MULTI-MODAL TRANSPORTATION SYSTEM

The population of Pierce County and the demand on the transportation system are both expected to increase significantly over the 20-year planning period. To keep our economy and environment healthy, it is essential for the transportation system to be able to meet the demands of tomorrow. The challenges of addressing transportation needs include population growth, transportation financing, and the variety of policy options for addressing issues. The County strives to meet the transportation needs of the community while achieving the lowest long-term costs.

In order to accommodate needs of all aspects of moving people and goods, it is becoming increasingly important to consider all modes of travel and a wide range of transportation options. The County supports an increase in the use of transit and other alternatives to the single-occupant vehicle. Alternatives to single-occupant vehicles are needed to reduce the cost of transportation and to provide the infrastructure to attract and retain businesses.

For more
background and
technical
information see the
<u>Technical Sections</u>
of this Element

Transportation improvements include the information and infrastructure to change travel habits. Transit strategies include improved bus service, high occupancy vehicle lanes, vanpools, and carpools with safe and convenient access to park-and-ride lots. Active transportation systems include facilities to support activities such as bicycling, walking, and skating. It is anticipated that Transportation Demand Management will play a greater role in integrating transit, ride sharing, and active transportation systems.

Pierce County's urban travel needs are met by a system of freeways and arterials, bike trails and bike lanes, a bus transit system, commuter rail, and light rail. In addition, the County is served by a maritime port, several general aviation airports, and ferry services. Joint Base Lewis-McChord (JBLM) is a major military facility with complex transportation systems and travel needs.

TRANSPORTATION SYSTEM DEVELOPMENT

- GOAL T-1 Collaborate in the development of a countywide multimodal transportation system that considers the mobility needs of all residents, emphasizes safety, minimizes impacts to the natural and built environments, and facilitates goods movement.
 - **T-1.1** Strategically expand capacity and increase efficiency of the system to move goods, services, and people to and within the Urban Growth Area.

The urban transportation system includes (T-1.1):

- Roadways
- Fixed-route public transit and shuttle services
- Bicycle and pedestrian facilities
- Water, rail, air, and industrial port and intermodal facilities
- Passenger and freight rail

- **T-1.2** Focus on investments that produce the highest benefits with the least amount of environmental impacts.
- **T-1.3** Provide information to users of all modes on the rules of the road.
- **GOAL T-2** Forecast traffic to plan for transportation infrastructure that accommodates planned growth and maintains service standards.
 - **T-2.1** Base traffic forecasts on assumptions from the <u>Land Use Element</u> of the Comprehensive Plan and adopted County population, housing, and employment growth targets, which are consistent with the Vision 2040 Regional Growth Strategy.
- GOAL T-3 Invest in all five categories of MOPIA (Maintenance, Operations, Preservation, Improvements, and Administration) in stewardship of the transportation system. Maintenance, Operations, and Preservation are the highest priorities.
 - **T-3.1** Lower the overall life-cycle costs through effective maintenance and preservation programs.
 - **T-3.2** Adequately maintain roadways, rights-of-way, and associated County property, while adhering to established levels of service.
 - **T-3.3** Promote an efficient roadway system through operational activities, improvements, and education.
 - **T-3.3.1** Recognize that operational improvements can lead to a reduction in the need for new project construction.
 - **T-3.4** Preserve the County roadway system.
 - **T-3.4.1** Repave and overlay roadways in a timely manner
 - **T-3.4.2** Replace or refurbish infrastructure when needed.
 - **T-3.5** Improve roadways through widening and extensions to keep pace with growth and enhance safety, particularly in urban areas.
 - **T-3.6** Provide adequate staffing to administer the maintenance, operations, preservation, and improvement activities.
- **GOAL T-4** Place a high priority on roadway safety.
 - **T-4.1** Complement Washington State's *zero death and disabling injury* target through safety improvements and education.
- **GOAL T-5** Prioritize transportation capacity improvements in the following order:
 - **T-5.1** Upgrade or build new transportation facilities to encourage and support growth and economic development in urban areas of the County.
 - T-5.2 Upgrade or build new transportation facilities in the more rural areas of the County to serve large lot, low density residential development at appropriate service levels.

- **T-5.2.1** Construction of new roads and addition of travel lanes should be avoided in the rural area, except when essential for safe and efficient interurban travel.
- GOAL T-6 Place particular emphasis on the development of an interconnected, multimodal transportation system within designated centers and along corridors connecting centers.
 - **T-6.1** Provide for the needs of freight movement and employees to and from the Frederickson Manufacturing/Industrial Center by ensuring a variety of transportation modes, and designing and funding road improvements to accommodate freight movement.

