TRANSPORTATION ELEMENT

GOALS

1. Contribute to a balanced multi-modal transportation system through reasonable, planned, economically feasible arterial improvements that enhance HOV and transit operations, support adopted land use plans, protect or improve business access, and protect Renton's neighborhoods.

2. Maximize the use of transit in Renton by providing step-by-step transit improvements to produce regionally linked and locally oriented transit services and facilities needed to serve travel demand generated by Renton residents and businesses.

3. Increase the person-carrying capacity of the Renton arterial system by the construction of improvements and the implementation of actions that facilitate the flow of HOVs into, out of, and through Renton.

4. Maintain, enhance, and increase pedestrian and bicycle travel by providing both safe and convenient routes and storage for the commuting and recreating public.

5. Encourage and facilitate the reduction of commute and other trips made via single occupant vehicles.

6. Create efficiently functioning air transportation facilities that are responsibly integrated with the City's transportation system and land use pattern.

7. Maintain and improve truck and freight rail access to Renton industrial areas, and integrate freight transportation needs into Renton's multi-modal transportation system.

8. Develop a funding and implementation program for needed transportation improvements supporting adopted land use policies, that distributes transportation costs equitably between public agencies and private development.

9. Develop a transportation system that contributes to the attainment and maintenance of regional air and water quality standards within the City of Renton, and complies with regional, state, and Federal air water quality standards, and preserves/protects natural resources.

10. Develop and maintain relationships between Renton and other agencies and local jurisdictions for cooperative planning of common transportation improvements, and discussion of transportation-related interests.

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SUMMARY

The Transportation Element of Renton's Comprehensive Plan serves several purposes. In addition to meeting the State Growth Management Act (GMA) requirements for a transportation element, it assists the City in coordinating transportation planning with land use planning and adequately serving existing and future residential and employment growth. The Transportation Element, sometimes called a Transportation Plan, also provides direction on coordinating the development of a multi-modal system, which is a system that accommodates various modes of transportation. Finally, the transportation element coordinates transportation projects with other relevant projects in adjacent jurisdictions and the region. This coordination is an important element in creating an effective system and in competing for transportation funding.

The goal of the Renton Transportation Element is to provide "a balanced multi-modal transportation system that will support land use patterns, and adequately serve existing and future residential and employment growth within the City." (A multi-modal system is defined as one which provides various choices of transportation for the public such as automobiles, buses, rail, transit, bicycles, walking.)

The main objective guiding the development of the Transportation Element is to be consistent with the City of Renton Comprehensive Plan Policies, the State's Growth Management Act, County-wide Planning Policies, and Commute Trip Reduction (CTR) legislation.

Another key objective of the Transportation Element is to "coordinate land use and transportation planning." This is a requirement of the State's Growth Management Act. The Transportation Element must also be coordinated with the Puget Sound Regional Council's (PSRC) VISION 2020 and Destination 2030 (the adopted long-range growth and transportation strategy for the Central Puget Sound area — King, Kitsap, Pierce, and Snohomish counties).

A companion regional document is the Metropolitan Transportation Plan (MTP), also produced by the PSRC, which specifically addresses regional transportation and how jurisdictional transportation plans fit within the regional context. This City of Renton Transportation Element is consistent with GMA, VISION 2020, Destination 2030, and the MTP.

The Comprehensive Plan (and Transportation Element) was adopted on February 20, 1995. Subsequent transportation planning work and enactment of development regulations that are consistent with, and help implement, the adopted Comprehensive Plan and Transportation Element have resulted in amendments (December 8, 1997, July 27, 1998, August 14, 2000, and August 13, 2001) to the Comprehensive Plan (and Transportation Element). Further transportation planning work by the City has resulted in the 2004 amendments, which are incorporated in this Transportation Element.

As noted above, the overall intent of the Comprehensive Plan is to create a desirable land use pattern and serve land uses with a multi-modal transportation system. This Transportation Element of the Comprehensive Plan comprises a set of framework transportation policies to support Renton's land use Vision and a more detailed and technical plan for implementation of the framework policies. The Transportation Element encompasses several chapters, including Street Network, Transit, High Occupancy Vehicle (HOV), Non-Motorized Transportation, Transportation Demand Management/Commute Trip Reduction (TDM/CTR), Airport, Freight, Financing and Implementation, Environmental and Natural Resources, and Intergovernmental Coordination. Some of the transportation policies apply to specific chapters; the policies compiled below apply to all of the chapters.

General Policies

Policy T-1. Land use plans and regulations should be used to guide development of the Transportation Element for the City.

Policy T-2. Transportation improvements should support land use plans.

Policy T-3. Transportation plans should be phased concurrently with growth.

Policy T-4. Adequate transportation facilities and services should be in place at the time of occupancy or an adopted strategy must be in place to provide those facilities within six years of the approval of new development.

Policy T-5. Land use and transportation plans should be consistent so that land use and adjacent transportation facilities are compatible with each other. Land use capacity/forecast assumptions used in capacity/forecast modeling should be used in estimating travel demand.

Policy T-6. Land use patterns should support transit and non-motorized modes of travel.

Policy T-7. The disruptive impacts of traffic related to centers and employment areas should be reduced.

(In this context, disruptive impacts are primarily traffic. They could be mitigated by implementing programs, such as transportation management programs implemented through cooperative agreements at the work place, flexible work hours, and/or sub-area planning policies supporting increased density.)

Increased land use densities and a balance of land use mixes in an urban setting will result in fewer and shorter vehicle trips. As people begin to live closer to employment and shopping, they will no longer need to drive to these facilities and they will be able to link trips, resulting in fewer vehicle trips.

In addition to the Transportation-Land Use interaction, another issue that pervades many of the chapters of the Transportation Element is that of parking. The location and supply of parking is an integral part of the local transportation system. Inadequate parking can increase congestion on streets as people circle and hunt for available spaces. Too much parking is an inefficient use of land and can deter transit use. A proper balance needs to be achieved between parking supply and demand. Satellite parking and shuttle services and collective structured parking are potential methods for increasing the parking supply. Note: Any references in this document to downtown parking restrictions and/or removal apply only to commuter/employee parking and not to business patron/customer parking.

Growth Management Act Requirements

The Growth Management Act specifies the following minimum requirements for information that is to be included in the Transportation Element of the Comprehensive Plan:

1. Land use assumptions used in estimating travel;

2. Facilities and service needs, including:

    a. An inventory of air, water, and land transportation facilities and services, including transit routing, to define existing capital facilities and travel levels as a basis for future planning;

    b. Level of service standards for the transportation system to serve as a gauge to judge performance of the system. These standards should be regionally coordinated, and adopted Level of Service (LOS) policy and/or standards for state facilities shall be stated in local transportation plans.

    c. Specific actions and requirements for bringing into compliance any facilities or services that are below an established LOS standard;

d. Forecasts of traffic for at least ten years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth;

e. Identification of system expansion needs and transportation system management needs to meet current and future demands;

3. Demand Management Strategies

4. Finance, including:

a. An analysis of funding capability to judge needs against probable funding resources;

b. A multi-year financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road, or transit program required by RCW 35.77.010 for cities;

c. If probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that LOS standards will be met;

5. Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions.

STREET NETWORK

Traffic generated by employment centers, regional pass-through traffic using local streets, and truck traffic all contribute to congestion and reduced accessibility within the City of Renton. In resolving traffic flow problems, a number of choices will need to be made. In some cases, increasing traffic flows only increase congestion on local streets or impact pedestrians, yet if traffic flows are reduced accessibility can be compromised. Alternately, if the local street system is efficient and not congested it will attract increased regional traffic.

The objectives and policies in the Street Network chapter are intended to reduce the amount of traffic that has neither an origin nor destination in the City of Renton while at the same time providing reasonable levels of traffic flow and accessibility on the local street system. These objectives and policies also address issues related to the street network as a system, the physical design of individual roadways, traffic flow, and traffic operations control.

The Street Network Chapter contains a detailed review of the City of Renton's street system – including existing functional classifications as well as a description of Renton's Arterial Plan. The Street Network Chapter also contains discussion of the Level of Service criteria used to judge performance of the system. (The service levels were developed in conjunction with King County adopted *Level-of-Service Framework Policies* and other local jurisdictions.)

Objectives

The Street Network Chapter is based on the following objective:

T-A: Create a comprehensive street system that provides reasonable vehicular circulation throughout the City while enhancing the safety and function of the local transportation system.

Policies

Policy T-8. Each street in the City should be assigned a functional classification based on factors including traffic volumes, type of service provided, land use, and preservation of neighborhoods.

Policy T-9. Streets and pedestrian paths in residential neighborhoods should be arranged as an interconnecting network that serves local traffic and facilitates pedestrian circulation.

Policy T-9.1. Street vacations should be supported when:

- The right-of-way to be vacated is not needed for future public use;
- The right-of-way to be vacated is not needed for the interconnection of the roadway system;
- The abutting property owners have demonstrated a need for the street vacation; and,
- The resultant road configuration, after the street vacation, conforms to adopted City plans.

Policy T-9.2. Street vacations should only be supported in Downtown and neighborhoods that have developed around a traditional grid system when the resultant road configuration after the street vacation does not significantly interrupt the function of the overall grid system.

Policy T-10. Street standards should continue to be based on functional classification, land use objectives, and HOV/transit/non-motorized facility needs. (The street standards should be coordinated with the objectives and policies of the Community Design Element.)

Policy T-11. A level of service should be maintained that: maximizes mobility by emphasizing transit and HOV improvements; is coordinated with level of service standards of adjacent jurisdictions; and meets State requirements under GMA and concurrency.

Policy T-12. Traffic flow on and accessibility to arterial streets should be managed to maximize person-carrying capacity.

Policy T-13. Provide a balance between protecting neighborhoods from increased through traffic while maintaining access to neighborhoods.

Policy T-14. Proactively work with the state and neighboring jurisdictions to provide capacity on regional transportation systems and to reduce regional traffic on local streets.

Policy T-15. Develop strategies to reduce adverse traffic impacts on local areas. (areas of the City that require this type of intervention should be identified and addressed through the sub-area planning process, neighborhood plans, or traffic mitigation programs that are implemented through development review.)

Policy T-16. Access management, such as restricting left turns and excessive use of driveways, should be coordinated with design standards and land use in order to enhance public safety and preserve traffic carrying capacity.

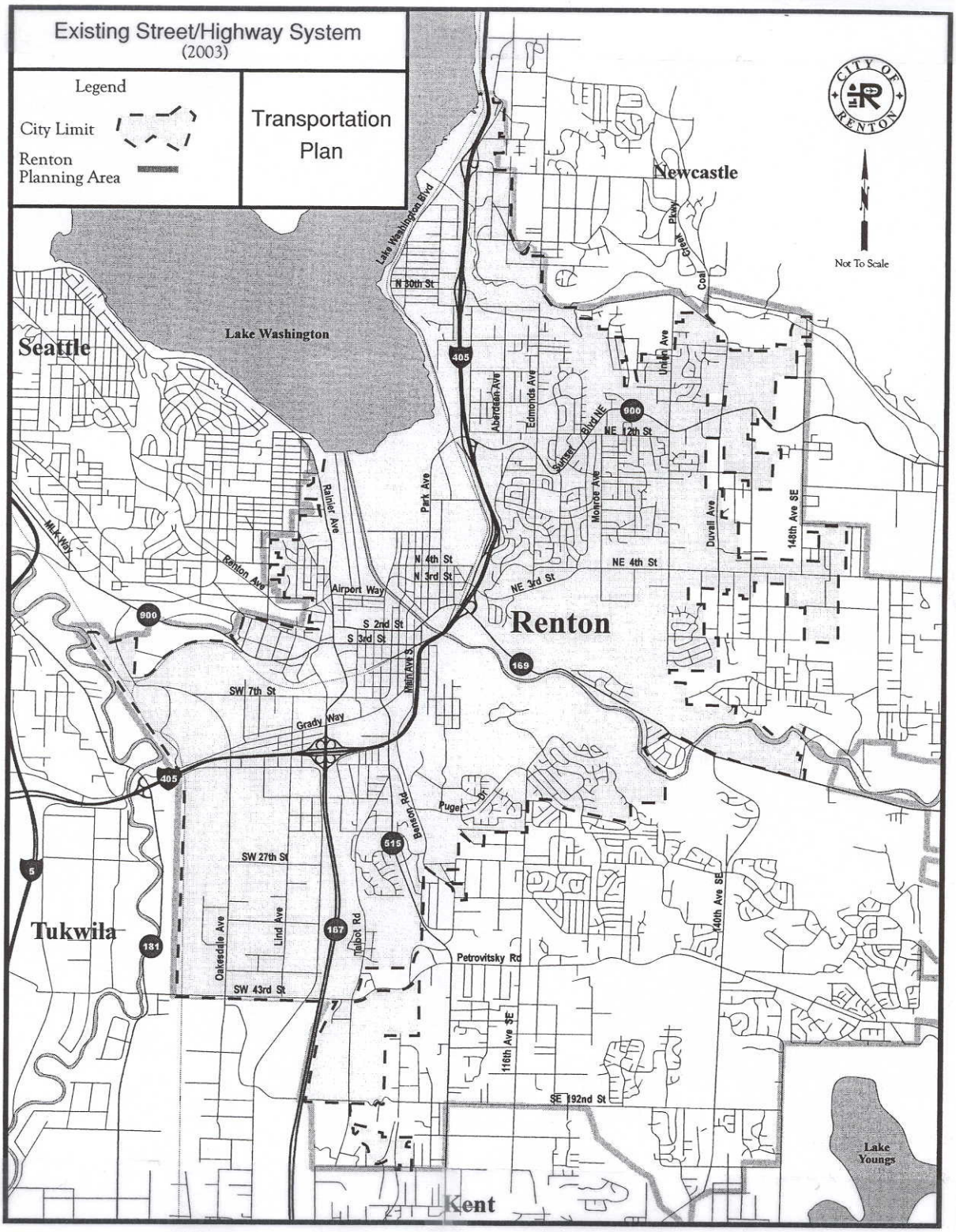
(Also see related policies in the HOV, Transit, Non-motorized and Freight sections of this Element and of the Community Design Element.)

Inventory of Existing Streets

The existing (2003) street/highway system serving Renton is shown in Figure 1-1. The system includes two freeways: Interstate-405 and State Route-167 (the "Valley Freeway"). Interstate 405 provides connections to the Eastside and Snohomish County to the north, and to I-5 and the Sea-Tac Airport area to the south. The Valley Freeway extends south from I-405 to Kent, Auburn, and Puyallup.

In addition to the freeways, Renton is served by several other state highways, including SR-900 (Sunset Boulevard), SR-169 (Maple Valley Highway), SR-515 (Benson Highway), and SR-167 (Rainier Avenue). Each of these state highways are integral elements of Renton's internal arterial system. In addition, SR-900 provides external connections to Issaquah on the east and to the Boeing Field area and I-5 on the west. SR-169 connects Renton to SR-18 and southeast King County, SR-515 provides the main arterial connection to the unincorporated Soos Creek area, and the Rainier Avenue section of SR-167 connects Renton with south Seattle.

FIGURE 1-1
RENTON STREET/HIGHWAY SYSTEM



Six routes, I-405, SR-167, SR-900, SR-169, SR-515, and SR-167, converge in central Renton within a half mile radius of each other. This close proximity results in a complex traffic flow, as regional and local trips interact within a relatively short distance.

Other key arterials that tie together the Renton street system include Grady Way and S.W. 43rd Street in the Valley, Talbot Road and Puget Drive in southeast Renton, Park Avenue and Park Drive, Logan Avenue, and Airport Way in Central Renton, and 3rd Street / 4th Street, Duvall, Union, and Edmonds Avenues in East Renton. These arterials, with numerous other arterial streets, link commercial, industrial, and residential neighborhoods to the freeways and state highways. Within neighborhoods, local access streets provide internal circulation and connections to the arterials.

Street System Characteristics
Physical and traffic control characteristics of the Renton street system, including the location of traffic signals and one-way streets, and the number of lanes on arterial street segments, are shown in Figure 1-2.

Existing Street Functional Classifications
The purpose of functional classifications is threefold: i) to identify appropriate uses for Renton streets, ii) to establish eligibility for road improvement funding from various sources, and iii) to define appropriate street design standards.

The arterial street functional classifications specified by the City of Renton include "Principal Arterial," "Minor Arterial," and "Collector Arterial" classifications. The adopted classifications in Renton, and the surrounding annexation areas of unincorporated King County, and on several roadways in adjacent City of Newcastle are shown in Figure 1-3.

“Principal Arterials” are streets and highways that connect major intra-city activity centers, have primarily high traffic volumes that travel at relatively fast vehicle speeds, and therefore, have less emphasis on land use access. Grady Way in south central Renton and N.E. 3rd/4th Street in East Renton are examples of principal arterials.

“Minor Arterials” are streets that provide links between principal arterials and collector arterials, and carry moderately high traffic volumes at less vehicle speed than on principal arterials. These arterials also connect intra-city activity centers with some emphasis on land use access. Southwest 7th Street in west central Renton and Union Avenue in northeast Renton are examples of minor arterials.

“Collector Arterials” are streets that distribute traffic between principal and minor arterials and local access streets. Collector arterials include streets that provide major traffic circulation with more emphasis on land use access within commercial and industrial areas, and residential neighborhoods. East Valley Road in southwest Renton and N.E. 12th Street in northeast Renton are examples of collector arterials.

Local access streets include all public streets not classified as principal, minor, or collector arterials. Local access streets primarily provide direct access to abutting land uses and are to be designed to discourage use by through traffic. These streets are identified by default on Figure 1-3 and are not listed in the legend.

Traffic Volumes and Forecasts
Existing (2000) and forecasted 2022* traffic volumes have been analyzed to reflect: i) latest regional and Renton land use modifications ii) latest regional transportation plans, and Renton Arterial, HOV and transit plans; iii) latest Renton mode split assumptions; and, iv) refinements to the City of Renton transportation model.

*NOTE: Renton's transportation model utilizes regional land use data and trip tables provided by the Puget Sound Regional Council (PSRC) for the horizon years 2000 to 2020. For the 2022 traffic volume forecast, a linear growth rate was calculated (from 2000 to 2020) and then applied to the 2020 traffic volumes to obtain 2022 volume forecasts.

Arterial Traffic Volumes

In order to show the overall level and pattern of utilization of the Renton street/highway system, 2000 and 2022 daily two-way traffic volumes were compiled (see Figures 1-4 and 1-5). The 2022 volumes reflect a freeway/arterial network comprised of facilities existing in 2000 and the following arterial and HOV improvements which are assumed to be implemented by 2022.

