

Appendix H

Transportation

Appendix H-1
Road Program 2016 – 2021
(or as updated)

RESOLUTION

2015 534

BEFORE THE BOARD OF COMMISSIONERS OF BENTON COUNTY, WASHINGTON:

IN THE MATTER OF COUNTY ROADS RE: APPROVAL OF THE 2016 - 2021 SIX-YEAR ROAD PROGRAM

WHEREAS, RCW 36.81.121 requires development of perpetual advanced six-year plans for coordinated transportation; and

WHEREAS, the updated six-year plan, describing the road maintenance and improvement program for the period of 2016 through 2021 shall be adopted prior to adoption of the annual budget, after one or more public hearings; and

WHEREAS, a public hearing on said six-year plan/road program was held on July 28, 2015; and

WHEREAS, in accordance with WAC 136-14-050 and WAC 136-20-060, the priority array and bridge report prepared by the County Engineer and staff were considered as a part of the six-year plan; and

WHEREAS, the County Engineer recommends approval of the 2016 – 2021 Six Year Road Program; **NOW THEREFORE**,

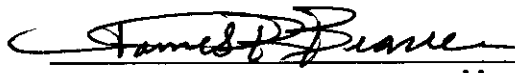
BE IT RESOLVED that the Board of Benton County Commissioners, Benton County, Washington hereby concurs with the County Engineer's recommendation and hereby approves the 2016 – 2021 Six-Year Road Program.

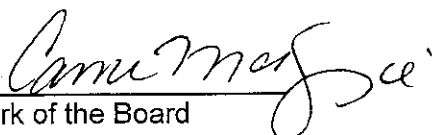
Dated this 28th day of July, 2015.


Chairman of the Board.

SHON SMALL - ABSENT

Chairman Pro-Tem.


Member.

Attest: 
Clerk of the Board

Constituting the Board of County
Commissioners of Benton County,
Washington.

BENTON COUNTY

Public Works Department



Submitted to

Board of County Commissioners

Hearing date: July 28, 2015

Jerome Delvin, Chairman

Shon Small, Pro Tem

James R. Beaver

Introduction

The Benton County Six-Year Road Program is a planning tool to identify the expenditure of operational and capital funds for improvement to County roadways. Even though this is not a budget document, budgets are prepared using the information contained in this planning document. A new Six-Year Program is prepared in the spring of each year with adoption by the Board of County Commissioners anticipated prior to July 31. In the fall of each year the Board of County Commissioners will adopt a One-Year Road Program identifying the next year's road projects to be designed and constructed. After the One-Year Road program is approved the Board of County Commissioners approves the Public Works budget that is authorization for all Public Works fund expenditures.

This document is intended to provide the following information:

Financial

The Financial Projection report shows proposed revenues and expenditures for the six-year planning period. Many of the projects listed in the Six-Year Road Program are grant dependent. If grants for each project are not received the project will be delayed until funding becomes available. Remember that this is a planning document and not a budgeting document. Once funds become available projects will be prioritized by the Board of County Commissioners and then included in the One-Year Road Program and Public Works budget.

Six-Year Road Program

Each project has a brief explanation of the needed improvements, sources of funding, project cost, phasing and schedule. As needs change throughout the roadway network system and as funds become available priorities will also change. Projects listed are in relative priority based upon community needs regardless of funding. The Board establishes priorities at the time of document approval however; community involvement, available funding and safety requirements will always modify project priorities.

Road Data

Following the Six-Year Road Program is supplemental road data. The supplemental data contains information about various roadway programs and plans in the Six-Year Program. The following categories are listed in the Road Data section of this document:

- Discussions concerning potential new roads
- A list of roads benefiting from the Rural Arterial Program
- Roads paved through the County Arterial Preservation Program
- Certain paved roads that are not constructed to current standards
- Gravel roads scheduled to be paved
- Railroad crossings where new signal improvements would be beneficial
- A list of bridges in Benton County
- An inspection report for Benton County bridges
- A glossary of terms

The inventory for our roadway network as of June 9, 2015 is as follows:

<u>Roadway Surface</u>	<u>Urban</u>	<u>Rural</u>
Bituminous Surface Treatment	144.8	383.2
Asphalt Concrete Pavement	29.8	45.4
Portland Cement Concrete Pavement	0.3	0.2
Gravel	2.5	241.5
Graded & Drained	0	5.3
Unimproved	<u>0</u>	<u>5.4</u>
Total Miles	177.4	681.0

<u>Federal Functional Classifications</u>	<u>Miles</u>
Urban	
16 Minor Arterial	3.1
17 Major Collector	44.1
18 Minor Collector	5.3
19 Local Access	<u>124.9</u>
Total Urban Mileage	177.4
Rural	
07 Major Collector	87.4
08 Minor Collector	202.9
09 Local Access	<u>390.7</u>
Total Rural Mileage	681.0
Total Mileage County Wide	858.4

<u>Bridges</u>	<u>Quantity</u>
Twenty feet in length or longer	54
Greater than 6 feet but less than 20 feet in length	28

**BENTON COUNTY SIX-YEAR ROAD PROGRAM
FINANCIAL PROJECTION 2016-2021**

-REVENUES-

<u>Item</u>	<u>Revenue</u>
Carryover (January 1, 2016)	\$1,700,000
Property Taxes (Prior to Diversion)	\$39,575,754
Motor Vehicle Fuel Tax:	
Road Fund #0101-101	\$18,743,903
CRID's	\$970,000
State Grants:	
UCP-TIB (formerly TPP; TIA)	
CAPP	\$2,869,500
FMSIB	
RAP	\$4,481,000
State Grants Total:	\$7,350,500
Federal Grants:	
FHWA APP	
STP/R: Rural	\$952,000
STP/U: Urban	\$983,000
STP/H: Hazard Elimination	
STP/XP: Railroad	\$54,000
STP/E: Enhancement	
STP/BRRP: Bridge	
Federal Grants Total:	\$1,989,000
Public Works Trust Fund Loan	
Other Funds	
Operating Transfer-In	
County Road Improvement Matching Program Fund #0101-102	\$5,446,000
CRIMP Fund #0101-102 Carryover	\$1,840,000
Paths & Trails Reserve Fund #0114-101	\$360,000
Interest on Road Fund	\$150,000

TOTAL ANTICIPATED REVENUES **\$78,125,157**

-EXPENSES-

<u>Item</u>	<u>Expenditures</u>
Traffic Policing (Diverted Property Taxes)	\$3,108,642
Maintenance	\$38,264,321
Administration	\$9,767,918
Operations	\$4,152,643
Construction:	
Road Fund #0101-101 (less PWTF P&I Pymt)	\$2,609,000
County Road Improvement Matching Program Fund #0101-102	\$5,446,000
Paths & Trails Reserve Fund #0114-101	\$360,000
CRID's	\$970,000
State Grants:	
UCP-TIB (formerly TPP; TIA)	
CAPP	\$2,869,500
FMSIB	
RAP	\$4,481,000
State Grants Total:	\$7,350,500
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FHWA APP	
STP/R: Rural	\$952,000
STP/U: Urban	\$983,000
STP/H: Hazard Elimination	
STP/XP: Railroad	\$54,000
STP/E: Enhancement	
STP/BRRP: Bridge	
Federal Grants Total:	\$1,989,000
Public Works Trust Fund Loan P & I Repayment	\$1,240,870
Other Funds	
Undetermined Funding Sources (less CRID)	\$18,420,000

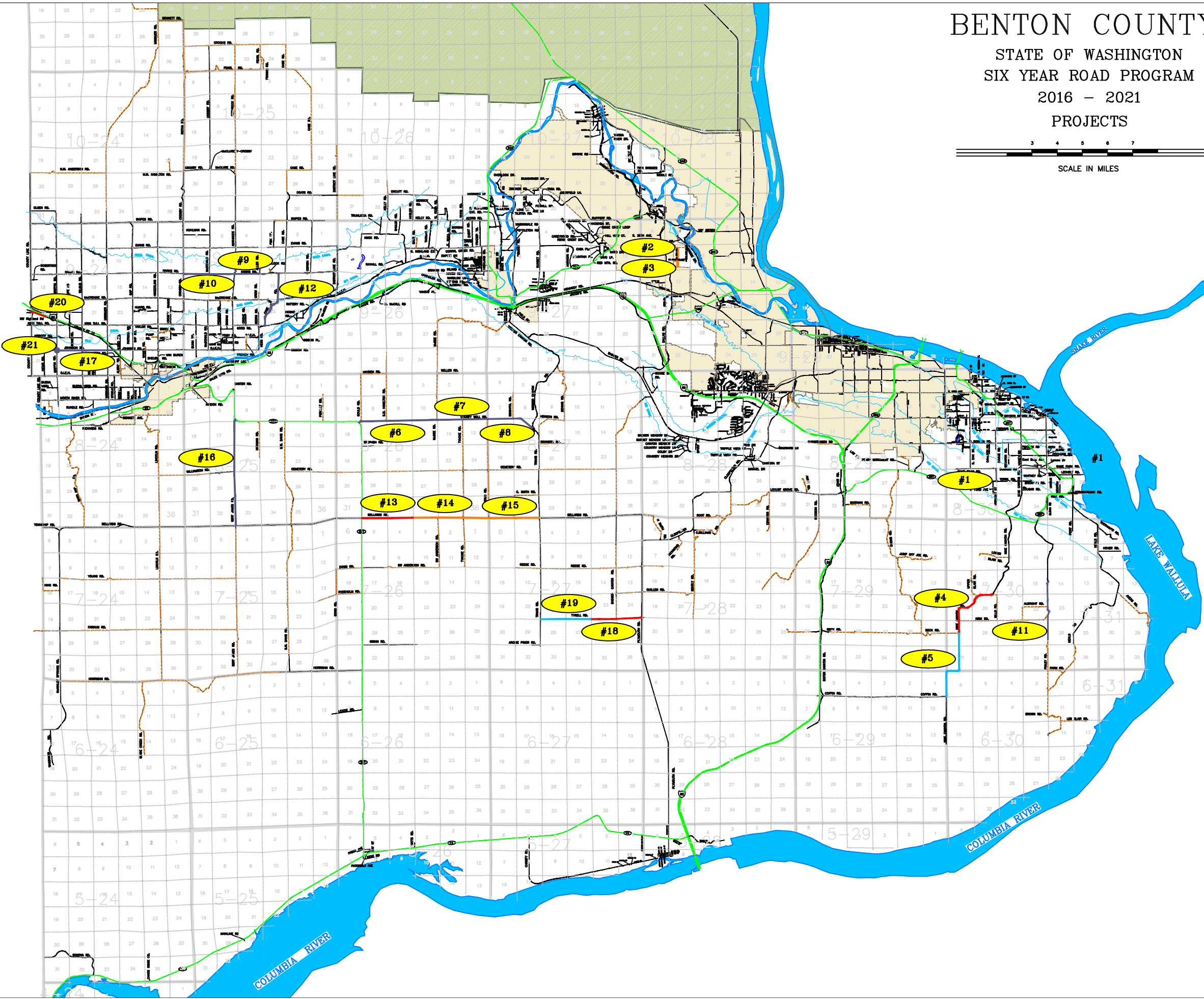
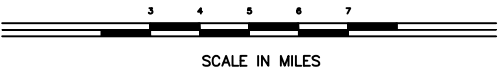
TOTAL ANTICIPATED EXPENDITURES **\$93,678,893**

