SCOPE OF WORK (SOW)
Bridge Inspection Services
Colorado Department of Transportation

I. GENERAL

The goal of this project is to update the National Bridge Inventory (NBI) through inspection of bridges owned by local governments (cities and counties) or the state of Colorado, and to inform the bridge owners and the Colorado Department of Transportation (CDOT) of the conditions of the bridges. The local agencies and state of Colorado may be referred to as the "owner" hereinafter in this Scope.

The purpose of this agreement is to conduct bridge inspections in accordance with the requirements of the National Bridge Inspection Standards (NBIS) and to report the findings to the state and to the owner. The structures to be inspected must meet the NBIS definition of a bridge as follows:

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

II. DEFINITIONS

A. **ENGINEER** – CDOT Bridge & Structures Inspection Engineer or designee.
B. **FHWA** – Federal Highway Administration.
C. **OFF-SYSTEM** – Those public bridges that are owned and maintained by local governments and not by the Colorado Department of Transportation.
D. **ON-SYSTEM** - Those public bridges that are owned and maintained by the Colorado Department of Transportation.
E. **NEW STRUCTURES** – Structures not previously inspected such as newly constructed structures requiring initial inspection or structures found to be qualifying and without prior inspections.
F. **TEMPORARY BRIDGE** – A structure with temporary shoring or temporary repairs or a structure erected to maintain traffic, for the short term, pending permanent repair or replacement.
G. **FRACTURE CRITICAL (FC)** – See Section XI.

III. INSPECTION STANDARDS

The work shall be performed in accordance with the following documents and revisions thereto:

A. National Bridge Inspection Standards (NBIS) Title 23 Code of Federal Regulations 650 Subpart C
B. Bridge Ratings, Inspections and Records (BRIAR Manual)
C. Pontis Bridge Inspection Coding Guide
D. Colorado NBI Coding Guide
E. AASHTO Manual for Bridge Element Inspection
F. AASHTO Manual for Bridge Evaluation
G. Bridge Inspection Reference Manual
H. Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges (Report No. FHWA-PD-96-001)
I. Inspection of Fracture Critical Bridge Members (Report No. FHWA-IP-86-26)
J. Culvert Inspection Manual, (Report No. FHWA-IP-86-2)
K. Hydraulic Engineering Circular No. 18 (HEC-18, Publication No. FHWA-IP-90-017)
L. Hydraulic Engineering Circular No. 20 (HEC-20, Publication No. FHWA-IP-90-014)
M. CDOT Construction Manual
N. CDOT Bridge Rating Manual
O. Other documents as specified by the CDOT Engineer.

The documents listed above may be updated at any time by the CDOT Engineer.

IV. CONSULTANT QUALIFICATIONS

The consulting firm shall be pre-qualified to conduct work for the State of Colorado, Department of Transportation.

The Consultant will also need a comprehensive knowledge of CDOT manuals, guidelines, policies and procedures.

All tasks assigned to the Consultant must be conducted by a person on the Consultant team that is qualified and has specific expertise in that task. The qualified person is a professional with the necessary education, certifications (including registrations and licenses), skills, experience, qualities, or attributes to complete a particular task. See below for specific required qualifications.

For inspection related tasks, the individual in charge of the organizational unit, in charge of the inspection team, and the structure inspectors, shall meet the qualifications as stated in the Code of Federal Regulations, 23 CFR, 650.309. Individuals performing Nondestructive Testing (NDT) shall be qualified in accordance with the current edition of the American Society for Nondestructive

Testing (ASNT) Recommended Practice No. SNT-TC-1A. The testing program shall be administered by an ASNT certified Level III.

