

Leading Idaho Local Bridge Program

Local Highway Technical Assistance Council

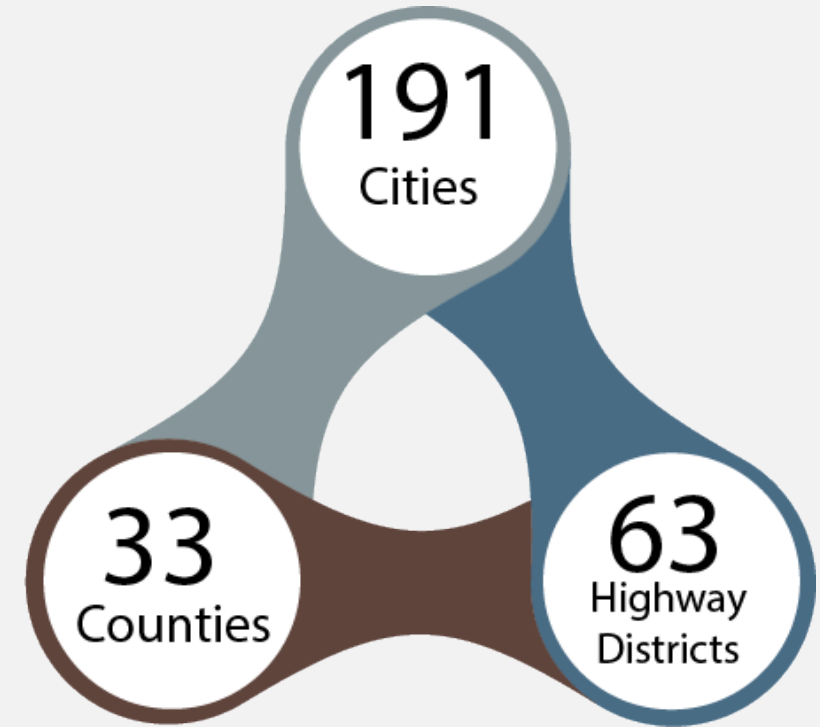
September 2023

Scott Wood, P.E.
Federal-Aid Engineer



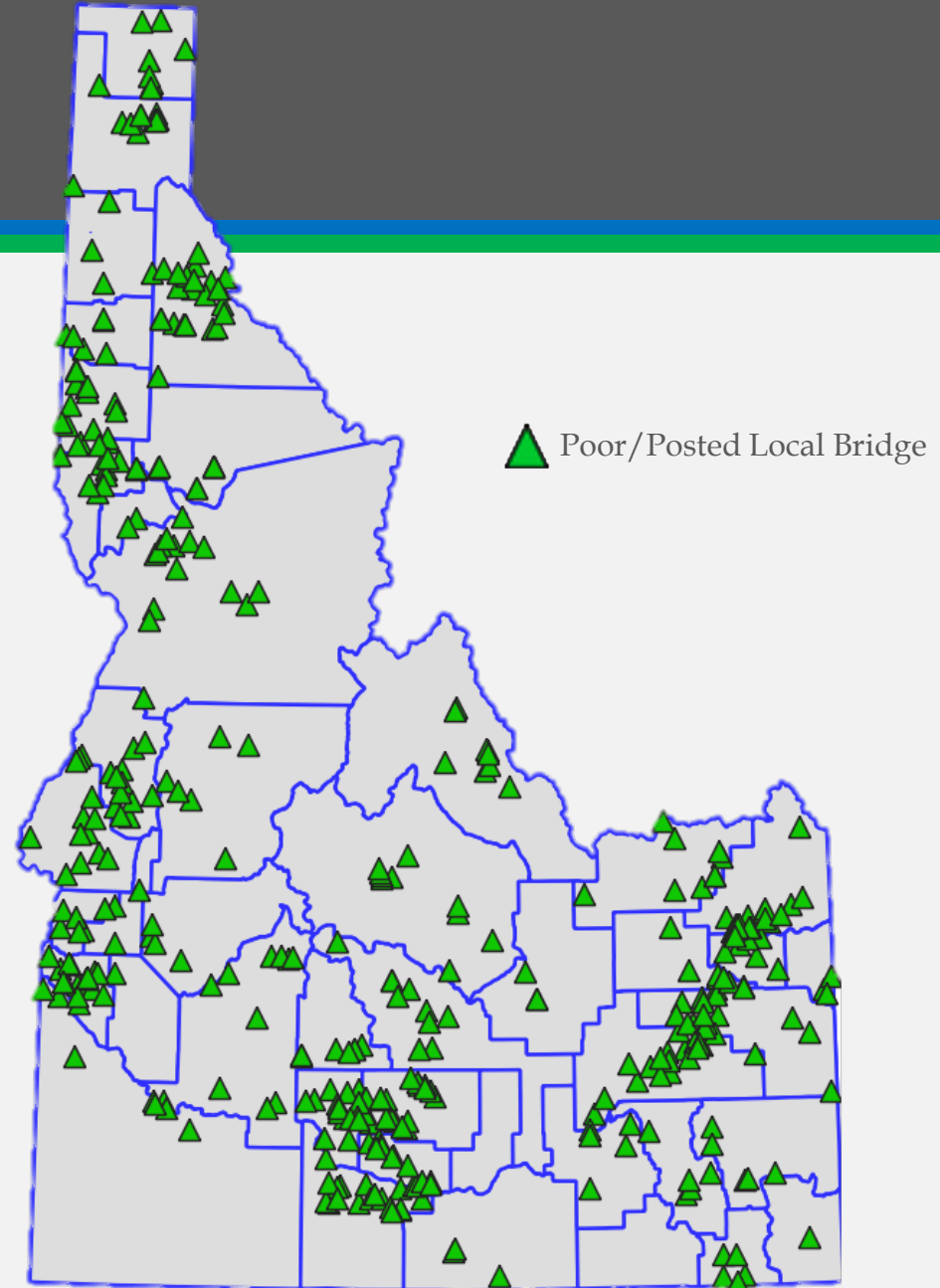
LHTAC – Advocate. Support. Train.

