

# Chapter 2

## Existing Network and Inventory

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## Introduction

Chapter 2 provides a brief history of corridor and inventory of the existing features. This chapter does not contain planning strategies, data analysis, or recommendations.

## History of the US 395 Corridor

Throughout history river crossings are critical to move people and goods through the area. Before 1922 the only way to cross the Columbia River in the area was by ferry (mainly fixed cable). In 1922 a steel truss two lane bridge was built to replace one of the ferry runs and connected Kennewick to Pasco. This was a private toll bridge (just downstream of current day Cable Bridge). The bridge was part of the Inland Empire Highway. Local people called it the Green Bridge.

In the 1930's when the State and Federal highway system was established, US 395 ran from Pendleton Oregon to Cold Springs vicinity (east of Umatilla on today's Oregon 37) then north concurrent with US 730 where they connected with US 410 (US 12 today) south of Wallula. Then US 395 ran north concurrent with US 410 & State Highway 3 to Pasco where it turned north and ran concurrent with Primary State Highway 11. In 1933 the State purchased the river crossing between Kennewick and Pasco and established it as US 410 & Primary State Highway 3.

In the 1930's there was no bridge crossing the Columbia River in the Umatilla / Plymouth area, only a ferry crossed the river. There was a county road (paved) from Plymouth to City of Kennewick. In 1945, the county road became Primary State Highway 8. In 1955 after McNary Dam was built, a toll bridge across the Columbia River at Umatilla (toll remained until 1974) was constructed.

In 1954 a new river crossing was constructed between Pasco and Kennewick (Blue Bridge, current US 395). This was a much larger four lane truss bridge 1.5 miles upstream from the original crossing to line up better with PSH 8 (SR 14). US 410 was moved to the new structure and the old crossing was turned over to the locals and removed from the state highway system (until 1993). In 1967, when Washington Highways were re-classed, US 410 became US 12 and Primary State Highway 8 became SR 14. US 395 still followed the same corridor as it did before.

In the 1980's two new Interstate Highways (I-82 and I-182) were constructed in the area. I-82 came from Yakima and turned south just east of the Tri-cities and went through Umatilla to connect to I-84 (earlier I-80N) in Oregon. I-182 created an interstate corridor through the Tri-Cities connecting I-82 to US 395 and US 12. This corridor is north of the existing river crossings (six miles) making a more northern crossing of the Columbia River. The I-82 corridor was finished in 1988 with the construction of a second bridge over the Columbia at Umatilla. I-182 began in 1984 with the construction of a new bridge over the Columbia and finished in 1986 with a connection to I-82. As part of this new interstate network, in 1985, US 395 was relocated from Oregon 37 to I-84, then US 395 leaves I-84 goes through Hermiston and connects to I-82 at the river crossing in Umatilla. US 395 then runs concurrent with I-82 (old SR 14 corridor) until it reaches where SR 14 turned and went through Kennewick. US 395 uses the old SR 14 corridor through Kennewick to where it connected US 12 at the Blue Bridge. US 12 was relocated to I-182 and US 395 runs through the old US 12 corridor through Pasco.

The old river crossing, the green bridge, remained in service as a car bridge until 1978, when a new wider four lane cable stay bridge was constructed just upstream of the existing structure. The old bridge was placed on the historic register and commissioned as a bike/pedestrian bridge. By 1990 the bridge had come to a state of disrepair from lack of maintenance and had to be removed. In 1993 this crossing once again became a state highway with the designation of SR 397. In 1993 SR 397 connected the Finley area (south of Kennewick) to

US 395 (north) / I-182 interchange. In 2009 SR 397 was extended to connect to I-82 (south of the US 395 interchange).

Over time, this corridor has seen many improvements. Some improvements included interchanges, widening, turn lanes, and installing traffic signals. In Pasco, what was US 12 became a freeway section in the mid-1960's. Through the mid 1970's and 1980's, concrete barrier was installed between the SR 240 interchange and the Court Street Interchange, as well as south of the SR 240 interchange. In Kennewick, this barrier was installed to improve safety by restricting left turns to selected intersections. To address increased traffic in Kennewick, some of this section was widened to four lanes at this time. As part of this widening, a noise wall was constructed buffering the residential neighborhood on US 395 along the north side of the highway from Yelm Street to the Canal Drive Bridge. A majority of the access rights were also acquired to improve the safety and capacity. Beginning in the mid 1990's, considerable geometric revisions were made at major intersections in Kennewick. Improvements included adding signals and channelization. Also, to minimize the extensive rutting in the asphalt at the signalized intersections, the state installed concrete pavement at 7<sup>th</sup>, 10<sup>th</sup>, 19<sup>th</sup>, and 27<sup>th</sup> Avenues.

In 2005, WSDOT and the City of Pasco partnered together to add a ramp from the I-182/US 395 interchange to Argent Road. In 2008, the city also constructed a pedestrian walkway over US 395 at the Court Street undercrossing. A major reconstruction of the SR 240 interchange was completed in 2010. The project was funded through the 2005 Transportation Partnership Account. In 2011, the segment from I-82 to Kennewick Avenue was repaved.

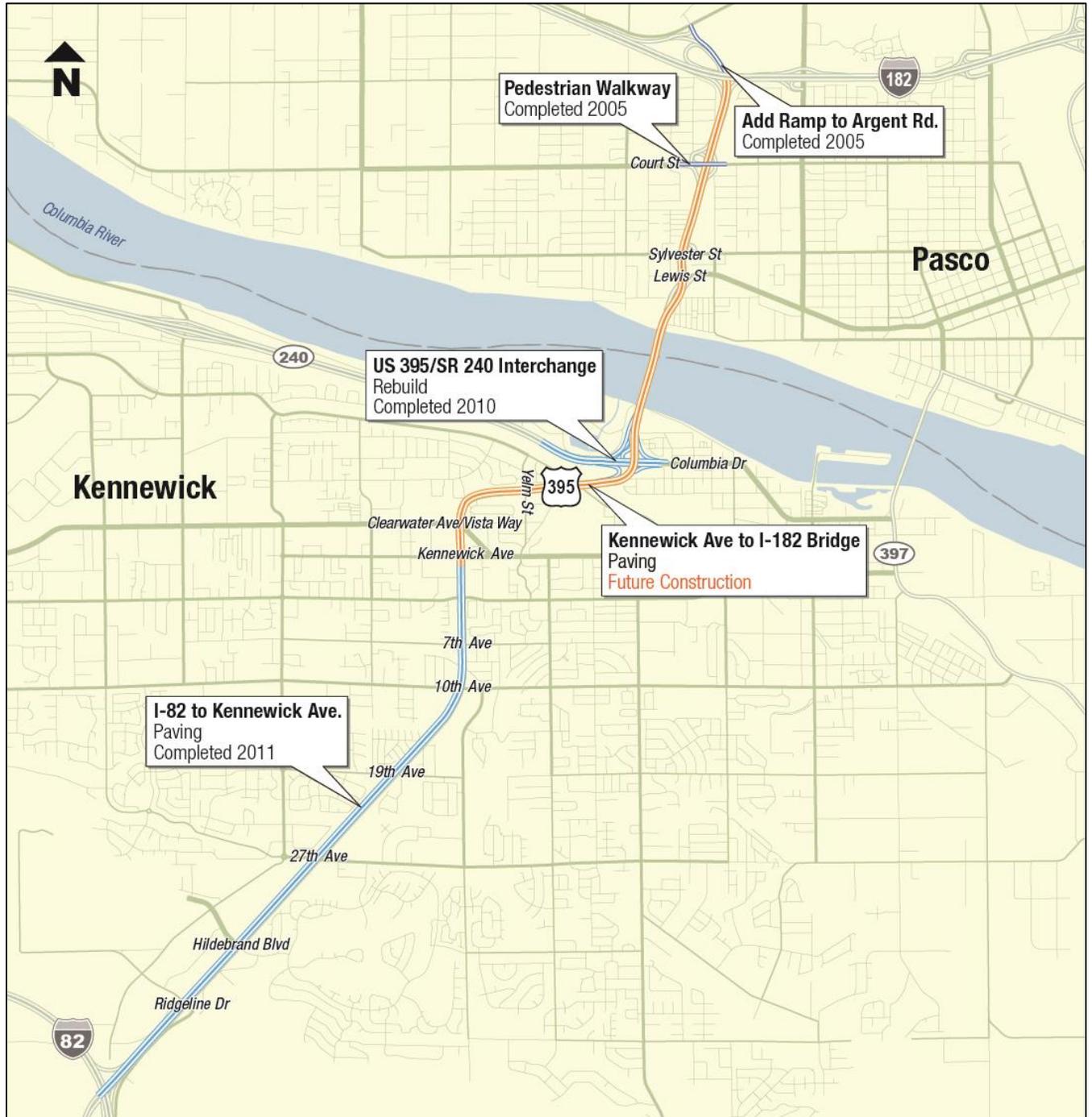


Figure 2-1 – Recently completed and currently programmed projects on US 395

**References**

- WSDOT SCR Program Management
- WSDOT SCR Materials database
- WSDOT SCR Records Office

## Designations of US 395

### Federal Highway Classifications

#### *Federal Functional Classifications*

The federal functional classification system classifies streets and highways according to the character of service they intend to provide. The Federal Highway Administration defines the various classifications as follows:

- Principal arterials are the most significant roads in an area and carry the highest traffic volumes and the longest trips.
- Minor arterials connect with and augment the principal arterials carrying trips of moderate length.
- Collectors provide both access for abutting properties and traffic circulation within residential neighborhoods, and commercial and industrial areas.
- Local streets provide access for abutting land and connections to higher order roadways.

Except for a short segment at the south end, US 395 is classified as an Urban Other Principal Arterial or Urban Other Freeways/Expressways. Appendix A contains the description for the Federal Highway Administration’s description of an Urban Other Principal Arterial.

**Table 2-1 – Federal & State Functional Classifications of US 395**

Location	Beg MP	End MP	Federal Classification
I-82 to urban/rural boundary	13.05	13.24	3 – Rural Other Principal Arterial
Urban/rural boundary to 10 <sup>th</sup> Ave	13.24	16.17	2 -- Urban Other Freeways/Expressways
10 <sup>th</sup> Ave to Ely St/Dennis St	16.17	17.24	3 – Urban Other Principal Arterial
Ely St/Dennis St to I-182 ramps	17.24	20.59	2 -- Urban Other Freeways/Expressways

#### References

FHWA, “Functional Classification Guidelines”

FHWA, MAP-21 National Highway System

Functional classification of highways, RCW 47.05.021

WSDOT Functional Classification Map: <http://www.wsdot.wa.gov/data/tools/geoportal/>

#### *Congressional High-Priority Corridor*

US 395, along with Interstate 5, are the only two routes in Washington State designated as Congressional High-Priority Corridors by the U.S. Congress. The purpose of this legislation was to identify corridors that needed further highway development to serve travel and economic development, and give priority to funding construction of this corridor.

#### Reference

FHWA High Priority Corridors:

[http://www.fhwa.dot.gov/planning/national\\_highway\\_system/high\\_priority\\_corridors/](http://www.fhwa.dot.gov/planning/national_highway_system/high_priority_corridors/)

Intermodal Surface Transportation Efficiency Act of 1991, Section 1105 – High Priority Corridors on National Highway System.

#### *National Highway System*

US 395 is on the National Highway System (NHS). The NHS is an interconnected system of principal arterial routes and highways that serve: major population centers, international border crossings, industrial centers,

ports, airports, public transportation facilities, other intermodal transportation facilities, and other major travel destinations.

The NHS includes the Interstate System, the Strategic Highway Corridor Network (STRAHNET), and its highway connectors to major military installations (interstate and non-interstate). The NHS meets national defense requirements and serves international, interstate, and interregional travel.

#### **References**

Design Manual, Chapter 1100 – Design Matrix Procedures, Exhibit 1100-3

### **State Highway Classifications**

#### ***State Functional Classification***

The Washington State Legislature directed WSDOT through RCW 47.05.021 to adopt a functional classification of highways and to classify each highway. Higher function highways emphasize mobility, have higher speed travel, serve greater freight movements and longer distance travel with little or no access to adjacent land. Lower function highways will provide some balance between access to adjacent land and mobility. US 395 in the corridor study is classified as an R1-Rural Principal Arterial in the I-82 interchange vicinity and as a U1-Urban Principal Arterial from the I-82 vicinity to I-182.

#### **References**

State Highway Log, 2013

#### ***Highway of Statewide Significance***

The state legislature has designated US 395 as a Highway of Statewide Significance (HSS). As an HSS highway, US 395 is exempt from concurrency requirements of the Growth Management Act; however, development impacts to a HSS must still be mitigated under the State Environmental Policy Act.

