cordon Road SE & State St	Modify the intersection to upgrade the signal, add NB & SB travel lanes, NB right turn lane, EB & WB travel lanes. Assume 50 percent developer funded.	Committed	$4,485,000	Exempt	Yes
M074	Brooklake Rd NE Pedestrian Enhancements	On the north side of Brooklake Rd, provide sidewalks, add seating areas, lighting and landscaping.	Included	$1,271,000	Exempt	Partial or No
M077	Sunnyview Rd NE: Walker Rd NE to Cordon Rd NE	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Included	$2,676,000	Non-Exempt	Yes
M082	ITS - Overheight Warning System	Add two overheight warning systems and turn arounds on River Rd S before low clearence railroad bridges.	Included	$3,119,000	Exempt	TBD
M084	Center St NE: Greencrest Dr NE to Cordon Rd NE	Widen to major arterial standards, including bikelanes, sidewalks, curbs and gutters as necessary. Was S171.	Included	$10,342,000	Non-Exempt	Yes
M085	Center St: Lancaster Dr to 45th Pl (3-lane interim)	Widen to include 3-lane section with center turn lane, sidewalks and bike lanes on the north side. Stormwater mitigation as required. Was S171, see also M084.	Committed	$4,286,000	Non-Exempt	Yes
M086	Connecticut St: Bike and Pedestrian	Design bike and pedestrian path on west-side. PE Phase in 2020, construction in 2024.	Committed	$1,594,000	Exempt	Yes
M088	Marion County Curve Warning Signs	Upgrade and install new curve warning (chevron) signs on curves where warranted (Vitae Springs Rd, Orville Rd and River Rd South)	Committed	$357,000	Exempt	Yes
M090	Cordon Road: Caplinger Road to State Street	Construct to county parkway standards with 4 travel lanes, center turn lane and a multi-use path including required signal modifications at the intersections.	Included	$6,978,000	Non-Exempt	Yes
M093	Small Bridge Replacement	Replace small bridges at locations to be determined after further study.	Included	$2,472,000	Exempt	TBD

M095	State Street: 46th Avenue to Cordon Road	Widen to three travel lanes adding center turn lane with curbs, gutters, sidewalks and bike lanes. Joint project with Salem (see Sxxx).	Included	$12,283,000	Non-Exempt	Yes
M099	Macleay Rd: Lancaster Dr. to Connecticut Ave	Construct sidewalks and bicycle lanes.	Included	$5,791,000	Exempt	Yes
M100	Lancaster Dr NE: Monroe St NE to State St	Reconstruct road, including sidewalks, ADA and access modifications. See M027 for first part of project.	Included	$4,332,000	Exempt	Yes
M102	Chemeketa CC East/West Bike Corridor	Create a corridor for bicycle travel connecting to Chemeketa Community College. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding one section of the corridor (covered in other projects)	Included	$129,000	Exempt	Yes
O004	Chemawa/Hazelgreen & Portland Rd NE	Upgrade signal and interconnect	ODOT TBD	297,000.00	Exempt	Yes
O006	I-5 Phase IV: Kuebler Interchange to Delaney Rd. (SB Phase)	Widen I-5 southbound from Battlecreek Road to Delaney Road. Pave the existing section southbound and northbound. Replace a bridge over Commercial Street NB off-ramp. Rebuild and realign the SB Delaney Road off-ramp. Create concept level designs for replacing Battle Creek Road over-crossing bridge. Add broadband along the segment. Design and Right-of-Way for both directions. See also O039 for NB project.	Committed	$61,516,000	Non-Exempt	Yes
O008	Hwy 22 and 51 interchange	Construct an interchange at the OR22W and OR51 intersection. Year to be built is a placeholder based on the OR22W EMP to allow for YoE estimates. No funding is currently available (2022)	ODOT TBD	71,543,000.00	Non-Exempt	Partial
O010	ITS - En-Route Traveler Information System - Phase II-III	Deploy Dynamic Message Signs and city/county/state websites to notify motorists of incidents and other traveler information. Multiple phase project.	Included	3,909,000.00	Exempt	TBD
O021	Commercial St NE & Marion St Bridge	Restripe the through/right lane to a right-turn only lane giving 2 right-turn only lanes onto the bridge. Add curb extensions on the south side of the intersection and improve the northwest corner to facilitate truck turning movements.	ODOT TBD	353,000.00	Exempt	Yes
O022	I-5: Traffic Surveillance	Install a new camera at the Delaney Rd interchange (SB) and upgrade the existing camera (NB lanes) that is south of Enchanted Forest. Signal will be sent to the NW Traffic Operations Center in Salem. Part of a larger project on I-5 between Salem and Albany.	Committed	$235,000	Exempt	Partial
O025	Backage Roads (OR 22W)	Develop backage roads to the north of OR 22W corridor between the revised alignment of Doaks Ferry Rd. and OR 51. Cost represents amount available for planning and other stages. Listed in the TIP/STIP (key number 13188). Was P003.	Committed	13,512,000.00	Non-Exempt	Yes
O027	I-5: Delaney Road to Albany	Widen I-5 from Delaney Road interchange south to Albany. Add an additional lane in each direction. Cost estimate is for development work only. Project is in the SKATS area only at ramps for the Delaney Road interchange.	ODOT TBD	4,069,000.00	Non-Exempt	No
O028	Mission St @ 25th St: Turn Lane	Add a WB right turn lane with storage lane. From OR 22E Facility Plan.	ODOT TBD	475,000.00	Non-Exempt	Yes
O029	Mission St at Airport Road: EB Turn Lanes	Install EB right turn with storage lane on Airport Road. Improve the North/South geometry of the intersection. From the OR 22E Facility Plan.	ODOT TBD	1,153,000.00	Non-Exempt	Yes

