

Transportation

The Transportation Element reflects the following framework goals highlighted in black:

FRAMEWORK GOALS

- FG1: Promote a sense of place by requiring quality building and development that is not just compatible with the surrounding environment, but enhances the community spirit.
- FG2: Promote quality building and development that is compatible with the surrounding environment.
- FG3: Support a variety of housing opportunities for Edgewood's diversifying population that are affordable, enhance a safe and livable community, and prepare and protect our families for life in the 21st Century.
- FG4: Pursue a strong and diverse economy and assure economic development that creates a "Heart" for Edgewood and balances regional objectives, while complementing the unique neighborhood character.
- FG5: Protect the natural environment and preserve environmentally sensitive areas.
- FG6: Promote improvements to human services as the Community changes and diversifies.
- FG7: Assure effective and efficient public investment for quality public services, facilities, and utilities.**
- FG8: Balance the transportation needs of the Community with regional objectives through improvement of both street and multimodal transportation systems for Edgewood's present and future population.**
- FG9: Provide for inclusive and meaningful citizen involvement in community planning decisions.

Intent

The intent of the Transportation Element is to guide the development of a transportation system that improves mobility and offers mobility choices for all City citizens. This Transportation Element identifies capacity, safety, pedestrian, automobile, public transit, and bicycle projects planned for future construction. This Element also establishes policies on prioritizing system improvements.

In addition, the Transportation Element provides direction to the City in guiding and influencing other transportation providers, such as Pierce Transit, Metro/King County Transit, and Sound Transit. Because of Edgewood's location in the region, the City must also consider inter-county and regional transportation issues. In order to assist in the development of a safe, efficient, and accessible transportation system, the City should actively coordinate with neighboring jurisdictions and aggressively seek funding sources to meet transportation system needs. The Transportation Element is a mandated Element under the Growth Management Act (GMA).

Background and Context

Edgewood is primarily a residential community with ready-access to employment and shopping within and outside the City limits. Rapid growth in Pierce County and South King County provide the City with both opportunities and challenges when planning for a balanced transportation system.

Edgewood's topography is a significant influence with regard to the design of Edgewood's current and planned transportation system. Depressional potholes, wetlands, and steep slopes have prevented the development of a traditional grid system. These same environmental constraints will continue to limit the location of future transportation system improvements including street improvements, pedestrian connections and bicycle routes.

The City is currently planning to accommodate a population allocation of 13,700 for the 2022 planning horizon. That number is expected to stay about the same when the City updates its plan to the 2030 planning horizon. Edgewood's existing street system was originally developed to serve the basic needs of a rural agricultural community. As the City plans for and experience growth it must meet both the Growth Management planning requirements as well as the community's expressed needs. While most of the roads of Edgewood (excluding Meridian Avenue East) currently have adequate vehicle capacity, much of the current system lacks pedestrian facilities. Additionally, much of the current transportation system is not constructed to current roadway standards. As growth occurs these portions of the transportation system will experience more use and become more congested.

Edgewood's street network is made up of two components, the first being Meridian Avenue East, also referred to as SR 161, a Washington State highway that runs through the middle of Edgewood for a total of 3.34 centerline miles. The second consists of all other roads in Edgewood that are under the sole jurisdiction of the City of Edgewood. The City road network is 46.66 centerline miles long and provides access primarily to residential areas.

Housing growth in Edgewood is not expected to significantly contribute to congestion on Meridian Avenue East. If the City experienced no growth within its borders over the next twenty years, it would still have congestion problems. This condition is due to growth in the surrounding communities and the resulting increase in pass-through traffic in Edgewood, both on Meridian Avenue East and major east/west connecting arterial streets.

While this Comprehensive Plan is supportive of transit, pedestrian, and other alternative modes of transportation it also recognizes automobile use as an ingrained cultural and social reality. Edgewood's dispersed land use also reflects this trend.

Growth Management Act and Concurrency

The Growth Management Act (GMA) requires the adoption of level of service (LOS) standards to gauge the performance of the City's transportation system. LOS standards for streets in the City of Edgewood are typically stated for arterial segments during the p.m. peak hours.

Under the GMA, local jurisdictions must plan and program for improvements for the transportation system in order to accommodate new development without allowing the adopted LOS to drop below the standard adopted by the City. This requirement is called *transportation concurrency*. The GMA requires that transportation improvements be provided concurrent with new development. In simple terms, once the adopted LOS drops below the standard, improvements must be funded and in place within six years or the City may not permit additional development.

The City strives for consistency between jurisdictions when establishing and revising transportation LOS. State law encourages the mitigation of transportation related concurrency problems through the use of transit, walking, biking, system efficiencies and transportation system management. The goals and policies of this Chapter encourage a variety of programs and methods to regularly review and update level-of-service methodology, standards and needs and encourage development of a multi-modal transportation system that balances the financial constraints of the City against a variety of improvement options that meet the City's transportation system needs.

The GMA also requires local jurisdictions to assess the "impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions." Edgewood's Land Use and Transportation Elements are consistent with and have minor impacts on neighboring jurisdictions. In developing this Plan, analysis was undertaken to ensure that all transportation system improvements are compatible with our neighbors. Edgewood is impacted by SR 167, Military Road, SR 161, West Valley Highway, Highway 99, and Interstate 5 (I-5). While these facilities are not all within Edgewood City limits, this Plan has identified improvements to these regional corridors and incorporated them for general consistency. Edgewood will continue to work with the State and adjoining jurisdictions in planning and coordinating future transportation improvements along these corridors.

Description of Arterial LOS

The following are general descriptions of the different arterial LOS defined in the Institute of Transportation Engineers Highway Capacity Manual:

LOS A - represents a free flow condition. Travel speeds are at or near the speed limit and little to no delay exists. Freedom to select desired speeds and to make turns and maneuver within the traffic stream is extremely high.

LOS B - represents a zone of stable flow. Drivers still have reasonable freedom to select their travel speeds.

LOS C - still falls within the zone of stable flow, but travel speeds and vehicle maneuverability are more closely controlled by the higher volumes. The selection of speed is not affected by the presence of others, and maneuvering within the traffic stream requires vigilance on the part of the driver.

