

Chapter Six

Transportation

This chapter is based on the land use element as established in this plan. King County envisions a future transportation system that supports the regional land use strategy, which seeks to focus most growth in urbanized areas. King County's goals are to:

- Connect all modes of transportation to form an integrated, balanced system;
- Strengthen the region's economy by moving people and goods efficiently;
- Give individuals and families a range of affordable transportation options; and
- Minimize transportation's adverse effects on the environment.

This chapter is consistent with and meets the requirements of regional and countywide plans and policies that respond to growth management legislation. The Countywide Planning Policies (CPP) have been used to guide the development of the transportation element and to ensure consistency with plans and programs developed by adjacent jurisdictions.

Regional direction for the transportation element is set by the Metropolitan Transportation Plan, *Destination 2030* developed by the Puget Sound Regional Council (PSRC). The Metropolitan Transportation Plan is consistent with the region's urban growth strategy, *Vision 2020*, also developed by the PSRC.

The framework and direction for the development of comprehensive plans is provided by growth management legislation. The transportation element of the King County Comprehensive Plan is consistent with and meets the requirements of growth management legislation.

Components of the Transportation Element

The Transportation Element of this plan is comprised of five major components. The first is the Transportation chapter, which includes the narrative and policy language. The second is Technical Appendix C of this Plan, which contains the Land Use and Travel Forecast Technical Report, the Arterial Functional Classification Map, and a transportation inventory. The third includes the Transportation Needs Report, which is adopted herein by reference and contains a 20-year financial forecast and a 20-year list of transportation needs, and the Roads Capital Improvement Program, which is also adopted herein by reference. The fourth is the Long-Range Transit Development Plan and the Six-Year Transit Development Plan and Capital Improvement Program, which are also adopted herein by reference. The fifth and last component is the concurrency regulation, which implements the concurrency requirements and is codified at King County Code chapters 14.65 through 14.70.

I. Regional System

A. Countywide Transportation Service Provider

King County provides countywide transit service and builds and maintains arterials of countywide and regional significance within unincorporated King County. King County also provides contract transportation services to a number of King County cities.

The Growth Management Act fundamentally changed the way King County carries out comprehensive planning, placing special emphasis on transportation by making it unlawful to approve development that fails to meet the test of concurrency. Future development is constrained by King County's ability to finance needed transportation facilities or programs. To limit sprawl, create the desired urban form, and provide some measure of predictability, King County will support comprehensive plan policies by focusing resources in the most efficient and cost effective way.

As a countywide transportation service provider, King County will maintain Metro Transit's public transportation services and work with Sound Transit and other transit agencies to provide seamless, multimodal transit services. King County will cooperate with other local governments and the Washington State Department of Transportation to implement the Regional Arterial Network, improve freight mobility and carry out strategies to maintain the efficiency of freeways and arterials in the region.

In the unincorporated Urban Area, King County will complete the roadway network, add sidewalks, bike lanes and transit facilities as appropriate, and maintain the transportation infrastructure to allow denser development to occur. In the Rural Area, King County will emphasize maintenance and safety rather than increased traffic capacity.

King County International Airport/Boeing Field (KCIA) is an essential element of the county and region's multimodal transportation system. The airport is also a significant employment center and supports over 150 aviation-related businesses including the Boeing Company. The airport is a port-of-entry for international flights and serves regional air carriers, national and regional cargo carriers, corporate aviation, and general aviation aircraft. KCIA is a regulated facility under Federal Aviation Regulation Part 139 of the Federal Aviation Administration (FAA) Code of Federal Regulation (CFR).

T-101 As a countywide transportation service provider, King County establishes policy for transit and for the unincorporated area road system. General and long-range policy shall be established for the road system in the King County Comprehensive Plan and for transit in the Transit Long-Range Policy Framework. The Six-Year Transit Development Plan and the six-year capital improvement program for roads shall also be prepared consistent with these primary policy documents.

T-102 In addition to involving the general public, transportation plans including any update to the Roads Strategic Plan shall be completed with timely input from the unincorporated area councils and the subarea transportation forums, among other bodies.

T-103 King County should identify improvements and strategies needed to carry out the land use vision and meet the level-of-service requirements for transportation. Road improvements should be guided by the Roads Strategic

Plan and prioritized in the Transportation Needs Report and Roads Capital Improvement Program. Public transportation projects should be identified in the improvement program of the Transit Capital Budget and the Six-Year Transit Development Plan, and the Long-Range Policy Framework for Public Transportation.

T-104 King County International Airport shall plan, design, and implement services, programs, and facilities in compliance with Federal Aviation Administration regulatory requirements to support a safe, secure, and efficient global aerospace system.

T-105 King County should develop a long-range financial component that generally evaluates and describes funding sources and strategies to carry out the transportation element. An annual six-year financial plan should be prepared that considers transportation priorities and is used in developing the Capital Improvement Program.

B. Public Transportation

King County Metro Transit provides bus and van service, ridesharing, paratransit, employer programs and other custom services in cities and unincorporated areas. One of King County's missions is to increase transit ridership by providing the best possible public transportation service, thereby improving regional mobility and the quality of life in King County. To achieve this mission, King County works with other local governments and communities, including Sound Transit, to provide an integrated network of public transportation services.