RIGHT-OF-WAY

The land that contains transportation corridors is referred to as right-of-way. Right-of-way exists for roads, trails, rail lines, and access to navigable waters.

- **GOAL T-7** Acquire and preserve rights-of-way.
 - **T-7.1** Preserve right-of-way for future transit alignments and high capacity transit.
 - **T-7.2** Require dedication of right-of-way as a condition for development.
 - **T-7.3** Request donations of right-of-way to the County.
 - **T-7.4** Include donated right-of-way in development density calculations so developers who donate are not penalized.
 - **T-7.5** Purchase rights-of-way.
 - **T-7.6** Purchase development rights from property owners.

Right-of-way can be used to (T-7):

- Protect access and provide safety for all users
- Preserve the integrity of County roads, drainage systems, and other publiclyprovided and maintained facilities
- **T-7.7** Require property owners to grant public easements.
- **T-7.8** Preserve County rights-of-way that terminate at navigable waters.
- **T-7.9** Preserve rail rights-of-way for future rail or other transportation purposes.
 - **T-7.9.1** Identify abandoned or to be abandoned rail lines and rights-of-way.
 - **T-7.9.2** Support and encourage the State allocate funds for the preservation of identified rail lines and rights-of-way.
- **T-7.10** Protect public rights-of-way from encroachment by any structure, vegetation, landscaping materials, or other obstruction.
- **T-7.11** Establish minimum setbacks for property improvements to preserve sufficient right-of-way to serve future transportation needs.
- **T-7.12** Assess the potential uses of rights-of-way for all forms of travel to preserve and implement their highest and best transportation use.

ROADWAYS

The road system in Pierce County consists of Federal, State, County, city, and privately-owned facilities. The County's road system connects with the interstate and state highway system, and city streets, as well as numerous privately constructed and owned roads throughout the County.

- **GOAL T-8** Encourage direct routing and greater connectivity of the arterial road system, while minimizing impacts to residential neighborhoods and the environment.
- **GOAL T-9** Utilize traffic calming measures, as appropriate, to reduce high traffic volumes and speeds through residential neighborhoods.
 - **T-9.1** Allow on-street parking on minor local and residential streets.
- **GOAL T-10** Provide for the safe use and presence of farm vehicles on the rural roadway network.
 - **T-10.1** Coordinate with the farming community to understand the specific operational needs of their industry.
 - **T-10.2** Encourage discussion and analysis of impacts of connectivity as it relates to agricultural lands.

ACCESS

- GOAL T-11 Consolidate access to state highways, and major and secondary arterials in order to complement the highway and arterial system.
 - **T-11.1** Identify access to private developments through a system of collector arterials and local access streets.
 - **T-11.2** Consolidate access in developing commercial and high density residential areas through shared-use driveways, frontage roads, and local access streets.
 - T-11.3 Encourage landowners developing property along highways, and major and secondary arterials to jointly prepare comprehensive access plans that emphasize efficient internal circulation and discourage multiple access points to major roadways.
 - **T-11.4** Consider access management to reduce the number of conflict points between pedestrians and vehicles, with the intention of improving pedestrian safety.
 - **T-11.5** Discourage gated communities that impair emergency vehicle access.

Access control is intended to (T-11):

- Reduce interference with traffic flow on arterials
- Reduce conflicts between motor vehicles and active transportation users
- Discourage through traffic on local access streets or private access roadways

ACTIVE TRANSPORTATION

Active transportation systems (nonmotorized) include sidewalks, trails, bike lanes, and roadway shoulders to accommodate pedestrians, bicyclists, and skaters for both transportation and recreational purposes.

