

## WORKPLAN NARRATIVE

### 1. OVERALL PROJECT SUMMARY AND APPROACH

Metroplan (MPO for Central Arkansas), the Northwest Arkansas Regional Planning Commission (NWARPC, MPO for Northwest Arkansas), and the City of Fort Smith (COFS) – referred to collectively as “the coalition” – propose to undertake the greenhouse gas (GHG) reduction efforts described in this workplan when awarded funding under the CPRG implementation grants general competition. The roles and responsibilities of each coalition member are described in the table below. Metroplan will submit a Memorandum of Agreement (MOA) signed by all coalition members by July 1, 2024.

The coalition has partnered with over 50 communities, agencies, and organizations across three regions to develop projects and programs that are both effective and aligned with public and stakeholder priorities. The partnerships built through this process, along with the support and enthusiasm for this work, will undoubtedly catalyze future Energy and Environment Innovations in the Natural State. The Letters of Commitment included in this application detail the robust support each partner has dedicated to helping the coalition achieve its CPRG objectives.

Entity	Roles and Responsibilities
<b>Metroplan (Central AR)</b>  <i>Measures to be implemented in Central Arkansas region:</i> <ul style="list-style-type: none"> <li>• Green Networks</li> <li>• Transportation Efficiency</li> <li>• Building Efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Issuing subawards to coalition partners and eligible local government and nonprofit agencies in accordance with <a href="#">EPA's Subaward Policy</a></li> <li>• Overseeing subrecipients, and/or contractors and vendors</li> <li>• Tracking and reporting on project progress on expenditures and purchases</li> <li>• Tracking, measuring, and reporting accomplishments on proposed timelines and milestones</li> <li>• Submitting semi-annual progress reports on grant implementation and planned activities to EPA</li> <li>• Submitting detailed final report to EPA within 120 calendar days of the completion of the period of performance</li> <li>• Community and stakeholder outreach and education within the Central AR</li> <li>• Hiring and managing regional Energy Ambassador and Grant Administrator</li> </ul>
<b>Northwest Arkansas Regional Planning Commission (NWARPC)</b>  <i>Measures to be implemented in Northwest Arkansas region:</i> <ul style="list-style-type: none"> <li>• Green Networks</li> </ul>	<ul style="list-style-type: none"> <li>• Assisting Northwest Arkansas subrecipients to: <ul style="list-style-type: none"> <li>○ comply with subrecipient requirements under <a href="#">EPA's Subaward Policy</a></li> <li>○ develop subaward agreements with Metroplan</li> <li>○ track and report to Metroplan on project progress and expenditures</li> </ul> </li> <li>• Tracking, measuring, and reporting to Metroplan on accomplishments and proposed timelines and milestones for projects and programs in Northwest Arkansas</li> <li>• Continuing community and stakeholder outreach and education in Northwest Arkansas</li> </ul>
<b>City of Fort Smith (COFS)</b>  <i>Measures to be implemented in Fort Smith region:</i> <ul style="list-style-type: none"> <li>• Green Networks</li> </ul>	<ul style="list-style-type: none"> <li>• Complying with subrecipient requirements under <a href="#">EPA's Subaward Policy</a></li> <li>• Determining/managing subawards in the Fort Smith AR-OK MSA</li> <li>• Overseeing local subrecipients and/or contractors and vendors</li> <li>• Hiring and managing regional Energy Ambassador</li> <li>• Tracking and reporting to Metroplan on project progress on expenditures and purchases within the Fort Smith AR-OK MSA</li> </ul>

<ul style="list-style-type: none"><li>• <i>Transportation Efficiency</i></li><li>• <i>Building Efficiency</i></li></ul>	<ul style="list-style-type: none"><li>• Tracking, measuring, and reporting to Metroplan on accomplishments and proposed timelines and milestones within the Fort Smith AR-OK MSA</li><li>• Community and stakeholder outreach and education within the Fort Smith AR-OK MSA</li></ul>
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### 1.a. Description of GHG Reduction Measures

The coalition proposes to implement a suite of shovel-ready, impactful, and transformative projects in three categories: **Green Networks**, **Transportation Efficiency**, and **Building Efficiency**. The projects outlined here were developed through an extensive intergovernmental and community outreach process to identify needs and strategies to overcome barriers to clean energy and environmental innovations. All measures target climate pollution reduction benefits to low-income and disadvantaged communities.

#### 1.a.i. Green Networks Description

The coalition proposes to implement projects that sequester carbon and reduce transportation emissions by protecting and restoring natural infrastructure cores and corridors and increasing access to active transportation and transit. The measure focuses on connecting low-income and disadvantaged communities (LIDACs) to jobs, education, and essential services through safe and convenient access to bicycle-pedestrian facilities, e-bike rebates, and the natural environment. The coalition proposes to provide funding, in collaboration with numerous conservation partners, for land acquisition, protection, and restoration, including wetlands, riparian zones, forested lands, and prairies, as well as strategic segments of trail construction and an e-bike incentive program. These projects will reduce GHGs by reducing vehicle miles traveled and sequestering carbon in restored natural lands to ensure that LIDAC residents reap physical, mental, and financial benefits.

In Central Arkansas, Metroplan will solicit proposals from local governments and nonprofits for land acquisition, preservation, and restoration around new bicycle/pedestrian trail segments guided by the Central Arkansas Regional Greenway (CARG) Plan and targeting LIDAC accessibility.

In Northwest Arkansas (NWA), the coalition proposes to issue subawards to local governments and nonprofits to create resilient Green Networks guided by the NWA Open Spaces Plan and the NWA Regional Bicycle and Pedestrian Master Plan.<sup>1</sup> Eighteen project sites in NWA have been identified, assessed, and developed through intergovernmental coordination and are primed for implementation (see GHG Calculation and Budget Spreadsheet for project details).

The City of Fort Smith (COFS) is acting on sustainable urban development by revitalizing alleyways, guided by the Fort Smith Active Transportation Master Plan and capitalizing on the city's small block urban street grid. This effort promotes safe, eco-friendly transportation by connecting neighborhoods and schools and leverages nearby transit stops by converting alleys into multi-use greenways. The resulting community connectivity will reduce traffic congestion and greenhouse gas emissions from idling vehicles. With its

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<sup>1</sup> The Central Arkansas Regional Greenways plan was prepared by Crafton, Tull, and Toole Design group for Metroplan in 2023. <https://www.centralarkgreenways.com/>. The Northwest Arkansas Open Space Plan and the NWA Regional Bicycle and Pedestrian Master Plan were prepared by Alta Planning + Design for NWARPC in 2016 and 2014, respectively. The NWA Regional Bicycle and Pedestrian Master Plan is undergoing an update. <https://www.nwarpc.org/bicycle-and-pedestrian/northwest-arkansas-bicyclepedestrian-master-plan/> and <https://www.nwarpc.org/environment/nwa-open-space-plan/>

focus on safe routes to schools and access to essential services, the city is harnessing the potential of underutilized alleyways to enable affordable transportation choices.

In all three regions, the coalition proposes to fund an electric bicycle (e-bike) incentive program to complement greenway development. This program will ensure affordable e-bikes so that low-income residents may benefit from active transportation.

#### *1.a.ii. Transportation Efficiency Description*

The coalition proposes to incentivize conversion of conventional streetlights to more efficient LED technologies, transition of public fleet vehicles to all-electric equivalents, and deployment of public and fleet electric vehicle charging. This measure focuses on reducing fossil-fuel energy use from the transportation system and ensuring equitable access to incentivized infrastructure. At least 50% of the investment will benefit LIDAC communities.

- **Fleet Vehicle Replacement with EVs:** In Central Arkansas, rebates to cities, counties, special districts, and nonprofits will cover the incremental cost, after tax credits, of replacing light-duty internal combustion engine fleet vehicles with all-electric equivalents.
- **EV Charging Infrastructure:**
  - In Central Arkansas, rebates will cover 70% of the costs for purchasing and installing widely available Level 2 electric vehicle chargers to overcome range anxiety. The remaining 30% of the cost is reimbursable with a federal tax credit for low-income and rural census tracts.
  - The City of Fort Smith will establish electric vehicle charging stations at seven strategic locations within the city, prioritizing placement in LIDACs.
- **Streetlight Replacement with LED:** In Central Arkansas, pass-through grants will enable cities and counties to work with their utility provider to replace conventional streetlights with LED bulbs.