LOS D - approaches unstable flow. Travel speed and freedom to maneuver are somewhat restricted and small increases in traffic flow can cause operational difficulties at this level.

LOS E - represents operating conditions at or near the capacity of the roadway. Lower speeds approaching 50 percent of normal are common. Freedom to maneuver within the traffic stream is extremely difficult. Any accident or irregular incident can be expected to produce a breakdown in traffic flow with extensive queuing.

LOS F - describes forced flow operation at very low speeds. Operations are characterized by stop-and-go traffic. Vehicles may progress at reasonable speeds for several hundred feet or more, and then be required to stop in a cyclic fashion.

A more technical method of measuring level of service is described in the Highway Capacity Manual, which involves the calculation of the V/C ratio of a roadway or intersection. The V/C ratio ranges shown in Table 1 have been developed for determining planning levels, mid-block LOS on urban and rural roadways. These LOS are based on the highest one-way directional volumes in the p.m. peak hours.

Table T-1. LOS criteria for arterial roadway segments.

LOS		V/C Ratio
A	Less than or equal to	0.3
B	Less than or equal to	0.5
C	Less than or equal to	0.80
D	Less than or equal to	0.90
E	Less than or equal to	1.0
F	Greater than	1.0

Destination 2030 Metropolitan Transportation Plan

Adopted in 2001, and updated in 2007, *Destination 2030* is the region's long-range metropolitan transportation plan (MTP). *Destination 2030* calls for the development of a region-wide, multi-modal transportation system that links urban centers with high capacity transit.

The MTP is a detailed, long-range plan for future investments in the central Puget Sound region's transportation system. It responds to legislative mandates such as the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU), the federal 1990 Clean Air Act Amendments, and the GMA. It also is intended to respond to regional concerns of pressing transportation problems. The basic building blocks for the MTP are city, county and transit agency plans, adopted multi-county and county-wide planning policies, and the Washington State Department of Transportation (WSDOT) Multimodal and Transportation System plans. The MTP is updated and amended every three years.

The MTP includes the following multi-county transportation policies:

- Optimize and manage the use of transportation facilities and services
- Manage travel demand addressing traffic congestion and environmental objectives
- Coordinating transportation and land use to support transit and pedestrian-oriented land use patterns
- Expand transportation capacity offering greater mobility options
- Addressing air quality emissions to ensure the region remains in conformity with federal and state air quality requirements

Edgewood is required to submit its Comprehensive Plan to the PSRC for certification of compliance with the MTP and GMA. PSRC is required to certify that the transportation related provisions in locally adopted comprehensive plans meet state transportation planning requirements and are consistent with the region's adopted Metropolitan Transportation Plan. Local jurisdictions are directed to incorporate a brief report in future updates to their comprehensive plans that addresses:

- 1) conformity with the requirements in the Growth Management Act for comprehensive plan elements,
- 2) consistency with the Metropolitan Transportation Plan (including consistency with established regional guidelines and principals, physical design guidelines for centers, and compliance with federal and state clean air legislation), and,
- 3) consistency with multi-county planning policies.

Consistency with VISION 2040 and Emerging Issues

The Puget Sound Region (PSRC) adopted VISION 2040 in April 2008. VISION 2040 contains the region's multi-county planning policies which are required by the Washington State Growth Management Act. The multi-county planning policies serve as the "Regional Principals and Guidelines" for local comprehensive plan review and certification required for regional transportation plans under RCW 47.80.026. The multi-county policies for transportation cover the following major areas:

- 1) maintenance, management and safety;

- 2) supporting the growth strategy; and,
- 3) greater options and mobility.

Climate Change

Washington State Law directs agencies to reduce green house gas emissions to 50% of 1990 levels by 2050 and to reduce the per capita vehicle miles of travel by 50% by 2050. Addressing climate change is a requirement of the Metropolitan Transportation Plan (MTP). The policy goals in the MTP include:

(MPP-En-20) Address the Central Puget Sound Region's contribution to climate change by, at a minimum, committing to comply with state initiatives and directives regarding climate change and the reduction of greenhouse gases. Jurisdictions and agencies should work to include an analysis of climate change impacts when conducting an environmental review process under the State Environmental Policy Act.

(MPP-En-21) Reduce the rate of energy usage per capita, both in building use and transportation activities.

(MPP-En-22) Pursue the development of energy management technology as part of meeting the region's energy needs.

(MPP-En-23) Reduce greenhouse gases by expanding the use of conservation and alternative energy sources and by reducing vehicle miles of travel by increasing alternatives to driving alone.

Sustainable Transportation

(MPP-T-3) 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.

(MPP-T-5) Foster a less polluting system that reduces the negative effects of transportation infrastructure and operation on the climate and natural environment.

(MPP-T-6) Seek the development and implementation of transportation modes and technologies that are energy efficient and improve system performance.

Land Use Assumptions and Forecasts of Traffic

Please see the Environmental Analysis Section of this Element.

Washington Transportation Plan (2007-2026)

Policy Recommendations in the WTP that impact Meridian Avenue (SR 161) include:

- Consider, and implement where appropriate, operational changes that improve efficiency before expanding the existing transportation system.

- Promote the use of advanced technologies to improve system efficiency and service.
- Aggressively pursue access management to protect operations of existing and future systems.

State Transportation Projects Planned in and near the City of Edgewood

The WSDOT's State Highway System Plan: 2007-2026 (Updates adopted December 2008) provides a comprehensive list of improvement projects and related actions and programs for state highways throughout the State of Washington. For the purposes of this Comprehensive Plan, staff planners looked at mobility improvements that were feasible within the budget for state highways (the financially constrained Plan). Within this sublist, planners focused on the parts of Meridian Avenue East (SR 161) as it goes through Edgewood and on improvements to SR 167 planned for areas near the City limits.

