

## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### **CHARACTERISTICS**

#### **Segment Description:**

This corridor starts from NW Nichols Blvd. within the City of Longview, goes into the City of Kelso and ends at I-5/SR 4 interchange.

**County/Counties:** Cowlitz

**Cities/Towns Included:** This corridor passes through the cities of Longview and Kelso.

**Number of lanes in the corridor:** 3 to 6

**Lane width:** 11 to 12 feet.

**Speed limit:** 25 to 35 mph.

**Median width:** 1 to 4 feet.

**Shoulder width:** 0 to 0 feet.

#### **Highway Characteristics:**

This corridor is in the National Highway System (NHS).

Its State Functional Class is U1 - Urban Major Arterial, speed limit ranges from 25 mph to 35 mph.

This corridor is a State Scenic Byway.

Based on 2004 data, this corridor carries a T-3 freight designation with 1,580,000 tons hauled annually.

#### **Special Use Lane Information (HOV, Bicycle, Climbing):**

There are two way turn lanes throughout this corridor.

#### **Access Control Type(s):**

This corridor consists of Managed Access Class 5 (125-foot minimum access spacing), Partial Control Limited Access (no commercial approaches are permitted). No Control Access, and Full Control Limited Access (accesses are permitted only through interchanges).

#### **Terrain Characteristics:**

Generally level terrain throughout the limits of the corridor analysis. This corridor lies primarily within the flood plain of the Lewis River.

#### **Natural Features:**

This corridor is located in a dense downtown environment. It crosses Cowlitz River and ends at I-5.

#### **Adjacent Land Description:**

Commercial, residential, and mixed-use.

#### **Environmental Issues:**













This area is urban in nature and wetlands are not anticipated unless any proposed improvement project impacts a portion of Lake Sacajawea.

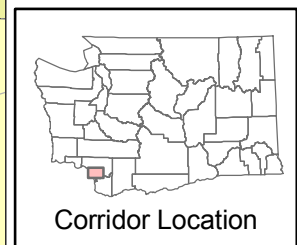
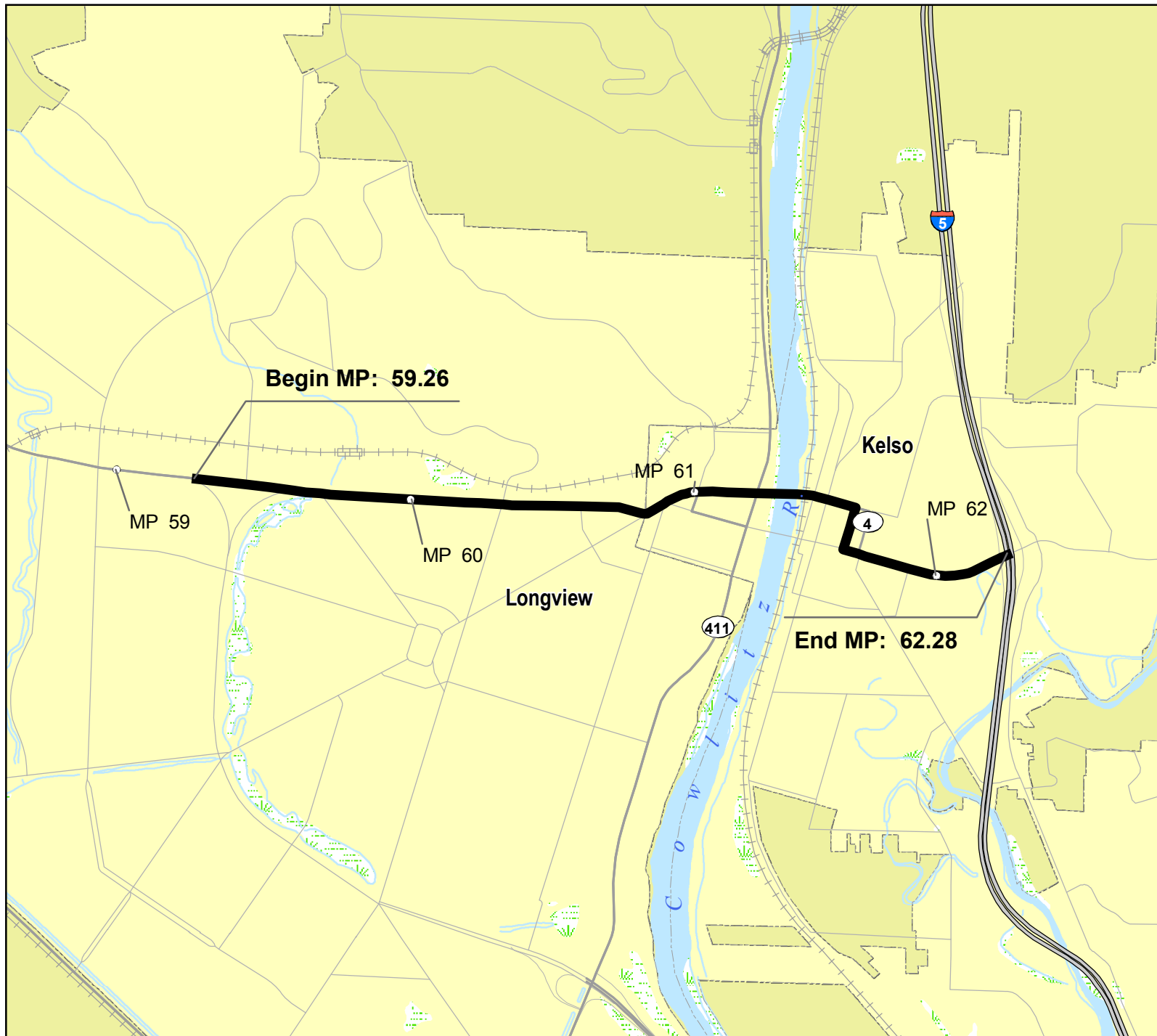
#### **Major Economic Issues:**

