

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 growth into urbanized areas. In recent years, global warming has become an increasing concern for this region. Research has shown that the transportation sector is responsible for 50 percent of greenhouse gas emissions in the Puget Sound region. King County supports providing a transportation system that helps to reduce greenhouse gas emissions from this region. King County's transportation goals are to:

- Provide a safe and efficient transportation system that supports peoples' mobility needs with a variety of transportation choices;
- Connect all modes of transportation to form an integrated, balanced system;
- Strengthen the region's economy by moving people and goods efficiently;
- Encourage healthful transportation choices by increasing the availability and improving the comfort and attractiveness of taking transit, ridesharing, walking, and bicycling;
- Give individuals and families a range of affordable transportation options; and
- Reduce greenhouse gas emissions from transportation sources, and minimize other transportation-related adverse effects on the environment.

Balancing land use, transportation systems and services, and funding is critical to achieving the goals of this chapter. The transportation chapter is 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. Road needs will be prioritized through updates to the Roads Strategic Plan and the Transportation Needs Report (TNR). High-priority projects are programmed for funding in the Roads Capital Improvement Program (CIP). Transit projects are implemented as the needed revenues become available, in coordination with other related improvements and service development needs as described in transit planning and budget documents.

Specific system performance is 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 WSDOT. If performance deteriorates below adopted standards, the comprehensive plan will be amended to include improvements needed to restore LOS standards, or a reassessment of standards, funding and growth will be considered.

A. Consistency with Plans

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 (MTP), developed by the Puget Sound Regional Council (PSRC). The MTP is consistent with the region's urban growth strategy, also developed by the PSRC.

King County identifies improvements and strategies needed to carry out the land use vision and meet the LOS requirements for transportation. Road improvements are guided by the Roads Strategic Plan and prioritized in the TNR and Roads CIP. Public transportation projects are identified in the improvement program of the Transit Capital Budget and the Strategic Plan for Public Transportation, and the Comprehensive Plan for Public Transportation.

The CIP and Financial Plan must be consistent with the comprehensive plan and 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, are programmed to appropriate projects.

The framework and direction for the development of comprehensive plans are 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.

B. Requirements of the Transportation Element

Specific requirements for the transportation element are found at RCW 36.70A.070(6)(a). The transportation element of the King County Comprehensive Plan meets those requirements as follows:

- **Land Use Assumptions** – The transportation element is based on the same population and employment growth targets provided in Chapter Two of the Plan and in Technical Appendix C.
- **Estimated Traffic Impacts to State-Owned Facilities** – Both the KCCP and the analysis conducted for the Transportation Concurrency Management program include state facilities. Both use standard transportation analysis techniques.

- **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.
- **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.
- **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 Roads CIP identify specific projects, strategies, and actions to address transportation needs.
- **Traffic Forecasts for at Least Ten Years** – Travel forecasts were developed for the year 2022 and are included in Technical Appendix C.
- **State and Local Transportation Needs to Meet Current and Future Demands** – The TNR, Roads CIP and Strategic Plan for Public Transportation are the elements of the KCCP that address the GMA requirement of identifying state and local system needs to meet current and future demand. State and local transportation networks are included in the travel demand forecasts provided in Technical Appendix C.
- **Analysis of Funding Capability** – A financial analysis is included in the TNR, which is adopted as an element of the plan. More information on the financial analysis is provided in Section IV A.
- **Intergovernmental Coordination** – See Section V for a discussion of coordination.
- **Transportation Demand Management** – King County includes demand management strategies in its policies, codes and project implementation as well as providing support for others through its transit, rideshare, and market strategies. See Section III. D.
- **Nonmotorized Transportation** – King County’s pedestrian and bicycle component includes collaborative efforts to identify and designate planned improvements for pedestrian and bicycle

facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles. Section III. C.

- **Concurrency** – The concurrency program is described in Section II.D. of this plan.
- **Consistency of Plans**--The comprehensive plan is consistent with the MTP, the regional transportation plan for the four-county region. The PSRC reviews the plan for consistency and has previously certified the KCCP 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.

C. Components of the Transportation Element

The Transportation Element of this plan is comprised of the following:

1. Transportation chapter, which includes the narrative and policy language.
2. 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.
3. Transportation Needs Report, which contains a multi-year financial forecast and a multi-year list of transportation needs, and the roads CIP, both of which are adopted herein by reference.
4. Comprehensive Plan for Public Transportation, the Strategic Plan for Public Transportation, and the Transit Capital Improvement Program, which are adopted herein by reference.
5. Concurrency regulation, which implements the concurrency requirements and is codified at King County Code Title 14.

