

CHAPTER 9 TRANSPORTATION

9.1 Introduction

9.1.1 Purpose of the Transportation Element

The Transportation Element consists of goals, policies, recommendations, and implementation plans to guide the development of the City's transportation system in support of the City's vision for the future.

The Transportation Element is intended to ensure that the City's transportation infrastructure and its management meets the needs of the City's populace and economy for safe, efficient, and economical local transportation and access to regional transportation facilities and services. It is intended that the Transportation Element:

1. Support, coordinate, and integrate with the plans of the other elements of the Comprehensive Plan,
2. Establish a framework for transportation system planning, development, and management processes,
3. Meet level of service, concurrency, and related elements of the Growth Management Act,
4. Address transportation facilities, services, and strategies for providing an array of practical alternatives for multi-modal mobility via:
 - Automobile and truck
 - Public transit, high-occupancy vehicle, and rideshare modes
 - Non-motorized (Bicycle and pedestrian modes)
5. Emphasize cost-effective, environmentally sound, and fundable transportation improvement measures which promote and enhance the livability and attractiveness of the City's neighborhoods and activity centers,
6. Promote efficient use of the existing transportation system components through Transportation System Management, and reduce the growth in single-occupant vehicle travel via Transportation Demand Management, and
7. Coordinate with all transit, municipal, regional, and state jurisdictions, as well as the private sector, in development and operation of the transportation system and transportation services.

9.1.2 The Transportation Setting

1. **Roadway and Capacity, and Level of Service (LOS).** Woodinville's roadway system serves cars, trucks, buses, bicycles, and pedestrians. Woodinville's roadway system connects to those of the City of Bothell, King County, Snohomish County and the state highway system.

The City's adopted level-of-service (LOS) for its roadway system is "E" throughout the City. Currently, the roadway system is operating at below LOS E at six locations (see Table 9-1). The City has a 20-year list of transportation improvements that are projected to keep the City's LOS at "E" or better at all measured locations (Table 9-1).

level-of-service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period.

LOS E describes operations with delay greater than 40 and up to 60 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume/capacity ratios. Individual cycle failures are frequent occurrences.

2. **Transit.** Metro Transit currently serves the City of Woodinville. Most of Metro's routes serve commuters traveling either to downtown Bellevue or downtown Seattle. In the downtown area, only NE 171st Street, NE 175th Street, 140th Avenue NE, and a portion of State Route (SR) 202 are served by transit. There is no bus service along SR 202 or in the Tourist District and no direct route connections to Snohomish County.
3. **Non-motorized.** Woodinville has a system of non-motorized facilities that serve bicyclists, in-line skaters, pedestrians, and other non-motorized transportation. The system is made up of sidewalks, paved shoulders, and paved and unpaved trails that provide connections between the downtown, the Tourist District and the neighboring cities of Bothell and Redmond. The most heavily traveled non-motorized facility within the City is the Sammamish River Trail, which parallels the Sammamish River connecting to the Burke-Gilman Trail system.
4. **Freight Mobility.** The efficient delivery of freight goods is important to the vitality of Woodinville's retail and manufacturing businesses. The cost of moving freight is directly related to roadway congestion and the delay incurred by it. If the cost to deliver freight increases in Woodinville relative to its neighbors, business will be impacted. Woodinville is traversed by railroad tracks owned by the Burlington Northern Santa Fe (BNSF) Railway which connects the BNSF Pacific Mainline at Tukwila with the Steven's Pass line at Snohomish Junction West. Another line, which runs down the eastside of the Sammamish River Valley through Redmond and south along East Lake Sammamish, is being converted to a non-motorized use trail by King County.
5. **Neighborhood Preservation.** The citizen's of Woodinville are sensitive to cut through traffic on residential streets and its impact on the safety and livability of their community. Cut through traffic may be caused by congestion on arterials, by a lack of sufficient connections within the street network, or other factors.
6. **Regional Coordination.** Woodinville serves as a crossroads for regional SR 202 and SR 522 (and SR 9 within the UGA). Other regional routes also cross through Woodinville such as Woodinville-Duvall Road and Woodinville-Snohomish Road. Woodinville's regional planning partners include King County, Snohomish County, and the Cities of Bothell and Redmond. In addition, Woodinville is within the Interstate 405 (I-405) planning area.
7. **Funding.** The City of Woodinville endeavors to fund the development and construction of transportation projects to provide continued mobility and maintain adopted level-of-services (LOS). Projected revenues are unable to fund all projects. The City utilizes grant programs at the state and federal level and public / private partnerships that are available to supplement City-generated revenue. In addition to the public funding, the City of Woodinville collects impact and/or mitigation fees to offset LOS reduction and land use needs.
8. **Downtown Street Development.** Woodinville's downtown area is the commercial backbone of the City. In addition to being the primary area of commercial activity, it is also

the most urbanized part of the City with the most traffic congestion. Pedestrian, bicycle and other non-motorized facilities and amenities are part of Woodinville's downtown transportation system and are being used by the community.

9. **Travel Demand Management / Growth Management Act Compliance.** Travel Demand Management (TDM) is a way to relieve traffic congestion that does not require capital improvements. TDM can be used to help reduce the number of vehicle trips and the time at which trips are made. Reducing trips requires that persons travel via an alternative mode (for example: carpool, transit, and non-motorized travel) or decide not to make the trip at all. Promoting TDM is a requirement of the Growth Management Act (GMA) and since 1991 has been a requirement for all employers within urban areas that employ over 100 persons at a single work site. There are several agencies that support TDM activities including the State Department of Transportation and King County Metro Transit.
10. **Parking.** Parking supports the City businesses and community.
11. **Operations and Maintenance.** The City monitors the transportation system for wear and damage to protect public investment and to respond to citizen concerns and requests. Travel within and through Woodinville is heavily dependent on the automobile. According to the 2000 Census, 75 percent of Woodinville residents drive to work alone, 12 percent drive in carpools, 5 percent travel to work by transit. Of the remaining 8 percent, 4 percent travel by non-motorized modes and 4 percent work at home. This fact, together with a limited arterial system, limited transit service, and limited non-motorized travel facilities characterizes much of the City's current transportation system and the challenges and opportunities for its future betterment. It is important to recognize that travel volumes and transportation to, in, and through Woodinville is also conditioned by its regional location, especially for automobile and transit travel (Figure 9-1). Specific challenges are posed by:
 - a. Nearly all of the arterial traffic is accommodated by only a few routes, all of which traverse or pass near the downtown; SR 202, NE 175th Street–Woodinville-Duvall Road, 140th Place NE–148th Avenue NE, and arterial NE 190th–195th Streets. Most of the level-of-service E and F intersections and high-accident locations are on these routes, principally in and near downtown (Figures 9-3 and 9-4). Several two-lane arterial segments carry average weekday traffic volumes of 15,000 to 25,000 vehicles (Figure 9-3),
 - b. Consequently, Woodinville's unique geographic location and its limited arterial network reflect the high percentage of through traffic on all of the principal routes serving and traversing Woodinville; Interstate-405, SR 522, SR 202, SR 9, the Woodinville–Duvall Road, and the 140th Avenue NE–148th Avenue NE corridor,
 - c. Woodinville-Duvall Road (with NE 175th Street) is the only through east-west arterial within the City of Woodinville,
 - d. Gaps in much of the downtown street network necessitate excessive use of the major routes for local circulation, with attendant adverse impacts on level-of-service, traffic friction and delay, safety, and inconvenience (see Figure 9-2),
 - e. Eastbound SR 522 access into downtown is impeded by bottlenecks and circuitous routing along 131st Avenue NE slowing both automobile and transit travel,
 - f. Transit service is mainly oriented to peak-hour connections to the Interstate-405 and SR 522 corridors south and west toward Bellevue and Seattle. Large portions of Woodinville's residential and employment areas lack local transit service,