The WSDOT plans to improve mobility on Meridian Avenue East by adding one general access lane for each direction between 36th Street East and Jovita Boulevard and a two-way left turn lane. To improve safety, WSDOT plans to upgrade intersections at 36th Street East and 24th Street East, revise the intersections with Chrisella Road and 36th Street East, and signalize the 16th Street East intersection. In addition, WSDOT plans to construct sidewalks for pedestrian traffic and wide shoulders to accommodate bicycles.

WSDOT is also planning, with support from the Port of Tacoma, to extend SR 167 to Commencement Bay. The project is important to the economy of the region because it will allow freight to move out of the Port of Tacoma without having to use I-5. The extension will go through the cities of Puyallup and Fife, bordering Edgewood to the south and west. The SR 167 Extension is anticipated to be constructed in phases due to the high cost of the project.

Both Meridian Avenue East and SR 167 are listed as deficient in the WSDOT's State Highway System Plan. Table T-2 lists highway improvements and mobility strategies for these two state highways in and near the City of Edgewood.

Table T-2: Highway improvements affecting traffic through and access to and from the City of Edgewood.		
Route	Vicinity	Strategy
Meridian Ave. E. (SR 161)	24 th St. E. to Jovita Blvd. E.	Phase 1 - Provide one additional general-purpose lane in each direction.
Meridian Ave. E. (SR 161)	36 th St. E. to 24th St. E.	Phase 2 - Provide one additional general-purpose lane in each direction.
SR 167	SR 509 (Port of Tacoma) to I-5	SR 167 Extension, Stage 1 from SR 509 to I-5, initial construction of four-lane freeway.
SR 167	I-5 to Meridian Ave. E./Existing SR 167	SR 167 Extension, Stage 2 from I-5, initial construction of a four-lane freeway. Extension will ultimately be a six-lane freeway with High Occupancy Vehicle (HOV) lanes, an Integrated Transportation System, and enhanced transit.

Source: Washington Department of Transportation's State Highway System Plan: 1999-2018 (January 1998).

City Transportation Projects Planned for the City of Edgewood

In addition to capacity needs, Edgewood also needs to upgrade its system of minor arterial streets to improve safety or operational efficiency. State Route 161 has been identified in the *State Highway System Plan* (WSDOT) as needing safety improvements. Finally, some of the pedestrian and bicycle needs that have been identified on the Linear Parks Trails Map will require the construction of curbs, gutters, and drainage as part of the project. These projects are, in effect, upgrades to urban street standards.

The City of Edgewood plans for transportation projects as a part of the six-year Transportation Improvement Plan (See current CIP). Significant projects include realignment of Jovita Boulevard's intersection with Meridian Avenue East, several pedestrian walkway projects and annual maintenance for City roads as programmed .

Existing Conditions

Generally speaking, the City of Edgewood's transportation network functions well. A street system is in place and I-5, SR 161, SR 167, Military Road, West Valley Highway, and Highway 99 provide regional connections to the north and south. Local Arterials such as 122nd Avenue East and 24th Street East are in good condition and subject to a regular maintenance schedule. However, portions of Meridian Avenue East are functioning over capacity at peak hours. The existing LOS concerns will be improved significantly once WSDOT's planned improvements for Meridian Avenue have been implemented. Components of the existing system that are deficient and in need of major improvement in Edgewood are:

- the need to develop a connected pedestrian and bicycle trail system;
- improved transit services within Edgewood and between Edgewood King and Pierce Counties; improved amenities for transit including improved stops, stations, lighting and pedestrian amenities.
- the need to provide a safer environment for pedestrians and bicycles and the need to improve operations and safety at intersections; and
- the need to better manage and improve the State Highway system in and bordering Edgewood including Meridian Avenue East and access to and from State Route 167 and I-5.
- the need to provide improved management of the signal system and access on Meridian.
- the need to provide wider shoulders and improved sight distance on local roadways and connecting streets in Edgewood.
- The need to add new traffic signals at 16th and Meridain.
- the need to improve safety and intersection operations at the Meridian Avenue/24th Street and Meridian Avenue/32nd Street intersections.
- the need to upgrade substandard rural roadways.

Roadway and Capacity Needs

The roadway network is the backbone of the transportation system and accommodates automobiles, trucks, transit, pedestrians, and bicycles. The provision of adequate capacity on the street system is important for safety, commerce, and efficient bus operations. Road

capacity is important for commerce because congestion increases trucking time and therefore increases the cost of goods delivered by truck. Likewise, employees and customers are delayed by congestion. Adequate transportation capacity reduces delay, which in turn reduces automobile emissions. In addition, adequate capacity on arterial streets will reduce the tendency for drivers to seek cut-through routes in neighborhoods to avoid congested roadways or intersections.

WSDOT is solely responsible for I-5 and SR 167. WSDOT may have some fiscal responsibility for future improvements to these highways, but Edgewood's involvement is a factor in whether future projects are built and how they are designed. These highways deliver many vehicles to and from Edgewood. The City does not consider I-5 and SR 167 in its concurrency management strategy for determining area-wide LOS. However, this Plan references projects on these corridors so that we can coordinate with our neighboring jurisdictions and WSDOT for planned projects. Meridian Avenue East is included in the LOS standard analysis .

Traffic Volumes

Updated traffic counts along the segment of Meridian Avenue East at the southern end of the City limits and north end of the City were completed in 2008. The average annual daily traffic along this segment was found to be about 15,164 vehicles (south) to 23,218 vehicles (north). The approximate p.m. peak hour occurs from 5:00 to 6:00 p.m. The approximate a.m. peak hour occurs from 7:30 to 8:30.

Transit, Regional Rail, and School Bus Service

Pierce Transit provides transit services to Edgewood via Meridian Avenue East (Pierce Transit Route 402 and Route 501). These routes provide primary connections for Edgewood residents to Puyallup, Federal Way and Tacoma as well as connecting to local and regional transit connections. Pierce Transit also operates route deviated services (SHUTTLE) for qualified riders within $\frac{3}{4}$ mile of fixed routes in compliance with American's with Disabilities Act requirements. Edgewood residents can also access regional bus, and commuter rail services (operated by Sound Transit) through local bus connections or through park and ride facilities developed by Sound Transit in Sumner, Puyallup, Auburn, Tacoma and Federal Way.