- GOAL T-12 Develop an interconnected countywide system of active/nonmotorized transportation facilities that provide travel options, promote physical activity and well-being, contribute to a healthier population and cleaner environment, and enhance safety.
 - **T-12.1** Prioritize trail development to form the core of the active transportation system, linking communities, centers, tourist attractions, and other destinations.
 - **T-12.1.1** Work collaboratively with other organizations, including Pierce County Parks and Recreation to develop the Pierce County Regional Trail System, community nonmotorized connections, and local access.
 - **T-12.2** Endorse the concept of *complete streets*, which promotes roadways that are safe and convenient for all users.
 - **T-12.3** Design and construct complete streets wherever feasible and practicable.
 - **T-12.4** Work to construct missing links in the active transportation system and access to the network.
 - **T-12.5** Inform the community about the economic transportation system performance, and environmental, health, and social benefits of active transportation.
 - **T-12.6** Develop improved programs to encourage increased levels of active transportation.
- **GOAL T-13** Require the installation of bicycle racks and secure bicycle parking at larger employment sites and within designated centers.
- GOAL T-14 Develop, maintain, and improve pedestrian amenities for routes connecting commercial areas to residential neighborhoods, civic uses, and schools.
 - **T-14.1** Realize both the recreational and transportation value of these routes.
 - **T-14.2** Accommodate students' travel to school and bus stops using safe walking corridors.
 - **T-14.3** Accommodate pedestrians and bicyclists on arterials unless precluded by environmental or physical constraints.
 - **T-14.4** Require developers to include active transportation elements (non-motorized) in all projects.
- **GOAL T-15** Support active transportation travel modes as a trip reduction strategy.

Active transportation facilities include (T-12):

- Trails
- Pathways
- Sidewalks
- Bike lanes
- Paved shoulders
- Wide curb lanes
- Shared use roadways

T-15.1 Provide facilities for bicyclists and pedestrians to access public transit.

TRANSIT

Transit service in Pierce County is provided by Pierce Transit, Intercity Transit, and Sound Transit. Pierce Transit provides local fixed-route bus service, express bus service to Gig Harbor, a demand response SHUTTLE service for persons with disabilities who are unable to use the fixed-route system, a rideshare program that includes vanpooling, and park-and-ride facilities to support these services. Intercity Transit provides express bus service between Olympia and Tacoma. Sound Transit provides express bus service to Seattle, south King County, and Sea-Tac International Airport, Sounder commuter rail between multiple Pierce and King County cities, and the Tacoma Link light rail.

- **GOAL T-16** Encourage and cooperate with transit agencies to provide services that meet the needs of residents.
 - **T-16.1** Coordinate with transit agencies to increase the number of routes and frequency, as funding becomes available, especially to underserved areas and designated centers within the unincorporated area.
 - **T-16.2** Cooperate with transit agencies in the location of transit centers, park and ride lots, rail stations, and bus stops.
 - **T-16.3** Support efforts to develop tourist-related transit service that reduces vehicle trips to local attractions, especially Mount Rainier.
 - **T-16.4** Work with transit agencies to improve bus and rail connections to popular bicycle and pedestrian routes and ferry terminals.
 - **T-16.5** Encourage transit agencies to add bicycle lockers and other amenities to accommodate multimodal connections.
 - **T-16.6** Work with transit agencies to identify improvements within the County right-ofway to support transit operations and rider access to transit facilities.
 - **T-16.7** Support the development of the regional park-and-ride lot system.
 - **T-16.8** Encourage the placement of transit shelters that are well lit, clearly visible, well marked, posted with easy-to-read schedules and route maps, equipped with litter receptacles, and that protect users from inclement weather.
 - **T-16.9** Coordinate with the Pierce County Coordinated Transportation Services Coalition to address mobility for people with special transportation needs and to implement the countywide Coordinated Transportation Plan recommendations.
- **GOAL T-17** Encourage residential developers to provide waiting areas, including bus shelters, for the safe congregation of children transported by bus to school.
- **GOAL T-18** Encourage transit oriented development and prioritize facilities that help connect people to transit, such as sidewalks, trails, crosswalks, and bicycle parking.

- Fixed route transit
- Rail
- Shuttles
- Tourism-related service

FERRY

Pierce County is served by two ferry routes, one operated by the County and the other by the Washington State Department of Transportation (WSDOT). The WSDOT ferry route is between Point Defiance in Tacoma and Vashon Island. The Pierce County ferry route connects Anderson and Ketron Island to the mainland in the town of Steilacoom. Both routes accommodate both motor vehicles and passengers.

GOAL T-19 Consider the Pierce County Ferry System an extension of the County roadway system.

RAIL AND FREIGHT

The efficient movement of freight is a priority for supporting economic development and providing living wage jobs. Movement of goods and services can be achieved using rail systems, trucking, and shipping.

- **GOAL T-20** Work with local communities, the Washington State Department of Transportation, railroads, labor groups, and shippers to:
 - **T-20.1** Identify and preserve all rail lines and services;
 - **T-20.2** Coordinate and implement passenger and freight rail service preservation projects consistent with a regional transportation program; and
 - **T-20.3** Consider localized rail service as a means of public transportation.
- GOAL T-21 Provide for the needs of freight movement and employees within the Frederickson Manufacturing/Industrial Center by ensuring a variety of transportation modes and funding road improvements to accommodate freight movement.
- **GOAL T-22** Work in cooperation with WSDOT, cities, JBLM, Port Authorities, and other entities to plan and implement projects and programs to meet freight mobility and access needs.
- GOAL T-23 Support efforts to construct transportation facilities that will benefit freight movement, including the proposed extensions of the SR 167 freeway and SR 704 (Cross-Base Highway).