The acceptable LOS for US 395, including the ramps, is:

- ✓ Urban Areas: LOS “D”
- ✓ Rural Areas: LOS “C”

#### **References**

Design Manual, Chapter 120 – Planning

RCW 36.70A.070(6)(a) and (b) – Comprehensive plans -- Mandatory elements

RCW 47.05.022 – Highways of statewide significance

RCW 47.06.140 – Transportation facilities and services of statewide significance – Level of service standards

Washington State Transportation Commission, Resolution No. 660 – Review State Highways of Statewide Significance system

#### ***Freight and Goods Transportation System***

US 395 is designated as a Primary Freight Corridor for Washington State. The classification of this highway does not permit restricting truck traffic. US 395 is classified as a T-1 on the Freight and Goods Transportation System (FGTS). T-1 is the highest freight class in the FGTS indicating the annual tonnage carried and US 395’s importance for freight movement both regionally and nationally. The study segment carried 17,320,000 tons in 2013 averaging 3,300 trucks per day. The percentage of trucks ranges from 23% between I-82 and Ely Street/Dennis Street to eight to ten percent between Ely Street/Dennis Street and I-182.

While alternate routes around the Tri-Cities area exist, a high percentage of these freight trips have their destination within the city.

On the local network, the major freight routes intersecting US 395 include Columbia Drive, Lewis Street, Clearwater Avenue, and 10<sup>th</sup> Avenue.

### **References**

BFCG Columbia River Crossing Origin-Destination Study 2010  
Freight and Goods Transportation System, 2013  
Strategic Highway Freight Corridor  
Washington State Freight Mobility Plan, October 2014

### ***Terrain Classification***

Terrain is defined as the contour of the roadway as it relates to the frequency and steepness of hills and the effect on truck speed. The State Highway Log has three terrain classifications:

- Level – trucks maintain speed
- Rolling – trucks slow down frequently
- Mountainous – trucks slow to a crawl frequently.

The US 395 terrain is classified as “rolling” from I-82 (MP 13.05) to the Columbia River (MP 18.93), and “level” from the Columbia River Bridge (MP 18.93) to I-182 (MP 20.59).

### **References**

State Highway Log 2013

### **Access Control and Speed Limits**

Within the partial and modified access control sections, Kennewick is served by public street intersections. In the partially controlled limited access section, there are deeded accesses for utilities. In the modified limited access control section, the businesses are served via deeded accesses, but are right-in/right-out accesses only. Through the fully controlled limited access section, access to US 395 for Pasco and Kennewick is served by interchanges.

The speed limit is 55 miles per hour in the fully controlled limited access section. The partially controlled section has a speed limit of 50 mph from the Ridgeline Drive vicinity to the 10<sup>th</sup> Avenue vicinity; the speed limit is 45 mph from Ely Street/Dennis Street to the Canal Drive Bridge. The modified limited access section has a 35 mph speed limit.

There are 40 deeded approaches between I-82 and I-182 (see Appendix B). Four are residential approaches, eight are utility approaches, and 28 are commercial approaches. All the approaches are between Hildebrand Boulevard and Ely Street/Dennis Street (three miles). The modified limited access section has the largest number approaches with 32, or 80% of the total. The partial limited access section has eight approaches, all of which are utility ones. The approaches are almost evenly distributed on the right or left side of the highway with 19 in the northbound direction and 21 in the southbound direction. The left or right designation identifies which side of the highway the approach is on as viewed going from south to north.



Figure 2-2 - Limited access control and speed limits on US 395

**Table 2-2 – US 395 Limited Access**

Limited Access Type	Begin SRMP	End SRMP	Location	Length	% of Total Miles
Full	13.05	13.78	I-82 to Ridgeline Dr	0.73	
	18.05	20.59	SR 240 to I-182	2.54	
Full Subtotal				3.27	43%
Partial	13.78	16.15	Ridgeline Dr to 10 <sup>th</sup> Ave Vicinity	2.37	
	17.25	18.05	Dennis St/Ely St to SR 240	0.80	
Partial Subtotal				3.17	42%
Modified	16.15	17.25	10 <sup>th</sup> Ave Vicinity to Dennis St/Ely St	1.10	15%
<b>TOTAL</b>	<b>13.05</b>	<b>20.59</b>	<b>I-82 to I-182</b>	<b>7.54</b>	<b>100%</b>

**References**

- RCW 47.52 Limited access facilities
- WAC 468-58 Limited access highways
- WSDOT Deeds
- WSDOT Limited Access Master Plan
- WSDOT State Highway Log, 2013

**Roadway Inventory**

**Highway Lanes, Intersections, Interchanges, Geometrics, Median Widths, and Right-of-Way Widths**

**Highway Lanes**

US 395 is a four-lane highway from I-82 to I-182 with two 12-foot wide through lanes in each direction. Vehicles are allowed full turning movements at all signalized intersections. The lanes are all built to current standard widths.

**Intersections and Interchanges**

The signalized corridor in Kennewick from I-82 to SR 240 has 11 at-grade intersections with turn lanes. There is one interchange (SR 240) that serves Kennewick and two (Lewis Street/Sylvester Street and Court Street) that serve Pasco. The Lewis Street/Sylvester Street is a partial interchange as it does not have northbound on or southbound off movements. Three of the at-grade city street intersections are principal arterials, three are minor arterials, and three are collectors. Two city street intersections are only local access streets, but neither is signalized.

**Table 2-3 – US 395 Public Road Intersections and Interchanges**

MP	City Street Intersection or Interchange Location	Type of Traffic Control	Left/Right	Year Signalized*
13.05	I-82	Interchange	Both	1980
13.78	Ridgeline Dr	Stop-controlled on side street	Both	–
14.22	Hildebrand Blvd	Traffic signal	Both	2007
14.90	27 <sup>th</sup> Ave	Traffic signal	Both	1993
15.56	19 <sup>th</sup> Ave	Traffic signal	Both	1998
16.17	10 <sup>th</sup> Ave	Traffic signal	Both	1989
16.42	7 <sup>th</sup> Ave	Traffic signal	Both	1995
16.80	2 <sup>nd</sup> Ave	Stop-controlled on side street; left/right-in, right-out	Left	–
16.92	Kennewick Ave	Traffic signal	Both	1977
17.11	Vista Way (Right)/Clearwater Ave (Left)	Traffic signal	Both	1970
17.24	Dennis St (Right)/Ely St (Left)	Stop-controlled on side street; right-in/right-out	Both	–
17.59	Yelm St	Traffic signal	Both	1976
18.26	SR 240	Interchange	Both	1954
19.35	Lewis St/Sylvester St	Interchange	Both	1966
20.04	Court St	Interchange	Both	1966
20.56	I-182	Interchange	Both	1981

\* - For the interchanges, this is the year the interchange was constructed.

**Table 2-4 – Number of Left and Right Turn Lanes**

Intersection or Interchange	US 395 NB		US 395 SB		Side Street EB			Side Street WB		
	LT Lanes	RT Lanes	LT Lanes	RT Lanes	LT Lanes	Thru Lanes	RT Lanes	LT Lanes	Thru Lanes	RT Lanes
I-82	1	1	2	1	N/A	2	1	N/A	2	1
Ridgeline Dr	1	-	1	-	-	1	-	-	1	-
Hildebrand Blvd	1	-	1	-	1	2	1	1	1	1
27 <sup>th</sup> Ave	2	1	2	1	2	2	1	2	2	1
19 <sup>th</sup> Ave	1	-	1	1	1	1	-	1	1	-
10 <sup>th</sup> Ave	1	1	1	1	1	2	1	1	2	1
7 <sup>th</sup> Ave	1	-	1	-	-	1	-	-	1	-
2 <sup>nd</sup> Ave *	1	N/A	N/A	-	-	N/A	1	N/A	N/A	N/A
Kennewick Ave	1	1	1	-	1	2	-	1	2	-
Clearwater Ave	1	1	1	1	1	1	-	-	2	-
Ely St/Dennis St **	N/A	-	N/A	-	N/A	N/A	1	N/A	N/A	1
Yelm St	1	-	1	1	1	1	-	1	1	1
SR 240/Columbia Dr	N/A	1	N/A	1	1	2	1	N/A	2	1
Lewis St/Sylvester St	N/A	1	N/A	N/A	2	2	N/A	N/A	1	N/A
Court St	N/A	1	N/A	1	1	2	1	N/A	2	1
I-182	1	1	N/A	N/A	N/A	2	1	N/A	2	1

LT = Dedicated left-turn lane(s)

RT = Dedicated right-turn lane(s); excludes right-turn tapers.

\* - 2<sup>nd</sup> Avenue is a T-intersection with no street on the east side.

\*\* - The Ely Street/Dennis Street intersection is a right-in/right-out intersection.

### References

WSDOT Approved Interchange Plans

WSDOT Contract Plans 7819, 7893

WSDOT State Highway Log, 2013

### Shoulders

Nearly seven miles of this corridor is constructed with shoulders or curbed sections that meet or exceed state standards. Exceptions are the bridges over and near the Columbia River, which account for 0.70 miles of the 7.54-mile corridor or about 9% of the total length.



Narrow shoulders on US 395 Bridge over Lewis Street

**Table 2-5 – Shoulders on US 395**

Location	Beg MP	End MP	Shoulder Width (feet)	
			Right	Left
<b>Non-Curbed Section</b>				
I-82 to 10 <sup>th</sup> Ave	13.05	16.17	10	7
Canal Drive Bridge – Northbound	17.89	17.94	2	2
Canal Drive Bridge – Southbound	17.89	17.94	8	7
BNSF & UP Bridge – Northbound	17.94	18.07	2	2
BNSF & UP Bridge – Southbound	17.94	18.07	10	8
SR 240 Interchange to Columbia River Bridge	18.07	18.59	7-10	4-5
Columbia River Bridge (Blue Bridge)	18.59	19.07	4	2
Columbia River Bridge to I-182 - Northbound	19.07	20.59	10	4
Lewis Street Bridge	19.33	19.37	1	1
<b>Curbed Section</b>				
10 <sup>th</sup> Ave to Canal Drive Bridge	16.17	17.89	2	7

**References**

WSDOT State Highway Log, 2013

**Intersection Geometrics**

There are separate turn lanes at all intersections through the signalized corridor. The storage lengths, radii, and taper lengths are constructed to current standards except for the southbound right-turn lane on US 395 at Yelm Street.

**Table 2-6 – Selected Intersection Geometrics on US 395**

Road Name	Type	Length of Storage	Radius	Speed Limit
Ridgeline Drive				55 mph
Right-turn(NB)	Taper	-	75 feet	
Left-turn (NB)	Lane	150 feet	-	
Right-turn (SB)	Taper	-	75 feet	
Left-turn (SB)	Lane	150 feet	-	
Hildebrand Boulevard/36 <sup>th</sup> Avenue				55 mph
Right-turn (NB)	Taper	-	55 feet	
Left-turn (NB)	Lane	550 feet	-	
Left-turn (SB)	Lane	450 feet	-	
27 <sup>th</sup> Avenue				50 mph
Right-turn (NB)	Lane	585 feet	55 feet	
Left-turn (NB)	Lanes	585 feet	-	
Right-turn (SB)	Lane	475 feet	55 feet	
Left-turn (SB)	Lanes	475 feet	-	
19 <sup>th</sup> Avenue				50 mph
Right-turn (NB)	Taper	-	75 feet	
Left-turn (NB)	Lane	230 feet	-	
Right-turn (SB)	Lane	475 feet	75 feet	
Left-turn (SB)	Lane	230 feet	-	
10 <sup>th</sup> Avenue				35 mph
Right-turn (NB)	Lane	100 feet	35 feet	
Left-turn NB)	Lane	200 feet	-	
Right-turn (SB)	Lane	100 feet	55 feet	
Left-turn (SB)	Lane	260 feet	-	
7 <sup>th</sup> Avenue				35 mph
Right-turn (NB)	Taper	-	55 feet	
Left-turn (NB)	Lane	150 feet	-	
Right-turn (SB)	Taper	-	55 feet	
Left-turn (SB)	Lane	210 feet	-	
2 <sup>nd</sup> Avenue				35 mph
Left-turn (NB)	Lane	150 feet	-	
Right-turn (SB)	Taper	-	55 feet	
Kennewick Avenue				35 mph
Right-turn (NB)	Lane	200 feet	55 feet	
Left-turn (NB)	Lane	300 feet	-	
Right-turn (SB)	Taper	-	55 feet	
Left-turn (SB)	Lane	220 feet	-	

Clearwater Avenue/Vista Way				35 mph
Right-turn (NB)	Taper	-	35 feet	
Left-turn (NB)	Lane	330 feet	-	
Right-turn (SB)	Lane	600 feet	50 feet	
Left-turn (SB)	Lane	500 feet	-	
Yelm Street				45 mph
Right-turn (NB)	Taper	-	55 feet	
Left-turn (NB)	Lane	100 feet	-	
Right-turn (SB)	Lane	150 feet	55 feet	
Left-turn (SB)	Lane	520 feet	-	

NB = northbound  
 SB = southbound

### ***Alignments and Sight Distance***

Horizontal alignment defines straight segments and curves while the vertical alignment, or profile, defines the changes in elevation of the roadway. The study area’s horizontal and vertical alignment was analyzed based on WSDOT Design Manual criteria in Chapters 1250 and 1260 and it was determined the vertical alignment meets design criteria. The horizontal alignment meets design criteria with exception to the northbound left curve approaching the Lewis Street overcrossing.