#### *1.a.iii. Building Efficiency Description*

The coalition proposes to implement building efficiency measures to reduce GHG emissions from public and commercial buildings in the Little Rock-North Little Rock-Conway and Fort Smith MSAs. Building efficiency will be achieved in four ways:

- **Pass-through grants to Energy Savings Performance Contracting (ESPC) participants in Central AR**  
Local public entities (municipalities, counties, and school districts) in Central Arkansas that enter into an ESPC may apply for an up to \$500,000 grant to expedite and/or enhance energy savings and efficiency upgrades.
- **Revolving Loan Fund for Commercial Property Assessed Clean Energy projects in Central AR**  
\$3,500,000 in CPRG funding will be used to establish, capitalize, market, and administer a regional Commercial Property Assessed Clean Energy Revolving Loan Fund (CPACE RLF) to finance loans in the \$75,000 to \$400,000 range where market-based funding is difficult to find. Loans will be used to finance highly efficient energy systems in commercial building construction and rehabilitation with a focus on LIDAC areas. The existing Pulaski County CPACE program, established by the Pulaski County Energy Improvement District under Act 1074 of 2013, will be extended to the entire 6-county region and administered by the Arkansas Advanced Energy Foundation, which will also lead the Workforce Development Programming for the coalition. The strength of the program is that it allows commercial property owners to finance approved building efficiency improvements by attaching the loan repayment to the property tax bill. Each project is amortized over up to 20 years, providing the owner with a cash-flow positive financing solution, as well as energy efficiencies and GHG reductions. The Revolving Loan Fund aspect will extend financing beyond the CPRG grant period of performance.
- **Subawards for public renewable energy projects in Central AR and Fort Smith regions**

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- Construction of an 850 kW DC solar array for the Fort Smith Housing Authority's Nelson Hall Homes, a 288-unit development that provides suitable and safe rental housing for eligible low-income elderly and/or disabled persons.
- Construction of approx. 700 geothermal wells for a planned \$25M geothermal Central Utility Plant (CUP) facility at the Bill and Hillary Clinton National Airport (LIT). A closed loop of piping will carry chilled water and heated return water throughout the well field to dissipate heat into the ground. The completed geothermal facility will eliminate the use of natural gas for HVAC and reduce the electricity needed by eliminating chillers and cooling towers, cutting the terminal's GHG emissions by 90%.
- **Promotion of existing and CPRG-funded efficiency measures in Central Arkansas and Fort Smith through regional Energy Ambassadors.** Energy Ambassadors housed at Metroplan and the COFS will connect the dots between needs and available resources, and reduce barriers to utilization of rebates, pass-through grants, and loans.

### 1.a.iv. Tasks and Milestones

The period of performance for all coalition measures is October 2024–October 2029. The table below provides detailed tasks and anticipated milestones for implementation of each measure and project.

Task Description	Milestone Dates
<b>GENERAL TO ALL MEASURES</b>	
Metroplan hires in-house grant administrator <i>Advertise position upon selection announcement and complete hiring upon receipt of award</i>	10/2024
Metroplan and City of Fort Smith hire in-house Energy Ambassadors	12/2024
Sign MOAs with subrecipients that are implementing projects	12/2024
Community Engagement <i>Obtain public feedback in all 3 regions on program design, locations, and community precautions needed throughout project implementation</i>	10/2024 – 10/2029
<b>PASS-THROUGH GRANTS AND REBATES (CENTRAL AR) – GENERAL TO ALL MEASURES</b>	
Develop pass-through grant and rebate program guides with public input <i>Begin public input upon funding announcement so rolling applications can be accepted by 12/2024</i>	10/2024 – 12/2024
Announce funding opportunity and promote program	12/2024
Review applications, select projects, and enter into agreements with project sponsors <i>Rolling application process will continue until all available funding is allocated. Community/stakeholder education, application solicitation, review, project agreements, and funding disbursement will be on-going.</i>	01/2025 – 10/2028
Provide technical assistance to project sponsors for duration of the program	08/2025 – 10/2029
Year 1: 48% implementation across all programs	10/2025
Year 2: 82% implementation across all programs	10/2026
Year 3: 96% implementation across all programs	10/2027
Year 4: 100% implementation across all programs	10/2028
Years 2-5: Performance tracking and quantification	11/2025 – 10/2029

<b>GREEN NETWORKS MEASURE</b>	
<b>Urban Tree Planting (Central AR)</b>	
Finalize priority planting sites <i>Review prior to implementation; selection based on Urban Heat Island Findings and Canopy Assessment Reports</i>	12/2024 – 03/2025
Review applications, select projects, and enter into agreements with project partners <i>Rolling applications will continue until all available funding is disbursed. Engagement, application review, project agreements, and funding disbursement will be on-going</i>	04/2025 – 12/2025
Year 2: 75% completion	12/2026
Year 3: 100% completion	12/2027
<b>Land Restoration (Northwest AR &amp; Central AR*)</b>	
Finalize restoration planning <i>Review prior to implementation needed</i>	12/2024 – 06/2025
*Review applications, select projects, and enter into agreements with project partners <i>Rolling applications will continue until all available funding is disbursed. Engagement, application review, project agreements, and funding disbursement will be on-going</i>	04/2025 – 12/2025
Partners follow procurement procedures for contracting and/or purchase materials <i>Based on each partners' project schedule &amp; concurrent with program administrator competitive procurement process</i>	12/2025 – 06/2027
Partners implement land restoration at sites <i>Based on partners' projects timeline</i>	12/2025 – 12/2027
Follow-up site inspections and vegetation establishment <i>Three/project: 1) initial work completed and 2) two annual site inspections</i>	12/2025 – 10/2029
<b>Stream Restoration (Northwest AR &amp; Central AR*)</b>	
Finalize restoration designs and obtain landowner access and federal, state, & local permits for construction <i>Based on partners' site-specific projects timeline</i>	12/2024 – 06/2026
*Review applications, select projects, and enter into agreements with project partners <i>Rolling applications will continue until all available funding is disbursed. Engagement, application review, project agreements, and funding disbursement will be on-going</i>	04/2025 – 12/2025
Partners follow procurement procedures for contracting, purchase restoration materials, and select heavy equipment contractor <i>Based on each partner's project schedule &amp; concurrent with program administrator competitive procurement process</i>	06/2025 – 12/2027
Implement Stream Restoration & Enhance Riparian Zones <i>Based on partners' project timelines</i>	01/2026 – 06/2028
Conduct follow-up site inspections and vegetation establishment activities <i>Three/project: 1) initial work completed and 2) two annual site inspections</i>	12/2025 – 10/2029
<b>Land Preservation (Northwest AR &amp; Central AR)</b>	
Develop and obtain conservation easements on designated projects <i>Based on partners' project timelines</i>	01/2025 – 12/2028
Develop easement program and purchase easements <i>Based on partners' project timelines</i>	01/2025 – 12/2028
<b>Trail Construction (Northwest AR &amp; Central AR*)</b>	
Partners competitively bid bike and pedestrian trail design and construction	01/2025 – 06/2027
*Review applications, select projects, and enter into agreements with project partners <i>Rolling applications will continue until all available funding is disbursed. Engagement, application review, project agreements, and funding disbursement will be on-going</i>	04/2025 – 12/2025

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*Engineering & Design <i>All projects must conform to Central Arkansas Regional Greenways Plan</i>	01/2026 – 10/2029
Construct bike and pedestrian trails	02/2025 – 06/2029
<b>Alleyway Rehabilitation (Fort Smith)</b>	
Engineering & design	10/2024 – 02/2025
Bidding/construction	03/2025
Phase 1 completion	12/2025
Phase 2 completion	12/2026
Alleyway Maintenance <i>Completed by the City of Fort Smith with operational funding</i>	On-going
<b>E-Bike Rebate Program (All 3 Regions)</b>	
Program design and materials development	01/2025 – 01/2025
Vouchers issued	07/2025 – 10/2027
<b>TRANSPORTATION EFFICIENCY MEASURE</b>	
<b>Rebates for Electric Vehicle Light-Duty Fleet Replacement &amp; Level 2 Charger Installation (Central AR)</b>	
<i>See "PASS-THROUGH GRANTS AND REBATES (CENTRAL AR)" above for program design milestones</i>	
Energy Ambassador works with eligible entities to analyze needs and identify locations	02/2025 – 06/2026
Year 1: 50% program implementation	10/2025
Year 2: 100% program implementation	10/2026
<b>Rebates for Streetlight Conversion to LED (Central AR)</b>	
<i>See "PASS-THROUGH GRANTS AND REBATES (CENTRAL AR)" above for program design milestones</i>	
Energy Ambassador works with eligible entities to analyze needs and identify locations	02/2025 – 08/2025
Year 1: 100% program implementation	10/2025
<b>EV Charging Infrastructure (Fort Smith)</b>	
Finalize design and engineering details <i>Drawings, obtaining all permits and other approvals, executing contracts and subcontracts</i>	11/2024 – 06/2025
Begin construction at all sites	07/2025
Complete construction	10/2025
Public outreach and promotion	09/2025 – 12/2025
Stations launch	11/2025
<b>BUILDING EFFICIENCY MEASURE</b>	
<b>Commercial Property Assessed Clean Energy (CPACE) Revolving Loan Fund (RLF) (Central AR)</b>	
Establish CPACE district boundaries and governing body <i>Representatives from the Metroplan Board of Directors will form the regional CPACE Commission</i>	03/2025
Prepare program guide, application, and promotional materials with public input	03/2025 – 04/2025
Educate stakeholders and communities about program guide <i>Education and rolling application acceptance will continue until program funds are expended and solicit rolling applications for projects</i>	05/2025 – 12/2025