This corridor is located in downtown areas with high density. It has significant impacts on local businesses. SR 4 is also one of the two highways in the region that connects US 101 and I-5.

# HSP Congested Corridor Analysis

## Characteristics

-  HSP Corridor Location
-  U.S. Interstate
-  U.S. Highway
-  State Route
-  Local Roads
-  Railroad
-  Wetlands
-  Military Reservation
-  Tribal Lands
-  City Limits
-  Urban Area
-  County Line



November, 2006



## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### **ASSETS**

#### **Pavement:**

There are 14.31 lane miles of Hot Mix Asphalt on this segment of SR 4.

#### **Signal:**

There are 15 signalized intersections throughout this corridor.

#### **Structures:**

There is one structure in this corridor that consists of a Steel Truss Concrete T-Beam.

(Ramps, and locally owned structures (if any exist) are not identified in this section and may not be reflected on maps.)

#### **Features Crossed:**

This segment crosses the Cowlitz river.

#### **ITS Facilities:**

There are no Intelligent Transportation Facilities on this corridor.

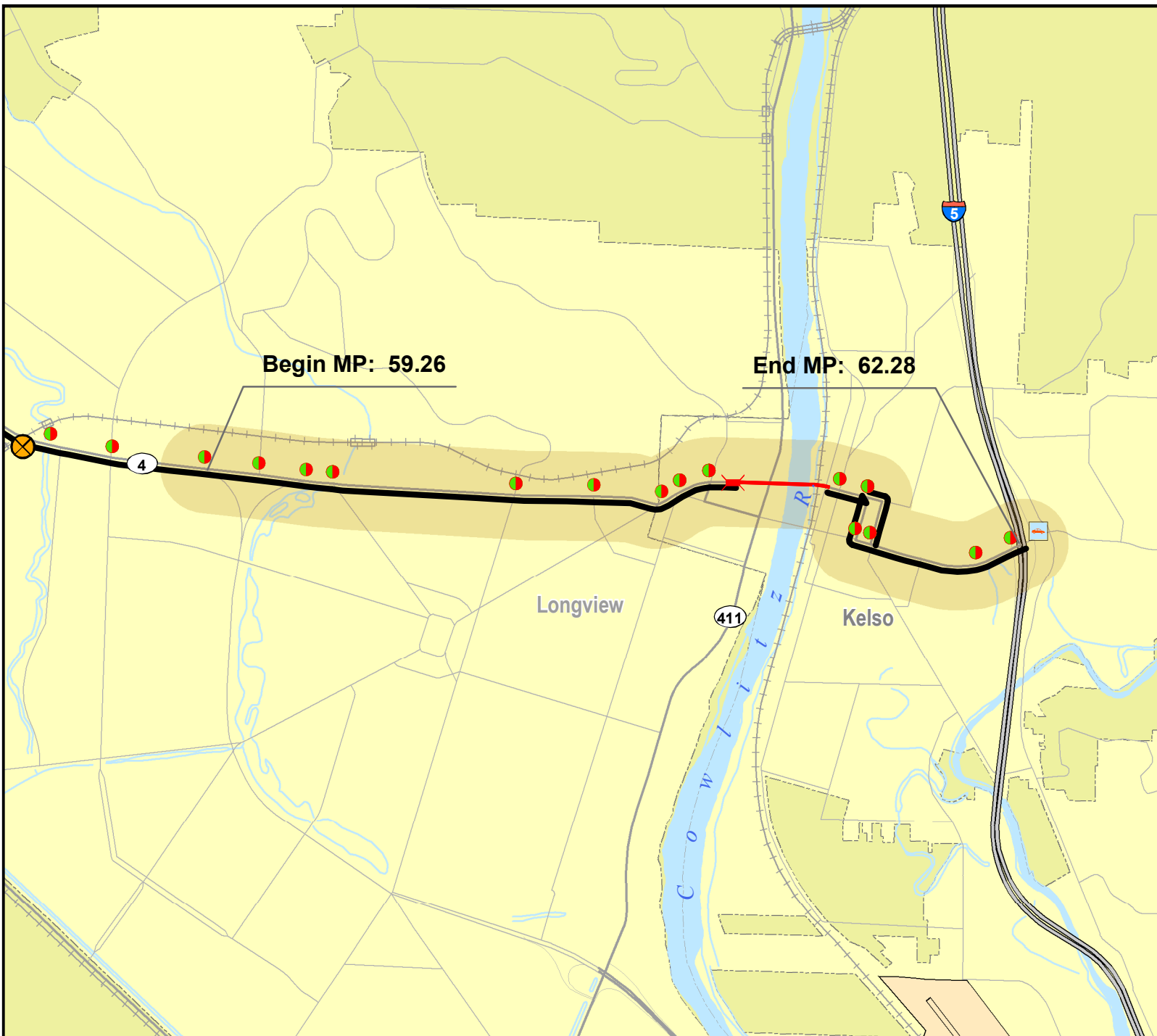
#### **Railroad Crossings:**

There are no at-grade railroad crossings on this corridor.

#### **Asset Other:**

**NONE IDENTIFIED.**

# HSP Congested Corridor Analysis Assets



- Corridor Location
- Assets**
- Signalized Intersection
- At Grade Railroad Crossings
- Bridge
- Weigh Stations
- Rest Area Sites
- Ferry Terminal
- Park and Ride
- Corridor Pavement Type**
- HMA
- BST
- PCCP
- Other Features**
- U.S. Interstate
- U.S. Highway
- State Route
- Local Roads
- Ferry Route
- Railroad
- Military Reservation
- Tribal Lands
- City Limits
- Urban Area
- Airports
- County Line

## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### *USAGE*

#### **General Origin and Destination Travel Characteristics:**

This section of highway is used mainly by local commuters and businesses.

#### **Snow/ice Issues:**

There are no sections within this corridor which present a problem for normal snow/ice control.

#### **Annual Average Daily Traffic:**

Ranges from 13,600 to 38,300.

#### **Significant Seasonal Average Annual Daily Traffic Changes:**

There are no significant seasonal annual average daily traffic changes for this section of SR 4.