Under - (Over) - Expended **(\$15,553,736)**

2016-2021 ROAD PROGRAM

PRIOR ITY	PROJECT	LENGTH (mi)	COST EST	COUNTY					STATE			FEDERAL			UNDETERMINED FUNDING SOURCE	CONSTRUCTION			
				ROAD FUND			CONTRIBUTIONS		TIB	FMSIB	CRAB	BFCOG	WSDOT	FHWA					2019 to
				PT & MVFT	P&T R	CRIMP	AMT	SOURCE	UCP		RAP	STP/R&U	STP/E&H			2016	2017	2018	2021
	POTENTIAL NEW ROADS																		
1	DAGUE RD: Terril to Game Farm	0.5	250											250					250
2	WILLAMETTE HEIGHTS - S. 38th AVE. (W. Rich. Limits to W. Rich. Limits)	0.7	1,283	300								983				300		983	
3	WILLAMETTE HEIGHTS - MT. ADAMS VIEW (S. 38th Ave West to W. Rich. Limits)	0.1	200	200												200			
	Subtotal		1,733	500								983		250	500		983	250	
	RURAL ARTERIAL PROGRAM																		
4	NINE CANYON RD Phase II: Beck to Mills	2.4	1,500			150					1,350					1,500			
5	NINE CANYON RD Phase III: Coffin to Beck	3.0	3,479			348					3,131					733	2,020	726	
6	COUNTY WELL ROAD Phase I: SR221 to McBee	3.0	2,250											2,250					2,250
7	COUNTY WELL ROAD Phase II: McBee to Clodius	2.0	1,500											1,500					1,500
8	COUNTY WELL ROAD Phase III: Clodius to County Pit	1.8	1,350											1,350					1,350
9	HANKS RD: 1/2 mile East of McDonald to Aller	1.5	1,800	100										1,700	100				1,700
10	HANKS RD: Crosby to 1/2 mile East of McDonald	1.5	1,800	100										1,700	100				1,700
11	FINLEY RD: M.P. 5.2 to End of Pavement	2.1	1,750											1,750					1,750
12	CASE RD: OIEH to Hanks	2.3	2,000											2,000					2,000
	Subtotal		17,429	200		498					4,481			12,250	2,433	2,020	726	12,250	
	PAVED ROAD UPGRADES																		
13	SELLARDS RD Phase I: SR 221 to 2 miles East of SR 221	2.0	1,100			148						952				1100			
14	SELLARDS RD Phase II: 2 miles East of SR221 to 1/2 mile East of Tyacke	2.5	1,475	75		1,400										75	700	700	
15	SELLARDS RD Phase III: 1/2 mile East of Tyacke to Travis	2.5	1,475	75		1,400										75		700	700
16	BERT JAMES RD: Sellards to SR 221	4.0	3,100	100										3,000	50	50			3,000
17	JOHNSON RD: CR 12 to Griffin	2.2	1,470	150										1,320		75	75	1,320	
	Subtotal		8,620	400		2,948						952		4,320	1,300	825	1,475	5,020	
	GRAVEL ROAD UPGRADES																		
18	TYRELL RD Phase I: 2 miles West of Plymouth Road to Plymouth Road	2.0	1,000			1,000										1,000			
19	TYRELL RD Phase II: Travis Road to 2 miles West of Plymouth Road	2.0	1,000			1,000											1,000		
	Subtotal		2,000			2,000										1,000	1,000		
	ENHANCEMENT & SAFETY PROJECTS																		
20	PROSSER to GRANDVIEW PEDESTRIAN & BICYCLE PATHWAY IMPROVEMENTS	0.6	20	3									17			20			
21	JOHNSON RD/GRIFFIN RD: Intersection Improvements	0.5	1,000											1,000					1,000
22	OBSOLETE BRIDGE REMOVAL	n/a	300											300					300
23	ROADSIDE WATERWAY PIPING AND SAFETY MITIGATION	n/a	300											300					300
	Subtotal		1,620	3									17	1,600	20				1,600
	ANNUAL PROGRAMS & MISCELLANEOUS PROJECTS																		
24	PATHS & TRAILS		60		60											10	10	10	30
25	RAILROAD CROSSINGS		60	6									54			10	10	10	30
26	EMERGENT PROJECTS		1,500	1,500												250	250	250	750
	Subtotal		1,620	1,506	60		0						54		270	270	270	810	
	TOTALS		33,022	2,609	60	5,446	0	0	0	0	4,481	1,935	71	0	18,420	5,523	4,115	3,454	19,930

BENTON COUNTY
STATE OF WASHINGTON
SIX YEAR ROAD PROGRAM
2016 – 2021
PROJECTS



BENTON COUNTY

Public Works Department

2015 Road Data

Supplemental Information to the
2016-2021 Road Program



Submitted to:

Board of County Commissioners

Hearing date: July 28, 2015

Jerome Delvin, Chairman

Shon Small, Pro Tem

James R. Beaver

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POTENTIAL NEW ROADS

Potential New Roads

Roads owned, operated and maintained by the County are established by resolution of the Board of County Commissioners. Prior to establishment of a county road the County Engineer completes an Engineer's Report and a Survey Report. The Board then holds a public hearing on those reports and determines if the road is to be established. These reports contain at least the following information:

- a) the necessity of the road,
- b) the proper terminal points, general course and length,
- c) the proper right-of-way width,
- d) the estimated cost of construction, including all necessary bridges, culverts, clearing, grubbing, drainage and grading,
- e) such other facts as may be of importance to be considered by the Board and,
- f) a map of the road as surveyed, which shows the tracts of land over which the road passes and any field notes and profiles of such survey.

Additionally certain environmental studies may be necessary prior to design and construction of any roadway.

Benton County is considering the following potential new roadways:

S. 38th Avenue and Mt. Adams View

In conjunction with the City of West Richland, we requested these potential roads be classified as arterials. The classification was granted; the City received STP funding and is designing the road. Construction funding will be pursued in 2018. These two roads serve the residents of Willamette Heights Section 8.

Dague Road

An unopened half mile North-South right-of-way exists between Game Farm Road and Terril Road and when constructed will help the traffic patterns in the area.

RURAL ARTERIAL PROGRAM

Rural Arterial Program

The Rural Arterial Program (RAP), created in 1983 by the Washington State Legislature, was established to improve rural arterials and collectors. Motor Vehicle Fuel Tax is distributed to five regions within the state and there is competition amongst counties within each of those regions for the funds. The County Road Administration manages this program through an oversight body known as the County Road Administration Board (CRAB).

Authority for the RAP program is contained in the Revised Code of Washington (RCW) 36.79 and the administrative rules are located in the Washington Administrative Code (WAC) 136-100. These laws and codes establish the uses and limitations of the program funds and create a competitive process for each county to apply for project funding.

CRAB staff manages the competitive process that is based upon roadway conditions. After review of the application and proposed improvements, CRAB staff then establishes a priority array for the projects. As funding becomes available from successful competition, the counties then program the projects for design and construction.

The Southeast Region (Asotin, Benton, Columbia, Franklin, Garfield, Klickitat, Walla Walla and Yakima counties) has established road-rating criteria for project competition in our region. That criterion includes traffic history, roadway structure and geometry. The following page provides information about projects that have been funded and completed with financial assistance through the RAP Program, or have been funded with assistance through the RAP Program and are in the design and construction process.

Completed Rural Arterial Program (RAP) Projects									
Dollars X \$1,000									
Road Name	From	To	From	To	Length	RAP	Biennium	Cost	Completed
Snipes Rd	McDonald	Rothrock	7.73	8.84	1.11	\$118	85 - 87	\$249	7/30/1986
Grant Avenue Bridge			0.00	0.15	0.15	\$326	85 - 87	\$2,292	9/24/1986
North River Rd	Griffin	Missimer	0.96	2.68	1.72	\$250	87 - 89	\$405	8/4/1988
McKinley Springs Rd	Horrigan	Farnum	2.66	4.66	2.00	\$250	87 - 89	\$370	7/10/1989
Travis Rd	Reese	Sellards	3.07	5.09	2.02	\$285	89 - 91	\$413	6/18/1990
McKinley Springs Rd	Farnum	Young	4.65	6.76	2.11	\$285	89 - 91	\$410	6/8/1990
Plymouth Rd	SR 14	MP 5.61	1.61	5.61	4.00	\$720	91 - 93	\$1,259	6/6/1994
Plymouth Rd	MP 5.61	Tyrell	5.61	9.73	4.12	\$356	91 - 93	\$760	7/10/1995
Horrigan Rd	Davis	SR 221	9.61	12.51	2.90	\$298	93 - 95	\$840	6/30/1995
County Route 12	County Line	Prosser CL	0.00	4.67	4.67	\$418	95 - 97	\$479	10/31/1997
Webber Canyon Rd	Henson	MP 1.10	0.00	1.10	1.10	\$594	95 - 97	\$1,456	7/1/1998
Plymouth Rd	Tyrell	Sellards	9.73	13.79	4.06	\$955	95 - 97	\$1,303	6/1/2001
Travis Rd	Archie Prior	Reese	0.00	3.04	3.04	\$810	97 - 99	\$900	6/1/2002
Sellards Rd	Travis	Plymouth	19.23	23.27	4.04	\$1,125	97 - 99	\$1,250	2003
Clodfelter Rd	Plymouth	Bently	0.00	2.25	2.25	\$846	01 - 03	\$1,945	2005
Webber Canyon Rd	Dennis	Kiona	3.31	6.44	3.13	\$1,300	99 - 01	\$5,184	2009
Clodfelter Rd	Bently	C.Williams	2.35	4.90	2.55	\$1,350	03 - 05	\$1,938	2012
Locust Grove Rd	C.Williams	Edwards	0.00	1.50	1.50	\$900	05 - 07	\$1,757	2012
Nine Canyon Rd	Mills	SR 397	7.40	10.80	3.40	\$2,741	07-09	\$3,706	2015
				Total	49.87	\$13,927		\$26,916	
Funded RAP Projects									
Dollars X \$1,000									
Road Name	From	To	From	To	Length	RAP	Biennium	Cost	
Nine Canyon Rd	Beck	Mills	4.80	7.40	2.60	\$2,543	09 - 11	\$2,826	
Nine Canyon Rd	Coffin	Beck	1.90	4.80	2.90	\$3,150	13 - 15	\$3,500	
				Total	5.50	\$5,693		\$6,326	

**COUNTY
ARTERIAL
PRESERVATION
PROGRAM**

County Arterial Preservation Program

The County Arterial Preservation Program (CAPP) created in 1990 by the Washington State Legislature was established to preserve rural arterials and collectors. Motor Vehicle Fuel Tax is distributed to counties based upon each counties allocation of arterial and collector lane miles proportional to the total statewide arterial and collector lane miles. The County Road Administration manages this program through an oversight body known as the County Road Administration Board (CRAB).

Authority for the CAPP program is contained in the Revised Code of Washington (RCW) 48.68.090 and the administrative rules are located in the Washington Administrative Code (WAC) 136-300. These laws and codes establish the uses and limitations of the program and create a fund distribution process.

County staff evaluates each arterial and collector for the appropriateness of preserving and resurfacing county arterials and collectors. The preservation usually consists of some shoulder work, pre-leveling and resurfacing, including chip seals.