## Energy and Environment Innovation for the Natural State

Review applications, select projects, and enter into agreements with project sponsors <i>Rolling applications will continue until all available funding is disbursed. Engagement, application review, project agreements, and funding disbursement will be on-going</i>	06/2025 – 09/2028
Year 1: 10% of CPACE projects completed and online	10/2025
Year 2: 50% of CPACE projects completed and online	10/2026
Year 3: 75% of CPACE projects completed and online	10/2027
Year 4: 100% of CPACE projects completed and online	10/2028
<b>Energy Savings Performance Contracting (ESPC) Participant Grant (Central AR)</b>	
<i>See "PASS-THROUGH GRANTS AND REBATES (CENTRAL AR)" above for program design milestones</i>	
Energy Ambassador promotes grant among small, LIDAC public agencies and provides assistance throughout participants' ESPC application and implementation process	12/2024 – 10/2028
Year 1: 10% of ESPC projects completed and online	10/2025
Year 2: 50% of ESPC projects completed and online	10/2026
Year 3: 75% of ESPC projects completed and online	10/2027
Year 4: 100% of ESPC projects completed and online	10/2028
<b>Clinton National Airport (LIT) Geothermal Well Field (Central AR)</b>	
Schematic Design ( <i>in progress</i> )	04/2024
Design Development	05/2024
Construction Documents	10/2024
Construction	12/2025 – 04/2026
<b>Fort Smith Public Housing Solar Project</b>	
Utility Study complete ( <i>paid for by City of Fort Smith</i> )	09/2024
Subaward received	12/2024
Engineering and design	02/2025
Procurement ( <i>30-week lead time for transformer</i> )	09/2025
Construction	12/2025
Commissioning & start-Up	01/2026
Operations & maintenance	On-going
<b>WORKFORCE TRAINING AND COMMUNITY ENGAGEMENT – ALL REGIONS</b>	
Develop restoration guidelines for partners and distribute through meetings	12/2024 – 01/2025
Conduct training workshops on invasive plant removal, native plant establishment, riparian, forest, and wetland restoration, and long-term management of sites	01/2025 – 10/2029
Host community engagement volunteer events in LIDACs that provide: 1) information on ecological restoration and carbon removal; 2) carbon reduction through mode-shift; 3) invasive plants removal and native vegetation establishment for conservation corps members and volunteers at select projects; and 4) employment opportunities in conservation action field <i>Connect low income and disadvantage communities to the projects and help to attract interest in workforce trainings and employment opportunities</i>	01/2025 – 10/2029
Work with local community colleges to develop 'conservation action' technician and manager positions and certification program that includes apprenticeship. <i>Certification and exposure to conservation-based careers at community colleges will attract students to the field</i>	01/2025 – 01/2026

### **1.a.v. Risks and Mitigation Strategies**

Anticipated risks and mitigation strategies have been organized into two categories: Program and Implementation. Risks are generally applicable to all measures unless otherwise stated. All these risks could reduce estimated cumulative GHG emissions reductions in the near-term (2025 – 2030).

#### **Program Risks**

- Lack of applications from eligible entities for pass-through incentives
  - *Begin public engagement and program design as soon as funding is announced. Inform stakeholders to begin collecting data and drafting proposals. Use GIS data to identify strong potential projects. Continue education and outreach throughout funding period*
- Demand for certain pass-through incentives might outpace demand for others
  - *Request budget amendment to shift from one program to the other to achieve equal or greater emissions reductions than included in proposal*
- Eligible pass-through recipients may lack cash on hand for reimbursement-based programs
  - *Create advance funding mechanisms outside of CPRG to ensure project implementation*
- Lack of adoption or use of measures by the public
  - *Public meetings, social media campaign, and advertising; Share maps and renderings with the public before implementation*

#### **Implementation Risks**

- Project implementation delays
  - *Utilize project management tools to create schedules, allocate resources effectively, and track progress; partner with local NGOs to help administer projects*
- Supply chain delays
  - *Identify various options for procurement that comply with program requirements*
- Delays to grant land permissions
  - *Incentives and partnerships with NWA Land Trust, Audubon Delta, and The Nature Conservancy*
- Overall funding for project completion (LIT Central Utility Plant geothermal well field)
  - *Clinton National Airport (LIT) is pursuing additional funding to complete other phases of the geothermal Central Utility Plant (CUP) project. LIT will secure other funding sources (such as bonds) as required so that the full geothermal facility can be completed and brought online in the timeframe outlined in this proposal*
- Heat exchange effectiveness (LIT CUP geothermal well field): Soil and groundwater conditions could reduce the effectiveness of the heat exchange system within the geothermal wells
  - *Conduct geotechnical investigation by drilling test wells; analyze appropriate location, depth, and density of wells to increase the Central Utility Plant's (CUP's) energy output*
- Airspace and Environmental Impacts (LIT CUP geothermal well field): Delays in obtaining approvals
  - *FAA issued final determination of no hazard to air navigation on 10/13/2022 and a NEPA categorical exclusion.*
- Lack of experienced workforce to implement projects
  - *Develop workforce training program included in this proposal to expand capacity*

### **1.a.vi. Priority Alignment**

Each proposed GHG reduction measure included in this application advances both the coalition's priorities and EPA's goals for the CPRG program. This section summarizes why each measure was selected, how the measures advance EPA's goals for the CPRG program, and where the measure is described in the coalition's supplements to the Arkansas Energy and Environment Innovation Plan.



The proposed **Green Networks measure** was selected as a priority for the following reasons:

- As the Natural State, Arkansans value the State's natural resources. Developing, creating, and sustaining outdoor recreation, business, and employment opportunities through ecology initiatives, environmental resiliency projects, and proper water management practices are key state priorities.
- Transportation and carbon removal sectors have high levels of public support, indicated through community and stakeholder engagement in all three regions.
- Existing regional bicycle-pedestrian and open space plans have been developed with significant community input and need funding to be realized.
- Further support is necessary to ensure that residents in LIDACs and rural areas have equitable access and connectivity through transit and active transportation to jobs, schools, and essential services.
- Reforestation is needed to mitigate urban heat islands and sequester carbon in tornado-hit areas.
- As the 15th fastest growing region in the United States (US News & World Reports), NWA needs land conservation and acquisition to mitigate the loss of carbon storage amid rapid development.

The proposed **Transportation Efficiency measure** was selected as a priority for the following reasons:

- Streetlight conversion to LED is an easy way to get a significant and quick return on investment, yet the upfront costs can be an obstacle for smaller cities.
- Lead-by-example transition of local government and non-profit fleets to EVs will increase exposure and comfort-level of citizens to these vehicles; thereby, increasing wider adoption.
- Ensuring equitable access to EV Charging infrastructure is critical to adoption, particularly for LIDACs.
- These projects included under this measure collectively aim to provide immediate and long-term solutions for reducing GHG emissions, criteria pollutants (CAPs), and hazardous air pollutants (HAPs), promoting electrification, and strategically placing EV charging infrastructure to benefit the community while fostering a sustainable and equitable transportation ecosystem.

The proposed **Building Efficiency measure** was selected as a priority for the following reasons:

- No affordable market-based financing is available for smaller commercial energy efficiency projects. Revolving loan funding will help meet the need in LIDAC communities, plus extend the reach of CPRG funds past the grant period of performance.
- Awareness and technical assistance are needed to ensure that small municipalities take advantage of Energy Savings Performance Contracting (ESPC) opportunities. With the proposed pass-through grant, small projects that typically do not have enough financial savings opportunity to leverage much work will be able to address a wider array of energy savings projects, especially in LIDACs.
- The City of Fort Smith has a master plan to provide solar power access to LIDACs. The proposed solar installation at Nelson Hall Homes Development presents a unique opportunity to pursue economies of scale and serve low-income elderly and disabled persons.
- The proposed geothermal project is an opportunity to permanently change the LIT's energy infrastructure, making LIT the largest vertical bore geothermal airport in the country.

The proposed measures relate to GHG reduction measures in all three coalition members' PCAP supplements:

Measure	Arkansas Energy and Environment Innovation (EEI) PCAP Section and Page #
<b>Green Networks</b>	Central Arkansas EEI Priority Action Plan Supplement, page 10-16 Northwest Arkansas EEI Priority Action Plan Supplement, pages 1-5, 8-12 Fort Smith EEI Priority Action Plan Supplement, pages 5-10, 15-20
<b>Transportation Efficiency</b>	Central Arkansas EEI Priority Action Plan Supplement, page 16-23 Northwest Arkansas EEI Priority Action Plan Supplement, page 1-5 Fort Smith EEI Priority Action Plan Supplement, pages 5-10

**Building Efficiency**

Arkansas Energy and Environment Innovation Priority Action Plan, page 49  
Central Arkansas EEI Priority Action Plan Supplement, page 23-32  
Northwest Arkansas EEI Priority Action Plan Supplement, pages 12-18  
Fort Smith EEI Priority Action Plan Supplement, page 21-24

The proposed measures will advance stated CPRG goals:

❖ ***Implement ambitious measures that will achieve significant cumulative GHG reductions***

The proposed **Green Networks measure** combines the power of natural GHG sequestration with reduced vehicle miles traveled (VMT) to reduce GHGs. Natural ecosystems play a critical role in sequestering carbon and mitigating climate change by acting as carbon sinks, absorbing CO<sub>2</sub> through photosynthesis and storing it in vegetation, soils, and biomass. Research estimates natural climate solutions (NCS) strategies could provide over one-third of the cost-effective CO<sub>2</sub> mitigation needed by 2030 to limit global warming to two degrees Celsius.<sup>2</sup> Urban areas and surrounding lands offer many opportunities to create healthy Green Network corridors of resilient carbon sinks from restored and protected urban stream corridors, floodplains, wetlands, prairies, and/or surrounding forests that are degraded from excessive stormwater runoff, neglect and lack of management, and invasive plant species that outcompete native plants and degraded soil health. Land conservation builds resilience to climate change by maintaining ecosystem services that are essential for adaptation. Linking natural infrastructure with bicycle and pedestrian systems and providing affordable e-mobility options offers residents opportunities to choose cleaner, healthier, more affordable modes of travel.