#### **General Description of Major Average Annual Daily Traffic Locations:**

At the SR 4 Couplet the annual average daily traffic (AADT) is 13,600. As you enter the city of Kelso the annual average daily traffic is 38,300 at the intersections of Washington Way, Catlin St. (7th Ave Shopping Center).

#### **Freight:**

**Freight Classification:** T3

**Yearly Tonnage:** 1.6M

**Truck Percentage of Annual Average Daily Traffic:** 2.6%

#### **Additional Usage Comments:**

There are no additional comments.

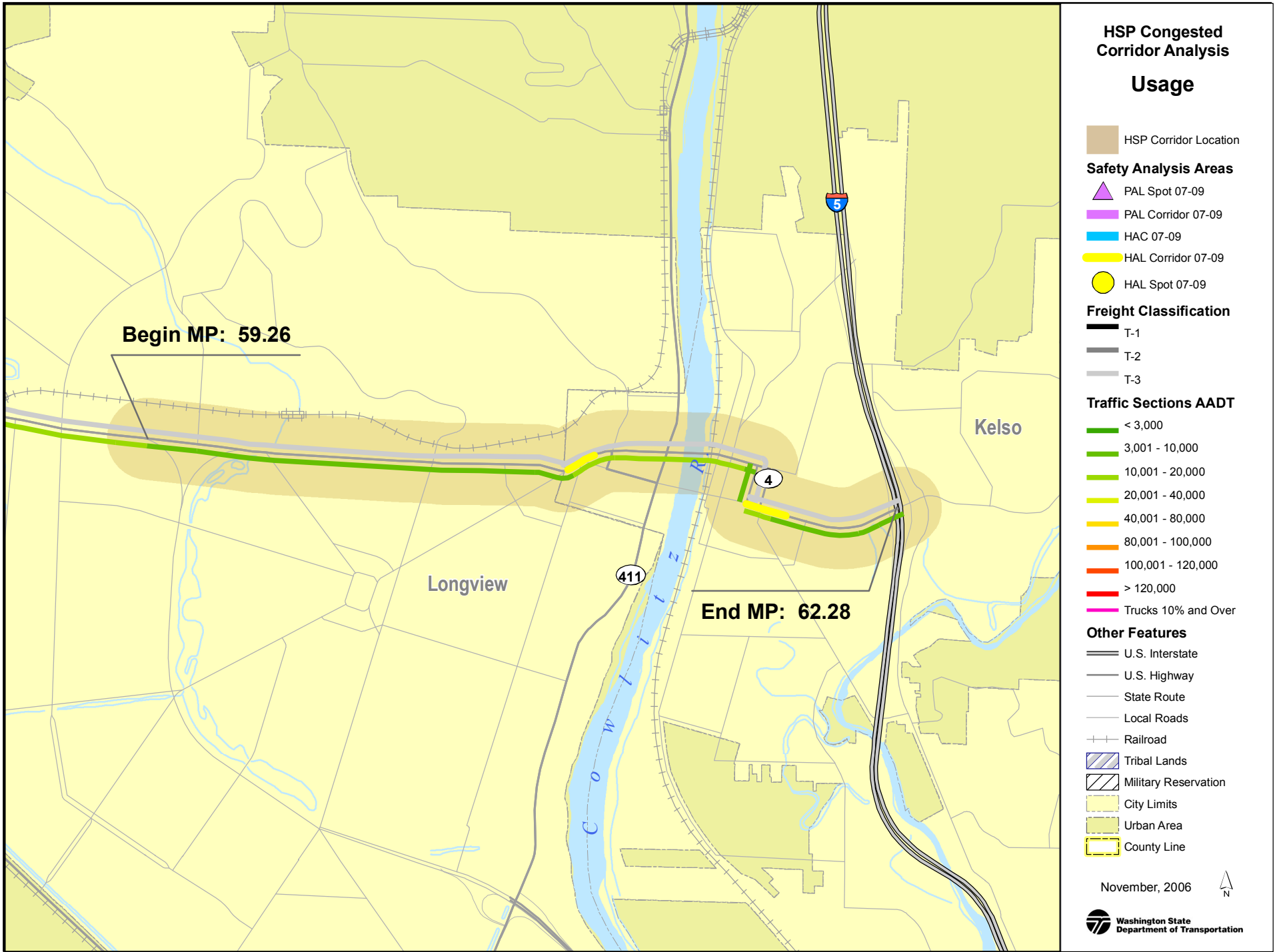
**Average Annual Societal Cost of All Collisions:** Approximately \$3.96M