I. System and Services

King County plays a unique role in the regional transportation sector accommodating a variety of non-motorized, motorized and air transportation needs and providing services and facilities ranging from local to international. The county has responsibility for the unincorporated area local road network as well as portions of the countywide and regional arterial systems located in unincorporated King County. It provides transit facilities and services throughout the county, including within cities. There are three public use general aviation airports in unincorporated King County including King County International Airport (KCIA), which is owned, operated and maintained by the county. In addition, King County contracts with a number of cities to provide road-related transportation services.

The transportation system is comprised of the following elements:

- a. Highways, arterial streets and local/neighborhood streets;
- b. Bridges
- c. Local and express bus transit and paratransit services, including Americans with Disabilities Act (ADA) service programs;
- d. High-capacity transit;
- e. High-occupancy-vehicle lanes and ridesharing facilities;
- f. Facilities and programs for pedestrians, bicycles and equestrians;
- g. Facilities to accommodate freight and goods movement, including railroads, intermodal yards and distribution centers;
- h. Marine transportation facilities and navigable waterways;
- i. Airports;
- j. Transportation demand management programs, systems, facilities and technologies; and
- k. Facilities to maintain the transportation system elements.

A. 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.

The Strategic Plan for Public Transportation 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 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.

Metro Transit offers a network of two-way, all-day core connections between employment and activity centers. New partnerships with employers have also led to greater use of transit, carpools, and vanpools to ease congestion during commute hours. The Transit Now program passed by voters in 2006 will increase service on core connections, implement five “*RapidRide*” bus rapid transit lines, add service in developing areas, and enhance partnership programs by providing a service hour match for public/private partnership investments in service or improvements to transit speed and reliability.

Increasing the use of transit will also help King County combat global warming and support livable, healthy communities. Metro’s increasing use of green vehicles such as electric trolley and hybrid diesel-electric trolley and hybrid diesel-electric buses, and cleaner-burning fuels such as biodiesel and Ultra Low Sulfur diesel, add to the environmental advantage of combining many riders in a single vehicle. Metro’s wide range of transportation alternatives, including vanpools, carpools, and Access paratransit—and its support of choices such as shared cars, biking and walking—make transit a powerful tool to help reduce pollution and support active, healthy lifestyles.

1. Coordination

Bus, rail, and ferry transit services cross county boundaries providing the critical transportation links on which our regional economy depends. In addition, transit services depend on convenient connections to roads, highways, and nonmotorized systems. As the region grows, transit routes and schedules must be coordinated among agencies and modes so transit is a viable and convenient option for people traveling in King County. It is also imperative King County seek input from a broad spectrum of county residents and businesses to identify needs and provide services to meet those needs.

T-101 King County establishes policy for Metro Transit and for the unincorporated area road system and associated uses. General and long-range policy is established for the road system in the King County Comprehensive Plan and for transit in the Comprehensive Plan for Public Transportation. The Strategic Plan for Public

Transportation and the CIP should be consistent with these primary policy documents.

- T-102 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 innovative public transportation options as a part of that system.**
- T-103 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-104 King County should work with the Washington State Department of Transportation, Kitsap County, and other entities offering passenger ferry services, including the King County Ferry District, 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. 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-105 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 Strategic Plan for Public Transportation.**

3. Transit-Supportive Land Use

To support transit ridership throughout the county, King County has established 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, and downtown Bellevue and Renton, transit routes have higher ridership and recover a higher percentage of their operating costs than lower density areas, allowing for more frequent service. Transit-oriented development (TOD) and transit centers in transit corridors can provide similar benefits.

- T-106 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-107 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-108 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.**

B. Arterial and Street System

The transportation system in King County relies heavily on highways and arterials to move people and goods. As federal and state highways become more congested, efficient operation of the regional arterials, some of which are owned and operated by King County, 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.

The highway and arterial system that is most crucial to the movement of people and goods is included in the Metropolitan Transportation System (MTS). The MTS is the system for the four-county region and is documented in PSRC's MTP.

Freight mobility is critical to King County's economy and western Washington's role as a major national and international trading region. King County supports 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.

- T-109 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.**

- T-110 The King County Department of Transportation has primary responsibility for development and maintenance of transportation facilities in public rights-of-way. Other right-of-way users must coordinate with the department regarding schedules for projects, maintenance and other activities affecting the right-of-way.**

- T-111 To the extent practicable, future expansion or redevelopment of the county's road stormwater infrastructure should mimic the natural drainage system or preserve the ability to create such a system in the future.**

- T-112 King County shall be a regional proponent for freight planning and mobility projects and actions that result in a reliable, continuous, and efficient freight transportation system. The county should identify and support opportunities to create financial partnerships to achieve these goals.**

- T-113 King County should work with other jurisdictions, the public and the private sector to identify and develop major transportation projects, including traffic operations and safety-related projects that improve freight mobility on the arterial system.**

C. Air Transportation

King County International Airport (KCIA), also known as Boeing Field, is a regulated facility under Federal Aviation Regulation Part 139 of the Federal Aviation Administration (FAA) Code of Federal Regulation (CFR). King County plans, designs, and implements services, programs, and facilities for the KCIA in compliance with FAA regulatory requirements to support a safe, secure, and efficient international aerospace 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.