A major redesign of the King County Metro Transit system was successfully implemented between 1996 and 1999. As a result, Metro Transit now offers more connections between employment centers and suburban activity centers. New partnerships with employers have also led to greater use of transit, carpools and vanpools to ease congestion during commute hours.

The Six-Year Transit Development Plan, 2002-2007, guides Metro Transit operations and capital investments. The plan focuses on the development of public transit service and facilities consistent with land use goals of this comprehensive plan, the Growth Management Act and the King County Countywide Planning Policies. Important issues for the Six-Year Transit Development Plan include: the coordination of transit and roadway improvements along arterials that cross more than one jurisdiction to improve traffic flow throughout the county; the coordination of regional transit services in the three-county area served by Sound Transit and its partner transit systems; and the improvement of intermodal connections.

1. Regional Coordination

Bus, rail, and ferry transit services cross county boundaries, providing the critical transportation links on which our regional economy depends. In addition, all of our transit services depend on convenient connections to our roadway, highway, and nonmotorized systems.

As the region continues to grow, transit routes and schedules must be coordinated between agencies and modes so transit will be a viable and convenient option for our citizens and visitors. It is also imperative that King County seek input from a broad spectrum of county residents to ensure that services meet citizen needs.

T-106 King County should work collaboratively with governments and communities to implement a locally based, regionally linked network of public transportation services and facilities addressing regional, inter-community, and local service needs. King County should actively develop, implement,

and promote nonconventional public transportation options as a part of that system.

T-107 Functional transportation plans should be coordinated with other related transportation plans and programs of other jurisdictions and may include coordinated funding arrangements to maximize the effectiveness of available resources.

T-108 King County should work with the Washington State Department of Transportation and Kitsap County to ensure that service and capital plans for ferries are consistent with transit service plans and goals. King County should encourage additional passenger-only ferry services to enhance the county's multimodal transportation network for both commute and recreational trips.

2. Transit Infrastructure

King County's transit infrastructure and service investments are developed to meet regional, inter-community, and local travel needs throughout the county. The policy framework used to make these investments must balance comprehensive plan requirements, regional cooperation, funding constraints, and community needs.

T-109 In areas where transit services and ridership demand warrant, the county should invest in transit supportive facilities consistent with the capital and service strategies in the Six-Year Transit Development Plan.

3. Linking Transit and Land Use

To support transit ridership throughout the county, King County encourages land use policies that link denser development with transit service. It costs more to provide transit service in low-density, single-use communities. In denser, mixed-use communities like downtown Seattle, Belltown, downtown Bellevue and Renton, transit routes have high ridership and recover a high percentage of their operating costs, allowing for more frequent service. Transit-oriented development (TOD) and transit centers in transit corridors can provide similar benefits.

T-110 King County and local cities should adopt transit supportive road design standards, site access guidelines and land use regulations to promote transit use, high-density development, mixed uses and reduced parking in the Urban Growth Area. Site design should stress connectivity with adjacent neighborhoods and other land uses via transit, pedestrian and other nonmotorized facilities.

T-111 Transit centers and park-and-ride lots should include safe and convenient access for buses, high-occupancy vehicles, pedestrians and bicycles to minimize conflicts with other traffic. Mixed land uses should be encouraged at transit centers and park-and-ride lots to meet passenger and commuter needs and reduce vehicle trips. Park-and-ride facilities should be designed with consideration of the most efficient use of land.

T-112 King County supports transit-oriented development in transit corridors. King County shall encourage public/private partnerships to propose opportunities for joint transit-oriented development. Such developments should provide priority access for transit, pedestrians, bicyclists, car and van pools and other alternatives to single-occupant vehicles.

C. Regional and Freight Mobility

King County's transportation system relies heavily on freeways and arterials to move people and goods. As federal and state highways become more congested, efficient operation of the regional arterials has become more important. The management of this arterial system is now a central part of King County's efforts to sustain the region's livability and economic health. King County uses advanced information processing, communications, sensing, and control technologies to facilitate management of the arterial system.

Freight mobility is critical to King County's economy and western Washington's role as a major national and international trading region. King County should support efforts to plan and create a fast, reliable freight transportation system in the region. To maintain the region's competitive edge, our transportation infrastructure must provide for the efficient movement of goods and freight to and from our port and industrial areas balanced with the needs of general purpose and high occupancy vehicle traffic.

The freeway and arterial system that is most crucial to the movement of people and goods is included in the Metropolitan Transportation System (MTS) and Regional Arterial Network (RAN). The MTS is the system for the four-county region and is documented in PSRC's Destination 2030. RAN is an integrated system of roadways that are critical for the movement of people and goods in King County. The RAN approach encompasses growth management and capital investment strategies for improved mobility between urban centers. Since many RAN corridors pass through multiple jurisdictions, RAN stresses a regional, multimodal approach to coordinate improvements such as transit enhancements, additional capacity, traffic signals timed for maximum mobility, and high-occupancy-vehicle lanes for buses and carpools. Together the MTS and RAN comprise a very important, high capacity system for moving people and goods.