Three school districts also operate numerous bus routes within the City of Edgewood. These districts are School District No. 3 (Puyallup), School District No. 417 (Fife), and School District No. 320 (Sumner). Most City roads are used for school bus routes. However, routes may change as school populations and service policies shift.

Air and Water Transportation Facilities

The City of Edgewood does not have air or ferry services. Three ferry terminals provide regional service to the Edgewood area: the Vashon Ferry terminal at Point Defiance, Fauntleroy in West Seattle, and downtown Seattle. Interstate 5 and SR 167 provide access to Seattle. River Road and I-5 provide access to Point Defiance. Edgewood is served by the Seattle Tacoma International Airport in the City of SeaTac. I-5, SR 99, and SR 167 provide access to SeaTac.

Non-motorized Transportation

In September 1997, the City Council of Edgewood approved the Linear Park Trail Map. The concept was general and is still in the preliminary planning phases. However, it set general direction for services to non-motorized transportation in Edgewood. Existing trails and sidewalks are found only at limited locations within the City limits. In 2004 the City began work on a “Non-Motorized Transportation System Plan” that was adopted in June 2006. As codified in Edgewood Municipal Code the Non-motorized Transportation System Plan addresses trails, sidewalks, pathways and linear parks that handle pedestrians, bicycles and other non-motorized modes of transportation. The Parks Element of the Comprehensive Plan describes the existing and proposed trail system in more detail.

Transportation Issues

Neighborhood Protection and Traffic Calming

Citizens have expressed concerns about cut-through traffic and speeding on neighborhood streets. Most cut-through traffic occurs because Meridian Avenue East is congested. The City should strike a balance between improving capacity to keep traffic flowing on arterials and installing traffic calming devices on neighborhood streets to discourage inappropriate use. Issues to consider include the cost of providing adequate capacity, the design and types of traffic calming tools used, the community process to evaluate and select these techniques, and the impact of traffic calming on emergency service access.

Traffic calming refers to the use of various physical devices to slow and sometimes divert traffic, but not obstruct it. Traffic calming measures fall into two categories: speed-control and volume-control measures. Speed control measures include speed humps, raised intersections, tree plantings, textured pavement, roundabouts, and deflectors. Deflectors range from the familiar traffic circles to subtle curves and narrowed points on streets. Volume-control measures include closures, partial closures, traffic diverters, and others. Different devices are successful in different situations because every neighborhood and every street is unique.

Transportation Demand Management

To minimize increases in the impacts of vehicles on the transportation system and the environment, alternatives to the single occupancy vehicle will become more necessary. These alternatives include carpooling, walking, bicycling, transit, rail, telecommuting, and flexible hours at work sites.

Transportation demand management (TDM) is the term used when communities, employers, schools, or households develop techniques to influence mode choice, the time of a trip, and the frequency of trips made. Transportation demand management is a major policy thrust in the Puget Sound Regional Council’s MTP and is also required under the GMA. Examples of TDM include:

- charging for parking at worksites to increase the cost of driving alone, relative to carpooling;

- providing free or low cost bus passes to employees as part of an employee benefit package to encourage use of transit or vanpools;
- providing incentives to employees who carpool, walk, or bicycle to work;
- allowing flexible hours at work sites so employees can shift their commute trip to non-peak periods;
- developing telecommuting programs so that employees do not need to commute into the office every work day;
- providing guaranteed ride home programs to employees who bus, carpool, or vanpool; and
- providing worksite amenities, such as cash machines, food services, daycare, breakrooms, showers, and clothes lockers, to reduce the need for non-work trips.

Other techniques, such as convenient parking for carpool/vanpools, in-house ride matching services, and bus maps on site, can encourage alternatives to the single-occupancy vehicle.

Washington's Commute Trip Reduction (CTR) Act sets goals for reducing the number of single occupant vehicle trips at worksites that employ over 100 regular, full-time employees. While there are currently no employers in the City that currently fall under these requirements the City will continue to coordinate with employers and transportation service providers (such as Pierce Transit, King County Metro, and Sound Transit) as appropriate, to coordinate policies and services to CTR affected sites.

The Meridian Corridor

Meridian Avenue East is designated as a regionally significant state highway by WSDOT and is subject to regionally LOS standards set by the Puget Sound Regional Council. Since Meridian Avenue East is a key vehicular, transit and truck corridor, as well as the commercial backbone of the City, the City must work with PSRC and WSDOT to regularly monitor and review the regionally established LOS to support local and regional priorities. Meridian Avenue East (also referenced in this Plan as state highway or SR 161) supports a significant through-traffic function. In continuing to develop policies and implementation strategies within the Meridian Avenue corridor the City needs to consider safety, access management, the lack of pedestrian facilities, congestion, and the ability of transit to flow through the corridor.

Meridian Avenue East has four signalized intersections in the City of Edgewood. These are located at Jovita Boulevard East, 8th Street East, 24th Street East, and 36th Street East.

Meridian Avenue East has a dynamic relationship with the commercial land uses it supports. The design of transportation facilities along Meridian Avenue East will impact land uses on the corridor, and the land uses will impact the transportation system. Increases in traffic are not necessarily good for businesses along the corridor. While increasing traffic may increase economic activity up to some point, maintaining the established LOS for Meridian Avenue East is essential for continued economic viability in Edgewood. If heavy traffic makes merging from commercial centers difficult, drivers are likely to shop elsewhere. Access points that allow for smooth transitions between traffic flows and commercial parking lots make businesses more attractive for drivers to visit. The City should also increase the visual ambiance along this corridor.

Public Transportation Issues

As the region continues to grow in population and ages, more citizens will become reliant on alternatives to the single occupant vehicle for mobility purposes. Pierce Transit, King County Metro, and Sound Transit will be key players in Edgewood's ability to maintain necessary mobility.