The highway includes two locations with steeper grades. The first segment is between the I-82 interchange and Ridgeline Drive and has an average grade of 5.1 % for 0.72 miles. The speed limit is 55 MPH in this segment. The second segment, between Yelm Street and the SR 240 interchange, begins just south of the Canal Drive overcrossing, and has a downhill grade of 4.9% for 0.11 miles. This is a 45 MPH segment. The remainder of the corridor has level to modest grades.

In 2009/2010 the SR 240 interchange was reconfigured. Shortly after reopening the highway to the public, there was an observed increase in vehicle crashes at the SR 240 on-ramp merge point with northbound US 395. In response to this safety performance issue, the merge was eliminated and the SR 240 to US 395 movement was provided its own lane on the Blue Bridge. This solution improved safety performance but reduced the operational efficiency for northbound through traffic due to the lane reductions for through movement. This interchange is further discussed in Chapter 5.

Stopping sight distance was analyzed for horizontal and vertical curves within the study corridor based on design criteria from Chapter 1260 and it was determined that all curves meet standards.

### **References**

WSDOT Design Manual  
 WSDOT South Central Region Traffic Office – Ball Bank Field Review, January 2013

### ***Acceleration and Deceleration Lanes***

There is only one acceleration lane and two deceleration lanes in the study area. The acceleration lane is in the northbound direction at Yelm Street. It is 600 feet long with a 480-foot taper and exceeds state standards. The deceleration lanes are at 27<sup>th</sup> Avenue. For intersections with a higher speed limit, deceleration length was included when the right-turn lanes were designed and built.

### ***Medians***

US 395 is a divided highway through the study corridor. Divided highways have a median that creates a physical or legal barrier prohibiting left turns and separating vehicular traffic traveling in opposite directions. Concrete

barrier or curbing was installed in the median to improve safety by restricting left turns to selected intersections. There are openings in the barrier at the intersections, but otherwise there are no unprotected medians in the corridor. The median width is 16 feet through the signalized corridor (from Hildebrand Boulevard to Yelm Street); the width varies in other locations.

In 1975, concrete barrier was installed between the SR 240 Interchange and the Court Street Interchange. From 1978 to 1981, median curbing was installed from the 4<sup>th</sup> Avenue Bridge to Ely Street/Dennis Street, and concrete barrier from there to the SR 240 Interchange. In 1983, concrete barrier was installed in the median from I-82 to Ridgeline Drive, and median curbing from the Ridgeline Drive vicinity to the 4<sup>th</sup> Avenue Bridge. In 1994, the median curbing was replaced by concrete barrier from the Ridgeline Drive vicinity to 10<sup>th</sup> Avenue, and from 7<sup>th</sup> to 4<sup>th</sup> Avenue.

**Right-of-Way**

The US 395 right-of-way varies between 150 and 200 feet wide for most of the study corridor. Right-of-way is 100 feet between 10<sup>th</sup> and Kennewick Avenue.

**Table 2-7 – Right-of-Way Widths\***

Beginning Location	Ending Location	Right-of-Way Width
I-82	Ridgeline Dr Vicinity	200 feet
Ridgeline Dr Vicinity	Hildebrand Blvd Vicinity	150 feet
Hildebrand Blvd Vicinity	0.25 miles S of 27 <sup>th</sup> Ave	175-200 feet
0.25 miles S of 27 <sup>th</sup> Ave	10 <sup>th</sup> Ave	150 feet
10 <sup>th</sup> Ave	Kennewick Ave	100 feet
Kennewick Ave	Canal Dr Bridge	150 feet
Canal Dr Bridge	SR 240 Interchange	200 feet
SR 240 Interchange	Lewis St	300 feet
Lewis St	Sylvester St	150 feet
Sylvester St	I-182	190 feet

\* The right-of-way table is intended to show the general amount of right-of-way and the approximate location. There may be short sections within a segment that differ from the most common width. The right-of-way within the interchanges varies considerably, so the table is not intended to identify the right-of-way width through the interchanges.

**Bridge Locations, Vertical Clearance, and Ratings**

There are 15 bridges through the US 395 study corridor from I-82 to I-182. The vast majority of these (13) are in the freeway section in the northern third of the corridor from the Canal Drive bridges to the I-182 interchange. Most (12) of the bridges were constructed or reconstructed over 25 years ago. Four bridges were constructed in the early to mid-1950’s including one that is almost 60 years old (the northbound US 395 bridge over Lewis Street). Two bridges were constructed within the last five years. There are no weight or height restrictions for legal loads on these bridges. For locations where US 395 goes over another road or other feature, an existing bridge must be a minimum of 16 feet over the road; new bridges are required to be 16 feet 6 inches over the road. Where US 395 crosses over a railroad track, the bridge must be a minimum of 22 feet 6 inches above the tracks; new bridges are required to be a minimum of 23 feet 6 inches above the tracks. Both existing and new pedestrian bridges must be a minimum of 17 feet 6 inches above the highway.

**Table 2-8 – US 395 Bridges from I-82 to I-182**

MP	Intersecting Feature	DIR	Bridge #	Lanes	Built/ Reconstructed	Width	Span	Clearance
<b>OVERCROSSINGS – US 395 goes over another road or other feature</b>								
13.05	I-82	Both	395/5	3	1984	56'	253'	16' 05"
16.68	W 4 <sup>th</sup> Ave	Both	395/11	4	1958/ 1985	52'	119'	16' 10"
17.89	Canal Dr	Inc	395/12E	2	1956	49'	90'	19' 05"
17.89	Canal Dr	Dec	395/12W	2	1980	32'	90'	18' 11"
17.94	BN&UP RR	Inc	395/14E	2	1956	22'	675'	22' 11"
17.94	BN&UP RR	Dec	395/14W	3	1980	55'	654'	24' 00"
18.25	Columbia Dr	Both	395/16	3	1954/ 1988	68'	72'	16' 01"
18.25	SR 240 E-N	Dec	395/38	3	2009	72'	152'	17' 03"
18.59	Columbia River*	Both	395/40	4	1954/ 1986	52'	2,521'	17' 09"
19.33	Lewis St	Inc	395/101N-E	2	1953	50'	233'	14' 01"
20.54	I-182	Inc	182/20N-W	2	1983	38'	307'	17' 03"
20.54	I-182	Dec	182/20W-S	1	1983	26'	326'	17' 01"
<b>UNDERCROSSINGS – US 395 goes under another road or other feature</b>								
19.51	Sylvester St	Both	395/102	-	1966	48'	252'	16' 05"
20.04	Court St	Both	395/103	-	1966	48'	114'	16' 02"
20.04	Court St Pedestrian	Both	395/103P	-	2008	10'	200'	17' 06"

\* – The Columbia River Bridge is also known as the Pioneer Memorial Bridge or the Blue Bridge.

The following six bridges are functionally obsolete and cannot be widened.

- Bridge # 395/12E (over Canal Drive, MP 17.89)
- Bridge # 395/16 (over Columbia Drive, MP 18.25)
- Bridge # 395/40 (over the Columbia River, MP 18.59)
- Bridge # 395/101N-E (over Lewis Street, MP 19.33)
- Bridge # 395/102 (over Sylvester Street, MP 19.51)
- Bridge # 182/20W-S (over I-182, MP 20.54)

#### References

WSDOT Bridge Engineering Information System  
 WSDOT Design Manual  
 Washington State Bridge Inspection Manual

## Average Annual Daily Traffic Volumes

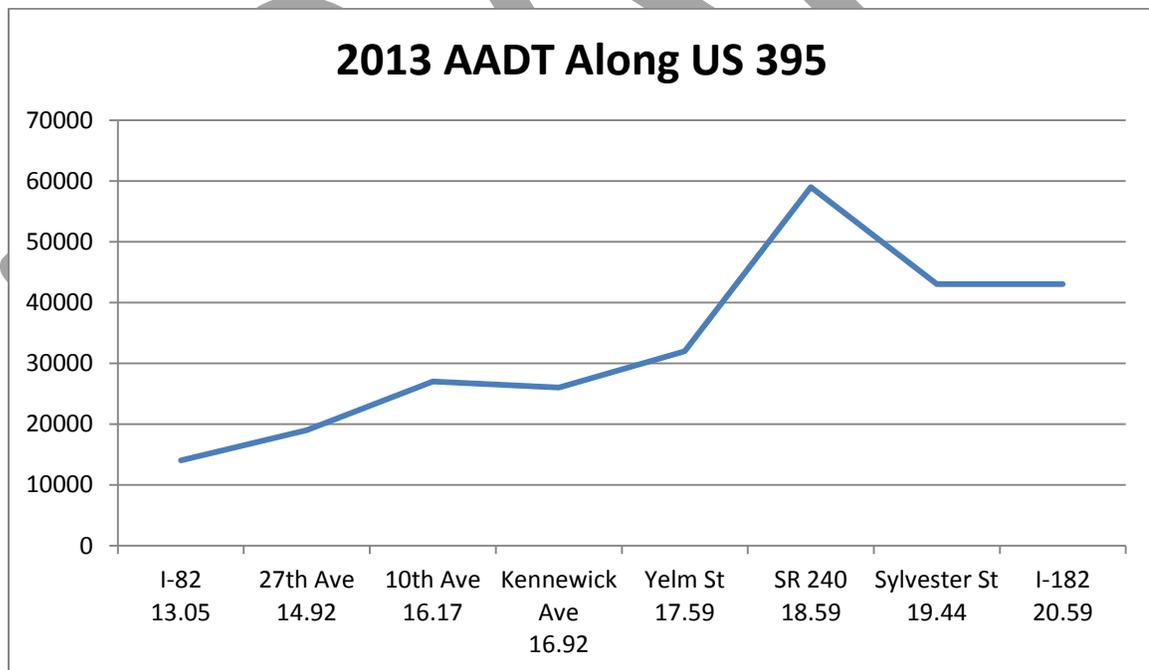
Over the last 20 years, traffic volumes have increased significantly on US 395. The highest volumes occur on the freeway section with the peak volumes occurring on the Columbia River Bridge (the Blue Bridge). The lowest traffic volumes occur at the south end of the corridor just after the Interstate 82 ramp. The South Central

Region Traffic Office completed a traffic study for the corridor in 2011. This study included an assumption that the Southridge Sub-area would be fully build developed within the 20-year horizon. Traffic growth rates used were 1.8% between I-82 and 10<sup>th</sup> Avenue, and 2.3% between 10<sup>th</sup> Avenue and I-182. These rates were validated by the Benton-Franklin Council of Governments traffic model. In 2014, the SCR Traffic Office confirmed these growth rates are still valid for this corridor.

**Table 2-9 – US 395 Average Annual Daily Traffic, 1990-2013**

Location	MP	Year					
		1990	1995	2000	2005	2010	2013
I-82 (after ramp)	13.42	7,100	9,600	12,000	13,000	14,000	14,000
27 <sup>th</sup> Ave (after)	14.92	8,200	11,000	12,000	16,000	18,000	19,000
10 <sup>th</sup> Ave (after)	16.17	16,000	20,000	21,000	26,000	27,000	27,000
Kennewick Ave (after)	16.92	—	21,000	22,000	26,000	25,000	26,000
Yelm St (before)	17.59	—	—	—	30,000	31,000	32,000
SR 240 Interchange (at recorder)	18.59	36,400*	45,000	49,000	57,000	57,000	59,000
Sylvester St Ramp (after ramp)	19.44	24,800*	31,000	36,000	40,000	42,000	43,000
I-182 (before EB ramp)	20.28	19,800	26,000	33,000	40,000	43,000	43,000

\* - Used traffic count from nearby location



**Reference**

US-395 I-82 to I-182 Corridor Study, February 2011 (WSDOT)  
 WSDOT Annual Traffic Reports

## Existing Level of Service

Level of Service (LOS) is the quantitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic density and interruptions, comfort and convenience. LOS is the generally accepted method of describing traffic conditions. Conditions are divided into six levels, A through F, with LOS A representing the best operating conditions from the driver’s perspective and LOS F the worst. The acceptable LOS threshold for US 395 in the study area is LOS D.

The conditions on US 395 vary from free flow at the south end to congestion within the signalized corridor and the Columbia River crossing, and then back to free flow for the freeway section in Pasco. Table 2-10 below shows the existing LOS (2012) for US 395, the forecasted LOS in 2032, and the year the intersection fails (falls below the established threshold).

**Table 2-10 – Existing LOS at US 395 Intersections**

Intersection	Type of Traffic Control	LOS (2012)	LOS (2032)	Year of Failure
Ridgeline Dr	Stop-controlled	D	N/A	
Hildebrand Blvd	Traffic Signal	B	F	2029
27 <sup>th</sup> Ave	Traffic Signal	D	F	2018
19 <sup>th</sup> Ave	Traffic Signal	B	C	
10 <sup>th</sup> Ave	Traffic Signal	C	F	2019
7 <sup>th</sup> Ave	Traffic Signal	A	C	
Kennewick Ave	Traffic Signal	C	F	2021
Clearwater Ave	Traffic Signal	D	F	2013
Yelm St	Traffic Signal	E	F	2012
NB Ramp Terminal at Sylvester St	Stop-controlled	D	F	2015
SB Off-Ramp to Court St	Traffic Signal	A	B	
NB Off-Ramp to Court St	Traffic Signal	B	C	

All intersections currently operate within the LOS standard except for Yelm Street, which has an LOS E. The Clearwater Avenue/Vista Way intersection is anticipated to fail within a year. The northbound ramp terminal at Sylvester Street is expected to fail within a year. The 27<sup>th</sup> Avenue, 10<sup>th</sup> Avenue, and Kennewick Avenue intersections are all expected to fail within 10 years. The signalized intersections at 7<sup>th</sup> and 19<sup>th</sup> Avenues and the Court Street ramp intersections are expected to operate at an acceptable Level of Service over the planning horizon. With the eventual build-out of the Southridge developments, there are safety concerns about the design of the Ridgeline Drive intersection. This analysis assumed the Ridgeline Drive intersection would operate as a stop controlled right-in/right-out intersection with an ultimate grade-separation configuration.