- g. Portions of Woodinville lack adequate pedestrian and bicycle facilities, with only a few sidewalk and bicycle lane segments in or near downtown. Portions of the low-density residential areas lack paved shoulders for non-motorized travel. The incomplete road network, hilly terrain, railroad tracks, and the Sammamish River serve to restrict safe and convenient non-motorized access to downtown and the Sammamish River Trail, and
- h. Regional air service in the Puget Sound area is provided by Seattle-Tacoma International Airport.

9.2 Goals and Policies

GOAL T-1: To establish and maintain a transportation system which supports the land use plan and incorporates transportation/land use linkages.

Policies

- T-1.1** Cooperate with neighboring cities of Bothell, Kirkland, and Redmond; the Washington State Department of Transportation; the Regional Transit Authority; Puget Sound Regional Council; Sound Transit; King County; Snohomish County; special service districts; citizens; and private developers in defining, planning, and implementing transportation improvements that accommodate planned land use and densities.
- T-1.2** Coordinate the planning of new facilities and management of the transportation system with current and future needs of the adjacent King County Bear Creek and Northshore planning areas (including participation in a regional corridor study of the Sammamish Valley [SR 202] Woodinville-Duvall Road, and Regional Arterial Network (RAN) corridors), Snohomish County, and neighboring cities.
- T-1.3** Cooperate with these and other jurisdictions on regional transportation solutions addressing the significant pass-through traffic originating outside the City of Woodinville.
- T-1.4** Develop transportation systems that support the quality of life for the residents of Woodinville while enhancing the economic viability of the City of Woodinville.
- T-1.5** Prepare solutions in cooperation with neighboring cities, transit agencies, and Washington State Department of Transportation for areas where movement of employees, goods, and services are impeded by traffic congestion during peak and mid-day periods.
- T-1.6** Develop a roadway system that maximizes the person-capacity of the system.

GOAL T-2: To ensure development is consistent with the transportation goals and policies.

Policies

- T-2.1** Development in the City of Woodinville should pay its fair share toward transportation improvements to help mitigate impacts as identified through adopted road adequacy standards, an impact fee program, State Environmental Policy Act, and the development review process.
- T-2.2** Monitor and modify as necessary access and circulation standards to maintain the

- safety and integrity of the arterial roadway system and safety, convenience, and amenity of on-site circulation.
- T-2.3** Require plan and approval of vehicle access, pedestrian access, and circulation schemes for major public or private developments.
- T-2.4** Encourage private development to support public transportation facilities.
- T-2.5** Encourage parking facilities to be designed to facilitate transit use and pedestrian access.
- T-2.6** Encourage the location of building entrances and transit facilities near each other.
- T-2.7** Encourage pedestrian amenities as part of all new public and private development in the City of Woodinville.
- T-2.8** Encourage landscaping in the construction of all new streets and street frontage improvements.
- T-2.9** Encourage trucks to make deliveries, when possible, outside of the peak hours of traffic.
- T-2.10** Coordinate with railway owners and users to develop and manage roadway and rail intersections in order to support transportation goals.
- T-2.11** Promote the construction of grade separations between roadways and rail where traffic volumes, rail movements or accident experience warrant them.
- T-2.12** Coordinate with Burlington-Northern Santa Fe Railroad to identify locations for and to develop new roadway rail crossings in order to complete key connections within Woodinville's transportation system.
- T-2.13** Incorporate special gateway/entrance treatments into transportation projects which support the identity of Woodinville and encourage patronage of Woodinville's businesses.
- T-2.14** Provide for a complete system of sidewalks in the downtown area that connects the retail areas to transit, the regional trail system, parking, parks and public facilities.
- T-2.15** Encourage signing that directs pedestrians to downtown public facilities consistent with approved City Standards.
- T-2.16** Develop a transportation network that supports the City's Land Use goals.
- T-2.17** Promote off-street parking.
- T-2.18** Reduce block size through the development of a grid road system.
- T-2.19** Promote a "Boulevard" concept in pedestrian oriented areas using access control and pedestrian friendly design to promote pedestrian activity. A "Boulevard" concept would incorporate street trees on both sides of the roadway with a center-landscaped median that meets vehicle sight distance and safety standards and specifications.

- T-2.20** Encourage transit services that are accessible to all users and provide a viable transportation alternative within the City.

GOAL T-3: To establish a transportation system planning, development, and management process.

Policies

- T-3.1** Improve the City of Woodinville's local transportation system by:
1. Emphasizing the improvement of existing corridors to improve traffic circulation within those areas which are already experiencing circulation or congestion problems,
 2. Proposing new transportation corridors only when other alternatives are not physically, economically, or functionally feasible,
 3. Identifying the acquisition of right-of-way at the earliest possible time when new corridors are deemed necessary, and
 4. Providing measures for the protection of natural systems and adequate buffering of existing and anticipated land uses during the establishment and acquisition of additional rights-of-way.
- T-3.2** Continue to assess rights-of-way for and plan completion of missing portions of the local roadway system, including neighborhood collectors. When new developments are proposed, completion of these missing roadways will be studied and encouraged as alternatives for access.
- T-3.3** Develop and implement a long-range Transportation Facilities Plan (TFP) that ensures compliance with the City's adopted Transportation Infrastructure Standards and Specifications and supports growth envisioned by the City's Land Use Element.
- T-3.4** Update the TFP at least once every three years.
- T-3.5** Annually update the Capital Improvement Program (CIP), which is a subset of the Capital Facilities Plan, to identify in detail needed transportation improvements and their funding for the current six-year planning period.
- T-3.6** Allocate resources in the City's transportation capital investment program according to the priorities as indicated below:
1. Address public health and safety concerns,
 2. Ensure adequate maintenance of existing facilities throughout the City,
 3. Relieve circulation and congestion problems,
 4. Provide other growth-supporting improvements serving downtown,
 5. Give priority to multi-modal projects versus single mode projects,
 6. Give priority to transit and non-motorized projects downtown, and
 7. Give priority to community development improvements not within the downtown, which contribute to the City's economic vitality.

