

**28E Cooperative Agreement for a
Competitive Highway Bridge Program (CHBP) Grant Project**

This Agreement is entered into this ____ day of _____, 2025, by and between the Iowa Department of Transportation (herein after referred to as Iowa DOT), and the counties named in Section 4, paragraph A (herein after collectively referred to as the Counties), and the cities named in Section 4, paragraph B (herein after collectively referred to as the Cities), as follows:

WHEREAS, the Iowa DOT, the Counties, and the Cities, are public agencies as defined by Section 28E.2 of the Code of Iowa, and

WHEREAS, Section 28E.3 of the Code of Iowa provides that any powers, privileges or authority exercised or capable of exercise by a public agency of the State of Iowa may be exercised and enjoyed jointly by a public agency of the State of Iowa having such power or powers, and

WHEREAS, In accordance with Iowa Code Chapter 28E and other relevant sections of the Code of Iowa, the Iowa DOT, the Counties, and the Cities enter into this cooperative and joint Agreement to define the roles and responsibilities of the Iowa DOT, the Counties, and the Cities, to provide for the design, construction, administration, and cost sharing for two (2) Iowa DOT-owned bridge projects, twenty-eight (28) county owned bridge projects, and three (3) city owned bridge projects, which will each be bundled into one of several construction contracts (hereinafter Project), detailed in Exhibit B, as part of an anticipated Competitive Highway Bridge Program (CHBP) Grant Award, and

WHEREAS, The CHBP funding was made available by Pub. L. 118-42, Section 126, of the Consolidated Appropriations Act, 2024, which appropriated \$250 million to be awarded by the United States Department of Transportation for a Competitive Highway Bridge Program. Federal funds are available to eligible States for replacement or rehabilitation of specific bridge projects that demonstrate cost savings by bundling multiple highway bridge projects, which were included in the grant application, and

WHEREAS, the Iowa DOT, the Counties, and the Cities, desire to select potential bridge replacement candidates, to develop an application for CHBP Grant funding, and to contract Grant Application Development Consulting Services with HDR Engineering, Inc., to assemble and submit a grant application for the purpose of acquiring said CHBP Grant funding, and

WHEREAS, the Iowa DOT is willing and able to enter into a contract with HDR Engineering, and provide contract management and accounting services as agreed to herein, for and between the parties to this Agreement; and

WHEREAS, The Iowa DOT agrees to be the Lead Applicant and Primary Recipient, and all other Counties and Cities herein agree to be Sub-Recipients, and

WHEREAS, the Iowa DOT, the Counties, and the Cities, have informed themselves as to this Agreement.

THEREFORE, IT IS NOW AGREED that the Iowa DOT, the Counties, and the Cities will enter into this Agreement pursuant to Chapter 28E of the Code of Iowa providing for cooperative action pursuant to the proposed Project, and said cooperative actions include the following:

SCOPE

I. GRANT APPLICATION WORK

1. The Iowa DOT will be the Contracting Authority for the HDR Engineering Inc. Professional Services contract, as per the attached proposal, Professional Services Agreement and associated Exhibit A. The Iowa DOT shall be responsible for contract administration and accounting services between the Counties, Cities, and the Consultant.

2. The Iowa DOT shall make payments to HDR Engineering Inc. for all grant application Professional Services rendered. The total amount paid to HDR Engineering will then be divided evenly across the total number of bridges included in the grant application. The Iowa DOT shall invoice each of the twenty (20) counties and three (3) cities for their share of the Professional Services rendered. Each of the twenty (20) counties and three (3) cities shall reimburse the Iowa DOT for their per bridge share times their total number of bridges included in the grant application within 30 days of receipt of invoice.

