

Rural and Tribal Assistance Pilot Program

Online Application Form (To be filled out online)

**All fields must be completed.*

1)Name and contact information of person for matters involving this application:

First and last name*: Jim Katzer, PE

Title*: Transportation Division Manager

Phone*: 720-874-6837

Email*: JKatzer@arapahoegov.com

2)Entity name, address, and website:

Organization/Entity Name*: Arapahoe County

Address (#, street - no P.O. box numbers)*: Public Works and Development Dept, 6924 S. Lima St,

City*: Centennial

State*: CO

Zip Code*: 80112

Website address, if applicable: <https://www.arapahoeco.gov/>

3)Employer/Taxpayer Identification Number (EIN/TIN)*: 84-6000740

4)Organization/entity Unique Entity Identifier (UEI) assigned by

SAM.gov*: J5WHK64NAWM1

5)Entity/Organization headquarters is in this congressional district(s)*: CO-006

Project is in this congressional district(s)*: CO-006

6)Below is a list of eligible entities for this program. Please select the one option that describes your eligibility*:

- ☒ A unit of local government or political subdivision seeking to advance a project that is located outside of an urbanized area that has a population of more than 150,000 residents

7)Project title*:

Construction of a new bridge on Gun Club Road at crossing of Coal Creek, and associated improvements, in Arapahoe County, Colorado (Phase I – Preliminary Engineering and Design)

8)Project location*:

Latitude: 39.70732 N

Longitude: 104.71627 W

9)Briefly describe the overall project (no more than 500 words)*:

This is a bridge project located in the eastern portion of unincorporated Arapahoe County,

Colorado. (Based on the Census Bureau's 2020 data, the total population of the county's unincorporated area is estimated at about 97,144.) The area is rural and has an undeveloped roadway network with large distances between major roadways. Gun Club Road is classified as a rural arterial that provides a critical north–south connection, linking communities within the County's unincorporated areas to the regional highway system.

At the Coal Creek crossing, the roadway is regularly impacted by flooding. The crossing is currently served by four 36-inch culvert pipes that together provide an estimated capacity of 200 CFS. This system is undersized and only handles nuisance and low flow to the point that flows from a minor 2-year storm exceed its capacity, resulting in backwater conditions, expansion of the floodplain, and frequent overtopping of the roadway. These conditions lead to closures of the road during major rain events, disrupting mobility and emergency access.

Drainage and flood hazard studies completed in 2013 and 2018 confirm the culverts are severely undersized. Hydrologic modeling indicates the current low flow culvert system conveys 200 CFS, while the estimated 2-year storm flowrates exceed 2,000 cubic feet per second (CFS) and the 100-year flood event exceeds 18,000 CFS. Given the magnitude of flow, culvert expansion is not feasible; only a bridge can provide the necessary long-term conveyance capacity and reliable access.

The overall project concept for a new 365-foot bridge, replacing the existing culverts to safely pass the 100-year storm event and prevent roadway overtopping. It also includes elevation of approximately 1,100 linear feet of roadway and improvements to portions of the Coal Creek channel to remove this segment of Gun Club Road from the 100-year floodplain. These improvements will eliminate recurring flood-related closures for Gun Club Road, remove three habitable structures from the floodplain and eliminate channel overtopping and splitting of the Coal Creek floodplain that results in inundation of an adjacent intersection. This will reduce risks to public safety, and improve reliability for commuters and emergency services. The improvements will also ensure consistent capacity and dependable access along a corridor identified in local and regional transportation plans as critical to eastern Arapahoe County.

The County plans to solicit proposals from qualified engineering firms to provide advisory services for Phase I – Engineering and Design of this project in the first quarter of 2026, with Phase 1 scope of work expected to take 18 to 24 months to complete. The cost for Phase I is estimated to be \$1.5 million. Arapahoe County is seeking the full \$1.5 million in RTA grant funds for this phase, which will advance the project from its current conceptual state to approximately 30 percent engineered design.

9a) Estimated total project cost*:

1500000

10)Is the applicant delinquent on any federal debt?*

No

If yes, explain: N/A

11)Appropriateness of services requested*:

11a)Please describe the activities/advisory services for which you are seeking program funds and how these activities will materially advance your overall project. (no more than 400 words)*

Arapahoe County requests RTA funding to retain qualified consultants for Phase I (Preliminary

Engineering and Design) of a Gun Club Road bridge at Coal Creek. Phase I will advance the project from concept to approximately 30% design completion.

The scope will include environmental review to define permitting needs and baseline impacts, subsurface utility investigations, floodplain analysis, hydrologic and hydraulic modeling to verify Coal Creek design flows, bridge structural analysis, and preliminary right-of-way mapping to identify acquisition needs. Public engagement also will be conducted with local stakeholders to ensure the design reflects community priorities and regional operational requirements.

