

## Section 5 Off-System Bridge Program

### 5.1 Objective

The Off-System Bridge Program primary objective is to inventory, inspect, evaluate, replace and rehabilitate major structures (i.e. major bridges and major culverts) on the public roads owned by Colorado counties and municipalities. The secondary objective is to inventory, inspect and evaluate the tunnels on public roads owned by Colorado counties and municipalities.

### 5.2 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). The passage of the Infrastructure Investment and Jobs Act in 2021 dedicated \$6.75 million annually from 2021 to 2026 for off-system bridges under the Bridge Formula Program.

The Off-System Bridge Program (BRO) funds major structure replacement or major rehabilitation. A Special Highway Committee (SHC) selected replacement or major rehabilitation project requires a minimum 20% match from the successful Colorado county or municipal applicant.

The Off-System Bridge Inspection Program (BIO) funds major structure and tunnel inspection. CDOT Staff Bridge manages the inspection program to ensure that the Colorado county and municipality owned structures are in compliance with National Bridge Inspection Standards (NBIS) and the National Tunnel Inspection Standards (NTIS). This includes the annual National Bridge Inventory (NBI) and National Tunnel Inventory (NTI) update submittals to FHWA.

Off-System Bridge Program funding is managed within CDOT by utilizing the statewide BRO pool and the regional BRO pools. The statewide BRO pool is used as a clearing house for Off-System Bridge Program funds before the SHC approves project funding. Funds are transferred from the statewide BRO pool to the appropriate regional BRO pool once a project is approved by the SHC. The regional BRO pools are used to fund specific projects within that region that are approved by the SHC. Unused funds in the regional BRO pools are transferred back to the statewide BRO pool so that the Off-System Bridge Program funds remain in the program until used by SHC authorized projects.

#### 5.2.1 Historical Grant Amount Report

A report produced annually or as needed to show total BRO funds granted to local agencies by the Special Highway Committee. The minimum data items on the report are summarized in the following table.

*Table 5-1 Historical Grant Amount Report Minimum Data Items*

Data Item	Description
<b>Agency</b>	County or Municipality
<b>Total Local Match</b>	Total local match funds applied to all projects within the agency
<b>Total BRO Funds</b>	Total BRO funds applied to all projects within the agency

Data Item	Description
<b>Number of Projects</b>	Total number of BRO projects within the agency
<b>Most Recent SHC Award Memo Date</b>	The date of the most recent SHC Award Memo

One report is produced for county BRO projects and one report is produced for municipality BRO projects.

**CDOT Commentary –**

Other terms used for the Off-System Bridge Program are:

- BRO - an internal CDOT funding center code used to set up projects
- Bridge Off System – A term used in annual budget documents
- Bridge Pass Through - A term used in the CDOT Budget and by local agencies

### 5.3 Eligible Major Structures

Effective January 2018, CDOT adopted new Poor, Fair, Good and Structurally Deficient major structure definitions that are consistent with updated FHWA national performance management measures for assessing bridge condition (i.e. 23 CFR 490.409 (1/2017) & 23 CFR 490.411 (1/2017)). CDOT Staff Bridge worked with the Special Highway Committee (SHC) to adopt the same measures for the Off-System Bridge Program in order to be consistent across the state.

The current eligibility criteria are:

- Major structure (i.e. major bridge or major culvert)
  - Bridge or culvert with a combined clear span(s) along roadway center line greater than 20ft
- Owned by a Colorado county or municipality
- Located on a public road
- The structure is in Poor or Fair condition.

A structure in Poor condition is eligible for replacement

- A Poor Major Bridge has a condition rating of 4 or less for: NBI Item 58 - Deck; or NBI Item 59 - Superstructures; or NBI Item 60 – Substructures.
- A Poor Major Culvert has a condition rating of 4 or less for: NBI Item 62 – Culverts.

A structure in Fair condition is eligible for major rehabilitation unless it can be shown that replacement is more economical or feasible (e.g. replacement is easier than a major rehabilitation, replacement is faster than a major rehabilitation, replacement has a longer life than a major rehabilitation, etc.)

- A Fair Major Bridge has a condition rating of 5 or 6 for: NBI Item 58 - Deck; or NBI Item 59 - Superstructures; or NBI Item 60 – Substructures.
- A Fair Major Culvert has a condition rating of 5 or 6 for: NBI Item 62 – Culverts.

The eligible Off-System major structures will be provided in a report titled the Colorado Off-System Structure Eligibility List.

Any request to use Off-System Bridge Program Funds for a major structure not on the most current Colorado Off-System Structure Eligibility List must be documented and justified to indicate that additional deficiencies have developed since the most recent inspection through some natural or unforeseen phenomenon (e.g. flood, fire, etc.)

### 5.3.1 Colorado Off-System Structure Eligibility List

The minimum data items for the Colorado Off-System Structure Eligibility List are summarized in the following table.

Table 5-2 Colorado Off-System Structure Eligibility List Data Items

<b>Data Item</b>	<b>Description</b>
<b>Bridge</b>	Structure Key / Structure Number
<b>CDOT Region</b>	The CDOT Engineering Region where the bridge is located
<b>County</b>	The County where the bridge is located
<b>City/Town</b>	The City or Town where the Bridge is located
<b>Owner</b>	Identifies whether the owner is a county or a municipality
<b>NHS Designation</b>	True if the structure is on the National Highway System
<b>Functional Classification</b>	Identifies the highest inventory route functional classification for the route over or under the major structure (e.g. 09 Rural Local)
<b>Facility Carried</b>	Identifies what roadway facility is on the bridge (e.g. 88 <sup>th</sup> Avenue)
<b>Feature Intersected</b>	Identifies what the bridge crosses over (e.g. Wolf Creek)
<b>Bridge Type</b>	A five-digit alpha code that is used to generally identify the bridge construction type (e.g. CSG – Concrete Slab and Girder) See Colorado Item 120A for more details
<b>Year Built</b>	The year the bridge was built
<b>Age</b>	Calculated - Current year less Year Built
<b>Deck Area (SF)</b>	The deck area of the bridge
<b>Inspection Date</b>	The date of the last bridge inspection
<b>Condition</b>	Fair or Poor condition. See subsection 2.4.1.1 for more details
<b>Structure Functionality</b>	Is the bridge functionally obsolete?
<b>Bridge Status</b>	Is the bridge open, posted or closed? See NBI Item 41, Open Closed Posted, for more details
<b>Posting Level</b>	Calculated - Lowest calculated percentage of Posting Loads / Legal Loads
<b>Scour Critical Rating</b>	Scour Critical Bridge Code. See NBI Item 113 for more details
<b>Notes</b>	Any additional comments that are relevant to the bridge that might aid the Off-System Bridge Program stakeholders

### 5.3.2 Application Review Summary Report

The Application Review Summary Report is a subset of the Colorado Off-System Structure Eligibility List that only lists the submitted applications grouped by counties and municipalities. In addition, the following table summarizes minimum data items on the report.

*Table 5-3 Application Review Summary Report Minimum Data Items*

<b>Data Item</b>	<b>Description</b>
<b>Bridge</b>	Structure Key / Structure Number
<b>Agency</b>	The agency that owns the bridge
<b>CDOT Region</b>	The CDOT Engineering Region where the bridge is located
<b>ADT</b>	Annual Average Daily Traffic
<b>ADTT</b>	Annual Average Daily Truck Traffic Percentage
<b>NHS Designation</b>	True if the structure is on the National Highway System
<b>Condition</b>	Fair or Poor condition. See subsection 2.4.1.1 for more details
<b>Functional Utility</b>	Is the bridge functionally obsolete?
<b>Bridge Status</b>	Is the bridge open, posted or closed? See NBI Item 41, Open Closed Posted, for more details
<b>Posting Level</b>	Calculated - Lowest calculated percentage of Posting Loads / Legal Loads
<b>Scour Critical Rating</b>	Scour Critical Bridge Code. See NBI Item 113 for more details
<b>Application Project Type</b>	Replacement or Rehabilitation
<b>Application Project Cost Estimate</b>	The total project cost estimate on the application
<b>Application BRO Funds Requested</b>	The BRO funds requested in the application
<b>Total Current Project Budget</b>	The total current project budget
<b>Total Expended</b>	The total project expenditures at the time this report is produced

## 5.4 Prioritization

Priority should be given to those eligible major structures that meet the following criteria:

- Shovel-Ready poor major structures
  - Project design is complete and ready for construction. In addition, 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. This includes:
    - Railroad (RR) is cleared
    - Utilities clearance issued by the CDOT Region Utilities Engineer
    - Right of Way (ROW) is cleared in accordance with the Uniform Act
    - All environmental clearances are approved
- Poor major structures on the National Highway System (NHS)
- Poor major structures

Major structures that have more structure elements in poor condition (e.g. deck, superstructure, substructure, culvert).

