Chapter 3 Plan Alternatives

1 What geographic area does the Transportation 2040 plan cover?

The central Puget Sound region is made up of King, Kitsap, Pierce, and Snohomish counties, and their 82 cities and towns (refer to Exhibit 3-1). The major metropolitan cities of the region are Seattle and Bellevue in King County, Bremerton in Kitsap County, Tacoma in Pierce County, and Everett in Snohomish County.

2 What makes up the region's Metropolitan Transportation System?

The Metropolitan Transportation System (MTS) for the central Puget Sound region facilitates the movement of people and goods making local, regional, national, and international trips. These trips range from traveling to work or school, flying across the country, or shipping Washington-made products overseas.

These trips are made using a variety of travel choices. Those choices are key elements of the MTS.

Roadway System

The region has thousands of miles of roadways ranging from interstate highways to residential streets. Roadways are the primary means for moving people and goods from one location to another in the region and beyond. The interstate system, which includes Interstate 5 (I-5), Interstate 405 (I-405), and

What is included in the Metropolitan Transportation System (MTS)?

The MTS promotes facilities and services for carrying out activities crucial to the social and economic health of the central Puget Sound region. Components of the MTS include:

- Roadway system
- Ferry system
- Transit systems
- Nonmotorized system
- Freight and goods system
- Intercity passenger rail system
- Regional airport system
- Transportation System Management
- Transportation Demand Management

Exhibit 3-1. Central Puget Sound Region Cities and Towns

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Interstate 90 (I-90), was created to support national commerce and defense needs. Together with state routes and U.S. Highways, the interstate highways are vital corridors connecting the central Puget Sound region to the rest of the state and the nation.

Ferry System

The region's ferry transportation system is the largest in the United States. It functions as a vehicle-carrying marine highway to move people and goods across Puget Sound, and as a high-capacity transit system that moves thousands of passengers daily. Washington State Ferries (WSF) operates the major routes across the Sound, with additional routes provided by Pierce County and the Kitsap Ferry Company.

Transit Systems

The region is served by regional and local public transit providers. Sound Transit, the Central Puget Sound Regional Transit Authority, is responsible for a mass transit system featuring commuter rail, light rail, and express bus services in King, Pierce, and Snohomish counties. Local transit service is provided by Community Transit (Snohomish County), Everett Transit, King County Metro Transit, Kitsap Transit, and Pierce Transit. The City of Seattle also operates monorail and streetcar services. These operators provide fixed-route and demand-responsive transit services, as well as vanpool services. Special needs transportation is provided by public transportation providers (both fixed-route and demand response service) and community-based and private transportation providers (usually demand response).

Nonmotorized System

The regional nonmotorized system consists of bicycle and pedestrian facilities, including dedicated bicycle and pedestrian paths, sidewalks, and bicycle routes or lanes on roadways.

Sound Transit's light rail service from Sea-Tac Airport to downtown Seattle started operation in 2009.

Source: Parametrix, Inc.

Freight and Goods System

The regional freight and goods system consists of roadways, port facilities, railroads and rail yards, and airport facilities, which serve to move freight within and through the region. The system includes the following types of facilities:

- *Freight Roadways.* These are roadways throughout the system that carry more than 4 million tons annually and are designated as critical for freight movement by the state of Washington (WSDOT, 2007). These include all of the region's interstate highways and some of the most important state routes and arterials.
- *Ports.* Everett, Seattle, and Tacoma provide marine deepwater ports to accommodate ocean-going container ships that carry cargo in and out of the region. The ports of Seattle and Tacoma are among the busiest ports in the United States, and along with the Port of Everett, continue to improve facilities to accommodate changing domestic and international needs.
- *Airports.* Two major airports in the region serve freight: the Seattle-Tacoma International Airport (Sea-Tac Airport) and King County International Airport (Boeing Field).
- *Railroads.* Two major national railroads serve the central Puget Sound region and provide intercontinental service: Burlington Northern Santa Fe and Union Pacific. Local distribution is provided by Tacoma Rail in Pierce County to the Port of Tacoma and by the Ballard Terminal Railway in Seattle.

Intercity Passenger Rail

Using major national railroads, Amtrak passenger rail trains provide service between Eugene, Oregon, and Vancouver, B.C. (Amtrak Cascades); Seattle and Los Angeles (Coast Starlight); and Seattle and Chicago (Empire Builder).

Regional Airport System

The MTS focuses on six regionally significant aviation facilities, among more than 25 aviation facilities throughout the four-county region: Sea-Tac Airport, Boeing Field, Paine Field,

Planning for future growth in aviation is an important challenge for the region.

Source: Parametrix, Inc.

Renton Municipal Airport, Harvey Field in Snohomish County, and Auburn Municipal Airport.

Transportation System Management Programs

These programs and facilities focus on operating the region's multimodal transportation system as safely and efficiently as possible through the use of information, control, and communications technologies. Many jurisdictions and agencies are involved in these programs, including the Washington State Department of Transportation (WSDOT), the region's transit operators, and local governments. Systems range from emergency management to traveler information to signal timing.

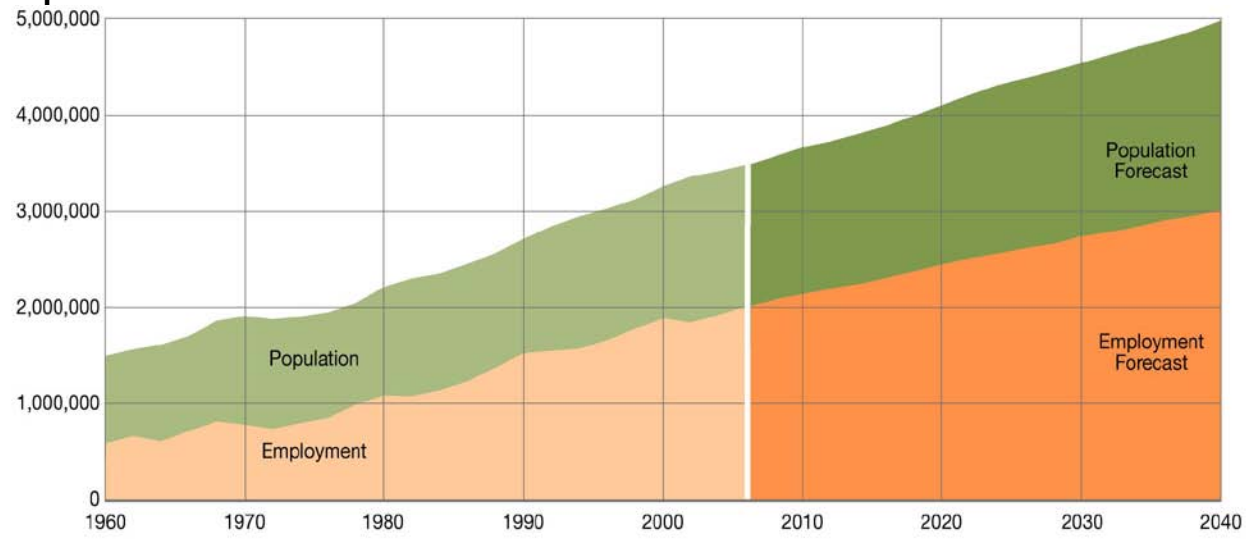
Transportation Demand Management Programs

These programs and strategies seek to improve the efficiency of the transportation system by promoting alternatives to driving alone, such as by shifting trips out of peak travel periods; using rideshare, transit, bicycling, or walking; or reducing the need for trips.

3 What challenges are addressed by the Transportation 2040 plan alternatives?

PSRC forecasts indicate that as the region adds 1.5 million people and 1.2 million jobs by 2040 (refer to Exhibit 3-2), people in the region will likely take 19.1 million trips daily. Those trips will be made by vehicle, bicycle, transit, ferry, or on foot, and represent an overall 39 percent increase over trips in 2006.

Exhibit 3-2
Population and Job Growth Trends and Forecasts



To address this growing regional travel demand, the State Environmental Policy Act (SEPA) scoping process helped to identify a number of objectives that this plan will address. These objectives became the basis for the development of major issues and for the evaluation framework being used to evaluate the alternatives. Through the scoping and related processes three major challenges/issues emerged: congestion and mobility, the environment, and transportation finance. These issues were considered in the development of the alternatives by varying the amount of efficiency and strategic capacity programs and the level and type of financial investments in the action alternatives. In particular, each action alternative includes various levels of tolling to evaluate the implications of these strategies on congestion, the environment, and transportation finance.

Congestion and Mobility: Reduce congestion for all types of freight and person travel.

The first challenge is to address how the region can maintain and improve regional mobility with forecasted growth in population and employment.

Tolling

All plan alternatives include some form of tolling or user fees to help fund improvements. Tolling options include:

- High-occupancy toll (HOT) lanes
- Freeway and bridge tolls
- Ferry fares
- Arterial road tolls
- Vehicle miles traveled fees

Environmental Concerns: Reduce greenhouse gas emissions linked to climate change, and reduce water quality impacts on Puget Sound.
The second major challenge is to learn how to reconcile the need for transportation facilities and their uses with growing concerns about how to protect and restore the quality of the built and natural environment. Transportation activities, if unmitigated, are a major source of water and air pollutants, including greenhouse gas emissions.

Transportation Finance: Support the development of sustainable transportation funding.
The third challenge, although not a component of this Environmental Impact Statement, is transportation finance. Information on transportation finance issues is included in the Transportation 2040 plan. Sustainable funding is a critical implementation issue for any of the alternatives and is a part of the region's federal requirement to produce a financially constrained plan.

Transportation 2040 provides additional information on travel trends, physical constraints, and the environmental concerns that need to be addressed to meet the region's commitments to better environmental stewardship. It also supports the region's policy to develop an urban environment that promotes healthy, active lifestyles.

4 What alternatives are being analyzed by the Transportation 2040 FEIS?

This Final EIS (FEIS) analyzes seven plan alternatives—a Baseline Alternative plus six action alternatives, including the Preferred Alternative. Each alternative describes how transportation investments can improve efficiency and expand the system's ability to handle future demand, while at the same time support the region's goals for managing urban growth and protecting the environment.

Transportation 2040 Alternatives

Please refer to Appendix A for more details on the Transportation 2040 alternatives.

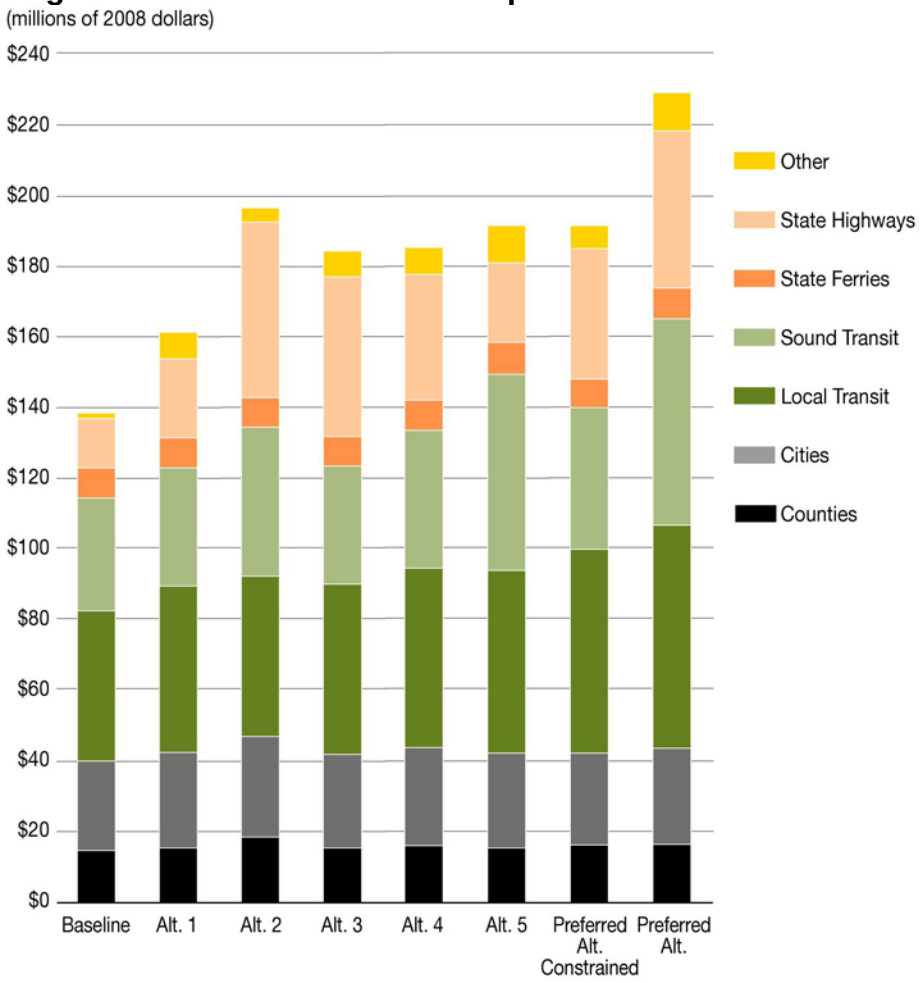
Improving efficiency means making better use of the existing system and managing growing demand more effectively, particularly during peak morning and evening travel hours. Efficiency can be improved through shifts in the chosen route, the time of travel, the mode of travel, and the patterns of trips taken to work and other activities.

Strategic expansion means increasing capacity by making investments in both capital facilities and operations. These investments include projects to relieve roadway bottlenecks; expanded and new transit lanes, transit services, and fleets; vanpools and carpool programs; high-occupancy vehicle (HOV) lanes; bicycle and pedestrian trails, sidewalks, and paths; and ferry terminals and service.

Some elements are consistent among all plan alternatives, and others vary. Exhibit 3-3 illustrates the relative level of investment for each element of the Transportation 2040 alternatives. These elements are described below.

Exhibit 3-3[1]

Program Investments in the Transportation 2040 Alternatives



What is the difference between the Preferred Alternative (Constrained) and the Preferred Alternative?

