

Grant Application: Climate Pollution Reduction Grant | April 1, 2024

Active Transportation Improvements in Southern Utah: Trail Projects to Reduce Vehicle Miles Traveled

Work Plan

Submitted to:



Submitted by:



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Abbreviations

CFDA	Catalog of Federal Domestic Assistance
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPRG	Climate Pollution Prevention Grant
DAQ	Division of Air Quality
FY	fiscal year
GHG	greenhouse gas
IRA	Inflation Reduction Act
LIDAC	Low-income and Disadvantaged Communities
NEPA	National Environmental Policy Act
NH ₃	ammonia
NO _x	oxides of nitrogen
OJT	on-the-job training
PCAP	Priority Climate Action Plan
PM _{2.5}	fine particulate matter less than 2.5 micrometers in diameter

Project	Active Transportation Improvements in Southern Utah: Trail Projects to Reduce Vehicle Miles Traveled Project
RAISE	Rebuilding American Infrastructure with Sustainability and Equity
SO ₂	sulfur dioxide
SR-7	State Route 7
SR-9	State Route 9
SR-67	State Route 67
SR-68	State Route 68
SR-177	State Route 177
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
US-89	U.S. Highway 89
USDOT	U.S. Department of Transportation
UTN	Utah Trail Network
VOCs	volatile organic compounds

Cover Page for Application

CPRG IMPLEMENTATION GRANTS COMPETITION COVER PAGE FOR APPLICATION	
Applicant Information	
Organization	Utah Department of Transportation
Primary contact	Lisa Campbell
Phone number	(435) 890-4283
Email address	lacampbell@utah.gov
Application Background	
Type of application	Individual applicant
Funding requested	\$127,736,000
Application title	Active Transportation Improvements in Southern Utah: Trail Projects to Reduce Vehicle Miles Traveled
Brief description of greenhouse gas (GHG) measures	The proposed trail projects are located in high-use areas to encourage a mode shift and fewer vehicle miles traveled, which would reduce emissions in southwestern Utah.
Sectors	Transportation
Expected Total Cumulative GHG Emission Reductions	
Estimated cumulative GHG reductions for 2025–2030 (in metric tons)	<ul style="list-style-type: none">Nitrogen oxides (NO_x): 0.5Particulate matter 2.5 (PM_{2.5}): 0.0Volatile organic compounds (VOCs): 0.7carbon dioxide equivalent (CO_{2e}): 940.9
Estimated cumulative GHG reductions from 2025–2050 (in metric tons)	<ul style="list-style-type: none">NO_x: 5.0PM_{2.5}: 0.1VOCs: 7.8CO_{2e}: 10,349.4
Locations	
Cities	St. George, Hurricane, La Verkin, Virgin, Springdale, Mt. Carmel, and Kanab
Counties	Washington and Kane Counties
State	Utah
Applicable Priority Climate Action Plan (PCAP) on Which Measures are Based	
PCAP lead organization	Utah Department of Environmental Quality, Division of Air Quality
PCAP title	Beehive Emission Reduction Plan: Priority Plan
PCAP website link	https://documents.deq.utah.gov/air-quality/laserfiche/DAQ-2024-005067.pdf
List of GHG reduction measures and PCAP page reference for each measure	Constructing two regional trail facilities alongside state routes would provide opportunities for a mode shift, which would reduce vehicles miles traveled and emissions. See page 90.

Workplan

1. Overall Project Summary and Approach

The Utah Department of Transportation (UDOT) is submitting this Climate Pollution Reduction Grant (CPRG) application to fund two transformative trails in Kane and Washington Counties of Utah. The Active Transportation Improvements in Southern Utah: Trail Projects to Reduce Vehicle Miles Traveled Project (the Project) seeks to reduce greenhouse gas (GHG) and criteria pollutant emissions through a mode shift from vehicles to bicycles or other modes of active transportation in southwest Utah. UDOT's application includes two trail projects. Both projects are listed in the [Beehive Emission Reduction Plan: Priority Plan](#) (the State's Priority Climate Action Plan) under Priority Measure #4: Mode-Shifting/Reducing Vehicle Miles Traveled (on page 90). Both trail projects are separated, paved, shared-use paths:

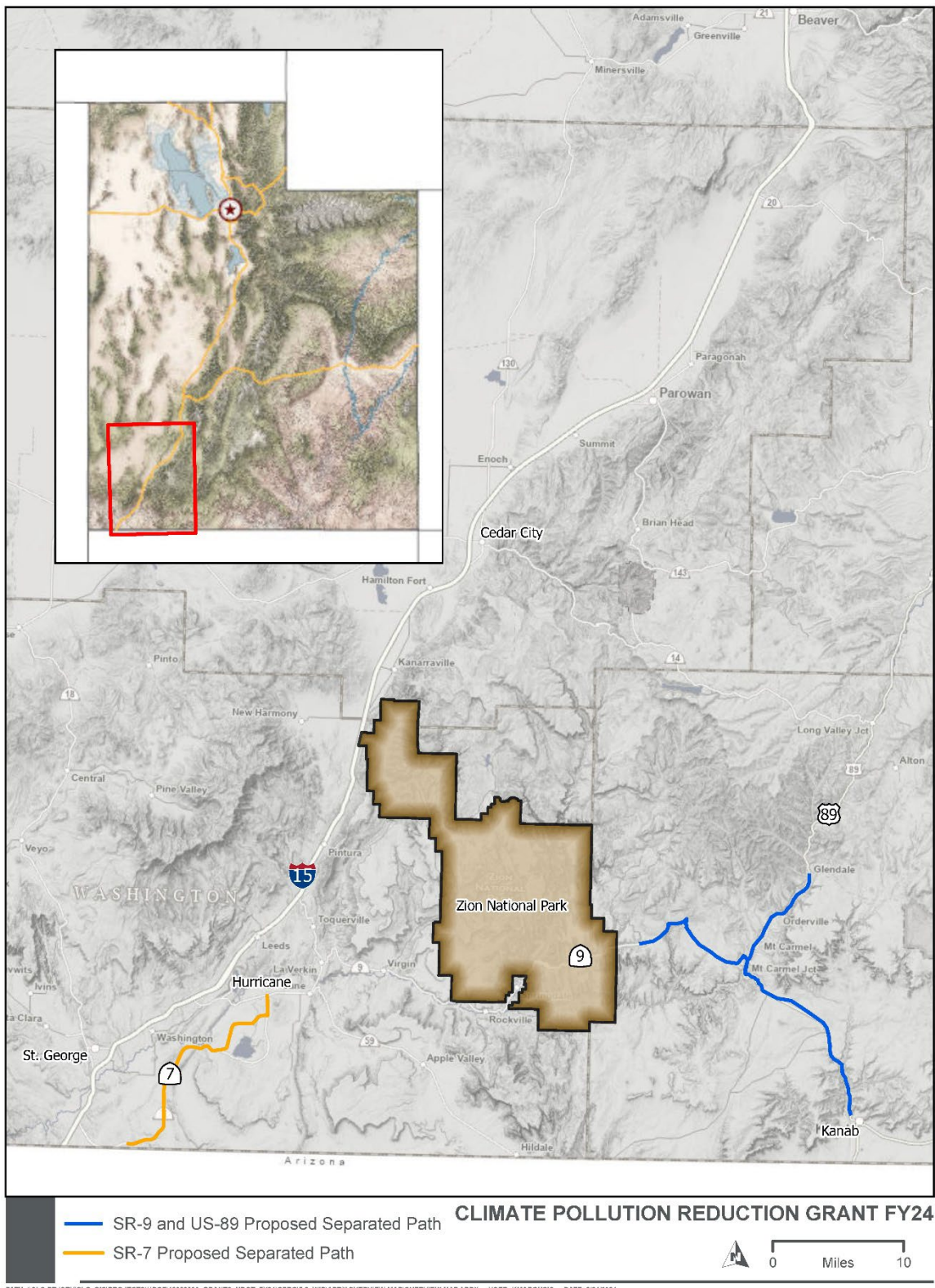
- Kane County: 35.6 miles along State Route 9 (SR-9) and U.S. Highway 89 (US-89)
- Washington County: 26.1 miles along State Route 7 (SR-7)

The SR-9 and US-89 trail is located in census tracts that are identified by the U.S. Department of Transportation as Historically Disadvantaged. Both trails support areas with transportation insecurity. Constructing these separated, paved, shared-use paths would support a mode shift to nonmotorized modes of travel and provide climate-resilient mobility for transportation-insecure communities, thereby reducing GHG emissions in the transportation sector, reducing vehicle miles traveled, and improving nonmotorized travel options. For more information, see the online story maps for the [SR-7 Active Transportation Plan](#) and the [SR-9 and US-89 Kane County Active Transportation Plan](#).

Figure 1. SR-9 in Kane County



Figure 2. Project Location and Overview Map



1.1 Description of GHG Reduction Measures

With the Project, two new regionally significant trails would substantially benefit Historically Disadvantaged Communities by providing the means to use active transportation and reducing GHG and criteria pollutant emissions. The trails would allow residents to commute and recreate using active transportation, which would reduce overall emissions. The Project’s trails are shown in Figure 2, and the emission reduction calculation is included in Table 1.

