**Transportation 2040** Developing the region's new long-range plan

# **TRANSPORTATION 2040**

# Appendix A ALTERNATIVES TECHNICAL REPORT

Abridgement only in this PDF ... excerpt of pages related to public transit and park & ride investments. Complete document as of March 28, 2010 is posted here: http://www.psrc.org/assets/3694/Appendix\_A\_-\_Transportation\_2040\_Alternatives\_Report.pdf See http://www.psrc.org/ for revisions before May 20, 2010 final approval.

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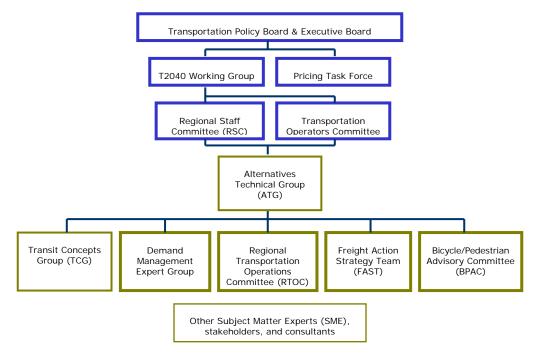
# **1** Process of Designing the Alternatives

## Organizational Structure

The figure below illustrates the committees and technical working groups that contributed to the process of designing and analyzing plan alternatives. The PSRC Transportation Policy Board (TPB), the main decision-making body, formed two subcommittees from its members to guide the planning process and alternatives development in general: the Pricing Task Force (PTF) to examine tolling and pricing strategies, and the Transportation 2040 Working Group (T2040 WG) to guide all other elements of alternatives construction. The Regional Staff Committee (RSC), a standing staff committee supporting TPB, supplies the primary PSRC member agency senior staff oversight for the planning process. PSRC recruited technical staff from various member agencies to form the Alternatives Technical Group (ATG) as the umbrella forum for addressing modeling, investment detail, and other technical questions. The ATG was in turn supported by a series of Subject Matter Expert (SME) groups already in existence or formed specifically for the transportation plan update as listed below:

- Transit Concepts Group (TCG):
- Freight Action Strategy Team (FAST):
- Regional Transportation Operations Committee (RTOC):
- Demand Management Team:
- Bicycle/Pedestrian Advisory Committee (BPAC):
- Full ATG:
- Other stakeholders (such as the Special Needs Committee):

transit details freight issues system management details demand management details bicycle and pedestrian details roadway details received opportunities to comment



## **Organizational Process**

The technical groups summarized above carried out a number of specific preparatory tasks in constructing the alternatives under the general direction of the Transportation 2040 Working Group, the Pricing Task Force. With their understanding of the goals and policies in VISION 2040, they:

- Conducted empirical research to understand current practices in their respective areas of expertise.
- Analyzed tolling concepts specified by the Pricing Task Force to determine which pricing strategies should be carried into the plan alternatives.
- Collected from member agencies and interest groups investment "concepts" to supplement the existing project list in the current plan, *Destination 2030*. Taken together, the investment concepts, existing projects, and tolling concepts formed the building blocks from which the working groups constructed the alternatives.
- Shared their findings on these topics with their peers and the groups and committees outlined above and in return received guidance on what the plan alternatives should attempt to address.

With the knowledge and material generated from the preparatory work, the Alternatives Technical Group began an iterative process of suggesting alternative design ideas and assumptions. For example, they synthesized from all they had heard the idea that one alternative should test what the region could do with very limited future financial resources and the idea that another alternative should test what the region could achieve by using tolls to pay specifically for roadway investments. The ATG and its representatives aired their ideas at meetings of the various groups and committees and refined those ideas using the feedback the groups offered, the tolling concepts results, and other results from other focused analyses, such as that done concerning freight investments for the Joint Transportation Committee (JTC) of the state Legislature. This iterative process of applying professional judgment and expertise—responding to stakeholder concerns—converged over several months on the alternatives' specifications contained in the rest of this document.

## 2 The Alternatives

## 2.a: Introduction to the Alternatives

A baseline alternative serves the requirements of the State Environmental Policy Act (SEPA) and serves as a point of comparison for the "action" alternatives. The baseline, consisting of existing systems and a limited series of future investments, is a foundation layer for all action alternatives. Another layer atop the baseline is common to all alternatives: "core" investments that are either required by law or regional policy or which are so fundamental to the region's needs that the region considers them necessary in any conceivable future. Finally, each alternative contains different mixes of future investments beyond the baseline plus the core. These "custom" investments differentiate one alternative from another. In total there are seven alternatives: the baseline, five preliminary alternatives, and the Preferred Alternative. The Preferred Alternative includes a range of possible actions, the minimum set of which are included in the financially constrained portion of the plan. The Constrained Plan 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. The Preferred Alternative (Constrained) contains fewer investments and actions than the Full Plan. For clarity in the following sections, the Preferred Alternative (Constrained) and Preferred Alternative (Full Plan) are described in separate narratives and figures.

## 2.b: The Baseline Alternative

i. Design Philosophy: Action alternatives for the *Transportation 2040* update require a baseline for consistent comparison during the planning and environmental review processes. The baseline scenario is necessary for environmental analysis and as a means of estimating benefit-cost results of build scenarios and plan alternatives. The baseline defined herein follows Washington state's SEPA guidance, which defines the No Action Alternative as "...what would be most likely to happen if the proposal did not occur." The base year is 2006; references in this document to "current conditions" mean conditions on the ground in calendar year 2006. The plan horizon is 2040.

ii. Roadway

1. Efficiency strategies

- Arterial
  - i. Signal Optimization: Existing
  - ii. Signal Coordination: Continue implementing Time of Day signal coordination and/or centralized control.
  - iii. Traffic-Responsive Coordination: Existing
  - iv. System Detection: Existing
  - v. Adaptive Control: None
  - vi. Incident Detection/Response: None
  - vii. Managed lanes (non-transit): Existing with additional HOV additions per baseline project list (see addenda listings for identification of Baseline investment specifics)
- Freeway
  - i. Ramp Meters: Deploy at remaining locations regionwide

- ii. Active Traffic Management (ATM)
  - 1. On I-5 NB only, from SR 900 (Boeing Access Road) to I-90: Speed harmonization
  - 2. I-90 between I-5 and I-405: variable speed signs/real time information
  - 3. Approaches to SR 520 and the corridor itself between the two freeways and as part of the Urban Partnership Agreement (UPA): variable speed signs/real time information
  - 4. US 2 "Trestle" EB only: hard shoulder running during the PM peak period
- iii. Incident Detection/Response: Continue incident detection capabilities and response on core freeway
- iv. Managed lanes: Existing with additional HOV additions per baseline project list (see addenda listings for identification of Baseline investment specifics)
- Other ITS (spanning both freeways and arterials)
  - i. ICM: On I-5 NB only, from SR 900 (Boeing Access Road) to I-90. Speed harmonization
  - ii. Advanced Traveller Information Systems (ATIS):
    - 1. Continue 511.
    - 2. WSDOT traveler information web page update.
    - 3. Highway Advisory Radio.
    - 4. Dynamic message and travel time signs.
  - iii. Traffic Management Centers Strategies: Maintain existing
  - iv. Truck focused management: None
  - v. Supporting deployments that are necessary for many of the other strategies to be successful include Traffic Management Center operations, traffic surveillance (CCTV & vehicle detection), maintenance and staffing.
    - 1. Expansion and new TMCs. NW Region, Lynnwood, Everett, Edmonds, Marysville
    - 2. Traffic Busters video sharing
  - vi. Other: None
- 2.Capacity expansion and major preservation strategies: Roadway facility functional classification (where applicable) and capacity will remain unchanged except for changes made by future projects specifically identified as belonging in the Baseline Alternative (see Addendum B listings for identification fo Baseline roadway projects). The following special case assumptions deserve special mention:
  - i. Alaskan Way Viaduct will remain in service in its present configuration with three general purpose lanes northbound and southbound.
  - ii. SR 520 Bridge will remain in service in its present configuration with two general purpose lanes eastbound and westbound.
  - iii. I-5 will be repaved at a point early enough in the planning period to retain its full

existing capacity.

iv. Old SR 509/City Waterway Bridge in Tacoma: The City Waterway Bridge, also known as 11th Street Bridge or Murray Morgan Bridge, was closed to vehicle traffic. This facility will be shown as closed in the baseline since there are no known fully funded efforts for replacement or refit.

#### iii. Freight aspects

Some of the FAST Corridor grade separation projects are in the Baseline (see addenda).

#### iv. Transit

- 1.Efficiency strategies: Transit agencies will in general seek all opportunities to make service as efficient as possible by rationalizing routes, stop consolidation, and other techniques.
  - i. Transit Signal Priority: maintain existing and add where needed to support baseline Metro Rapid Ride routes.
  - ii. Continue and maintain ORCA card
  - iii. Continue and maintain AVL
- 2. Capacity expansion/reallocation strategies: The Baseline description of service in this section (subsections a-c) is organized by operator rather than by service type.

## **Regional Transit (Sound Transit Program Area)**

#### Light Rail

- Link Light Rail
  - Central Link will run from Redondo/Star Lake through Sea-Tac Airport and downtown Seattle to Lynnwood.
  - East Link will run from Northgate through the U-District Capitol Hill, Seattle Central Business District (CBD) and then across Lake Washington to Mercer Island, Bellevue and Overlake.
  - Tacoma Link will be extended to Tacoma Community College.
- Link Light Rail service will be<sup>1</sup>:
  - Central and East Link (as they come on line 2010 to 2040): 7-minute headways during AM and PM peaks, 10-minute headways midday, and 15-minute headways in evening and night. This gives effective headways on the Seattle CBD to Northgate segment of 3.5 minutes in the peaks, 5 minutes midday, and 7.5 minutes evening and night.
  - Tacoma Link (2006 to 2040): 10-minute headways during AM & PM peaks and midday, 20-minute headways evening and night.

#### **Commuter Rail**

- Routes: system will run from Everett to Seattle ("north line") and from Tacoma to Seattle ("south line") in 2006 with some south line service to Lakewood starting 2011.
- Sounder Commuter Rail service<sup>2</sup>:

<sup>&</sup>lt;sup>1</sup> Communication from Sound Transit staff correcting draft 05 per the ST2 vote.

- North Line: 4 daily peak period roundtrips from Everett to Seattle from 2008 on and Amtrak Rail Plus trips.
- South Line: 7 daily peak period roundtrips from Tacoma to Seattle and 2 daily peak period roundtrips from Seattle to Tacoma from 2009 on; extend all 7 Tacoma-Seattle roundtrips to Lakewood in 2012; add 3 daily peak period and 1 daily midday roundtrip from Lakewood to Seattle by 2015.

#### **Regional Bus Service**

- Existing regional bus service configuration will remain unchanged except for changes described in the Sound Transit 2008 Service Implementation Plan (ST 2008 SIP) to:
  - Connect service to future park-and-ride facilities that will come online under other baseline assumptions.
  - Connect certain bus routes to Link Light Rail stations.
- Service levels will increase 17 percent of 2006 levels (100,000 new service hours) by 2010 from the ST2 funding. Service will remain at that level until 2040.

#### **Intermediate Capacity Transit**

• Streetcar will connect Seattle CBD to First Hill.

## Local Transit (Bus Service from providers other than Sound Transit)

#### Kitsap Transit (KT)

- Service configuration in the baseline.
  - Regional model now treats operations under KT's worker-driver program as regular fixedroute service; regional model will be changed to represent these as extended vanpool type of service.
  - Worker-driver runs will remain the only direct KT connections to the Bremerton Shipyard.
  - Local service will be added to cover the new Quadrant development in Port Orchard.
  - Worker-driver and vanpool will be added to serve South Kitsap Industrial Area (SKIA).
  - Cross-Sound passenger-only ferry (POF) is only in demonstration mode and will NOT be included in the baseline.
- Service levels in the baseline
  - Fixed route service will be maintained at 2007 levels until 2010, at which time there will be a <u>one-time</u> 2 percent service increase<sup>3</sup> (with the addition of new service configuration noted above) with the assumption that sufficient revenue will be generated to maintain the 2010 <u>scheduled service level as-is</u> from 2010 to 2040.
  - Twenty vanpool vans will be added in  $2012^4$ .

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> 2006-2012 Transit Development Plan, Kitsap Transit, p. 15 (see http://www.kitsaptransit.org/capital/Planning.html)

<sup>&</sup>lt;sup>4</sup> Ibid.

#### King County Metro

- Service configuration in baseline.
  - Rapid Ride service will be included starting in years shown in parentheses on these routes:

		Weekdays						
Route	Direction	Begin	AM Peak	Midday	PM Peak	Evening	Night	End
Ballard (15th Ave only) to Seattle CBD (2010)	Inbound	5:00	7.5	15	15	15	30	1:00
Seattle CBD to Ballard (15th Ave only) (2010)	Outbound	5:00	15	15	7.5	15	30	1:30
W Seattle to Seattle CBD (2011)	Inbound	5:00	7.5	15	15	15	30	1:00
Seattle CBD to W Seattle (2011)	Outbound	5:00	15	15	7.5	15	30	1:30
Aurora Village to Seattle CBD via SR 99 (2013)	Inbound	4:30	7.5	15	15	15	30	0:30
Seattle CBD to Aurora Village via SR 99 (2013)	Outbound	5:30	15	15	7.5	15	30	1:30
Federal Way to SeaTac via Pacific Highway South (2010)	Inbound	24 hrs	10	15	10	15	30	24 hrs
SeaTac to Federal Way via Pacific Highway South (2010)	Outbound	24 hrs	10	15	10	15	30	24 hrs
Bellevue to Redmond (2012)	Inbound	5:00	10	15	10	15	30	0:00
Redmond to Bellevue (2012)	Outbound	5:30	10	15	10	15	30	0:30

	Direction	Begin	AM Peak	Midday	PM Peak	Evening	Night	End
Ballard to U-District (Route 44 UVTN)	Both	5:00	15	15	15	15	15	23:00
Greenwood to Downtown (Route 5 UVTN)	Both	5:00	15	15	15	15	15	23:00
Rainier Beach to Downtown (Route 7 UVTN)	Both	5:00	15	15	15	15	15	23:00
U-District to 23rd Ave (Route 48 UVTN)	Both	5:00	15	15	15	15	15	23:00

• In addition, Urban Village Transit Network (UVTN) service in Seattle will start in 2020 and persist through 2040 with these characteristics:

- Minor route adjustments will be made to connect to Link Light Rail stations as Link comes online.
- All other service routes will remain the same as 2008 throughout future baseline years.
- A new south base will be constructed by 2016 (necessary to support service increases and schedule maintenance).
- Service levels in baseline:
  - Fixed route service levels will grow 2 percent of 2006 levels per year up to and including 2016 (this growth INCLUDES the Rapid Ride Service) and 1 percent of 2006 levels per year afterward.
  - o Rapid Ride service levels will stay fixed throughout 2040 (see above).
  - Schedule maintenance consumes one third of the service increase in any given year.
  - South Lake Union Streetcar will run at 15-minute headways through 2019 changing to 10minute headways 2020 and beyond.
  - Baseline will assume that rideshare (vanpool) investments will double the program's ridership from 2007 to  $2016^5$ .

#### **Community Transit**

- Service configuration in baseline:
  - Swift BRT service will be added from Everett Station in the City of Everett along Pacific Avenue, down Rucker Avenue, Evergreen Way and Highway 99 to the Aurora Village Transit Center in Shoreline starting 2009<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> King County Metro Strategic Plan for Public Transportation, 2007-2016. p 4-33

<sup>&</sup>lt;sup>6</sup> Transit Development Plan 2008-2013, Community Transit, p. 126 (http://www.commtrans.org/?mc=commtrans&subcat=15)

- By 2013 CT will add a new route between north, east and south Snohomish County extending service running between Marysville and Lake Stevens south along SR 9 to Cathcart Way and then west along 132nd St SE and 128th St to Mariner park & ride.
- The planned route restructure in south Snohomish County proposed for 2011-2013 and potential growth in service area will be addressed in the action alternatives (not in the baseline) to aid in Community Transit service planning.
- Service levels in baseline:
  - Fixed route will increase 17 percent of 2008 levels by 2013, with sufficient investment after that to maintain 2013 schedules<sup>7</sup>.
  - Fixed route increases will be focused in selected corridors per the *Community Transit Development Plan 2008-2013* (see pp. 126-129).
  - Vanpool fleet will grow from 358 vehicles to 383 in 2008 with 7,000 added revenue service hours, but with no additional growth in the baseline through 2040.
  - DART paratransit services will have these increases in total service hours in the years shown in parentheses: 4,000 (2008) 1,000 (2009) 9,000 (2010) 1,000 (2011) 1,000 (2012) and 1,000 (2013). Baseline assumes that 2013 service levels will be maintained through 2040.

#### **Everett Transit**

- Service configuration in baseline:
  - Will remain the same as current 2008 routing.
- Service levels in baseline:
  - Fixed route will be assumed to remain constant through 2040 (sufficient revenue to maintain existing schedules, but no new service)<sup>8</sup>.

#### **Pierce Transit**

- Service configuration in baseline:
  - Will largely remain unchanged, with minor adjustments as indicated in the *Pierce Transit Development Plan 2008-2013* (see pp. 13-16)
- Service levels in baseline:
  - Fixed route service will grow (beyond schedule maintenance) 1 percent per year starting in 2010 through 2013<sup>9</sup> with no net growth thereafter.
  - Vanpool fleet will grow an additional 19 percent of 2008 size by  $2013^{10}$ .

## Shared Right-of-Way strategies

• Baseline assumes that some arterial BAT lanes will be added in the future (see Addendum C for details).

<sup>&</sup>lt;sup>7</sup> Ibid p. 121

<sup>&</sup>lt;sup>8</sup> Transit Development Plan 2007-2012 and Annual Report 2006, Everett Transit, p. 10 (see www.everettwa.org/Get\_PDF.aspx?pdfID=902)

<sup>&</sup>lt;sup>9</sup> Electronic <u>communication</u> from Kelly Hayden 7/25/08

<sup>&</sup>lt;sup>10</sup> Transit Development Plan 2008-2013, Pierce Transit, p. 12 (see http://www.piercetransit.org/).

## Other Facilities (i.e., Park & Rides, stations, stops, etc.)

• Park-and-ride locations and capacities will remain unchanged except for changes made by future projects specifically identified as belonging in the baseline (see addendum C).

## **Operating Environment/Support**

- Baseline assumes the transit access percentage (the proportion of persons within an analysis zone with access to transit) will remain unchanged.
- Baseline assumes that timed transfer points (where separate bus routes "connect" reliably) will remain unchanged.
- v. Ferry: The regional plan update baseline uses the assumptions compiled by Washington State Ferries (WDF) for its long range planning effort underway at the time of writing. These assumptions are summarized below.

## Washington State Ferries (WSF) Service: WSF will...

- Maintain its existing auto ferry service configuration (year 2006) through 2040.
- Maintain the existing service levels (year 2006) through 2040.
- Maintain and preserve existing ferry terminals and boats. Includes replacement boats for the following vessels that have either recently been retired or will need to be replaced during the planning horizon: construction of two Island Home and three 144-car boats near term to replace the recently retired Steel Electric class plus the Rhododendron and the first of three Evergreen State class vessels, two additional Evergreen State Class boats by 2020-2025; four Super Class boats plus the Hiyu by 2025-2030, two jumbo class vessels by 2030 2035, and two Issaquah class vessels in 2035 2040.
- Maintain existing transit routes and service levels to ferry terminals.
- Implement planned and funded transit improvements to ferry terminals.

## **Other Ferries Service**

- King County will operate a passenger-only ferry (POF) on the Vashon-Seattle run.
- Seattle-Vashon POF service will have three weekday Vashon-to-Seattle morning sailings (first two return to Vashon) and three weekday Seattle-to-Vashon evening sailings (first two return to Seattle).<sup>11</sup>
- West Seattle to Seattle CBD Water Taxi service will commence year-round service by year 2010 in the peak period (6:30 a.m. to 9 a.m. and 4:30 p.m. to 7 p.m.).<sup>12</sup>
- Existing Bremerton-Port Orchard and Bremerton-Annapolis Passenger-Only service will continue through 2040.

## **Existing and Future Pricing**

• WSF rates will increase 2.5 percent per year every October (starting from May 2006 fares) and ending in October 2019 (the 2019 rates would apply to year 2020). After 2020, rates would scale with predicted inflation.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> King County Passenger-Only Ferry Project Briefing Paper (November 7, 2007). (<u>http://www.kingcounty.gov/council/ferry\_district.aspx</u>) p. 4

<sup>&</sup>lt;sup>12</sup> Ibid. p 5

- Seattle-Vashon fares will start at \$4.25 adult one-way per trip (in May 2006) and scale the same as WSF fares as described above.<sup>14</sup> (Note that this is slightly higher than fare assumptions in a King County briefing paper, which assumed only inflation).<sup>15</sup>
- West Seattle-Seattle fares will start at \$3.00 adult one-way per trip and scale with predicted inflation.<sup>16</sup>

### Ferry Terminal Parking

- Parking locations and capacities will remain unchanged except for changes made by future projects specifically identified as belonging in the Baseline (see addenda).
- Parking costs will start at 2006 levels and scale by 1.5 percent over predicted inflation to reflect observed historical trends.
- vi. Bicycle/Pedestrian: some future bicycle and pedestrian investments are included in the Baseline. See Appendices for details.
- vii. Demand Management
  - 1. Programs and integrated efforts
    - a. CTR: Existing program configuration. CTR affects employers with over 100 employees commuting to worksite between 6 and 9 a.m. Currently affects 715 worksites and approximately 396,814 employees.
    - b. GTEC: GTECs funded in downtown Seattle, Bellevue, Tacoma, and Redmond/Overlake.
    - c. Land use policy: No regionally coordinated land use policy outside of recently adopted VISION 2040. Disparate and uncoordinated policies throughout region.
    - d. Transportation policy: Existing policies remain in effect.
    - e. Enabling efforts: Maintain RideshareOnline.com and other regional travel calendaring efforts. Integrate with local, regional, and statewide TDM efforts.
  - 2. Efforts that reduce number of person-trips
    - a. Telework: Passive education campaigns. No coordinated regional effort to promote the use of telework in the region.
    - b. Employer tools (flexible scheduling, etc.): Various firms allow employees to work flexible schedules. No coordinated regional effort to promote flexible schedules as method to reduce commute trips.
  - 3. Efforts that promote use of non-SOV modes
    - a. Guaranteed Ride Home: Existing configurations
      - i. King County All employers eligible through contractual arrangements

<sup>&</sup>lt;sup>13</sup> WSF Base Year and Future Baseline LOS Update – Key Assumptions. Parsons Brinkerhoff (February 25, 2008) p.1

<sup>&</sup>lt;sup>14</sup> Ibid. p. 2.