This contract requires that the prime firm or any member of its team be pre-qualified in the following disciplines for the entire length of the contract:

1. Bridge Inspection
2. Bridge Design (for Bridge Ratings)
3. Hydraulics (for Scour/POA evaluations)

V. PROJECT MANAGEMENT AND COORDINATION

The Contract Administrator for the work is:

Lynn E. Croswell, P.E., Bridge & Structures Inspection Engineer
Colorado Department of Transportation
2829 West Howard Place
Denver, Colorado 80204
(303) 757-9188

Project Management activities will be coordinated by:

Andrew Brown, PM I, Statewide Bridge Inspection Coordinator
Colorado Department of Transportation
2829 West Howard Place
Denver, Colorado 80204
(303) 512-4172

VI. PROJECT LOCATION

For off-system structures, the state is divided into three areas with one consultant contracted to perform the inspections in each area. It is anticipated that the consultants inspecting these areas will finish the four-year cycle in the regions that they are currently inspecting. Consultants will rotate to another area of the state after two years and every four years thereafter. The department reserves the right to combine or otherwise modify any, or all, of the areas and to select the consultant(s) to perform the work in accordance with these modifications at the conclusion of the consultant selection process. The CDOT Engineer may revise these alignments of counties in the odd and even years.

See Appendix D for the counties, which include the cities within these counties, currently in each of the three areas.

A. STATEWIDE ON-SYSTEM

Inspection services for on-system, state-owned structures shall be provided as identified by individual Task Order (TO) Scope of Work (SOW).

VII. PROJECT QUANTITIES AND DURATION

The work shall commence on the date specified in the TO Notice To Proceed and shall be completed by the date specified in the individual TOs. Completion is defined as (1) having submitted all bridge reports in the required format to the CDOT Engineer for review, (2) the CDOT Engineer having reviewed and approved the reports for distribution to the owners, and (3) the presentation of the final reports to the owners in a meeting held at a location specified by the owner.

The maximum term for this agreement shall be for five years. The term shall be divided into periods as follows:

Period 1: July 1, 2021 through December 31, 2022
Period 2: July 1, 2022 through December 31, 2023
Period 3: July 1, 2023 through December 31, 2024
Period 4: July 1, 2024 through December 31, 2025

Task orders may be written as follows:

Period 1: North Area Inspections: Approximately 790 Routine Bridge Inspections including approximately 11 FC Bridge Inspections

Central Area Inspections: Approximately 960 Routine Bridge Inspections including approximately 4 FC Bridge Inspections

South Area Inspections: Approximately 870 Routine Bridge Inspections including approximately 24 FC Bridge Inspections.

Period 2: North Area Inspections: Approximately 940 Routine Bridge Inspections including approximately 11 FC Bridge Inspections

Central Area Inspections: Approximately 870 Routine Bridge Inspections including approximately 15 FC Bridge Inspections

South Area Inspections: Approximately 750 Routine Bridge Inspections including approximately 30 FC Bridge Inspections.

Period 3: North Area Inspections: Approximately 790 Routine Bridge Inspections including approximately 11 FC Bridge Inspections

Central Area Inspections: Approximately 960 Routine Bridge Inspections including approximately 4 FC Bridge Inspections

South Area Inspections: Approximately 870 Routine Bridge Inspections including approximately 24 FC Bridge Inspections.

Period 4: North Area Inspections: Approximately 940 Routine Bridge Inspections including approximately 11 FC Bridge Inspections

Central Area Inspections: Approximately 870 Routine Bridge Inspections including approximately 15 FC Bridge Inspections

South Area Inspections: Approximately 750 Routine Bridge Inspections including approximately 30 FC Bridge Inspections.

The list of bridges to be inspected during each period will be identified in the TO. The list of bridges to be inspected will be attached to the Project Cost Worksheet (PCW) request for each TO. The CDOT Engineer may also direct the consultant to inspect other bridges as necessary.

Additional TOs may be written for Scour Plan of Action (POA), ADT's, Load Rating Updates, and On-System structure inspections.

VIII. UNSCHEDULED INSPECTIONS

Unscheduled inspection of bridges will be required from time to time.
These inspections are typically for newly constructed bridges that require a post-construction inspection. At times, a local entity will request an inspection for bridges that the local entity has discovered to have an apparently critical problem.

Newly constructed bridges must be inspected and rated within thirty days of notification from the CDOT Engineer.

Special inspections shall be conducted at the request of the CDOT Engineer for non-NBI qualifying and CDOT-owned structures. The inspection requirements and standards outlined within this scope of work shall apply to these structures.

