

Eastside SMART Corridor

Corridor Description

The Eastside **SMART** Corridor encompasses many suburban cities, including Bellevue, Bothell, Kenmore, Kirkland, Redmond, Newcastle, and Woodinville. The corridor also includes smaller suburban and rural communities, as well as some portions of unincorporated suburban and rural King County. The corridor includes major commercial/retail centers and other major trip generators, which affect travel patterns. Major commercial and retail centers are located in downtown Bellevue adjacent to Interstate 405 and in the Overlake/Crossroads area of Bellevue and Redmond. Significant trip generators include Microsoft Corporation, Eddie Bauer, T Mobile, Puget Sound Energy and Overlake hospital. The Overlake/Crossroads area is located east of downtown Bellevue and is near the east end of SR 520. Other major trip generators in the corridor include Bellevue College, hospitals, and many other medium-sized commercial/retail centers.

Major employers in the corridor include:

- Microsoft
- Evergreen Hospital
- City of Bellevue
- Costco
- Overlake Hospital
- Puget Sound Energy
- Bellevue Community College

2009 Population Estimate	395,000
2009 Covered Employment Estimates	
Metropolitan Cities: Bellevue	114,270
Core Cities: Bothell, Redmond, Kirkland, Renton	142,805
Larger Cities: Kenmore, Woodinville	15,168
Smaller Cities: Beaux Arts, Clyde Hill, Hunts Point, Medina, Newcastle, Yarrow Point	2,598
Unincorporated Urban	7,032
Rural	3,380
Total	285,253

Existing Congestion and Mobility Conditions

Roadways: The following facilities operate at 70% of the posted speed limit during peak periods and therefore have been identified as a bottleneck and/or chokepoint by WSDOT:

- I-405 from Snohomish County line to Renton
- I-90 from Bellevue Way vicinity west to Seattle and from 148th Ave vicinity east to Issaquah
- SR 520/ I-405 interchange west to Seattle and segments east to Redmond
- SR 522 between Shoreline city limits and Kenmore
- SR 202 north of Redmond to NE 124th St and segments in Woodinville

Arterials identified by the Regional Traffic Operators Committee as key arterials for freight, transit, high volume/capacity ratio and alternate routes to the interstate include:

- SR 522 (K27): Between I-405 and I-5
- 68th Ave NE/NE 170th St/Simonds Road NW/100th Ave NE/ NE 120th Pl/ 98th Ave NW/Market St/Central Way / Lake St S/ Lake Washington Blvd NE/Bellevue Way NE (K12): Between SE 522/NE Bothell Way and I-90
- NE 90th/148th Ave NE (K5): Between SR 202 and Newport Way
- Central Way/NE 85th St/ Redmond Way/SR 202 (K10): Between Market Street and I-90
- Richards Road SE/Factoria Blvd SE/Coal Creek Parkway SE/Duval Ace NW/138th Ave SE (K14): Between Lake Hill Connector and NE 4th Street
- S. 2nd, S 3rd St/ Houser Way, Bronson Way/Sunset Blvd NE/Rainier Ace S/ Airport Way S/Logan Ace S/SR 900/ 17th Ave NW/NW Sammamish Rd/SE 56th St (K16): Between SR 167 and East Lake Sammamish Parkway
- Woodinville Duval Road (K1): Between SR 522 and SR 203
- S Jackson St/ Rainier Ave S (K25): Between 4th Ave S and Grady Way
- SR 527 (S9): Between I-5 and SR 522 in Bothell

Pavement Conditions²⁷: The following are the pavement condition index (PCI) scores for the Eastside **SMART** Corridor.

Condition	PCI Range
Excellent	89-100
Good	67-88
Fair	49-66
Poor	21-48
Fail	<20

Jurisdiction	2008 Weighted Avg.* Jurisdiction PCI
Bellevue	79.1
Bothell	72.3
Redmond	81.2
Kirkland	56.5
Renton	56.4
Kenmore	78.4
Woodinville	56.1
Beaux Arts	79.5
Clyde Hill	72.2
Hunts Point	95.3
Medina	79.3
Newcastle	59.3
Yarrow Point	60.3
Unincorporated King County	75.8
King County Weighted Average*	70.6

* weighted by length of roadway segment (ft)

²⁷ Pavement Condition Index (PCI) scores are reported to WSDOT by individual jurisdictions, or are collected by WSDOT in the case of smaller cities, on a biennial basis. PCI scores are a composite measure representing environmental and structural distresses on pavement and measured on 0-100 scale where zero is the lowest. The scores presented in this document are not representative of a jurisdiction's entire roadway network; rather they include the principal and minor arterials for which each jurisdiction has submitted PCI information per requirements of RCW 46.68.113. Scores have been weighted by the length of the measured roadway segments to present a more accurate representation of the condition of the arterial network.