FIGURE 1-2
ARTERIAL SYSTEM CHARACTERISTICS

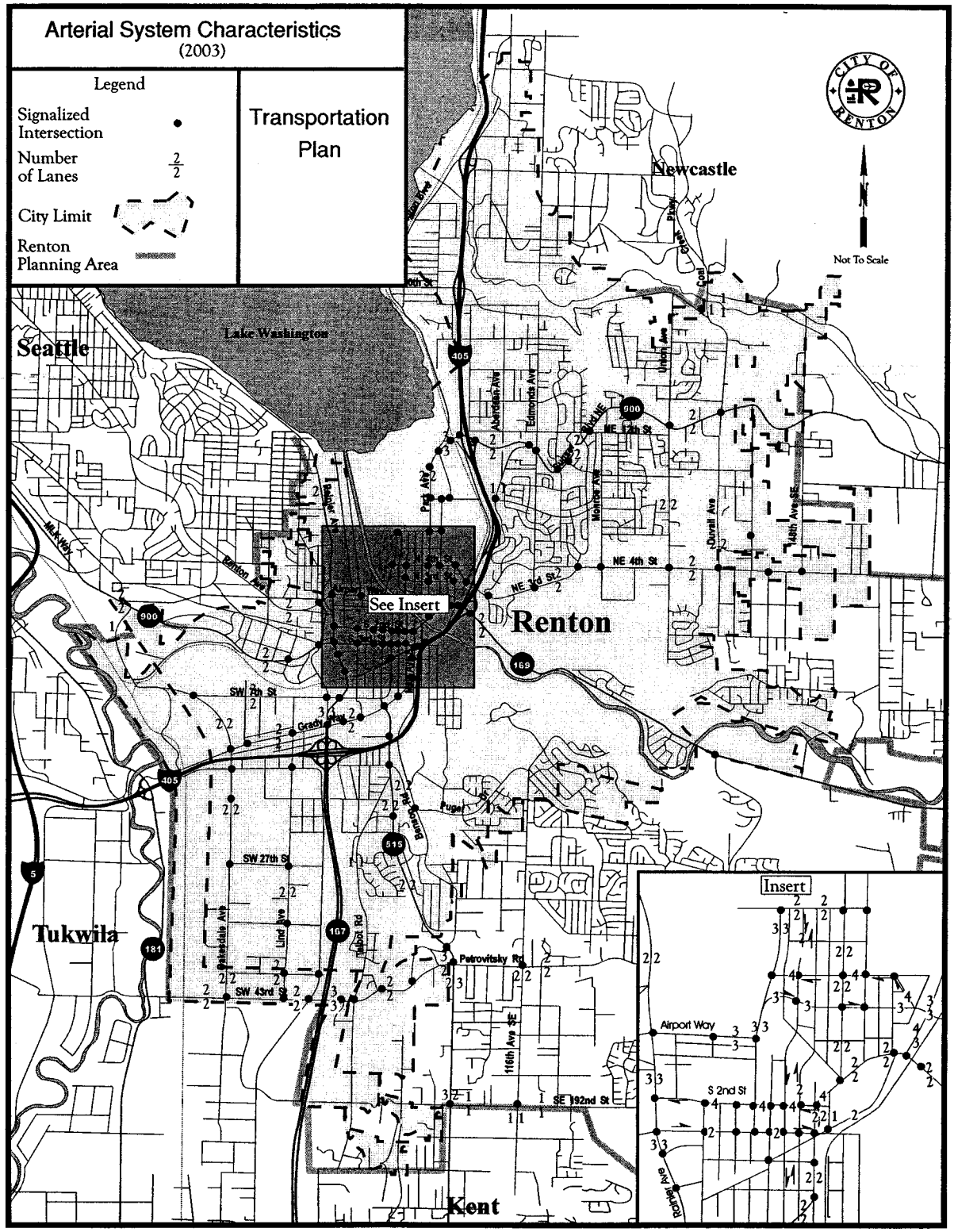


FIGURE 1-3
ARTERIAL SYSTEM FUNCTIONAL CLASSIFICATIONS

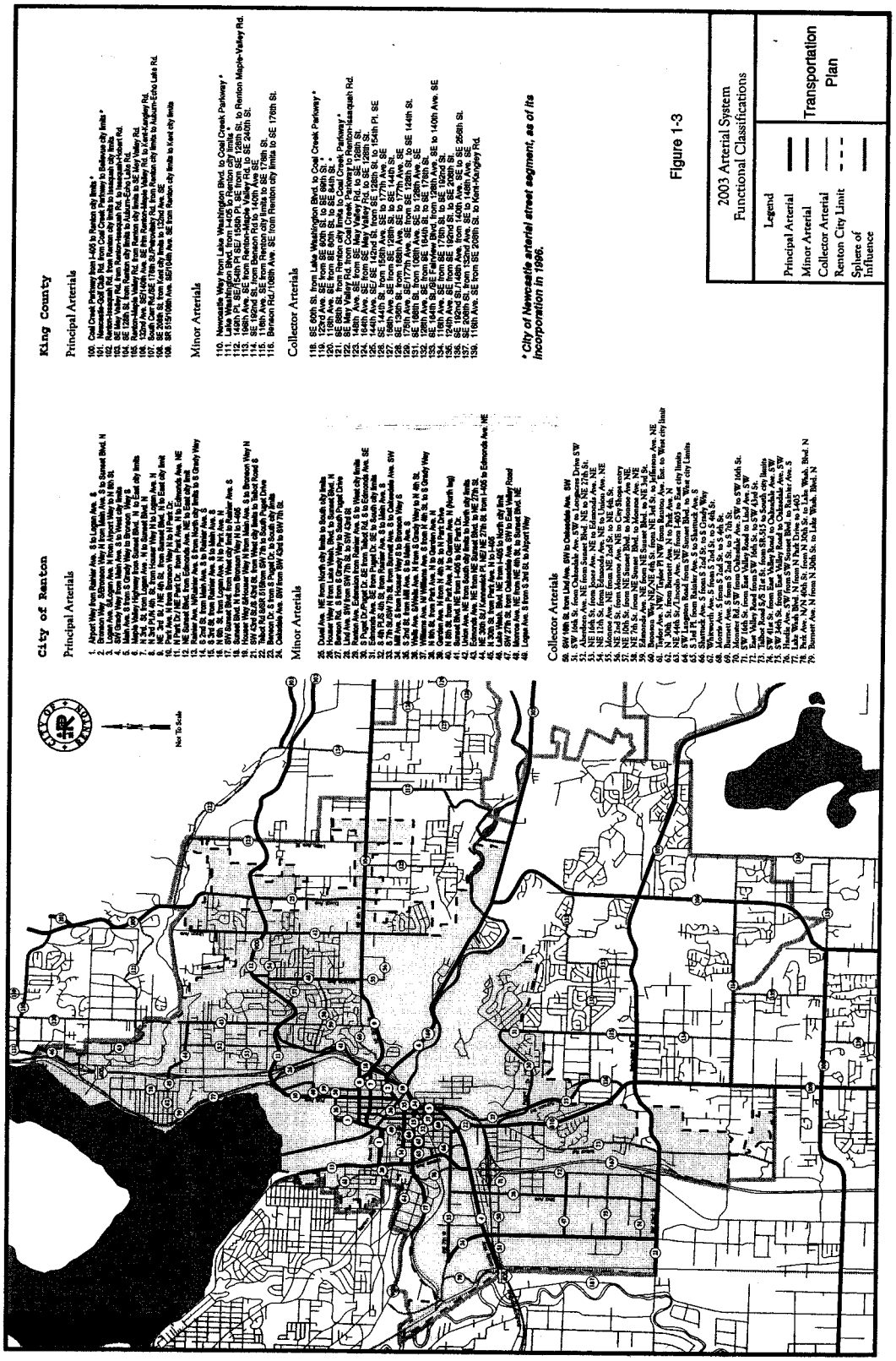


Figure 1-3

FIGURE 1-4
2000 DAILY TRAFFIC VOLUMES

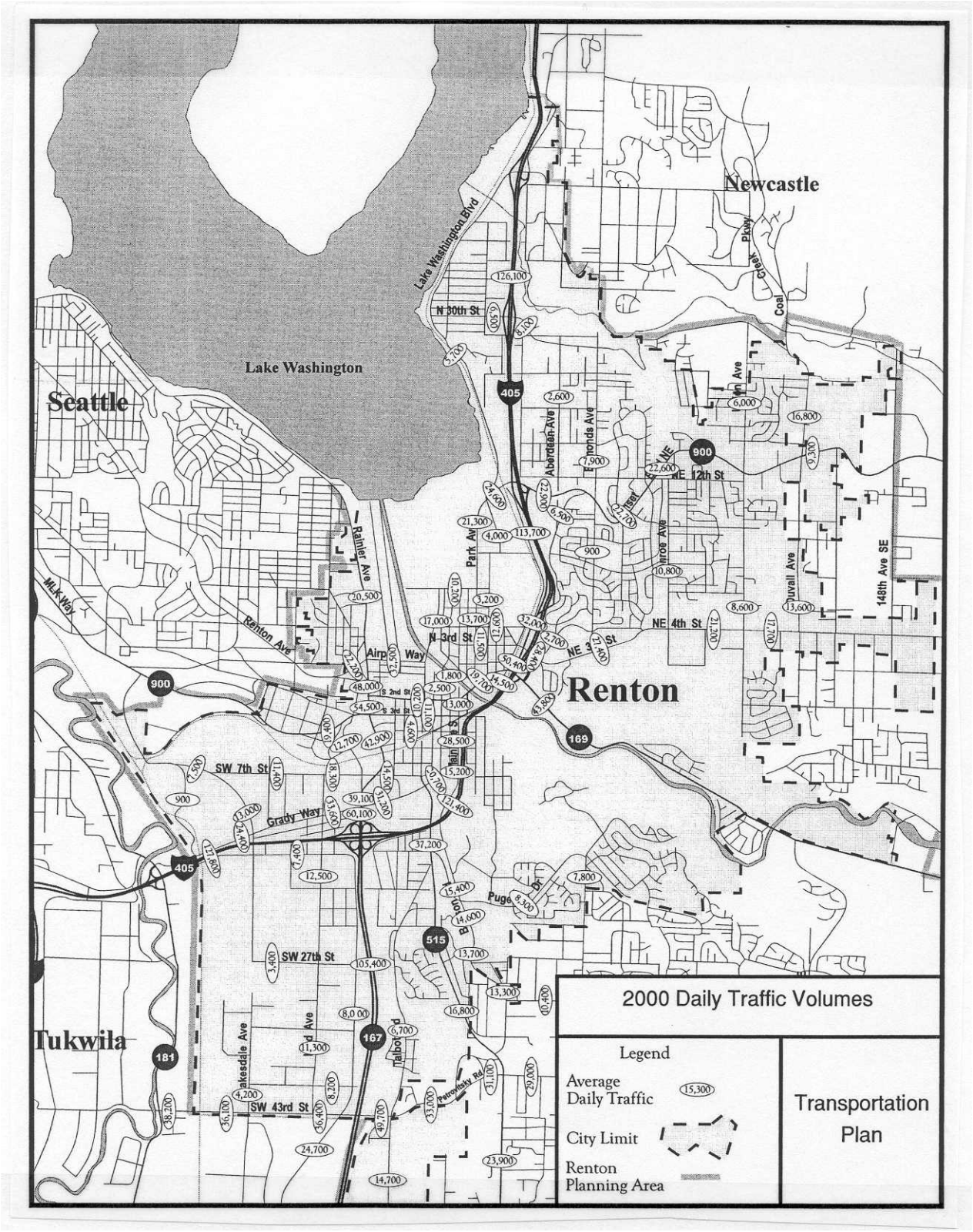
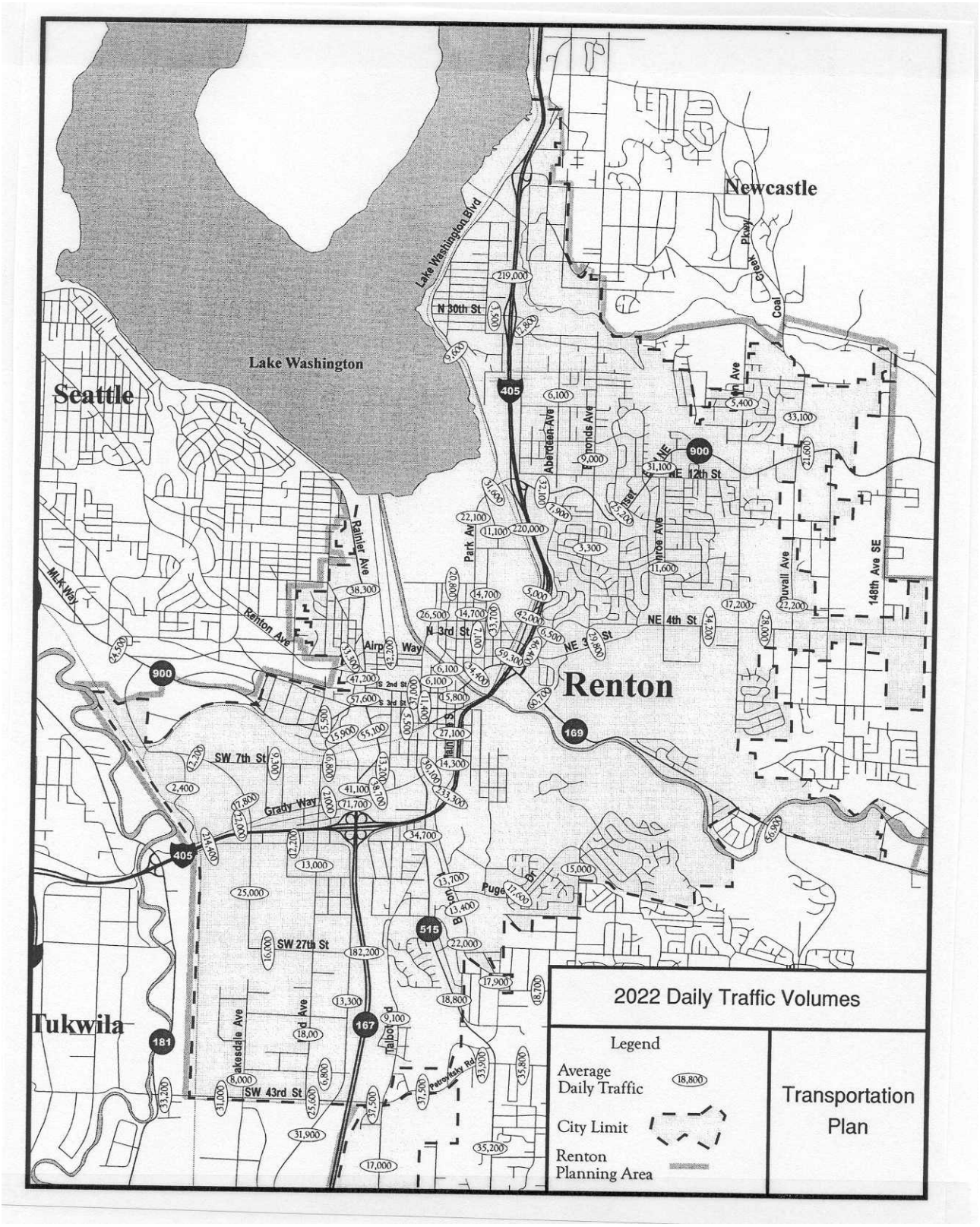


FIGURE 1-5
2022 DAILY TRAFFIC VOLUMES



Arterial improvements:

- Puget Drive Southeast – Benson Road to 116th Avenue Southeast
- Southwest 27th /Strander Boulevard Connection – Oakesdale Avenue Southwest to SR-181
- Duvall Avenue Northeast – Sunset Boulevard to City Limits
- Widen Bronson Way – South 2nd Street to Sunset Boulevard
- Lake Washington Boulevard – Park Drive to Coulon Park
- Oakesdale Avenue – Monster Road to SR-900
- South Grady Way/ Rainier Avenue South – Intersection Improvements
- Northeast 44th Street – Ripley Lane to Lake Washington Boulevard N.E.
- SR-167 / East Valley Road Off-Ramp
- NE 3rd Street – Sunset Boulevard to Edmonds Avenue N.E.

HOV improvements:

- Full HOV interchange at I-405 / Northeast 44th Street
- Add HOV lanes on I-5 – Seattle CBD to Tacoma
- I-405 HOV Direct Access at Park Drive or North 8th Street
- Half or full HOV interchange at I-405/Benson Road or Talbot Road (SR-515) and HOV lanes on SR-515 or Benson Road South from the new HOV interchange to Puget Drive
- Half HOV interchange at SR-167/S.W. 27th Street and HOV lanes on S.W. 27th Street from SR-167 to Oakesdale Avenue Southwest
- HOV lanes or intersection queue jump on SR-169 – Sunset Boulevard to east city limits
- HOV lanes or intersection queue jump on N.E. 3rd / N.E. 4th Street – I-405 to Monroe Avenue Northeast
- Transit Lane –South Grady Way to South Third Street

High-volume arterial corridors include Rainier Avenue and Airport Way, each with over 30,000 vehicles per day (vpd), and Renton Avenue, North Park Drive-Sunset Boulevard Northeast, Northeast 3rd Street/4th Street, Talbot Road South, Southwest 43rd Street and South Grady Way-Main Avenue South, each carrying over 20,000 vpd (volume numbers in 2000).

The forecasted 2022 volumes show significant increases over 2000 volumes. On major arterial corridors, volumes are forecasted to increase on the order of 40% - 100% over the 22-year period. The highest-volume arterial corridor in 2022 is Rainier Avenue, with forecasted daily volumes of 20,000—66,000 through Renton. Maple Valley Highway (SR169) also has forecasted volumes in excess of 40,000 vpd. Other high-volume arterials with forecasted volumes in excess of 30,000 vpd are listed below:

South Grady Way
Airport Way/Logan Avenue
NE 3rd Street/N.E. 4th Street
North Park Drive/NE Sunset Boulevard
Sunset Boulevard North (west of I-405)
S/ 43rd Street / South Carr Road/S.E. 176th Street/ Petrovitsky Road

Traffic volumes on the freeway system are also forecasted to increase significantly by 2022, with daily volumes of over 200,000 on most segments of I-405 and over 120,000 on SR-167 (Valley Freeway) through

Renton. The forecasted I-405 volumes are equivalent to current volumes on I-5 at the Ship Canal Bridge, where I-5 has eight mainline lanes plus four reversible roadway lanes (as compared to the two lanes plus an HOV lane in each direction on I-405). The I-405 Corridor is vital for regional connections between Renton and other Puget Sound cities and for the economic vitality of the city. At the same time, the traffic that overflows out of the corridor will severely impact the City's streets and neighborhood livability.

Level of Service Policy

Numerous jurisdictions define Level of Service (LOS) using the traditional Highway Capacity Manual (Transportation Research Board, National Research Council, 1997). This LOS concept quantifies a motorist's degree of comfort as they travel through an intersection or along a roadway segment. The degree of comfort includes such factors as travel time, amount of stopped delay at intersections, impedance caused by other vehicles and safety. Six Levels of Service are defined using letter designations -- A, B, C, D, E and F, with a LOS A representing the best operation conditions and LOS F the worst. LOS B represents stable flow with somewhat less comfort and convenience than does LOS A. At LOS C, comfort and convenience declines noticeably. At LOS D, speed and freedom to maneuver are restricted. At LOS E, speeds are low. Flow is relatively uniform flow, but there is little freedom to maneuver.

Prior to 1995, the City of Renton policy was primarily focused toward improving roadway capacity for single occupancy vehicle (SOV) travel. However, because of traffic congestion in the I-405 and SR 167 corridors, traffic is overflowing off of these facilities onto congested arterials and diverting through Renton neighborhood streets. Trying to solve the problem solely through building facilities to improve roadway capacity only attracts more traffic onto Renton's streets.

In recognition of the regional nature of the traffic problems faced by Renton and the basic impossibility of building enough roadway capacity to alleviate traffic congestion, the City of Renton revised its LOS policy in 1995 to emphasize the movement of people, not just vehicles. The new LOS policy is based on three premises:

- Level of Service (LOS) in Renton is primarily controlled by regional travel demands that must be solved by regional policies and plans;
- It is neither economically nor environmentally sound to try to accommodate all desired single occupancy vehicle (SOV) travel; and
- The decision-makers for the region must provide alternatives to SOV travel.

Renton’s LOS policy is based on travel time contours which in turn are based on auto, transit, HOV, non-motorized, and transportation demand management/commute trip reduction measures. The LOS policy is designed to achieve several objectives:

- Allow reasonable development to occur;
- Encourage a regionally-linked, locally-oriented, dynamic transportation system;
- Establish a LOS standard that meets requirements of the Growth Management Act and King County’s adopted Level-of-Service Framework Policies;
- Require developers to pay a fair share of transportation costs; and
- Provide Renton flexibility to adjust its LOS policy if the region decides to lower regional LOS by not providing regional facilities.

The City of Renton LOS standard is used to evaluate Renton citywide transportation plans. The auto, HOV and transit elements of the LOS standard are based on travel times and distance and are the primary indicators for concurrency. The non-motorized and TDM measures serve as credit toward meeting multi-modal goals of Renton and the region. Renton's LOS standard sets a travel time standard for the total average trip rather than single intersections, and it provides a multi-modal LOS standard that conforms with current regional and local policies requiring encouragement of multi-modal travel.

The Renton LOS standard has been refined to provide a system for use in evaluating transportation plans. This process includes the following:

- Determination of existing travel times within the City of Renton;
- Calibration of the City of Renton traffic model to reflect existing SOV and HOV travel times;
- Determination of future SOV and HOV travel times for the adopted Land Use (described in the Land Use Element) using the calibrated traffic model;
- Development of transit travel times using indicators of transit access, intra-Renton travel time to regional system, and regional travel time;
- Development of a city-wide LOS travel time standard (index) using the most recent existing travel time data;
- Development of transit and HOV mode splits;
- Development of a twenty-year LOS standard using the most recent travel time index as the standard;
- Testing transportation plans using LOS policy and standard to gauge the performance of the local transportation system, including State-owned facilities; and
- Selecting a plan that maintains the established LOS standard.

Other elements of the LOS implementation process include:

- Monitoring the area to re-validate transportation plans;
- Adjusting transportation plans as needed to meet standards and/or address other environmental/coordination issues; and
- Providing flexibility to modify the LOS standards over time (if needed).

Level Of Service Standard

A Citywide 2022 Level of Service standard has been developed for the City of Renton. The following demonstrates how Renton's LOS policy was used to arrive at the 2022 LOS standard.

A 2002 LOS travel time index has been determined for the City by establishing the sum of the average 30-minute travel distance for SOV, HOV, and Transit as follows:

2002 Average PM peak travel distance in 30-minutes from the City in all directions			
SOV	HOV	2 times Transit (includes access time)	LOS Index
16.6 miles	18.7 miles	6.8 miles	42*

* Rounded

As indicated in the above table: a single occupant vehicle (SOV) could expect in 2002 to travel approximately 17 miles in 30 minutes; a high occupant vehicle (HOV - carpool, vanpool) could expect to travel approximately 19 miles in 30 minutes; and a transit vehicle could expect to travel approximately 7 miles in 30 minutes. It should be noted that the transit index value takes into account the time to walk from the work site or residence to the bus stop and the time spent waiting for the bus to arrive. The initial value (3.4 miles in 2002) is then weighted by doubling it (to 6.8 miles) to recognize the advantage that the transit mode has over SOV and HOV modes in its passenger-carrying capacity.

The 1990 LOS index of 49, and the basis for the 2010 LOS standard, presented in Renton's Comprehensive Plan adopted in 1995, was based on raw data collected prior to 1994. Subsequently in mid-1995, this raw data was updated using an enhanced Renton (1990-2010) transportation model, which resulted in a 1990 LOS index of 46. After calibration of a 2002 transportation model that reflects 2002 (and 2022) land use data and examining the raw data, the 2002 LOS index was found to be 42. This reduction in LOS index could be attributed to: i) reduced King County Metro transit service in Renton, especially in the Renton Valley area, as a result of regional funding constraints (e.g. passage of Initiative 695); ii) limited implementation of Sound Transit's planned express bus service and HOV direct access projects; and, iii) higher growth rate of vehicular traffic than anticipated for the period of 1990 – 2002.

The 2002 LOS index is the basis for the 2022 standard. The average SOV 30-minute travel distance is forecast to decrease by 2022. SOV improvements alone will not maintain the 2002 LOS standard in 2022. A combination of HOV and/or transit improvements will need to be implemented to raise the HOV and/or transit equivalents to maintain the 2022 LOS standard.

With the 2002 LOS index as a base, the City-wide 2022 LOS standard has been determined as follows:

2022 Average PM peak travel distance in 30-minutes from the City in all directions			
SOV	HOV	2 times Transit (includes access time)	LOS Standard
15* miles	17* miles	10* miles	42

* Rounded

This standard will require that the travel time of SOV (15) + HOV (17) + 2 T (10) or the sum of these three modes (42) must be maintained in the year 2022 and intervening years.

The improvements in the Transportation Plan Arterial, HOV, and Transit Sub-Elements that are designated for Renton have been tested against the above LOS standard to ensure that the Transportation Plan meets 2022 demands for traffic growth/land use development. To test against the LOS standard, the 2022 planned Arterial, HOV, and Transit improvements identified later in this Transportation Element are programmed into the 2022 Traffic Model. The Traffic Model then calculates the average travel speed for the SOV, HOV, and Transit* modes along specified travel routes (which have been broken into segments of known distance) including those routes that have been identified for improvements by the year 2022. The Traffic Model then converts the travel speed along known distances into travel distances in 30 minutes for each mode of travel. The 2022 standard is met if the sum of the SOV, HOV, and Transit travel distance indices equal 42.

*Other factors are considered for calculating the transit LOS index including frequency of service and access time.

Additional information describing the methodology for determining Renton's LOS standard is provided in the City of Renton Level of Service Documentation, September 1995.

LOS standards for Highways of Statewide Significance (HSS) (i.e. I-5, I-405, SR 167) have been adopted in 1998 by the Washington State Department of Transportation (WSDOT). For urban areas the adopted LOS standard is equivalent to the traditional LOS D. LOS standards for regionally significant state highways (non-HSS) in the Central Puget Sound region (i.e. SR-900, SR-169, SR-515) were adopted by the Puget Sound Regional Council (PSRC) on October 30, 2003. For urban areas the adopted LOS standard ranges from LOS E/mitigated (pm peak hour LOS is below the traditional LOS E) to the traditional LOS D. (Further information on LOS standards for HSS and non-HSS facilities can be found on WSDOT and PSRC web sites, respectively.)

Both Highways of Statewide Significance and regionally significant state highways are included in the inventory of all state-owned facilities within Renton's city limits. These state-owned facilities have been factored into Renton's modeling estimates of Renton's projected growth, and this local modeling estimate identifies how Renton's Comprehensive Plan land use and growth projections may impact state-owned facilities. These state-owned facilities are also included in Renton's city-wide travel-time based LOS standard, which is influenced by stopped delay at intersections and on roadway segments by impedance due to queuing vehicles. These same factors, as well as travel time, are elements of the traditional LOS concept (A through F). To maintain Renton's LOS standard Renton's Transportation Element has identified SOV, HOV, and transit-oriented improvements to state-owned facilities within Renton, as well as the local roadway system.

Arterial Plan

This Street Network Chapter includes an Arterial Plan developed to make reasonable SOV improvements in the City of Renton from 2002 to 2022. These arterial improvements are intended to enhance multi-modal corridor capacity on the Renton arterial system, and/or to provide new arterial and freeway connections as necessary to support the multi-modal concept. Also, the improvements comprised by the Arterial Plan have been identified through the land use and transportation planning process as improvements that protect or improve neighborhoods, improve safety, improve business access, and are economically feasible. The Renton Arterial Plan is shown in Figure 1-6. The improvements included in the Arterial Plan are listed in Table 1.1 and their location shown in Figure 1-7.

The Arterial Plan (Figure 1-6) includes segments of several King County and City of Newcastle arterials. The list of arterial improvements includes several proposed King County improvements within the sphere of influence of Renton's Land Use Element. Also, several Tukwila, Kent, and Newcastle proposed improvements are included in the list in Table 1.1 due to their influence on the Renton arterial system. (These improvements have been compiled from the Tukwila, Kent, and Newcastle Transportation Improvement Programs and the King County Transportation Plan: *Annual Transportation Needs Report*.)

The improvements listed on Table 1.1 are the arterial/freeway mitigation measures for the Land Use Element of the City of Renton Comprehensive Plan. These improvements, along with the Transit Plan and HOV improvements identified later in this document, provide a transportation plan that will meet the 2022 Level of Service standard and will be concurrent with land use development envisioned by 2022.