II. POST-AWARD ROLES AND RESPONSIBILITIES

1. The Iowa DOT shall serve as the Lead Applicant, primary point of contact, and primary recipient for the CHBP grant award. The primary recipient shall be an eligible applicant that submits the application and is responsible to deliver the CHBP Grant Awarded Project.
2. The Iowa DOT, as Primary Recipient, will administer the CHBP grant funding for the Counties and the Cities, as sub-recipients, and provide Federal-aid oversight in the same manner as it does for other Federal formula funds that are administered through the Iowa DOT to the Counties and the Cities. Primary and sub-recipients shall be responsible for financial accounting for their jurisdictional portion of the Project.
3. One lead agency, the Contracting Authority, will be identified for each of the construction contract bundles, per Exhibit B. The Contracting Authority may be a County Bridge Owner, a City Bridge Owner, or the Iowa DOT, and shall be responsible for contract and project administration including:
 - Execution of the construction contract
 - Signature as Contracting Authority on construction phase change orders
 - Provide all pertinent correspondence, documentation, and relevant project information necessary to fulfill the reporting requirements to the primary recipient (Iowa DOT)
 - Upon successful completion of the contract, the Contracting Authority's Engineer will be responsible for signing final acceptance documents for the contract.
4. Each County Bridge Owner or City Bridge Owner shall be a sub-recipient to Iowa DOT and is responsible for the project development and administration items listed below, and shall provide all pertinent information, as per the resolutions attached hereto and as such becomes part of this Agreement, to the Iowa DOT for CHBP project coordination and reporting requirements for the bridges identified in Exhibit B.
 - Project planning, development, construction administration and inspection, and completion of final paperwork for their respective project(s) in accordance with Iowa DOT policy, Iowa DOT Specifications, Iowa DOT Materials Instructional Memorandums (I.M.s), and with Iowa DOT I.M.s for Local Public Agencies, which include processes and design requirements that meet Federal-aid standards and are approved by the Federal Highway Administration (FHWA)
 - Coordination with other agencies within the contract bundle for letting and contract close-out
 - Process contractor's progress and final payments for each Bridge Owner's respective bridge(s)
 - Construction engineer signature on change orders. In the event the construction engineer is a consultant, the Bridge Owner shall also sign change orders as the Person in Responsible Charge (PIRC).
 - Pay its proportionate share of the Local Matching Costs as set forth in the FINANCING paragraph of this Agreement.
 - Perform or complete all other duties and documentation required to administer their project

A. The Counties

- Allamakee County
- Bremer County
- Buena Vista County
- Cedar County
- Chickasaw County
- Des Moines County
- Dubuque County
- Ida County
- Jackson County
- Lee County
- Madison County

- Mitchell County
- Monona County
- Montgomery County
- Osceola County
- Scott County
- Shelby County
- Story County
- Warren County
- Washington County

B. The Cities

- City of Dyersville
- City of Iowa City
- City of Villisca

5. The projects in Exhibit B shall be bundled within construction contracts via the Iowa DOT's Contracts and Specifications Bureau's letting process. The Iowa DOT will let the construction contracts. The Project shall be obligated by September 30, 2027. The Project shall be paid in full by September 30, 2032, or the amount not paid will be de-obligated.
6. After the bid letting, all non-Contracting Authority agencies agree to discuss the bids and take action to either recommend awarding the contract to the lowest, responsive bidder or reject all bids within 30 days of the letting date. The Contracting Authority agrees to discuss the bids and take action to either award the contract to the lowest, responsive bidder, or reject all bids within 30 days of the letting date. The Contracting Authority shall then follow the Iowa DOT process to accept the low bid or reject all bids.

FINANCING – Each County Bridge Owner, City Bridge Owner, and the Iowa DOT shall pay for their respective project costs, including overages beyond the initial budget presented in the application. Payment to the Prime Contractor shall be made either directly by each agency, or from each County Bridge Owner's Farm to Market (FM) account, and the CHBP funds shall be reimbursed to said agency or FM account, as per the Iowa DOT payment and reimbursement methodologies. All costs not reimbursed with CHBP funds, County HBP funds, the County Bridge Construction Fund, City HBP Funds, STBG Funds, or Farm to Market funds shall be paid for by each respective County Bridge Owner, City Bridge Owner, or the Iowa DOT. Any cost incurred by a county, city, or Iowa DOT outside of the period of performance of the CHBP grant agreement is non-reimbursable and the responsibility of the county, city, or Iowa DOT.

TERMINATION – This Agreement will be terminated upon final acceptance of the work by all County Bridge Owners, City Bridge Owners, and the Iowa DOT and settlement of the financial conditions set forth in the FINANCING paragraph of this Agreement, including final project acceptance and closeout in FMIS, and final acceptance of CHBP Grant award requirements and final reporting. If any of the Counties, the Cities, or the Iowa DOT wish to terminate their responsibilities under this agreement, an amendment to this agreement must be executed by all parties specifying the conditions of such termination.

