



RIOB-014-00.23A  
Rio Blanco County Road 14 over North Fork White River  
Built in 2004 on BRO Project  
14317 BRO C490-002



**COLORADO**  
Department of Transportation

# Off-System Bridge Program

August 14, 2024



- Program Overview
  - History
  - Objective
  - Funding
  - Responsibilities
  - 2024 Update
- Application Overview
  - Structure Eligibility
  - Typical Schedule
  - Application Components
  - Prioritization of applications
  - Application tools





# Program History

- The Off-System Bridge Program got its start as part of the Federal Highway Bridge Replacement & Rehabilitation Program (HBRRP)
- The passage of MAP-21 eliminated HBRRP as a separate program
- The Off-System Bridge Program continues due to federal requirements and Transportation Commission direction
- The passage of the Infrastructure Investment and Jobs Act (IIJA) added additional funding to the program for years 2022-2026



PUCO 0.07-216A



# Program Objective

## APPLICABILITY

- Colorado county and municipality public roads

## PRIMARY OBJECTIVE

- Inspections and Construction Projects for Major Structures (major bridges and major culverts)
  - Inventory, inspect, and evaluate
  - Replace and rehabilitate

## SECONDARY OBJECTIVE

- Inventory, inspect, and evaluate tunnels



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# Program Funding

- The Off-System Bridge Program (BRO) and the Off-System Bridge Inspection Program (BIO) are funded by the Bridge Off-System line in the annual Colorado Department of Transportation (CDOT) Budget.
- The CDOT Budget Bridge-Off System line is funded partially through a mandated federal program and partially through Transportation Commission-directed funds (i.e. other federal/state funds).

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CDOT provides stewardship and oversight for the federal funds in this program to ensure compliance with federal regulations.



## KEY GROUPS THAT HAVE OFF-SYSTEM BRIDGE PROGRAM RESPONSIBILITIES

- Special Highway Committee
- Local Agencies
- CDOT Local Agency Coordinators
- CDOT Staff Bridge
- CDOT Office of Financial Management and Budget



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# Special Highway Committee Responsibilities

## KEY RESPONSIBILITIES

- Annually calls for applications
- Selects projects to be awarded
- Produces formal award notifications
- Reviews budget supplement applications for approval or denial
- Produces formal budget supplement award or denial notification
- Annually reviews Annual Local Communication Project List to update status



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# Local Agency Responsibilities

## KEY RESPONSIBILITIES

- Submits applications for funding on eligible projects
- Coordinates project activities with the responsible CDOT Local Agency Coordinator
- Provides the local match or overmatch funds for the project
- Performs all project work in accordance with State and Federal laws, rules and regulations
  - For more information: [CDOT Local Agency Manual](#)





# CDOT Local Agency Coordinator Responsibilities

## KEY RESPONSIBILITIES

- Support local agencies as they prepare to submit applications
- Coordinate questions/inquiries with Staff Bridge
- Manage projects from award of funding through project closure
  - Intergovernmental agreements
  - Project setup
  - Budget actions
  - Verify applicable laws, regulations, and codes are followed



WST11-7-RA



# CDOT Staff Bridge Responsibilities

## KEY RESPONSIBILITIES

- Consulted by the CDOT Office of Financial Management and Budget (OFMB) when the annual Off-System Bridge Program budget setting is finalized
- CDOT's Liaison to the Special Highway Committee (SHC)
- Provides support to the SHC
- Provides program information to the SHC
  - Available budget
  - Eligible structure listing
  - Annual Local Communication Project List
- Maintains BRO tracking with support from OFMB
- Design Units provide technical support and recommendations



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# CDOT Office of Financial Management and Budget Responsibilities

## KEY RESPONSIBILITIES

- Annual budget recommendation in consultation with CDOT Staff Bridge
  - Inspection costs
- Transfer funds between the statewide BRO pool and region BRO pools
- Transfer project saving from the region BRO pools to the statewide BRO pool
- Identify local overmatch when necessary
- Maintains BRO Tracking Summary with support from CDOT Staff Bridge