O030	Mission St at Airport Rd: EB Turn Lane	Add EB left turn with storage lane (resulting in dual lefts). From the OR 22E Facility Plan.	ODOT TBD	748,000.00	Non-Exempt	Yes
O031	Mission St at Hawthorne Av: WB Turn Lane	Add a WB right turn with storage lane on Hawthorne Av. From OR 22E Facility Plan.	ODOT TBD	475,000.00	Non-Exempt	Yes
O032	Mission St at 25th St: Pedestrian Refuge	Add a pedestrian refuge island on west leg of the intersection. From the OR 22E Facility Plan.	ODOT TBD	339,000.00	Exempt	Yes
O033	Mission St (OR 22E) Corridor Multi-Use Path	Construct a separated multi-use path paralleling Mission St (OR 22E) from 25th St to Lancaster Dr. Preliminary proposal is for a path would follow Mission St to Turner Rd, go south until Cascade Park to a trail that goes under I-5 linking to Lancaster Dr. From the OR 22E Facility Plan.	ODOT TBD	1,015,000.00	Exempt	Yes
O034	Center St Bridge - Seismic Updates	Seismic updates to the Center Street Bridge based on the Seismic Study (2019). Funded by Oregon Legislature via HB 2001 for $60 million.	Committed	131,286,000.00	Exempt	Yes
O035	Chemawa / I-5 Phase 1 - Lockhaven/Chemawa Limited Widening	Projects from the Chemawa / I-5 IAMP for Phase 1 including widening Lockhaven Road from I-5 to the Verda Lane extension (see K0xx) and widening Chemawa Road from I-5 to Portland Road (OR99E).	ODOT TBD	64,859,000.00	Non-Exempt	Yes
O036	Chemawa / I-5 Phase 2 - Tepper / 35th / Indian	Projects from the Chemawa / I-5 IAMP for Phase 2, including realignment of	ODOT TBD	123,541,000.00	Non-Exempt	Yes
O037	Chemawa / I-5 Phase 3 - Chemawa Partial Cloverleaf	Projects from the Chemawa / I-5 IAMP for Phase 3. Build NB Partial cloverleaf interchange of I-5 and Chemawa Road on the eastside.	ODOT TBD	18,531,000.00	Non-Exempt	Yes
O038	Brooklake at I-5 Short-term projects	Placeholder for short-term projects from the Brooklake/I-5 IAMP (2022) Traffic signals at I-5 ramp terminals. Re-grade ramp terminals. Lengthen and widen I-5 off-ramps (increase to two-lanes) Traffic signal and turn lane on Brooklake Road at Huff Avenue	ODOT TBD	11,062,000.00	Non-Exempt	Partial
O039	I-5 from Kuebler Bv Interchange to Delaney Rd Interchange - Phase 2 NB	Widen I-5 to three lanes between Kuebler Boulevard and Delaney Road interchange ramps. Design and RoW were part of Phase 1 (O006). Phase 2 focuses on the NB lanes and the Battle Creek Road over-crossing bridge.	ODOT TBD	18,234,000.00	Non-Exempt	Yes
O041	Wallace Rd NW & Edgewater St NW (BHES)	Increase radius of westbound bridge ramp to Wallace Road NW, provide an additional westbound entrance lane from bridge onto Edgewater Road NW, and bridge ramp lanes, and close Musgrave Lane NW. Alternative access would be provided to impacted businesses.	ODOT TBD	3,959,000.00	Exempt	Yes
O042	Wallace Rd NW: Edgewater St NW to Orchard Heights Rd NW	Address safety issues through construction of a raised median with turn pockets to serve businesses. Pedestrian and bicycle facilities will be included.	ODOT TBD	3,897,000.00	Non-Exempt	Yes
S036	Doaks Ferry Rd NW: Brush College Rd NW to Orchard Heights Rd NW	Widen to 3 lanes where appropriate with curbs, bikelanes and sidewalks. Improves intersection at Orchard Hts. Developer contribution expected.	Included	$12,824,000	Non-Exempt	Yes
S061	17th St NE: Norway St NE to Sunnyview Rd NE	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Included	$4,962,000	Non-Exempt	Yes
S064	25th St SE: State St to Helm St SE	Add bike facilities and turn pockets as needed.	Included	$6,457,000	Exempt	Yes

