Public Works Department

Spokane County, Washington

Date: April 5, 2021

To: Board of County Commissioners

From: Chad Coles, PE
County Engineer

Subject: **2020 ANNUAL BRIDGE REPORT**

The bridges of the County Road System have been inspected in accordance with the County Road Administration Board guidelines and herewith I submit a report of the findings of the inspection. These findings will be taken into consideration in the preparation of the proposed 2022 Annual and 2022-2027 Six Year Construction Programs.

The report also comments on some of the major bridge accomplishments during the past year and describes some of the bridge projects contemplated this year.

I would be glad to meet with the Board to discuss and answer questions about the report, if the Board desires.

ANNUAL BRIDGE REPORT

April 2021

The following report is submitted in accordance with W.A.C. 136-20-060, and is the findings of the annual inspection of the bridge inventory. Included is a brief explanation of bridge inventory and inspection, State and County funding, a review of the current bridge conditions and a summary of bridge design and construction work during the past year.

Definitions:

Bridge – structure having a centerline length greater than 20 feet, also referred to as an NBI bridge.

Functionally Obsolete (FO) – designation when the deck geometry, load carrying capacity (comparison of the original design load to the current State legal load), clearance or approach roadway alignment no longer meet the usual criteria for the system of which it is an integral part. In general, FO means that the bridge was built to standards that are not used today.

Short Span Bridge – structure having a centerline length less than or equal to 20 feet and meets the short span bridge criteria in the WSBIM.

Structurally Deficient (SD) – designation if significant load carrying elements are found to be in poor condition due to deterioration and/or damage, or the adequacy of the waterway opening provided by the bridge is determined to be extremely insufficient to the point of causing overtopping with intolerable traffic interruptions.

Sufficiency Rating (SR) – provides a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result of this method is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. The formula considers the structural adequacy, functional obsolescence, level of service and essentiality for public use.

WSBIM – Washington State Bridge Inspection Manual.

BRIDGE INVENTORY

Spokane County currently has 174 bridges in its bridge inspection inventory, 18 of which are owned by the Railroad and 7 of which are owned by small cities.

Of the 149 county owned bridges, 107 are bridges and 42 are short span bridges. A breakdown by main span material as well as weight restrictions and calculated deficiencies can be found in Tables 1 and 2 below, respectively.

Table 1: Main span material breakdown for both County owned bridges and short span bridges.

Main Span Material	107 Bridges	42 Short Span Bridges
Concrete/Concrete Continuous	30	8
Prestressed and/or Post Tensioned Concrete/Concrete Continuous	64	8
Steel	10	3
Timber	3	23

Table 2: Posted and calculated designations for both County owned bridges and short span bridges.

Classification	107 Bridges	42 Short Span Bridges
Posted for Weight	10	5
Structurally Deficient (SD)	7	0
Functionally Obsolete (FO)	11	0

A complete list of posted bridges can be found in in Appendix B.

The replacement value of all county owned structures is estimated to be $313.5 million dollars.

BRIDGE INSPECTION

The County follows the National Bridge Inspection Standards (NBIS) in its program as required by the Federal Highway Administration (FHWA) in accordance with the Code of Federal Regulations part 650. The inspection requirements of this standard are met by performing inspections in two categories: Routine Inspections and Special Inspections. Routine Inspections must be done at least once every two years and Special Inspections are performed at different intervals as required by the condition of the bridge. Special Inspections often require specialized equipment and training to perform. There are currently 7 bridges and 7 short span bridges that require inspections every 12 months or less due to some structure components needing more frequent inspections.

Routine Inspections and some aspects of Special Inspections are accomplished by Bridge Department staff. To perform Special Inspections, the County utilizes the services of a local company, Commercial Grading, to provide the specialized equipment and operators

required to accomplish these inspections. In addition, the WSDOT Bridge Preservation Dive Team performs Underwater Inspections.

For the towns of Spangle, Fairfield, and Rockford, the Bridge Department staff performs routine inspections and other work, such as load rating and scour evaluation. A complete inventory of structures that Spokane County inspects can be found in Appendix A.

ROUTINE INSPECTIONS: 53 bridges, 24 short span bridges, and 1 interim inspection (which look at a specific element of a bridge rather than every piece of a bridge) were conducted in 2020. All deficiencies found from the inspections have been noted and scheduled for routine maintenance either with the Spokane County Bridge Maintenance Crew or put on the list for future Small Works Roster projects.