Completed County Arterial Preservation Program (CAPP) Projects							
Road Name	From	To	From	To	Length	Cost	Year
Finley Rd	SR 397	Donelson	12.33	14.25	1.92	\$101,593	1990
Haney Rd	Game Farm	Bowles	0.00	1.00	1.00	\$132,994	1990
Nine Canyon Rd	KID Canal	Game Farm	11.54	13.31	1.77	*	1990
Demoss Rd	SR 224	Rupert	0.00	3.97	3.97	\$244,071	1991
Reata Rd	Vaca	Leslie	2.23	3.31	1.08	*	1991
Hinzerling Rd	OIEH	King Tull	0.00	1.04	1.04	\$276,900	1992
OIEH	I-82	Whitstran	5.51	9.51	4.00	*	1992
19th Ave, W	Washington	Oak	0.00	0.98	0.98	\$281,960	1993
Finley Rd	Riek	Game Farm	11.14	12.15	1.01	*	1993
Game Farm Rd	Haney	Finley	7.04	8.05	1.01	*	1993
Highland Rd	Olympia	Washington	0.00	1.31	1.31	*	1993
Piert Rd	CID Canal	Lechelt	0.91	2.24	1.33	*	1993
Gap Rd	I-82	Hanks	0.28	3.72	3.44	\$308,653	1994
Sellards Rd	SR 221		12.14	14.14	2.00	*	1994
Clodfelter Rd	Tripple Vista	10th	6.52	10.22	3.70	\$294,500	1995
Meals Rd	Piert	Hover	7.73	10.07	2.34	*	1995
Griffin Rd	McCreadie	Snipes	0.76	3.78	3.02	\$271,927	1996
Rothrock Rd	OIEH	Hanks	0.00	2.55	2.55	*	1996
Ruppert Rd	Demoss		0.37	1.14	0.77	\$315,830	1997
Oak St	27th	Bowles	1.18	2.05	0.87	*	1997
Finley Rd	SR 397	Donelson	14.33	16.61	2.28	*	1997
Sellards Rd	Ward Gap		0.99	2.19	1.20	*	1997
Sellards Rd		Lincoln	3.24	4.04	0.80	*	1997
Webber Canyon Rd	County Well		0.00	1.10	1.10	\$124,731	1998
BST (Various Locations)						\$207,743	1998
Sellards Rd	Lincoln	SR 221	4.04	12.10	8.06	\$365,149	1999
Badger Rd	Webber Canyon	Badger Canyon	0.00	5.93	5.93	\$349,348	2000
OIEH	Rothrock	District Line	9.48	13.93	4.45	\$339,472	2001
Pioneer Rd	OIEH	King Tull	0.00	1.03	1.03	*	2001
Badger Rd	Badger Canyon	I-82	5.93	12.00	6.07	\$443,783	2002
Hanks Rd	County Line	Crosby	0.00	6.07	6.07	\$367,660	2003
BST (Various Locations)						\$327,609	2004
Johnson Rd	County Route 12	Hinzerling	3.24	5.03	1.79	\$134,310	2005
BST (Various Locations)						\$199,062	2005
BST (Various Locations)						\$272,946	2006
BST (Various Locations)						\$266,634	2007
Reata Rd	Bermuda	Leslie	1.79	3.57	1.78	\$189,941	2007
OIEH	Bunn	Pioneer	7.50	8.50	1.00	\$25,241	2007
BST (Various Locations)						\$362,600	2008
BST (Various Locations)						\$348,981	2009
BST (Various Locations)						\$306,105	2010
BST (Various Locations)						\$367,274	2011
BST (Various Locations)						\$479,033	2012
BST (Various Locations)						\$444,447	2013
BST (Various Locations)						\$471,046	2014
BST (Various Locations)**						\$478,250	2015
Total						\$9,099,793	
*Indicates cost is included in total above							
**Amount is projected to end of the Year							

RAILROAD CROSSING IMPROVEMENT PROJECTS

Unfunded Railroad Crossing Improvement Projects

There are nineteen publicly permitted railroad crossings in Benton County (listed on the following page) with passive warning devices. Benton County pursues federal/state grants to convert the remaining passive warning devices to active warning devices by applying for funding at all passive crossings each time a call for projects is requested. Passive warning devices include pavement markings and signs. Active warning devices include warning lights, bells and crossing arms in addition to the pavement markings and signs. While the existing railroad crossings with passive warning devices are safe to cross, safety can be improved with the installation of active warning devices.

Privately permitted railroad crossings are not listed on the following page. Improvements to privately permitted railroad crossings are dependent upon permit conditions between the railroad and the permittee.

The primary source of funding for publicly permitted crossing improvements is from the federal Surface Transportation Program (STP). Because of the significant expense associated with installation of active warning devices Benton County relies upon a competitive process for the use of STP funds to determine construction timing. During a competitive process for STP funds a variety of criteria is used to determine the successful applicants. Two of the most significant criteria for the competitive process are “Exposure Factor” and “Crossing Angle”. The Exposure Factor and Crossing Angle for each unfunded crossing are listed in the following table.

Unfunded Railroad Crossing Improvement Projects

Crossing	Crossing No	Railroad	Exposure Factor	Crossing Angle
			Veh Vol x Train Vol	
Richards Rd	1 C 42.60	BNSF	3800	75
Bryson Brown Rd	6H 9.70	BNSF	3200	60
Perkins Rd	6H 8.50	BNSF	2800	60
Finley Rd	6 H 8.51	BNSF	2000	80
Ward Gap Rd	1 C 44.20	BNSF	2000	75
Haney Rd	6 H 9.70	BNSF	1700	80
Pioneer Rd	1U 37.30	BNSF	1400	85
Pioneer Rd (Simplot Spur)	6H 48.50	BNSF	1400	85
County Line Rd, S	1U 44.90	BNSF	1200	60
Griffin Rd, S	1U 43.80	BNSF	1000	65
Lechelt Rd	3AS D 26.00	BNSF	800	90
Wilgus Rd, S	1U 41.60	BNSF	440	85
Bunn Rd	1 U 37.80	BNSF	340	90
Albro Rd, N	1U 41.30	BNSF	320	90
Missimer Rd, S	1U 41.80	BNSF	250	85
Hansen Rd	1C 33.60	BNSF	200	85
McDonald Rd	1U 37.80	BNSF	150	90
Toothaker Rd	3A 220.20	BNSF	150	120

BRIDGE INVENTORY

Bridge Inventory

The National Bridge Inspection Standards (NBIS) published in the Code of Federal Regulations defines a bridge as follows:

“A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between under copings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes: it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.”

The sufficiency rating (SR) is the basis for establishing eligibility and priority for replacement or rehabilitation of bridges with Federal Highway Bridge Replacement and Rehabilitation Program (HBRRP) funds. The sufficiency rating is a numeric value which indicates a bridge's relative ability to serve its intended purpose. The value ranges from 100 (a bridge in new condition) to a 0 (a bridge not suitable for carrying traffic). The sufficiency rating is the summation of four calculated values: Structural Adequacy and Safety, Serviceability and Functional Obsolescence, Essentiality for Public Use, and Special Reductions.

There are two types of deficient bridges – structurally deficient (SD) and functionally obsolete (FO). A structurally deficient bridge, as defined by the Federal Highway Administration (FHWA), is one whose condition or design has impacted its ability to adequately carry its intended traffic loads. A functionally obsolete bridge is one in which the deck geometry, load carrying capacity, clearance or approach roadway alignment has reduced its ability to adequately meet the traffic needs below accepted design standards. Those bridges meeting the criteria for both SD and FO are only considered SD, the structural deficiency overrides the functional obsolescence and the bridge will be considered in the SD classification.

In general, a lower sufficiency rating results in a higher priority for repairs or replacement. To qualify for replacement with federal financial assistance, a bridge must have a sufficiency rating of less than 50 and be structurally deficient or functionally obsolete. To be eligible for rehabilitation, a bridge must have a sufficiency rating of less than 80 and be structurally deficient or functionally obsolete. Federal funding applies to bridges or structures that meet the NBIS definition and are greater than ten years old. Currently, sufficiency ratings prioritize the funding for these bridges or structures.

Benton County currently has no bridges rated as structurally deficient and the seven bridges that have been rated as functionally obsolete have been so rated because of deck geometry or roadway alignment.

BRIDGE INSPECTION REPORT

Bridge Inspection Report

The County Engineer is required to report bridge deficiencies to the Board (WAC 136.20.060) in the Six-Year Road Program. Following is the bridge inspection report through June 30, 2015.

Bridge Inspection Report for Annual Certification

Revised 7/15/2014 j.a.l.

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
137001050	B	Horrigan Rd	28	02/24/14	02/24/16	E Branch of Glade Creek	Y	1	Place rip rap at outlet end of all 3 culverts.	99.97
242100162	B	McDonald Rd	25	02/26/14	02/26/16	SVID Canal	N	0	All previous repairs have been made. No new repairs.	98.99
186500803	B	McBee Rd	52	02/21/14	02/21/16	KID Canal	Y	1	Skin patch both approaches.	98.50
242100336	B	McDonald Rd	44	02/19/14	02/19/16	Roza Canal	Y	1	Place rip rap at the Northwest and Southwest corners at roadway surface to stop erosion.	97.97
518000027	B	Twin Bridges North Crossing	200	06/24/15	06/24/17	Yakima River	N	1	All previous repairs have been made. No new repairs.	97.67
121500000	B	Grant Ave	617	06/25/15	06/25/17	Yakima River	Y	1	Clean out expansion joints and drains.	96.45
								1	Contact BCSO for graffiti abatement.	
110500253	B	Plymouth Rd	22	02/24/14	02/24/16	Four Mile Canyon	Y	1	Paint culvert crossing markings	97.30
								1	Old tires and a TV have been dumped on the East end of the culvert.	
221501725	B	OIEH	24	02/26/14	02/26/16	Knox Creek	Y	1	Remove silt from the West pipe. Enlarge the inlet eare for silt deposit.	97.26
202500732	B	Griffin Rd	44	02/19/14	02/19/16	Roza Canal	Y	1	Raise guardrail at NW corner of the bridge	97.11
221900316	B	Crosby Rd	32	02/19/14	02/19/16	Roza Canal	Y	1	The joint material between the abutment and the wingwall at the SE & SW corners that was previously replaced has failed. Replace again.	96.14
441100924	B	Clodfelter Rd	48	02/21/14	02/21/16	KID Canal	N	0	All previous repairs have been made. No new repairs.	96.09
218500071	B	Hinzerling Rd	34	02/26/14	02/26/16	SVID Canal	N	0	No repairs	95.95
218500352	B	Hinzerling Rd Roza	43	02/19/14	02/19/16	Roza Canal	N	0	Crack seal joints at both abutments	95.94
199100926	B	Badger Canyon Rd	39	02/21/14	02/21/16	KID Canal	N	0	A portion of the bridge rail at the Northeast corner of the bridge has been damaged and should be replaced.	95.74

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
518000001	B	Twin Bridges	64	02/21/14	02/21/16	CID Canal	N	0	No repairs	95.72
761000004	B	Bernath Rd CID	34	02/20/14	02/20/16	CID Canal	Y	1	Cut down the small tree under the southwest corner of the bridge.	95.56
								1	Crack seal the East approach	
								1	Skin patch the West approach	
210900436	B	Gap Rd	32	02/19/14	02/19/16	Roza Canal	Y	1	Replace joint filler material at all 4 corners on the wing walls.	94.41
								1	Clean and patch spall on SE wingwall.	
518000009	B	Twin Bridges South Crossing	450	06/24/15	06/24/17	Yakima River	Y	1	The modular block retaining walls are starting to push away from the concrete abutments on the SE corner and SW corner. The block should somehow be attached back to the abutment concrete wall. The Maintenance Superintendent should consult the County Engineer on what repair would work best in this situation. Patch approaches	97.67
515500302	B	Yakima River Dr CID	30	02/21/14	02/21/16	CID Canal	Y	1	Skin patch both approaches.	92.99
515800002	B	Bridge Rd	32	02/21/14	02/21/16	CID Canal	Y	1	Skin patch both approaches.	92.21
253000313	B	Rothrock Rd Roza	40	02/19/14	02/19/16	Roza Canal	Y	1	Clean and paint the exposed rebar at the North end of the West curb.	92.09
517000000	B	Grosscup Rd	34	02/21/14	02/21/16	CID Canal	Y	1	Skin patch Westerly approach.	91.96
204600008	B	King Tull	52	02/24/14	02/24/16	SVID Canal	N	0	No repairs	91.24
776800042	B	Erickson Rd	28	02/20/14	02/20/16	CID Canal	Y	1	No repairs	90.88
309500093	B	District Line Rd	28	02/26/14	02/26/16	BID Canal	N	0	Canal has been filled in.	89.98
189100007	B	Graham Rd	52	02/21/14	02/21/16	KID Canal	Y	1	No repairs	89.67
243100154	B	Pioneer Rd	29	02/26/14	02/26/16	SVID Canal	N	0	No repairs	88.94
315500288	B	Case Rd	29	02/19/14	02/19/14	Roza Canal	Y	1	Place riprap along South retaining wall under Unit A	87.55
								1	Crack Seal joint at S approach	
714000085	B	36th Ave, E	32	02/20/14	02/20/16	CID Canal	N	0	No repairs	87.51
489101153	B	Nine Canyon	20	02/20/14	02/20/16	KID Canal	Y	1	Crack seal both approaches	86.21