- T-113 King County shall be a regional proponent for freight planning and mobility projects and actions that result in a reliable and efficient freight transportation system. The county should identify opportunities to create financial partnerships to achieve these goals.**
- T-114 King County should identify and develop major transportation projects, including traffic operations and safety related projects, which improve freight mobility. This work shall be coordinated with local jurisdictions, other counties or regional agencies, the state, ports, and the private sector.**

D. Transportation Demand Management

To sustain and enhance regional mobility, King County should be a leader in implementing programs and land use measures that encourage people and businesses to reduce single occupant vehicle trips. Transportation Demand Management (TDM) covers a broad range of efforts to reduce single-occupant vehicle travel including telecommuting, congestion pricing, parking management, nonmotorized travel, site design standards, public information, ridesharing, public transportation, joint use of parking facilities, and park and ride and other intermodal transfer facilities. Transportation demand management contributes to successful implementation of new private and public development, concurrency, the regional arterial network, and other transit and road investments such as High Occupancy Toll (HOT) lanes, High Occupancy Vehicle (HOV) lanes, and Intelligent Traffic Systems (ITS).

- T-115 Transportation Demand Management (TDM) strategies should be used to promote travel efficiency and energy conservation and reduce the adverse environmental impacts of the transportation system. These strategies should include commute trip reduction, demand management and system management. TDM measures may include telecommuting, congestion pricing, parking management, nonmotorized travel, site design standards,**

public information, ridesharing, public transportation, joint use of parking facilities, and park and ride and other intermodal transfer facilities.

- T-116** **Transportation demand and system management strategies beyond those adopted as county regulation may be considered as one of a menu of measures to mitigate for traffic impacts of proposed development. Transportation demand and system management strategies, as well as other mitigation requirements may be imposed on new development as mandatory mitigation measures as necessary to meet the requirements for mitigation of impacts pursuant to the State Environmental Policy Act and the State Subdivision Act.**
- T-117** **Management of employee parking, such as the provision of preferred parking for high-occupancy vehicles and bicycle parking, should be used to support alternatives to commuting by single-occupant vehicles. Employers should consider the accessibility to adequate public transportation and high-occupancy vehicle facilities and services when developing site and parking plans.**
- T-118** **King County should participate financially in efforts to implement Transportation Demand Management strategies, including policies developed through regional consensus and adopted by the county. To this end, the county shall identify funds to implement transportation demand management strategies, public education/information, research and planning.**
- T-119** **King County should work with the Washington State Department of Transportation, Puget Sound Regional Council, and cities to develop and implement a regional policy on appropriate applications of transportation pricing strategies that reflect the higher cost of peak hour automobile usage.**
- T-120** **King County should work with the cities and other affected agencies to develop a regional parking strategy. This strategy should be consistent with regional and local transportation plans. King County should encourage shared parking facilities in areas where high-density, mixed-use development is planned and where walking is convenient for short trips. This strategy should include establishing minimum and maximum parking ratios.**

II. Linking Transportation Infrastructure and Services with Growth

A. Land Use

The transportation element is based on adopted targets for household and employment growth to the year 2022. These growth targets have been developed with consensus of the cities and are based on a countywide growth strategy that encourages growth in the urban areas where public facilities exist or can be provided efficiently. The new demands for travel created by such growth could be accommodated consistent with level-of-service standards, revenue forecasts and the overall King County land use development strategy and vision.

The growth targets are the basis of the transportation element and consistent with land capacity and density estimates used to calculate travel demand in the county. Travel demand was used to project the needs for transportation system improvements. The population targets for each area should be considered as minimum growth amounts that may be exceeded under unexpected scenarios of growth and development. The expected growth in housing units includes development proposals that are already in the permitting process and are termed pipeline development.

King County's transportation system should improve the mobility of residents providing greater access to housing, jobs, goods and services, shopping and recreation, all of which are characteristic of a high quality of life. The transportation component of this plan establishes a vital link between land use and the transportation facilities and services needed to support growth. The land use vision established in this plan has been used to develop the transportation policies, needs, financing, and strategies.

- T-201 The transportation system should provide mobility choices for county residents, visitors and businesses in support of Destination 2030, the regional transportation strategy; Vision 2020, the region's urban growth strategy; and the county's land use and development vision, goals and policies.**
- T-202 Travel modes should be interconnected to form an integrated, coordinated and balanced multimodal transportation system that serves the travel needs of the county both effectively and efficiently.**
- T-203 In addition to encouraging transit, and nonmotorized mobility choices including pedestrian and bicycle travel, the transportation system should address the needs of persons with disabilities. King County should evaluate and implement, when appropriate, innovative ways to address these needs in the design and operation of transportation infrastructure, facilities, and services.**
- T-204 The transportation system should include:**
- a. Freeways, arterial streets and local/neighborhood streets;**
 - b. Local and express bus transit and paratransit services, including Americans with Disabilities Act (ADA) service programs;**
 - c. High-capacity transit;**
 - d. High-occupancy-vehicle lanes and ridesharing facilities;**
 - e. Demand and system management programs;**
 - f. Facilities and programs for pedestrians, bicycles and equestrians;**

- g. Facilities to accommodate freight and goods delivery, including railroads, intermodal yards and distribution centers;
- h. Airports; and
- i. Marine transportation facilities and navigable waterways.