CONSULTANT RESPONSIBILITY

The consultant shall be responsible for the complete inspection, rating, and reporting of qualifying off-system bridges in their areas. NBI bridge inspections shall be conducted at regular intervals not to exceed the specified inspection frequency from the time the structures were last inspected. When this timing requirement cannot be met, written notification shall be given to the CDOT Engineer and documented in the Inspection Notes for that inspection in the bridge inspection report.

The consultant shall stay informed of changes in the bridge inventory in their areas due to annexations, replacements, or newly constructed bridges. The consultant shall inform the CDOT Engineer of these changes in a format approved by the CDOT Engineer or his/her designee.

The consultant shall insure that bridges are properly posted and signed. Photo documentation of the posting signs shall be included with each inspection report. If a bridge is found not to be properly posted, the consultant shall follow the CDOT Essential Repair Letter (ERL) procedures listed in Appendix A.

The consultant shall verify that any vertical clearance signs or markings on bridges are accurate. This information should be noted in the bridge notes section of the inspection report. The consultant shall notify the owner via an ERL, when the actual measured vertical clearance is less than what is denoted on the sign/marking. Vertical clearances are to be measured per the guideline defined in Section 601.1.2 and Appendix D of the CDOT Construction Manual.

The consultant shall notify the owner immediately of a critical inspection finding. (see Appendix B)

The consultant shall submit completed inspection reports to the CDOT Engineer for review prior to submitting the reports to the owner.

The consultant shall conduct the work in accordance with all governing safety rules and regulations applicable to the work.

The consultant shall provide verification of Consultant Qualifications to the CDOT Engineer or his/her designee at minimum annually. The CDOT Engineer or his/her designee may request verification at any time.

The consultant shall contact each bridge owner prior to beginning work in the owner’s area. The consultant shall meet with the bridge owner at the owner’s request. The purpose of this contact or meeting is to identify themselves to the owner, to learn of changes in the inventory, to present their plan of action to the owner, and to obtain information pertinent to the inspection such as plans, maps, etc.

The consultant shall maintain current contact information in an Excel file in a centralized CDOT owned location for each owner.

IX. INSPECTION REQUIREMENTS

All bridge coding items shall be completed per the requirements of all documents listed in Section III (Inspection Standards)

Supplemental photographs, sketches, tally sheets or other documents shall be completed to give a clear understanding and documentation of distressed bridge conditions.

The Element condition states and comments and the SI&A items shall be reported using the report format as directed by the CDOT Project Manager or his/her designee in each TO.

Completed inspection reports shall be submitted to the CDOT Engineer within 120 days of the date of the inspection for Off-System bridges or within 90 days of the date of the inspection for state owned bridges, or at the end of the contract period whichever is earlier. Submittal time frames may be adjusted and required by the FHWA.

If cracks or other flaws are suspected in steel members, non-destructive testing (NDT) (dye-penetrant, magnetic particle, or ultrasonic) shall be performed on the suspected portion to accurately determine if cracks or other flaws are present. Consultants shall have the appropriate NDT equipment present at each steel structure inspection site.

Each inspected bridge shall be located using GPS equipment or web based mapping, i.e. Google Maps, Google Earth, etc., to obtain longitudes and latitudes at Abutment 1 left.

The consultant shall meet with the CDOT Engineer each quarter to discuss changes to the program, changes in coding, and to discuss any issues or to get clarification for the good of the program.

The consultant shall present a progress report monthly to the CDOT Engineer. The progress report shall list the entities inspected and the number of bridges and types inspected, and the square footage of deck area inspected in each entity. This information must also be included in each invoice.

X. LOAD RATING REQUIREMENTS

The consultant shall be responsible for performing load ratings on bridges identified during the inspections that meet the conditions below. Load ratings shall be done in accordance with the CDOT Bridge Rating Manual.

A. New bridges identified during the inspection if load ratings do not exist.

B. Existing bridges identified during the inspection for which the rating may have changed since the last inspection. Examples include, but are not limited to the following:

1. The change in asphalt or fill thickness from the previous rating amounts greater than 3" or more.

2. Structural conditions change. For example, when one or more timber stringers have deteriorated, broken, split, or otherwise lost section capacity since the previous rating.