S065	36th Av SE: Kuebler Bv SE to Langley St SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$2,234,000	Non-Exempt	Yes
S067	Battle Creek Rd SE: Kuebler Bv SE to Wiltsey Rd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks. Likely developer funded or built.	Included	$8,290,000	Non-Exempt	Yes
S071	Brush College Rd NW: Doaks Ferry Rd to BPA Power Lines	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks.	Included	$8,846,000	Non-Exempt	Yes
S079	Commercial SE & Ratcliff Drive SE	Construction of sidewalks along east side of Commercial St SE between Ratcliff Dr SE and Vista St SE, and new signal at Ratcliff Dr SE.	Committed	$5,908,000	Exempt	Yes
S082	Commercial St SE: Ratcliff Dr SE to Vista Av SE	Add curbs, gutters and sidewalks where missing along this segment of Commercial Street SE.	Committed	$3,729,000	Exempt	Yes
S083	Commercial St SE: Baxter Rd SE to I-5 Interchange	Widen to major arterial standards, including 4 travel lanes, left turn lanes at selected locations, curbs, gutters, sidewalks, and bike lanes.	Included	$23,882,000	Non-Exempt	Yes
S085	Cordon Rd SE & Hwy 22	Construct interchange with recommended signalized intersections and lane configurations. From Cordon Road Interchange Study and the OR 22E Facility Plan.	Included	$64,098,000	Non-Exempt	Yes
S087	Croisan Creek Rd S: River Rd S to Heath St S	Widen to collector standards by adding curbs, bikelanes & sidewalks	Included	$9,026,000	Exempt	Yes
S094	Fabry Rd SE: Reed Ln SE to Battle Creek Rd SE	Extend Fabry Rd SE eastward from Reed Ln SE to Battle Creek Rd SE. This along with the westward extension of Mildred Ln SE will provide an east/west minor arterial connection south of Kuebler Bv SE from Battle Creek Rd SE to Skyline Rd. Developer funded partially or fully.	Included	$7,618,000	Non-Exempt	Yes
S095	Front St N: Norway St NE to Division St NE	Rebuild Front Street to a modified minor arterial standard and aligning the railroad tracks down the center. Construct wide travel lanes as well as curbs, gutters, and sidewalks. The project includes the reconstruction of Mill Creek Bridge.	Included	$13,034,000	Non-Exempt	Yes
S096	Front St N: River Rd N to Norway St N	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Included	$5,637,000	Non-Exempt	Yes
S098	Glen Creek Rd NW: Crescent Dr NW to Westfarthing Way NW	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks.	Included	$7,736,000	Non-Exempt	Yes
S103	Hilfiker Ln SE: Commercial St SE to Pringle Rd SE	Construct extention of Hilfiker Lane SE to Hillrose Street SE and reconstruct both Hilfiker and Hillrose to collector standards, with two travel lanes, turn pockets, curbs, gutters, sidewalks, and bike lanes. A portion of the project will likely be developer funded.	Included	$7,741,000	Non-Exempt	Yes
S110	Kuebler Bv SE: Turner Rd SE to Hwy 22 Overpass	Widen to four travel lanes, paved or raised median, bike lanes, curbs, gutters and sidewalks, improvements to the bridge over Mill Creek. Developer funds the NB portion.	Included	$22,424,000	Non-Exempt	Yes
S113	Lancaster Dr SE: Cranston St SE to Kuebler Bv SE	Realign curves and widen to 2 travel lanes plus a center turn lane with curbs, gutters, sidewalks, and bike lanes.	Included	$8,007,000	Non-Exempt	Yes
S117	Macleay Rd SE: Pennsylvania Av SE to Cordon Rd SE	Widen to minor arterial standards, including 2 travel lanes, curbs, gutters, sidewalks, and bike lanes where designated.	Included	$7,616,000	Non-Exempt	Yes
S119	Madrona Av S: Biegler Lane S to Liberty Rd S	Widen to minor arterial standards, including 2 travel lanes with curbs, gutters, sidewalks and bike lanes, plus left turn lanes at intersections.	Included	$2,931,000	Non-Exempt	Yes
S120	Madrona Av S: Croisan Creek Rd S to Elderberry Dr S	Widen to an interim 2 travel lanes with curbs, gutters, sidewalks and bike lanes.	Included	$7,179,000	Exempt	Yes

S124	32nd Av SE & Trelstad Ave SE: East of I-5 to 36th Av SE signal at Kuebler Bv SE	Widen to minor arterial standards, including 2 travel lanes, left turn pockets where needed, curbs, gutters, sidewalks, and bike lanes.	Included	$10,634,000	Non-Exempt	Yes
S126	McGilchrist St SE: 12th St SE to 25th St SE	Reconstruct to a 3-lane standard from 12th to 22nd, and to a 4-lane standard (with eastbound lanes) from 22nd the 25th. Add or revise signals at 5 intersections, realign 22nd and widen both 22nd and 25th in the vicinity of McGilchrist. See S316. Work on/at 22nd separately funded. RAISE grant awarded in 2022 for $13,229,320. Also part of the 2022 GO Bond	Committed	$16,760,000	Non-Exempt	Yes
S128	Mildred Ln SE: Lone Oak Rd SE to Sunnyside Rd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$8,434,000	Non-Exempt	Yes
S131	Orchard Heights Rd NW: Parkway Dr NW to Snowbird Dr NW	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks. NEW *** Reconstruct northside of the road to include stormwater, bike and pedestrian facilities. See Sxyz for sidewalks on southside.	Included	$3,002,000	Non-Exempt	Yes
S132	Orchard Heights Rd NW: Titan Dr NW to UGB	Widen to minor arterial standards with 2 travel lanes, left turn lanes, bike lanes, curbs, gutters and sidewalks. Include realignment of Orchard Heights Rd west of BPA power lines. Developer funded.	Included	$9,056,000	Non-Exempt	Yes
S135	Pringle Rd SE: McGilchrist St SE to Georgia Av SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, stormwater treatment, streetlights, and sidewalks. Includes four pedestrian crossing near transit stops.	Committed	$19,220,000	Non-Exempt	Yes
S137	Robins Lane, east of Commercial St. SE	Connect Robins Lane to Battlecreek Rd with a new collector street alignment.	Included	$5,928,000	Non-Exempt	Yes
S143	Skyline Rd S: Maplewood Dr S to Mildred Lane S	Widen to minor arterial standards including 2 travel lanes, a center turn lane, curbs, gutters, sidewalks and bike lanes.	Included	$8,260,000	Non-Exempt	Yes
S147	Sunnyside Rd S: Kuebler Bv SE to Mildred Lane SE	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$14,729,000	Non-Exempt	Yes
S148	Sunnyside Rd S: Pawnee Circle SE to the UGB	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$17,060,000	Non-Exempt	Yes
S149	Sunnyview Rd NE: Evergreen Av NE to Fisher Rd NE	Install roundabout at Park Av NE, traffic signal at Lansing Av NE, and curbs, gutters, and sidewalks from Evergreen Avenue NE to Bryam Street NE.	Included	$8,036,000	Exempt	Yes
S155	Turner Rd SE: 2100 feet south of Cascade Gateway Park to Airway Dr SE	Project to include bike lanes, drainage, paved shoulder on one side, and curb, gutter and sidewalk on the other.	Included	$15,270,000	Exempt	Yes
S156	Turner Rd SE: Airway Dr SE to Kuebler Blvd SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$13,000,000	Non-Exempt	Yes
S158	Turner Rd SE: Gath Rd SE to UGB	Widen to minor arterial standards with 2 travel lanes, left turn pockets, bike lanes, curbs, gutters and sidewalks.	Included	$15,789,000	Non-Exempt	Yes
S168	Airport Rd SE: State St. to Mission St.	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters, and sidewalks	Included	$7,306,000	Non-Exempt	Yes
S172	Chemawa Rd NE: I-5 to Portland Rd NE	Widen to 4 lanes plus center turn lane, bike lanes, curbs, gutters and sidewalks.	Included	$6,956,000	Non-Exempt	Yes
S173	Cherry Av NE: BNRR to Dr. MLK Jr Parkway NE	Widen to 5 lanes with 4 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes	Included	$17,997,000	Non-Exempt	Yes

