

## US 395 - MP 15.56 TO MP 20.28

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### **CHARACTERISTICS**

#### **Segment Description:**

This route segment begins at the intersection of US 395 and 19th Ave. in Kennewick and ends at the I-182/US 395 interchange.

**County/Counties:** Benton

**Cities/Towns Included:** This corridor runs through Kennewick.

**Number of lanes in the corridor:** 4 to 6

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

**Speed limit:** 55 to 55 mph.

**Median width:** 0 to 0 feet.

**Shoulder width:** 4 to 10 feet.

#### **Highway Characteristics:**

This urban-principal arterial is classed as both HSS and NHS. It carries a T-1 freight designation carrying 19,300,000 tons per year.

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

There are no special use lanes.

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

This section varies between Partial, Modified and Full Limited Access Control throughout the project limits.

#### **Terrain Characteristics:**

The terrain in this section is relatively flat to rolling

#### **Natural Features:**

This section allows access to parks and recreational areas. It parallels the Columbia River and allows connection to semi-arid dessert areas within proximity to this section.

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

This section is adjacent to residential, and commercial land uses, as well as the shore line of the Columbia River.

#### **Environmental Issues:**

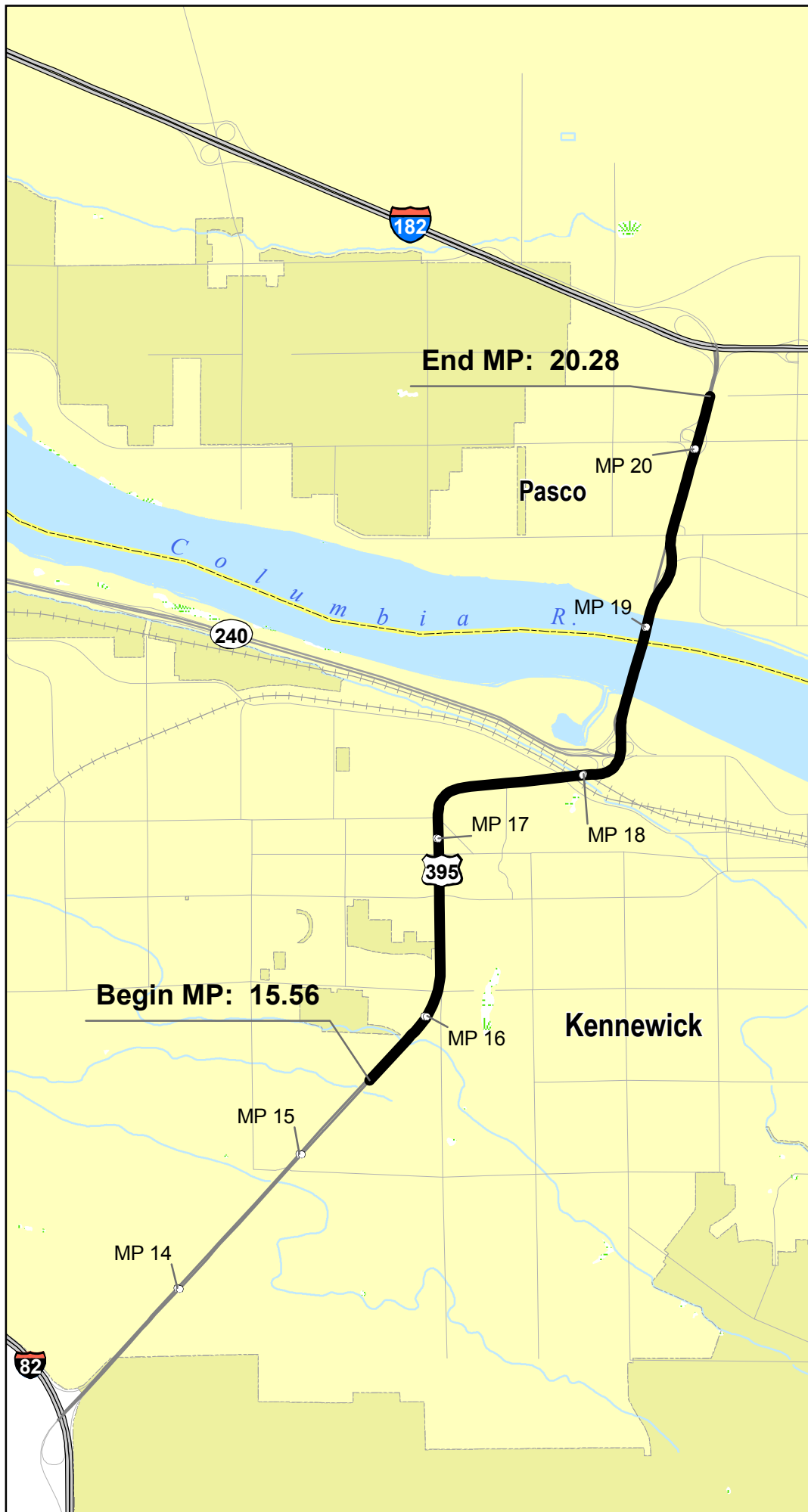
Working within the wetted perimeter of the Columbia River.