Roadway Safety: PSRC is building on the safety policy guidance outlined in VISION 2040 and aligning it with the goals, strategies and objectives identified in the Washington State Strategic Highway Safety Plan, *Target Zero*. This plan aims to reduce serious injury and fatality collisions to zero by 2030 by focusing on four priority areas that promote safer and smarter roadways, safer walkways and pathways for bicyclists or pedestrians, enhanced emergency response systems, and improved passenger and driver behavior. The following map identifies the locations of collisions that resulted in a serious injury or fatality in 2007.

Ferries: Not applicable

Transit: All of King County is in King County Metro's service area and the western portion is within Sound Transit's service area (see Figures F-2 and F-3). The Eastside Corridor is served by King County Metro locally and regionally, and by Sound Transit regionally. In addition, Community Transit operates one commuter route to Overlake. Sound Transit contracts with Metro to provide seven regional commuter service routes from east King County and with Community Transit to provide seven regional commuter routes from Snohomish County. King County Metro provides 63 suburban local routes and 69 suburban commuter routes, many of which serve the Eastside Corridor. Major transit centers are located in Renton, Bellevue, Overlake and downtown Kirkland, Totem Lake, Redmond, and at the UW Campus in Bothell.

Existing Transit Congestion: Transit congestion in the Eastside Corridor matches the roadway congestion of the most congested commutes on WSDOT facilities. These include the I-405 freeway to and from Bellevue and out to Redmond, Tukwila, and Everett. With HOV lanes on I-405 from Tukwila to Lynnwood and on I-90 to Issaquah, and direct access ramps to transit centers in Bellevue, Totem Lake, and Lynnwood, transit has significant priority in this corridor on the freeway. The 3+ HOV lanes on SR 520 westbound from I-405 to the Lake Washington Bridge operate as an extended queue jump rather than a typical HOV lane. Limited management of the HOV lanes has resulted in high roadway congestion within the HOV lanes, particularly around Bellevue and SR 520. Arterial congestion is significant, particularly around the freeway connections and in downtown Bellevue and the Overlake area.

Special Needs Transportation: To provide the most options to people with special transportation needs, the transit agencies on the Eastside have expanded and enhanced the fixed-route transit service in this area. For those individuals who are unable to take the fixed-route transit service, King County Metro's ADA Paratransit Program provides next-day, shared rides on *Access Transportation* within ¾-mile on either side of non-commuter fixed-route bus service during the times and on the days those routes are operating. Access is a shared-ride shuttle service for people who, because of their disability, are unable to ride the regular fixed-route bus service within King County. Metro Transit, Pierce Transit, Community Transit, Everett Transit, Kitsap Transit, Intercity Transit, and Jefferson Transit have a joint paratransit eligibility agreement. Persons found eligible by any of those agencies can use paratransit service offered by the other agencies. Applications for eligibility must be submitted to the transit agency that serves the area where the rider lives.

Going beyond the required ADA services, through its Community Transportation Program, King County provides:

- Enhanced Access Transportation Service (expanded service area beyond the ¼-mile of fixed-route service, advance reservations, etc.)
- Taxi Scrip Program (allows disabled low-income residents to purchase taxi scrip at 50% discount)
- Transit Instruction Program (free training for persons with disabilities on how to ride regular transit)
- Community Access Transportation:
 - CAT Advantage Vans (Provides retired Access and vanpool vehicles to participating agencies, including emergency response, vehicle maintenance and repairs, driver training, and technical assistance)
 - CAT Vanworks (Provides retired Access and vanpool vehicles and pays the cost of standard Vanpool agreement on behalf of local agencies that have a number of clients who are eligible for Metro's ADA Paratransit program (Access) and are traveling to work sites.)