Table 1. Calculation for GHG and Criteria Pollutant Emissions Reduction

Year	NO _x	SO ₂	PM _{2.5}	VOCs	NH ₃	CO ₂ e
By 2030	0.5	—	0.0	0.7	—	940.9
By 2050	5.0	—	0.1	7.8	—	10,349.4

Source: Utah Department of Environmental Quality (UDEQ) [Beehive Emissions Reduction Plan: Priority Plan](#)
Note: NO_x = nitrogen oxides; SO₂ = sulfur dioxide; PM_{2.5} = particulate matter less than 2.5 micrometers in diameter; VOC = volatile organic compounds; NH₃ = ammonia; and CO₂e = carbon dioxide equivalent

1.2 Demonstration of Funding Need

UDOT has embarked on an ambitious statewide program to support and plan trail development and active transportation throughout Utah by creating a new Trails Division that focuses on building and maintaining paved, shared-use, and separated paths throughout the state ([source](#)). UDOT’s vision for the Utah Trail Network (UTN) includes a network of paved trails throughout the state that connect Utahns of all ages and abilities to their destinations and communities. The Trails Division has recently released their ranked list of 43 prioritized projects that were identified by the Transportation Investment Fund (TIF) Active Prioritization Model as meeting the UTN Guiding Principles, emphasizing a transportation benefit, and feasible for construction soon ([source](#)). The trails proposed in this application are included in this prioritized, ranked list, which speaks to the planning and preparation that has already been done for this project. In March 2024, the Trails Division assessed the list of ranked projects against the available funding in the UTN two-year budget and developed a list of 21 projects that are recommended for initial programming.

The trails proposed in this application are listed on the state’s ranked prioritization list but are not included in the initial programming list, which speaks to the importance of this CPRG grant funding for the construction of these trails.

The trails proposed in this application are near one of Utah’s most popular attractions, Zion National Park. Southwestern Utah has had tremendous population and economic growth, and the proposed trails would promote a mode shift, or an incentive to use active transportation, in an increasingly traffic-congested area.

UDOT is actively moving elements of trail development forward and has funded the first five segments of the SR-7 trail (segments 1 through 5). These funded segments are not part of this

application. UDOT lacks the funding to implement the two proposed trails in this CPRG application. This CPRG application is the only active proposal for federal funding for this project.

Without CPRG funding, UDOT would need to build the two trails in segments over a much longer period. Building the trails in segments would delay the benefits, including reduced vehicle-miles traveled, emissions, and congestion as well as improved quality of life and health outcomes of those who use active transportation.

1.3 Transformative Project

The proposed trails are near one of Utah's most popular attractions, Zion National Park, and in one of the fastest-growing areas of Utah. The project area is largely rural and lacks a regional network of trails necessary to encourage a mode shift from vehicles to nonmotorized, active transportation. Residents in Washington and Kane Counties have few options for travel other than a personal vehicle. This project would solve the transportation issues faced in a location with hard-to-abate emission sources. That is, most residents in these counties rely on their personal vehicles for travel, which makes reducing GHG emissions difficult. Building the proposed trails offers a way to reduce GHG emissions as well as improve quality of life and health outcomes by giving residents a place to actively commute and recreate.

The SR-7 trail connects new residential and commercial developments in Washington County with the St. George Airport and employment centers. UDOT assumes that the SR-7 trail has the greatest potential for encouraging a mode shift because it parallels a main highway that connects residents to places of work, shopping, and recreation areas.

The proposed SR-9 and US-89 trail is important because it would serve as a pilot project for the region and provide insight into how bicyclists and pedestrians travel through National Parks. The SR-9 and US-89 trail would be located east of Zion National Park, a park that limits vehicle access to enhance the safety and experience of visitors. Zion National Park has narrow roads and limited parking facilities. During the busy season, which runs the majority of the year from February to November, Zion National Park has implemented a free shuttle service to reduce congestion in the park ([source](#)). The SR-9 and US-89 trail would be a way for tourists and park employees to access the Park without having to drive. The SR-9 and US-89 trail would also provide a case study for the demand for trails in rural areas.

The Project would benefit low-income and disadvantaged communities (LIDAC) by reducing GHG and criteria pollutant emissions, providing access to transportation alternatives, reducing vehicle traffic, enhancing the safety of nonmotorized modes of travel, and improving the quality of life and health outcomes of those who use active transportation.

Additionally, FHWA recently released the *Trails as Resilient Infrastructure* report, which discusses the role that trails can play in a resilient transportation network and their role in making

communities more resilient in the face of climate change and other emergencies ([source](#)). This report states that trails should be prioritized in communities that have limited transportation options because providing redundancy in a network is a key component of climate resilience. For the rural communities considered in the proposed project, the two-lane highways that connect their communities provide the only link to services, jobs, and health care. The trail design work in this project would provide a construction-ready project for the most vulnerable communities.

2. Impact of GHG Reduction Measures

From the local to the global context, climate change poses a threat to the health and safety of all travelers. Increasingly frequent severe weather can be problematic for travelers trying to reach homes, jobs, or healthcare services. UDOT recognizes the important role that the transportation sector has in society and environmental health. For this reason, UDOT considered both adaptation and mitigation strategies for climate change and environmental justice while planning and designing this project.

The Project would benefit environmental sustainability and climate change by reducing air pollutant emissions through reducing vehicle miles traveled. According to the [Utah Division of Air Quality's Emission Source Graphic](#), automobiles (mobile sources) are responsible for about 42% of all GHG emissions. Emissions from combustion engines contribute to air pollution and can have serious health implications, especially for children, the elderly, and those with respiratory conditions, including asthma. Exposure to vehicle emissions is related to higher rates of respiratory disease, cardiovascular disease, and adverse pregnancy outcomes. Emissions also contribute to climate change and environmental hazards, such as pollution, water quality, and urban heat islands.