- T-205** The transportation system in the Urban Growth Area should be consistent with urban development policies and growth targets. System improvements should implement the Urban Land Use Chapter and be prioritized according to the capital and services strategies in the Six-Year Transit Development Plan and the goals, strategies, and actions in the Roads Strategic Plan and should be reflected in the Transportation Needs Report.
- T-206** The transportation system in the Rural Area and Natural Resource Lands should be consistent with their rural/resource character. Projects will be prioritized to address safety, operations, and capacity improvements that correct existing deficiencies or serve development that is already in the permitting process. All projects should emphasize safety, maintenance, and environmental quality.
- T-207** King County shall not construct and shall oppose the construction by other agencies of any new arterials or freeways or any additional arterial or freeway capacity in the Rural Area or Natural Resource Lands except for segments of certain arterials that pass through rural lands to serve the needs of urban areas. Any capacity increases to these urban connector arterials shall be designed to serve mobility and safety needs of the urban population while discouraging development in the surrounding Rural Area or Natural Resource lands.
- T-208** King County recognizes the impact to rural area mobility caused by urban connector arterials that traverse the rural area, and should work with state and federal agencies to mitigate these impacts when consistent with adopted transportation policy.
- T-208a** Any segment of a county roadway that forms the boundary between the urban growth area and the rural area shall be designed and constructed to urban roadway standards on both sides of such roadway segment.

B. Travel Forecasts

Travel forecasts provide one of the important steps in linking land use and transportation. The land use vision and growth targets for planning areas have been allocated to the county's transportation zone system. This provides the level of detail needed to develop travel forecasts to analyze future transportation system performance and to identify system improvement needs. Travel forecasts are based on the regionally adopted household and job growth targets for 2022 for the Urban and Rural Areas. The travel forecasting process is based on the Puget Sound Regional Council's modeling and forecasting techniques.

- T-209** The travel forecasts used to identify transportation improvements/needs shall be prepared consistent with state law and on a schedule that coincides with a major comprehensive plan update as outlined in King County Code.

C. Level of Service Standards

The Growth Management Act (GMA) requires level of service (LOS) standards for all arterials and transit routes to judge performance of the transportation system. The GMA also calls for

specific actions and requirements for bringing into compliance facilities or services that are not meeting the adopted LOS standard. King County's LOS standards comply with growth management policies of encouraging growth in the urban area while restricting growth in the rural area.

Level of service is a qualitative measure that describes traffic flow and is often represented by a system using the letters A through F. Level of service A is the highest quality of service and level of service F is the lowest. Level of service B is indicative of stable traffic flow. However, unlike level of service A, operating speed is beginning to be restricted by other traffic. At level of service E, operation is unstable, and speeds are reduced but will fluctuate widely from point to point. There is little independence of speed selection and maneuverability at level of service E. Level of service F is indicative of forced flow of traffic with extremely low speeds and long delays at intersections.

King County uses two sets of measures to determine whether a proposed development meets the LOS standards. They are an averaging of traffic congestion on roadways in the area and a measure of traffic congestion in an individual corridor. Area wide averaging is used to judge performance of the road system as measured against the adopted LOS standards. An individual corridor measure is used to judge performance of monitored corridors as measured against the adopted LOS standards.

T-210 The level of service (LOS) standard for the Urban Area and designated Rural Towns shall be E except as provided in Policy T-212. The LOS standard for the Rural Area shall be B except as provided in Policy T-212. These standards shall be used in concurrency testing.

T-211 In Potential Annexation Areas where King County has a preannexation agreement with the annexing city, the county will apply the annexing city's adopted level of service (LOS) standard within that Potential Annexation Area.

T-212 The LOS standard for certain minor residential and minor commercial developments, along with certain public and educational facilities, shall be LOS F. This standard shall be used in concurrency testing.

T-213 Level of service guidelines for allocating transit service should be developed to be consistent with the Six-Year Transit Development Plan's policy objectives. The land use criteria that are used to determine where future transit service is allocated are established in the Six-Year Transit Development Plan's service strategies. These Service Strategies provide the framework for identifying the level of service that each community can plan for as the Six-Year Transit Development Plan is implemented.

D. Concurrency

The Growth Management Act (GMA) requires local jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the level of service (LOS) on identified county arterials or certain state roads to decline below the adopted LOS standards. King County's Transportation Concurrency Management (TCM) program was developed to address the GMA's concurrency requirement. The TCM program requires that transportation facilities must be available to carry the traffic of a proposed development at county LOS standards, or else the proposed development cannot be approved. The requirements of King County's TCM program do not apply to transportation facilities designated by the Washington State Department of Transportation (WSDOT) as "highways of statewide significance."

- T-214** King County’s transportation concurrency test shall be a two-part test, involving area-wide averaging of roadway congestion and measuring of congestion in specific roadway corridors.
- T-215** A Certificate of Transportation Concurrency confirms that adopted level of service (LOS) standards are met by a proposed nonresidential development or a residential concurrency zone. A certificate of transportation concurrency will be issued only if a proposed development or residential concurrency zone passes both parts of the two-part transportation concurrency test.
- T-216** To ensure that adopted LOS standards are met, transportation improvements needed to serve new development must be currently in place, or construction for needed improvements must be funded in the adopted Six-Year Capital Improvement Program.

E. Mode Split

“Mode split” means the share of total vehicle traffic by mode – bus, nonmotorized vehicle, carpool, single occupant vehicle, etc. - during a particular time period. Mode split varies by time of day, weekdays vs. weekend, and location. A higher mode split for non-single occupant vehicles, usually during weekday peak periods, means fewer vehicles are needed to carry a given number of people. Mode split is used as a measure of the efficiency of the transportation system.