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

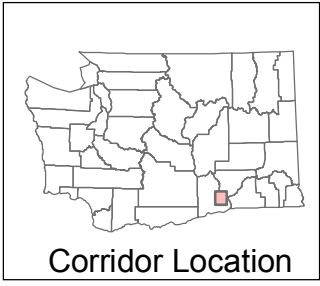
There are no major economic issues

# HSP Congested Corridor Analysis

## Characteristics



- Milepost Marks
- █ 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



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### **ASSETS**

#### **Pavement:**

There are 18.88 lane miles of Hot Mix Asphalt on this segment of SR 395. The mainline legs of intersections have been paved with PCCP because of heavy truck volumes.

#### **Signal:**

There are six signalized intersections within the City of Kennewick.

#### **Structures:**

There are nine structures in this corridor that consist of: two Concrete Box Girder, one Concrete Slab, three Concrete T-Beam, one Pre-Tensioned Concrete Beam, one Steel Arch Steel Beam Pre-Tensioned Concrete Slab and one Steel Beam. (Ramps, and locally owned structures (if any exist) are not identified in this section and may not be reflected on maps.)

#### **Features Crossed:**

395/40 crosses the Columbia River.

#### **ITS Facilities:**

There are no intelligent Transportation systems on this corridor.

#### **Railroad Crossings:**

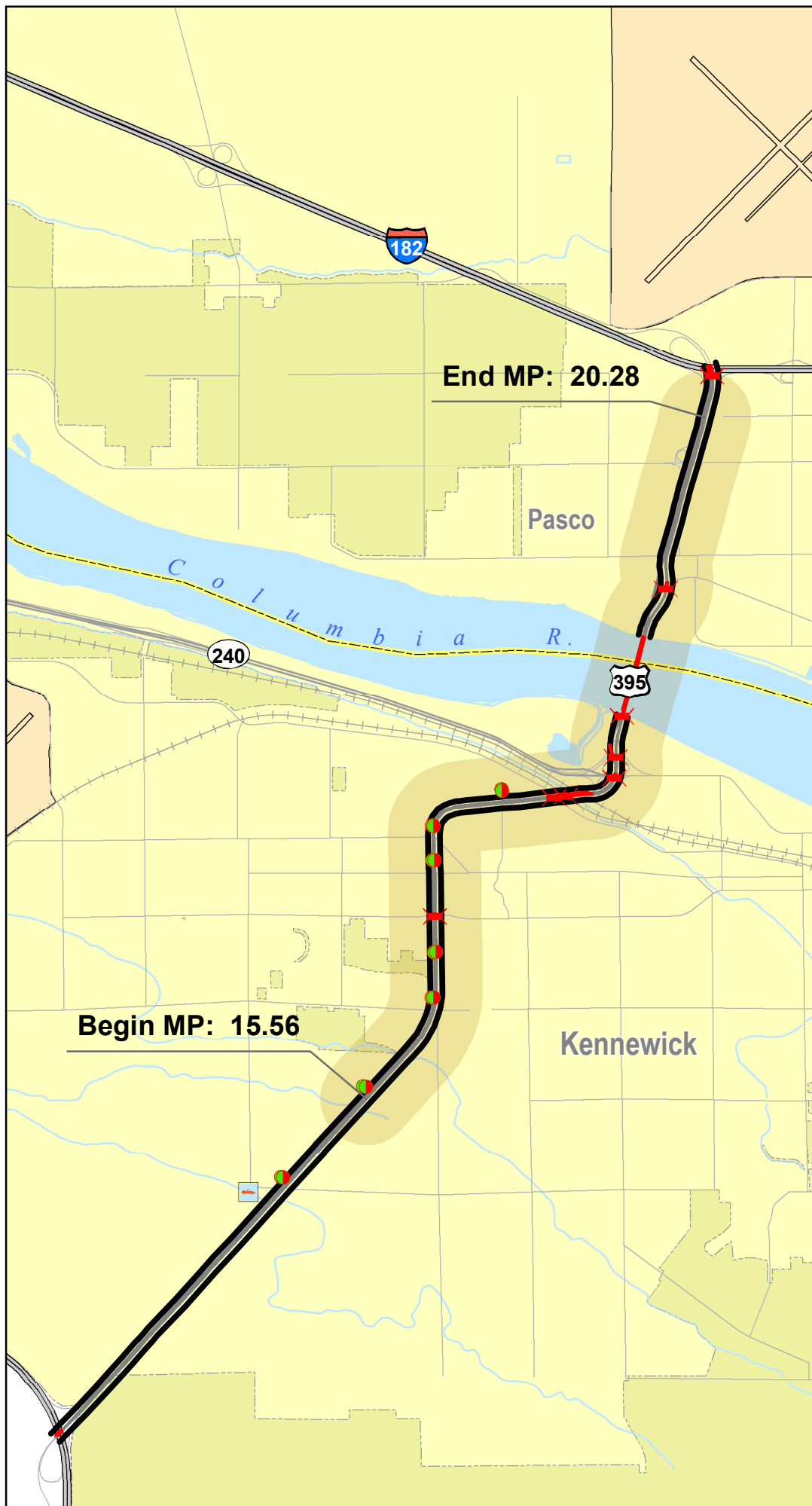
There are no at-grade rail crossings within this route segment.

#### **Asset Other:**

None Identified.

# HSP Congested Corridor Analysis

## Assets



HSP Corridor Location

### Assets

- Signalized Intersection
- At Grade Railroad Crossings
- Bridge
- Ferry Terminals
- Park and Ride
- Weigh Stations
- Rest Area Sites

### 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
- Airport
- County Line

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### *USAGE*

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

The majority of this route segment is a city street as well as a major truck route. It is used by commuters and truck traffic passing through.

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

There are minor snow and ice issues in this location due to curbing, driveways and intersections.

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

Ranges from 19,000 to 55,000.

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

There is minimal seasonal change in ADT.

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

The average daily traffic at the beginning of the segment is 15,000 increasing to 25,000 after 10th Ave., 39,000 at Columbia Dr. and 55,000 after the SR 240 ramp.

#### **Freight:**

**Freight Classification:** T1

**Yearly Tonnage:** 19.3M

**Truck Percentage of Annual Average Daily Traffic:** 24%

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

There are no additional comments.

