

## Chapter 9: Transportation

### What is this chapter about?

The goals and policies in this chapter convey the City's intent to:

- Create a coordinated, efficient, and more affordable multimodal transportation system.
- Make cost-effective investments and system-management decisions that encourage people to choose healthy, active, and low-carbon transportation modes and systems, and enhance the economic competitiveness of the region.
- Reduce service disparities and achieve equitable access to all types of facilities and transportation modes.
- Ensure safety for users of all transportation modes, with attention to the most vulnerable users, including people with disabilities, those using mobility devices, the young, and the elderly.
- Guide the location and design of new street, pedestrian, bicycle, and trail infrastructure.
- Direct how and when transportation infrastructure is managed and maintained.
- Provide policy guidance for developing and implementing the Transportation System Plan.

### Why is this important?

The transportation system is essential to the functioning of the city and the well-being and prosperity of the community. It connects people and businesses to goods and services, and links them to the region, state, nation, and world. Although transportation is often measured in terms of mobility, it also creates access to opportunity. The way we build our city has an impact on our mobility and, by extension, our access to opportunity. These goals and policies also reflect the role of transportation planning in reducing carbon emissions and improving public health. Finally, this chapter acknowledges the role that streets can play in providing great civic and recreational spaces.

With its 1980 Comprehensive Plan, the City of Portland became a national leader in the integration of land use and transportation. The 2035 Comprehensive Plan builds on that tradition and adds new innovations. The goals and policies in this chapter increase the focus on complete multimodal transportation systems. The historical emphasis on automobile mobility increasingly creates a cost burden on households and the community as a whole. For the city to successfully meet its transportation system goals for the future, other more affordable choices must be widely available and safe.

### **What is the Transportation System Plan?**

The Transportation System Plan (TSP) is the 20-year plan to guide transportation investments in Portland. The TSP meets state and regional planning requirements and addresses local transportation needs. It includes:

- Policies that guide the maintenance, development, and implementation of Portland’s transportation system.
- A list of projects necessary to accommodate 20 years of growth in population and employment, including a financial plan.
- Master street plans and modal plans.
- Strategies and regulations for implementation, including street classification maps.

Elements of the TSP — the policies, the projects included in the List of Significant Projects, street classification maps, and street plan maps — are adopted as part of the Comprehensive Plan. The TSP itself is adopted concurrently with the Comprehensive Plan but is published under a separate cover. For ease of use and transparency, the citywide policies from the TSP are also included in this chapter of the Comprehensive Plan.

The TSP also provides more detail than the Comprehensive Plan by including additional sub-policies and area-specific policies, and additional supporting information about transportation system conditions. The TSP contains the transportation element of the City’s Public Facilities Plan. Figure 9-1 — Transportation System Plan: Relationship to Other Policies and Plans illustrates the relationship between the TSP and other policies and plans.

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## Goals

### **GOAL 9.A: Safety**

The City achieves the standard of zero traffic-related fatalities and serious injuries. Transportation safety impacts the livability of a city and the comfort and security of those using City streets. Comprehensive efforts to improve transportation safety through equity, engineering, education, enforcement and evaluation will be used to eliminate traffic-related fatalities and serious injuries from Portland's transportation system.

### **Goal 9.B: Multiple goals**

Portland's transportation system is funded and maintained to achieve multiple goals and measurable outcomes for people and the environment. The transportation system is safe, complete, interconnected, multimodal, and fulfills daily needs for people and businesses.

### **GOAL 9.C: Great places**

Portland's transportation system enhances quality of life for all Portlanders, reinforces existing neighborhoods and great places, and helps make new great places in town centers, neighborhood centers and corridors, and civic corridors.

### **GOAL 9.D: Environmentally sustainable**

The transportation system increasingly uses active transportation, renewable energy, or electricity from renewable sources, achieves adopted carbon reduction targets, and reduces air pollution, water pollution, noise, and Portlanders' reliance on private vehicles.

### **GOAL 9.E: Equitable transportation**

The transportation system provides all Portlanders options to move about the city and meet their daily needs by using a variety of safe, efficient, convenient, and affordable modes of transportation. Transportation investments are responsive to the distinct needs of each community.

### **GOAL 9.F: Positive health outcomes**

The transportation system promotes positive health outcomes and minimizes negative impacts for all Portlanders by supporting active transportation, physical activity, and community and individual health.

### **GOAL 9.G: Opportunities for prosperity**

The transportation system supports a strong and diverse economy, enhances the competitiveness of the city and region, and maintains Portland's role as a West Coast trade gateway and freight hub by providing efficient and reliable goods movement, multimodal access to employment areas and educational institutions, as well as enhanced freight access to industrial areas and intermodal freight facilities. The transportation system helps people and businesses reduce spending and keep money in the local economy by providing affordable alternatives to driving.

**GOAL 9.H: Cost effectiveness**

The City analyzes and prioritizes capital and operating investments to cost effectively achieve the above goals while responsibly managing and protecting our past investments in existing assets.

**GOAL 9.I: Airport Futures**

Promote a sustainable airport (Portland International Airport [PDX]) by meeting the region’s air transportation needs without compromising livability and quality of life for future generations.

**Policies**

**Design and planning**

The City of Portland’s transportation system is a key public facility. The following policies describe what the transportation system is, what it does, and what factors to consider in how the overall system is used. *Policies 8.1-8.60 in Chapter 8: Public Facilities and Services also apply to the need for quality facilities and services, multiple benefits, reliability, and creating a multi-purpose and safe right-of-way.*

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

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

**9.2.a.** Designate district classifications that emphasize freight mobility and access in industrial and employment areas serving high levels of truck traffic and to accommodate the needs of intermodal freight movement.