FIGURE 1-6
RENTON ARTERIAL PLAN

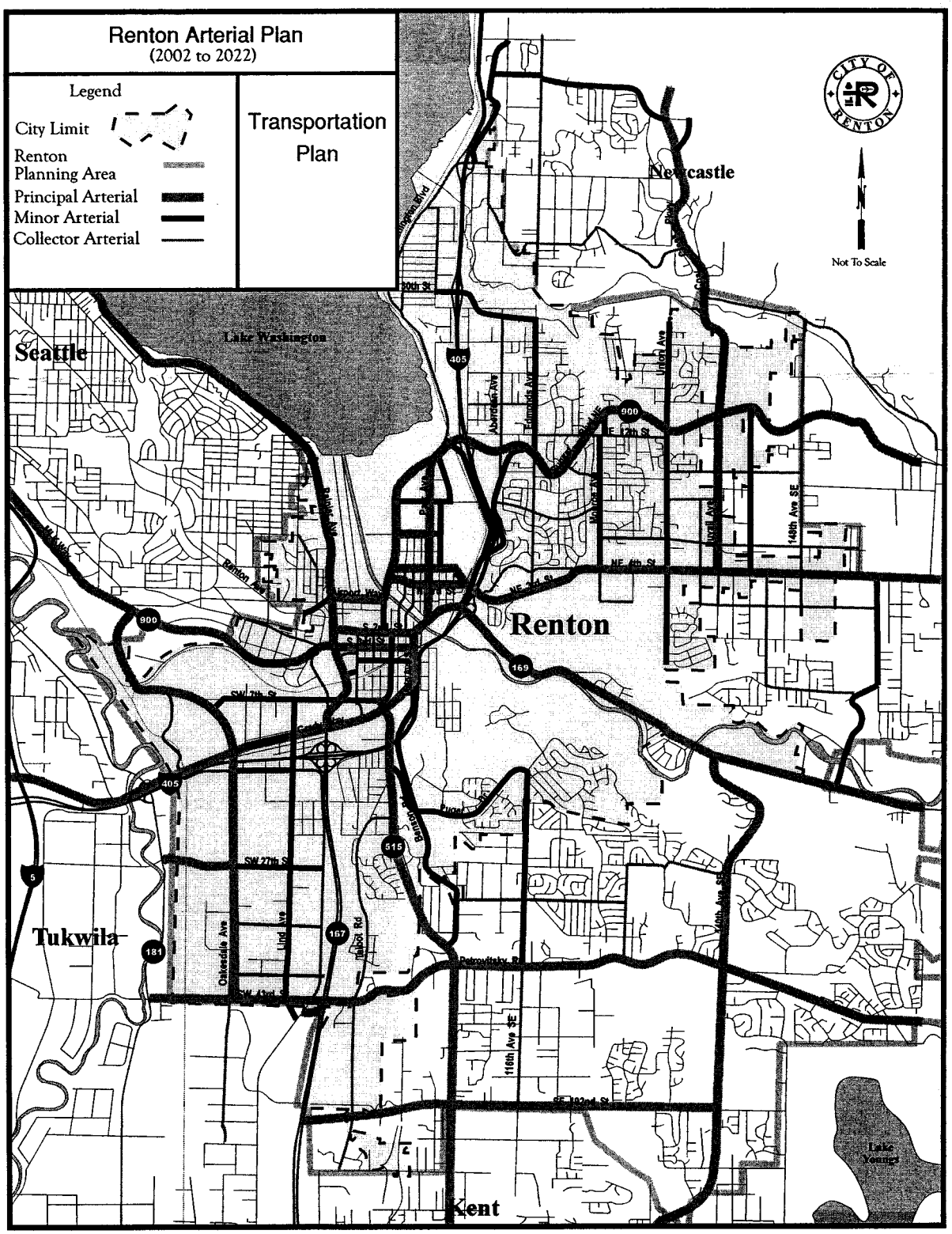


TABLE 1.1
RENTON ARTERIAL PLAN

2002 – 2022 IMPROVEMENTS

1.	Bronson Way – South 2nd Street to Park Avenue North	arterial improvements/bridge rehabilitation
2.	South Lake Washington Roadway Improvements	
	• Logan Ave N – North 6th to Garden Avenue N	new arterial
	• Park Avenue N – North 6th to Logan Avenue N	arterial widening
	• North 10th Street – Logan Avenue N to Garden Avenue N	new street
	• North 8th Street – Logan Avenue N to Park Avenue N	new street
3.	CBD Streetscape	street improvements
4.	Rainier Avenue – South 4th Place to South 7th Street	arterial widening/RR over crossing replacement
5.	Grady Way - Main Avenue to West City Limits	arterial improvements
6.	Lind Avenue Southwest - Southwest 16th to Southwest 43rd Street	arterial widening
7.	NE 2nd and NE 6th Street – Duvall Avenue NE to 156th Avenue SE	street improvements
8.	Duvall Avenue Northeast – Sunset Boulevard to East City Limits	arterial widening
9.	Oakesdale Avenue Southwest - Monster Road to SR-900	arterial widening
10.	S.W. 27th Street / Strander Boulevard – SR-181 to Oakesdale Avenue Southwest	new arterial
11.	Sunset Boulevard/Duvall Avenue NE	intersection improvements
12.	Rainier Avenue –Grady Way to North City Limits	arterial improvements
13.	Puget Drive Southeast - Jones Place Southeast to Edmonds Avenue Southeast	arterial widening
14.	Benson Road – South 26th Street to South 31st Street	safety improvements/ arterial widening
15.	Talbot Road – Southwest 43rd to South City Limits	arterial widening
16.	N.E. 3rd / N.E. 4th Corridor Improvements – Sunset Boulevard to East City Limits	arterial improvements
17.	Mill Avenue South/Carr Road	intersection improvements
18.	Lake Washington Boulevard. – Park Avenue North to Coulon Park Entrance	arterial improvements
19.	Park Ave. N. / Sunset Boulevard – Garden Avenue N. to Duvall Avenue N.E.	safety/mobility improvements
20.	S.W. 7th Street / Lind Avenue S.W.	safety improvements
21.	South Renton Neighborhood Improvements	street improvements
22.	N.E. 8th and NE 10th Street – Union Avenue N.E. to Duvall Avenue N.E.	street improvements
23.	NE 4th Street/Hoquiam Avenue NE	intersection improvements
24.	Maple Valley Highway (SR 169) – I-405 to East City Limits	safety/mobility improvements

OTHER JURISDICTION PLANNED IMPROVEMENTS

TUKWILA:

25.	West Valley Highway (SR 181)/South 156th Street	intersection improvements
26.	West Valley Highway (SR 181) – I-405 to Strander Blvd.	arterial improvements
27.	Nelsen Place – South 156th to South 158th	street improvements

KENT:

28.	South 196th/192nd Street Corridor (Phase III) - East Valley Highway to SR515	new arterial
29.	80th Avenue South – South 196th to South 188th	arterial widening
	NEWCASTLE:	
30.	Coal Creek Parkway (Phase 2 and 3) SE 84th Way to SE 95th Street	arterial widening
31.	Newcastle Way – 112th Avenue SE to 129th Avenue SE	arterial widening
32.	Newcastle Way / 116th Avenue SE	intersection improvements
33.	112th Avenue SE – SE 64th Street to Newcastle Way	arterial widening
34.	116th Avenue SE – Newcastle Way to SE 88th Street	arterial improvements
35.	112th Place SE – West City Limit to 116th Avenue SE	arterial improvements
	KING COUNTY:	
36.	Duvall Avenue NE/Coal Creek Parkway – Renton City Limits to Newcastle City Limits (SE 95th Way)	arterial widening
37.	South 192nd Street - SR-515 to 140th Avenue Southeast	arterial widening
38.	116th Avenue Southeast - Renton City Limits to South 192nd Street	arterial widening
39.	140th Way Avenue Southeast - SR-169 to Southeast 192nd Street	arterial widening
40.	Elliott Bridge – Jones Road to SR-169	bridge replacement
41.	East Corridor Study – SR-169 to Northeast Fourth Street	arterial widening
42.	Carr Road / SE 176th / SE Petrovitsky – Lind Ave. S.W. to 116th Avenue S.E.	arterial improvements
43.	Carr Road / Benson Road (SR-515)	intersection improvements
44.	140th Avenue SE / SE Petrovitsky	intersection improvements
45.	Trans-Valley Corridor – Southcenter Parkway to SR 515	transportation improvements
46.	Benson Road / South 31st Street	intersection improvements
	WSDOT (Limited Access):	
47.	I-405 – I-5 to SR 167	add one lane in each direction
48.	I-405 – SR 167 to North City Limits	add two lanes in each direction
49.	SR 167 – I-405 to SW 43rd Street	add one lane in each direction
50.	I-405/SR 167 Interchange	
	• Southbound I-405 to Southbound SR 167	construct direct connection ramp
	• Northbound SR 167 to Northbound I-405	construct direct connection ramp
	• Northbound I-405 to Southbound SR 167	construct direct connection ramp
51.	I-405 between Lind Avenue SW and Talbot Road	construct one-way frontage road in each direction with ramp connections to I-405 at Lind and Talbot
52.	I-405/SR 169 Interchange	

	• SR 169/North 3rd Street	construct split-diamond interchange
	• Southbound I-405 to Eastbound SR 169	construct direct connection ramp
53.	I-405/Park Avenue N Interchange	reconstruct to accommodate I-405 widening
54.	I-405/N 30th Street Interchange	reconstruct to accommodate I-405 widening
55.	I-405/NE 44th Street Interchange	reconstruct to accommodate I-405 widening and future improvements
	WSDOT (City ROW)	
56.	SW 43rd Street – Lind Avenue SW to Talbot Road	arterial widening
57.	East Valley Road – SW 16th to SW 34th Street	arterial realignment
58.	Lind Avenue SW – Grady Way to SW 16th Street	arterial widening to accommodate frontage road and I-405 ramps
59.	Talbot Road – South Renton Village Place to South 15th Place	arterial widening to accommodate frontage road and I-405 ramps
60.	Mill Avenue South – Houser Way to Bronson Way	convert to one-way northbound
61.	Renton and Cedar Avenue Overpasses of I-405	realignment/revisions to accommodate I-405 widening
62.	Sunset Boulevard – west of I-405	realignment/revisions to accommodate I-405 widening
63.	Houser Way – north of North 4th Street	realignment/revisions to accommodate I-405 widening
64.	Lake Washington Boulevard – north of NE 44th Street	realignment to accommodate I-405 widening
65.	Benson Road/I-405 Overpass	replacement to accommodate I-405 widening

POST 2022 IMPROVEMENTS

RENTON:

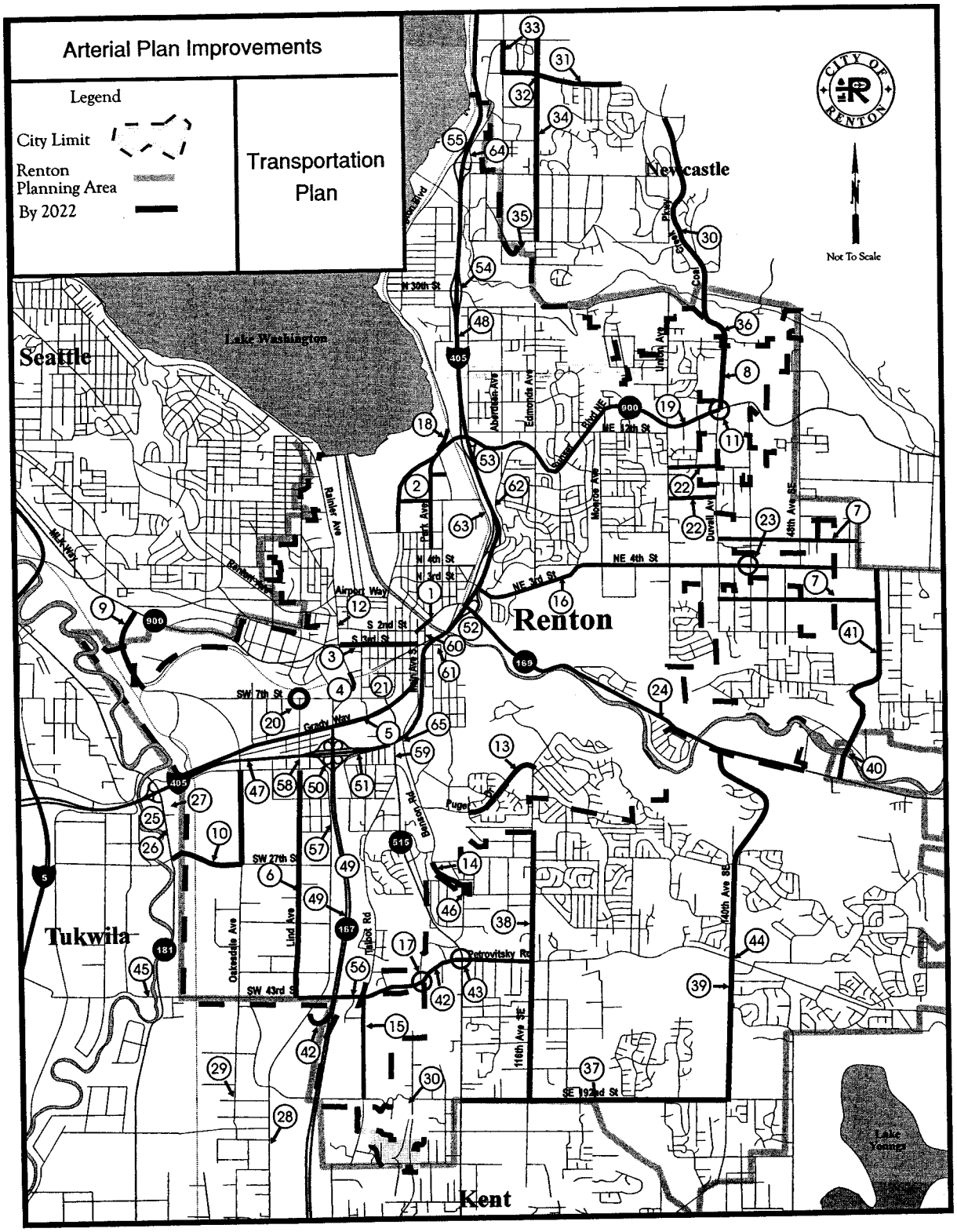
South Lake Washington Improvements

• Logan Avenue North – North 4th Street to Garden Avenue North	arterial widening
• North 10th Street – Logan Avenue North to Houser Way	street widening
• North 8th Street – Logan Avenue North to Garden Avenue North	arterial widening
• Park Avenue North – Logan Avenue North to 1,200 feet north of Logan Avenue North	new street
North 4th Street – Logan Avenue North to Sunset Boulevard	revise street network

WSDOT (Limited Access):

I-405 – I-5 to SR 167	add one lane in each direction
I-405/SR 167 Interchange	
• Northbound SR 167 to Southbound I-405	construct direct connection ramp
East Valley Road at SW 34th Street	construct new ramps connecting to SR 167
I-405 at North 10th Street	construct direct connection ramps to and from the north
I-405 at SR 169	
• Northbound I-405 to Houser Way	construct direct connection ramp
• Southbound Houser Way to Southbound I-405	construct direct connection ramp
• Northbound SR 169 to Northbound I-405	construct direct connection ramp
WSDOT (City ROW):	
Rainier Avenue – Grady Way to East Valley Road	realign roadway to connect to East Valley Road at SW 16th Street
East Valley Road – SW 16th to SW 34th Street	arterial widening

FIGURE 1-7
RENTON ARTERIAL PLAN IMPROVEMENTS



Included in Table 1.1 are arterial and freeway improvements that have been identified beyond 2022. These improvements will also be needed to support future land use and neighborhood and business goals and improve safety.

Ongoing transportation planning work will include periodic testing of the 2002-2022 arterial and freeway improvements in Table 1.1 against the LOS standard.

TRANSIT

In the future, fewer new roads will be built to handle increased traffic. The challenge will be to better manage the existing transportation system and reduce traffic demand by encouraging the use of alternatives to single occupant vehicles. One of the most important of these alternatives is public transportation, or "transit." The Renton transit system, defined in this Transit Chapter of the Transportation Element, must provide attractive, convenient service for the local and regional travel needs of Renton businesses and residents.

Objectives

The Transit Chapter is based on the following objectives:

T-B: Encourage the development and use of alternatives to single-occupancy vehicles.

T-C: Ensure that a regional high-capacity transit system serves Renton.

T-D: Develop a transit system that conveniently connects the regional high-capacity transit system and local Renton residential areas, activity centers, and employment centers to the transit center.

T-E: Develop a local transit system that provides attractive, convenient service for intra-Renton travel.

Policies

Policy T-17. The City should work with other jurisdictions in the greater metropolitan area to plan and provide frequent, coordinated and comprehensive bus service and transit facilities in all residential and employment areas.

Policy T-18. Local and regional transit service and facilities should be planned and improved in cooperation with the regional transit authority.

Policy T-19. The City should take an active role in working with the regional transit agencies in planning and locating public transit facilities.

Policy T-20. The multi-modal Transit Center in downtown Renton should be promoted as part of a regional high capacity transit system.

Policy T-21. Parking serving the downtown Transit Center should be encouraged in parking structures.

Policy T-22. Non-structured park-and-ride facilities should be located out of the Urban Center and feed into the downtown Transit Center.

Policy T-23. Development of a regional network using new technology to move people and goods should be supported.

Policy T-24. The City should support development of transit service connecting Renton to a regional rail network.

Policy T-25. Criteria should be developed to locate park-and-ride lots serving residential areas.

Policy T-26. Park-and-rides within the City of Renton's Urban Center and its Center Village designations should meet the following criteria:

- Use structured parking garages.
- Be available for non-commuter use during evenings and weekends.
- Be located within the immediate vicinity of the City's Transit Center, or any future major transit transfer facility (e.g., in Renton Highlands or South Lake Washington Neighborhood).

Policy T-27. Surface park-and-rides located outside of the City's Urban Center should meet the following criteria:

- Be located in the vicinity of I-405, SR-167, SR-900 east of I-405, and/or SR-169. (These park-and-ride locations shall be chosen to provide convenient access for transit to those

corridors while minimizing commuter pass-through traffic on Renton's street system.)
- Be located in Commercial or Industrial designations within easy walking distance of employment, and/or multi-family uses.
- Not be located within the Rainier Avenue corridor north of the I-405/SR-167 interchange.
- Avoid consuming large areas of urban land for primary use parking lots.

Policy T-28. Shared-use park-and-rides located anywhere within the City should meet the following criteria:
- Be leased from existing, under-utilized parking spaces required per development standards for a primary use.
- Not be expanded to accommodate leased park and rides.
- Not be leased within the commercial area west of the Urban Center– Downtown bounded by SW 7th Street, Shattuck Avenue, Airport Way, and Hardie Avenue SW since cash flow resulting from a lease may be a disincentive for redevelopment of surface parking lots in this area.

Policy T-29. Regional commercial uses should be linked by frequent and reliable mass transit to major employment and population centers.

Also see related policies in: TDM/CTR Section; Land Use Element/Urban Center Section; and Community Design Element.

The residential and centers policies of the land use plan also support transit through establishment of residential densities and a mix of residential and commercial uses in centers that can support public transportation.

Specific treatment of the routes and stops for a transit system in downtown Renton are addressed in the Downtown policies of the land use plan. However, it is expected that such stops would serve commercial activity centers, which would complement the commercial and residential activities envisioned in the centers and residential policies of the land use plan.

Existing Transit Service

Bus service in Renton is currently provided by the King County Transit Division (Metro), the agency responsible for transit service in King County, and Sound Transit, the agency responsible for regional transit service.

Figure 2-1 identifies the bus routes operating in Renton in 2003. A variety of Metro service is provided in the city ranging from internal Renton routes such as Route 110, the Renton *"Rush"* circulator route, to regional service to downtown Seattle and downtown Bellevue. Sound Transit's service includes express routes operating to SeaTac and Bellevue (Route 560), to Auburn and Bellevue (Route 564) and to Federal Way and Bellevue (Route 565). While not serving the city directly, Sound Transit's *Sounder* commuter rail service stops at the nearby Tukwila station. During weekday peak periods, Sounder trains currently serve several locations in Pierce County and South King County as well as downtown Seattle (King Street Station).

The following provides an overview of the 2003 transit network serving Renton.

Local Access

The route structure and service headways for Renton routes provide basic overall service coverage. One of the local, community-oriented routes, Route 148, provides late evening and Sunday service. Route 105 provides evening service in the Highlands. Service connections in the Highlands area are reduced in the early evening periods; however, Route 240 provides evening and weekend service in the Highlands. In addition, Route 110, which was intended to operate as a local circulator, is available only during the peak periods and includes service connection to the Tukwila commuter rail station.

Eastside Connections
Several Metro and Sound Transit routes provide connections to downtown Bellevue and other Eastside communities. These connections include Bellevue (non-downtown) and Factoria. Direct service is currently provided between Highlands and Factoria via Metro Route 240. Route 140 provides 30-minute service during the day Monday through Saturday plus hourly service in the evenings.

South King County Connections
The baseline travel demand patterns indicate a substantial level of demand between Kent and various locations in Renton, particularly the Green River Valley. While several Metro and Sound Transit routes connect Kent with Renton, the service is focused on the downtown Renton. The Green River Valley area is accessed at the western edge of this district.

East-West Connections
Metro Route 140 currently connects Burien and Renton. Sound Transit Route 560 provides a connection between SeaTac and Renton. East-west connections to the Green River Valley area are particularly important given the current level of travel demand to this area from locations such as Tukwila and Burien.

The following routes serve a variety of markets:

- Routes 101 and 106, Downtown
- Route 140, Burien
- Route 148, Local Renton
- Route 240, Bellevue
- Route 169, Kent

Downtown Renton Transit Center
The Downtown Renton Transit Center is the hub of transit service in Renton. The Transit Center is served by regional and local service provided by Sound Transit and the King County Transit Division (Metro), and acts as both a destination and a major transfer center. The Downtown Renton Transit Center is located between South Second and South Third Streets on Burnett Avenue South and on a new connection between Logan Avenue South and Burnett Avenue South. The facility has been carefully integrated with other planned developments in the downtown area.

Custom Bus Service
King County Transit, as of 2003, operated one custom bus route (952) serving Renton. This route operates one trip in the peak hour in the peak direction serving areas with significant employment density. Renton custom bus service originates at the Auburn Boeing plant, and serves Kent, Renton and terminates at the Everett Boeing plant.