SERVABILITY- If any part of this Agreement is found to be void and unenforceable then the remaining provisions of this Agreement shall remain in effect.

NON-DISCRIMINATION- In accordance with Title VI of the Civil Rights Acts of 1964 and Iowa Code Chapter 216 and associated subsequent nondiscrimination laws, regulations and executive orders, the LPAs shall not discriminate against any person on the basis of race, color, creed, age, sex, sexual orientation, gender identity, national origin, religion, pregnancy, or disability.

CHAPTER 28E PROVISIONS - There will be no new or separate legal or administrative entity created by this Agreement. The primary recipient shall be responsible for the filing of this Agreement with the Iowa Secretary of State as required by law following its execution.

PROPERTY – No property will be jointly held as part of this Agreement.

LIABILITY – Nothing in this Agreement shall be construed to create joint or several liability of a party hereto for the acts omissions or obligations of the other parties. Each party shall be liable only for its own acts and the parties shall have such rights of indemnity and contribution among themselves with respect to this Agreement and the undertakings hereunder as shall be permitted by law and consistent with the provisions of this Agreement.

OBLIGATIONS – The Counties, the Cities, and Iowa DOT's obligations hereunder will cease immediately, without penalty of further payment being required, in any year for which the General Assembly of either state or the U.S. Congress fails to make an appropriation or re-appropriation to pay such obligations. The Counties, the Cities, and Iowa DOT will provide the other parties to this Agreement notice of such termination of funding as soon as practical after it becomes aware of the failure of funding. In the event such notice is provided, the other parties to this Agreement may terminate the Agreement or any part thereof.

EXECUTION – This Agreement may be executed in any number of counterparts as the case may be, each of which shall be deemed a duplicate original and which together shall constitute one and the same instrument. In addition, the parties agree that the Agreement may be executed by electronic, digital, pdf, or facsimile signatures by any party and such signature will be deemed binding for all purposes hereof without delivery of an original signature being thereafter required. Execution of this Agreement constitutes approval pursuant to Iowa Code section 28E.10 as to all matters within the Iowa DOT's and the Counties' and Cities' jurisdiction with regard to any services (or facilities) over which each agency has constitutional or statutory powers of control.

AMENDMENTS - This Agreement may only be amended in writing, after the amendment has been signed by all parties. An amendment shall become effective immediately upon filing with the Iowa Secretary of State pursuant to Iowa Code section 28E.8.

INDEMNIFICATION – As permitted by law, the Counties, the Cities, and Iowa DOT shall Indemnify and hold each other, their employees and agents, wholly harmless from any damages, claims, demands, or suits by any person or persons to the extent caused by the respective acts or omissions by the Counties, the Cities, or the officers, agents, or employees of either, in the course of any work done in connection with any of the matters set forth in this Agreement.

[This space intentionally left blank]

IN WITNESS WHEREOF, in consideration of the mutual covenants set forth above and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties have entered into the Agreement and have caused their duly authorized representatives to execute the Agreement.

County Signature Block

This agreement was approved by official action of the (County Name) County Board of Supervisors in official session on the _____ day of _____, 2025.

County Auditor

Chair, County Board of Supervisors

IN WITNESS WHEREOF, in consideration of the mutual covenants set forth above and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties have entered into the Agreement and have caused their duly authorized representatives to execute the Agreement.

City Signature Block

By _____ Date _____, 20____

Title of city official

I, _____, certify that I am the City Clerk of (City Name), and
that _____, who signed said Agreement for and on behalf of the city was duly
authorized to execute the same by virtue of a formal resolution duly passed and adopted by the city on the _____
day of _____, 20_____.

Signed _____ Date _____, 20____

City Clerk of (City Name), Iowa

IN WITNESS WHEREOF, in consideration of the mutual covenants set forth above and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties have entered into the Agreement and have caused their duly authorized representatives to execute the Agreement.

Iowa DOT Signature Block

This agreement was approved by official action of the Iowa DOT on the _____ day of _____, 20_____.