- Technical Assistance
- Training – T2 Center
- Administer Transportation Programs
 - Federal-aid
 - Rural & Urban (Surface Transportation Block Grant)
 - Bridge (Local & Off-System)
 - Local Highway Safety Improvement Program (LHSIP)
 - Transportation Alternatives (TAP)
 - State Funded
 - Local Rural Highway Investment Program (LHRIP)
 - Leading Idaho Local Bridge (LILB)
 - Children Pedestrian Safety (CPS)



Local Idaho Bridges

- 4,259 Bridges in Idaho
- 2,479 local bridges
- 150 in poor condition
- 359 posted for load restriction
- 1,039 over 50 years old
- 2018 ASCE Report Card Grade D
- 227 Local Highway Jurisdictions (City, County, Highway District)
- Currently about \$13M federal-aid per year for local bridges



Program Creation

Idaho Senate Bill 1359 passed in March 2022 - \$200 Million in surplus funds:

- Establishes new state funded program
- To address 1/3 poor or posted local bridges
- There were 428 eligible bridges
- Fund bridges through 5 rounds of awards

Additional \$200M in 2023


\$400M total so far



Application Outreach

Extensive Local Outreach

- Post cards
- Emails
- Website
- Webinars
- Regional meetings
- Phone calls

Leading Idaho Local Bridge Program 

About

The Leading Idaho Local Bridge (LILB) Program uses one-time state funds to repair or replace qualifying local bridges.

In 2022, the Idaho Legislature approved up to \$200 million for this program. These funds are available immediately. The Local Highway Technical Assistance Council (LHTAC) is administering the program.

Informational Webinars

LHTAC is hosting two online webinars for additional help. You can register for either online at:

April 13, 10 a.m. - 12 p.m. MDT
bit.ly/LILBwebinar1

May 4, 2-3 p.m. MDT
bit.ly/LILBwebinar2

Eligibility

To qualify for the LILB Program, a bridge must meet the following criteria:

- On any local road network
- Minimum span of 20 feet
- Certified inspection report with a "poor" rating on superstructure, substructure, or deck
 - OR -
 - Posted for load weight restriction
 - OR -
 - Closed

428 bridges qualify as of Nov 2021

Application

LHTAC is accepting applications for the LILB Program from April 11 - June 8, 2022. Each eligible bridge will be scored with a combination of Technical Analysis (75%) from certified inspection reports and Local Knowledge (25%) provided by the qualifying Local Highway Jurisdiction (LHJ).

The application is designed to be easily completed with existing staff. LHTAC staff are completing the Technical Analysis section for each application.

The Local Knowledge section of the application will ask LHJs to provide simple information. This includes how the repair or replacement of the bridge would impact the community's safety, mobility, and economic benefit. A fourth short answer allows for additional information not captured in these three topics to be shared.