Other transportation programs at Metro include:

- Dial-a-ride Transit or DART (Using vans that can go off regular routes to pick up and drop off passengers within a defined service area, DART service may allow the rider to arrange for transit service closer to a location.) DART local community connector service is provided between Redmond and Kingsgate/Kirkland, Kirkland/Juanita, Bellevue/Crossroads to Eastgate, Renton Highlands to Lake Kathleen, Newcastle to Coal Creek, and Kenmore to Juanita to Kingsgate.
- Job Access Transportation Program or *JARC* (Comprehensive approach to providing transportation to transition low-income and welfare reform clients into employment)
- Rideshare Operations (provides Ridematch, vanpool and Rideshare Plus for sharing the ride to work, school or other frequent destinations. Lift-equipped vehicles are available for vanpools.)
- Custom Bus (service for employers and schools. Routes are designed to meet the specific needs of the business or educational facility. Fares are based on the length of the trip; however, a current Regional Reduced Fare Permit, reduced fare sticker or an Access Pass is valid for the fare.)
- Car sharing (King County Metro and the City of Seattle have joined with Mobility, Inc. to introduce the car sharing program, ZipCar, to the Seattle region, with vehicles located in downtown Bellevue in the Eastside Corridor.)
- Bicycling (Every Metro bus has a bicycle rack that can accommodate two bikes, and many vanpools are also equipped for transporting bikes. No special permit or extra fare is required.)

Community Resources:

- Hopelink coordinates transport to services covered by Medicaid through Medical Transportation Brokerage and provides other community transportation services as a non-profit.
- Crisis Clinic operates the Community Information Line providing information and referral assistance.
- Senior Services has two programs to assist seniors:
 - Senior Shuttles, using both paid and volunteer drivers, transport seniors to hot meal programs, medical appointments, senior centers, grocery stores, and other local destinations. Service area and type of service is specific to each van.
 - Senior Services Volunteer Transportation with volunteers driving their own vehicles providing transportation to seniors 60 years of age and older living throughout King County to medical and other essential appointments. Volunteers not only provide a ride but also wait with seniors at their appointments before driving them home, offering a helping hand and moral support.

Beyond the transit agency-provided special needs transportation services listed above and on Findaride.org, numerous additional human services organizations have been identified as having a transportation role. Please also refer to Appendix C—Inventory of Services—in the Coordinated Plan.

TDM Programs: The Eastside Corridor contains approximately 175 active Commute Trip Reduction sites along I-405, SR 520, and I-90. One of the most notable programs is offered by Microsoft, which in 2007 unveiled “the Connector,” a private transit service serving five Seattle and Eastside neighborhoods. Today, the program has expanded to offer service to 21 communities around the region with a fleet of over 40 vehicles. The corridor also contains two Growth and Transportation Efficiency Center programs: one in downtown Bellevue and the other in Redmond/Overlake. Employers benefit from two Transportation Management Associations (TMAs) which are public private partnerships to reduced trips in a targeted area: TransManage in downtown Bellevue and the Greater Redmond TMA. Jurisdictions and transit agencies operating in the corridor implement various incentive programs and other efforts that support healthy communities, rideshare, and transit investment as alternatives to travel by single-occupant vehicles.

Transportation System Management and Operations: Most of the core freeway system in the corridor is instrumented with cameras and detection equipment to provide data to traveler information portals such as the WSDOT Flow map and the Bellevue Flow map. Cameras and detection also assist with quickly identifying incidents from the traffic management centers. There are currently five traffic management centers in the corridor: WSDOT NW Region, Bellevue, King County, Renton, and Redmond. There are also roving incident management teams to assist with incident clearance and reduce related congestion and delay. Transit Signal Priority (TSP) is in place on some major arterial transit routes as well as Metro’s Rapid Ride routes. Traffic signal coordination exists on some major arterials such as 148th between Redmond and Bellevue, but there is still need for more multi-agency coordination. Eastside is

included in various regionwide ITS programs such as 511, transit trip planning and the ORCA regional transit fare card. All major freeways are included in the WSDOT traveler information web and mobile applications displaying travel times.

Bicycle and Pedestrian Facilities²⁸: There are numerous bicycle travel options in this corridor including off-road facilities such as the Burke Gilman (northern portion), Sammamish River, SR 520, I-90, and Lake Washington Trails, but critical gaps exist in the bikeway network. The bicycle trail network is more fully developed than the bicycle on-road network, which needs significant improvements to ensure that it adequately accommodates bicycle travel. There are also some difficult roadway crossings and a need to improve east/west connections. There is very limited wayfinding signage, although five cities (Bellevue, Redmond, Kirkland, Issaquah, and Bothell) recently jointly applied for, and received, grant funding to begin planning on a coordinated bicycle wayfinding system.