Park-and-Ride Facilities

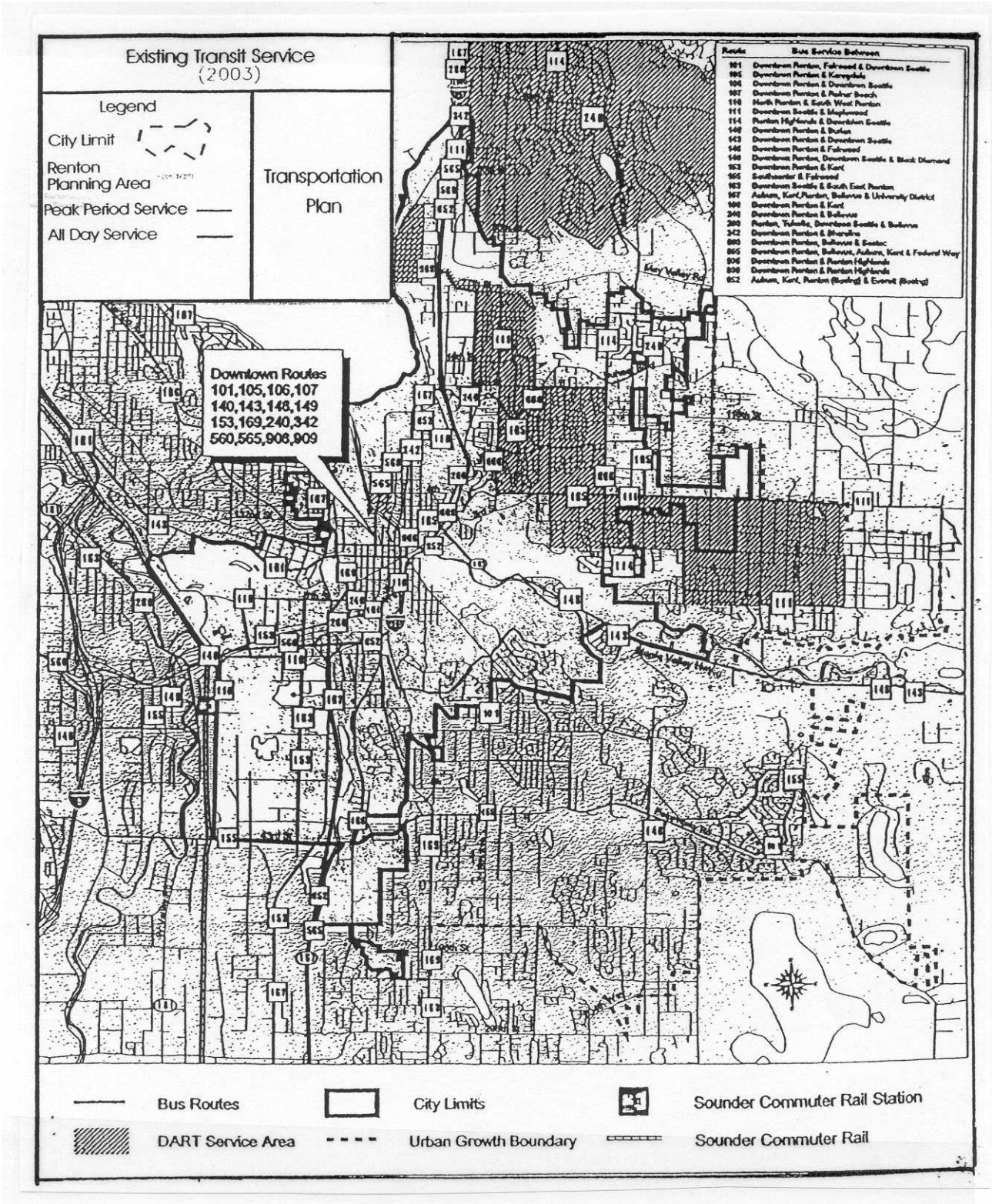
Renton has one dedicated transit park-and-ride lot facility within the city limits: the South Renton Park-and-Ride lot located at South Grady Way and Shattuck Avenue South. This park-and-ride lot has 370 spaces and is used at capacity.

There are four park-and-ride lots in the Renton planning area which are leased by King County Transit for commuter parking. One of the lots is in downtown Renton, at the First Baptist Church at Southwest Sunset Boulevard and Hardie Avenue Southwest. It has 21 spaces and is used at 19% capacity. Another lot located in the Renton Highlands at Saint Matthew's Lutheran Church on Northeast 16th Street and Edmonds Avenue Northeast has 146 spaces and is at 29% capacity. A third lot is located at the East Renton Shopping Center at Southeast 128th Street and 164th Avenue Southeast, east of the Renton City limits in unincorporated King County. This lot has 21 spaces and is at 29% capacity. The fourth leased lot, also located in unincorporated King County, is at the Nativity Lutheran Church at 140th Avenue Southeast and Southeast 177th Street. This lot has 25 spaces and is at 60% capacity.

The Boeing Company has an employee-only park-and-ride lot located in the vicinity of North 8th Street and Garden Avenue North. This lot has a capacity of approximately 100 stalls.

The City has leased 200 parking spaces in the downtown parking garage to King County Metro Transit as a park and ride facility.

FIGURE 2-1
EXISTING RENTON TRANSIT SERVICE AND FACILITIES



Future Regional Accessibility

The long range transit and rideshare service concept for the King County Transit Division (Metro) service area is described in the *Long Range Policy Framework for Public Transportation* (adopted October, 1993). The Framework establishes policies that will guide future planning and development efforts, and it identifies possible policy implementation strategies. More specific near term transit improvements are outlined in the King County Transit Division's *Six-Year Transit Development Plan for 2002-2007.*

On May 31, 1996 the Central Puget Sound Regional Transit Authority (Sound Transit) approved a 10-year plan, Sound Move, which is illustrated in Figure 2-2: The Ten-Year Regional Transit System Plan. Voters approved a funding package to implement the plan on November 5, 1996. The approved Sound Transit Plan includes the following regional improvements: light rail transit, commuter rail transit, HOV expressway development, regional express bus service, and community connection improvements.

Sound Transit improvements which will directly serve Renton include HOV access improvements, express bus service, and local connection improvements. In addition, commuter rail running between Seattle and Tacoma will stop at a station serving Renton and Tukwila, sited adjacent to the Boeing Longacres property. Efficient transit connections will be provided between the Downtown Renton Transit Center and the Commuter Rail Station.

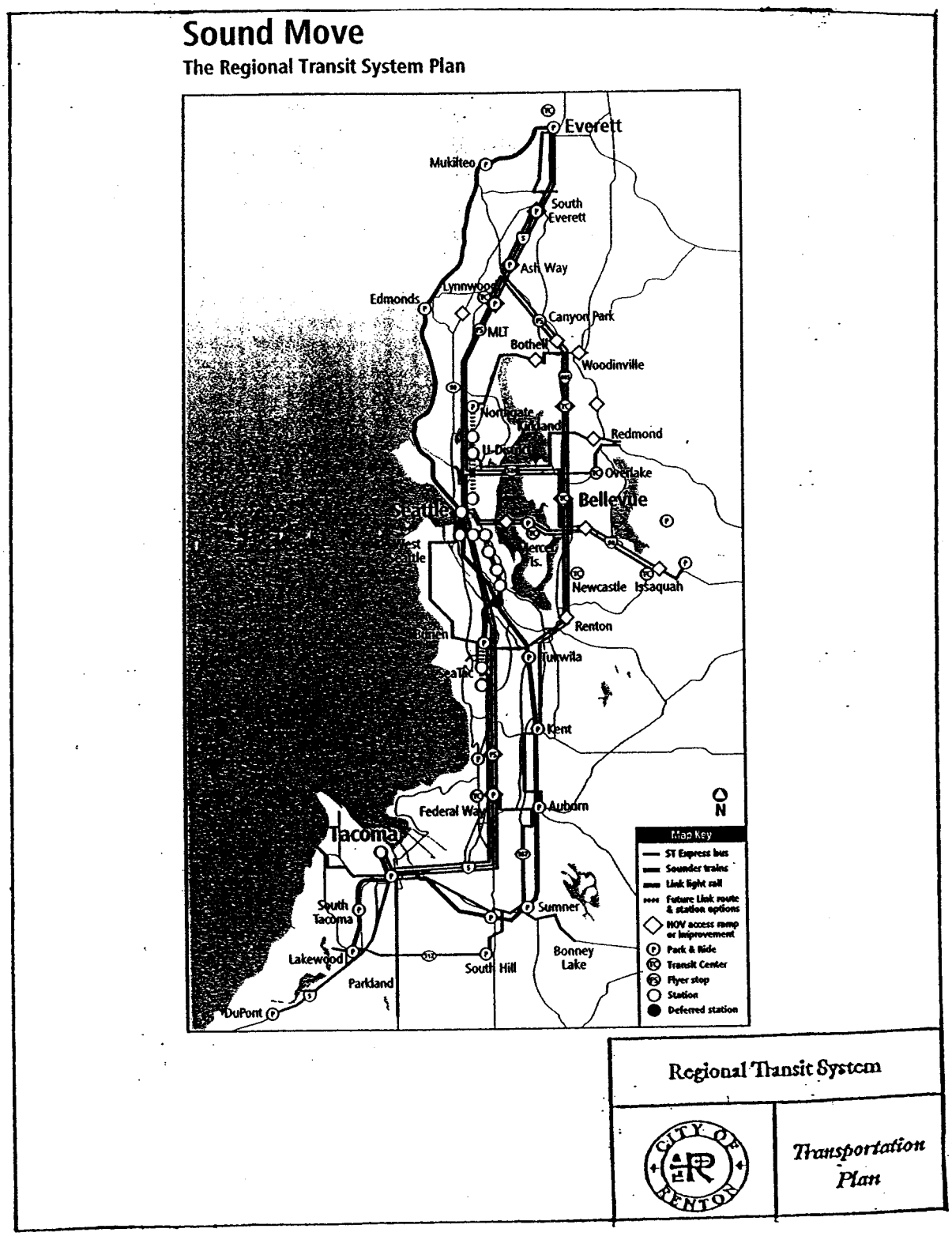
Sound Transit provides regional express bus service, with three routes serving Renton. As noted previously, express routes serve SeaTac, Bellevue, Auburn and Federal Way. To ensure quick access to the Downtown Renton Transit Center, the Sound Move plan identified direct access HOV ramps on I-405 in the vicinity of North 8th Street and needed arterial HOV improvements in Renton to improve transit speed, reliability and ridership of transit services. Before constructing any arterial HOV improvements, Sound Transit will evaluate alternative improvements to benefit transit speed, reliability, and access. The City of Renton is coordinating with Sound Transit to ensure that commensurate transit service and improvements to improve transit speed, reliability and ridership in Renton will be provided should I-405/HOV direct access ramps not be implemented.

Transit Plan

Transit improvements are needed to provide the facilities and services necessary to support and encourage increased transit use and provide an alternative to single occupancy vehicle travel. The transit facilities and services outlined in the Transit Chapter of the Transportation Element are needed to provide adequate access between the regional transit system and Renton residential and employment areas, and to provide an attractive transit alternative for travel within Renton.

As described in the previous section, an element of the regional system is the Seattle-Tacoma commuter rail line. Access to Renton is provided by a station located on the Renton-Tukwila border between Longacres Way and Strander Boulevard. This station is currently served by local bus transit and will additionally be served by local, and possibly regional, bus transit, including fast connections to the Downtown Renton Transit Center.

FIGURE 2-2
REGIONAL TRANSIT SYSTEM



Regional transit services are provided by the previously described Sound Transit express bus service, as well as by select King County Transit Division (Metro) express bus routes. The local transit system links neighborhoods and commercial centers with one another as well as to the regional transit system through connections to the Downtown Renton Transit Center. Local service is provided through a combination of services, including buses, shuttles, and Dial-a-Ride (DART) service. In addition, interceptor park-and-ride lots outside of downtown Renton should be developed close to trip origin locations, with transit service feeding the Transit Center and regional services. Renton has been and will continue to work with these transit agencies to assure that transit adequately serves Renton's developing residential areas.

An illustration of Renton's 20-year transit plan is provided in Figure 2-3. This figure depicts planned regional and local improvements, and identifies at a conceptual level potential service types and transit routes. Specific transit service improvements and facilities identified for the next 6 years, and over the next 20 years to support Renton's conceptual transit plan, are described in the City of Renton Transit Needs Assessment as well as in the King County Transit Division's Six-Year Transit Development Plan for 2002-2007 and by the regional Sound Move program. The Transit Plan comprises a transit system that will serve Renton from 2002 to 2022, as a regional destination and as a city with commercial and neighborhood centers.

It should also be noted that the exclusive freeway/arterial HOV facilities included in the HOV Chapter are needed to support and encourage increased transit use by improving transit travel times (by enabling buses to bypass or avoid the traffic congestion that is forecasted for the Renton and regional road systems).

Level of Service

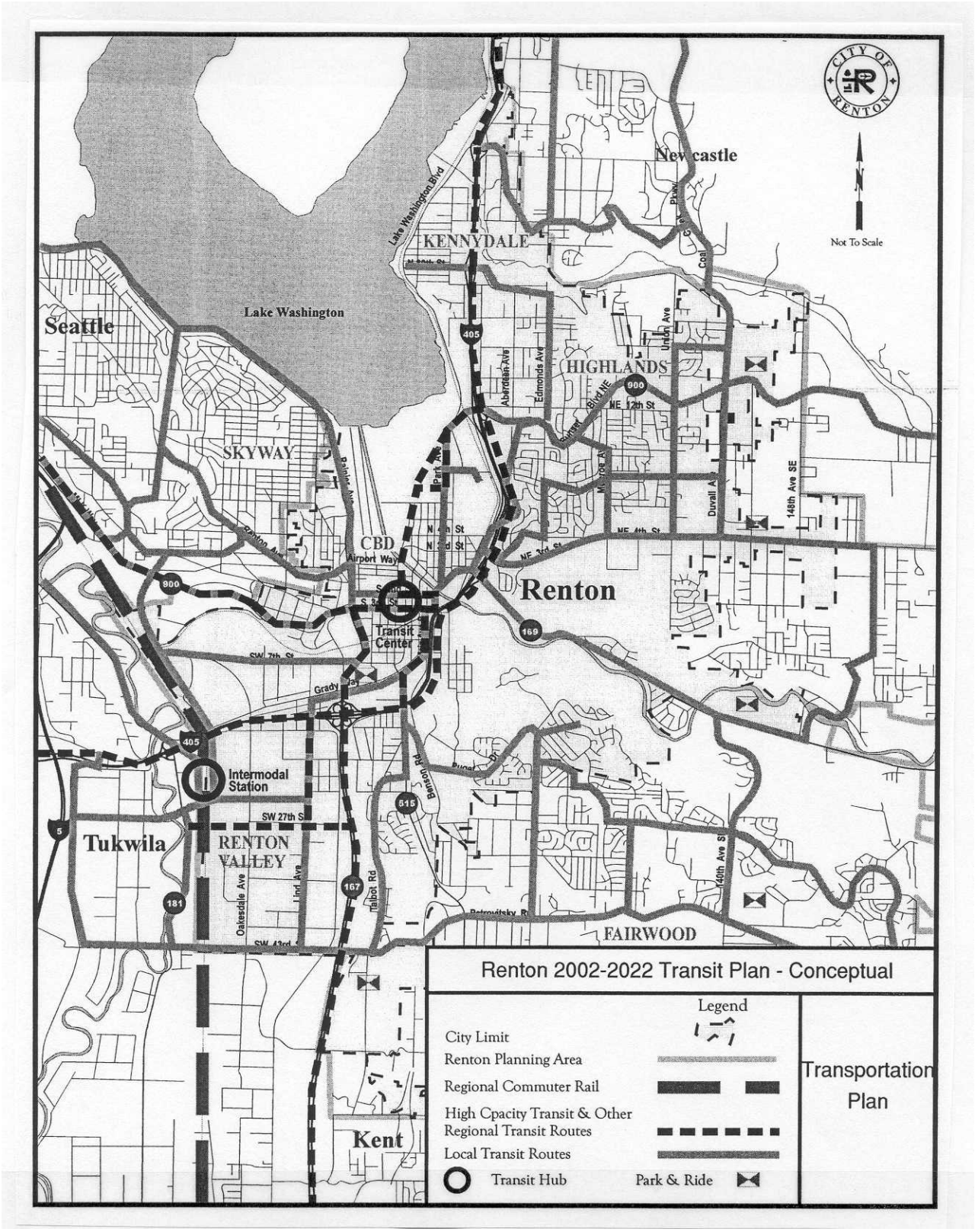
The City of Renton Level of Service (LOS) policy emphasizes the movement of people, not just vehicles. This LOS policy is based on a set of multi-modal elements including auto, transit, HOV, non-motorized, and transportation demand management/commute trip reduction measures.

The LOS standard will be used to evaluate Renton citywide transportation plans. The auto, HOV, and transit measures will be based on travel time contours and will be the primary indicators for concurrency.

The 2022 LOS standard has been established to greatly increase the competitiveness of transit compared to SOV travel. Achieving this goal has guided the planning and programming of the elements of the Transit Plan.

Information on development of the transit index of the Level of Service Standard is provided in the City of Renton Level of Service Documentation. Ongoing transportation planning work will include continued refinement and updating of the transit index.

FIGURE 2-3
RENTON TRANSIT PLAN



HIGH OCCUPANCY VEHICLE (HOV)

In the future, fewer new roads will be built to handle increased traffic. A major challenge of the Renton Transportation Element will be to better manage the existing transportation system and reduce traffic demand by encouraging the use of alternatives to single-occupant vehicles. The HOV Chapter addresses this challenge by focusing on increasing the person-carrying capacity of the system rather than the vehicular capacity.

Objectives

The HOV Chapter is based on the following objectives:

T-F: Encourage the development and use of alternatives to single-occupancy vehicles.

T-G: Develop HOV facilities on freeways and arterials to support and encourage ridesharing by enabling HOVs to bypass or avoid severe traffic congestion on Renton and regional street and highway networks.

T-H: Provide facilities to support attainment of Commute Trip Reduction and other Growth Management goals within the City.

Policies

Policy T-30. The City should support completion of a comprehensive system of HOV improvements and programs on state highways and regional arterials that give high-occupancy vehicles a travel time advantage over single-occupancy vehicles.

Policy T-31. The City should continue to promote measures to increase the use of high occupancy vehicles among employers located within the City.

Policy T-32. A continuous network of arterial HOV facilities (lanes, bypass, etc.) should be provided on the congested travel corridors in Renton.

Policy T-33. Arterial HOV facilities should be provided on the local arterial routes in Renton that provide access to/from the regional highway system.

Policy T-34. The City should establish or should encourage the establishment of arterial HOV system warrants, standards and criteria for usage (volume, capacity, LOS); physical and geometric characteristics; appropriate locations; time-of-day of operation; HOV facility type.

Policy T-35. The City should support a regional vehicle occupancy monitoring and HOV system evaluation program that includes elements such as a "demonstration managed lanes" project, electronic tolling or "HOT LANES" concept.

(Also see related policies in the TDM/CTR Section and see King County Countywide Planning Policies.)

Existing HOV Facilities

Freeway HOV facilities are provided on Interstate 405 and SR-167. These include inside (median) HOV lanes, both northbound and southbound, on I-405 from the I-5 interchange and continuing to the Renton north city limit and beyond. Two or more persons in a vehicle are allowed to travel in these lanes. These lanes are in effect 24 hours per day, except when non-HOV use is allowed between 7 pm and 5 am.

Inside HOV lanes, both northbound and southbound, exist on SR-167 between the south Renton city limits and SR-405. This HOV facility is also designated for 2+ occupant vehicles.

An HOV queue jump lane is provided at the following interchange ramps in Renton: the northbound SR-167 to northbound I-405 ramp; the I-405/SR-169 (Maple Valley) northbound and southbound on-ramps; the I-405/N.E. Park Drive northbound and southbound on-ramps; the I-405/N.E. 30th northbound on-ramp; and, the I-405/N.E. 44th southbound on-ramp. Each of the queue jump lanes has a 2+ designation.

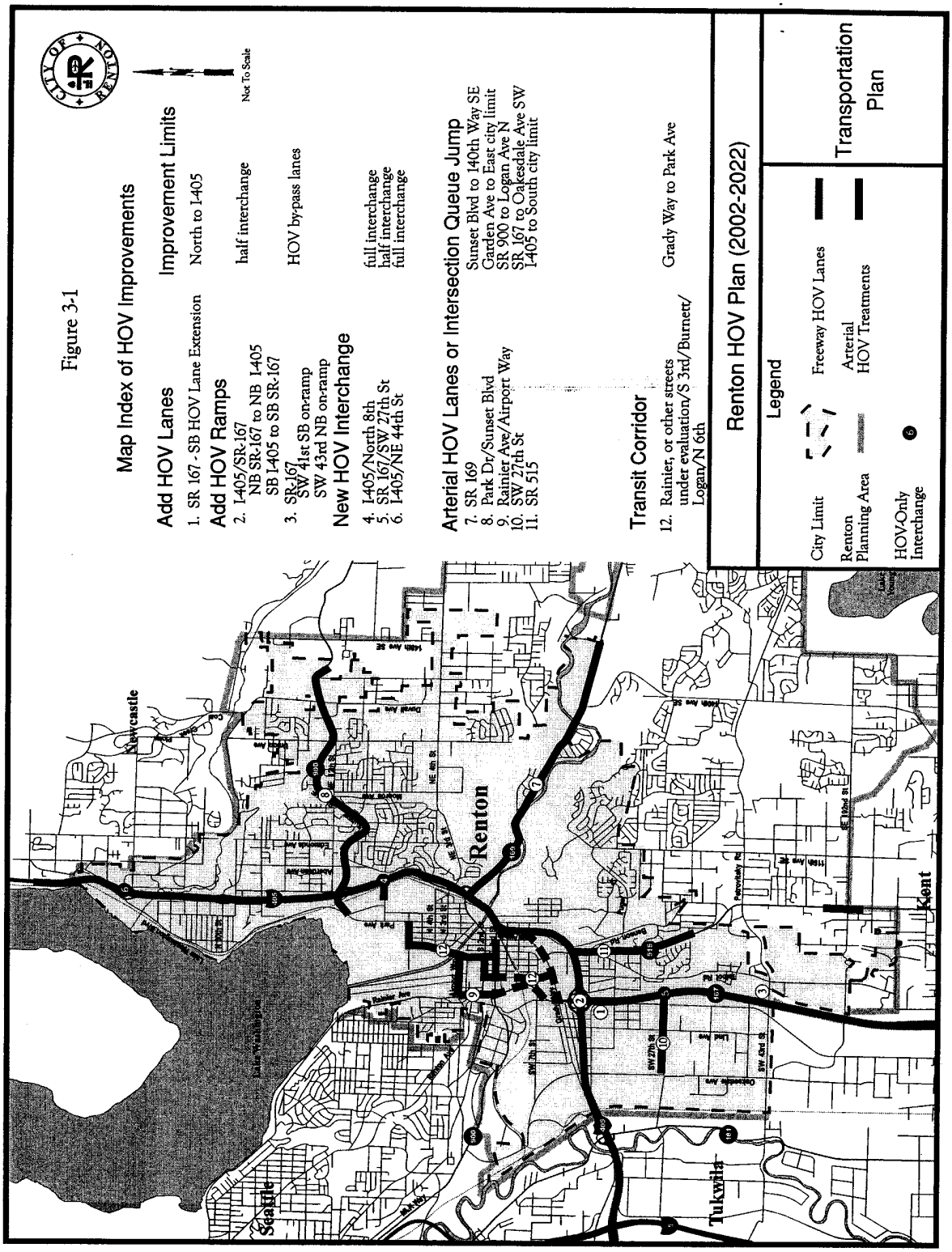
HOV Plan

HOV facilities on SR-167 and I-405 provide the freeway HOV system through Renton.. Additional regional HOV facilities (i.e., on I-5) must be implemented by the State Department of Transportation in order to provide regional HOV service to the I-405 and SR 167 corridors. To-date HOV lanes have been completed on I-5 between the Seattle CBD and Puyallup and on SR 167 between 15th Street NW in Auburn and I-405 in Renton.

The City has identified arterial HOV corridors based on the policies listed previously. These corridors include many of the principal arterials through central Renton and state routes throughout the city. The Renton HOV Plan includes the provision (over the next 20 years (2002 to 2022) of the HOV facilities shown in Figure 3-1. The Plan includes HOV facilities, in the form of HOV lanes or intersection queue jumps, in the Renton corridors listed below:

- Rainier Avenue / Airport Way
- SR-169 (Maple Valley Highway)
- Park Drive North / N.E. Sunset Boulevard
- SR-515 or Benson Road
- S.W. 27th Street

FIGURE 3-1
RENTON HOV PLAN



In addition to arterial HOV improvements, construction of direct access HOV interchange ramps to provide connections to the I-405 HOV lane system is planned at N.E. 44th Street, N. 8th Street, and on the SR-167 system at S.W. 27th Street. These ramps will provide vital HOV access and enable efficient transit movements in the City to support regional and local transit service consistent with the objectives and policies described in the Transit Chapter of this Transportation Element.

The HOV Plan also includes a transit corridor in Central Renton: S. 3rd/Burnett/ Logan/N. 6th comprise the northern portion of the corridor and in the southern portion South Grady Way, Rainier Avenue, Lind Avenue, Hardie Avenue and Main Avenue South are under consideration to complete the corridor. (Other potential north-south streets south of S. 4th Street, i.e. Shattuck Avenue S., Burnett Avenue, Williams Avenue and Wells Avenue are not under consideration as a result of the City's decision, in response to significant public input, to locate the southern portion of the transit corridor outside of the South Renton residential area.) A north-south transit corridor is an important element of a transit plan that supports Renton's policies to: 1) encourage local and regional transit agencies to provide a high level of transit service to the Downtown Renton Transit Center by improving transit travel time, accessibility and reliability; and, 2) provide an attractive and effective alternative mode of transportation to the single occupant vehicle that contributes to a reduction in traffic congestion and air pollution in Renton's Urban Center. Also, the Strander Boulevard improvement identified in the Arterial Plan, Table 1.1, will serve transit vehicles as well as SOV and HOV traffic and is planned for implementation coordinated with the Renton/Tukwila commuter rail station.