#### **Collisions:**

**Severe No of Collisions:** 3

**Less Severe No of Collisions:** 434

**List Data Years:** 2003 to 2005



## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### **NEEDS AND STRATEGIES**

#### **Preservation**

##### **Pavement Condition and Needs:**

The existing pavement type is hot mix asphalt.

All of the pavement in the corridor is in need of rehabilitation because of rutting and structural deterioration.

##### **Pavement Management Strategies:**

The pavement type for this corridor will remain hot mix asphalt.

All of the lane miles in this corridor will be paved with hot mix asphalt in 2007. Estimated pavement life is 15 years; the corridor will be due for hot mix asphalt paving in 2022.

##### **Structures Condition and Needs:**

There is 1 steel truss structure on untreated timber piling in this corridor. (This may include ramps and locally owned structures if any exist.)

##### **Structures Management Strategies:**

There are none identified.

##### **Additional Condition and Needs:**

There are none identified.

##### **Additional Management Strategies:**

There are none identified.

#### **Improvement**

##### **Mobility Condition and Needs:**

This three-mile corridor goes through downtown Longview and Kelso. It is surrounded by dense urban environment. There are fifteen signals within the corridor; speed limits range from 25 mph to 35 mph. High volume and frequent access points contribute to the long delay and low speed. It is predicted that by 2030, the peak hour speeds on the corridor will be 50% of the posted speed.

##### **Mobility Management Strategies:**

To improve the mobility on this corridor, WSDOT needs to work closely with local partners and the communities. Short-term, due to the right-of-way costs, access management is a cost-effective way to reduce the congestion in the short term. Long-term, a solution for this corridor relies on the identification and development of alternative routes.

##### **Safety Condition and Needs:**

Reduce the frequency and severity of accidents along the corridor. Intersection related accidents account for 63%. 51% of all accidents occur between ARM 60 and ARM 61 (adjacent to and including intersections with Cowlitz, Washington and 7th). Existing land-uses are already built out for this corridor stressing the roadway capacity. Under 23 United State Code-Section 409, this data cannot be used in discovery or as evidence at trial in any action for damages against the WSDOT or the State of Washington. This disclaimer is for all accident data mentioned in this report.

##### **Safety Management Strategies:**

Increase access management through median curbing to mitigate high number of driveways and intersections on the south side of SR 4 and the resulting accident levels. Realign route from Washington Way to Allen St. Provide alternate routes outside this densely urbanized corridor: full development of SR 432 and clear direction to new access ramps and bridge to I-5 at Lexington St. (project in progress). Beyond fixes in this plan, monitor corridor for future high accident locations and high accident corridors. Review accidents as they occur and develop solutions commensurate to the severity and causes.

##### **Environmental Condition and Needs:**

There are no fish barriers. There are two stream crossings (Cowlitz River is one of these) in this corridor with associated riparian and wetland areas that provide habitat for vegetation, fish and wildlife. There is a slough located to the south in close proximity

## SR 4 LONGVIEW/KELSO/I-5 AREA

---

to the western end of the corridor that may have lost connectivity to the north when the roadway was built. There are approximately 30 known stormwater outfalls located along this corridor.

### **Environmental Management Strategies:**

Proposed improvement solutions will take into consideration the existing environmental conditions of the corridor and make every effort to minimize any potential adverse impacts.