AIR TRANSPORT

Pierce County is served by Seattle-Tacoma International Airport in south King County, two military base airports, and a number of smaller airports owned by the public and private sector.

The largest airports located in the County are the military air facilities on Joint Base Lewis McChord (JBLM) - McChord Field and Gray Field. General aviation is served by the County-owned Tacoma Narrows Airport and Thun Field and several other small private airports.

- GOAL T-24 Participate in regional airport planning to ensure that County needs are met and that County concerns are addressed.
 - **T-24.1** Support the preservation of air navigation resources and facilities.

T-24.2 Provide adequate ground transportation to move people and goods to and from airports.

CONCURRENCY AND LEVEL OF SERVICE

Level of service standards exist for all arterials and transit routes to serve as a gauge to judge performance of the system. These service standards should be regionally coordinated.

To gauge the performance of the County road system, Pierce County Council adopts level of service standards (hereafter referred to as service standards or standards). The standards are set according to the <u>Capital Facilities Element</u> of this Plan. The standards reflect the maximum acceptable level of congestion throughout the County.

- GOAL T-25 Establish service standards for County arterials and reflect the level of service standards for state highways to monitor the performance of the system, evaluate improvement strategies, and facilitate coordination for funding.
 - **T-25.1** Annually report transportation concurrency on County roadways based on the adopted County service standard, which reflects the maximum allowable level of congestion on roadways.
 - **T-25.2** Consider the impacts on neighboring jurisdictional roadway facilities, inclusive of the Washington State Department of Transportation (WSDOT), when developing and administering service standards.
 - T-25.3 Pursue the concept of Ultimate Capacity as applicable to the county roadways. Roadways designated as ultimate capacity facilities would be improved to certain specified levels. These types and levels of improvements would not necessarily meet current or future Pierce County Roadway Concurrency Management System standards. Provisions should be made for providing adequate operational safety and nonmotorized improvements when appropriate. Targeted Transportation Demand Management measures may also be considered.
- GOAL T-26 Transportation improvements or strategies to accommodate the impacts of development must be made concurrent with the development.
 - **T-26.1** Consider varied strategies in the concurrency program to address substandard service standards.
 - **T-26.2** Consider targeted application of transportation demand strategies on roadways that exceed service standard thresholds.
 - **T-26.3** Prohibit development in areas that are served by facilities that do not meet concurrency standards.
- **GOAL T-27** Tailor concurrency programs for centers to encourage transit-oriented development.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) involves strategies that are targeted towards reducing drive-alone travel. TDM efforts include education, incentives, and the provision of infrastructure.

- GOAL T-28 Encourage alternate travel modes within an efficient multimodal transportation system that reduces and shifts travel demand to improve the flow of people and goods.
 - **T-28.1** Partner with other agencies to implement travel demand management (TDM) programs.
 - **T-28.2** Emphasize transportation investments that provide and encourage alternatives to single-occupancy vehicle travel and increase travel options, especially to and within centers, and along corridors connecting centers.

ENVIRONMENTAL AND PUBLIC HEALTH

- GOAL T-29 Impacts on health and the natural and built environments shall be important considerations when designing and implementing facilities.
 - **T-29.1** Use low impact development practices or environmentally appropriate approaches for the design, construction, and operation of facilities to reduce and mitigate environmental impacts.
 - **T-29.2** Locate and construct improvements to discourage adverse impacts on water quality and other environmental resources.
 - **T-29.3** Design facilities to fit within the context of the built or natural environment in which they are located.
 - **T-29.4** Strive to use and encourage the use of cleaner fuels and lower-emission vehicles.
 - **T-29.5** Mitigate unavoidable environmental and health impacts, including cumulative impacts.
 - **T-29.6** Where appropriate, use recycled materials in the construction of facilities.
 - **T-29.7** Consider landscaping and other types of buffers along major facilities, where appropriate.
 - **T-29.7.1** Preserve the natural environment and existing vegetation as much as possible.