<sup>&</sup>lt;sup>15</sup> King County Passenger-Only Ferry Project Briefing Paper (November 7, 2007). p. 14

<sup>&</sup>lt;sup>16</sup> Ibid. p. 15

- ii. Snohomish County CTR employers eligible for service
- iii. Pierce County CTR employers eligible for service
- iv. Kitsap County CTR employers eligible for service
- b. Alternative Mode Education: Campaigns implemented by jurisdictions, Transportation Management Associations (TMA), transit agencies, and individual employers. No regionally coordinated campaign.
- c. Alternative Mode Incentives: Incentives offered by jurisdictions, TMAs, transit agencies, the state, and individual employers. No regionally coordinated incentive program.
- d. Rideshare (vanpool/vanshare/carpool):
  - i. 2006: 1,714 vans in operation; 8.34 average occupancy, 14,273 passengers
  - ii. 2040: 2,772 vans in operation; 9.07 average occupancy, 24,581 passengers
- e. Carshare: Market-driven, 175 locations in greater Seattle
- f. Parking Supply and Management: Limit additional parking in major regional centers to spur transit and alternative mode use in these high-activity areas. Focus on-street parking for short-term users (<2 hours.) and encourage long-term parkers to use off-street facilities. Parking management programs implemented throughout region in high-activity areas.

#### viii. System Management

The Baseline continues existing system management programs for the most part with the addition of the selected Active Traffic Management investments listed above.

- ix. Pricing, Managed Lanes, and operating costs:
  - The Tacoma Narrows Bridge will be the only tolled roadway facility.
  - Tacoma Narrows Bridge tolls will scale with predicted inflation (in other words, will remain the same in constant dollars) but will end at the end of year 2030 when the bonds are projected to be paid off.<sup>17</sup>
  - Locations within the region that apply parking charges will not change.
  - Future parking costs will be forecast by scaling to 1.5 percent over the predicted inflation rate on an annual basis.
  - Auto operating costs at 15 cents per mile (in year 2000 dollars) are applied to all auto modes, to the light commercial vehicles, and to the auto-access to transit modes. Medium and Heavy truck costs are 78 cents per mile. These costs are assumed to scale with inflation into the future.
  - The Baseline freeway HOV network will apply an HOV3+ restriction on all HOV lanes **after** year 2020 in the peak AM and PM periods but preserve the existing primarily HOV2+ restriction in all non-peak time periods after 2020. In and before year 2020 HOV2+ will be allowed in all HOV lanes except for the eastern approach to the SR 520 Bridge.
- x. Other: Demographics and Land Use

<sup>&</sup>lt;sup>17</sup> http://www.wsdot.wa.gov/projects/sr16narrowsbridge/

- Population and employment growth and distribution through 2040 will occur per the regional land use vision described in the VISION 2040 plan.
- Locations within the region assumed in the analysis to generate or attract especially high volumes of trips (for example, Sea-Tac Airport, Seattle Center, and major logistics centers, which are labeled "special generators") will remain unchanged through 2040.
- Trips generated by or attracted to regional "special generators" will be factored by population and employment growth in future analysis years.
- General and truck trips generated by or attracted to locations outside the four-county region will be factored by population and employment growth in future analysis years.

#### xi. Financial Strategy:

- Baseline financial constraint is defined by current law revenue authority (as currently enacted) forecast through 2040:
  - Revenue streams were estimated for each program area.
  - Forecast risk was addressed by choosing a final forecast with a level of probability acceptable to the Alternatives Technical Group.
  - Future actions assumed in each program area in the baseline were limited to the estimated revenues in that program area (additional limitations may be applied).
  - Adjustments were made to assumptions in certain special cases (called out as appropriate in the following text).
- Financial Forecast for the Baseline Alternative: PSRC staff forecast future current law revenue in various program areas to establish what financial constraints might apply. In broad terms the conclusions of this analysis were:
  - Cities and Counties ability to channel general funds to transportation investments is diminishing, to the extent that by 2022 jurisdictions such as King County will face a shortfall in both capital project and maintenance/preservation program areas.<sup>18</sup> It is uncertain whether current law revenues combined with increasing demand upon general fund resources will enable local jurisdictions to fully fund preservation and maintenance of their transportation assets.
  - Local Transit in general, operating costs have exceeded the basic inflation rate in the period 2004-2007. Although revenues will grow into the future as regional population grows, and it is unlikely that operating costs will grow at the recent rate indefinitely, operators will be able to fund schedule maintenance and at most modest increases to service (described below).
  - Regional Transit Sound Transit 2 (ST2) was funded by voter referendum in November 2008. Combined with the original Sound Move program, ST2 funds the increased regional express bus service and Link Light Rail extensions documented above.
  - Ferries revenues can support the maintenance of existing service.
  - Highways Nickel and TPA capital projects are funded; pre-existing revenues continue to be needed to support maintenance and preservation within the region and throughout the state.
- Financial Rationale for State Highways Program

<sup>&</sup>lt;sup>18</sup> Transportation Needs Report 2008. King County Metro. Draft, March 2008.

- "Nickel" and "TPA" funds intended to fully fund specific projects (such as the specific I-405 widening projects in addendum B identified as being in the Baseline) are committed and those projects will be constructed as planned.
- Other state current-law revenues will be sufficient to maintain the existing system at present capacity and to fund the remaining state capital projects listed in the Addenda below as being in the Baseline.
- The baseline will assume that the rate of return to the region of regionally generated state transportation funds will remain sufficient to supply the funds necessary for the I-5 repaying.
- Financial Rationale for Local Roadways
  - The baseline assumes that city and county general funds available for transportation investments will continue to decline into the future, although local revenues will grow with population growth. The default assumption was that the baseline included no future local capital roadway projects except those explicitly identified by local agencies as fundable and necessary to meet statutory growth requirements (see Addendum B). The default baseline assumption is that preservation and maintenance of existing facilities could be sustained through 2040 with current law revenue.
- Financial Rationale for Washington State Ferries (WSF). WSF is now engaged in updating its system plan, which will cover service and financial planning. PSRC will assume for now in the baseline that the state will fund WSF ferry service levels described above but will confirm with WSF—hopefully by end of calendar 2009—before beginning final alternatives analysis under SEPA.
- Financial Rationale for Transit Systems Assumptions
  - Sound Move and Sound Transit 2 provide sufficient funds to complete light rail extensions and regional bus service additions documented above.
  - Local transit agencies' financial pictures vary, but, in general, recent years have seen operating costs escalating faster than inflation (4 percent to 5 percent per year). Agencies report that they are also seeing higher demand for paratransit services as the percent of the population eligible for such services increases. For these reasons, the baseline assumptions above for fixed level service remain modest.
  - King County Metro Vanpool ("rideshare") funds 100 percent of operating costs from user fees and increased ridership 20 percent from 2006 to 2007.<sup>19</sup> Metro analysis indicates that this trend can be sustained to achieve the doubling of vanpool ridership by 2016 assumed in the baseline.<sup>20</sup>
  - The Transit Now referendum funded King County Metro "Rapid Ride" routes.

<sup>&</sup>lt;sup>19</sup> Rideshare Operations Monthly Performance Indicators, December and YTD 2007. King County Metro. Roger Bruckshen. 1/29/08.

<sup>&</sup>lt;sup>20</sup> Personal communication from Rideshare Manager Syd Pawlawski, 3/27/08

## 2.c Core Strategies for All Action Alternatives

i. Design Philosophy: core strategies are those investments beyond the baseline common to all action alternatives. They became "core" because they are required by law, are required by regional policy, or were found during the alternatives construction process to be proposals useful and appropriate for all action alternatives.

ii. Roadway

- 1. Efficiency strategies
  - Arterial
    - i. Signal Optimization: No change from baseline
    - ii. Signal Coordination: Corridor-level coordinated signal control via technology investments
    - iii. Traffic-Responsive Coordination: No change from baseline
    - iv. System Detection: No change from baseline
    - v. Adaptive Control: No change from baseline
    - vi. Incident Detection/Response: Expand to all arterials
    - vii. Managed lanes (non-transit): No change from baseline
  - Freeway
    - i. Ramp Meters: Complete deployment regionwide
    - ii. ATM: No change from baseline
    - iii. Incident Detection/Response: Expand to all freeways
    - iv. Managed lanes: No change from baseline
  - Other ITS (spanning both freeways and arterials)
    - i. ICM: No change from baseline
    - ii. ATIS: Regional Integrated Multimodal traveler information
    - iii. Operations Center Strategies: TMC, infrastructure, maintenance as needed
    - iv. Truck focused management: No change from baseline
    - v. Support: No change from baseline
    - vi. Other: Coordinate freeway ramp meters with arterial signals
- 2. Capacity expansion and major preservation strategies

All alternatives include a six-lane SR 520 bridge and the FAST Corridor "grade separation" projects.

#### iii. Freight aspects

Freight needs are addressed in the core by the inclusion of the FAST Corridor grade separation projects.

iv. Transit

1. Efficiency strategies

Transit agencies will, in general, seek all opportunities to make service as efficient as possible by rationalizing routes, stop consolidation, and other techniques.

- 2. Capacity expansion/reallocation strategies
  - Core Service:
    - See the Baseline for ST2 program service provisions.
    - Other core bus service: 2 percent annual increase from 2006 to 2020, 1 percent of which is consumed by schedule maintenance and 1 percent of which is net service increase.
  - Community Connections Service: 2 percent annual increase from 2006 to 2020, 1 percent of which is consumed by schedule maintenance and 1 percent of which is net service increase.
  - Specialized Service: 2 percent annual increase from 2006 to 2020, 1 percent of which is consumed by schedule maintenance and 1 percent of which is net service increase.
  - Shared Right-of-Way strategies: No change from Baseline.
  - Other Facilities (i.e., park-and-rides, stations, stops, etc.):
    - i. Park-and-rides: No change from Baseline
    - ii. Bases: New bases to support increased service
    - iii. Fleet: New buses to support increased service
    - iv. Transit Centers and Stations: Multi-modal hubs at King Street Station, Westlake Station, and Colman Ferry Terminal
  - Operating Environment/Support: No change from Baseline.
- v. Ferry: Core proposals for the ferry system focus on efficiency measures, specifically:
  - Establish variable fare pricing structure to: (1) reduce vehicle demand; (2) shift demand to walk-on; and (3) encourage use by smaller vehicles. Pricing strategies include lower fares for passengers (over time, passenger fares would increase at half the rate of vehicle fares), discounts (20 percent) for smaller vehicles, and introduce a three-season pricing structure (highest fares in summer).
  - Establish reservation system on some or all routes to mitigate existing and forecast imbalance between supply and demand during peak periods (especially for autos).
- vi. Bicycle/Pedestrian
  - 1. Education & Encouragement: Regional bike map, online walk/bike route planner, regionally coordinated individualized marketing program, best practices manual for CTR and GTEC employers
  - 2. Access to Transit: Expand bike-on-bus rack capacity, improve roadway crossing safety, accommodate pedestrians and bicyclists when making transit improvements where appropriate
  - 3. Pedestrian Network: Improve roadway crossing safety, accommodate pedestrians when making roadway improvements where appropriate
  - 4. Bicycle Network: Improve roadway crossing safety, accommodate bicyclists when making roadway improvements where appropriate.

- 5. Support Facilities: Regional Wayfinding System, targeted bike parking, end-of-trip facilities such as shower facilities and lockers
- 6. Other: Establish a regionally coordinated bike share program. Implement regionwide "no net loss" policy that would ensure that future roadway transportation projects not reduce existing bicycle and pedestrian mobility or accessibility.
- vii. Demand Management
  - 1. Programs and integrated efforts
    - a. CTR: No change from baseline. Coordinated, regionwide, employer-based marketing/incentive/education program through CTR employers
    - b. GTEC: No change from baseline
    - c. Land use policy: No change from baseline
    - d. Transportation policy: No change from baseline
    - e. Enabling efforts: Upgrade RideshareOnline.com for calendaring and incentive distribution
  - 2. Efforts that reduce number of person-trips
    - c. Telework: Deployment of Kitsap Regional Coordinating Council "Telework Toolkit"
    - d. Employer tools (flexible scheduling, etc.): No change from baseline
  - 3. Efforts that promote use of non-SOV modes
    - g. Guaranteed Ride Home: No change from baseline
    - h. Alternative Mode Education: No change from baseline
    - i. Alternative Mode Incentives: No change from baseline
    - j. Rideshare (vanpool/vanshare/carpool): No change from baseline
    - k. Carshare: No change from baseline
    - 1. Parking Supply and Management: No change from baseline
- viii. System Management: System management, in summary, focuses on extending freeway ramp metering regionwide and extending incident response to all freeways and major arterials. Signal coordination along key arterial corridors would be extended across jurisdictions.
- ix. Pricing: No change from Baseline
- x. Other: As part of the plan update process, the region is examining public policy efforts to promote low-emissions technologies in the transportation sector. This will include research on the impact improved vehicle and fuel technologies may have on reducing greenhouse gas emissions. Analysis will document the potential emission reductions from varying levels of improved vehicle fleet fuel economy (e.g., 50 miles per gallon [mpg], 75 mpg, 100 mpg) and carbon fuel content. Specific scenarios that may be researched include a fleet of hybrid vehicles, percentages of electric vehicles, biofuels, etc. These strategies would be potential actions that could be applied to a preferred alternative in addition to the transportation system strategies contemplated in the action alternatives as documented in the rest of this report.
- xi. Financial Strategy: Finances necessary to implement proposed core investments are discussed in the financial strategy for each individual action alternative.

## 2.i Preferred Alternative (Constrained)

## **Custom Strategies IN ADDITION TO Core and Baseline Strategies**

i. Design Philosophy: The Constrained version of the Preferred Alternative seeks to advance the region's mobility and environmental goals within a sustainable and achievable financial framework. It chooses from among all actions in the Full Plan those ripest for implementation and those believed likely to achieve key mobility, emissions, and other benefits.

#### ii. Roadway:

- 1. Efficiency strategies
  - a. Integrated Corridor Management
    - i. Begin initial deployment of Integrated Corridor Management (ICM) on I-5 from I-90 to SR 900
  - b. Arterial Traffic Management
    - ii. Corridor and regionally coordinated signal control
      - 1. Maintain existing re-timing and maintenance programs
      - 2. Expand and construct traffic management centers and work toward center to center communication
    - iii. Expand transit signal priority on key transit arterials and bus rapid transit routes
    - iv. Coordinate traffic signals
    - v. Improve incident detection and response
    - vi. Move toward Adaptive Signal control
  - c. Freeway Management
    - i. Complete ramp meter deployment.
    - ii. Active Traffic Management:
      - 1. Install dynamic message signs for traveler information using Active Traffic Management Techniques such as speed harmonization and queue warning
  - d. Incident Management and Response
    - i. Expand incident detection capabilities to core freeway and arterial system
    - ii. Expand incident response teams on all freeways and to the arterials
  - e. Regional Multimodal Traveler Information
    - i. Strive towards integrated traveler information
    - ii. Maintain and expand existing travel information outlets such as 511, Internet sites, handheld devices, and kiosks
    - iii. Strive towards route guidance
    - iv. Additional travel time message boards on core freeways

- f. Supporting Deployments
  - i. Supporting deployments that are necessary for many of the other strategies to be successful include Traffic Management Center operations, traffic surveillance (CCTV & vehicle detection), maintenance and staffing
    - 1. Expand and construct traffic management centers and work toward center-to-center communication
- 2. Capacity expansion strategies: the Preferred Alternative (Constrained) makes both freeway and arterial expansion investments to complete the managed lane network, add transit-emphasis facilities (such as Business Access/Transit lanes), eliminate bottlenecks and chokepoints, establish new connections in the region, and provide the capacity necessary for the tolled system to function for motorists, freight, and transit. This includes (See Addendum B for more details.):
  - Additional managed lanes on I-5, SR 16, and I-405.
  - Additional general purpose lanes on I-405, SR 169, and other routes.
  - The SR 704 (Cross-Base) highway plus the SR 509 and SR 167 Extensions.

More than 95 percent of roadway investment costs and 94 percent of highway system costs are for projects located in the urban growth area. Approximately 76 percent of arterial roadway investments and 69 percent of highway investments costs are for projects within or directly serving Metropolitan Cities, Core Cities and designated regional and manufacturing/industrial centers.

- iii. Freight aspects:
  - 1. Efficiency strategies: Freight will benefit greatly from the congestion mitigation that freeway system tolling is likely to bring. In addition, arterial system management strategies will improve freight movement on key arterial freight corridors and in general.
  - 2. Capacity expansion strategies: The roadway capacity investments mentioned above are designed to serve truck movement as well as transit and personal vehicles. In addition, the Preferred Alternative (Constrained) contains the entire set of freight-specific grade separation and operational improvement projects identified by the Freight Action Strategy Team (FAST) group.
- iv. Transit:
  - 1. Design Philosophy: The Preferred Alternative (Constrained) contains significant investments in transit efficiency, service expansion, and new infrastructure. Service expansion emphasizes allday Core service with additional specialized service also to serve peak period commutes. See Addenda C and F for more details on transit investments.
  - 2. Efficiency strategies include efforts to:
    - Continue and expand fare collection by implementing the Regional Fare Coordination Project and reducing the time spent at bus stops to load passengers.
    - Continue inter-county bus routes through Regional Automated Trip Planning project.
    - Improve and expand vehicle location and identification through the development and implementation of new vehicle tracking technologies.
    - Provide better safety monitoring by installing closed-circuit cameras on buses and at park-and-rides.

- Improve and integrate transit information available to travelers at transit stations and over the Internet.
- 3. Capacity expansion/reallocation strategies
  - a. Core Service (including HCT): Increase peak period bus service 119 percent and offpeak service 105 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments). Sound Transit Link Light Rail will extend to Redmond, Everett, and Tacoma from the existing segment in Seattle.
  - b. Community Connections Service: Increase peak period bus service 43 percent and offpeak service almost 18 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments).
  - c. Specialized Service: Increase peak period bus service 98 percent and off-peak service 4.5 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments).
  - d. Shared Right-of-Way strategies: ROW priority for transit for all service types on the arterial system. While the FEIS analysis did not explicitly assume managed lane treatments on the fully tolled freeways, such treatments could be included in practice if found to be necessary by experience in early tolling deployments.
  - e. Capital Facilities (i.e., park-and-rides, stations, stops, etc.)
    - i. Park-and-rides: Expand existing park and ride capacity and, in a few cases, add a new facility at more than 30 locations around the region, focused on supporting rail and bus Core Service
    - ii. Bases: Add bases sufficient to support expanded service
    - iii. Fleet: Add buses and rail vehicles sufficient to support expanded service
    - iv. Transit Centers & Stations: Add or enhance eight transit centers, other new stations to support the Light Rail extensions, and other transit stops, stop amenities, and supporting infrastructure for expanded bus service
  - f. Operating Environment/Support: Transit Signal Priority treatments on key arterial corridors. Implement technology upgrades for system management, fare collection, automatic passenger count/automatic vehicle locations, and traveler information
- 4. Other Linkages: Significant pedestrian and bicycle facilities to ensure connections to the transit centers and stations. See subsection (vi) below.
- v. Ferry:
- Sustain existing auto ferry service through vessel replacement and preservation investments and the following actions.
- Institute a fuel charge on top of regular base fares.
- Improve transit frequencies and connections to ferry terminals and provide park-and-rides to encourage transit use and walk and bike passengers.
- Provide dedicated transit connections at major ferry terminals during peak periods: Seattle, Bremerton, Edmonds, Winslow, Kingston, Southworth.
- Employ comprehensive system efficiency measures to reduce vehicle congestion: reservation system; improved fare collection; traffic management; improved entrance and exit queuing; parking and holding strategies.

- Begin passenger-only ferry service on these new routes: Seattle-Bremerton, Seattle-Kingston, and Seattle-Southworth.
- Maintain and/or improve existing passenger ferry terminals where needed to serve existing routes (Bremerton, Port Orchard, Annapolis, downtown Seattle, Vashon, West Seattle) and improve or expand existing passenger ferry terminals or provide new terminals to serve new routes (Bremerton, Kingston, Southworth).

#### vi. Bicycle/Pedestrian

- 1. Education & Encouragement: No change from core
- 2. Access to Transit
  - a. Secure bike parking at HCT stations, transit centers, ferry terminals, and park-and-ride lots.
  - b. Complete a continuous network of pedestrian facilities (sidewalks, walkways, paths, bridges, etc.) within a <sup>3</sup>/<sub>4</sub>-mile radius of high-capacity transit stations, transit centers, ferry terminals and park-and-ride lots.
  - c. Complete a continuous network of bicycle facilities (bike lanes, trails, shared lane pavement markings, bike boulevards, etc.) within a 3/4-mile radius of high-capacity transit stations, transit centers, ferry terminals and park-and-ride lots.
  - d. Walk and bike information wayfinding systems at HCT stations, transit stops and centers, ferry terminals, and park-and-ride lots.
- 3. Pedestrian Network
  - a. To encourage walking, to reduce pedestrian deaths and injuries, and to increase access, create a connected network of enhanced pedestrian-friendly amenities including wide, well-lit sidewalks, refuge islands, clearly marked crosswalks; pedestrian-activated crossing signals, and transit station/stop treatments in regional growth centers.
- 4. Bicycle Network
  - a. To encourage bicycling, to reduce bicyclist deaths and injuries, and to increase access, create a network of bicycle tracks/paths physically separated from motor vehicle traffic, including intersection modifications to minimize conflicts, within and between regional growth centers and manufacturing/industrial centers, and complete the regional trail network resulting in over 315 miles of trails beyond the 2040 Baseline.
- 5. Support Facilities
  - a. Bike parking and end-of-trip facilities throughout the region
- 6. Other: No change from core
- vii. Demand Management:
  - 1. Programs and integrated efforts
    - a. CTR:
      - Continue implementation of the existing Washington state CTR in the region.
      - Use the Regional Council's role under the 2006 CTR Efficiency Act to coordinate local CTR plans and integrate them into regional planning efforts and work with local, regional, and state stakeholders to analyze the CTR program to identify successes and opportunities for improvement.
    - b. Growth and Transportation Efficiency Centers (GTEC):

- Focus GTEC growth in regional growth centers and manufacturing/industrial centers within the five Metropolitan Cities.
- Create or expand TMAs concurrent with GTEC growth.
- c. Land use policy:
  - Implement "green" and/or "complete" streets policies in all jurisdictions. The effects of these types of physical improvements are being addressed in the "Bicycle/Pedestrian" portions of this document.
  - Promote programs and policies that provide bicycle and pedestrian facilities and increased population and job density near transit hubs.
  - Provide developer incentives or credits for the inclusion of nonmotorized "end of trip" facilities in new or re-development within regional growth centers.
  - Implement developer incentive program to encourage transit- and pedestrianoriented development at regionally significant park and rides and transit station areas.
- d. Transportation policy: No change from core or baseline
- e. Enabling efforts: No change from core or baseline
- 2. Regional efforts that reduce number of person-trips:
  - a. Telework:
    - Implement a regionally coordinated telework and flexible scheduling education, marketing, and technical assistance program targeted towards 500 employers annually.
  - b. Employer tools (telework and flexible scheduling, etc.):
    - Implement a regionally coordinated telework and flexible scheduling education, marketing, and technical assistance program targeted towards 500 employers annually.
- 3. Efforts that promote use of non-SOV modes
  - a. Guaranteed Ride Home: No change from baseline
  - b. Alternative Mode Education:
    - Implement a regionally coordinated residential-based marketing and incentive program. This program would be similar to "Smart Trips" programs implemented in Portland, OR and in Whatcom County. Targeted at 22,500 households annually in coordination with multimodal investments throughout the region.
  - c. Alternative Mode Incentives: See "Alternative Mode Education" and "CTR" above.
  - d. Rideshare (vanpool/vanshare/carpool):
    - Greatly expand vanpool programs Steadily increase vanpool investment to proposed Alternative 5 2040 levels: 4,301 vans in 2040. Leverage investment in other alternative mode commute programs to increase ridership to 40,000 passengers over the same period. Program cost includes maintenance/preservation, lifecycle replacement costs, and vanpool incentives.
  - a. Carshare:
    - Carshare supply: Incentivize carshare expansion in regional growth centers to promote single-vehicle households and to provide non-commute trip

transportation options in the densest areas of the region.