SPECIAL INSPECTIONS: Three inspections fall under this category:

Fracture Critical Inspection (FC): Spokane County has no FC bridges.

Underwater Inspections: The WSDOT dive team completed underwater inspections for both Seven Mile Road Bridge No. 2601 and Argonne Road Bridge No. 4504 in 2020.

Under Bridge Inspection Truck (UBIT): These inspections require the use of a truck that can access the soffits of high span bridges which cannot be inspected from the ground. In 2020, three County bridges received UBIT inspections. These included: Seven Mile Road Bridge No. 2601, Valley Chapel Road Bridge No. 3304, and West Bradshaw Road Bridge No. 4211.

Other noteworthy elements of the NBIS which are integral to the bridge program are:

LOAD RATING: All bridges on the inventory have been rated to determine the percentage of legal loads which they can safely carry. This is an ongoing effort and the files are maintained as the condition of the inventory changes. This work is shared between Bridge Department staff and a consultant.

In 2014, FHWA mandated that all bridge load ratings be updated to address a new class of trucks. A two-tier timetable was established and the Bridge Department is currently working to ensure compliance with the load rating schedule.

SCOUR EVALUATIONS: All bridges over water must be evaluated for the stability of their foundations due to the erosion of the stream bed which supports them. For bridges that have foundations classified as scour critical or unknown, a Scour Plan of Action has been prepared which includes monitoring during high flows and is updated as needed.

FUNDING

The Federal Government provides the main source of funds for bridge rehabilitation and replacement projects which are constructed under contract. Under the MAP-21 structure, bridges located on the National Highway System are eligible for funding under the National Highway Performance Program (NHPP) while bridges not located on the NHS have a separate set-aside in the Surface Transportation Program (STP). In Washington, the MAP-21 Steering Committee created a set-aside for the local bridge program. Agencies with eligible bridges can then apply for these funds through a process which awards funds to those bridges with the greatest need. In general, eligibility is established based on four criteria with the sufficiency rating being the primary factor. The sufficiency rating (SR) is a number on a scale of 0 to 100, with 100 being a new bridge, that captures all the factors which reflect the condition of a bridge. The other three criteria are structural deficiency (SD), functional obsolescence (FO), and scour condition.

Figure 1, below, shows a snapshot of the sufficiency rating for the 149 Spokane County owned bridges in 2020. A complete list of the SD, FO, and weight restricted bridges can be found in Appendix B.