S174	Cherry Av NE: Johnson St NE to Pine St NE	Widen to an interim 3-lane configuration, with 2 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes	Included	$5,227,000	Non-Exempt	Yes
S178	Doaks Ferry Rd NW: Glen Creek Rd NW to Eola Dr NW	Widen to an interim 3-lane, minor arterial standard, with 2 travel lanes, center turn lane, bike lanes, curbs, gutters and sidewalks. Include all necessary realignments and intersection modifications.	Included	$9,483,000	Non-Exempt	Yes
S184	Hyacinth St NE: Dr. MLK Jr Parkway NE to Portland Rd NE	Widen to major arterial standards, including 4 travel lanes and a center turn lane with curbs, gutters, sidewalks, bike lanes and intersection modifications.	Included	$10,529,000	Non-Exempt	Yes
S185	Kale St NE: Portland Rd NE to Cordon Rd NE	Add a center turn lane, bike lanes, curbs and sidewalks in missing sections as development occurs.	Included	$9,171,000	Non-Exempt	Yes
S187	Kuebler Bv SE: Skyline Rd S to Liberty Rd SE	Widen to 4 lanes, curbs, sidewalks, bikelanes, center turn lane or median	Included	$3,672,000	Non-Exempt	Yes
S189	Liberty Rd S & Salem Heights Av S	Add northbound and southbound left turn lanes, bike lanes	Included	$5,929,000	Exempt	Yes
S190	Liberty Rd S: Commercial St SE to Browning Av SE	Widen to 4 travel lanes, center turn lanes or raised medians, curbs, gutters, sidewalks, and bike lanes.	Included	$49,779,000	Non-Exempt	Yes
S191	Liberty Rd S: Holder Ln SE to South UGB	Widen to an interim 3-lane urban standard, with 2 travel lanes, a center turn lane, curbs, gutters, sidewalks, and bike lanes.	Included	$5,047,000	Non-Exempt	Yes
S197	Battle Creek Rd SE: Kuebler Bv SE to Hillrose St SE	Widen to minor arterial standards with 2 travel lanes, center turn lane or turn pockets, bike lanes, curbs, gutters, and sidewalks. Additional lanes may be required in the vicinity of the Kuebler Bv intersection.	Included	$15,489,000	Non-Exempt	Yes
S198	Reed Rd SE: Battle Creek Rd SE to Strong Rd SE	pockets, bike lanes, curbs, gutters, and sidewalks. Half street modifications to	Included	$3,027,000	Non-Exempt	Yes
S204	Broadway St NE: Liberty St NE to Dr. MLK Jr Parkway NE	Add bike facilities. The portion from Dr. MLK Jr Parkway to Pine St NE is funded with ARTS funds is $1.4 million. This includes a turn pocket. See also Sxxx and Sxxy	Included	$3,633,000	Exempt	Yes
S205	Center St NE: Commercial St NE to 17th St NE	Add bike facilities	Included	$1,850,000	Exempt	Yes
S208	Commercial St SE: Mission St SE to Superior St SE	Add bike facilities	Included	$300,000	Exempt	Yes
S210	Liberty St: Trade St SE to E St NE	Add bike facilities	Included	$435,000	Exempt	Yes
S211	Marion St NE: 13th St NE to Commercial St NE	Add bike facilities	Included	$1,142,000	Exempt	Yes
S212	Market St NE: Commercial St NE to Hawthorne Av NE	Add bike facilities	Included	$7,410,000	Exempt	Yes
S213	Madrona Av SE: Liberty Rd S to Commercial St SE	Add bike facilities	Included	$661,000	Exempt	Yes
S214	Mission St SE: 12th St SE to Commercial St SE	Add bike facilities.	Included	$461,000	Exempt	Yes
S216	Silverton Rd NE: Fairgrounds Rd NE to Lancaster Dr NE	Add bike facilities	Included	$6,413,000	Exempt	Yes
S219	17th St NE: Sunnyview Rd NE to Silverton Rd NE	Add bike facilities	Included	$707,000	Exempt	Yes
S224	Broadway St NE: Dr. MLK Jr Parkway NE to River Rd N	Add bike facilities	Included	$262,000	Exempt	Yes
S225	D St NE: Lancaster Dr NE to Summer St NE	Add bike facilities	Included	$7,572,000	Exempt	Yes
S226	Fairgrounds Rd NE/Hood St NE: Summer St NE to Commercial St NE	Add bike facilities	Included	$335,000	Exempt	Yes