- Carshare supply: Incentivize building managers/owners and private parking operators to offer carshare facilities within regional growth centers. Placing carshares on the employer end of the trip will provide alternative mode commuters with a car when needed while at work and is intended to increase the overall effectiveness of the carshare strategy.
- Carshare demand: Incentivize GTEC employers to maintain company sponsored carshare or bikeshare memberships. By encouraging carshare or bikeshare memberships, employers and employees alike would feel less like they needed to have a personal automobile at their place of employment. This combined with commuter financial incentives inherent in the CTR and GTEC network would have an effect on an individual's decision to drive alone.
- b. Parking Supply and Management:
  - Implement on-street parking management plans in regional growth centers that favor short-term consumers. One aspect of these plans should be performance-based parking pricing, a strategy in which the price of parking is set to encourage 85 percent occupancy of short-term spaces during peak periods.
  - Implement shared-parking policies in regional growth centers. Evidence presented by Litman indicates that shared-parking facilities can accommodate 20-40 percent more users than those facilities with assigned parking. The intent is to increase parking supply efficiency where all users do not need a parking space all day, every day. This is likely to be more successful in mixed-use areas where customer or employee demand for parking peaks at different points during the day.
  - See section (ix) below.
- viii. System Management: Mid-term (HOT with some fully tolled segments) and long-term (fully tolled freeway system) tolling strategies form a major component of system management in the Preferred Alternative (Constrained). Other vital activities are described above in the Roadway...Efficiency Strategies and Transit subsections.
- ix. Pricing: Roadway Tolling: The Preferred Alternative (Constrained) expands road tolling implementation in successive steps from HOT lane operations on most of the region's freeways in the mid-term of the plan to fully tolling the entire regional freeway system by 2035. See Addendum A for a map showing the extent of the tolled freeways reviewed in the analysis at 2040 build-out.
  - Parking Charges: In general on-street parking charges will grow with inflation (cost increases at 1.5 percent above the general inflation rate) per baseline assumptions except centers in Metropolitan and Core cities. In those centers the analysis assumes a 5 percent regional parking surcharge applied to on- and off-street parking facilities with existing parking charges in year 2006 plus the addition of on- and off-street parking charges in centers where there are no existing parking charges. The latter were set based on the surcharged parking rates proportional to total employment density (off-street) or retail employment density (on-street). See Addendum E for details.
  - 2. Park-and-Ride Charges: No charges
  - 3. Ferry Special Charges: Institute a fuel charge on top of regular base fares
- x. Other: See the "Other" discussion in the Core Strategies section (page 17) for emissions technology strategies.

xi. Financial Strategy: The Preferred Alternative (Constrained) includes a variety of additional traditional funding measures plus new funding. Elements of the latter explicitly treated in the alternatives modeling include the roadway tolling and parking charges summarized above plus a fuel tax replacement (treated in the modeling as an additional 2 cents per vehicle mile traveled for non-transit vehicles by year 2035).

Abridgement only in this PDF ... excerpt of pages related to public transit and park & ride investments. Complete document as of March 28, 2010 is posted here: http://www.psrc.org/assets/3694/Appendix\_A\_-\_Transportation\_2040\_Alternatives\_Report.pdf See http://www.psrc.org/ for revisions before May 20, 2010 final approval.

## 2.j Preferred Alternative (Full Plan)

## **Custom Strategies IN ADDITION TO Core and Baseline Strategies**

- i. Design Philosophy: The Full Preferred Alternative is an ambitious set of actions designed to advance the region's mobility and environmental goals. While the region has not yet articulated means of funding all actions, the Full Plan articulates a long-term vision of what the region would like its future transportation system to be.
- ii. Roadway:
  - 1. Efficiency strategies
    - a. Integrated Corridor Management
      - i. Begin initial deployment of Integrated Corridor Management (ICM) on I-5 from I-90 to SR 900
      - ii. Expand to applicable corridors with parallel route and modes
    - b. Arterial Traffic Management
      - i. Corridor and regionally coordinated signal control
        - 1. Maintain existing re-timing and maintenance programs
        - 2. Expand and construct traffic management centers and work toward center to center communication
      - ii. Expand transit signal priority on key transit arterials and bus rapid transit routes
      - iii. Coordinate traffic signals beyond jurisdictional boundaries
      - iv. Improve incident detection and response
      - v. Move toward Adaptive Signal control
    - c. Freeway Management
      - i. Complete ramp meter deployment
      - ii. Active Traffic Management
        - 1. Install dynamic message signs for traveler information using Active Traffic Management Techniques such as speed harmonization and queue warning and hard shoulder running.
    - d. Incident Management and Response
      - i. Expand incident detection capabilities to core freeway and arterial system
      - ii. Expand incident response teams on all freeways and to the arterials
    - e. Regional Multimodal Traveler Information
      - i. Strive towards integrated traveler information
      - ii. Maintain and expand existing travel information outlets such as 511, Internet sites, handheld devices, and kiosks
      - iii. Strive towards route guidance

- iv. Travel time message boards on core freeway
- f. Supporting Deployments
  - i. Supporting deployments that are necessary for many of the other strategies to be successful include Traffic Management Center operations, traffic surveillance (CCTV & vehicle detection), maintenance and staffing.
    - 1. Expand and construct traffic management centers and work toward center-to-center communication
- 2. Capacity expansion strategies: the Full Preferred Alternative makes additional freeway and arterial expansion investments beyond the Constrained plan. It includes additional transitemphasis facilities (such as Business Access/Transit lanes) and more widenings to alleviate bottlenecks and chokepoints (see Addendum B for more details.)

Approximately 88 percent of highway investments costs are for projects within or directly serving Metropolitan Cities, Core Cities and designated regional and manufacturing/industrial centers.

- iii. Freight aspects:
  - 1. Efficiency strategies: Freight will benefit greatly from the congestion mitigation that freeway or full system system tolling are likely to bring. Broader tolling would fund additional system management strategies that are also likely to improve freight mobility.
  - 2. Capacity expansion strategies: The roadway capacity investments mentioned above are designed to serve truck movement as well as transit and personal vehicles. In addition the Full Preferred Alternative contains the entire set of freight-specific grade separation and operational improvement projects identified by the Freight Action Strategy Team (FAST) group.

#### iv. Transit:

- 1. Design Philosophy: The Full Preferred Alternative contains major investments in transit efficiency, service expansion, and new infrastructure. Service expansion emphasizes all-day Core service with additional Specialized service also to serve peak period commutes. See Addenda C and F for more details on transit investments.
- 2. Efficiency strategies include efforts to:
  - Continue and expand fare collection by implementing the Regional Fare Coordination Project and reducing the time spent at bus stops to load passengers.
  - Continue inter-county bus routes through Regional Automated Trip Planning project.
  - Improve and expand vehicle location and identification through the development and implementation of new vehicle tracking technologies.
  - Provide better safety monitoring by installing closed-circuit cameras on buses and at park-and-rides.
  - Improve and integrate transit information available to travelers at transit stations and over the Internet.
- 3. Capacity expansion/reallocation strategies
  - a. Core Service (including HCT): Increase peak period bus service 160 percent and offpeak service 135 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments). Sound Transit Link Light Rail or other High Capacity Transit (HCT) systems will extend beyond the system envisaged in the

Constrained plan to locations including West Seattle, Ballard, Woodinville and Monroe along the east-side Burlington Northern/Santa Fe (BNSF) right-of-way, and other places (see Addendum C for details).

- b. Community Connections Service: Increase peak period bus service 58 percent and offpeak service almost 30 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments).
- c. Specialized Service: Increase peak period bus service 123 percent and off-peak service over 12 percent above 2006 levels by 2040 (includes the 2020 increase assumed in core alternative investments).
- d. Shared Right-of-Way strategies: ROW priority for transit for all service types on the arterial system. While the FEIS analysis did not explicitly assume managed lane treatments on the fully tolled freeways, such treatments could be included in practice if found to be necessary by experience in early tolling deployments.
- e. Capital Facilities (i.e., park-and-rides, stations, stops, etc.)
  - i. Park-and-rides: Expand existing park and ride capacity and in a few cases add a new facility at more than 40 locations around the region, focused on supporting rail and bus Core Service.
  - ii. Bases: Add bases sufficient to support expanded service.
  - iii. Fleet: Add buses and rail vehicles sufficient to support expanded service.
  - iv. Transit Centers & Stations: Add or enhance eight transit centers, other new stations to support the Light Rail extensions, and other transit stops, stop amenities, and supporting infrastructure for expanded bus service.
- f. Operating Environment/Support: Transit Signal Priority treatments on key arterial corridors. Implement technology upgrades for system management, fare collection, automatic passenger count/automatic vehicle locations, and traveler information.
- 4. Other Linkages: Significant pedestrian and bicycle facilities to ensure connections to the transit centers and stations. See subsection (vi) below.
- v. Ferry:

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- Sustain existing auto ferry service through vessel replacement and preservation investments and the following actions.
- Institute a fuel charge on top of regular base fares.
- Improve transit frequencies and connections to ferry terminals and provide park-and-rides to encourage transit use and walk and bike passengers.
- Provide dedicated transit connections at major ferry terminals during peak periods: Seattle, Bremerton, Edmonds, Winslow, Kingston, Southworth.
- Employ comprehensive system efficiency measures to reduce vehicle congestion: reservation system; improved fare collection; traffic management; improved entrance and exit queuing; parking and holding strategies.
  - Begin passenger-only ferry service on these new routes:
    - Bainbridge Island Des Moines
    - Kirkland University of Washington
    - Des Moines downtown Seattle
    - Shilshole downtown Seattle
    - Port Orchard downtown Seattle
    - Port Townsend downtown Seattle

- Vancouver, BC downtown Seattle
- Kenmore University of Washington
- Renton Leschi
- Maintain and/or improve existing passenger ferry terminals where needed to serve existing routes (Bremerton, Port Orchard, Annapolis, downtown Seattle, Vashon, West Seattle) and improve or expand existing passenger ferry terminals or provide new terminals to serve new routes.

#### vi. Bicycle/Pedestrian

- 1. Education & Encouragement: No change from core
- 2. Access to Transit
  - a. Secure bike parking at HCT stations, transit centers, ferry terminals, and park-and-ride lots.
  - b. Complete a continuous network of pedestrian facilities (sidewalks, walkways, paths, bridges, etc.) within a <sup>3</sup>/<sub>4</sub>-mile radius of high-capacity transit stations, transit centers, ferry terminals and park-and-ride lots.
  - c. Complete a continuous network of bicycle facilities (bike lanes, trails, shared lane pavement markings, bike boulevards, etc.) within a 3-mile radius of high-capacity transit stations, transit centers, ferry terminals and park-and-ride lots.
  - d. Walk and bike information wayfinding systems at HCT stations, transit stops and centers, ferry terminals, and park-and-ride lots.
- 3. Pedestrian Network
  - a. To encourage walking, to reduce pedestrian deaths and injuries, and to increase access, create a connected network of enhanced pedestrian-friendly amenities including wide, well-lit sidewalks, refuge islands, clearly marked crosswalks, pedestrian-activated crossing signals; and transit station/stop treatments in regional growth centers.
- 4. Bicycle Network
  - a. To encourage bicycling, to reduce bicyclist deaths and injuries, and to increase access, create a network of bicycle tracks/paths physically separated from motor vehicle traffic, including intersection modifications to minimize conflicts, within and between regional growth centers and manufacturing/industrial centers, and complete the regional trail network resulting in over 553 miles of trails beyond the 2040 Baseline.
- 5. Support Facilities
  - a. Bike parking and end-of-trip facilities throughout the region
- 6. Other: No change from core
- vii. Demand Management:
  - 1. Programs and integrated efforts
    - a. CTR:
      - Continue implementation of the existing Washington state CTR in the region.
      - Use the Regional Council's role under the 2006 CTR Efficiency Act to coordinate local CTR plans and integrate them into regional planning efforts. Work with local, regional, and state stakeholders to analyze the CTR program to identify successes and opportunities for improvement.

- Study the potential Implementation a "CTR Light"- type program targeting non-CTR impacted employers. Examine relationship to full CTR program as input for program refinement.
- b. Growth and Transportation Efficiency Centers (GTEC):
  - Create GTECs in regional growth centers and manufacturing/industrial centers throughout the region.
  - Create or expand TMAs within all regional growth centers commensurate with GTEC expansion in regional centers.
- c. Land use policy:
  - Implement "green" and/or "complete" streets policies in all jurisdictions. The effects of these types of physical improvements are being addressed in the "Bicycle/Pedestrian" portions of this document.
  - Promote programs and policies that provide bicycle and pedestrian facilities and increased population and job density near transit hubs.
  - Require new or re-development within regional growth centers to include nonmotorized "end of trip" facilities.
  - Require development around regionally significant park and rides and transit station areas to be transit- and pedestrian-oriented.
- d. Transportation policy: No change from core or baseline
- e. Enabling efforts: No change from core or baseline
- 2. Regional efforts that reduce number of person-trips:
  - a. Telework:
    - Implement a regionally coordinated telework and flexible scheduling education, marketing, and technical assistance program targeted towards 1,000 employers annually.
    - Provide mini-grants designed to assist employers with capital costs associated with the implementation of a telework policy.
    - Implement a public subsidy or tax break for employers achieving a high telework or flexible-scheduling mode share.
  - b. Employer tools (flexible scheduling, etc.):
    - See "Telework" subsection above.
- 3. Regional efforts that promote use of non-SOV modes
  - a. Guaranteed Ride Home:
    - Expand guaranteed ride home (GRH) eligibility to all firms in urban growth area. The availability of the service greatly factors into an individual's decision to utilize an alternative mode for the daily commute.
  - b. Alternative Mode Education:
    - Implement a regionally coordinated residential-based marketing and incentive program. This program would be similar to "Smart Trips" programs implemented in Portland, OR and in Whatcom county. Targeted at 40,000 households annually in coordination with multimodal investments throughout the region.
  - c. Alternative Mode Incentives: See "Alternative Mode Education" and "CTR" above.
  - d. Rideshare (vanpool/vanshare/carpool):

- Greatly expand vanpool programs– Steadily increase vanpool investment to proposed Alternative 5 2040 levels: 4,301 vans in 2040. Leverage investment in other alternative mode commute programs to increase ridership to 40,000 passengers over the same period. Program cost includes maintenance/ preservation, lifecycle replacement costs, and vanpool incentives.
- c. Carshare:
  - Carshare supply: Incentivize carshare expansion in regional growth centers to promote single-vehicle households and to provide non-commute trip transportation options in the densest areas of the region.
  - Carshare supply: Incentivize building managers/owners and private parking operators to offer carshare facilities within regional growth centers. Placing carshares on the employer end of the trip will provide alternative mode commuters with a car when needed while at work and is intended to increase the overall effectiveness of the carshare strategy.
  - Carshare demand: Incentivize GTEC employers to maintain company sponsored carshare or bikeshare memberships. By encouraging carshare or bikeshare memberships, employers and employees alike would feel less like they needed to have a personal automobile at their place of employment. This combined with commuter financial incentives inherent in the CTR and GTEC network would have an effect on an individual's decision to drive alone.
  - Carshare demand: Provide public funding for either partial or full memberships for carshare memberships for "eligible individuals" living within a quarter mile of carshare stations. "Eligible individuals" yet to be determined.
- d. Parking Supply and Management:
  - Implement on-street parking management plans in regional growth centers that favor short-term consumers. One aspect of these plans should be performance-based parking pricing, a strategy in which the price of parking is set to encourage 85 percent occupancy of short-term spaces during peak periods.
  - Implement shared-parking policies in regional growth centers. Evidence presented by Litman indicates that shared-parking facilities can accommodate 20-40 percent more users than those facilities with assigned parking. The intent is to increase parking supply efficiency where all users do not need a parking space all day, every day. This is likely to be more successful in mixed-use areas where customer or employee demand for parking peaks at different points during the day.
  - See section (ix) below.
- viii. System Management: Mid-term (HOT with some fully tolled segments) and long-term tolling strategies form a major component of system management in the Full Preferred Alternative. The long-term option analyzed was full system tolling (tolling all freeways and arterials) to establish an upper end of the range of possibilities beyond freeway system tolling. Other vital activities are described above in the Roadway...Efficiency Strategies and Transit subsections.
- ix. Pricing: Roadway Tolling: The full Preferred Alternative expands road tolling implementation in successive steps from HOT lane operations on most of the region's freeways in the mid-term of the plan to fully tolling the entire regional freeway system by 2035. In addition, the full Preferred

Alternative realizes the need for a potential range of additional pricing strategies such as extended VMT, system tolling, and other user fees. For analysis purposes, arterial tolling was assumed in addition to freeway tolling to represent the extent of that range of user fees. See Addendum A for a map showing the extent of the tolled freeways reviewed in the analysis at 2040 build-out.

- 1. Parking Charges: In general on-street parking charges will grow with inflation (cost increases at 1.5 percent above the general inflation rate) per baseline assumptions except centers in Metropolitan and Core cities. In those centers the analysis assumes a 5 percent regional parking surcharge applied to on- and off-street parking facilities with existing parking charges in year 2006, plus the addition of on- and off-street parking charges in centers where there are no existing parking charges. The latter were set based on the surcharged parking rates proportional to total employment density (off-street) or retail employment density (on-street). See Addendum E for details.
- 2. Park-and-Ride Charges: No charges
- 3. Ferry Special Charges: Institute a fuel charge on top of regular base fares
- x. Other: See the "Other" discussion in the Core Strategies section (page 17) for emissions technology strategies
- xi. Financial Strategy: The Full Preferred Alternative does not include a detailed financial strategy. It does, however, include actions that would generate revenues. Elements of the latter explicitly treated in the alternatives modeling include the roadway tolling and parking charges summarized above plus a fuel tax replacement (treated in the modeling as an additional 2 cents per vehicle mile traveled for non-transit vehicles by year 2035).

# 3 Glossary

### **Demand Management**

Alternative Mode Subsidy or Incentive => Subsidies that either partially or fully offset the cost of an individual's choice to use an alternative mode. These subsidies are often offered by employers as a part of the CTR program but can also be offered through other public or private programs. Some employers or agencies may also offer financial incentives to use non-motorized modes of transportation that do not incur a monthly cost.

**Carshare =>** Carshare programs and station cars allow a large group of people to share a pool of vehicles—usually owned by an implementing agency or private company—and split the associated costs. In the central Puget Sound region the most widely used carshare company is Zipcar.

**Commute Trip Reduction (CTR) =>** Washington's CTR law was enacted in 1991 with the intent of reducing peak period traffic congestion through employer-based programs. The law affects only employers with over 100 employees commuting during peak periods and aims to reduce congestion by decreasing the number of commute trips made by single-occupant drivers. The primary method of reducing these single-occupant commute trips is offering alternative commute mode incentives and subsidies such as free bus passes.

**Distance-Based Insurance =>** Also known as pay-as-you-drive (PAYD) insurance and other names, these are automobile insurance policies whose premiums are determined by the number of miles driven during the policy term.

**Guaranteed Ride Home (GRH)=>** Guaranteed ride home programs subsidize an occasional or emergency ride, such as by taxi or rental car, for commuters who normally carpool or use transit.

**Growth and Transportation Efficiency Center (GTEC) =>** A GTEC is a defined boundary of dense mixed development with major employers, small businesses and residential units. The Washington State Legislature created the Growth and Transportation Efficiency Center (GTEC) concept in 2006 as part of the CTR Efficiency Act to increase the efficiency of the state's transportation system in areas of the containing high concentrations of jobs and housing. The program allows implementing agencies to employ a variety of strategies to reduce single-occupant commute trips into and out of the defined area.

"Green Streets" or "Complete Streets" Policies => "Green Streets" and "Complete Streets" are policies in which existing or planned streetscapes are designed to provide multimodal transportation facilities, such as bike lanes and sidewalks, as well as provide an inviting environment to pedestrian activity. The latter would include trees and other amenities or design characteristics that increase the walk-ability of a particular segment of roadway.

**Individual Trip Planning =>** Individualized trip planning is a service that equips customers with the knowledge of how to get from their home to their destination or vice versa. Generally a one-on-one session with a trip planner will result in the customer receiving information such as which bus routes to take and when, which facilities are appropriate for cycling, and potentially the establishment or joining of a rideshare. These types of trip planning services are expensive to provide, but generally result in some form of mode shift.

**Mixed-Use and Transit/Pedestrian Oriented Development (TOD) =>** Mixed-use and transit/pedestrianoriented development works hand-in-hand with other strategies such transit service and non-motorized improvements to encourage residents and customers to take advantage of alternate modes of travel. Additionally, by locating homes, commercial, and retail in the same space, the need to travel longer distances for particular services may be avoided.