Sidewalk coverage in the Eastside SMART Corridor varies greatly. Some communities have fairly complete sidewalk systems, while others are underdeveloped. The connectivity of the underlying street network also varies greatly. Some older neighborhoods are laid out in some form of a grid pattern highly conducive to walking. However, other communities established in the decades after World War II have street networks that rate poorly in terms of connectivity (large block sizes, many cul-de sacs, neighborhoods with few access points, etc.). Making these communities walkable poses a difficult challenge.

The overall walkability in the various Eastside town centers also varies greatly. Some, such as downtown Kirkland, rate very well with complete sidewalks, small block sizes, and pedestrian-scale development. Others, such as Totem Lake, are dominated by large “big-box” retail surrounded by large surface parking lots.

Pedestrian access to transit service varies in quantity and quality, with some routes lacking covered waiting areas, route information, and benches. Pedestrian improvements are needed to enhance access to bus rapid transit service currently programmed to link Bellevue and Redmond on NE 8th St and 156th Ave NE.

Bicycle and Pedestrian Safety: As part of *Target Zero*, schools in the Eastside SMART Corridor have been focusing on the Safe Routes to School approach, successfully obtaining grants to develop their programs. Stevenson Elementary School in Bellevue has improved crosswalks and signage for walking to and from school.

Bicycle Parking: King County Metro and Sound Transit offer secure bicycle lockers at park-and-ride lots and transit centers as well as bicycle racks on buses. As of February 2009, there is a waitlist for lockers at the Kenmore, Redmond, South Bellevue, and South Kirkland park-and-ride lots. In 2008 King County Metro began a demonstration/pilot project on the SR 520 Bridge allowing deadheading coaches to provide free bike service in either direction between

²⁸ Existing conditions provided in fall 2009 by participants in the Bicycle and Pedestrian Advisory Committee.

Montlake and Evergreen Point to free up capacity for cyclists making longer trips using regular in-service coaches across the lake. It also supports the increase in cyclists traveling across the SR 520 Bridge, which has no pedestrian or bicycle access. There is very limited information on the availability of bicycle racks and end-of-trip facilities such as lockers and showers.

Freight: All of the major facilities identified within the Eastside SMART Corridor are significant to freight and are classified as either T1 or T2 on the State of Washington's freight tonnage classification system, each moving more than 4-10 million tons per year (with the exception of Bellevue Way and 148th above SR 520).

Park-and-Ride Lots: The Eastside SMART Corridor contains nine major (over 250 stalls) lots and 28 smaller (fewer than 250 stalls) park-and-ride lots in the corridor totaling 4,230 stalls with an average utilization rate of 61% (2009).

Park-and-Ride Lot	2009 Capacity	2009 Occupancy	2009 Utilization
Bear Creek P&R	283	288	102%
Bellevue Christian Reformed Church	20	1	5%
Bellevue Foursquare Church	35	4	11%
Bethany Bible Church	75	68	91%
Bothell P&R	220	200	91%
Brickyard Road P&R	233	228	98%
Cottage Lake Assembly of God P&R	20	8	40%
Eastgate Congregational Church P&R	20	12	60%
Eastgate P&R	1,614	1,294	80%
Evergreen Point Bridge	51	44	86%
Grace Lutheran Church	50	42	84%
Holy Spirit Lutheran Church	40	19	48%
Houghton	470	143	30%
Kenmore Community Church	15	8	53%
Kenmore P&R	603	526	87%
Kennydale United Methodist Church	50	51	102%
Kingsgate P&R	502	434	86%
Korean Covenant Church	30	8	27%
Newport Covenant Church	75	40	53%
Newport Hills Community Church	37	21	57%
Newport Hills P&R	275	167	61%
Overlake P&R	203	87	43%
Overlake Transit Center	170	176	104%
Redmond Home Depot*	178	40	22%
Redmond Interim*	110	106	96%
Redmond P&R**	221	178	81%
Redwood Family Church	10	3	30%
Renton Boeing Lot 12	225	216	96%
Renton Highlands	146	115	79%
South Bellevue P&R	519	551	106%
South Kirkland P&R	596	590	99%
SR 908/Kirkland Way	20	16	80%
St. Andrews Lutheran Church	20	4	20%
St. Luke's Lutheran Church-Bellevue	30	5	17%
St. Margeret's Episcopal Church	64	34	53%
St. Thomas Episcopal Church	52	24	46%
Wilburton P&R	186	162	87%
Woodinville P&R	438	185	42%
Woodinville Unitarian Universalist Church	30	0	0%