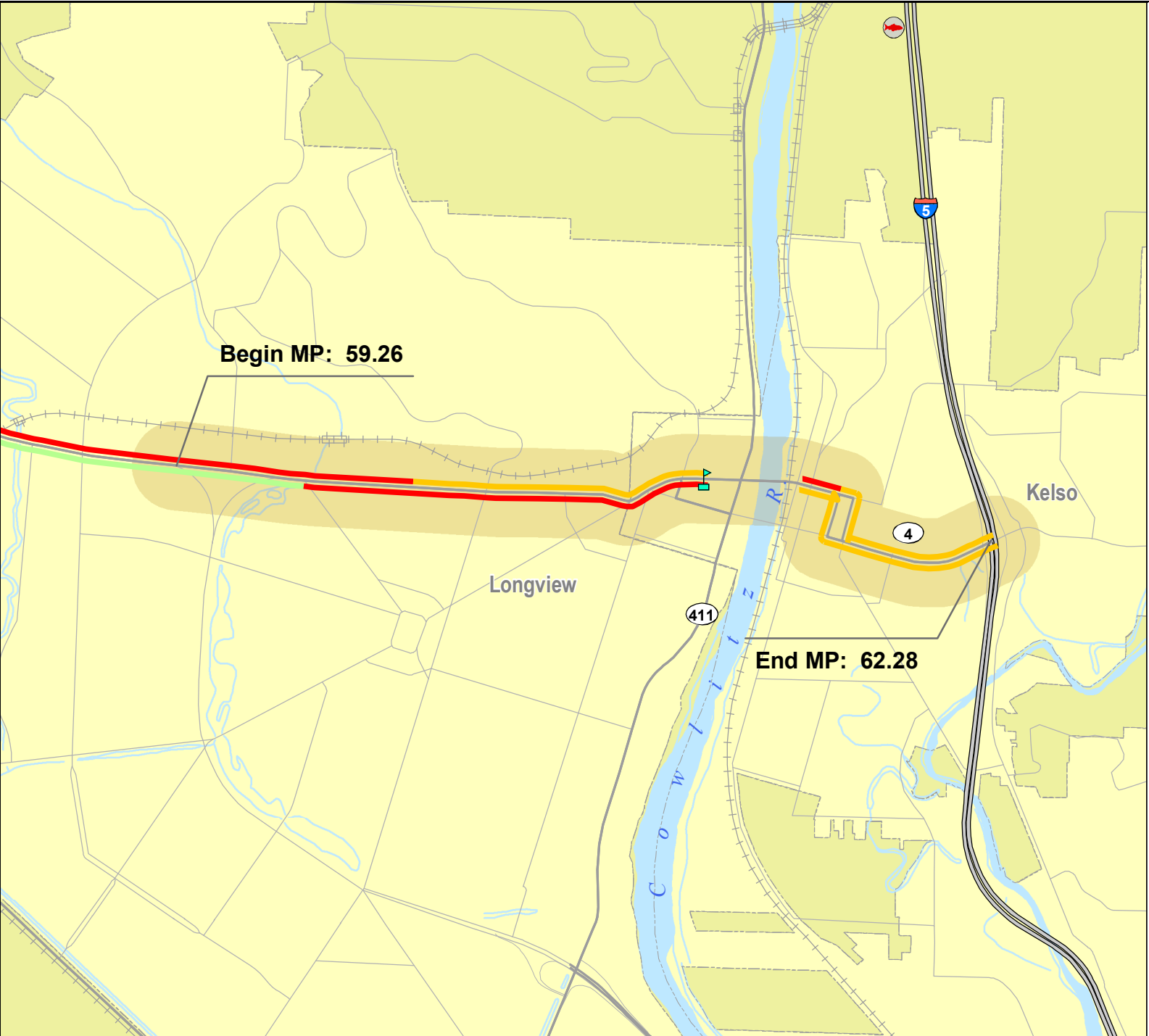
### **Restrictions:**

There are none identified.

### **50-Year Configuration:**

The SR 4 congested corridor segment that runs through the Kelso and Longview communities most likely will not see significant change since the right of way is in a dense commercial downtown location. Parallel routes are the 50 year corridor configuration for SR 4, including the full development of the SR 432 corridor and the establishment of the new bridge crossing to I-5 at Lexington Avenue (project currently in progress).