Deputy Director, Transportation Development Division

Resolution No. _____

In Support of the Joint CHBP Grant Agreement
&
Letter of Support for the
Competitive Highway Bridge Program (CHBP) Grant Project

Whereas, _____ County, Iowa bridge FHWA number(s): _____, has been identified as being part of a joint Competitive Highway Bridge Program (CHBP) Grant Project, and

Whereas, Iowa bridge FHWA number(s) _____ have been included in a Bundle, as detailed in Exhibit B, and

Whereas, we accept the Contracting Authority for the bundle as detailed in Exhibit B, and acknowledge the roles and responsibilities of each party as detailed in Section 3 and 4, and

Whereas, it is desired by and in the interest of _____ County to participate fully in the CHBP project activities as a Sub-recipient and provide all requisite information necessary to bring to completion all project phases through final completion, and

Whereas, we are in support of the Iowa DOT providing Primary Recipient roles and duties, and

Whereas, we understand and accept the Sub-recipient roles and responsibilities as defined in the "28E Cooperative Agreement for a Competitive Highway Bridge Program (CHBP) Grant Project", including its referenced Exhibits, and

Whereas, each County as shown in Section 4, paragraph A shall be responsible for all matching funds and accept any costs exceeding the funds requested in the CHBP Grant application for their respective structure, and

Whereas, it is the intent of _____ County, upon award of CHBP funds, to enter into a Federal-aid Agreement with the Iowa Department of Transportation (DOT).

THEREFORE BE IT RESOLVED that the Board of Supervisors of _____ County, Iowa hereby approves and directs the Chair to sign this Letter of Support for the Bridge Competitive Highway Bridge Program (CHBP) Grant Project and the 28E Cooperative Agreement for a Competitive Highway Bridge Program (CHBP) Grant Project, and to provide all pertinent correspondence and project information to:

Attn: Nicole Stinn, P.E.
Secondary Roads Engineer
Iowa DOT Local Systems Bureau
800 Lincoln Way
Ames, IA 50010

Adopted this ____ day of _____, 2025.

Chair, Board of Supervisors

ATTEST:

Resolution No. _____

In Support of the Joint CHBP Grant Agreement
&
Letter of Support for the
Competitive Highway Bridge Program (CHBP) Grant Project

Whereas, City of _____, Iowa bridge FHWA number(s): _____, has been identified as being part of a joint Competitive Highway Bridge Program (CHBP) Grant Project, and

Whereas, Iowa bridge FHWA number(s) _____ have been included in a Bundle, as detailed in Exhibit B, and

Whereas, we accept the Contracting Authority for the bundle as detailed in Exhibit B, and acknowledge the roles and responsibilities of each party as detailed in Section 3 and 4, and

Whereas, it is desired by and in the interest of the City of _____ to participate fully in the CHBP project activities as a Sub-recipient and provide all requisite information necessary to bring to completion all project phases through final completion, and

Whereas, we are in support of the Iowa DOT providing Primary Recipient roles and duties, and

Whereas, we understand and accept the Sub-recipient roles and responsibilities as defined in the "28E Cooperative Agreement for a Competitive Highway Bridge Program (CHBP) Grant Project", including its referenced Exhibits, and

Whereas, each City as shown in Section 4, paragraph B, shall be responsible for all matching funds and accept any costs exceeding the funds requested in the CHBP Grant application for their respective structure, and

Whereas, it is the intent of the City of _____, upon award of CHBP funds, to enter into a Federal-aid Agreement with the Iowa Department of Transportation (DOT).

THEREFORE BE IT RESOLVED that the City Council of the City of _____, Iowa hereby approves and directs the City Clerk to sign this Letter of Support for the Bridge Competitive Highway Bridge Program (CHBP) Grant Project and the 28E Cooperative Agreement for a Competitive Highway Bridge Program (CHBP) Grant Project, and to provide all pertinent correspondence and project information to:

Attn: Eryn Stone, P.E.
Urban Engineer
Iowa DOT Local Systems Bureau
800 Lincoln Way
Ames, IA 50010

Adopted this ____ day of _____, 2025.

City Clerk of (City Name), Iowa

ATTEST:

EXHIBIT A

Attachment A1-1

Scope of Services

Contract 319AL, SA10

Grant Application for Competitive Highway Bridge Program (CHBP)

INTRODUCTION

The Federal Highway Administration (FHWA) of the US DOT is anticipated to announce the availability of the next round of funding through the Competitive Highway Bridge Program (CHBP). The program is open only to states with a population density of less than 100 individuals per square mile. Program funding must be used for highway bridge rehabilitation or replacement on public roads that demonstrate cost savings through the bundling of multiple bridge projects into a single contract.