The Preferred Alternative includes two categories of programs and projects: (1) Constrained, and (2) Unprogrammed. These categories recognize the federally approved structure for regional plans and the range of uncertainty that is inherent in long-range transportation planning programs.

The Preferred Alternative contains both the financially constrained and the unprogrammed programs and projects.

How does this FEIS analyze the constrained portion of the Preferred Alternative?

The Preferred Alternative in this FEIS contains both the financially constrained and the unprogrammed programs and projects (sometimes referred to as the full Preferred Alternative). Accordingly, most of the environmental disciplines analyze the potential effects of the Preferred Alternative. However, for instances when the constrained portion of the Preferred Alternative would result in greater effects upon the environment, such as in certain analyses in Chapter 4: Transportation and Chapter 6: Air Quality and Climate Change, the effects of the constrained portion of the Preferred Alternative are analyzed.

Consistent Growth Assumptions

Each alternative was analyzed using the same future land use policy and strategy assumptions for growth management as established in VISION 2040. The base year 2006 population is also consistent. The analysis found minimal population and employment growth differences among the alternatives in the year 2040 at the regional level.

Consistent Transportation Assumptions

The Baseline Alternative is the starting point for comparing the alternatives. The action alternatives start with the policies, plans, and funded projects included in the Baseline Alternative.

[1] This exhibit has changed since the DEIS.

Each alternative also includes the current base year (2006) transportation facilities in the region.

In addition, the action alternatives include an identical set of core investments to improve safety and security and to support transportation options for special needs populations. These core investments focus on improvements that extend beyond the existing funding level and are therefore not contained in the Baseline Alternative.

Core investments would include improved roadway crossings, safety projects, improved signal coordination, completion of freeway system ramp metering and coordination with arterial signals, and Freight Action Strategy (FAST) freight mobility projects.

Differing Transportation Assumptions

The action alternatives differ by the new projects, policies, and programs proposed in each, and by how new projects and programs (and to a lesser extent existing projects and programs) are financed. These different levels of investment in projects and programs are shown in Exhibit 3-3 and described in the subsequent sections.

All action alternatives contain components to expand and complete the walking and bicycling network and ways to connect this network to transit stations and ferry terminals, although at different levels of investment and emphasis. Each action alternative also includes programs to reduce vehicle miles traveled and to reduce greenhouse gas emissions, again at different levels.

The action alternatives differ in how the region would distribute investments in efficiency and expansion. The approaches range from modest improvements with limited funds to a dramatic shift in priorities resulting in a new type of transportation system.

Tolling also plays a role in each alternative. The alternatives explore how different approaches to tolling can help manage congestion and also pay for improvements.

5 Which programs and projects are included in the Baseline Alternative (SEPA No-Action Alternative): Build Funded Projects?

The Baseline Alternative is funded mostly with "current law" traditional revenue sources—gas tax, sales tax, state and federal grants and loans, local general fund revenues, permit and licensing fees, and limited tolling (on the Tacoma Narrows Bridge and the ferry system). The Baseline Alternative would build state highway projects funded under the state's "nickel" gas tax and Transportation Partnership Account (TPA) programs, plus the Sound Transit Phase 2 (ST2) plan, approved by voters in November 2008. It would sustain existing ferry service and demand management programs and make modest additions to transit service, including King County Metro's RapidRide and Community Transit's Swift bus rapid transit (BRT). Beyond current law funding, the Baseline Alternative assumes that the region would find sufficient additional revenue to fully maintain and preserve the existing transportation system.

The programs and projects included in the Baseline Alternative are described below and are shown in Exhibits 3-4 and 3-5.

Why is a "No Action" alternative required?

The State Environmental Policy Act (SEPA) requires the evaluation of the no-action alternative, which at times may be more environmentally costly than the action alternatives, or may not be considered "reasonable" by other criteria. Still, it provides a benchmark to which the other alternatives can be compared.

Exhibit 3-4. Baseline Alternative (SEPA No-Action Alternative): Build Funded Projects

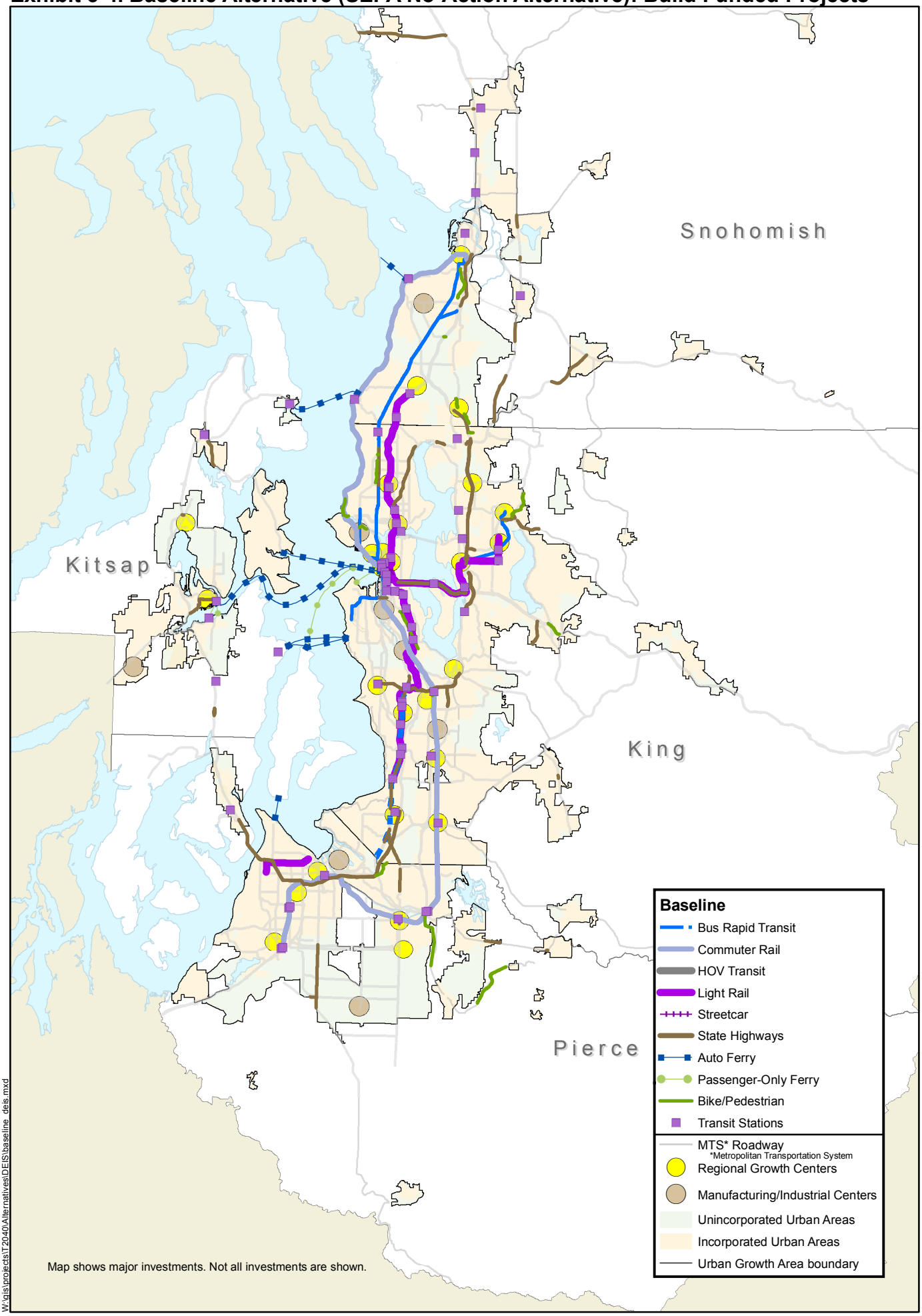
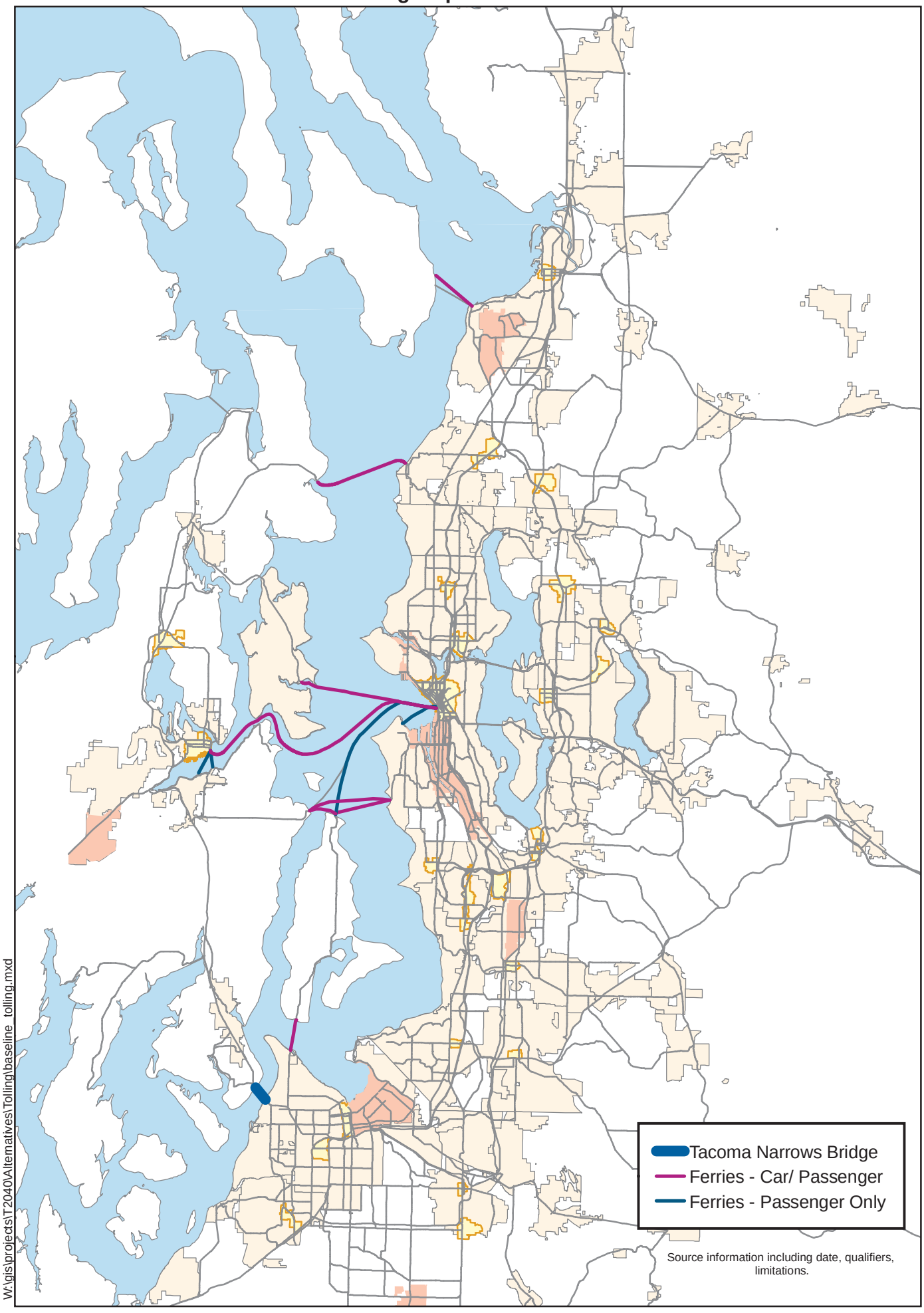


Exhibit 3-5. Baseline Alternative Tolling Map



Baseline Alternative System Efficiency

Baseline Alternative Demand Management

The Baseline Alternative assumes that participation in employer demand management programs will continue at existing levels (714 employment sites with 100 or more employees). Support continues for Growth and Transportation Efficiency Center (GTEC) programs in Seattle, Bellevue, and Tacoma, and the regional growth center in the Redmond/Overlake area. Parking management programs will vary from jurisdiction to jurisdiction, as will investments in "complete streets," bicycle and pedestrian networks, and local development regulations to induce mixed-use development near transit centers and rail stations.

What are Growth and Transportation Efficiency Centers (GTECs)?

GTECs are defined areas (generally with higher employment and/or population) within which cities are encouraged to expand.

Baseline Alternative System Management

This program will include ramp metering, Intelligent Transportation Systems (ITS), corridor management, transit signal priority, incident detection and management, active traffic management and speed harmonization programs, and 511 and traveler information systems. The Baseline Alternative assumes that the state and the region can maintain and preserve existing ferry routes (and service levels), terminals, the fleet, and current passenger-only service.

Baseline Alternative Strategic Expansion

Baseline Alternative Roadways

The roadway improvements in the Baseline Alternative are limited to those funded by the state's "nickel" and Transportation Partnership Act funding programs, plus a few other investments funded under current law. Tolling is limited to those facilities where it exists or is planned (on the ferry system and the Tacoma Narrows Bridge until the tolls are lifted).

Baseline Alternative Transit

The Baseline Alternative assumes that funds are available to maintain current levels of transit services for core, community connector, and specialized types of service and to increase service across all providers by, on average, approximately 1 percent per year. Core service operates all day at a high

frequency serving a high volume of riders. Community connector transit provides less frequent service to areas with lower ridership. Specialized transit offers service to specific destinations at limited times of day, such as peak hour trips to centers from park-and-ride lots.

The Baseline Alternative includes funding to complete Sound Transit's Phase 1 and 2 programs, which will expand the light rail, commuter rail, and express bus network. The region's other transit agencies will implement 6-year plans, including King County Metro's RapidRide BRT projects and Community Transit's SWIFT services along SR 99 in Snohomish and King counties.

Baseline Alternative Ferry

The Baseline Alternative assumes that the state and the region can maintain and preserve existing ferry routes (and service levels), terminals, the fleet, and current passenger-only service.

Baseline Alternative Bicycle and Pedestrian

The Baseline Alternative includes completion of selected trail extensions and bicycle lanes. Sidewalk completions or improvements are subject to funding availability and based on local plans and regulations.