Several of the above HOV/transit improvements have been identified for funding under the regional Sound Transit plan approved by voters. Under this regional high capacity transit plan, Renton is designated to be served by the regional express bus system. Sound Transit has evaluated if there are capital facilities that could be constructed in Renton which would improve reliability and travel time for transit and HOV movement sufficient to warrant Sound Transit's investment. Sound Transit has identified the Central Renton north-south transit corridor improvements and HOV direct access interchange improvements at North 8th Street as beneficial capital investments.

The improvements in the Renton HOV Plan, along with improvements in the Arterial Plan and Transit Plan, provide a multi-modal transportation plan that meets the 2022 level of service standard for the projected travel demand from land use development envisioned by 2022.

HOV improvements in the I-405 corridor that have been identified beyond 2022 are listed below. These improvements would help to support future land use development. If these improvements were implemented by 2022 they could help maintain Renton's 2022 level of service standard.

I-5/I-405 Interchange	
• Northbound I-5 to Northbound I-405	construct direct connection ramp
• Southbound I-405 to Southbound I-5	construct direct connection ramp
• Southbound I-5 to Northbound I-405	construct direct connection ramp
I-405/SR 167 Interchange	
• Northbound SR 167 to Southbound I-405	construct direct connection ramp
• Northbound I-405 to Southbound SR 167	construct direct connection ramp
I-405 at Tukwila Commuter Rail Station	construct half interchange
I-405 at Rainier Avenue	construct half interchange

Ongoing transportation planning work will include further analysis of the freeway interchange and arterial corridor HOV improvements identified in the HOV plan to verify physical, operational and financial needs and scheduling of implementation. This further study may find that the planned HOV improvements may not be feasible on one or more of the selected corridors. Therefore, ongoing work will also include the examination of additional arterial corridors for HOV treatment on an as-needed basis (without over-developing or over-

using this type of transportation facility). Over-development of HOV facilities can lead to under-utilization and HOV traffic dispersion, rather than consolidation.

Level of Service

As discussed in the Arterial Chapter, the City of Renton LOS policy emphasizes the movement of people, not just vehicles. This LOS policy is based on a set of multi-modal elements including auto, transit, HOV, non-motorized, and transportation demand management/commute trip reduction measures.

The LOS standard will be used to evaluate Renton citywide transportation plans. The auto, HOV, and transit measures of this LOS standard will be based on travel times and distance and will be the primary indicators for concurrency.

HOV improvements along with transit improvements should show great effectiveness in improving 2022 travel times and distance. Achieving this goal will guide the planning and programming of the elements of the HOV Plan.

Further information on how the HOV index of the Level of Service Standard was established is provided in the City of Renton Level of Service Support Document.

NON-MOTORIZED TRANSPORTATION

The non-motorized component of the City's Transportation Plan is designed to enhance the quality of urban life in Renton, to improve walking and bicycling safety, and to support the pedestrian and bicycle transportation modes as alternatives to the use of automobiles.

The plan recognizes that non-motorized facilities along roadways and trails may serve multiple functions, including commuting and recreation. The on-street elements are specified in the *City of Renton Comprehensive Citywide Walkway Program* and as described later in this section. Off-street elements of the non-motorized transportation system are specified by the *City of Renton Long Range Parks, Recreation Open Space and Trails Master Plan described in the Parks Element*.

1. Renton's existing transportation system is oriented towards accommodating cars, trucks, and buses rather than pedestrians or bicycles. The intent of the objectives and policies that follow is to provide guidelines for reevaluating the existing system and providing a better environment for walking and bicycling. Overall, pedestrian facilities throughout the City are intended to be upgraded.

2. More facilities are also needed for bicycle storage and parking in shopping areas, employment centers and in public places.

3. A better pedestrian network can be encouraged by creating an interconnected street system, developed to street standards, which include adequate walkways and street crossings. Traffic sanctuary islands and midblock crossings across busy arterials are also useful methods of improving the pedestrian environment.

Objectives

The Non-Motorized Chapter is based on the following objectives:

T-I: Improve the non-motorized transportation system for both internal circulation and linkages to regional travel.

T-J: Develop and maintain comprehensive trails system which provides non-motorized access throughout the City, maximizes public access to open space areas, and provides increased recreational opportunities for the public.

T-K: Integrate Renton's non-motorized transportation needs into a comprehensive transportation system serving both local and regional users.

T-L: Enhance and improve the non-motorized circulation system to, from, and within the City.

T-M: Develop and designate appropriate pedestrian and bicycle commuter routes along existing minor arterial and collector arterial corridors.

Policies

Policy T-36. Pedestrian and bicycle traffic should be accommodated within all areas of the City.

Policy T-37. Pedestrian and bicycle movement across arterial intersections should be enhanced.

Policy T-38. Obstructions and conflicts that restrict pedestrian movement should be minimized on sidewalks, paths and other pedestrian areas.

Policy T-39. Convenient and safe pedestrian and bicycle access should be provided to and at the downtown Transit Center and all transit stops.

Policy T-40. Bicycle storage facilities and parking should be encouraged within

development projects, in commercial areas and in parks.

Policy T-41. Streets and pedestrian paths in residential neighborhoods should be arranged as an interconnecting network and should connect to other streets.

Policy T-42. New pedestrian facilities should be compliant with the Americans with Disabilities Act, and existing facilities should be upgraded to improve accessibility.

Policy T-42.1. Non-motorized transportation should be developed in tandem with motorized transportation systems, recognizing issues such as safety, user diversity, and experiential diversity.

Policy T-42.2. Recognize the diversity of transportation modes and trip purposes of the following four groups: pedestrians, bicyclists, joggers and runners.

Policy T-42.3. Foot/bicycle separation should be provided wherever possible; however, where conflict occurs, foot traffic should be given preference.

Policy T-42.4. Adequate separation between non-motorized and motorized traffic should be provided to ensure safety.

Policy T-42.5. The adopted Long Range Parks, Recreation, Open Space, and Trails Plan should be coordinated with and be an integral component of the City's on-going transportation planning activities.

Policy T-42.6. Appropriate mitigation measures should be taken to address impacts on the City's transportation infrastructure. Contributions to the City's non-motorized circulation system will help alleviate such impacts.

Existing Bicycle and Pedestrian Facilities

The City's existing non-motorized transportation system is comprised primarily of roadside sidewalks. Pedestrians have the exclusive use of sidewalks within business districts and have shared use with cyclists in other areas of the city.

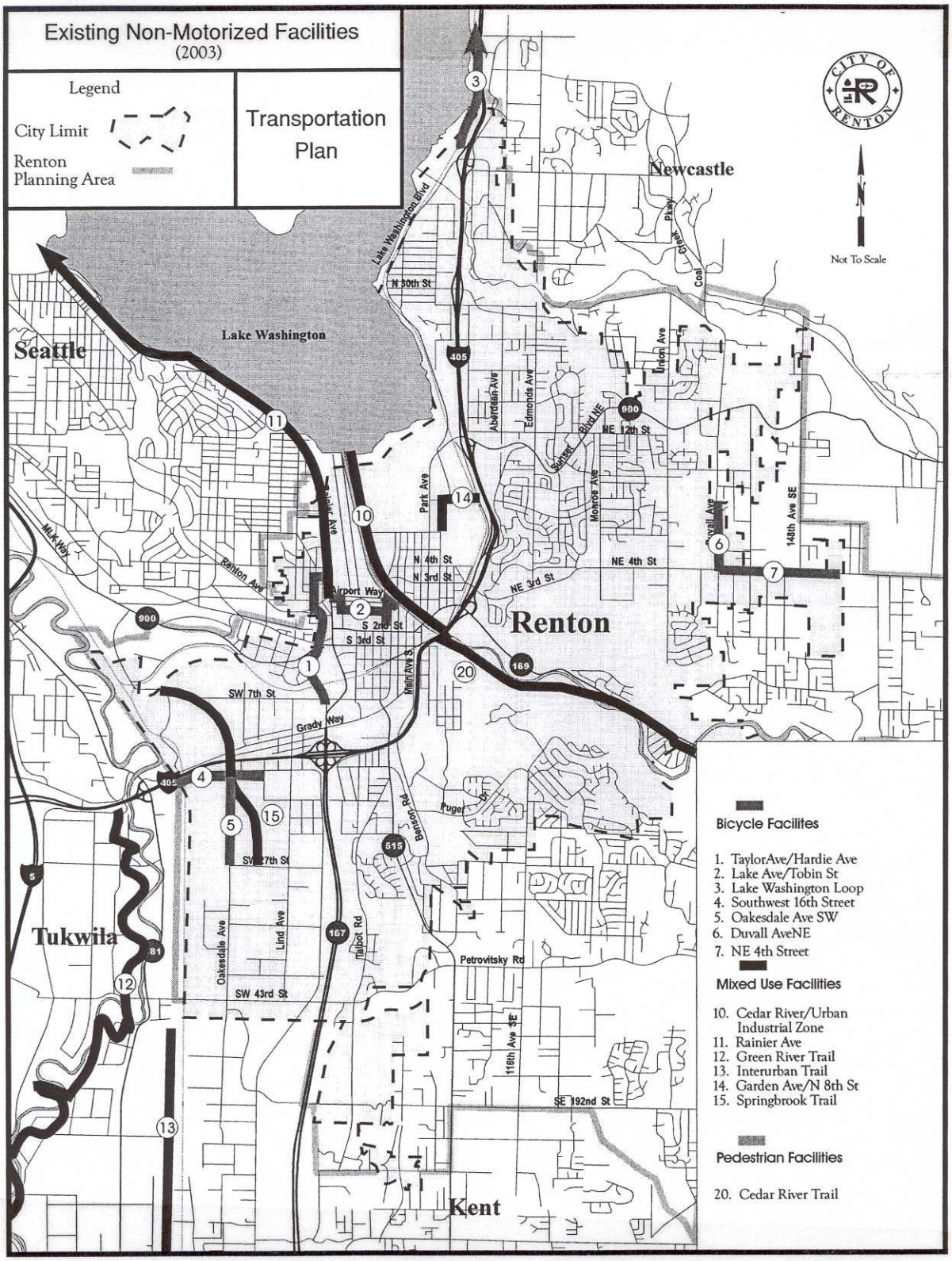
Although the City Code requires that sidewalks be provided on all streets, many of the public streets were constructed before the existing code was enacted, and as a result, numerous roadways are currently without sidewalks. Streets needing sidewalks include both local and arterial roadways. The *City of Renton Comprehensive Citywide Walkway Study* addresses the sidewalks and walkways within the City. This report identifies a priority roster to construct "missing" sidewalk/walkway sections throughout the City. The priority evaluation system is based on four sidewalk users: 1) school children, 2) elderly persons, 3) transit riders, and 4) all other users.

Except within business districts, cyclists may use existing sidewalks, provided that they yield the right-of-way to pedestrians. As of 2003, Renton has a combined bicycle/pedestrian facility along Garden Avenue North (North 6th Street to North 8th Street) and North 8th Street (Garden Avenue North to Houser Way), and striped bicycle lanes on Southwest 16th Street (Oakesdale Avenue Southwest to Longacres Drive), on Oakesdale Avenue Southwest (SW 16th Street to SW 27th Street) on Duvall Avenue NE (NE 4th Street to NE 8th Street), and on NE 4th Street (east of Duvall Avenue NE).

Renton is located at the crossroads of a regional system of existing and proposed trails. Existing trails within the City include the Cedar River Trail System and a portion of the Lake Washington Loop Trail. Regional Systems with proposed access to the City include the Green River Trail and the Interurban Trail.

Figure 4-1 shows the existing (2003) non-motorized facilities within Renton and the nearby regional routes.

FIGURE 4-1
EXISTING NON-MOTORIZED FACILITIES



Design criteria for walkways, trails, and bikeways are contained in a variety of documents, including the City of Renton Municipal Code and Trails Master Plan, King County Road Standards, American Association of State Highway and Transportation Officials Guide for the Development of Bicycle Facilities, and Federal Highway Administration Manual on Uniform Traffic Control Devices (the MUTCD).

Neighborhood and Regional Access

The principal non-motorized facility type linking neighborhoods within Renton and providing regional access are sidewalks or walkways. These facilities provide safe non-motorized mobility for both pedestrians and cyclists outside of business districts. Within business districts, sidewalks provide safe mobility for pedestrians.

Currently, the sidewalks that exist along most of the arterials within the City provide the primary regional link as well. This "regional" access includes non-contiguous areas within Renton as well as areas outside of the City planning area. Some notable walkway deficiencies exist along sections of Maple Valley Highway (SR-169), Puget Drive, and Talbot Road South. These roadways do not currently provide safe non-motorized mobility through Renton. Installation of walkways/sidewalks has been either programmed into future transportation improvement projects, or identified in the *City of Renton Comprehensive Citywide Walkway Study*.

Non-motorized neighborhood connections are made via sidewalks along arterial and collector roadways. Sidewalk connections between most neighborhoods within the City limits currently exist. In some locations, however, sidewalks are not continuous along a roadway.

In potential annexation areas that are or were defined as "rural" by King County, sidewalks have generally not been constructed along either arterial or local roadways, because sidewalks are not required by rural area design standards. Most existing county roadways have either paved or gravel shoulders for use by cyclists and pedestrians. Consequently, many of the potential annexation areas do not provide protected non-motorized inter-neighborhood connection. This is not the case in Fairwood, however, where sidewalks have been installed throughout the development.

Another important consideration is the bicycle route connection to regional cycling corridors. The regional corridors, to which the Renton bicycle routes should connect, include the Interurban, Christensen/Green River, Lake Washington Loop, Sammamish, and Soos Creek Trails.

Bicycle and Pedestrian Facilities Plan

The City, per the *Comprehensive Citywide Walkway Study*, will construct sidewalks/walkways at "missing locations." In some areas, sidewalks will be constructed along each side of the street. Because of physical constraints such as side slopes and roadway grades, or minimal expected pedestrian usage, some locations will have pedestrian/cyclist facilities constructed on only one side of the street. Sidewalk facilities will be constructed as part of a prioritized installation program. Additional non-motorized facilities will be constructed in conjunction with roadway improvement projects and as part of the Transit Improvement Program.

Current annexation area roadways without sidewalks will be added to the *Comprehensive Citywide Walkway Study* after annexation into the City. Sidewalk improvements on roadways could be improved through local improvement district (LID) and capital improvement projects (CIP).

Table 4.2 lists routes that have been identified as important bicycle transportation elements. Along roadways designated as bicycle routes, roadway or shoulder widening may accommodate cyclists' needs.

These improvements could be added when roadway improvement projects are constructed or implemented as individual improvement projects.

Further review by the City of Renton, in cooperation with citizen groups, will be necessary to determine which of the projects listed in Table 4.1 are selected for development.

King County is pursuing development of bicycle facilities outside of the Renton city limits. Four routes leading into Renton have been identified in the King County Non-motorized Plan:

- 116th Avenue Southeast (Edmonds Avenue Southeast) (Southeast Petrovitsky Road to South 157th Street)
- 140 Place/Avenue Southeast (Southeast 192nd Street to Southeast Renton-Maple Valley Road)
- State Route 900 (138th Avenue Southeast (Duvall Avenue Northeast) to Southeast 82nd Street)
- Coal Creek Parkway Southeast (Newcastle City Limits to Renton City Limits)

The routes identified by the City of Renton and listed in Table 4.1 will be planned to connect with these proposed King County facilities.

The *City of Renton Long Range Parks, Recreation, Open Space, and Trails Plan* identified in the Parks Element provides an in-depth description of proposed walking, bicycle, and mixed-use trails. By nature, these types of trails are primarily used for recreational purposes, and are not necessarily supportive of transportation goals. The creation of these trails would certainly supplement the City's non-motorized transportation system, and their development by the Parks Department should be encouraged. Routes that are found to be important transportation elements could be constructed through the transportation program.

TABLE 4.1

PROPOSED BICYCLE ROUTES

Facility Name	Route
Sunset Bypass Route	Northeast 17th Street (Duvall Avenue Northeast to Union Avenue Northeast) Union Avenue Northeast (Northeast 17th Street to Northeast 12th Street) Northeast 12th Street or NE 10th Street (Union Avenue Northeast to Edmonds Avenue Northeast) Edmonds Avenue Northeast (Northeast 12th /10th Street to Northeast Park Drive) Northeast Park Drive (Edmonds Avenue Northeast to Lake Washington Boulevard North)
Monroe Avenue Northeast	Monroe Avenue Northeast (Northeast 4th Street to Northeast 12th Street)
Duvall Avenue Northeast	Duvall Avenue Northeast (Northeast 10th Street to Northeast 24th Street)
Lake Washington Boulevard (Lk Washington Loop Route)	Lake Washington Boulevard (Northeast 44th Street to Coulon Park) (Partially completed)
Garden (Lk Washington Loop Route)	Houser Way North (Lake Washington Boulevard to North 8th Street) Garden Avenue North (North 6th Street to Bronson Way)
Central Renton Connection (Lk Washington Loop Route)	Garden Avenue/North 6th Street to Airport Perimeter Road (Various routes under consideration).
Burnett	Burnett Avenue South (Cedar River Trail to Southwest 7th Street)
Airport (Lk Washington Loop Route)	Airport Perimeter Road corridor (Logan Avenue North to Rainier Avenue) Rainier Avenue North (Airport Perimeter Road to Northwest 3rd Street)
Hardie/Rainier Bypass	Northwest 3rd (Rainier Avenue North to Hardie Avenue Northwest) Hardie Avenue (Northwest 3rd Street to Southwest 7th Street)
Southwest 7th	Southwest 7th Street (Burnett to Oakesdale)
Southwest 16th	Lind Avenue Southwest (Southwest 7th Street to Southwest 16th Street) Southwest 16th Street (Lind Avenue Southwest to Raymond Avenue Southwest)
Southeast Area	Main Avenue (Bronson Way to Benson Road South) Benson Road South (Main Avenue South to Southeast 168th Street) Puget Drive Southeast (Benson Road South to Edmonds Avenue Southeast) Edmonds Avenue Southeast (Puget Drive Southeast to South 157th Street)
Strander Boulevard/Southwest 27th Street	Springbrook Wetlands Trail to Interurban Trail
Sunset Boulevard (West)	Hardie Avenue Southwest to West City Limits
Talbot Road	South 7th Street to South City Limits
Northeast 3rd/Northeast 4th Street	Sunset Boulevard North to East City Limits

TRANSPORTATION DEMAND MANAGEMENT/ COMMUTE TRIP REDUCTION (TDM/CTR)

As stated in the Arterial, Transit, and HOV Chapters, a major challenge of the Renton Transportation Plan will be to better manage the existing transportation system and reduce traffic demand by encouraging the use of alternatives to single occupant vehicles. The Transportation Demand Management/Commute Trip Reduction (TDM/CTR) Chapter addresses this challenge by focusing on encouraging and facilitating reductions in trip-making, dispersion of peak period travel demand throughout the day, increased transit usage, and increased ride sharing.

In enacting the Washington State Commute Trip Reduction (CTR) law of 1991, and the 1997 amendments, the State Legislature found that decreasing the demand for vehicle trips is significantly less costly and at least as effective in reducing traffic congestion and its impacts as constructing new transportation facilities, such as roads and bridges, to accommodate increased traffic volumes. The legislature further found that reducing the number of commute trips to work made via single occupant cars and light trucks is an effective way of reducing automobile-related air pollution, traffic congestion and energy use. The goals, objectives, and policies of the Transportation Demand Management/Commute Trip Reduction Chapter also are based on these findings.

Objectives

The Transportation Demand Management/Commute Trip Reduction Chapter is based on the following objectives:

T-N: Encourage the development and use of alternatives to single occupancy vehicles.

T-O: Promote a reasonable balance between parking supply and parking demand.

Policies

This Chapter of the *Transportation Element of the Comprehensive Plan* contains City policies concerning Transportation Demand Management and Commute Trip Reduction (including support for ride sharing and management of parking supply).

Policy T-43. The disruptive impacts of traffic related to centers and employment areas should be reduced. (In this context, disruptive impacts are primarily traffic. They could be mitigated through techniques such as transportation management programs implemented through cooperative agreements at the work place, flexible work hours, and subarea planning.)

Policy T-44. Appropriate parking ratios should be developed that take into account existing parking supply, land use intensity, and transit and ride-sharing goals.

Policy T-45. Alternatives to on-street or on-site parking should be explored.

Policy T-46. Site selection criteria should be developed for location of park-and-ride lots serving residential areas.

Policy T-47. The construction of parking structures in downtown Renton should be encouraged.

Policy T-48. Parking ratios should be reduced as transit services are increased and an adequate level of public transit can be demonstrated.

Policy T-49. Transportation demand management measures should be implemented at residential and retail developments, as well as at the workplace.

Policy T-50. Employers affected by Commute Trip Reduction laws should be encouraged to implement measures that support reductions in SOV travel and vehicle miles traveled.

Policy T-51. Site design and layout for all types of development should incorporate transportation demand management measures such as convenient priority parking places for HOVs, and convenient, direct pedestrian access from residential, commercial, and other facilities to transit stops/stations.

Also see related policies in the HOV section.

Strategy T-51.1 Downtown (Central Business District) parking restrictions and/or removal resulting from TDM/CTR policies shall apply to commuter/employee parking, not to business patron/customer parking.

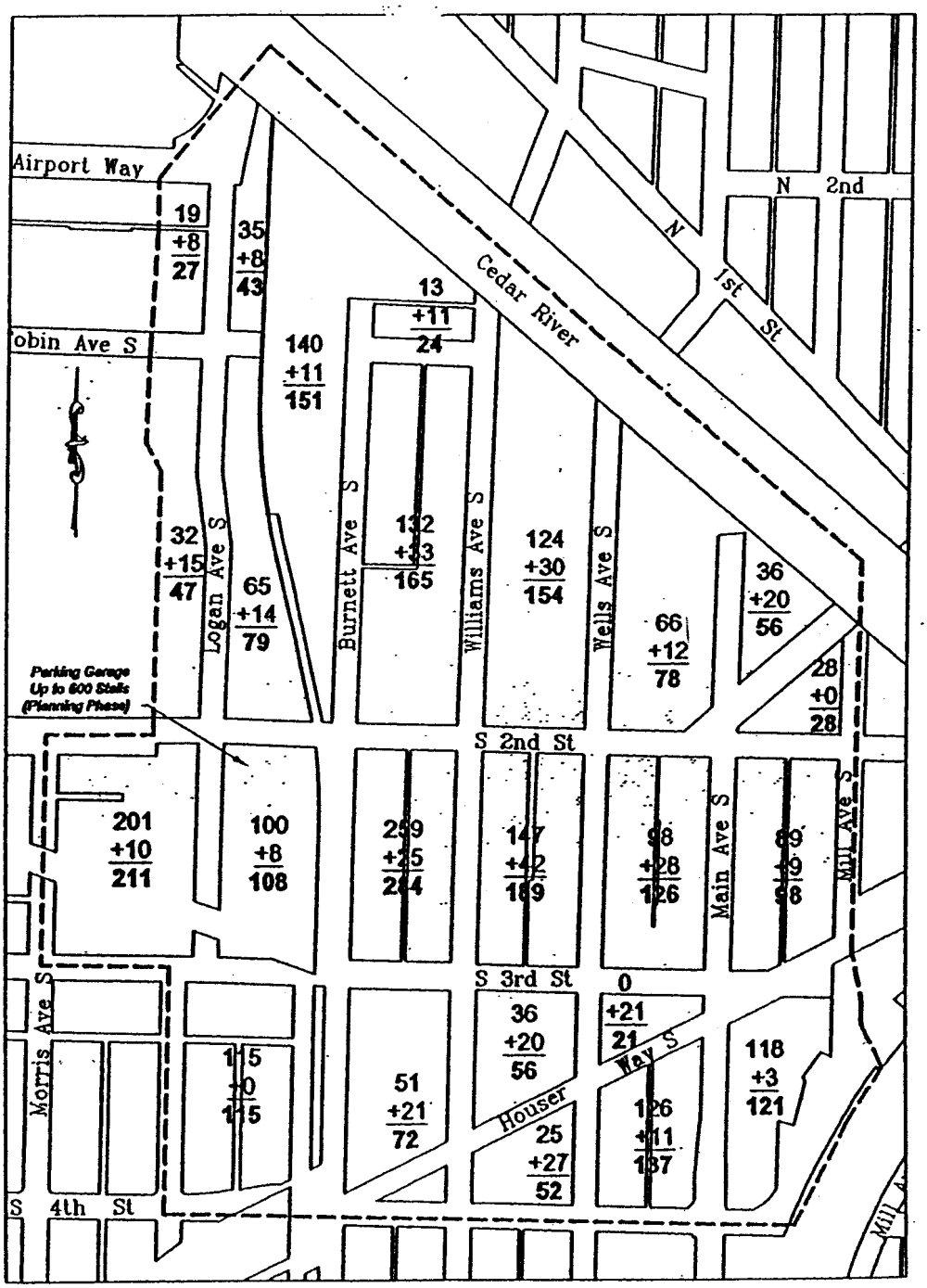
Existing Parking Supply and Demand

An inventory of the existing parking supply in the Downtown Core was conducted in 2001. The inventory gathered data for both on-street and off-street spaces. Figure 5.1 summarizes the results of the inventory. The Downtown Core has 2,055 off-street spaces. There are also 387 public off-street parking spaces within the Downtown Core. The remaining off-street parking spaces are private or signed for use by patrons of a specific business. Additional information on this parking inventory is provided in the *Parking in Renton's Downtown Core* report.