**9.2.b.** Designate district classifications that give priority to pedestrian access in areas where high levels of pedestrian activity exist or are planned, including the Central City, Gateway regional center, town centers, neighborhood centers, and transit station areas.

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

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**Policy 9.3**     **Transportation System Plan.** Maintain and implement the Transportation System Plan (TSP) as the decision-making tool for transportation-related projects, policies, programs, and street design.

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

**9.4.a** Classification descriptions are used to describe how streets should function for each mode of travel, not necessarily how they are functioning at present.

**Policy 9.5**     **Mode share goals and Vehicle Miles Travelled (VMT) reduction.** Increase the share of trips made using active and low-carbon transportation modes. Reduce VMT to achieve targets set in the most current Climate Action Plan and Transportation System Plan, and meet or exceed Metro’s mode share and VMT targets.

**Policy 9.6**     **Transportation strategy for people movement.** Implement a prioritization of modes for people movement by making transportation system decisions according to the following ordered list:

1. Walking
2. Bicycling
3. Transit
4. Fleets of electric, fully automated, multiple passenger vehicles
5. Other shared vehicles
6. Low or no occupancy vehicles, fossil-fueled non-transit vehicles

When implementing this prioritization, ensure that:

- The needs and safety of each group of users are considered, and changes do not make existing conditions worse for the most vulnerable users higher on the ordered list.
- All users’ needs are balanced with the intent of optimizing the right of way for multiple modes on the same street.
- When necessary to ensure safety, accommodate some users on parallel streets as part of a multi-street corridor.
- Land use and system plans, network functionality for all modes, other street functions, and complete street policies, are maintained.
- Policy-based rationale is provided if modes lower in the ordered list are prioritized.

*Specific modal policies are found below in policies 9.17 to 9.40.*

**Policy 9.7**     **Moving goods and delivering services.** In tandem with people movement, maintain efficient and reliable movement of goods and services as a critical

transportation system function. Prioritize freight system reliability improvements over single-occupancy vehicle mobility where there are solutions that distinctly address those different needs. *Multimodal freight policies are found below in policies 9.33 to 9.35.*

**Policy 9.8 Affordability.** Improve and maintain the transportation system to increase access to convenient and affordable transportation options for all Portlanders, especially those who have traditionally been under-served or under-represented or have historically borne unequal burdens.

**Policy 9.9 Accessible and age-friendly transportation system.** Ensure that transportation facilities are accessible to people of all ages and abilities, and that all improvements to the transportation system (traffic, transit, bicycle, and pedestrian) in the public right-of-way comply with the Americans with Disabilities Act of 1990. Improve and adapt the transportation system to better meet the needs of the most vulnerable users, including the young, older adults, and people with different abilities.

**Policy 9.10 Geographic policies.** Adopt geographically-specific policies in the Transportation System Plan to ensure that transportation infrastructure reflects the unique topography, historic character, natural features, system gaps, economic needs, demographics, and land uses of each area. Use the Pattern Areas identified in Chapter 3: Urban Form as the basis for area policies.

**9.10.a** Refer to adopted area plans for additional applicable geographic objectives related to transportation. Land use, development, and placemaking

Land use patterns and connections among different land uses are key elements defining the form and character of places. In tandem with Chapter 3: Urban Form and Chapter 4: Design and Development, the policies in this section give direction for designing and building a transportation system that supports, complements, and meets the needs of different places. These policies acknowledge development adjacent to transportation as a critical component in shaping the future of Portland’s public spaces and places.

**Policy 9.11 Land use and transportation coordination.** Implement the Comprehensive Plan Map and the Urban Design Framework through coordinated long-range transportation and land use planning. Ensure that street policy and design classifications and land uses complement one another.

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**Policy 9.12 Growth strategy.** Use street design and policy classifications to support Goals 3A-3G in Chapter 3: Urban Form. Consider the different design contexts and transportation functions in Town Centers, Neighborhood Centers, Neighborhood Corridors, Employment Areas, Freight Corridors, Civic Corridors, Transit Station Areas, and Greenways.

**Policy 9.13 Development and street design.** Evaluate adjacent land uses to help inform street classifications in framing, shaping, and activating the public space of streets. Guide development and land use to create the kinds of places and street environments intended for different types of streets.

## Streets as public spaces

Streets, including sidewalks and planting strips, provide critical transportation and utility functions. In Portland, streets are the most abundant type of public space, occupying nearly 20 percent of land area in the city. The following policies support community desire to expand the use of streets beyond their transportation functions. *See Chapter 8: Public Facilities and Services and Chapter 4: Design and Development for further use and streetscape policies.*

**Policy 9.14 Streets for transportation and public spaces.** Integrate both placemaking and transportation functions when designing and managing streets by encouraging design, development, and operation of streets to enhance opportunities for them to serve as places for community interaction, environmental function, open space, tree canopy, recreation, and other community purposes.

**Policy 9.15 Repurposing street space.** Encourage repurposing street segments that are not critical for transportation connectivity to other community purposes.

**Policy 9.16 Design with nature.** Promote street and trail alignments and designs that respond to topography and natural features, when feasible, and protect streams, wildlife habitat, and native trees.

## Modal policies

Portland is committed to providing a multimodal transportation system that offers affordable and convenient travel options within the city, region, and outside the Metro area. Because trips are made for different reasons, they vary in length and type of vehicle (mode) needed to make them. Different modes create different kinds of impacts — on neighborhood livability and carbon emissions, for example. These policies recognize that some modes are more appropriate than others for different types of trips.

**Policy 9.17 Pedestrian transportation.** Encourage walking as the most attractive mode of transportation for most short trips, within neighborhoods and to centers, corridors, and major destinations, and as a means for accessing transit.