Additionally, state-regulated airports that must comply with FAA regulations are located in unincorporated King County. These include Banderra and Skykomish airports. King County has only land use regulatory authority for these facilities.

T-114 King County shall plan, design, and implement services, programs, and facilities for the King County International Airport in compliance with FAA regulatory requirements to support a safe, secure, and efficient global aerospace system.

In 2005, the FAA approved a Part 150 Noise and Land Use Compatibility Plan to reduce noise impacts in communities surrounding Boeing Field. This is a significant event and represents a positive step in making KCIA a “good neighbor” to affected residential areas. The Part 150 plan identifies many actions that are allowed to be taken by KCIA, pilots, tenants, the FAA and others to reduce noise impacts on residential areas.

T-115 Recognizing that certain noise reduction measures are contingent on ongoing and future FAA funding, King County shall implement those actions, under its control and identified in the Part 150 Noise and Land Use Compatibility Plan. King County shall encourage other entities to implement those measures under their control and also identified in the Part 150 Noise and Land Use Compatibility Plan.

II. Linking Transportation with Growth

A. Land Use

The projections used in the transportation element are based on the household and employment growth targets for the year 2022. Cities and the county agree to the growth targets based on a countywide growth strategy focusing growth into urban areas where public facilities exist or can be provided most efficiently. These are areas where it is anticipated growth can be accommodated consistent with level of service standards, revenue forecasts, and the land use vision for King County.

The transportation system should provide mobility choices for county residents, visitors and business in a manner consistent with the Metropolitan Transportation Plan and the region's urban growth strategy.

The transportation system in the Urban Growth Area is consistent with urban development policies and growth targets. System improvements support the Urban Land Use Chapter and are prioritized according to the capital and services strategies in the Strategic Plan for Public Transportation and in the TNR.

HealthScope is King County's initiative to encourage community design promoting healthful transportation choices. King County's transportation system supports this effort by providing greater access to housing, jobs, goods and services, shopping and recreation, all of which contribute to a high quality of life. Designing highly connected communities with fewer cul-de-sacs and more intersections supports nonmotorized travel and reduces vehicle miles of travel (VMT). Health benefits derive from greater levels of activity and from reduced air pollution.

T-201 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-202 In addition to encouraging transit and nonmotorized mobility choices, the transportation system shall address the needs of persons with disabilities pursuant to federal and state statutory requirements. The design and operation of transportation infrastructure, facilities and services should evaluate and address these needs.

- T-203** King County shall not construct and shall oppose the construction by other agencies of any new arterials or highway or any additional arterial or highway 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-204** Urban connectors should be designed and developed in a way that considers and accommodates adjacent, existing uses without promoting development that would be inconsistent with Rural Area and Resource Land uses outside of the Urban Growth Area.
- T-205** 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 demand forecasts are used to project transportation system needs. They provide one of the important links between land use and transportation. The regionally adopted growth targets for the year 2022 have been used to develop the travel demand forecasts for the KCCP and the TNR.

The travel forecasting process is based on the PSRC's modeling and forecasting techniques. The land use vision and growth targets have been incorporated into the county's transportation zone system. These projections provide the level of detail needed to analyze future transportation system performance and to identify system improvement needs.

C. Level of Service Standards

The Growth Management Act requires level of service standards for all arterials and transit routes to judge performance of the transportation system. The Growth Management Act also calls for specific actions and requirements for bringing into compliance facilities or services that are not meeting the adopted level of service standard. King County's level of service standards comply with growth management policies of encouraging growth in the urban area while restricting growth in the rural area.

Level of service (LOS) is a qualitative measure that describes traffic flow and is often represented by a system using the letters A through F. LOS A represents the least congested conditions and LOS F represents the most congested conditions. LOS B is indicative of stable traffic flow. However, unlike LOS A, operating speed is beginning to be restricted by other traffic. At LOS 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 LOS E. LOS F is indicative of forced flow of traffic with extremely low speeds and long delays at intersections.

King County recognizes a profound difference between the nature and character of the Rural Area as compared with the urban area and therefore sets LOS standards to allow less congestion in the Rural Area. In addition, King County recognizes areas, called Mobility Areas, where land use designations support a greater variety of transportation mode choices. The LOS standards for Mobility Areas are set to recognize these greater choices and support and encourage people to use forms of transportation other than cars consistent with the findings of HealthScape. The Rural Mobility Areas are the Rural Towns of Vashon, Snoqualmie Pass and Fall City.