With transportation as the second largest contributor to GHG emissions in Arkansas,<sup>3</sup> catalyzing efficiencies in the transportation ecosystem is critical to making significant reductions in GHGs. The proposed **Transportation Efficiency measure** will reduce energy use by streetlights and encourage the transition of vehicles by government, nonprofit, and private fleets from internal combustion engines to all-electric equivalents. The long equipment life of these technologies will result in significant and sustained GHG reductions in 2030 and beyond.

The proposed **Building Efficiency measure** will reduce reliance on natural gas heating and fossil electric generation. The proposed solar, geothermal, and energy efficiency projects are long-lasting in nature resulting in significant near-term GHG reductions that will continue through 2050 and beyond.

❖ ***Pursue measures that will achieve substantial community benefits, particularly in LIDACs***

The **Green Networks** projects provide important co-benefits that enhance urban resilience and contribute to broader environmental and social objectives. The projects will reduce emissions of criteria pollutants from motor vehicles, remove stormwater pollutants, create wildlife habitats and continuous wildlife corridors, reduce heat islands, protect watersheds, improve soil health, enhance water quality. Socio-economic benefits include connecting LIDACs to streams, natural places, and active transportation networks. The projects included under this measure have been designed to ensure that LIDACs are the primary beneficiaries of the proposed investments.

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<sup>2</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Díaz, S., Settele, J., Brondízio, E. S., et. al. (eds.). IPBES secretariat, Bonn, Germany. 56 pages.

<sup>3</sup> U.S. EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks by State: 1990 – 2020)

The proposed **Transportation Efficiency** and **Building Efficiency** projects will reduce reliance on fossil energy for electricity, heating, and transportation. Fossil-fuel combustion by power plants, in buildings, and by vehicles emits CAPs and HAPs. Because these projects specifically target LIDACs, residents in these locations will experience the greatest share of the co-benefits associated with these projects.

❖ ***Complement other funding sources to maximize GHG reductions and community benefits***

The **Green Networks** projects complement other planning and funding processes including State and Regional Transportation Alternatives Programs (TAP), the Carbon Reduction Program (CRP), and other competitive United States Department of Transportation (USDOT) funding opportunities for the planning and construction of active transportation facilities.

The **Transportation Efficiency** EV infrastructure and fleet vehicle replacement projects will complement federal tax credits for these technologies. The **Building Efficiency** projects will complement federal tax credits for renewable energy development and reduce barriers to participation in existing financing programs for energy efficiency. See the Demonstration of Funding Need section of this application for a list of other funding sources explored.

❖ ***Pursue innovative policies and programs that are replicable and can be “scaled up”***

The proposed projects under the **Green Networks**, **Transportation Efficiency**, and **Building Efficiency** measures are innovative and replicable. Projects will be implemented across multiple jurisdictions in Arkansas. The emphasis on targeting funding support towards LIDACs will break down barriers to participation in active transportation modes, electric vehicle ownership, and energy efficiency. The coalition partners have identified additional projects and actions that could be taken under these measures with additional funding beyond CPRG. The seed money provided by the CPRG implementation grant will create success stories that encourage further investment by public and private organizations. The successes and lessons learned from implementation of these projects can be shared to support other jurisdictions interested in implementing similar projects.

**1.b. Demonstration of Funding Need**

CPRG implementation funding is necessary to fully implement the proposed measures. Coalition members have explored and applied for related federal and non-federal grants; however, these grants are not sufficient to fully implement the proposed measures (see table below).

Funding Source	Funding Status and Need for CPRG funding
Green Networks	
Transportation Alternatives Program (TAP) through ARDOT and MPOs	University of Arkansas Oak Ridge Trail Construction – not awarded. City of North Little Rock for Five Mile Creek Trail – not awarded.
USDOT RAISE Grant	City of Fort Smith for Alleyway Rehabilitation project – not awarded. City of North Little Rock for multi-modal railway overpass – not awarded. Pulaski County for the Southwest Trail – not awarded.
Federal USDOT Grants	While multi-use trail construction is eligible for federal funding under DOT programs, land acquisition for conservation is not, yet it is an essential prerequisite to trail construction and key to realizing impactful GHG emissions reductions

Transportation Efficiency	
USDOT Charging and Fueling Infrastructure Grant Program (CFI)	City of Fort Smith – not awarded.
Tax Credits ( <i>Alternative Fuel Infrastructure, EV and Fuel Cell Electric Vehicle</i> )	The proposed projects assume that program participants take advantage of these tax credits. The proposed incentives further offset the cost of transportation and building efficiency improvements.
Volkswagen Settlement Arkansas Environmental Mitigation Programs	This program has been fully subscribed. Cities in the coalition regions have used rebates provided by the Arkansas E&E. However, additional infrastructure is needed to meet needs and ensure LIDAC access.
Building Efficiency	
Commercial Property Assessed Clean Energy (CPACE) Program	Currently financed by commercial banks. Investors have only funded large projects exceeding \$400,000. A revolving loan fund will enable smaller loans for clean energy projects.
Arkansas Energy Office Energy Savings Performance Contracting (ESPC) RLF	State's RLF is almost fully leveraged with the ability to fund only one or two more projects until loans are repaid. Additional incentives are needed to increase participation in ESPC.
Investment Tax Credit	Federal tax credits insufficient to make the payback period for clean energy projects meet organizations' needs. Proposed grant funding will make improvements affordable by offsetting costs.
FAA Airport Terminals Program (ATP)	LIT received \$8M in FY23 to support the electrical portion of the new Central Utility Plant (CUP). CPRG funds needed for mechanical portion. Program only covers areas directly serving airport passengers.
FAA Airport Infrastructure Grants (AIG)	LIT received \$623,756 in FY22 for terminal improvements. Program only covers areas directly serving airport passengers.
FAA Airport Improvement Program (AIP)	CUP not eligible for this program, which focuses on runways, taxiways, terminal, airport-transit connections, and roadways.
FAA Airport Zero Emissions Vehicle (ZEV)	CUP project not eligible under this program, which funds light and heavy-duty vehicles and trucks.
FAA Voluntary Airport Low Emissions Program	Financing for low emission vehicles, refueling/recharging stations, gate electrification, and other air quality improvements. Insufficient funds available for the CUP project.

### 1.c. Transformative Impact

**Green Network Measure:** The coalition views CPRG as an opportunity to develop and implement several catalyst and demonstration projects that illustrate a vision for The Natural State's urban areas that are interconnected through a network of green spaces, stream corridors, and trails. The NWA region is rapidly developing with natural spaces being quickly converted into the built environment. However, there is still time to plan and implement a green networks plan that will be transformative for realizing sustainable land use and transportation patterns that value and utilize meaningful open spaces.

By championing the conservation of natural spaces, the coalition is enhancing its environmental resilience and encouraging collective efforts toward sustained emission reduction. This approach goes beyond a singular focus on emissions, extending to the broader goal of cultivating communities that value and prioritize environmental stewardship. As a result, the intersection of greenhouse gas reduction strategies and the preservation of natural areas fosters a higher quality of life for residents, creating a healthier and more sustainable living environment.

Through the rehabilitation of alleyways, the Fort Smith MSA is creating safe routes to school for its youngest citizens, reducing the need for car pickups, cutting down on commute times and idling, and lowering greenhouse gas emissions caused by vehicle traffic. As residents adopt these improved alleyways as non-motorized transportation routes, the increase in pedestrian and cyclist traffic will drive investments in enhanced public transit infrastructure and service.

**Transportation Efficiency Measure:** Comprehensive EV planning allows government officials to think ahead about the effects of EV investments on equity, the grid, air quality, and greenhouse gas emissions. Strategic planning helps communities adapt to changes in transportation and support residents, especially those without home charging and that are in low-income, disadvantaged locations. Well-planned charging stations are used more often, and planning helps communities improve their electrical grids to handle more demand. Commercial charging stations are also more efficient than home setups, reducing energy waste and environmental impact.

**Building Efficiency Measure:** It has been difficult to find private market funding for smaller energy efficiency projects. If funded at all, these upgrades are typically included in a larger rehabilitation project. The CPACE RLF will provide proof of concept of demand among smaller businesses for energy efficiency-only projects, proving that projects can be cost-effective and a secure candidate for loan repayment. The RLF approach provides an evergreen source of funding for energy efficiency projects, long outlasting the grant performance period. Last, the regional CPACE program will be designed to 1) make it simple for additional counties to join and 2) be replicable, so that counties and cities across Arkansas can use program guidelines and materials to establish their own CPACE programs.