# Program Update

From 2019 to 2023, the Special Highway Committee awarded, on average

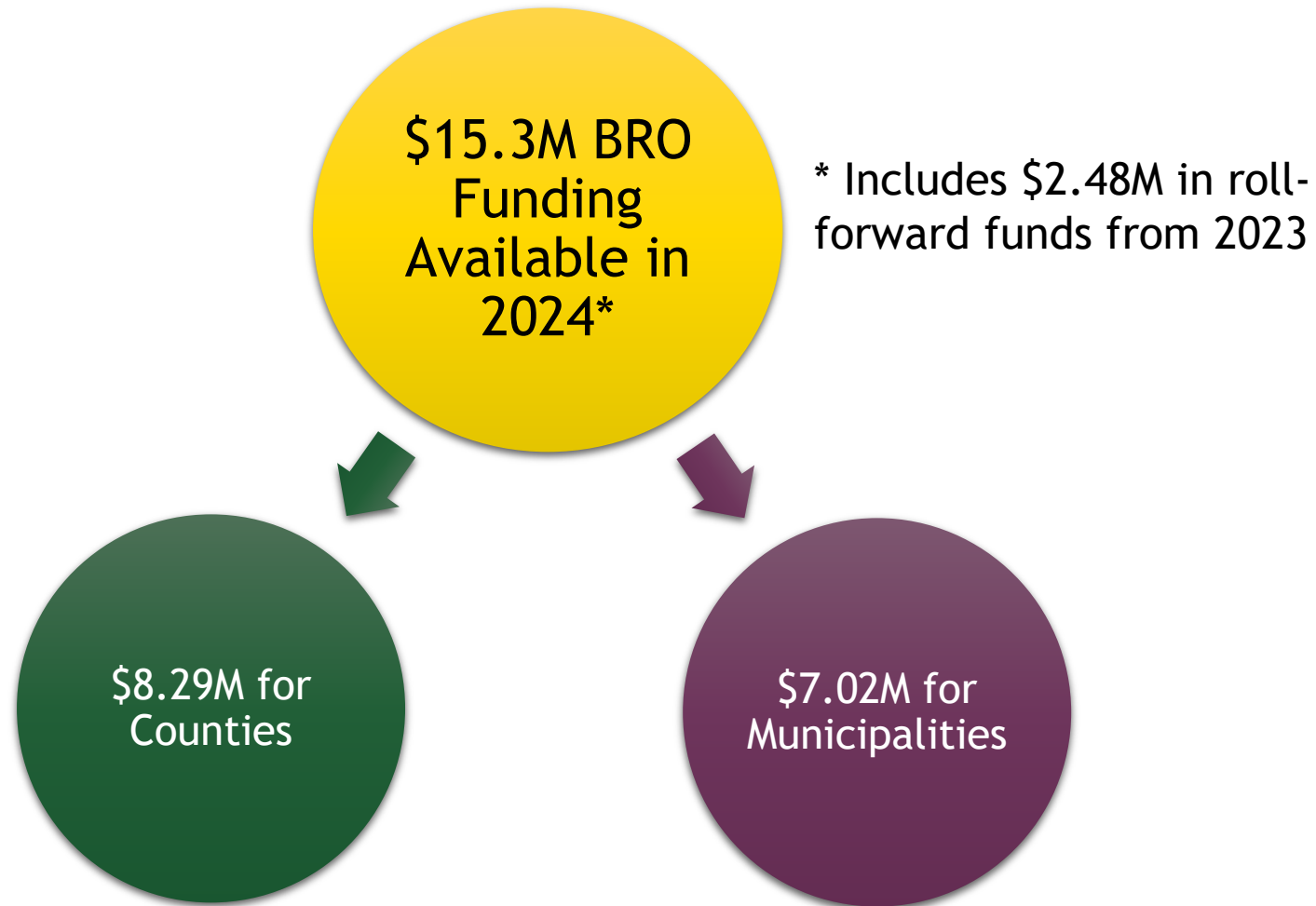
4 replacement projects per year	\$960,000 per replacement project	4 rehabilitation projects per year	\$685,000 per rehabilitation project
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In 2023, the Special Highway Committee awarded