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
327100069	B	Truhlicka Rd	21	02/19/14	02/19/16	Roza Canal	Y	1	Skin patch both approaches.	85.22
253000011	B	Rothrock Spring Creek	22	02/26/14	02/26/16	Spring Creek	N	0	No repairs	84.41
205700224	B	Wilgus Rd SVID Canal	32	02/24/14	02/24/16	SVID Canal	N	0	No repairs	84.40
255500668	B	Missimer Rd	48	02/19/14	02/19/16	Roza Canal	N	0	No repairs	84.28
489101306	B	Nine Canyon	22	02/20/14	02/20/16	CID Canal	Y	1	Crack seal both approaches	84.14
255500339	B	Missimer Rd	38	02/26/14	02/26/16	SVID Canal	N	0	No repairs	83.94
221501858	B	OIEH	20	02/26/14	02/26/16	Corral Creek	Y	1	Cut down and remove the trees and brush from the upstream side of the bridge. Do not remove the root balls.	80.54
210300295	B	County Rt 12	46	02/24/14	02/24/16	SVID Canal	N	0	No repairs	79.90
204600575	B	King Tull	31	02/26/14	02/26/16	SVID Canal	N	0	No repairs	79.15
503500035	B	Valley View Rd	32	02/21/14	02/21/16	CID Canal	Y	1	Patch the Westerly approach.	79.14
								1	Crack seal both approaches.	
205700629	B	Wilgus Rd	40	02/19/14	02/19/16	Roza Canal	N	0	No repairs	76.48
202500280	B	Griffin Rd	37	02/24/14	02/24/16	SVID Canal	N	0	No repairs	75.76
221501017	B	OIEH	26	02/26/14	02/26/16	Spring Creek	Y	1	Replace missing joint material on all 4 corners.	75.69
518000171	B	Twin Bridges Rd Horn Rapids	34	02/21/14	02/21/16	Horn Rapids Corp Canal	N	0	No repairs	73.14
210900136	B	Gap Rd	34	02/26/14	02/26/16	SVID Canal	N	0	No repairs	73.12
133500073	B	McKinley Springs Rd	10	12/11/15	12/11/16	Glade Creek	Y	2	Crack seal at both ends of the bridge	71.01
301000093	B	Hess Rd	52	12/13/13	12/09/15	Chandler Canal	N	M	Monitor the crack in cap at the west abutment	69.68
253000110	B	Rothrock Rd	25	02/26/14	02/26/16	SVID Canal	Y	1	Crack Seal Both Approaches	67.17
221501107	B	OIEH	60	02/26/14	02/26/16	Snipes Creek	Y	1	Recaulk joints between abutments and wingwalls.	66.89
301000146	B	Hess Rd	71	12/10/13	12/10/15	Chandler Canal	Y	3	Remove brush from shoulder of road at NE corner	65.51
221501583	B	OIEH	50	12/10/13	12/11/15	Chandler Canal	Y	1	Remove old patches and repair curbing at NW and SW corners	58.10
								1	Patch SW corner at bottom of canal on abutment where spall is.	

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
								1	Repair spall in SW corner of diaphragm of Girder D. Paint exposed rebar.	
								1	Repair Joint at SE and SW corner of abutment	
309500042	B	District Line Rd	52	12/13/13	12/10/15	Chandler Canal	Y	2	Replace cut cross braces between Girders A & B at both abutments.	54.35
761300110	B	Oak St	36	02/16/14	02/20/16	CID Canal	Y	1	Replace missing joint material at the SW corner.	41.98
156500713	SS	Bert James Rd	14	04/08/11	04/08/16	Unnamed drainage	N	0	No repairs	85.31
343200001	SS	Davis Rd	12	03/30/11	03/30/16	BID Canal	Y	1	Structure could be removed	84.43
322200054	SS	Acord Rd	19	03/20/11	03/20/16	Corral Creek	N	0	No repairs	82.08
337100133	SS	Whan Rd	16	03/20/11	03/20/16	BID Canal	Y	1	Remove structure as it is no longer needed.	81.39
330900083	SS	Knox Rd	14	03/30/11	03/30/16	BID Canal	N	0	No repairs	77.46
226400967	SS	McCreadie Rd	18	02/19/13	08/31/15	Snipes Creek	N	M	Monitor large rip rap at SE corner for further scour	77.39
772100091	SS	Piert Rd	15	04/05/11	04/05/16	CID Canal	N	0	No repairs	74.61
330200133	SS	Highland Extension, W	18	03/30/11	03/30/16	Corral Creek	Y	3	Replace sixth & seventh post from SE corner of bridge.	74.23
								1	Place shoulder rock at Southeast and Northwest corners of Patch both roadway approaches	
								1	Patch both roadway approaches	
245000038	SS	Biggam Rd	18	07/22/11	07/22/16	Spring Creek	N	0	No repairs	73.61
330900027	SS	Knox Rd	14	03/30/11	03/30/16	Corral Creek	Y	1	Place rip rap at Southwest corner wingwall.	72.69
								1	Remove brush from outlet end of bridge	
								1	Replace delineator at Southwest corner of bridge	
720300062	SS	Gum St	18	04/05/11	04/05/16	CID Canal	N	0	No repairs	64.81
758000101	SS	27th Ave, E	12	04/05/11	04/05/16	CID Canal	N	0	No repairs	64.64
332100076	SS	Thomas Rd	19	02/26/13	08/31/15	BID Canal	Y	1	Recommend removing the structure/BID Pressurized system.	61.71
203600052	C	Apricot Rd	10	4/31/2011	4/31/2016	SVID Canal	Y	1	Small hole at SE corner of apron that needs some rip rap.	99.94
504400019	C	Brian Lane	10	02/20/08	08/31/15	Lapierre Canyon drainage	N	0	No repairs	96.98

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
110200733	C	Sellards Rd at MP 7.39	10	03/05/08	08/31/15	Unnamed drainage	Y	1	Place material in downstream scour hole.	96.96
137000978	C	Horrigan Rd MP 9.776	8	12/27/11	12/27/16	Unnamed drainage	N	0	No repairs	96.95
311700080	C	Obrien Rd	8	12/27/11	12/27/16	Roza Canal	N	0	No repairs	96.95
110200922	C	Sellards Rd at MP 9.22	10	03/05/08	08/31/15	Unnamed drainage	Y	1	Place material in downstream scour hole.	96.94
221900272	C	Crosby Rd	10	02/25/10	08/31/15	Spring Creek	N	0	No repairs	96.94
188200504	C	Jacobs Rd	8	02/26/10	08/31/15	Unnamed drainage MP 5.037	Y	2	Mark the crossing with white paint on the roadway surface.	96.93
133500379	C	McKinley Springs Rd at MP 3.79	10	03/05/08	08/31/15	Unnamed drainage	Y	1	Add more fill material to SE guardrail end treatment. Check the bolts on the guardrail.	96.89
309500218	C	District Line Rd	8	03/30/11	03/30/16	Roza Canal	N	0	No repairs	96.83
110201483	C	Sellards Rd at MP 14.83	9	03/05/08	08/31/15	Unnamed drainage	Y	1	Install end treatment on east end of south guardrail that is missing. Reshape SW end treatment.	96.81
110201382	C	Sellards Rd at MP 13.82	12	03/05/08	08/31/15	Unnamed drainage	Y	1	Place material along exposed footings.	96.79
111800008	C	Webber Canyon Rd at MP 0.078	9	04/08/11	04/08/16	Unnamed drainage	Y	1	There is a scour hole approx 10' diamter x 14" deep at the outlet end of the culvert. Maintenance should replace the rock that was washed out.	96.78
								1	Clean out the tumbleweeds from both ends of the culvert	
111800031	C	Webber Canyon Rd at MP 0.308	9	04/08/11	04/08/16	Unnamed drainage	Y	1	Clean out the tumbleweeds from both ends of the culvert	96.78
111800059	C	Webber Canyon Rd at MP 0.594	13	04/08/11	04/08/16	Unnamed drainage	Y	1	Clean out the tumbleweeds from both ends of the culvert	96.78
								1	There is a scour hole at the outlend end of the culvert approximately 1.5 Deep x 3 diameter. Replace the rock.	
111800078	C	Webber Canyon Rd at MP 0.778	12	04/08/11	04/08/16	Unnamed drainage	Y	1	Clean out the tumbleweeds from both ends of the culvert	96.78
111800102	C	Webber Canyon Rd at MP 1.020	18	04/08/11	04/08/16	Unnamed drainage	N	0	No repairs	96.78
111800112	C	Webber Canyon Rd at MP 1.116	18	04/08/11	04/08/16	Unnamed drainage	Y	1	Clean out the tumbleweeds from both ends of the culvert	96.78

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
111800120	C	Webber Canyon Rd at MP 1.203	15	04/08/11	04/08/16	Unnamed drainage	Y	1	Clean out the tumbleweeds from both ends of the culvert	96.78
110201894	C	Sellards Rd at MP 18.94	8	02/21/08	08/31/15	Carter Canyon	N	0	No repairs	96.77
111900860	C	Travis Rd	9	04/08/11	04/08/16	Unnamed drainage	Y	1	There is a scour hole approx 10' wd x 15' lg at the outlet end of the culvert. Place rip rap in scour hole.	96.74
111900401	C	Travis Rd	10	12/27/11	12/27/16	Unnamed drainage	Y	2	Add paint marks for the alignment across the road	96.64
475000239	C	Coffin Rd	15	03/04/08	08/31/15	4 Mile Canyon	N	0	No repairs	96.56
169600109	C	Chandler Rd	18	02/26/10	08/31/15	KID Canal	Y	3	Mark the crossing with white paint on the roadway surface.	94.41
222200946	C	Hanks Rd	12	12/27/11	12/27/16	Snipes Creek	N	0	No repairs	92.19
111900531	C	Travis Rd	12	02/21/08	08/31/15	Carter Canyon	Y	1	Exposed footing on south side. Fill scour hole 45" deep by 4' long at SE corner with large material.	90.39
222200644	C	Hanks Rd	12	02/25/10	08/31/15	Spring Creek	N	0	No repairs	89.96
221200412	C	Snipes Rd	14	03/31/11	03/31/16	Spring Creek	Y	2	Clean out inlet end of culvert.	88.33
502000032	C	Lorayne J Blvd	10	02/20/08	08/31/15	Lapierre Canyon	Y	1	Clean brush and debris from inlet end.	87.75
162000182	C	Gwinn Rd	8	03/04/08	08/31/15	Unnamed drainage	Y	1	Place material in scour hole caused by water running off the roadway at the top of the north headwall and down underneath the west side.	87.54
230000520	C	Evans Rd	18	03/31/11	03/31/16	Spring Creek	Y	1	Remove brush from inlet end of culvert	86.23
								1	Place rip rap at the Northeast corner	
201000101	C	County Line Rd	10	03/31/11	03/31/16	SVID Canal	Y	1	Place rip rap at the ends of the downstream wingwalls	86.21
328100137	C	Kelly Rd	9	03/30/11	03/30/16	Roza Canal	N	0	No repairs	85.63
218500398	C	Hinzerling Rd	18	03/31/11	03/31/16	Spring Creek	N	0	Replace large rip rap along footings and in stream bed- or- shotcrete or pour a floor with inlet and outlet aprons.	82.15
764000224	C	Haney Rd	16	04/05/11	04/05/16	CID Canal	N	0	No repairs	81.31
495501132	C	Finley Rd	9	08/18/11	08/31/15	CID Canal	N	0	No repairs	81.22
240100184	C	Bunn Rd	12	03/02/11	03/02/16	SVID Canal	N	0	No repairs	79.37
330900006	C	Knox Rd	9	03/30/11	03/30/16	Corral Creek	N	0	No repairs	72.69
301000143	C	Hess Rd	8	04/06/11	04/06/16	Spring Creek	N	0	No repairs	71.17

Bridge No.	B = BRIDGE SS = SHORT SPAN C = CULVERT	Bridge Name	Length (in feet)	Date Inspected	Next Inspection Date	Bridge Crossing	Repair Needed	Priority*	Repair Description	Sufficiency Rating
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*1= 1 year max

*2= 3 year max

*3= when time allows

ROAD INVENTORY

Road Inventory

This section is an inventory of roads that are operated and maintained by Benton County. This list changes yearly because annexations into adjoining cities diminish our road inventory while new developments add to our inventory.