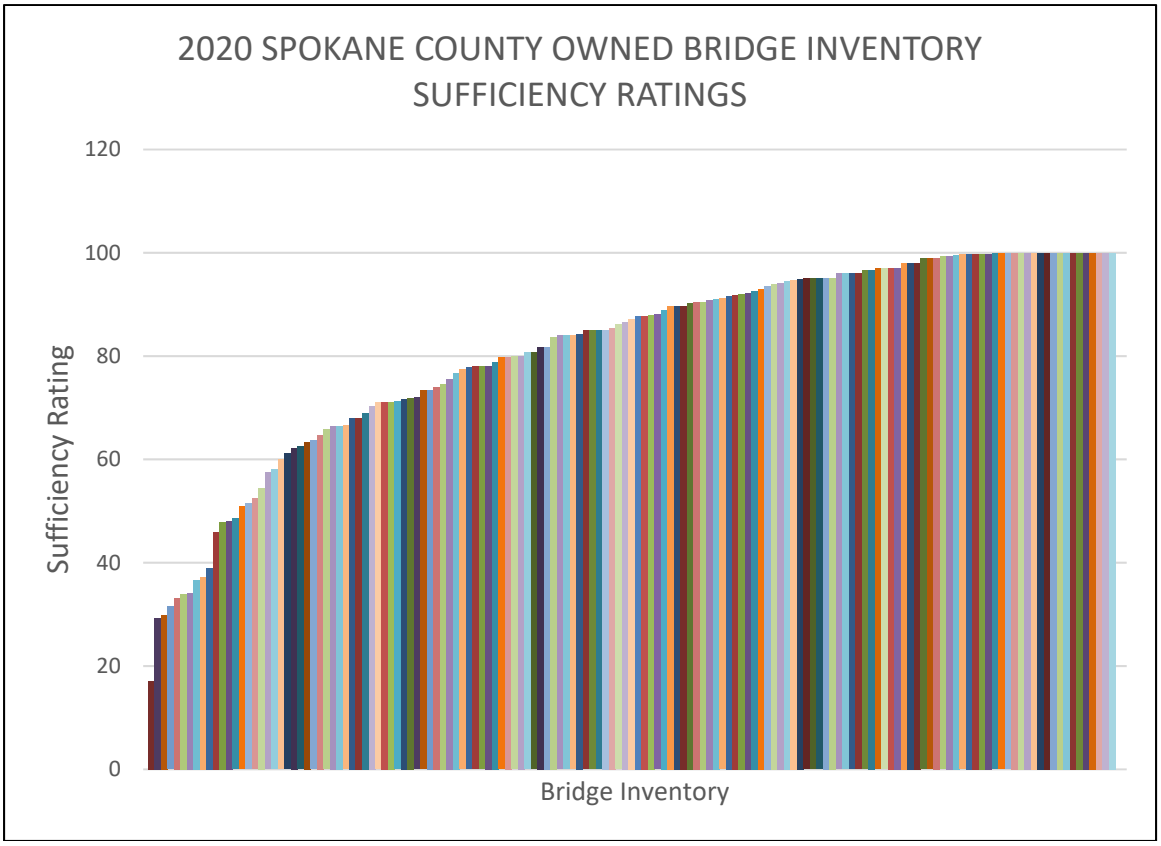

Figure 1: Sufficiency ratings for the 149 Spokane County owned bridges.

In most years, Federal funding is provided at an 80% level with the County Road Fund providing a 20% match. However, on occasion, State funding such as those available through the Rural Arterial Program (RAP) have been utilized as matching funds.

The County Road Fund provides money for replacing short span bridges (less than 20 feet in length) that are not eligible to receive funding through the State, as well as yearly routine maintenance of bridges.

In 2019, the local bridge program awarded approximately $81.1 million in funds to be distributed to local agencies throughout the State in the upcoming years. The next call for projects closed on February 19, 2021 with approximately $85 million dollars available for local agency bridge projects.

RECENTLY FUNDED PROJECTS

In December 2019, the County was successful in obtaining $4,109,512 in Federal grants for the following three bridge projects: Little Spokane Drive over Little Spokane River Bridge No. 3704 replacement, Sunset Highway over North Fork of Deep Creek Bridge No. 0514 removal, and Waikiki Road over Little Spokane River Bridge No. 2606 deck repair. The preliminary engineering began in 2020 for Little Spokane Drive and Waikiki Road and will begin in 2021 for Sunset Highway.

The following photos highlight two of the most recently awarded federally funded bridge projects in 2019 due to structural deficiencies.

Structural Deficient
Sufficiency Rating: 16.91 SD
Little Spokane Drive Bridge No. 3704 over Little Spokane River

Structural Deficient
Sufficiency Rating 36.60 SD
Waikiki Road Bridge No. 2606 over Little Spokane River

ACTIVE PROJECTS

Table 3 below provides the status of the active projects in 2020. Additional details about each project can be found on the following pages.

Table 3: Status of active projects in 2020.

PROJECT	ESTIMATED TOTAL COST	PLANNED CONSTRUCTION DATE	FUNDING
Projects Constructed in 2020			
Blanchard Creek Road Culvert Replacement CRP 3229	$574,500	Constructed in Summer 2020	Federal County
Pine Bluff Road Bridge No. 2609 CRP 3230	$568,100	Constructed in Fall 2020	Federal County
Idaho Road Bridge No. 6206 CRP 3254	$297,000	Constructed in Summer 2020	County
North Kentuck Trail Bridge No. 4205 CRP 3240	$557,000	Constructed in Summer 2020	Federal County
Projects in Design			
Frideger Road Bridge No. 4902 CRP 3239	$1,300,500	Construct in 2021	Federal County
Waikiki Road Bridge No. 2606 CRP 3264	$799,000	Construct in 2021	Federal County
Sunset Highway Bridge No. 0514 CRP 3263	$293,000	Removal in 2022	Federal County
Forker Road Culvert Replacement CRP 3270	$500,000	Construct in 2021	County
Deer Park Milan Road Bridge No. 3915 CRP 3241	$1,325,200	Construct in 2023 or 2024	County
Wallis Road Bridge No. 5712	$330,000	Construct in 2021	County

COMPLETED BRIDGE PROJECTS

During 2020, three bridge projects were completed. The following are a few details about the projects.