In addition to the Mobility Areas certain large Rural Neighborhood Commercial Centers are recognized as having distinct mobility characteristics and will have a LOS standard consistent with their land use character. The large Rural Neighborhood Commercial Centers are: Cottage Lake, Maple Valley, Preston and Cumberland.

- T-206 The travel forecasts used to identify transportation improvements/needs shall be on a schedule that coincides with a major comprehensive plan update as outlined in King County Code.**
- T-207 The LOS standard for the Urban Area shall be E except as provided in T-209. The LOS standard for the Rural Area shall be B except as provided in T-209, T-210, and T-211. These standards shall be used in concurrency testing.**
- T-208 In Potential Annexation Areas where King County has a preannexation agreement with the annexing city, the county will apply the annexing city's adopted LOS standard within that Potential Annexation Area.**
- T-209 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-210 The LOS standard for designated Rural Mobility Areas shall be E.**
- T-211 The LOS standards for the Cottage Lake, Maple Valley, Preston and Cumberland Rural Neighborhood Commercial Centers shall be D.**
- T-212 LOS guidelines for allocating transit service should be developed to be consistent with the Comprehensive Plan for Public Transportation’s policies and objectives. The land use criteria that are used to determine where future transit service is allocated are established in the Strategic Plan for Public Transportation’s service strategies. These Service Strategies provide the framework for identifying the LOS that each community can plan for as the Strategic Plan for Public Transportation is implemented.**

D. Concurrency

The Growth Management Act requires local jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the LOS on identified county arterials or certain state roads to decline below the adopted LOS standards. King County’s Transportation Concurrency Management program was developed to address the Growth Management Act’s concurrency requirement. The Transportation Concurrency Management 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 Transportation Concurrency Management program may apply to transportation facilities designated by the Washington State Department of Transportation (WSDOT) as “highways of statewide significance.” The portions of certain highways of statewide significance that do not have limited access and function like county arterials may be included in the King County concurrency test.

The Transportation Concurrency Management program has been designed to meet the following goals:

- Fulfill the requirements of state growth management legislation;
- Be simple to understand, easy to implement and administer and transparent to those affected by its processes and regulations;
- Include elements of multimodalism;
- Encourage growth in urban areas where provision of transportation infrastructure and services is most efficient and economical;
- Efficiently integrate concurrency determination into the permit system process and database.

Transportation concurrency is a plan level system that does not require testing of individual developments. Instead, concurrency status is determined by broad geographic areas called travel sheds, which were drawn to reflect where travel patterns share common characteristics. Trips associated with development within a particular travel shed would use or be affected by arterials located within and bordering that travel shed. A development proposal (including both residential and nonresidential proposals) will be considered to meet the transportation concurrency standard if it is located in a travel shed that meets LOS standards as depicted on the concurrency map in effect at the time of development application. Development proposals must still meet all applicable zoning and land use regulations.

- T-213** **To ensure that adopted LOS standards are met, transportation improvements or strategies 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.**

- T-214** **For the purposes of concurrency, a travel shed is a geographic area within unincorporated King County where trips generated by development within the travel shed would likely use or be affected by traffic on arterials within the travel shed.**

- T-215** **The concurrency program shall include provision for mobility areas within travel sheds. Rural Mobility Areas shall be defined as unincorporated Rural Towns as designated in the King County Comprehensive Plan.**

- T-216** **The concurrency map shall divide unincorporated King County into travel sheds and shall show the areas that meet concurrency standards. Any proposed development in areas that are shown on the map to meet concurrency standards will be deemed concurrent.**

- T-217** **The concurrency test shall be based on the LOS on arterials in unincorporated King County using established LOS analysis methodology. The test may be applied to designated Highways of Statewide Significance.**

- T-218** **The concurrency test may include provision of factors for safety, pavement condition and availability of multiple modes of transportation.**

T-219 In the Rural Area, the concurrency test may include a provision that allows the purchase of Transferable Development Rights in order to satisfy transportation concurrency requirements.

E. Impact Mitigation

The State Environmental Policy Act (SEPA) establishes environmental review of project impacts on all elements of the environment including transportation. In addition, the county has a mitigation payment system whereby developments are charged proportionate shares for transportation projects and services needed as a result of growth.

T-220 Needed rights-of-way, strategies to manage transportation 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.

T-221 King County shall encourage the development of highly connected, 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 findings to establish a nonarterial grid system for public and emergency access in developments at the time of land-use permit review.
- b.** Require new commercial, multifamily, and residential subdivisions to develop highly connective street networks to promote better accessibility and minimize the use of cul-de-sacs.

T-222 Development proposals should extend the public road system through dedication when the extension is in the public interest. Conditions 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, reductions in traffic safety through uncoordinated and/or inadequately spaced street access to arterials, and restrictions on the availability of alternative emergency access routes.