It is anticipated that the Notice of Funding Opportunity (NOFO) for the Competitive Highway Bridge Program will once again stress the project's capability to deliver long-term public benefit outcomes under the four selection criteria as follows:

Innovation. Using innovative approaches to improve safety and expedite project delivery, with consideration to one or more of the following key categories:

1. Innovative Technologies
2. Innovative Project Delivery
3. Innovative Financing

Support for Economic Vitality. As indicated by the results of the benefit-cost analysis and any additional non-quantified benefits identified.

Life-Cycle Costs and State of Good Repair. FHWA will consider two areas of information – the change in bridge condition and the anticipated cost savings associated with bundling bridge projects.

Project Readiness. Projects will be evaluated on their ability to authorize for construction and obligation of funding before a noted date within the NOFO.

SCOPE OF SERVICES

HDR will provide technical support to Iowa DOT to develop a single CHBP grant application for bridge bundling. HDR will work with DOT staff, as well as the ICEA Service Bureau, to collect necessary data for use in the benefit-cost analysis and grant application, such as traffic data and project cost estimates. It is HDR's understanding that critical data, such as National Bridge Inventory Data (NBI) and cost assumptions, are already available for the project. HDR will develop a benefit-cost analysis (BCA) model using assumptions consistent with US DOT's guidance for conducting BCAs for discretionary grant programs. HDR will provide DOT with the following tasks for assistance in developing its CHBP grant application:

TASK 1.0: Project Management and QC

TASK 1.1: Project Management

HDR will provide contract administration, coordination, and direction for the duration of this contract. HDR will provide a project manager to serve as the HDR's single point of contact with Iowa DOT for this Scope of Services. Five (5) months are assumed for invoicing and progress reporting.

Deliverables:

- One (1) electronic copy of monthly invoice and progress report.

Task 1.2: Quality Review of Deliverables

HDR will perform an independent quality review of deliverables noted below.

To facilitate more efficient document management, reviews and collaboration, HDR will establish and host a project Teams/SharePoint site and provide access to Iowa DOT, ICEA and other project representatives.

EXHIBIT A

Task 1.3: Kickoff / Coordination Meetings

HDR will conduct a kick-off meeting with the Iowa DOT project team to review the scope of work for this project. As part of the project kickoff meeting, HDR will provide Iowa DOT with guidance on US DOT's guidelines for the Competitive Highway Bridge Program and probable application review strategy, application development, schedule, criteria, and overall strategy. HDR will use the project kick-off call as an opportunity to facilitate a strategy session on the grant application approach and detailed work plan. The kick-off call will also be used as an opportunity to obtain relevant existing documentation related to the individual bridge projects.

This task will also include virtual meetings with Iowa DOT, ICEA, and representatives of cities and counties with participating bridge projects. Coordination meetings will be used to discuss various options for the development of the application, develop common themes and messages for the proposed bundling of projects, confirm budget inputs, and review draft application documents as the project progresses. It is anticipated that a total of eight (8) 2-hr virtual meetings will be held to discuss interim deliverables and progress during project development.

Deliverables: Monthly invoices and progress reports, action items from calls/meetings, and quality control-quality assurance.

Task 2: Collect and Review Available Data

HDR will develop a questionnaire to obtain or confirm bridge specific information from cities / counties, including ADT, percent trucks, current load rating, proposed detour route, etc.

It is assumed that the following data would be provided to HDR for use on the study:

- Existing traffic volumes, including vehicle classification (e.g., percent trucks)
- Projected traffic volumes (e.g., annual growth rate)
- Estimated detour distance for each bridge
- Bridge construction cost estimates
- Maintenance and rehabilitation costs for different states of repair
- Bridge weight limitations and load postings (current and forecasted timing)
- Proposed or anticipated contracting and delivery method.

In addition, HDR will create a public-friendly online survey for each county to distribute and conduct engagement, the results of which will be included in the application.

Task 3. Scenario Definition and Project Prioritization

HDR will work with Iowa DOT, ICEA and other cities and counties to identify and assess bridge projects to be include in the grant application.