Several features can make transit more attractive:

- bus stops at popular destinations
- bus stops that are comfortable for waiting and exiting or entering the bus
- high frequency of service
- low number of transfers required to reach a destination
- service during non-peak hours and weekends
- accessibility of transit facilities (bus stops, park and rides)
- safety and security at the transit facility
- protection from weather

Pedestrian and Bicyclist Issues

Sidewalks are important along Meridian Avenue East (SR 161) and other roadways. Although sidewalks and trails create additional impervious surface, appropriate measures to control surface runoff and infiltration are necessary. Edgewood agrees on the desirability of sidewalks and trails in the City. The City has accepted the Pedestrian Safety Study Report as a guide to implementing a sidewalk and trail system throughout the City and has implemented non-motorized transportation system standards (Title 12 EMC). The non-motorized transportation system is expected to connect residential, commercial and community facilities.

All sidewalk and capital construction projects must comply with the Americans with Disabilities Act (ADA) where technically feasible and cost effective.

Bicycles are an important form of non-motorized transportation use. Sidewalks, trails, bicycle lanes on streets, wider outside lanes, adequate street drainage, bicycle parking, and signage, can accommodate bicycle use.

Freight and Mobility System

Trucks deliver goods to retail establishments and construction materials to construction sites. By increasing the time cost and other costs of moving freight, traffic congestion increases the price of goods. The City must ensure that trucks have the ability to move to and through Edgewood.

Although freight mobility is important to the economy, cut-through traffic from trucks causes negative impacts to residential areas and increased road maintenance costs to the City. To minimize the negative impacts of trucks, the City has established truck regulations. These regulations restrict the movement on trucks over a certain weight on all roads in the City other than Meridian Avenue East for purposes other than delivery (Edgewood Municipal Code Section 10.05). Truck regulations could be further amended to include restrictions on

the use of compression brakes, noise levels, and times and locations for loading and unloading.

Funding

The City of Edgewood’s Street Fund dedicates money to maintain streets, ditches, traffic flow and construct capital transportation projects. Grant funding would be supplemental to this source. The City Edgewood has also adopted Traffic Impact Fees (Title 4.30 EMC) to address identified system improvements necessary to maintain LOS standards and accommodate planned population growth for Edgewood.

Regional Coordination

Edgewood is located in a dynamic and complex regional transportation system. Many governmental entities make funding, policy, and project decisions that affect Edgewood. These entities include the United States Congress, the Washington State legislature, Federal Highway Administration, WSDOT, Puget Sound Regional Council, Pierce County Regional Council (PCRC), Pierce County, Pierce Transit, Sound Transit, and neighboring cities.

Edgewood should track, at the regional, state-wide, and national levels, legislation that will affect funding or may have fiscal or administrative impacts on the City. It is important for Edgewood to foster relationships with its neighbors in jointly funding, mitigating, and constructing transportation projects and services.

Because of its unique geographic location between major growth areas, the City needs to ensure that it does not become a pass-through city. Edgewood is impacted by state highways. Meridian Avenue East (SR 161) runs through the middle of the City and LOS is set by PSRC. Two other state highways, interstate 5 (I-5) and SR 167 carry regional traffic to and from the City of Edgewood. The 8th Street East/Jovita exit, east of the City, links Edgewood with State Route 167. The Meridian Avenue East exit in the City of Puyallup also provides access to and from State Route 167. Milton Way provides access to and from I-5 via 20th Street East. State Route 18, which connects to I-5 in Federal Way, may also impact traffic patterns in Edgewood. Even though I-5 and SR 167 are outside the corporate limits of the City, Edgewood residents and businesses take primary and direct access from them. Edgewood should aggressively work with WSDOT, the transit providers, and neighboring jurisdictions to improve these corridors.

Edgewood's transportation system is also impacted by neighboring jurisdictions. Edgewood needs to address regional traffic impacts to jointly develop or push for roadway improvements along common border streets, and to leverage Metro, Pierce Transit, or Sound Transit service coverage.

Edgewood participates in and is a member of Pierce County’s GMCC, the PCRC, and the PSRC. In addition, City staff has been in contact with the Washington State Department of Transportation, the Puget Sound Regional Council, and Pierce County during the development of this Plan. These intergovernmental coordination efforts have included an assessment of the impacts of the transportation plan and land use assumption on the transportation systems of adjacent jurisdictions. Regular coordination with PSRC to review the effect of regional LOS standards on Meridian Avenue East with respect to the City’s

comprehensive Plan should be a priority. Timely and regular coordination will allow consideration for changes in regional travel growth, employment, and economic development considerations as well as the financial considerations of funding any major new highway improvements.

Operations and Maintenance

Maintenance and operations of the transportation infrastructure are important for safety and to preserve the City's investment. Maintenance includes responding to Citizen Action Requests (CAR), street sweeping, traffic signal maintenance, roadside vegetation control, illumination, street sign and channelization, transit stops, and street resurfacing. Operations include operating and improving the traffic signal system, including transportation system management tasks such as transit priority projects, ramp metering, coordination of signals, and monitoring signal system operations. A pavement management evaluation system assists the City in evaluating and prioritizing streets for resurfacing. A regular program of pavement resurfacing extends the useful life of the roadway asset, and prevents more costly repairs in the future.

Safety Issues

The City of Edgewood staff have identified the following intersections as being in need of safety improvements:

- Jovita Boulevard and Meridian Avenue East/8th Street East and Meridian Avenue East
- Chrisella Road, 36th Street East, and Meridian Avenue East
- 43rd Street Court East and Meridian Avenue East
- 102nd Avenue East and Meridian Avenue East
- Meridian Avenue and 16th Street East
- Meridian Avenue and 24th Street East
- Meridian Avenue and 32nd Street East

These intersections are characterized by a large number of accidents and/or near misses. Of these, the Jovita Boulevard East/8th Street East/Meridian Avenue East intersection is considered the most dangerous.

Dangerous conditions on roadways in Edgewood worsen during or after wet weather. In particular, water on roadways may freeze, creating road hazards, especially on steep slopes.

Most of the roads with shoulders have inadequate shoulders and many shoulders are just storm water drainage ditches. Therefore, pedestrian and bicycle travel on the street system poses risks to the safety of pedestrians and bicyclists. The provision of adequate shoulders next to roads could substantially increase the safety of non-motorized travel in Edgewood.