In addition to prioritization, the other factors to consider when selecting a project to award are age, scour evaluation, posted, closed, and functional utility.

## 5.5 Application

### 5.5.1 Original Application

Prior to submitting an application to the Special Highway Committee (SHC), the Colorado county or municipality shall coordinate with the assigned CDOT Local Agency Coordinator to make sure preliminary scoping, environmental impacts, right-of-way (ROW) requirements, utility requirements, railroad requirements, and conceptual cost estimate requirements are understood and appropriately addressed within the application. See CDOT Local Agency Manual Chapter 1 – Project Application for more details.

In addition to the above, an application submitted to the SHC must address at least the following items:

- A narrative describing why the funds are being requested
    - Why is the work needed?
    - Is the structure eligible?
  - A project scope narrative
    - Replacement or major rehabilitation?
    - Why replacement?
    - Why major rehabilitation?
      - If replacement is more economical or feasible than major rehabilitation, then consider replacement.
      - Consider the life expectancy of any proposed major rehabilitation in the project scope narrative.
      - Will the major rehabilitation improve the structure condition to good?
      - Will the major rehabilitation address scour?
    - Is the project Shovel-Ready?
      - See subsection 5.4 Prioritization for a Shovel-Ready definition.
      - Provide required clearances with the application
      - Provide the structure design phase submittals defined in subsection 5.7.1.1 Deliverables with the application.
    - What is the anticipated project schedule, if the SHC selects the project for funding (i.e. identify fiscal years when funding will be required)?
    - Will the project be completed within the four full calendar years after the original SHC award year?
  - A cost estimate for the project
  - The amount requested from the SHC for the project
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- The Colorado county or municipality match for the project
  - Is the local match at least 20% of project cost?
  - Provide evidence of local match commitment for all project phases (i.e. design and construction).
- Provide Colorado county or municipality commitment to see the project through to completion.
- The most recent inspection report
- Pertinent structure photographs

### 5.5.2 Budget Supplement Application

A budget supplement application sent to the SHC and copied to the Staff Bridge Off-System Bridge Program Manager Responsibilities and the Local Agency Coordinator must address at least the following 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
- The budget supplement amount requested from the SHC
- The Colorado county or municipality match for the budget supplement
  - Is the total local match at least 20% of the total project cost?
- A copy of the current executed IGA

### 5.5.3 Cost Estimate

A current cost estimate is to be provided.

The cost estimate is to consider anticipated construction costs at the time the project is expected to be advertised.

Warnings:

- Any costs incurred by the Colorado county or municipality prior to a successful SHC Application, execution of an Inter-Governmental Agreement (IGA), authorization by FHWA, and CDOT Notice to Proceed are not reimbursable with Off-System Bridge Program funds.
- Any cost overruns that exceed the amount in the executed IGA are the responsibility of the Colorado county or municipality. This requirement does preclude applying for a budget supplement. See the CDOT Local Agency Manual Chapter 3 - Inter-Governmental Agreements.
- Funds expended beyond the federal regulation assigned project end date are not eligible for reimbursement and are the responsibility of the Colorado county or municipality.
- If a Colorado county or municipality uses Off-System Bridge Program funds, then construction must be completed within the contract term stated in the IGA.

- CDOT will seek reimbursement from the local agency for expended funds on projects where the project is cancelled before the construction is complete.
- FHWA will require reimbursement for Federal-aid funds expended on preliminary engineering (PE) projects when on-site construction or right-of-way (ROW) acquisition does not commence within 10 years of the date on which Federal funds were first made available. See FHWA Order 5020.1A, Repayment of Preliminary Engineering Costs.

#### 5.5.3.1 Shovel-Ready Project

A current detailed engineering estimate is required when the SHC Application is for a Shovel-Ready project. See subsection 5.4 Prioritization for a Shovel-Ready definition.

#### 5.5.3.2 Project Budget Supplement

A current detailed engineering estimate is required when the SHC Application is for a budget supplement on a previously approved project.

#### 5.5.3.3 Major Structure Rehabilitation

A current detailed engineering estimate is required when the SHC Application is for a major structure rehabilitation because major rehabilitations vary widely in scope.

Consider replacement if it is more economical or feasible than a major rehabilitation.

#### 5.5.3.4 Major Structure Replacement Prior to any Engineering

A current planning level total project cost estimate is required when the SHC Application is prior to doing any engineering on a major structure replacement. However, detailed engineering cost estimates will still be needed before starting either the design or construction phases using Off-System Bridge Program funds.

#### 5.5.3.5 Estimating a Major Bridge Replacement Cost

The method described below may be used to estimate the major bridge replacement total project cost prior to any engineering if a more rigorous estimate is not available. The method does not apply to a major culvert, structure widening, or minor structure.

If the replacement major bridge deck area is not known, then the existing major bridge deck area multiplied by the Replacement Deck Area Growth Factor may be used.

Table 5-4 Estimating Replacement Major Bridge Deck Area

Data Item		Value	Units
<b>Structure Length (NBI Item 49):</b>			Ft.
<b>Deck Width (NBI Item 52):</b>	X		Ft.
<b>Existing Deck Area</b>	=		Sq. Ft.
<b>Replacement Deck Area Growth Factor (GF)</b>	X	2.2	Unitless
<b>Estimated Replacement Deck Area (ERDA)</b>	=		Sq. Ft.

## Total Project Cost

Table 5-5 Estimating Major Bridge Replacement Total Project Cost

Data Item		Value	Units
Estimated Replacement Deck Area (ERDA)			Sq. Ft.
Bridge Only Replacement Cost ( $SI_N$ )		\$190	\$/Sq. Ft.
Colorado Cost Factor ( $COCF_{BR}$ )		2.74	Unitless
Design Engineering Cost Factor (DECF)		1.15	Unitless
Construction Engineering Cost Factor (CECF)		1.17	Unitless
Estimated total project cost (TPCO) = ERDA x $SI_N$ x $COCF_{BR}$ x (DECF + CECF - 1)	=	\$	

## Definitions

*Bridge Only Replacement Cost ( $SI_N$ )* - Bridge replacement cost, structural items only, per square foot, of the new bridge projected using Colorado Construction Cost Index from bridge replacement projects between 2000 and 2020.

*Colorado Cost Factor ( $COCF_{BR}$ )* - A factor used to account for all Project costs other than the Bridge Only Replacement Cost and the Design and Construction Engineering costs calculated from bridge replacement projects between 2000 and 2011.

*Construction Engineering Cost Factor (CECF)* - A factor used to account for Construction Engineering (CE) costs calculated from bridge replacement projects between 2000 and 2011.

*Design Engineering Cost Factor (DECF)* - A factor used to account for Design Engineering (DE) costs calculated from bridge replacement projects between 2000 and 2011.

*Replacement Deck Area Growth Factor (GF)* – A calculated ratio of replacement major structure deck area to replaced major structure deck area based on a population of bridge replacements between 2000 and 2011.

#### 5.5.4 Off-System Bridge Program Application Data Worksheet

The Off-System Bridge Program Application Data Worksheet is a single sheet worksheet used to summarize the application in order to simplify the review process. The items on the worksheet are summarized in the table below.