- T-3.7** Emphasize the development of joint projects, such as those involving neighboring cities, King County, Snohomish County, Washington State Department of Transportation, and/or transit providers, particularly where such partnerships will increase the likelihood of obtaining funding.
- T-3.8** Coordinate with other right of way users and neighboring jurisdictions when planning facility construction and/or maintenance.
- T-3.9** Identify and require, as conditions of development approval, needed rights-of-way, strategies to reduce demand, and off-site improvements to the extent that such conditions are directly related to impact mitigation and will benefit the development.
- T-3.10** Integrate and achieve consistency between the short-range and long-range transportation plans and improvement programs of the City.
- T-3.11** Encourage transit providers to maintain their facilities to adopted transit standards.
- T-3.12** Coordinate transportation plans so they are consistent with the Capital Facilities Plan, and all Elements of the Comprehensive Plan.

GOAL T-4: To establish level-of-service standards to ensure development meets Growth Management Act transportation concurrency requirements.

Policies

- T-4.1** The City of Woodinville should only approve development that would be consistent with the Level of Service standards established in the City's Zoning Code. The following criteria must be met:
1. New development should not create a level-of-service F for intersections,
 2. Where development significantly impacts an existing or future level-of-service F intersection, the development must offset impacts by either:
 - a) constructing improvements to result in Level of Service E or better, or
 - b) mitigating impacts by one or more alternative measures as described in the City's Zoning Code, including contributions to an impact fee program, Transportation Demand Management measures, project phasing, or other measures determined by the City.
 3. The City will identify intersections that may be exempt from 1 and 2 above when improvements to remedy level-of-service deficiencies are not financially or environmentally feasible as determined by the City. However, other mitigating measures as described in Goal T-7 may be required.
- T-4.2** Cooperate with the neighboring cities and counties, transit operators, and Washington State Department of Transportation to comply with Growth Management Act concurrency and level-of-service requirements.

- T-4.3** Consider other modes of transportation, in addition to single-occupant vehicles, in making concurrency determinations.
- T-4.4** Coordinate data collection and processing using professionally accepted measures and methods in determining transportation level-of-service and other transportation information related to travel demand and system operations with adjacent local jurisdictions and transit agencies.
- T-4.5** Develop interlocal agreements with neighboring jurisdictions that require development within Woodinville and the neighboring jurisdictions to mitigate significant impacts that are generated on Woodinville's and neighboring jurisdiction's transportation system in violation of that jurisdiction's concurrency service standard. Prior to entering into such an agreement, the City shall verify that the concurrency service standards of the neighboring jurisdiction are consistent with the policies under Goal T-4.
- T-4.7** Evaluate and ensure the adequacy of the transportation system by establishing and monitoring transportation service standards. Service standards shall:
1. Give priority to overall transportation system performance over individual locations,
 2. Reflect development patterns and objectives for different land uses,
 3. Account for the availability of alternative means of transportation,
 4. Reflect community goals in other areas such as land use, environmental protection, congestion management, and economic development, and
 5. Support the City's concurrency standard that defines acceptable levels of service for roadway segments and intersections throughout the City.
- T-4.8** Continue to consider King County Metro and Sound and Community Transit's level-of-service guidelines for transit when making transportation decisions.

GOAL T-5: To improve and increase use of public transit, paratransit, and ridesharing in cooperation with transit providers, adjacent jurisdictions, and the private sector.

Policies

- T-5.1** Cooperate with transit providers, adjacent jurisdictions, and private development to:
1. Encourage commuters to use car/vanpool programs, public transit, and non-motorized transportation as alternatives to the single-occupancy vehicle,
 2. Develop ride sharing, transit use, and incentive programs through the development review process and/or in accordance with state and local legislation for residential and commercial development,
 3. Promote and encourage coordination between transit service and new development to facilitate transit use, and
 4. Encourage transit providers, paratransit operators, and private purveyors to provide mobility for elderly, disabled, low income, youth, and other mobility-disadvantaged residents in the City of Woodinville and the surrounding community.

- T-5.2** Cooperate with transit agencies to achieve increased service from more developed portions of Woodinville by extending existing transit routes or creating new routes while encouraging Woodinville residents to take advantage of them.
- T-5.3** Cooperate with King County Metro and Community Transit, in coordination with local and regional transportation and planning efforts, to establish one or more transit centers in the Woodinville area to facilitate transit options for local and regional travel, increase service frequency and to shift dependence away from single-occupancy vehicle automobile travel.
- T-5.4** Locate park-and-ride lots along major transit corridors and near areas where high-density residential development is planned to intercept trips close to their origin and to make use of effective transit/high-occupancy vehicle facilities.
- T-5.5** Plan for and implement additional park-and-ride lots as needed in low-density neighborhoods and within joint-use lots to facilitate ride sharing where transit is not effective or efficient.
- T-5.6** Explore potential for joint use of park-and-ride lots with the public and private sectors for commercial and residential use.
- T-5.7** Encourage transit providers to improve existing park-and-ride lots to maximize use. This includes bicycle facilities, security, lighting, and lot expansion, where appropriate.
- T-5.8** Cooperate with public transit providers and Washington State Department of Transportation to develop transit improvements and high-occupancy vehicle treatments on Interstate-405 and SR 522. This may include developer contributions as part of the development review process.
- T-5.9** Cooperate with public transit providers and Washington State Department of Transportation to develop transit and ride sharing road improvements such as bus pullouts, high-occupancy vehicle lanes, high-occupancy vehicle priority treatment at major intersections, and preferential treatment of high-occupancy vehicles.
- T-5.10** Actively participate in the Eastside Transportation Partnership and its high capacity transit recommendations. The City should cooperate with the Regional Transit Authority, King County, Snohomish Community Transit, Washington State Department of Transportation, and neighboring cities of Bothell, Kirkland, and Redmond in planning for high-capacity transit. This regional high-capacity transit system should be integrated with the planning for the rest of the transportation system serving the Woodinville area. Planning for high-capacity transit should not detract from the immediate need for other high-occupancy vehicle facilities and improvements in the area.
- T-5.11** Coordinate with transit agencies to identify and designate locations for planned park-and-ride lots and transit stations and ensure ease of access to those facilities. Ensure that clear provisions for such transit facilities are made in the City's development regulations.
- T-5.12** Coordinate with transit agencies to plan and construct transit-friendly road treatments along primary corridors and selected transit routes.

- T-5.13** Coordinate with transit agencies to plan for public transportation modes that are time-coordinated and interconnected (signal interconnect and over-ride) to increase level-of-service and ridership.
- T-5.14** Locate and design transportation centers and terminals to permit use by multiple modes of travel (e.g., bus, auto, bicycle, pedestrian/disabled, and high-capacity transit).
- T-5.15** Encourage and support cooperation among neighboring cities, transit agencies, and King and Snohomish Counties to establish compatible schedules and terminal locations.
- T-5.16** Coordinate with transit agencies to promote service throughout the City and connections between the Tourist District and downtown.

GOAL T-6: To promote non-motorized travel and ensure its safety, convenience, and comfort.