* Closed 7/09

** Closed 6/08, Opened 7/09

Security and Emergency Management: According to the Regional Transportation Recovery Plan there is one potential disruption scenario that has been identified in the Eastside Corridor. The following describes the potential system disruption/closure and the most likely reroutes. See Maps and Alternate Routing Plan for specific and additional information.

King County Closure of I-90 I-405 Interchange

The I-90 I-405 Interchange is located just south of Bellevue and provides many different access routes to downtown Seattle, I-405 and I-90. It also is a significant freight route for east-west traffic to and from the Seattle-area. The alternative routes for this section of roadway are as follows:

- Use I-5 for north-south through traffic.
- Use SR 18 for south traffic from I-90.
- Use SR 520 for east-west traffic from I-90 to downtown Seattle.
- 148th Ave. SE should be used as a local detour.
- Lake Washington could be used as an additional transportation corridor for passenger-only ferries at various locations.

King County Closure of I-405 Exits 18 to 20

For the closure of I-405 at Exits 18 thru 20, there are several routes presented as alternatives.

Regional Trips

- Northbound traffic from I-405 will be diverted onto I-90 to I-5 and SR 522 back to I-405.
- Southbound traffic from I-405 will be diverted onto SR 522 to I-5 and I-90 back onto I-405.

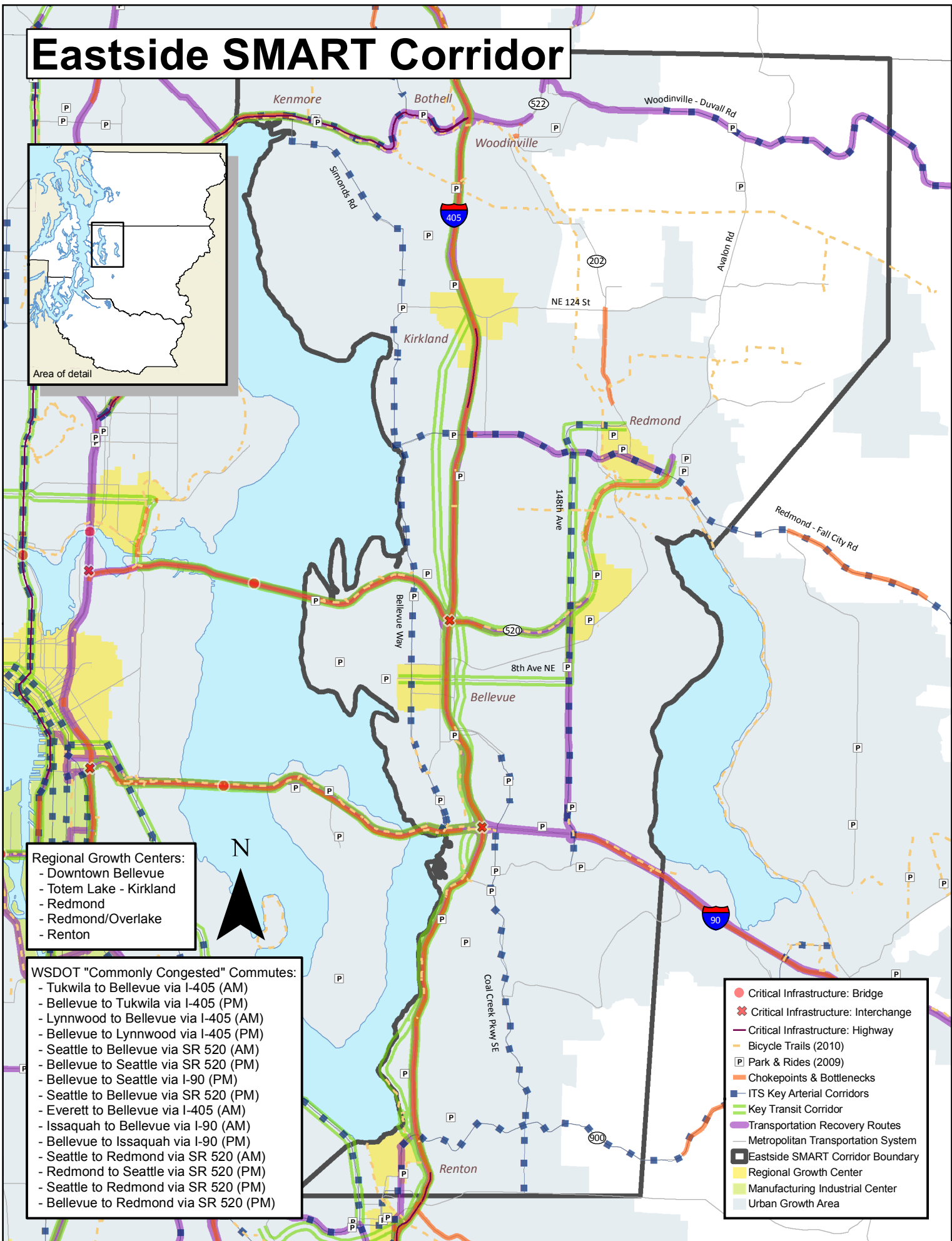
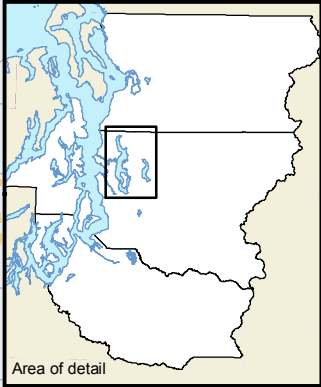
Local Trips