**Park-and-Ride Lots =>** Park-and-ride lots serve as an artificial means of creating the critical mass for commuter transit service. They spare users increasingly high parking costs while providing the flexibility to run errands and make other trips prior to returning home.

**Parking Cash-Out =>** Commuters who are offered subsidized parking are also offered the cash equivalent if they use alternative travel modes. This strategy can be very effective in reducing single-occupant commute trips to and from work.

**Parking Management =>** Includes a variety of strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users and improve parking facility design. Parking Management can help address a wide range of transportation problems and help achieve a variety of transportation, land use development, economic, environmental objectives. Parking pricing is included as a parking management strategy.

**Pricing =>** Toll roads, cordon pricing, congestion pricing, and high-occupancy toll (HOT) lanes are all forms of road pricing that charge motorists for driving on a particular roadway or zone.

**Public Education and Promotion =>** A lack of understanding of available transportation options has been identified as a major barrier to alternative mode use. Marketing and public education programs can help overcome that barrier, effectively making the use of those alternative modes more convenient.

**Ridematching Programs =>** Programs that facilitate carpool formation, including ride-matching services and vanpool programs. One example of a ridematching system is <u>www.rideshareonline.com</u> where individuals log in to start a car or vanpool or find an existing local rideshare.

**Rideshare =>** Generic term referring to carpooling, vanpooling, or vansharing.

**Shuttle Services =>** Shuttle services are a subset of public transportation using vans, shuttles, or small buses to fill gaps in the transportation system, often serving very small or particular market segments.

**Telecommuting and Flexible Work Schedules =>** Telecommuting programs enable employees to use telecommunications (phone, Internet, video-conferencing, remote desktop, and others) to substitute for physical travel to a worksite. Some telecommuting programs also include the use of remote worksites, facilitating shorter commute trips for some employees. Flexible work schedules, a compressed work week (such as 4/40 or 9/80), or staggered shifts that enable employees to reduce peak-hour tripmaking.

**Transit =>** The provision of reliable, efficient transit service is essential to reducing VMT and SOV rates.

**Transit and Vanpool Operational Improvements =>** Include agency efforts designed to increase the efficiency and effectiveness of existing transit and vanpool services.

**Transportation Concurrency =>** Provision contained in Washington state's Growth Management Act (GMA) requiring local jurisdictions to have in place, or to have funded, necessary transportation facilities "concurrent" with new development.

**Transportation Management Association (TMA) =>** Non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. Local TMA's include the Greater Redmond TMA, TransManage, the Urban Mobility Group, and the Duwamish TMA.

**Vanpool =>** A service in which 6-15 passengers meet or are picked up in a van and transported to a common destination. The vehicle is operated by one of the vanpool members and is owned by a transit agency. Members pay a fare to ride in vanpools, which provide a comfortable alternative to individuals where their commute does not lend itself to fixed-route transit.

**Vanshare =>** Vanshare vehicles are essentially the same thing as vanpools; however, this service is utilized for either the first or last leg of a commute. On the origin end of the trip members of the vanshare are picked up, or they meet in a common location and are transported to a transit stop/station, where they disembark and board the fixed-route transit vehicle to take them to their final destination. The vehicle remains at the drop-off point and members re-board upon their return trip to be taken back to their place of origin. On the destination end, vanshare members disembark from fixed-route transit and board the vanshare vehicle to go to a common destination.

# **Bicycle & Pedestrian**

**Bicycle and Pedestrian Infrastructure and Transit Integration =>** This includes investment in the nonmotorized network that facilitates efficient movement of pedestrians and bicyclists. Includes, but is not limited to sidewalk improvements, dedicated non-motorized paths, bike lanes, signage, signalization, and parking that make it easier and safer to move throughout the community without the use of an automobile. Additionally, providing capacity for bicycles on transit vehicles and at transit stations promotes not only non-motorized transportation, but the use of transit as well.

## System Management

**511** => An easy-to-remember 3-digit telephone number, available nationwide, that provides current information about travel conditions, allowing travelers to make better choices—choice of time, choice of mode of transportation, choice of route.

Active Traffic Management (ATM) => A tool that can maximize safety and traffic flow by dynamically managing and controlling traffic based on the prevailing traffic conditions. These strategies include speed harmonization, queue warning, junction control, hard shoulder running, dynamic re-routing, and traveler information.

Adaptive Signal Control=> Automatically adjusts signal timings (cycle lengths, splits, offsets) in real-time based on current traffic conditions. Adaptive timing has been shown to improve travel times, reduce stops and reduce fuel consumption compared to traditional signal timing methods. Adaptive timing requires additional detection and a communications controller on the selected corridors, as well as a central computer.

Advanced Parking Systems=> Advanced parking systems help drivers find or reserve parking, enable wireless and/or electronic payment, and/or convey real-time information regarding the status of a lot or metered space.

Advanced Signal Systems => Includes coordinated signal operations across neighboring jurisdictions, as well as centralized control of traffic signals, which may include some necessary technologies for the later development of adaptive signal control.

Advanced Vehicle Location (AVL)=> AVL systems are computer-based vehicle tracking systems that measure the real-time position of each vehicle and relay the information back to a central location. They are used most frequently to identify the location coordinates of vehicles in order to better satisfy demand. They also serve to provide location coordinates to respond to emergency situations. The benefits of AVL include improved dispatch and operational efficiency, improved overall reliability of service, quicker responses to disruptions in service, such as vehicle failure or unexpected congestion, quicker response to threats of criminal activity (via silent alarm activation by the driver), and extensive information provided at a lower cost for future planning purposes.

**Center to Center Communications (C2C)** => Communications span the entire ITS domain, covering the exchange of data between computers physically located in different transportation management center facilities (e.g., traffic management centers, transit management centers, emergency management centers, and parking management centers).

**Closed Circuit Television (CCTV) Cameras =>** Fixed or pan/tilt/zoom cameras could be used to monitor traffic conditions on these roadways, collect counts, and to observe the operation of signal coordination on the corridor.

**Dynamic Messaging =>** Dynamic messaging uses changeable message signs to provide information to motorists.

**Dynamic Rerouting =>** Change destination signs to account for current traffic conditions to effectively utilize available roadway capacity by redirecting traffic to less congested facilities.

Hard Shoulder Running => Hard shoulder running uses the shoulder as a travel lane during congested periods or allows traffic to move around an incident. Use of the lane may be general purpose or restricted, such as to transit vehicles.

**Highway Advisory Radio=>** Can be deployed temporarily, or existing systems can be updated periodically to provide information on work zones or other highway maintenance activities. ITS operators may also send this information to in-vehicle devices capable of displaying traveler information.

**High-Occupancy Vehicle (HOV) lanes =>** High occupancy vehicle lanes are reserved for vehicles containing at least a specified number of occupants (such as 2, 3, 4, or more) or for transit vehicles.

**Incident Management Systems =>** Incident management systems assist in the efficient handling of incidents, such as emergency response, highway service patrol, highway advisory radio, and incident detection.

**Incident Response Teams =>** Roadside assistance teams that are dispatched and/or roving to quickly to respond to incidents.

**In-Vehicle Systems =>** Organizations operating ITS can share information collected by detectors associated with arterial management systems with road users through technologies within the arterial network, such as dynamic messages signs or highway advisory radio. ITS operators may also send information to in-vehicle devices capable of displaying traveler information. Coordination with regional or multimodal traveler information efforts, as well as freeway and incident management programs, can increase the availability of information on arterial travel conditions.

**Integrated Corridor Management (ICM) =>** A combination of traveler information, inter-jurisdictional and modal coordination to achieve a balance in the demand on the system. Creates equilibrium in the corridors by distributing travel on parallel routes and modes.

**Junction Control =>** Use variable traffic signs, dynamic pavement markings, and lane use control to direct traffic to specific lanes (mainline or ramp) based on varying traffic demand.

**Queue Warning =>** Overhead messaging signs warn motorists of downstream queues and direct through-traffic to alternate lanes.

**Ramp Metering =>** Ramp metering uses signals at points where ramps enter a freeway to regulate the rate and spacing of traffic.

**Reversible Lanes =>** Traffic may travel in either direction in reversible lanes, depending on conditions. Direction of flow may be established using signals, signage, or pavement markings.

**Signal interconnect=>** Twisted wire pair and fiber optic signal interconnect are used to allow local traffic signal controllers to communicate to field masters or to a central monitoring and/or control system. With a physical communication link to traffic signals, agency personnel can upload and download data from a remote site, alarms can alert operators of problems, and timings can be monitored and adjusted.

**Special Events and Work-Zone Planning =>** These are procedures for managing the impact on traffic of construction projects or irregular events.

**Speed Harmonization =>** Speed harmonization dynamically and automatically reduces speed limits approaching areas of congestion.

**Traffic Signalization and Control =>** Adapting and synchronizing control systems to current conditions in a larger signalized network.

**Traveler Information =>** Provides estimated travel time and other condition reports to communicate travel and traffic conditions. Allows for better pre-trip and en-route decisions by travelers.

**Traffic Management Center (TMC) =>** Is the hub of a transportation management system, where information about the transportation network is collected and combined with other operational and control data to manage the transportation network and to produce traveler information. The TMC links various elements of Intelligent Transportation Systems, such as variable message signs, closed circuit video equipment (CCTV), roadside count stations, etc. It enables decision makers to identify and react to an incident in a timely manner based on real-time data.

**Time of Day Signal Coordination =>** Multiple signals are synchronized based on coordinating clocks so timing plans operate in sync.

**Time of Day Signal Timing =>** Signal timing plans are varied to respond to peak and off-peak periods.

**Traffic Responsive Signal Timing (TRPS) =>** Would be used to adjust signal timings based on current volumes. Count stations are used to monitor traffic volumes. When the volumes reach a pre-defined level for a certain amount of time, the coordination plan is changed. Each coordination plan used is predefined, whereas, with adaptive signal timing, the plans are continuously being modified.

**Transit Signal Priority =>** Transit priority access to green signals at intersections can speed travel by public transportation and improve the on-time performance of buses and light-rail vehicles. Transit signal priority systems follow a number of different operating strategies that provide green signals to approaching transit vehicles.

**Vehicle Infrastructure Integration (VII)** => An initiative that is a cooperative effort among U.S. Department of Transportation, state and local governments, the automobile industry, and other partners to support development of an information infrastructure for ongoing real-time data communications with, and among, vehicles to enable a number of safety, mobility, and commercial applications. An implemented VII network will enable travelers to access traffic conditions and routing information for multiple modes of travel, receive warnings about imminent hazards, and conduct commercial transactions within their vehicles. Transportation agencies will have access to data needed to better manage traffic operations, support planning, and more efficiently manage maintenance services.

## <u>Transit</u>

Automatic Fare Collection=> Electronic transit fare payment systems, often enabled by smart card or magnetic stripe technologies, can provide increased convenience to customers and generate significant cost savings to transportation agencies by increasing the efficiency of money handling processes and improving administrative controls.

#### **Community Connectors or Community Connector Service =>** See "Service Typology"

**Core Service =>** See "Service Typology"

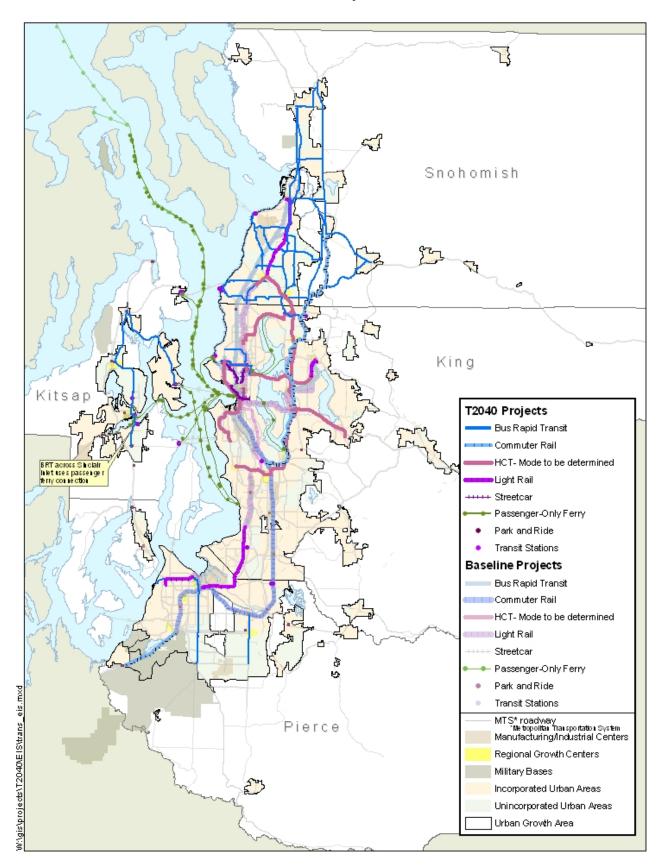
**Service Typology =>** The arrangement of transit service provision, for the purpose of long-range planning and regardless of technology, into one of these three categories:

- *Core Service*: Transit routed between or through areas with higher density population and/or employment. Because of the land use patterns it serves, it is by design the most accessible to large numbers of people (highest ridership). Typically running all day, it tends to be high frequency, operating at the highest possible speeds. Examples include the King County Metro 71, 72, and 73, as well as the Sound Transit all-day regional buses. HCT service is considered part of core service.
- Community Connector Service: Transit routed between or through areas that are not dense enough to warrant core service but that the operator is required or has chosen to serve for policy reasons. Because of the land use pattern it serves, it does not serve large numbers of people. Typically running through much (but not all of) the day, it tends to be lower frequency but can operate at higher or lower speed depending on individual routes. Examples are King County Metro #'s 17 and 24.
- Specialized Service: Transit routed to serve very specific users at specific times, such as peakperiod commutes from Park and Rides to employment centers. Running only at specific times, it can be either high frequency or low frequency during those times but is generally high speed and can carry high volumes of passengers. An examples are the King County Metro #37 or the 306/312 route connecting Park and Rides in Bothell and Kenmore to downtown Seattle in the morning and evening commute periods. Paratransit service is also considered part of specialized service.

Specialized Service=> See "Service Typology"

# Addendum C: Transit Strategies

Transit investments in the alternatives are categorized into a "service typology" distinguishing "core service," "community connector service," and "specialized service." See the Chapter 5 Glossary section on transit for typology definitions. The following maps illustrate the major "core service" investments (but not all "core service" investments) for each alternative. Note that these maps and lists exclude "specialized service" including most express bus service changes. Following the maps is a table cross-referencing individual core service investments shown on the maps to each alternative. Appendix E discusses the alternatives analysis approach to bus service hour investments across the alternatives.



Ad. C Part 6: Transit "Core Service" Expansion, Preferred Alternative

### Ad. C Part 7: Major "core service" Transit Investment Cross-Tabulation

This table shows the larger "Core Service" transit investments presented in the maps in part 1 of this Addendum. These are not ALL Core Service investments; see Appendices F and G for additional transit information. Sorted by sponsor.

Note that the Preferred Alternative was analyzed with a range of possible outcomes starting from a "Constrained" configuration (column "PA-C") extending to the full Preferred Alternative (column "PA").

This list was revised in response to comments and additional information received during the DEIS comment period. Comments in the "PA-C" and "PA" columns reflect the additional information. In some cases staff discovered that the project had entered construction or been recently completed (labeled "under construction" or "completed"). Certain investment outcomes were found to have been included in other projects (labeled "in XXXX" where XXXX denotes the other project) or duplicates (labeled "duplicate"). Finally, in the process of reaching a decision on the final plan, some investments included in the original five alternatives were excluded from the Preferred Alternative. Some of these projects were retained in a "concepts" list outside of the final plan (these are labeled "concepts" below). In some cases new investments were analyzed for the first time in the Preferred Alternative, making it possible that an investment will only have X's in the PA-C and PA columns.

Abridgement only in this PDF ... excerpt of pages related to public transit and park & ride investments. Complete document as of March 28, 2010 is posted here: http://www.psrc.org/assets/3694/Appendix\_A\_-\_Transportation\_2040\_Alternatives\_Report.pdf See http://www.psrc.org/ for revisions before May 20, 2010 final approval.

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2519	Link LRT Extension from Lynnwood to Everett	Light Rail extension. COST ESTIMATE ASSUMES GRADE- SEPARATED AERIAL ALIGNMENT. PER-MILE AERIAL COST ESTIMATE USED. PROJECT COMPLETION POST- 2027.	Everett	Lynnwood Transit Center (202nd St SW & 46th Ave W)	2040	Sound Transit			x		x	X	x	
2524	Link LRT Extension from Overlake Transit Center to Redmond	Alignment and Stations. East Link project from the Overlake Transit Center to downtown Redmond. This segment would have three stations at SR-202 @ SR-520 (SE Redmond), BNSF ROW @ ~ 165th Ave. NE (Redmond Town Center), 161st Ave. NE @ NE 83rd St. (Redmond TC)		Redmond	2030	Sound Transit			x		x	x	x	
2494	Link LRT Initial Segment	Alignment; Westlake Station, University St. Station, Pioneer Square Station; International District Station; Stadium, SODO, Beacon Hill, Mt Baker, Columbia City,Othello, Rainier Beach, Tukwila International Blvd HAS ABSORBED 2495. INCLUDES King Co./Metro	Westlake Station	Tukwila Internationa I Boulevard	2009	Sound Transit	x						complet	ted
2497	Airport Link	Alignment; Airport Station	Tukwila Internation al Boulevard	SeaTac Airport	2009	Sound Transit	X						complet	ted

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5392	Lake Station to Federal	Alignment and Stations: Federal Way Transit Center (at S. 316/317th - track extends E from SR99 btwn 312th and 316th to meet the transit station) to S 272nd (272nd Street Station - S of 272nd to serve existing Redondo Heights P&R but opposite side of SR99 from P&R to be connected by ped bridge).	Redondo/ Star Lake	Federal Way Transit Center	2040	Sound Transit			x		x	X	x	
4088	Link LRT Extension from Federal Way Transit Center to South Federal Way	Alignment and stations. From Federal Way TC (see #2525 for Fed Way TC info) to S 348th (vicinity: W side of I-5 and S. 348th).	Federal Way Transit Center	South Federal Way	2040	Sound Transit			x		x	x	x	
4089	Link LRT Extension from South Federal Way to Port of Tacoma	Alignment and stations. From S 348th St. to Port of Tacoma (station in vicinity between I-5 and 58th Ave).	South Federal Way	Port of Tacoma	2040	Sound Transit			x		x	x	x	
2526	Link LRT Extension from Port of Tacoma to Tacoma Dome	HCT Corridor. COST ESTIMATE ASSUMES GRADE-SEPARATED AERIAL ALIGNMENT. PER-MILE AERIAL COST ESTIMATE USED. PROJECT COMPLETION POST- 2027.	Port of Tacoma	Tacoma Dome	2040	Sound Transit			x		x	x	x	
5459	Extension of Tacoma Link to Mary Bridge Hospital	Link LRT from Tacoma (UWT station most likely) to Mary Bridge Hospital (MLK Jr. Way and Division in Tacoma).	9th Street/The ater District Station	Mary Bridge Hospital (MLK Jr. Way and Division)	2023	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4075	Extension of Tacoma Link to Tacoma Community College with Tacoma Link Technology	Construct a 5.5-mile at-grade extension of the existing Tacoma Link system from the 9th Street/Theater District Station in Downtown Tacoma to Tacoma Community College. Stations under consideration: stations at Stadium High School, Tacoma General Hospital, 6th/Sprague, the University of Puget Sound (on 6th), 6th/Stevens, 6th/Pearl, Tacoma Community College (S. 19th and Mildred in University Place). NOTE: This alignment is also subject to change, extension to Pacific Lutheran University (121st ST. S and Park Ave S in Parkland) is being considered. Undetermined which aligment will be chosen at this time but funded by ST2.	Mary Bridge Hospital (MLK Jr. Way and Division)	Tacoma Community College	2040	Sound Transit	X							x
2492	North Link: LRT Extension from University of Washington Station to Northgate	Light Rail. Alignment; NE 45th Station, Roosevelt Station, Northgate Station	Northgate	University of Washington Station	2020	Sound Transit	x						x	
2493	University Link	Alignment; Capitol Hill Station, University of Washington Station; includes some PE/ROW for UW Station - Northgate	Westlake Station	University of Washington Station (stadium)	2016	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2520	Link LRT Extension from Northgate to Lynnwood Transit Center	Alignment and Stations. Northgate to 145th (Jackson Park Station), 145th to185th (Shoreline Station), 185th to 236th (Montlake Terrace Station), 236th to Lynnwood TC.	Lynnwood Transit Center (202nd St SW & 46th Ave W)	Northgate	2023	Sound Transit	X						x	
	Link LRT Extension from Seattle to Downtown Bellevue	Seattle to Bellevue Light Rail segment, Alignment and Stations. Stations under consideration include: I-90 @ Rainier Avenue (Rainier/I-90), Mercer Island P&R (Mercer Island), South Bellevue P&R (South Bellevue), Main St @ SE 8th St. (SE 8th)	Seattle	Downtown Bellevue	2020	Sound Transit	x						x	
2523	Link LRT Downtown Bellevue to Overlake Transit Center	Light Rail Alignment and Stations. Stations under consideration include: Bellevue TC (Bellevue TC), NE 12th St. @ I-405 (Overlake Hospital), 124th Ave. NE @ ~ NE 16th St. (Bel-Red West), 130th Ave. NE @ ~ NE 16th St. (Bel-Red East), 152nd Ave. NE @ NE 24th St. (NE 24th), Overlake TC (Overlake TC)	Downtown Bellevue	Overlake Transit Center	2021	Sound Transit	x						x	
2525	Link LRT Extension from SeaTac Airport to Highline Community College	Alignment and Stations : Kent- DesMoines Rd (Near Highline CC) to S 200th St (Station). From 200th to SeaTac/ Airport Station	SeaTac Airport Station	Highline Community College	2020	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5391		Alignment and Stations: From S 272nd St to Kent-DesMoines Rd (Near Highline CC).	Highline Communit y College	Redondo/St ar Lake	2023	Sound Transit	x						x	
5345	LRT UW to Ballard	New LRT alignment (exact alignment TBD) generally following Pacific St. from the UW LRT station to the U District, then along N 45th St. to Ballard (at 15th)	UW	Ballard	2040	Sound Transit						x		x
5295	LRT Ballard, Seattle, W Seattle	Light Rail from Ballard to Seattle CBD then to West Seattle (exact alignment TBD but potentially along previously studied monorail alignment)	Ballard	West Seattle	2040	Sound Transit						x		x
5337	Redondo/Star Lake LRT station	Redondo/Star Lake LRT station:á + 500 stalls	S. 272nd St @ SR- 99 or I-5		2023	Sound Transit	x						x	
5338	Jackson Park LRT station	Jackson Park LRT station:á + 500 stalls	I-5 @ N 145th St		2023	Sound Transit	x						x	
5339	Shoreline LRT station	Shoreline LRT station:á + 500 stalls	I-5 @ N 185th St.		2023	Sound Transit	X						x	
5340	Bel-Red LRT station	Bel-Red LRT station:á + 300 stalls	~ NE 16th St. @ 132nd Ave. NE		2021	Sound Transit	x						x	
5341	Overlake LRT station	Overlake LRT station:á + 320 stalls	Overlake TC		2021	Sound Transit	X						x	
2533	Sounder Lakewood to Dupont Extension	Extension of service to DuPont, upgrade of track & signals between Lakewood and DuPont, and a new station at DuPont HAS ABSORBED 3314	Lakewood	Dupont	2040	Sound Transit						x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5296	BNSF - Eastside	Utilize the Eastside BNSF rail corridor from Snohomish - Woodinville to Renton/ Tukwila for Commuter Rail	Snohomis h	Tukwila	2040	Sound Transit						X		x
2500	Sounder Everett- Seattle Track & Signal	Track and signal improvements (cost includes permitting & environmental mitigation)f	Everett	Seattle	2007	Sound Transit	x						complet	ed
2501	Sounder Seattle- Auburn Track	Track and signal improvements	Seattle	Auburn	2007	Sound Transit	X						complet	ed
2502	Sounder Commuter Rail Auburn- Tacoma Track & Signal	Track and signal improvements.	Auburn	Tacoma	2008	Sound Transit	X						x	
4047	Tacoma- Lakewood Track & Signal	Track and signal improvements needed to implement the Tacoma- to-Lakewood Commuter Rail project. May include a rail grade- separated overcrossing at Pacific Avenue and S 26th Street in downtown Tacoma listed in project 4110.	Tacoma	Lakewood	2012	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4087	Expanded Sounder Service Levels	Expand Seattle-Tacoma-Lakewood Sounder service beyond the level provided in Sound Move, and implement track improvements along the Seattle/Tacoma Sounder line to support the service expansion. Up to 26 trains (13 round trips) in the south allowed by current agreements with the BNSF and up to four round trips in the north. The ST transit model for 2030 assumes p.m. peak headways of 18 minutes Seattle- Lakewood, 45 minutes Lakewood- Seattle, and 30 minutes Seattle- Everett. There is no reverse-peak direction service on the Everett line. There is no off-peak service except some special event service. Related Track and Signal Improvements between Lakewood and Seattle	Seattle	Lakewood	2015	Sound Transit	X						x	
3311	Ballard Commuter Rail Station	Commuter Rail Station. PROJECT COMPLETION POST-2027.	NW 70th Block @ BNSF RR		2040	Sound Transit						x		x
4073	Station at	Construct new station at the north end of the downtown Seattle core in the vicinity of Broad Street	Vicinity Broad Street@B NSF tracks		2040	Sound Transit						X		x
4082	New Station in North Sumner	Construct a new Sounder station including station facilities, bus boarding area, and a surface parking lot with up to 400 stalls upon completion.	SW of East Valley Hwy / 8th St E @ BNSF RR (Sumner)		2040	Sound Transit			x	x		x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4080	Permanent Station at Tukwila	Build permanent station facilities, bus loading area, and new parking facilities (400 new stalls) for a total of 620 stalls at the station upon completion. See also 3557 for Tukwila street access project.	Longacres Way @ BNSF RR (Tukwila)		2015	Sound Transit	x						x	
4050	Edmonds Station	Commuter Rail Station including two platforms, shelters for weather protection, off-street bus area, short-term parking, and about 150 parking spaces	Edmonds Way / James Street @ BNSF RR		2011	Sound Transit	x						x	
4048	Everett Station	Final phase of multimodal station, including 770 parking stalls, pedestrian bridge over tracks, pedestrian access plazas on both sides of tracks, and operations building. Part of structure was completed by the City of Everett and Sound Transit will be fi	32nd St @ Smith Ave (Everett)		2008	Sound Transit	x						comple	ted
4049	Mukilteo Station	Commuter rail station including two platforms connected by overhead pedestrian walkway, continuous canopies, and parking for 65 vehicles	First St E of SR 525 (Mukilteo)		2009	Sound Transit	x						comple	ted
4052	South Tacoma Station	Commuter Rail Station sith a single- side platform and a passenger dropoff zone. See 2600 for P & R portion.	S 56th St & Washingto n St (Tacoma)		2012	Sound Transit	x						comple	ted
4053	Lakewood Station	Multimodal station with 620-stall parking garage, bus transit center, commuter rail platform	Pacific Hwy SW near 47th Ave SW @ BNSF RR		2012	Sound Transit	x						comple	ted