Utah Governor Spencer Cox has identified the [Utah Department of Environmental Quality \(UDEQ\)](#) as the lead agency to receive Inflation Reduction Act (IRA) CPRG funding to engage in GHG emission reduction planning in Utah through the [Beehive Emission Reduction Plan Initiative](#). In this capacity, UDEQ will play a key role in helping Utah obtain broader emissions reduction-related funding under the IRA, the Infrastructure Investment and Jobs Act, and other sources. UDEQ has extensive emission reduction planning experience and has worked with stakeholders and partners to help ensure such funding is leveraged to support balanced, state-driven solutions that pave the way for continued growth while maintaining a high quality of life in Utah.

UDEQ has tasked its Division of Air Quality (DAQ) with leading the [Beehive Emission Reduction Plan Initiative](#). In this capacity, DAQ has partnered with stakeholders and agencies to produce the [Beehive Reduction Plan](#), Utah's Priority Plan to support investing in measures, practices, and technologies that reduce emissions, create high-quality jobs, spur economic growth, and enhance the quality of life for all Utahns.

The sections below describe the magnitude of both short-term and long-term cumulative GHG emission reductions, the relative cost-effectiveness of those reductions, and the reasonableness and quality of the assumptions and calculations used to determine the reductions.

Reducing short-term and long-term cumulative GHG emissions would provide the following benefits for Kane and Washington Counties:

- **Air Quality:** Rising GHG emissions cause the temperature to rise, and, according to the Paris Agreement, air quality will worsen if GHG emissions continue to rise. Decreasing air quality will jeopardize clean land and water and decrease quality of life for residents, especially for those in disadvantaged and underserved communities, such as those in the project area.
- **Economic Growth:** The Project would use CPRG implementation funding to construct two regionally significant trails that would connect individuals to businesses and job opportunities, which would help grow Utah’s economy.
- **Climate Change Slowdown:** Climate change is contributing to rising sea levels, increased droughts, and extreme weather such as forest fires, hurricanes, and tornadoes. In southern Utah specifically, climate change is increasing the frequency of flash floods and wildfires. Reducing GHG emissions will help slow the effects of climate change. The State of Utah is working to reduce GHG emissions, and this project would push those initiatives further.
- **Improved Health:** Through constructing facilities (such as trails) that encourage people to use active transportation and encourage a mode shift from vehicles to nonmotorized modes of travel, Utahns would have more opportunities to exercise, which would support their health. Additionally, the amount of GHG emissions jeopardizes the air people breathe, the food people grow and eat, and the water people drink. Decreasing GHG emissions will make both the environment and people healthier.

The Project will provide safer, more convenient, more comfortable, and better-connected transportation choices that also promote healthier lifestyles, which would encourage a transportation mode shift and reduce air pollutant emissions. This project would benefit the environmental health of residents.

2.1 Magnitude of GHG Reductions from 2025 to 2030

For this project, emission reductions from 2025 through 2030 are estimated on a cumulative basis and as metric tons (MT) of carbon dioxide equivalent (CO₂)-equivalent emission reduction. Table 2 shows the magnitude of cumulative GHG emission reductions from 2025 through 2030 and the durability of the reductions that would be achieved through implementing the Project. If UDOT is awarded CPRG funding, the SR-7 trail would be constructed in 2027, and the SR-9 and US-89 trail would be constructed in 2028. To be conservative, the emission reductions shown in Table 2 is the project benefit assumed for 2029 and 2030 only.

Table 2. Magnitude of GHG Reductions from 2025 through 2030

Priority Measure/Project	Cumulative GHG Emission Reductions (MT CO ₂ e) 2025–2030	Potential Implementing Agencies	Potential Partners	Geographic Scope
Measure #4: Mode-Shifting/Reducing Vehicle Miles Traveled				
Project #2—Trail Development for Active Transportation	940.9	UDOT	See Appendix A for letters of support	Washington and Kane Counties

2.2 Magnitude of GHG Reduction Measures from 2025 to 2050

Table 3 shows the magnitude of cumulative GHG emission reductions and the durability of the deductions that would be achieved through implementing each GHG measure from 2025 through 2050 on a cumulative basis. In describing the durability of the GHG emissions reductions, Table 3 displays the extent to which the measures would permanently reduce cumulative GHG emissions. As with Table 2, above, UDOT assumes that the SR-7 trail would be constructed in 2027 and the SR-9 and US-89 trail would be constructed in 2028. Both trails would open for use in 2029.