# HSP Congested Corridor Analysis Needs



- HSP Corridor Location
- Bridge Replacement Priority**
  - Replacement
  - Seismic
  - Special
  - Scour
  - Painting
  - Miscellaneous
  - Bridge Deck
- Other Bridge Issues**
  - 2 Lane BW Narrow Bridge
  - Restricted Bridge
  - Posted Bridge
  - Vert. Clearance 15.5' Or Less
- Fish Barriers**
  - Require Repair
  - Little Gain
  - Undetermined
- Unstable Slope**
  - Debris Flow
  - Erosion
  - Landslide
  - Rockfall
  - Settlement
- Paving Due**
  - Past Due
  - 2005 - 2007
  - 2008 - 2009
  - 2010 - 2011
  - 2012 - 2026
- Infrastructure**
  - U.S. Interstate
  - U.S. Highway
  - State Route
  - Local Roads
  - Railroad
  - Military Reservation
  - Tribal Lands
  - City Limits
  - Urban Area
  - County Line

November, 2006

## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### ***TIERED PROPOSED SOLUTIONS***

#### **Minimum Fix**

**Description:**

Access management and median curb, where feasible, between intersections 32nd Ave to Washington Way (ARM 58.71 - 60.78)  
B/C Ratio = 2.09. Only safety benefits are included.

**Delay Reduction:** None identified.

**Collision Reduction:** 10%

**Deficient Concrete Lane Miles:** None identified.

**Total Estimate Cost:** \$2.1 million

**Cost Estimate Explanation:**

Assume a construction cost of \$50 per linear foot for the median curb.

**Minimum Fix Benefits:**

There are a total of 14 intersections and 73 driveways at the south side of this section of SR 4. The mobility benefits are hard to quantify; but the safety benefits alone give this project a Benefit Cost ratio (B/C) of 2.09.

#### **Moderate Fix**

**Description:**

Realignment from Washington Way to Allen St., including widening and left turn channelization  
Note that this project is not on a state managed route. This would be a city project.

**Delay Reduction:** None identified.

**Collisions Reduction:** None identified.

**Deficient Concrete Lane Miles:** None identified.

**Total Estimate Cost:** None identified.

**Cost Estimate Explanation:**

None identified.

**Moderate Fix Benefits:**

None identified.

#### **Maximum Fix**

**Description:**

Alternative corridor (SR 432) - (50 year vision)

**Delays Reduction:** None identified.

**Collisions Reduction:** None identified.

**Deficient Concrete Lane Miles:** None identified.

**Total Estimate Cost:** None identified.

**Cost Estimate Explanation:**

Not available for 50-year vision.

**Maximum Fix Benefits:**

None identified.

## SR 4 LONGVIEW/KELSO/I-5 AREA

---

### Off-System Solutions:

None identified.

### Special Studies/Reports:

SR 432 Realignment Feasibility Study (\$500,000, led by CWCOG - Cowlitz-Wahkiakum Council of Governments) - in process.

### Required Studies

There are no identified required studies.

### Start/Completion Date of Study:

There are no planned start/completion dates.

### Expected Results

Not Applicable.