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4071	Parking Garage at Mukilteo Sounder Station	Joint Development of a garage at the Mukilteo Sounder station. ST to provide funding to construct up to 130 additional structured parking stalls for Sounder riders in a joint- use parking garage developed as part of Washington State Ferries' Mukilteo Landing multimodal terminal project. See 808 for main terminal project.	First St E of SR 525 (Mukilteo)		2023	Sound Transit	x						x	
4072	New Permanent Sounder Station at Edmonds Crossing	This project would relocate the interim station at Edmonds to the permanent location and expand parking by up to 300 structured stalls for Sound Transit riders, in conjunction with Washington State Ferries' Edmonds Crossing multimodal terminal project. COST INCLUDES SOUND TRANSIT PORTION OF PROJECT ONLY.	11400 Block Admiral Way @ BNSF RR		2023	Sound Transit	x						x	
5359	HCT Northgate to Bothell	HCT (mode TBD) from Northgate to Bothell via Roosevelt, NE 125th St., SR 522	Northgate	Bothell	2040	Sound Transit						x		x
2527	I-405 HCT Corridor from I-5 Interchange (Lynnwood) to Burien	HCT Corridor. COST ESTIMATE ASSUMES GRADE-SEPARATED AERIAL ALIGNMENT. PER-MILE AERIAL COST ESTIMATE USED. PROJECT COMPLETION POST- 2027. HAS ABSORBED 2528, 2531, AND 2532. Intersects the Central Link line between the Airport and downtown Seattle but does not serve the airport directly.	I-5 / I-405 Interchang e (Alderwoo d)	Burien Transit Center	2040	Sound Transit						x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2529	HCT Extension from South Bellevue to Issaquah	HCT Corridor. COST ESTIMATE ASSUMES GRADE-SEPARATED AERIAL ALIGNMENT. PER-MILE AERIAL COST ESTIMATE USED. PROJECT COMPLETION POST- 2027.	S Bellevue	Issaquah	2040	Sound Transit						x		x
5294	HCT Redmond to UW	New HCT alignment (mode and exact alignment TBD) starting from Redmond TC and genarally following the Link LRT Extension from Overlake to Redmond (MTP 2524) but then following SR 520 to vicinity of the UW LRT station.	Redmond	UW	2040	Sound Transit						x		x
5133	Central Streetcar Line	Construct a four-mile line running primarily along First Avenue and S Jackson St, making connections through the center of Seattle to connect major center city destinations, transit services and neighborhoods including the Central District, Chinatown- International District, Piorneer Square, the Waterfront, The Retail Core, Belltown and Uptown/Seatlle Center. The project would also include a connection to the South Lake Union Line.	Republica n St	23rd23rd Ave S	2020	Seattle		X	×	×	×	X	x	
5154	Fremont - Ballard Streetcar Line	Four-mile streetcar network extension, making connections between historic and emerging mixed-use neighborhood district in Ballard, Fremont and South Lake Union, as well as providing connecting service to downtown Seattle	Westlake Hub	Ballard Commons	2040	Seattle						x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5271	UW / Eastlake	Three and one-half mile extension of the South Lake Union line will serve the Eastlake neighborhood, connect the centers of life science research at UW and South Lake Union, and bring streetcar economic benefits to "The Ave"	E Galer St	NE 50th St	2040	Seattle						x		x
5153	First Hill / Capitol Hill Streetcar Line	Provide three miles of streetcar service with connections to First Hill via LINK Light Rail stations at Chinatown / International District and Capitol Hill	IntÆl District Station	Capitol Hill Station (John St)	2016	Seattle	x						x	
	BRT to Ballard (TCI) - U district along 45th to 24th Ave W	Bus Rapid Transit from UW along N. 45th/ Market to Ballard (24th Ave W). This route was identified in the Transit Competitive Index	UW Hub	Ballard (24th Ave W)	2020	TBD						x		x
5317	BRT to Ballard (TCI) - U district to Roosevelt to 80th to 85th at I-5 to NW 24th Ave	Bus Rapid Transit from UW along Roosevelt/ 85th to Ballard (24th Ave W). This route was identified in the Transit Competitive Index	UW Hub	Ballard (24th Ave W)	2020	TBD						x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4025	(K Co Metro) -	Bus Rapid Transit between Federal Way and SeaTac, providing more frequent service, transit signal priorty, enhanced bus zones, queue jumps and rider information kiosks. Rapid Ride - Bus Rapid Transit (A line) along Pacific Highway S. Corridor from existing Link Light Rail station in Tukwila to the Federal Way Transit Center.	Federal Way Transit Center	Tukwila Light Rail Station	2010	King County/Metro	x						x	
	Rapid Ride BRT: Redmond TC to Bellevue TC (B line)	Bus Rapid Transit between Bellevue and Redmond, providing more frequent service, transit signal priority, enhanced bus zones, queue jumps and rider information kiosks. From the Redmond Transit Center (NE 90th to 148th Ave NE) to Overlake Transit Center then (along 156th Ave NE and NE 8th ST) to the Bellevue Transit Center.	Redmond Transit Center	Bellevue Transit Center	2011	King County/Metro	x						x	
4023	Rapid Ride BRT: West Seattle to Downtown (C line)	Bus Rapid Transit between West Seattle and Downtown Seattle. Station, providing more frequent service, transit signal priority, enhanced bus zones, queue jumps and rider information kiosks. Westwood Village in West Seattle to Seattle CBD bia Fauntleroy and Alaska Junction. This is the Route 54 Rapid Ride or Bus Rapid Transit C line.	West Seattle	Downtown Seattle	2011	King County/Metro	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4022	Rapid Ride BRT: Ballard to Downtown (D line)	Bus Rapid Transit between Ballard and Downtown Seattle via lower Queen Anne, providing more frequent service, transit signal priority, enhanced bus zones, queue jumps and rider information kiosks. Routing alternatives on 15th Ave NW or 24th Ave NW and is Route 15 RapidRide or E line).	Ballard	Downtown Seattle	2012	King County/Metro	x						x	
4026	Aurora Village Rapid Ride BRT (E line)	Bus Rapid Transit between Aurora Village and and Downtown Seattle, providing more frequent service, transit signal priority, enhanced bus zones, queue jumps and rider information kiosks (in coodination with SWIFT).	Aurora Village	Downtown Seattle	2013	King County/Metro	x						x	
5526	RapidRide BRT: Burien to Renton (F line)	Provide a direct East/West routing between Burien and Renton via Tukwila International Blvd Link Station, Southcenter Mall, Tukwila Sounder Station and South Renton P&R. 10 minute peak, 15 minute off-peak midday and early evening, 30 minute night. Span 5:30AM- 12:00AM. 1/2 mile stop spacing.	Burien Transit Center	Renton Transit Center	2013			not in E	DEIS	<u>.</u>			x	
5297	BRT - SR 167	Bus Rapid Transit along SR 167 using HOT lanes (see I-405 corridor Master Plan)	15th St. NW (SB) or 15th St. SW (NB)	I-405	2030	King County/Metro					x	x	remove	d
5304	BRT - Federal Way to Tacoma	Bus Rapid Transit from Federal Way Transit Center to Tacoma via Pacific Highway South	Federal Way Transit Center	Tacoma Dome	2020	King County/Metro				x			concept	:

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C PA
5305	BRT - Tukwila to Bellevue	Bus Rapid Transit from Tukwila to Bellevue along I-405 corridor (see I- 405 corridor Master Plan)	Tukwila	Bellevue	2020	King County/Metro			X	X	X	x	removed
5306	BRT- Bellevue to Lynnwood (I- 405)	Bus Rapid Transit Bellevue to Lynnwood via I-405 corridor (see I- 405 corridor Master Plan)	Bellevue	Lynnwood	2020	King County/Metro			X	x	x	X	removed
5307	BRT - Redmond to UW via SR 520	Bus Rapid Transit from Redmond to UW via SR 520 corridor (see I- 405 corridor Master Plan)	Redmond	uw	2020	King County/Metro		x			x	x	removed
5308	BRT - Northgate to Bothell -	Bus Rapid Transit from Northgate to Bothell via Roosevelt, NE 125th St., SR 522	Northgate	Bothell	2020	King County/Metro					x	x	removed
5309	BRT - Bothell to Woodinville	Bus Rapid Transit from Bothell to Woodinville	Bothell	Woodinville	2020	King County/Metro					X	x	removed
5311	BRT - DT Seattle to West Seattle/ Burien via Viaduct/ W Seattle Bridge/Delrid ge/ Ambaum	Bus Rapid Transit from Downtown Seattle to West Seattle / Burien via Viaduct/ W Seattle Bridge/ Delridge/ Ambum	Downtown Seattle	West Seattle/ Burien	2020	Agency not Identified		x			x	x	removed
5322	Extend BRT / Rapid Ride from White Center to LRT Terminus @ 154th/ Tukwila	Bus Rapid Transit from White Center to LRT Terminus at 154th in Tukwila. This route was identified in the Transit Competative Index	White Center	LRT Terminus (154th in Tukwila)	2020	Agency not Identified						x	concept
5394	Delridge to Redmond bus service	Add bus route from Delridge to I-90 to Bellevue/Overlake/Redmond	Delridge	Redmond	2020	Agency not Identified		X		x	X	X	program

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5395		Model supplement bus service from West Seattle to East Link	West Seattle	East Link	2020	Agency not Identified			x			x	progran	١
5396	Additional Bus routes from Crown Hill, Ballard, Wallingford, Ravenna to Bel/Red	Add bus routes from Crown Hill, Ballard, Wallingford, Ravenna to Bel/Red	Crown Hill	Bell/Red	2020	Agency not Identified		x		×	x	x	program	1
3649	SR 99 Bus Rapid Transit (SWIFT)	Create a bus rapid transit system operating along SR-99 from Everett Station to the Aurora Village Transit Center. This will include new bus fleet investments, design/construction of upgraded bus passenger stations with amenities and technology to suppor		Aurora Village	2008	Community Transit	x						complet	ed
5312	BRT - SR 526	Service hours and buses. Core service or Swift Bus Rapid Transit on SR 526 from SR 525 to I-5. Requires speed & reliability improvements and accessible transit stops.	SR 525	I-5	2040	Community Transit					x	x		x
5331	Core or Swift BRT - SR 524 (196th)	Service hours and buses. Core service or Swift Bus Rapid Transit on SR 524 (196th, Filbert) from ferry to SR 527. Requires speed & reliability improvements and accessible transit stops.	Edmonds Ferry	SR 527	2030	Community Transit						x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5332	Core or Swift BRT - Smokey Point Corridor	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on N broadway (Smokey Point corridor) from Everett Station up N broadway, SR 529, State Ave, Smokey Pt to Arlington (SR 531). Requires speed & reliability improvements and accessible transit stops.	Everett Station	SR 531	2030	Community Transit/ Everett Transit						x	x	
5333	Core or Swift BRT - Mukilteo Speeday	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on Mukilteo Speedway (SR 525) fro	Mukilteo Ferry	I-405	2040	Community Transit						x		x
5334	BRT - Airport Rd to	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on Airport Rd, 128th, 132nd, Cathcart Way from SR 526 to SR 9. Requires speed & reliability improvements and accessible transit stops.	SR 526	SR 9	2030	Agency not Identified						x	x	
5335	Core or Swift BRT - 164th St	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on 164th from SR 99 to SR 527. Requires speed & reliability improvements and accessible transit stops.	SR 99	SR 527	2030	Agency not Identified						x	x	
5466	Core or Swift BRT - SR 527 Downtown Bothell to SR 526/I-5	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on SR 527 from downtown Bothell to SR 526/I-5. Requires speed & reliability improvements and accessible transit stops.	Downtown Bothell	SR 526/I-5	2030	Community Transit		not in E	DEIS				x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5468	Core or Swift BRT - SR 531 I-5 to downtown Arlington	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on SR 531 from I-5 to downtown Arlington. Requires speed & reliability improvements and accessible transit stops.	I-5	Downtown Arlington	2040	Community Transit		not in D	EIS					x
5470	Core or Swift BRT - SR 528 I-5 to SR-9	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on SR 528 from I-5 to SR 9. Requires speed & reliability improvements and accessible transit stops.	I-5	SR 9	2040	Community Transit		not in D	EIS					x
5472	BRT - US 2 Everett to	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on US 2 from Everett to Monroe (via Ave D and 2nd St in Snohomish). Requires speed & reliability improvements and accessible transit stops.	Everett	Monroe	2040	Community Transit		not in D	EIS					x
5474	Core or Swift BRT - SR 9 Bothell to Arlington	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on SR 9 from Bothell to Arlington. Requires speed & reliability improvements and accessible transit stops.	Downtown Bothell	Arlington	2040	Community Transit		not in D	EIS					x
5476	Core or Swift BRT - 228th St Edmonds Ferry, SR 104, 228th, 236th, 228th to SR 9	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on 228th St from Edmonds Ferry to SR 9. Requires speed & reliability improvements and accessible transit stops.	Edmonds Ferry	SR 9	2040	Community Transit		not in D	EIS					x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5478	Core or Swift BRT - 20th St US 2 to SR 9	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on 20th St from US 2 to SR 9. Requires speed & reliability improvements and accessible transit stops.	US 2	SR 9	2040	Community Transit		not in E	DEIS					x
5480	BRT - 35th Ave SE	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on 35th Ave SE from downtown Bothell to Everett. Requires speed & reliability improvements and accessible transit stops.	Downtown Bothell	Everett	2040	Community Transit		not in E	DEIS					x
5482	Core or Swift BRT - I-5 Smokey Point to King County	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on I-5 from Smokey Point to King County. Requires speed & reliability improvements and accessible transit stops.	Smokey Point	King County	2040	Community Transit		not in E	DEIS					x
5484	BRT - SR 522 Monroe to Bothell	Service hours and buses. Core Service or Swift Bus Rapid Transit (BRT) on SR 522 Monroe to Bothell. Requires speed & reliability improvements and accessible transit stops.	Monroe	Bothell	2040	Community Transit		not in E	DEIS					x
5320	BRT (Route 1) on SR 7 from Roy Y to Downtown Tacoma(PC Congested Corridor)	Bus Rapid Transit from on SR 7 from Roy Y to downtown Tacoma. This route was identified in the Transit Competitive Index	Roy Y	Downtown Tacoma	2020	Pierce Transit						x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5487	6th Avenue (Tacoma) Transit Corridor Transit Service	Additional core service			2020	Pierce Transit		not in E	DEIS				x	
5489	BRT - Meridian / SR 161	Bus Rapid Transit on SR 161 from 176th Street to Downtown Puyallup	176th St.	Downtown Puyallup	2030	Candidate		not in E	DEIS				x	
5491	112th Avenue (Puyallup/Lak ewood) Transit Corridor Transit Service	Additional core service			2030	Pierce Transit		not in [	DEIS				x	
5318		Bus Rapid Transit on SR 303 from Bremerton to SR 305. This route was identified in the Transit Competitive Index	SR 160 (Sedwick)	Silverdale	2020	Kitsap Transit						x	x	
5319	BRT on SR 305 (matching congested corridor) to Bainbridge Ferry Dock	Bus Rapid Transit on SR 305 from SR 3 to Bainbridge Ferry Dock. This route was identified in the Transit Competitive Index	SR 3 (Poulsbo)	Bainbridge Ferry Dock	2020	Kitsap Transit						X	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
	Ballard Transit Center	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	NW Market		2020	Seattle						X	x	
	North Rainier Transit Center	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	McClellan	Yesler	2020	Seattle		X					x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5277	West Seattle Junction Transit Center	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	Alaska	SW Alaska St	2020	Seattle		x					x	
5212	Northgate Hub	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	NE 103rd	Pinehurst	2030	Seattle						X	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5266	University District Hub/ Husky Stadium	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	University Way	17th	2030	Seattle		X					x	
5279	Westlake Multimodal Transportatio n Hub	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	Pine St		2020	Seattle		X					x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4404	I-405 Corridor: SR 522 to I-5 (UW Bothell Transit Station)	(k) UW Bothell Transit Station,	UW Bothell Transit Station		2030	WSDOT			x	x	X	X		x
4405	I-405 Corridor: SR 522 to I-5 (DT Woodinville Transit Center)	(I) Downtown Woodinville Transit Center,	Downtown Woodinvill e Transit Center		2030	WSDOT			x	x	x	x		x
4393	I-405 Corridor: SR 520 to SR 522 (Central Kirkland Transit Station)	(h) Transit/HOV: Central Kirkland Transit Station.	Central Kirkland Transit Station		2030	WSDOT			x	x	x	x		x
1303	Tukwila CBD Bus Transit Center	Construct Transit Center in the CBD	CBD		2017	Tukwila						X		x
4403	I-405 Corridor: SR 522 to I-5 (Canyon Park Transit Station)	(j) Canyon Park Transit Station,	Canyon Park Transit Station		2030	WSDOT			x	×	x	x		x
3310	East Bremerton Bus Transit Center	Relocated and improved intermodal transit center	[Not submitted]		2010	Kitsap Transit						x	x	
610	King St Multimodal Terminal	Intermodal; MIS Redevelop as inter/multimodal terminal	[Not submitted]		2010	Seattle	X						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
3418	Atlantic / Central Base Expansion	Pre-design and property acquisition toward expanding the Phase One bus base capacity in the North Duwamish area of Seattle to cost effectively repair, service and dispatch buses for transit service planned by both King County METRO and Sound Transit for King County. This three phase will increase area capacity by approximately 385 buses. Phase One is estimated at approximately \$58 million and will add capacity for approximately 100 buses to the existing bases.	1270 Sivth		2011	King County/Metro	X						x	
4160		Provide a new transit center on 3rd Street between Central Way and Kirkland Avenue. The project will transform the existing bus facility into a regional transit hub with expanded bus capacity and routing options, improved waiting areas and passenger shelters, and enhanced pedestrian crossings. Signal, intersection, and traffic circulation improvements will increase bus speed and schedule reliability. Bicycle amenities, landscaping and public art are also elements of the project.	3rd Street between Central Way and Kirkland Avenue		2010	Sound Transit	X						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4128	Highline Community College Intermodal Transit Facility and Parking Garage	Construct a Transit Center with bus layover to facilitate a potential Bus Rapid Transit route on SR 99 in south King County. In addition, the project will construct a parking garage with up to 500 stalls that will provide commuter parking, vanpool and carpool stalls as well as joint use parking for Highline Community College students and staff.	240th Street@S		2012	King County/Metro	X						x	
1003	On-Board Systems Integration (OBSI) Program	Replace and upgrade on-board infrastructure components for voice and data communications, automatic vehicle location, automatic passenger counting and signal priority. (Note: this does not include the radio itself but the management of it.) Add automated stop announcements, external route and destination announcements, interior next stop signs and automatic vehicle monitoring. Integrate destination signs so that they automatically change to the correct display at the correct place along the route.	[Not submitted]		2009	King County/Metro	X						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
N/A	Ponlocomont	With 2010 FTA 5307 funds and local matching funds, ET will acquire approximately six replacement paratransit vehicles for use within the Everett Transit service area. ET also used previously approved FTA grants WA-03-0156-00 (approved March 2002) and gra	NULL	NULL	2010	Everett Transit	x	added as roadway component to existing BRT service projects to acount for additional cost					program	
298	Renton Urban Shuttle Local Cir	Transit shuttle service trips within the City of Renton. Interconnects activity centers, major employers, regional transit routes and park and ride facilities. Cost represents 20 years total costs of operations.	[Not submitted]		2020	Renton	X						exempt	
1894		Provide space for approx. 6 buses and customer amenities in North Everett, in close proximity to Everett Community College. Project is in partnership with Sound Transit. Current FTA grant WA-90- X196 funds \$320,000 federal/\$80,000 local for construction. \$	NULL	NULL	2004	Everett Transit	X						complete	;d
3304	Totem Lake Transit Center/Evergr een Medical Center	Transit Center Totem Lake @ Evergreen Health Care	NE 128th St@Evergr een Health Care		2007	Sound Transit	X						complete	эd