**Policy 9.18 Pedestrian networks.** Create more complete networks of pedestrian facilities, and improve the quality of the pedestrian environment.

**Policy 9.19 Pedestrian safety and accessibility.** Improve pedestrian safety, accessibility, and convenience for people of all ages and abilities.

**Policy 9.20 Bicycle transportation.** Create conditions that make bicycling more attractive than driving for most trips of approximately three miles or less.

**Policy 9.21 Accessible bicycle system.** Create a bicycle transportation system that is safe, comfortable, and accessible to people of all ages and abilities.

**Policy 9.22 Public transportation.** Coordinate with public transit agencies to create conditions that make transit the preferred mode of travel for trips that are longer than 3 miles or shorter trips not made by walking or bicycling.

**9.22.a** Consider and incorporate transit priority treatments, such as those in The Enhanced Transit Corridors Plan, to improve transit speed and reliability during the planning and design phase of capital projects and permitted projects along streets served by transit lines.

**Policy 9.23 Transportation to job centers.** Promote and enhance transit to be more convenient and economical than the automobile for people travelling more than three miles to and from the Central City and Gateway. Enhance regional access to the Central City and access from Portland to other regional job centers.

**Policy 9.24 Transit service.** In partnership with TriMet, develop a public transportation system that conveniently, safely, comfortably, and equitably serves residents and workers 24 hours a day, 7 days a week.

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- Policy 9.25**    **Transit equity.** In partnership with TriMet, maintain and expand high-quality frequent transit service to all Town Centers, Civic Corridors, Neighborhood Centers, Neighborhood Corridors, and other major concentrations of employment, and improve service to areas with high concentrations of poverty and historically under-served and under-represented communities.
- 9.25.a** Support a public transit system and regional transportation that address the transportation needs of historically marginalized communities and provide increased mobility options and access.
- Policy 9.26**    **Transit funding.** Consider funding strategies and partnership opportunities that improve access to and equity in transit service, such as raising metro-wide funding to improve service and decrease user fees/fares.
- Policy 9.27**    **Transit service to centers and corridors.** Use transit investments as a means to shape the city’s growth and increase transit use. In partnership with TriMet and Metro, maintain, expand, and enhance Portland Streetcar, frequent service bus, and high-capacity transit, to better serve centers and corridors with the highest intensity of potential employment and household growth.
- 9.27.a** Locate major park-and-ride lots only where transit ridership is increased significantly, vehicle miles traveled are reduced, transit-supportive development is not hampered, bus service is not available or is inadequate, and the surrounding area is not negatively impacted.
- Policy 9.28**    **Intercity passenger service.** Coordinate planning and project development to expand intercity passenger transportation services in the Willamette Valley, and from Portland to California, Seattle, and Vancouver, BC.
- Policy 9.29**    **Regional trafficways and transitways.** Maintain capacity of regional transitways and existing regional trafficways to accommodate through-traffic.
- Policy 9.30**    **Multimodal goods movement.** Develop, maintain, and enhance a multimodal freight transportation system for the safe, reliable, sustainable, and efficient movement of goods within and through the city.
- Policy 9.31**    **Economic development and industrial lands.** Ensure that the transportation system supports traded sector economic development plans and full utilization of prime industrial land, including brownfield redevelopment.
- Policy 9.32**    **Multimodal system and hub.** Maintain Portland’s role as a multimodal hub for global and regional movement of goods. Enhance Portland’s network of multimodal freight corridors.

- Policy 9.33** **Freight network.** Develop, manage, and maintain a safe, efficient, and reliable freight street network to provide freight access to and from intermodal freight facilities, industrial and commercial districts, and the regional transportation system. Invest to accommodate forecasted growth of interregional freight volumes and provide access to truck, marine, rail, and air transportation systems. Ensure designated routes and facilities are adequate for over-dimensional trucks and emergency equipment.
- Policy 9.34** **Sustainable freight system.** Support the efficient delivery of goods and services to businesses and neighborhoods, while also reducing environmental and neighborhood impacts. Encourage the use of energy efficient and clean delivery vehicles, and manage on- and off-street loading spaces to ensure adequate access for deliveries to businesses, while maintaining access to homes and businesses.
- Policy 9.35** **Freight rail network.** Coordinate with stakeholders and regional partners to support continued reinvestment in, and modernization of, the freight rail network.
- Policy 9.36** **Portland Harbor.** Coordinate with the Port of Portland, private stakeholders, and regional partners to improve and maintain access to marine terminals and related river-dependent uses in Portland Harbor.
- 9.36.a.** Support continued reinvestment in, and modernization of, marine terminals in Portland Harbor.
- 9.36.b.** Facilitate continued maintenance of the shipping channels in Portland Harbor and the Columbia River.
- 9.36.c.** Support shifting more long-distance, high-volume movement of goods to river and oceangoing ships and rail.
- See Policy 3.71 for the river transportation policy.*
- Policy 9.37** **Portland Heliport.** Maintain Portland’s Heliport functionality in the Central City.
- Policy 9.38** **Automobile transportation.** Maintain acceptable levels of mobility and access for private automobiles while reducing overall vehicle miles traveled (VMT) and negative impacts of private automobiles on the environment and human health.
- Policy 9.39** **Automobile efficiency.** Coordinate land use and transportation plans and programs with other public and private stakeholders to encourage vehicle technology innovation, shifts toward electric and other cleaner, more energy-efficient vehicles and fuels, integration of smart vehicle technology

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with intelligent transportation systems, and greater use of options such as car-share, carpool, and taxi.