**Average Annual Societal Cost of All Collisions:** Approximately \$24.64M

#### **Collisions:**

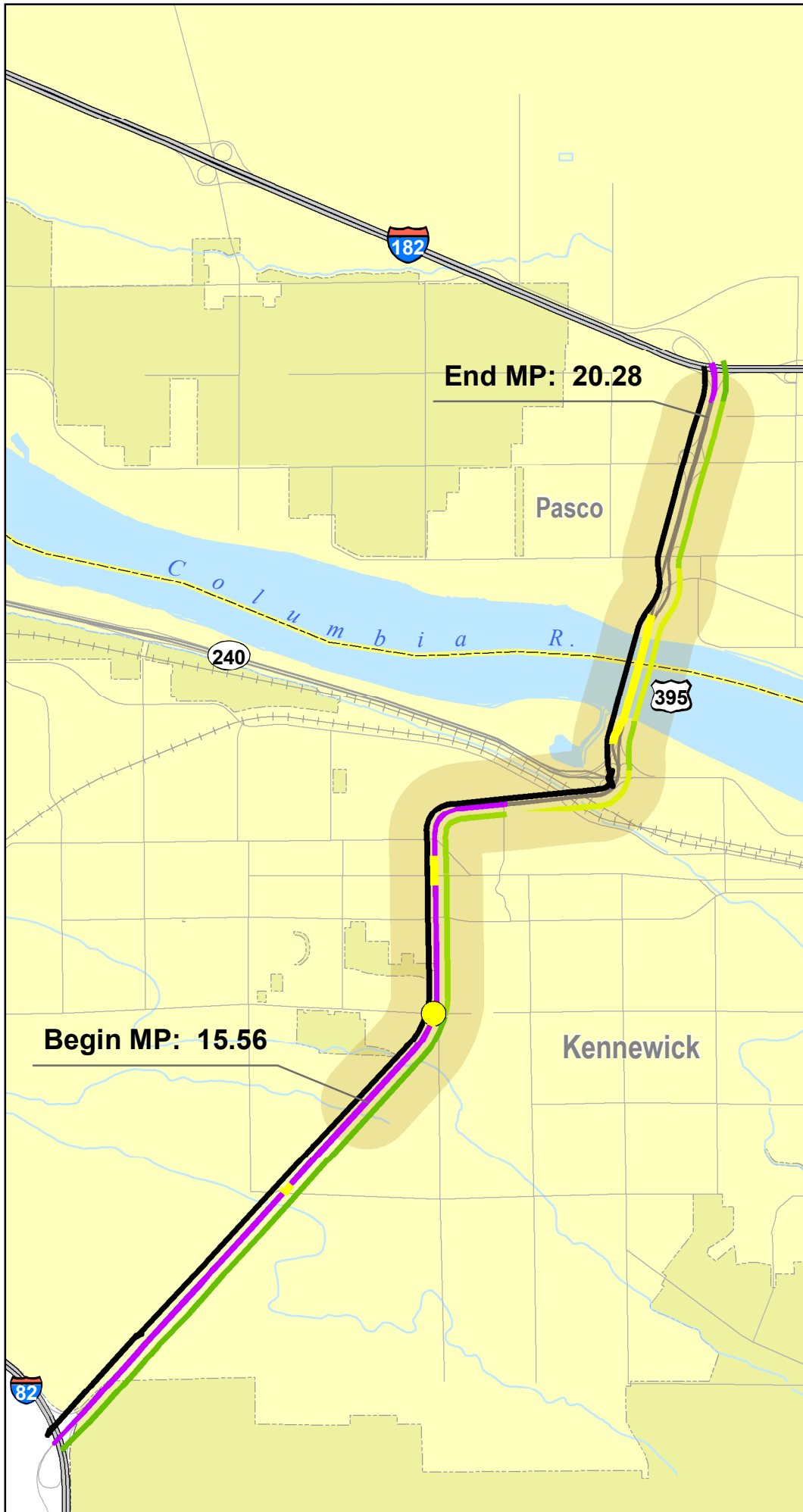
**Severe No of Collisions:** 9

**Less Severe No of Collisions:** 762

**List Data Years:** 2003 to 2005

# HSP Congested Corridor Analysis

## Usage



HSP Corridor Location

### Safety Analysis Areas

- PAL Spot 07-09
- PAL Corridor 07-09
- HAC 07-09
- HAL Corridor 07-09
- HAL Spot 07-09

### Freight Classification

- T-1
- T-2
- T-3

### Traffic Sections AADT

- < 3,000
- 3,001 - 10,000
- 10,001 - 20,000
- 20,001 - 40,000
- 40,001 - 80,000
- 80,001 - 100,000
- 100,001 - 120,000
- > 120,000
- Trucks 10% and Over

### Other Features

- U.S. Interstate
- U.S. Highway
- State Route
- Local Roads
- Railroad
- Tribal Lands
- Military Reservation
- City Limits
- Urban Area

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## ***NEEDS AND STRATEGIES***

### **Preservation**

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

This section of corridor is predominately hot mix asphalt (HMA) with the exception of the approaches to and departures from intersections in the corridor. This change was made because of heavy truck traffic.