Countywide Planning Policy T-10 calls for local jurisdictions to develop mode split goals to established employment centers. Unincorporated King County does not have any established employment centers although cities within King County served by Metro Transit do. As part of the Six-Year Transit Development Plan development, King County coordinates the establishment of mode split goals for cities within the county.

The Metropolitan Transportation Plan provides policy guidance for determining mode split goals. This chapter is based on the mode split policy guidance provided by that plan.

- T-217** The county should pursue mode split goals through the implementation of policies that support transportation demand management, transit service improvements, and expansion of high-occupancy vehicle programs. The county should recognize and support efforts locally, regionally, and statewide to advance Transportation Demand Management technologies.

III. Transportation System Planning and Design

A. Arterials and Streets

King County designs, builds, operates and maintains roads, bridges and pathways in unincorporated areas of King County. The goal is to make the county's transportation system safe and efficient for all uses and modes of travel. King County's arterial system represents a broad range of mobility options. In the past, the arterial system has been characterized as the system for moving cars and other vehicles. The arterial system should be viewed as a resource for moving people and goods by many modes of transportation, including autos, carpools, buses, bicycles, pedestrians, and trucks.

- T-301** **The most cost-effective improvement should be considered first to solve existing and future deficiencies before higher-cost, capital-intensive projects are considered. Efficiency improvements supporting high-occupancy-vehicles (HOV) and transit operations on existing roads should be a higher priority than general capacity improvements enhancing single-occupant-vehicle (SOV) travel.**
- T-302** **Transportation improvements should be designed, built, and operated to minimize air, water and noise pollution and the disruption of natural surface water drainage in compliance with provisions and requirements of applicable federal, state and local environmental regulations. Natural and historic resource protection should also be considered. Particular care should be taken to minimize impacts where the location of such facilities could increase the pressure for development in sensitive areas or rural or resource lands.**
- T-303** **Needed rights-of-way, strategies to reduce demand and off-site improvements should be identified and required as conditions of development approval to the extent that such conditions are directly related to impact mitigation and will benefit the development.**
- T-304** **King County's road design and construction standards shall promote safe, cost-effective roads that encourage multimodal use, reflect the different needs and service levels for the Urban Growth Area and Rural Area, responding to the different needs for areawide mobility and access to abutting properties.**
- T-305** **Roadway safety improvements increase the safety of the traveling public by reducing the number and severity of accidents, providing refuge for pedestrians and bicyclists, providing positive traffic control, minimizing driver decisions, reducing hazardous roadway conditions, and reducing unexpected situations. Improvements of this type include, but are not limited to, pathways, traffic signals, turn and merge lanes, provisions for sight lines, removal of roadside obstacles, and improvements to lessen the likelihood and impacts of localized flooding.**
- T-306** **Appropriate neighborhood traffic control measures, land use, zoning, design and road standards and development conditions should be used to improve safety, transit access and nonmotorized travel in residential neighborhoods.**

- T-307** King County should encourage the development of highly connective, grid-based arterial and nonarterial road networks in new developments and areas of in-fill development. To this end, the county should:
- a. Make specific determinative findings to establish nonarterial grid system routes needed for public and emergency access in in-fill developments at the time of land-use permit review.
 - b. Encourage new commercial, multifamily, and single-family residential developments to develop highly connective street networks to promote better accessibility by all modes. The use of cul-de-sacs should be discouraged, but where they are used, they should include pedestrian pathways to connect with nearby streets.
- T-308** Development proposals should extend the public road system through dedication when the extension is in the public interest and is reasonably necessary as a result of the impacts of the development. The impacts that may warrant such an extension include, but are not limited to, impacts on neighborhood circulation, increases in the use of arterials for local vehicular trips, the reductions in traffic safety through uncoordinated and/or inadequately spaced street access to the arterials, and restrictions on the availability of alternative emergency access routes.
- T-309** The county should limit the placement of facilities or physical barriers and improvements, such as buildings, utilities, and surface water management facilities within specific areas of a development in order to allow for the future construction of roads to facilitate the establishment of a safe and efficient traffic circulation network, or to retain the availability of access to an adjacent property.
- T-310** As a condition of the approval of new development, the county should require the improvement of existing offsite roadways and undeveloped road rights-of-way, and/or other strategies to reduce demand on roads when the improvement or strategy is reasonably necessary as a result of the impacts of the development. The impacts that may warrant such improvements include, but are not limited to, those that create safety concerns, raise road operational issues or increase the number of residences served by a single access route.
- T-311** Arterial Functional Classification should be implemented through the King County Road Design and Construction Standards. The comprehensive plan's Urban Growth Area boundary should provide the distinction between urban and rural arterials.

B. Public Transportation Strategies

King County's transit infrastructure and service investments are consistent with the capital and services strategies in the Six-Year Transit Development Plan and balance policy requirements, regional cooperation, funding constraints, and community needs.

- T-312** King County should plan, design, and implement a system of services and facilities that supports integration of regional and local services and that facilitates access to the system for pedestrian, bicyclists, transit collection/distribution services, and persons with disabilities, thereby providing a viable and interconnected network that is an alternative to auto usage.