Table 2-11 below shows the LOS for the freeway segments on US 395 including the on and off ramp merge/diverge for the existing year (2012), the forecasted LOS in 2032, and the year the segment fails.

**Table 2-11 – Existing Freeway Current and Design Year LOS**

Interchange ramps	Analysis Type	LOS (2012)	LOS (2032)	Year of Failure
<b>Lewis St/Sylvester St Interchange</b>				
Lewis St - NB Lt off ramp	Diverge	D	F	2018
Lewis St - SB Lt on ramp	Merge	D	F	2020
Sylvester St - NB off ramp	Diverge	C	E	2028
<b>Court St Interchange</b>				
Court St - NB off ramp	Diverge	C	D	2026
Court St NB ramp weave to I-182	Weave	C	F	2023
Court St – SB off ramp	Diverge	C	D	
Court St- SB Loop on ramp	Merge	B	C	
Court St – SB on ramp	Merge	C	D	
<b>SR 240 Interchange*</b>				
EB SR 240-NB 395 on ramp	Add lane	C	D	
Columbia Dr – NB on ramp	Merge	D	F	2020
EB SR 240-SB on ramp	Merge	C	D	
NB – Columbia Dr	Diverge	C	D	
SB – SR 240	Diverge	C	D	
<b>Freeway</b>				
NB – between UP bridge and Columbia Drive- on ramp	Freeway	C	F	2020
NB - Blue Bridge	Freeway	D	F	2020
SB - Blue Bridge	Freeway	D	F	2020
NB – between Sylvester & Court Sts	Freeway	C	D	
SB – between Sylvester & Court Sts	Freeway	C	D	

\*analysis based on 2009 and 2029 data

All freeway segments currently operate within the accepted LOS standard, with the exception of the two northbound lanes merging to a single lane in advance of the Columbia Drive on-ramp at the SR 240 interchange. The Lewis Street northbound off-ramp and southbound on-ramp are expected to fall below the LOS standard in 2018, and the free flow movements in both directions on the Blue Bridge are expected to fail in 2020.

### References

Traffic Study: US 395, I-82 to I-182 Corridor Study, February 2011  
 WSDOT Design Analysis: US 395 & Columbia Drive to SR 240 Interchange, 2009  
 WSDOT Highway System Plan 2007-2026

## Corridor Safety Analysis

### Introduction

WSDOT’s highway safety program uses Sustainable Safety methodology to address the safety aspect of the State’s highways. This methodology provides new tools and processes that use quantitative data and scientific engineering methods to achieve ongoing reductions in fatal and serious injury crashes. Benefits include

increased accuracy in crash risk assessment, project and program performance assessment and project benefit assessment. It identifies the most critical locations, addresses a greater number of crucial safety locations for the same investment, and provides tools to continually improve and refine analysis tools.

The Sustainable Safety program was implemented to save lives and reduce the potential for injury, and assist WSDOT in achieving its ultimate goal of reducing the number of serious injury and fatal crashes to zero by the year 2030. This policy has been established through the Washington State Strategic Highway Safety Plan: Target Zero. The Target Zero plan sets priorities for all traffic safety partners, provides a resource for potential strategies, and monitors outcomes for each of the priority areas. The strategies focus on education, enforcement, engineering and emergency medical services. Additional strategies involve laws, agency rules and policy changes.

Crash data is gathered and used by safety professionals who are tasked with making decisions based on the data collected that will increase the level of safety and overall well-being of the traveling public. Knowing where problem areas exist, safety countermeasures can be implemented.

## **Crash History Overview**

To determine where crashes are occurring within the US 395 study corridor and to help identify problem areas related to safety, crash data was gathered for a 5-year period from January 1, 2009 to December 31, 2013. Crash data captured at intersections also included the city street legs. During the study period, 1,062 crashes occurred within the corridor. The majority of crashes were property damage only, at 66% of all crashes. Possible or evident injury crashes made up 33%. Fatal and serious injury crashes accounted for 1% of all crashes. No single location experienced more than one fatal or serious injury crash during the study period. Based on information received from WSDOT Region's Traffic Office, there are no identified Collision Analysis Locations (CALs) or Collision Analysis Corridors (CACs) within the study corridor.

The US 395 corridor is an urban highway where traffic is interrupted by numerous intersections, ramp connections and driveways which create conflict points within the corridor. The most common type of crash at signalized intersections is rear-end contact. The rear-end crash locations within the signalized corridor are dependent on traffic queue lengths and are most influenced during peak traffic periods. Numerous rear-end crashes have been recorded in the vicinity of signalized intersections but not coded by law enforcement officials as "intersection related". For this study, these crashes have been categorized as "non-intersection" related.

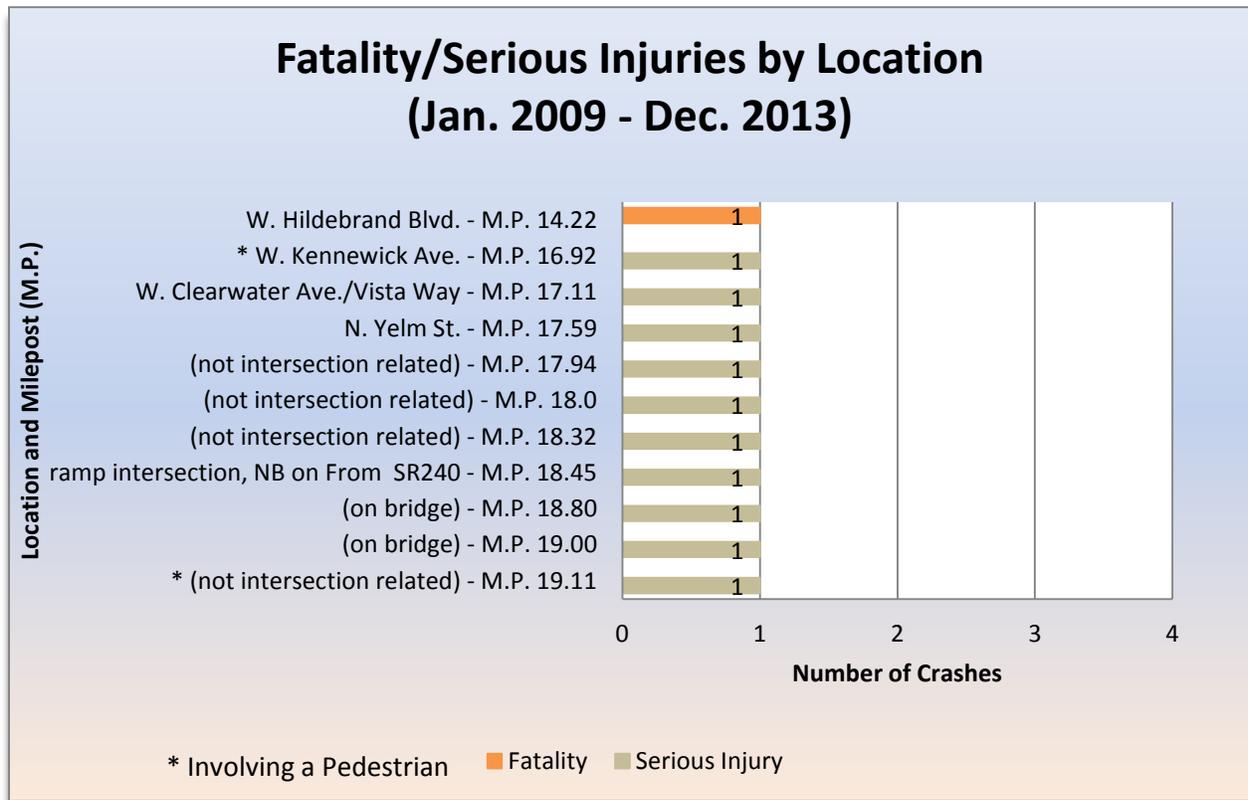
In the free-flowing freeway segment of the corridor, interchange ramp connections, while experiencing fewer crashes than intersections, create conflict points influenced by the speed differential between the ramp and the highway. All ramp connection crashes identified during this 5-year study period occurred at on-ramp merge locations with none occurring at off-ramp diverge locations. The majority of ramp connection crashes were a result of the merging vehicle striking an appurtenance, due to excessive speed leaving the ramp. Sideswipes were the second most common type of crash at on-ramp merge locations.

## **Analysis and Findings**

### ***Fatal and Serious Injury Crashes:***

Eleven crashes occurred within the corridor resulting in a fatality or serious injury. These crashes were dispersed between W. Hildebrand Boulevard and the north end of the Columbia River Bridge. The single fatality crash occurred at the intersection of W. Hildebrand Boulevard in the northbound direction. The driver of a

truck-tractor/trailer disregarded the traffic signal on the highway and collided with a vehicle legally entering from the cross street on the right.



The remaining ten crashes resulted in a serious injury. The three northern-most intersections within the signalized corridor (W. Kennewick Avenue, W. Clearwater Avenue / Vista Way and N. Yelm Street) each had a single crash resulting in a serious injury. The crash at W. Kennewick Avenue involved a pedestrian and was the result of the pedestrian crossing the highway outside of the marked crosswalk. The crash at W. Clearwater Avenue was a rear-end collision in the southbound direction by a driver who was under the influence of alcohol. At N. Yelm Street, a driver entered the highway from northbound Yelm Street and was struck on the right side at an angle by a southbound driver on US 395. The contributing circumstance was identified as “other”.

Further north, four serious injury crashes occurred within the SR 240 interchange in the northbound direction. The two crashes at mileposts 17.94 and 18.0 were located immediately ahead of the northbound off-ramp to Columbia Drive. One involved a motorcycle striking the rear-end of another vehicle and the other involved a vehicle striking an appurtenance while changing lanes to the left. In both cases, exceeding a reasonable and safe speed was the contributing circumstance. One of the remaining two crashes within the SR 240 interchange occurred at milepost 18.32, immediately ahead of the northbound on-ramp from Columbia Drive. This was a rear-end collision due to the driver eating or drinking while operating the vehicle. The final crash within the interchange occurred at the merge point of the northbound on-ramp from SR 240. The driver lost control while merging from the ramp and struck the left side of a northbound truck-tractor/trailer on SR 395. Alcohol was a factor.

Two serious injury crashes occurred on the Columbia River Bridge. At milepost 18.8 a northbound motorcycle was rear-ended by a driver following too closely. The crash in the southbound direction at milepost 19.0 was also of the rear-end type, and was due to inattention.

The last of the ten serious injury collisions within the corridor occurred at milepost 19.11 in the southbound direction, involving a pedestrian. This location is within the fully controlled limited access section of US 395 near the north end of the Columbia River Bridge, so pedestrian traffic is restricted and crosswalks are not provided.

The highway segments with fewer crashes generally have fewer interruptions from intersections due to stricter access control.

See Appendix C for crash characteristics in more detail.

**References**

WSDOT GIS Workbench, 2010  
 WSDOT TDO Collision Data, 2014  
 Washington State Collision Data Summary, 2010  
 WSDOT Statewide Travel and Collision Data Office, 2012  
 Washington State’s Strategic Highway Safety Plan Target Zero, 2014  
 WSDOT Capital Program Development & Maintenance Office, 2013

**Pedestrian and Bicycle Facilities**

Local networks are the primary facilities for non-motorized travel. The US 395 corridor has a disjointed network of paths, trails, and sidewalks. There are locations with narrow widths and discontinuities. In addition to this local network, US 395 provides shoulders and sidewalks for pedestrians, bicyclists, and other non-motorized modes in accordance with its highway classification. The following section provides a review of the local non-motorized system, as well as WSDOT-owned facilities.

**Table 2-11 – Shoulder and Sidewalk Locations on US 395**

Location	Beg MP	End MP	Class Description	Width
I-82 to 10 <sup>th</sup> Ave	13.05	16.17	Shoulder	10 feet
10 <sup>th</sup> Ave to Canal Dr Bridge	16.17	17.89	Sidewalk - adjacent to curb	6 feet
Canal Dr Bridge to Columbia River Bridge	17.89	18.59	Shoulder	4 feet (Right), 9 feet (Left)
Columbia River Br (Blue Bridge)	18.59	19.07	Sidewalk - separated by barrier	3.5 – 4 feet
Columbia River Br to I-182	19.07	20.59	Shoulder	8 feet (Right), 8-10 feet (Left)

**Pedestrians**

Pedestrians use a variety of local and state facilities for travel throughout the corridor. Figure 2-3 shows the local and state pedestrian facilities through the US 395 corridor. Pedestrians are prohibited along the roadway from I-82 to Ridgeline Drive, from the SR 240 Interchange vicinity to the Columbia River Bridge, and from the Columbia River Bridge to I-182 (the freeway sections with full limited access control). There are no sidewalks, paths or trails along the highway between Ridgeline Drive and 10<sup>th</sup> Avenue. The local network is generally located away from the highway and pedestrian traffic is along the adjacent city streets. There are sidewalks on either side of US 395 as well as a denser local network between 10<sup>th</sup> Avenue and the Canal Drive Bridges.