Policies

- T-6.1** Actively promote the use of bicycle and pedestrian transportation as viable alternatives to motorized transportation.
- T-6.2** Develop a community-wide trail system for pedestrians, bicyclists, and other non-motorized transportation. Where feasible, this trail system will connect regional trails with local trails and walkways and provide improved access and linkages between the City of Woodinville's commercial/industrial areas, the Sammamish River Trail and other trails, residential neighborhoods, and community amenities.
- T-6.3** Pursue opportunities for expansion of multipurpose trails separated from the street systems as a transportation resource to the Woodinville community.
- T-6.4** Investigate the potential for linear rights-of-way such as utility corridors, abandoned railroad rights-of-way, and major limited-access highways to serve non-motorized transportation needs through the inclusion of separated trail facilities.
- T-6.5** Cooperate with adjacent jurisdictions and public agencies to seek and develop appropriate trail links between elements of the open space system including, but not limited to, completing the connection between existing and proposed trail systems.
- T-6.6** Enhance access to the trail system through the provision of increased parking at key access points.
- T-6.7** Examine new and existing non-motorized facilities for their ability to meet safe and effective non-motorized design standards.
- T-6.8** Incorporate the role of non-motorized travel modes as a viable and legitimate element of the overall transportation system. Transportation projects should accommodate the needs of non-motorized transportation by incorporating a network of facilities:
1. Within the road right-of-way,

2. Within an enhanced trail network, and
3. As part of design and review of development features which can improve non-motorized access and safety.

- T-6.9** Incorporate non-motorized-friendly design in transportation projects, using a variety of design and traffic control techniques.
- T-6.10** Encourage parking facilities for securing bicycles at centers of activity throughout the City of Woodinville.
- T-6.11** Ensure that development addresses non-motorized transportation in its site planning.
- T-6.12** Plan for a continuous non-motorized transportation system that provides Woodinville's citizens and visitors safe and direct access to the City's schools, employment, housing, shopping and recreation areas.
- T-6.13** Encourage employers to provide bike facilities and amenities, such as showers and bike lockers.
- T-6.14** Encourage pedestrian facilities to be consistent with the unique downtown character.

GOAL T-7: To develop and implement Transportation Demand Management programs and policies.

Policies

- T-7.1** Utilize Transportation Demand Management techniques to:
1. Help increase the person-carrying capacity of the transportation system,
 2. Reduce peak period traffic congestion,
 3. Encourage the use of high-occupancy vehicles, and
 4. Increase use of public transportation.
- T-7.2** Implement the requirements of the Commute Trip Reduction Act and meet mandated deadlines.
- T-7.3** Encourage smaller employers not mandated to meet the Commute Trip Reduction Act requirements to offer trip reduction programs for employees.
- T-7.4** Encourage the development of coordinated traffic demand management in areas where employers are clustered within the same vicinity.
- T-7.5** Cooperate with other jurisdictions to develop Transportation Demand Management programs, policies, regulations, and strategies.
- T-7.6** Encourage development to provide physical features supportive of convenience, comfort, and safety in the use of alternative modes of travel.
- T-7.7** Pursue with neighboring jurisdictions, the development community, and Woodinville businesses an active public education on the benefits of carpooling.

Assisting public transit providers and employers in providing information on the carpool/vanpool ride match services.

- T-7.8** Promote Transportation Demand Management and Commute Trip Reduction programs and activities.

GOAL T-8: To coordinate with local, regional, and State jurisdictions in the development and operation of the transportation system.

Policies

- T-8.1** Coordinate with adjoining jurisdictions in the development and operation of the transportation system.
- T-8.2** Participate with the Puget Sound Regional Council and the Eastside Transportation Partnership as the primary forum for the development of Eastside transportation systems plans and strategies.
- T-8.3** Prepare, in cooperation with Washington State Department of Transportation, policies to guide the planning, development, and management of state routes: 9, 202, and 522.

GOAL T-9: To establish programs and mechanisms for the sound financial development and management of the transportation system.

Policies

- T-9.1** Coordinate transportation plan improvements to be consistent with the Capital Facilities Plan and the goals and policies of the Comprehensive Plan.
- T-9.2** Prepare a 6-year Transportation Improvement Program (TIP) that finances transportation improvements within projected funding levels and clearly identifies sources of public money for such purposes.
- T-9.3** Prioritize and finance transportation improvements for the greatest public benefit, and consider the extent to which improvements fulfill the objectives of this Comprehensive Plan.
- T-9.4** Consider first the most cost-effective and most readily implemented improvements within the prioritization policies of the CIP programming process to solve existing and future deficiencies before higher-cost, capital-intensive projects are considered.
- T-9.5** Identify and pursue a long-term strategy for obtaining grant funding which matches project objectives with revenue sources so as to maximize opportunities for grant awards.
- T-9.6** Identify resources to effectively compete in regional, state, and federal grant funding programs.
- T-9.7** Consider impact fees and user-based fees as a source of funding for transportation improvements.
- T-9.8** Pursue creative and technologically advanced solutions that are economically

viable and appropriate to reduce congestion and improve roadway operations.

- T-9.9** Consider participation in public partnerships with private, public and state development to optimize and leverage funds.
- T-9.10** Consider annual funding for monitoring and implementation programs: Pavement Management, Safety and Intersection Control, Neighborhood Traffic Control, Sidewalks and Crosswalks (Non-motorized), Freight Mobility, and Travel Demand Management Program.
- T-9.11** Consider the delivery and transport of goods and services projects within the TIP.

GOAL T-10 To provide safe, convenient, and comfortable neighborhood access and circulation properly integrated with the city-wide transportation system.

Policies

- T-10.1** Based on identified impacts, new development projects should participate in providing transportation circulation solutions.
- T-10.2** Where there is an identified need, require new local access streets or missing sections of existing ones to be provided on-site as part of the permit for development. Encourage circulation improvements to include non-motorized mobility, where appropriate.
- T-10.3** Ensure convenient access to residential neighborhoods and major community facilities from collector, minor and major streets.
- T-10.4** Emphasize design of the arterial street system to minimize the potential for external traffic to cut through neighborhoods.
- T-10.5** Design residential neighborhoods to discourage cut through traffic movements.
- T-10.6** Evaluate impacts on neighborhoods when proposing to extend a neighborhood's local street to serve adjacent new development.
- T-10.7** Encourage traffic-calming (speed reduction) features in residential neighborhoods; however, the City discourages the use of barriers across access points for subdivisions.
- T-10.8** Site residential driveways off of neighborhood collectors and onto internal access roads whenever feasible.
- T-10.9** Design the arterial street system to accommodate regional trips and minimize the potential for external traffic to use residential streets for through access.
- T-10.10** Encourage public involvement when considering improvements to residential streets.
- T-10.11** Design new residential streets to avoid creating roadways that are conducive to high speeds.

GOAL T-11: To ensure the development and regulation of parking facilities that support the transportation system and development goals and policies.

