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Applicant: Mid-America Regional Council (MARC)

Tom Jacobs, 816-474-4240, tjacobs@marc.org

Type of Application: Individual application

Funding Requested: \$197,823,216

Application Title: Kansas City – Anchoring Climate Transformation (KC-ACT)

Sector(s): Electric power, transportation, commercial and residential buildings, agricultural/natural lands, waste management

Expected Total Cumulative GHG Emission Reductions:

- Total cumulative GHG emission reductions, 2025 – 2030: 622,873 metric tons of CO₂e. Cost effectiveness \$318 per ton.
- Total cumulative GHG emission reductions, 2025 – 2050: 5.455 million metric tons of CO₂e. Cost effectiveness \$36 per ton.

Location(s): Bi-state Kansas City metropolitan area, including Cass, Clay, Jackson, Platte and Ray counties in Missouri; and Johnson, Leavenworth, Miami and Wyandotte counties in Kansas.

Applicable PCAP Reference(s):

Lead organization: Mid-America Regional Council (MARC); **PCAP title:** Kansas City Regional Priority Climate Action Plan; **PCAP website link:** <https://kcmetroclimateplan.org/wp-content/uploads/2024/02/Priority-Climate-Action-Plan.pdf>

Building Energy and Renewable Energy: *Reduce energy burdens and improve public health through a regional network of resilience hubs, quality affordable housing, high-performing public/institutional buildings/nonprofit buildings and renewable energy.*

Building Energy Efficiency & Renewable Energy Investments measures (and PCAP page references)

Measure BE-1: Build resilience in LIDAC communities by investing in resilience hubs (pp. 16-17)

Measure BE-2: Reduce energy burden by investing in quality housing (pp. 18-19)

Measure BE-3: Achieve regional energy savings by investing in high-performance public, nonprofit & commercial buildings & schools (pp. 20-21)

Measure BE-4: Deploy renewable energy solutions to reduce grid and cost burden (pp. 22-23)

Transportation Alternatives and Technologies: *Reduce emissions through green transportation corridors, connected trails/bike lanes, e-bikes and e-bike infrastructure, EV charging and low-emission fleet transitions.*

Transportation Alternatives & Technologies measures (and PCAP page references)

Measure T-1: Connect resilient neighborhoods and activity centers with green corridors and active transportation (p. 25)

Measure T-2: Connect resilient neighborhoods by expanding/linking trails and separated bikeways (p. 26)

Measure T-3: Enhance low-carbon mobility by Investing in shared electric bike infrastructure and expand the use of electric bikes (p. 27)

Measure T-4: Reduce emissions by expanding the network of publicly available electric vehicle charging infrastructure to fill network gaps and provide access to underserved communities (p. 28)

Measure T-5: Transition public transit/municipal fleets to zero-/low-emissions technology (p. 29)

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Urban Greening: *Sequester carbon and reduce urban heat islands through landscape scale riparian restoration, urban forestry, native landscaping, green stormwater infrastructure and landscape scale habitat restoration.*

Urban Greening measures (and PCAP page references)

Measure UG-1: Increase and maintain tree canopy along green corridors and within neighborhoods to address urban heat islands, conserve energy and protect public health (p. 32-33)

Measure UG-2: Sequester carbon through the conservation and restoration of riparian and natural areas and through green stormwater infrastructure (p. 34-35)

Measure UG-3: Adopt stormwater standards and related policies to enhance land stewardship and sequester carbon (p. 36)

Agriculture, Food and Waste Innovation Systems: *Reduce emissions through regional composting facilities, food waste reduction, and regenerative agricultural investments.*

Agriculture, Food and Waste Innovation Systems measures (and PCAP page references)

Measure FA-1: Invest in innovation and entrepreneurship to build capacity of Kansas City regional food system stakeholders (p. 40-41)

Measure FA-2: Build resilience in LIDAC communities by investing in at least 10 applied regenerative agriculture facilities (p. 42)

Measure FA-3: Increase residential composting and diversion to local livestock (p. 43)

Measure FA-4: Reduce food waste at schools, food service, grocery, distribution, and commercial facilities (p. 44-45)

Cross-Sector Measures: *Create the precondition to optimize greenhouse gas reductions while building long-term capacity and ensuring durable outcomes.*

Cross-Sector Measures (and PCAP page references)

Measure CS-1: Advance public policy and build collaborative partnerships (p. 47)

Measure CS-2: Develop an equitable green workforce (p. 48)

Measure CS-3: Empower individuals to reduce GHG emissions through action (p. 49)

Measure CS-4: Create multi-faceted professional and community training program to accelerate implementation of measures (pp. 50-51)

Measure CS-5: Develop a co-creation-based model to support capacity building, shared leadership and project monitoring and evaluation (pp. 52-53)

Project Workplan: Overall Project Summary and Approach

Kansas City – Anchoring Climate Transformation (KC-ACT) is a regional climate protection strategy aimed at strengthening public leadership, neighborhood resilience and critical infrastructure resilience. KC-ACT reflects broad community commitment to transformative climate action; deep collaboration across sectors, scales and geographies; and decades of experience supporting sustainability.