- Northbound I-405 traffic headed for local destinations east of I-405 such as Redmond and Totem Lake will exit eastbound to NE 85th Street at exit 18. Detour routing will lead from eastbound NE 85th Street north to NE 124th Street.
- Northbound I-405 traffic headed for local destinations west of I-405 such as Kirkland and Kenmore will exit westbound to NE 70th Street at exit 17. Detour routing will lead from eastbound NE 70th/68th Streets to northbound 6th Street.
- Southbound I-405 traffic headed for local destinations east of I-405 such as Redmond and Totem Lake will exit eastbound to NE 160th Street at exit 22. Detour routing will lead from eastbound NE 160th Street to 124th Avenue NE.
- Southbound I-405 traffic headed for local destinations west of I-405 such as Kirkland and Kenmore will exit westbound to NE 124th Street at exit 20. Detour routing will lead from eastbound NE 124th Street to southbound NE 100th Street.

King County Closure of I-405 SR 520 Interchange

The I-405 and SR 520 Interchange is a major interchange for north-south traffic on I-405 as well as the east-west traffic on SR 520. The alternate routes consist of using the I-90 via the floating bridge, or by going around the lake either to the north or to the south. Lake Washington could be used as an additional transportation corridor for passenger-only ferries at various locations.

Eastside SMART Corridor



- Regional Growth Centers:**
- Downtown Bellevue
 - Totem Lake - Kirkland
 - Redmond
 - Redmond/Overlake
 - Renton