Roads are categorized according to how they operate/function. This Federal Functional Classification (FFC) is a significant factor in determining available funding for road improvements. Following is a chart that illustrates certain funding sources and which FFC roads have access to those funds. Also, identified below, are the operational characteristics for each of the FFC's.

RURAL

Major Collector (07):

- Provides service to:
 - any county seat not on arterial;
 - larger towns not served by arterial;
 - other traffic generators of intra-county importance.
- Links these places with other nearby towns or cities with routes of higher classifications.
- Serves more important intra-county travel corridors.
- Total Length of Major Collectors is 87.394 Miles.

Minor Collector (08):

- Roads spaced to:
 - reflect population density;
 - collect traffic from local roads;
 - bring all developed areas within a reasonable distance of a collector road.
- Provide service to remaining smaller communities.
- Link locally important generators with outlying areas.
- Total Length of Minor Collectors is 202.926 Miles.

Local Access (09):

- Primarily provide access to adjacent land.
- Provide service to travel over relatively short distances.
- Encompasses all roadways not classified as collectors or arterials.
- 65 – 75% of road mileage.
- Total Length of Local Access is 390.704 Miles.

URBAN

Minor Arterial (16):

- Interconnects and augments the urban principal arterial system.
- Serves moderate length trip desires as a somewhat lower mobility than principal arterials.
- Distributes traffic to smaller geographic areas than principal arterials.
- Should not penetrate identifiable neighborhoods.
- Cumulative percentages:
 - 15 – 25% of total system road mileage
 - 65 – 80% of Vehicle Miles Traveled (VMT)
- Total Length of Urban Minor Arterials is 3.045 Miles.

Major Collector (17):

- Provides land access and traffic circulation within residential neighborhoods, commercial and industrial areas.
- May penetrate residential neighborhoods.
- Collects traffic from local streets and minor collectors and channels it to arterials.
- May include majority of Central Business District (CBD) street grid.
- Total Length of Urban Major Collectors is 44.049 Miles.

Minor Collector (18)

- Provides land access and traffic circulation within residential neighborhoods, commercial and industrial areas.
- May penetrate residential neighborhoods.
- Collects traffic from local streets and channels it to arterials.
- May include majority of Central Business District (CBD) street grid.
- Link residential traffic to a major collector.
- Total Length of Urban Minor Collectors is 5.341 Miles.

Local Access (19):

- Provides direct access to abutting land use.
- Provides access to higher orders of the system.
- Service to through traffic is usually discouraged.
- Total Length of Urban Local Access is 124.908 Miles.

FUNDING SOURCES

Road Fund

CPF - (Local)

CRID

CRIMP

(T.I.B.) UAP

(T.I.B.) UCP

(Fed.) STP/U

URBAN

RURAL

Minor Arterial 16

Collector 17

Access 19

Minor Arterial 07

Collector 08

Access 09

RAP (C.R.A.B)

STP/R (Fed.)

CAPP (C.R.A.B)

Local

Road Fund.....County Road Fund (101-101)
CPF.....Capitol Project Fund (101-102)
CRID.....County Road Improvement District
CRIMP... County Road Improvement Matching Program

State - T.I.B. (Transportation Improvement Board)

UAP.....Urban Arterial Program
UCP.....Urban Corridor Program

Federal

STP/U.....Surface Transportation Program/Urban

State - C.R.A.B. (County Road Admin. Board)

RAP.....Rural Arterial Program
CAPP.....County Arterial Preservation Program

Federal

STP/R.....Surface Transportation Program/Rural

GLOSSARY

GLOSSARY

COUNTY FUNDS

PROPERTY TAX (PT)

Property taxes are levied for many local purposes – schools, police & fire protection, health, roads, general government and other uses. The basic upper limits of the two senior county levies are \$1.80 per \$1,000 assessed valuation for general government (current expenses) and \$2.25 per \$1,000 assessed valuation for roads. The sum of the two senior county levies cannot exceed \$4.05 per \$1,000 assessed value. The actual amounts of the two senior levies are established annually by the Benton County Commissioners. Benton County receives revenues from property taxes in two payments during the months of April and October.

The Road Fund is defined as a ‘special revenue’ fund where certain funds earmarked for county road purposes are deposited. The two major sources of revenue for this Fund are property taxes and MVFT. Additionally, the Road Fund finances projects that are refunded by local, state and federal programs (UAP, UCP, CAPP, RAP, FMAC and STP).

MOTOR VEHICLE FUEL TAX (MVFT)

State Motor Vehicle Fuel Tax is an excise tax on the sale of motor vehicle fuel. This tax is used by the State, counties and cities for road, street, ferry and highway purposes. The County Road Administration Board (CRAB) is responsible for the biennial calculations that are furnished to the State Treasurer who makes monthly distributions to counties.

The following information will change due to the 2015 State Legislature passing a new Transportation package. At this time, the changes have not been enumerated.

Washington Gas Tax History

<u>Year Enacted</u>	<u>Tax Rate</u>
<u>1921</u>	<u>1.0¢</u>
<u>1924</u>	<u>2.0¢</u>
<u>1929</u>	<u>3.0¢</u>
<u>1931</u>	<u>4.0¢</u>
<u>1933</u>	<u>5.0¢</u>
<u>1949</u>	<u>6.5¢</u>
<u>1961</u>	<u>7.5¢</u>
<u>1967</u>	<u>9.7¢</u>
<u>1977</u>	<u>11.0¢</u>
<u>1979</u>	<u>12.0¢</u>
<u>1981</u>	<u>13.5¢</u>
<u>1983</u>	<u>16.0¢</u>
<u>1984</u>	<u>18.0¢</u>
<u>1990</u>	<u>22.0¢</u>
<u>1991</u>	<u>23.0¢</u>
<u>2003</u>	<u>28.0¢</u>

<u>2005</u>	<u>31.0¢</u>
<u>2006</u>	<u>34.0¢</u>
<u>2007</u>	<u>36.0¢</u>
<u>2008</u>	<u>37.5¢</u>

Gas Tax Distribution as of July 1, 2009

<u>State Highways</u>	<u>24.46¢</u>
<u>State Ferries</u>	<u>1.08¢</u>
<u>Cities</u>	<u>2.96¢</u>
<u>Counties</u>	<u>4.91¢</u>
<u>CRAB</u>	<u>1.05¢</u>
<u>Arterial Preservation Account</u>	<u>0.45¢</u>
<u>Rural Arterial Trust Account</u>	<u>0.60¢</u>
<u>TIB</u>	<u>3.01¢</u>
<u>Transportation Improvement Account</u>	<u>1.31¢</u>
<u>Urban Arterial Trust Account</u>	<u>1.70¢</u>
<u>Total</u>	<u>37.5¢</u>

PATHS AND TRAILS RESERVE (P&TR) FUND

The Paths and Trails Reserve (P&TR) Fund is financed from 0.5% of MVFT County Formula Distribution revenue. These funds are meant primarily for the construction of pedestrian, equestrian, or bicycle facilities or any combination of facilities, other than a sidewalk constructed as a part of a city street or county road for the exclusive use of pedestrians or non-motorized vehicles. These funds may also be used to widen a highway shoulder, street or road when the extra shoulder width is constructed to accommodate bicyclists consistent with a comprehensive plan or master plan for bicycle trails or paths adopted by a local government authority prior to such construction.

CAPITAL PROJECTS FUND (CPF)

When a county has incurred a loss or reduction of real property tax revenue due to the existence of lands and waters administered by the federal government, this 'payment in lieu of tax' process offsets the loss.

The Capital Projects Fund was established in 1997 as the County Road Public Works Fund, renamed the Public Works Fund, renamed the Capital Acquisition Fund and finally renamed the Capital Projects Fund. These funds, received from the U.S. Department of Energy, are designated by the Board of County Commissioners toward accomplishing public works projects that support economic development and other public purposes.

LOANS

The County may occasionally borrow money to accomplish a project and may occasionally loan money to accomplish a project. For County Road Improvement Districts, Road funds may be used to construct a new roadway with reimbursement to occur if bonds are sold or from property payments over a period of time. Some projects may be of such a scope or financial magnitude that the County will borrow funds to accomplish the project with

payment to be made over time. For construction of CR 397 (the I-82 to SR 397 Intertie Project), funds were borrowed from the Public Works Trust fund.

County Road Improvement District (CRID)

The Board of County Commissioners may form a CRID under the authority of RCW 36.88. The process is initiated by a group of landowners who request formation of the CRID and authorize their payment for the construction of county roads. A CRID is formed after the filing of a petition that meets the requirements of RCW 36.88.020 and holding a public hearing or; after the filing of a resolution by the Board of County Commissioners that meets the requirements of RCW 36.88.030 and holding a public hearing. The landowners pay for the roads over a period of years, determined by the Board, not to exceed 20 years.

County Road Improvement Matching Program (CRIMP)

The Board of County Commissioners resolved in 2010 to dedicate the Road District portion of PILT funds issued by the Department of Energy for the Hanford Site to be utilized for the purpose of securing and matching funding through the State and Federal Highway programs. These funds are to be used for the purpose of improving the County Road System. In 2014, the BOCC amended the required purpose of the funds to include any work on the improvement of the Arterial system within the county.

Public Works Board (PWB)

The Public Works Board was created by the 1985 Legislature to provide leadership in the arena of public works management. Appointed by the Governor for staggered four-year terms, the Board is comprised of: (1) local government officials from counties and cities; (2) special purpose district representatives; and (3) private sector members. The 13 members of the Public Works Board possess a wide range of experience and talent in relevant fields such as public finance, engineering, construction, and local government public works management.

The Public Works Board understands that the condition of local physical infrastructure has a significant bearing on the quality of life in Washington communities. In addition to providing stewardship of the Public Works Trust Fund, and the Drinking Water State Revolving Fund, the Board recognizes one of its chief aims is to promote good public works management strategies and techniques. The mission of the Washington State Public Works Board is to assist Washington's local governments and private water systems in meeting their public works needs that sustain livable communities.

Washington State Public Works Trust Fund (PWTF)

1. *Objective:* the Washington State Public Works Trust Fund is a low-interest revolving loan fund designed to help local governments finance critical public works projects.
2. *Eligibility:* eligible projects include repair, replacement, rehabilitation, reconstruction, or improvement of eligible public works systems to meet current standards for existing users. Growth related projects are not eligible.
3. *Selection Criteria:* each question in the application is weighted with a certain number of points. Total points possible are 100. The Public Works Board

then ranks, from highest to lowest, each application according to the number of points earned.

4. *Funding:* \$10 million is available per jurisdiction per biennium.

One-half percent (0.5%) to two percent (2%) interest, depending on local match.

Loan term is for the life of the project, or a maximum of 20 years. Projection completion time is 48 months after contract execution.

STATE FUNDS

TRANSPORTATION IMPROVEMENT BOARD (TIB)

The Transportation Improvement Board is a state agency directed by a twenty-one-member board. The composition of the board is six city members, six county members, two WSDOT officials, a governor appointee from a state agency, a private sector representative, a member representing special needs transportation, a non-motorized representative, a member representing the ports, and two representatives from transit. The local agency, private sector, port, non-motorized, special needs, and transit board members are appointed by the WSDOT Secretary to four-year staggered terms. The WSDOT Secretary also appoints the WSDOT officials. The County Road Administration Board Director is one of the county members and is an ex-officio member. The governor appointee position also has a four-year term. The TIB meets periodically throughout the state.

The primary purpose of the TIB is to administer state funding for local government transportation projects. Projects are funded by utilizing TIB revenue in combination with local matching funds and private sector contributions.

Urban Arterial Program (UAP)

1. *Objective:* this program was established in 1967 under the title Urban Arterial Trust Account (UATA). Its purpose is to fund city and urban county arterial road and street projects to reduce congestion and improve safety, geometric, and structural concerns.
2. *Eligibility:* annually, the Public Works Department proposes projects for consideration by the TIB. Road candidates must be classified as arterial and will compete with candidates statewide.
3. *Selection Criteria:* includes pavement condition, pavement and roadway width, traffic, accidents, and people carrying capacity.
4. *Funding:* until 1987, state bond sales and excess revenues funded the projects. The program is now on a pay-as-you-go basis with the majority of the fuel tax revenue currently used to make payments on the UATA bonds sold since 1967. UAP provides 80% project funds with 20% local match.