KC-ACT will be coordinated by the Mid-America Regional Council (MARC), the metropolitan planning and coordinating agency that is led by local elected officials and has strong capacity to lead complex, multi-jurisdictional initiatives. KC-ACT is rooted in a community-based climate movement sparked in 2019 by Climate Action KC (CAKC), a network of more than 150 elected officials at 10 distinct levels of elected office. KC-ACT advances the goals of the Regional Climate Action Plan (RCAP) adopted in 2021 with involvement of over 1,000 volunteers. KC-ACT reflects the region’s readiness to act — over 500 community members generated over 300 specific ideas in the region’s recently adopted Priority Climate Action Plan (PCAP), ideas that have shaped this grant proposal. Finally, KC-ACT includes immediate and near-term investments that will reduce greenhouse gas (GHG) emissions by 5.5 million M-tons by 2050 and transform systems to position the region to sustain continual carbon reduction efforts into the future.

1. Grant Approach

MARC will collaborate with approximately 20 public, 40 nonprofit and 15 commercial partners to produce quantifiable, replicable outcomes in four measure areas — the majority of which invest in low-income disadvantaged communities (LIDACs). Investments will support broad public leadership for city/county projects that meet local needs, neighborhood-scale investments led by Justice40 communities and climate-ready infrastructure. Systemic investments will transform community decision-making in ways that create resilience and capacity for climate action. Every investment is structured to build civic, public, nonprofit and neighborhood capacity to undertake more climate action in the future.

Each measure area features: 1) **anchor projects**, which are shovel-worthy, shovel-ready, equity-focused, collaborative, replicable projects that deliver GHG emissions reduction and demonstrate transformational impact and/or cross-measure benefit); 2) **expansion and enhancement of anchor programs** with proven ability to deliver meaningful outputs and outcomes; 3) an **equity project pipeline** build-out that draws from a comprehensive pool of over 300 GHG reduction project ideas, with opportunities for new constituency groups to propose projects; and 4) **equity-centered capacity building, workforce development, communications and project management initiatives** that cut across all measure areas to mitigate potential risks, ensure authentic engagement of historically divested groups, and lead to the realization of outcomes and benefits to the environment and LIDACs.

a. Description of GHG Reduction Measures

KC-ACT invests in four measure areas: 1) building retrofits and renewable energy (BE); 2) transportation alternatives and technology (T); 3) urban greening (UG); and 4) food, agriculture and waste systems (FA). Further, cross-sector (CS) measures create the tools to optimize GHG reductions while building long-term capacity and ensuring durable outcomes. Project infrastructure leverages MARC knowledge and experience, supplemented by that of project partners. MARC project managers will work with the anchor partners and facilitate diverse community advisory boards (CABs) of volunteer stakeholders to design and implement the equity project pipeline build-out. CAB-managed RFP competitions will be issued for three distinct but overlapping constituencies: 1) public sector agencies; 2) nongovernmental organizations (NGOs), community-based organizations (CBOs) and small businesses; and 3) building sector

representatives. MARC may issue multiple RFPs to allow for project development and evaluation and mitigate labor and supply chain challenges. Technical assistance will be made available to all NGOs and CBOs to ensure subrecipient readiness. Assistance will include legal services, audit services, fiscal agent services, and access to standardized contracts and templates/checklists to meet compliance standards.

(BE) Building Energy Efficiency & Renewable Energy Investments

Why was this measure selected: The built environment contributes 63% of our region’s GHG emissions. The region’s \$24 billion architecture, engineering and construction sector uniquely positions the area to act at scale to reduce energy burdens in low-income homes and to build leadership and community by investing in community buildings. Project investments will drive market change for high-performing affordable housing and commercial buildings.

Why is this a priority: Building improvements contribute to healthy communities. Building investments address critical home health issues (e.g., indoor air quality and mold) and energy burdens facing frontline communities. The lowest quintile of socioeconomic status in Kansas City, Missouri, (KCMO) and Kansas City, Kansas, (KCK) show energy burdens of more than 15%. Children’s Mercy Hospital, the region’s leading children’s health organization, documented more than 30% reductions in admissions for youth who live in homes benefiting from energy efficiency retrofits. Building investment and policy adoption will accelerate a market transition because local capital providers, building owners and consumers are unfamiliar with low-carbon buildings.

(T) Transportation Alternatives and Technologies

Why was this measure selected: On-road transportation accounts for 34% of regional GHG emissions. There is an urgent need to fill gaps in our existing transportation options to create stronger connections among activity centers, and to create new transportation system models. We are eager to advance this agenda, in part, because we are hosting the World Cup in 2026. Key regional needs include broadening the region’s electric vehicle (EV) charging network, increasing affordable mobility options, connecting regional bicycle and trail systems, investing in clean fleets, and expanding green corridors (see UG-1).

Why is this a priority: There are considerable inequities in the transportation system. LIDACs are burdened with a higher prevalence of poor health, in part due to proximity to traffic. Severely limited transportation options impede individuals’ ability to access opportunities, negatively impacting upward economic mobility. Community-supporting investments will provide more access to affordable modes of transportation, safe infrastructure, the EV revolution and benefits from cleaner fleets.