T-223 As mitigation for the impacts of new development and as a condition of development approval, the county shall require the improvement of existing offsite roadways and undeveloped road rights-of-way, and/or other strategies to reduce demand on roads. Impacts that may warrant such mitigation 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-224 The county shall implement a system that establishes fees needed to mitigate the growth-related transportation impacts of new development. The fees will be used to pay a development's proportionate share of transportation capital projects needed to support growth including, but not limited to, road, transit, and nonmotorized facilities. Such fees are in addition to any requirements established for transportation services and facilities needed solely as a result of the development.

III. Transportation System Planning and Design

King County operates, maintains and improves transportation networks and systems that support many modes and users. King County recognizes that a transportation system that provides mobility choices is a better system. Such a system helps achieve goals related to reducing air pollution and greenhouse gas emissions by encouraging healthy lifestyles that increase physical activity through walking and bicycling. The policies in this section emphasize the connection between transportation and health as promoted in the county's HealthScape initiative.

Design and planning of these systems reinforce the character of the surrounding area. In the urban area, King County emphasizes system efficiency for all modes of travel. Urban arterials are designed to support higher land use densities, transit access, walking, and bicycling. Intelligent transportation systems coordinate and improve traffic signal synchronization to provide smooth traffic flow. This allows buses and cars to travel along arterials with the fewest stops at intersections while minimizing delay for traffic waiting on side streets. More transit service is provided in the urban area where higher population and employment densities can make the most use of that service.

In the Rural Area, King County emphasizes preservation, maintenance and safety rather than increased traffic capacity. Rural arterials reflect rural densities, resource access, and are generally less congested than urban arterials. Transit service for the Rural Area is provided mainly through park and ride service.

A. Public Transportation Strategies

King County's transit infrastructure and service investments are consistent with the capital and services strategies in the Strategic Plan for Public Transportation and balance policy requirements, regional cooperation, funding constraints, and community needs.

T-301 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 pedestrians, bicyclists, transit collection/distribution services, and persons with disabilities, thereby providing a viable and interconnected network that is an alternative to auto usage.

- T-302** 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-303** 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-304** High-Capacity Transit facilities and services which are consistent with, and supportive of, the comprehensive plan should be supported and implemented.
- T-305** 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.

B. 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 users and modes of travel. King County's arterial system represents a broad range of mobility options. The arterial system is a resource for moving people and goods by many modes of transportation, including autos, carpools, buses, bicycles, pedestrians, and trucks.

- T-306** The most cost-effective transportation improvements addressing existing and projected future needs should be considered and implemented first. Efficiency projects, such as signal timing, that support transit and other high-occupancy-vehicles (HOV) operations should be given priority over general capacity improvements.
- T-307** Projects will be prioritized to address safety and operations. Projects that address existing capacity needs in urban unincorporated King County shall also be given priority consideration.

- T-308** 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-309** Consistent with the King County Road Design and Construction Standards, consideration shall be given to roadway safety improvements because they have the potential to reduce the number and severity of collisions by providing refuge for pedestrians and bicyclists, providing positive traffic control, reducing hazardous roadway conditions, and reducing unexpected situations. Improvements of this type include, but are not limited to, pathways, traffic signals, roundabouts, turn and merge lanes, provisions for sight lines, and removal of roadside obstacles. Consideration shall be given to safety improvements that lessen the likelihood and impacts of flooding.
- T-310** Appropriate neighborhood traffic control measures and the King County Road Design and Construction Standards should be used along with zoning and development conditions to improve safety, transit access and nonmotorized travel in residential neighborhoods.
- T-311** To facilitate the establishment of a safe and efficient traffic circulation network reflecting all transportation modes and to retain the availability of access to adjacent properties, the county shall review and comment on the appropriate placement of new or major modified facilities or physical barriers, such as buildings, utilities, and surface water management facilities in or adjacent to road rights-of-way.

C. Nonmotorized Program

Nonmotorized transportation is an essential part of King County’s multimodal transportation system. In unincorporated King County, the Road Services Division is responsible for nonmotorized facilities such as bike lanes and sidewalks on County roads. The King County Road Design and Construction Standards specify bike lane and sidewalk criteria for urban unincorporated and rural roads. The Road Services Division also addresses specific needs through such programs as:

- Pedestrian Safety and Mobility Program—an effort to address deficiencies and missing links that exist in roadside pedestrian facilities in order to safely accommodate pedestrians;

- School Pathways Program—an effort to identify student travel paths and address safety concerns;
- Neighborhood Traffic Safety Program—an effort to help local communities gather information on traffic problems; to educate residents about traffic safety issues, enforcement, and engineering options; and to work with neighborhoods to develop effective solutions.