Baseline Alternative Funding

The Baseline Alternative would be funded using current law revenues primarily from traditional sources (gas tax, sales tax, etc.). Toll revenues would also be available from the ferry system (fares), tolls on the State Route (SR) 167 high-occupancy toll (HOT) lanes, and from the Tacoma Narrows Bridge.

Baseline Alternative Preservation

In general, the Baseline Alternative assumes that existing facilities will maintain their capacity through year 2040 (exceptions are noted in Appendix A: Alternatives Technical Report). The state and the region are planning two major replacement efforts for the Alaskan Way Viaduct and Seawall Replacement Program and the SR 520 Bridge Replacement and

HOV Project. The regional plan update made the following assumptions to allow regional planning to proceed while these processes reach their own conclusions:

Alaskan Way Viaduct

All alternatives, including the Baseline Alternative, assume that sufficient resources have been committed to preserve the viaduct or replace it in ways that would be equivalent to the current viaduct's capacity (three lanes in each direction through the downtown core).

SR 520 Bridge Replacement

The Baseline Alternative assumes that sufficient resources have been committed to preserve the bridge in ways that would maintain the current capacity (two lanes each direction at the middle of Lake Washington on the bridge section). Alternatives 1 through 5 include replacing the existing Evergreen Point Bridge (referred to herein as the SR 520 floating bridge) with a six-lane structure (two general-purpose lanes and one managed lane in each direction).

6 Which programs and projects are included in Alternative 1: Emphasize the Efficiency of the Existing System?

This alternative is designed to recognize that one possible future goal is to make the most of our existing transportation system with limited funding. This scenario includes efficiency improvements through significant investments in programs to manage demand and in technology to manage roadways. This management strategy includes limited use of tolling by converting the existing HOV network to a one-lane HOT system with limited capacity investments to provide a two-lane HOT system on much of I-405. In addition, Alternative 1 includes a substantial increase in bus service. Together, these strategies are designed to do a better job of moving people and goods on the existing system by providing options that would reduce both demand for peak hour travel and demand for drive-alone trips.

The programs and projects included in Alternative 1 are described below and are shown in Exhibits 3-6 and 3-7.

Exhibit 3-6. Alternative 1: Emphasize the Efficiency of the Existing System

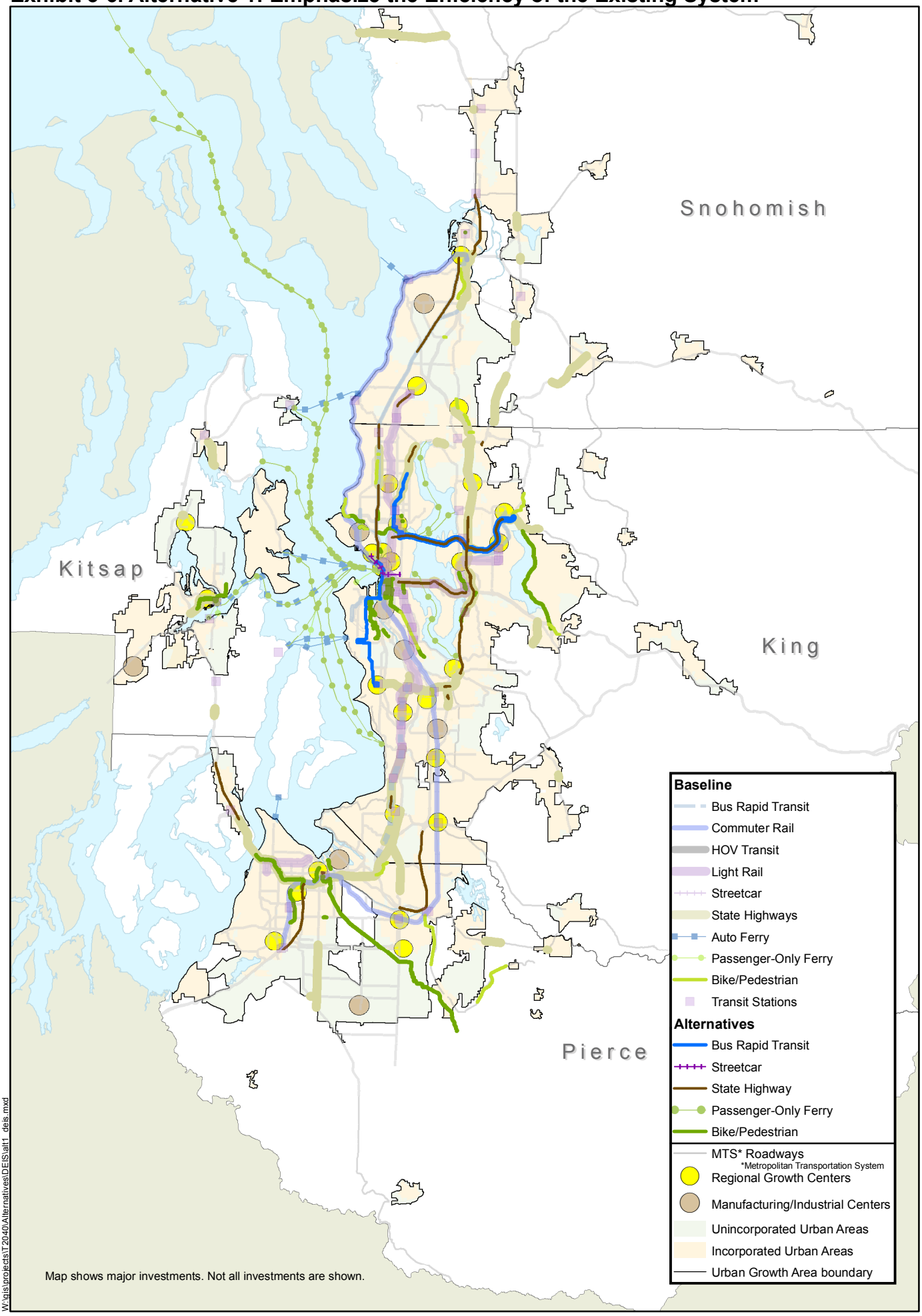
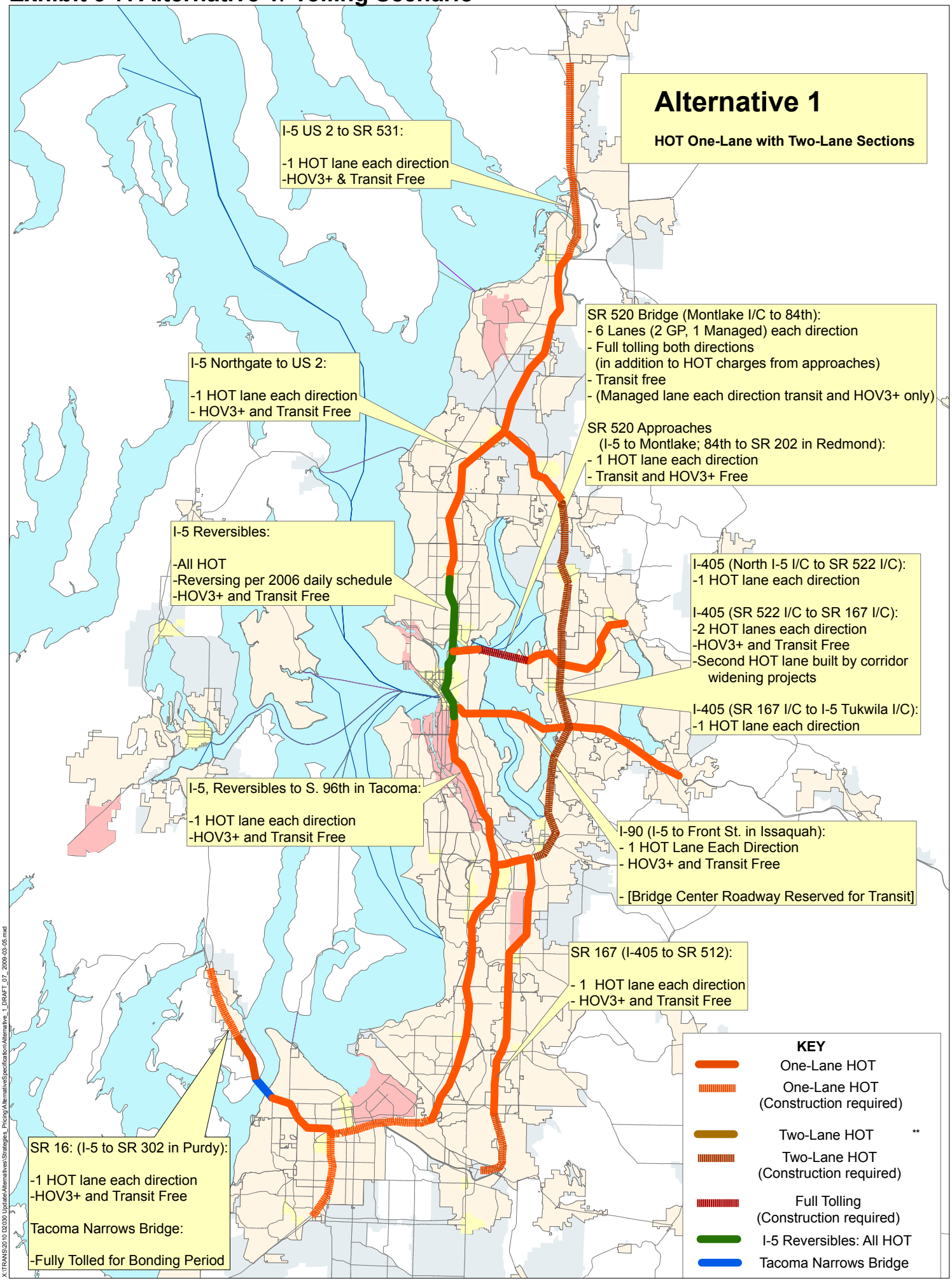


Exhibit 3-7. Alternative 1: Tolling Scenario



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Alternative 1 System Efficiency

Alternative 1 Demand Management

To increase the efficiency of the system, Alternative 1 places more emphasis on the use of employer demand management programs (incentive and volunteer) that promote options to driving alone. Options include expanding established programs such as Commute Trip Reduction (CTR), better use of vanpools, guaranteed ride home, and more opportunities to telecommute. GTEC programs would extend to more locations and could include options for trips that are not part of the work commute. These programs will accomplish several objectives: fewer vehicle trips, improved air quality, and other quality-of-life improvements. More cities would address parking regulations and implement parking rate surcharges or increases for both private and public facilities.

Alternative 1 System Management

Alternative 1 makes use of a variety of ITS techniques to monitor the system and to improve freight mobility on freeways and arterials. These ITS techniques range from center-to-center communications to in-vehicle traveler information devices. Alternative 1 also expands system management techniques and programs (e.g., signal coordination, incident management), extending them across jurisdictional boundaries regionwide. Doing so would reduce travel times and delay and would improve travel reliability.

Alternative 1 Strategic Expansion

Alternative 1 Roadways

Alternative 1 includes improvements to HOV lanes on I-5 and SR 16. This alternative relies on the limited use of tolling by implementing the one-lane HOT lane network on core freeways and is designed to improve roadway operations (HOT lanes allow single-occupant vehicles to use the HOV lane for a fee). Toll rates would be set to maximize system efficiency, and most revenues would be spent to operate the HOT network, with the remainder spent on investments in the tolled corridors. (The HOT network includes lanes on I-5, I-90, I-405, SR 167, and SR 16, with full tolls in both directions on the SR 520 floating bridge.)

Alternative 1 Transit

Alternative 1 makes the most of low-cost transit investments to improve core service throughout the day and more community connector service during peak hours. Sound Transit ST2 will extend Link light rail service north to Lynnwood, east to Redmond/Overlake, and south to Redondo/Federal Way. Increases in transit service hours would keep pace with the region's population growth. Improvements that connect regional growth centers to transit centers, rail stations, and ferry terminals will also result in a more efficient system.

Alternative 1 Bicycle and Pedestrian

An extended and safer network of connecting sidewalks, trails, and paths will facilitate bicycle and pedestrian choices.

Alternative 1 Funding

Alternative 1 would rely on limited increases in traditional funding (gas tax, etc.), revenue from a one-lane HOT lane system on core freeways, and additional parking revenues for local jurisdictions.

7 Which programs and projects are included in Alternative 2: Emphasize Roadway and Transit Capacity Expansion?

This alternative most resembles the current plan, Destination 2030. Alternative 2 adds the most roadway capacity through lane additions to existing highways, the creation of several new highways (SR 167 Extension, SR 509 Extension, and the Cross-Base Highway), and added lanes on the regional arterial network. It adds considerable new light rail capacity beyond ST2 and a new auto ferry route across Puget Sound. It adds pedestrian and bicycle infrastructure in key locations. Its demand management, bus service, and system management investments are similar to the Baseline Alternative. Its most significant management strategy is the establishment of a two-lane HOT system on much of the regional freeway network (with some one-lane HOT) to manage congestion and provide revenue to supplement traditional funding sources. Traditional funding sources would provide the majority of the financing.

The programs and projects included in Alternative 2 are described below and are shown in Exhibits 3-8 and 3-9.