(UG) Urban Greening

Why was this measure selected: Urban greening will sequester over 2.79 million M-tons of CO₂e by 2050 while providing many co-benefits. Regional support for this agenda began with an area-wide greenway plan, MetroGreen (1991), followed by the first regional Manual of Stormwater Best Management Practices, Regional Green Infrastructure Framework and Clean Air Action Plan. These efforts provide the conceptual and political basis for scaling up strategies, all of which are replicable and will benefit LIDACs.

Why this is a priority: Research demonstrates that urban greening has significant LIDAC benefits. Local comprehensive plans also support this outcome. We are eager to regionalize Evergy’s pilot Urban Heat Island (UHI) Reduction Program in northeast KCMO and to implement studies by Lawrence Berkeley National Laboratory and NOAA that mapped heat islands in KCMO, Johnson and Wyandotte counties. A 2008 USDA - FS/MARC study estimated that regional forests provide \$320 million/year in health benefits from ozone reduction. Kansas State University determined that riparian restoration was the top watershed mitigation/adaptation priority based on detailed modeling of Blue River system hydrology.

(FA) Agriculture, Food and Waste System Innovation

Why was this measure selected: Regenerative agriculture practices bolster land stewardship and carbon sequestration, address unmet demand for local food and jobs, and improve nutrition and food access in LIDACs. Features of this measure area provide opportunities to foster a circular economy that creates high-quality local food, compost, usable natural gas, biochar, sustainable building materials, and heat cogeneration. Reduction of food waste and recovery of excess, edible food addresses food security in LIDACs while reducing landfill methane emissions.

Why this is a priority: A pronounced need exists to address these issues holistically. A 2014 study led by KC Healthy Kids found a \$177 million unmet demand for local food. MARC recently completed an EPA-funded Food Loss and Waste Action Plan. The region generates about 300,000 tons of food waste/year, yet has only one large-scale commercial composting operation, generating about 35,000 tons of compost/year – demonstrating the need for additional capacity (FA-3). High levels of food insecurity (1 in 8 children) will be addressed, in part, by reducing food waste and recovering excess food (FA-4).

(CS) Cross-Sector Measures

Features of cross-measure policy work (CS-1): MARC will lead stakeholder processes with consultant support to develop public policies designed to embed GHG reduction measures in future investments. MARC initially will focus on consistent regional adoption of energy efficiency building codes; over time, dialogue will address other energy policy issues like building performance standards, and EV- and solar-ready construction practices. Over 30 local governments are already involved in stormwater standards development. Additional policy considerations will include updated stream buffer requirements, tree preservation and native landscaping allowances. Finally, planning and zoning provisions constraining walkable communities and urban agriculture will be identified and elevated for policy consideration.

Features of cross-measure equitable green workforce development (CS-2): Workforce strategies will encourage job seekers to engage in workforce pipeline/specialized training opportunities (see Section 5).

Features of cross-measure communications work (CS-3): MARC will procure communications services to finalize and implement a regional climate communications and social marketing plan. The five-year effort, conceptualized with \$120,000 in pro bono support, will address all measure areas. MARC staff will complement consulting support. Behavior change strategies will start with creative messaging/framing. Messages will be tailored for segmented targeted audiences across measure areas, using paid, earned, social and digital media strategies. Detailed market and demographic analyses provide for an evidence-based approach to focus messaging. GHG reductions will come from significantly increasing the uptake of IRA efficiency/renewable energy incentives, home retrofits, cycling, tree planting and composting.

Features of cross-measure professional development/training work (CS-4): MARC's Academy for Sustainable Communities (ASC) will accelerate implementation of measures' areas. The ASC provides training through events like workshops, charettes, peer-to-peer learning, case studies and webinars. The ASC will develop training programs for all sectors and for diverse constituencies. Professional and community training becomes another mechanism to drive transformative change, together with policy, collaborative implementation/engagement, and performance evaluation.

Features of cross-measure capacity building, shared leadership, and project monitoring and performance evaluation work (CS-5): UMKC will help lead CBO leadership and capacity building, collaborative performance evaluation, and the development of a "co-creative" project management structure to thread community engagement throughout all KC-ACT elements (i.e., fund allocation, project program implementation, evaluation). Co-creation includes developing, user testing and launching a specialized app and data dashboard to streamline data collection, evaluation and reporting; data will provide real-time insights into the project's progress.