More information can be found online at:

lhtac.org/programs/LILB

Published 4-06-2022

Application Statistics

- 428 Eligible bridges
- 404 In need of funding
- 221 Applications received
- 89 out of 93 jurisdictions applied

Application Scoring

Technical Analysis – 75%

- Inspection reports
 - Condition
 - Load rating
- Existing conditions
 - Environmental risk
 - Highway use
- Constructability
 - Bridge length
 - Detour length
- Scored by LHTAC staff

Local Knowledge – 25%

- Right-of-way ownership
- Four open Questions (100 words max)
 - Safety
 - Mobility
 - Economic benefit
 - Additional information
- Scored by Council

Technical Scoring

Technical Analysis 75%

- Condition 15%
- Scour 6%
- Posting Level 10%
- ADT/Detour 9%
- Bridge Length 10%
- Estimated Cost 5%
- Environmental 10%

<u>CONDITION</u>	<u>POINTS</u>
9 Excellent	0
8 Very Good	0
7 Good	0
6 Satisfactory	0
5 Fair	2
4 Poor	3
3 Serious Condition	4
2 Critical Condition	5
1 Imminent Failure	5
0 Failed	5

		ADT				
		0 - 50	51 - 100	101-500	501 - 1000	>1000
Detour Length (miles)	2	3	4	5	5	5
	5	2	3	4	5	5
	100	1	2	3	4	5

Application

Application Scoring 25%

- 4 Questions
- 100 words max
- Online, email, hardcopy
- Take application over the phone
- ROW Ownership 5%

4. Short Answer

Please provide four short answers that demonstrate the importance of this bridge. There are three specific areas of focus: safety, mobility, and economic benefit. A fourth short answer section may include additional information not captured in the first three answers. Each answer is limited to 100 words.

Examples: Specific business, services, annual events, seasonal access, neighborhood connectivity, safety benefits, fiscal impact, or other activity that is vital to your jurisdiction.

Each answer is worth up to 5% of the total application score:

- 0-1: Blank, irrelevant, or non-impactful information
- 2-3: Demonstrates minor importance of the bridge
- 4-5: Demonstrates the significant importance of the bridge