S229	Lana Av NE: Portland Rd NE to Silverton Rd NE	Add bike facilities	Included	$153,000	Exempt	Yes
S231	Madrona Av SE: Pringle Rd SE to Commercial St SE	Add bike facilities	Included	$2,918,000	Exempt	Yes
S236	25th St SE/Airway Dr SE: Madrona Av SE to Turner Rd SE	Add bike facilities	Included	$8,494,000	Exempt	Yes
S238	Sunnyview Rd NE: 17th St NE to Fairgrounds Rd NE	Add bike facilities	Included	$1,140,000	Exempt	Yes
S245	12th St SE: Ibsen St SE to Commercial St SE	Add sidewalks for the west side of the street.	Included	$2,068,000	Exempt	Yes
S247	Center St NE: Mitchel St NE to Cordon St NE	Add sidewalks. See S346.	Included	$15,506,000	Exempt	Yes
S248	Commerical St SE: Winding Way SE to Lansford Dr SE	Add sidewalks	Included	$16,547,000	Exempt	Yes
S249	~~Connecticut Ave SE~~ Bike/Ped overpass of Hwy 22 between Lancaster and Cordon	Construct a pedestrian overpass of Highway 22 connecting a residential area to the south to a shopping center and two schools to the north. Salem has an overcrossing from Bill Riegel Park to Miller E.S. in their plans.	Included	$9,073,000	Exempt	Yes
S274	Salem Industrial Dr Improvement	Widen half the street to collector standards, with sidewalks, curbs, gutters and bike lanes where designated.	Included	$7,066,000	Exempt	Yes
S286	Cordon Rd: Highway 22 E to Caplinger Rd SE	Widen to 4 lanes, plus center turn lane or left turn lanes at selected locations, curbs, gutters, sidewalks and bike lanes.	Included	$9,391,000	Non-Exempt	Yes
S287	Kuebler Blvd SE: I-5 to Turner Rd SE	Widen to 4 travel lanes, paved or raised median, bike lanes, curbs, gutters and sidewalks. This project includes turn lanes at Turner Rd SE and bridge modifications over the railroad.	Included	$31,559,000	Non-Exempt	Yes
S288	Hawthorne Ave NE: Silverton Rd NE to Sunnyview Rd NE	Widen to 2 travel lanes with center turn lane where needed. Add curbs, gutters, sidewalks, bicycle lanes, and modify intersection approach to Silverton Rd NE and Sunnyview Rd NE. Project scope is to do interim minor arterial projects using a modified cross section (46 feet curb to curb in a 64 foot ROW) with construction to major arterial standards within 400 feet of intersections with Silverton Rd and Sunnyview Ave. Project includes some intersection realignment on the south side of Sunnyview to line up with new cross section. See also S364 for Hawthorne Ave at Sunnyview Rd project.	Included	$28,073,000	Non-Exempt	Yes
S292	Brush College Rd NW: Pedestrian Project	Construct missing section (approximately 850 feet) of sidewalk on north side of Brush College Rd NW to Doaks Ferry Rd NW to provide access to Brush College Elementary school from the west.	Included	$6,238,000	Exempt	Yes
S293	Hines St SE Railroad Crossing Pedestrian Facilites	Construct sidewalks on Hines St SE at the Union Pacific railroad crossing, including relocating rail switching equipment, crossing arms, and connect to existing sidewalks.	Included	$5,049,000	Exempt	Yes
S297	Marine Drive NW: Harritt Dr Nw to Cameo St at 5th Av NW	Construct a new collector street to the east of Wallace Rd along alignment determined by the flood plain. Uses a special Salem TSP cross section with two travel lanes, new curb, sidewalk on westerly side, 12-foot multi-use path on the easterly side, stormwater treatment, and streetlights. Includes connetor streets at Beckett St and 5th Av and improvements to Harritt Dr NW. Sections may be constructged by developers depending on timing of development vs. funding for city construction. See also S343 and S382. In the 2022 GO Bond.	Committed	$23,530,000	Non-Exempt	Yes

S308	Capitol Mall to Keizer/Kroc Center Bike Corridor	Enhance the corridor for bicycle travel between the Capitol Mall and Keizer/Kroc Center. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects).	Included	$361,000	Exempt	Yes
S310	State St to Kroc Center Bike Corridor	Enhance corridor for bicycle travel between the State St in central east Salem and the Kroc Center. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects)	Included	$2,497,000	Exempt	Yes
S312	Geer Community Park to Hoover Elementary School Bike Corridor	Create a corridor for bicycle travel between Geer Community Park and Hoover Elementrary School. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Included	$164,000	Exempt	Yes
S314	McKay Park East/West Bike Corridor	Create a corridor for bicycle travel connecting to McKay Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding one section of the corridor (covered in other projects)	Included	$264,000	Exempt	Yes
S315	Four Corners Elementary School and Auburn Elementary School Bike Corridor	Create a corridor for bicycle travel between the Four Corners Elementary School and Auburn Elementary School. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Included	$507,000	Exempt	Yes
S317	Sprague HS to South Salem HS Bike Corridor	Create a corridor for bicycle travel between Sprague HS and South Salem HS. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Included	$857,000	Exempt	Yes
S318	Bush's Pasture Park to River Road Bike Corridor	Create a corridor for bicycle travel between the Bush's Pasture Park and River Road S. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Included	$76,000	Exempt	Yes
S319	Saginaw St Bike Corridor	Create a corridor for bicycle travel between Mission St and Rural Av, bypassing the Commercial/Liberty couplet. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards.	Included	$180,000	Exempt	Yes