3. The structure was widened or rehabilitated and not re-rated at that time.

C. Special Rating Conditions:

1. Typically, substructures are not analyzed in establishing the load ratings. However, if the consultant finds deteriorated conditions in the substructure that affect the load carrying capacity of the bridge, the consultant shall conduct a substructure analysis and load rate the bridge based on the controlling rating. The ratings of the superstructure and substructure shall both be noted on the load rating summary sheet when the substructure is the controlling rating.

D. Other conditions as directed by the CDOT Engineer.

XI. FRACTURE CRITICAL STEEL BRIDGES

Fracture critical members are those defined by the FHWA in their manual titled *Inspection of Fracture Critical Bridge Members* and shall be identified and inspected in accordance with that document and shall comply with the memorandum titled *Inspection of Bridge Fracture Critical Members* in the BRIAR Manual.

A. A Fracture Critical Member (FCM) is a steel member, or part of a member, in tension whose failure would probably cause a portion of or the entire bridge to collapse.

B. The consultant must prepare forms and sketches that identified Fracture Critical members prior to the inspection. It is important that the inspection of fracture critical bridge members be documented thoroughly and accurately.

C. Use of dye penetrant and/or magnetic particle NDT methods are considered part of the regular inspection work and not paid for separately.

XII. UNDERWATER INSPECTIONS

Although Routine Underwater Inspections are not included on this work, the consultant may perform an Underwater Inspection as part of the Routine Inspection as approved by the CDOT Engineer.

The consultant shall investigate the foundation conditions by probing and/or feeling for undercutting of the foundation or other problems such as deterioration of foundation elements.

All bridges with piers and/or abutments with typical water depths in excess of 3' throughout the year shall be recorded in the inspection report and a list of the submerged substructure units provided to the CDOT Engineer.

XIII. SITE REVIEW

A site review will be required for all bridges recommended for closure to verify that they are closed. Inspect bridges closed to highway traffic to assure that the physical non-movable barriers are maintained and that the public safety is not jeopardized. Assess the physical integrity of the structure and any potential hazards to the public on or beneath the structure, especially if pedestrian use is to be allowed. Photographs shall be taken to record the visit and, if appropriate, notes shall be made and included in the structure folder.

Bridges that have been removed and replaced with non-qualifying structures shall be photographed and a short narrative shall be provided describing the replacement structure. These bridges shall be removed from the bridge inventory.

XIV. SCOUR ANALYSIS/REPORT/POA

Although preparing Drainage Reports, Scour Analysis, and Scour Critical Bridge Plan of Action (POA) is not part of this work, the consultant shall make visual observations for scour at each bridge during the Routine Inspection. The consultant

shall notify the CDOT Engineer of bridge where the inspector identifies the need to perform a more in-depth evaluation i.e., Drainage Report, Scour Analysis, and/or Scour Critical Bridge POA.

Preparing Drainage Reports, Scour Analysis, and/or Scour Critical Bridge POA may be included in the work and determined by the CDOT Engineer. If so, specific requirement will be included in the Task Order SOW.

Probe at abutments and piers to identify and record scour and undercutting.

Make visual observation of bridge site relative to the drainage basin.

XV. REPORTING

The consultant shall use a CDOT-provided computer program for reporting Structure Inventory, Appraisal, and Element inspection data. The consultant shall provide final reports, with original signatures, to the owner and to the CDOT Engineer. Final reports shall be submitted either hard copy, electronic copy or both to the owner, and electronic copy only to CDOT. The report format will be detailed in the task order SOW. See Appendix E for contents of a typical inspection report.

XVI. SERVICES AND MATERIALS AVAILABLE FROM CDOT

The following services and materials will be available to the consultant from CDOT:

A. All forms required to be completed for each inspection.
B. Colorado NBI Coding Guide
C. Bridge Rating, Inspection and Records (BRIAR Manual)
D. CDOT Staff will be available for reference on coding, rating, computer use, or other related concerns.

XVII. FINAL REVIEW

Each inspection report will be reviewed by the project manager for completeness and consistency. Each incomplete or inconsistent report will be returned to the consultant for review and for corrections.