These unincorporated area needs are included in the Transportation Needs Report (TNR) and Roads Capital Improvement Program (CIP).

King County also has a countywide role in nonmotorized transportation. The regional trail network, discussed in Chapter 6, includes facilities in cities and the unincorporated area. The Metro Transit Division supports nonmotorized transportation as well. Resources include, but are not limited to, the following:

- King County Bicycling Guidemap—an informational pamphlet and map to assist bicyclists in navigating safely around King County;
- Bus Bike Rack and Bike Locker programs—efforts to facilitate bike/bus travel through provision of racks on buses and lockers at park and ride lots, employment sites and other locations that ease travel by bike and bus.

Nonmotorized transportation users include pedestrians, bicyclists and, in some parts of the county, equestrians. While each group has different needs, they all rely on King County's road system and nonmotorized facilities for safe access and mobility. 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.

Nonmotorized travel augments county efforts to affect climate change and create more walkable communities through HealthScape. In addition to meeting mobility goals, achieving greater transportation mode parity delivers other benefits. Nonmotorized facilities augment county efforts to better integrate public health with recreational opportunities, support transit-oriented and pedestrian-oriented economic development and implement HealthScape findings.

T-312 The nonmotorized transportation system and associated services should be improved countywide to increase safety, public health, mobility and convenience for nonmotorized modes of travel.

T-313 In the unincorporated area, King County shall evaluate and, where appropriate, implement nonmotorized transportation improvements in its road construction and road reconstruction. Countywide, consistent with the King County Metro transit planning process and and in collaboration with affected cities in the incorporated

area, King County, should promote nonmotorized transportation improvements related to development and construction of transit services and facilities.

- T-314** New land use plans, subdivisions, and urban planned development proposals shall accommodate nonmotorized mobility within and access to nearby shopping parks, trails, schools, community resources and other public and private services and facilities.
- T-315** King County Road Design and Construction Standards should allow flexibility in selecting, and the authority to require, design features that benefit nonmotorized safety and accessibility.
- T-316** Evaluation of requests to vacate unused road rights-of-way will consider existing and future development of nonmotorized uses and shall seek opportunities to acquire and develop nonmotorized transportation corridors.
- T-317** King County shall seek to improve bicycle and pedestrian safety both within residential areas and along arterials where improvements would increase nonmotorized transportation choices, connect across gaps in existing nonmotorized facilities, or otherwise improve facilities for nonmotorized users. At a minimum, nonmotorized safety improvements should include adequate signage, markings, and signalization. To foster safe walking conditions for students, King County should continue the School Pathways Program.
- T-318** To enhance and improve nonmotorized access to transit throughout the transit system area, King County should develop a plan for the unincorporated areas, and with the cooperation of the cities, for the incorporated areas, to comply with the Americans with Disabilities Act in corridors served by transit.
- T-319** King County should coordinate with bicycling, pedestrian and equestrian stakeholders and advocacy organizations to ensure that their input is included early in the planning and project design process for its capital projects with nonmotorized elements.
- T-320** Criteria used to identify, plan, and program nonmotorized facilities shall give priority to projects that:
- Improve user safety;

- **Add connections to community resources such as parks, trails, and libraries;**
- **Promote health;**
- **Improve neighborhood to neighborhood connections;**
- **Improve air quality and reduce greenhouse gas emissions;**
- **Increase access to transit and services.**

D. Transportation Demand Management

Transportation affects every aspect of our lives, not only our mobility but also our health, economy, and our environment. Transportation Demand Management (TDM) consists of a broad range of strategies that provide for reduced reliance on single occupancy vehicle (SOV) trips; reduced vehicle miles travelled (VMT); increased efficiency of the whole transportation system; and results in lower greenhouse gas emissions.

King County is a leader in implementing transportation initiatives and land use measures that encourage people and businesses to reduce single-occupant-vehicle (SOV) trips and vehicle miles traveled (VMT) while decreasing the impacts of greenhouse gas emissions from the transportation sector. Furthermore, King County's ability to provide for mobility needs of its residents will increasingly depend on actively managing our existing transportation system.

TDM strategies include (but are not limited to):

- public education/information,
- public transportation (i.e. bus, rail, ferry, and vanpool)
- nonmotorized travel options,
- state-mandated Commute Trip Reduction and Growth and Transportation Efficiency Centers,
- roadway and lane management (e.g. ridesharing, intelligent traffic systems, and active traffic management)
- variable tolling strategies (e.g. high-occupancy toll lanes, corridor tolling, cordon tolling, and system-wide tolling),
- joint use and intermodal transfer facilities such as park and rides,
- parking management and pricing (e.g. connecting supply with mode split targets),
- telecommunications substitutes for physical travel (e.g. telecommuting, e-government, and internet-based business-to-business activities),
- land use decisions (e.g. site design standards and concurrency).