Table 1: Features of GHG Reduction Measures				
Building Efficiency and Energy Efficiency				
Measure BE-1, Resilience Hubs				
Description: Resilience hubs will be community spaces that model high-performing building practices and provide an increased level of community education, training and services – including during times of extreme heat and cold.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
KCPL Bluford Library will include deep HVAC retrofits, envelope improvements, trees and orchards, solar, native landscaping, EV charging ports, and an E-bike hub. Project will spur transit-oriented development and affordable housing.	Building owners (public, NGOs and CBOs) respond to calls for projects, and work with MARC and technical assistance providers to select elements of multiple measures for their facilities & communities	Bluford Resilience Hub project launch; evaluation of Bluford Hub project; community outreach; call for scaling projects; technical assistance to building owners; performance measurement, community workshops; community performance evaluation; measure-specific workforce opportunities	Kansas City Public Library (KCPL); KCMO; KCK; NGOs/ CBOs; local governments	Completed Bluford Library catalyzes additional LIDACs to create resilience hubs; ~15 completed resilience hub projects
Measure BE-2, Home Repairs & Retrofit				
Description: Minor home repairs will average \$20,000 to account for substantial upgrades to mechanical systems and building envelopes, exceeding the amount that most providers spend per home (~\$5,000). Energy efficiency projects will include HVAC upgrades, ceiling and insulation repair, and doors/ windows. DIY weatherization may include weatherstripping and window film, caulk, aerators and low-flow showerheads, and other recommended items.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Habitat for Humanity KC will coordinate Minor Home Modification Coalition (MHMC) to perform minor home repairs and retrofits and launch a “quick fix” initiative to train new installers to install weatherization kits.	Additional rounds of competition for multi-dwelling owners	Minor home repair projects; new installer/energy auditor trainings; distribution of weatherization kits; technical assistance; communications linking homeowners to tax credits; policy consensus-building on IECC code adoption; community education/assistance about high-perf. building practices; call for scaling projects; multi-dwelling building retrofits; workforce development	Ten MHMC members; Regional Housing Partnership; BE-EX and Rising Trade Contractor Network; Evergy; two workforce boards (FEC/WP)	Completed projects: (600) for single- and (15) multi-dwelling buildings; 12,000 weatherization kits; community classroom committee recruited; uptick from applying 2024 IECC codes to homebuilding; installers/auditors trained; job seekers placed in programs

Measure BE-3, Public Building Retrofits (Community, School, Commercial, Urban Farm Buildings)				
Description: Public building retrofits and nonprofit affordable housing performance improvements.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Year 1 competition for shovel-ready building retrofits.	Additional rounds of competitions after initial evaluation. A revolving loan fund will enable loans for one funding competition for commercial buildings.	Community outreach; subrecipient technical assistance; call for scaling projects; energy audits; tech. assist. with energy roadmaps; engage MBE/DBE/WBE contractors; performance measurement; workforce development; recruit policy committee	BE-Ex & Rising Trades; public workforce boards; local gov'ts; school districts; affordable housing developers	16 public, 15 commercial, 6 farm buildings retrofitted; community members participate in capacity building and perf. evaluation; job seekers placed in programs; policy comm. formed
Measure BE-4, Renewable Energy Projects				
Description: Projects will focus on grid-relieving technologies that also help meet community-scale energy needs through renewable sources.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Vicinity project: An electric chiller in the downtown KCMO district heating/cooling loop provides renewable energy to 4 million ft ² of space. Grandview Solar will install 4 public solar projects (including a solar parking canopy), leading by example in providing public renewable energy.	Additional rounds of competitions to support solar installations at other anchor projects (Bluford Library) and other scaling projects in the equity project pipeline.	Complete anchor projects; evaluation of anchor projects; community outreach and facilitation; call for scaling projects; completion of renewable energy projects; performance measurement; evaluation and community engagement	Vicinity; KCPL Urban farms; City of Grandview, MO; 25 NGOs involved in DOE-funded Renew America's Nonprofits grant	Completed system- and community-level anchor projects catalyze other projects in LIDACs; completed solar installation at the Bluford Library; completed ~ 50 solar installations (sizes vary from 8kw, 30 kw and 260 kW systems) at resilience hubs, Grandview, urban farm buildings and NGOs
Risks (BE-1:BE-4): Workforce and labor shortages could delay project schedules, impacting scope and cost. There may be a lack of skilled labor to perform energy audits and building retrofits. MARC, BE-Ex and workforce partners (see Section 5) will help building owners engage with diverse contractors, employers, labor unions and the trades. MARC will stagger funding competitions to alleviate labor and supply chain issues and provide technical assistance to help building owners identify non-federal funding to bridge pre-development work. Finally, historical buildings offer strong emissions reduction potential and reduce landfill waste. But, ground disturbance or historical preservation requirements could create delays; MARC will work with sub awardees to minimize ground disturbances, and with historic preservation offices to streamline approvals. Legal services may mitigate NEPA risks.				
Assumptions (BE-1:BE-4): Local architects/contractors recommended proposed funding levels to “drive the market,” showing the financial and technical feasibility of producing extremely high-performing buildings. Funds will be leveraged when possible to increase the potential to support more building projects than reflected in the budget (e.g., energy solutions programs will determine if projects qualify for other funding programs – see Section 1.b.). CPRG funding allows projects to maintain significantly higher quality systems, saving energy costs in the long run.				