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

This section is schedule to be resurfaced between 2009 and 2013 in the next phase of paving.

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

There are none described. (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 section experiences back-ups starting at 5:30 am and continuing throughout the day Monday through Sunday.

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

Adding two general purpose lanes will alleviate the problems in this corridor for a time by adding capacity but the ultimate fix for this corridor is to re-route the highway around the urbanized area that passes through Kennewick.

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

This section of US 395 experiences a great number of collisions many of which are rear-ends due to slowing traffic caused by congestion

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

43% of all accidents within the corridor in the three year study window occurred in the area of the US 395/SR 240 I/C and extending across the Columbia River through the Lewis Street I/C.

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

There are none identified.

#### **Environmental Management Strategies:**

There are none identified.

#### **Restrictions:**




































Misc. - Infilling around the existing US 395/SR 240 interchange with commercial and public uses (park and commercial and industrial uses).

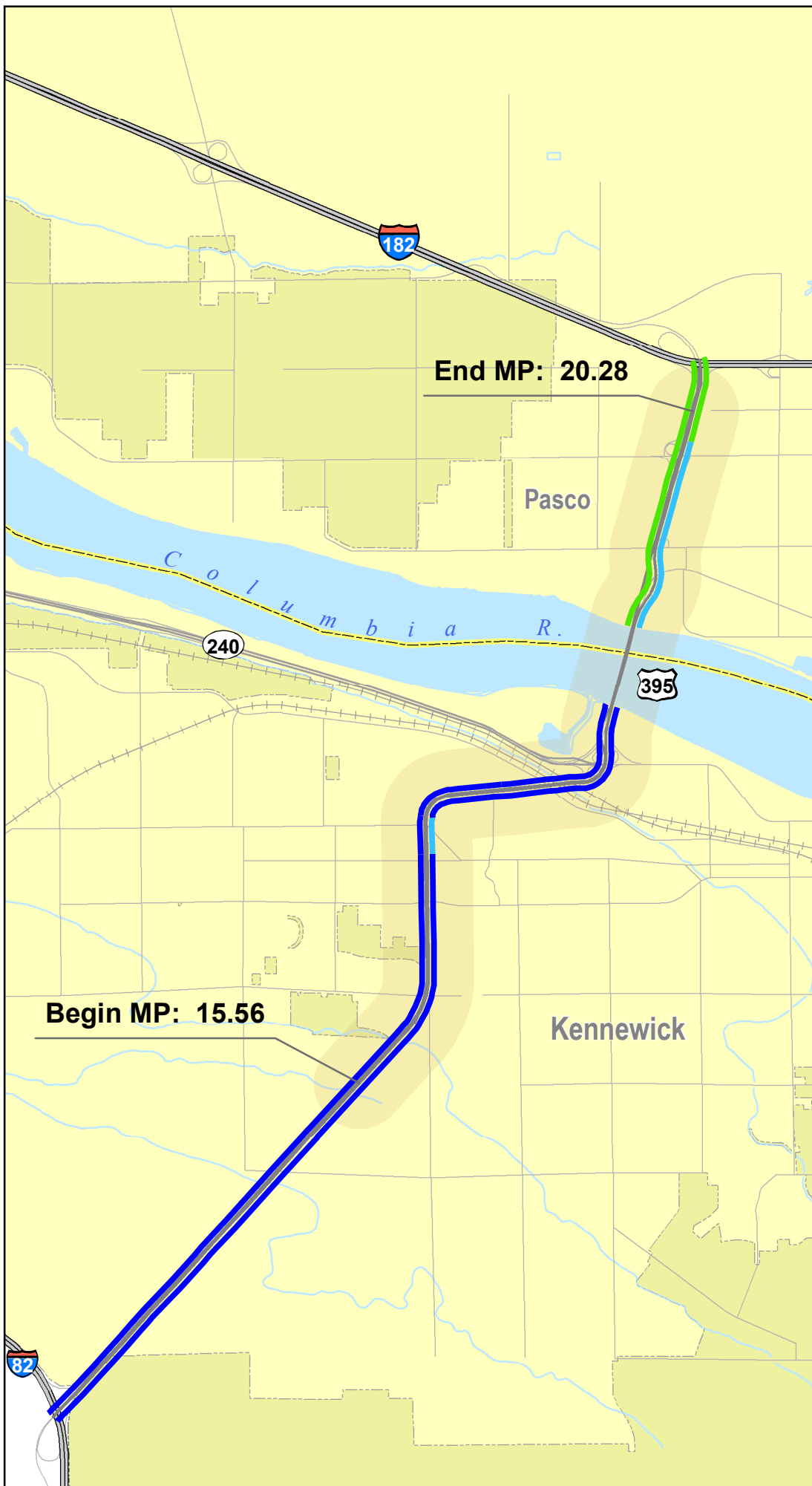
#### **50-Year Configuration:**

This corridor will continue to be clogged with traffic due to the surrounding lands that will develop as commercial and residential uses. The collector system will also become more congested as time progresses.

# HSP Congested Corridor Analysis

## Needs

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



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## ***TIERED PROPOSED SOLUTIONS***

### **Minimum Fix**

**Description:**

None Identified.

**Delay Reduction:** None identified.

**Collision Reduction:** None identified.

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

**Total Estimate Cost:** None identified.

**Cost Estimate Explanation:**

None Identified.

**Minimum Fix Benefits:**

None Identified.

### **Moderate Fix**

**Description:**

This project will upgrade intersections, and construct two general purpose lanes from MP 15.56 to MP 20.59. The structure crossing the Columbia River will also be replaced and the US 395/SR 240 interchange will be reconstructed.