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
3434	Bremerton Transportatio n Center	Bremerton Transportation Center is a multimodal transfer center located at the current Bremerton Ferry Terminal. Phase A/B/C/D will include such elements as expanded car holding, elevated transit deck, expanded waiting terminal, WSF tollbooths, terminal	Bremerton Ferry Terminal		2007	Kitsap Transit	x						completed	
N/A	Pierce Transit Base Expansion	Expand the existing Pierce Transit base facility at South 96th Street and South Tacoma Way. This project will add additional vehicle storage, operational facilities and equipment.	So. 96th St @ South Tacoma Way	NULL		Pierce Transit	x						progran	ı
5365	Passenger Only Ferry: Bremerton- Downtown Seattle	Passenger Only Ferry - new route: Bremerton-Downtown Seattle	Bremerton	Downtown Seattle	2020	Agency not Identified		x	x	x	x	x	x	
5366	Passenger Only Ferry: Kingston- Downtown Seattle	Passenger Only Ferry - new route: Kingston-Downtown Seattle	Kingston	Downtown Seattle	2020	Agency not Identified		x	x	x	x	x	x	
	Passenger Only Ferry: Southworth- Downtown Seattle	Passenger Only Ferry - new route: Southworth-Downtown Seattle	Southwort h	Downtown Seattle	2020	Agency not Identified		x			X	X	x	
	Passenger Only Ferry: Kirkland-UW	Passenger Only Ferry - new route: Kirkland-UW	Kirkland	UW	2020	Agency not Identified		X			X	X		x

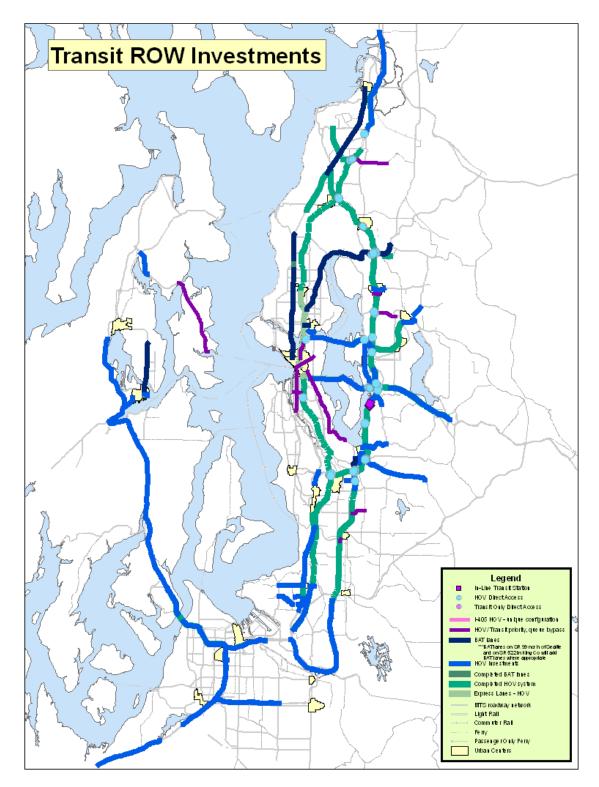
ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
5369	Passenger Only Ferry: Bainbridge- Des Moines	Passenger Only Ferry - new route: Bainbridge-Des Moines	Bainbridge	Des Moines	2020	Agency not Identified		X			X	x		x
5370	Passenger Only Ferry: Port Orchard- Downtown Seattle	Passenger Only Ferry - new route: Port Orchard-Downtown Seattle	Port Orchard	Downtown Seattle	2020	Agency not Identified				x				x
5372	Passenger Only Ferry: Des Moines- Downtown Seattle	Passenger Only Ferry - new route: Des Moines-Downtown Seattle	Des Moines	Downtown Seattle	2020	Agency not Identified		x		x	x	x		x
5373	Passenger Only Ferry: Shilshole- Downtown Seattle	Passenger Only Ferry - new route: Shilshole-Downtown Seattle	Shilshole	Downtown Seattle	2020	Agency not Identified						x		x
5374	Passenger Only Ferry: Renton- Leschi	Passenger Only Ferry - new route: Renton-Leschi	Renton	Leschi	2040	Agency not Identified		X				x		x
5375	Passenger Only Ferry: Kenmore-UW	Passenger Only Ferry - new route: Kenmore-UW	Kenmore	UW	2020	Agency not Identified		x				x		x
5376	Passenger Only Ferry: Port Townsend- Downtown Seattle	Passenger Only Ferry - new route: Port Townsend-Downtown Seattle	Port Townsend	Downtown Seattle	2020	Agency not Identified		x	x	x	x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5377	Passenger Only Ferry: Vancouver B.C Downtown Seattle	Passenger Only Ferry - new route: Vancouver B.CDowntown Seattle	Vancouver B.C.	Downtown Seattle	2020	Agency not Identified		x	x	x	x	X		x
2478	Southworth POFF Terminal Expansion	Terminal expansion	[Not submitted]		2015	Kitsap Transit		X	X	X	X	X	x	
2480	Bremerton POFF Terminal Expansion	Terminal expansion	[Not submitted]		2010	Kitsap Transit		X	X	x	X	X	x	
3436	Annapolis Ferry Terminal	Purchase and improve existing passenger-only dock. Extend the dock 50 feet, provide ADA accessibility and build a larger float to accommodate both Bremerton ferries and smaller, fast POFs to Seattle.	Marine Drive and Olney Rd		2015	Kitsap Transit		X	X	x	X	X	x	
2485	Kingston POFF Terminal Construction	Terminal construction	[Not submitted]		2015	Kitsap Transit		x	x	x	x	x	x	
3308	Bainbridge Island Multimodal Center	Replace old ferry terminal to new multimodal terminal at Winslow.	Olympic Dr		2015	Kitsap Transit						x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
5135	Colman Dock Hub	Make improvements to improve transfer opportunities between transit services, create clear routes and improved wayfinding, provide real-time transit rider information, and maximize fare integration. Transportation hubs and transit centers bring together regional and local transit service, as well as other transportation services. They are important points of transfer for passengers traveling from Seattle neighborhoods to regional destinations and for many neighborhood-to-neighborhood trips.	Marion St		2020	Seattle						x	x	
3415	Edmonds Terminal Relocation/Ex pansion Phase II	Phase II or relocation; people mover. See 4072 for the parking structure and Sounder Station.	[Not submitted]		2020	Edmonds			x	x				x
2483	Edmonds Terminal Relocation/Ex pansion Phase I	Bus/Rail connection, vehicle holding lanes, toll-booth, parking, ferry pier, slip and terminal relocation	[Not submitted]		2005	Edmonds			x	x				x
	Mukilteo Multimodal Terminal	Develop new multimodal terminal at current location for rail, bus, ferry, pedestrian, bicycle; initial work on access from terminal to Paine Field Blvd Extension. See 4071 for Park and Ride portion.	Loveland Street	Cornelia Street	2015	WSDOT			x	x			x	
2486	Mukilteo Terminal Relocation/Ex pansion	Terminal relocation/expansion	Loveland	Cornelia St.	2015	WSDOT			x	x			x	

## Ad. C Part 8: Transit-Supportive Shared Right-of-Way Investments

This map shows all capital investments in various rights of way that would improve transit speed and reliability. Part 4 of this Addendum tabulates these investments into each alternative.



## App. C Part 9: Transit-Supportive Right of Way Investments Cross-Tabulation

Sorted by Sponsor.

Note that the Preferred Alternative was analyzed with a range of possible outcomes starting from a "Constrained" configuration (column "PA-C") extending to the full Preferred Alternative (column "PA").

This list was revised in response to comments and additional information received during the DEIS comment period. Comments in the "PA-C" and "PA" columns reflect the additional information. In some cases staff discovered that the project had entered construction or been recently completed (labeled "under construction" or "completed"). Certain investment outcomes were found to have been included in other projects (labeled "in XXXX" where XXXX denotes the other project) or duplicates (labeled "duplicate"). Finally, in the process of reaching a decision on the final plan, some investments included in the original five alternatives were excluded from the Preferred Alternative. Some of these projects were retained in a "concepts" list outside of the final plan (these are labeled "concepts" below). In some cases new investments were analyzed for the first time in the Preferred Alternative, making it possible that an investment will only have X's in the PA-C and PA columns.

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4331	I-405 Corridor: SR 169 to I-90 (112th I/C P&R Exp, In-Line Station)	(c) Construct 112th I/C Park & Ride expansion and In-Line Station.	I-405 @ 112th I/C		2030	Agency not Identified			X		X	X	x	
4025a		Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	Federal Way Transit Center	Tukwila Light Rail Station	2010	Federal Way/ Tukwila		existing	as roadv J BRT se for addii	ervice pr	ojects to		x	
4024a	Transit priority infrastructure for RapidRide BRT: B line	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	Redmond Transit Center	Bellevue Transit Center	2011	Redmond/ Bellevue		existing	as roadv J BRT se for addit	ervice pr	ojects to		x	
5073	14th / 15th Ave UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Campus Parkway	2040	Seattle		x			x	x	x	
5075	15th AV NE UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Campus Parkway	65th Ave NE	2040	Seattle		x			x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5079	15th Ave NE / Pinehurst UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Way	145th St	2020	Seattle		x			x	x		x
5082	15th Ave S UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		S Roxbury St	2040	Seattle		x			x	x		x
5084	1st Ave N / Cedar UVTN	Make capital improvements to support 15 minute or better service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Denny and Queen Anne Ave	3rd and Cedar	2040	Seattle	x						x	
5087	1st Ave S UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Yesler St	S Spokane St	2020	Seattle		x			x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5088	23rd / 24th Ave UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Pacific Ave	Ranier Ave S	2020	Seattle	x						x	
5091	24th Av NW UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	NW 65th St	NW 85th St	2040	Seattle		x			x	x	x	
5094	25th Ave NE UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Campus Parkway	NE 65th St	2040	Seattle		x			x	x		x
5095	3rd Avenue UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Jackson St	2020	Seattle	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5097		Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	St	South Park	2040	Seattle		x			x	x		x
5100	5th Ave N / Taylor / Ave N / Boston UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Denny and 5th Ave N	3rd Ave W and McGraw	2020	Seattle		x			x	x		x
5103	5th Ave NE UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	65th St NE	103rd St NE	2020	Seattle		x			x	x		x
5108	92nd St / 1st Ave NE UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	92nd and Meridian	Northgat e LRT	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5115	Beacon / Myrtle / Othello UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	12th and Jackson	East end of Othello	2020	Seattle		x			x	x		x
5126	Broadway UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Jackson St	Campus Parkway	2040	Seattle		x			x	x		x
	BRT to Ballard Supporting Investments - U district along 45th to 24th Ave W	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	UW Hub	Ballard (24th Ave W)	2020	Seattle				vay com s to acou				x
5317a	BRT to Ballard Supporting Investments - U district to Roosevelt to 80th to 85th at I-5 to NW 24th Ave	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	UW Hub	Ballard (24th Ave W)	2020	Seattle				vay com s to acou				x
5131	California UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Admiral St	Fauntlero y	2040	Seattle		x			x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5137	Delridge UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	St	S Roxbury St	2020	Seattle		x			x	x	x	
5141	Dexter / Nickerson UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Denny and Dexter	Fremont Bridge and Nickerso n	2020	Seattle	x						x	
5146	E3 Transit Way Limited Stop UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		S Spokane St	2020	Seattle		x			x	x	x	
5152	Fairview UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		U District	2020	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5155	Green Lake / 65th UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	85th and Aurora	Roosevel t LRT	2040	Seattle		x			x	x		x
5156	Greenwood Ave N UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		NW 145th St (City Limits)	0	Seattle	x						x	
5160	Holman / NE 105th St / Northgate Way UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Northgat e LRT	2040	Seattle		x			x	x		x
5164	James or Yesler / 9th UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		9th Ave	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5165	Jefferson / Cherry UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	9th Ave	MLK Jr E	2020	Seattle		x			x	x		x
5166	Lake City Way UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Roosevelt LRT	145th St	2020	Seattle		x			x	x	x	
5171	Leary, 20th Ave NW UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	20th Ave and Market	14th Ave NW and Leary	2040	Seattle		x			x	x		x
5172	Leary, NW 39th St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Stone Way	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5173	Madison / Marion UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Western Ave	6th Ave	2040	Seattle		x			x	x		x
5177	Market / N 46th St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	32nd Ave NW	Stone Way	2020	Seattle	x						x	
5185	Montlake Ave UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Montlake Station	NE 45th St	2020	Seattle		x			x	x		x
5190	Morgan, 35th Ave SW, Roxbury UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		S Roxbury St	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5192	N 115 th St, Meridian Av UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Aurora	105th and Meridian	2040	Seattle		x			x	x		x
5194	N 45th or N 50 St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Universit y Ave	2020	Seattle	x						x	
5198	N/NE 40th or N/NE Pacific St. UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Stone Way	Universit y Ave	2020	Seattle		x			x	x		x
5203	NE 45th St / Sand Point UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Ave	Princeton / Sand Point (NE 50th St)	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5206	NE 65 St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	LRT	25th Ave NE	2040	Seattle		x			x	x		x
5210	Nickerson / 15 Ave W UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	15th Ave NW	Fremont Bridge	2040	Seattle		x			x	x		x
5216	NW 85th St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	NW	Aurora	2020	Seattle		x			x	x		x
5218	Olive / John / Thomas UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		23rd	2040	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5219	Olive or Stewart or Virginia UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		I-5	2020	Seattle		x			x	x		x
5220	Olympic / 10th Ave W / Gilman Dr W UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		15th Ave NW	2040	Seattle		x			x	x		x
5222	Pacific St UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Montlake Station	U District	2020	Seattle	x						x	
5223	Pike / Pine UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Summit	2020	Seattle		x			x	x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5224	Pine / Union UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	Summit	MLK	2020	Seattle		x			x	x		x
5226	Queen Anne Ave / McGraw / 3rd Ave W UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Nickerso n	2040	Seattle		x			x	x		x
5227	Rainier / Rainier Beach UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.		Henders on St	2020	Seattle	x						x	
4023a	Transit priority infrastructure for RapidRide BRT: C line	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	West Seattle	Downtow n Seattle	2011	Seattle		existing	as roadv   BRT se for addil	ervice pr	ojects to		x	
4022a	Transit priority infrastructure for RapidRide BRT: D line	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	Ballard	Downtow n Seattle	2012	Seattle		existing	as roadv J BRT se for addif	ervice pr	ojects to		x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5272	Wallingford / Meridian (NSCC) UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	85th and Aurora	Northgat e LRT	2040	Seattle		x			x	x		x
5282	Yesler or Jackson UVTN	Make capital improvements to support service frequency, 18 hours a day, 7 days a week, in both directions. Make speed & reliability improvements. Improve accessibility of transit stops.	1st	MLK	2040	Seattle		x			x	x		x
4026a	Transit priority infrastructure for RapidRide BRT: E line	Improve RapidRide corridor - stations, real-time info sighs, transit signal priority and fiber communications	Aurora Village	Downtow n Seattle	2013	Seattle/ Shoreline		existing	as roadv I BRT se for addit	ervice pr	ojects to		x	
5526a	Transit priority infrastructure for RapidRide BRT: Burien to Renton(F line)	Improve RapidRide corridor - 10 stations, real-time info sighs, transit signal priority and fiber communications - realize approx 10-15% running time improvement	Burien Transit Center	Renton Transit Center	2013			existing	as roadv   BRT se for addil	ervice pr	ojects to		x	
5494	SR 305 Transit Corridor Supporting Investments	Transit priority treatments on SR 305	Poulsbo	Bainbridg e Ferry	2020	Poulsbo, Bainbridge Island, Kitsap County, Kitsap Transit		existing	as roadv   BRT se for addit	ervice pr	ojects to		x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5493	SR 303 Transit Corridor Supporting Investments	Transit priority treatments on SR 303	Silverdale	Bremerto n	2020	Silverdale, Bremerton, Kitsap County, Kitsap Transit		existing		ervice pr	ponent t ojects to ost		x	
5451	Ambaum Boulevard SW Corridor Study (SW 116th Street to SW 153rd Street)	Conduct study to determine current and projected requirements for Transit HOV/BAT capabilities, non- motorized upgrades for bicycle and pedestrian uses, center turn lane/left turn pocket additions and coordinated signalization enhancement for safety and volume improvement requirements. The study will identify locations of anticipated significant purchases of ROW and easements.	SW 116th Street	SW 153rd Street	2020	Burien		not part	t of DEIS	3				x
5517	Broadway Corridor Improvements	Widen to 5 lanes with bike lanes, sidewalks, new bridge. Transit signal priority.	SR 526	37th St.	2013	Everett		not part	t of DEIS	3				x
5516	148th Ave NE	Create third northbound through lane on 148th Ave NE from NE 22nd St to SR 520 eastbound on-ramp using primarily existing right turn lanes and modify SR 520 westbound on-ramp to allow HOV access. At NE 24th St and 148th Ave NE intersection add second left	NE 22nd St	SR 520 eastboun d on- ramp	2020	Redmond		not part	t of DEIS	3			x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5492	112th Avenue (Puyallup/Lakewood) Transit Corridor Supporting Investments	Transit priority treatments on 112th Avenue			2030	Puyallup, Lakewood, Pierce County		not in E	DEIS				x	
5490	Meridian Avenue (Puyallup) Transit Corridor Supporting Investments	Transit priority treatments on 6th Avenue	176th St.	Downtow n Puyallup	2030	Puyallup, Pierce County		not in E	DEIS				x	
5488	6th Avenue (Tacoma) Transit Corridor Supporting Investments	Transit priority treatments on 6th Avenue			2020	Tacoma		not in E	DEIS				x	
5486	Pacific Avenue (SR 7) Transit Corridor Supporting Investments	Transit priority treatments on Pacific Avenue	Ft Lewis	Universit y Place	2020	Tacoma, Spanaway, Pierce County		not in E	DEIS				x	
5465	Transit priority infrastructure for Core or Swift BRT - 164th St	Transit priority infrastructure for Core or Swift BRT - 164th St. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	SR 99	SR 527	2030	Agency not Identified		existing	as roadv g BRT se for addit	ervice pr	ojects to		x	
5479	Transit priority infrastructure for Core or Swift BRT - 20th St US 2 to SR 9	Transit priority infrastructure for Core or Swift BRT - 20th St US 2 to SR 9. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	US 2	SR 9	2040	Agency not Identified		not in E	DEIS					x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5477	Transit priority infrastructure for Core or Swift BRT - 228th St Edmonds Ferry, SR 104, 228th, 236th, 228th to SR 9	Transit priority infrastructure for Core or Swift BRT - 228th St Edmonds Ferry, SR 104, 228th, 236th, 228th to SR 9. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	Edmonds Ferry	SR 9	2040	Agency not Identified		not in E	DEIS					x
5481	Transit priority infrastructure for Core or Swift BRT - 35th Ave SE Bothell to Everett	Transit priority infrastructure for Core or Swift BRT - 35th Ave SE Bothell to Everett. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Downtown Bothell	Everett	2040	Agency not Identified		not in E	DEIS					x
5464	Transit priority infrastructure for Core or Swift BRT - Airport Rd to Cathcart Way (Everett, Sno Co, Mill Creek)	Transit priority infrastructure for Core or Swift BRT - Airport Rd to Cathcart Way. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	SR 526	SR 9	2030	Agency not Identified		existing	as roadv g BRT se for addil	ervice pr	ojects to		x	
5483	Transit priority infrastructure for Core or Swift BRT - I- 5 Smokey Point to King County	Transit priority infrastructure for Core or Swift BRT - I-5 Smokey Point to King County. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	Smokey Point	King County	2040	Agency not Identified		not in E	DEIS					x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5463	Transit priority infrastructure for Core or Swift BRT - Mukilteo Speedway	Transit priority infrastructure for Core or Swift BRT - Mukilteo Speedway. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Mukilteo Ferry	I-405	2040	Agency not Identified		existing		ervice pr	iponent t ojects to ist			x
5462	Transit priority infrastructure for Core or Swift BRT - Smokey Point Corridor	Transit priority infrastructure for Core or Swift BRT - Smokey Point Corridor. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Everett Station	SR 531	2030	Agency not Identified		existing		ervice pr	iponent t ojects to ist		x	
5485	Transit priority infrastructure for Core or Swift BRT - SR 522 Monroe to Bothell	Transit priority infrastructure for Core or Swift BRT - SR 522 Monroe to Bothell. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Monroe	Bothell	2040	Agency not Identified		not in E	DEIS					x
5461	Transit priority infrastructure for Core or Swift BRT - SR 524 (196th, Filbert) from ferry to SR 527	Transit priority infrastructure for Core or Swift BRT - SR 524 (196th, Filbert) from ferry to SR 527. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	Edmonds Ferry	SR 527	2030	Agency not Identified		existing		ervice pr	iponent t ojects to ist		x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5460	SR 526 from SR 525 to I-5	Transit priority infrastructure for Core or Swift BRT - SR 526 from SR 525 to I-5. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	SR 525	I-5	2040	Agency not Identified			BRT se	ervice pr	iponent t ojects to ist			x
5467	Bothell to SR 526/I-5	Transit priority infrastructure for Core or Swift BRT - SR 527 Downtown Bothell to SR 526/I-5. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	Downtown Bothell	SR 526/I- 5	2030	Agency not Identified		not in D	EIS				x	
5471	Transit priority infrastructure for Core or Swift BRT - SR 528 I-5 to SR-9	Transit priority infrastructure for Core or Swift BRT - SR 528 I-5 to SR-9. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	I-5	SR 9	2040	Agency not Identified		not in D	EIS					x
5469	Transit priority infrastructure for Core or Swift BRT - SR 531 I-5 to downtown Arlington	Transit priority infrastructure for Core or Swift BRT - SR 531 I-5 to downtown Arlington. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue- jumps, etc.	I-5	Downtow n Arlington	2040	Agency not Identified		not in D	EIS					x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5475	Transit priority infrastructure for Core or Swift BRT - SR 9 Bothell to Arlington	Transit priority infrastructure for Core or Swift BRT - SR 9 Bothell to Arlington. To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Downtown Bothell	Arlington	2040	Agency not Identified		not in E	DEIS					x
5473	Transit priority infrastructure for Core or Swift BRT - US 2 Everett to Monroe (via Ave D and 2nd St in Snohomish)	Transit priority infrastructure for Core or Swift BRT - US 2 Everett to Monroe (via Ave D and 2nd St in Snohomish). To provide speed and reliability for transit. May include BAT lanes, signal priority, stations, queue-jumps, etc.	Everett	Monroe	2040	Agency not Identified		not in D	DEIS					x
3477	Bellevue Way HOV Lanes and Transit Priority	HOV lanes addition and transit priority	South Bellevue P&R	I-90	2020	Bellevue		x	x	x	x	x	x	
2399	Woodinville Dr	This project includes adding a Business Access Transit (BAT) lane on both direction and sidewalk	SR 522	Kaysner Way	2010	Bothell		x	x	x	x	x	concept	:
621	Evergreen Way Transit HOV Treatments	Design, construct transit priority HOV enhancements. See also ST (Potential ST2 N11) and WSDOT (#1710) projects which overlap this; PSRC assumption is that the BAT lanes will go the entire extent of this ST project but there may be multiple sponsors on different segments for implementation.	Madison Street	Airport Road	2010	Everett		x	x	x	x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2100	16th Ave S	нол	SR 99	SR 18	2030	Federal Way		X	X	X	X	X	remove	d
3660	City Center AccessPhase 4A: S 320th St @ I-5 I/C HOV lanes	Add two HOV lanes and widen existing bridge structure to the south with HOV lanes on S 320th St from 25th Ave S to 32nd Ave S, retrofit to current standards existing HAL loop ramp, modify existing ramps, add CD lane.			2015	Federal Way		x	x	x	x	x	x	
2008	S 320th St	HOV	8th Ave S	SR 99	2011	Federal Way		x	x	x	x	x	x	
2012	S 320th St	ноу	1st Ave S	8th Ave S	2012	Federal Way		X	X	X	X	X	x	
1905	S 348th St	Add HOV lanes, raised median, underground utilities	9th Ave S	SR 99	2008	Federal Way		X	x	x	x	x	comple	ted
2019	S 348th St	HOV	1st Ave S	9th Ave S	2030	Federal Way		X	X	X	X	X	x	
2013	SW 320th St	ноу	1st Ave S	21st Ave SW	2030	Federal Way		X	X	X	X	X	remove	d
2022	SW Campus Dr (SW336th/S 348th St)	HOV, major widening (6 lanes)	1st Ave S	21st Ave SW	2030	Federal Way		x	x	x	x	x	remove	d