Blanchard Creek Road Culvert Replacement over Blanchard Creek Overflow, CRP 3229 was a culvert replacement project. It is located approximately 9.5 miles east of Elk-Chattaroy Road on Blanchard Creek Road, 50 feet south of Blanchard Road. The four existing culverts, two 36-inch diameter and two 30-inch diameter, were deteriorating and not adequately conveying the flows. The new structure is a precast concrete three-sided bottomless culvert, 14 feet in length and 35.3 feet wide. The profile of Blanchard Creek Road was adjusted to allow the installation of the structure and maximize the freeboard. Construction occurred in Summer 2020.

Pine Bluff Road Bridge No. 2609 over Coulee Creek, CRP 3230 was a bridge scour repair project. It is located approximately 0.2 miles north of Seven Mile Road in northwest Spokane County. The bridge is a three span, prestressed concrete bridge. High spring flows from 2017 caused significant stability concerns to the foundations of the two interior piers. Repairs included anchoring a cast-in-place concrete wall to the bedrock and using soil anchors with reinforced shotcrete on the slopes with riprap at the toe of the slopes in front of each interior pier. Construction was completed in Fall 2020.

North Kentuck Trails Road Bridge No. 4205 over Latah Creek, CRP 3240 was a bridge scour repair project. It is located approximately 2.6 miles northeast of Spangle Waverly Road in south Spokane County. The bridge built in 1961 is a three span, concrete slab bridge. The creek bottom has degraded approximately six feet in depth in Span 1, exposing the footings at Abutment 1 and Pier 2. Repairs included placing rock for erosion and scour protection around Abutment 1. Construction was completed in Fall 2020.

BRIDGE DESIGN

County Bridges are designed using in the latest edition of the AASHTO LRFD Bridge Design Specification in concert with the WSDOT Bridge Design Manual. Following is a short description of the bridges which are currently under design.

Frideger Road Bridge No. 4902 over Little Spokane River, CRP 3239 is a bridge replacement project. It is located approximately 0.07 miles east of Elk-Camden Road in north Spokane County. The existing single span, conventionally reinforced concrete structure is scour critical and weight restricted for all seven legal trucks. The replacement structure will be a single span, prestressed concrete slab girder bridge with a concrete cast-in-place deck and include a roadway realignment. The topographic survey was completed in 2018 with design work completed in 2019/2020 and construction in 2021.

Waikiki Road Bridge No. 2606 over Little Spokane River, CRP 3264 is a bridge deck rehabilitation project. It is located approximately 1.7 miles west of Mill Road in north Spokane County. The existing three-span prestressed concrete girder bridge is 168 feet long with 857 square feet (19.6%) of the concrete deck deteriorating. The deck will be rehabilitated, including new asphalt approaches and expansion joint reconstruction/replacement. Design work was completed in 2020 and construction will take place in 2021.

Sunset Highway Bridge No. 0514 over North Fork of Deep Creek, CRP 3263 is a bridge removal project. It is located approximately 500 feet west Highway 2 in west Spokane County. The existing single span steel and concrete bridge is 27 feet long and was built in 1910. The weight restricted bridge will be removed, stream banks stabilized and scoured

areas filled with streambed sediment. The survey for the design work was completed in 2020 with design to begin in 2021 and bridge removal to take place in 2022.

Deer Park Milan Road Bridge No. 3915 over Bear Creek, CRP 3241 is a bridge replacement project. It is located approximately 4 miles east of Deer Park. The existing single span cast-in-place concrete bridge was built in 1921 and widened to the north in 1973. It is scour critical and deteriorating. The replacement structure is still being evaluated and will be built on the existing alignment. The topographic survey was completed in 2018 with design work scheduled for 2022 and construction in 2023 or 2024.

BRIDGE MAINTENANCE

Routine maintenance includes work on the inventory of timber bridges, by rebuilding deteriorated superstructures, updating bridge rail systems, repairing damaged guardrail and scour repair. There is also an extensive inventory of concrete bridges which receive maintenance work such as repairing and washing decks, cleaning and replacing expansion joints and bridge rail repairs. The bulk of this work is accomplished by the Bridge Maintenance Crew who also handle emergency repairs and monitoring of the inventory during high water events.