**Delay Reduction:** None identified.

**Collisions Reduction:** None identified.

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

**Total Estimate Cost:** 279,426,600

**Cost Estimate Explanation:**

This estimate is based on adding two general purpose lanes through the length of the project, making intersection improvements, making improvements to the US 395/SR 240 interchange, and constructing a new bridge across the Columbia River near the existing alignment.

**Moderate Fix Benefits:**

This project will serve to maintain an acceptable level of service on the facility and to enhance safe operations in areas where turning movements are creating congestion and delay. There are \$ 109,702,275 in GP lane and \$ 105,866,296 in Safety benefits associated with this project

### **Maximum Fix**

**Description:**

This project will by-pass the City of Kennewick by connecting to the SR 397 to I-82 Intertie and extending it across the Columbia River and connecting to US 12 in the vicinity of Dodd Road (Most likely between the proposed US 12/SR 124 Interchange, a spacing of approximately 2 miles between each). This will all be new construction.

**Delays Reduction:** None identified.

**Collisions Reduction:** None identified.

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

**Total Estimate Cost:** \$119.0 M

**Cost Estimate Explanation:**

The estimate is based on constructing four new lanes of divided highway and a new bridge across the Columbia River. It also includes a new urban interchange at the connection with SR 397 at Finley.

**Maximum Fix Benefits:**

This project will serve to maintain an acceptable level of service on the facility and to enhance safe operations in areas where turning movements are creating congestion and delay. There are \$ 589,860,978 in general purpose lane and \$ 102,979,596 in Safety benefits associated with this project.

**Off-System Solutions:**

None identified.

**Special Studies/Reports:**

None identified.

**Required Studies**

The maximum fix proposal needs further study.

**Start/Completion Date of Study:**

7/2006 - 7/2007

**Expected Results**

The expected result is that the feasibility of this proposal will be established and a proposed alignment as well.

**Funded Projects within Corridor Limits**

<b>Project No</b>	<b>Title</b>
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539502L/XL2527	US 395/Columbia Drive to SR 240 Interchange (Reconfigure Interchange)
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539504G/XL286	US 395/Pasco Vicinity - Paving (HMA)
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**Additional Comments:**

None identified.