The consultant shall hold a final report presentation meeting with each owner when all inspection work is completed and reports have been accepted by the project manager. This presentation shall occur no later than 60 days from the date that the final reports are accepted by the project manager. This will be a joint review with the

proper city/county officials and the consultant to discuss the inspection reports. This review will be held at a mutually agreed upon location. An e-mail documenting this meeting shall be submitted to the project manager. If an owner chooses not to have the presentation, the e-mail will state that the owner declined the presentation. Prior to the meeting, the consultant shall notify the project manager of the time, date and location of the meeting by e-mail and extend an invitation for the project manager to attend. See Appendix E for contents of a typical presentation.

The CDOT Engineer or his designee may accompany the consultant during field inspections or visit the office of the consultant to review procedures and inspection reports and to verify billings.

XVIII. METHOD OF PAYMENT

The contract will be paid for on a cost plus fixed fee basis. The consulting firms will bill for their actual costs, using the negotiated rates, incurred while performing the work. Consultants will bill monthly and include a project status update, a summary of the entities inspected, the number of bridges and types inspected, and the square footage of deck area inspected in each entity with each billing.

APPENDIX A
IDENTIFICATION OF ESSENTIAL REPAIR FINDINGS (ERF)

PURPOSE: This appendix establishes the procedures of the Colorado Department of Transportation, Staff Bridge Branch regarding the general subject of Essential Repair Findings. The term "essential repair" as contained within these procedures is intended to mean a structural or safety related deficiency that requires follow-up inspection or action.

Bridge postings and/or closings may result in short term adverse effects on the delivery of public and private service locally.

A. TYPICAL CONDITIONS: The following represents typical but not all inclusive inspection findings which are considered to be a ERF:

1. Tension Members
   Tension members identified as fracture critical members within the Structure File Data and which are damaged by natural or impact forces.

2. Load Capacity
   A condition which results in a restriction of the maximum acceptable load carrying capacity of a structure to some value less than 27 Tons on the Type III, 3-axle truck at the Operating Rating level.

3. Timber Structures
   a. Three adjacent crushed stringers
   b. Three broken stringers in one span, two of which are adjacent to one another.
   c. Stringers with rot at the ends, which may cause the stringer to fall off the timber cap.
   d. "Mushrooming" for a depth of 2" on three adjacent stringers.
   e. Rot in the top of 80% of all stringers in one span, which reduces the effective depth by 25%.
   f. Rot in timber piles that affect the carrying-capacity of the structure.

4. Concrete Structures
   a. Concrete girders with over 30% of the primary moment steel severed.
   b. Loss of section in beam ends and/or spalls in concrete girder supports where girders have less than 80% bearing area remaining.

5. Steel Structures
   a. Steel members with over 30% section loss.
   b. Steel or aluminum culverts including super spans with unusual section displacement and/or gaps at the point of overlap and cracks in bolt lines.

6. General – All Structures
    a. Scour greater than one foot since the last inspection which has caused vertical or horizontal displacement.
    b. Scour under a spread footing, which has caused a loss of 15% of the bearing area.

B. It shall be the responsibility of the bridge inspection team leader performing an inspection to be alert for conditions other than identified above which may also be considered an ERF. Such a finding shall be reported to the owner via ERL upon return from the inspection or, if deemed necessary, immediately by telephone or in person.

C. The criticality of the deficiency will result in one or more of the following actions with an importance described as follow:

1. Posting load limits.
2. Urgent repairs.

D. SPECIAL ACTIONS REQUIRED OF THE INSPECTION TEAM LEADER:

1. The consultant shall provide written confirmation via ERL within one week to the owner for any action required by anything in paragraph D above. Copies of the confirmation with supporting documentation shall be sent to the CDOT Engineer with “cc” to project manager on all correspondence. This notice should include comments relative to an appropriate repair. This does not mean that the consultant must provide a design for the repair.

APPENDIX B
IDENTIFICATION OF CRITICAL INSPECTION FINDINGS (CIF)

A. PURPOSE: This appendix establishes the procedures of the Colorado Department of Transportation, Staff Bridge Branch regarding the general subject of Critical Inspection Findings. The term "Critical" as contained within these procedures is intended to mean a structural or safety related deficiency that requires immediate follow-up inspection or action.