The sidewalks terminate at the Canal Drive bridges in both directions (see photo before Figure 2-3) and, with the exception of the Columbia River Bridge, pedestrians are prohibited within the remainder of the corridor. The

Columbia River Bridge was constructed with a five foot sidewalk on the northbound side (see photo before Figure 2-3). For pedestrian safety, a concrete barrier with pedestrian railing was added, but it reduces the sidewalk width to 3.5 to 4 feet. WSDOT’s minimum design standard sidewalk width on a bridge is 6 feet. The bridge’s sidewalk connects to the local system and not US 395 itself. The river crossing is over one-half mile and to get from housing to businesses a walking commuter would have to commute over one mile on foot using the bridge. There is no sidewalk on the southbound side.

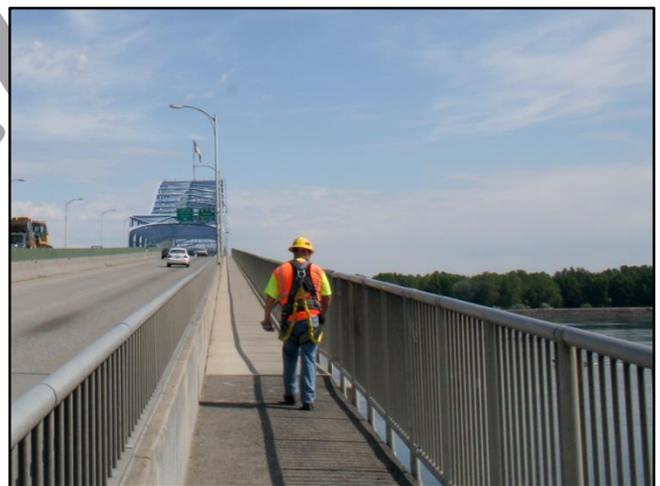
The sidewalk network (Figure 2-3) is incomplete or non-existent in many areas along the corridor. In Kennewick the classified streets, for the most part, have sidewalks. Off these streets, sidewalks are sporadic, so people have to walk in the street with traffic or dirt shoulders to get to a classified street. Marked crosswalks are located at all signalized intersections, and provide pedestrian display and detection equipment to cross the highway or the adjacent city street. Due to the existing intersection spacing within the expressway section, pedestrians are allowed far more frequent crossing opportunities than typically provided. Intersections south of 10<sup>th</sup> Avenue are at or greater than one-half mile, so walking commuters will not likely use this section of US 395.

In Pasco, east of US 395 (old Pasco) there is a well-connected sidewalk system. West US 395 in Pasco, sidewalks are non-existent except for a short segment along Court Street. This means people are walking on the street with traffic or on dirt shoulders. The Sylvester Street Bridge has a deficient pedestrian crossing (two feet) over US 395. The Court Street Interchange, however, has a 10 foot pedestrian crossing above US 395 that was constructed in 2005.

The US Census Bureau’s FactFinder (2009-2013 American Community survey 5-year estimates) shows that 1.9% (1,774) commuters walk to work within the Tri-Cities urbanized area. Because of the normal walk commute distance (one-quarter to one-half miles), most trips within the US 395 corridor will begin and end within the city they started (Pasco or Kennewick) and not cross the Columbia River. FactFinder shows that Kennewick has 0.7% (690) households and Pasco has 0.4% (381) of the area’s walking commuters.



Pathway ends just south of the Canal Drive Bridge on northbound US 395.



Sidewalk on Columbia River Bridge Northbound (3.5 to 4 feet wide)



Figure 2-3 – Pedestrian facilities in the US 395 study corridor

## Bicycles

Figure 2-4 was taken from the Benton-Franklin Council of Governments’ (BFCG’s) bicycle map and shows the local bicycle routes through the US 395 corridor. The local plan shows that the bicycle routes are all on the local network. Most of the bicycle routes are on the cities’ classified system (collector streets or above – see Figure 2-5) for bicycle connectivity. There are a few classified roads that are not shown on the local plan as bicycle routes and are not recommended by the local bicycle groups. They are: US 395, SR 240, Columbia Drive and

part of Court Street. This is because of higher traffic volumes, higher speeds, and restrictive roadway widths for bicycles.

The local bicycle plan shows two different levels of routes, “preferred” and “caution”. They are defined as follows:

- **Preferred:** *These routes are designated for the bike commuter with a focus on system connectivity. These routes often lack a designated lane stripe, but road shoulders are deemed sufficiently wide so as to be safe for a rider of average-to-above average capabilities to use for a point to point ride or commute.*
- **Caution:** *These routes are for veteran riders who are comfortable maneuvering close to traffic. For example: lane width between bike and car is narrow and adjacent automobile speed is fast; or engineering challenges such as chokepoints in the design of the street are sufficient that riders should survey these routes before using them and then use them with caution, if at all.*

With these designations, the map shows a disconnected / incomplete system for bicycle commuters moving through the corridor. But there are major differences in how the City of Kennewick and the City of Pasco accommodate bicyclists on their systems.

Kennewick has made provisions for bicycles on most of their classified streets below the principal arterial level by placing them on Road Diets (reducing four lanes to three lanes with a striped shoulder). However, this varies slightly from a true road diet that has designated bike lanes instead of just striped a shoulder. Some of the shoulders are too narrow for a design standard bike lane. The Road Diet provision is for both north/south and east/west routes. In Kennewick, Union, Morain, Ely, and Vancouver Streets are all designated local north-south bicycle routes that parallel US 395. Also, bicycles are allowed on local sidewalks within the City of Kennewick.

Pasco has not made provisions for bicycles on their street system. Bicycles have to compete with automobile for space on their streets, i.e. ride in the traffic lane. That is why Pasco’s routes are rated with a caution or not on the local plan in the US 395 Corridor. In Pasco, 20<sup>th</sup> Avenue, 28<sup>th</sup> Avenue, and Road 36 are local north-south bicycle routes. Road 36 is the only acceptable route for a bicycle commuter, because it is a low volume rural road with narrow shoulders. Pasco could improve bicycle commuter connectivity if they would place 20<sup>th</sup> Avenue on a road diet.

The only off-street trail system in the corridor is the Sacagawea Heritage Trail. It runs east-west along both sides of the Columbia River from the I-182 Bridge to the SR 397 Bridge and uses both bridges as crossings of the river. The US 395 Bridge sidewalk has a connection to this trail.

The Washington State Bicycle Map shows bicycles are allowed to use parts of US 395. From I-82 to 10<sup>th</sup> Avenue, bicycles are allowed to use an eight-foot shoulder next to the traffic lanes. From 10<sup>th</sup> Avenue to Yelm Street, there is an unstriped two-foot shoulder, so bicycles are in the traffic lane. From Yelm Street to SR 240, the shoulder is striped varying from two to four feet, so bicycles still need to be in traffic lane. From SR 240 to Court Street, bicycles are prohibited on the roadway. Bicyclists are allowed to walk their bicycle across the Blue Bridge (US 395) on the narrow pedestrian walkway located on the east side of the bridge. This walkway connects to local streets on either side of the bridge and does not connect to US 395.

The US 395 corridor has a very low level of service for the bicycle commuter. This is due to lack of connectivity of commuter routes (green). They are either broken by caution areas or are strictly caution routes. Currently routes are local (within one’s city) and not regional due lack of connectivity across the Columbia River.

There are no bicycle count data for the US 395 corridor; Pasco and Kennewick do not participate in the State Bicycle survey. Data from the US Census Bureau’s FactFinder (2009-2013 American Community survey 5-year

estimates) show that 0.34% (326) of commuters within the Tri-Cities' urbanized area bicycle to work. Because of the normal bicycle commute distance (5 to 7 miles) most trips within the US 395 corridor will begin and end within Pasco and Kennewick. FactFinder shows that Kennewick has 0.09% (87) and Pasco has 0.04% (35) of the area's bicycle commuters. For these low commuter numbers and the disconnected north-south bicycle routes, very few bicycles would use this corridor (US 395 or adjacent local streets).

The BFCG 2010 Regional Bicycle & Pedestrian Plan has collision data for 2001 to 2008. It shows that Kennewick had the highest bicycle collision rate in the Tri-City area with 101 collisions, resulting in 94 injuries and one fatality. Pasco was third with 47 collisions, resulting in 45 injuries and no fatalities. The data are not by location, so they only show trends by city. US 395 has no recorded bicycle collisions.

DRAFT



Figure 2-4 – Bicycle facilities in the US 395 study corridor

### Americans with Disabilities Act (ADA)

The U.S. Americans with Disabilities Act (ADA) of 1990 requires pedestrian facilities be designed and constructed such that they are readily accessible and usable by individuals with disabilities. This includes shared-use paths, since they are intended for pedestrian use. On US 395, pedestrians enter or exit the crosswalks from handicap accessible diagonal curb ramps constructed or reconstructed in the 1990's.

Current ADA requirements may include additional widths, reduced grades and features to assist the sight, hearing, and mobility impaired. Portions of the US 395 corridor have pedestrian facilities that meet these updated guidelines. Other areas do not meet these standards or are missing pedestrian facilities. However, any potential project will be required to meet current ADA standards.

## Trails

There are two trails in the immediate vicinity of US 395: the Sacagawea Heritage Trail Loop and the Bofer Canyon Climb. The Sacagawea Heritage Trail Loop is a 19-mile pathway that uses the streets of Pasco from Sacagawea Park to the SR 397 Cable Bridge river crossing. The trail then runs along the river levee and under US 395 into Columbia Park.

Bofer Canyon Climb is a rural facility that runs parallel to I-82 from the Ridgeline Drive intersection to the I-82/Coffin Road interchange. The trail begins east of the Ridgeline Drive intersection and runs 21 miles south.

## References

- Americans with Disabilities Act, 1990
- Benton-Franklin Council of Governments, 2010 Regional Bicycle and Pedestrian Transportation Plan
- City of Kennewick Comprehensive Plan, 2009
- Design Manual 1510, Pedestrian Facilities
- Design Manual 1515, Shared Use Paths
- Design Manual 1520, Roadway Bicycle Facilities
- Kennewick Municipal Code 11.90.960
- RCW 46.61.160
- State Highway Log, 2010
- WAC 468-58-050

## Local Street System

The local street system connects to and interacts with US 395 to form a single transportation network. How well the local system functions can impact the operation of US 395. Reviewing the existing major north-south and east-west streets on the local system can give a broader view of the role of US 395 and the local system as part of the larger corridor and identify any limitations in the local system that may be impacting US 395.

**Table 2-12 – Federal Functional Classifications of State & Local Streets Intersecting US 395**

Intersecting Local Street	US 395 MP	Federal Classification	On NHS
Ridgeline Dr (Left)	13.78	Urban Collector	No
Ridgeline Dr (Right)	13.78	Urban Minor Arterial	No
Hildebrand Blvd (Left)	14.22	Urban Other Principal Arterial	Yes
Hildebrand Blvd (Right)	14.22	Urban Local Access Street	No
27 <sup>th</sup> Ave	14.90	Urban Minor Arterial	No
19 <sup>th</sup> Ave	15.56	Urban Collector	No
10 <sup>th</sup> Ave	16.17	Urban Minor Arterial	No
7 <sup>th</sup> Ave	16.42	Urban Collector	No
2 <sup>nd</sup> Ave (Left side only)	16.80	Urban Local Access Street	No
Kennewick Ave (Left)	16.92	Urban Minor Arterial	No
Kennewick Ave (Right)	16.92	Urban Other Principal Arterial	No
Clearwater Ave/Vista Way	17.11	Urban Other Principal Arterial	Yes

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Ely St/Dennis St	17.24	Urban Local Access Street	No
Yelm St	17.59	Urban Collector	No
SR 240 (Left side only)	18.26	Urban – Other Freeway Expressway	Yes
Columbia Dr (Right side only)	18.26	Urban Other Principal Arterial	Yes
Lewis St	19.35	Urban Other Principal Arterial	Yes
Sylvester St	19.51	Urban Minor Arterial	No
Court St (Left)	20.04	Urban Other Principal Arterial	Yes
Court St (Right)	20.04	Urban Minor Arterial	No
Argent Rd	20.59 + 0.10	Urban Minor Arterial	No

Figure 2-5 identifies the various classifications of major local roads and, specifically, the classification of local roads intersecting US 395.