Urban Corridor Program (UCP)

1. *Objective:* this program was established in 1988 under the title Transportation Improvement Account (TIA). It provides funding for transportation projects for urban counties, cities with a population over 5,000 and Transportation Benefit Districts.
2. *Eligibility:* annually, the Public Works Department proposes projects for consideration by the TIB. Road candidates must be classified as arterial and

will compete with candidates statewide. The TIB requires multi-agency planning, coordination and public/private cooperation to further the goal of achieving a balanced transportation system.

3. *Selection Criteria:* projects must be attributable to congestion caused by economic development or growth; consistent with state, regional and local contributions (including transit and rail); and be partially funded by local contributions.
4. *Funding:* projects are eligible for reimbursement up to 80% and can receive a higher priority if their local contribution is greater than the 20% minimum and includes private sector funds.

Small City Arterial Program (SCAP)

1. *Objective:* the Small City Arterial Program was formally established by the Legislature in 1995. Before its creation, small city projects were funded with a portion of the revenue distributed to the Urban Arterial Program and Urban Corridor Program. Projects preserve and improve the arterial roadway system consistent with local needs in cities with a population less than 5,000.
2. *Eligibility:* an arterial must meet at least one of the following conditions to be eligible for TIB funding:
 - a. Serves as a logical extension of a county arterial or state highway into the corporate limits
 - b. Serves as a route connecting local generators such as schools, medical facilities, social centers, recreational areas, commercial centers or industrial sites
 - c. Acts as a bypass or truck route to relieve the central core area
3. *Selection Criteria:* project selection is based upon safety, pavement condition and local support.
4. *Funding:* funds are distributed across three regions based on small city populations

Local match requirements:

- Under 500 population – no match
- 500 and over – 5% local match

COUNTY ROAD ADMINISTRATION BOARD (CRAB)

The County Road Administration Board (CRAB) was created by the Legislature in 1965 to provide statutory oversight of Washington's thirty-nine county road departments. The agency is funded from the portion of the counties' fuel tax that is withheld for state supervision, and from a small portion of the two grant programs that it administers. The agency is governed by a nine-member board that meets quarterly and is comprised of six county commissioners/council-members and three county engineers. The Board of Directors of the Washington State Association of Counties appoints the CRAB Board. The CRAB Board establishes and maintains "Standards of Good Practice" to guide and ensure consistency and professional management of county road departments in the State of Washington. The agency is a major resource for the Washington Association of County Engineers and the Washington State Association of Counties for transportation related issues. CRAB does research, provides reports and presents testimony when appropriate. The responsibility to distribute the counties' portion of the Motor Vehicle Fuel Tax (MVFT) was given to CRAB in 1985. At that time the agency also became the custodian of the county

road log, a database of over 40,000 miles of roads. The formula for the distribution of fuel tax revenues is updated biennially to reflect statewide changes in population, costs, and mileage.

County Arterial Preservation Program (CAPP)

1. *Objective:* to preserve and improve the safety and functionality of paved arterials and collectors in the unincorporated area of each county.
2. *Eligibility:* each county shall utilize a computer-based pavement management system meeting State requirements on all county paved arterial roads in order to retain eligibility for CAPP funds.
3. *Selection Criteria:* after evaluating arterials for deficiencies, the Public Works Department, in the Six-Year Road Program, proposes projects for approval by the Benton County Commissioners.
4. *Funding:* at its first regular meeting after July 1 of each year, CRAB establishes the next calendar year's allocation percentages for the individual counties based on information contained in the most recently certified master county road log. CRAB shall compute each county's allocation percentage as its percentage of paved arterial lane miles of the total statewide paved county arterial lane miles.

Rural Arterial Program (RAP)

1. *Objective:* to improve rural arterials and collectors for safety, drivability and maintainability.
2. *Eligibility:* all rural arterials and collectors. Counties eligible to receive Rural Arterial Transportation Account (RATA) funds are:
 - a. Those in which there has been no diversion of the county road levy;
 - b. Those in which the actual expenditures for traffic law enforcement have been equal to or greater than the amount of the diverted road levy budget for the traffic law enforcement;
 - c. Those with a population of less than 8,000; and
 - d. Those expending revenues collected for road purposes only on other governmental services after authorization from the voters of that county.
3. *Selection Criteria:* project selection is based upon traffic history, roadway structure and geometrics. Proposed projects are evaluated and prioritized in each of five regions by CRAB.
4. *Funding:* RATA 90% with 10% local match.

FREIGHT MOBILITY STRATEGIC INVESTMENT BOARD (FMSIB)

Previously administered directly by the Legislative Transportation Committee, in 1998 the Legislature created the Freight Mobility Strategic Investment Board for the purpose of reviewing and recommending funding, on a prioritization basis, for freight mobility projects that are of strategic importance to the State of Washington.

Freight Mobility Advisory Committee (FMAC)

1. *Objective:* established to assist WSDOT in looking at ways of evaluating and selecting freight mobility projects for possible funding, and in developing a priority list of freight projects. The Board shall carry out the provisions of Chapter 175, Laws of 1998, as now or hereafter amended, and shall perform the duties and functions as prescribed.
2. *Eligibility:* all transportation municipalities.

3. *Selection Criteria:*
 - project must be on a strategic freight corridor
 - projects must meet one of the following conditions:
 - a. Project primarily aimed at reducing identified barriers to freight movement with only incidental benefits to general or personal mobility.
 - b. Aimed at increasing capacity of the movement of freight with only incidental benefits to general or personal mobility
 - c. It is primarily aimed at mitigating the impacts on communities of increasing freight movement, including roadway/railway conflicts; and
 - the project must have a total public benefit/total public cost ratio of equal to or greater than one
4. *Funding:* part of Legislative package that is voted on in November of each year under the Transportation Budget.

FEDERAL GRANTS

COMMUNITY ECONOMIC REVITALIZATION BOARD (CERB)

Administered by the Department of Community, Trade and Economic Development (CTED), CERB is the only state program that contracts with counties, cities, towns, port districts, special districts, and municipal corporations to finance infrastructure projects which result in increased capacity for economic development. The 19-member board provides low interest loans (and grants in some circumstances) for public infrastructure such as bridges, roads, domestic and industrial water, sanitary sewer, storm sewer, port facilities and general purpose industrial buildings. Assisted projects facilitate job creation and retention by businesses and industry, primarily in areas of high unemployment.

Rural Economic Vitality (REV) Program

1. *Objective:* the Community Economic Revitalization Board (CERB) and WSDOT, Highways and Local Programs, have partnered to implement an element of the Governor's Economic Vitality Initiative for rural areas and specified urban pockets of poverty.
2. *Eligibility:* activities such as improvements on state and federal highways, county roads and city streets.
3. *Selection Criteria:* project provides improvements to transportation systems linked to economic development; projects must be located in a designated Rural County (population less than 100 persons per square mile), **or** State Urban Community Empowerment Zone.
4. *Funding:* projects are eligible for reimbursement up to 86.5% Federal.

UNITED STATES DEPARTMENT OF COMMERCE (DOC)

The Department of Commerce promotes job creation, economic growth, sustainable development and improved living standards for all Americans by working in partnership with businesses, universities, communities and workers to:

- Build for the future and promote U.S. competitiveness in the global marketplace by strengthening and safeguarding the nation's economic infrastructure.

- Keep America competitive with cutting-edge science and technology and an unrivaled information base.
- Provide effective management and stewardship of the nation's resources and assets to ensure sustainable economic opportunities.

Economic Development Administration (EDA)

1. *Objective:* established under the Public Works and Economic Development Act of 1965 (42 U.S.C. 3121), as amended, to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically-distressed areas of the United States.
2. *Eligibility:* activities may include, but are not limited to, the creation/expansion of strategically targeted business development and financing programs such as construction of infrastructure improvements, organizational development and market or industry research and analysis.
3. *Selection Criteria:* projects need to be prioritized in the Comprehensive Economic Development Strategy (CEDS) assembled and administered by the Benton-Franklin Council of Governments.
4. *Funding:* no specific grant matches.

BENTON-FRANKLIN COUNCIL OF GOVERNMENTS (BFCOG)

The function of the Benton-Franklin Council of Governments is to facilitate a cooperative approach to local and regional problem solving. The basic activities of the BFCOG are:

- To provide a regional forum for multi-jurisdictional decision making,
- To serve as the Economic Development District for the region,
- To serve as a regional planning entity for the development of multi-jurisdictional programs, and
- To provide a lead agency capacity for the provisions of multi-jurisdictional programs.
- Act as the central planning agency for federal funds.

Surface Transportation Program /Rural (STP/R)

1. *Objective:* improve transportation facilities based upon regional priorities.
2. *Eligibility:* projects must be on federally functional roads classified higher than rural minor collector and local access roads. All transportation modes are eligible. Entities within Benton County that compete for these funds are the City of Prosser, City of West Richland, City of Benton City, Port of Benton, Ben Franklin Transit and Benton County.
3. *Selection Criteria:* the criteria and applications procedures are established by Tri-MATS and the BFCOG. Selection criteria include:
 - a. Supports the Growth Management Act/Regional Transportation Planning/Comprehensive Plan;
 - b. Preserves the existing transportation system;
 - c. Increases capacity and mobility;
 - d. Enhances safety;
 - e. Facilitates alternative transportation modes and intermodalism;
 - f. Eliminates seasonal road restriction and provides all weather road; and
 - g. Provides for connectivity of the existing system to the proposed project.
4. *Funding:* the basic program is 80% federal with 20% local match. However, this is modified to 86.5% federal with 13.5% local match due to adjustments

for public lands in Washington. Exceptions are pedestrian or bicycle facilities that are 80% federal with 20% local match.

Surface Transportation Program/Urban (STP/U)

1. *Objective:* develop, improve, and/or preserve an integrated transportation system that encourages multimodal choices to the public.
2. *Eligibility:* projects must be on federally functional roads classified higher than urban collectors.
3. *Selection Criteria:* funds are distributed by formula. The current formula allocates a minimum base of 5% to each of nine agencies with the remainder distributed according to each agency's share of urban population and road miles.
4. *Funding:* the basic program is 80% federal with 20% local match. However, this is modified to 86.5% federal with 13.5% local match due to adjustments for public lands in Washington. Exceptions are pedestrian or bicycle facilities that are 80% federal with 20% local match.

WSDOT HIGHWAY & LOCAL PROGRAMS (H&LP)

H&LP helps Washington's local agencies develop their local transportation projects and qualify for federal and state funding to cover some of their project costs. H&LP also provides oversight, technical support, and training to insure effective delivery of these projects. H&LP was established by the Legislature in 1935 as the State Aid Division of the (then) Department of Highways, and serves: Washington State citizens, Cities, Counties, Ports, Transit, Indian Tribes, Metropolitan Planning Organizations, Regional Transportation Planning Organizations, Benton Franklin Council of Governments, Other State and Federal Agencies and Private non-profit agencies.

Surface Transportation Program/Hazard Elimination and Safety (STP/H)

1. *Objective:* improve specific locations that constitute a danger to vehicles or pedestrians as shown by frequency of accidents.
2. *Eligibility:* projects must be located on a public road system. These projects may include (but are not limited to) intersection improvements, alignment changes, installation of railroad devices and other protective devices;
3. *Selection Criteria:* Washington State Department of Transportation (WSDOT) H&LP prioritizes proposals from local agencies and selects projects depending upon the availability of funds.
4. *Funding:* federal aid 90% with 10% local match.

Surface Transportation Program/Railroad-Highway Crossing Program (STP/R-H)

1. *Objective:* reduce fatalities, injuries, and damages through improved railway-highway crossings.
2. *Eligibility:* a crossing on any public road is eligible to receive federal funds. At least half of the available funds shall be designated for the installation of protective devices at railway-highway crossings.
3. *Selection Criteria:* projects are competitive on a statewide basis and are evaluated on:
 - a. Considerable distractions near or beyond the crossing which would compete for the driver's attention;
 - b. Traffic or parking conditions are such that the view of a post-mounted flashing light signal could be blocked;

- c. The angle of approach to the crossing is acute and post-mounted signals could go undetected;
 - d. The highway has two or more lanes in each direction; and
 - e. The highway carries high-speed and high-volume traffic.
4. *Funding:* federal aid 90% with 10% local match for the basic safety program with railroad grade crossings 99% federal and 1% Washington Utility and Transportation Commission (WUTC).