Short Answer #1: Safety

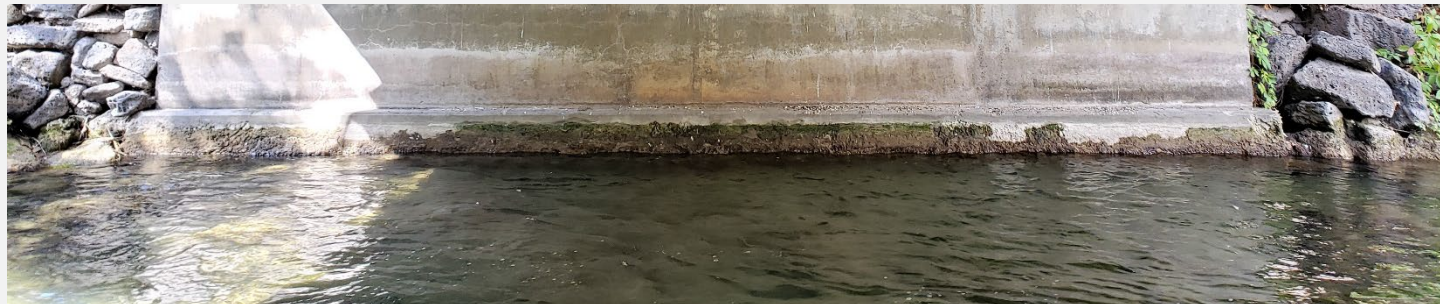
Short Answer #2: Mobility

Short Answer #3 Economic Benefit

Short Answer #4: Additional information you would like to include

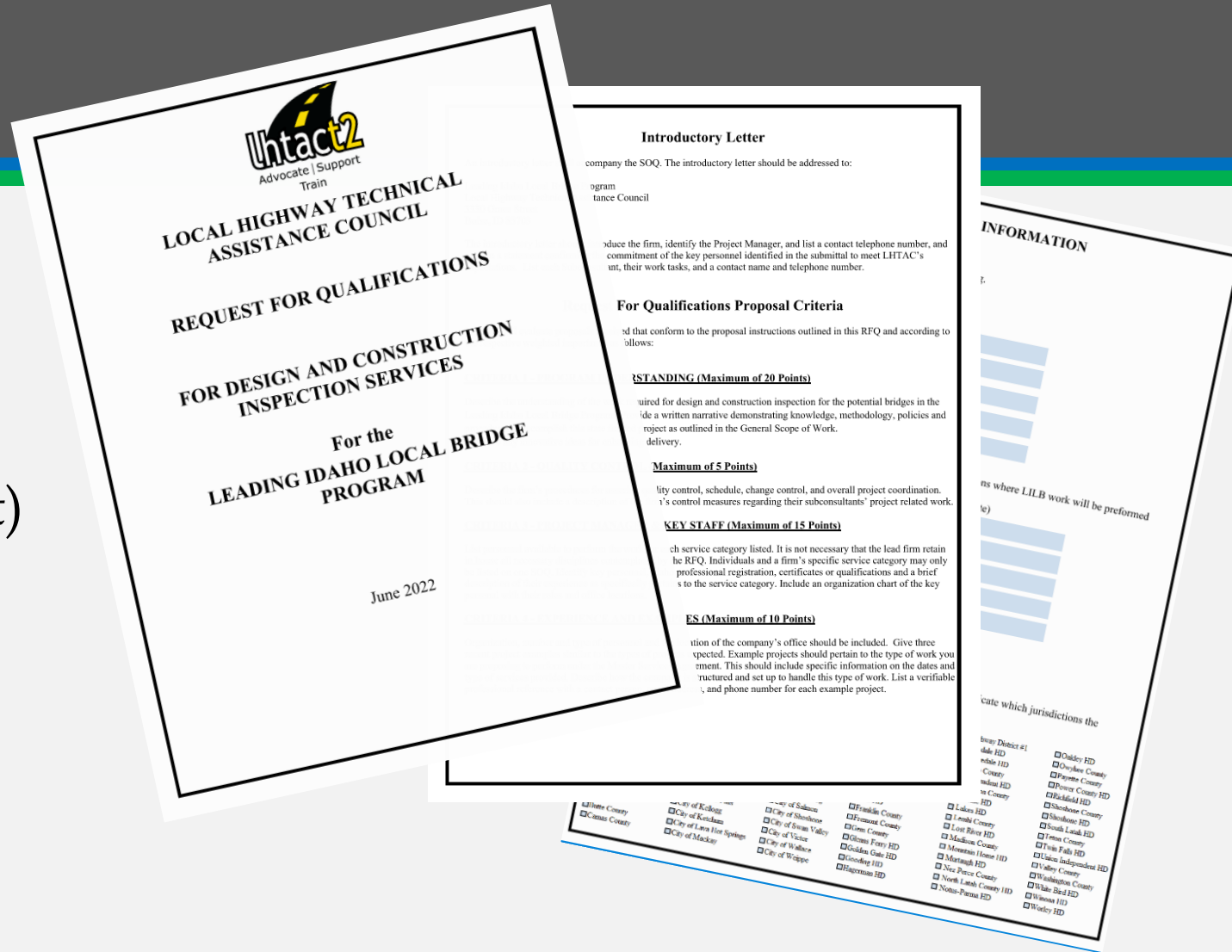
Program Categories

- 221 bridges in the program
- 5 Groups
 - Construction Ready
 - Greater than 50% design
 - Repairs
 - Testing and Analysis
 - Replacements/Removals



Consultant Selection

- Consultant outreach
- Request for qualifications
- Pre-qualified list (term agreement)
- Design and CE&I
 - Unique teams
- Geotechnical engineering
- Environmental services