**Policy 9.40**    **Emergency response.** Maintain a network of accessible emergency response streets to facilitate safe and expedient emergency response and evacuation. Ensure that police, fire, ambulance, and other emergency providers can reach their destinations in a timely fashion, without negatively impacting traffic calming and other measures intended to reduce crashes and improve safety.

## **Airport Futures**

The Port of Portland manages the Portland International Airport (PDX) as a regional, national, and international air transportation hub. The Port partnered with the City of Portland and Multnomah, Washington, and Clackamas Counties to prepare the Airport Futures Plan (2010) and guide airport development to 2035. Policy direction set in this project include Goal 9.I and the following policies. *Additional airport-related policies are found in Chapter 4: Design and Development and Chapter 7: Environment and Watershed Health.*

**Policy 9.41**    **Portland International Airport.** Maintain the Portland International Airport as an important regional, national, and international transportation hub serving the bi-state economy.

**Policy 9.42**    **Airport regulations.** Implement the Airport Futures Plan through the implementation of the Portland International Airport Plan District.

**9.42.a.** Prohibit the development of a potential third parallel runway at PDX unless need for its construction is established through a transparent, thorough, and regional planning process.

**9.42.b.** Support implementation of the Aircraft Landing Zone to provide safer operating conditions for aircraft in the vicinity of Portland International Airport by limiting the height of structures, vegetation, and construction equipment.

**9.42.c.** Support the Port of Portland’s Wildlife Hazard Management Plan by implementing airport-specific landscaping requirements in the Portland International Airport Plan District to reduce conflicts between wildlife and aircraft.

**Policy 9.43 Airport partnerships.** Partner with the Port of Portland and the regional community to address the critical interconnection between economic development, environmental stewardship, and social responsibility. Support an ongoing public advisory committee for PDX to:

**9.43.a.** Support meaningful and collaborative public dialogue and engagement on airport related planning and development.

**9.43.b.** Provide an opportunity for the community to inform the decision-making related to the airport of the Port, the City of Portland, and other jurisdictions/organizations in the region.

**9.43.c.** Raise public knowledge about PDX and impacted communities.

**Policy 9.44 Airport investments.** Ensure that new development and redevelopment of airport facilities supports the City’s and the Port’s sustainability goals and policies, and is in accordance with Figure 9-3 — Portland International Airport. Allow the Port flexibility in configuring airport facilities to preserve future development options, minimize environmental impacts, use land resources efficiently, maximize operational efficiency, ensure development can be effectively phased, and address Federal Aviation Administration’s airport design criteria.

## System management

Portland’s transportation system is an integrated network of roads, rails, trails, sidewalks, bicycle paths, and other facilities within and through the city. These modal networks intersect and are often located within the same right-of-way. The policies below provide direction to manage the system in ways that:

- Allow different modes to interact safely.
- Maximize the capacity of the existing network.
- Identify where additional capacity might be needed.

*Also see Policies 8.37 through 8.49 in Chapter 8: Public Facilities and Services.*

**Policy 9.45 System management.** Give preference to transportation improvements that use existing roadway capacity efficiently and that improve the safety of the system for all users.

**9.45.a** Support regional equity measures for transportation system evaluation.

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**Policy 9.46**    **Traffic management.** Evaluate and encourage traffic speed and volume to be consistent with street classifications and desired land uses to improve safety, preserve and enhance neighborhood livability, and meet system goals of calming vehicle traffic through a combination of enforcement, engineering, and education efforts.

**9.46.a** Use traffic calming tools, traffic diversion and other available tools and methods to create and maintain sufficiently low automotive volumes and speeds on neighborhood greenways to ensure comfortable cycling environment on the street.

**Policy 9.47**    **Connectivity.** Establish an interconnected, multimodal transportation system to serve centers and other significant locations. Promote a logical, direct, and connected street system through street spacing guidelines and district-specific street plans found in the Transportation System Plan, and prioritize access to specific places by certain modes in accordance with policies 9.6 and 9.7.

**9.47.a** Develop conceptual master street plans for areas of the City that have significant amounts of vacant or underdeveloped land and where the street network does not meet City and Metro connectivity guidelines.

**9.47.b** As areas with adopted Street Plans develop, provide connectivity for all modes by developing the streets and accessways as shown on the Master Street Plan Maps in the Comp Plan.

**9.47.c** Continue to provide connectivity in areas with adopted Street Plans for all modes of travel by developing public and private streets as shown on the Master Street Plan Maps in the Comp Plan.

**9.47.d** Provide street connections with spacing of no more than 530 feet between connections except where prevented by barriers such as topography, railroads, freeways, or environmental constraints. Where streets must cross over protected water features, provide crossings at an average spacing of 800 to 1000 feet, unless exceptional habitat quality of length of crossing prevents a full street connection.

**9.47.e** Provide bike and pedestrian connections at approximately 330 feet intervals on public easements or rights-of-way when full street connections are not possible, except where prevented by barriers such as topography, railroads, freeways, or environmental constraints. Bike and pedestrian connections that cross protected water features should have an average spacing of no more than 530 feet, unless exceptional habitat quality or length of connection prevents a connection.

**Policy 9.48 Technology.** Encourage the use of emerging vehicle and parking technology to improve real-time management of the transportation network and to manage and allocate parking supply and demand.

**Policy 9.49 Performance measures.** Establish multimodal performance measures and measures of system completeness to evaluate and monitor the adequacy of transportation services based on performance measures in goals 9.A. through 9.I. Use these measures to evaluate overall system performance, inform corridor and area-specific plans and investments, identify project and program needs, evaluate and prioritize investments, and regulate development, institutional campus growth, zone changes, Comprehensive Plan Map amendments, and conditional uses.

**9.49.a.** Eliminate deaths and serious injuries for all who share Portland streets by 2025.

**9.49.b.** Maintain or decrease the number of peak period non-freight motor vehicle trips, system-wide and within each mobility corridor to reduce or manage congestion.