Similarly, there is a need to foster more equity and opportunity among public entities in small and disadvantaged communities. While eligible, these entities rarely implement ESPC projects due to an unfortunate combination of a lack in knowledge of the opportunity and a disincentive for contractors to spend expensive resources chasing small projects. With CPRG funding, both issues can be addressed. Facility owners will be exposed to the opportunity and contractors can pursue the projects knowing that funding is available. This will bring GHG and cost reduction impacts to long underserved communities.

The Fort Smith Housing Solar Project directly impacts a low-income community that typically does not benefit from solar projects. While reducing the demand on their wallets, the array will provide exposure to a growing workforce opportunity. Additionally, projects like this one can help Arkansas recognize the benefits of more favorable solar policy.

The Bill and Hillary Clinton National Airport (LIT) has the potential to be the largest vertical bore geothermal airport in the United States with the potential for 700 geothermal wells 500' deep. This project is projected to reduce GHG emissions by at least 80%, and if concession spaces using gas stoves are transitioned to electric, LIT would make a complete transition to all-electric. The project is projected to reduce overall energy usage by 30%, as well as deliver higher indoor air quality than existing systems.

## 2. IMPACT OF GHG REDUCTION MEASURES

The table below provides estimates of the cumulative emission reductions in metric tons of carbon dioxide equivalent (mt CO<sub>2</sub>e) anticipated from implementation of the proposed measure(s) for two time periods: 2025-2035 and 2025-2050. These cumulative GHG emission reduction values represent emission reductions achieved attributable to CPRG implementation dollars consistent with the following formula:

$$\text{Quantified GHG reductions from CPRG funding} = \left[ \frac{\text{Requested CPRG funding}}{\text{Total funding to implement measure}} \right] \times (\text{Total estimated GHG reductions of measure})$$

Further details on quantification methods, relevant assumptions, annual emission reduction estimates, and any uncertainties associated with the estimates are provided in the Technical Appendix to this application and the “GHGcalcs\_Metroplan” Excel sheet. Costs associated with each measure are detailed in the Budget Table spreadsheet accompanying this application.

Priority Measure	Cumulative GHG emission reductions (mt CO <sub>2</sub> e)	
	2025–2030	2025–2050
<b>Green Networks</b>		
Carbon Removal and Active Transportation Projects (Central AR)	109,552	393,097
Carbon Removal and Active Transportation Projects (NWA)	88,512	335,037
Fort Smith Alleyway Rehabilitation Project (COFS)	3,884	4,588
E-bike Rebate Program (All 3 Regions)	12,087	65,363
<b>Transportation Efficiency</b>		
Electric Vehicle Fleet Transition Rebate Program (Central AR)	765	2,156
EV Charging Infrastructure Rebate Program (Central AR)	1,600	9,142
Streetlight Conversion to LED (Central AR)	4,762	19,482
EV Charging Infrastructure Installation (COFS)	1173	5867
<b>Building Efficiency</b>		
CPACE Revolving Loan Fund (Central AR)	14,277	116,289
ESPC Participant Grants (Central AR)	16,850	80,799
Clinton National Airport (LIT) Geothermal Facility (Central AR)	4,757	22,413
Public Housing Solar Project (COFS)	3,563	16,956
<b>Total</b>	<b>261,782</b>	<b>1,071,188</b>

Implementation of the proposal is highly cost-effective. The near-term cost-effectiveness of this proposal (cost per mt CO<sub>2</sub>e for 2025 – 2030 cumulative reductions) is **\$382/mt CO<sub>2</sub>e**. The projects included in this proposal have durable and long-term impacts through 2050 and beyond. The Green Networks projects proposed are designed to remain open space in perpetuity through ownership or conservation easements to ensure long-term durability. The long-term cost-effectiveness of this proposal (cost per mt CO<sub>2</sub>e for 2025 – 2050 cumulative reductions) is **\$93/mt CO<sub>2</sub>e**.

### 3. ENVIRONMENTAL RESULTS – OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

This proposal directly supports the EPA’s Goal: Tackle the Climate Crisis, Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts by setting up the regions to anticipate, prepare for, adapt to, and recover from the impacts of climate change. This proposal was intentionally designed to address climate change’s impacts on our most vulnerable communities and individuals. This proposal will strengthen local government’s ability to begin to envision and transform their environmental programs and strengthen their adaptive capacity while focusing on advancing environmental equity and justice.

#### 3.a. Expected Outputs and Outcomes

##### Central Arkansas Outputs (minimum of 50% occurring in or directly benefiting LIDACs)

- 3 Public engagement, 3 LIDAC, and 10 marketing meetings held in each county per year per measure
- 455 acres purchased and/or placed in conservation easements



## Energy and Environment Innovation for the Natural State

- 2,073 acres of restored forest, wetland, prairie, and riparian areas
- 178,547 tree seedlings planted in urban environments
- 4 miles of bike-ped infrastructure along the Central Arkansas Regional Greenways (CARG) system
- 1,252 e-bike rebates
- 40 internal combustion engines vehicles replaced with all-electric equivalents
- 136 Level 2 EV chargers deployed
- 4,033 conventional streetlights replaced with LED bulbs
- 38 CPACE RLF projects completed, 2025-2030 (assumed average project cost: \$75,000)
- 105 CPACE RLF projects completed, 2031-2050 (loan repayments are reinvested into new projects)
- 7 public building efficiency projects incentivized through EPSC grants
- 1 geothermal well field installed at LIT, with 700 wells replacing four 2000-MBH natural gas fired boilers, three 500-ton refrigerant chillers and two 1000-ton cooling towers in current use

### **Northwest Arkansas Outputs (minimum of 65% occurring in or directly benefiting LIDACs)**

- 2,154 acres of high-quality land restoration conducted, creating resilient ecosystems
- 35,700 feet of degraded stream channel and 34 acres of adjacent riparian areas restored
- 916 acres of restored green network lands protected from disturbance through conservation or other easements and/or formal restrictions.
- 2.5 miles of trails constructed in or connecting to LIDAC areas creating mode-shift opportunities
- 2,922 e-bike rebates
- 120 Conservation Corps members trained, receiving hands-on experience in implementing restoration measures and maintaining restoration sites.
- 50,000 people reached through newsletters or direct contact with information on project goals and milestones, partnerships, and accomplishments.

### **Fort Smith MSA Outputs (minimum of 50% occurring in or directly benefiting LIDACs)**

- 6x Level 2 chargers deployed; 3 located in LIDACs
- 6x 150 kW DCFC chargers deployed; 3 located in LIDACs
- 2x 400 kW DCFC chargers deployed
- 1x 850 kW DC solar array installed at public housing for low-income elderly and disabled residents
- 1,670 e-bike rebates
- 11,510 linear feet of alleyway converted to multi-use greenway; 100% located in LIDACs

### **Workforce Development Outputs**

- 30 hands-on training workshops on subjects that need less than 144 hours of training
- 70 pre-apprentices trained and placed in subsequent apprenticeships for individuals that need introductory career training and support services
- Over 100 new apprentices hired in energy efficiency, solar, land restoration, and related workforce needs for roles that need a year or more of training
- A “conservation action” technician and manager certification program with 1-year apprenticeships
- 450 participants in workforce and conservation action certification programs
- 500 participants in industry and career workforce events and introductory training programs
- 120 Conservation Corps members trained through hands-on restoration and site maintenance
- 30 community engagement events conducted to engage LIDAC communities, employers, and others in climate solutions and job opportunities in related fields

## Energy and Environment Innovation for the Natural State

- 50,000 people reached through newsletters or direct contact with information about project goals, milestones, partnerships, and accomplishments

### All Projects

- Marketing and solicitation materials
- Semi-annual progress reports: *Beginning with the second semi-annual report, reporting will include detailed quantified benefits to low-income and disadvantaged communities, including changes in co-pollutant emissions, and provide updates on ongoing and planned community engagement*
- Detailed final report

### Outcomes from this proposal include:

- 2025-2030 (in metric tons): 261,782 mt CO<sub>2</sub>e reduced or sequestered.
- 2025-2050 (in metric tons): 1,071,188 mt CO<sub>2</sub>e reduced or sequestered.
- Annual criteria pollutant (CAP) and hazardous air pollutant (HAP) emissions reduced. CAP emissions reductions were quantified for some, but not all the proposed projects. At least 50% of the CAP and HAP reductions are anticipated to occur in LIDACs. The table below lists total CAP reductions in tons for quantified projects.