Deficiencies that compromise the ability of the structure to safely convey traffic are deemed to be CIF's requiring immediate identification, notification, correction, and follow-up.

B. TYPICAL CONDITIONS: The following represents typical but not all inclusive inspection findings which are considered to be a CIF:

1. Tension Members
   a. Tension members identified as fracture critical members within the Structure File Data and which are significantly damaged by natural or impact forces that may result in partial or full failure.

2. Load Capacity
   a. A condition which results in a restriction of the maximum acceptable load carrying capacity of a structure to a value less than 3 Tons at the operating level.

3. Timber Structures
   a. Three adjacent broken stringers in one span.
   b. Rot in timber piles that affect the carrying-capacity of the structure.

4. Concrete Structures
   a. Girders sheared at the ends to the extent that displacement has occurred.
   b. Loss of post-tensioning

5. Steel Structures
   a. Trusses with misalignment of a top chord member in an amount that exceeds half the width of the member.
   b. One element of a two element bottom chord truss member being severed.
   c. The bottom flange of a steel girder being severed.
   d. Corrosion in steel piling that affects the carrying-capacity of the structure.

6. General – All Structures
   a. Substructure problems that threaten the structural integrity of the bridge.

C. It shall be the responsibility of the bridge inspection team leader performing an inspection to be alert for conditions other than identified above which may also be considered a CIF. Such a finding shall be reported to the owner immediately by telephone or in person.

D. The criticality of the deficiency will result in one or more of the following actions with an importance described as follow:

   a. Immediate closure.
   b. Restricted traffic usage.

E. SPECIAL ACTIONS REQUIRED OF THE INSPECTION TEAM LEADER:

   1. The team leader shall notify the owner by phone, or in person, when the actions identified in paragraph D above are appropriate. They should describe the unsafe condition and recommend immediate steps to be taken to insure safety to the traveling public.

   2. The team leader shall provide written confirmation to the owner for any action required by anything in paragraph D above. Copies of the confirmation with supporting documentation shall be sent to the CDOT Engineer with “cc” to project manager on all critical inspection finding correspondence.

   3. Within ten working days after an owner has been informed of a deficiency, the consultant shall contact the owner to determine what action was taken. The consultant shall send a follow-up correspondence to the CDOT Engineer describing what action was taken by the owner.

   4. The CDOT Engineer will notify the FHWA division administrator when a critical deficiency is reported. The CDOT Engineer will forward documentation to the FHWA Division Bridge Engineer.