Ongoing transportation planning work will include expanding the parking study area, possibly citywide, if needed for the refinement of parking policies and guidelines.

FIGURE 5-1

DOWNTOWN CORE EXISTING PARKING SUMMARY 2001



Parking Policy Review

As stated in the Washington State Commute Trip Reduction (CTR) law of 1991, there exists a close relationship between commuter behavior and the supply and cost of parking. As required by the CTR law, the City has completed a review of local parking policies and ordinances as they relate to employers and major worksites and revisions necessary to comply with commute trip reduction goals and guidelines.

Maximum parking ratios have been established, and the existing minimums modified in the City's Development Regulations, to create a range of appropriate allowable parking ratios. Additional revisions have been made to support HOV, transit, and non-motorized usage and access.

Employers' Mode Split

The Washington State Commute Trip Reduction (CTR) Law requires employers deemed to be affected by the CTR Law to have transportation programs for their employees designed to meet goals for reduction of single occupancy vehicle commuter trips and/or reduction of vehicle miles traveled. CTR-affected employers shall have two (2) years to meet the first CTR goal of fifteen percent (15%); four (4) years to meet the second goal of twenty percent (20%); six (6) years to meet the third goal of twenty-five percent (25%); and twelve (12) years to meet the fourth goal of thirty-five percent (35%) from the time they are deemed a CTR-affected worksite and begin their program.

Employers' mode split will be addressed with data being gathered and used for the implementation of the CTR law. In order to implement the state Commute Trip Reduction law, King County was divided into approximately a dozen CTR zones with similar employment density, population density, level of transit service, parking availability, and access to High Occupancy Vehicle facilities. The Puget Sound Regional Council produced base year values for 1992 for each zone using its regional transportation model. These values reflect the average rate of single occupant vehicle (SOV) trips for all employers in the zones.

Most of the City of Renton is located in the South King County zone. A small piece of the City, the northernmost tip, north of May Creek, is located in the East King County zone. The base year value for single occupant vehicle trips for both the South and the East King County zone is 85%. While this figure is not an exact mode split figure, it is representative of the degree to which employees of all employers in Renton are accessing their worksites by single occupant vehicle or using other modes. The assumption is made that the SOV rate is 85%, and the rate of trips made by other modes is 15%.

TDM/CTR Programs

The City has adopted a CTR Ordinance and a CTR Plan (February 1993). The ordinance outlines the manner in which and the schedule with which employers located within the City of Renton are required to design and implement commute trip reduction programs at their worksites.

The CTR Plan is a summary document that describes the City's implementation approach. As stated in the Plan, the City has contracted with Metro to perform certain activities, including employer notification, employer assistance, and program review. The Plan summarizes the CTR goals and establishes the CTR zones mentioned above. It explains the circumstances and procedures for employer appeals of CTR program administrative decisions. The Plan also states the City's commitment to implementing a CTR program for its own employees, to complete the parking policy review mentioned above, and to report on an annual basis to the state regarding progress towards meeting CTR goals.

In the past, the City, with the support of Metro, has developed Transportation Management Programs (TMPs) for new residential, commercial, and office developments. These TMPs have usually been put in place through SEPA agreements. At some point in the future, the City may consider adopting a developer-based Transportation Demand Management ordinance (with site design and other requirements) to complement the employer-based CTR ordinance and its employer worksite requirements.

Parking Management Regulations

Parking regulations are specified in Section 4-4-080 of the Renton Municipal Code. The regulations include requirements for new construction of parking including landscaping, screening, layout, paving, markings, and wheel stops. They also include requirements for size and amount of parking according to the land use activity involved.

Ongoing transportation planning work will include refinement of criteria for locating park and ride lots serving residential areas to address factors such as the intensity of development in adjacent areas, the level of traffic congestion in the areas, proximity to arterial streets, and opportunities to buffer lots from living areas. Also, standards for construction of parking garages will be reviewed to address minimization of land area and the amount of impervious surface.

AIRPORT

Renton's Airport is more than a transportation facility. It is also a vital element to Renton's commercial and industrial economy, providing aircraft services, manufacturing support, flight training, and other airport activities. The Airport Chapter of the Renton Transportation Element is implemented by the 2002 Airport Business Plan and the Airport Master Plan for the Renton Municipal Airport.

The intent of the objectives and policies is to support increased aviation activities and appropriate mitigation of adverse impacts when possible. *(See also the Airport Compatible Land Use section of the Land Use Element.)*

Objectives

The Airport Chapter is based on the following objectives:

T-P: Promote and develop local air transportation facilities in a responsible and efficient manner and recognize the Renton Municipal Airport as a unique, valuable, and long-standing public transportation facility within the region.

T-Q: Maximize available space on the airport site for uses that require direct access to taxiways and runways such as storage and parking of aircraft and aircraft maintenance and service facilities.

T-R: Continue operation of the Airport as a Landing Rights Airport, ultimately providing permanent inspection facilities to the U.S. Customs Service.

Policies

Policy T-52. Support the land base and seaplane base activities. Acknowledge that there are certain costs to the community associated with the existence of the Renton Municipal Airport, such as noise generation, but recognize that these costs have historically been accepted by the community in exchange for the economic and transportation-related benefits and the civic prestige that are also associated with the airport.

Policy T-53. Promote and develop airport facilities and services for all wheeled and float-equipped aircraft, owners, pilots, and passengers in a manner that maximizes safety, efficiency, and opportunity for use.

Policy T-54. Lease airport property for aviation-related uses that create jobs and expand the City's tax base.

Policy T-55. The Renton Municipal Airport provides the only publicly-owned seaplane facility in the area and, therefore, the northern shoreline of the airport should be restricted to seaplane access.

Policy T-56. Develop appropriate land use plans and regulations for structures and vegetation within the airport's runway approach zone. (See Airport section of the Land Use Element, Objectives LU-E, LU-F, LU-G and Policies LU-19 – LU-30.)

Airport Facilities

The Renton Municipal Airport is a major general aviation airport in the Puget Sound area. The Renton Municipal Airport is formally designated as a Reliever Airport in the Federal Aviation Administration's National Plan of Integrated Airport Systems and the Puget Sound Regional Council's Regional Airport System Plan.

The airport is owned by the City of Renton and is located in the northwest corner of the city, bounded generally on the east by the Cedar River, on the west by Rainier Avenue North, on the south by Airport Way, and on the north by Lake Washington (see Figure 1.1). The Airport consists of approximately 165.46 acres. It is oblong in shape, and has one runway with two parallel taxiways with concrete and blacktop surfaces and surface water drainage.

The runway, running southeast to northwest, is 5,379 feet long and 200 feet wide, with a 340-foot displaced threshold at the south end. It is equipped with medium intensity runway lighting, runway end identification lighting (REIL), and precision approach path indicators (PAPI). Taxiways are lighted, and there is a rotating beacon, a windsock, and a non-directional radio beacon. The Federal Aviation Administration operates a contracted Air Traffic Control Tower during the hours of 7 a.m. to 9 p.m. May 1 through September 30 and from 7 a.m. to 8 p.m. October 1 through April 30.

Approximately 115,000 landings and take-offs per year take place at the Airport, making it the seventh busiest airport in the State of Washington. Contiguous to the Renton Airport is the Will Rogers-Wiley Post Memorial Seaplane Base. Landings and take-offs from the water are not recorded, but during the summer months the seaplane base is one of the busiest in the Northwest.

Airport Activities

The Renton Airport serves general aviation demand generated by Renton, as well as by other communities generally within a 30-minute driving time (e.g. Bellevue to the north, Issaquah to the east, Kent to the south, and Seattle to the northwest). The concept of "general aviation" includes all aviation uses except scheduled commercial passenger airline servicesand military operations. Consequently, nearly all of the aviation operations at Renton Airport are those of general aviation, including the flights of the transport-class aircraft produced by the adjacent Boeing plant. General aviation uses are both personal and revenue-producing, the latter category including business, charter, and flight instruction.

The seaplane base provides facilities only for small general aviation types of aircraft (both personal and revenue-producing).

Aircraft services available at the Airport include aircraft maintenance and service, fuel, flight instruction, aircraft charter and rental, and aircraft storage, both hangared and open. Fixed base operators (FBO's), which are aviation-oriented businesses offering a variety of services and products to aircraft owners and operators, provide these services to the aviation public.

Airport Master Plan and Renton Municipal Airport Business Plan

1997 Airport Master Plan Update

A 1997 update to the original 1978 Master Plan was approved by the City Council in August 1997. A primary purpose of the 1997 update was to determine the existing and future role of the airport and to provide the City with information and direction in the future planning and continued development of the

airport. The objective of the study was to develop a plan for providing the necessary facilities to best accommodate the aviation needs of the airport and contiguous seaplane base over the next twenty years. The study work scope consisted of inventories, forecasts of aviation demand, demand/capacity analyses, facility requirements, airport layout plans and land use plans, development staging and costs, financial plans, and an environmental impact assessment report. The Airport Master Plan is updated as necessary to reflect progress and changes from the original Master Plan.

The 1997 Airport Master Plan should be updated in 2005 or 2006 as many of the recommendations from the 1997 Airport Master Plan have been implemented. The remaining recommendations should be re-evaluated in the next update of the Airport Master Plan as conditions have changed.

2002 Renton Municipal Airport Business Plan

The 2002 Renton Municipal Airport Business Plan was prepared at the direction of the Renton City Council. The purpose of the plan was to review business potential for the Airport and develop a plan for the management and operation of the Airport, given the needs of aviation and the neighborhoods surrounding the airport.

The Airport Business Plan reaffirmed Renton's commitment to strong management and operation of the Renton Municipal Airport. The recommendations reaffirmed the mix of uses presently at the Airport while supporting increased efforts to curb aircraft noise.

Implementation of the Airport Master Plan

The airport development and financial plan portions of the Master Plan identify the capital improvements that should be accomplished, specify when these improvements should be accomplished, and determine the economic feasibility of accomplishing the programmed improvements and developments. The schedule of developments and improvements is established in five-year increments, to coincide with the five-, 10- and 20-year projections of the Master Plan.

Based upon the five-year schedule of improvements and developments, Federal Aviation Administration Airport Improvement Program Funds are requested for assistance with the accomplishment of those eligible projects programmed in the Master Plan.

FREIGHT

The Freight Chapter of the Transportation Element addresses the needs and impacts of goods movement and distribution in Renton. The Freight Chapter focuses on the two primary providers of freight transportation: trucking and freight rail.

Objectives

The Freight Chapter is based on the following objectives:

T-S: Maintain existing freight rail service to Renton commercial and industrial sites.

T-T: Maintain truck access between Renton industrial areas and the regional highway system.

T-U: Minimize the impact of truck traffic on general traffic circulation and on Renton neighborhoods.

Policies

Policy T-57. Heavy through truck traffic should be limited to designated truck routes in order to reduce its disruptive impacts. (In this context, "disruptive impacts" refers to nuisances, particularly noise and parking, associated with heavy trucks. In addition, the intent of the policies is to minimize the physical impact of heavy trucks on city streets.)

Policy T-58. Transportation facilities should be designed to complement railroads.

Policy T-59. Spur tracks should be located to provide a minimum number of street crossings and serve a maximum number of sites.

Policy T-60. Strategies to minimize adverse impacts of railroad operations on adjacent residential property should be supported.

Policy T-61. Support railroad crossing improvements that minimize maintenance and protect the street surface.

Policy T-62. Where warranted, provide protective devices, such as barriers and warning signals, on at-grade crossings.

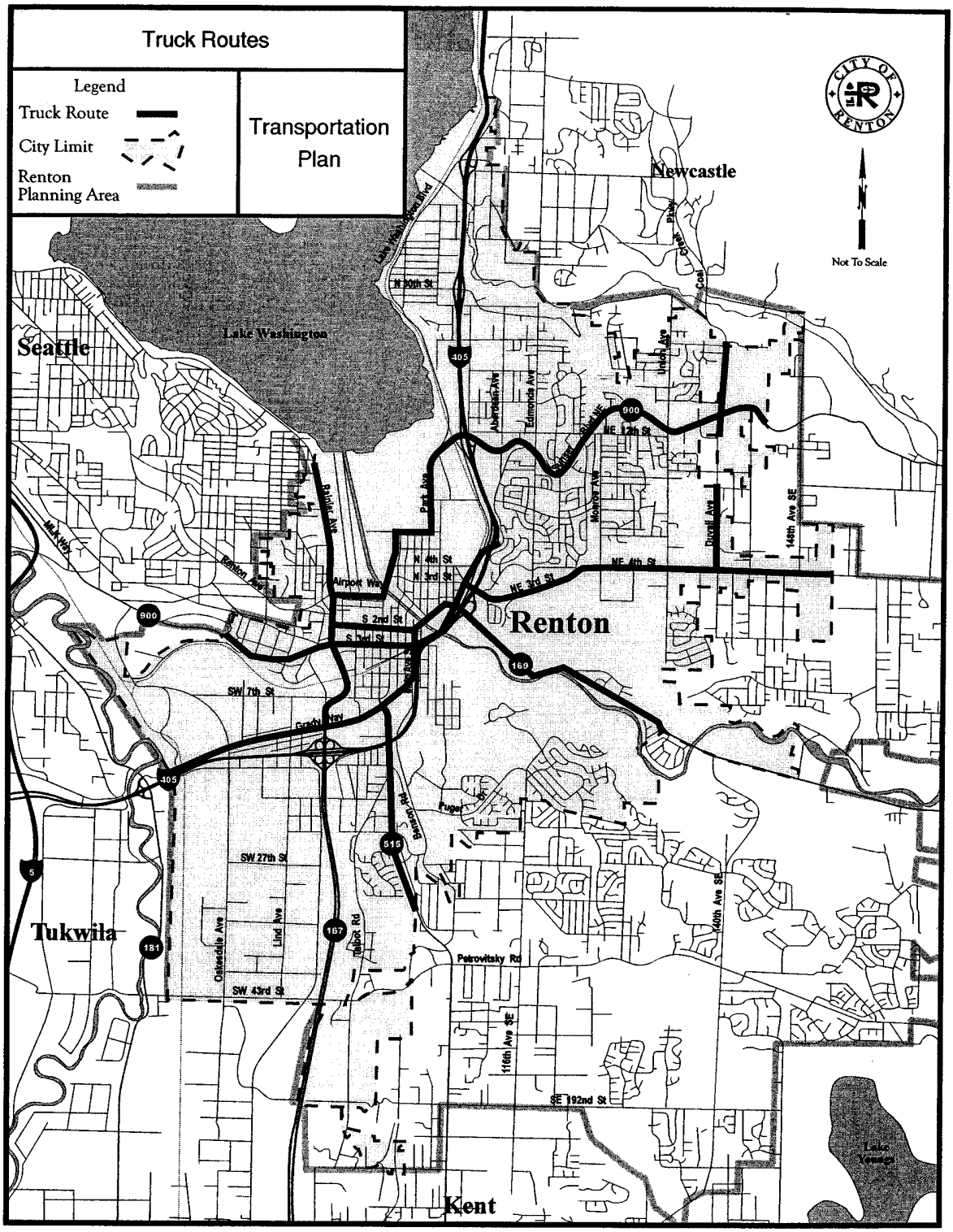
Policy T-63. The City should continue to work with local, regional, state and federal agencies to address regional freight needs and to mitigate local impacts.

Truck Routes

The City has a system of truck routes (see Figure 7-1). Until October 1991, the system had been informal, comprising only advisory signs on the routes. With the City Council adoption of the Truck Route Ordinance, the truck route system became a regulatory system. Trucks weighing over 26,000 pounds gross vehicle weight are restricted to operating on one of the designated truck routes. Trucks needing to make deliveries off of the designated truck routes are required to take the most direct arterial route to/from one of the designated truck routes. When more than one delivery off the designated truck routes can be combined to limit multiple intrusions into residential neighborhoods, a truck driver has an obligation to combine those trips. The truck route ordinance does not apply to the operation of Renton School District buses on designated routes, public transit on designated routes, garbage trucks, city maintenance vehicles, or emergency vehicles.

FIGURE 7-1

TRUCK ROUTES



Inventory of Local Rail System Facilities and Users

The Freight Chapter of the Transportation Element recognizes the importance of maintaining rail transportation, which supports industrial and commercial land uses, and provides one component of a multi-modal transportation system. The Freight Chapter also provides guidelines to ensure that existing rail lines do not impact adjacent land uses, create maintenance problems for City streets or pose safety concerns.

Freight rail service is currently available to several industrial and commercial areas of the City. Existing rail lines bordering the City of Renton include the Union Pacific (UPRR) and Burlington Northern Santa Fe Railroad (BNSF) main line tracks between Seattle and Tacoma. Within the City of Renton, the BNSF 18th Subdivision Branch Line connects Renton and the east side of Lake Washington to the BNSF main line.

The BNSF main line runs in a north-south direction and is located along the City of Renton's western city limits, separating Renton from the City of Tukwila. The BNSF main line is double-track, and carries a considerable volume of freight service, as well as passenger service provided by Amtrak under a trackage rights agreement. Only freight service is provided to the City of Renton from the BNSF main line. A single spur track with several branch lines serves the Renton Valley industrial area (southwest Renton). Another single spur track from the BNSF main line serves the Container Corporation of America plant, located north of I-405 in the Earlington industrial area. Use of these spur lines is intermittent, usually on an as-needed basis with no particular set time or frequency.

Commuter rail trains use the BNSF main line, with a stop at the new Renton/Tukwila (Longacres) station located just south of I-405. The commuter rail service is an element of the Regional Transit Plan (Sound Move), approved by voters in 1996. The commuter rail service began in 2001. Three trains currently provide one-way service between Tacoma and Seattle during the weekday AM peak period and between Seattle and Tacoma in the weekday PM peak period, with stops at the Renton/Tukwila station.

The BNSF 18th Subdivision Branch Line splits from the BNSF main line at the Black River Junction, and continues easterly through downtown Renton and then northerly through the North Renton industrial area. The line continues north along the east side of Lake Washington, and connects back with the BNSF main line in Snohomish County. Freight service on this branch line is provided by two trains per day (one in each direction). Passenger excursions are made on this branch line by the Spirit of Washington Dinner Train, which makes one round trip on weekdays and two round trips on weekends between downtown Renton and Woodinville at the north end of Lake Washington. Three spur tracks off of the branch line provide freight service to the Earlington industrial area in west central Renton. Two spur tracks serve the North Renton industrial area north of downtown Renton. Freight service can occur at any time during the day. The Spirit of Washington Dinner Train leaves downtown Renton at 6:00 p.m. and returns by 10:00 p.m. with an additional afternoon run on weekends.

The infrequent use of the BNSF main line spur tracks and the BNSF branch line results in minimal disruption to vehicular traffic movement in Renton.

The UPRR mainline track, located 200 to 300 feet west of the BNSF mainline and Renton's City limits, also runs in a north-south direction. The UPRR mainline is a single track, carrying a somewhat lower level of freight-only service.

Regional Accessibility

Trucks and Industrial Traffic

Truck access from City of Renton industrial areas to the regional highway/freeway system has the option of several alternative designated truck routes (see Figure 7-1). The Valley industrial area (southwest Renton) is directly connected to the regional system via the S.W. 43rd Street/SR-167 (Valley Freeway) interchange and the SR-181 (West Valley Highway)/I-405 interchange. The Earlington industrial area in west central Renton is served by designated truck routes on Rainier Avenue and Grady Way, which provide direct access to SR-167 and to I-405 (via the SR-181/I-405 and SR-167/I-405 interchanges). Truck access to the North Renton industrial area (north of downtown Renton and west of I-405) from I-405 is provided via the designated truck route on Park Avenue North. Another truck route to I-405 and SR-167 from the North Renton industrial area is via North 6th Street, Airport Way, and Rainier Avenue. Truck and industrial traffic access from I-405 to the King County waste transfer station and maintenance shops east of I-405 is provided via the Sunset and Maple Valley (SR-169) interchanges and N.E. 3rd Street-N.E. 4th Street. The Stoneway Sand and Gravel complex, west of I-405, generates industrial traffic that uses the North Park Avenue on-ramp to access I-405. Arterial improvement projects in the Transportation Plan will enhance truck access between the industrial areas and the regional highway/freeway system.

Freight and Passenger Rail Use

Future land use development is not anticipated to result in a significant increase in rail freight service in Renton. Future plans call for additional commuter rail trains using the BNSF main line, stopping at the Renton/Tukwila (Longacres) station.

Freight Action Strategy (FAST) Corridor

The Freight Action Strategy (FAST) corridor, and the projects which comprise FAST, evolved over several years. Beginning in 1994, the Freight Mobility Roundabout — a jointly-sponsored effort of the Puget Sound Regional Council and the public/private Economic Development Council of Seattle and King County — made a sustained commitment to freight mobility within and through the northwest gateway region, which ties the regional (and national) economy to the Pacific Rim. Roundabout participants include shippers and carriers representing all freight mobility modes: marine, rail, truck, air, and intermodal. Other participants are public agencies at all levels: local governments (including the City of Renton), the three ports of Seattle, Tacoma and Everett, WSDOT and the State Transportation Commission, and federal agencies (FHWA, FTA). Late in 1994 the United States Department of Transportation together with the Roundabout, the WSDOT, and the Puget Sound Regional Council established FAST Corridor.

FAST Corridor is a collection of complementary grade separation and port access projects within the Everett-Seattle-Tacoma area of Washington State. Collectively, these projects will enhance the movement of freight within and through the region. Key points of the FAST Corridor projects include:

- Between Everett in the north and Tacoma in the south, focus on the region's north-south rail routes and port access routes.
- Helping to improve the state and region's transportation capacity to better meet the needs for freight and goods movements.
- Implementation of a series of grade separation and port access improvements, along with some corollary improvements. These improvements will complement other freight and passenger rail improvements in the region, regional ITS efforts, and other planned highway improvements.

- Continuation of the FAST Corridor Partnership, which has been functioning since 1995 and is working on determining appropriate project level solutions to regional freight mobility issues.