Item	Description
Structure Number	The structure number used in inspection reports
Structure Location	The road name over the feature intersected e.g. Dexter over Cherry Creek
Application Date	The date the application is submitted
County / Municipality	The county or municipality that owns the structure
CDOT Engineering Region	The CDOT Engineering Region where the structure is located
CDOT Local Agency Coordinator	The name of the CDOT Local Agency Coordinator that is assigned to the project



Item	Description
<b>Consulted Prior to Application Date</b>	A check box to indicate that the local agency consulted with the CDOT Local Agency coordinator before submitting the application
<b>Project Type</b>	Replacement or major rehabilitation are the available options
<b>Request Type</b>	Original request or supplemental request are the available options
<b>Design Level Completed at time of application</b>	No design, preliminary design, or final design (shovel ready) are the available options
<b>Work Phase to be funded by this grant application</b>	Design only, construction only, or total project are the available options
<b>Estimated Total Project Cost</b>	What is the total estimated project cost?
<b>Year the Total Project Cost Estimate was created</b>	What year was the estimate created?
<b>20% minimum local match amount</b>	20% of the estimated total project cost
<b>Local Overmatch amount</b>	Any match amount in excess of the 20% minimum match
<b>Proposed Total Local Match Amount</b>	The sum of overmatch and the minimum match
<b>Local Match Commitment documentation</b>	What documentation is in the application that shows the local agency commitment for the total local match
<b>SHC Grant Amount requested</b>	The SHC grant amount requested with this application This should be the total project cost minus total local match
<b>Colorado Fiscal Years when funding will be required</b>	Use a range of Colorado fiscal years when the funding will be required for the work
<b>Anticipated start date</b>	The date to the nearest month when work is expected to start
<b>Anticipated completion date</b>	The date to the nearest month when work is expected to be completed
<b>Work Description</b>	Describe the work that is planned

## 5.6 Special Highway Committee

The Special Highway Committee (SHC) is typically composed of eight representatives. Four county representatives and four municipal representatives. Administrative support to the SHC is provided by the Colorado Municipal League (CML) and Colorado Counties Incorporated (CCI).

Colorado Counties Incorporated - <https://ccionline.org/>

Colorado Municipal League - <https://www.cml.org/>

### 5.6.1 SHC Responsibilities

The Special Highway Committee (SHC):

- Annual Call for Applications and Annual Meeting
  - Annually calls for the submission of new project applications from Colorado counties and municipalities for eligible major structures

- Receives new project applications and sends copies of the applications to the Staff Bridge Off-System Bridge Program Manager for review
- Selects projects to be awarded funds
  - The selection criteria are at the SHC’s discretion. However, structure eligibility, application completeness, CDOT Staff Bridge recommendations, available budget, and Colorado county or municipality commitment level should be considered.
- Only awards new project funding at the annual meeting
- Produces the formal SHC Award Memorandum that lists the new projects that are awarded funding
  - The minimum information required on the SHC Award memo is:
    - County/Municipality
    - Structure Key / Structure Number
    - Structure geolocation
    - Award Year
    - Award Amount
  - The SHC Award Memorandum is to be sent to the local agencies and copied to the CDOT Staff Bridge Off-System Program Manager within 14 days of the annual meeting
  - The SHC Award Memorandum is distributed to CDOT OFMB, CDOT Regional Planners, CDOT Local Agency Staff, CDOT Local Agency Coordinators and CDOT Regional Business Managers by the CDOT Staff Bridge Off-System Program Manager. See subsection 5.8.1.2 Staff Bridge Off-System Bridge Program Manager Responsibilities
- Budget Supplement Applications
  - May receive Budget Supplement Applications at any time during the year and sends a copy to Staff Bridge Off-System Bridge Program Manager for review
  - May review and approve or deny Budget Supplement Applications on previously approved projects between the annual meetings, upon verification of available funding from the CDOT Staff Bridge Off-System Program Manager
    - The budget supplement approval criteria are at the SHC’s discretion. However, application reasonableness, CDOT Staff Bridge recommendations, and available budget should be considered.
  - Produces written approval or denial on Budget Supplement Applications within 14 days of the decision
    - The minimum information required on the SHC budget supplement decision is:
      - County/Municipality
      - Structure Key / Structure Number

- Structure geolocation
- Original Award Year
- Budget Supplement Award Year
- Budget Supplement Amount
- Annual Local Communication
  - Annually reviews the list of previous Design and Construction authorized projects in order to update project status as part of the Annual Local Communication. See subsection 5.13

## 5.7 Colorado Counties and Municipalities

Only Colorado cities or Colorado counties are eligible for the Off-System Bridge Program.

### 5.7.1 Colorado County and Municipality Responsibilities

- Performs all project work in accordance with State and Federal laws, rules and regulations
- Local agencies that are awarded an SHC grant are required to have an approved Civil Rights Act of 1964 Title VI Plan on file with CDOT’s Civil Rights and Business Resource Center (CRBRC). Local agencies that receive an SHC Grant will be contacted by CRBRC staff to confirm that the Title VI Plan requirement is met. Further information about the Title VI requirement can be found on CRBRC’s website at <https://www.codot.gov/business/civilrights/titlevi/fhwa-subrecipients>
- Coordinate with the assigned CDOT Local Agency Coordinator to make sure all State and Federal laws, rules and regulations are followed
- Submits applications to the SHC for eligible major structures that the Colorado county or municipality is committed to address
- Submits budget supplement applications as early as possible during the project development phase when the need becomes known.
- Provides project status updates to CDOT anytime the project status changes
- Provides project status updates to CDOT when requested during the Annual Local Communication
- Provides the local match funds for the project
- Provides the local overmatch funds for the project, if necessary
- Provides for construction administration
- Provides for construction inspection
- Provides for construction materials testing
- Provides for quality assurance (QA) level fabrication inspection
- Delivers the project meeting CDOT requirements
- All Off-System major structure replacement or major rehabilitation projects that include State or Federal funding shall meet the CDOT Bridge Design Manual requirements. Failure to meet the requirements will result in project rejection.

- The Staff Bridge Engineer will consider variances from the policies presented in the Bridge Design Manual when warranted.
- The Staff Bridge Engineer must authorize any variances to the Bridge Design Manual policies before the project can proceed.
- Submit variance requests as early as possible to avoid project delays.

#### 5.7.1.1 Deliverables

The deliverables listed below are required unless otherwise determined during project development.

- General Submittals
    - Applications submitted to the SHC for eligible bridges
    - Final Maintenance and Ownership Inter-Governmental Agreement (IGA)
  - Structure Design Phase Submittals
    - Final Geotechnical Report
    - Final Hydraulic Report
    - Scour Evaluation
    - Final Structure Selection Report
      - A Structure Selection Report is required when any project phase includes Federal or state funds
    - Final Construction Plans in PDF and native file format
    - Project Specifications in PDF and native file format
    - Design Calculations
    - Independent Design Check Calculations
    - Load Rating Package per the CDOT Bridge Rating Manual
    - Field Information Package
    - Inspection Sketch in PDF and native file format
    - Certification by the Engineer of Record that the structure plans and specifications have been prepared in accordance with CDOT's current design standards.
      - See CDOT Bridge Design Manual Policies and Procedures E.4.f.
  - Construction Phase Submittals
    - All Structure Construction documents (e.g. as-built drawings, working drawings, shop drawings, material certifications, test reports, etc.)
    - The final bid documents if not advertised by CDOT
    - Bid Cost Results
    - Design Engineer of Record to attend the final walk through and provide signed documentation that all structures on the project were inspected and determined to be in reasonably close conformance with the plans and specifications
      - See CDOT Bridge Design Manual subsection 36.7
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All deliverables are required to be in PDF format with native file format required where noted.

Additional deliverables not listed will be as determined by the Local Agency Coordinator during project development.

See Subsection 5.14 Project Requirements for manual references where additional deliverable details are defined.

## 5.8 CDOT Staff Roles and Responsibilities

### 5.8.1 CDOT Staff Bridge Branch Responsibilities

CDOT Staff Bridge does not provide construction inspection, construction materials testing, or fabrication quality assurance (QA) inspection for local agency projects.