Priority Measure	Criteria Pollutant Reductions					
	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	SO <sub>2</sub>
<b>Green Networks</b>						
Carbon Removal and Active Transportation Projects	NQ = Not quantified					
Fort Smith Alleyway Rehabilitation Project (COFS)	NQ					
E-bike Rebate Program (All 3 Regions)	12.3	0.43	NQ	0.036	NQ	NQ
<b>Transportation Efficiency</b>						
Electric Vehicle Fleet Transition Rebate Program (CA)	0.75	0.03	0.002	0.002	0.02	NQ
EV Charging Infrastructure Rebate Program (CA)	3.14	0.08	0.008	0.007	0.31	0.001
Streetlight Conversion to LED (CA)	NQ	0.57	NQ	0.055	0.02	0.725
EV Charging Infrastructure Installation (COFS)	1.79	0.04	0.01	0.004	0.18	0.001
<b>Building Efficiency</b>						
CPACE Revolving Loan Fund (CA)	NQ					
ESPC Participant Grants (CA)	NQ					
Clinton National Airport (LIT) Geothermal Facility (CA)	NQ	1.0	NQ	0.1	0.0	1.3
Public Housing Solar Project (COFS)	NQ	1.0	NQ	0.1	0.0	1.0
<b>Total</b>	<b>18.0</b>	<b>3.1</b>	<b>0.0</b>	<b>0.3</b>	<b>0.6</b>	<b>2.9</b>

- Increased flood attenuation and increased treatment and pollutant removal of urban stormwater runoff as it flows through restored riparian areas, streams, wetlands, and floodplains.
- Re-establishment of biodiverse habitat and wildlife corridors in urban areas.
- Reduction of streambank erosion, improving and restoring aquatic habitat in urban streams and preventing 16,000 tons of sediment and 5,300 pounds of phosphorus from entering state priority watersheds per year.
- Creation of civic connectivity to streams and natural areas for residents in LIDACs.
- Incremental and exponential mitigation of urban heat island impacts, especially in LIDAC, by reestablishing healthy forest, riparian areas, and streams that naturally cool the landscape through shade and evapotranspiration.
- At least one City will enact a policy to place stream and riparian areas into protected easements.

- Transformation of degraded urban forest lands choked with invasive vegetation into resilient healthy ecosystems that sequester carbon, while improving urban quality of life by enhancing recreation opportunities and wildlife habitat in LIDACs.
- Creation of resilient urban ecosystems that sequester carbon and provide healthy, natural corridors.
- Linking critical multimodal and active transportation networks, decreasing reliance on cars, and creating more equitable access to services and clean mobility options.
- Downward pressure on energy bills, reducing energy insecurity in LIDACs.
- Increased electric vehicle adoption, particularly in LIDACs.
- Energy savings from streetlight and building retrofits.

### 3.b. Performance Measures and Plan

The coalition has established the following performance measures to track progress concerning successful processes and output and outcome strategies:

- Semi-annual tracking and reporting of project progress on expenditures and purchases related to each project and measure
- Semi-annual tracking, measuring, and reporting of accomplishments on proposed timelines and milestones for each measure
- Semi-annual tracking, measuring, and reporting of outputs delivered in each MSA and in LIDACs
- Semi-annual tracking, measuring, and reporting of outcomes delivered in each MSA and in LIDACs
  - The coalition will use the tools and method relied upon in this proposal to track GHG emissions reductions and sequestration delivered based on outputs delivered, or such other tools as may be appropriate and agreed upon by EPA
  - ESPC and CPACE projects energy savings will be evaluated and verified after a project is installed and operational and measurement and verification (M&V) will continue throughout the term of the assessment or as specified in the contract between the property owner and the contractor. Savings verification using *Investor Confidence Project (ICP) – Energy Performance Protocols (EPP) for Standard and Large Commercial Facilities* is performed post-retrofit to determine whether installed equipment is operating as designed and expected savings predictions are being realized. EPP incorporates *ASHRAE Guideline 14, Whole Building Performance Path* and the *International Performance Measurement and Verification Protocol (IPMVP)* as guidance documents to define common practices for measuring, computing, and reporting savings achieved by energy or water efficiency projects.
  - Annual kWh consumption of LED streetlights
  - Annual kWh usage of EV charging stations
  - Annual mileage of electric fleet vehicles

Coalition partners will track progress for each performance measure within their jurisdiction and report progress to Metroplan. Subrecipients and project participants will be required to track progress for relevant performance measures and report progress to the coalition partners. Metroplan will provide a status update with respect to each performance measure to EPA in the semi-annual and final reports.

### 3.c. Authorities, Implementation Timeline, and Milestones

The table below identifies the parties, roles, and responsibilities for implementing each GHG reduction measure. The overarching roles and responsibilities of each coalition member are detailed in section 1 of this proposal. A detailed implementation timeline—including tasks, milestones, and key actions needed to meet measure goals and objectives by the end of the grant period—is provided in section 1.a.iv. of this

proposal. All parties have authority to implement the identified measures or have included the timeline for acquiring required authorizations and permits in the detailed implementation timeline.

Implementing Entities	Measure-Specific Roles and Responsibilities
<b>All Measures</b>	
<b>Metroplan</b>	Program management, marketing, and education in Central Arkansas; identification and analysis of potential implementation projects; selection of pass-through incentive recipients
<b>City of Fort Smith (COFS)</b>	Owner of easements for alleyway rehabilitation and EV charging infrastructure; provide oversight of implementation, operations, and maintenance through subcontractor and City employees
<b>Green Networks</b>	
<b>Northwest Arkansas Regional Planning Commission (NWARPC)</b>	Progress and performance measurement for each project; contract reporting and annual project site visits; coordinate partner meetings on restoration guidelines and information
<b>Cities and NGOs implementing Green Networks Projects</b> <ul style="list-style-type: none"> <li>• <i>Participating Cities/Counties</i></li> <li>• <i>Northwest Arkansas Land Trust</i></li> <li>• <i>Illinois River Watershed Partnership</i></li> <li>• <i>University of Arkansas</i></li> </ul>	Coordinate, administer, and implement land and stream restoration and/or trail construction projects; procure contractors as needed; obtain landowner access, implementation, and maintenance permission; develop and execute conservation easements; implement restoration; obtain any required regulatory permits; conduct maintenance and repairs at restored sites; coordinate with city/NGO partners on implementation of restoration measures
<b>Watershed Conservation Resource Center (WCRC)</b>	Coordinate, administer, and implement land and stream restoration projects in NWA; complete land and stream restoration designs; obtain landowner access; implement land and streamside riparian restoration; obtain floodplain development, USACE 404, ADEQ stormwater, and STAA regulatory permits required for channel work; provide maintenance at restored sites and conduct repairs; conduct workforce training, assist with community engagement events and certification program; assist with restoration guidelines
<b>Trailblazers</b>	Develop and implement E-bike Incentive Program
<b>Building Efficiency</b>	
<b>Pulaski County Energy Improvement District</b>	Votes to allow CPACE program regionalization and to allow AAEF to administer the program on its behalf.
<b>Arkansas Advanced Energy Foundation (AAEF)</b>	Creates framework for RLF governance and application process; connects potential applicants to resources; workforce project implementer
<b>Fort Smith Housing Authority</b>	Subrecipient of solar array for public housing
<b>Clinton National Airport (LIT)</b>	Implements geothermal well field project under authority of Airport Commission

#### 4. LOW-INCOME AND DISADVANTAGED COMMUNITIES

##### 4.a. Community Benefits

The implementation of the measures included in this PCAP are anticipated to provide significant benefits to low-income and disadvantaged communities (LIDACs). A spreadsheet is attached to this application

(Areas\_Metroplan.xls) which includes, by MSA, all LIDAC census block groups affected by this proposal and CPRG projects corresponding with specific LIDAC block groups.

The coalition partners will assess, quantify, and report a thorough analysis of associated community benefits based on actual data collected during implementation. The coalition partners will track the deployment of CPRG funding in and near identified LIDAC census block groups to quantify reduction in GHG emissions and co-pollutant emissions and other community benefits. The coalition partners will make results of these assessments available publicly and in semi-annual reports to EPA.

**Green Networks:** The coalition partners were deliberate in designing a program that would be highly impactful for LIDAC residents, who are disproportionately affected by severe weather brought on by climate change. LIDACs will receive at minimum 50% of the budget allocated for green network projects. Investments in nature-based solutions will increase climate resiliency and benefit communities by providing connections for active transportation, increasing tree canopy to provide shade and air quality during extreme heat and drought, and stabilizing the regions' stormwater infrastructure and streams.

Bike trails provide equitable access to safe, affordable, and sustainable transportation options for people of all ages, abilities, and socioeconomic backgrounds. Priority projects meet criteria such as connections to schools, grocery stores, and other vital amenities. When LIDAC residents have safe options for getting around without a car, they can save money on car-related expenses such as payments, insurance, maintenance, and fuel. This provides more discretionary income to those who need it most. Additionally, cycling eliminates the emissions associated with motor vehicles, including carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and particulate matter.

The coalition is also proposing an innovative, tri-regional e-bike incentive program that could transform transportation options for low-income residents. E-bike purchases will be incentivized by providing residents with a point-of-sale voucher that can be redeemed at local bike shops. The following design features will ensure that residents in low-income and disadvantaged communities are prioritized:

- **Vouchers Tiered by Income:** Income-limited applicants can apply for an increased voucher by providing proof of income, and 75% of voucher funds will be dedicated to income-qualified applicants. Income eligibility will be determined as 200% of the federal poverty level and will be verified by a contractor.
- **Voucher Lottery:** Voucher applications will be open for a set period and selected by lottery. Priority will be given to income-qualified residents in each of the three regions.
- **Point-of-Sale:** The voucher program allows for discounted prices at the point-of-sale, so participants are not required to pay the full price of the e-bike upfront and then wait for a rebate.