**9.49.c.** By 2035, reduce the number of miles Portlanders travel by car to 11 miles per day or less, on average.

**9.49.d.** Establish mode split targets in 2040 Growth Concept areas within the City, consistent with Metro’s targets for these areas.

**9.49.e.** By 2035, increase the mode share of daily non-drive alone trips to 70 percent citywide, and to the following in the five pattern areas:

Pattern Area	2035 daily target mode share
Central City	85%
Inner Neighborhoods	70%
Western Neighborhoods	65%
Eastern Neighborhoods	65%
Industrial and River	55%

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**9.49.f.** By 2035, 70 percent of commuters walk, bike, take transit, carpool, or work from home at approximately the following rates:

Mode	Mode Share
Walk	7.5%
Bicycle	25%
Transit	25%
Carpool	12.5%
Single Occupant Vehicle (SOV)	30% or less
Work at home	10% below the line (calculated outside of the modal targets above)

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

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

**9.49.i.** Develop and use alternatives to the level-of-service measure to improve safety, encourage multimodal transportation, and to evaluate and mitigate maintenance and new trip impacts from new development.

**9.49.j.** Use level-of-service, consistent with Table 9.1, as one measure to evaluate the adequacy of transportation facilities in the vicinity of sites subject to land use review.

**9.49.k.** Maintain acceptable levels of performance on state facilities and the regional arterial and throughway network, consistent with the interim standard in Table 9.2, in the development and adoption of, and amendments to, the Transportation System Plan and in legislative amendments to the Comprehensive Plan Map.

**9.49.l.** In areas identified by Metro that exceed the level-of-service in Table 9.2 and are planned to, but do not currently meet the alternative performance criteria, establish an action plan that does the following:

- Anticipates growth and future impacts of motor vehicle traffic on multimodal travel in the area
- Establishes strategies for mitigating the future impacts of motor vehicles
- Establishes performance standards for monitoring and implementing the action plan.

**9.49.m.** Develop performance measures to track progress in creating and maintaining the transportation system.

**Policy 9.50 Regional congestion management.** Coordinate with Metro to establish new regional multimodal mobility standards that prioritize transit, freight, and system completeness.

**9.50.a.** Create a regional congestion management approach, including a market-based system, to price or charge for auto trips and parking, better account for the cost of auto trips, and to more efficiently manage the regional system.

**Policy 9.51 Multimodal Mixed-Use Area.** Manage Central City Plan amendments in accordance with the designated Central City Multimodal Mixed-Use Area (MMA) in the geography indicated in Figure 9-2. The MMA renders congestion / mobility standards inapplicable to any proposed plan amendments under OAR 660-0012-0060(10).

## **Transportation Demand Management**

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

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

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

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programs. Monitor and improve the performance of private-sector TDM programs.

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

## Parking management

Vibrant urban places link people and activities. As Portland grows, we must manage both the demand and supply of parking to achieve climate, health, livability, and prosperity goals. Providing too much and/or underpriced parking can lead to more driving and less walking, cycling, and transit use; inefficient land use patterns; and sprawl. Insufficient parking can negatively affect neighborhood livability and economic vitality. These policies provide guidance to manage parking demand and supply to meet a variety of public objectives, including achieving compact walkable communities, reducing private vehicle ownership and overall vehicle use, enhancing livability, reducing pollution, and expanding economic opportunity.

**Policy 9.55**    **Parking management.** Reduce parking demand and manage supply to improve pedestrian, bicycle and transit mode share, neighborhood livability, safety, business district vitality, vehicle miles traveled (VMT) reduction, and air quality. Implement strategies that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability.

**Policy 9.56**    **Curb Zone.** Recognize that the Curb Zone is a public space, a physical and spatial asset that has value and cost. Evaluate whether, when, and where parking is the highest and best use of this public space in support of broad City policy goals and local land use context. Establish thresholds to utilize parking management and pricing tools in areas with high parking demand to ensure adequate on-street parking supply during peak periods.

**Policy 9.57**    **On-street parking.** Manage parking and loading demand, supply, and operations in the public right of way to achieve mode share objectives, and to encourage safety, economic vitality, and livability. Use transportation demand management and pricing of parking in areas with high parking demand.

**Policy 9.58**    **Off-street parking.** Limit the development of new parking spaces to achieve land use, transportation, and environmental goals, especially in locations with frequent transit service. Regulate off-street parking to achieve mode share objectives, promote compact and walkable urban form, encourage lower rates of car ownership, and promote the vitality of commercial and employment areas. Use transportation demand management and pricing of

parking in areas with high parking demand. Strive to provide adequate but not excessive off-street parking where needed, consistent with the preceding practices.

- Policy 9.59 Share space and resources.** Encourage the shared use of parking and vehicles to maximize the efficient use of limited urban space.
- Policy 9.60 Cost and price.** Recognize the high public and private cost of parking by encouraging prices that reflect the cost of providing parking and balance demand and supply. Discourage employee and resident parking subsidies.
- Policy 9.61 Bicycle parking.** Promote the development of new bicycle parking facilities including dedicated bike parking in the public right-of-way. Provide sufficient bicycle parking at high-capacity transit stations to enhance bicycle connection opportunities. Require provision of adequate off-street bicycle parking for new development and redevelopment. Encourage the provision of parking for different types of bicycles. In establishing the standards for long-term bicycle parking, consider the needs of persons with different levels of ability.

## **Finance, programs, and coordination**

Programs and funding are required to build and maintain the transportation system, and they are necessary to help decide what projects to build. They also provide public information about what facilities are available and how they can be used. Agencies outside the City also own and operate facilities within Portland and provide funding for new facilities. These policies address essential funding and coordination opportunities with other agencies, as well outreach and education programming.