Table 3. Magnitude of GHG Reductions from 2025 through 2050

Priority Measure/Project	Cumulative GHG Emission Reductions (MT CO ₂ e) 2025–2050	Potential Implementing Agencies	Potential Partners	Geographic Scope
Measure #4: Mode-Shifting/Reducing Vehicle Miles Traveled				
Project #2—Trail Development for Active Transportation	10,349.4	UDOT	See Appendix A for letters of support	Washington and Kane Counties

2.3 Cost Effectiveness of GHG Reductions

Table 4 shows the cost effectiveness of the Project’s GHG emission reduction.

Table 4. Calculation for GHG and Criteria Pollutant Emissions Reduction

Year	GHG Emission Reductions in metric tons (CO ₂ e)	Funding Request	Formula	Cost Effectiveness Calculation
By 2030	940.9	\$127,736,000	Funding Request / Quantified GHG Reductions	\$136,759.38
By 2050	10,349.4	\$127,736,000		\$12,342.36

Source: UDEQ [Beehive Emissions Reduction Plan: Priority Plan](#)

2.4 Documentation of GHG Reduction Assumptions

See the attached *Technical Appendix—Emissions Reduction Calculation*, [GHGcalcs.xlsx](#), [Appendix C, UDOT Mode Shift Tool Documentation](#), and [Appendix D, Emissions Reduction](#)

Calculation, which document the assumptions and the reasonableness of the GHG emission reduction estimate presented in this application and Utah’s Beehive Emissions Reduction Plan: Priority Plan.

3. Environmental Results—Outputs, Outcomes, and Performance Measures

UDOT expects that the Project would provide residents and tourists in southwestern Utah with an option to reduce their reliance on personal vehicles, increase active transportation use, and ultimately reduce overall emissions. The sections below describe the expected project outcomes.

3.1 Expected Outputs and Outcomes

UDOT expects that the Project would reduce GHG emissions, specifically CO₂e, by 940.9 metric tons in the first 2 years of operations after construction. Additional emission reductions are described in Table 1, above. The Project and its cumulative GHG emission reductions would be in Kane and Washington Counties and would benefit disadvantaged and underserved communities.

3.2 Performance Measures and Plan

UDOT proposes the following potential performance measures as a means to track the success of the Project and its emissions reductions. Each measure in Table 5 describes an element that is necessary to calculate the success, use, and overall benefit of the Project. If UDOT is selected for a CPRG award, these potential performance measures would be finalized in discussions with the U.S. Environmental Protection Agency.

Table 5. Suggested Performance Measures for the Project

Metric	Description and Constraints	Measurement	Reporting
Timely construction completion	UDOT proposes that the trails would start accruing benefits in 2029. The construction completion milestone is contingent on the availability of CPRG funding and a timely National Environmental Policy Act (NEPA) process.	Date of completion and trail opening	Once
Awareness of trails	UDOT and its partners would advertise the trails through educational campaigns to encourage greater awareness and use of the trail system.	Number of outreach activities completed	Annually for 5 years
Trail use	After construction, UDOT would install trail counters to document quantitative use of the trail system.	Annual use	Annually for 5 years
Trail trip and user characteristics	UDOT proposes to survey bicyclists and pedestrians that use the trail system to determine the trip characteristics such as trip type, length, and frequency. UDOT would also request optional demographic data.	A survey and summary of data several months after the Project is complete	Once
Emission reduction	Through survey data and trail count data, UDOT would quantitatively calculate the GHG emission reduction of the Project for 5 years after construction.	Annual reduction	Annually for 5 years

3.3 Authorities, Implementation Timelines, and Milestones

UDEQ is the state regulatory agency charged with implementing and enforcing state and federal environmental rules and regulations. UDEQ’s mission is to safeguard and improve Utah’s air, land, and water. UDEQ DAQ is responsible for Utah’s PCAP.

UDOT is the applicant and sole point of contact for this project and grant application. UDOT has the capacity and expertise to deliver this project as well as a proven track record for using Federal-aid Highway Program funds to deliver projects on time and within budget. In 2023, UDOT delivered 131 projects totaling approximately \$1.1 billion ([source](#)).

Table 6 and Table 7 show the schedule for the two trail projects. If UDOT is awarded CPRG funding, the SR-7 trail would be completed in 2027, and the SR-9 and US-89 trail would be completed in 2028. The SR-9 and US-89 trail would take 1 year longer to construct due to a longer National Environmental Policy Act (NEPA) process. UDOT assumes a 5-year period of performance will start in 2029 and conclude in 2034.