Grant Project Identification and Prioritization

As part of this effort, HDR will define a thematic scenario (e.g. "farm to market across Iowa" or "moving the needle for state of good repair") to help establish an overall approach and benefit justification for the grant package. This coordination effort will utilize the public impacts expected from the individual bridge projects to determine the bridges included in the application. Part of this strategy will involve selecting the various components of the project for inclusion in the scope in order to increase the probability of a grant award. This scope of work assumes that these public impacts will be:

- Time and distance impacts associated with bridge detours (due to weight posted or closed bridges)
- Expected safety improvements due to bridge improvements (increased bridge width, improved guardrail protection)
- Lower rehabilitation costs due to a better state of repair

Also, as part of this task, HDR will also work with Iowa DOT to help screen and select Iowa DOT bridge projects to include in the application with the county and city bundles. We will use available data to help develop simple screening criteria to select the most beneficial projects in terms of the grant thematic scenarios.

EXHIBIT A

Assessment of Bridge Bundling/Packaging

Upon completion of Task 3.1 above, HDR will support ICEA and Iowa DOT in the development of bridge bundles, which will represent contract packages for construction. Bridge projects will be grouped together, as able, based on factors such as:

- Project Readiness
- Geographic Proximity
- Structure Type
- Economies of Scale to Reduce Overall Bridge Construction Costs
- Reduction of Construction Detour Duration

This exercise will provide a more efficient project delivery scenario, enhancing the overall merits of the grant application.

Deliverable: Brief documentation of scenario definition and project prioritization results.

Task 4. Traffic Operations and Safety Analysis

Safety Analysis

Crash data will be obtained for the past 10-year period for up to 50 bridges identified by Iowa DOT and the cities and counties. Crash rates will be calculated for identified bridges to highlight bridges that exceed the statewide average crash rate for similar features and support predictive safety analysis. Highway Safety Manual-based crash prediction methods will be implemented with the NCHRP 17-38 spreadsheet tool provided by AASHTO for up to 50 bridges, resulting in predicted crashes on the existing bridge and predicted crashes on the new bridge. Iowa DOT's published average crash rates by facility class will be collected and forecasted if necessary. Crash prediction results developed (crashes per year) will be estimated for up to 4 key years of analysis by KABCO severity level. These data will serve as inputs for Task 6.

Operations Analysis

Highway Capacity Manual methods applied via spreadsheet will be utilized to determine a before and after average travel speed for travel through the project limits and via the project detour for up to 50 bridges. The differential between before and after travel times will be applied to the volume of traffic impacted by the project in Task 6. Daily out-of-distance travel delay will also be calculated for bridge detours using the same HCM-based methods. Before and after travel time analysis will focus on typical day conditions or recurring congestion and will be estimated for each year in the benefit-cost analysis. Estimates of delay for non-recurring congestion may be developed at the request of Iowa DOT but will be calculated as a fixed percentage increase to recurring congestion based on statewide breakdowns of source congestion published in Iowa DOT's TSMO Program Plan or provided by Iowa DOT.

Deliverable: Documentation of the methodologies for the traffic and safety analyses will be developed for inclusion as an appendix in the grant application package.

Task 5. GIS Mapping & Detour Analysis

HDR will map the locations of the individual bridge projects proposed for the application, including the selected city and county bridges. This GIS mapping will assist in efforts to appropriately bundle bridge projects into construction packages, helping to inform geographic themes or points of merit.

HDR will work with DOT to review existing bridge inventory data for the bridges in the bundles, including detour routes in the event of bridge posting or closure. DOT will help refine these detour routes and distances. HDR may conduct GIS analyses to aid the calculations of distances and consider the proximity and condition of neighboring bridges for passenger vehicle and truck detour routes. The results of these analyses will inform the user costs of detours in the case of bridge closures or weight restrictions estimated in Task 6, Benefit-Cost Analysis. User costs will cover travel time, vehicle operating costs, safety, and emissions impacts associated with bridge detours.

Deliverable: Predicted detour costs for the baseline scenario – required for input into benefit-costs.

EXHIBIT A

Task 6. Benefit-Cost Analysis

HDR will quantify public benefits and impacts expected from the project that demonstrate adherence with the CHBP selection criteria. A key challenge of this grant application will be to provide compelling evidence to USDOT of the merits of bundling the bridge projects compared to implementing the projects individually, as well as demonstrating that the monetized benefits of the bundled projects outweigh the project costs.