- T-313** King County should support local and regional growth management plans and policies. King County should work with other jurisdictions to focus new and existing services and facilities to support targeted land use concentrations identified in local comprehensive and regional plans and within the Urban Growth Area of King County.
- T-314** King County should adopt transit supportive policies assigning highest priority to serving urban centers and manufacturing centers with transit service, including transit priorities on arterial streets jointly designated for transit priority by the county, cities, and the Washington State Department of Transportation.
- T-315** King County should use a community-based planning process when working with cities and unincorporated area communities to develop effective transit services including consideration of local circulation needs, feeder bus service, fixed and nonfixed routes, and various coach sizes appropriate to the neighborhood scale and market.
- T-316** High-Capacity Transit facilities and services which are consistent with, and supportive of, the comprehensive plan should be supported and implemented.

C. Nonmotorized Transportation

The nonmotorized program is an essential element of King County's multimodal transportation system. Nonmotorized transportation users include pedestrians, bicyclists and (in certain areas of the county) equestrians. While each group has different needs, they all rely on King County's road system for safe access. Trail networks, sidewalks, bike lanes, and other nonmotorized improvements encourage walking and cycling. They also improve access to transit stops, resulting in increased transit ridership and improving the quality of life in their communities.

- T-317** Efforts should be made to improve nonmotorized transportation countywide to increase safety, public health, mobility and convenience for nonmotorized modes of travel. These efforts should emphasize the ability of nonmotorized modes to extend the efficiency of regional transit, promote personal mobility in a range of land use areas and expand the transportation alternatives available to the public to form a complete or connected network.
- T-318** King County should evaluate and implement, where appropriate, nonmotorized transportation when general transportation improvements are made, including road construction, reconstruction, subdivision development and development of new transit systems.
- T-319** New land use plans, subdivisions, and urban planned development proposals should include enhancements to nonmotorized mobility and access to surrounding areas.
- T-320** King County design standards should allow flexibility in selecting, and the authority to require design features that benefit nonmotorized safety and accessibility.
- T-321** Unused rights-of-way should be considered for development as pedestrian, bicycle, equestrian or accessible connectors.

T-322 King County should seek to improve pedestrian safety both within residential areas and at arterials near pedestrian activity centers such as schools, retail centers, concentrations of housing, transit facilities and trails. Within residential areas, King County shall offer a comprehensive package of neighborhood traffic services to unincorporated area residents and, on a contract basis, to local jurisdictions. Pedestrian safety improvements should include adequate signage, markings and signalization where warranted. To foster safe walking conditions for students, King County should continue the School Pathways Program.

D. Air Quality

The Washington State Clean Air Conformity Act establishes guidelines and directives for implementing the federal Clean Air Act Amendments. The Washington Act specifically links air quality conformity to growth management planning efforts at the local and regional level.

The Washington Administrative Code states that local transportation plans shall include, “. . . policies and provisions that promote the reduction of criteria pollutants that exceed national ambient air quality standards.” (WAC 173-420-080)

Global climate change continues to be a focus of local concern. It is clear that greenhouse gas emissions from transportation sources are a significant contributing factor to global climate change. Reducing greenhouse gas emissions from transportation sources is an important goal for King County.

The following policies have been developed to be consistent with and support the policies in Chapter 4, Section 1B of this Plan, "Air Quality and Forest/Tree Cover."

T-323 The transportation system should conform to the federal and state Clean Air Acts by maintaining its conformity with the Metropolitan Transportation Plan of the Puget Sound Regional Council and by following the requirements of Chapter 173-420 of the Washington Administrative Code.

T-324 King County should work with the Puget Sound Regional Council, the State Department of Transportation, transit agencies and other jurisdictions in the development of Transportation Demand Management measures and other transportation and air quality programs where warranted. This work would address the requirements of the federal Clean Air Act as amended, the air quality provisions of the federal Transportation Equity Act for the 21st Century and the Washington State Clean Air Conformity Act and should include measures to address greenhouse gas emissions.

T-325 King County should consider the following Transportation Demand Management strategies to reduce criteria pollutants and greenhouse gas emissions including, but not limited to: trip reduction strategies, transportation pricing controls, employer transportation management programs, work schedule changes, ridesharing programs, dedicated facilities for high-occupancy-vehicles, traffic flow improvements, parking management, bicycle and pedestrian programs, mixed use development, and car sharing programs.

IV. Finance

King County's transportation vision depends on adequate funding for transportation needs. The Growth Management Act requires that the county include an analysis of funding capabilities, a multiyear financing plan based on needs and a discussion of how to raise additional funds or reassess growth and level-of-service standards to resolve a potential funding shortfall for at least a ten-year period. This section provides such information and discusses the extent to which the transportation facilities can be funded within a reasonable revenue forecast and expenditure schedule.

A. Funding Capabilities: Road-Related Sources

Financial viability to support transportation capital needs is tested at two levels. Initially, a 20-year plan is identified to meet transportation improvements needed to support the plan vision. The 20-year plan provides for an assessment of revenues from currently available resources and identifies reasonable options for securing additional revenues over the life of the plan. Secondly, the annual capital improvement program preparation provides a six-year window review that examines the specifics of how to implement the financing plan.

King County receives road revenues from a variety of sources, including unincorporated King County property tax, federal and state grants, state gas tax, local taxes and road mitigation payments from private developments. A full description of transportation financing can be found in the Roads Strategic Plan.