7 replacement projects	\$8.23M in replacement projects	8 rehabilitation projects	\$9.12M in rehab projects	4 supplemental awards	\$3.03M in supplemental awards
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# 2024 Program Update





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# Structure Eligibility

- Major structure (i.e. major bridge or major culvert)
- Owned by a Colorado county or municipality
- Located on a public road
- The structure is in Poor or Fair condition



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# Structure Eligibility

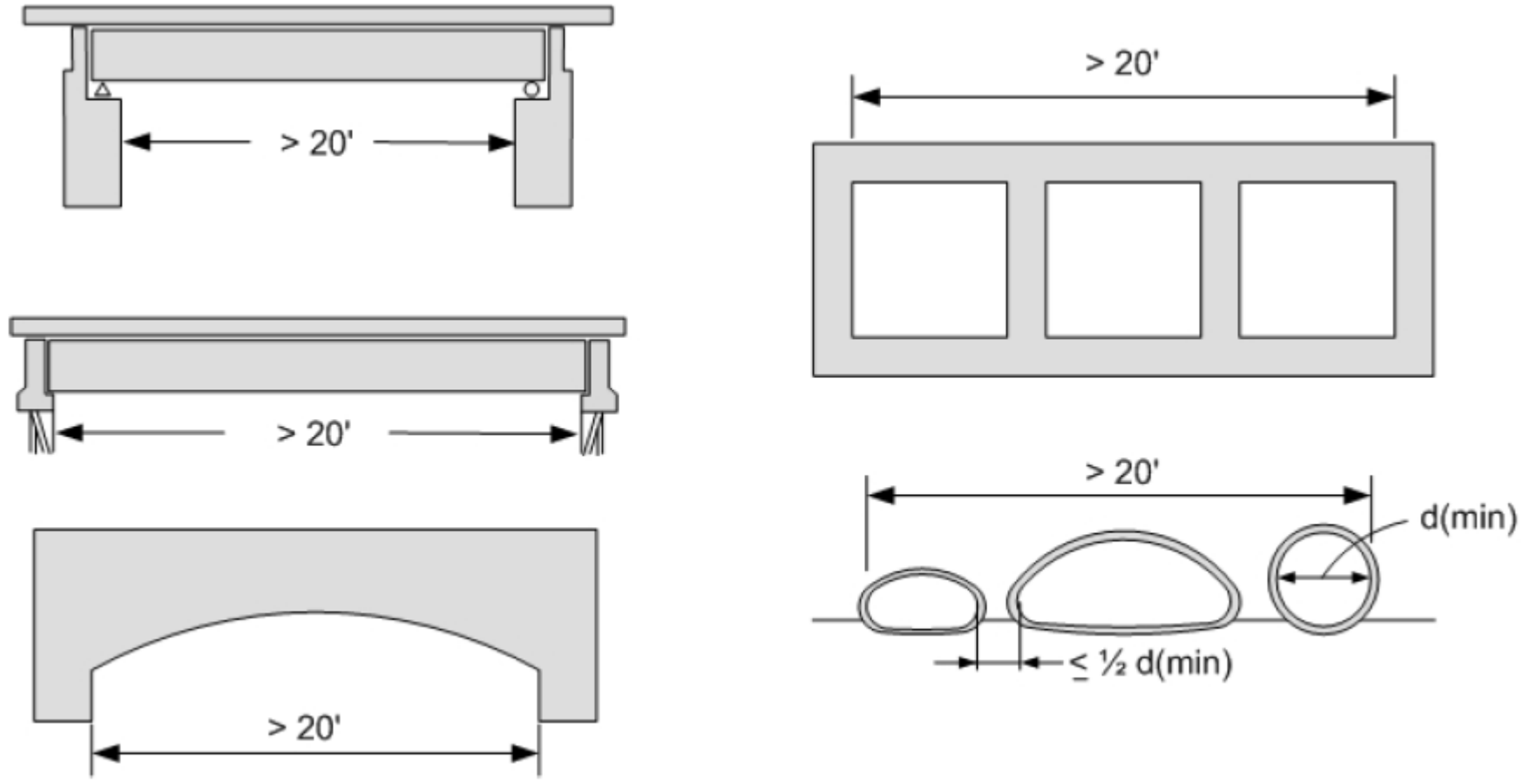
## Major Structure Definition

- Bridge or culvert with a combined clear span(s) along roadway center line greater than 20ft
- 23 CFR 650.305 states in part:

*Bridge.* 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 undercopings 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.



# Structure Eligibility Major Structure Definition



Taken from the FHWA Bridge Inspector's Reference Manual





# Structure Eligibility Public Road Definition

- A road owned and maintained by a public authority
- 23 USC 101 (a) (21) states in part:

(21) Public road. - The term "public road" means any road or street under the jurisdiction of and maintained by a public authority and open to public travel.



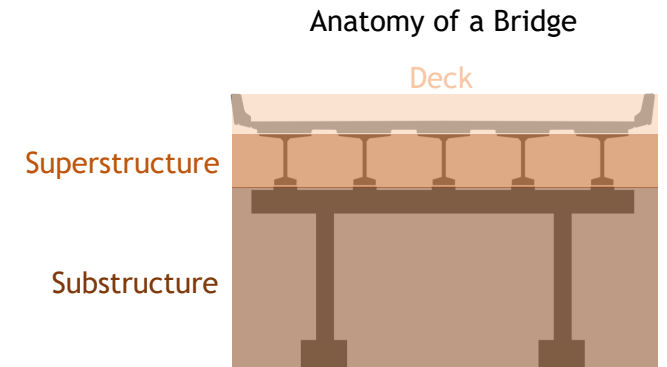