S320	Clark Creek Park/South Village Park Bike Corridor	Create a corridor for bicycle travel between the Clark Creek Park and South Village Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Included	$388,000	Exempt	Yes
S321	Pringle Creek Path: Civic Center to Riverfront Park.	Construct a pedestrian bridge crossing of Pringle Creek under the Commercial street bridge, construct a new path along Pringle creek from Commercial Street under the existing railroad bridge to the Riverfront Park. Includes creek overlooks and art wall. From 2022 Salem GO Bond.	Committed	$5,300,000	Exempt	Yes
S322	Orchard Heights Park / Brush College Park Bike Corridor	Create a corridor for bicycle travel between Orchard Heights Park and Brush College Park. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding three sections of the corridor (covered in other projects)	Included	$705,000	Exempt	Yes
S323	2nd St NW Bike Corridor - Phase 1	Design and reconstruction of 2nd St NW, phased from Gerth Av NW to Wallace Rd NW. Phase 1 is between Patterson St NW to Wallace Rd NW. From the Salem CIP. See also S344. Previously $5.93 million has been allocated to this project.	Included	$2,953,000	Exempt	Yes
S324	25th St South of Mission St Bike Corridor	Create a corridor for bicycle travel along 25th Av SE. This will be accomplished by implementing the appropriate supporting facility, such as bike lanes, shared lane markings, off-street paths and/or modifying the road to bikeway standards. Cost is an estimate excluding two sections of the corridor (covered in other projects). See S221.	Included	$6,607,000	Exempt	Yes
S326	Cottage St - Convert to two-way	Convert to two-way with sharrows. From the Central Salem Mobility Study (2012).	Included	$1,649,000	Exempt	Yes
S333	Summer St NE & Marion St NE Intersection Modifications	Remove southbound right-turn movement from shared lane and remove fourth westbound lane east of Summer St and start it as an add lane for the southbound right-turn movement. From the Central Salem Mobility Study (2012).	Included	$274,000	Exempt	Yes
S336	Union St Bikeway - Phase 2 Summer St NE to 12th St NE	Build buffered bike lanes on Union Street from Summer St NE to 12th St curve and end at Marion St. Requires adjustment to curb extensions. From Central Salem Mobility Study (2012). See also S311 for Phase 1, S298 for the signal at Commercial St, and S347 for Phase 1B. Part of the 2022 GO Bond Package.	Committed	$4,300,000	Exempt	Yes
S340	Kroc Center Pathway	Build a bicycle/pedestrian connection between Hyacinth St NE and Bill Frey Dr, including a bridge over Claggett Creek. Cost estimate is for the most expensive option (concrete path and bridge).	Included	$3,973,000	Exempt	Yes
S341	Hyacinth St Multi-Use Path	Build a bicycle/pedestrian path along the south side of Hyacinth St NE between Dr. MLK Jr Parkway and Salem Industrial Drive NE.	Included	$1,214,000	Exempt	Yes
S342	Bike/Pedestrian Bridge over Dr. MLK Jr Parkway	Build a bridge over Dr. MLK Jr Parkway to separate bicycle and pedestrian travel from motorized vehicles. Would include connections to the existing multi-use path along Dr. MLK Jr Parkway and to the proposed multi-use path along Hyacinth St NE (see S3421).	Included	$12,170,000	Exempt	Yes