Policies

- T-11.1** Regulate parking in business districts to favor shoppers and clientele.
- T-11.2** Encourage preferential and convenient parking as an incentive for using carpools, vanpools, and disabled (pursuant to the Americans With Disabilities Act standards and specifications).
- T-11.3** Provide minimum and maximum off-street parking stall ratios for different uses to provide safe and adequately sized parking facilities. Implement the provisions and requirements of the American Disabilities Act (ADA) and other design and development standards to improve parking and access facility safety and security features.
- T-11.4** Encourage joint parking facilities for compatible uses to reduce the total number of spaces needed and reduce overall impervious surface.

GOAL T-12: To provide transportation facilities and services that enhance the health, safety, welfare, and mobility of all citizens regardless of age, disability, or income.

Policies

- T-12.1** Use generally accepted state, national, and other applicable standards and guidelines for design and operation of new and improved transportation facilities.
- T-12.2** Develop programs in cooperation with the Washington State Department of Transportation, transit operators, and neighboring cities to identify and mitigate any roadway hazards that may result in accidents and threats to public safety. Seek the input of local bicycle and trail/walking clubs, school transportation officials, and other interested groups and individuals in this endeavor.

9.3 Implementation Strategies, Planning and Monitoring

The following programs, plans and strategies are used by the City to ensure that the goals and policies established in the Transportation Element will be achieved.

9.3.1 Implementation Strategies

1. Require that all development in Woodinville be constructed in accordance with the requirements of the Americans With Disabilities Act (ADA). *(Implements T-2.2)*
2. Require new development to include street frontage improvements that meet the adopted Transportation Infrastructure Standards and Specifications. *(Implements T-2.2 & T-2.8)*
3. Restrict vehicle access from public and private property onto designated principal and minor arterials to maintain and improve the integrity of traffic flow. Vehicle access shall be limited to collector arterials and local roads as a condition of development whenever practicable. *(Implements T-2.3)*
4. Require joint driveway access and internal site circulation as a condition of new development for adjacent properties that have compatible land uses pursuant to adopted street standards and Design Guidelines. *(Implements T-2.3 & T-10.8)*
5. Design traffic circulation within developments in a way that allows safe and

- efficient storage and movement of driveway traffic. *(Implements T-2.3 & T-10.8)*
6. Require driveway and traffic flow restrictions to allow safe and efficient access for emergency vehicles. *(Implements T-2.3)*
 7. Maintain the guidelines for intersection spacing, median treatments and driveway spacing based on roadway functional classification and posted speed. *(Implements T-2.3)*
 8. Require that public and private developments in Woodinville that meet minimum thresholds of size and/or activity levels (e.g., number of employees or customers) as defined in the Zoning Code and pursuant to Metro standards to provide public transportation facilities, such as bus pullouts, bus stop shelters, and improvement to park-and-ride lots, as a condition of development approval. *(Implements T-2.3, T-5.9 & T-12.1)*
 9. The City of Woodinville shall consult public transit providers during the permit process regarding existing and future routes near the site, design considerations, and the extent to which this policy is fulfilled. *(Implements T-2.4, T-5.9 & T-5.19)*
 10. Require that new development in Woodinville incorporate pedestrian/ transit design considerations and provide appropriate access through barriers, particularly fences, that enclose developments and isolate them from transit routes and principal pedestrian pathways. *(Implements T-2.3)*
 11. Require pedestrian amenities to reduce pedestrian, non-motorized (bicycles, in-line skaters, etc.), and motor vehicle conflicts at activity centers such as schools, commercial centers, recreational facilities, transit facilities, and residential developments. *(Implements T-2.7, T-6.7, T-6.9 & T-6.11)*
 12. Provide handicapped accessibility for pedestrian facilities pursuant to the Americans With Disabilities Act. *(Implements T-2.7 & T-12.1)*
 13. Require developments to incorporate transit and pedestrian supportive measures during the development approval process, by choosing from a menu of alternative measures such as, but not limited to: *(Implements T-2.4, T-2.7, T-6.9, T-6.10 & T-6.10)*
 - a. Providing attractive pedestrian spaces and amenities,
 - b. Providing adequate sidewalks, bikeways, pathways, and crosswalks,
 - c. Minimizing walking distances between buildings and streets, sidewalks, and transit stops,
 - d. Clustering buildings near each other, near streets, and near intersections,
 - e. Preserving the connectivity of the pedestrian, bicycle, and street system,
 - f. Reducing vehicle speeds, walkway crossing distances, and improving visual quality of neighborhood streets,
 - g. Designing transit access into large developments, by including bus lanes, stops, and shelters as part of the project, and
 - h. Providing connections with off-site transit, shopping and community facilities, and other neighborhoods.

14. Maintain a Transportation System Inventory Program to provide information needed for facility operation, maintenance, and planning. The program should be comprehensive and include, but not be limited to: *(Implements T-3.4 & T-3.5)*
 - a. Traffic counts,
 - b. Level-of-service calculations,
 - c. Accidents,
 - d. Speed studies,
 - e. Traffic control devices,
 - f. Street lights,
 - g. Parking,
 - h. Pavement condition
 - i. Physical characteristics of roadways (lanes, widths, and channelization), and
 - j. Mid- and long-range traffic forecasts.
15. Establish an ongoing allocation of funds for the construction and maintenance of non-motorized improvements in the transportation capital investment program. *(Implements T-6.1, T-2.7 & T-3.8)*
16. Implement Transportation Demand Management strategies that emphasize incentives rather than disincentives, but avoid imposing disincentives to single-occupancy vehicle travel in the absence of reasonable alternatives. *(Implements T-7.6 & T-7.8)*
17. Work to reduce parking demand by requiring accommodation within site plans of pedestrians, public transportation, ridesharing, and bicycles. *(Implements T-6.9, T-6.10, T-7.8 & T-11.2)*
18. Create an impact fee structure so that development pays its fair share. *(Implements T-2.1, T-9.8 & T-9.10)*
19. Place TIP funding priority on improvements that enhance the safety and effectiveness of existing transportation facilities and services. *(Implements T-9.3)*
20. Use the travel demand generated by development projects as the primary measurement in establishing the project's proportionate share of road improvements. *(Implements T-9.8 & T-9.10)*
21. Designate freight routes within the City that have connectivity and continuity with routes serving other jurisdictions. *(Implements T-1.5, T-2.10, T-4.5, T-4.6 & T-9.12)*
22. Use freight mobility as a TIP selection criterion in the development of transportation projects. *(Implements T-9.12)*
23. Create a citizen panel to study options for increasing the use of public transit. *(Implements T-5.1)*
24. Identify through the development approval process the impacts of developments on existing transportation systems. *(Implements T-2, T-9.8 & T-10.1)*
25. Require the developer to mitigate transportation impacts by participating in improving local circulation problems or providing the missing roadway portions identified in the applicable local circulation plan. *(Implements T-2.1, T-9.8 & T-10.1)*