Strategies to implement TDM include (T-28.1):

- Assist employers and employment centers to promote alternatives to commuting in single-occupant vehicles.
- Inform the public about the benefits of alternative travel modes, especially those relating to physical health and the environment.
- Provide tools and technology, including social media, to disseminate travel options and route information.
- Invest in capital facilities that support alternative modes of travel including park and ride lots, transit amenities, and bicycle and pedestrian projects.
- Focus TDM and TSM strategies to address travel behavior in congested corridors and urban centers.
- Encourage developers to provide bus shelters and stops, bicycle parking, and carpool parking.

- **T-29.8** Solicit and incorporate the concerns and comments of interested parties regarding environmental issues into the planning, design, construction, operation, and maintenance of the system.
- **T-29.9** Minimize changes to existing topography and impacts to critical areas.
 - **T-29.9.1** Avoid the removal of trees outside the safety perimeter of roadways in the rural areas.
 - **T-29.9.2** Relocate or replace any trees removed as part of any roadway projects if feasible.
- **T-29.10** Include roadside native vegetation and trees in the buffer areas adjacent to arterials.
 - **T-29.10.1** Ensure that any plantings do not affect driver visibility or line of sight.
- GOAL T-30 Develop a system that minimizes negative impacts to human health and provides opportunities for healthy, non-polluting travel options.
 - **T-30.1** Protect the system against disaster.
 - **T-30.1.1** Develop prevention and recovery strategies, and plan for coordinated responses.
 - **T-30.2** Consider the impacts of noise on both the transportation facility user and the larger population when locating and designing future transportation facilities.

COORDINATION, IMPLEMENTATION, AND FUNDING

- **GOAL T-31** Coordinate the planning, design, and implementation of improvements with other agencies.
 - **T-31.1** Coordinate with the Puget Sound Regional Council, Pierce County Regional Council, transportation agencies, other organizations, and other jurisdictions in developing and updating the regional plan and the programming efforts that cross jurisdictional lines.
 - **T-31.2** Create interlocal agreements that address development impacts on one another's facilities, including potential developer mitigation measures.
 - **T-31.3** Coordinate with social service organizations and transit agencies to provide services that meet the needs of transit-dependent residents.
- GOAL T-32 Develop a multi-year financing plan that identifies sustainable funding sources adequate to construct and maintain the system.
 - **T-32.1** Prioritize funding transportation improvements in designated regional, local, and manufacturing/industrial centers and in the transportation corridors that provide linkages to these centers.
 - **T-32.1.1** Create a reassessment strategy if revenue forecasts fall short of expectations.

- **T-32.1.2** The reassessment strategy should include a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that service standards will be met.
- **GOAL T-33** Reduce the need for new capital improvements through investments in operations, pricing programs, demand management strategies, and system management activities that improve the efficiency of the current system.
- GOAL T-34 Address anticipated revenue shortfalls through such forums as the newly formed Transportation Benefit District and programs such as the updating of the Traffic Impact Fee Program. This forum and program will assess how to develop additional funding in the context of current land use assumptions and adopted service standards.
 - **T-34.1** Consider the following funding options and possibilities in developing additional revenue for the comprehensive plan time horizon:
 - **T-34.1.1** Changes in state law to allow additional funding sources such as road utilities and additional local option financing mechanisms;
 - **T-34.1.2** Lobbying the state legislature for a more equitable distribution of state funds generated by a jurisdiction and received by that jurisdiction;
 - T-34.1.3 Reduction or elimination of either/both the Traffic Law Enforcement transfer from the Road Fund (currently \$2.65 million per year), or the voter-approved Road Fund Levy Shift (currently over \$12 million per year), and further restricting the use of the Road Fund levy to the maintenance, operation, preservation, administration, and improvement of transportation facilities;
 - **T-34.1.4** Encouraging public/private partnerships for financing transportation projects;
 - **T-34.1.5** Sharing costs with other jurisdictions for needed improvements that solve shared transportation objectives;
 - T-34.1.6 Maximize opportunities when appropriate to utilize the cost recovery mechanism as found in Chapter 12.36 PCC. The cost recovery mechanism would facilitate the cost sharing of projects among private developers and possibly, the County. This would potentially accelerate construction of particular transportation improvements or for additional transportation facilities and services needed to serve new developments, in proportion to the impacts and needs generated by individual projects
 - **T-34.1.7** When cost effective, encourage the use of Road Improvement Districts by local residents to upgrade public and private roads and develop new roads consistent with County public road standards;
 - **T-34.1.8** Continue to seek federal funding for transportation projects that support the military mission and fund the mitigation of its traffic impacts;

Continue to leverage County funds to the highest level by pursuing non-County T-34.1.9 funding sources for transportation funds and using County funds as matching funds.