APPENDIX C
BRIDGE CLOSURE REQUIREMENTS

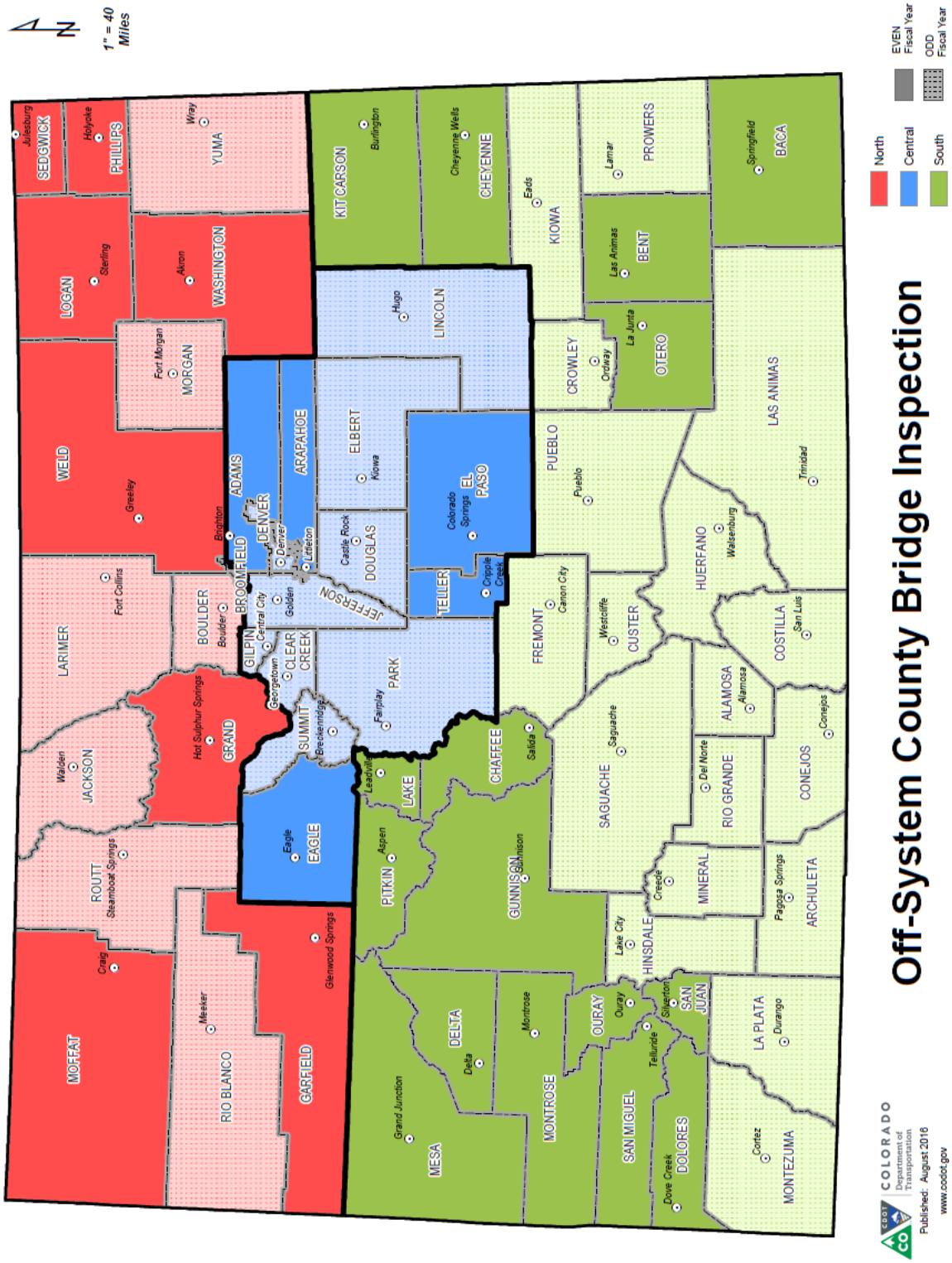
A. A bridge MUST BE CLOSED if it is not capable of carrying 3 Tons at the operating level.

B. Bridges with an Inventory Rating of 3 Tons must be posted with a gross load of 3-Tons and must be closed to trucks.

C. Bridges that require closure must be closed per the MUTCD signing and barricading specifications. The “ROAD CLOSED” sign shall be placed at the point of physical closure. If the jurisdiction desires, the message may be changed to “BRIDGE CLOSED”. This sign is to be accompanied by a permanent Type III barricade installation that completely closes the roadway to the passage of vehicles.

D. Due to the tendency for the public to move and/or drive around barricades, particular effort should be made to insure that a substantial installation is used.

APPENDIX D
NORTH – CENTRAL – SOUTH BREAKDOWN



NORTH AREA

Approximately 1,700 Bridges
(includes 22 F/C Bridges)
Approximately 4,574,000 SF Deck Area

ODD FY	EVEN FY
~940 Inspections	~790 Inspections
(includes ~11 F/C)	(includes ~11 F/C)
~2,642,000 SF	~1,958,000 SF

BOULDER (013)
BROOMFIELD (014)
JACKSON (057)
LARIMER (069)
MORGAN (087)
RIO BLANCO (103)
ROUTT (107)
YUMA (125)
GARFIELD (045)
GRAND (049)
LOGAN (075)
MOFFAT (081)
PHILLIPS (095)
SEDGWICK (115)
WASHINGTON (121)
WELD (123)

CENTRAL AREA

Approximately 1,800 Bridges
(includes 19 F/C Bridges)
Approximately 10,693,000 SF Deck Area

ODD FY	EVEN FY
~870 Inspections	~960 Inspections
(includes ~15 F/C)	(includes ~4 F/C)
~5,652,000 SF	~5,117,000 SF