26. Require that all property in the city be conveniently accessible from streets, walkways, or trails, subject to environmental, traffic, and safety limitations. *(Implements T-10.3)*
27. Maintain continuity of the street pattern by avoiding street system gaps, half streets, and dead-end streets without turnaround provisions. *(Implements T-10.3)*
28. Avoid the creation of excessively large blocks and long local access residential streets, as defined in the City's Subdivision Ordinance. *(Implements T-10.3)*
29. Utilize a neighborhood traffic control program to oversee, investigate and install appropriate neighborhood traffic control measures. *(Implements T-10.4, T-10.5 & T-10.7)*
30. Ensure parking availability for commercial needs without affecting arterial circulation, residential neighborhoods, or other businesses. Limit or prohibit parking on arterials that have inadequate capacity and/or facilities. *(Implements T-10.3, T-10.4, T-10.5 & T-11.1)*
31. Allow for the adjustment of parking ratios less than the required minimum for industrial and institutional land uses by: *(Implements T-11.3)*
 - a. Allowing new development to provide less than the minimum parking where demand for employee parking is below normal,
 - b. Allowing and encouraging property owners of major work sites to reduce their parking supply, especially where an excess exists, to support Commute Trip Reduction Act goals,
 - c. Providing for reductions in minimum parking ratios in exchange of contributions to improved transit services and/or facilities, and
 - d. Allowing parking to be provided below the minimum ratio where there are incentives to redevelop existing sites in employment centers supported by transit and where such actions are not likely to cause spill-over parking impacts on adjacent land uses.

9.3.2 Implementation Plans

The policies of the Transportation Element can be implemented through a variety of methods. Listed below are a number of tools the City can use to further the goals and objectives of the Transportation Element.

9.3.2.1 Road System Facilities Plan

The Road System Facilities Plan addresses measures to meet needs for route or corridor vehicular capacity and level-of-service improvements, safety, travel comfort improvements; and preservation of existing roadbed investments and multimodal circulation and access enhancements. The Road System Facilities Plan recommended capital improvement projects in four categories:

1. New Roadway Links or Segments. Includes new freeway ramps and roads or construction of missing links and road extensions.
2. Major Widening. Add one or more through traffic lanes or a continuous two-way, left-turn lane.

Categories 1 and 2 (except ramps) include either curbs, sidewalk, and bicycle lane construction or paved shoulders for combined pedestrian/bicycle use, depending on facility type and location.

3. Minor Widening. Typically incorporates paved shoulders for combined pedestrian and bicycle use, together with widening of existing narrow traffic lanes. A few projects involve limited paved sidewalk or trail construction in the road right-of-way or non-paved equestrian trail adjacent to a new paved shoulder. Primary focus is thus on non-motorized facilities improvements.
4. Intersection and Other Spot Special Improvements. This includes installation of signals at un-signalized intersections, signal improvements, channelization improvements (installing left- or right-turn lanes), realignment of intersection approaches, other low-capital spot improvements, and combinations of the above measures.

Figures 9-5 and 9-6 show the projects in the road improvement plan, while Table 9-1 lists the individual projects by project number and describes them in terms of location, project type, principal features, traffic volume, and in-place cost (construction, right-of-way, and design/engineering/environmental studies).

The revised Downtown Grid Project consists mainly of a number of new downtown street links, which would be funded primarily by downtown development and redevelopment projects. These projects will be implemented in stages as new development takes place and therefore have not been prioritized. The individual projects will, however, improve downtown circulation and access and contribute to improved traffic flow and safety on existing downtown streets.

King County has initiated the Regional Arterial Network (RAN) and is attempting to coordinate and plan improvements and programs on the major regional arterials that consider multi-modal solutions, consistent across multi-jurisdictional boundaries.

9.3.2.2 Transit, High-Occupancy Vehicle and Rideshare Plan

Much of the implementation for transit and HOV facilities in the City of Woodinville will be the responsibility of King County Department of Transportation Metro Transit Division, Sound Transit and Community Transit.

1. Public Transit

The transit strategy includes two principal components: improved line haul service and improved local service. The implementation of the improved line haul service includes increased schedule frequencies: 15-30 minutes peak and 30-60 minutes off-peak, an additional route via SR 202 and/or 140th Place NE to 148th Avenue NE, a new express route from Woodinville to the Seattle area beginning in the year 2002 provided by Sound Transit, route re-orientation to emphasize more direct service to other suburban King and Snohomish County major destinations (lessened orientation to downtown Seattle), and service hours extended to 16 hours per day weekdays and seven-day per week service.

The King County Metro Six Year Transit Development Plan for 2002-2007 outlines service alternatives, which are generally consistent with the Woodinville transit service components.

The transit goals and policies also provide specific recommendations for improved transit stop design features and pedestrian access design features.

2. High Occupancy Vehicle Facilities

Park-and-ride and bus stop facilities are addressed under "Public Transit," above. Other high-occupancy vehicle (HOV) facilities recommendations include preferential treatment for high-occupancy vehicles (bus, carpools, and vanpools) at intersections in terms of queue-bypass lanes and/or preferential signal timing and phasing for high-occupancy vehicles. Sound

Transit's system plan includes funding for arterial high occupancy vehicle improvements.

3. Rideshare

Rideshare—vanpool and carpool travel—will be enhanced by the high-occupancy vehicle facility plan element discussed above. Ridesharing also will become an increasingly larger share of the work and school trip commute through the increased employer rideshare programs—both large employers covered by the Commute Trip Reduction Act, as well as smaller employers. Major new developments are required to address rideshare incentives under City-required, on-site Transportation Demand Management programs (see Transportation Demand Management).

4. Transit and Rideshare Target

The percentages recommended as goals for Woodinville combined daily person trips via transit and rideshare for the years 2000 and 2010 are, respectively, 5 percent and 15 percent.

9.3.2.3 Non-motorized Facilities Plan

Non-motorized travel in Woodinville consists primarily of pedestrian and bicycle transportation. The first two modes have sizable “transportation” or “utility” trip purpose as well as recreation trip purpose. Pedestrian and bicycle improvements contribute to improved automobile traffic safety and reduced automobile delay, as well as enhancing the utility and safety of the walking and bicycling modes. These two modes are important for access to transit routes and park-and-ride facilities.

The potential for non-motorized travel growth in Woodinville is indicated by a May 1995 12-hour 7:00 a.m. to 7:00 p.m. count of bicycle activity on the Sammamish River trail in Woodinville:

In 1985, 94 percent of all trail trips were made for recreational purposes and the remaining 6 percent were for commuting to school and/or work. This year's survey results show that only 62 percent of all trips were for recreational purposes while 32 percent were for commuting and 6 percent were for shopping.

User counts show that between 1980 and 1995, trail use continued to grow every year, with a drop off in 2000. Trail usage jumped by 65 percent from 1990 to 1995, while regional population grew only 10 percent. One reason for this could be that prior to 1993 the two trails were not connected as they are today. There was a 3-mile gap between Bothell and Kenmore. In 1993, that missing link was completed, providing a continuous trail from Gas Works Park in Seattle to Marymoor Park in Redmond. The final joining of the trails coincides with a steep increase in use during that same time period.