**Transportation Efficiency:** The proposed EV charging, fleet transition, and streetlight conversion projects will allocate 50% of benefits to low-income, disadvantaged, and underserved communities while ensuring proportional impacts across the region and avoiding negative effects on these communities. Projects will target communities that face heightened climate disaster risk, environmental burden, social vulnerability, and transportation insecurity compared to the national average, with high poverty rates and low educational attainment. The conversion of conventional streetlights to LED provides longer-lasting bulbs to improve safety in LIDACs while achieving GHG reduction benefits. In most cases, the electric utility pays for the power to streetlights. More efficient bulbs lead to lower costs – first to the utility, and ultimately to households through lower electric rates. The Transportation Efficiency measure will not only address transportation-related disparities but also create employment opportunities for residents and contribute to improved air quality.

**Building Efficiency:** Arkansas is a relatively poor state that ranks 37th on the American Council for an Energy Efficient Economy's list (2022). The ACEEE found that "the State has not taken steps to engage with marginalized groups for creation or implementation of its energy, sustainability or climate actions plans."<sup>4</sup> There is a latent and unmet need for funding for efficiency upgrades. Deploying the proposed building efficiency projects in LIDACs extends the benefits of renewable energy to all communities.

A DOE study<sup>5</sup> examined energy use in Greater Little Rock by building type, size, and location, and found that half of all commercial building stock is located in CEJST disadvantaged areas. The ability to finance loans of all sizes is essential to ensuring small business owners in LIDACs can benefit from the program. The existing CPACE program will be revised to meet regional programming and LIDAC needs. In essence, the CPACE program can be an important economic development vehicle for communities where commerce has languished for years. Similarly, ESPC grants will be targeted towards public buildings in LIDACs, which will benefit entire communities. Energy savings can reduce facility expenses and free up budgets for additional services to residents.

The solar project for Nelson Hall Homes in Fort Smith, AR, is situated in an area of the city falling into the CEJST Burden Categories of Climate Change, Energy, Health, Legacy Pollution, and Workforce Development. The area ranks in the 97th percentile for energy cost, 96th percentile for low income, and 95th percentile for poverty. If awarded, this project would pave the way for the city to further fund and support other public housing solar and weatherization projects. When combined with strong carbon reduction and renewable energy policies, the argument for solar in affordable homes becomes even more persuasive. Moreover, integrating solar energy can alleviate energy costs for residents, which can be a substantial burden in affordable housing communities. Each of the 288 residential units is expected to save \$384 per year in electric bill costs.

With the airport's Central Utility Plant's (CUP's) 85% reduction in airport emissions, LIT's geothermal project will provide reduced exposure to toxic chemicals and improve air quality for the surrounding LIDAC neighborhood. Additionally, the site preparation underway is separating the aircraft ramp drainage from the parking lot drainage to isolate and capture possible pollution from aircraft fuel and chemicals. Incorporating sustainability, reducing emissions, and increasing efficiency in the CUP design and construction will begin to reverse the disproportionate negative impacts of airport operations on surrounding communities. LIT will aim to limit noise and air pollution impacts for the surrounding community due to CUP construction by scheduling appropriate work hours. Additionally, truck routes and construction access will be planned to avoid disturbing the nearby residential communities and to avoid disrupting the local business community.

In addition to climate change, energy cost, and pollution burdens, nearly all the communities listed above experience health burdens. These burdens include top percentiles for diabetes, asthma, heart disease, and low life expectancy. High GHG emissions reductions will be key factor in reducing negative health effects of the residents. For example, LIT's CUP will result in significant co-pollutant CAP and HAP emissions reductions including a CAP reductions total of 2.55 tons and HAP reductions of 0.1 tons. Per a COBRA health analysis, these reductions will reduce asthma and heart-related conditions and increase life expectancy for LIT neighbors.

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<sup>4</sup> <https://database.aceee.org/state/arkansas>

<sup>5</sup>U.S. Department of Energy, Understanding Building Energy Use in the Greater Little Rock Area: Basic Building Stock Characterization. August 2023.



#### 4.b. Community Engagement

Each coalition partner performed extensive community outreach, including to LIDACs, during development of the measures contained in this proposal as part of their Priority Climate Action Plan (PCAP) development process. Coalition partners identified LIDACs using the Climate and Economic Justice Screening Tool (CEJST), EJ Screen, and EPA's combined tool, the IRA Disadvantaged Communities Map. Coalition partners used the following strategies for engagement with LIDACs to seek their input on creation of the measures included in this proposal:

- Online resources:
  - AR Energy and Environment CPRG webpage: [www.adeg.state.ar.us/air/planning/eei/](http://www.adeg.state.ar.us/air/planning/eei/)
  - Email list
  - Social media
  - Portal for submitting ideas: <https://forms.office.com/g/jGypB90WmN>
  - Community Survey: <https://forms.office.com/r/nmibnvDgJw>
- Community meetings across AR with in-person, livestream, and video conference participation
- Targeted outreach to known community-based organizations
- Push cards and flyers
- Attendance at known community events to disseminate information about how to provide input

See each coalition partner's Arkansas Energy and **Environment Innovation PCAP Supplement for additional details on the results of this engagement effort.**

**If this proposal is funded, the coalition partners will continue** LIDAC engagement throughout the implementation process. The public will be informed, including direct mail to people in LIDACs, of project goals and milestones, project sites, partnerships, and accomplishments along with career and job training opportunities.

In NWA, NGO partners IRWP, WCRC, and BWA will work with Cities and other partners' communications teams to develop press releases and social media posts detailing project objectives, funding source, and outcomes. They will work with project partners to develop:

- Newsletter articles on the project
- Flyers announcing workshops, volunteer opportunities, and other events
- Social media posts on invasive removal efforts, planting native vegetation, and stream restoration progress and completion

Cities and other partners implementing Green Network projects will work together to engage with LIDAC to keep them informed on project progress and invite residents to community outreach and stewardship events. The IRWP, WCRC, and BWA will work with Cities, the University, BWD, and other partners to host the following community engagement activities and events: invasive plant removal training; establishing native plants; and urban forestry, riparian buffers, and ecological restoration to sequester carbon.

Trailblazers, with its track record of championing the promotion of equity in active transportation in Arkansas, will utilize existing partnerships with minority-focused non-profit organizations to maximize the audience reached with the e-bike incentive program. A marketing strategy will be designed and executed to target LIDACs using an array of media and channels of promotion. Previous involvement with organizations such as Fayetteville's Juneteenth celebration will provide excellent opportunities for e-bike demonstrations and program promotion.

Building efficiency measures will be marketed first to commercial property owners, municipalities, and other eligible entities in LIDAC communities. The Central AR Energy Ambassador will present information using a combination of meetings with community organizations, churches, and direct contact such as doorhangers, before moving on to non-LIDAC communities. They will use county data to identify and contact commercial property owners, realtors, and developers directly about the CPACE opportunity to re-energize properties, and by extension, the community. Extensive public outreach will also be conducted with assistance of Southern Bancorp, one of the largest Community Development Financial Institutes in the country, among other entities. The City of Fort Smith will partner with the River Valley Green Energy & Education Program (RV-GEEP), Arkansas Climate Lobby, and Tribal Leaders to foster community engagement and inclusivity in the awarded initiatives.

### 5. JOB QUALITY

Implementation entities for each proposed project will need to hire and train skilled staff to achieve grant goals.

Implementation of the **Green Networks** measure's land and streamside riparian restoration projects will require a skilled workforce seeking a meaningful career in the field of conservation that enjoys working outside in natural areas, hands-on construction-based activities, and urban green infrastructure maintenance. This includes land conservation technicians, project managers, landscape designers, and contractors. Arkansas is already in a deficit in this industry for those that understand how to restore/add carbon-sequestering and native vegetation as part of natural infrastructure.

Similarly, implementation of **Transportation Efficiency** and **Building Efficiency** improvements will require a skilled workforce proficient in addressing a variety of energy usage types and will provide high-paying meaningful careers in the field of advanced energy. These may include roles like the Central Arkansas and Fort Smith Energy Ambassadors, Energy Auditor, Weatherization Technician, Solar Installer, Electrician, EV Charging Technicians, EV Maintenance, Bicycle Mechanics, and more. All these emerging industry roles are apprenticeable and pay higher than median wages for Arkansans. For example, solar installation is one of the fastest growing jobs in the country and requires services such as civil and electrical design, surveying, legal, construction, commissioning, utility and more. All renewable energy projects performed under the ESPC and CPACE programs will need to meet applicable prevailing wage and apprenticeship requirements to qualify for federal tax credits.

To address these workforce needs, coalition partners will create training workshops, internships, and apprenticeships, which will also require partnerships with local training institutions and relevant disadvantaged community stakeholders for outreach, as well as local government and non-profits for additional funding. Career events, workshops, pre-apprenticeships, and internships will provide a variety of early, hands-on training on-ramps to help individuals from a variety of backgrounds explore conservation as their preferred career path. Then the apprenticeship model will be utilized to provide technical training, credentials, and to establish a career progression.