B. Revenue Shortfall

Comparing the plan's future transportation needs with projections of revenue from current sources shows the total revenue shortfall over the 20-year planning horizon. Different strategies or actions can be identified to address this shortfall. As an example, priority for funding may be given to only projects directly related to achieving the level-of-service standard, to projects that are related to providing capacity or to noncapacity projects.

The intent of this plan is not to demonstrate a dollar by dollar accounting of transportation needs and revenues. Rather, it is to demonstrate the reasonableness of the plan and its implementation and to show that the goals of growth management can be met. Other sections of this chapter describe how the transportation element addresses growth management goals for transportation and adequate facilities/services. The reasonableness of the plan's transportation element focuses on the shortfall and the potential for funding future needs.

Strategies to address the shortfall can range from reconsideration of the transportation needs to new revenue options to changes in levels-of-service to revisions of the land use policies. Decisions on what to do should be made based on monitoring implementation of this plan. The following actions can be used to balance the funding shortfall of the plan:

1. Reduce transportation funding needs:
 - Reevaluate the need for projects;
 - Promote transportation demand management actions to reduce vehicle trips; and
 - Rescope project needs and downsize where possible.
2. Develop new revenue options:
 - Increase revenues by using existing sources;
 - Participate in regional funding strategy development;

- Seek new or expanded revenue sources; and
 - Public/private participation.
3. Change level-of-service:
 - Adjust the level-of-service standard to allow more growth;
 - Adjust the level-of-service standard to allow more growth in selected areas only; and
 - Adjust the level-of-service standard to discourage more growth.
 4. Change land use:
 - Revise the land use plan to encourage/discourage growth in selective areas;
 - Adjust the target forecast; and
 - Delay development until facilities are adequate.

T-401 Financial resources available for transportation improvements should support a program of capital facilities needed for a multimodal transportation system. The Transportation Priority Process should give priority to critical capacity projects needed to achieve level-of-service standards in the Urban Area.

T-402 The essential maintenance, preservation, safety and operations costs of the transportation system should be funded prior to other costs for capital improvements so that existing investment is protected and current mobility is not degraded.

T-403 During annual review of the Comprehensive Plan, King County should consider and address any potential shortfalls that may occur between expected revenues and needed improvement costs. Such resolution could include a reassessment of land use, growth targets, level-of-service standards and revenue availability.

C. Urban Unincorporated Area Road Financing

Each area of urban unincorporated King County is unique in terms of its character, the issues that its residents care most about, and its specific road-related needs. By targeting road capital funds toward each area's most pressing needs, the county can provide the greatest overall benefit for each public dollar spent. This prioritization process is particularly important since current funding is inadequate to meet all needs and since road infrastructure is often an issue in annexation discussions.

Road improvements essentially fall into three areas:

1. **Operational and safety improvements** such as signals, turn lanes, lighting, and crosswalks improve system efficiency and safety. These improvements are needed throughout the urban unincorporated area.
2. **Urban retrofit improvements** reconstruct existing street systems to current urban road design standards (curb, gutter and sidewalk, enclosed drainage, and adequate surface water detention facilities) without adding more than a modest amount of additional capacity. Urban retrofit improvements are especially needed in the West Hill and North Highline communities, where most neighborhoods were developed before current urban road design standards were established.
3. **Capacity improvements** build new roads or add two or more lanes to existing roads. These projects generally are needed in areas with significant congestion or that have greater potential for new development.

Continuation of funding for transportation projects that alleviate existing deficiencies is a high priority since all areas have existing capacity, operational, and safety deficiencies at one level or another.

- T-404** **King County’s urban road investments shall address the unique needs of each unincorporated area and shall target the road deficiencies in each area that act as barriers to infill, redevelopment, annexation, and the achievement of growth targets.**

- T-405** **Projects addressing existing capacity, operational, and safety deficiencies shall have a high priority throughout the urban unincorporated area.**

- T-406** **When funding transportation projects in areas where annexations or incorporations are expected, the Department of Transportation should seek interlocal agreements with the affected cities and other service providers to provide opportunities for joint grant applications and cooperative funding of improvements.**

V. Coordination

This chapter has been prepared in coordination with adjacent cities and counties to assess potential impacts on their jurisdictions. Citizen participation and coordination was also used to assist in the planning process and to reconcile any conflicts. The following activities have supported the coordination process:

- Review by the transportation subarea boards;
- Review by the Unincorporated Area Councils;
- Development of the Regional Arterial Network;
- The update of the Six-Year Transit Development Plan;
- The statewide and countywide grant application process;
- The Capital Improvement Program (CIP) coordination process; and
- Participation in the Puget Sound Regional Council, enabling King County to coordinate its transportation planning activities with other local and regional agencies' for the four central Puget Sound counties.

T-501 All elements of the transportation system should be planned and operated in coordination with the cities in and abutting King County, the adjoining counties, the Washington State Department of Transportation, the Port of Seattle, the transit agencies that provide service in and to the County, and the Puget Sound Regional Council. Prioritization of countywide facility improvements should be coordinated among jurisdictions to implement the countywide land use vision.

T-502 King County should work with the Puget Sound Regional Council and its members to ensure that any regional projected aviation capacity problems, and the air transportation needs of the region's residents and economy are addressed in a timely manner.

T-503 King County should support the completion of the designated freeway HOV lane and limited access highway system. Access to this HOV lane system should also be supported.