The economic analyses will include the following elements:

- **Develop Benefit-Cost Model:** For each of the user costs and associated benefit categories identified in Task 5, logic diagrams will be developed that represent the methodology used to monetize each project benefit. The model will be built according to the logic diagrams and populated with the most up-to-date information available. HDR will collect model inputs from Tasks 4 and 5, Iowa DOT, USDOT guidance, and other publicly available data.
- **Produce Benefit-Cost Results, Test Sensitivity of Results against Key Variables:** Initial benefit-cost results will be developed, and key variables will be flagged for testing. The model will be re-run using ranges on key variables to evaluate the robustness of the BCA.
- **Issue and Document Results:** Materials for the CHBP grant application, including the BCA excel-based model, technical documentation, and data points to support the merit criteria narrative will be written, reviewed, and finalized.

To support the development of O&M costs for each structure, HDR work with the Iowa DOT Bridges & Structures Bureau to establish a schedule of standard or parametric cost estimates for operations and maintenance activities by such characteristics as bridge/structure type (i.e. timber, concrete, etc.) and general age of structure. This schedule of O&M costs will be applied to each bridge site to assist in the development of site-specific O&M costs for the BCA.

Deliverables: A short document summarizing key data for the application narrative; technical documentation (appendix or narrative) describing the evaluation approach, data, assumptions, and results of the analysis; and the benefit-cost excel-based model for submission to USDOT.

Task 7. CHBP Grant Application Preparation

HDR will compile the analysis, develop select graphics, and document strategies that address the grant requirements. HDR will also assist in evaluating the selected projects and developing content for each of the applicable selection criterion described earlier in this proposal. Iowa DOT will be responsible for the actual submittal of the grant application on the grants.gov site.

The application narrative will follow USDOT's recommended structure and approach for describing the project, its costs, funding, benefits, and other factors. The CHBP grant application narrative will include the following project narrative, generally following the basic outline below, as per the previous NOFO:

- I. Cover Page Table (as per template in NOFO)
- II. Project Description
- III. Project Location
- IV. Project Parties
- V. Grant Funds, Sources and Uses of Project Funds
- VI. Selection Criteria
 - a. Innovation
 - b. Support for Economic Vitality
 - c. Life-Cycle Costs and State of Good Repair
 - d. Project Readiness
- VII. Letters of Support
 - a. HDR will provide a letter of support template for Iowa DOT and ICEA to provide to stakeholders.
 - b. HDR will help Iowa DOT and ICEA develop a list of potential stakeholder supporters and track requests as they are made, and letters obtained.

EXHIBIT A

Deliverable: Completed CHBP Grant Application (Draft and Final)

Key Assumptions

1. Up to 50 bridges will be analyzed for the grant application.
2. Existing Year Average Daily Traffic (ADT) Volumes to be obtained via the Iowa DOT GIS traffic maps and confirmed by Cities / Counties via questionnaire.
3. Forecast Year Average Daily Traffic (ADT) Volumes to be derived from the iTRAM model in coordination with Iowa DOT. Bridges with forecast ADT not provided will be estimated with a sketch-planning approach based on travel-sheds for traffic and safety benefits.
4. Existing and proposed bridge barrier rail protection and existing and proposed bridge traveled width (face of barrier to face of barrier) to be provided by DOT / Cities / Counties via questionnaire. Any missing information to be provided by Iowa DOT via the SIIMS database.
5. Detour Route for bridge construction or for diverted trucks from load rated bridges to be provided by Cities / Counties via questionnaire.
6. Percentage of Trucks to be provided by Cities / Counties via questionnaire. For load rated bridges, the estimated daily traffic volume of trucks diverting to other crossings to be provided by Cities / Counties via questionnaire. For bridges with percent of trucks or estimated daily truck volume diverted not provided, the iTRAM model will be used to estimate percent of trucks.
7. Bridges to include in application, including year of proposed construction and construction costs for each bridge, will be provided by the DOT/City/County.

Schedule

HDR will begin to perform these services upon Notice-to-Proceed. Most of the scope deliverables will be completed within a 5-month period. A schedule for delivery of notable deliverables outlined above will be established in coordination with Iowa DOT and largely be based on the release date of the NOFO from USDOT, which is anticipated in January 2025. Final application packet will be submitted to Iowa DOT seven (7) days prior to submittal deadline outlined in the published NOFO.