Local freight improvement projects identified at this time include additional rail lines for both the BNSF and UPRR lines. BNSF has plans to add a third and a fourth track to its mainline along the western edge of the City. UPRR also has plans to add a third additional track to its mainline that runs parallel to and is in close proximity to the BNSF mainline. A grade separation of the BNSF and UPRR mainlines at South 180th Street in Tukwila (S.W. 43rd Street in Renton) was completed in 2003. These improvements are a constructive first step toward improving rail freight travel along the western boundary of the City of Renton and associated freight rail travel passing through Renton.

The Freight Mobility Strategic Investment Board (FMSIB):

- develops and maintains a comprehensive and coordinated state program to facilitate freight movement between and among local, national and international markets;
- works to find solutions that lessen the impact of the movement of freight on local communities;
- proposes policies, projects, corridors, and funding to the state legislature to promote strategic investments in a statewide freight mobility transportation system; and
- proposes projects that lessen the impact of freight movement on local communities.

In 2003, the FMSIB selected the SW 27th /Strander Boulevard project to receive $4,000,000. It is anticipated these funds will be programmed by 2006.

FINANCING AND IMPLEMENTATION

The Financing and Implementation Chapter outlines the strategies and actions to finance and implement the transportation improvements and programs planned as part of the City of Renton's transportation plan. Renton will meet transportation needs through arterial, transit, high occupancy vehicle, non-motorized improvements, travel demand management programs, and airport, truck and rail plans as outlined in previous discussion of the transportation plan. The Financing and Implementation Chapter includes:

- Goals, objectives and policies relating to financing and implementation of the transportation plan.
- Information on current revenue sources and future revenues.
- Assessment of Renton's 20-year transportation needs and funding capability.
- Assessment of Renton's Six-Year Transportation Improvement Program (TIP) with regard to transportation improvements and programs identified in this document.
- Strategies and actions for financing and implementing the transportation plan over the next 20 years.
- Identifying future ongoing work needed to finance and implement the transportation plan.

Objectives

The Financing and Implementation Chapter is based on the following objectives:

T-V: Pursue adequate funding for transportation improvements from all potential sources in an efficient and equitable manner.

T-W: Develop a staging and implementation plan that expedites transportation system improvement projects that i) improve HOV flow, ii) improve transit service, iii) improve pedestrian and bicycle facilities and iv) provide neighborhood protection against the impacts of through traffic.

Policies

Policy T-64. To support economic development, growth related traffic improvements should be funded by a combination of impact fees charged to new development and business license fees.

Policy T-65. Coordinate equitable public/private partnerships to help pay for transportation improvements.

Policy T-66. Pursue federal, state and local sources of funding (e.g. loans, matching funds) for transportation improvements.

Policy T-67. Establish a mechanism to provide multi-jurisdictional cooperation to fund transportation improvements. This could include establishing joint and/or coordinated transportation mitigation systems with other jurisdictions.

Policy T-68. Create a funding mechanism that can be applied across boundaries to address the impact of growth outside the city limits on the City's transportation system.

Transportation Program Costs

To determine transportation financing needs, a twenty-year (2002 to 2022) program (including arterial, HOV, transit and non-motorized components identified previously in this document) was established, and a planning level cost estimate prepared. Also included as an element of the 20-year funding needs are annual transportation programs that include: transportation system rehabilitation and maintenance; traffic operations and safety projects and programs; Transportation Demand Management/Commute Trip Reduction programs; neighborhood livability projects and programs; and, ongoing project development. These annual programs support and supplement the Street Network, HOV, Transit and Non-motorized Elements and are a necessary part of maintaining transportation level of service standards.

The total cost of the 20-year transportation plan is estimated at $134 million. The costs of the various components of this plan are summarized in Table 8.1. The costs for the arterial, HOV and non-motorized components represent Renton's costs (including Renton's share of responsibility under joint projects with WSDOT and other local jurisdictions). This cost does not include costs of transportation projects that are the responsibility of the state, King County, and other cities (Newcastle, Tukwila, and Kent). The transit costs include only local match for Renton's local feeder system improvements, park-and-ride lots, signal priority, and transit amenities.

Ongoing transportation planning work will include continued refinement of the 20-year transportation plan and costs.

Inventory of Funding Sources

Having established a 20-year transportation funding level of $134 million, an annual funding level of $6.7 million can be determined. Sources of revenue to provide this annual funding need are identified on Table 8.2.

The Business License Fee is an annual per capita fee assessed to all businesses within the City of Renton. Currently, 85% of the annual revenue generated from this fee is dedicated to fund transportation improvements. The Business License Fee is assumed to contribute 28% of the future annual funding level.

TABLE 8.1

RENTON 20-YEAR TRANSPORTATION PROGRAM

PLANNING LEVEL COST ESTIMATES

Arterial Plan:	=	$	60,000,000
HOV Plan:	=	$	26,000,000
Transit Plan:	=	$	15,000,000
Non-motorized Plan:	=	$	4,500,000
Annual Programs:	=	$	28,500,000
Total 20-Year Cost	**=**	**$**	**134,000,000**

TABLE 8.2

CITY OF RENTON

SOURCE OF TRANSPORTATION FUNDS

	Annual	20-Year
Business License Fee	$ 1.88 million	$ 37.6 million
Half-Cent Gas Tax	$ 0.35 million	$ 7.0 million
Grants	$ 3.90 million	$ 78.0 million
Developer Mitigation	$ 0.57 million *	$ 11.4 million *
TOTAL FUNDS:	**$ 6.70 million**	**$ 134.0 million**

* In addition, there will be site-specific mitigation.

The Half-Cent Gas Tax is a portion of the State gas tax revenue that is distributed to local jurisdictions based on population. The Half-Cent Gas Tax is assumed to remain at its current level and contribute 5.2% of the future annual funding level.

The City of Renton has aggressively pursued federal and state grants in the past, which is assumed to continue, thus providing 58% of the future annual funding level. Examples of federal grants include the Surface Transportation Program (STP), Congestion Management Air Quality (CMAQ), and Transportation Enhancements Program, which are awarded regionally by the Puget Sound Regional Council and bridge replacement, road safety, and railroad crossing improvement programs administered by WSDOT. State grants include those provided by the Transportation Partnership Program (TPP), the Arterial Improvement Program (AIP), and Pedestrian Safety and Mobility Program (PSMP), which are administered by the Transportation Improvement Board.

Developer mitigation revenue is obtained by the City of Renton through an assessment on development city-wide, based on the number of daily vehicle trips generated by a specific development multiplied by a fee per vehicle trip. Developer mitigation is assumed to contribute 9% of the future annual funding level. It should be noted that developer mitigation is not a reliable (or stable) source of transportation funds (as required by GMA). The irregularity of private development projects and thus uneven flow of mitigation revenue contribute to the unreliability of developer mitigation. It should also be noted that, in addition to a mitigation fee, private development approval will be conditioned on site-specific improvements to ensure that on-site and adjacent off-site transportation facility impacts are mitigated.

Local Improvement Districts (LIDs) are formed by property owners to provide funds for the portion of the cost of improvement projects that benefit the properties. Petitions from two-thirds of the property owners of property equal to two-thirds of the assessed valuation of the LID area are required in order to form an LID. Because it cannot be determined when there will be enough petitioners to form an LID and, therefore,

it is not known when an LID can be formed to make improvements, LIDs have not been included as a source of transportation funds.

The above revenue sources are projected to remain approximately the same over the next 20 years, though the percent contribution from individual sources may change. However, trends in transportation financing are becoming apparent, which could affect the City of Renton's transportation revenue. The trends include: declining revenue available from several existing sources, such as the half-cent gas tax; transportation needs growing faster than available revenues; local, state, and federal requirements on transportation improvements lengthening the design process and increasing cost; the undetermined potential for new funding sources; and, the continued inability of regional agencies to address regional transportation needs.

Ongoing transportation planning work will include a review and update of current revenue sources to reflect federal, state, and regional decisions regarding these revenue sources.

Funding Program

The Growth Management Act (GMA) requires "an analysis of funding capability to judge needs against probable funding resources." This includes development of a "multi-year financing plan" based on the needs identified in the transportation plan with "appropriate parts" serving as the basis for the Six-year Transportation Program required by the RCW for cities.

The following presents the City of Renton's transportation finance plan (as required by GMA) and the underlying assumptions, which are:

- to provide both a 20-year and a six-year transportation improvement program
- establish consistency between the six-year and 20-year programs.

A 20-year transportation program (comprised of improvements discussed previously in the Street Network, HOV, Transit, and Non-motorized Chapters and annual transportation programs) and a planning level cost estimate of $134 million (summarized on Table 8.2) have been established first. Based on the 20-year funding level of $134 million, an annual funding level of $6.7 million was determined. Having established an annual funding rate it can reasonably be assumed that if this funding level is maintained, if the facilities being funded are consistent with the 20-year plan, and if transit and HOV facilities are conscientiously emphasized, it should be reasonable to assume that the level of service can be maintained for the intervening years with the established funding rate.

The City of Renton's Six-Year Transportation Improvement Program (TIP) is part of an on-going process intrinsically linked with the development of the City's Capital Improvement Program. The Six-Year TIP is also linked with various state and federal funding programs, regional/inter/jurisdictional planning and coordination processes, and the City's Comprehensive Plan.

Projects are developed and prioritized based on both specific goals to be achieved by the program and on general programming considerations. Those general programming considerations are:

Planning. How a project fits with or addresses identified future transportation goals, demands, and planning processes must be evaluated on both a local and regional level. This is strongly influenced by ongoing land use decisions and by regional highway and transit system plans.

Financing. Many projects are dependent on receiving outside grants, formation of LIDs, or the receipt of mitigation funds. Prioritization has to take into account the peculiarities of each of the various fund sources and the probabilities of when, and how much, money will be available.

Scheduling. If a project is interconnected with, or interdependent on, other projects taking place, it is reflected in their relative priorities.

Past Commitments. The level of previous commitment made by the City in terms of resources, legislative actions or interlocal agreements also must be taken into consideration in prioritizing TIP projects.

In addition to the general considerations discussed above, there are five specific project categories through which the TIP is evaluated and analyzed. They are:

- Preservation of Existing Infrastructure
- Multi-Modal and Transportation Demand Management
- Community Livability and Enhancement
- Economic Development
- Operations and Safety

These categories provide a useful analysis tool and represent goals developed through an evaluation of the City's transportation program in response to input from citizens and local officials and to State and federal legislation.

Taken as a whole, the five categories provide a framework for evaluating projects both individually and as part of a strategy that seeks to meet and balance the transportation needs of Renton during a time of increasing transportation demand, decreasing revenues, and growing environmental concerns.

Although each project can be identified with an important concern that allows it to be classified into one of the five categories, most projects are intended to address, and are developed to be compatible with, multiple goals.

Preservation of the existing infrastructure is a basic need that must be met by the program. The Mayor, City Council and Citizens Transportation Advisory Committee have all addressed the importance of sustaining strong programs in this project category. The State Growth Management Act also requires jurisdictions to assess and address the funding required to maintain their existing transportation system.

Multi-Modal and Transportation Demand Management (TDM) projects and programs are oriented toward "moving people" through a balanced transportation system that involves multiple modes of transportation and provides alternatives to the existing heavy reliance on the single occupant vehicle (SOV). Included are projects that facilitate the movement of transit and carpools, and programs that promote the use of high occupancy vehicles (HOV's) and reduce the numbers of SOV's. The Federal Transportation Efficiency Act, the State and Federal Clean Air legislation and the State Commute Trip Reduction Act have added momentum to regional efforts and placed requirements on local jurisdictions such as Renton to promote these transportation elements.

Community livability and enhancement consists of projects that have been developed with major emphasis on addressing community quality of life issues by improving and/or protecting residential livability while providing necessary transportation system improvements. Bicycle and pedestrian projects are included in this category.

Economic development projects and programs involve transportation improvements necessitated by new development that is taking place. Thus, a significant source of local funding for these projects is projected to come from mitigation payments and from specific access needs financed by new development in the City of Renton.

Operations and safety projects and programs are developed through ongoing analyses of the transportation system and are directed mainly toward traffic engineering concerns such as safety and congestion. Projects are identified not only by analysis of traffic counts, accident records and geometric data, but also through review and investigation of citizen complaints and requests.

The City of Renton's adopted 2005-2010 Six-Year Transportation Improvement Program includes many of the transportation improvements and programs identified in the Street Network, Transit, HOV, Non-motorized and Transportation Demand Management Chapters of this Transportation Element. The projects or programs are listed in Table 8.3. Also shown in Table 8.3 are annual programs (transportation system rehabilitation and maintenance, traffic operations and safety; projects and programs, ongoing project development). The following lists various 2005-2010 TIP projects under each of the chapters of the Transportation Element.

TABLE 8.3
CITY OF RENTON SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM
(2005-2010)

Total Project Costs

TIP	Project Title	Previous Costs	2005	2006	2007	2008	2009	2010	Six-Year Period Total	Total Cost
1	Street Overlay Program	1,050,002	405,000	405,000	405,000	405,000	405,000	405,000	2,430,000	3,480,002
2	SR 167/SW 27th St/Strander Bv	355,174	10,000	10,000	10,000	10,000	10,000	5,000	55,000	410,174
3	Strander Bv/SW 27th St Connect.	1,705,460	800,000			9,394,540	28,000,000	26,500,000	64,694,540	66,400,000
4	SR 169 HOV - 140th to SR900	2,000,392	10,000		55,100	3,680,000	2,350,000		6,095,100	8,095,492
5	Renton Urban Shuttle (RUSH)	20,169	5,000	5,000	5,000	5,000	5,000	5,000	30,000	50,169
6	Transit Program	32,584	20,400	20,400	20,400	20,400	20,400	20,400	122,400	154,984
7	Rainier Av Corridor Study/ Improv.	267,710	20,000	20,000	20,000	261,000	2,964,000	3,165,000	6,450,000	6,717,710
8	NE 3rd/NE 4th Corridor	323,892	315,300	807,500		5,017,000	2,100,000	2,100,000	10,339,800	10,663,692
9	Walkway Program	317,533	236,600	250,000	250,000	250,000	250,000	250,000	1,486,600	1,804,133
10	S Lake Wash. Roadway Improv.	1,500,000				1,850,000	14,300,000	23,800,000	39,950,000	41,450,000
11	SR 169 Corridor Study		50,000						50,000	50,000
12	South Renton Project	156,800	18,200			240,000			258,200	415,000
13	I-405 Improvements in Renton	42,186	30,000	20,000	10,000				60,000	102,186
14	Project Development/Predesign	271,363	175,000	175,000	200,000	200,000	200,000	200,000	1,150,000	1,421,363
15	NE 4th St/Hoquiam Av NE	55,100	344,900						344,900	400,000
16	Rainier Av - SW 7th to 4th Pl	80,000	585,000	2,150,000	855,000				3,590,000	3,670,000
17	Benson Rd - S 26th to Main	20,000	459,400	2,500					461,900	481,900
18	Arterial Circulation Program	195,308	200,000	200,000	200,000	200,000	250,000	250,000	1,300,000	1,495,308
19	Bridge Inspection & Repair	120,411	40,000	140,000	40,000	615,000	40,000	30,000	905,000	1,025,411
20	Loop Replacement Program	57,441	20,000	20,000	20,000	20,000	20,000	20,000	120,000	177,441
21	Sign Replacement Program	13,427	7,500	7,500	7,500	7,500	7,500	7,500	45,000	58,427
22	Pole Program	47,974	25,000	48,400	25,000	25,000	25,000	25,000	173,400	221,374
23	Sound Transit HOV Direct Access	46,523	10,000	5,000					15,000	61,523
24	Traffic Safety Program	233,791	80,000	40,000	40,000	40,000	40,000	40,000	280,000	513,791
25	Traffic Efficiency Program	250,505	251,900	114,400	75,000	30,000	30,000	30,000	531,300	781,805
26	CBD Bike & Ped. Connections	25,212	50,000	50,000	10,000	590,000	410,000	5,000	1,115,000	1,140,212
27	Arterial Rehab. Prog.	537,800	195,000	240,000	205,000	340,000	230,000	180,000	1,390,000	1,927,800
28	Duvall Ave NE	667,781	1,258,700	1,692,000					2,950,700	3,618,481
29	Sunset/Duvall Intersection	115,000	381,000						381,000	496,000
30	RR Crossing Safety Prog.	5,198	5,000	5,000	10,000			10,000	30,000	35,198
31	TDM Program	100,670	64,200	64,200	64,200	64,200	64,200	64,200	385,200	485,870
32	Trans Concurrency	1,784	40,000	10,000	40,000	10,000	10,000	30,000	140,000	141,784
33	Missing Links Program	36,350	30,000	30,000	30,000	30,000	30,000	30,000	180,000	216,350
34	GIS Needs Assessment	44,874	35,000	35,000	20,000	20,000	20,000	20,000	150,000	194,874
35	Grady Wy Corridor Study	5,000	35,000	120,000	80,000	230,000	1,810,000	1,020,000	3,295,000	3,300,000
36	Bicycle Route Dev. Program	24,798	20,000	18,000	18,000	110,000	80,000	80,000	326,000	350,798
37	Lake Wash. Bv-Park to Coulon Pk	329,900	79,500		149,100				228,600	558,500
38	Interagency Signal Coord.	26,572	12,000						12,000	38,572
39	Environmental Monitoring	223,711	85,000	75,000	50,000	25,000	25,000	25,000	285,000	508,711
40	Trans-Valley & Soos Creek Corr.	7,300	5,000						5,000	12,300
41	WSDOT Coordination Program	18,857	10,000	10,000	10,000	10,000	10,000	10,000	60,000	78,857
42	1% for the Arts	20,000	50,000	30,000	30,000	50,000	30,000	30,000	220,000	240,000
43	Arterial HOV Program	125,354	10,000	10,000					20,000	145,354
44	Park-Sunset Corridor	7,889	25,000	50,000	390,000	1,691,000	1,059,000		3,215,000	3,222,889
45	Lind Av-SW 16th - SW 43rd	5,000	5,000	5,000		1,914,000	626,000		2,550,000	2,555,000
46	Benson Rd S / S 31st St	138,500	61,500						61,500	200,000
47	Logan Av Concrete Panel Repair					460,000			460,000	460,000
48	Carr/Mill Signal		5,000	10,000	20,000	340,000	400,000	10,000	785,000	785,000
49	Transit Priority Signal System	1,280,315	30,000						30,000	1,310,315
50	Transit Center Video	26,391	10,000						10,000	36,391
51	Houser Wy S - Main to Burnett					810,000			810,000	810,000
52	Trans Valley ITS	50,000	5,000	5,000					10,000	60,000
53	Lake Wash. Bv Slip Plane	629,400	10,600						10,600	640,000
54	Monster Road Bridge	500,000	12,000						12,000	512,000
55	SW 7th St./Lind Ave SW	273,577	26,423						26,423	300,000
56	Duvall Ave NE - King County	547,858	1,311,342	2,810,800					4,122,142	4,670,000
	Total Sources	14,938,836	7,986,465	9,710,700	3,364,300	28,964,640	55,821,100	58,367,100	164,214,305	179,153,141

07/27/2004

Street Network

- South Lake Washington Roadway Improvements (TIP #10)
- Rainier Avenue – SW 4th Place to SW 7th Street (TIP #16)
- Grady Way – Main Avenue to West City Limits (TIP #35)
- Lind Avenue S.W. – S.W. 16th Street to S.W. 43rd Street (TIP #45)
- Duvall Ave N.E. – Sunset Boulevard to Renton City Limits (TIP #28)
- Mill Avenue South / Carr Road (TIP #48)
- Strander Boulevard – SR-181 to Oakesdale Avenue S.W. (TIP #3)
- Sunset Boulevard/Duvall Avenue NE (TIP #29)
- Benson Road – South 26th Street to South 31st Street (TIP #46)
- N.E. 3rd/N.E. 4th Corridor Improvements (TIP # 8)
- Rainier Avenue Corridor Study/Improvements (TIP #7)
- Lake Washington Blvd. – Park Avenue North to Coulon Park (TIP #37)
- Park Avenue North/Sunset Boulevard – North 6th to Duvall Avenue N.E. (TIP #44)
- S.W. 7th Street/Lind Avenue S.W. (TIP #55)
- South Renton Neighborhood Improvements (#12)
- N.E. 4th/Hoquiam Avenue N.E. (TIP #15)

Also included are expenditures for study of the SR 169 Corridor (TIP project #11).

Included in the Six-Year TIP is the Arterial Circulation Program (TIP #18), which will provide funding for further development of multi-modal improvements on Renton's arterials to support the Transportation Plan and comply with clean air legislation. Also included are expenditures for project development studies (TIP #14) for development of future TIP projects and grant applications for currently proposed and future TIP projects.

Transit

- Transit Program: facilities to support regional transit service, local transit service improvements; development of park and ride lots, transit amenities (TIP #8)
- Renton Urban Shuttle (RUSH) Program: operation of the shuttle bus service within Renton. (TIP #5)
- Transit Priority Signal System: development and implementation of traffic signal programming to give priority to transit vehicles. (TIP #49)

Also, the HOV Chapter improvements identified below will be designed to enhance transit service.

HOV

- SR-167 / S.W. 27th Street HOV (TIP #2)
- Sound Transit HOV Direct Access (TIP #23)
- SR-169 HOV – Sunset Blvd. to east City Limits (TIP #4)

It should be noted that the expenditure shown for Sound Transit HOV Direct Access (TIP #23) is for coordination with the State and Sound Transit direct access interchange improvements.

Included in the Six-Year TIP is the Arterial HOV Program (TIP #43), which will provide funding for further development of Renton HOV improvements identified previously in the HOV Plan (Figure 3-1), to examine additional routes and corridors for HOV facilities in Renton, and for coordination with direct access HOV projects.

Non-Motorized

- Benson Road Improvements – South 26th to Main Avenue (TIP #17)
- CBD Bike and Pedestrian Connections (TIP #26)

Also included in the proposed Six-Year TIP is the Walkway Program (TIP #9), which will provide funding for sidewalk and handicap curb ramp needs identified in the City of Renton *Comprehensive Citywide Walkway Program*. The Bicycle Route Development Program (TIP #36) will upgrade existing bicycle routes, construct missing links in the bicycle route system, and develop, evaluate, prioritize future bicycle facilities. These projects are in addition to bicycle and pedestrian improvements, anticipated as part of arterial, HOV and transit projects.

Implementation of the non-motorized element falls into two categories - walkways/sidewalk and bike facilities. Each of these components are described below.

Walkways/Sidewalks Implementation. The implementation procedures for the City's comprehensive walkway/sidewalk program is detailed in the City of Renton *Comprehensive Citywide Walkway Study*. This report identifies the sidewalk and curb ramp needs within the City. Specific improvements will be prioritized and will respond to the needs of school children, the aged and persons with disabilities, and will support increased use of transit.

Bike Facilities Implementation. Bicycle facilities include lanes along roadways and signed bicycle routes. Current funding is provided for the construction of segments of the Lake Washington Loop Trail.

Bicycle route designation and signing along City roadways is provided on an as-needed basis by the Transportation Systems Division of the Planning/Building/Public Works Department. Project prioritization is determined by the Transportation Systems Division in coordination with the Community Services Department.

Funding for bicycle signing is provided through the capital improvement programs and the General Fund operating budgets of the Transportation Systems Division. Signing specifically identified as part of transportation projects will be funded through the Six-Year Transportation Improvement Program (TIP).

Trails Implementation. Many of the planned pedestrian/bicycle facilities in the Long Range Parks, Recreation, Open Space and Trails Plan, administered by the Community Services Department, would be valuable components of the transportation system, and, therefore, are coordinated with the Transportation Plan. The Long Range, Parks, Recreation, Open Space and Trails Plan contains the recommended six-year trails development program. Only projects that are specifically identified as transportation facilities will be included in the Six-Year Transportation Improvement Program (TIP).