#### 5.8.1.1 *CDOT Staff Bridge Branch Manager / Colorado State Bridge Engineer Responsibilities*

- Appoints the Staff Bridge Off-System Bridge Program Manager
- Consulted by the CDOT Office of Financial Management and Budget (OFMB) when the annual Off-System Bridge Program budget setting is done.
- Authority to approve all requests for transferring program funds from the statewide pool

#### 5.8.1.2 *Staff Bridge Off-System Bridge Program Manager Responsibilities*

- CDOT's liaison with the SHC
- Provides the following information from the Department needed by the SHC to make decisions prior to the annual SHC meeting:
  - The current Colorado Off-System Structure Eligibility List
  - A current Annual Local Communication Project List
  - A current Historical Grant Amount Report
  - A current Historical Grant Performance Report, including any unusual stipulations upon which a grant award was contingent
  - A current Application Review Summary Report
  - Total Off-System Bridge Program available budget
    - The available budget includes an assumed 20% Colorado county or municipality match. Confirm with OFMB so that the SHC has accurate information.
    - Divide the available Off-System Bridge Program available budget between municipalities and counties using the municipality and county poor deck area percentages. See subsection 8.4.8.1
- Provides support to the SHC
  - Reviews Colorado county and municipality applications to confirm eligibility of the Major Structures
  - Makes recommendations to the SHC related to the BRO program
  - Reviews Budget Supplement Applications

- Makes budget supplement recommendations to the SHC based on available BRO budget and the budget supplement application review
  - Responds to SHC information requests
- Ensures that all the major bridges recommended to the SHC for funding are eligible for Off-System Bridge Program funds
- Responsible for ensuring that the bridge and budgetary information the SHC needs for making decisions is accurate and complete
- Forwards the formal SHC award notification memorandum to CDOT OFMB, CDOT Regional Planners, CDOT Local Agency Staff, CDOT Local Agency Coordinators and CDOT Regional Business Managers within 14 days of receipt
- Forwards the formal SHC supplemental award notification memorandum to CDOT OFMB, CDOT Regional Planners, CDOT Local Agency Staff, CDOT Local Agency Coordinators and CDOT Regional Business Managers within 14 days of receipt
- Technical and program advisor to the SHC, CDOT HQ Staff, CDOT regional personnel, and local agencies
- Conduct the Annual Local Communication which reviews previously approved bridge projects to identify inactive projects, closed projects, current project status, project savings, and changes in the award amount
  - This requires consultation with SHC, Local Agencies, CDOT regional planners, CDOT Local Agency coordinators, and CDOT project managers
- Updates the BRO Tracking Summary spreadsheet:
  - With relevant findings from the Annual Review process
  - With new projects when authorized by the SHC
  - When a project is closed
  - When a project is cancelled
  - When a project budget is revised as approved by the SHC
  - When a project status changes
- Receives requests for project authorization modifications, from local agencies and CDOT personnel. Reviews these requests for accuracy, completeness and eligibility before forwarding the requests to the SHC for action
- Retains Colorado county and municipality applications, SHC Award Memorandums, SHC correspondence, Annual Local Communication correspondence, and any other Off-System Bridge Program correspondence in a central location for future reference and access by stakeholders.

#### *5.8.1.3 Staff Bridge Structure Asset Management Engineer Responsibilities*

- Provides the Colorado Off-System Structure Eligibility List to the Staff Bridge Off-System Bridge Program Manager for distribution to the SHC and CDOT stakeholders

- Ensures that all the major structures on the Colorado Off-System Structure Eligibility List are eligible for the Off-System Bridge Program funds
- Determines the percentage of Poor deck area in the Municipalities or Counties. See subsection 8.4.8.1

### 5.8.2 CDOT OFMB Responsibilities

- Annual Budget Setting
  - Determine the Annual Budget for the Off-System Bridge Program (BRO) allocation, based on FHWA BRO specific revenues, local and state match, and additional funds as directed by the Transportation Commission. All parties are informed via the adoption of the annual CDOT budget by the TC
- Annually fund the statewide BRO pool using the value in the CDOT Budget Bridge Off-System line
- Identify Local Overmatch when necessary
  - Allocate Colorado county or municipality funds to meet match requirement for funding above and beyond the typical 20%

See the CDOT Local Agency Manual for additional details

### 5.8.3 CDOT Statewide Transportation Improvement Program (STIP) Manager Responsibilities

- Year End Roll forward of pool balances
  - Roll forward of pre-determined project savings from regional BRO pool to statewide BRO pool.
- Identify unneeded funds
  - Identify closed projects or cancelled projects that leave funds in the regional BRO pool
- Return any liquidated or unused funds from regional BRO pool to the statewide BRO pool
- Inform Staff Bridge Off-System Bridge Program Manager of any funding changes so that the BRO Tracking Spreadsheet can be updated

See the CDOT Local Agency Manual Chapter 2 – TIP / STIP and Long-Range Plans for additional details

### 5.8.4 CDOT Federal Aid / Project Budget Responsibilities

- Distribution of funds to Regions
  - Based on the SHC Award Memorandum, transfer relevant funds to the respective regional pool for further distribution to the awarded projects

### 5.8.5 CDOT Regional Planner Responsibilities

- STIP Projects
  - Designate a unique STIP number, amount by fiscal year based on SHC award memorandum and project data
- Re-STIP projects into current STIP

- Identify projects that will not be completed in the predicted fiscal year and re-STIP to reflect current fiscal year for project

See CDOT Local Agency Manual Chapter 4 – Federal Funding Obligation and Authorization for additional details

#### 5.8.6 CDOT Regional Business Manager Responsibilities

- Budget Projects by phase
  - Funding projects in SAP using ZFMBBT no greater than 90 days prior to desiring FHWA authorization on a phase (or 90 days before advertisement for C phases)
- Project close, identification of project savings
  - De-STIPing and de-budgeting of project as well as determining if there are project savings to roll forward from pool balance

#### 5.8.7 CDOT Local Agency Coordinators / CDOT Project Managers Responsibilities

- Project Application
    - Meet with Colorado counties and municipalities as requested to review pre-application materials and cost estimates prepared by the local government (or their consultant) and offer comments on project elements, costs and processes
    - See subsection 5.5 Application
  - Oversee projects from award of funding through project closure
  - Facilitate preparation of the IGA with CDOT Engineering Contracts using documents provided by the local government
    - See the CDOT Local Agency Manual Chapter 3 – CDOT / Local Agency Intergovernmental Agreements for additional details
  - Set-up projects in SAP
  - Finalize 2 CFR 200 risk assessment using initial assessment from the Local Agency
  - Prepare and submit CDOT project budget actions
  - Prepare and submit project shopping carts within CDOT SAP (i.e. an enterprise level software application used to satisfy CDOT business needs)
  - Review and provide general, high-level comments on work-hour estimates and schedules developed by Colorado counties and municipalities
  - Conduct project scoping meetings in coordination with appropriate CDOT specialty unit personnel
  - On federally-funded BRO projects, review Request for Proposals for engineering services prepared by Colorado counties and municipalities to ensure compliance with the Brooks Act and / or appropriate Colorado Revised Statutes
  - Administer CDOT project development process to ensure compliance with applicable CDOT Manuals
-



- Coordinate with CDOT specialty unit personnel throughout the project development process to achieve ROW, Environmental and Utility clearances
- Coordinate and attend Field Inspection Review (FIR) meeting
- Coordinate and attend Final Office Review (FOR) meetings
- Perform or facilitate general engineering review of advertisement plans and specifications
- Submittal of Form #1180, Standard Certification and Project PS&E Approval, to get funding authorization for the federally funded projects
- Review project advertisement package for compliance with applicable forms and requirements
- Provide concurrence to award to selected low bidder
- Provide support through the process to achieve CDOT Concurrence to Award
- Oversee construction and visit projects as necessary to:
  - Ensure compliance with federal/state laws and regulations
  - Ensure general conformance with the plans and specifications.
- Review change orders and provide comments as appropriate to ensure the CDOT responsible party has the necessary information to provide CDOT concurrence
- Coordinate with CDOT CRBRC and the RCRO to ensure Civil Rights laws are being followed
- Coordinate with CDOT Environmental to ensure compliance with storm water requirements
- In coordination with CDOT Materials, review construction and material forms to ensure conformance with the requirements for proper documentation as listed in applicable CDOT guidance
- Attend final walk through
- Concur with final acceptance when appropriate
- Review project closure and final documentation for compliance