Transportation Alternatives & Technologies				
<p>Measure T-1, Connect resilient neighborhoods and activity centers with green corridors and active transportation. Description: Projects will integrate trees, native landscapes and energy-efficient lighting alongside paths/bikeways, connecting parks, neighborhoods, commercial districts and schools. Greenway will accommodate trails and bikeways.</p>				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Cross-reference to the anchor project listed in T-2 and T-3 that will lead to more biking. See UG-1.	Additional competitions for projects to add “green” elements along transportation corridors.	Completion of anchor projects; green corridor design trainings; community outreach and engagement; call for projects; completion and tours of corridor projects; performance measurement; evaluation	KCMO; KCK; other local governments; Bridging the Gap; Deep Roots; MARC’s Government Training Institute (GTI)	Completed trail; 10 mi. green corridors developed; Local gov’t officials trained in green corridor design; 5-10 workshops for local officials and LIDACs; ~6,720 corridor trees planted
<p>Measure T-2, Bike Lanes Description: Projects will address critical gaps or extend miles of existing bikeways to enhance neighborhood connectivity.</p>				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
The Unified Gov’t of WYCO/KCK will build the final piece of the Bi-state Heritage Trail – connecting downtown KCMO to KCK & LIDACs with 5.5 miles of trail and green infrastructure.	Additional rounds of competitions to support connected bike and trailways.	Community outreach; call for projects; complete projects; performance measurement; evaluation	Unified Government of WYCO/KCK; local governments; neighborhood organizations (e.g. Groundworks NRG)	15.5 miles of trails and bikeways developed; celebration of neighborhood and bi-state connections, from Kaw Point (where Lewis and Clark camped in 1804) to Quindaro Town site (part of Underground Railroad).
<p>Measure T-3, Electric Bikes Description: Projects to encourage mode shift to biking for all, and to encourage utilization of e-bikes through a community-wide e-bike share program, with hubs at resilience hubs and other community locations.</p>				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
BikeWalkKC (BW) and MARC will create an e-bike incentive program and deploy e-bikes at res. hubs. Electric vans and EV charging infrastruct. will help BW support the network. Translation programs and in-person interpretation provided.	Additional installations of e-bike hubs at community-based locations and additional partners for e-bike programming.	Anchor project launch; community partner outreach; develop and test rebate and purchase program; workshops on bike skills and safety; language services; program promotion; e-bike infrastructure expanded; deploy e-bikes; performance measurement	Social service agencies in LIDACs; MARC Academy for Sustainable Communities; bike shops; local governments	~10 NGO/CBO social service agencies selected to host e-bike share program; rebate and purchase program launched; 5,402 e-bikes deployed (including 400 new e-bikes for bike share); program marketed; bike hub locations installed with racks/signage and e-bikes

Measure T-4, EV Charging Level 2				
Description: Projects will focus on installation of charge ports for EV infrastructure.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Cross reference to BE-1. Installation of EV charging station at Bluford resilience hub .	Additional rounds of competitions to support EV charging stations installations.	Community outreach; technical assistance; calls for projects; implement projects; initial project evaluation; performance measures	Local governments; training programs through community colleges or others to increase number of EV technicians	35 EV charging stations with an average of 3.6 ports/station installed at resilience hubs or other project sites
Measure T-5, Fleet Transition				
Description: Projects will replace gasoline-powered passenger cars, trucks, diesel-powered utility/refuse trucks or buses with zero- or low- emissions technology.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Selection process will occur in year two.	Additional rounds of competitions to support fleet transmissions.	Community outreach; pair new fleets with new renewables; technical assistance; calls for projects; initial project evaluation; performance measurement	Metropolitan Clean Energy Center; RideKC transit providers; local governments	Replacement of: 23 cars 37 trucks 18 diesel-utility/refuse 4 buses
Assumptions (T-1:T-5): E-bikes offer immediate expansion opportunities to equitable transportation due to lower purchase and operating costs than electric motor vehicles. MARC estimates that 50% of total rebates and 71% of total rebate costs will be allocated to low-income individuals. Trails and bikeway projects will enhance connectivity between neighborhoods and activity centers, either by closing critical gaps or extending existing bikeways.				
Risks (T-1:T-5): Lower-than-anticipated uptake in LIDACs for proposed e-bike strategies will be addressed through MARC media buys and translating marketing materials into Spanish to ensure clear messaging for incentives and rebates, including income eligibility tiers. Bike costs may exceed estimates, potentially limiting inclusion of infrastructure and projects. Establishing e-bike hubs at resilience hubs and promoting availability of memberships through social service agencies may help drive utilization. Local planners and engineers may not incorporate green corridors elements. Sharing local best practices and performance measures may mitigate this.				
Urban Greening				
Measure UG-1, Tree Planting				
Description: Projects will support tree planting and installation of native landscaping along transportation corridors (cross reference to measure T-1), including newly connected bike and trailways.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Bridging the Gap (BTG) will lead and coordinate urban forestry and corridor greening efforts. Deep Roots will advance native landscaping with homeowners and offer technical assistance for large landscape plantings.	Additional competitions for urban greening projects; urban greening strategies may also be linked to building project scopes.	Complete anchor projects; evaluation of initial green corridors; community outreach; call for scaling projects; training/workforce development opportunities for youth via BTG and DR; DR-led neighborhood and homeowner consultations and assistance; performance measurement; evaluation	Bridging The Gap; Deep Roots; area transportation authorities; local governments; CBOs; MARC	10,000 to 12,000 trees + 600 native landscapes planted; 40 GSI “green acres;” workshops on nature-based design; BTG supports cross-measure projects