- Policy 9.62 Coordination.** Coordinate with state and federal agencies, local and regional governments, special districts, other City bureaus, and providers of transportation services when planning for, developing, and funding transportation facilities and services.
- Policy 9.63 New development impacts.** Prevent, reduce, and mitigate the impacts of new development and redevelopment on the transportation system. Utilize strategies including transportation and parking demand management, transportation system analysis, and system and local impact mitigation improvements and fees.
- Policy 9.64 Education and encouragement.** Create, maintain, and coordinate educational and encouragement programs that support multimodal transportation and that emphasize safety for all modes of transportation. Ensure that these programs are accessible to historically under-served and under-represented populations.

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**Policy 9.65 Telecommuting.** Promote telecommuting and the use of communications technology to reduce travel demand.

**Policy 9.66 Project and program selection criteria.** Establish transportation project and program selection criteria consistent with goals 9A through 9I, to cost-effectively achieve access, placemaking, sustainability, equity, health, prosperity, and safety goals.

**Policy 9.67 Funding.** Encourage the development of a range of stable transportation funding sources that provide adequate resources to build and maintain an equitable and sustainable transportation system.

## **New Mobility**

Ensure that connected and automated vehicles advance Portland’s Comprehensive Plan multiple transportation goals and policies, including vision zero, climate pollution reduction and cleaner air, equity, physical activity, economic opportunity, great places, cost effectiveness, mode share, and reducing vehicle mile traveled.

**Policy 9.68 New mobility priorities and outcomes.** Facilitate new mobility vehicles and services with the lowest climate and congestion impacts and greatest equity benefits; with priority to vehicles that are fleet/shared ownership, fully automated, electric and, for passenger vehicles, shared by multiple passengers (known by the acronym FAVES). Develop and implement strategies for each following topic.

**9.68.a.** Ensure that all new mobility vehicles and services and levels of automated vehicles advance Vision Zero by operating safely for all users, especially for vulnerable road users. Require adequate insurance coverage for operators, customers, and the public at-large by providers of new mobility vehicles and services.

**9.68.b.** Ensure that new mobility vehicles and services improve active transportation and shared ride travel time reliability and system efficiency by:

1. maintaining or reducing the number of vehicle trips during peak congestion periods;
2. reducing low occupancy vehicle trips during peak congestion periods;
3. paying for use of, and impact on, Portland’s transportation system including factors such as congestion level, carbon footprint, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency; and
4. supporting and encouraging use of public transportation.

**9.68.c.** Cut vehicle carbon pollution by reducing low occupancy “empty

miles” traveled by passenger vehicles with zero or one passengers. Prioritize vehicles and services with the least climate pollution, and electric and other zero direct emission vehicles operated by fleets and carrying multiple passengers.

**9.68.d.** Make the benefits of new mobility available on an equitable basis to all segments of the community while ensuring traditionally disadvantaged communities are not disproportionately hurt by new mobility vehicles and services. This includes people with disabilities, as well as communities of color, women, and geographically underserved communities.

**9.68.e.** Identify, prevent, and mitigate potential adverse impacts from new mobility vehicles and services.

**Policy 9.69** **New mobility tools.** Use a full range of tools to ensure that new mobility vehicles and services and private data communications devices installed in the City right-of-way contribute to achieving Comprehensive Plan and Transportation System Plan goals and policies.

**9.69.a.** Maintain City authority to identify and develop appropriate data sharing requirements to inform and support safe, efficient, and effective management of the transportation system. Ensure that when new mobility vehicles and services use City rights-of-way or when vehicles connect with smart infrastructure within the City they share information including, but not limited to, vehicle type, occupancy, speed, travel routes, and travel times, crashes and citations, with appropriate privacy controls. Ensure that private data communications devices installed in the City right-of-way are required to share anonymized transportation data.

**9.69.b.** Design and manage the mobility zone, curb/flex zone, and traffic control devices, e.g. to limit speeds to increase safety, to minimize cut-through traffic, evaluate future demand for pick-up and drop-off zones, and to prioritize automated electric vehicles carrying more passengers in congested times and locations;

**9.69.c.** Evaluate the public cost and benefit of investments in wayside communication systems serving new mobility vehicles and services.

**9.69.d.** Develop sustainable user-pays funding mechanisms to support new mobility vehicle infrastructure and service investments, transportation system maintenance, and efficient system management .

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**9.69.e.** Ensure that new mobility vehicles and services that connect to smart city infrastructure, and private data communications devices installed in the City right-of-way, help pay for infrastructure and service investments, and support system reliability and efficiency. Develop a tiered pricing structure that reflects vehicle and service impacts on the transportation system, including factors such as congestion level, carbon footprint, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency.

*Table 9-1. City Level of Service*

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

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

Table 9-2. Oregon Metro Interim Deficiency Thresholds and Operating Standards

Location	Standards		
	Mid-Day One-Hour Peak *	PM 2-Hour Peak	
		1st Hour	2nd Hour
Central City, Gateway, Town Centers, Neighborhood Centers, Station Areas	0.99	1.1	0.99
I-84 (from I-5 to I-205), I-5 North (from Marquam Bridge to Interstate Bridge, OR 99- E (from Lincoln St. to OR 224), US 26 (from I-405 to Sylvan Interchange), I-405	0.99	1.1	0.99
Other Principal Arterial Routes	0.90	0.99	0.99
*The demand-to-capacity ratios in the table are for the highest two consecutive hours of the weekday traffic volumes. The mid-day peak hour is the highest 60-minute period between the hours of 9 a.m. and 3 p.m. The 2nd hour is defined as the single 60-minute period, either before or after the peak 60-minute period, whichever is highest.			