In the application of TDM strategies, King County fulfills many roles, such as:

- the jurisdiction for unincorporated areas with land use, transportation infrastructure and permitting responsibilities;
- an operator and manager of unincorporated area roadways and Metro Transit;
- a local, regional and statewide advocate for integrated transportation solutions and climate change actions; and
- a leading edge employer implementing progressive employee transportation programs.

In addition to vehicle and public transportation ridership counts, one way to measure the effectiveness of TDM efforts is the establishment of mode split goals. Mode split means the proportion of total person-trips using various modes of transportation, including by drive alone, foot, bicycle, carpool, vanpool, bus, ferry, train, etc. during a particular time period. Countywide Planning Policy (CPP) T-10 calls for local jurisdictions to develop mode split goals for non-SOV travel to established employment centers. CPP T-12 states that jurisdictions and Metro shall establish mode split goals and measures of mobility for transit, ridesharing, and non-motorized travel.

T-321 TDM strategies should be used to increase mobility options, promote travel efficiency, optimize the existing transportation system and reduce the adverse environmental impacts of the transportation system, including through the use of variable tolling strategies.

T-322 TDM 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. TDM, 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-323 King County will actively participate in developing and implementing state-mandated Growth and Transportation Efficiency Centers, as described in the state's Commute Trip Reduction Law.

T-324 King County should participate in local, regional, and statewide efforts to implement and measure the results of TDM strategies, technologies, and systems, including policies developed through regional consensus and adopted by the county. To this end, the county shall identify funds to research, plan, implement and measure TDM strategies.

- T-325** King County will work with the Washington State Department of Transportation, Washington State Transportation Commission, Puget Sound Regional Council, and cities to develop and implement applications of managed transportation facilities and variable tolling strategies on new and existing transportation facilities. Toll and high-occupancy-toll lane collection systems used in the region should be simple, unified, and interoperable and should avoid the use of tollbooths, whenever possible.
- T-326** King County supports variable tolling strategies as a means to optimize transportation system performance, generate revenues and reduce vehicle miles traveled, and reduce greenhouse gas emissions.
- T-327** Revenue from variable tolling should be used to improve, preserve and operate the transportation system including transit and other multimodal investments, as well as to help fund improvements that address the diversionary impacts on non-tolled facilities.
- T-328** King County, as an employer, should use and encourage other employers to use management of employee parking to support alternatives to commuting by single-occupant-vehicles.
- T-329** King County should encourage employers to consider the accessibility to adequate public transportation and high-occupancy-vehicle facilities and services when developing site and parking plans.
- T-330** King County shall support regional policies that connect parking supply and management to targets for reducing single-occupancy-vehicle travel.
- T-331** King County shall establish mode split goals and achieve them through the implementation of policies that support transportation demand management, transit service improvements, and expansion of high-occupancy-vehicle programs.

E. Climate Change, Air Quality, and the Environment

Clean air contributes to the health of people, the ecosystem and the economy. Transportation is the primary source of air pollutants regionally. In addition to complying with state and federal regulations

described below, the county is working to reduce transportation-related emissions through the policies and actions contained throughout this plan.

The Washington State Clean Air Conformity Act establishes guidelines and directives for implementing the federal Clean Air Act Amendments. The Washington Clear Air Conformity Act specifically links air quality conformity to growth management planning efforts at the local and regional level. The King County transportation system conforms to the federal and state Clean Air Acts by maintaining 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.

Climate change is of increasing local concern. It is clear that greenhouse gas emissions from transportation sources are a significant contributing factor to global climate change. In addition to meeting its regulatory requirements, King County is committed to addressing climate change through its decisions and actions and encouraging others to act to reduce greenhouse gas emissions as well.

Climate change is projected to increase the frequency of flood events in most of western Washington's river basins. Increased flood frequency and intensity will increase public investment needed to ensure public safety and mobility, particularly on the county road system. Climate change will affect the county's road and transit infrastructure. More storm events and increased temperatures will disrupt service, increase road maintenance requirements and adversely affect customer comfort. Changes in precipitation patterns and sea levels may cause greater damage to roads, bridges and seawalls from erosion, landslides, and flooding.

T-332 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 critical areas or rural or resource lands.

T-333 King County supports designing and building roads, bike lanes, pedestrian ways and trails within new developments in ways that minimize pollution, provide opportunities for physical activity, promote energy conservation, increase community cohesion, and preserve natural flora and wildlife habitat.