The drop off in use recorded between 1995 and 2000 is more difficult to explain. It could be due to weather conditions that were present on the day counts were taken this May. Or, it could be that the trail is a victim of its own success -- many users, especially bicyclists, are complaining that the trail is becoming too crowded, which may lead them to choose alternate routes. Future counts will be needed to determine if the decline in users in 2000 is actually the beginning of a downturn in use or if it is due to other temporary factors.

In 1985, 94 percent of all trail trips were made for recreational purposes and the remaining 6 percent were for commuting to school and/or work. In 2000, survey results show that only 62 percent of all trips were for recreational purposes while 32 percent were for commuting and 6 percent were for shopping. This shows that utilitarian use of the trail has grown by more than six times since 1985.

Planned extension of the Sammamish River Trail south along the east side of Lake Sammamish within the Burlington Northern Railroad right of way will further increase ridership in this trail and increase its usefulness as a commute route in addition to a recreation route.

Among principal objectives for the Non-motorized Plan are:

1. Provide pedestrian and bicycle facilities on all new and existing links of the City's arterial system (see Figures 9-5, 9-6, and 9-7),
2. All current and future activity centers are to be linked by pedestrian and bicycle facilities. These centers include Central Business, Tourist Business, Neighborhood Business, Industrial, schools, and parks,
3. Improve non-motorized access to and across the Sammamish River Trail,
4. Improve pedestrian and bicycle circulation in downtown, and
5. Develop a monitoring and implementation plan to identify pedestrian and bike facilities such as crosswalks, curb ramps, and missing sidewalks, to prioritize and to implement.

Nonmotorized improvements in the Transportation Element include:

1. Paved sidewalks,
2. Paved multi-use trails (pedestrian and bicycle),
3. Unpaved trails (pedestrian and equestrian, and bicycles in some instances),
4. Paved five- to six-foot-wide road shoulders (for pedestrians and bicycles in most residential areas and other non-downtown locations),
5. Wide curb lanes (13 to 15 feet) or five-foot-wide bicycle lanes adjacent to the curb, and
6. Pedestrian trail and bicycle route signing and information kiosks.

These improvements are integrated and coordinated in accordance with the current adopted Parks, Recreation, and Open Space Plan.

The Road System Facilities Plan includes "on-roadway" (i.e. non-trail) non-motorized improvements under both Major Widening and Minor Widening project categories, with the Minor Widening mostly being the addition of paved shoulders. These are supplemented by trail (off-road) construction projects. Figure 9-7 maps the non-motorized plan. Table 9-1 also includes non-motorized improvement features. Pedestrian and bicycle improvement elements in the Road System Facilities Plan account for about 10 percent of that plan's total cost.

Regional and sub-regional project integration is represented by bicycle lanes and paved shoulders in the Woodinville-Snohomish Road Projects, which will link up with the "SR 9/City of Snohomish to the King County Line Bikeway Project" in the Snohomish County Comprehensive Plan's Transportation Element. Similarly, King County's Non-motorized Plan includes improvement of Woodinville-Duvall Road to Duvall, while Redmond's non-motorized element includes bicycle lanes on SR 202 (Woodinville-Redmond Road northward to NE 124th Street).

If any rail links are abandoned, they will be considered for trail conversion under the state's "rails-to-trails" program such as the King County project to extend the East Lake Sammamish Trail south to Issaquah.

Bicycle-friendly design and parking features must be incorporated in transportation planning for on-site circulation and parking in private developments.

9.3.2.4 Transportation System Management Plan

Transportation System Management has the objective of increasing the vehicular and person trip capacities of the existing street and highway system. It is closely integrated with the Transit/High-occupancy vehicle/Rideshare and the Transportation Demand Management plans and programs, as well as the Road System Facilities Plan. It includes all traditional traffic engineering measures along with improvements and measures of the other plan elements above. Spot and low-cost improvements are sometimes included under Transportation System Management, although such projects of more than minor cost have herein been included in the Road System Facilities Plan. Two programs, safety management, and intersection control management are included in the monitoring section (9.5) and identify processes for annually setting priorities and identifying these types of improvements.

Functional Classification

The functional classification of Woodinville's streets is a Transportation System Management and capital planning element and is a tool to guide, unify, and prioritize improvements to the street system as well as address their transportation service needs, design features, access management, and operational performance characteristics.

Figure 9-4 shows the existing functional classification of principal arterials, minor arterials, and collector streets. Recommended revisions to the arterial system classification are presented in Table 9-2. The recommended revisions are based on the various functional classification criteria, such as current and forecasted traffic volumes, speeds, truck, and transit usage, and associated trip/traffic geography such as the importance of local and sub-regional destinations and linkages served, trip length, and through traffic levels.

Table 9-2. Functional Classification System

Road/Street Segments	Adopted Functional Classification
1. <u>140th Ave NE: From NE 195th to southern City limits</u>	5 Lane Principal Arterial
2. <u>Wood-Snoh Rd: From NE 195th to northern City limits</u>	3 Lane Principal Arterial
3. <u>Woodinville-Redmond Rd NE (SR 202): From the southern City limits to 127th PI NE</u>	3 Lane Principal Arterial
4. <u>NE 195th St, NE North Woodinville Way, NE Woodinville-Duval Rd: From 136th Ave NE to 156th Ave NE</u>	5 Lane Principal Arterial
5. <u>NE 143rd St, 137th PI NE: From 132nd Ave NE to SR 202</u>	Minor Arterial
6. <u>156th Ave NE: From northern City limits to NE Woodinville-Duvall Rd</u>	Collector
7. <u>NE 171st St, 146th PI NE, NE 173rd St, 155th PI NE, NE 175th St, 164th Ave NE, NE 180th PI, 167th Ave NE: From 140th Ave NE to NE Woodinville-Duvall Rd</u>	Collector
8. <u>SR 202: From Woodinville-Redmond Road (SR 202) to 131st Avenue NE</u>	5 Lane Principal Arterial
9. <u>131st Ave NE, NE 171st St: From SR 522 to 140th Ave NE</u>	5 Lane Principal Arterial
10. <u>NE 175th St, NE Woodinville Duvall Rd: From 131st Ave NE to NE North Woodinville Way</u>	3 Lane Principal
11. <u>NE Woodinville-Duvall Rd: From 156th Ave NE to east city limits</u>	3 Lane Principal
12. <u>NE 173rd PI: From 124th Ave NE to 127th PI NE</u>	3 Lane Principal
13. <u>148th Ave NE: From SR 202 to NE 147th PI</u>	3 Lane Principal
14. <u>NE 173rd : From western City limits to SR 202</u>	Minor Arterial

15. <u>NE 178th (Mill Pl): From Little Bear Creek Pkwy to 140th Ave NE</u>	Minor Arterial
16. <u>130th Ave NE, 132nd Ave NE: From SR 522 to north city limits</u>	Collector
17. <u>Woodinville-Snohomish Rd NE, 132nd Ave: From NE 175th St to 140th Ave NE</u>	Collector
18. <u>NE 195th St: From western City limits to 136th Ave NE</u>	Collector
19. <u>205th St.: from 130th Ave NE to Wood-Sno Rd</u>	Collector
20. <u>124th Ave NE: from NE 145th PL to NE 173rd PI</u>	Arterial

Source: City of Woodinville, 1996.