Exhibit 3-8. Alternative 2: Emphasize Roadway and Transit Capacity Expansion

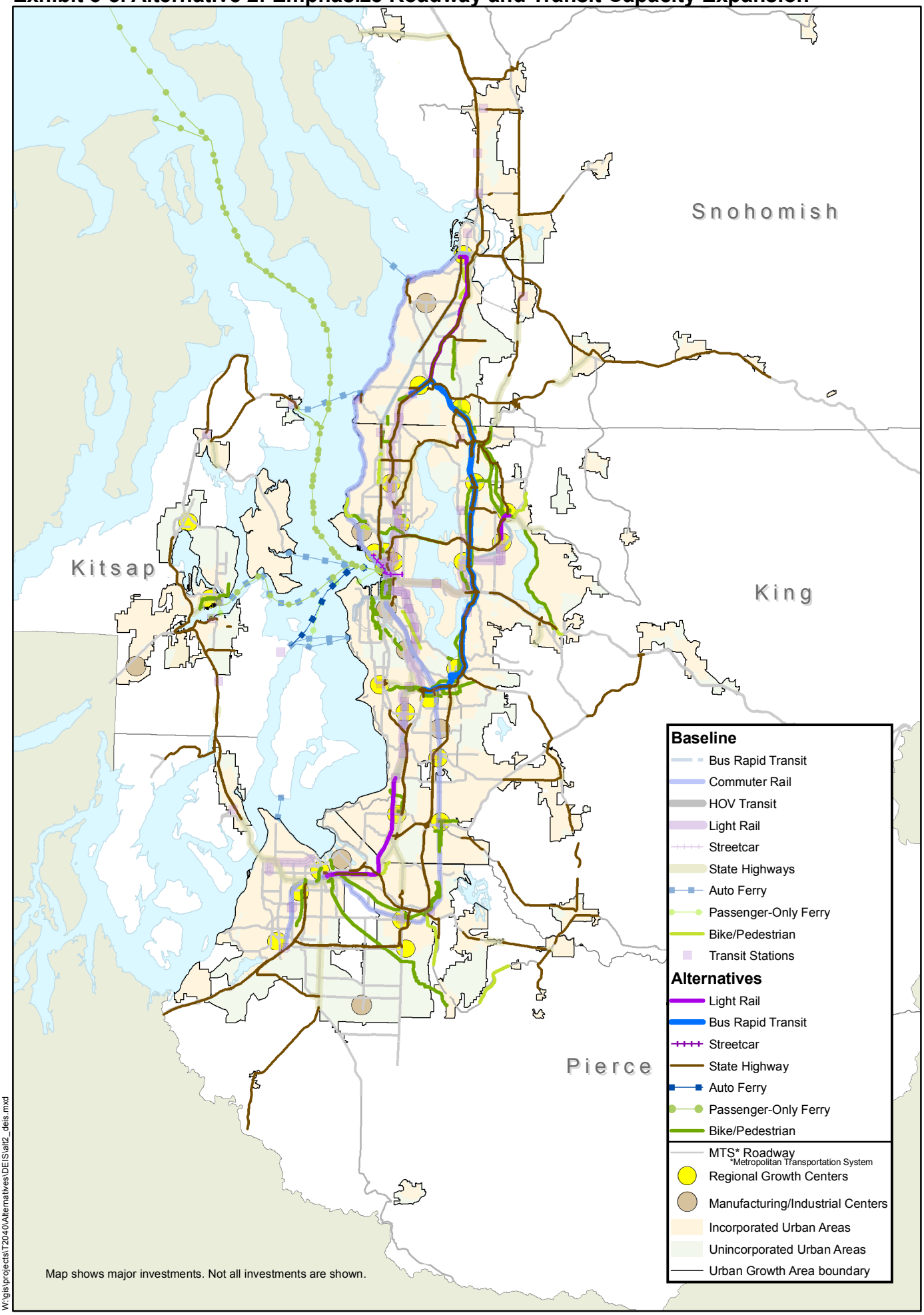
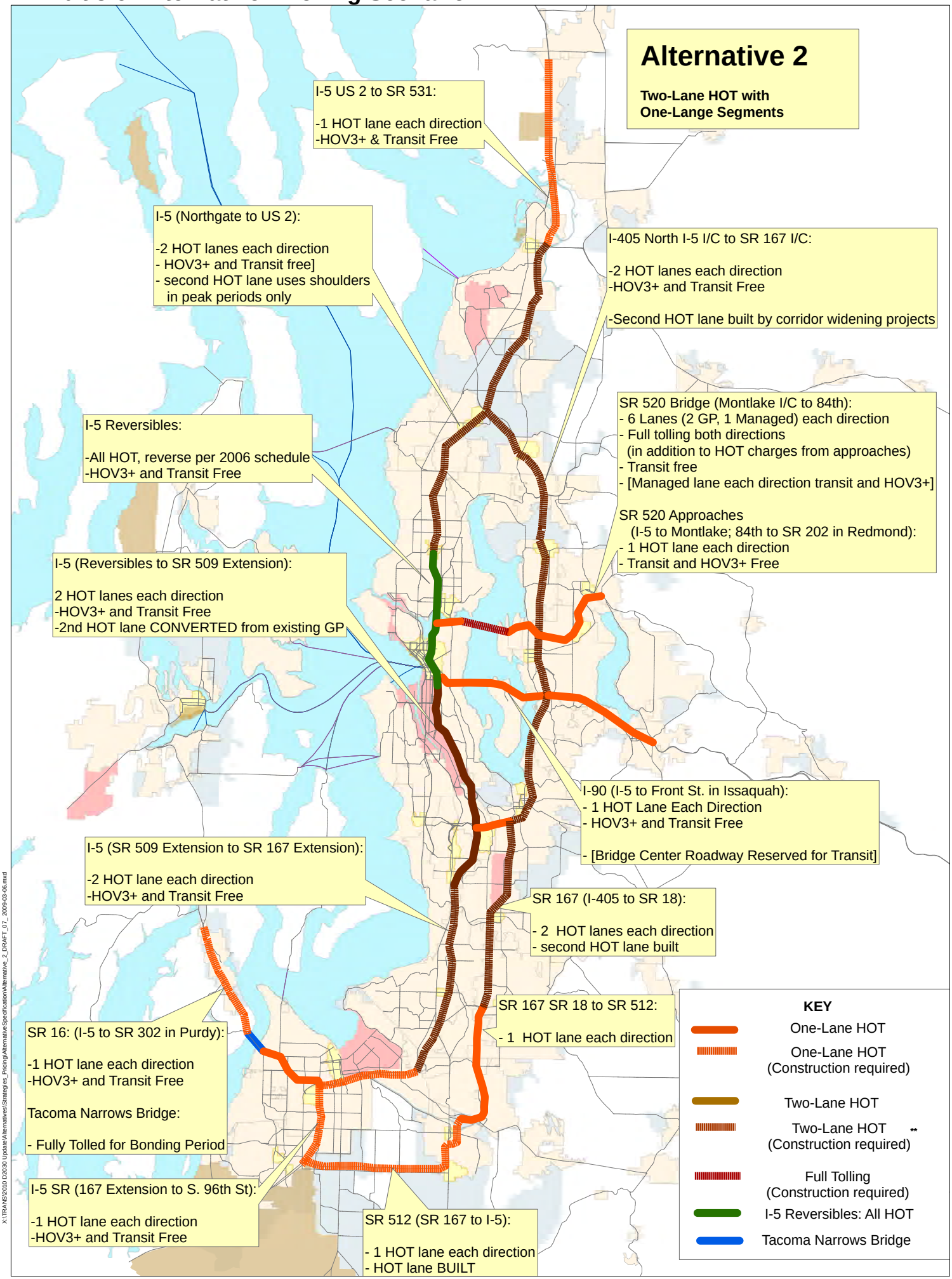


Exhibit 3-9. Alternative 2 Tolling Scenario



Alternative 2 System Efficiency

Alternative 2 Demand Management

Given its emphasis on roadway and transit expansion, Alternative 2 relies less on increased participation in employer demand management programs such as commute trip reduction (CTR), vanpools, and "telework" for system efficiency. Rather than expecting all cities with regional growth centers to participate in GTECs and "complete streets" programs, Alternative 2 places emphasis on the five metropolitan cities (Seattle, Bellevue, Bremerton, Everett, and Tacoma) as proposed locations for such programs. Pricing strategies and a reservation system would help manage auto ferry demand and improve system efficiency.

Alternative 2 System Management

There would be only modest investments in overall system management programs and ITS. Efforts would concentrate on coordinating signals across jurisdictional boundaries and transit signal priority improvements.

Alternative 2 Strategic Expansion

Alternative 2 Roadways

Alternative 2 assumes both arterial and freeway expansions (on I-405, SR 167, SR 18, SR 522, SR 509, and US 2 among others). This alternative proposes to convert existing HOV lanes to HOT lanes and to add new HOT lanes, resulting in a two-lane HOT system on a large portion of the region's freeways. This will result in increased efficiency by maximizing use of the roadway capacity to improve travel times, reduce delay, and improve reliability for all users.

Alternative 2 Transit

In Alternative 2, rail and ferry services would extend farther. Sound Transit's Link light rail service would extend to Everett, Tacoma, and downtown Redmond. Passenger-only ferry service would augment the WSF auto ferry system, with improved transit connections to ferry terminals.

Alternative 2 Bicycle and Pedestrian

Alternative 2 includes investments to complete a continuous network of sidewalks, paths, and trails to connect bicyclists and pedestrians to transit centers, rail stations, and ferry terminals.

This network would also connect to park-and-ride lots in manufacturing/industrial centers and in regional growth centers. Combining bicycle and pedestrian options with the expanded transit systems and more efficient roadways would provide significant improvements in access to housing and jobs.

Alternative 2 Funding

Alternative 2 would rely on significantly more traditional funding (gas tax, etc.), as well as new revenues from implementing a two-lane HOT lane network on major highways. Given the amount of new capacity investments, this alternative would likely have the highest need for generating new revenue.

8 Which program and projects are included in Alternative 3: Toll Revenues Expand Capacity and Improve Efficiency?

Alternative 3 would expand capacity and improve efficiency primarily in the central portion of the Puget Sound region. This alternative proposes a significant shift in the way our region collects and allocates transportation funds. Major freeways where improvements are planned would be tolled, and toll revenues would be spent on highway improvements in the tolled corridors. These revenues would be sufficient to fund significant portions of highway projects, including lane additions on the central regional freeways; reconfiguration of ramps and interchanges for efficiency, such as those on I-5; and new facilities such as the SR 167 Extension, SR 509 Extension, and the Cross-Base Highway. Traditional revenues would fund other efficiency and management programs, including substantial bus service investments, strategic arterial roadway expansion, and new off-road trail infrastructure in the corridors connecting the regional centers to form a nonmotorized network. Alternative 3 includes the same light rail program (Sound Transit's Phase 2 [ST2]) as the Baseline Alternative to form the regional transit system. The highway tolling rates would be set to also serve a demand management function and minimize impacts on adjacent arterials.

The programs and projects included in Alternative 3 are described below and are shown in Exhibits 3-10 and 3-11.

Exhibit 3-10. Alternative 3: Toll Revenues Expand Capacity and Improve Efficiency