Unique Consultant Teams

Design and CE&I

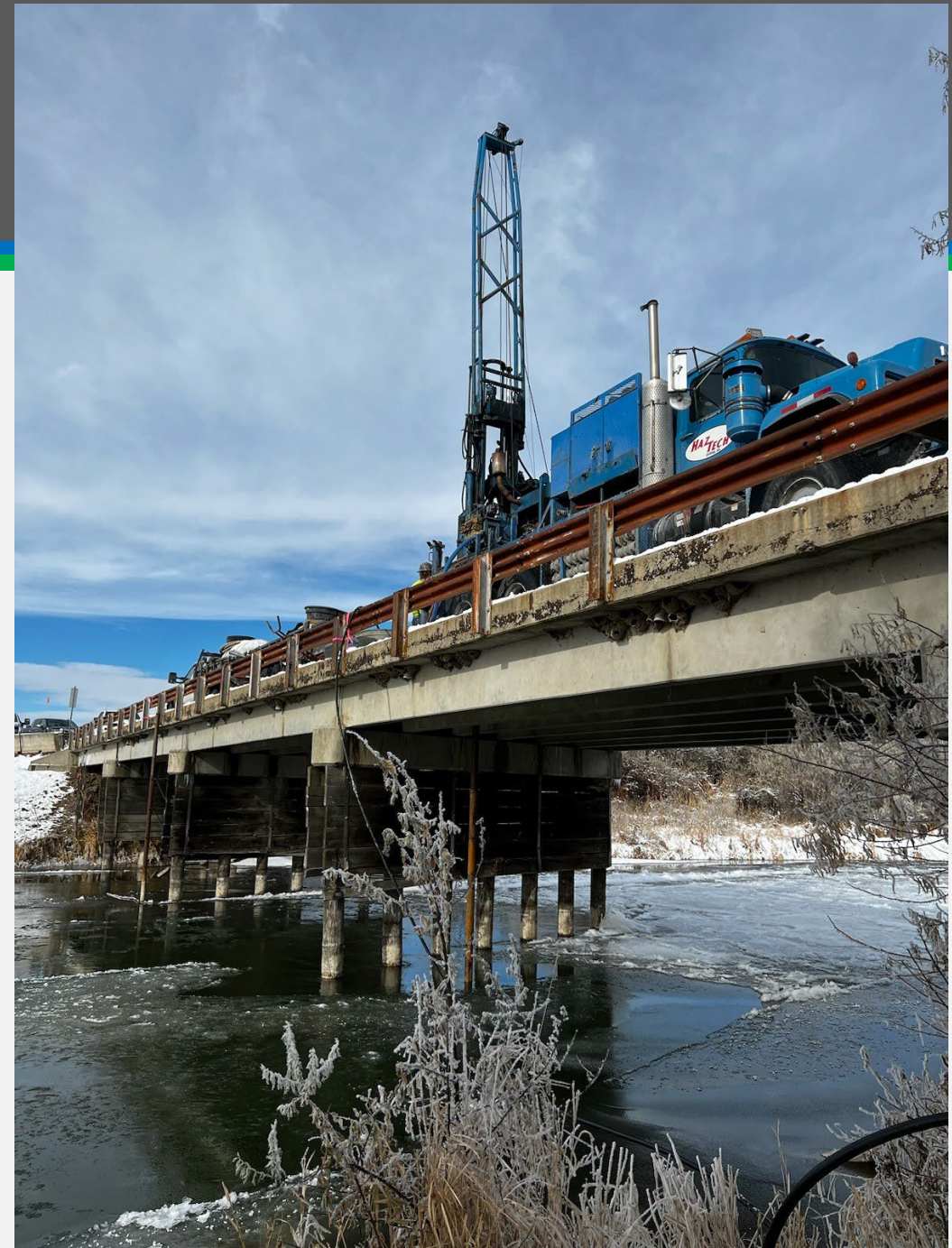
- Same PM/team for design and CE&I
- Assigned 1 to 8 bridges
- Awarded contracts to top scoring teams and in their preferred geographic area
- Large projects by themselves, phased contracts
- Award to all qualified firms through the life of the program
- Lump sum agreements for design
- Invoiced on milestone submittals and percent complete



Consultant Unique Teams

Separate geotechnical agreements

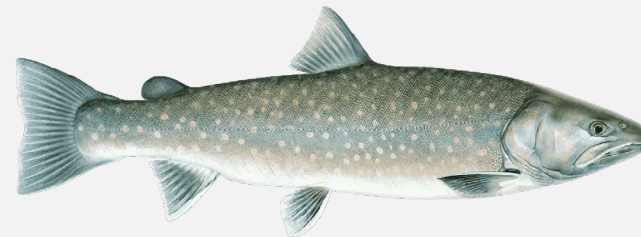
- Assigned 7 to 19 bridges by region
- Lump sum agreements + direct expenses for drilling and traffic control
- Coordination with design teams



Environmental Consultants

5 Environmental Categories

- Aquatic resources
- Biological resources
- Archaeological resources
- Architectural history
- NEPA documentation



Consultant Teams

Conceptual Consultant Selection						
Bridge #	Design	Geotechnical	Environmental			
1	Firm A	Firm 1	Historical Firm	Archaeological Firm	Aquatic/Biological Firm	
2						
3						
4	Firm B		Cultural Firm		Aquatic Firm	Biological Firm
5						
6						
7	Firm C	Firm 2	Environmental Firm All Services			
8						
9	Firm D					
10						

17 Design & CE&I teams

9 Geotechnical firms

11 Environmental firms

Streamlining Environmental Process

Programmatic Biological Assessment

- Statewide
- Extend to local usage

State Historic Preservation Office Programmatic Agreement

- Direct coordination
- Mitigation process

Permit Efficiencies

- Pre-coordination (USACE, IDWR, DEQ)
- Non-reporting permits (automatic 404)



What is Funded?