MAJOR BRIDGE MAINTENANCE

Two major bridge maintenance projects were completed in 2020. Design work for two other bridge replacement projects that will use County funds and the Bridge Maintenance and District Crews to perform the work will continue in 2021.

Idaho Road Bridge No. 6206 over South Fork Rock Creek was a bridge replacement project located on the stateline with Idaho. The existing weight restricted timber bridge was deteriorating with rot and section loss in the timber beams, deck planks and piles. The existing structure and center timber pile bent were removed and a new steel piles were driven in line with the existing abutment piles, a new steel pile cap and modular steel bridge superstructure were placed. Construction took place in 2020 using the Spokane County Bridge Maintenance Crew, Plummer Gateway Highway District, and a Small Works Roster (SWR) contract for the pile installation.

Madison Road Bridge No. 4408 over California Creek was a superstructure and deck replacement in Summer 2020. A hole in the deck was discovered which warranted a deck replacement. During the repair, top rot in the girders was observed so the girders were replaced with new glu-laminated girders. Glu-laminated deck panels were then placed with 2.5 inches of asphalt on top creating a smooth transition over the bridge.

Wallis Road Bridge No. 5712 over South Fork Deadman Creek is a bridge replacement project. The existing weight restricted timber bridge is deteriorating with rot and section loss in the timber beams, deck planks and piles. The existing structure will be removed and a new steel bridge supported on a structural earth wall foundation will be constructed. Preliminary engineering and survey work started in 2019 with potential construction completion in 2021.

Forker Road Culvert Replacement is a culvert replacement project. The existing six-foot diameter culvert is deteriorating with rot and section loss in the corrugated metal pipe bottom. The existing structure will be removed and a new modular steel bridge supported on a structural earth wall foundation will be constructed. Preliminary engineering and survey work started in 2020 with construction completion in 2021.

MOVING FORWARD

Of the 23 County owned timber bridges, 20 are founded on timber pile. Most of these timber bridges were built in the 1950's and 1960's and have an average age of 50 years. The typical expected service life of a timber bridge is 50 years, indicating that the County's timber bridge inventory is at or beyond its expected service life. Currently, 35 percent of the timber bridges supported by timber piling are considered in poor condition as the timber substructure and/or piles are wearing out and beginning to fail. With more expected to be added to this list, funding options and replacement structures will be reviewed.

APPENDIX A
INVENTORY OF STRUCTURES

Spokane County

Bridge Description	Total Number of Bridges	Bridges with weight restrictions	Closed bridges	Bridges with height restrictions
Railroad Under Crossings (Primary Safety Inspections)	17	0	0	13
Railroad Over Crossings	7	2	1	0
River, Stream, Drainage Crossings, Trails, and Roadways	143	13	1	0
Totals:	167	15	2	13

SMALL CITY BRIDGES INSPECTED BY SPOKANE COUNTY

City of Fairfield

Bridge Description	Total Number of Bridges	Bridges with weight restrictions	Bridges with height restrictions
River, Stream and Drainage Crossings	2	0	0
Totals:	2	0	0

City of Rockford

Bridge Description	Total Number of Bridges	Bridges with weight restrictions	Bridges with height restrictions
River, Stream and Drainage Crossings	1	0	0
Totals:	1	0	0

City of Spangle

Bridge Description	Total Number of Bridges	Bridges with weight restrictions	Bridges with height restrictions
River, Stream and Drainage Crossings	4	0	0
Totals:	4	0	0

APPENDIX B
2020 BRIDGE REPORT FIGURES AND TABLES

Bridges Categorized as Structurally Deficient in 2020 (7)

Bridge #	Bridge Name	Sufficiency Rating	Posting Status	Year Built	Length (ft)	Traffic Volume (ADT)
SPOK-3704	L SPO DR OVER L SPO RIV	17.05	Posted	1951	90	1109
SPOK-3801	CHATTAROY RD OV LITTLE SPOKANE RIVER	29.23	Posted	1953	45	1387
SPOK-3112	OLD STATE ROUTE 195	29.91	Posted	1929	195	888
SPOK-4902	FRIDEGER ROAD	33.19	Posted	1957	30	321
SPOK-0514	SUNSET HWY OV N FK DP CR	33.99	Posted	1910	27	8
SPOK-2606	WAIKIKI RD OV LITTLE SPOKANE RIVER	36.60	Open	1961	168	2944
SPOK-2404	CHENEY-SPO OVER UP&BN RR	51.47	Posted	1949	547	3301