Parking

As population and job growth occurs in Edgewood during the next twenty years, demand for parking will also increase. Assuming continued preference for single occupancy vehicles (SOV), adequate parking will continue to be an important issue. An adequate supply of parking is important for businesses in a competitive market to be able to attract customers and

employees. Limited off-street parking can force parking onto streets and into neighborhoods, resulting in negative impacts to residential areas, bicyclists, pedestrians, and equestrians.

The design of parking lots is also important to the ambiance of the City. Buffering parking from the street through screening, setbacks, and landscaping can be effective in mitigating these impacts. The design and location of parking lots is also an important factor in safely drawing pedestrians to businesses from streets and sidewalks. See the Community Character Element for more detail.

GOALS AND POLICIES

MOBILITY AND CAPACITY

Goal T I: Develop a safe and efficient street system that accommodates all transportation modes and maximizes people carrying capacity. Improve the operating efficiency of the existing system and maintain the capacity to adequately serve present and future volumes of traffic.

Policies

T1: *The efficient movement of traffic should be accomplished through advanced traffic control measures, intelligent transportation system technologies, speed management, access management, channelization improvements, and multimodal design features.*

T2: *Restrict roadway access points and locate driveways on Meridian Avenue to improve safety, maintain optimal capacity and provide for the efficient movement of autos, bicycles, pedestrians and transit. Access management measures may include:*

- *Providing internal access between off-street parking areas in commercial areas through reciprocal agreements;*
- *Using intersecting streets as access points; or*
- *Designing subdivisions for efficient internal circulation.*

Discussion: Many safety and capacity problems relate to driveways that connect to public roads. Design of new street improvements should include provisions to consolidate existing accesses where feasible.

T3: *Require dedication of roadway rights-of-way for new development consistent with the appropriate functional classification, adopted road standards, and the Comprehensive Plan.*

T4: *Coordinate with the WSDOT and the City of Milton to study and resolve the traffic congestion and circulation concerns found on Meridian Avenue East and arterials.*

T5: *Conduct a circulation study to better understand the demands on the transportation system in Edgewood. Conduct a study to ascertain the origins and destinations of peak hour trips through the City of Edgewood along Meridian Avenue East to assist the City in forming policies regarding state highways.*

T6: *Update Edgewood's roadway design standards to provide a higher level of consistency to the development community and to increase the safety and function of the roadway for all users and modes to better align with the character and level of volumes expected on the roadway. Develop a uniform set of appropriate roadway design standards that comply with federal and state design criteria.*

Discussion: The City has adopted Pierce County's road standards and classification map, which addresses issues such as emergency access, maintenance, minimum roadway width, and roadbed construction. The City should revise these documents to reflect local conditions and require all public and private road projects to comply with them.

T7: *Assure that transportation systems are appropriately sized and designed to support the land use element, serve the*

surrounding land uses, and minimize the negative impacts of growth.

Discussion: The City can use the Arterial Classification Map as a guide to balance street function and land use.

T8: Develop a citizen participation program to increase public involvement in circulation and transportation planning issues.

T9: Promote adequate capacity on roadways and intersections to provide access to homes and businesses.

T10: Consider all multimodal transportation modes in street improvement projects.

T11: Consider improvements that support non-motorized transportation or transit in developing a concurrency management system.

T12: Encourage minimization of driveways on Meridian Avenue East, Jovita Boulevard East, and other arterials by combining driveways through the development review process and implementing capital projects.

T13: Use advanced technologies to better manage traffic volumes on Meridian Avenue East and to improve the efficiency and coordination of the signals.

Discussion: An upgraded signal system will be responsive and move people efficiently and safely.

T14: Recognize that the primary use of roadways in Edgewood is to move people. Parking on arterial roadways is a secondary need.

T15: Work with adjacent jurisdictions and stakeholders to jointly study the

(SR 161), SR 167, and Interstate 5 corridors to develop a plan and funding strategy for future improvements.

Goal T II: Develop a transportation system that enhances the delivery and transport of goods and services.

T16: Improve Meridian Avenue East to support safe and efficient truck movement.

T17: Enforce truck regulations so that trucks do not utilize City roads, except for local deliveries and services.

Discussion: The City can minimize the disruption of arterial traffic flow by developing ordinances that regulate zones and times in which loading is permitted.

Multimodal Transportation

Goal T III: Provide clear and identifiable systems of walkways, sidewalks, and trails.

T18: Provide a system of Linear Park Trails for pedestrians and bicyclists.

Discussion: The Edgewood City Council adopted the concept of a Linear Park Trails Map on September 11, 1997, and incorporated this into the City's development code in 2006 (Title 12 EMC). The non-motorized transportation system plan seeks to connect parks, open space, recreation areas, transit, trails, schools, and shopping. To implement this policy, the City should preserve rights-of-way for future non-motorized trail connections and utilize utility easements for trails when feasible.

The City can provide systems of walkways and trails through some of the following methods:

1. Work with school districts to identify and construct high priority pedestrian and bicycle school routes.
2. Require new commercial and multi-family developments to construct sidewalks or trails.
3. Assist neighborhoods in forming Local Improvement Districts (LIDs) for sidewalk or trail construction.

T19: Develop a non-motorized transportation system that promotes connectivity between residential developments via pathways, trails and street extensions.

Discussion: A non-motorized transportation system that connects residential neighborhoods encourages walking and provides for safer routes for children.

T20: As general guidelines, give priority to improvements to the walkways and trails systems that:

- **Increase public safety,**
- **Construct missing links in the existing bicycle and pedestrian system,**
- **Make upgrades to existing walkways and trails,**
- **Are along arterial streets, and**
- **Connect to key destinations.**

Discussion: Because funding sources are limited, the City must establish priorities. Information on costs and benefits of improvements will be included in a walkway and trail plan to assist the City Council and Planning Commission establishing priorities.

T21: Provide pedestrian signalization at signalized intersections and install midblock crossings if safety standards can be met.

T22: Develop a curb ramp program to install wheelchair ramps at all curbed intersections.