### 5.9 Responsible, Accountable, Consulted, Informed (RACI) Matrix

Table 5-6 Off-System Major Structure Program RACI Matrix

Off-System Bridge Program RACI Matrix		Outside Partners				CDOT HQ Staff					CDOT Regional Staff			
Event	Detailed Explanation of Event	Local Agencies	Special Highway Committee	Federal Highway Administration	Transportation Commission	Budget Office	Staff Bridge	STIP Managers	Federal Aid / Project Budget	Procurement Office	Regional Planners	Regional Business Managers	Local Agency Coordinators or Project Managers	
Annual Budget Setting	Determine the Annual Budget for the Off-System Bridge Program (BRO) allocation, based on FHWA BRO specific revenues, local and state match, and additional funds as directed by the Transportation Commission. All parties are informed via the adoption of the annual CDOT budget by the TC	-	I	C	A	R	C	I	I	-	-	-	-	
Subdivide funds between Municipalities and Counties	Quantify the \$ available for Municipalities and Counties based on the percentage of poor deck area in the Municipalities or Counties.	I	C	-	-	-	R	-	-	-	-	-	-	
Colorado Off-System Structure Eligibility List created	Prepare the list of major structures that qualify for the Off-System Bridge Program.	-	A	-	-	-	R	-	-	-	-	-	-	
Solicitation of Colorado county and municipality Project Applications	Call for the submission of applications from Colorado counties and municipalities for identified bridges in need of rehabilitation or replacement for those that fall below substandard.	R	A	I	I	-	I	-	-	-	-	-	-	
Application review	Review applications and prepare recommendations to go before the Special Highway Committee for consideration during formal project selection process.	-	A	-	-	-	R	-	-	-	-	-	-	
Perform Selection of the Projects	Selection of projects to be awarded funds based recommendations from Bridge Staff and qualifying criteria.	-	R	-	-	-	-	-	-	-	-	-	-	
Notification of Selected Projects	Formal award notification that includes an award letter and a list of projects that are awarded funding. This also contains pertinent information about the award itself such as the amount awarded, structure number, and the geolocation. Information should be sent to the local agencies, CDOT Staff Bridge, Regional Planners, and Regional Business Managers.	I	R	-	-	-	I	I	-	-	I	I	I	
Reconciliation of Projects	Updating the BRO Tracking Summary spreadsheet with all newly awarded projects as well as information regarding the budgeting and status of existing projects.	I	-	-	-	I	R	-	A	-	I	I	I	
Distribution of funds to Regions	Based on the SHC Award Memorandum, transfer relevant funds to the respective regional pool for further distribution to the awarded projects	-	-	-	-	-	A	C	R	-	I	I	I	
Intergovernmental Agreements	Receiving contractual agreement between CDOT and the Local Agency for scope and budget.	C	-	-	-	-	-	-	I	A	C	C	R	
Identify Local Overmatch when necessary	Allocate local funds to meet match requirement for funding above and beyond the typical 20%	A	-	-	-	R	-	I	-	C	C	C	I	
STIP Projects	Designating unique STIP number, amount by fiscal year based on allocation and project data.	-	-	-	-	-	-	A	-	-	R	I	C	
Budget Projects by phase	Funding projects in SAP using ZFMBBT no greater than 90 days prior to desiring FHWA authorization on a phase (or 90 days before advertisement for C phases).	-	-	-	-	-	-	I	A	-	I	R	C	
Federal Highways Agreement	Receiving FHWA concurrence on a phase via the FMIS system.	-	-	R	-	-	-	-	A	-	-	I	-	
Project development and implementation	Delivery of the project by the local agency and monitored by CDOT.	R	-	-	-	-	-	-	-	C	C	C	A	
Project close, identification of project savings	De-STIPing and de-budgeting of project as well as determining if there are project savings to roll forward from pool balance.	-	-	-	-	-	I	-	A	-	-	R	-	
Annual Review Process	Identification of inactive projects, closed projects, project status, project savings, and changes in the award amount. Update the BRO tracking spreadsheet with relevant findings from the Annual Review Process.	-	-	-	-	-	A	C	C	-	C	I	C	
Year End Roll forward of pool balances	Roll forward of pre-determined project savings from regional BRO pool to statewide BRO pool.	-	-	-	-	-	I	R	A	-	I	-	-	
Re-STIP projects into current STIP	Identify of projects that will not be completed in the predicted fiscal year and re-STIP to reflect current fiscal year for project.	-	-	-	-	-	I	A	-	-	R	-	-	
Identify unneeded funds	Identify closed projects or cancelled projects that leave funds in the regional BRO pool.	-	-	-	-	-	A	R	-	-	I	I	-	
Return unneeded funds to statewide BRO pool	After project closure unused funds are returned to the statewide pool using SAP transaction FMBB. The Special Highway Committee may now select additional project(s).	-	I	-	-	-	A	R	C	-	-	-	-	

### 5.10 Off-System Bridge Program Flow Charts

The flow charts below are not intended to be a project delivery guideline. It is meant to provide specific steps about the Off-System Bridge Program (BRO) funding process only. Basic delivery steps were added to provide context, not instruction. See the CDOT Local Agency Manual for project delivery requirements.