Surface Transportation Program/Transportation Enhancement Program (STP/E)

1. *Objective:* add value to transportation systems. The following activities are considered enhancements and may be eligible for funding:
 - a. Provision of facilities for pedestrians and bicycles;
 - b. Provision of safety and educational activities for pedestrians and bicycles;
 - c. Acquisition of scenic easements and scenic or historic sites;
 - d. Scenic or historic highway programs (including the provision of tourist and welcome center facilities);
 - e. Landscaping and other scenic beautification;
 - f. Historic preservation;
 - g. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals);
 - h. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails);
 - i. Control and removal of outdoor advertising;
 - j. Archaeological planning and research;
 - k. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity;
 - l. Establishment of transportation museums.
2. *Eligibility:* projects must be one of the ten qualifying activities listed and must be transportation related. Environmental activities must go beyond what is customarily provided in projects.
3. *Selection Criteria:* projects are recommended and prioritized by the Benton Franklin Council of Governments and selected by a statewide advisory committee.
4. *Funding:* federal aid 80% with 20% local match.

FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Federal Highway Administration is a major agency of the U.S. Department of Transportation (DOT). FHWA is charged with the broad responsibility of ensuring that America's roads and highways continue to be the safest and most technologically up-to-date. FHWA provides financial and technical support to state and local governments for constructing, improving, and preserving America's highway system

Appropriations (APP)

Although the majority of FHWA's programs are funded through contract authority, budget authority is provided for some highway programs through appropriations acts. Though most of the Federal aid highway programs do not receive budget authority

through appropriations acts as do most other Federal programs, the appropriations act is important in the fiscal process.

For the most part, appropriations that are enacted for the highway program are contained in the annual DOT Appropriations Act, although they can be placed in other legislative acts such as a supplemental appropriations act.

BRIDGE REPLACEMENT ADVISORY COMMITTEE (BRAC)

The Highways and Local Programs Service Center of the Washington State Department of Transportation (WSDOT) and local agencies have developed a bridge replacement selection process for selecting and prioritizing bridges to be replaced with Highway Bridge Replacement and Rehabilitation Program (HBRRP) funding.

The primary committee specifically set up to facilitate selection of local agency bridges for replacement or rehabilitation is the Bridge Replacement Advisory Committee. The BRAC Technical Committee is a BRAC subcommittee, consisting of three members appointed by BRAC. WSDOT works extensively with these two committees in the selection process.

Bridge Replacement and Rehabilitation Program (BRRP):

1. *Objective:* replace or rehabilitate roadway bridges over waterways, other topographical barriers, other roadways, railroads, canals, ferry landings, etc., when those bridges have been determined deficient because of structural deficiencies, physical deterioration, or functional obsolescence.
2. *Eligibility:* bridges on public roads are eligible for funding for rehabilitation seismic retrofit, and painting.
3. *Selection Criteria:* Benton County inventories County owned structures in accordance with the National Bridge Inspection Standards and Washington State Law. BRAC prioritizes proposals from local agencies and selects projects depending upon the availability of funds.
4. *Funding:* federal aid 80% with 20% local match.

Appendix H-2

Transportation Level of Service

Table 1 shows the Level of Service (LOS) and Average Daily Traffic (ADT) for major collector roads in Benton County, along with other roads. The LOS is displayed as the speed at which Level C LOS can be maintained; Level C LOS corresponds with a stable traffic flow. ADT is provided for either 2015 or 2016 depending on when the road was surveyed. Future growth of ADT was assumed to be 3 percent per year and was calculated for 10 years from the last surveyed date (either 2015 or 2016). For each road with an established LOS, it was determined that the 10-year forecasted ADT will result in an LOS of Level C or higher, as significant capacity still exists on these roads, and will be maintained as the County increases in population.

Table 1
Current and Future ADT for Major Collectors, Minor Arterials and Other Roads

Road Name	LOS@mph (C/XX mph)	Current ADT (2015 or 2016) ¹	Future ADT (10 Year Forecast) ^{2,3}
19th Avenue East		471	633
25th Avenue East		1,170	1,572
27th Avenue East		5,492	7,381
Acord Road		803	1,079
Badger Canyon Road		345	464
Badger Road	C/50 mph	1,897	2,549
Bennett Avenue	C/50 mph	1,003	1,348
Bert James Road		207	278
Bofer Canyon Road		90	121
Bowles Road		1,997	2,684
Byron Road	C/50 mph	no data	N/A
Case Road		599	805
Christy Road	C/50 mph	358	481
Clodfelter Road	C/50 mph	2,508	3,371
Coffin Road		318	427
Corral Creek Road		1,030	1,384
County Line Road		337	453
County Route 12	C/50 mph	8,503	11,427
County Well Road		209	281
Crosby Road		45	60
Dallas Road		4,166	5,599
Demoss Road		732	984
Finley Road		3,484	4,682
Game Farm Road		1,085	1,458
Gap Road	C/35 mph	1,874	2,518
Grant Avenue	C/25 mph	4,447	5,976
Griffin Road		1,297	1,743
Hanks Road		3,218	4,325
Harrington Road		2,499	3,358

Road Name	LOS@mph (C/XX mph)	Current ADT (2015 or 2016) ¹	Future ADT (10 Year Forecast) ^{2,3}
Hinzerling Road	C/50 mph	1,614	2,169
Horrigan Road		51	69
Jacobs Road	C/50 mph	no data	N/A
Johnson Road	C/50 mph	2,893	3,888
Kennedy Road	C/50 mph	2,013	2,705
King Tull Road		977	1,313
Knox Road		360	484
Locust Grove Road		362	486
Lower County Line Road		125	168
Mccreadie Road		175	235
Mckinley Springs Road	C/50 mph	263	353
Meals Road		60	81
Nine Canyon Road		630	847
North River Road		2,409	3,237
Oak Street South		1,764	2,371
Old Inland Empire Highway	C/50 mph	13,842	18,602
Plymouth Road	C/50 mph	659	886
River Road		905	1,216
Rothrock Road		1,091	1,466
Ruppert Road		442	594
Sellards Road	C/50 mph	713	958
Snipes Road		988	1,328
Travis Road	C/50 mph	595	800
Twin Bridges Road		2,465	3,313
Ward Gap Road		26	35
Webber Canyon Road	C/25 mph	759	1,020
Wilgus Road		626	841

Notes:

1. Includes data from either 2015 or 2016 depending on when each road was sampled
2. Forecasted to either 2025 or 2026 depending on Current ADT year
3. 10-year forecast uses a 3% yearly increase in ADT

Appendix H-3

Washington State Highway Inventory Within Benton County

Appendix H-3

Washington State Highway Inventory Within Benton County

Washington State Highway Route Mileage and Description				
SR #	Beginning	Ending	Route Miles	Description
I-82	Yakima Co. Line West of Prosser	Oregon State Line at Umatilla	57.23	I-82 is a freeway extending from I-90 near Ellensburg, Washington, to I-84 near Hermiston, Oregon
I-182	Jct. I-82 West of the Tri-Cities	Franklin Co. Line at Columbia River	6.04	I-182 is a 16-mile interstate spur route from I-82 west of the Tri-Cities to US 395, SR 397 and US 12 in Pasco
US 395	Jct. I-82 South of Kennewick	Franklin Co. Line at the Blue Bridge	5.88	US 395 is a Highway of National Significance, extending from Mexico to Canada via eastern Washington. Within the RTP, the road extends from Umatilla, Oregon to the Adams County Line.
SR 14	Klickitat Co. Line	Jct. I-82 at Plymouth	28.53	SR 14 is an east-west route along the Columbia River from Vancouver to Plymouth in Benton County south of the Tri-Cities. This route provides a two-lane alternative to I-84 on the Oregon side of the river.
SR 22	Yakima Co. Line West of Prosser	Jct. I-82 at East Prosser	6.76	SR 22 from Toppenish (SR 97) to Prosser (I-82) primarily serves local needs. Less than seven miles are in Benton County. Some truck traffic utilizes this route in lieu of I-82.
SR 24	Yakima Co. Line West of Hanford West Gate	Grant Co. Line at Vernita Bridge	12.8	SR 24 extends from Yakima to SR 26 at Othello. A primary function of this route is access to the west gate of the Hanford site at the SR 24/SR 240 Junction.
SR 221	Jct. SR 14 at Paterson	Jct. SR 22 at Prosser	25.95	SR 221 is a 26-mile local farm route from SR 22 at Prosser to SR 14 at Paterson, but attracts through traffic as well.
SR 224	Jct. I-82 at Kiona	Jct. SR 240 at Richland	10.18	SR 224 provides a 10-mile connection, from I-82 (Kiona/Benton City) through West Richland to Richland (SR 240). Traffic on this route is oriented to Richland and Hanford work sites and local freight movements.
SR 225	Jct. SR 224 at Kiona	Jct. SR 240 at Horn Rapids	11.32	SR 225 extends from Kiona (I-82) through Benton City to SR 240 at Horn Rapids. DOE Route 10 extends on into the Hanford reservation. Hanford commuters dominate peak volumes on this two-lane roadway.
SR 240	Jct. SR 24 at Hanford West Gate	Jct. US 395 at Kennewick	40.22	SR 240 extends from SR 24 at the Hanford west gate to Richland and Kennewick (to a junction with US 395), a distance of 40 miles. In conjunction with SR 24 to Yakima and SR 243 north to SR 90 at Vantage, SR 240 carries regional traffic, including freight movements. It also serves as the primary route of the daily Hanford work-commute.
SR 397	I-82/Locust Road Interchange	I-182/US 395 Interchange	22.31	SR 397 extends from I-82 at Locust Grove interchange (exit 114) to the Finley area, then to Kennewick, across the Columbia River, and through East Pasco to the I-182/US 395 interchange. This route serves as freight access to the Port of Pasco, the Port of Kennewick and other industrial sites along the river.

Appendix H-4

Washington State Highway Inventory within Benton County and 2028 Forecast and Level of Service Analysis

Appendix H-4

Washington State Highway Build-out of Benton County Comp Plan Land Use Assumptions - 2028 AADT