T23: Work with neighboring jurisdictions and other agencies to ensure that Edgewood's bicycle routes/corridors and designs are compatible and interconnect.

T24: Plan for the expansion of appropriate road shoulders to maintain safe areas for walking, jogging, and biking.

T25: Accommodate the needs of bicyclists and pedestrians in the design and construction of all future roadway improvements

Discussion: Design of roadway improvements can reduce barriers and increase safety for bicyclists and pedestrians. The location and design of walkways and trails should vary depending on adjoining land uses.

T26: Require the installation of walkways or trails on both sides of Meridian Avenue East.

Goal T IV: Support improved transit coverage and service throughout the region to improve mobility options for Edgewood.

T27: Plan to maintain and improve transit coverage.

Discussion: Meridian Avenue East is a primary transit corridor in and through Edgewood. The City should advocate frequent headways and express service and emphasize priority for easy connections in/on higher density residential areas, and popular destinations.

T28: Enhance bus service connections across county lines and to popular destinations.

Discussion: The City should support efforts to provide regional express bus service, good connections to commuter rail stops, and a rider-friendly fare system. To implement this policy, the City will work with Pierce Transit, King County Metro, and Sound Transit.

T29: Consider transit facilities as mitigation for new developments that have probable significant impacts to the transportation system.

T30: Support and promote public involvement in Pierce Transit, King County/Metro, and Regional Transit Authority decision-making.

Goal T V: Promote programs to encourage carpooling, transit, and non-motorized transportation to reduce the impacts of economic and residential development.

T31: Work with Pierce Transit to make transit use more attractive to potential and existing customers.

Discussion: Examples can include increasing frequency of service, requiring adequate right-of-way, sidewalk, and roadway improvements where transit stops are located, and safe and weather protected passenger waiting areas.

T32: Provide for a new Park and Ride location in Edgewood.

Discussion: To implement this policy, the City should identify and evaluate potential locations of Park and Ride lots that could be easily served by public transportation and would not have conflicting weekday demands.

T33: Work with Pierce Transit and businesses to evaluate and improve transit service and facilities that serve employment sites.

T34: Support public and private TMD programs to promote alternatives to driving alone.

Discussion: To implement this policy, the City will work with major employers, such as schools and retail centers, to provide incentives for carpooling, transit use, and non-motorized transportation. The City can also support educational programs that communicate transportation options.

T35: Encourage new commercial and office developments to provide physical features supportive of carpooling, transit, and non-motorized modes of travel.

Discussion: Examples can include preferential parking for carpools, vanpools and bicycles; transportation information and bus schedules, special loading and unloading areas for transit, carpools, and vanpools; and strong pedestrian linkages to off-site destinations.

Goal T VI: Ensure adequate parking supply.

T36: Develop guidelines that ensure adequate parking supply.

Discussion: Sufficient off-street automobile parking reduces transportation conflicts on streets and supports pedestrian and bicycle uses. The City should require parking to be designed for average need, not full capacity.

T37: Develop off-street parking that is compatible with abutting uses and supports a pedestrian-oriented streetscape.

T38: Encourage shared parking, underground parking, or parking structures.

SAFETY

GOAL T VII: Minimize transportation conflicts to ensure safety.

T39: Conduct studies and regularly review data at high accident locations to support operational changes and designs that improve safety.

T40: Maintain and enhance the safety of roads in the City of Edgewood.

Discussion: Examples of methods to improve safety include center left turn lanes, median islands, turn prohibitions, signals, lighting, access management, and other techniques.

T41: Improve the safety of intersections by eliminating obstacles to vision, constructing turn lanes, or providing signalization.

T42: Designate and maintain Meridian Avenue East as a multimodal roadway, emphasizing pedestrian and traffic safety for the local Community.

T43: Identify appropriate speed limits on existing and new connecting roadways within Edgewood and identify improvements needed to support safe roadway operation at the desired speeds. Provide shoulders and improve the sight distances where needed to meet the design standards for the desired speeds.

T44: Provide access control where needed to improve the safety of roadways, install improved lighting or intersection control where needed, provide adequate facilities for

pedestrians where needed (especially around schools) and provide safe areas at bus stops for transit patrons.

FINANCING

Goal T VIII: Secure a reliable funding package to ensure a cost-effective LOS for the roadway network of the City of Edgewood.

T45: Regularly review and update the Traffic Impact Fee schedule and ordinance to provide more consistency with existing zoning designations and ITE standards to ensure the equitable assessment of impact fees.

T46: Develop a Transportation Improvement Plan (TIP) that demonstrates the medium-range adequacy of transportation revenues, by balancing project costs against reasonably expected revenue sources.

Discussion: The TIP is part of the six-year Capital Facilities Funding Plan located in the Capital Facilities Element. To implement this policy, the City will undertake an analysis of potential funding sources, the revenues that they would generate, and the feasibility of implementation.

T47: Annually update the TIP to reflect changes in revenue availability and roadway system needs.

T48: Develop a concurrency management program and revise it as part of the annual amendment process for the Comprehensive Plan. Update the concurrency program to align with the multi-county planning policies which require standards based upon the movement of people and goods, not vehicles.

Discussion: The intent of the concurrency management program is to ensure funding

for transportation improvements needed to support new development and maintain adopted transportation LOS.

T49: In the event that the City is unable to fund the transportation capital improvements needed to maintain adopted transportation LOS standards, pursue one of the following actions:

- **Phase development that is consistent with the Land Use Element until adequate resources can be identified to provide adequate improvements;**
- **Revise the Land Use Element to reduce the traffic impacts to the degree necessary to meet adopted transportation service standards;**
- **Reevaluate the City's adopted transportation LOS standards to reflect levels that can be maintained, given known financial resources;**
- **Require new and existing development to implement measures to decrease congestion and enhance mobility; or**
- **Place a moratorium on development in affected areas.**
- **Develop concurrency programs and methods that fully consider growth targets, service needs and level-of-service standards.**
- **Focus level-of-service standards for transportation on the movement of people and goods instead of only the movement of vehicles.**
- **Encourage the mitigation of transportation related concurrency problems through the use of transit, walking, biking, system efficiencies and transportation system management.**

T50: Allocate resources in the City TIP and City Capital Facilities Funding Plan according to the prioritization guidelines listed in the Capital Facilities Element.