Bridges Categorized as Functionally Obsolete in 2020 (11)

Bridge #	Bridge Name	Sufficiency Rating	Posting Status	Year Built	Length (ft)	Traffic Volume (ADT)
SPOK-3715	GREENLEAF DRIVE	31.51	Open	1990	126	1422
SPOK-3703	COLBERT RD OV LITTLE SPOKANE RIVER	37.18	Posted	1953	90	2167
SPOK-3902	DEER PARK-MILAN RD OV LITTLE SPOKANE RIVER	48.04	Posted	1954	42	2046
SPOK-2608	SEVEN MILE RD OV DEEP CREEK	52.43	Open	1958	170	2996
SPOK-3308	VALLEY CHAPEL ROAD OV CALIFORNIA CREEK	63.68	Open	1923	38	411
SPOK-4204	KEEVEY ROAD OV LATAH CREEK	64.66	Open	1976	96	15
SPOK-4403	DUNN RD OV CALIFORNIA CREEK	76.70	Closed	1963	42	0
SPOK-3701	LITTLE SPOKANE DR OV LITTLE SPOKANE RIVER	79.91	Open	1961	97	2260
SPOK-2604	RUTTER PKWY OV LITTLE SPOKANE RIVER	81.70	Open	1960	157	2317
SPOK-4212	HAYS ROAD	92.99	Open	1960	81	16
SPOK-3313	ELDER RD OV CALIFORNIA CREEK	94.93	Open	1984	73	62

APPENDIX B

2020 BRIDGE REPORT FIGURES AND TABLES

Bridges with Weight Restrictions in 2020 (15)

Bridge #	Bridge Name	Sufficiency Rating	Posting Status	Year Built	Length (ft)	Traffic Volume (ADT)
SPOK-3704	L SPO DR OVER L SPO RIV	17.05	Posted	1951	90	1109
SPOK-3801	CHATTAROY RD OV LITTLE SPOKANE RIVER	29.23	Posted	1953	45	1387
SPOK-3112	OLD STATE ROUTE 195	29.91	Posted	1929	195	888
SPOK-4902	FRIDEGER ROAD OV LITTLE SPOKANE RIVER	33.19	Posted	1957	30	321
SPOK-0514	SUNSET HWY OV N FK DP CR	33.99	Posted	1910	27	8
SPOK-4814	ANTLER RD OV DEER CREEK	34.17	Posted	1955	18	21
SPOK-3703	COLBERT RD OV LITTLE SPOKANE RIVER	37.18	Posted	1953	90	2167
SPOK-2401	MARSHALL RD OV MARSHALL CREEK	38.96	Posted	1960	20	44
SPOK-5712	WALLIS RD OV SOUTH FORK DEADMAN CK	45.91	Posted	1948	15	24
SPOK-3902	DEER PARK-MILAN RD OV LITTLE SPOKANE RIVER	48.04	Posted	1954	42	2046
SPOK-2203	WELLS RD OVER SANDERS CR	48.53	Posted	1953	30	282
SPOK-2404	CHENEY-SPO OVER UP&BN RR	51.47	Posted	1949	547	3301
SPOK-3705	SHADY SLOPE RD OV LITTLE DEEP CRK	54.43	Posted	1955	20	1641
SPOK-3620	JAY AVE OVER DRAINAGE	66.54	Posted	1963	27	156
SPOK-1102	BADGER LK OVERFLOW BR	77.39	Posted	1952	21	141

APPENDIX B
2020 BRIDGE REPORT FIGURES AND TABLES

County Owned Short Span Bridges (42)