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2027	W Valley Hwy	Widen Washington Ave (SR- 181) to seven lanes (two general purpose lanes in each direction, one HOV lane in each direction, plus turn lanes), from Harrison St to SR- 516 (Kent-Des Moines Rd), and four lanes S to the Green River Bridge, and modify the existing traffic signal systems at the intersections of Wa Ave at W Meeker St and Kent-Des Moines Rd. Project will include the construction of full- width paving, concrete curbs, gutters and 10-foot wide sidewalks/bicycle-ways, street lighting, storm drainage, bike paths, landscaping, utilities and appurtenances. Improvements from Harrison St to James are limited to curbs, gutters, sidewalks and drainage.		Green River Bridge	2006	Kent		x	X	X	X	X	remove	d
2282	SE 212th Wy/SE 208th St	Widen to Six LanesTurn ChannelsProvide Transit/HOV Preferential Treatment/Operating ImprovementsConstruct Bike Lane	SR 167	Benson Rd/SR 515	2022	King County/Metro		x	X	x	x	x	duplicat	te
443	NE 124th St	New HOV lanes	116th Ave NE	132nd PL NE	2020	Kirkland		X	X	X	X	X	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2415	NE 124th St		@I-405 WB		2010	Kirkland		x	x	x	x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
1308	Central Renton Transit Corridor - Rainier Ave S (SR 167): S Grady Way to S 2nd St	This project consists of reconfiguration of Rainier Ave S to accommodate Business Access and Transit (BAT) lanes specifically for use by transit, vehicles entering and exiting businesses and for right turn use at intersections. The BAT lanes will extend from S Grady Way to S 3rd St in the northbound direction and S 2nd St to Grady Way S in the southbound direction. The project will also install traffic signalization (including signal preemption), landscaped medians, rebuild curb/gutter, install a stormwater bypass system along Shattuck Ave S, widen sidewalks, add planted pedestrian buffer between traffic lanes and the sidewalks, add pedestrian scale lighting, install textured and colored pavement at intersections. This project will complete the 0.85 miles corridor between SR-167 and SR-900.	Grady Way	S 3rd St.	2012	Renton		×	X	X	X	X	x	
2347	Logan Ave N / N 6th St	HOV improvements, sidewalks	S 3rd St	Park Dr	2020	Renton		X	X	X	X	X	x	
2341	Park Dr-Sunset Blvd	HOV lane (Garden Ave to I- 405). Construct HOV operational improvements.	Garden Ave	Duvall Ave NE	2020	Renton		X	X	X	X	X	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4165	SW 27th St/Strander Blvd Ph 2	Extend SW 27th St as a five lane arterial between East Valley Hwy and Oaksdale Ave SW, including transit queue jumps at Lind. Construct HOV lanes on SW 27 S. ST FINANCIAL PARTNER CAPPED AT \$4M.	Oaksdale Ave SW	East Valley Rd	2011	Renton		x	x	x	x	x	x	
5187	Montlake Blvd NE HOV Lane	Extend HOV lane on s/b Montlake Blvd to increase speed of HOV vehicles and encourage new transit service	NE Pacific Place	25th Ave NE	2020	Seattle		x	x	x	x	x	x	
5205	NE 45th St Corridor BAT Lanes	Add westbound BAT Lane	7th Ave NE	Univ. Way NE	2020	Seattle		x	x	x	x	x	x	
5209	NE Pacific St Corridor Improvements	Extend existing e/b HOV lane to 15th Ave NE and widen Burke Gilman Trail	Burke Gilman Trail	Montlake Blvd	2030	Seattle		x	x	x	x	x	x	
1031	15th Ave NE (Fircrest Vicinity)	Roadway safety and operations, new signal at NE 150th St, Transit transfer upgrade (bus stop improvements such as nice shelter) at SR-523, new x- walk at NE 152nd St.	NE 147th Street	NE 152ND ST	2007	Shoreline		x	x	x	x	x	exempt	
1028	N 175th St	Roadway and pedestrian improvements (additional center left turn lane), sidewalks, signal improvement at Meridian Ave N, transit transfer upgrade at Meridian	MERIDIAN AVE N	SR 99	2017	Shoreline		x	x	x	x	X	x	
1298	Tukwila International Blvd / S 116th St	Design and construct widening on SR-99 and SR- 599 for HOV and queue jump	Duwamish Bridge	SR 599	2010	Tukwila		x	x	x	x	x	remove	d

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
3476	Avondale Rd SB HOV Lane and Transit Priority	SB HOV lane addition and transit priority	Novelty Hill Rd	Avondale Way	2020	WSDOT		x	X	x	X	x	x	
3472	Coal Creek Parkway	HOV lane addition and transit priority	Forest Drive	I-405	2020	WSDOT		X	X	X	X	X	x	
4508	Lea Hill Capacity	New roadway capacity and transit services from Lea Hill to other areas of Auburn.	-		2030	Auburn			x					x
3619	Downtown Bremerton Pedestrian/Bremerto n Transit Center Access Improvements	Construct a two-lane, one- directional tunnel for ferry traffic egress, and reconfigure and reconstruct the surface alignments of Burwell Street (between Warren and Pacific Ave), Pacific Ave (between 1st St. and Burwell St), and 1st St to accommodate ferry	Ave, 1st St, Pacific (respective ly)	Pacific Ave, Burwell St, Burwell St (respecti vely)	2009	Bremerton	x						complet	ied
265	E Lake Sammamish Pkwy	This project includes widening to four/five lanes, interconnecting traffic signals, constructing curb, gutter, sidewalk, and bike lane, and providing tansit/HOV preferential treatment/operating improvements	SE 56th St	1-90	2011	Issaquah	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4544	I-90 Corridor Arterial HOV queue jumps	Will improve speed and reliability of transit and other HOV modes and, therefore, increase ridership and decrease SOV travel. Travel time savings past congestion points will create an incentive to use van- and car-pools, jitneys and buses to access transit centers, I-90 HOV lanes and local activity and employment centers, and provide a synergy for those centers to develop as desired.	Areas north and south of Issaquah to I-90 and to the Issaquah transit center	1-90	2018	Issaquah			x		×	x	x	
2007	S 272nd St	Major Widening Phase I (including HOV, sidewalks and bike lanes)	Military Rd	Pacific Hwy S.	2010	Kent			x				x	
141	31st Ave SW	Widen 31st Ave SW between S Meridian/SR 161 to SR-512 westbound ramp including widening 31st Avenue SW overpass across SR-512, signal modifications, addition of curb, gutter, sidewalks, and shared bike lanes, and add transit signal priority.	SR 512 off ramp	S Meridian/ SR 161	2005	Puyallup	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
494	Shaw Rd	Widen Shaw Road from 2 lanes to 5 lanes to include curb, gutter, sidewalk, shared bike lanes, transit signal priority, and street lighting. This project is critical as the other portion of Shaw Road connecting E Main and E Pioneer is currently under construction and will be completed by 2010. As a parallel route to S Meridian/SR 161, Shaw Road improvements would also help ease the traffic congestion along S Meridian/SR 161.	E Pioneer	39th Ave SE	2004	Puyallup			X		x		x	
3664	Redmond Way HOV Treatments	Construct HOV treatments such as queue jumps and signal priority from SR 520 to East Lake Sammamish Pkwy.	SR 520	E Lake Sammam ish Pkwy	2030	Redmond			x					x
4152	1st Avenue South Corridor Improvements	Multimodal corridor improvements. Some combination of: a) operational improvements such as signal interconnection and transit priority along the length of the corridors, which serve urban centers; b) transit queue jumps or lanes in some locations (primarily using existing ROW); c) bicycle and pedestrian facilities within and connecting to regionally designated urban centers.	Jackson St	South Graham Street	2012	Seattle			X		×		exempt	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
5127	Broadway/10th Ave E Corridor Improvement	Reconstruct full corridor in concrete; sidewalk, driveway and curb ramp improvements. Emergency vehicle preempt at all signals, Transit Signal Priority and queue jumps as needed, CCTV at Roanoke, upgrade lighting and signal equipment. New tree pits as space allows.	E Yesler	E Roanoke	2030	Seattle			x		x		exempt	
176	Lake City Way Multimodal	Ped safety/access to transit will be enhanced by sidewalk enhancements and completion of the sidewalk system where feasible. Main elements include: addition of NB BAT lane (NE 135th St. to NE 130th St. and NE 123rd St. to NE Northgate Way); expansion of W side of roadway (NE 123rd to NE Northgate Way); construct sidewalks on W side (NE 123rd St. to NE Northgate Way); and bus stop improvements at 24th Ave. NE. WSDOT will contribute to resurfacing on the I-5 to 12th Ave. NE segment.	NE 145th St	I-5	2010	Seattle	X						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4153	Madison Street Corridor Improvements	Multimodal corridor improvements. Some combination of: a) operational improvements such as signal interconnection and transit priority along the length of the corridors, which serve urban centers; b) transit queue jumps or lanes in some locations (primarily using existing ROW); c) bicycle and pedestrian facilities within and connecting to regionally designated urban centers.	1st Avenue	23rd Av E	2012	Seattle			×		X		exemp t	
4155	Northgate Way Corridor Improvements	Multimodal corridor improvements. Some combination of: a) operational improvements such as signal interconnection and transit priority along the length of the corridors, which serve urban centers; b) transit queue jumps or lanes in some locations (primarily using existing ROW); c) bicycle and pedestrian facilities within and connecting to regionally designated urban centers.	Meridian Av NE	15th Av NE	2010	Seattle			×		X		exempt	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4154	Rainier Avenue South Corridor Improvements	corridors, which serve urban	South Jackson St.	South City Limits	2012	Seattle			X		x		exempt	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
958	Spokane Street Viaduct	Widening, bridge strengthening and seismic improvements. Improve transit operations and access to the Port of Seattle by: a) removing and replacing traffic signal controllers; b) installing a full signal interconnect; c) providing loops for signal actuation; d) providing left turn lanes at 6th Ave S and at 4th Ave S; e) providing spot pavement resurfacing; f) providing transit a separate turn lane; g) installing a video system to monitor traffic in the corridor and on the viaduct; h) providing U-Turn facilities for trucks; i) improving signing to Port of Seattle facilities; j) improving x-walls; k) connecting signals to the central traffic computer, and; l)proving landscaping enhancements.		SR 99	2010	Seattle	X						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
4263	Viaduct 4th Avenue Off-Ramp	traffic across the arterial	St. Viaduct	4th Ave S.	2010	Seattle	X						X	
4010	Mukilteo Multimodal Terminal & Commuter Rail Pedestrian Connections		Dept. of Defense Tank Farm	Mukilteo waterfron t	2020	Sound Transit	x						exempt	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
3572	Totem Lake Freeway Station/NE 128th	New I-405 overpass connecting N.E. 128th St. and adding direct access to/from the NB and SB I-405 HOV lanes, serving the Totem Lake area of Kirkland incl. Kingsgate P & R and the proposed Totem Lake Transit Ctr. on the Evergreen Hospital campus.	I-405 @128th St NE		2007	Sound Transit	x						comple	ted
3557	Tukwila Station Access with 156th St to 16th Ave S Link	The project will construct approximately 1500 feet of new roadway, curb, gutter and sidewalks, and rail bridges to pass under the BNSF and UP tracks; connecting S 156th St in Tukwila to 16th Ave in Renton. Projects 4051 and 4080 describe the accompanying rail station (for Sound Transit and Amtrak) and Park & Ride facilities. Express bus and light rail may also serve the site.	156th St	16th Ave S	2020	Tukwila			x				x	
4324	I-405 Corridor: SR 169 to I-90 (112th St I/C component)	(g) Modify or rebuild 112th St I/C (to accommodate future flyer stop and park & ride expansion)	2020	I-405 @ 112th St I/C	I-405 @ 112th St I/C	WSDOT				x	x		see 432	23
4091	I-5 @ 272nd Street Interchange	Reconstruct the S. 272nd Street I/C. Current concept is for a SPUI, This project includes a flyer stop.	2030	S 272nd I/C	I-5	WSDOT			x	x	x		x	

### Addendum C Part 10: Park and Ride Strategies

The alternatives analysis tested different approaches to future Park and Ride investments. Park and Ride investment inclusion in the various alternatives appears below.

This list was revised in response to comments and additional information received during the DEIS comment period. Comments in the "PA-C" and "PA" columns reflect the additional information. In some cases staff discovered that the project had entered construction or been recently completed (labeled "under construction" or "completed"). Certain investment outcomes were found to have been included in other projects (labeled "in XXXX" where XXXX denotes the other project) or duplicates (labeled "duplicate"). Finally, in the process of reaching a decision on the final plan, some investments included in the original five alternatives were excluded from the Preferred Alternative. Some of these projects were retained in a "concepts" list outside of the final plan (these are labeled "concepts" below). In some cases new investments were analyzed for the first time in the Preferred Alternative, making it possible that an investment will only have X's in the PA-C and PA columns.

Note also that in cases where no sponsor is identified an operating agency or other jurisdiction would need to take sponsorship to realize the project.

Sorted first by original sponsor then by title.

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
4082	New Station in North Sumner	Construct a new Sounder station including station facilities, bus boarding area, and a surface parking lot with up to 400 stalls upon completion.	SW of East Valley Hwy / 8th St E @ BNSF RR (Sumner)		2040	Sound Transit			x	X		X		x
4080	Permanent Station at Tukwila	Build permanent station facilities, bus loading area, and new parking facilities (400 new stalls) for a total of 620 stalls at the station upon completion. See also 3557 for Tukwila street access project.	Longacres Way @ BNSF RR (Tukwila)		2015	Sound Transit	x						x	
4048	Everett Station	Final phase of multimodal station, including 770 parking stalls, pedestrian bridge over tracks, pedestrian access plazas on both sides of tracks, and operations building. Part of structure was completed by the City of Everett and Sound Transit will be fi	32nd St @ Smith Ave (Everett)		2008	Sound Transit	x						complet	ed
4053	Lakewood Station	Multimodal station with 620-stall parking garage, bus transit center, commuter rail platform	Pacific Hwy SW near 47th Ave SW @ BNSF RR		2012	Sound Transit	x						complet	ed

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	РА
4071	Parking Garage at Mukilteo Sounder Station	Joint Development of a garage at the Mukilteo Sounder station. ST to provide funding to construct up to 130 additional structured parking stalls for Sounder riders in a joint-use parking garage developed as part of Washington State Ferries' Mukilteo Landing multimodal terminal project. See 808 for main terminal project.	First St E of SR 525 (Mukilteo)		2023	Sound Transit	x						x	
4072	New Permanent Sounder Station at Edmonds Crossing	This project would relocate the interim station at Edmonds to the permanent location and expand parking by up to 300 structured stalls for Sound Transit riders, in conjunction with Washington State Ferries' Edmonds Crossing multimodal terminal project. COST INCLUDES SOUND TRANSIT PORTION OF PROJECT ONLY.	11400 Block Admiral Way @ BNSF RR		2023	Sound Transit	x						x	
4056	Transit Center and Parking Garage (Bothell)	Construct a transit center/park- and-ride with up to 400 stalls in the vicinity of SR 527/Bothell Way NE and NE 185th Street in downtown Bothell	SR 527@NE 185th St.		2040	Bothell		x	x	x	x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
4128	Highline Community College Intermodal Transit Facility and Parking Garage	Construct a Transit Center with bus layover to facilitate a potential Bus Rapid Transit route on SR 99 in south King County. In addition, the project will construct a parking garage with up to 500 stalls that will provide commuter parking, vanpool and carpool stalls as well as joint use parking for Highline Community College students and staff.	South 240th Street@SR 99 South		2012	King County/Metro	X						x	
4059	Parking Garage at South Kirkland Park- and-Ride	Construct parking garage for a 850 stalls upon completion.	NE 38th St @ 108th Ave NE		2027	King County/Metro			x	x		x	x	
1011	LEASED PARK & RIDE LOT PROGRAM	Maintain existing small lots and open new couple lots (apprx. less than 200 stalls)	Throughout County		2030	King County/Metro		x	x	x	x	x	exempt	
3601	Burien Transit Oriented Development/ Park and Ride Expansion	117 additional stalls. This project will assist in meeting the City's goals by constructing a 550-stall transit-oriented development (TOD) Facility that will occupy 50% less land than the present 385-stall park and ride surface lot. \$12.5m contribution	Burien P & R		2011	King County/Metro		x	x	x	x	x	x	
2665	Kennydale P&R	400 new stalls	I-405		2030	King County/Metro			x	x		x		x
3584	Eastgate Park and Ride Expansion	250 new stalls.	Eastgate P & R		2030	King County/Metro			x	x		x		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
5393	Issaquah Park and Ride Expansion	1000 new stalls	l- 90@lssaqua h P & R		2030	King County/Metro			x	x	x			x
2342	New P&R Lot- Renton East Highlands	Construct new lot.	SR 900	Duvall (138th Ave SE)	2020	Renton		x			x	x		x
3597	Shoreline Park and Ride TOD	Replace existing 385, and add additional 200, for a total of 585 stalls in parking structure supporting new mixed use housing development. In King County TOD Workplan to issue 2010 RFP seeking deve	Shoreline P&R at 18821 Aurora Ave. N.		2013	King County/Metro			x	x		x	x	
4407	I-405 Corridor: SR 522 to I-5 ( Lake Forest Park vicinity P&R expansion)	Park & Ride: (n) Lake Forest Park at Bothell Way and SR 104 vicinity park & ride capacity expansion (+300 spaces),	at Bothell Way and SR 104 vicinity		2030	Agency not Identified			x	x		x		x
4331	I-405 Corridor: SR 169 to I-90 (112th I/C P&R Exp, In-Line Station)	(c) Construct 112th I/C Park & Ride expansion and In-Line Station.	I-405 @ 112th I/C		2030	Agency not Identified			x		x	x	x	
2589	SR 305 / SR 307 / SR 3 (OLHAVA) P&R	800 new stalls	SR 305	SR 305 / SR 307 / SR 3	2015	Kitsap Transit		x			x	x	x	
2574	SR 304 (Bremerton) P&R (Gateway)	400 new stalls (At 6th and Montgomery)	Central Kitsap	SR 304	2015	Kitsap Transit		x			x	x	x	
2575	SR 303 (North of Bremerton) P&R (Riddell)	300 new stalls	Central Kitsap	SR 303	2015	Kitsap Transit		x			x	x	x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2576	(Silverdale) P&R	200 new stalls - changed location now at Silverdale P&R above the mall in DT Silverdale.	Central Kitsap	SR 3	2015	Kitsap Transit		x			x	x	x	
2577	SR 3 / SR 16 P&R	250 new stalls (intercept lot)	Central Kitsap	SR 3 / SR 16	2015	Kitsap Transit		x			X	X	x	
2585	SR 3 / SR 303 P&R (N Silverdale)	300 new stalls (upper Silverdale)	Central Kitsap	SR 3 / SR 303	2030	Kitsap Transit		x			x	X	x	
2582	SR 16 P&R (Mullenix)	250 new stalls (Vanpool lot no busses)	South Kitsap	SR 16	2015	Kitsap Transit		x			X	X	x	
3603	SR 104 Port Gamble Park and Ride Expansion	250 Stalls total	SR 104@Port Gamble		2030	Kitsap Transit		x			x	x	x	
3602	SR 104 Kingston Park and Ride Expansion	100 additional stalls (350 total)	SR 104@Kingst on		2030	Kitsap Transit		x			x	x	x	
3604	SR 16/SR 160 or at SR 16/SR 166 Park and Ride Expansion	250 Stalls total	SR 16/SR 160@Port Orchard or at SR 16@SR 166		2015	Kitsap Transit		x			x	x	x	
2592	Bonney Lake P & R	350 new stalls	Valley	SR 410	2030	Plerce Transit		x			x	X		x
2594	Dupont P&R	250 new stalls	I- 5@Steilacoo m Rd.		2030	Plerce Transit		x			X	X		x
2596	South Hill P & R	433 new stalls	Valley	SR 512 / SR 161	2030	Plerce Transit		X			X	X		x
2602	SR 512 / SR 7 (Parkland) P&R	550 new stalls	Vicinity SR 512@SR 7		2030	Plerce Transit			X		X	X		x
2606	Fife I-5 P&R	1000 new stalls	I-5 Central		2030	Plerce Transit			X		X	X		x