VI. Implementation and Monitoring

The balance between land use, transportation services and funding is critical. The Transportation Chapter will be implemented through the funding of planned transportation improvements and strategies from available resources and by the management and monitoring of the system to ensure there are adequate facilities to support growth. Roads needs will be prioritized through updates to the Roads Strategic Plan and the Transportation Needs Report. High-priority projects will be programmed for funding in the Capital Improvement Program. Transit projects will be implemented as the needed revenues become available and in coordination with other related improvements and service development needs as described in transit planning and budget documents.

The annual Capital Improvement Program and Financial Plan will be consistent with the comprehensive plan and will consider the current performance of the transportation system, concurrency needs of planned developments, priority projects, phased implementation of improvements and other related factors. Revenues from all sources including Mitigation Payment System fees will be programmed to appropriate projects.

Concurrency will be maintained through the development and use of the Transportation Concurrency Management Program to help manage development and achievement of the level-of-service standards adopted in the comprehensive plan.

System performance will be monitored through periodic traffic counts, speed and delay studies, travel time observations for autos and buses and by computer simulation of travel network characteristics. Information on system performance will be shared with other transportation agencies in the county and with the Washington State Department of Transportation. If performance deteriorates below adopted standards, then the comprehensive plan will be amended to include improvements needed to restore level-of-service standards, or a reassessment of standards, funding and growth will be considered.

- T-601 King County should maintain an inventory of its transportation facilities and services to support its management of the system and to monitor system performance.**

- T-602 King County shall periodically evaluate transportation components of the comprehensive plan and shall recommend actions that ensure implementation of the comprehensive plan vision.**

- T-603 King County shall monitor and establish benchmarks to assess regional transportation system performance and implementation of the comprehensive plan. To accomplish this task King County should develop travel forecasts and maintain a Geographic Information System and databases. The data shall include existing and forecast regional population, employment, development and transportation information. The county, in cooperation with other jurisdictions, should produce reports on traffic and transportation activities. Such reports should highlight performance characteristics and identify the deficiencies, problems of safety and operations and areas not in compliance with level-of-service standards.**

VII. Transportation Element: Requirements and Components

Specific requirements for the transportation element are found at RCW 36.70A.070(6)(a). The following sections describe how the transportation element of the King County Comprehensive Plan meets those requirements.

A. Land Use Assumptions

The transportation element uses the same growth targets as the entire comprehensive plan. These targets are provided in Chapter Two of the Plan.

These regionally adopted growth targets have been used in developing the travel demand forecasts for the comprehensive plan and in the development of the Transportation Needs Report. The Six-Year Roads Capital Improvement Program is derived from the Transportation Needs Report. This links the transportation plan with growth targets for households and employment.

B. Estimated Traffic Impacts to State-Owned Facilities

Both the King County Comprehensive Plan and the analysis conducted for the Transportation Concurrency Management program include state facilities. Both use standard transportation analysis techniques.

C. An Inventory of Transportation Facilities and Services

The inventory is provided in Appendix C. As required by growth management legislation, it includes air, water, and ground transportation facilities and services as well as transit alignments and general aviation airport facilities. It includes both county-owned and state-owned transportation facilities within the county's boundaries.

D. Level of Service Standards Including Standards for State Routes

King County has adopted urban and rural area level of service standards for its Transportation Concurrency Management Program. The standards consist of Transportation Adequacy Measure (TAM) and Travel Time measures to determine if proposed nonresidential developments and concurrency zones for proposed residential developments meet these standards. The TAM is used to judge the performance of the county's road system. Travel time is used to judge the performance of monitored corridors and critical road segments within the monitored corridors.

State routes, except for highways of statewide significance and state routes with HOV lanes, are included in the TAM calculation. Portions of six state routes that are regionally significant state highways are included in the county's list of monitored corridors.

E. Actions to Bring Facilities into Compliance

King County's traffic impact analyses and other planning processes have identified needed projects. These projects are listed in the Transportation Needs Report that is adopted by reference along with the KCCP. The Roads Strategic Plan and the six-year Capital Improvement Program identify specific projects, strategies, and actions to address transportation needs.

F. Traffic Forecasts for at Least Ten Years

Travel forecasts were developed for the year 2022. See Section II and Appendix C for more information on forecasts.

G. State and Local Transportation Needs to Meet Current and Future Demands

King County will be in compliance with this new GMA requirement by the December 31, 2000, deadline. The Transportation Needs Report six-year roads and transit development plans and capital improvement programs are the elements of the King County Comprehensive Plan that address the GMA requirement of identifying state and local system needs to meet current and future demand.

H. Analysis of Funding Capability

A financial analysis is included in the Transportation Needs Report which is adopted as an element of the plan. More information on the financial analysis is provided in Section IV of this chapter of the KCCP.

I. Intergovernmental Coordination

See Section V for a discussion of coordination.

J. Concurrency

The concurrency program is described in Section II E of this plan.

K. Consistency of Plans

The comprehensive plan is consistent with the Metropolitan Transportation Plan, the regional transportation plan for the four-county region. The Puget Sound Regional Council reviews the plan for consistency and has previously certified the King County Comprehensive Plan and also its amendments. In addition the comprehensive plan policies have been reviewed by other jurisdictions within King County.

The comprehensive plan provides policy direction for the development of the county's 6-year functional plans.