#### 5.10.1 BRO Selection Through Planning Flow Chart

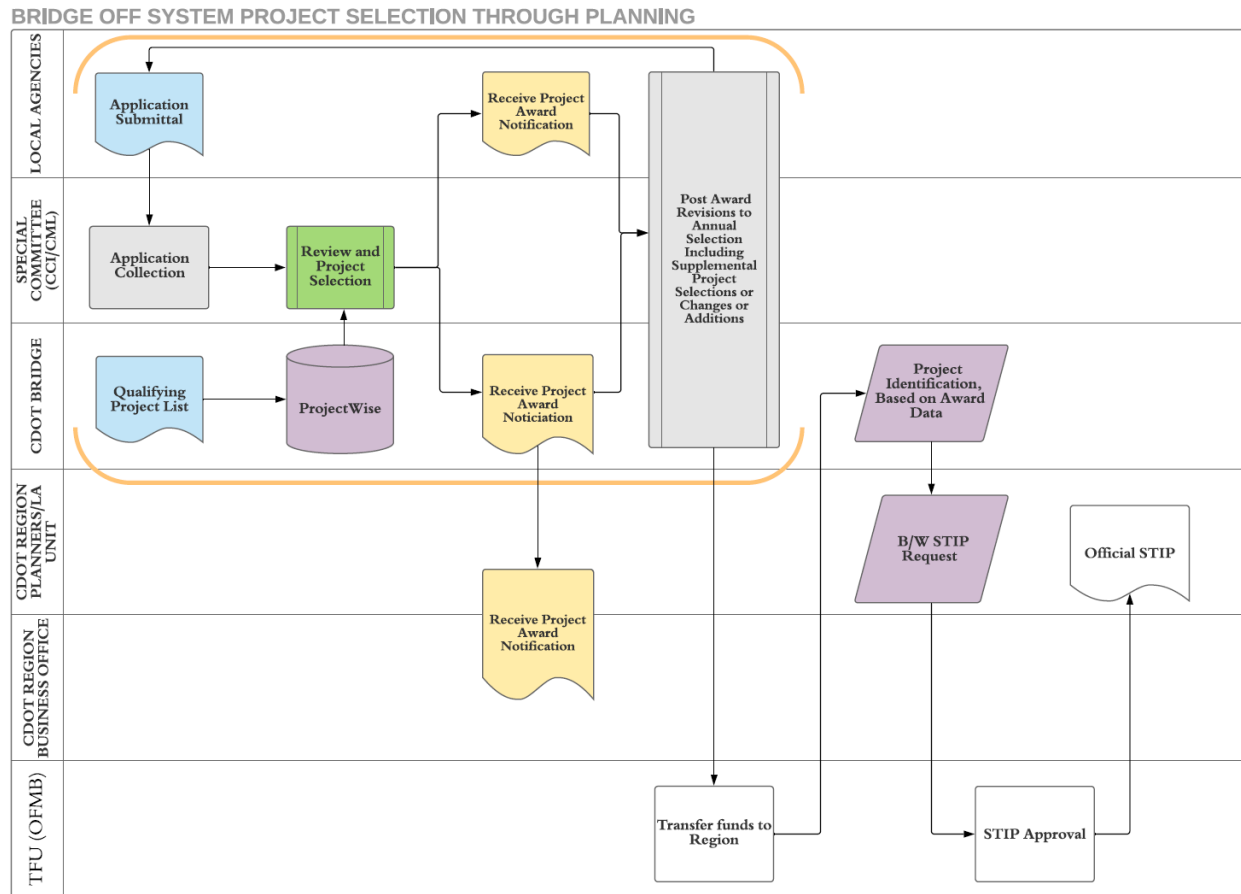


Figure 5-1 BRO Selection Through Planning Flow Chart

5.10.2 BRO Implementation Through Project Closure Flow Chart

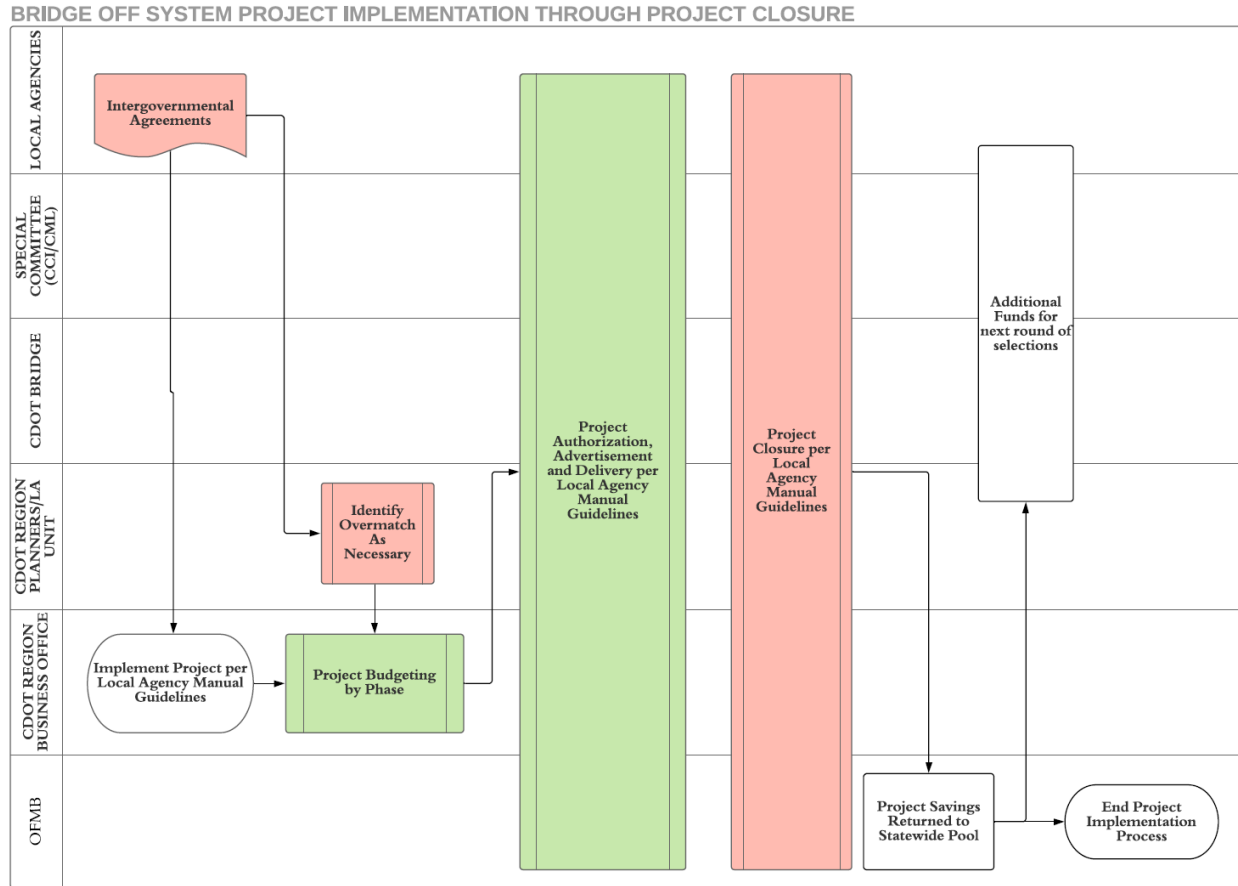


Figure 5-2 BRO Implementation Through Project Closure Flow Chart

### 5.10.3 BRO Annual Review and STIP Rollover Process Flow Chart

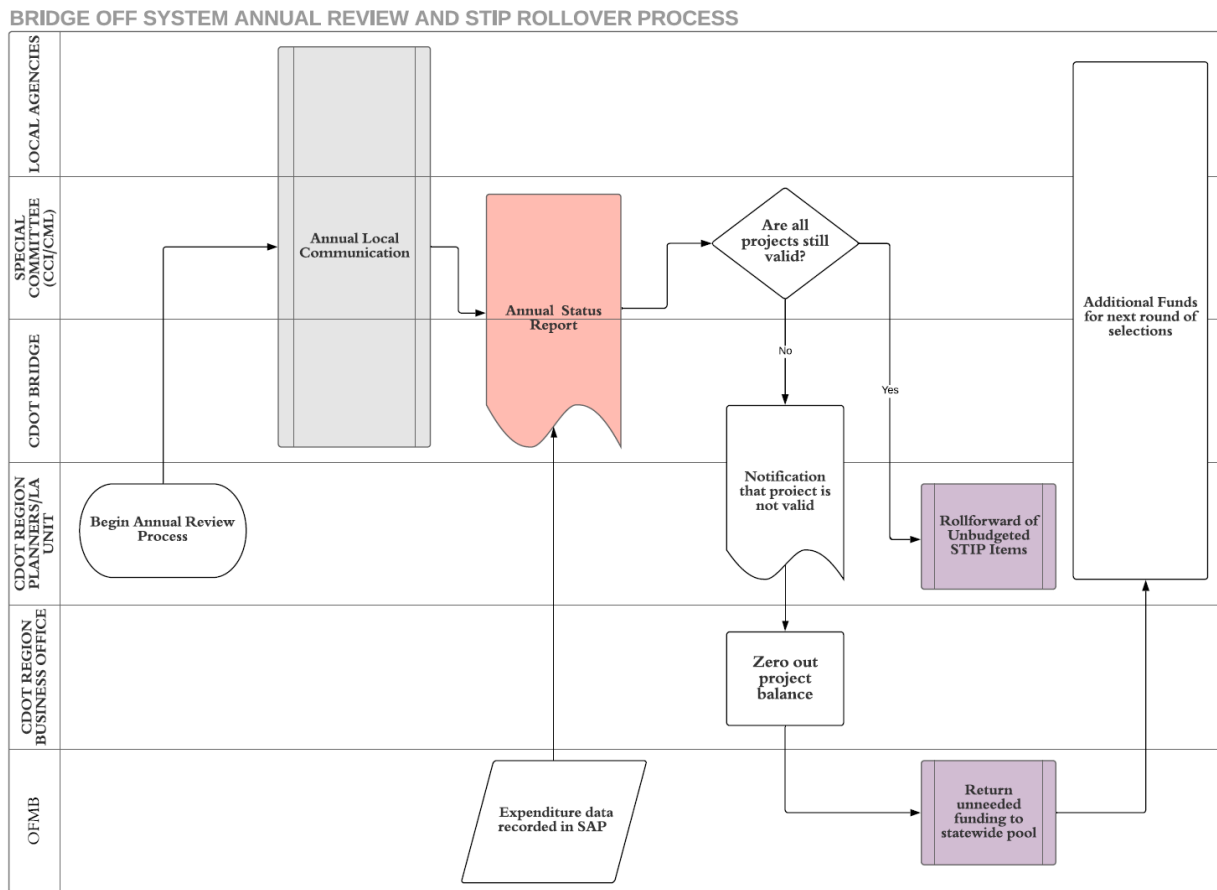


Figure 5-3 BRO Annual Review and STIP Rollover Process Flow Chart

### 5.11 Typical Annual Timeline

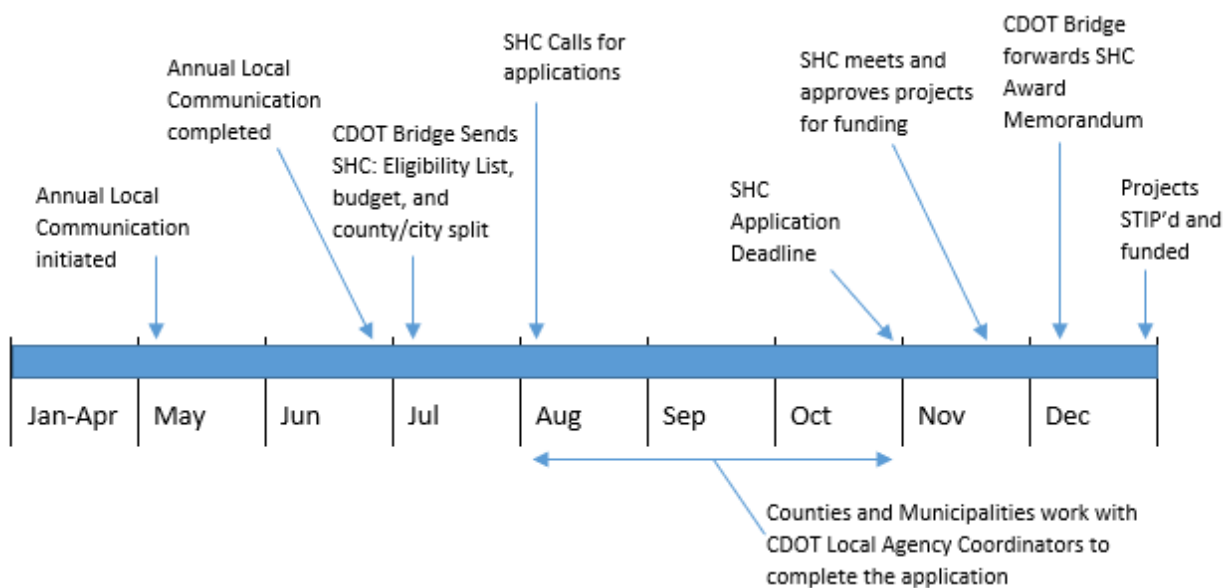


Figure 5-4 BRO Typical Annual Timeline

- January through April
    - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
  - May
    - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
    - Prepare the current Colorado Off-System Structure Eligibility List
    - Prepare the current Annual Local Communication Project List
    - Prepare the current Historical Grant Amount Report
    - Staff Bridge sends the following information to the SHC
    - Off-System Bridge Project Reconciliation memorandum
    - The current Colorado Off-System Structure Eligibility List
    - The current total Off-System Bridge Program available budget for the upcoming fiscal year
    - The split of available BRO budget dollars between Municipalities and Counties based on the percentage of Poor deck area in the Municipalities or Counties based on the total Poor deck area in the Municipalities and Counties.
  - June
    - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
    - Off-System Bridge Project Reconciliation:
      - Update BRO Tracking Summary spreadsheet with outcomes from reconciliation
      - Sweep funds from languishing projects as authorized by the SHC
  - July
    - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
    - CDOT OFMB funds statewide BRO Pool
    - Staff Bridge sends the following information to the SHC:
      - The current Colorado Off-System Structure Eligibility List
      - The current Historical Grant Amount Report
      - Total Off-System Bridge Program available budget
      - The split of available BRO budget dollars between Municipalities and Counties based on the percentage of Poor deck area in the Municipalities or Counties based on the total Poor deck area in the Municipalities and Counties.
  - August
    - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
    - SHC calls for applications
    - Counties and Municipalities start working with CDOT Local Agency Coordinators to complete applications
  - September
-

- Monitor projects and update BRO Tracking Summary spreadsheet as necessary
- October
  - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
  - LA Deadline for SHC Applications
- November
  - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
  - Staff Bridge sends the following information to the SHC:
    - The current Historical Grant Amount Report
    - Application Review Summary Report
  - SHC meets and approves projects for funding
  - SHC produces the SHC Award Memorandum and sends it to the successful local agencies and copies CDOT Staff Bridge
- December
  - Monitor projects and update BRO Tracking Summary spreadsheet as necessary
  - Staff Bridge forwards SHC Award Memorandum to CDOT OFMB, CDOT Regional Planners, CDOT Local Agency Coordinators and CDOT Regional Business Managers.
  - Regional Planners STIP the project
  - OFMB transfers funds to the regions to budget the projects
  - Local Agency Coordinators work with the local entities to move the project forward

## 5.12 BRO Tracking Summary

The BRO Tracking Summary is the centralized spreadsheet for monitoring bridge projects. This tool should be used regularly and be updated throughout the year as the local agencies and regional staff provide revisions to the project information.

The BRO Tracking Summary spreadsheet is a protected document. If access is needed, then request permission from the Structure Asset Management Engineer.

## 5.13 Annual Off-System Bridge Project Reconciliation

This is an annual process whereby the Colorado counties and municipalities with support from CCI and CML update the Off-System Bridge Project status to CDOT. In addition, this process provides Colorado counties and municipalities an opportunity to justify continuing with projects that are more than 4 years past the year of the original SHC award.

The Annual Local Communication is initiated by CDOT Staff Bridge and the CDOT Office of Financial Management and Budget (OFMB). The communication is also copied to the CDOT Local Agency Coordinators to support the Colorado counties and municipalities as project status is updated.

### 5.13.1 Annual Off-System Bridge Project Reconciliation Memorandum

The typical memorandum on CDOT letterhead contains at least the following:

**To:** CCI and CML

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**From:** CDOT Staff Bridge and CDOT Office of Financial Management and Budget

**Subject:** Annual Off-System Bridge Project Reconciliation and Colorado Off-System Structure Eligibility List

Purpose

The primary purpose of this memorandum is to reconcile a list of known Off-System Bridge projects that were selected over the past several years but have yet to be fully executed or funded. By documenting an updated status of each project, CDOT hopes to improve the transparency & accountability of the project list, identify projects that are cancelled or no longer valid, and identify whether there is a deficit or surplus of funding to cover the remaining projects. Furthermore, this list demonstrates the annual reconciliation report CDOT will continue to produce going forward.

The secondary purpose of this memorandum is to provide the information needed by the Special Highway Committee (SHC) to solicit applications from Colorado local agencies for selecting projects during the next annual SHC meeting. The information provided with this memorandum includes the Colorado Off-System Structure Eligibility List, the current available federal Off-System Bridge Program Budget, the program budget allocation between counties and municipalities, the Structure Management Manual Section 5 - Off-System Bridge Program, the SHC Application Data Worksheet, and the current list of CDOT Local Agency Coordinators.

Action

The Colorado Department of Transportation requests that the Special Highway Committee, including Colorado Counties Inc. (CCI) and the Colorado Municipal League (CML) review and update the project status.

Instructions:

Within the Google Sheet linked below and labeled “Annual Local Communication”, please make the following updates for the projects that your organization oversees:

- Column C: Indicate the status of the project by selecting from the drop-down menu. Every project shall be marked with a status, please refer to the ‘Status Legend’ tab for more information
  - If necessary, please reach out to the municipality or county to validate the status of projects
- Column D: Include comments as necessary to describe any issues or justifications for the status selected
- If the award amount, structure number, or other reported value is different from your records, please include this in the comment section
- If there are open projects that are not on the list, please provide the Structure #, a description of the location, the dollar amount awarded, and the award memo in an email response
- Provide any email responses to: CDOT OFMB, CDOT Staff Bridge Branch Manager and CDOT Staff Bridge Off-System Bridge Program Manager



Next Steps

The Special Highway Committee has the authority and obligation to reconcile the previously authorized projects so that the Off-System Bridge Program can continue to operate unhindered by languishing projects.

Once the project statuses are updated and reconciliation finalized any program surplus or deficit after the reconciliation will be discussed between CDOT and the Special Highway Committee prior to making further funding decisions or project awards.

The goal of the reconciliation process in this memo will be to clarify project's status prior to the annual meeting when the selection of off-system bridge projects is made as well as to increase the overall transparency and accountability of the program.

Current Available Budget

The current federal funds available for FY 20\_\_ are:

__% to Counties	\$
__% to Municipalities	\$ _____
Statewide Total	\$

The county and municipality Off-System Bridge Program allocation percentages are determined based on the deck area of poor structures on the eligibility list.

The available funding will change following the annual reconciliation, any project savings, and any supplemental awards authorized during this construction season. Therefore, the final available federal funding amount available for SHC awards will be made available at or before the annual meeting when the selection of off-system bridge projects is made.

Links:

Google Sheet: Annual Local Communication 20\_\_

Attachments:

Attachment A: Colorado Offsystem Structure Eligibility List

Attachment B: Structure Management Manual Section 5 - Off-System Bridge Program

Attachment C: SHC Application Data Worksheet

Attachment D: CDOT Local Agency Coordinators

CC: Local Agency Coordinators

**5.13.2 Annual Local Communication Project List**

The Annual Local Communication Project List is a report spreadsheet based on the Open projects tab in the BRO Tracking Summary spreadsheet with added columns to identify funding status and to test for project age. The minimum required data items are described in the following table.