Measure UG-2, Riparian & Native Areas and Green Stormwater Infrastructure (GSI)				
Description: Community-based GSI measures will complement transportation and building measures in ways that magnify community benefits.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Heartland Conservation Alliance (HCA) will restore 95 acres of riparian habitat on an ecologically and socially strategic reach of the Blue River, a key MetroGreen corridor. HCA will help youth to plant riparian agroforestry systems, linking food security, stewardship and climate.	Additional competitions for urban greening projects. Entities submitting projects in other measure areas may add urban greening features or green stormwater infrastructure elements to scope.	Complete 20 acres of anchor program in year 1; evaluate initial riparian restoration; community outreach; call for projects (including GSI, forestry, native landscaping); train LIDAC youth through HCA to support UG activities and milestones; establish cross-sector linkages; workshops on riparian and related scaling projects; evaluation	Heartland Conservation Alliance; The Nature Conservancy; three local government parks departments; The Conservation Fund; Bridging The Gap; Cornerstones of Care	Restoration complete; youth trained; Riparian Restoration Guidebook published; 100-300 addl. acres restored (funded by UG-1); cross-measure partnerships established; 200-400 attend 5 MARC workshops
Measure UG-3, Resilience-focused storm engineering standards for redevelopment, new development and stream setbacks				
Description: MARC will facilitate adoption and implementation of the new standards.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Update regional stormwater engineering standards with APWA-KC & 30 local governments. KC-ACT will support local adoption and implementation.	Additional presentations as requested.	Develop/deliver presentations to local gov'ts; conduct 6-8, 2-day workshops for engineers; technical assistance; performance evaluation; convene stakeholders & consultant to revise standards with NOAA Atlas 15 projections	MARC's Government Training Institute (GTI); local governments	~500 professional engineers trained; local govts adopt standards; update standards (2027)
Risks (UG-1:UG-3): Demand may exceed supply for native trees and plants over the performance period. To mitigate risk, in years two through five, most plants will be procured through bulk, cooperative contracts to assure supply, achieve economies of scale and grow trees/plants to local specifications. Lack of community or local government support/resources may constrain the maintenance of planted and landscaped areas. Community engagement by BTG, DR and HCA will be fundamental to helping local partners understand direct and indirect benefits, and to developing community stewardship. Finally, political constraints may impede adoption and implementation of new standards. Education and engagement will mitigate risks.				
Assumptions (UG-1:UG-3): MARC assumes that the American Public Works Association (APWA) KC regional section membership will adopt new standards in May 2025, with local governments adopting them shortly thereafter. MARC estimates high levels of sequestration from the widespread use of the new stormwater standards, based upon detailed calculations of expected land areas to develop and redevelop, the level and types of GSI applications to manage runoff from the tributary acreage served, and peer-reviewed research demonstrating carbon sequestration levels from GSI practices.				

Food, Agriculture & Waste				
Measure FA-1, Stakeholder capacity building and regenerative agricultural facility equipment				
Description: Efficient farm-based equipment and stakeholder capacity building.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Cross-over with Buildings and Energy measures (BE-1, BE-2, BE-4).	Calls for projects for resilience (and farm) hubs and energy efficiency projects/equipment.	Food system asset mapping; farm tours; calls for projects	KC Healthy Kids; GKC Food Policy Coalition; KC Food Wise Council; local govts.; Cultivate KC; farms	6 farm resilience hubs w/efficiency upgrades and renewables (B-3-4); project completion
Measure FA-2, Regenerative agriculture system development				
Description: Enhance and expand a network of regenerative agriculture hubs				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
The KC Community Gardens (and The Giving Grove) will plant school/community gardens and orchards in LIDACs.	Additional competition for applied regenerative agriculture hubs.	Community workshops on gardening & ag. systems/ operations; evaluate initial gardens; soil sampling at 10 farms; performance evaluation	Resilience hubs; CBOs; local governments; schools; libraries; UMKC Urban Ag Business Development	52 gardens & 35 orchards; 1,500 residential gardens via 25 trainings; 8-12 new farms/farmers trained
FA-3, Composting				
Description: Scale up compost infrastructure by investing in programs that create quality jobs while increasing residential composting.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Initial competition for composting projects (including projects with circular economy elements).	Additional competitions for composting projects and related projects identified by food system assessment.	Outreach; call for projects; initial/final project evaluation; community outreach; performance measurement	KC Can Compost; MO Organic Recycling; Compost Collective; Foundation for Regeneration; local govts	~ 3 commercial composting initiatives funded
FA-4, Food Waste Reduction				
Description: Increase capacity of regional food redirection efforts.				
Anchor Project	Scaling Projects	Activities/Tasks	Partners	Milestones
Initial competition for food redirection projects.	Additional competitions for food waste reduction projects based on food waste plan.	Community outreach call for projects; performance measurement and evaluation	School districts; NGOs/ CBOs; Kanbe's Market; After the Harvest	New partnerships for diverting/recovering food waste
Risks (FA-1: FA-4): Land acquisition by composting operations for prospective new facilities is not yet finalized. Community support for and participation in organics and food collection infrastructure is not fully tested. New gasification technology has been piloted, but not locally or at scale.				
Assumptions (FA-1:FA-4): Coordination among members of the regenerative farming community will spur additional opportunities to grow the urban and regional farming network, likely spurring the creation of farm hubs. Workshops to teach community gardening practices, supported by resilience/farm hubs, will catalyze significant uptake among participants. Growth in regenerative agriculture will increase demand for local compost.				