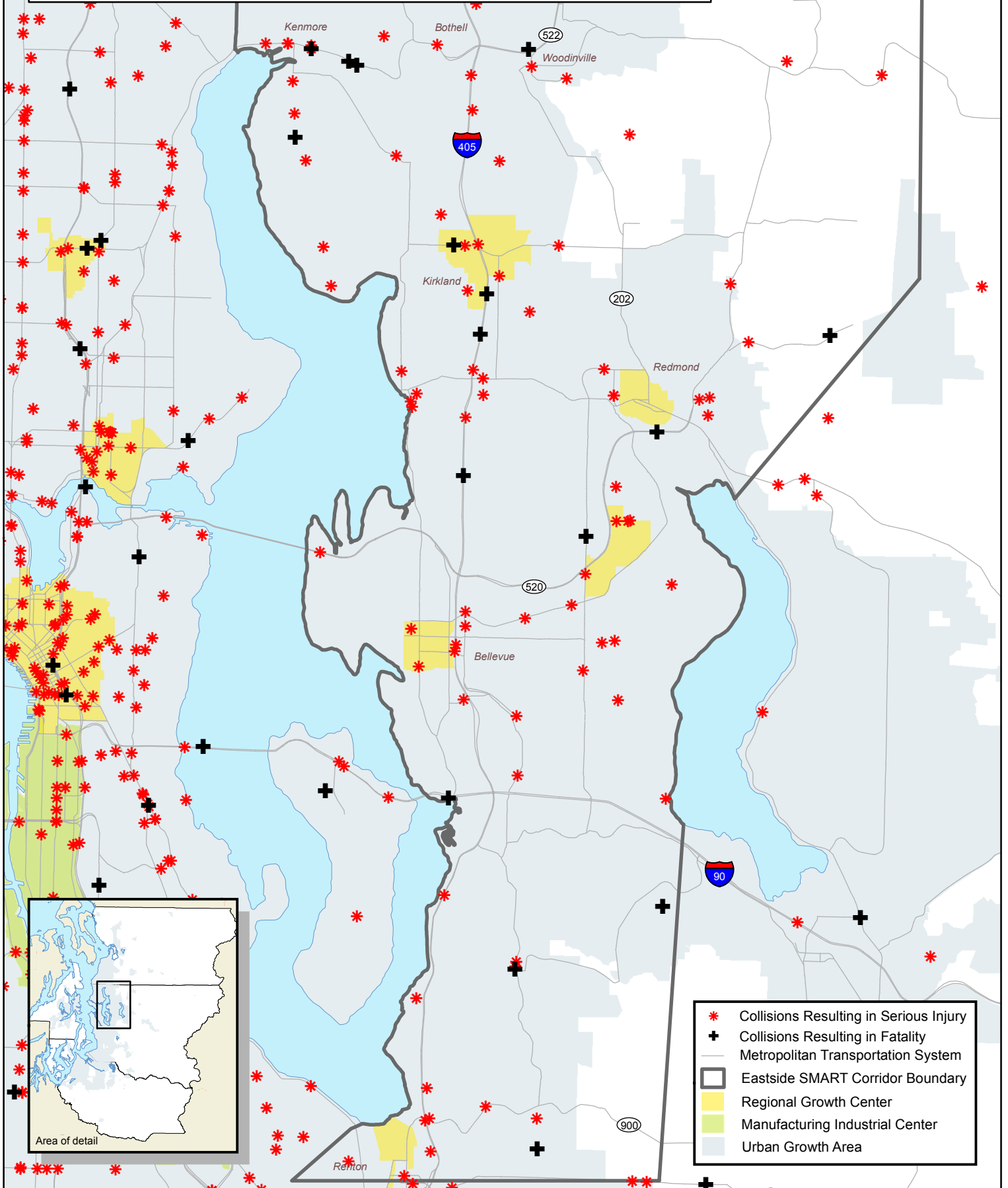


- WSDOT "Commonly Congested" Commutes:**
- Tukwila to Bellevue via I-405 (AM)
 - Bellevue to Tukwila via I-405 (PM)
 - Lynnwood to Bellevue via I-405 (AM)
 - Bellevue to Lynnwood via I-405 (PM)
 - Seattle to Bellevue via SR 520 (AM)
 - Bellevue to Seattle via SR 520 (PM)
 - Bellevue to Seattle via I-90 (PM)
 - Seattle to Bellevue via SR 520 (PM)
 - Everett to Bellevue via I-405 (AM)
 - Issaquah to Bellevue via I-90 (AM)
 - Bellevue to Issaquah via I-90 (PM)
 - Seattle to Redmond via SR 520 (AM)
 - Redmond to Seattle via SR 520 (PM)
 - Seattle to Redmond via SR 520 (PM)
 - Bellevue to Redmond via SR 520 (PM)

- Critical Infrastructure: Bridge
- ✕ Critical Infrastructure: Interchange
- Critical Infrastructure: Highway
- Bicycle Trails (2010)
- Ⓟ Park & Rides (2009)
- Chokepoints & Bottlenecks
- ITS Key Arterial Corridors
- Key Transit Corridor
- Transportation Recovery Routes
- Metropolitan Transportation System
- ▭ Eastside SMART Corridor Boundary
- ▭ Regional Growth Center
- ▭ Manufacturing Industrial Center
- ▭ Urban Growth Area