Table 5-7 Annual Local Communication Project List Data Items

Data Item	Value – Description
<b>Project #</b>	The value is the five-digit project number once assigned to the project. If the project number is yet not assigned, then the field will be blank.
<b>Status</b>	<i>Planned</i> - Project has not received funding or a subaccount number but will be budgeted shortly <i>Open</i> – Project has not been fully-funded and has a subaccount number <i>Delayed</i> - Project is still valid but is on hold <i>Cancelled</i> - Project is no longer valid <i>Funded Pre-construction</i> - Project has been fully funded and is in the pre-construction phase <i>Funded Construction</i> - Project has been fully funded and is in the construction phase <i>Closed</i> – The project is closed
<b>Comments</b>	The value is comments by the stakeholders. The comments can be anything but most often the Status source is identified. (e.g. Per Region 2)
<b>City/County</b>	The value is the city or county that owns the major bridge. (e.g. Mesa for a Mesa county owned bridge)
<b>CCI/CML</b>	CCI - County owned bridge CML - City owned bridge. (e.g. CCI for a Mesa county owned bridge)
<b>Structure #</b>	The value is the structure number (i.e. NBI Item 8 – Structure Number) (e.g. MESA 34-F.9A)
<b>BRO Award Amount</b>	The amount of BRO Funds authorized by the Special Highway Committee for the project.
<b>BRO Funded to Date</b>	The total amount of BRO Funds that have been funded to the project to date.
<b>Remaining BRO Funds Needed</b>	The difference between BRO Award Amount and BRO Funded to Date.
<b>Award Fiscal Year</b>	The fiscal year the project was first authorized by the Special Highway Committee. <i>Blank</i> - If the Special Highway Committee Award Year is not known.
<b>Current Phase</b>	<i>Construction</i> – The project is funded for construction <i>Preconstruction</i> – The project is funded for preconstruction <i>Blank or Empty</i> – A project phase has not been funded
<b>Total Project Budget</b>	The total project budget
<b>Total Expended</b>	The total project expenditures at the time this report is produced

Data Item	Value – Description
<b>Funding Status</b>	<p><i>Fully Funded</i> – All SHC authorized funds have been budgeted to the project</p> <p><i>Partially Funded</i> – Some SHC authorized funds have been budgeted to the project</p> <p><i>Unfunded</i> – No SHC authorized funds have been budgeted to the project</p>
<b>Years Outstanding</b>	<p>The difference between the current year and the Award Fiscal Year.</p> <p><i>Missing</i> - If the Special Highway Committee Award Year is not known.</p>
<b>Overdue</b>	<p><i>No</i> - Years Outstanding is less than or equal to 4</p> <p><i>No</i> - The current project phase is construction.</p> <p><i>Yes</i> - Years Outstanding is greater than 4<sup>7</sup> and the current project phase is not construction</p> <p><i>Unknown</i> if the Years Outstanding is Missing.</p>
<b>Recommendation</b>	<p><i>Retire</i> - If the Project is past its four-year deadline, then review the project. Recommend that the funds be returned to statewide pool if the project is not advancing or expected to advance.</p> <p><i>Review</i> - If the Years Outstanding is 4.</p> <p><i>Allow [blank] more year(s)</i> - If the Years Outstanding is less than 4.</p> <p><i>Validate</i> – The years outstanding is greater than 4 and the Project has entered the construction phase or is fully funded or both.</p>

## 5.14 Project Requirements

The replacement or major rehabilitation project must follow the criteria set by the following documents:

### 5.14.1 General Requirements

- CDOT Project Development Manual
- CDOT Local Agency Manual
- Other requirements as identified by the CDOT Region Local Agency Project Coordinator

### 5.14.2 Roadway Design Requirements

- CDOT Roadway Design Guide
- CDOT Drainage Manual
- AASHTO Policy on Geometric Design of Highways and Streets

### 5.14.3 Structure Design Requirements

- CDOT Bridge Design Manual
- CDOT Bridge Detailing Manual
- CDOT Bridge Rating Manual

<sup>7</sup> The 4-year period starts with the fiscal year when the SHC originally awarded the project.

- CDOT Geotechnical Design Manual
- AASHTO LRFD Bridge Design Specifications

#### 5.14.4 Construction Requirements

- CDOT Construction Manual
- CDOT Field Materials Manual
- CDOT Standard Specifications for Road and Bridge Construction
- CDOT M-Standard Plans
- CDOT S-Standard Plans

### 5.15 Eligible Work

Eligible work may utilize the awarded BRO funds.

#### 5.15.1 Major Structure

- Replacement or major rehabilitation as shown in the application and awarded by the SHC.

#### 5.15.2 Roadway

- A nominal amount of approach work, sufficient to connect the new facility to the existing roadway or to return the grade line to an attainable touchdown point in accordance with good design practice is eligible. This roadway work should generally be no more than 15% of the cost for replacing the bridge and shall not be more than the minimum necessary to meet current geometric design requirements.

#### 5.15.3 Aesthetic Features

- Special architectural features on major structures required by the environmental document may be eligible for bridge program funds.

### 5.16 Ineligible Work

- Ineligible work must utilize other funding sources.
- The ineligible work described below is retained by CDOT from the retired federal HBRRP program.

#### 5.16.1 Major Structure

- Structure length or width beyond that required to satisfy current design requirements is not eligible.

#### 5.16.2 Roadwork

- The costs of long approach fills, causeways, connecting roadways, interchanges, ramps, and other extensive earth structures, when constructed beyond the attainable touchdown point is not eligible.
- Roadwork costs exceeding 15% of the bridge replacement or major rehabilitation costs, or the minimum necessary to meet current geometric design requirements is not eligible.

### 5.16.3 Aesthetic features

- Special architectural features on major structures are not eligible.
- Any other project aesthetic features are not eligible.

### 5.16.4 Other ineligible work

- Safety feature replacement or upgrading independent of a structure replacement or major rehabilitation (e.g. bridge rail, approach guardrail or impact attenuators)
- Overlay of bridge deck as part of a larger highway surfacing project (e.g. an overlay carried across bridge deck for surface uniformity without additional bridge work).
- Utility work independent of a structure replacement or major rehabilitation
- Emergency repair to restore structural integrity to the previous status following an accident
  - Federal ER program funding may be available for a declared disaster exceeding \$700,000 in roadway and bridge damage
- Any retrofit done to correct a deficiency which does not substantially alter the physical geometry or increase the load-carrying capacity
- Any work performed to keep a major structure operational while plans for complete major rehabilitation or replacement are under preparation (e.g. adding a substructure element, adding an extra girder, installing a pulpit to support a girder end, etc.)

## 5.17 Off-System Bridge Program Performance

The performance of each project is tracked by comparing performance thresholds to the project duration, percent of original SHC Grant, and the number of SHC Award Memos. The tracked data items and threshold values are in the BRO Tracking Summary spreadsheet.

### 5.17.1 Off-System Bridge Program Performance Report

Data Item	Value – Description
<b>Project #</b>	The project Sub Account number
<b>City/County</b>	The city or county that owns the major bridge.
<b>CCI/CML</b>	CCI - County owned bridge CML - City owned bridge.
<b>Structure #</b>	The structure number
<b>Original SHC Award Memo Date</b>	The date of the first SHC Award Memo
<b>SAP Closure Date</b>	The date the project was closed in SAP
<b>Project Duration</b>	SAP Closure Date minus Original Award Date in years
<b>Project Duration Performance</b>	-1 if greater than the duration performance threshold 1 if less than the duration performance threshold
<b>Original SHC Grant Amount</b>	The original amount of BRO Funds authorized by the Special Highway Committee for the project.
<b>Supplemental SHC Grants</b>	The sum of supplemental BRO Funds authorized by the Special Highway Committee for the project
<b>Total BRO Funding</b>	Total BRO funding in the project

<b>Data Item</b>	<b>Value – Description</b>
<b>Percent of Original SHC Grant</b>	Total BRO Funding divided by the Original BRO Grant expressed as a percentage
<b>Percent of Original SHC Grant Performance</b>	-1 if greater than the funding performance threshold 1 if less than the funding performance threshold
<b>Number of SHC Award Memos</b>	The number of SHC Award Memos on the project
<b>Number of SHC Award Memos Performance</b>	-1 if greater than the estimate performance threshold 1 if less than the estimate performance threshold
<b>Performance Measure</b>	Sum of Project Duration Performance, Percent of Original SHC Grant Performance, Number of SHC Award Memos Performance

### 5.18 Off-System Bridge Program Records

Records pertinent to the Off-System Bridge Program are to be retained in a central location for future reference with access made available to stakeholders. Select CDOT personnel (e.g. Staff Bridge Off-System Bridge Program Manager) will have full access while all CDOT personnel will have at least read only access. External stakeholders (e.g. CCI, CML, SHC, Local Agencies, etc.) will have to request the documents.

The minimum records to retain are:

- BRO Tracking Summary spreadsheet
- Colorado Off-System Structure Eligibility Lists
- Program budgets
- Annual Local Communication Project Lists
- Colorado county and municipality applications
- SHC Award Memorandums
- Supplemental funding requests
- SHC Supplemental Funding Award Memorandums
- Annual Off-System Bridge Project Reconciliation correspondence
- Relevant Off-System Bridge Program templates