# Structure Eligibility Poor Definition

A **bridge** with a condition rating of **4** or **less** for:

- NBI Item 58 - Deck; or
- NBI Item 59 - Superstructures; or
- NBI Item 60 - Substructures

A **culvert** with a condition rating of **4** or **less** for:

- NBI Item 62 - Culverts



National Bridge Inventory (NBI)  
Rating Scale





# Structure Eligibility Poor Definition

Major structures in Poor condition do not meet standards and typically require reactive maintenance to ensure continued safe service. For the purpose of determining major structure funding needs it is assumed that major structures in poor condition have exceeded an economically viable service life and require replacement or major rehabilitation.

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Major structures in Poor condition are also considered Structurally Deficient.



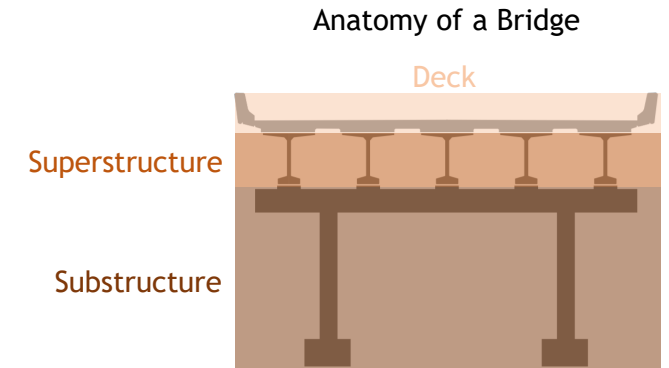
# Structure Eligibility Fair Definition

A **bridge** with a condition rating of **5** or **6** in:

- NBI Item 58 - Deck; or
- NBI Item 59 - Superstructures; or
- NBI Item 60 - Substructures

A **culvert** with a condition rating of **5** or **6** in:

- NBI Item 62 - Culverts



National Bridge Inventory (NBI)  
Rating Scale







# Structure Eligibility Fair Definition

Major structures in Fair condition marginally satisfy standards and either require preventative maintenance or major rehabilitation.