- 32 Design Agreements
- 26 Environmental Contracts
- 16 Geotech Agreements
- 4 in bidding
- 6 in construction
- Projected 35+ bridges under construction in 2023

Total Obligated ~ \$200M



Featured Projects

Mormon Rd. over West Fork Solider Creek

Camas County

Project Estimate: \$700,000

Final Cost: \$440,720

Before



After

Featured Projects

Northwest Passage



Featured Projects



Hexon Rd. over Boise River

Notus-Parma Highway District

Project Estimate: \$17,100,000 - \$22,000,000



Featured Projects

Canyon Road over Cd'A River

Eastside Highway District

Project Estimate: \$15,000,000

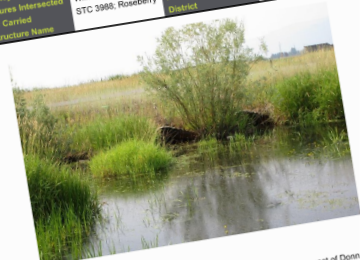


Repair / Review / Test Bridges

- Document review
- Load rating review
- Material testing
- Repair vs Replace
 - Fair Condition or better
 - Less than 50 years old
 - Cost Benefit Analysis

COST-BENEFIT ANALYSIS | KN 20068

Bridge Key	20068	Structure Name	93988A 0.05
(01) Features Intersected	Willow Creek	(01) Location	1 S E Donnelly
Facility Carried	STC 3988; Roseberry	Admin. Jurisdiction	8500 Valley County
And Structure Name	District		03



GENERAL BACKGROUND

Project Description and Location
This bridge carries E Roseberry Road over Willow Creek approximately 1.5 miles east of Donnelly, and about 350 feet west of the intersection of E Roseberry Road and Farm to Market Road in Valley County. The purpose of this project is to determine the costs of recommended rehabilitation items in comparison with the replacement cost.

AGE AND SERVICE	CONDITION
(27) Year Built: 1996	(58) Deck: N N/A
(166) Year Reconstructed	(09) Superstructure: N N/A
(42a) Type of Service: On	(60) Substructure: N N/A
(42b) Type of Service Under	(81) Channel/Protection: 7 Minor Damage
(28a) Lanes On: 2	(82) Culvert: 4 Considerable Damage
(28b) Lanes Under: 0	
(29) ADT: 370	
(36) Year of ADT: 2019	
(109) Truck ADT: 8%	
(19) Detour Length: 2 miles	

CONDITION HISTORY AND FORECAST

Condition Forecast Graphs
Federal Highway Administration tracks bridge condition data for all the bridges that are part of our air/strengthening evaluation. For this bridge (culvert), the historical data is available based on its past section ratings. Figure 1 represents the historic condition evaluations graph from the Bridge Inspection reports.

FIGURE 1: STRUCTURE HISTORIC CONDITION GRAPH

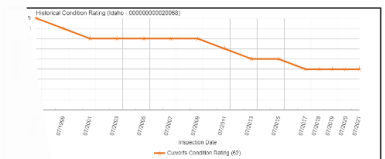


TABLE 1: COST COMPARISON SLIP LINING

Item	Initial Cost	Service Life	Annual Maintenance	Annualized Cost
1	\$301,950	50	--	\$7,639
12	\$39,196	50	--	\$784
	\$431,146	50	--	\$10,623
	\$200,216	25	\$2000	\$16,649
		25	\$2000	\$16,649

COST COMPARISON SPRAY APPLIED LINING

Item	Initial Cost	Service Life	Annual Maintenance	Annualized Cost
13	\$56	50	--	\$6,271
14	\$357	50	--	\$627
15	\$23	50	--	\$8,898
16		25	\$2000	\$10,649
		25	\$2000	\$10,649

Alternative for rehabbing: It also has the advantage of minimal...
Since the spray applied lining maintains the original culvert...
of the larger service life of the culvert, the...
of weeds and grasses.

Inspection Report dated August 3, 2021 for additional information.

KN 20068, STC 3988, Roseberry over Willow Creek | Valley Co.

Potential Challenges & Adaptability

- Contractor availability
- Material availability
- Timing with weather, permitting restrictions, mitigation
- Project bundling
- Local construction



Questions?