Eastside SMART Corridor

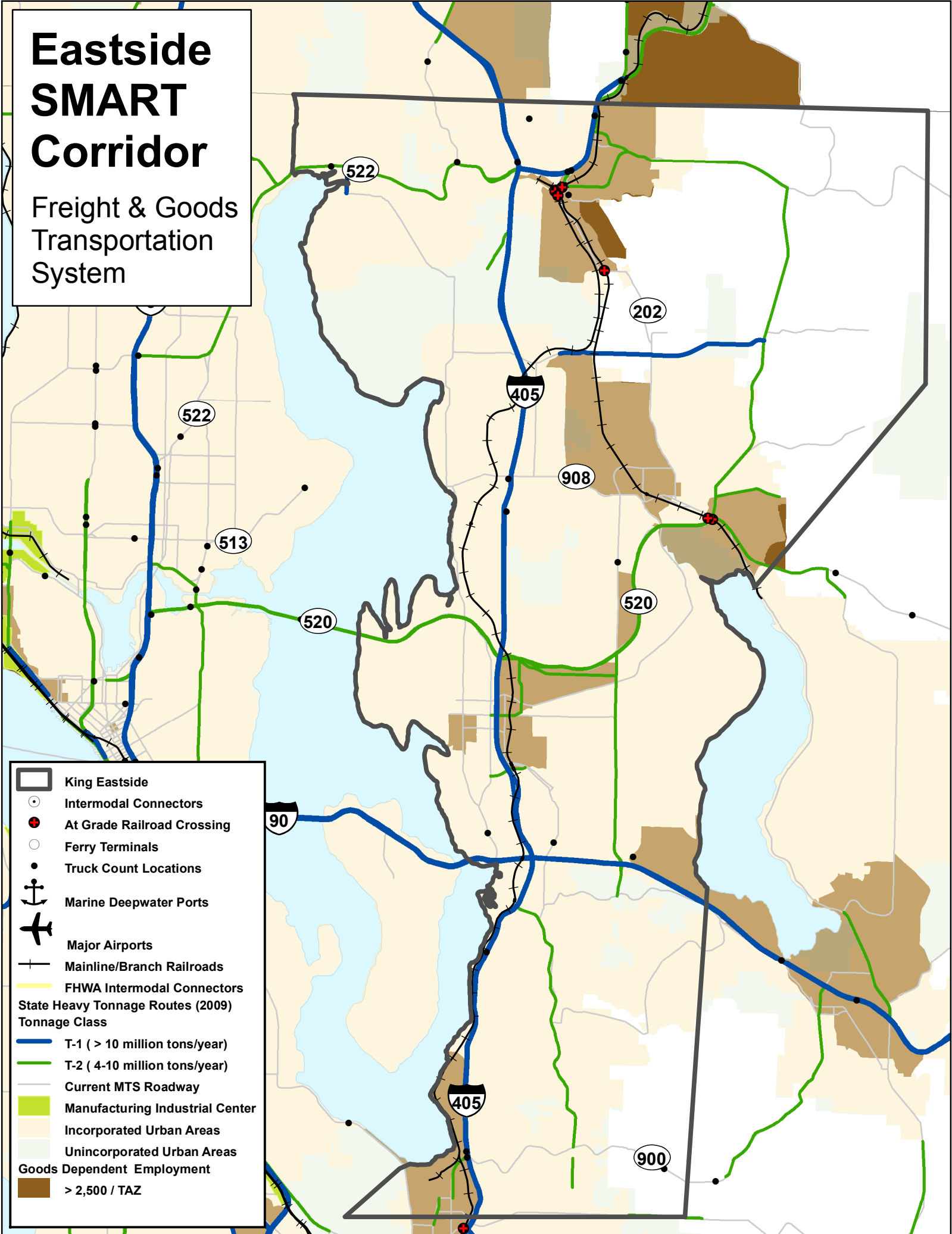
2007: Collisions Resulting in Serious Injury or Fatality



















Note: Collision data provided to PSRC by WSDOT Transportation Data Office

Eastside SMART Corridor

Freight & Goods
Transportation
System



-  King Eastside
-  Intermodal Connectors
-  At Grade Railroad Crossing
-  Ferry Terminals
-  Truck Count Locations
-  Marine Deepwater Ports
-  Major Airports
-  Mainline/Branch Railroads
-  FHWA Intermodal Connectors
- State Heavy Tonnage Routes (2009)
Tonnage Class
-  T-1 (> 10 million tons/year)
-  T-2 (4-10 million tons/year)
-  Current MTS Roadway
-  Manufacturing Industrial Center
-  Incorporated Urban Areas
-  Unincorporated Urban Areas
- Goods Dependent Employment
-  > 2,500 / TAZ