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
3582	Purdy Crescent Park and Ride Expansion	375 new stalls.	Purdy Crescent P & R		2030	Plerce Transit		x			x	x		x
3654	Park & Ride #2	Create a new Park and Ride facility with approximately 350 stalls, bus bays and layover space, DART transfer space, platform with customer shelters, lighting, bike lockers & racks, information kiosks, driversÆ restroom/utility building, pedestrian walkway	172nd in Smokey Pt		2009	Community Transit		x			x	x	x	
4007	Everett Station Parking Structure	Structured parking for up to 900 vehicles at Everett Station. Separate from Multimodal station with ST and Everett, this provides additional parking on E side of tracks in a separate structure.	33rd Street	35th Street	2010	Everett			x	x	x	x		x
2599	SR 16 Peninsula Park and Ride	New Park and Ride with up to 600 stalls west of SR 16 south of Wollochet Dr. on the Gig Harbor peninsula.	Peninsula	SR 16	2022	Approved	x						x	
4081	Parking Garage at Auburn Station	Construct up to 600 parking stalls in a new structure for a net increase of up to 500 parking stalls, and up to 1,100 stalls upon completion.	23 A St (Auburn)		2015	Sound Transit	x						x	
3594	South Bellevue Park and Ride Expansion	900 additional stalls, 1400 total stalls.	I-90@South Bellevue P & R		2020	Sound Transit	x						x	
2640	S. 200th Park and Ride	630 new stalls	I-5 South		2020	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2644	Kent Station P&R	450 new stalls (1,550 total after completion)	SR 167		2023	Sound Transit	X						X	
4079	Surface Parking Expansion at Tacoma Dome Station	Construct a new surface parking lot with up to 300 stalls, for a total of 2,700 stalls upon completion.	605 Puyallup Ave (Tacoma)		2023	Sound Transit	x						x	
4083	Parking Garage and Pedestrian Bridge at Sumner Station	Construct a new multilevel parking structure with up to 400 stalls and a pedestrian bridge, for a total of up to 700 stalls upon completion.	810 Maple St (Sumner)		2015	Sound Transit	x						x	
4084		Expand parking by building a multilevel parking structure and a surface parking lot (600 new stalls) for a total of up to 900 stalls upon completion.	131 W Main St (Puyallup)		2015	Sound Transit	x						x	
4085	and Pedestrian Bridge at South	Construct a new multilevel parking structure (400 new stalls) for a total of up to 600 stalls upon completion.	S 56th St & Washington St (Tacoma)		2023	Sound Transit	x						x	
4086	Parking Garage at Lakewood Station (Alternative)	Construct a new multilevel parking structure with up to 600 stalls adjacent to the planned Lakewood Sounder Station parking garage on property currently owned by Sound Transit, for a total of up to 1,000 1,200 stalls upon completion.	Pacific Hwy SW near 47th Ave SW @ BNSF RR		2023	Sound Transit	x						x	

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
2627	Marysville P&R	250 new stalls split between Marysville 4th Street #1 and Marysville 4th Street #2 P&Rs	North Snohomish	I-5	2009	WSDOT	x						x	
2628	SR 9 / SR 2 / Lake Stevens P&R	350 new stalls	SE Snohomish	SR 9 / SR2	2010	WSDOT	x						x	
4067	Parking Garage at Lynnwood Transit Center	Construct parking structure with 500 stalls upon completion	202nd St SW @ 46th Ave W		2023	Sound Transit	x						x	
1852	S Everett Freeway Station/ 112th SE	HOV Direct-Access Ramps @ 112th St SE and direct Park and Ride lot (up to 400 stalls) in I-5 median and flyer stop for transit.	I-5 @ 112th St SE vicinity (Silver Lake)		2008	Sound Transit	x						comple	ted
3653	Cedar @ Grove P & R	Construct new 200 stall Park and Ride at intersection of Cedar and Grove Streets in Marysville	Cedar @ Grove		2012	Community Transit	x						comple	ted
2614	I-5, Mountlake Terrace P&R	500 new stalls: 5 story parking garage on existing lower (west) parking lot.	SW Snohomish County	I-5	2008	Community Transit	x						comple	ted
2366	Issaquah Transit Center	Build new transit center or expand existing park and ride lot to include transit center (building over 800 parking stalls in a garage; don't know what net addition is above current surface parking).	Newport Wy	NW Maple	2008	Sound Transit	x						comple	ted
2370	Mercer Island Park-and- Ride/N Mercer Way	Transit Center and Park and Ride with up to 247 new stalls	North Mercer and 80th Ave SE		2007	Sound Transit	x						comple	ted

ID	Title	Description	From	То	Year	Sponsor	BL	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	ΡΑ
	Harper Church - Sedgwick Road P&R		South Kitsap	SR 160	2007	Kitsap Transit	x						complet	ed
2639	i 'antar/Parking	Transit Center and up to 1200 new stalls HAS ABSORBED PROJECT 2014	23rd Ave @ S 317th		2006	Sound Transit	x						complet	.ed

# Addendum E: Demand Management Strategies Applied Across Alternatives

#### Vanpool Strategy Details

Vanpool trips are essentially an input to the Travel Demand Model. Based on the work of the Travel Demand Management stakeholders' group, these future year inputs were created to implement the vanpool strategies by alternative listed in Section 2:

#### **Total Daily Vanpool Round Trips**

Year	Baseline	Alt1	Alt2	Alt3	Alt4	Alt5	PA-C	PA
2020 2040	,	, -	,	,	2,956 3,856	, -	, –	, -

#### Park and Ride Parking Charge Details

Park and Ride charges cited in Section 2 will be examined in future studies.

#### Parking Charges Summary

Alt.	Daily SOV Parking (Destination, Off-Street)*	Hourly Parking (Public)*	P & R Parking SOV	P & R Parking HOV	P & R Parking Vanshare
Base- line	1.5% real annual growth	1.5% real annual growth	No Charge	No charge; Some Reserved	None
1	20% Surcharge atop baseline	20% Surcharge atop baseline	No Charge	Same as baseline	None
2	Same as baseline Same as baseline		No Charge	Same as baseline	None
3	5% Surcharge atop baseline	5% Surcharge atop baseline	Pay (rate set to cover annual maint.)	Pay (same as SOV)	None
4	5% Surcharge atop baseline	5% Surcharge atop baseline	Pay (rate set to manage supply)	Pay (same as SOV)	None
5	Same as baseline	Same as baseline	No Charge	Same as baseline	None
PA-C	C 5% Surcharge 5% Surcharge atop baseline atop baseline		No Charge	Same as baseline	None
PA	5% Surcharge atop baseline	5% Surcharge atop baseline	No Charge	Same as baseline	None

• Surcharges or discounts applied only in designated centers or GTEC's; see Section 2

TAZ	City	Alt 1 2020 Daily	Alt 1 2020 Hourly	Alt 1 2040 Daily	Alt 1 2040 Hourly	Alt 3, 4, PA-C, PA 2020 Daily	Alt 3, 4, PA-C, PA 2020 Hourly	Alt 3, 4, PA-C, PA 2040 Daily	Alt 3, 4, PA-C, PA 2040 Hourly
433	Auburn	406.2	23.5	547.1	31.7	355.4	20.6	478.7	27.7
438	Auburn	443.1	0.0	596.8	0.0	387.7	0.0	522.2	0.0
291	Bellevue	674.9	285.0	909.0	383.8	590.5	249.4	795.4	335.8
293	Bellevue	1977.4	685.0	2663.3	922.5	1730.2	599.3	2330.4	807.2
294	Bellevue	1840.1	718.6	2478.3	833.3	1610.1	628.8	2168.5	729.2
295	Bellevue	1445.9	484.7	1947.5	652.8	1265.2	424.1	1704.0	571.2
296	Bellevue	1746.4	542.8	2352.1	731.0	1528.1	474.9	2058.1	639.6
300	Bellevue	912.1	370.1	1228.5	498.5	798.1	323.9	1075.0	436.2
301	Bellevue	974.4	492.5	1312.3	663.3	852.6	430.9	1148.3	580.4
239	Bothell	442.1	20.7	595.4	27.9	386.8	18.1	521.0	24.4
240	Bothell	616.2	185.1	830.0	249.2	539.2	161.9	726.2	218.1
247	Bothell	802.5	167.8	1080.8	226.0	702.2	146.8	945.7	197.7
884	Bremerton	796.0	234.1	1072.0	315.3	696.5	204.9	938.0	275.9
885	Bremerton	1110.9	484.1	1496.3	652.0	972.1	423.6	1309.2	570.5
886	Bremerton	638.5	114.3	860.0	154.0	558.7	100.0	752.5	134.7
890	Bremerton	574.8	32.5	774.2	43.7	503.0	28.4	677.4	38.3
891	Bremerton	955.2	262.8	1286.5	354.0	835.8	230.0	1125.6	309.7
892	Bremerton	942.7	240.9	1269.7	324.5	824.9	210.8	1111.0	283.9
893	Bremerton	1027.5	374.8	1383.9	504.9	899.1	328.0	1210.9	441.8
894	Bremerton	754.5	221.8	1016.2	221.8	660.2	194.0	889.1	194.0
363	Burien	304.6	0.0	410.3	0.0	266.6	0.0	359.0	0.0
601	Canyon Park	849.2	168.9	1143.7	227.5	743.0	147.8	1000.7	199.1

Parking Charges Details: Charges (cents) By TAZ in Alternatives 1, 3, 4, PA-C, PA

TAZ	City	Alt 1 2020 Daily	Alt 1 2020 Hourly	Alt 1 2040 Daily	Alt 1 2040 Hourly	Alt 3, 4, PA-C, PA 2020 Daily	Alt 3, 4, PA-C, PA 2020 Hourly	Alt 3, 4, PA-C, PA 2040 Daily	Alt 3, 4, PA-C, PA 2040 Hourly
603	Canyon Park	783.1	71.5	1054.7	96.4	685.2	62.6	922.9	84.3
605	Canyon Park	794.0	64.6	1069.5	87.0	694.8	56.5	935.8	76.1
608	Canyon Park	521.6	63.8	702.6	86.0	456.4	55.9	614.7	75.2
534	Everett	754.5	48.5	1016.2	65.3	660.2	42.4	889.1	57.1
536	Everett	858.9	331.7	1156.9	446.7	751.6	290.2	1012.2	390.9
537	Everett	1158.4	268.0	1560.1	269.5	1013.6	234.5	1365.1	235.8
538	Everett	987.1	85.6	1329.5	115.3	863.7	74.9	1163.3	100.9
416	Federal Way	376.5	27.0	507.1	36.4	329.4	23.7	443.7	31.9
419	Federal Way	594.2	175.9	800.3	236.9	519.9	153.9	700.3	207.3
421	Federal Way	568.6	189.8	765.9	255.6	497.5	166.1	670.1	223.7
429	Federal Way	738.6	214.2	994.8	288.5	646.3	187.4	870.5	252.4
389	Kent	713.2	322.4	960.6	434.2	624.0	282.1	840.5	379.9
406	Kent	629.2	78.7	847.5	106.0	550.6	68.9	741.5	92.7
407	Kent	679.9	279.7	915.8	376.7	594.9	244.7	801.3	329.6
258	Kirkland	604.8	162.7	814.6	219.2	529.2	142.4	712.8	191.8
805	Lakewood	521.9	184.2	702.9	248.1	456.7	161.2	615.1	217.0
806	Lakewood	904.9	362.1	1218.8	487.7	791.8	316.9	1066.4	426.8
809	Lakewood	526.9	184.0	709.7	247.9	461.1	161.0	621.0	216.9
810	Lakewood	487.6	144.4	656.8	194.5	426.7	126.4	574.7	170.2
811	Lakewood	766.0	142.2	1031.6	191.5	670.2	124.4	902.7	167.6
812	Lakewood	413.3	0.0	556.6	0.0	361.6	0.0	487.0	0.0

#### **Potential Impacts of Various TDM Programmatic Investments**

These effects are not presently captured in the PSRC model suite and are discussed qualitatively in the FEIS.

Projected impacts in target geographies of state or regionally coordinated residential-based alternative-mode marketing and incentive program:

SOV Reductions	10.7%
Walk Increase	4.0%
Bike Increase	1.5%
Transit Increase	2.0%

Land Use Impacts on Vehicle Ownership and Travel (Ohland and Shelley Poticha, 2006)

Land Use Type	Auto Ownership	Daily VMT		Mode Split					
	Per Household	Per Capita	Auto	Walk	Transit	Bike	Other		
Good transit/Mixed use	0.93	9.8	58.10%	27.00%	11.50%	1.90%	1.50%		
Good transit only	1.5	13.28	74.40%	15.20%	7.90%	1.40%	1.10%		
Remainder of county	1.74	17.34	81.50%	9.70%	3.50%	1.60%	3.70%		
Remainder of region	1.93	21.79	87.30%	6.10%	1.20%	0.80%	4.00%		

Abridgement only in this PDF ... excerpt of pages related to public transit and park & ride investments. Complete document as of March 28, 2010 is posted here: http://www.psrc.org/assets/3694/Appendix\_A\_-\_Transportation\_2040\_Alternatives\_Report.pdf See http://www.psrc.org/ for revisions before May 20, 2010 final approval.

## Addendum F: Transit Corridors Used in Alternatives Development

The following table identifies transit corridors identified as congested or otherwise needful of specific attention in developing the plan alternatives. It also summarizes proposed specific actions in that corridor for each alternative. These corridors appear in gray on the maps in Addendum C.

		Corridor	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	РА
		I-5 N: Seattle CBD to Everett								
	1	1a. I-5 from Lynnwood to	Incl'ds SWIFT BRT and Rapid Ride on SR 99		LRT extended north to Everett		HOT Lanes – travel time improvements	LRT extended north to Everett	LRT extended north to Everett	LRT extended north to Everett
		1b. I-5 from Everett to Arlinginton, Smokey Point	No changes	Decrease HW to 15 min.		Decrease HW to 15 min.		BRT Broadway/State St/Smokey Pt Blvd - Increase HW to 15 min all day	BRT Broadway/State St/Smokey Pt Blvd - Increase HW to 15 min all day, reduce transfers	BRT Broadway/Stat e St/Smokey Pt Blvd - Increase HW to 15 min all day, reduce transfers
	2	I-5 S: Seattle CBD to Tacoma	No changes		LRT extended to Tacoma			LRT extended to Tacoma	LRT extended to Tacoma	LRT extended to Tacoma
Γ		I-90 to Eastgate								
		3a. West Seattle to Bel/Red	No changes	from Delridge to I-90 to Bellevue/Overl	supplement bus service from	from Delridge to I-90 to	Add bus route from Delridge to I- 90 to Bellevue/Overlake/	Add bus route from Delridge to I- 90 to Bellevue/Overlake/ Redmond or Model supplement bus service from West Seattle to East Link	Supplemental bus service from West Seattle to East Link	HCT Connection to Seattle CBD and from there to other regional destinations

	Corridor	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
	SR 520 to Redmond								
4		HOV lanes on SR 520 Bridge		Improved travel times on Eastlink - better than SR 520 Bus?	times, lower wait times from HOT	Improved travel times, lower wait times from HOT lanes	Light Rail or High Capacity Transit from Seattle CBC across SR 520 Bridge to Bellevue Improved travel times via Eastlink connections	Improved travel times via Eastlink connections.	Light Rail or High Capacity Transit (Mode to be Determined) from UW across SR 520 Bridge to Redmond Improved travel times via Eastlink connections
	4b. Northwest Seattle to Bel/Red	No changes	from Crown Hill, Ballard, Wallingford	Eval. Travel time from NW Seattle to Bel/Red on Eastlink vs improved SR 520 Bus	bus routes from Crown Hill, Ballard, Wallingford, Ravenna to	Add direct thru-rt bus routes from Crown Hill, Ballard, Wallingford, Ravenna to Bel/Red	Evaluate bus route/LRT feeding U-Dist TC vs through routes to Bel/Red		
	WSF Seattle to Bainbridge Island	No changes						BRT on SR 305: Improved travel times, reduced wait times	BRT on SR 305: Improved travel times, reduced wait times
6	SR 99 N: Seattle CBD to Everett								
	Village to Everett Station	Incl'ds SWIFT BRT and Rapid Ride on SR 99		LRT extended north to Everett			LRT extended north to Everett	LRT extended north to Everett	LRT extended north to Everett

Corridor		Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	РА
	Seattle CBD to West Seattle/SR 509								
7	7a. SR 509 from Seattle to Burien (Congested #3)	No Change	Model BRT on Delridge as alt to 509 (KCM 120)			Model BRT on Delridge as alt to 509 (KCM 120)	LRT extension from Seattle CBD to West Seattle BRT on Delridge as alt to 509 (KCM 120)	Rapid Ride Seattle CBD to West Seattle	HCT extension (Mode to Be Determined) from Seattle CBD to West Seattle Rapid Ride Seattle CBD to West Seattle
	7b. SR 99 S from SoDo and SR 518 to Federal Way (Congested 4)	Model Rapid Ride: 99 S					LRT extended south to Tacoma	LRT extended south to Tacoma	LRT extended south to Tacoma
	I-405: Totem Lake to Tukwila								
	8a. I-405 Tukwila to Bellevue (Congested #8)	No changes		times, lower wait times from Direct	Improved travel times, lower wait times from Direct	I-405 BRT: Improved travel times, lower wait times from Direct Access Ramps	I-405 LRT: Improved travel times, lower wait times, fewer transfers		I-405 HCT: Improved travel times, lower wait times, fewer transfer HCT on BNSF Right-of-Way
	8b. Eastside Commuter Rail	No changes					Model Renton to Snohomish all day CR: improved travel times, reduced transfers, reduced wait times		Renton to Snohomish HCT (mode to be determined) on the BNSF Right-of-Way

	Corridor	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
9		Incld Rapid Ride along 15th Ave					BRT from U-Dist to Ballard and Crown Hill; reduced wait times, improved travel times. LRT from Seattle CBD to Ballard (and from U-Dist to Ballard)		HCT (mode to be determined) from Seattle CBD to Ballard and from U-Dist to Ballard.
	SR 522 to Bothell								
10	10a. SR 522 Lake City Way (Congested #10)	No changes				Upgrade to BRT to Bothell with BAT lanes: reduced wait times, improved travel times, reduced transfers	times, reduced transfers. Then replace BRT	Upgrade to BRT to Bothell with BAT lanes: reduced wait times, improved travel times, reduced transfers.	Replace BRT with LRT or HCT (mode to be determined) from Northgate to Bothell.
11	SR 167: Auburn to Renton					travel times, lower wait times, fewer	BRT: Improved travel times, lower wait times, fewer transfers		
12	SR 7: Tacoma to Spanaway								
	12a. Pacific Ave, Tacoma to Parkland, 6 <sup>th</sup> Ave to Narrows (Congested #6)	No changes						BRT with transit- supportive road- side elements.	BRT with transit- supportive road-side

	Corridor	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
							transfers		elements.
13	SR 18: Fed. Way to Auburn								
13	13a. SR 18 from Auburn to Federal Way	No changes				BRT: Improved travel times, lower wait times, fewer transfers	BRT: Improved travel times, lower wait times, fewer transfers		
	SR 3: Silverdale to Bremerton								
14	14a. SR 305 from Poulsbo to Bainbridge Ferry (Congested #7)	No changes					BRT with BAT lanes: Improved travel times, lower wait times, fewer transfers	BRT with BAT lanes as far as Sedgwick Road: Improved travel times, lower wait times, fewer transfers	BRT with BAT lanes as far as Sedgwick Road: Improved travel times, lower wait times, fewer transfers
15	SR 525/526: Boeing to I- 5/I-405								
	15a . Mukilteo Speedway, SR 525 from Mukilteo to I-405	No changes					BRT with BAT lanes: Improved travel times, lower wait times, fewer transfers	BRT with BAT lanes: Improved travel times, lower wait times, fewer transfers	BRT with BAT lanes: Improved travel times, lower wait times, fewer transfers
	15b. Boeing Freeway SR 526, from SR 525 to I-5	No changes						BRT with BAT lanes with service to Everett Mall: Improved travel times, lower wait	BRT with BAT lanes with service to Everett Mall: Improved travel

	Corridor	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	PA-C	PA
								times, fewer transfers	times, lower wait times, fewer transfers
	15c. Boeing to Mill Creek Airport Rd to 128th to 132nd to Maltby Rd	No changes					lanes: Improved travel times, lower wait times, fewer	ianes: improved travel times, lower wait times, fewer transfors	BRT with BAT lanes: Improved travel times, lower wait times, fewer transfers
	South Snohomish: East - West Corridor								
16	16a. 164th to Mill Creek	No changes					lanes from SR 99 N to SR 527 in Mill Creek: Improved travel times, lower wait times, fewer transfors	lanes from SR 99 N to SR 527 in Mill Creek: Improved travel	BRT with BAT lanes from SR 99 N to SR 527 in Mill Creek: Improved travel times, lower wait times, fewer transfers
	16b. Edmonds and Lynnwood to Bothell/Maltby	No changes							