The existing routing of SR 202, via the Woodinville-Redmond Road segment northwest of the NE 145th Street/148th Avenue NE intersection, does not coincide with the City's Land Use Goals and Policies. Several alternative routes are possible:

1. Shift the route to 140th Place NE - 148th Avenue NE to the NE 171st Street South Bypass, and along the latter and 131st Avenue NE to the SR 522/132nd Avenue NE Interchange,
2. Shift the route to 140th Place NE, then to Woodinville-Snohomish Road to either SR 522 at the NE 195th Street interchange or at the SR 9 interchange,
3. "Split the SR 202 route" and assign it to both (1) and (2) above,
4. Provide an overpass over SR 522. Shift the SR 202 segment between SR 202/127th PL NE and SR 202/SR 522 Interchange to the new overpass, and
5. Abandon as a SR altogether.

These measures meet land use objectives for the Tourist District. Furthermore, potential costly and difficult widening of the existing SR 202 routing to four or five lanes by the Washington State Department of Transportation can be avoided, with some of the savings shifted to improvements recommended herein for the alternative routes.

Access Management

Access management is an ongoing Transportation System Management activity for the City's arterial system that includes these measures:

1. Regulating minimum spacing of driveway and local street intersections,
2. Encouraging consolidated access for adjacent properties, with good internal connections within the properties,
3. Controlling turning movements at driveways, with turn prohibitions via traffic control devices or raised medians and other channelization measures, and
4. Developing access classifications within the functional classification system that promote the function and set desirable access limits for driveways, turn prohibitions and intersection spacing.

Routes identified for further review of access management include:

1. SR 202, Woodinville-Redmond Road,

2. Woodinville-Duvall Road,
3. 140th Place NE–148th Avenue NE,
4. 140th Avenue NE,
5. Woodinville-Snohomish Road (north of 140th Avenue NE),
6. NE 190th to NE 195th Streets between SR 522 and Woodinville-Duvall Road,
7. NE 171st and NE 175th Streets, downtown, and
8. 131st Avenue NE.

High-occupancy vehicle Facilities

Transportation System Management includes planning and promotion of high-occupancy vehicle roadway and traffic control measures at selected arterial locations and includes the Washington State Department of Transportation's SR 522 ramp metering improvement program.

Design Standards

The transportation policies address design standards (City of Woodinville's Transportation Infrastructure Standards and Specifications) for public roads, transit, and on-site circulation and parking in private developments. Enhanced opportunities for improved road and parking facilities are afforded by the Downtown Grid Road program and the abutting new developments.

Traffic Impact Studies

The Transportation Infrastructure Standards and Specifications manual provides Traffic Impact Analysis requirements to assist developers in traffic impact assessment and mitigation studies and Environmental Impact Statement documentation. Ordinances will be established to regulate concurrency threshold of developments and set impact fees.

Construction Traffic

Guidelines for management of construction traffic, including hours of construction, road and traffic lane closures and detours, and construction truck traffic routes, should be prepared by the City's traffic engineer. Road construction for both public and private projects should be addressed. Guidelines for traffic and parking management for major special events.

9.3.2.5 Transportation Demand Management and Parking Plan

These plan elements receive considerable transportation policy coverage. Transportation Demand Management consists of measures for reducing peak-hour single-occupancy vehicle travel that are largely focused on major employers. The Washington Commute Trip Reduction Act requires Transportation Demand Management performance targets for reducing single-occupancy vehicle travel for firms with over 100 employees.

The City of Woodinville has formalized the Transportation Demand Management requirements for medium-sized as well as large companies and employment developments, and allows developers a wide latitude of Transportation Demand Management program components. Major institutional uses also should be included.

Transportation demand management programs have significance for the need for improvements in alternative non-single-occupancy vehicle travel modes and should therefore be coordinated with Transportation System Management, transit/high-occupancy vehicle/rideshare, non-motorized transportation, and parking plan elements.

Parking management is closely related to Transportation Demand Management and includes policies for minimum and maximum parking supply ratios as well as reduction in parking supply where firm linkages to Transportation Demand Management performance objectives will be met. Parking cost also is a key determinant in the success of Transportation Demand Management,

Transportation System Management, and high-occupancy vehicle/rideshare programs to reduce single-occupant usage and promote alternative transportation modes.

A City Transportation Demand Management Program is proposed that encourages alternative modes of travel.

9.3.2.6 Freight and Goods Movement Plan

Limited rail freight service is provided in the SR 202 Valley Industrial Subarea and along the Woodinville-Snohomish Road corridor. Planned roadway and intersection improvements will accommodate these rail lines and their street crossing needs, including coordinated traffic signal/roadway intersection provisions as warranted.

The major and minor arterial improvements in the Road System Facilities Plan will generally benefit economical and safe truck movement. Particularly important here are the freeway ramp and interchange improvements (see Figure 9-6, and Table 9-2), and improvement projects on SR 202, the Woodinville-Snohomish Road, and the Woodinville-Duvall Road.

Freight movement policies and a Freight Management Program are proposed to identify strategies to assist the City in accommodating freight movement in a way that promotes economic development while protecting residential neighborhoods.

9.3.3 Plan Monitoring

The Transportation Element and its strategy components will be monitored for update and revision as local and regional growth in urban development and transportation continues. Some amendments likely will be necessary over time. Sources of data and other inputs to the monitoring and amendment process include:

1. Revisions to Woodinville Transportation policies,
2. Revisions in policies, programs, and plans of the counties, neighboring cities, transit providers, Eastside Transportation Programs, Puget Sound Regional Council, Regional Transit Authority, and Washington State Department of Transportation,
3. Annual Woodinville traffic volume count program,
4. Other periodic local studies: accidents, roadway condition, and level-of-service, and
5. Traffic impact studies, transportation plan and project design studies by local municipalities, transit providers, Regional Transit Authority, and Washington State Department of Transportation.

The annual studies for the preparation of the Transportation Improvement Program and changes in project funding aid will also provide monitoring and amendment inputs. Changes in scale, character, staging, funding, and timing of major capacity projects for Woodinville and adjacent jurisdictions are especially important here.

Concurrency implementation and monitoring requires ongoing attention. This activity is addressed in depth in Chapter 10, Capital and Public Facilities.

Citizen Advisory Groups and special purpose citizen outreach programs (meetings, surveys, workshops, special advisory committees) for major projects, program formulation, and issues resolution will be valuable resources.

Several monitoring programs are proposed to annually identify, prioritize and implement projects, and also monitor overall transportation system progress. These include:

1. Intersection Control and Safety Management,
2. Pavement Management,
3. Freight Management, Non-motorized modes (or crosswalks sidewalks and bike routes), and
4. Transportation Demand Management.
5. Creation of a standing Citizen Advisory Committees and/or other citizen outreach programs and/or groups to aid in the annual identification and prioritization of projects or policy issues.