T51: Maintain at least LOS C with a volume/capacity ratio of 0.80 or less on all arterials in the City of Edgewood, with the following exceptions:

- **Maintain LOS F with a volume/capacity ratio of 1.30 on Meridian Avenue East (SR 161) between 36th Street East and the Union Pacific rail crossing**
- **Maintain LOS F with a volume/capacity ratio of 1.30 on Meridian Avenue East (SR 161) between 8th Street East and the King County Line;**
- **Maintain LOS D with a volume/capacity of 0.90 on 114th Avenue East between Jovita Boulevard and 8th Street East.**

Discussion: The GMA requires that a LOS standard be established for local arterial routes. LOS A is the highest LOS and LOS F is the lowest. LOS D and lower is typical of many arterial streets and intersections in urban areas. LOS A, B, and C are characteristic of residential streets and rural areas.

SR 161 (Meridian Avenue East) is a regionally significant state highway. The Puget Sound Regional Council, in consultation with WSDOT determines the LOS for regionally significant state highways.

The City will implement this policy through its TIP and concurrency management program. In implementing levels of service for Meridian Avenue East, the City will continue to coordinate with PSRC and

WSDOT, particularly as improvements planned and funded for Meridian Avenue East are implemented.

T52: *Balance financing of roadway improvements between existing and future users based on the principle of proportional benefit.*

Discussion: Existing gas taxes and motor vehicle registration fees are not sufficient to meet the financial needs of Edgewood's transportation system. Other funding methods should be developed that are equitable and consistent with the benefits derived from improvements. Examples include Road Improvement Districts, LID public/private partnerships, impact fees, and other tools. The funding programs must be adequate to allow transportation improvements to be implemented concurrently with development. New development must pay a fair share of the cost to serve it.

T53: *Analyze and strongly consider the use of development impact mitigation fees.*

Discussion: The City should require traffic studies where a change of land use is likely to result in a LOS on adjacent roads and require mitigation based on these studies.

T54: *Require that all road projects be adequately funded to include all required public safety and design standards.*

T55: *Identify and pursue long-term strategies to obtain grant funding.*

Discussion: The City should maximize opportunities for grant awards by matching project objectives with revenue sources and developing joint projects with neighboring jurisdictions and other agencies.

T56: *Support efforts at the state and federal levels to increase funding for transportation systems.*

T57: *Aggressively pursue improvements to the State Highways through or near Edgewood. The improvements can include:*

- ***Traffic management systems with queue spillback detection***
- ***A communications backbone on Meridian that can support the installation of intelligent transportation system devices such as CCTV cameras, video detection, signal interconnect, speed detection and dynamic message signs.***
- ***Transit signal priority to improve bus service and reliability***
- ***Capacity increases;***
- ***Access Control***
- ***HOV lanes or transit enhancements;***
- ***Improved pedestrian facilities, such as sidewalks, pedestrian crossings, and bus zone improvements;***
- ***Advanced traffic signal system that is traffic responsive***
- ***Street lighting***

T58: *Develop interlocal agreements with neighboring jurisdictions and other agencies to develop funding sources for transportation improvements.*

Discussion: The City should work with other agencies to mitigate the impacts of new development, coordinate joint projects, and establish a program for the maintenance of Meridian Avenue East. The City can share transportation resources and reduce overlap in transportation expenditures through interlocal agreements.

T59: *Support the continuous, cooperative, and comprehensive transportation planning process conducted by the PSRC pursuant to its*

designation as the Puget Sound's Metropolitan Planning Organization.

Discussion: The PSRC is the primary forum for the development of regional transportation and strategies. The City is required to submit this Transportation Element to the PSRC for review and certification of conformity with the Metropolitan Transportation Plan, as dictated by county, state, and federal guidelines.

T60: Participate in public/private partnerships to finance facilities.

Goal T IX: Assign a high priority to meeting the maintenance needs of the transportation system so that it is safe and functional.

T61: Inventory and inspect the transportation infrastructure annually.

T62: Establish a pavement management system.

T63: Develop a regular maintenance schedule for all components of the transportation infrastructure.

Discussion: The City should base maintenance schedules on considerations for safety and resource conservation.

T64: Encourage the maintenance and improvement of the street system when addressing the transportation and circulation concerns of the community.

T65: Develop strategies necessary to improve public streets to meet applicable road standards.

LAND USE AND TRANSPORTATION

Goal T X: Maintain a dynamic relationship between transportation and land use along the Meridian Avenue East corridor.

T66: Develop a comprehensive Meridian Avenue East corridor study and plan.

T67: Consider a complementary roadway pattern to increase accessibility to higher use areas.

T68: Increase the visual ambiance along the Meridian Avenue East corridor.

Discussion: See the Community Character Element.

T69: Encourage parking behind residential and commercial facilities along Meridian Avenue East and landscaping in the front.

T70: Promulgate programs, such as an adopt-a-road program, to assist in keeping roadsides and trails free of litter.

Goal T XI: Protect the livability and safety of residential neighborhoods from the adverse impacts of the automobile.

T71: Design new residential streets to discourage cut-through traffic while maintaining the connectivity of the transportation system.

T72: Support the creation of residential parking zones or other strategies to protect neighborhoods from spillover parking from major parking generators.

T73: Work with residents to encourage preservation of neighborhood character and safety on residential streets.

Discussion: Reducing speeds and cut-through traffic can protect the livability and safety of residential neighborhoods. The City should explore a program whereby neighborhoods can buy traffic calming devices. The City should involve Fire District

No. 8 and the Edgewood Police Department in the implementation of this policy.

Environmental Stewardship

Goal T XII: Develop transportation solutions that align with the state and multi-county policies on climate change and global warming.

T74: Consider the impacts of climate change in the analysis of transportation improvements.

T75: Identify measures that reduce GHG emissions that could be included in roadway design and development standards.