Assumed Notice to Proceed

1/22/2025

Contract Completion

6/15/2025

Exhibit B

Competitive Highway Bridge Program (CHBP) Grant Project Bundle Information*

Bridge Bundle 1

- **Contract Authority: Buena Vista County, Iowa**
 - FHWA Structure Number(s): 85740
 - TPMS number(s): 57279
- **Ida County, Iowa**
 - FHWA Structure Number(s): 186961
 - TPMS number(s): 53452
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 2

- **Contract Authority: Mitchell County, Iowa**
 - FHWA Structure Number(s): 248530 & 249201
 - TPMS number(s): 54931 & 38550
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 3

- **Contract Authority: Chickasaw County, Iowa**
 - FHWA Structure Number(s): 112770 & 19680
 - TPMS number(s): 53435 & 53429
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 4

- **Contract Authority: Bremer County, Iowa**
 - FHWA Structure Number(s): 78920 & 79060
 - TPMS number(s): 35012 & 27164
- **Allamakee County, Iowa**
 - FHWA Structure Number(s): 61140
 - TPMS number(s): 37763
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 5

- **Contract Authority: Dubuque County, Iowa**
 - FHWA Structure Number(s): 148160
 - TPMS number(s): 45812
- **Jackson County, Iowa**
 - FHWA Structure Number(s): 193040
 - TPMS number(s): 53229
- **City of Dyersville, Iowa**
 - FHWA Structure Number(s): 004305
 - TPMS number(s): TBD
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 6

- **Contract Authority: Scott County, Iowa**
 - FHWA Structure Number(s): 303010
 - TPMS number(s): 31024
- **Cedar County, Iowa**
 - FHWA Structure Number(s): 103280
 - TPMS number(s): 55091
- **City of Iowa City, Iowa**
 - FHWA Structure Number(s): 6260
 - TPMS number(s): TBD
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 7

- **Contract Authority: Iowa DOT**
 - FHWA Structure Number(s): 37830
 - TPMS number(s): N/A
- **Des Moines County, Iowa**
 - FHWA Structure Number(s): 143270
 - TPMS number(s): 47049
- **Washington County, Iowa**
 - FHWA Structure Number(s): 337040
 - TPMS number(s): 51161
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 8

- **Contract Authority: Lee County, Iowa**
 - FHWA Structure Number(s): 218910 & 219030
 - TPMS number(s): 57243 & 57244
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 9

- **Contract Authority: Warren County, Iowa**
 - FHWA Structure Number(s): 332850 & 333690
 - TPMS number(s): 52966 & 52967
- **Story County, Iowa**
 - FHWA Structure Number(s): 316170
 - TPMS number(s): 38675
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 10

- **Contract Authority: Madison County, Iowa**
 - FHWA Structure Number(s): 234750 & 232680 & 233280
 - TPMS number(s): 57271 & 57273 & 57272
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 11

- **Contract Authority: Shelby County, Iowa**
 - FHWA Structure Number(s): 47910
 - TPMS number(s): 57233
- **Monona County, Iowa**
 - FHWA Structure Number(s): 250540
 - TPMS number(s): 33857
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 12

- **Contract Authority: Montgomery County, Iowa**
 - FHWA Structure Number(s): 254240 & 254550
 - TPMS number(s): 55055 & 31034
- **City of Villisca, Iowa**
 - FHWA Structure Number(s): 11520
 - TPMS number(s): 55855
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

Bridge Bundle 13

- **Contract Authority: Iowa DOT**
 - FHWA Structure Number(s): 23700
 - TPMS number(s): N/A
- **Osceola County, Iowa**
 - FHWA Structure Number(s): 263300
 - TPMS number(s): 50903
- Budget and Funding: See Iowa DOT FY24 CHBP Grant Application

*It is the intention to use the bundles presented in the application, but bundles are subject to change due to unforeseen conditions. Bundles will be formalized upon CHBP grant award via a post-award Iowa DOT funding agreement. Resolutions signed by partner agencies attached as part of this 28E agreement acknowledge a commitment to these partnerships and an endorsement of each bundle lead.