DRAFT

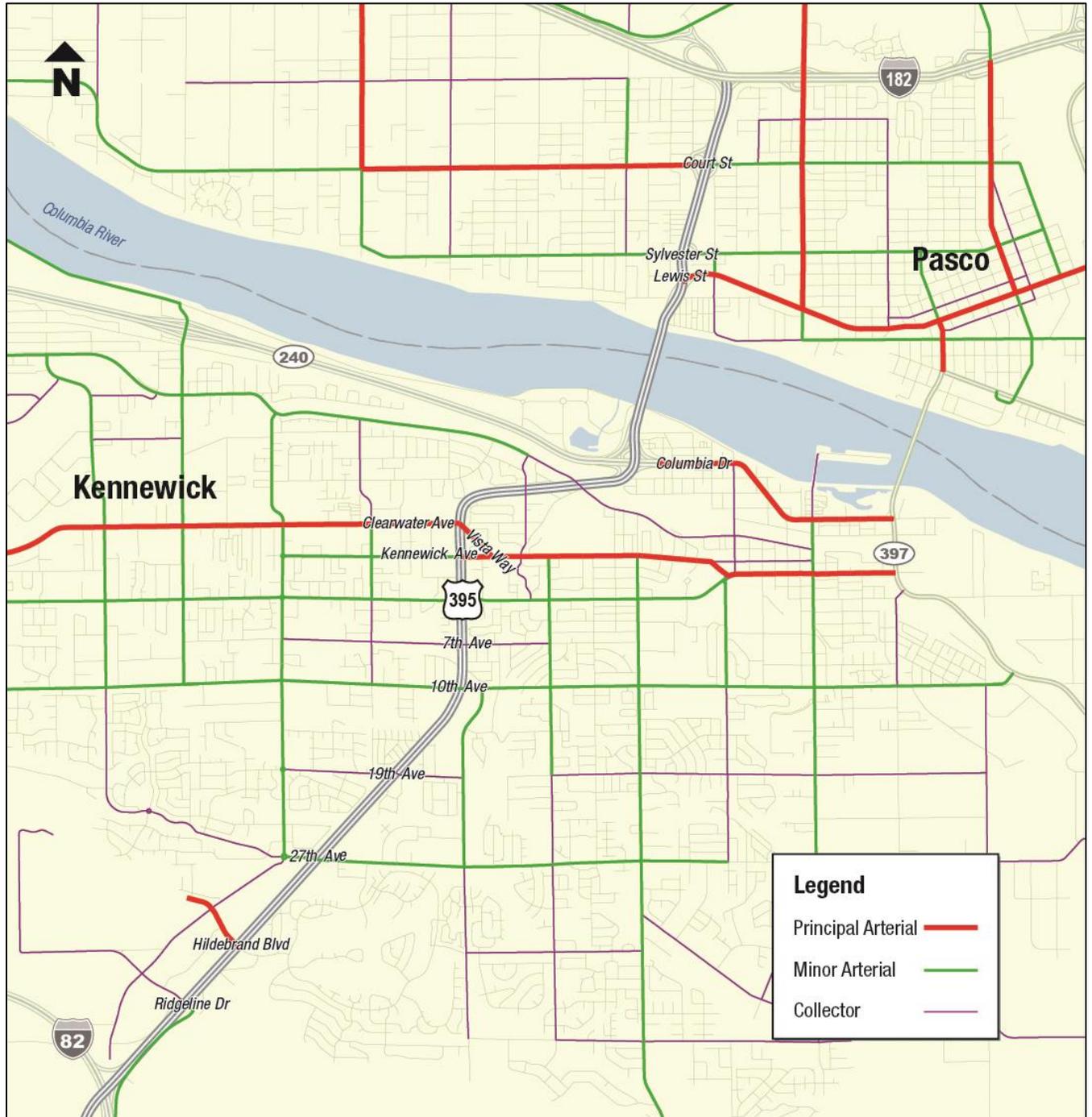


Figure 2-5 – Functional classifications for major local roads

Table 2-13 – Average Annual Daily Traffic, 2003-2012

Location	Year				
	2003	2004	2005	2008	2012
<b>LOCAL ROADS – INTERSECTING</b>					
Hildebrand Blvd (east)	2,600	Unknown	2,600	2,800	3,600
Hildebrand Blvd (west)	Unknown	Unknown	Unknown	Unknown	2,600

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27 <sup>th</sup> Ave (east)	Unknown	Unknown	18,800	20,500	22,300
27 <sup>th</sup> Ave (west)	12,100	11,300	11,600	12,800	14,000
19 <sup>th</sup> Ave (east)	2,100	Unknown	2,100	2,000	2,200
19 <sup>th</sup> Ave (west)	2,300	Unknown	2,100	2,300	2,700
10 <sup>th</sup> Ave (east)	18,800	18,500	17,600	16,400	17,800
10 <sup>th</sup> Ave (west)	13,900	15,100	12,600	12,100	13,500
Kennewick Ave (east)	11,900	Unknown	11,300	10,500	11,500
Kennewick Ave (west)	12,000	Unknown	10,000	10,300	10,800
Clearwater Ave	22,700	21,500	21,100	21,900	22,300
Vista Way	9,400	Unknown	8,200	9,300	8,400
Yelm Ave (north)	Unknown	3,800	3,500	1,800	1,700
Yelm Ave (south)	11,300	10,600	11,100	11,000	11,800
Columbia Dr	26,100	25,600	25,500	23,600	25,300
Lewis St	Unknown	13,400	13,700	13,200	Unknown
Sylvester St (east)	13,300	6,000	9,200	8,900	Unknown
Sylvester St (west)	11,900	7,500	10,700	10,100	Unknown
Court St (east)	33,700	18,100	Unknown	Unknown	Unknown
Court St (west)	30,900	20,000	Unknown	Unknown	Unknown
<b>LOCAL RDS – PARALLEL TO US 395</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2008</b>	<b>2012</b>
Fruitland St (@ Kennewick Ave)	Unknown	7,300	7,100	6,000	6,900
Fruitland St (@ Columbia Dr)	Unknown	9,800	9,000	8,500	9,700
Garfield St (@ 27 <sup>th</sup> Ave)	Unknown	3,800	4,200	4,600	3,600
Garfield St (@ 1 <sup>st</sup> Ave)	Unknown	9,300	9,100	10,000	9,000
Olympia St (@ 27 <sup>th</sup> Ave)	Unknown	7,700	7,200	8,300	7,800
Olympia St (@ 10 <sup>th</sup> Ave)	Unknown	10,900	9,600	9,300	9,700
Olympia St (@ Kennewick Ave)	8,900	9,000	8,200	7,600	8,500
Vancouver St (@ 27 <sup>th</sup> Ave)	Unknown	5,200	5,500	6,000	6,000
Vancouver St (@ 10 <sup>th</sup> Ave)	7,900	7,800	7,700	8,300	8,100
Vancouver St (@ Kenn. Ave)	6,300	6,000	6,000	6,200	6,200
Ely St (@ 36 <sup>th</sup> Ave)	Unknown	5,900	5,300	7,500	6,000
Ely St (@ 27 <sup>th</sup> Ave)	Unknown	6,600	6,300	6,500	6,400
Ely St (@ 10 <sup>th</sup> Ave)	Unknown	6,800	6,400	6,600	6,800
Southridge Blvd (@ 27 <sup>th</sup> Ave)	Unknown	3,500	3,300	4,400	4,500
Morain St (@ 10 <sup>th</sup> Ave)	Unknown	2,500	2,200	2,300	2,200
Morain St (@ Kennewick Ave)	Unknown	5,700	5,000	5,300	5,000
Morain St (@ Clearwater Ave)	Unknown	7,500	6,600	6,500	6,200
Union St (@ 27 <sup>th</sup> Ave)	12,100	10,700	7,800	7,400	9,000
Union St (@ 10 <sup>th</sup> Ave)	14,500	12,300	10,400	10,100	10,600
Union St (@ Clearwater Ave)	13,000	11,500	10,800	11,800	11,500
Edison St (@ 10 <sup>th</sup> Ave)	Unknown	6,800	7,400	6,800	6,400
Edison St (@ Clearwater Ave)	16,000	16,000	15,000	15,000	16,000
Edison St (@ SR 240)	24,000	22,000	22,000	24,000	26,000
20 <sup>th</sup> Ave (@ Sylvester St)	Unknown	Unknown	9,700	Unknown	Unknown
20 <sup>th</sup> Ave (@ Court St)	Unknown	Unknown	12,600	Unknown	Unknown
28 <sup>th</sup> Ave (@ Lewis St)	12,600	5,600	7,800	Unknown	Unknown
Road 36 (@ Court St)	2,700	1,500	2,000	Unknown	Unknown

Figure 2-6 identifies the major local east-west streets that intersect US 395. The speed limits, traffic volumes and number of lanes are noted. Generally, the local east-west streets have more lanes (capacity) and carry significantly more traffic than the local parallel north-south routes.

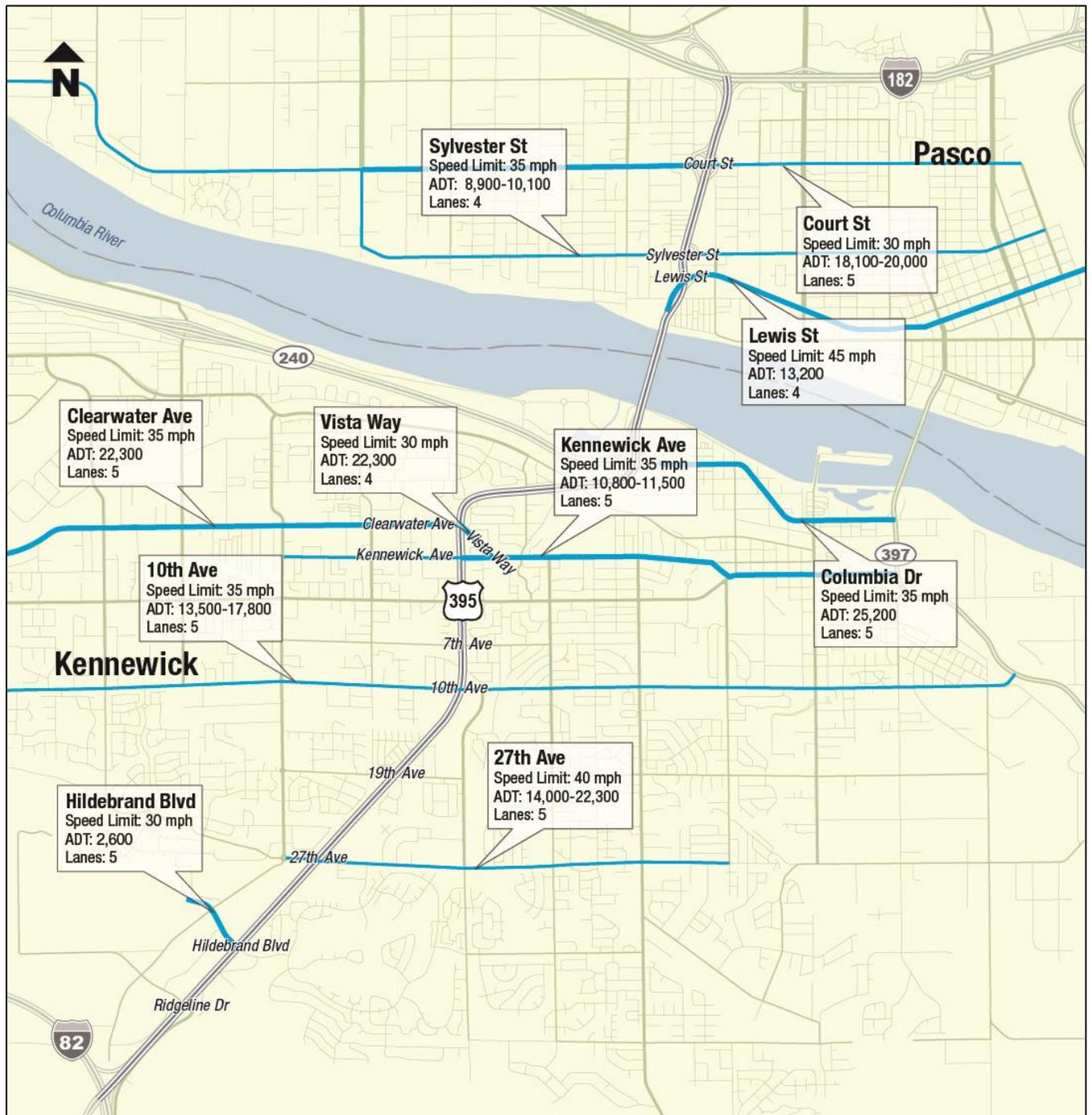


Figure 2-6 – Major local east-west streets intersecting US 395

Figure 2-7 identifies the major local north-south streets that intersect US 395. The speed limits, traffic volumes and number of lanes are noted. 20<sup>th</sup> Avenue in Pasco is the only local north-south road classified as a principal arterial.