SR #	Begin MilePost	End MilePost	Functional Class	HSS	Lanes Inc.	Lanes Dec.	Legal Speed	Current AADT	Single Truck %	Double Truck %	Triple Truck %	AADT 2028	Comments
14	141.33	154.89	Rural Minor Arterial		1	1	65	1200				1512	
14	154.89	157.21	Rural Minor Arterial		1	1	65	1500	7.02	37.54	3.63	1890	
14	157.21	165.93	Rural Minor Arterial		1	1	65	1900				2394	
14	165.93	167.14	Rural Minor Arterial		1	1	65	2300	6.92	30.67	5.9	2898	
14	167.14	178.79	Rural Minor Arterial		1	1	65	3500	6.25	33.9	6.46	4410	
14	178.79	179.85	Rural Minor Arterial		1	1	65	4100	6.58	28.84	5.6	5166	
14	179.85	180.66	Rural Minor Arterial		1	1	55	4400	5.52	24.09	4.24	5544	
22	28.6	34.83	Rural Major Collector		1	1	60	1900				2394	Prosser UGA
22	34.83	35.06	Urban Minor Collector		1	1	55	2100	2.95	12.03	1.51	2646	Prosser UGA
22	35.06	35.3	Urban Minor Arterial		1	1	45	4000	3.32	15.63	4.31	5040	Prosser UGA
22	35.3	35.62	Urban Minor Arterial		1	1	45	5100				6426	Prosser UGA
22	35.62	35.72	Urban Minor Collector		1	1	45	6700				8442	Prosser UGA
22	35.72	35.84	Urban Minor Arterial		1	1	45	4200				5292	Prosser UGA
24	30.41	35.39	Rural Minor Arterial		1	1	65	3300				4158	
24	35.39	38.48	Rural Minor Arterial		1	1	65	3400				4284	
24	38.48	41.98	Rural Minor Arterial		1	1	60	4800				6048	
24	41.98	43.87	Rural Minor Arterial		1	1	60	4800	4.34	11.27	4.67	6048	
82	74.66	75.55	Rural Interstate	Y	2	2	70	19000				23940	
82	75.55	79.53	Urban Interstate	Y	2	2	70	22000				27720	
82	79.53	80.45	Urban Interstate	Y	2	2	70	15000				18900	
82	80.45	82.19	Urban Interstate	Y	2	2	70	19000				23940	
82	82.19	82.86	Urban Interstate	Y	2	2	70	16000				20160	
82	82.86	88.2	Rural Interstate	Y	2	2	70	20000				25200	
82	88.2	89	Rural Interstate	Y	2	2	70	20000				25200	
82	89	93.16	Rural Interstate	Y	2	2	70	20000				25200	
82	93.16	94.14	Rural Interstate	Y	2	2	70	20000				25200	
82	94.14	96.24	Rural Interstate	Y	2	2	70	21000				26460	
82	96.24	97.13	Rural Interstate	Y	2	2	70	18000				22680	
82	97.13	102.84	Urban Interstate	Y	2	2	70	25000				31500	
82	102.84	104.13	Urban Interstate	Y	2	2	70	12000				15120	
82	104.13	105.12	Urban Interstate	Y	2	2	70	9300				11718	
82	105.12	109.64	Urban Interstate	Y	2	2	70	12000				15120	
82	109.64	113.72	Urban Interstate	Y	2	2	70	16000				20160	
82	113.72	113.99	Urban Interstate	Y	2	2	70	21000				26460	
82	113.99	114.91	Rural Interstate	Y	2	2	70	19000				23940	
82	114.91	122.28	Rural Interstate	Y	2	2	70	20000	3.86	13.64	1.72	25200	
82	122.28	123.23	Rural Interstate	Y	2	2	70	20000				25200	
82	123.23	131.23	Rural Interstate	Y	2	2	70	20000				25200	
82	131.23	132	Rural Interstate	Y	2	2	70	18000				22680	
82	132	132.57	Rural Interstate	Y	2	2	65	22000	4.76	14.12	1.92	27720	
182	0	0.44	Urban Interstate	Y	1	1	70	11000	6.04	9.14	1.83	13860	

Appendix H-4

Washington State Highway Build-out of Benton County Comp Plan Land Use Assumptions - 2028 AADT

SR #	Begin MilePost	End MilePost	Functional Class	HSS	Lanes Inc.	Lanes Dec.	Legal Speed	Current AADT	Single Truck %	Double Truck %	Triple Truck %	AADT 2028	Comments
182	0.44	3.44	Urban Interstate	Y	2	2	70	22000	5.67	12.81	2.39	27720	Richland UGA
182	3.44	4.21	Urban Interstate	Y	2	2	70	54000				68040	Richland UGA
182	4.21	5.67	Urban Interstate	Y	2	2	70	67000				84420	Richland UGA
182	5.67	6.95	Urban Interstate	Y	3	3	70	64000				80640	Richland UGA
221	0	0.14	Rural Minor Arterial		1	1	50	2500	5.59	34.69	7.21	3150	
221	0.14	11.44	Rural Minor Arterial		1	1	65	2400				3024	
221	11.44	18.67	Rural Minor Arterial		1	1	65	2400	4.12	28.79	4.74	3024	
221	18.67	20.18	Rural Minor Arterial		1	1	65	2200	3.04	27.51	6.28	2772	
221	20.18	25.65	Rural Minor Arterial		1	1	65	2500				3150	Prosser UGA
221	25.65	25.95	Urban Minor Arterial		1	1	55	2800	3.98	22.61	4.83	3528	
224	0	0.24	Rural Major Collector		1	1	55	6500	5.45	5.39	0.72	8190	
224	0.24	0.62	Rural Major Collector		1	1	55	4000				5040	
224	0.62	3.12	Rural Major Collector		1	1	55	3600				4536	
224	3.12	4.47	Rural Major Collector		1	1	55	3200				4032	
224	4.47	6.23	Urban Minor Arterial		1	1	55	4100	3.69	1.17	0	5166	W Richland UGA
224	6.23	6.82	Urban Minor Arterial		1	1	55	4400				5544	W Richland UGA
224	6.82	7.27	Urban Minor Collector		1	1	35	5800				7308	W Richland UGA
224	7.27	7.9	Urban Minor Arterial		1	1	35	9200				11592	W Richland UGA
224	7.9	8.45	Urban Minor Arterial		2	2	35	15000				18900	W Richland UGA
224	8.45	8.96	Urban Minor Arterial		2	2	40	16000				20160	W Richland UGA
224	8.96	9.97	Urban Minor Arterial		2	2	40	17000				21420	W Richland UGA
224	9.97	10.15	Urban Minor Arterial		2	2	40	17000				21420	W Richland UGA
225	0	0.92	Rural Major Collector		1	1	35	11000	4.15	2.18	0.33	13860	Benton City UGA
225	0.92	1.12	Rural Major Collector		1	1	30	7800				9828	Benton City UGA
225	1.12	1.74	Rural Major Collector		1	1	25	7900				9954	Benton City UGA
225	1.74	1.95	Rural Major Collector		1	1	25	8000				10080	Benton City UGA
225	1.95	2.51	Rural Major Collector		1	1	35	6000				7560	Benton City UGA
225	2.51	4.02	Rural Major Collector		1	1	40	3500	4.13	1.45	0.72	4410	Benton City UGA
225	4.02	4.72	Rural Major Collector		1	1	40	1800				2268	
225	4.72	9.76	Rural Major Collector		1	1	50	1800				2268	
225	9.76	11.33	Rural Major Collector		1	1	50	1800	8.98	5.24	0.54	2268	
240	0	7.95	Rural Minor Arterial		1	1	65	2600	5.49	13.56	3.46	3276	
240	7.95	20.49	Rural Minor Arterial		1	1	65	3800	6.21	3.42	1.29	4788	
240	20.49	21.93	Rural Minor Arterial		1	1	55	4900	2.68	7.45	1.31	6174	Richland UGA
240	21.93	25.13	Urban Other		1	1	55	5100				6426	Richland UGA
240	25.13	26.93	Urban Other		1	1	55	5300				6678	Richland UGA
240	26.93	27.78	Urban Other		1	1	55	10000	4.32	4.13	0.69	12600	Richland UGA
240	27.78	28.27	Urban Other		1	1	55	12000				15120	Richland UGA
240	28.27	28.88	Urban Other		1	1	55	13000				16380	Richland UGA
240	28.88	29.66	Urban Other	Y	3	3	55	29000	3.26	3.56	0.3	36540	Richland UGA
240	29.66	30.27	Urban Other	Y	3	3	55	28000				35280	Richland UGA

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Washington State Highway Build-out of Benton County Comp Plan Land Use Assumptions - 2028 AADT

SR #	Begin MilePost	End MilePost	Functional Class	HSS	Lanes Inc.	Lanes Dec.	Legal Speed	Current AADT	Single Truck %	Double Truck %	Triple Truck %	AADT 2028	Comments
240	30.27	31.25	Urban Other	Y	3	3	55	35000				44100	Richland UGA
240	31.25	32.09	Urban Other	Y	3	3	55	40000				50400	Richland UGA
240	32.09	32.81	Urban Other	Y	3	3	55	45000				56700	Richland UGA
240	32.81	32.99	Urban Other	Y	1	1	55	24000				30240	Richland UGA
240	32.99	33.1	Urban Other	Y	2	2	55	30000				37800	Richland UGA
240	34.22	34.83	Urban Other	Y	3	2	60	30000				37800	Richland UGA
240	34.83	35.74	Urban Other	Y	3	3	60	76000	2.26	0.59	0.04	95760	Richland UGA
240	35.74	36.46	Urban Other	Y	3	3	60	48000				60480	Richland UGA
240	36.46	37.44	Urban Other	Y	1	1	60	54000				68040	Richland UGA
240	37.44	38.29	Urban Other	Y	2	2	60	45000				56700	Richland UGA
240	38.29	39.1	Urban Other	Y	2	2	60	32000				40320	Richland UGA
240	39.1	40.95	Urban Other	Y	2	2	60	42000				52920	Richland UGA
240	40.95	41.24	Urban Other		1	1	60	21000				26460	Kennewick UGA
240	41.24	41.31	Urban Other	Y	2	2	60	23000				29670	Kennewick UGA
241	22.87	25.18	Rural Minor Collector		1	1	55	1600				2064	Kennewick UGA
395	13.05	13.42	Urban Other	Y	1	2	55	8600	3.95	10.45	1.8	10836	Kennewick UGA
395	13.42	13.78	Urban Other	Y	2	2	55	17000	4.1	9.59	1.76	21420	Kennewick UGA
395	13.78	14.22	Urban Other	Y	2	2	55	16000				20160	Kennewick UGA
395	14.22	14.92	Urban Other	Y	2	2	55	17000				21420	Kennewick UGA
395	14.92	15.56	Urban Other	Y	2	2	50	22000				27720	Kennewick UGA
395	15.56	16.17	Urban Other	Y	2	2	50	23000				28980	Kennewick UGA
395	16.17	16.42	Urban Other	Y	2	2	35	29000	3.47	6.32	0.89	36540	Kennewick UGA
395	16.42	16.8	Urban Other	Y	2	2	35	29000				36540	Kennewick UGA
395	16.8	16.92	Urban Other	Y	2	2	35	29000				36540	Kennewick UGA
395	16.92	17.11	Urban Other	Y	2	2	35	28000				36120	Kennewick UGA
395	17.11	17.6	Urban Other	Y	2	2	45	35000	2.47	3.43	0.37	44100	Kennewick UGA
395	17.6	18.07	Urban Other	Y	2	2	45	46000				57960	Kennewick UGA
395	18.07	18.59	Urban Other	Y	2	2	55	36000				45360	Kennewick UGA
395	18.59	19.11	Urban Other		2	2	55	64000	5.2	2.71	0.37	80640	Kennewick UGA
397	0	7.23	Urban Minor Arterial		1	1	60	1700	5.54	11.85	0.83	2142	
397	7.23	10.44	Urban Minor Arterial		1	1	60	760	8.83	20.07	0.97	957	
397	10.44	11.12	Urban Minor Arterial		1	1	45	1200	4.52	19.13	1.04	1512	
397	11.12	11.68	Urban Major Collector		1	1	50	1400	4.72	7.18	0.65	1764	
397	11.68	12.06	Urban Major Collector		1	1	50	1700				2142	
397	12.06	12.35	Urban Major Collector		1	1	50	2100	4.72	5.66	0.49	2646	
397	12.35	12.79	Urban Major Collector		1	1	50	3300	4.73	3.56	0.28	4158	
397	12.79	13.46	Urban Major Collector		1	1	50	4600				5796	
397	13.46	13.89	Urban Major Collector		1	1	50	5800	4.56	5.76	0.38	7308	
397	13.89	14.25	Urban Major Collector		1	1	50	6800	4.25	5	0.35	8568	
397	14.25	15.78	Urban Major Collector		1	1	50	8100	4.17	4.37	0.33	10206	
397	15.78	16.25	Urban Major Collector		1	1	50	11000	3.94	3.54	0.28	13860	

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Washington State Highway Build-out of Benton County Comp Plan Land Use Assumptions - 2028 AADT

SR #	Begin MilePost	End MilePost	Functional Class	HSS	Lanes Inc.	Lanes Dec.	Legal Speed	Current AADT	Single Truck %	Double Truck %	Triple Truck %	AADT 2028	Comments
397	16.25	16.66	Urban Major Collector		1	1	40	10000				12600	Kennewick UGA
397	16.66	17.23	Urban Other		2	2	40	9800				12348	Kennewick UGA
397	17.23	17.48	Urban Other		2	2	35	11000				13860	Kennewick UGA
397	17.48	17.59	Urban Other		2	2	35	16000	3.41	3.2	0.09	20160	Kennewick UGA
397	17.59	18.69	Urban Other		2	2	40	17000				21420	Kennewick UGA