Consultants will develop roadway alignment and profiles to establish the elevation needed to remove the crossing from the base floodplain, evaluate bridge type, size, and location, and prepare 30% construction plans for the bridge, roadway, and drainage improvements, including channel stabilization alternatives. The scope also will include outlining traffic control and staging concepts and producing cost estimates—covering both construction and right-of-way acquisition—consistent with FHWA and CDOT standards.

Phase I is appropriate for the project's current state of development and will materially advance the overall project. It will define critical design elements, right-of-way needs, utility impacts, and major design constraints. Deliverables will also provide reliable cost and schedule estimates and create the baseline for environmental clearance and stakeholder engagement. By moving from concept to preliminary engineering, Phase I will reduce uncertainty, manage risk, and avoid costly redesigns, ensuring that future investments in final design and construction proceed with a well-defined scope, minimized risk, and a clear path to delivery.

Without this work, the project remains at the concept level, leaving the County unable to accurately budget, schedule, or pursue funding for full design and construction. Completion of Phase I will demonstrate readiness—a key requirement for advancing to final design and competing for state and federal construction funding.

11b) Requested funds from this program*:

1500000

11c) Estimated cost of activities proposed*:

1500000

11d) Describe what project-related development activities have been completed, if any. Examples include: data or information that has been collected or activities conducted that are necessary to complete the activities funded through this Program. (no more than 250 words)*

A 2013 Sand Creek Master Drainage Plan and Conceptual Design Report provided updated hydrologic and hydraulic information for Sand Creek and Coal Creek, resulting in a revised Flood Hazard Delineation (FHAD) for the watershed. The study included conceptual alternatives for critical crossings and identified the preferred solution at Gun Club Road as a 365-foot bridge span with associated upstream channel improvements capable of passing the 100-year storm event. These findings established the baseline conditions, design requirements, and long-term solution for this location.

A 2018 Phase III Drainage Report further evaluated conditions at the Gun Club Road crossing. The report confirmed that the existing culvert system was undersized and unable to pass even a 2-year event and documented the need for a full bridge structure to achieve adequate capacity. While it considered potential interim culvert and roadway stabilization measures, the

report reinforced that such efforts were only temporary and that construction of a bridge would be necessary for long-term flood protection and roadway reliability. This report provided critical hydrologic, hydraulic, and design information that will directly inform Phase I preliminary engineering and design under this grant request.

12) Viability of grant services requested

12a) Please describe the following your organization's experience procuring advisory services. State if you have additional funds available to commit to this effort should grant funding provided prove insufficient to complete the proposed activities. If additional funds will be provided, include the amount and source of the local funding commitment. (no more than 400 words)*

The Project will be managed by Arapahoe County's Public Works and Development Department, Transportation Division. The Division has extensive experience administering Federal Highway Administration (FHWA) funds and delivering projects in full compliance with federal requirements. The County has consistently procured and managed advisory services for planning, design, and construction, coordinating multiple technical disciplines to deliver complex transportation improvements on schedule and within federal standards.

Over the past decade, the County has advanced a broad range of FHWA funded projects, all requiring competitive procurement of professional services. These procurements have followed established procedures to ensure compliance, quality control, and timely delivery. Examples include a \$23.5 million (\$17.4 million in FHWA funds) 2-mile arterial corridor improvement project; a \$7.3 million FHWA-funded multimodal safety project that reconfigured more than a mile of roadway; and a \$2.5 million design project that will widen 1.3 miles of arterial roadway from two to four lanes, including intersection and access upgrades. Other federally funded projects, ranging from \$2 million to \$12.7 million, have included intersection reconstructions with innovative designs, freeway ramp widening and restriping, corridor planning studies, and bridge and streambed repairs to restore hydraulic capacity and roadway safety. These efforts required the County to procure and manage advisory services for preliminary engineering, traffic analysis, hydraulic and drainage studies, roadway and bridge design, and preparation of construction documents.

All procurement of advisory services for Phase I – Preliminary Engineering and Design of the Gun Club Road bridge at Coal Creek will follow the County's Public Works and Development Operations Manual, which is based on the County's Agency Accreditation through the American Public Works Association, maintained since 2018. This manual outlines detailed procedures for procurement, quality control, and compliance with federal and state regulations related to federally funded projects.

The County anticipates the amount requested in RTA funds to be adequate to complete the activities in this proposal. No additional funds are currently committed for this project.

12b) Applicants are encouraged to seek bids or quotes, or to estimate the amount of dedicated staff time for the services being requested to demonstrate the reasonableness of the requested funding in this application. Have you obtained a bid, quote, or estimate for the services requested in this application?*

No.

Phase I (30% design) is estimated at \$1.5 million, or about 5–6% of the currently projected \$25–30 million construction cost. This construction estimate is a rough order-of-magnitude figure based on the conceptual design recommended in the 2013 Sand Creek Master

Drainage Plan and Conceptual Design Report, which originally placed construction at \$15 million (excluding design/engineering) before escalation to current values.

13) ☐ By checking this box and submitting this application, I certify that the statements contained herein are true, complete, and accurate to the best of my knowledge. I also provide the required assurances and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)*

Signature (e-signature is sufficient)*

Date*