Bridge #	Bridge Name	Sufficiency Rating	Posting Status	Year Built	Length (ft)	Traffic Volume (ADT)
SPOK-4814	ANTLER RD OV DEER CREEK	34.17	Posted	1955	18	21
SPOK-2401	MARSHALL RD OV MARSHALL CREEK	38.96	Posted	1960	20	44
SPOK-5712	WALLIS RD OV SOUTH FORK DEADMAN CREEK	45.91	Posted	1948	15	24
SPOK-3710	SHADY SLOPE RD OV PEONE CREEK	50.87	Open	1964	21	1641
SPOK-3705	SHADY SLOPE RD OV LITTLE DEEP CRK	54.43	Posted	1955	20	1641
SPOK-2818	DAHL RD OV SPRING CREEK	57.43	Open	1916	16	995
SPOK-3619	HOLLAND AVE OV DRAINAGE	59.98	Open	1974	13	900
SPOK-2813	DAHL RD OV DRAGOON CREEK	62.21	Open	1916	16	972
SPOK-2101	CHENEY-PLAZA RD OV BUCKEYE CREEK	62.45	Open	1921	12	234
SPOK-3915	DEER PARK-MILAN OV. BEAR CREEK	65.77	Open	1921	13	3108
SPOK-3202	SPANGLE-WAVERLY RD OV SPANGLE CREEK	66.38	Open	1917	20	854
SPOK-4909	MILAN-ELK OVER DRY CR.	66.46	Open	1968	17	1239
SPOK-2909	BRIDGES RD OV DRAGOON CREEK	67.98	Open	1972	18	40
SPOK-4404	CONNOR RD OV CALIFORNIA CREEK	67.99	Open	1953	21	36
SPOK-3201	KEEVY RD OV SPANGLE CREEK	68.94	Open	1951	22	56
SPOK-2911	SPRING CREEK RD OV SPRING CREEK	70.36	Open	1964	21	349
SPOK-5305	OLD ELDER RD OV MICA CREEK	71.18	Open	1921	21	29
SPOK-4410	BELMONT RD OV CALIFORNIA CRK	73.41	Open	1965	19	879
SPOK-1102	BADGER LK OVERFLOW BR	77.39	Posted	1952	21	141
SPOK-3204	WHITTIER OV BR N PINE CR	77.95	Open	1954	16	88
SPOK-4408	MADISON RD OV CALIFORNIA CREEK	79.73	Open	1952	19	767
SPOK-0515	STROUP RD OV NORTH FORK DEEP CREEK	80.00	Open	1967	21	20
SPOK-3706	SHADY SLOPE OV PEONE CRK OVERFLOW	80.71	Open	1964	21	1662
SPOK-5107	KNIGHT RD OV COVE CREEK	84.00	Open	1962	16	26
SPOK-3709	WOOLARD RD OV LITTLE DEEP CREEK	84.23	Open	1958	22	371

Bridge #	Bridge Name	Sufficiency Rating	Posting Status	Year Built	Length (ft)	Traffic Volume (ADT)
SPOK-3203	CEDAR RD OVER CREEK	84.96	Open	1967	12	65
SPOK-0512	COULEE HITE RD. OV DP CR	84.99	Open	1952	21	25
SPOK-3102	BABB RD OV NORTH PINE CREEK	86.08	Open	1952	20	84
SPOK-3621	IVANHOE RD OVER DRAINAGE	89.68	Open	1957	21	173
SPOK-3622	BARNES RD OVER DRAINAGE	89.75	Open	1957	21	270
SPOK-0524	STROUP RD OVER BR DEEP C	90.32	Open	1950	20	49
SPOK-5905	BLANCHARD CREEK RD OV OVERFLOW	93.96	Open	2020	14	112
SPOK-4202	RATTLERS RUN ROAD	94.10	Open	1964	21	14
SPOK-6201	IDAHO RD OV ROSE CREEK	94.99	Open	1900	18	9
SPOK-4801	BRUCE RD OV DEER CREEK	95.96	Open	1950	19	47
SPOK-4215	CAHILL OVER DRAINAGE	95.98	Open	1955	18	34
SPOK-0508	COULEE HITE RD OV DP CRK	95.99	Open	1962	22	33
SPOK-5701	MUZZY RD OV THOMPSON CREEK	96.57	Open	1951	21	379
SPOK-0406	THORPE ROAD OV SOUTH FORK DEEP CREEK	96.96	Open	1962	19	78
SPOK-3108	GRIFFITH RD ARCH PIPE OV NORTH PINE CREEK	97.00	Open	1994	18	3
SPOK-1201	MULLINIX RD OV COLUMBIA PLATEAU TRAIL	98.90	Open	1994	17	195
SPOK-3104	DIXON ROAD ARCH PIPE	100.00	Open	1992	17	18