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# Typical Schedule

## Spring

- After bridge inspection data is submitted to Federal Highways, the Off-system Eligibility List is generated
- Annual Local Communication e-mail is sent to reconcile existing projects and distribute eligibility list



## Summer

- Call for applications typically comes from the Special Highway Committee in late July/early August



## Fall

- Applications are typically due at the end of October
- The Special Highway Committee meets to read applications and determine awards



## Winter

- Awards are typically announced in December/January



**Due Annually in October**

## **KEY ITEMS TO INCLUDE**

- Project scope narrative
  - Replacement or major rehabilitation?
  - Coordination with CDOT Local Agency Coordinator
  - Application Worksheet
- Project schedule/readiness
- Recent cost estimate
- Amount requested
- 20% minimum local match



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# Prioritization of Applications

## KEY CONSIDERATIONS

- Shovel-Ready
  - Project design is complete and ready for construction
  - All clearances must have been received through the CDOT Local Agency Unit following the federal project process defined in the CDOT Local Agency Manual to be considered Shovel-Ready.
- Poor structures on the National Highway System (NHS)
- Structures that have more than one structure component in poor condition
  - (e.g. deck, superstructure, substructure, culvert).
- Other factors considered when selecting a project to award are age, scour evaluation, posted, closed, and functional utility.





# Budget Supplement Application

Can be submitted any time. Occasionally, the SHC requests that supplements are submitted with other applications in October

## KEY ITEMS

- A narrative justifying why the additional funds are being requested
  - Why is a budget supplement needed?
  - What could not have been reasonably foreseen that requires the requested budget supplement?
- A cost estimate for the budget supplement
- Budget supplement amount requested
- 20% minimum local match



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# Available Application Tools

<b>COLORADO SPECIAL HIGHWAY COMMITTEE</b> <b>Off-System Bridge Program</b> <b>Application Data</b>		Structure Number: <input type="text"/>	Application Date: <input type="text"/>
		Structure Location: <input type="text"/>	County / Municipality: <input type="text"/>
CDOT Engineering Region: <input type="text" value="Region 5"/>	CDOT Local Agency Coordinator: <input type="text"/>		Consulted Prior to Application Date <input type="checkbox"/>
Project Type: <input type="text"/>	Request Type: <input type="text"/>		
Design Level Completed at time of application:	<input type="text"/>		
Work Phase to be funded by this grant application:	<input type="text"/>		
Estimated Total Project Cost (Design + Construction):	<input type="text"/>		
Year the Total Project Cost Estimate was created:	<input type="text"/>		
SHC Award Amount requested:	\$ 0.00		
20% minimum local match amount:	\$ 0.00		
Local Overmatch amount:	<input type="text"/>		
Proposed Total Local Match Amount:	<input type="text"/>		
Local Match Commitment documentation:	<input type="text"/>		
Colorado Fiscal Years when funding will be required:	<input type="text"/>		
Anticipated start date: <input type="text"/>	Anticipated completion date: <input type="text"/>		
Work Description: <input type="text"/>			

For convenience, key application items are included in the SHC Application Data Worksheet.



# Available Application Tools

- CDOT M-Standard Plans are available for all to use. These are the pre-engineered standard plans that can be used to estimate and deliver cost effective solutions to a lot of the proposals we receive.
- M-Standards to highlight:
  - Cast in Place Concrete Box Culvert - single, double, and triple cell
  - Precast Concrete Box Culvert
  - Culvert Wingwalls
  - Excavation and Backfill for Structures
- Additionally, CDOT has created a project cost estimator tool for concrete box culvert replacement projects



**COLORADO**

Department of Transportation

Thank You

- For questions or comments, please contact:

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