**Data Sources and Contacts used:**

Collision Data Mart

2004 Annual Traffic Report

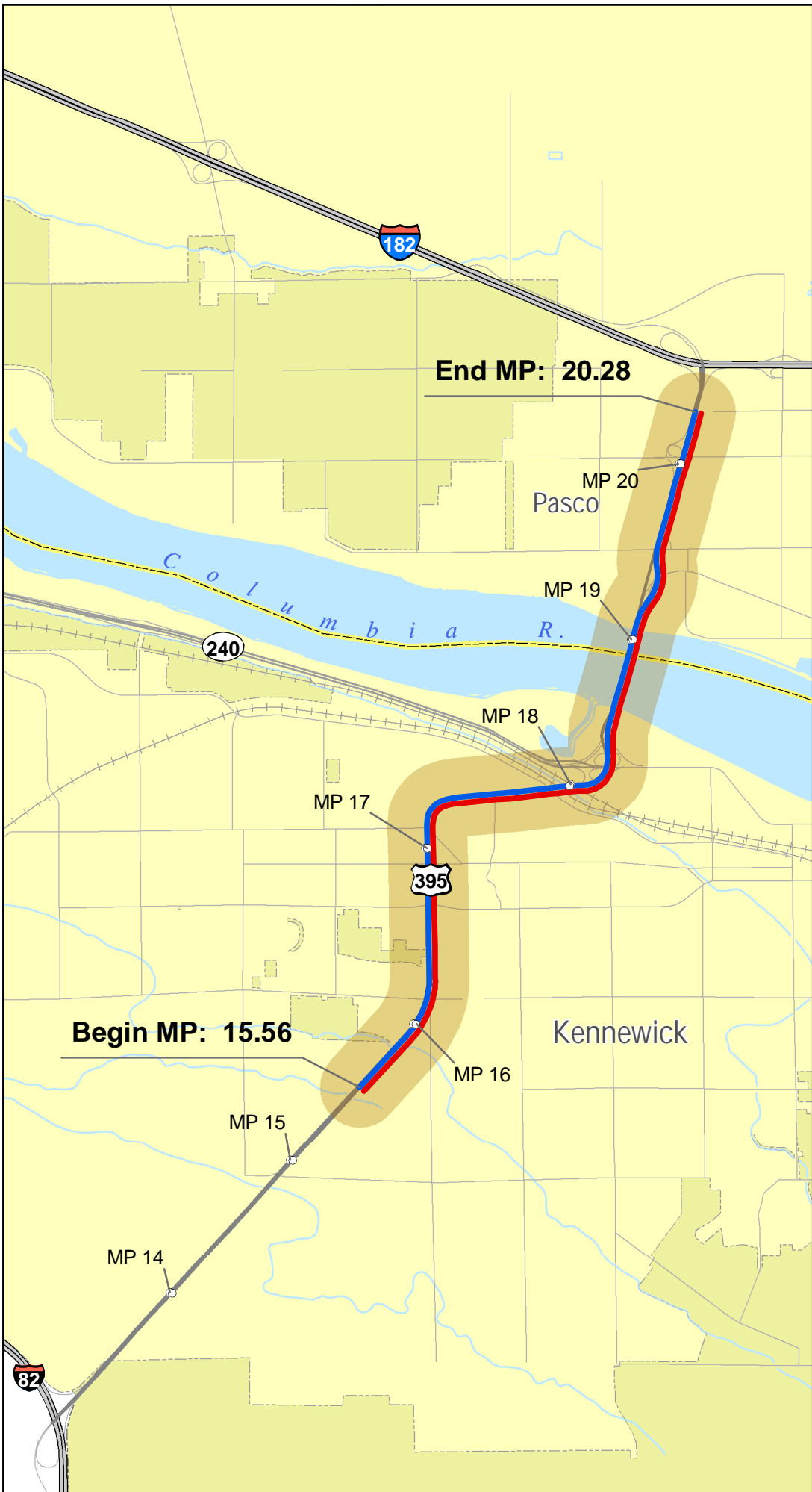
2005 State Highway Log

2003-2022 Washington State Highway System Plan

Pavement Management System

Geographic Information System

# HSP Congested Corridor Analysis Solutions



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

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