Figure 9-1. Transportation System Plan: Relationship to Other Policies and Plans

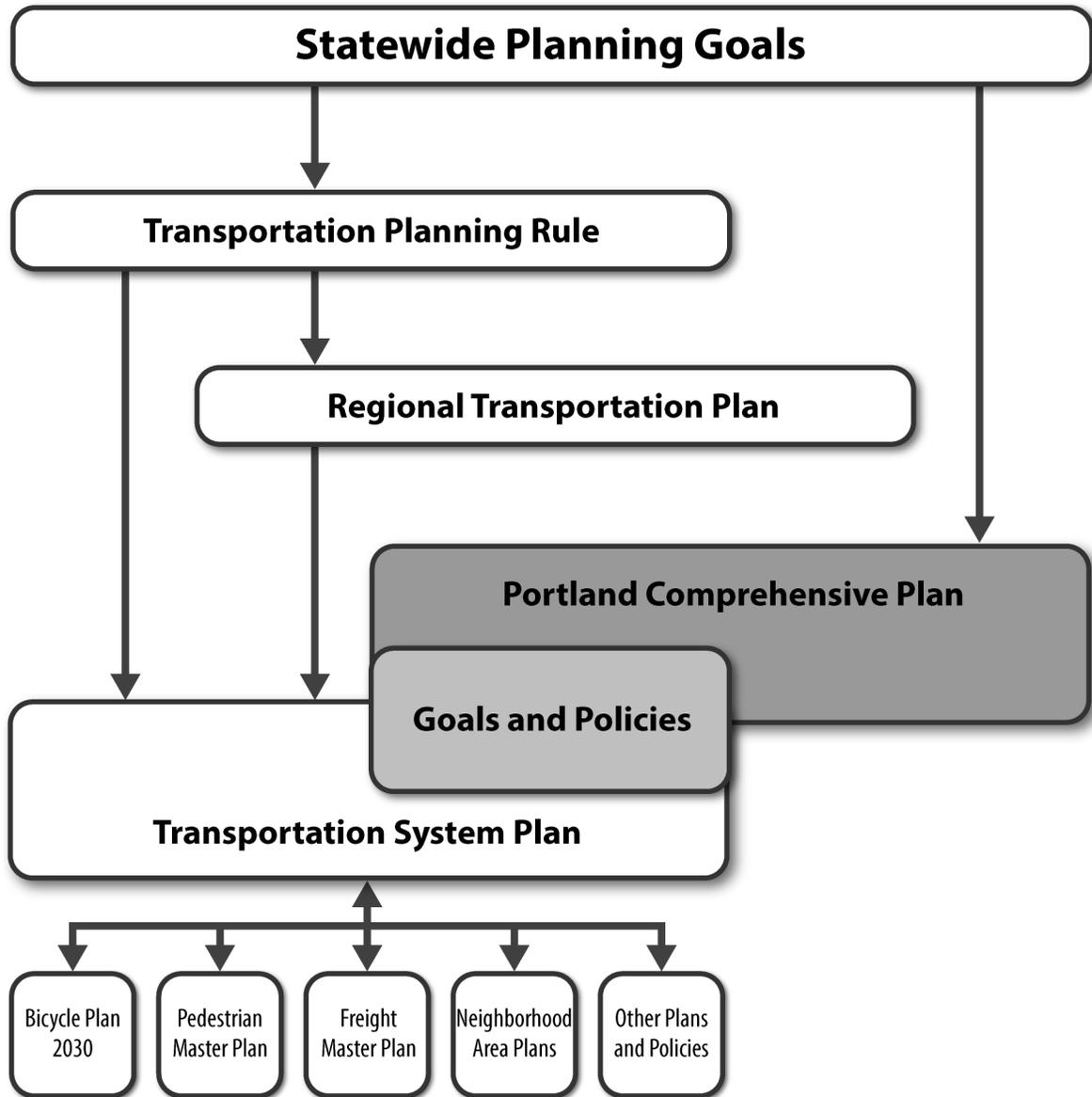


Figure 9-2. Central City Multimodal Transportation Area (MMA)

