

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-004

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*:

Enter a brief, descriptive title of the project for which the entity/organization is seeking funding (e.g., "Widening of X Street from Avenue 1 to Avenue 7 in Y Community in Z State").

Bridge and roadway upgrades on Watkins Road at crossing of Muskrat Gulch, in Arapahoe County, Colorado

8) Project location*: *Must be listed as either street address, including city and state, or as latitude/longitude. Enter the latitude coordinates of the project location (e.g., 38.87602). Do not enter special characters. Coordinates can be obtained by right-clicking on the project location in Google Maps or other software.*

Address (#, street- no P.O. box numbers):

City:

State:

Zip Code:

OR

Latitude: 39.7232283 N

Longitude: 104.6031905 W

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

Enter a concise description of the overall project. Include project type (i.e., bridge, roadway, transit service), features to be constructed, project schedule, and estimated total project cost. Note that the estimated total project cost is the cost for the overall project, not how much funding the applicant is seeking from this program.

This is a bridge and roadway project located in the eastern portion of unincorporated Arapahoe County. Based on the Census Bureau's 2020 data, the total population of the County's unincorporated area is about 95,000. The project area is rural with a roadway network that is undeveloped, with large distances between major roadways.

Watkins Road is a two-lane rural north-south arterial. Immediately south of the intersection with 6th Avenue, Watkins Road crosses Coyote Run on a bridge, and approximately 800 feet south of that point, an existing 72-inch culvert conveys Muskrat Gulch under Watkins Road. The confluence of Muskrat Gulch and Coyote Run is just to the east of the roadway in this area between the existing bridge and culvert. Muskrat Gulch and Coyote Run are both dry gulches that are prone to rapid flash flooding during heavy rainfall. The existing bridge and culvert are severely undersized, leaving Watkins Road prone to overtopping during heavy rain events.

The intersection of Watkins Road at 6th Avenue, just north of the crossing of Coyote Run, also serves as the sole access point for a one-way-in, one-way-out community, Watkins Farm, a neighborhood of approximately 150 households. Flooding south of this intersection frequently cuts off access to and from the neighborhood, creating safety concerns and limiting mobility for residents.

In June 2023, a significant storm caused severe flooding in the area. A flood investigation study (Muskrat Gulch and Coyote Run Flood Investigation: Storm Event – June 21–22, 2023, Prepared for Mile High Flood District, December 22, 2023, Executive Summary) documented peak flows exceeding 2,500 cfs at the upper end of Muskrat Gulch. Floodwaters overtopped Watkins Road, inundating a half-mile stretch south of the crossing, with depths ranging from 0.5 to over 2 feet. Flows spilled out of the channel, traveled along Watkins Road, and reentered the drainage system.

This flooding caused significant property and infrastructure damage and resulted in multiple stalled vehicles and emergency rescues, including a fatality when a vehicle was swept off Watkins Road and carried north under the existing bridge structure. Hydrologic analysis comparing data from NOAA Atlas 14 and previous Flood Hazard Area Delineation studies estimated the 2-hour precipitation intensity as a 1-in-200-year event. Peak flow recurrence at cross-sections on Muskrat Gulch was estimated between a 1-in-10-year and 1-in-50-year event, highlighting the critical need for improved drainage and roadway resilience.

The project will assess and design solutions to mitigate flooding on Watkins Road at Muskrat Gulch, including elevating the roadway and installing larger culverts or a new bridge. The design process will include obtaining all necessary environmental clearances and a final design package.

The overall cost for pre-development activities for this project is estimated at \$730,000. Arapahoe County is seeking the full \$730,000 in RTA grant funds. This phase will advance the project from its current conceptual state toward construction readiness by delivering design, permitting, and technical documentation. It is anticipated that final design will take approximately 18 to 24 months.

9a) Estimated total project cost*:

Enter the estimated total project cost as a number (e.g., 500000). Do not include decimals, commas, or dollar sign symbols (\$). Note that this is the cost for the overall project, not how much funding the applicant is seeking from this program.

6072000

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

☐ Yes

☒ No

If yes, explain: NO

11)Appropriateness of services requested*:

Criteria: Proposed activities are appropriate for the project's current state of development and, will have a material impact on the project's overall development, considering:

- the current state of the project's development and project readiness,*
- whether the proposed activities are appropriate for the current state of the project's development, and*
- the likelihood that the activities will materially advance the project.*

Meets

Likely to advance the project

- It is reasonably likely that the proposed activities will demonstrably advance the project;*
- It is probable that the necessary information or data needed for the proposed activities will be available by the project's start; and*
- A transportation need has been identified, and it is likely the overall project will deliver a solution.*

Does Not Meet

Proposed activities are either not helpful in advancing the project or not appropriate for the project in its current state of development.

- The proposed activities are not necessary or appropriate for the project's ultimate funding and/or financing, and delivery;*
- Key activities to advance the project have not been completed and are not included in the description of proposed activities; or*
- The proposed activities description does not provide information on the overall project's need or specific challenges it will address.*

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 is seeking Rural and Tribal Assistance (RTA) program funding to complete final design (100 percent plans, specifications, and estimates) for improvements to North Watkins Road at the Muskrat Gulch and Coyote Run crossings.

The project will advance detailed hydrologic and hydraulic modeling, complete all required environmental review and permitting, and deliver full roadway and bridge design to 100 percent, including bid-ready documents and certified cost estimates. The design will also address right-of-way and utility conflicts and establish a phasing and cost plan to prepare for construction, but the requested funding through the RTA program will not be used for right of way acquisition or utility relocation, if needed.