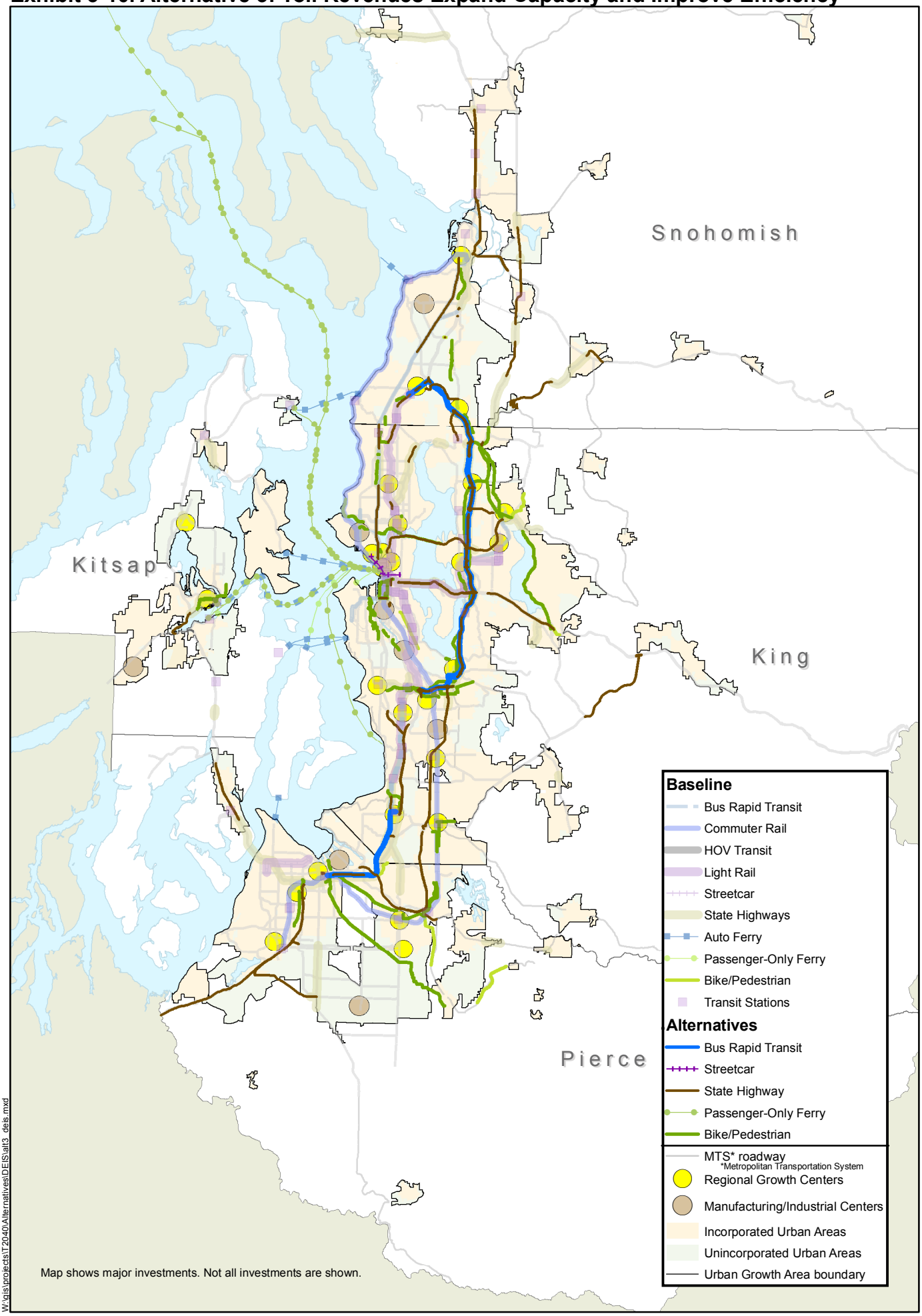
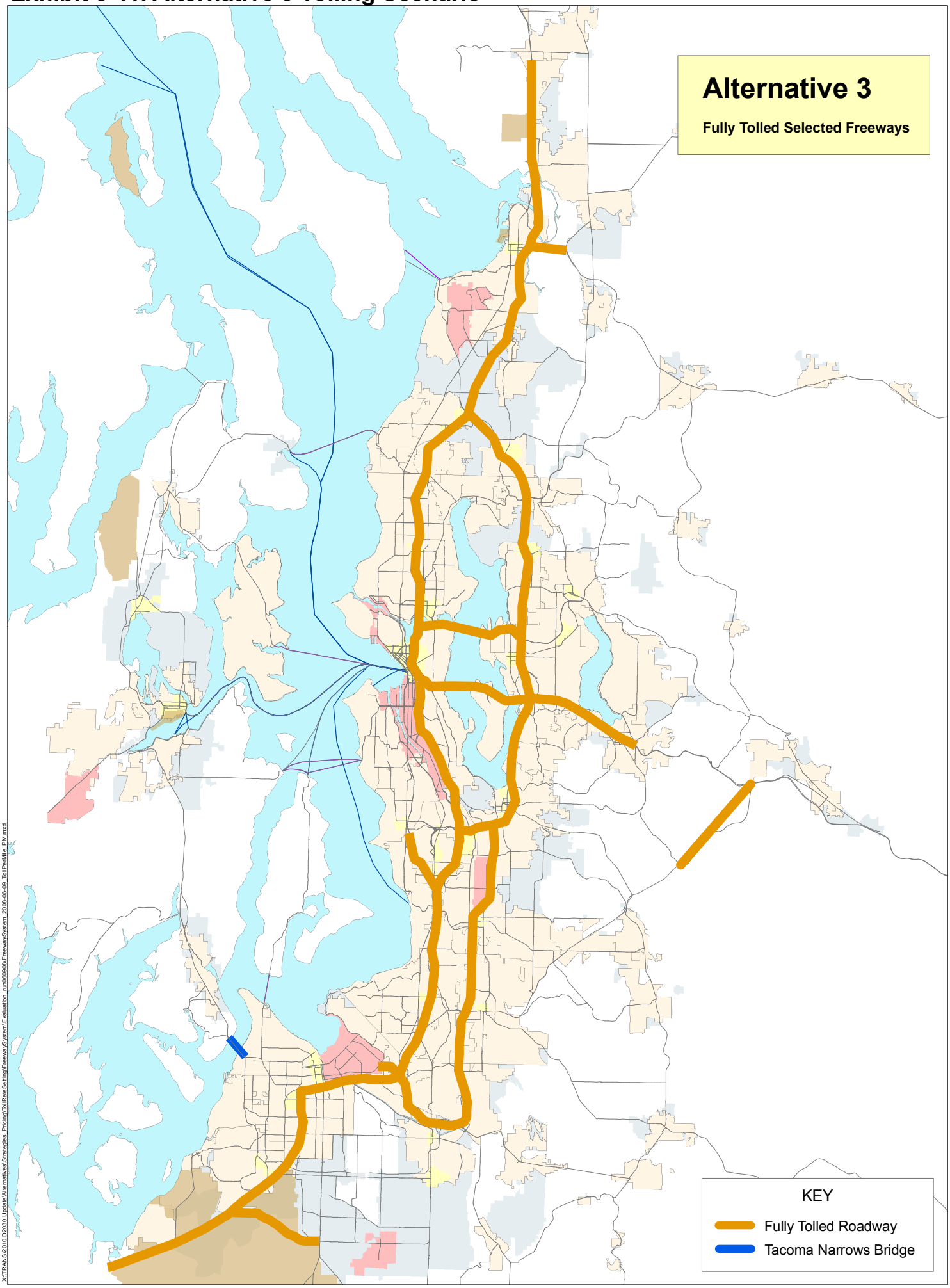


Exhibit 3-11. Alternative 3 Tolling Scenario



Alternative 3 System Efficiency

Alternative 3 Demand Management

Alternative 3 relies more on greater participation in employer demand management programs such as CTR, vanpools, and "telework." GTECs would locate in all cities with regional growth centers and would collect additional parking charges to manage parking supply. This alternative includes incentives for mixed-use development near transit centers and rail stations. In response to a greater demand for parking, a user fee would be charged at park-and-ride lots. Regional growth centers may provide incentives to supply parking for carpools and vanpools. Pricing strategies and a reservation system would help manage auto ferry demand and improve system efficiency.

Alternative 3 System Management

The approach to arterial management in Alternative 3 concentrates on signal coordination in major corridors that connect centers, and places a strong emphasis on ITS and a wide range of other technology tools (from center-to-center communications to in-vehicle devices) that allow operators—including freight movers and transit drivers—to use the system more efficiently.

Alternative 3 Strategic Expansion

Alternative 3 Roadways

By collecting tolls on the region's core freeways, Alternative 3 would generate sufficient revenue to complete major highway projects, including the SR 509 and SR 167 extension projects, as well as improvements to SR 9, SR 18, and US 2. It is important to note that Alternative 3 proposes to adhere to a traditional tolling philosophy that targets the use of toll revenue to the facility where it is collected. The collected toll funds would not be spent on transit or other projects, programs, or system improvements.

Alternative 3 Transit

Alternative 3 implements specific management measures to retain transit speed and reliability on the arterial system. Transit service hours would increase from higher transit speeds on the tolled freeways. These additional service hours would be reallocated to key arterial routes. This alternative would also

focus arterial system management investments on transit-supportive strategies. Passenger-only ferry service would augment the Washington State Ferries (WSF) auto ferry system, and transit service to ferry terminals would be improved.

Alternative 3 Bicycle and Pedestrian

Alternative 3 would increase bicycle access to transit on arterials and proposes to complete sidewalk networks on all arterials in urban areas. Bicyclists would benefit from a completed network along the corridors that connect regional growth centers. Bicycle and car share programs would offer more travel choices.

Alternative 3 Funding

Alternative 3 would rely on toll revenues to finance highway improvements and would use limited traditional funding sources (sales taxes) to fund transit improvements. In this alternative, tolls would be placed on the core freeway system: I-5, I-405, I-90, the SR 520 floating bridge, SR 167, SR 509, and the northern segment of SR 18 near Snoqualmie that would be widened.

9 Which programs and projects are included in Alternative 4: Combine Traditional Revenues and Tolls to Maximize Efficiency?

This alternative combines traditional revenue sources and highway tolling to create funding for a broad array of investments. In this alternative, nearly the entire highway network would be tolled, and toll rates would be set to maximize efficiency rather than to generate revenue. It includes strategic roadway expansion to alleviate congestion at bottlenecks and chokepoints, integrated system management and operational coordination across multiple modes, a light rail network beyond ST2, significant bus service increases, and strategic arterial roadway expansion. It would add new bicycle and pedestrian infrastructure in the regional centers and their connecting corridors.

The programs and projects included in Alternative 4 are described below and are shown in Exhibits 3-12 and 3-13.

Exhibit 3-12. Alternative 4: Combine Traditional Revenues and Tolls to Maximize Efficiency

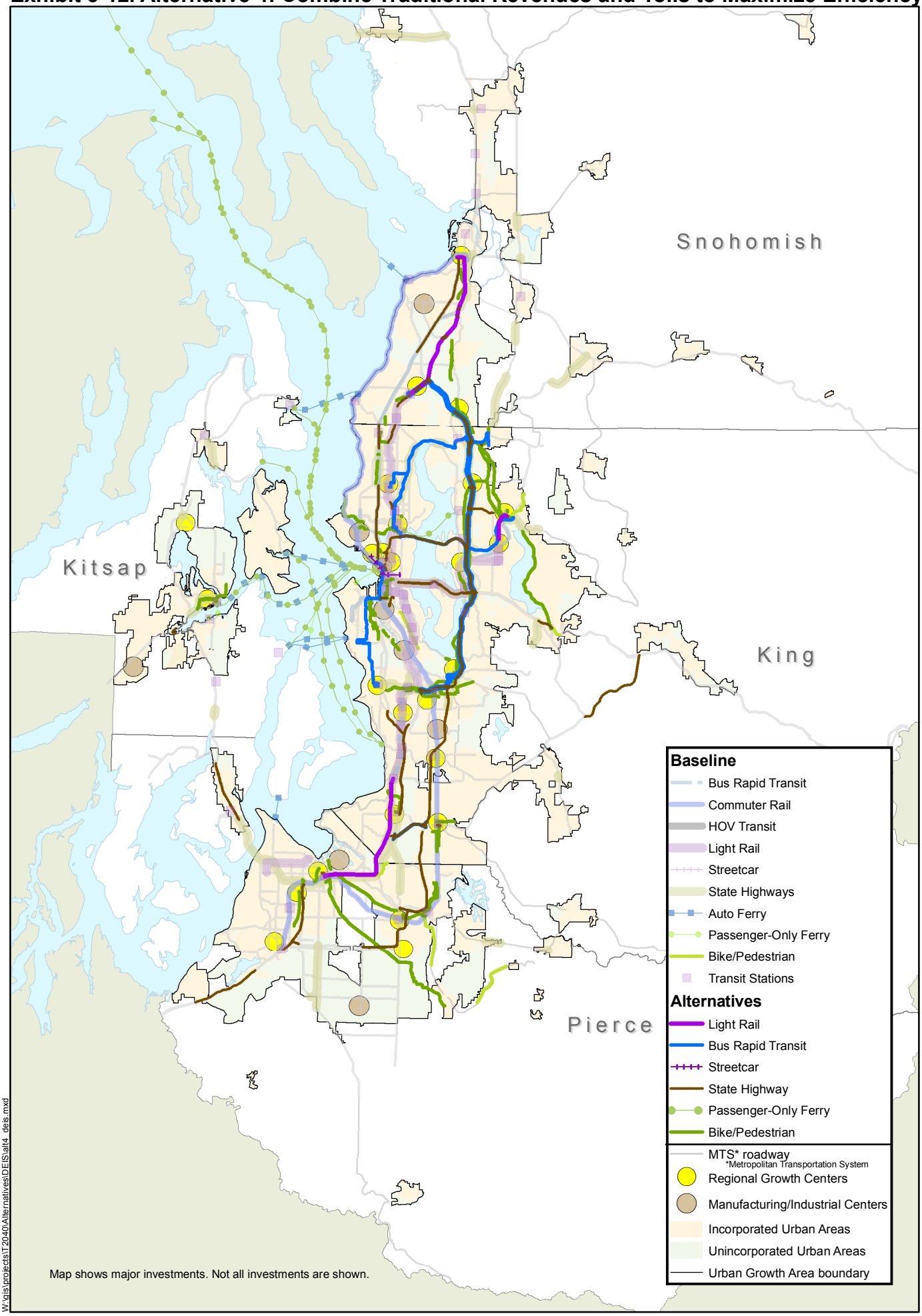
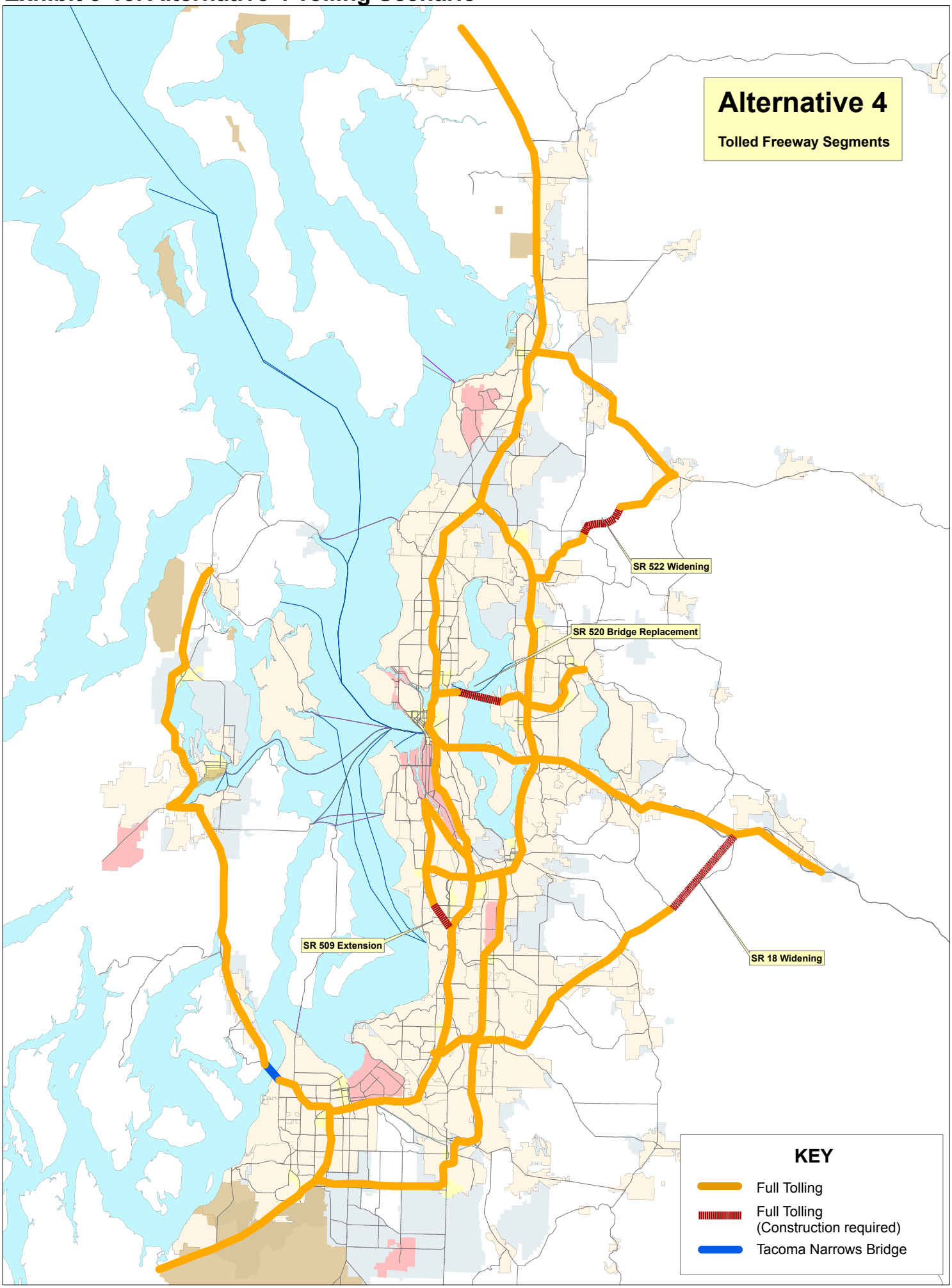


Exhibit 3-13. Alternative 4 Tolling Scenario



Alternative 4 System Efficiency

Alternative 4 Demand Management

In Alternative 4, more funds would be available to invest in employer demand management programs such as CTR to support transit users and vanpools. These programs, plus other incentives that encourage travel choices other than driving alone, would increase opportunities to reduce freeway congestion. Pricing strategies and a reservation system would help manage auto ferry demand and improve system efficiency.