TDM/CTR

- Transportation Demand Management Program: implement Commute Trip Reduction Act requirements, other TDM programs (TIP #31)

Funding Assessment

A 20-year transportation program has been established having an estimated cost of $134 million. This program was the basis for determining an annual funding level of $6.7 million. Assuming this annual funding level can be maintained over the 20-year period (2002-2022), it is reasonably certain that the 20-year transportation program can be implemented. Annual reassessment of transportation needs, continuing

to aggressively pursue grant funding, and/or continuation of the strong rate of growth in Renton, which will generate higher developer mitigation revenue, will be needed over the intervening years in order to assume the 2022 transportation program can be achieved.

The City of Renton's proposed 2005-2010 Six-Year TIP includes 56 individual projects and programs, with a total estimated cost of $179.15 million. Of this total cost, approximately $164.2 million is to be expended over the 2005-2010 six-year period. (It should be noted that for several projects and programs, expenditures over the six-year period are shown, not the total project or program cost.) The difference of about $15 million represents expenditures prior to year 2005.

The projected revenues over the six-year period, based on the established $6.7 million annual funding, will total $40.2 million. The TIP identified expenditures of $164.2 million is $124 million more than the projected revenues. Of this $124 million, approximately $64 million represents the amount of participation anticipated by the State, Sound Transit, King County, neighboring jurisdictions, and private sector contributions on joint projects. As previously discussed, transportation improvement expenditures of other jurisdictions have not been included when establishing the $6.7 million annual funding level. Therefore, the Six-Year TIP expenditures exceed projected revenues by $60 million.

In order for projects to be eligible for projected funding, they must be, by law, included in the Six-Year Transportation Improvement Program (TIP). Because it is not possible to know which projects will qualify for funding, the Six-Year TIP includes a cross-section of projects to provide a list of projects that will be eligible for funding from the various revenue sources, when and if, such funds become available. The result is a Six-Year TIP which has expenditures exceeding projected revenues.

The challenge for the future will be to secure enough funding for the City of Renton, Cities of Tukwila and Kent, King County, Sound Transit, and the state to implement the improvements to their respective facilities included in the Transportation Plan. However, several strategies for acquiring needed funding are evident at this time. They include:

- Establish interjurisdictional funding mechanisms, such as payment of mitigation fees to address impacts of growth within adjacent jurisdictions that affect the City of Renton.

- Update transportation priorities annually and incorporate in the Six-Year Transportation Improvement Program.

- Continue to work more aggressively with adjacent cities, King County, Washington State Department of Transportation and other agencies to fund their respective improvements in the Transportation Plan, i.e., through joint projects.

- Continue to work with regional agencies to encourage them to find and fund regional solutions for regional transportation problems.

Mitigation Process

There are new laws and regulations that have tremendous impacts on land use, the need for new or different kinds of transportation projects and programs, and costs and funding of transportation projects. Examples are the Wetlands Management Ordinance, Surface Water Management Ordinance, the Clean Air Act, Commute Trip Reduction Act, Endangered Species Act, and the Growth Management Act. As a result, a transportation mitigation policy and process has been developed as part of the transportation plan. This

mitigation policy serves as a framework for the citywide mitigation payment system that was adopted by the City in 1996. This mitigation policy includes the City of Renton:

- Developing a citywide 20-year transportation system improvement plan (defined in the Transportation Element of the Comprehensive Plan).
- Determining the cost of the citywide 20-year transportation improvements to support new development.
- Establishing a fee for developments' pro-rated share of the cost of the citywide 20-year transportation improvements (in addition to site-specific mitigation required by the City). This mitigation fee would be established during the SEPA review process and paid during the project development process.
- Continuing the current established business license fee and percentage of the business license fee allocated for transportation purposes as has been the custom in the past.
- Having the flexibility to modify the citywide transportation plan as needed to address environmental/regional coordination issues.
- Approving future development conditioned upon site specific improvements to ensure that on-site and adjacent transportation facility impacts are mitigated, and the payment of the mitigation fee as the development's fair share contribution towards: 1) ensuring that the cumulative impacts of development can be mitigated; and 2) maintaining the City of Renton adopted level of service standard. Site specific improvements could include construction of additional traffic lanes and/or traffic signals.

Mitigation Payment System

The development mitigation fairshare cost has been established at $75 per daily vehicle trip.

The developer mitigation fee is based on the total daily increase in vehicle trips generated by the specific development project multiplied by the vehicle trip rate fee. In addition to this fee, there may be site-specific improvements required by the City, such as construction or contribution towards construction of additional traffic lanes and/or traffic signals, to mitigate on-site and adjacent facility impacts. (New business development will also pay the annual per capita business license as currently required of all businesses in the City of Renton).

Additional information on the determination of the mitigation trip rate fee is contained in the Renton Transportation Mitigation Fee Support Document.

A development may qualify for reduction of the $75 per vehicle trip mitigation fee through certain credits for development incentives, construction of needed transportation improvements (arterial, HOV, transit), through public/private partnerships, and transportation demand management programs. Specific credits and the amount of reduction in the mitigation trip rate fee that could result from such credits will be determined on a case by case basis during the development permitting process. The Mitigation Payment System provides flexibility to modify the basic trip rate fee as needed to respond to the effect that credits may have on developer mitigation as a funding source.

Concurrency Management System

The Growth Management Act (GMA) describes concurrency as the situation where adequate public facilities are available when the impacts of development occur, or within a specified time thereafter. This description includes the concept of available public facilities. The GMA defines "available public facilities" as facilities or services in place, or a financial commitment in place, to provide the facilities within a specified time. For transportation, the specified time is six years from time of development.

City of Renton policies that support the GMA's definition of concurrency have been identified in the Land Use Element and in this Element. To address concurrency under the GMA and City of Renton policies, a concurrency management system has been developed for the City of Renton that is based on the following process:

- The City of Renton will adopt a multi-modal Transportation Plan that will be consistent with regional plans and those of neighboring cities. Improvements and programs of the Transportation Plan will be defined in the Transportation Element of the Comprehensive Plan.

- The City of Renton Transportation Level of Service (LOS) Policy, although it differs from the traditional LOS for arterials, is consistent with King County Growth Management Countywide Planning Policies and will be used to evaluate the City of Renton Transportation Plan.

- If the region decides to lower regional LOS by not providing regional facilities, then Renton will adjust its LOS policy accordingly.

- The Transportation Plan will include a financial component with cost estimates and funding strategy. One of the fund sources will be mitigation fees collected from developers as a condition of land use development within the City of Renton. The approval of the development will be conditioned upon the payment of this Transportation Mitigation Fee and site-specific mitigation of on-site and adjacent facility impacts.

- The City of Renton may allocate the developer funds to any of the improvement elements of the citywide Transportation Plan in such a manner to assure that concurrency between transportation LOS and land use development is met.

- The City of Renton will establish concurrency by annually testing the citywide Transportation Plan as funded in the Six-Year Transportation Improvement Program to ensure conformance with the Level of Service standard. The City of Renton will adjust the transportation improvement plan as necessary to meet the LOS standard.

- Based upon the annual test of the citywide Transportation Plan, consideration of growth levels included in the LOS-tested Transportation Plan, payment of a Transportation Mitigation Fee, and an application of site specific mitigation, development will have met City of Renton concurrency requirements.

Transportation Concurrency Regulations (Ordinance No. 4708, adopted 3-2-1998) and Guidelines and Procedures for Monitoring Transportation Concurrency (adopted 4-6-1998) comprise the procedures, standards and criteria that allow the City of Renton to determine whether adequate public facilities are available to serve new land use development.

As specified in the Regulations and Guidelines and Procedures, a concurrency test is conducted by the City of Renton for each non-exempt development activity. The concurrency test determines consistency with the adopted citywide Level of Service standard and the Concurrency Management System, using rules and procedures established by the City of Renton. The concurrency test includes technical review of a development activity by the City of Renton to determine if the transportation system has adequate or unused or uncommitted capacity, or will have adequate capacity, to accommodate vehicle trips generated by the proposed development, without causing the level of service standard to decline below adopted standards, at the time of development or within six years. A written finding of concurrency is provided by the City prior to the approval of the development permit. If the development activity fails the concurrency test, the City allows the development applicant to submit alternative data, provide a traffic mitigation plan, or reduce the size of the development project in order to achieve concurrency.

Monitoring, and evaluation of the City of Renton's Concurrency Management System and Transportation Concurrency Regulations will be reviewed as part of ongoing transportation work.

ENVIRONMENTAL AND NATURAL RESOURCES

The Environmental and Natural Resources Chapter describes objectives, policies, and strategies to help protect Renton's natural resources and Renton residents from unacceptable air and water quality impacts of the transportation system. Clean air and water are necessary for healthful living in an urban society.

Objectives

T-X: Protect and promote clean air to ensure a healthful environment.

T-Y: Reduce vehicular emissions by encouraging increases in carpooling, vanpooling, transit, and non-motorized transportation usage.

T-Z: Ensure the long-term protection of the quality of water resources of the City of Renton.

T-AA: Reduce the impact on water quality from vehicular pollutants associated with run-off from impervious transportation facility surfaces.

T-BB: Preserve and protect natural resources (particularly critical areas and wildlife habitat).

Policies

Policy T-69. Promote programs which maintain mobile source pollutant levels at or below those prescribed by the EPA, State Department of Ecology, and the Puget Sound Clean Air Agency.

Policy T-70. Comply with the stipulations described in the State Implementation Plan (SIP) for air quality compliance.

Policy T-71. Promote water quality by encouraging increases in carpooling, vanpooling, transit, and non-motorized transportation usage.

Policy T-72. Incorporate in transportation facilities vehicular pollutant and surface water run-off management and treatment techniques that maximize water quality.

Policy T-73. Comply with the stipulations described in federal, state, and local water quality standards and regulations.

Policy T-74. Develop transportation plans and projects to comply with City, state, and federal regulations that address critical areas and wildlife habitat.

Also see related Policies in the Environmental Element, the Land Use Element, and the King County Countywide Planning Policies, which by this reference, are incorporated in this Chapter.

Air Quality -- Implementation Plan

The City will subscribe to the plans, policies, and programs catalogued in the State Implementation Plan for air quality non-attainment areas. Transportation demand management (TDM) strategies will be encouraged, including the Commute Trip Reduction Law. Existing vehicle programs such as the winter oxygenated fuels and vehicle inspections will be continued, supported, and updated as requirements demand.

Ongoing transportation planning work will include the review of the latest information from state and local agencies regarding air quality non-attainment areas, severity of violations and implementation plans.

Improving Water Quality

The City of Renton will comply with federal, state, and local plans, policies and programs for water quality. The City's Transportation Element of the Comprehensive Plan focuses on increasing the availability and use of HOV, transit, and non-motorized transportation modes and transportation demand management strategies. The intent of this program is to reduce vehicular traffic which will make it possible to limit the expansion of the existing roadway system and, in certain locations, limit additional impervious surfaces. This, in turn, will reduce vehicular pollutants and their effect on water quality.

INTERGOVERNMENTAL COORDINATION

A multitude of agencies are involved in transportation planning and improvement. To become better integrated into the regional transportation system, Renton needs to strengthen its role in the region, especially in South King County, East King County, and the Puget Sound area, and participate in regional forums as transportation decisions are made. This is particularly important since a disproportionate number of the vehicles on Renton's arterials are pass-through traffic. Also, Renton continues to be a major regional employment center and decisions made about future transportation systems for the Puget Sound area will directly impact the future of Renton's commercial and industrial base.

With requirements of the Growth Management Act mandating concurrency between land use and transportation planning, the kind of interjurisdictional cooperation envisioned in the policies has become more of a reality. However, in this environment it will become increasingly important for Renton to support negotiation tools such as interlocal agreements, and participate in interjurisdictional decision making.

Therefore, the City of Renton participates in regional forums and supports transportation plans that preserve the livability of our neighborhoods, maintain the economic vitality of our City, and provide for an improved environment for future generations. This will be accomplished by:

- providing a multi-modal regional plan with HOV, transit and other modes serving Renton; and
- providing regional financial strategies which encourage other than SOV travel.

The City of Renton has prepared and adopted a multi-modal Transportation Plan, which is consistent with regional plans and plans of neighboring cities.

Objectives

Objectives and Policies which address the need for coordination between regional and local agencies with respect to transportation planning and operation needs are presented below:

T-CC: Coordinate transportation operations, planning and improvements with other transportation authorities and municipalities.

Policies

Policy T-75. A sub-regional transportation system should be designed and implemented in cooperation with neighboring jurisdictions.

Policy T-76. WSDOT should provide funding for and construct grade-separated inside HOV lanes with direct access (or barrier-separated HOV facility) in the SR-167 corridor from Auburn to Renton and I-405 corridor, extending from Sea-Tac Airport north to Bothell.

Policy T-77. The Regional Transit Plan (RTP) should include regional express bus service to downtown Renton.

Policy T-78. Provide park-and-ride lots in unincorporated King County to intercept pass through traffic affecting the Renton street system. Transit service to these park-and-ride lots should be frequent in order to encourage transit usage.

Policy T-79. King County Transit (Metro) should provide intra-Renton bus service to serve local activity centers and employment centers, and to provide frequent, convenient access to future commuter rail stations and light rail transit stations.

Policy T-80. The City of Renton, in collaboration with King County Transit (Metro), should place high priority in providing transit service to areas experiencing high residential and commercial growth.

Policy T-81. The Regional Transit Authority (Sound Transit) should provide transit service and transit-oriented capital improvements in Renton consistent in size, scope, and cost with those proposed in the voter-approved *Sound Move*.

Policy T-82. Give priority to working with King County to ensure that King County policies regarding transportation consistency/concurrency in Renton's Potential Annexation Areas are compatible with Renton's transportation plans and goals.

Also see related Policies in the Transit Section and King County Countywide Planning Policies.

Current Coordination Activities

The City of Renton has been actively involved in an ongoing dialogue with state, regional, and county agencies -- as well as adjacent jurisdictions and business and community groups in Renton -- concerning Renton's transportation planning goals and objectives. Coordination efforts underway include participation in the following primary forums. (Note: not all committees are listed.)

State Coordination [Washington State Department of Transportation (WSDOT)]

I-405 Corridor Study. The City is participating in this WSDOT study along with representatives of affected jurisdictions adjacent to I-405. Renton elected officials serve on the study's Executive Committee and Renton staff serve on the Steering Committee and Technical Committee. The purpose of the study is to work with local jurisdictions to define transportation needs in the I-405 Corridor from Tukwila to Swamp Creek, and to develop transportation improvement projects for the corridor that complement local plans, goals, and objectives.

Regional Coordination

South County Area Transportation Board (SCATBd). The purpose of the group is to serve as a central forum for information-sharing, consensus-building, coordination to resolve transportation issues, and to implement transportation programs and projects that benefit the region in general and South King County area jurisdictions in particular. Voting members include King County and the cities of Algona, Auburn, Black Diamond, Burien, Covington, Des Moines, Enumclaw, Federal Way, Kent, Maple Valley, Milton, Normandy Park, Pacific, Renton, SeaTac, and Tukwila. Non-Voting members include Sound Transit, Pierce Transit, the Port of Seattle, the Puget Sound Regional Council, WSDOT, and the State Transportation Improvement Board (TIB).

Eastside Transportation Partnership (ETP). ETP is a coalition of Eastside cities (similar to SCATBd), with representatives from Bellevue, Kirkland, Redmond, Issaquah, Bothell, Mercer Island, Sammamish, Woodinville, Newcastle, and Renton. Representatives from WSDOT, Sound Transit, King County, PSRC, TIB, and Snohomish County also are participants. Renton's primary affiliation and purpose for participating in the group is to coordinate Eastside and South County issues.

Puget Sound Regional Council (PSRC). The PSRC is a regional council of governments and the local MPO and RTPO, with representatives from every agency, jurisdiction, and governing body in King County, Pierce County, Kitsap County and Snohomish County. Staff level technical committees meet regularly to discuss a wide range of transportation topics related to the region's long range growth and transportation strategy as envisioned under VISION 2020 and Destination 2030, including finance, transportation improvement programs, commute trip reduction issues, regional transportation forecast data, air quality, and other issues requiring regional coordination.

Central Puget Sound Regional Transit Authority/Sound Transit. The City coordinates regularly with Sound Transit staff, as Sound Transit is the regional transit service provider. For long range planning, Renton and other jurisdictions are working with Sound Transit to implement Phase 1 of the Regional Transit Plan (Sound Move), which includes Regional Express bus service and associated capital facilities, and HOV/transit exclusive interchanges and/or arterial HOV improvements in Renton.

County Coordination

King County Metro. The City is also coordinating with King County Transit (Metro) in the development of local bus service plans that will complement the Sound Transit regional transit service concept.

King County Public Works Directors. The City works as a member of this group on numerous and varied transportation action issues of concern to local jurisdictions including making recommendations for projects to be funded with the regional distribution of federal transportation funds.

Commute Trip Reduction. Another group within King County is responsible for coordinating regional and South County Commute Trip Reduction (CTR) issues in cooperation with local jurisdictions and King County. Working groups have been established for the purpose of coordinating state-required CTR ordinance and plan development/adoption by local jurisdictions and King County. With most local jurisdictions having successfully adopted local CTR ordinances, the group is now focusing on the successful implementation of the ordinance requirements (working with affected employers) and on starting a parking review regional coordinating effort.

Impacts on Adjacent Jurisdictions

The City of Renton is coordinating and will continue to coordinate with adjacent jurisdictions through interlocal agreements and through appropriate regional, county, local, and state forums to assure consistency between plans, and to work out acceptable and appropriate agreements regarding local plans.

Impacts on Regional Transportation Plan

The City of Renton has adopted a position that specifies the elements that must be included in a regional transit plan in order for the City to meet the requirements of the Growth Management Act. The City Council supports the following elements in the voter-approved regional system plan (Sound Move):

1. A bus element, with early emphasis on express bus service and TSM improvements proposed for the South County area;

2. A plan that increases local circulation transit services and feeder service connections and provides a variety of modal options;

3. High Capacity Transit (HCT) to urban and employment centers, including Renton; and

4. A plan that provides convenient connections within the regional bus service, local bus service, and between the light rail line and the commuter rail system.

Renton is coordinating with Sound Transit to ensure commensurate transit services and/or roadway/freeway improvements should any elements of the approved regional plan that benefit Renton not be implemented.

Strategies to Address Inconsistencies

Inconsistencies between Renton, the State, King County, Sound Transit, and other local jurisdictions will be addressed by interlocal agreement as specified in King County Growth Management policies.

ONGOING TRANSPORTATION PLAN WORK

This Transportation Element includes a number of recommendations for ongoing transportation work. This additional work will include continued refinement of certain elements of the transportation plan and development of more detailed strategies and programs to implement the transportation plan. The specific transportation planning tasks are summarized in this section.

Street Network

Level of Service (LOS)
Continue to refine and update Renton's LOS policy to reflect new information on regional and local transportation plans.

Arterial Plan
Conduct further analysis of the improvements included in the Arterial Plan to verify physical, operational, and financial feasibility. The analyses will include development of conceptual plans and cost estimates, assessment of neighborhood and environmental impacts, and the development of more detailed scopes of improvement, as appropriate. Adjust the Arterial Plan, as needed, to reflect the results on this analysis.

Re-evaluate residential, commercial, and industrial access street function definitions and classifications.

Transit

Transit Plan
Update and revise Renton's Transit Plan to reflect new information regarding the Regional Transportation Plan (Sound Move).

Conduct further analysis of the local feeder system transit improvements identified in the City of Renton Transit Needs Assessment in order to verify operational and financial feasibility. (Includes the development and incorporation of more detailed bus routing and dial-a-ride needs.)

Level of Service
Continue to refine the transit index of Renton's LOS standard to address transit service frequency.

HOV

HOV Plan
Continue the assessment of criteria for HOV facility planning, design, and operation.

Conduct further analysis of the HOV improvements identified in the HOV Plan in order to verify physical, operational, and financial feasibility. Also, investigate other potential locations for HOV improvements, and define scope and cost of the proposed improvements in more detail, as appropriate.

Level of Service
Continue to update the HOV index of Renton's LOS standards, if needed.

Non-motorized

Neighborhood and Regional Access
Based on the City of Renton *Comprehensive Citywide Walkway Study*, determine additional bicycle and pedestrian facilities that support Renton's access needs and complement the Regional Transit Plan and local transit system.

Bicycle and Pedestrian Facilities Plan
Update the routes identified in the Bicycle and Pedestrian Facilities Plan to reflect the reassessment of neighborhood and regional access needs. Identify, in cooperation with other City of Renton departments and citizen groups, the facilities that could be included in the City of Renton's transportation funding program.

TDM/CTR
Existing Parking Supply and Demand
Inventory existing citywide on-site and off-site parking facilities to determine number of spaces and utilization, if needed during future review of parking policies, guidelines, and regulations.

Parking Policy Review and Revisions
Continue to review, update and/or revise Renton parking policies to complement other elements of the Renton Transportation Plan and to be consistent with regional parking policies. Working in regional forums propose parking regulation revisions to be worked out on a sub-regional basis.

Employer Mode Split
With assistance from King County, evaluate updated Renton employers CTR data and revise citywide employer mode split if needed.

TDM/CTR Programs
Renton's CTR ordinance was amended in February, 1998. Public and private employers have developed programs for complying with the ordinance. Annual review of these programs will be conducted to monitor progress toward meeting CTR goals.

Parking Management Ordinance
Continue to review the City of Renton parking regulations for revisions to complement the Renton Land Use Element and Transportation Element and to be consistent with regional and other local jurisdictional parking policies.

Airport
Continue to update the goals, objectives, policies, functional requirements, and implementation strategies of the Airport Chapter of the Transportation Element as needed.

Freight
Inventory of Local Rail System Facilities and Users
Update assessment of rail use compatibility with current land uses and FAST implementation strategies, as needed.

Regional Accessibility
Continue to review, and update if needed, the assessment of Renton rail use with respect to implications of the Regional Transit Plan (Sound Move) and to reflect Central Puget Sound Regional Transit Authority (Sound Transit) decisions.

Freight and Passenger Rail Use
Review and update the assessment of freight and passenger rail needs, as appropriate.

Financing and Implementation

Program and Project Costs
Update the scope and cost of improvements determined from the continued feasibility analysis of the arterial and HOV elements. Also, update the scope and cost of transit, non-motorized and other programs included in the City of Renton's transportation funding program. Update the cost of the 20-year transportation plan, as needed.

Mitigation Process
Adjust the citywide developer mitigation fee structure, if needed, to reflect revisions to the financing plan resulting from further analysis of the Transportation Plan improvements and costs, and funding sources.

Funding Program
Adjust the priority of projects or programs identified under the Arterial, Transit, HOV, Non-Motorized, and TDM chapters as needed. Review the multi-year (20 years) financing plan and assess funding needs for the identified projects or programs. Include appropriate projects and programs in the City's Six-Year Transportation Improvement Program (TIP). Identify potential sources of additional funds, if funding from current sources is not adequate, and to reflect federal, State, regional or local decisions regarding availability of current sources.

Concurrency
Continue to review, and revise if needed, the implementation, monitoring, and evaluation aspects of the Concurrency Management System (CMS) and update, as necessary, the rules, regulations and ordinances that

implement the concurrency requirements. Coordinate with adjacent jurisdictions regarding CMS requirements and regulations.

Environmental and Natural Resources

Continue to review and revise, as needed, the objectives, policies and strategies to minimize or mitigate impacts of transportation plans on Renton's environment and natural resources. Review the latest air and water quality implementation plans from local and state agencies, and update if needed.

Intergovernmental Coordination

Continue to coordinate Renton's Transportation Element with adjacent jurisdictions' transportation and land use goals, countywide policies, regional land use and transportation plans, and statewide goals outlined in the GMA. Regulations, facilities to be provided, and development actions by regional and other local jurisdictions may change, which could affect the City of Renton. Pursue strategies to address inconsistencies, i.e. through interlocal agreements, and adjust Renton's Transportation Element, as needed.