S343	Marine Dr NW: Harritt Av NW to River Bend Rd NW	Construct a collector/minor arterial from the Harritt Av NW extension to River Bend Rd NW. Road will include one lane in each direction, center turn pockets as necessary and facilities for bicycles and pedestrians. See also S297 and S382.	Included	$19,731,000	Non-Exempt	Yes
S345	Auburn Rd NE: Baldwin Av NE to Cordon Rd NE	Widen to collector standards, add bike lanes, drainage and sidewalks. Continuation of M071. Was M011. Developer funded.	Included	$4,137,000	Exempt	Yes
S347	Union St Bikeway: Phase 1B	Phase 1B includes curb extensions at the intersection of Liberty St NE and Union St NE, and the design and construction of enhanced bicycle facilities on Union St NE between Commercial St NE and Summer St NE. See also S298, S311, and S336.	Committed	$4,525,000	Exempt	Yes
S348	Fisher Rd NE - Silverton Rd NE to East/West Curve	On Fisher Rd NE from Silverton Rd NE to the East/West curve, construct to collector street standrads, including new curb, sidewalks, bike lanes, stormwater treatment, and streetlights. Includes a traffic signal replacement at Sunnyview Road and pedestrian crossings at Beverly Av and Devonshire Av. Part of the Salem 2022 GO Bond.	Committed	$27,650,000	Exempt	Yes
S354	Replace Railroad and McGilchrist St culverts on West Fork Pringle Creek	Replace Union Pacific Railroad and McGilchrist St culverts on West Fork Pringle Creek. From the Pringle Creek Basin Plan, project PC-01C. In FY2023 CIP.	Committed	$3,076,000	Exempt	Yes
S355	Hawthorne Av NE at Sunnyview Rd NE	Design and construction of modification to the northwest and southeast quadrants of the intersection of Hawthorne Ave NE at Sunnyview Rd NE to align the northbound and southbound left-turn pockets and add a new northbound right-turn pocket. This project would require minor widening of the southeast quadrant to accommodate the new right-turn lane. The project would also overlay the approaches, restripe the new lane configuration and relocate traffic signal poles in the NW and SE quadrants	Committed	$3,215,000	Exempt	Yes
S357	Turner Rd SE: Mill Creek Bridge to Deer Park Dr SE	Design and construction of full-street improvements from Mill Creek bridge to Deer Park Rd SE	Committed	$1,506,000	Non-Exempt	Yes
S358	Turner Rd SE at Gath Rd SE and Deer Park SE	Design and construction of improvements to realign Turner Rd SE at Gath Rd SE / Deer Park Dr SE and add SB and WB left-turn lanes.	Committed	$7,727,000	Non-Exempt	Yes
S359	Turner Rd SE: Kuebler Blvd SE to Mill Creek Bridge	Design and construction of full-street improvements on Turner Rd SE for 1500 linear feet from Kuebler Blvd SE to the Mill Creek bridge and 500 linear feet from Turner Rd SE north of Kuebler Blvd SE. Work also includes signal modifications and 1000 linear feet of half-street improvements on the south side of Kuebler Blvd SE from Turner Rd Se to the Mill Creek bridge.	Committed	$5,596,000	Non-Exempt	Yes
S360	Deer Park Dr SE Modifications	Construct full-street improvements from Aumsville Hwy SE to Turner Rd SE. Work includes one travel lane in each direction, left-turn pockets, curbs, and sidewalks.	Committed	$6,829,000	Non-Exempt	Yes
S362	Hilfiker Ln SE at Commercial St SE	Design, RoW, and construction to widen the approaches on Hilfiker Ln SE to allow a left-turn lane and bike lanes in both directions. Replace traffic signal.	Committed	$5,344,000	Exempt	Yes
S363	Commercial St SE: Oxford St SE to Madrona Ave SE	Design and construct buffered bike lanes and pedestrian crossings along this stretch.	Committed	$2,554,000	Exempt	Yes
S364	Commercial St SE: Madrona Av SE to Robins Ln SE - Signal Improvements	Design and construct upgrades at signalized intersections on Commercial St SE from Madrona Av SE to Robins Ln SE.	Committed	$952,000	Exempt	Yes

S365	State St at 25th St SE Intersections Improvements	Design and construct intersection modifications to improve pedestrian visability and reduce traffic incidents.	Committed	$798,000	Exempt	Yes
S366	Pedestrian Island and Crossing Safety Improvements Package	Design and construct crossing modifications on State St at 21st SE; Lancaster Dr NE at Weathers St NE and River Rd N at Riveria Dr NE. ***Note: Project list will be revised in Oct/Nov 2022 due to cost escalation	Committed	$1,752,000	Exempt	Yes
S367	Downtown Signal Upgrades	Design and construct upgrades at signalized intersections at various locations within downtown bordered by State St, Capitol St NE, Union St NE, and Commercial St NE.	Committed	$141,000	Exempt	Yes
S369	Orchard Hts Rd NW Modifications	Design and construct modifications along the south side of two segments of Orchard Hts Rd NW, from Snowbird Dr NW to Schoolhouse Ct NW, and from Chapman Hill Dr to Westhaven Av NW. Modifications include constructing missing curb, sidewalks, and widening Orchard Hts Nw to provide a pedestrian median island at Parkway Dr NW and WB left-turn pocket from Orchard Hts Rd Nw to Parkway Dr NW.	Committed	$2,939,000	Exempt	Yes
S370	Sunnyview Rd NE at Hollywood Dr NE Pedestrian Crossing	Design and construct a new median island crossing at Sunnyview Rd NE at Hollywood Dr NE with street lighting, improved crosswalk and ramps.	Committed	$210,000	Exempt	Yes
S372	Pedestrian Crossing Program	Design and construct pedestrian safety crossings. Locations determined annually based on opportunites or identified crossing safety issues.	Included	$1,161,000	Exempt	Yes
S373	Broadway St NE at Locust St NE Pedestrian Crossing	Design and construct a new median island crossing of Broadway St at Locust St NE, with street lighting, improved crosswalk, and ramps.	Committed	$192,000	Exempt	Yes
S374	Macleay Rd SE and Caplinger Rd SE Pedestrian Crossing	Design, RoW, and construction of a new crossing with pedestrian island, lighting, and new sidewalk on west side of Macleay Rd SE from 150 linear feet south of Periwinkle Dr SE to 100 linear feet west of Gaffin Rd SE and the south side of Caplinger Rd Se from Macleay Rd SE to 750 linear feet easterly to connect to existing sidewalk.	Committed	$2,763,000	Exempt	Yes
S376	Lone Oak Rd SE at Rees Hill Rd SE	lengthened left-turn lane and an acceleration lane on Rees Hill Rd SE.	Committed	$1,716,000	Exempt	Yes
S377	Davis Rd S: Skyline Dr S to Liberty Rd S	Urban upgrade of the existing road to add new curb, sidewalks, bikelane, stormwater treatment and streetlights with pedestrian crossings. Adds a new traffic signal at Davis Rd S at Liberty Rd S. From the 2022 Salem GO Bond.	Committed	$7,600,000	Exempt	Yes
S378	State St: 13th St NE to 17th St NE Bike Lanes and Pavement	Pavement rehabilitation and striping reconfiguration to one travel lane in each direction with a center turn lane and bike lanes. Includes a pedestrian crossing at 15th St andstreetscape features. Also includes a new traffic signal at the 17th St intersection. From the 2022 Salem GO Bond. See S217 for portion east of 17th.	Committed	$12,950,000	Exempt	Yes
S379	Broadway: Pine St N to Tryon St N	Add bike facilities via ARTS funds. See S204 and S380.	Committed	$2,382,000	Exempt	Yes
S382	Marine Dr NW: 5th St NW to Glen Creek Rd	Construct a new collector from 5th St NW to Glen Creek Rd. Road will include one lane in each direction, center turn pockets as necessary, facilities for bicycles and pedestrians, and appropriate stormwater treatment. See also S297 and S343.	Included	$32,951,000	Non-Exempt	Yes