Alternative 4 System Management

Alternative 4 makes strategic use of a variety of ITS techniques to manage traffic flow. Techniques range from traveler information systems both in and out of vehicles that can expedite freight traffic and assist transit operators on the freeways and arterials. Added ITS technology will provide better traveler information.

Alternative 4 Strategic Expansion

Alternative 4 Roadways

Roadway expansions in Alternative 4 would be limited to projects that relieve congestion at bottlenecks and chokepoints by using some of the revenue generated by tolls.

Alternative 4 Transit

New revenue (including some toll revenue) would be invested in transit service. Alternative 4 would implement ST2 plus extend light rail to Everett, Tacoma, and downtown Redmond. These expansions, and the better use of shared rights of way for BRT, would combine to make the entire transit system more convenient for users and better integrated with roadway systems. Alternative 4 proposes to increase transit services on tolled corridors, including core and specialized service on routes where the use of tolling improves transit travel times. Passenger-only ferry service would augment the WSF auto ferry system, and transit service to ferry terminals would be improved.

Alternative 4 Bicycle and Pedestrian

Toll revenues would be spent to complete bicycle and pedestrian connections to transit centers, rail stations, and ferry

terminals. These investments would provide better access to arterial transit service, complete sidewalk systems and bicycle networks along corridors that connect regional growth centers, and provide more safety features at crosswalks. Cities with regional growth centers would work to provide better "end-of-trip" facilities such as locker rooms, storage, and secure bicycle racks.

Alternative 4 Funding

Funding for Alternative 4 would include limited traditional revenue sources and a significant increase in toll revenues derived from tolling most of the regional freeway system. Toll revenues would be used for both highway system improvements and for systemwide transit improvements.

10 Which programs and projects are included in Alternative 5: Reduce Emissions with Limited Highway Investment and a Focus on Regional Tolling?

Alternative 5 would include limited highway investments and focus on transit and nonmotorized programs. This alternative proposes a shift from dependence on fuel-based revenues to creating a system with greatly enhanced travel choices. In Alternative 5 all freeway and arterial roadways would be subject to tolls (or similar user fees) designed to maximize system efficiency. Toll revenue would replace some traditional funding sources and would fund a wide variety of investments, including elimination of bottlenecks and chokepoints on freeway and arterial roadways, expansion of arterials and highways in strategic locations, and creation of sophisticated roadway and transit management systems. Other than the Preferred Alternative, Alternative 5 contains the largest expansion of light rail or other high-capacity transit, the largest increase in bus service, and the largest expansion of dedicated nonmotorized infrastructure. Altogether, these programs and investments are designed to also reduce carbon dioxide emissions.

The programs and projects included in Alternative 5 are described below and are shown in Exhibits 3-14 and 3-15.

Exhibit 3-14. Reduce Emissions with Limited Highway Investment and a Focus on Regional Tolling

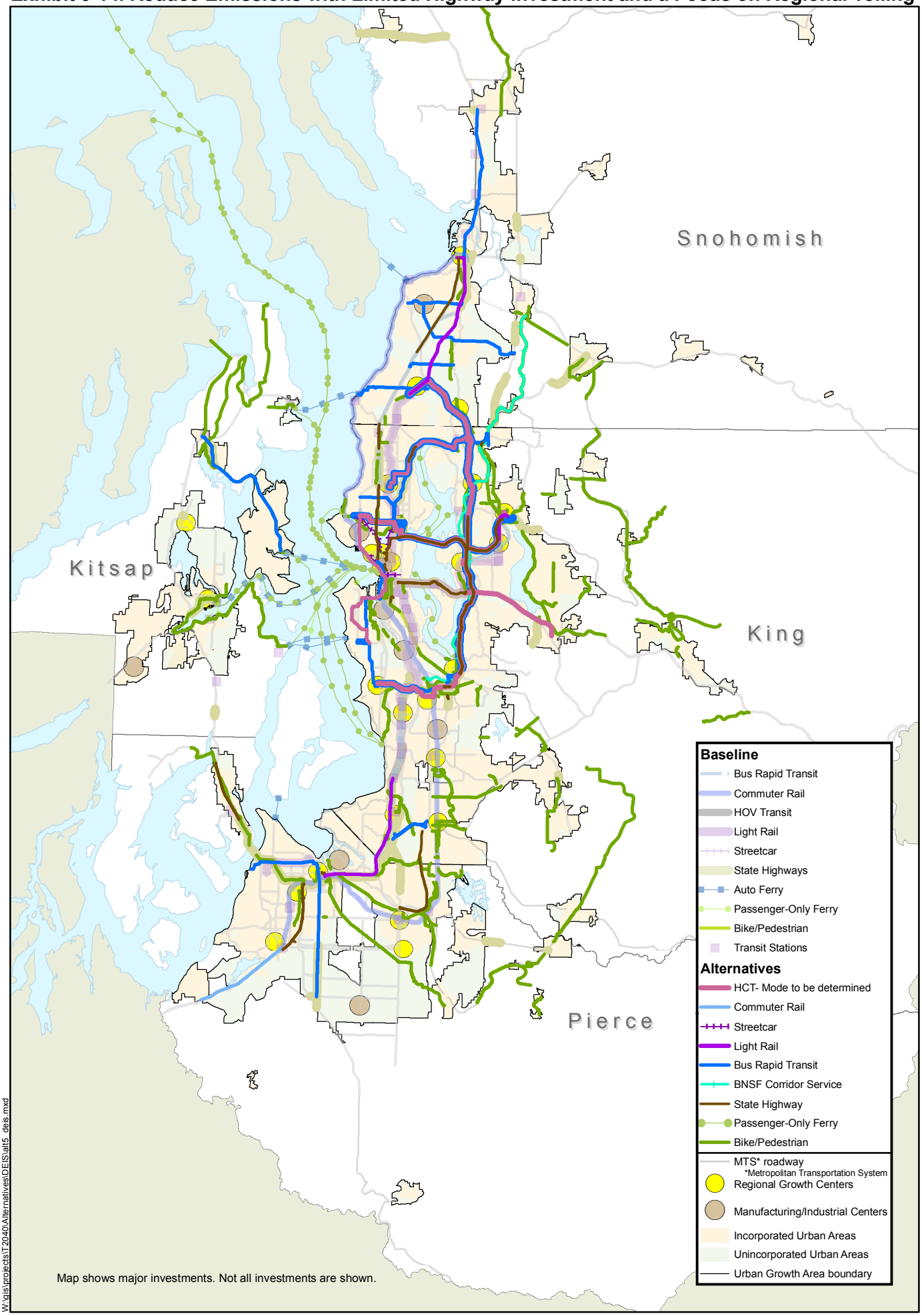
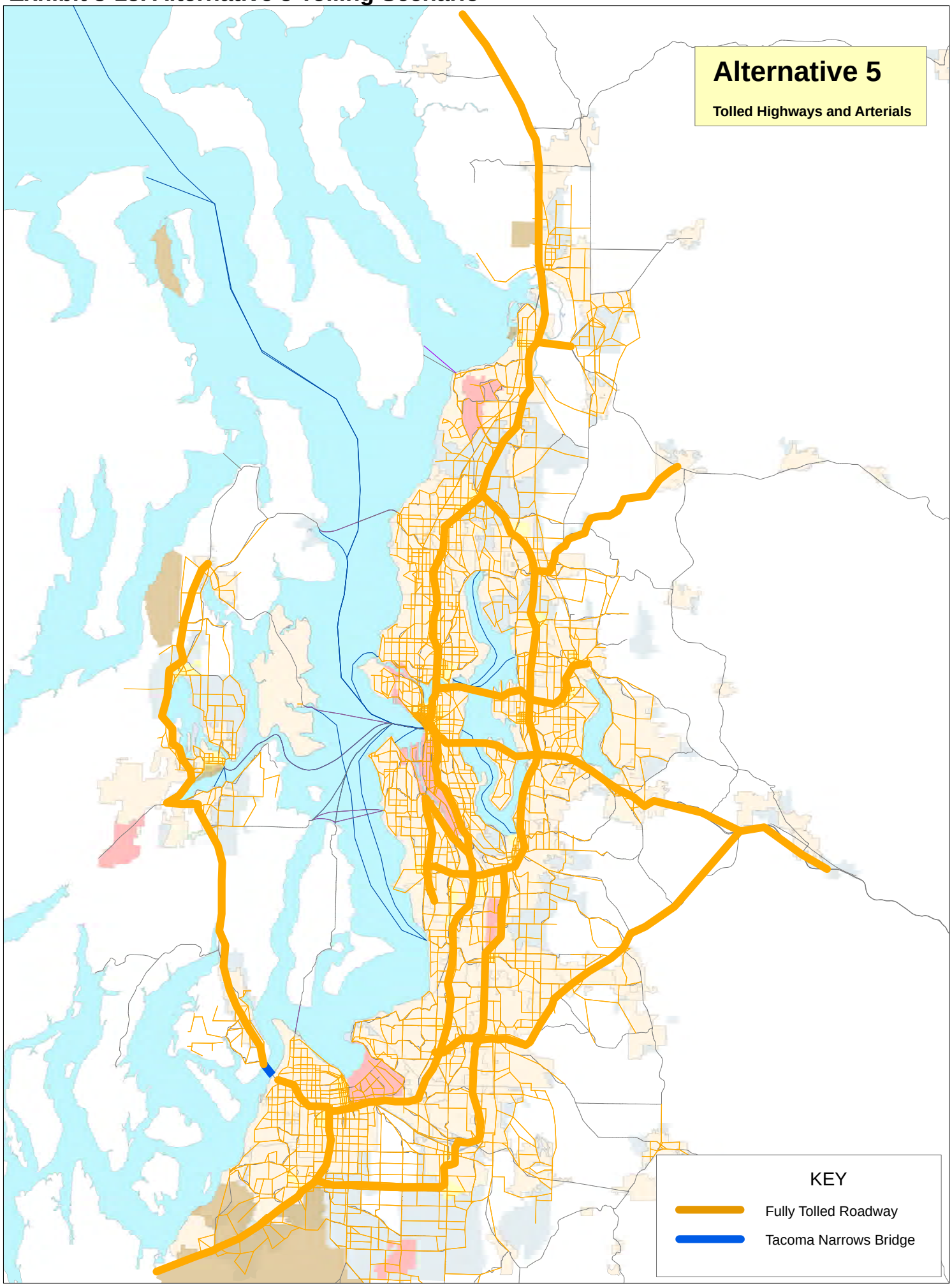


Exhibit 3-15. Alternative 5 Tolling Scenario



Alternative 5 System Efficiency

Alternative 5 Demand Management

Alternative 5 includes incentive programs that encourage travel options for employers in small towns and rural areas. All cities with regional growth centers will offer GTEC programs. In addition, more effort will be made to engage small businesses and residential areas in car share and vanpool programs. Pricing strategies and a reservation system would help manage auto ferry demand and improve system efficiency.

Alternative 5 System Management

Alternative 5 relies on extensive system management and regionwide ITS programs to regulate traffic flow and improve travel time.

Alternative 5 Strategic Expansion

Alternative 5 Roadways

Alternative 5 would include limited investment in roadways. Improvements would primarily include completion of HOV lanes on I-5 and SR 16 and regionwide chokepoint and bottleneck improvements.

Alternative 5 Transit

Alternative 5 promotes an interconnected transit system that reaches beyond ST2 by building out the Sound Transit Long-Range Plan. It would extend express bus and rail (both light and commuter) service and increase core, connector, and specialized bus services throughout the region. Light rail or other high-capacity transit would connect Everett and Tacoma, extend to downtown Redmond, and serve Ballard and West Seattle. In addition, commuter rail would connect Renton and Snohomish via the Burlington Northern Santa Fe (BNSF) rail corridor. Alternative 5 would invest in new passenger-only ferry service to serve demand rather than expanding the auto ferry system, and transit service to ferry terminals would be improved. Investments in the transit system would stimulate mixed-use development near transit centers and rail stations. Cities would have funds for “complete street” projects to support safe, walkable, communities.

Alternative 5 Bicycle and Pedestrian

Dedicating more space in the right of way would provide a continuous network of bicycle lanes, sidewalks, paths, and trails connected to transit centers, rail stations, ferry terminals, and park-and-ride lots. Combined with parking management techniques and wide use of employer-based demand management programs, the system would offer commuters safer and more efficient travel alternatives.

Alternative 5 Funding

Alternative 5 would replace existing traditional funding sources (gas tax, etc.) with user-based fees and place tolls on all highways and arterials. This complete network tolling approach would generate sufficient revenues to finance roadways, transit, bicycle and pedestrian options, and other investments.