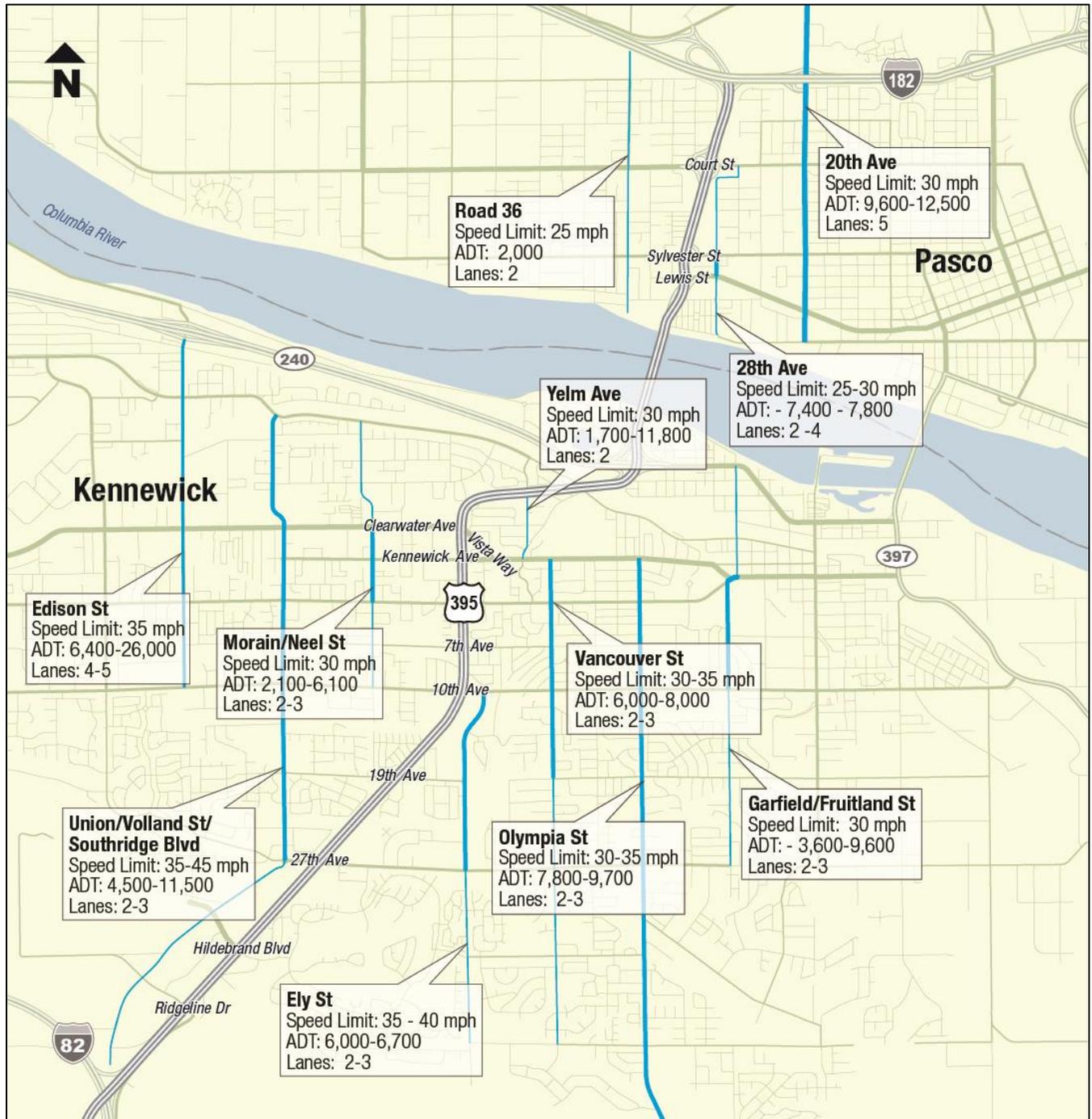


Figure 2-7 – Major local north-south routes parallel to US 395

## **Kennewick – North-South Roads**

There are several major north-south streets on either side of US 395, but none provide a full-length connection from north to south. Only one has four or five lanes (Edison Street). In the last 10 years many streets in Kennewick were converted from four lanes to three lanes using the road diet philosophy except the bike lane is unmarked. As Kennewick improves their streets they incorporate areas for pedestrians and bicycles. The City of Kennewick does not have any north-south principal arterials east of US 395 and the nearest one (Columbia Center Boulevard) to the west is over three miles away.

### ***Garfield Street/Fruitland Street***

The Garfield Street/Fruitland Street route is a signalized route that lies one and one-half miles east of US 395. Although it is a significant distance from US 395, it is the closest major route east of US 395 that crosses the railroad tracks and connects to Columbia Drive. Garfield Street is a two-lane street with on-street parking and classified as a collector or minor arterial from 27<sup>th</sup> Avenue to Kennewick Avenue. It has a 30 mile per hour speed limit and carries between 4,000 and 9,000 vehicles per day. Fruitland Street is a three-lane (road diet) street classified as a collector from Kennewick Avenue to Columbia Drive. It has a speed limit of 30 miles per hour and carries between 7,000 and 10,000 vehicles per day.

### ***Olympia Street***

Olympia Street is a signalized street one mile east of US 395. From SR 397 to 45<sup>th</sup> Avenue, Olympia Street is a rural two-lane road with no shoulders. From 45<sup>th</sup> Avenue to 27<sup>th</sup> Avenue, it is a two-lane mixed rural/urban road with shoulders that are narrow in some spots. From 27<sup>th</sup> Avenue to 10<sup>th</sup> Avenue, Olympia Street is a three-lane road (road diet) with no parking, curb, and narrow striped shoulders. From 10<sup>th</sup> Avenue to Kennewick Avenue, it is a three-lane road (a road diet) with on-street parking and no bike lane. Olympia Street is a long minor arterial route beginning with its connection to SR 397 at the south end and terminating at Kennewick Avenue on the north end. It carries between 1,400 and 10,000 vehicles per day with a speed limit of 30 or 35 miles per hour.

### ***Vancouver Street***

Vancouver Street is a three-lane (road diet with narrow bike shoulder) signalized street and lies one-half mile east of US 395. It is a longer north-south route that also terminates at Kennewick Avenue. Vancouver Street is classified as a collector or minor arterial from 45<sup>th</sup> Avenue to Kennewick Avenue. It has a speed limit of 30 or 35 miles per hour and carries between 1,400 and 10,000 vehicles per day. A single roundabout exists on this street at the 27<sup>th</sup> Avenue intersection.

### ***Yelm Street***

Yelm Street is a short north-south collector that connects Canal Drive and Kennewick Avenue. Yelm Street is a two-lane street (with on-street parking) with a speed limit of 30 miles per hour and carries between 1,200 and 12,000 vehicles per day. Although Yelm Street is a collector street, it carries more traffic at the US 395 intersection than Kennewick Avenue, which is classified as a principal arterial. Yelm Street is signalized at the Kennewick Avenue intersection, and is stop controlled at Canal Drive.

### ***Ely Street***

Ely Street ranges from only 600 feet east of US 395 at 10<sup>th</sup> Avenue to just less than a mile at 27<sup>th</sup> Avenue. It is a three-lane (road diet) street classified as a minor arterial or collector from 10<sup>th</sup> Avenue to 45<sup>th</sup> Avenue. Ely Street has a speed limit of 35 or 40 miles per hour and carries between 3,100 and 6,800 vehicles per day. Ely Street is signalized at major intersections.

### ***Morain Street/Neel Street***

Morain Street is one-half mile west of US 395 at 10<sup>th</sup> Avenue north to Clearwater Avenue. Morain Street and Neel Street are three-lane (road diet with narrow bike shoulder) signalized streets and classified as a minor arterial or collector from 10<sup>th</sup> Avenue to Canal Drive. They carry between 2,200 and 4,000 vehicles per day and have a 30 mile per hour speed limit.

### ***Southridge Boulevard/Union Street/Volland Street***

The Southridge Boulevard/Union Street/Volland Street forms another long major north-south route. Southridge Boulevard parallels US 395 approximately one-quarter mile to the west from Christenson Road to 27<sup>th</sup> Avenue. Union Street ranges from only one-quarter west of US 395 at 27<sup>th</sup> Avenue to one mile west at 10<sup>th</sup> Avenue north to Clearwater Avenue. Volland Street continues the Union Street route up to Canal Drive. Southridge Boulevard is classified as a collector, and Union Street and Volland Street are classified as minor arterials. All are three-lane (road diet) streets. Southridge Boulevard is a free-flow street with a roundabout at the north end. It has a 45 mile per hour speed limit and carries around 4,400 vehicles per day. Union Street has a mix of roundabouts and signals. There is a 35 mile per hour speed limit with traffic averaging between 8,300 and 12,000 vehicles per day. Volland Street is a signalized street with a 35 mile per hour speed limit and averaging around 8,600 vehicles per day. At the south end, Southridge Boulevard intersects Christenson Road, which crosses underneath I-82 and provides access to the new urban area south of I-82.

### ***Edison Street***

Edison Street is one and one-half miles west of US 395. Although it is a significant distance from US 395, it is the nearest north-south route to connect with SR 240 west of US 395. Edison Street is a signalized four or five-lane (with disconnected bike shoulder) minor arterial from 10<sup>th</sup> Avenue to Columbia Park Trail adjacent to the Columbia River. It carries between 6,400 and 26,000 vehicles per day and has a 35 mile per hour speed limit.

## **Pasco – North-South Roads**

The City of Pasco has three major north-south routes in the vicinity of US 395. Pasco does not have any bicycle designated areas on their streets. 20<sup>th</sup> Avenue is classified as a principal arterial.

### ***20<sup>th</sup> Avenue***

20<sup>th</sup> Avenue is approximately one-half to three-quarters of a mile east of US 395. It is a five-lane (with no bike area) signalized street classified as a principal arterial from Lewis Street to Argent Road, and a minor arterial south of Lewis Street to A Street. 20<sup>th</sup> Avenue carries between 6,200 and 18,000 vehicles per day and has a speed limit of 30 miles per hour.

### ***28<sup>th</sup> Avenue***

28<sup>th</sup> Avenue is about one-quarter mile east of US 395. 28<sup>th</sup> Avenue is a two-lane (on-street parking on one side and a new bike area) signalized street classified as a collector or minor arterial from Sylvester Street to A Street. It continues as a corridor north of Sylvester Street up to Court Street, but is only a local access street. 28<sup>th</sup> Avenue carries around 7,600 vehicles per day with a speed limit of 25 or 30 miles per hour.

### ***Road 36***

Road 36 is less than one-half mile west of US 395. Road 36 is a two-lane (on-street parking, no bike area) rural street classified as a collector or minor arterial from Sylvester Street to Wernett Road. It continues as a route south of Sylvester Street to the Columbia River, but is only classified as a local street. Road 36 has a 25 mile per hour speed limit and carries 1,900 vehicles per day. There is only one signal and it is at Court Street.

## **References**

City of Kennewick, 2003-2012 Traffic Volume Chart:

<http://www.go2kennewick.com/go2kennewick/dmdocuments/Traffic%20Counts.pdf>

City of Pasco, Comprehensive Plan 2007-2027

## Public Transportation Facilities and Services in the Corridor

### Ben-Franklin Transit

Ben Franklin Transit (BFT) is a municipal corporation and the sole provider of public transportation for riders through the greater Tri-Cities area. There are no transit stops on US 395, but several routes run on or cross the highway.

BFT have a number of transit stops along the corridor located within a few blocks of US 395. In Kennewick, the stops are located in the vicinity of the 27<sup>th</sup> Avenue, 19<sup>th</sup> Avenue, 10<sup>th</sup> Avenue, 7<sup>th</sup> Avenue, Kennewick Avenue, Clearwater Avenue, Ely Street, and Yelm Street intersections, and the SR 240/Columbia Drive interchange. In Pasco, the stops are located near the Lewis Street/Sylvester Street and Court Street interchanges. Transit stops in the immediate vicinity of US 395 can generate pedestrian traffic at the US 395 intersections. BFT has stated they do not want transit stops on US 395 (on the roadway itself) now or in the future due to safety concerns. One transit route extends south to Hildebrand Boulevard providing limited service to the Southridge area, but there is no service to the Canyon Lakes area. BFT has applied for funding to increase service in the corridor and been unsuccessful. As these areas continue to grow BFT will continue evaluating the need for transit serve to these new areas.

Data from the US Census Bureau's FactFinder (2009-2013 American Community survey 5-year estimates) show that 1.4% (1,364) of commuters within the Tri-Cities urbanized area use public transportation (bus) to get to work. FactFinder shows that Kennewick has 0.57% (537) and Pasco has 0.42% (403) of the area's public transportation commuters. It is noted that this data is for commuter trips and not general transit use. BFT buses run approximately 50% full or less during morning and afternoon commutes. This includes commuters and non-commute transit users. The area's main employment center, the Hanford Reservation, is no longer served by transit. Since 2001 transit has not be allowed to service the site due to security reasons. BFT notes that they have a hard time establishing ridership due to a lack of a central business district in the Tri-Cities area. All of the cities have their own old business district (old downtown) and new business districts are separated from the old district by some distance (i.e., business sprawl). This employment discontinuity makes BFT have shorter routes trying to cover all the areas. Most transit commuters will not tolerate more than one transfer to get to their destination. Because of the discontinuity (more than one transfer) most transit trips within the US 395 corridor will begin and end within Pasco and Kennewick.