S383	McGilchrist St SE at 22nd St SE	Realign 22nd St SE at McGilchrist St SE to make a four-leg intersection and install a new traffic signal to increase traffic flow. See S126 for remaining work on McGilchrist St SE.	Committed	$9,925,000	Exempt	Yes
T008	Delaney Road at Turner Road	Add sidewalks, bicycle lanes, and a right turn lane to Delaney Road east of Turner Road extending approximately 340 feet, connecting to the existing sidewalks and bicycles lanes at 2nd St. SE.	Included	$1,188,000	Exempt	No

Appendix Z – Adopting Resolutions

On the following pages are the Resolutions for the AQCD and RTSP

Resolution 23-13 : Adopting of the Air Quality Conformity Determination (AQCD) for the SKATS 2023-2050 Metropolitan Transportation Plan (MTP)

Resolution 23-14 : Adopting the SKATS 2023-2050 Metropolitan Transportation Plan (MTP)

Resolution 23-13

Resolution of the Salem-Keizer Area Transportation Study (SKATS) Policy Committee Adopting the Air Quality Conformity Determination for the SKATS 2023-2050 Metropolitan Transportation Plan

WHEREAS, the Salem-Keizer Area Transportation Study Policy Committee has been designated by the State of Oregon as the official Metropolitan Planning Organization (MPO) for the Salem-Keizer Urbanized Area; and

WHEREAS, the Policy Committee is authorized by an Intergovernmental Cooperative Agreement to adopt and adjust the Metropolitan Transportation Plan (MTP); and

WHEREAS, the SKATS area is currently designated non-attainment for the carbon monoxide standard;

WHEREAS, a new MTP must demonstrate air quality conformity before the MPT is approved by the MPO or accepted by the federal Department of Transportation, according to the requirements of OAR-340-252-0010 et. seq. (*Transportation Conformity Rule*)

NOW THEREFORE, BE IT RESOLVED BY THE POLICY COMMITTEE OF THE SALEM-KEIZER AREA TRANSPORTATION STUDY:

THAT the Air Quality Conformity Determination for the SKATS 2023-2050 MTP has been prepared according to state and federal regulations and undertaken through interagency coordination with local, state, and federal agencies;

THAT the Air Quality Conformity Determination for the SKATS 2023-2050 MTP has gone through a 30-day public and agency review period, and no negative responses were received as a result of that public review process;

THAT the SKATS 2023-2050 MTP has been determined to conform to requirements related to regional air quality emissions contained in OAR 340-252 (Transportation Conformity), and the SKATS Policy Committee hereby adopts the document *Air Quality Conformity Determination for the SKATS 2023-2050 Metropolitan Transportation Plan* dated May 15, 2023, in support of this resolution.

ADOPTED by the Policy Committee of the Salem-Keizer Area Transportation Study on the 23rd day of May 2023.

Cathy Clark

Chair
Salem-Keizer Area Transportation Study
Policy Committee

Resolution 23-14

Resolution Adopting the SKATS 2023-2050 Metropolitan Transportation Plan (MTP)

WHEREAS, the Salem-Keizer Area Transportation Study (SKATS) Policy Committee has been designated by the State of Oregon as the official Metropolitan Planning Organization (MPO) for the Salem Urbanized Area; and

WHEREAS, SKATS as the MPO is required by federal and state regulations to periodically prepare and adopt a 20-year transportation plan; and

WHEREAS, the SKATS Policy Committee is authorized by an Intergovernmental Cooperative Agreement to prepare and adopt said transportation plan; and

WHEREAS, the adopted SKATS Public Participation Process has been followed in the preparation and development of the SKATS 2023-2050 Metropolitan Transportation Plan (MTP), and the document has undergone the required 30-day public and agency review and comment period; and

WHEREAS, the public review draft of the SKATS 2023-2050 MTP has been revised to reflect responses to comments received during the public and agency review and comment period; and

WHEREAS, the **SKATS 2023-2050 MTP** has been shown to demonstrate conformity with the requirements of the federal Clean Air Act Amendments and the Oregon Statewide Conformity Rule; and

WHEREAS, the SKATS Regional Transportation Planning Process and the **SKATS 2023-2050 MTP** have been determined to be in substantial compliance with the required elements of federal legislation; and

WHEREAS, the projects contained in the SKATS 2023-2050 MTP demonstrate financial constraint; and

WHEREAS, the projects contained in the SKATS 2023-2050 MTP support the Oregon Department of Transportation and the Salem Area Mass Transit District in meeting the targets they have set for the federal performance measures;

NOW, THEREFORE, BE IT RESOLVED BY THE POLICY COMMITTEE OF THE SALEM-KEIZER AREA TRANSPORTATION STUDY:

THAT the SKATS 2023-2050 Metropolitan Transportation Plan (MTP), copies of which are on file at the Mid-Willamette Valley Council of Governments office, is hereby adopted; and

THAT the SKATS 2023-2050 MTP supersedes the Salem-Keizer Regional Transportation Systems Plan updated adopted in 2019.

ADOPTED by the Policy Committee of the Salem-Keizer Area Transportation Study on the 23rd day of May 2023.

Cathy Clark

Chair
Salem-Keizer Area Transportation Study
Policy Committee