- T-334** Through its own actions and through regional partnerships, King County will promote strategies to reduce emissions from the transportation sector. The county will promote new vehicle technologies and fuels and strategies to reduce emissions, including land use changes, provision of transit, promotion of nonmotorized travel, and other actions to reduce vehicle travel.
- T-335** King County will be a leader in the use of transportation fuels and technologies that reduce operational greenhouse gas emissions from its fleets by buying hybrid-electric, electric and other clean transportation technologies; using clean fuels in its fleets; implementing demonstration projects that use alternative fuels; purchasing locally-produced energy sources when practical; seeking local and federal support to expand the use of alternative fuels; and promoting best practices, innovations, trends and developments in transportation fuels and technologies.
- T-336** The King County Department of Transportation will incorporate climate change impacts information into construction, operations, and maintenance of infrastructure projects. In the near term, the department will incorporate climate change into its planning and design documents. In the long term, the department will develop strategies to incorporate climate change response into the design and operations of its transportation structures and services.
- T-337** The King County Department of Transportation will develop methods to evaluate the climate change impacts of its actions and train staff to implement climate sensitive practices in its work.

IV. Finance

Achieving King County's transportation goals depends on adequate funding for transportation system and service needs. This section discusses the extent to which the transportation system and services can be funded within a reasonable revenue forecast and expenditure schedule. The Growth Management Act requires the county to include an analysis of funding capabilities, a multiyear financing plan based on needs, and a discussion of how to raise additional funds to build needed transportation projects, or to reassess growth and level of service (LOS) standards to resolve potential funding shortfalls in a ten-year time frame. This analysis is provided in the Transportation Needs Report and summarized below.

A. Road-Related Funding Capabilities

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 Chapter 3 of the March 2004 Roads Strategic Plan.

Financial viability to support transportation system and service capital needs is tested over two time frames. A multi-year transportation plan identifies the improvements needed to support the land use vision of the comprehensive plan. The multi-year plan provides an assessment of revenues projected from currently available resources and identifies reasonable options for securing additional revenues over the life of the plan. Secondly, the annual update of the roads CIP examines the specifics of how to implement the financing plan over the next six years.

B. Revenue Shortfall

The state growth management act provides guidance for managing a revenue shortfall.

The following actions can be used to balance the funding shortfall of the plan:

1. Reduce transportation funding needs
2. Develop new revenue options
3. Change LOS
4. Change land use

- T-401** 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.
- T-402** Financial resources available for transportation improvements should support a program of capital facilities needed for a multimodal transportation system.
- T-403** 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-404** During annual review of the Comprehensive Plan, King County should consider and address any potential shortfalls likely to occur between expected revenues and needed improvement costs. Such review could include a reassessment of land use, growth targets, LOS standards and revenue availability.

C. Urban Unincorporated Area Road Financing

Each area of unincorporated King County differs from its counterparts. Its character, the issues its residents care most about, and its specific road-related needs are unique. 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. Project priorities differ depending on the Urban or Rural designation of the area. Setting priorities that recognize the special needs of each area is particularly important when inadequate to meet all needs and since road infrastructure is often an issue in annexation discussions.

The TNR lists needs under the following categories: ITS, Safety, Bridge, Reconstruction, Guardrail, Operational, Capacity, and Pedestrian. Equestrian needs are included as parts of other needs.

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

- T-405** King County's urban road investments shall address the unique needs of each unincorporated area and shall target projects that facilitate redevelopment, infill, annexation, and the achievement of growth targets.

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 and Public Outreach

All elements of the transportation system in this comprehensive plan update are planned and operated in coordination with the cities in and abutting King County, the adjoining counties, the PSRC, the Port of Seattle, the transit agencies providing service in and connecting to King County, and the WSDOT. The public also was invited to review and comment on the plan. The following activities support the coordination process:

- Review by the transportation subarea boards;
- Review by the Unincorporated Area Councils (UACs);
- The update of the Strategic Plan for Public Transportation;
- The statewide and countywide grant application process;
- The TNR and CIP coordination process; and
- Participation in the Puget Sound Regional Council, which enables King County to coordinate its transportation planning activities with other local and regional agencies for the four central Puget Sound counties.

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 WSDOT to improve freight mobility and carry out strategies to maintain the efficiency of freeways and arterials in the region.

King County works with the PSRC 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-501 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 supports active management of freeways to optimize movement of people. High-Occupancy-Vehicle (HOV) or High Occupancy Toll (HOT) lanes should be managed to prioritize reliable speed advantage for transit and vanpools, and maintain a reliable speed advantage for the other high occupancy vehicles.
- T-504** King County should work with other jurisdictions to coordinate planning and implementation of transportation improvements on corridors passing through or otherwise affecting parts of unincorporated King County. This work shall include timely outreach to unincorporated area councils, subarea forums and the general public and support of such efforts by other agencies.
- T-505** 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.
- T-506** Updates to the transportation plans and Roads Strategic Plan shall involve input from the general public, unincorporated area councils, the subarea transportation forums, and other appropriate forums.
- T-507** 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.