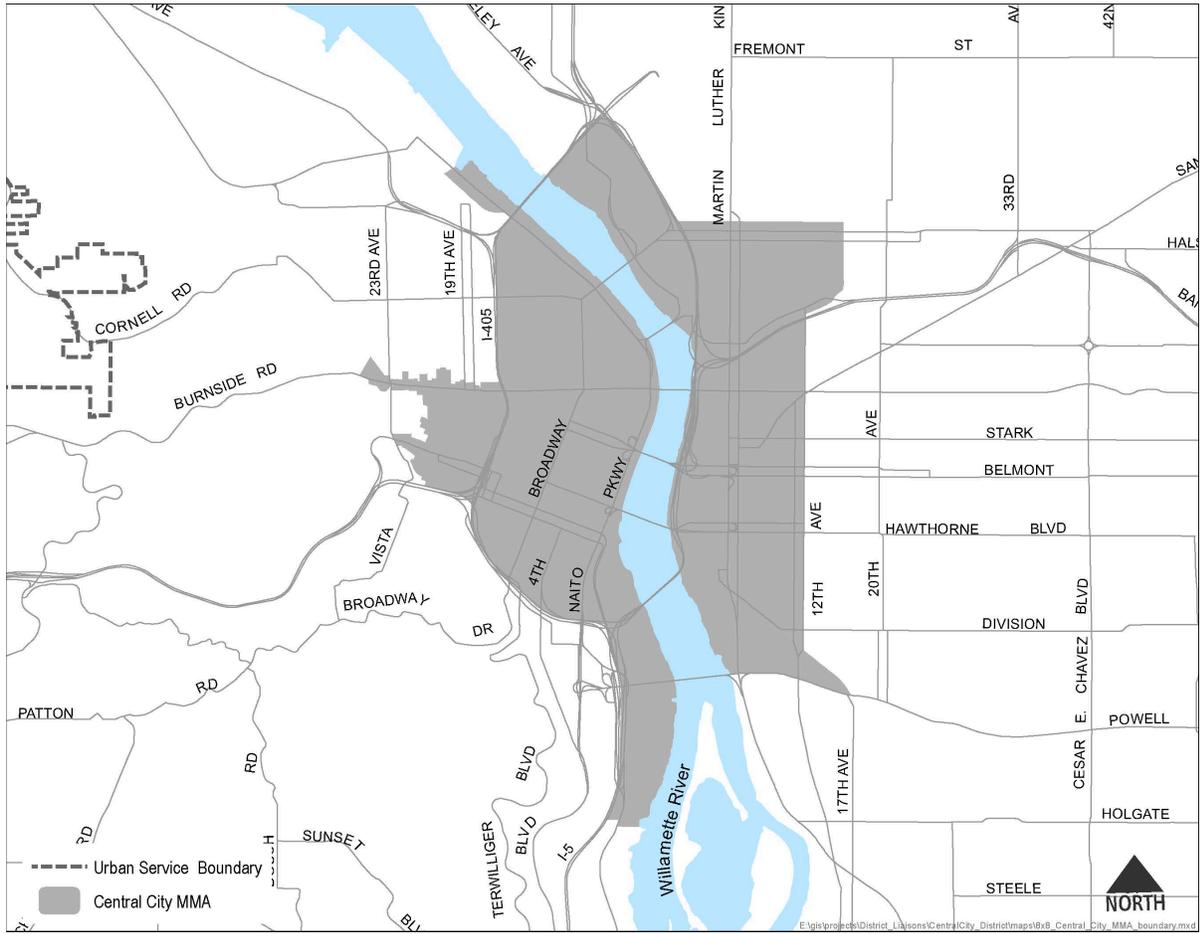
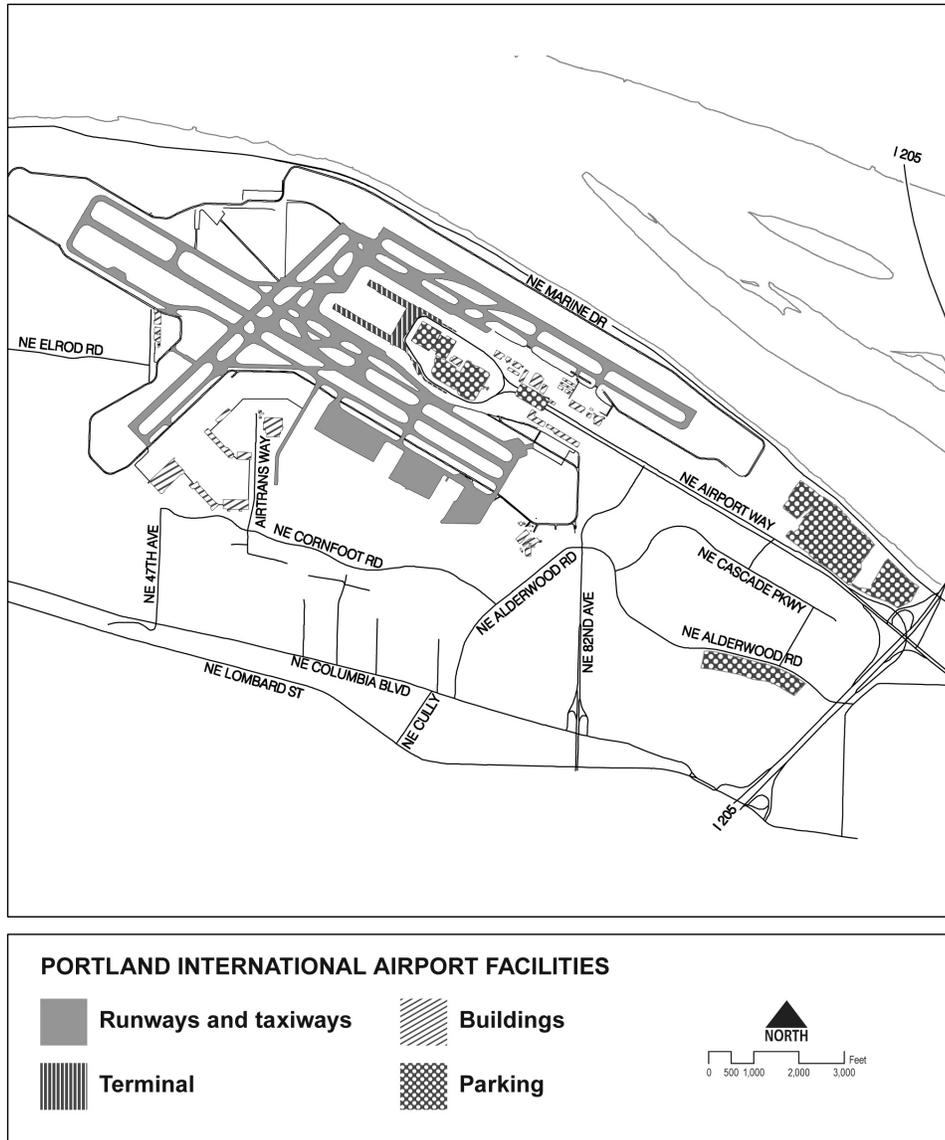


Figure 9-3. Portland International Airport



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