Thus, the workforce ecosystem that the Arkansas Advanced Energy Foundation (AAEF) has been building to connect employers, trainers, talent, curricula, and funding in the energy and environment sector is critical to the success of this grant. AAEF has been hosting collaborative industry workforce meetings for groups within the conservation/land management, HVAC, Solar, and Energy Efficiency industries to develop support for these roles. AAEF will coordinate further with all implementation entities to:

- **Facilitate the creation of apprenticeships, internships, workshops, and on the job training both for staff intended to be hired through this grant and to create the workforce necessary to meet the goals of the grant.** Apprenticeships will be utilized where there is a clear career progression and over 144 hours of technical training required. Workshops will be used for training that requires less than 144 hours and to engage the community. On-the-job training will be utilized for professional development for existing staff and pre-apprenticeships/internships used for early job experiences/career exploration.
- **Create pathways to quality jobs with tailored entry points designed to empower Arkansas' diverse talent pool, with particular focus on uplifting disadvantaged communities.** Creating pre-apprenticeships or entry training programs that include soft skills and basic technical introductions, while also providing connections to support services for marginalized individuals, previously incarcerated, etc. These programs will be relatively short term and directly connect with future apprenticeships, paid internships, and early jobs in partnership with local employers.
- **Require employers to meet job quality standards per the eight DOL principles.** Arkansas has few labor unions, so while the right to unionize is available, we will need to focus our work with employers to ensure jobs quality, which would include the following types of activities:
  - Review job postings and recruitment efforts to ensure non-discrimination and skills-first approach
  - Ensure living wages and family-sustaining benefits for all full-time roles
  - Limit temporary or contract labor
  - Connect employers to available resources for including DEIA principles in employment
  - Ensure workers can provide contributions and feedback to employers about their work and the organization at large
  - Guarantee that all employees are provided safety training, adequate hours, predictable schedules, and relevant job security
  - Creating career progression opportunities for all employees with transparent advancement opportunities, access to training and education, and other tools to progress in their careers
- **Collaborate with other funding sources.** The Arkansas Office of Skills Development will reimburse employers up to 75% of the per apprentice or employee cost for skills training. Additionally, the ACE Network, funded by the US DOL Intermediary Contract, can provide \$1k/apprentice for minorities in specific advanced energy roles. The state of Arkansas can access allocated funding for home energy career training which is related to the HOMES and HEEHRA funding provided by US DOE. The training provided under this grant will increase Arkansans' access to energy efficiency funding through utilities, weatherization, and other related programs.
- **Coordinate workforce marketing which includes newsletter articles, flyers, presentations, social media posts, career exposure, education, and workforce events.** To ensure equitable participation by a diverse population, especially LIDACs, AAEF will engage the active support of non-profits serving these populations. This includes organizations like 100 Families, Arkansas United, Black Chamber, Seis Puentes, Circles NWA, Goodwill, Arkansas Innovation Hub, NWA Girl Gang, Hispanic Women's Organization of Arkansas, Job Corps, EforAll NWA Chapter, and Arkansas Coalition of Marshallese.
- **Provide education to and connections between relevant organizations to meet the workforce needs of this grant utilizing the workforce ecosystem already created.** We will connect with:
  - Organizations implementing CPRG projects, which will be hiring LIDAC employees and apprentices
  - Organizations providing connections to LIDAC individuals looking for careers in project sectors
  - Public and nonprofit organizations providing support services like transportation, healthcare, childcare, etc. that will help LIDAC populations participate in workforce related activities
  - Training institutions that need support in curricula development, credentialing, etc.

## 6. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

Metroplan and the coalition partners have successfully implemented and administered dozens of grants within their jurisdictions. Federal and state assistance agreements that Metroplan, NWARPC, and/or the City of Fort Smith are performing or have performed within the last three years include:

- **Climate Pollution Reduction Grant Planning Grant subawards** through the Arkansas Department of Energy and Environment (Metroplan, NWARPC, and City of Fort Smith)
  - Assistance Agreement Number: 5D 02F35201-0
  - Funding Agency: EPA
  - Assistance Listing Number (e.g., CFDA number): 66.046
  - Description: The state of Arkansas provided subawards to each of the three coalition members to perform regional Climate Action Planning under its CPRG planning grant agreement
  - Funding Agency Contact: Terrie Wright, 214-665-8453, Wright.Terrie@epa.gov
  - Status: This project is ongoing; Metroplan, City of Fort Smith, and NWARPC are actively making progress toward subaward deliverables consistent with agreed upon milestones in their subaward agreements with Arkansas Department of Energy and Environment
  - Reporting History: The coalition partners submit quarterly reports to the Arkansas Department of Energy and Environment about progress toward achieving the expected outputs and outcomes, challenges to meeting expected outputs and outcomes during the reporting period, and strategies to address such challenges.
- **Safe Streets and Roads for All Discretionary Grant Program** (Metroplan and NWARPC)
  - Award Numbers: 693JJ32340469 (Metroplan); 693JJ32440096 (NWARPC)
  - Funding Agency: US DOT
  - Assistance Listing Number (e.g., CFDA number): 20.939
  - Description: The SS4A discretionary grant program supported the development of regional comprehensive safety action plans in Central AR and NWA; the plans identify significant roadway safety concerns in each region and provide strategies to reduce fatal and serious injury crashes
  - Funding Agency Contact: Paul D Teicher, 202-366-4114, SS4A@dot.gov
  - Status: Project is 71% complete as of 1/31/24 (Metroplan); 21% complete as of 1/19/24 (NWARPC)
  - Reporting History: Metroplan and NWARPC submit quarterly reports to FHWA about progress toward achieving the expected outputs and outcomes, challenges to meeting expected outputs and outcomes during the reporting period, and strategies to address such challenges
- **Regional Planning Funding** administered through the Arkansas Department of Transportation (Metroplan and NWARPC)
  - Federal ID Number: 71-0415864 (Metroplan); 71-0394390 (NWARPC)
  - Federal Project No. AR-81-X025 (Metroplan); AR-81-X026 (NWARPC)
  - Funding Agency: FTA/FHWA
  - Assistance Listing Number (e.g., CFDA number): 20.2505
  - Description: Metroplan and NWARPC, serving as the designated MPOs for their respective urbanized areas, receive and manage yearly planning grants supporting transportation planning and agency operations.
  - Funding Agency Contact: David Siskowski, 501-435-3253, david.siskowski@ardot.gov
  - Status: On-going for 30+ years
  - Reporting History: Work programs are developed yearly by Metroplan and NWARPC. Monthly or quarterly reports are submitted to include work accomplished and financial reporting.

- **Fort Smith Transit Operating Assistance**

- Assistance Agreement Number: AR-2018-005-01
- Funding Agency: DOT Federal Transit Administration (FTA)
- Assistance Listing Number (e.g., CFDA number): Fort Smith FY18 5307
- Description: These funds were used to maintain public transportation in Fort Smith, Arkansas. More specifically for preventive maintenance, operating assistance, paratransit assistance, MPO planning and capital items
- Funding Agency Contact: Heriberto Chavarria, Heriberto.chavarria@dot.gov
- Status: Closed and complete
- Reporting History: The City of Fort Smith submitted annual reports to DOT Federal Transit Administration about progress toward achieving the expected outputs and outcomes, challenges to meeting expected outputs and outcomes during the reporting period, and strategies to address such challenges

Metroplan is an association of local governments that has operated by inter-local agreement since 1955. Originally formed as the Metropolitan Area Planning Commission of Pulaski County, Metroplan now has 33 members in Pulaski, Faulkner, Saline, Lonoke, and Grant Counties as well as public agency partners. Metroplan is the Little Rock-North Little Rock-Conway Metropolitan Statistical Area's designated Metropolitan Planning Organization (MPO) under Title 23 of the United States Code.

Northwest Arkansas Regional Planning Commission (NWARPC) is a governmental organization established pursuant to ACA 14-56501 et seq. and was formed through a cooperative agreement in 1966. Since that time, the Commission has grown to include 38 units of government and other public agency partners in Benton and Washington Counties in Arkansas and a portion of McDonald County in Missouri. NWARPC is the designated Metropolitan Planning Organization (MPO) under Title 23 of the United States Code for the Fayetteville-Springdale-Rogers, AR-MO Urban Area.

Metroplan and NWARPC are responsible for managing and reporting FHWA/FTA planning funds distributed to each MPO. Both hold the designation of Transportation Management Areas (TMAs) by the U.S. Secretary of Transportation for urbanized areas with populations of at least 200,000. As such, Metroplan and NWARPC receive annual allocations of federal Surface Transportation Block Grant (STBG), Transportation Alternatives Program (TAP), and Carbon Reduction Program (CRP) funding through the Arkansas Department of Transportation (ARDOT). The MPOs subaward this funding to their member jurisdictions through a formalized application process, then manage project agreements, implementation, and the federal reimbursement process. The experience with subawarding and managing federal funds has prepared the two MPOs well for the responsibility of designing application processes, setting project parameters, awarding funding, and monitoring projects in compliance with federal regulations.

The City of Fort Smith has a history of successfully implementing various state and federal grants across multiple departments, including Transit, Parks & Recreation, Community Development, Water Utilities, and Solid Waste. The City boasts a highly skilled staff comprising experts in engineering, operations, procurement, project management, planning, utilities, and community development.

This application includes resumes for Metroplan staff as well as bios for all coalition partners and subrecipients and Statements of Qualification (SOQs) for key nonprofit partners.

**7. BUDGET** – see Budget Narrative attachment, Budget\_Metroplan.pdf.