Access to transit (the sidewalk network – see Figure 2-3) is incomplete or non-existent in many areas along the corridor. The buses run on the cities' classified system (collector or above – see Figure 2-5) for connectivity. In Kennewick, the classified streets for the most part have sidewalks. Off these streets, sidewalks are sporadic, so people have to walk in the street with traffic or on dirt shoulders to get to a classified street. In Pasco, east of US 395 (old Pasco) there is a well-connected sidewalk system. West US 395 in Pasco, sidewalks are non-existent except for a short segment along Court Street. This means people are walking on the street with traffic or on dirt shoulders to an unprotected transit stop (standing on a dirt shoulder waiting for a bus).

In a transit surveys, BFT found that nearly 85% of riders using the bus need it for transportation, because they have no access to a vehicle. Data from FactFinder show that 1.8% (1,708) of commuters had no vehicle and 17.3% (16,423) had only one vehicle available in a household within the Tri-Cities urbanized area to get to work.

FactFinder shows that Kennewick has 0.77% (732) households with no car and 6.9% (6,554) with only one car, while Pasco has 0.59% (556) with no car and 4.6% (4,365) with only one car. These facts tend to show that transit in this area is used by people without a vehicle and not general commuters with access to a vehicle.

### Ben-Franklin Vanpool

BFT runs one of the state’s largest vanpool programs. Since transit is not allowed on the Hanford Reservation (a major employment center) and there is a disconnected transit system, a majority of public transportation commuters use vanpools. Most commuters are going to the north end of Richland and Hanford areas. The Benton-Franklin Council of Governments (BFCG) conducts a bi-annual SOV/HOV (single-occupant vehicle/high-occupant vehicle) windshield survey that includes counting marked vanpool vehicles. The 2014 survey showed over 150 vanpools going to the Hanford site (not all are BFT vehicles; Yakima Transit and Grant Transit Authority also have vans that run to Hanford). The 2014 windshield survey showed six vans were counted on US 395 at 27<sup>th</sup> Street in Kennewick and one van was counted at Court Street and 20<sup>th</sup> Avenue in Pasco.

Data from the US Census Bureau’s FactFinder (2009-2013 American Community survey 5-year estimates) show that 3.2% (3,002) of commuters within the Tri-Cities urbanized area are in carpools of more than four persons (assumed to be vanpools). FactFinder shows that Kennewick has 1.0% (970) of the area’s four-plus-person carpool commuters and Pasco has 0.9% (813).

The BFCG windshield survey shows carpooling accounts for between seven and ten percent of the area’s commuters on average. However, carpooling accounts for 20% of the commuters on US 395 at 27th Street in Kennewick and 25% at Court Street and 20th Avenue in Pasco. BFT has requests to form vanpools in this area, but lacks the infrastructure (parking areas) to support vanpooling along the US 395 corridor in Kennewick and Pasco.

### Park and Ride Lots

There are four park-and-ride lots within the study corridor (see Figure 2-8) totaling 235 spaces. Three of the lots are owned and operated by Ben Franklin Transit and are served by buses. WSDOT has one lot on Falls Avenue, which is not served by bus.

BFT has identified the need for 300 new parking spaces in the southern part of the corridor. This area is growing and their existing lot in the area is at or near capacity. If 85 to 90 percent of spaces in a parking lot are filled, it is considered at capacity. BFT has a goal to increase the number of park and ride spaces along this corridor to facilitate vanpool opportunities and requests.

**Table 2-14 – Park-and-Ride Locations along US 395 Corridor**

Park-and-Ride Location	# of Spaces	Lot Usage
Union Loop Rd and 27 <sup>th</sup> Ave, one block west of US 395 (BFT)	50	80%
Huntington Ave Transit Center located two blocks west of US 395 (BFT)	96	61%
Falls Ave located in US 395 right-of-way just west of Yelm Street (WSDOT)	39	50%
22 <sup>nd</sup> Ave Transit Center in Pasco, about one-half mile east of US 395 (BFT)	50	42%

Data from the US Census Bureau’s FactFinder (2009-2013 American Community survey 5-year estimates) show that 14% (13,130) commuters within the Tri-Cities urbanized area are in carpools. Of that, 8.3% (7,850) are two-person carpools and 2.4% (2,278) are three-person carpools. The rest are assumed to be vanpools as noted above. FactFinder shows that Kennewick has 4,412 and Pasco has 4,624 of the area’s carpool commuters. Of

this, Kennewick has 2,835 two-person carpools and 607 three-person carpools, while Pasco has 2,627 two-person carpools and 1,184 three-person carpools.

As noted above, the BFCG windshield survey shows the Tri-cities urbanized area average between seven and ten percent carpooling commuters except along US 395 where carpoolers average between 20 and 25 percent.



Figure 2-8 – Park-and-Ride Lots and Ben Franklin Transit Routes within the US 395 Corridor Study Area

### References

Benton-Franklin Council of Governments Regional Bicycle and Pedestrian Transportation Plan, 2005

Ben Franklin Transit, <http://www.bft.org>, Richard Ciccone, 2009 and Kathy McMullen, 2012  
BFCG “2007 Tri-Cities Metropolitan Area Park and Ride Lot Report”

## **Intercity Transit Services**

There are several entities that offer transit service between the Tri-Cities metropolitan area and other communities. The Confederated Tribes of the Umatilla Indian Reservation funds the Tri-City Trolley offering free public transit service between Hermiston, Oregon and the Tri-Cities. The service operates Monday through Saturday with stops at the 27<sup>th</sup> Avenue park-and-ride, the Huntington Street Transfer Station, and the 22<sup>nd</sup> Street Transfer Station. US Census Bureau’s FactFinder show that 49 people in Pasco use the Trolley to commute to work.

Through a partnership with WSDOT and Greyhound Bus Line, Grape Line Transit provides intercity bus service between Walla Walla and Pasco. Grape Line Transit stops at three locations in Pasco: at the 22<sup>nd</sup> Avenue Transit Center, the Tri-Cities Airport, and the Amtrak Station. Grape Line currently offers three round-trips daily.

Greyhound offers intercity bus service from the Tri-Cities to other locations in the United States, Canada, and Mexico. The only Greyhound transit stops are in Pasco at the three Grape Line Transit stops (see the Grape Line service map in the figure above). The main station, located at the Pasco Intermodal Station/Amtrak Station (535 N 1<sup>st</sup> Avenue), is a full-service terminal. Riders can also board the Greyhound bus at the Pasco Transit Center and the Tri-Cities Airport, which offer limited service.

## **Railroads**

Burlington Northern Santa Fe (BNSF) and Union Pacific (UP) are the two major railroads in the area. There are no at-grade railroad crossings on US 395. There is an overcrossing of a BNSF mainline and a UP spur line immediately south of the SR 240 interchange. On the local system, at-grade crossings that may influence the highway are located at Fruitland Street, Benton Street, and Washington Street.

These railroad companies serve the Ports of Pasco and Kennewick. The UP line generally parallels SR 240 through Kennewick while the BNSF tracks bisect both Kennewick and Pasco. These railroads as well as canals create barriers to a more interconnected local system.

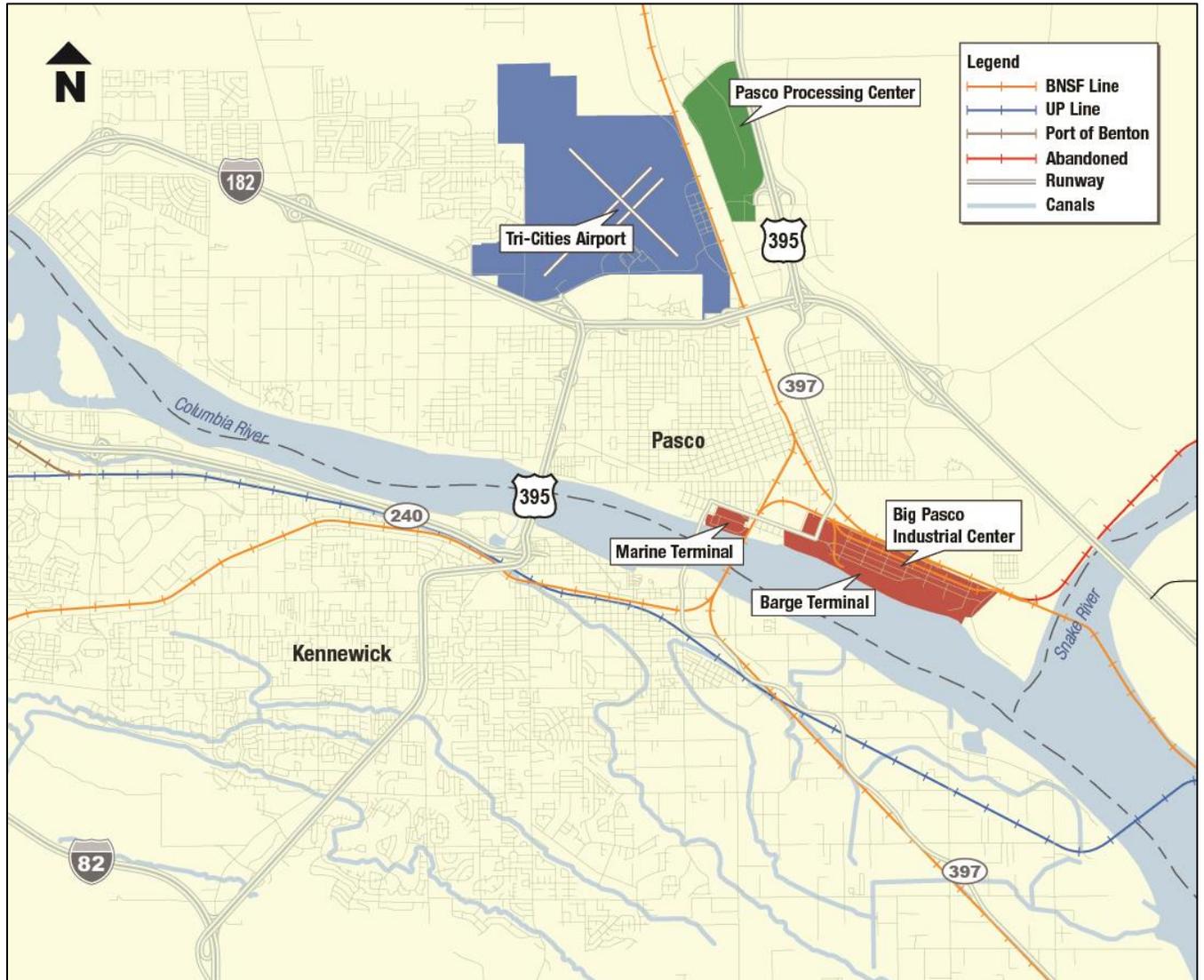


Figure 2-9 – Railroads, Airport, and Canals within the US 395 Corridor Study Area

Although outside the corridor study area, BNSF has major rail facilities in Pasco. BNSF is concentrating regional service at the Big Pasco Industrial Center location as containers from ports in eastern Idaho and northeastern Oregon are expected to increase. The Big Pasco Industrial Center is a multi-modal rail/barge terminal and is able to transfer freight from train to barge without always using trucks for the haul.

BNSF has designated Big Pasco as one of the three strategic rail properties in the region where they will expand service. It is also the largest switching yard in the Pacific Northwest, with more rail cars per day than Seattle, Tacoma or Portland. The Port of Pasco identified a need to increase the facility at Big Pasco Industrial Center to create an intermodal hub to serve containers by rail, truck or barge in order to accommodate the area's agricultural exporters. The railroad and the multimodal port facilities provide an indirect improvement to the mobility and safety of the US 395 corridor by decreasing the number of trucks needed to move freight out of the Tri-City area.

#### References

Benton Franklin Council of Governments 2006-2025 Regional Transportation Plan  
BNSF <http://www.bnsf.com/>

Port of Pasco <http://www.portofpasco.org/>  
Union Pacific Railroad <http://www.up.com/>  
WSDOT Freight Systems Division <http://www.wsdot.wa.gov/freight>

## **Airport**

The Tri-Cities Airport lies at the north end of the planning study area (see Figure 2-9). US 395 is a major route for access to the airport. The airport has the only commercial air service in the Tri-Cities area, and is the third largest airport in the state based on the number of passengers boarding. It serves communities in southeastern Washington and northeastern Oregon. There are over 250,000 passenger boardings per year with commercial passenger service to Seattle, Salt Lake City, Denver, and Minneapolis.

### **References**

Port of Pasco web site, <http://www.portofpasco.org/tri-cities-airport/general-information/>

## **Utilities**

The study area has a large number of utility easements within the US 395 right of way and corridor with several different types of utilities represented. The utilities are buried or overhead. The known utilities along the US 395 corridor are listed in Appendix D. There are a total of eight utility approaches on US 395 and all are located between Hildebrand Boulevard and 10<sup>th</sup> Avenue. US 395 crosses four canals through the study corridor (MP 14.82, 15.49 (piped), 15.83, and 17.97).

### **References**

WSDOT's Utility Franchise Permit Program, accessed November 2009.  
WSDOT Utilities Manual M 22-87.01, December 2008