This phase is appropriate and necessary at the project's current stage. The Mile High Flood District's Muskrat Gulch and Coyote Run Flood Investigation (2023) has documented peak flows exceeding 2,500 cubic feet per second and confirmed that the existing crossing is undersized. RTA funding will translate these findings into an engineered solution that restores reliable access for residents and emergency responders and positions the County to compete for federal and state construction funds.

Completion of final design will materially advance the overall project by delivering construction-ready documents, accurate cost estimates, and necessary approvals. Advancing Watkins Road to full design will ensure this critical flood-prone crossing remains safe for all users and provide a shovel-ready project that positions the County to secure construction funding.

11b) Requested funds from this program*:

Enter the total requested funds from this program as a number (e.g., 250000). Do not include decimals, commas, or dollar sign symbols (\$). Note that this is how much funding the applicant is seeking from this program. Minimum/maximum is \$250,000 - \$2,500,000.

730000

11c) Estimated cost of activities proposed*:

Enter the estimated cost of activities proposed as a number (e.g., 250000). Do not include decimals, commas, or dollar sign symbols (\$). Note that this is the estimated cost of the activities/advisory services described in field 11a. This field does not need to equal the requested funds from this program, in field 11b; however, it cannot be less than the funds in field 11b.

730000

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)*

Enter a concise description of the project-related development activities that have been completed. These are activities that were completed before the date this application was submitted that are necessary to complete the activities to be funded through this program. If no activities were completed, then enter "N/A."

The following flood studies have previously been conducted in the project area.

- 2023 Muskrat Gulch and Coyote Run Flood Investigation: Storm Event (June 21st and 22nd, 2023)
- 2015 Alternatives Evaluation for Watkins Road/Muskrat Gulch Drainage & Roadway Improvements
- 2014 Box Elder Creek (Downstream of Jewell Avenue) and Coyote Run FHAD

The 2015 Alternatives Evaluation Study identified the preferred alternative that will be advanced to final design. These studies will provide historical and predictive insights into flood behavior, stormwater conveyance, and infrastructure vulnerabilities. They will be used to evaluate existing and future drainage conditions, conduct hydrologic and hydraulic modeling to assess runoff patterns and system capacity, and support final design decisions on roadway

elevation and bridge or culvert design based on projected stormwater flows.

12) Viability of grant services requested

Criteria: Funding plan, including funding requested in application, and staffs' experience in procuring advisory services or efficiency in hiring staff are adequate to complete the activities proposed and to achieve the deliverable(s) necessary to advance the project. Review will assess whether the applicant has an established process to advance their project and to what extent the funding package (made up of funding requested through this Program and other funding sources, if any, including local funding commitment) is likely to result in fully funding and completing the specified activities, while also providing the deliverable(s) necessary to materially advance the project(s), considering:

- whether the applicant has obtained bids or quotes for the requested services, and the applicant's experience procuring advisory services in the past,*
- the source and amount of funding the applicant intends to commit (if any) as a contribution to the overall cost of the activities being proposed. (The addition of local funding will not influence the rating).*

Meets

It is likely the applicant has experience or an established procurement or hiring process, and that the funding package is appropriate for completing the identified activities and deliverable(s).

- The applicant has provided sufficient evidence demonstrating their procurement experience and*
- The applicant has provided reasonable cost estimates or quotes to conclude the funding requested will likely result in completed activities or deliverable(s) identified in the application. Note: The funding package is made up of the funding requested through this Program and other funding sources, if any, including local funding commitment.*

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)*

Include in this description whether additional funds are accessible to use for the proposed activities if the requested funds are not enough to complete these activities. If additional funding is available for the project, provide the amount and source of the funding.

Procurement Experience

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 federally funded projects, all requiring competitive procurement of professional services. These procurements followed established procedures to ensure compliance, quality control, and timely delivery.

Major examples include a \$23.5 million corridor improvement project supported by \$17.4 million in FHWA funds that incorporated drainage, sidewalks, turn lanes, bike lanes, and intersection upgrades along nearly two miles of arterial roadway; a \$7.3 million FHWA-funded multimodal safety project that reconfigured more than a mile of roadway with lane reductions, bike lanes, new lighting, and two roundabouts; and a \$2.5 million FHWA-funded project now in design to 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. Each of 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 consulting services for this project will follow the County's standard procurement process for engineering services, which has been designed to meet federal procurement requirements as many of the County's transportation projects have historically utilized state and federal funds. Additionally, the County routinely coordinates closely with the Colorado Department of Transportation on procurement of professional engineering services to assure compliance with applicable federal funding requirements.

Additional Funding Availability

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

Select yes if a bid or quote has been obtained. Select no if a bid or quote has not been obtained and provide a statement of how the estimated cost of the proposed activities was computed.

No.

The estimated cost **of final design services** is **\$730,000**, representing about **12%** of the projected **\$6,072,000** construction cost. Construction estimates are based on the preferred alternative identified in the **2015 Alternatives Evaluation for Watkins Road/Muskrat Gulch Drainage & Roadway Improvements** study, adjusted for inflation to 2027 dollars using the Colorado Department of Transportation Construction Price index to adjust for inflation between 2015 and 2025, and continuing for two more years at the same average annualized rate into 2027.

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*