Table 6. Schedule for SR-7 Trail

Phase	2024				2025				2026				2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CPRG application (4/24)		★														
CPRG notice of selection (6/24)			★													
CPRG anticipated award (10/24)				★												
Environmental document (categorical exclusion)																
Final design/engineering																
Advertise and selection																
Construction (1 to 2 years)																
Opening																★

★ = major project milestone

Table 7. Schedule for SR-9 and US-89 Trail

Phase	2024				2025				2026				2027				2028			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CPRG application (4/24)		★																		
CPRG notice of selection (6/24)			★																	
CPRG anticipated award (10/24)				★																
Environmental document (environmental assessment)																				
Final design/engineering																				
Advertise and selection																				
Construction (1 to 2 years)																				
Opening																				★

★ = major project milestone

4. Low-income and Disadvantaged Communities

Transportation decisions can strongly affect communities’ access to jobs, healthy food, green space, recreation, art, housing, and healthcare facilities, yet these effects are not always reflected in fiscal terms and not always in terms of quality of life. The Project will most benefit residents who live closest to the individual component projects. The Project will have environmental justice benefits by supporting disadvantaged residents by providing improved access and connectivity to jobs and recreation areas and by removing the need for a private vehicle to access areas of employment. The demographics in the project area are diverse and include people with above- and below-average incomes and varying degrees of transportation access. People experience transportation insecurity when they cannot get to where they need to go to meet the needs of their daily lives regularly, reliably, and safely (source). Households without access to a vehicle and households with at least one person with a disability are vulnerable to transportation insecurity. This insecurity is exacerbated in areas that do not have infrastructure for nonmotorized trips or limited transit options. This project area is rural, and people must travel longer distances to access employment, health care, recreation, childcare, and education. People in these communities tend to spend a disproportionately high percentage of their income on transportation, which leaves less money for housing, food, and health care. These communities also tend to have poorer health metrics, such as higher rates of obesity, diabetes, and heart disease.

Constructing the proposed trails would reduce GHG measures, deliver benefits, and avoid disadvantages for LIDACs in Kane and Washington Counties. Table 8 and Table 9 summarize the community characteristics by census tract for the two trail projects.

Table 8. 2020 Census Tract Summary for the SR-7 Trail

Description	Census Tract		
	49053271702	49053270803	49053270905
<i>Grant Project Location Verification</i>			
Rural area	✓	✓	✓
<i>Climate and Economic Justice Screening Tool</i>			
Historically Disadvantaged Community	—	—	—
Low-income thresholds met	—	—	—
<i>U.S. Department of Transportation (USDOT) Equitable Transportation Community (ETC) Explorer</i>			
Climate and disaster risk burden	X	—	—
Transportation insecurity	✓	—	✓
Annualized disaster losses	✓	✓	✓

Sources: [Grant Project Location Verification Map](#), [Opportunity Zones Map](#), [USDOT ETC Explorer](#) (national and state results data), and [Climate and Economic Justice Screening Tool](#)

X = Census tract meets the thresholds under the state results data.

Table 9. 2020 Census Tract Summary for the SR-9 and US-89 Trail

Description	Census Tract	
	49025130100	49025130200
<i>Grant Project Location Verification</i>		
Rural area	✓	✓
<i>Climate and Economic Justice Screening Tool</i>		
Historically Disadvantaged Community	✓	✓
Low-income thresholds met	—	✓
<i>USDOT ETC Explorer</i>		
Social vulnerability indicator	X	X
Transportation insecurity	✓	X
Annualized disaster losses	✓	✓

Sources: [Grant Project Location Verification Map](#), [Opportunity Zones Map](#), [USDOT ETC Explorer](#) (national and state results data), and [Climate and Economic Justice Screening Tool](#)

X = Census tracts meet thresholds under the state results data.

4.1 Community Benefits

UDOT recognizes the important role that the transportation sector plays in the overall quality of life, health, and wellbeing of our communities, and we know that infrastructure either helps or hinders residents' quality of life in many ways. This understanding was instrumental in developing the Project. Furthermore, when residents participate in active transportation as a social (versus isolated) activity, they experience additional benefits to their overall wellbeing, such as better physical and mental health. The benefits of investing in bicyclist and pedestrian infrastructure cannot be denied. [The U.S. Department of Transportation's \(USDOT\) Expand and Improve Bicycle and Pedestrian Infrastructure website](#) covers an array of community benefits. As communities seek to attract residents, build their tax bases, improve their economies despite limited budgets, ensure transportation equity, promote public health, and address climate change, adding to and improving active transportation options is paramount.

The trail projects in this CPRG application would enhance the quality of life for Historically Disadvantaged and underserved communities by improving safety and comfort as well as accessibility to affordable transportation choices, thereby providing convenient connectivity and increasing livability in the towns intersected by these trail projects. The Project would provide important active transportation connectivity between the goods, services, and employment centers in Kane and Washington Counties.

Overall, the Project supports a growing trend toward active transportation. The physical health benefits of active transportation have been well-documented by hundreds of studies. An increasing number of studies have confirmed that these benefits are specifically linked to walking and biking. For example, it's been reported by [Active People, Healthy Nation](#) that people who bike or walk at an amount equal to the national physical activity guidelines of 150 minutes per week reduce their risk of death from all causes by about 10%. With regard to the risk of heart disease, as documented in the [2008 Physical Activity Guidelines for Americans](#), the report found that risk is reduced by 11% to 16% for people who walk 3 hours per week and/or commute using active transportation modes compared to those who don't.