b. Demonstration of Funding Need

Our region is ready for large-scale investment in climate reduction strategies. KC-ACT demonstrates strong leadership commitment and experience for equitable climate action, deep community partnerships, a readiness to act with shovel-ready and shovel-worthy projects, a well-articulated theory of change, and a demonstrated ability to leverage additional resources.

The need for investment is compelling. The 308 PCAP projects submitted by local partners demonstrate clear local need and readiness. These project ideas respond, in part, to long-recognized patterns evident in our region, including concentrated poverty — a legacy of historical inequalities. Market signals tied to energy prices, land values and landfill costs have disincentivized systemic investments in climate action.

By providing funds at this scale, the EPA will enable the Kansas City region to transform the way it does business — embedding climate action into decision-making processes at all levels. Funds will enable transformative change in public policy, plans and investment programs; strengthen low-income neighborhoods through geographically focused, multi-benefit collaborations; and nurture a process of redefining how resilience-informed design practices can retool public infrastructure systems.

Building community capacity for climate action is foundational. Every measure will strengthen the already deep collaborative networks that underlie each program measure. Grant funds will grow CBO capacity while also enhancing the efficacy of regional planning, better linking climate equity with transportation, air and water quality, land use, natural hazard mitigation, and early learning.

Finally, grant funds will fundamentally shift local markets. Investments in buildings and transportation will demonstrate how new sources of capital, a newly trained workforce, new approaches and technologies, and a new framework for collaboration will drive future investment toward a net-zero future. Urban greening and agriculture investments will expand existing markets for native plant production, resilient stormwater design and local food. Investments in large-scale commercial composting will reshape public understanding of circular economies. Investment in social marketing will dramatically increase consumer demand for products and services that define the region’s resilience.

While CPRG funds will create shifts in the broad systems that drive our continued progress, MARC and community partners have worked to secure other resources made available through federal programs. MARC’s funding approach stacks funding from multiple sources, including individual, corporate, utility and philanthropic on the private side, and local, state and federal on the public side. Related federal sources include programs overseen by the EPA, DOT, DOE, FEMA, HHS, HUD and USDA.

The region has been successful in securing other funds to date. MARC received a \$5.6 million DOT RAISE grant for bus rapid transit planning along two J40 corridors and \$4.6 million from DOE Renew America’s Nonprofits to install energy efficiency improvements in 25 area nonprofit buildings. MARC received and is awarding \$23.5 million to local governments through the DOT Carbon Reduction Program. KCMO and the City of Olathe received \$12 million and \$1 million, respectively, from the USDA Urban and Community Forestry Program. Metropolitan Energy Center received \$8 million from DOE to conduct training on new building energy codes. KCPL was the beneficiary of a DOE Phase I: Buildings UPgrade prize. Local philanthropy supported the BE-Ex with \$3 million for the Rising Trades program, and \$1.5 million to match the DOE nonprofit grant.

Pending sources of related funds include Greenhouse Gas Reduction Funds. These resources will be pivotal to supporting building improvements, though uncertainty remains about how those funds will be deployed. If awarded to the State of Missouri, EPA’s Solar for All funding will complement KC-ACT. Eergy’s launch of a \$3 million pilot heat island program will be replicated in KCK and other LIDACs.

c. Transformative Impact

Proposed measures will focus strategic investment in three areas: public leadership, strengthening neighborhoods/CBO capacity and system-level infrastructure investment. Local policy adoption will strengthen a public approach of “leadership by example” while spurring subsequent private investment aligned with policy goals. CPRG investment in interconnected, multi-benefit measures will have oversized neighborhood benefits, while system-level infrastructure investment will create broader, long-term community impacts.