### Funded Projects within Corridor Limits

Project No	Title
400406U	SR 4/Coal Creek Road to I-5 - Paving

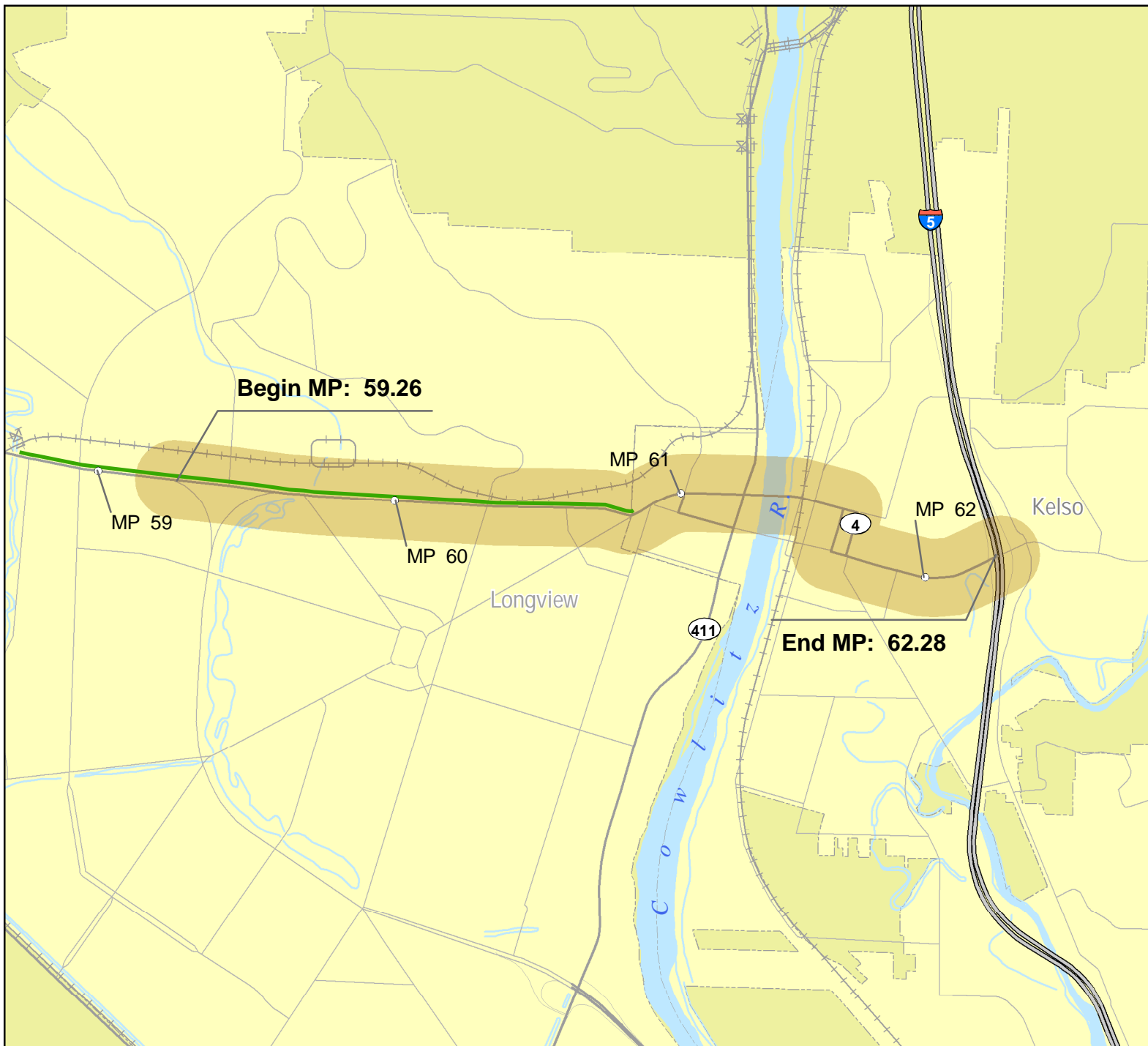
### Additional Comments:

None identified.

### Data Sources and Contacts used:

Washington State Highway System Plan: 2003-2022, dated February 2002  
GIS Environmental and Transportation Workbench  
Capital Improvement and Preservation Program  
Transportation Data Office  
Washington State Highway Log 2005B  
WSDOT Kelso Area Engineering Office  
WSDOT SWR Environmental Service Office  
WSDOT SWR Real Estate Office  
WSDOT SWR Traffic Office  
WSDOT BidTabs Professional Database  
Washington State Pavement Management System, 2005

# HSP Congested Corridor Analysis Solutions



- HSP Corridor Location
- Solutions**
- Tier 1
- Tier 2
- Tier 3
- Other Features**
- U.S. Interstate
- U.S. Highway
- State Route
- Milepost Marker
- Local Roads
- Railroad
- Tribal Lands
- Military Reservation
- City Limits
- Urban Area
- COUNTY

November, 2006