A 2014 study published in the American Journal of Public Health found a significant correlation between how close people live to pedestrian and bicyclist infrastructure and the amount of weekly exercise they get ([source](#)). In the cited study, researchers found that, after new trail infrastructure was built, residents who lived within 1 mile of the trail got 45 more minutes of exercise per week. Residents who lived farther from the new trails got less additional exercise, but the study concluded that exercise benefits extended up to 2.5 miles. Separated, paved trails

Community Support

... I want to reiterate my unwavering support for these critical projects, and I am confident that they will bring about positive change. I ask for your favorable consideration.

—Kelly B. Wilson
LaVerkin City Mayor

provide a safe space for people of all ages and abilities to access the physical and mental health benefits of exercise.

4.2 Community Engagement

The Project depends on intense collaboration with local and regional governments and citizens.

4.2.1 Community Outreach for the Project

The Project has broad support from residents, Cities, Towns, Counties, and agencies in the region. As part of the community outreach for this grant application, approximately 38 letters of support were procured from many community organizations, government entities, and residents. The letters of support are compiled in [Appendix A](#). UDOT has and will continue to engage meaningfully with these communities.





And Residents

4.2.2 Community Outreach for the PCAP

DAQ conducted extensive stakeholder and intergovernmental coordination and outreach while developing the Priority Plan. DAQ used robust and meaningful engagement strategies to ensure comprehensive stakeholder representation and overcome obstacles to engagement including linguistic, cultural, institutional, geographic, and other barriers.

Outreach Plan and Summary of LIDAC Input Received

Stakeholder and LIDAC-focused engagement was central to developing Utah's Priority Plan. DAQ had a robust public engagement and outreach strategy, as well as two stakeholder working groups (a Coordinating Entities Working Group and a LIDAC Working Group) to assist in identifying and prioritizing GHG emission reduction measures for the Priority Plan. Broad public engagement and outreach was conducted through hybrid (in-person and virtual) meetings that varied in content depending on the audience. Efforts were made to include a diverse array of stakeholder officials, local and state government agencies, academics, industry professionals, energy providers, Federally Recognized Tribes, LIDACs, and other constituencies and/or

community members who sought to participate. Public meetings and related materials were publicly noticed as accessible, and deliverables were made available for public review.

Strategies to Overcome Linguistic, Cultural, Institutional, Geographic, and Other Barriers to Participation

One of Utah's top goals is to make websites and applications across the many different agencies (including DAQ) accessible for all people including those with varying impairments. By prioritizing accessibility, Utah demonstrates a commitment to those served by fostering a sense of inclusivity and ultimately enhancing the user experience for everyone.

5. Job Quality

Utah is committed to providing good-paying jobs through federal programs, such as prevailing-wage programs, as well as through numerous State-run programs. Utah's state-run programs focus on providing access to long-term careers and leveraging partnerships to engage and recruit nontraditional populations.

Through its Department of Workforce Services, Utah has developed incentive programs for employers who provide customized job training to employees in the program. The [On-the-Job-Training program](#) (OJT) provides reimbursement to employers by covering up to 50% of the employees' training wages for up to 6 months. The program is limited to eligible new hires, including dislocated workers (previously laid off), economically disadvantaged workers, and workers entering the workforce for the first time. Construction contractors bidding on the Project would be eligible for the program if they meet the program requirements and intend to continue to employ the new hires beyond the OJT contract period.

The [Apprenticeship Utah](#) program is a high-quality apprenticeship program that includes business involvement, structured on-the-job training, instruction, established rewards for gaining skills, and nationally recognized credentials. The [Apprenticeship Utah Network](#) "strives to diversify the apprenticeship candidate pool in Utah to include at-risk youth, women, people with disabilities, veterans, and people of color."

UDOT would ensure that CPRG implementation grant funds and the implementation of GHG reduction measures generate high-quality jobs with a diverse, highly skilled workforce and support "high road" labor practices. Creating active transportation facilities and trails throughout the state, specifically in Kane and Washington Counties, would give people in disadvantaged and underserved communities new opportunities, connect people to new communities, and help people get jobs. Constructing the Project would also create high-paying and high-quality jobs.

According to the *Tribal Development of Trails and Other Dedicated Pedestrian and Bicycle Infrastructure* white paper, published by FHWA in 2023, “construction and maintenance of trails and dedicated bicycle and pedestrian infrastructure not only provides opportunities for people to get to work or school, but they also create jobs as well. According to the Political Economy Research Institute, pedestrian-only projects create an average of about 10 jobs per \$1 million spent, and multi-use trails create 9.6 jobs per \$1 million spent” ([source](#)).

6. Programmatic Capability and Past Performance

6.1 Past Performance

UDOT is the applicant and sole point of contact for this grant application and project. UDOT has the capacity and expertise to deliver this project as well as a proven track record for using Federal-aid Highway Program funds to deliver projects on time and within budget. In 2023, UDOT delivered 131 projects totaling approximately \$1.1 billion (source). Examples of past awards are included in Table 10. Lisa Campbell, UDOT’s Federal Discretionary Grants Manager, is the contact person for each of the projects below as well as this CRPG grant application.