11 Which programs and projects are included in the Preferred Alternative?

The Preferred Alternative includes elements of the other five action alternatives, as well as the projects and programs included in the Baseline Alternative and core investments, and some programs and projects that were not included in previous alternatives. As described below, the Preferred Alternative is designed to improve the region's transportation system through a combination of investments in system efficiency, strategic expansion, transit, ferry, bike and pedestrian improvements, as well as investments to preserve the existing transportation system. The Preferred Alternative financial strategy is based on a phased approach of transitioning away from current gas taxes toward the implementation of new user fees.

The Preferred Alternative includes:

- more transit service than all other alternatives;
- more miles of biking and walking facilities focused on access to transit stations and centers and completing regional trail links than all other alternatives;
- current levels of vehicle ferry service, and additional passenger ferries;

- replacement of several vulnerable roadways including the Alaskan Way Viaduct and SR 520 Floating Bridge;
- completion of missing links in the highway network such as SR 509, SR 167, and the Cross Base Highway; and
- expansion of local arterials and state highways in limited but strategic ways to service growth in urban growth centers.

The programs and projects included in the Preferred Alternative are described below and are shown in Exhibits 3-16 and 3-17.

Preferred Alternative Project and Program Categories

The Preferred Alternative includes two categories of programs and projects: (1) Constrained, and (2) Unprogrammed. These categories recognize the federally approved structure for regional plans and the range of uncertainty that is inherent in long-range transportation planning programs.

Financially Constrained: This category is a federally required component of the plan where project and program costs must be accounted for and balanced with reasonably expected revenues over the life of the plan.

Unprogrammed: This category represents projects and programs that are included in the Preferred Alternative but are not subject to the requirement of having a corresponding funding strategy and may be more illustrative or aspirational in nature.

The Preferred Alternative contains both the financially constrained and the unprogrammed programs and projects.

How does this FEIS analyze the constrained portion of the Preferred Alternative?

The Preferred Alternative in this FEIS contains both the financially constrained and the unprogrammed programs and projects (sometimes referred to as the full Preferred Alternative). Accordingly, most of the environmental disciplines analyze the potential effects of the Preferred Alternative. However, for instances when the constrained portion of the Preferred Alternative would result in greater effects upon the environment, such as in certain analyses in Chapter 4: Transportation and Chapter 6: Air Quality and Climate Change, the effects of the constrained portion of the Preferred Alternative are analyzed.

Exhibit 3-16. Preferred Alternative

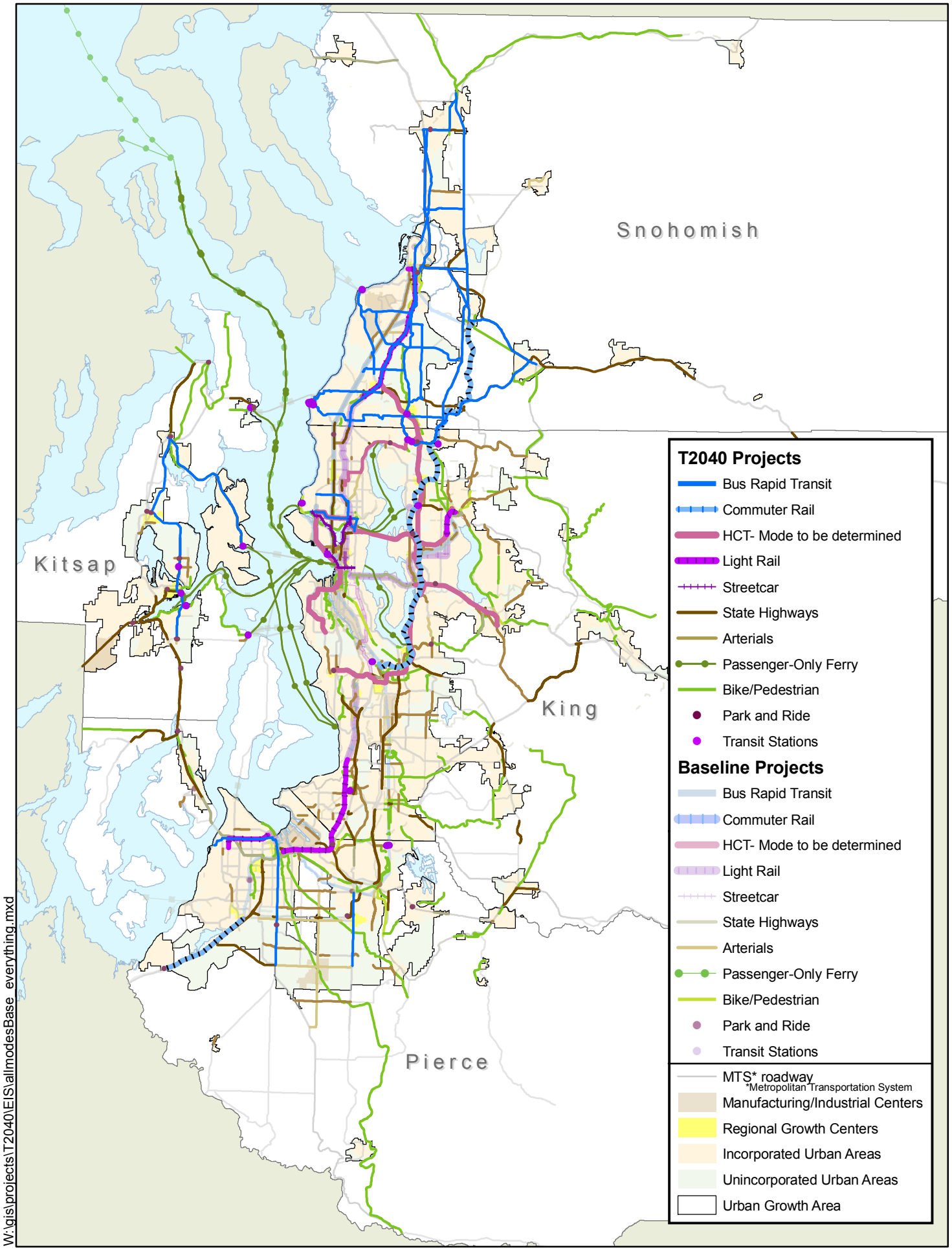
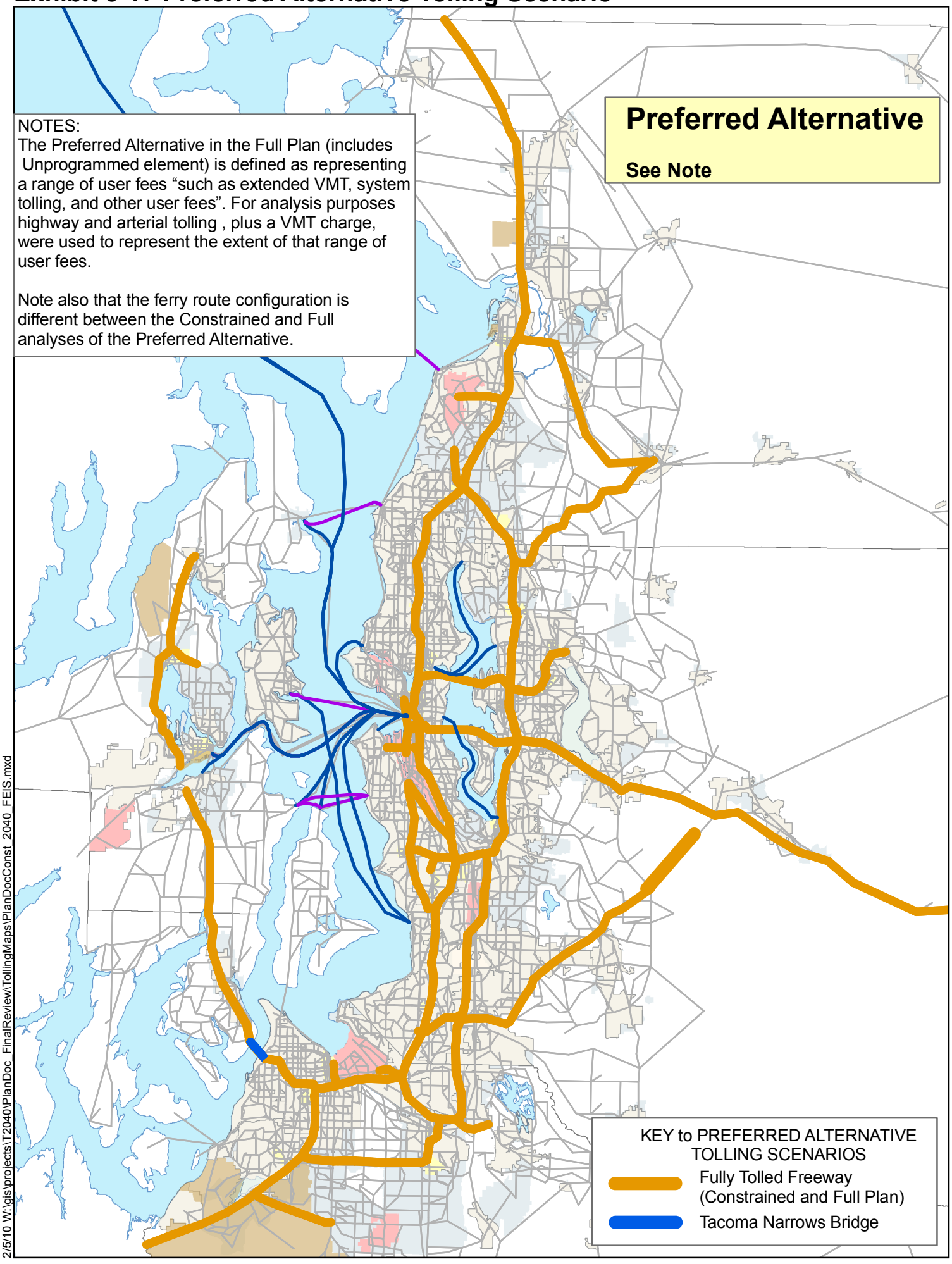


Exhibit 3-17 Preferred Alternative Tolling Scenario



Preferred Alternative Preservation

Consistent with the other alternatives, preservation, operation and maintenance is prioritized and represents approximately 60% of the Preferred Alternative costs.

Preferred Alternative System Efficiency

The Preferred Alternative emphasizes greatly expanded employer and residential programs to reduce unnecessary travel and increase use of transit, vanpools, bicycling, and walking. The Preferred Alternative includes an aggressive program of advanced technology on arterials and freeways, including better signal coordination, active traffic management, new and expanded traveler information services, and transit-specific technologies to ensure on-time performance and provide customers with more complete, up-to-date travel information. Consistent with the other alternatives, the Preferred Alternative supports the state's Target Zero program (refer to Chapter 4: Transportation for more information) and continues progress on regional security programs.

Preferred Alternative Strategic Expansion

The Preferred Alternative includes investments in integrated strategies that support all forms of travel. The Preferred Alternative completes or replaces the network of roadway projects necessary to support development of the centers identified in VISION 2040 and keep freight moving to support a strong economy, such as SR 167, SR 509, SR 520 floating bridge, US 2 and SR 3. The Preferred Alternative contains approximately 950 new roadway lane miles, which represents the second highest level of roadway investment (Alternative 2 contains approximately 1200 new roadway lane miles) and a 7% increase over 2006 levels.

Users of the new highway capacity would directly pay for improvements through tolling, which would also reduce congestion and emissions. Local roadways would be expanded to support transit and improve the efficiency of people and freight movement, especially to provide access to and within centers.

Preferred Alternative Transit

The Preferred Alternative would implement a comprehensive transit strategy, including completion of ST2 projects and additional Link light rail extensions to Everett, Tacoma, and Redmond. The Preferred Alternative includes more light rail miles than any other alternative, and the largest expansion of commuter rail of any alternative, equal to Alternative 5. The Preferred Alternative includes more local transit investment than any other alternative: over 100% more service than 2006 in peak periods and over 80% more service off-peak. All-day service with high frequencies (generally every 15 minutes) would be emphasized.

Preferred Alternative Ferry

The Preferred Alternative includes three new passenger ferry routes on Lake Washington and six new passenger ferry routes on Puget Sound. The Preferred Alternative includes the most new passenger ferry service, one route more than Alternative 5.

Preferred Alternative Bicycle and Pedestrian

The Preferred Alternative would prioritize pedestrian and bicycle facilities within regional growth centers and within ¾ mile of transit passenger facilities. Missing links in regional trails would be completed. The Preferred Alternative includes 553 miles of new off-road trails, more than any other alternative.

Preferred Alternative Financial Strategy

The Preferred Alternative financial strategy is based on a phased approach of transitioning away from current gas taxes toward the implementation of new user fees, which could include tolls, VMT charges, and other pricing approaches to fund and manage the transportation system. There should be a relationship between the tax, fee, or toll and the use of the revenues. However, it is anticipated that the region would continue to rely on traditional funding sources and financial instruments as it makes a transition to a more sustainable financial strategy.

12 How did PSRC develop the alternatives?

The development of a Preferred Alternative was a three-year effort involving ongoing public involvement, agency consultation, and environmental analysis. The major elements of this effort included:

Background and Tool Development: The program started with the development of background information on transportation issues, such as growth, the economy, congestion, funding, environment, and health. Tools were developed to better inform the public and decision makers on specific areas that benefit or are affected by transportation programs, including land use, travel times, reliability, and safety. The tools included the development of a new benefit-cost model.

Scoping: Through scoping a list of issues, strategies, programs and projects were developed. A set of three critical issues were identified: Congestion and Mobility, Environment, and Transportation Funding.

Alternatives Development: Based on the issues and programs identified in scoping, alternatives were constructed to represent different transportation policy choices. The levels and type of investment, management, and funding strategies varied among the alternatives.

Criteria: Criteria were developed to evaluate key issues, particularly mobility, environment, economy, and equity. When possible, criteria were based on monetary values to provide quantitative information for the benefit-cost analysis.