CLEAR CREEK (019)
DENVER (031)
DOUGLAS (035)
ELBERT (039)
GILPIN (047)
JEFFERSON (059)
LINCOLN (073)
PARK (093)
SUMMIT (117)
ADAMS (001)
ARAPAHOE (005)
EAGLE (037)
EL PASO (041)
TELLER (119)

SOUTH AREA

Approximately 1,600 Bridges
(includes 50 F/C Bridges)
Approximately 3,764,000 SF Deck Area

ODD FY	EVEN FY
~750 Inspections	~870 Inspections
(includes ~30 F/C)	(includes ~24 F/C)
~1,879,000 SF	~1,975,000 SF

ALAMOSA (003)
ARCHULETA (007)
CONEJOS (021)
COSTILLA (023)
CROWLEY (025)
CUSTER (027)
FREMONT (043)
HINSDALE (053)
HUERFANO (055)
KIOWA (061)
LA PLATA (067)
LAS ANIMAS (071)
MINERAL (079)
MONTEZUMA (083)
PROWERS (099)
PUEBLO (101)
RIO GRANDE (105)
SAGUACHE (109)
BACA (009)
BENT (011)
CHAFFEE (015)
CHEYENNE (017)
DELTA (029)
DOLORES (033)
GUNNISON (051)
KIT CARSON (063)
LAKE (065)
MESA (077)
MONTROSE (085)
OTERO (089)
OURAY (091)
PITKIN (097)
SAN JUAN (111)
SAN MIGUEL (113)

FY2022 is an EVN Fiscal Year and runs from July 1,2021 to June 30,2022
FY2023 is an ODD Fiscal Year and runs from July 1,2022 to June 30,2023
FY2024 is an EVN Fiscal Year and runs from July 1,2023 to June 30,2024
FY2025 is an ODD Fiscal Year and runs from July 1,2024 to June 30,2025

F/C = Fracture Critical
County Name Format = *County Name* (*County Code*)

Data Date: July 2020

APPENDIX E
TYPICAL CONTENTENTS OF AN INSPECTION REPORT AND PRESENTATION

1. PDF file of Full Report:
    - Full Inspection Report consists of the following (in this order):
    - SIA / Element inspection report
    - Photos (inventory photos followed by substantiating photos)
    - Tally sheet (if applicable)
    - Structure sketch
    - Fracture Critical Sheet/Memo (if applicable)
    - Vertical clearance sheet (if applicable)
    - Load rating summary sheet
    - Scour Screening Chart
    - Scour Plan of Action (if applicable)
    - Streambed profile sheet (if applicable)
    - Essential Repair Letter (if applicable)
2. PDF of Essential Repair finding or Critical Inspection Finding Letter
3. PDF of SIA / Element Inspection report
4. PDF of the last Underwater Inspection Report
5. PDF of the last Ultrasonic Pin Inspection Report
6. PDF of Timber Girder Sheet if applicable
7. Excel file of Tally Sheet (Timber, Steel, Concrete…)
8. PDF of Load Rating Summary Sheet
9. PDF of Load Rating Calculation Package
10. XML of Load Rating BrR Input File
11. Miscellaneous other Load Rating Files
12. PDF of Fracture Critical sheets (combined FCM memo and elements)
13. PDF of Sketch
14. DGN file of Sketch
15. PDF of Structure Plans (for new or rehabilitated structures, if available)
16. DGN of Structure Plans (for new or rehabilitated structures, if available)
17. PDF of Streambed Profile
18. PDF of Scour Plan of Action
19. PDF of Scour Change Request Memo (if revised during this inspection)
20. PDF of Scour Item 113 Screening Chart
21. PDF of Vertical Clearance Sheet if applicable
22. JPG file of All photos with full caption as name
23. PDF of Miscellaneous Structure Files (Design Calculations, etc.)
24. PDF file of Load Posting Certificate for each local agency
25. Excel file of Structures added / removed from inventory
26. PDF file (full inspection report) of Structures added / removed from inventory

27. PDF and Excel files of their Structure Inspection Results
28. PDF and Excel files of Maintenance recommendations including Priority, sorted by Structure Number
29. Other documents as directed by the CDOT Project Manager