Table 10. References of Past Grant Awards

Agreement	Description	Catalog of Federal Domestic Assistance (CFDA) Number
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Fiscal Year (FY) 2023 Grant Agreement	First/Last Mile Connections: Improving Communities' Quality of Life through Access to Opportunities and Healthy Transportation Connections. UDOT submitted a successful FY 2023 RAISE Discretionary Grant application in collaboration with the Utah Transit Authority, Wasatch Front Regional Council, and Mountainland Association of Governments. The First/Last Mile Connections: Improving Communities' Quality of Life through Access to Opportunities and Healthy Transportation Connections Project will make 15 critical active transportation improvements to serve 10 light rail stations and 13 bus stops.	CFDA Number: 20.933—National Infrastructure Investments
Advanced Transportation Technology and Innovation FY 2023 Grant Agreement	Connected Communities Program. UDOT will use the funding for its Connected Communities program to expand connected vehicle technology and capabilities statewide. The project area includes disadvantaged communities in both rural and urban parts of Utah.	CFDA Number: 20.200—Highway Research & Development

(Continued on next page)

Table 10. References of Past Grant Awards

Agreement	Description	Catalog of Federal Domestic Assistance (CFDA) Number
Wildlife Crossing Pilot Program FY 2023 Grant Agreement	US-89 Safety Corridor Project. As a part of its efforts to improve safety on Utah roads, UDOT will use federal funds to construct three wildlife underpasses and extend existing wildlife fencing by 7.2 miles along US-89 near Kanab. In addition to the seven existing underpasses, this project will reduce the number of wildlife-vehicle collisions and reconnect mule deer critical ranges.	CFDA Number: 20.205—Highway Planning and Construction
Formula Grant FY23 Grant Agreement	Rehabilitation High-volume Project. The grant was awarded to fund the State Route 68 (SR-68); 9000 South to 6600 South Rehabilitation High-volume Project. This project will rehabilitate SR-68 from milepost 46.69 to 50.01 in Utah. This formula grant will support rehabilitation activities along a 3.32-mile section of SR-68 to upgrade and preserve this high-volume road.	CFDA Number: 20.205 Highway Planning and Construction

UDOT also has extensive experience studying, designing, and delivering separated, paved, shared-use paths that parallel state and federal highway facilities, such as the Legacy Parkway Trail (SR-67), the Mountain View Corridor Trail (SR-85), the West Davis Corridor Trail (SR-177), and the Candy Mountain Express Bike Trail (US-89).

6.2 Reporting Requirements

UDOT has always submitted acceptable interim and final reports under agreements, such as federal grant agreements, on time and with the necessary and appropriate information. UDOT has also adequately and promptly reported on our progress toward achieving the expected outputs and outcomes under federal grant agreements. UDOT fully commits to continuing reporting efforts for all future federal grant agreements, as identified by the granting agency.

6.3 Staff Expertise

UDOT is recognized as a national leader in the transportation industry, not only because of the condition of our roads and our innovative methods for operations, construction, and project delivery but also because we work as a collaborative team where everyone is given the chance to thrive ([source](#)). UDOT has the staff and expertise to manage and successfully deliver the Project if awarded CPRG funding. UDOT’s Trails Division is dedicated solely to t delivering paved, shared-use trails throughout the state, which speaks to the importance of this project and the dedication of the specialized staff ([source](#)). UDOT’s mission is to enhance the quality of life through transportation. This project is an example of furthering that mission.

This project would be managed by UDOT Region 4, which covers the southern half of Utah. UDOT Region 4 has successfully partnered with local governments, agencies, and advocacy

groups to deliver numerous projects. This project has the support of the community. See [Appendix A](#) for letters of support.

7. Budget

7.1 Budget Detail

The total cost of the Active Transportation Improvements in Southern Utah: Trail Projects to Reduce Vehicle Miles Traveled Project is \$127.7 million (Table 11). The Project would include constructing over 60 miles of a regional trail system in variable desert terrain and across many jurisdictions. The detailed cost estimates by trail and by segment are included in the attached Budget Narrative and [Appendix B, Project Cost Estimate](#). The trails have broad support at all levels, including support from residents, mayors, county councils, nonprofits, and state agencies. See [Appendix A](#) for letters of support.

Table 11. Total Project Cost

Trail	Year of Cost	Cost
SR-7 trail	2027	\$24,940,000
SR-9 and US-89 trail	2028	\$102,796,000
Total Project Cost		\$127,736,000

Source: [Appendix B, Project Cost Estimate](#)

7.2 Expenditure of Awarded Funds

UDOT has the expertise and support of the community and is ready to move this project forward if CPRG funding is awarded. UDOT would construct the Project based on the schedules presented in Table 6 and Table 7.

7.3 Reasonableness of Costs

The project costs include escalation to account for inflation at the time of construction, which is the majority of project costs. The unit costs of materials were updated in March 2024. Detailed costs by trail segment are provided in [Appendix B](#).