Alternative Evaluation: The alternatives included three types of evaluation:

- Policy Review: All of the projects and programs in the alternatives were evaluated and found compliant with the VISION 2040 policies.
- Environmental Impact Statement (EIS): A Draft Environmental Impact Statement (DEIS) was used to evaluate the impact of the alternatives on the environment.

Public Scoping Process

For more information on the public scoping process, please refer to Appendix F.

Transportation 2040 Alternatives Development

Please refer to Appendix A for more details on developing the Transportation 2040 alternatives.

This FEIS responds to comments on the DEIS and also includes an analysis of the Preferred Alternative.

- Criteria: Criteria evaluation and reporting for each of the alternatives includes both qualitative and quantitative analysis.

Public Involvement and Consultation: The process included continuous public involvement and consultation with member agencies, including over 450 meetings, public notices, ongoing information posted on the Internet, and other materials. PSRC conducted a focused effort to provide outreach to seek input from low-income and minority populations and people with special transportation needs. Over 2000 comments on the DEIS were received and have been reviewed.

Recommendation: The Preferred Alternative includes the programs and projects contained in the Draft Transportation 2040 Plan, which was designed through lengthy consultation with many stakeholders (refer to the Public Involvement and Consultation Appendix in the Transportation 2040 Plan). Those consulted included all of PSRC's standing committees and boards, technical committees formed for the plan update process, and numerous nonprofit or private entities. The stakeholders considered many aspects of the proposals in the course of recommending inclusion in the plan, including proposal maturity, proposal support for regional policies and objectives as set forth in VISION 2040, and the analysis results from the DEIS. Ultimately, the Transportation Policy Board recommended the investments included in the draft plan to the Executive Board, which endorsed the draft plan as the basis for the Preferred Alternative evaluated in this FEIS.

13 How was the public involved in the development of the alternatives?

On November 15, 2007, PSRC released a Scoping Notice and Determination of Significance for the Destination 2030 regional transportation plan update.

The Determination of Significance marked the beginning of an extended public outreach and scoping process that extended to February 2008. Public outreach included a variety of methods,

How were resource agencies involved in the development of alternatives?

Refer to Appendix J: Agency Consultation for more information about the involvement of resource agencies in the development of the plan alternatives.

Major Issues Identified through Scoping

Comments received during the scoping process were related to the following 10 broad issues:

- Land Use
- Economy
- Congestion and Mobility
- Equity and Special Needs Transportation
- Safety and Health
- Security
- Energy and the Environment
- Preservation of the System
- Transportation Funding
- Project Prioritization

including a public opinion survey, workshops, open houses, presentations to a diverse set of stakeholders, and more.

One of the key purposes of the scoping process was to focus the plan update and environmental review on the most compelling transportation issues facing the region. PSRC received hundreds of comments, and about two-thirds of all comments suggested that the plan (1) focus on congestion and mobility, and (2) address concerns about energy and the environment (including climate change). In addition, over 300 comments called for the plan to address the following concerns: support for VISION 2040, tolling and congestion pricing programs, investments in transit, system and demand management measures, transportation funding, and ways to prioritize investments.

Emphasis on these issues was included in the DEIS Scope of Work and directly influenced the structure of the alternatives discussed earlier in this chapter.

PSRC received more than 1,200 comment letters, and more than 3,700 individual comments during the DEIS comment period, all of which have been considered and responded to in Volume 2. Shortly after the close of the public comment period, a summary of the comments was provided to key boards and committees at PSRC. The committees were also given the opportunity to review and discuss the comments as the Preferred Alternative was developed.

VISION 2040

For more information about VISION 2040 and its relationship to Transportation 2040, refer to Chapter 2: Introduction and Background.

14 How were the alternatives evaluated?

The alternatives were evaluated by a process that involved the following steps:

- A technical analysis using the PSRC integrated land use and travel models, as well as other technical tools to measure air quality impacts and user benefits impacts
- An assessment using measures in the Transportation 2040 evaluation criteria as described below
- A comprehensive policy analysis of each alternative's ability to support VISION 2040

Evaluation Policies and Criteria

For more information about the evaluation of plan alternatives, please refer to Appendix D: Policy Analysis and Evaluation Criteria Report.

- The analysis of environmental impacts under the formal SEPA review process contained in this document

Integrated Transportation and Land Use Modeling

The transportation modeling effort produced forecasts of the future distribution of jobs and population across the region and the future performance of the region's transportation system. The transportation system inputs used in the forecasts were derived directly from the investments specified for each alternative as documented in the Alternatives Technical Report (refer to Appendix A). The model inputs vary for each alternative. The outputs of the forecast tools are presented in detail in the Policy Analysis and Evaluation Criteria Report (refer to Appendix D).

Modeling methods and details

Refer to Appendix E: Technical Description of the Modeling Framework for a more detailed technical description of the modeling framework.

To test how transportation can affect land use patterns, the travel modeling for Transportation 2040 employed a new land use model, UrbanSim (www.urbansim.org).

Using an internal representation of the region's collective future year land use plans as a starting point, each alternative, including the Baseline Alternative, was modeled to assess whether the alternatives resulted in land uses consistent with VISION 2040 policies. The results of this modeling are described in detail in the Policy Analysis and Evaluation Criteria Report (refer to Appendix D) and in Chapter 5: Land Use, Population, Employment, and Housing.

Transportation 2040 Evaluation Criteria

VISION 2040 is the organizing framework for evaluating the alternatives. The Regional Growth Strategy and the goals, objectives, and policies in VISION 2040 guided the development of the evaluation criteria and the organization of the policy analysis. The evaluation criteria provide the methodology to measure progress toward achieving VISION 2040. The evaluation criteria were developed to address the overarching goals of the transportation planning process. Individual metrics were developed to quantify different aspects of the evaluation criteria. The criteria measures are grouped into seven categories: mobility, finance, growth management,

economic prosperity, environmental stewardship, quality of life, and equity.

Some of the metrics represent a different means to measure transportation benefits (or impacts) than has been commonly used in the past. For example, VMT is a commonly used proxy for measuring congestion or air quality impacts. In these metrics, congestion was directly measured as a function of travel time savings, and the cost of emissions as a function of vehicle speeds and distance was also measured directly; as a result, there was no direct need to use VMT as a proxy measure for these other metrics. In fact, reporting VMT would produce a duplicative effect of measuring both the proxy metric and the actual metric, based on the same underlying data.

Many of the criteria measures are estimated in monetary values so they can be included in a benefit-cost result. These measures are reported as annual benefits (positive values) and costs (negative values) for the plan horizon year 2040 in millions of year 2008 dollars. All monetary values are additive except for the economic prosperity benefits, which are a subset of the regional benefits already reported in the other measures. Other criteria measures are reported in the following summary table with directional measures as follows: "⊗" indicates no significant change, "–" indicates negative or undesirable change, and "+" indicates positive or desirable change.

The advantages of the benefit-cost approach are that both benefits and costs can be combined to assess the potential economic consequences of a particular transportation alternative. The disadvantage is that those measures not having a monetary value, such as growth management or economic prosperity, cannot be directly included. The full set of evaluation criteria recognizes the advantages of the benefit-cost method but combines this with other quantitative and qualitative measures to provide a more comprehensive assessment of each alternative in Appendix D. The results of the evaluation process are shown in Exhibit 3-18.

Exhibit 3-18[2]

Evaluation Criteria

Evaluation Criteria	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
Mobility							
M1. Travel Time Savings	$1,850	$2,510	$3,440	$2,890	$3,560	$5,020	$6,390
M2. Improved Reliability Benefits	$290	$410	$1,000	$1,140	$1,290	$1,070	$1,180
M3. Vehicle Operating and Ownership Benefits	-$93	-$189	-$125	$200	$13	$73	$213
M4. Other User Benefits	$17	$38.	$77	-$15	-$457	$89	$34
Finance							
F1. Facility Operating Cost	-$360	-$160	-$300	-$510	-$1,030	-$1,570	-$2,600
F2. Capital Cost	-$640	-$2,310	-$1,670	-$1,650	-$1,700	-$1,560	-$2,770
F3. Operating Revenues	$180	$257	$2,940	$3,660	$7,100	$3,500	$5,360
F4. Influence of Finance on the Economy	-$134	-$363	-$46	$44	$138	$224	$103
Growth Management							
GM1. Population	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GM2. Employment	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GM3. Jobs to Housing Balance	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GM4. Population and Jobs in Centers	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Economic Prosperity							
EP1. Benefits Low and High-wage Employment	$382	$441	$555	$431	$370	$1,060	$1,380
EP2. Benefits to Cluster Employment	$56	$116	$179	$142	$49	$297	$373
EP3. Benefits to Freight-Related Employment	$55	$86	$97	$81	$52	$171	$226
Environmental Stewardship							
ES1. Vehicle and Stationary Emission Benefits	-$14	-$35	$19	$31	$94	$38	$72
ES2. Impervious Surfaces	⊗	-	-	⊗	⊗	-	-
ES3. Agriculture and Natural Resource Lands	⊗	-	⊗	⊗	⊗	⊗	⊗
ES4. Energy Usage from Vehicle and Building Use	⊗	⊗	+	+	+	+	+
Quality of Life							
QL1. Accident Cost Savings	-$94	-$177	-$52	$1	$168	-$26	$32
QL2. Non-motorized Travel	⊗	-	⊗	+	+	+	+
QL3. Redundancy (Roads and Transit)	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Equity							
E1. Geographic Distribution of Benefits	+	⊗	+	-	⊗	⊗	⊗
E2. Income Distribution of Benefits	⊗	⊗	⊗	-	-	⊗	⊗
E3. Benefits to Personal and Commercial Users	⊗	⊗	⊗	-	-	⊗	⊗
E4. Benefits to Environmental Justice Populations	+	+	+	+	+	+	+

All comparisons to the 2040 Baseline Alternative:

$$ in millions in the year 2040; positive values are benefits, negative values are costs; all monetary values are additive except for the Economic Prosperity benefits which are benefits to a subset of the region

PA-C is Preferred Alternative (Constrained), PA is Preferred Alternative, ⊗ is no significant change, - is negative change, + is positive change

[2] This exhibit has changed since the DEIS.

Policy Analysis

The adoption of the VISION 2040 Regional Growth Strategy in April 2008 set forward a series of growth policies. The Transportation 2040 alternatives are evaluated against these goals and policies. Excerpts from the Policy Analysis are included below.

Environment

A core principle of VISION 2040 is maintaining and improving both the natural and built environments. Land use, transportation, air quality, and human health are interconnected and therefore require integrated planning, regulations, and implementation actions.

Evaluation Policies and Criteria

For more information about the evaluation of plan alternatives, please refer to Appendix D: Policy Analysis and Evaluation Criteria Report.

Current conditions of habitat loss/fragmentation, impervious surface, pollution, and alterations of processes will be similar for all alternatives. Much of the region's transportation system is already in place, and the most common type of improvements for all alternatives involve the replacement or expansion of existing facilities within the urban area.

Development Patterns

The Development Patterns section of VISION 2040 reflects key elements of the Regional Growth Strategy, with a focus on the continued growth of designated regional centers and sub-regional centers. It also re-emphasizes preserving rural lands and not allowing development to diminish rural character and scale.

While all of the alternatives were highly supportive of population growth in regional growth centers, Alternatives 3, 4, and the Preferred Alternative were most successful. Alternatives 1 and 5 were most consistent for employment growth in regional growth centers and manufacturing industrial centers. Forecasted growth in designated rural areas throughout the region was fairly low in each of the alternatives, including the Preferred Alternative. An analysis of development on rural parcels adjacent to designated natural resource lands did not indicate a disproportionately large change in activity compared to the Baseline Alternative. It does not appear that any of the

alternatives place undue conversion pressure on rural areas or natural resource lands.

Economy

The economic policies focus on creating a prosperous and sustainable regional economy. They incorporate new focus areas based on the Regional Economic Strategy. The policies are organized around the topics of business, people, and places. This new structure maintains many of the existing policies, but streamlines them while addressing many new topics.

The Preferred Alternative would likely do the most to improve workforce mobility and job access to existing and planned population and employment concentrations because of the following factors: conducting maintenance and minor improvements to existing highway infrastructure, providing extensive transportation options regionwide, and establishing extensive transportation demand management, transportation system management, and roadway pricing policies.

Transportation

The region's long-range transportation strategy is to establish a coordinated multimodal transportation system that is integrated with and supportive of regionwide growth management planning objectives. To support the regional vision for focusing growth within the designated urban growth area, especially in identified centers, transportation facilities and programs should contribute to establishing a balanced transportation system that provides enhanced travel options. The transportation policies focus on creating a cleaner, more efficient transportation system, and reducing congestion.

When evaluating improvements to VMT reduction, trip times, trip lengths, speeds, and delay, the Preferred Alternative appears to best improve regional mobility and accessibility.

15 What are the benefits and disadvantages of delaying implementation to a future time?

If implementation of the Transportation 2040 plan is delayed, transportation projects or programs identified in the plan could also be delayed. The primary benefit of this delayed

implementation would be to delay any adverse construction and operating impacts of the projects included in the final Transportation 2040 plan.

The primary disadvantages of delayed implementation could include:

- Failure to implement a key component of VISION 2040, the region's long-range vision for managing growth
- Delays in implementing transit, nonmotorized, and other project types that have environmental benefits
- Impacts on achieving economic development goals including affordable and convenient housing opportunities
- Deferred decisions by other parties on related transportation or development projects
- Increased cost or pressure to develop rights of way needed for some of the projects
- Risk in delaying or receiving a reduced amount of federal funding
- Higher construction costs due to inflation

16 What are the next steps?

After the release of the FEIS, PSRC will take the following steps:

- PSRC will continue to collect and review comments on the Draft Transportation 2040 Plan and will present these comments for consideration at the meeting of the General Assembly in spring 2010 (currently scheduled for May 2010).
- Based on a recommendation from PSRC's Transportation Policy Board and the Executive Board, the General Assembly will adopt Transportation 2040.
- Following the adoption of Transportation 2040, a project and program prioritization process will be developed (approximately 2 years, starting in summer 2010).