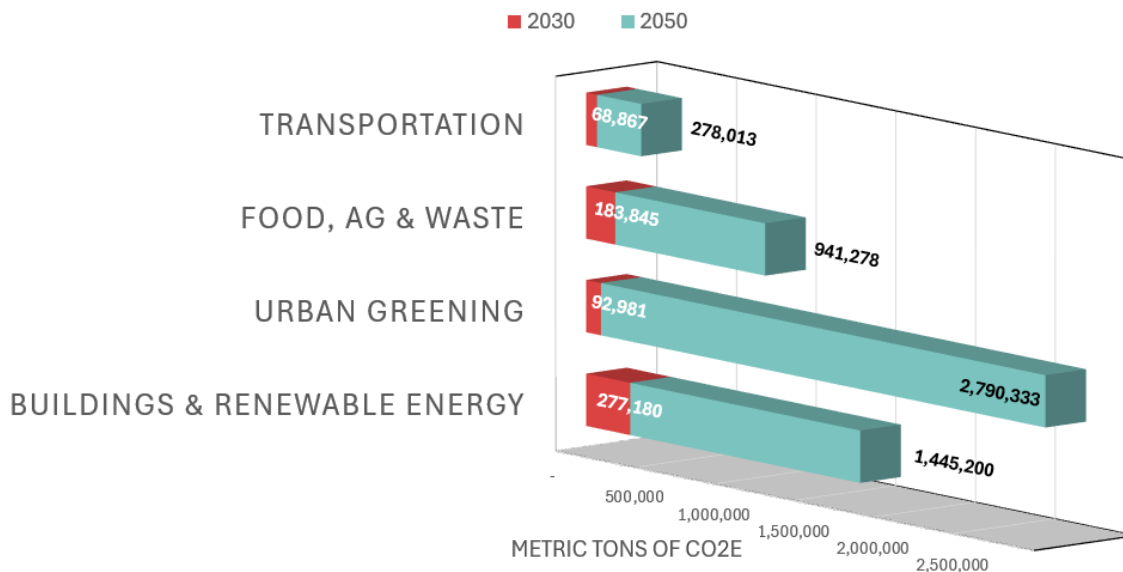
Leveraging Public Leadership. Local governments have “led by example” over the past decade through a range of sustainability investments, many spurred by CAKC’s 2020 Climate Action Playbook. Additional funding to local governments will strengthen local leadership models, while also shifting policy frameworks to ensure the continuity of project impacts. Local policy shifts will supplement the application of a climate and equity lens across the portfolio of MARC’s regional planning activities (e.g., transportation, housing, land use and natural hazard mitigation).

Neighborhood resilience. A set of interconnected, multi-benefit and resilience-focused solutions will increase quality of life in low-income neighborhoods. Investments will address known climate risks and vulnerabilities related to energy/water burdens, home health, heat, air and water quality, food security, and mobility. Resilience hubs will create new models for community building, effectively creating “resilient villages.” Neighborhood-scale capacity building will occur in several ways. UMKC’s Center for Neighborhoods will train neighborhood leaders and provide resources to meet neighborhood-identified needs/capacities. Peer-to-peer learning will occur within and across training cohorts. KC-ACT resources will support “soft costs” to help CBOs develop and administer new initiatives. Community programs, complemented by social marketing, will be hosted at or near resilience hubs to support weatherization, tree planting, urban agriculture or cycling.

Critical infrastructure resilience. Resilience at the regional scale requires investment in broad regional systems in addition to geographically focused projects. Regional composting facilities will provide demonstrable improvements to landfill-dominated solid waste management systems. Green on- and off-road transportation corridors will reinforce policies to encourage mode shifts. District-scale clean power complements the region’s transition to more renewable sources. A focus on riparian corridor restoration will effectively redefine conventional approaches to watershed management.

Figure 1

GHG EMISSIONS REDUCTION BY MEASURE AREA



2. Impact of GHG Reduction Measures

a. Magnitude of GHG Reductions 2025-2030:

Figure 1 shows the estimated metric tons of CO₂e emission reductions by measure, totaling 622,873 CO₂e by 2030. These short-term outcomes are driven by the shovel-ready, equity-focused investments in years 1 and 2. However, these early milestones of completed anchor projects and programs will offer community members and stakeholders opportunities to inform additional climate action and change. *See additional discussion in 3b. about how performance measurement will inform scaling.*

b. Magnitude of GHG Reductions 2025-2050:

Figure 1 shows the estimated metric tons of CO₂e emission reductions by measure, totaling 5,454,823 CO₂e by 2050. The interconnectedness of proposed measures and cross-sector strategies is focused on achieving permanent GHG reductions. Over the long term, KC-ACT also focuses on building momentum among constituents to engage in their increasingly resilient spaces to create even more equity-focused projects at scale, leading to exponentially greater long-term reductions.

c. Documentation of Cost Effectiveness:

	2030 CO ₂ e Reduction (M-Tons)	2050 CO ₂ e Reduction (M-Tons)	2030 Cost effectiveness per M-Ton CO ₂ e	2050 Cost effectiveness per M-Ton CO ₂ e
Grand Total	622,873	5,454,823	\$318	\$36

Factors affecting the measures' cost-effectiveness have been anticipated as risks to be mitigated in section 1a. The attached budget narrative also discusses cost-effectiveness.

d. Documentation of GHG Reduction Assumptions

Please see the attached Technical Appendix and GHG calculations spreadsheets for a discussion of the quality, thoroughness, reasonableness and comprehensiveness of the methodology, assumptions and calculations described for developing the estimated GHG emission reduction. MARC used the latest available information to the greatest extent possible.

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

a. Expected Outputs and Outcomes

Large-scale emissions reductions will be accompanied by improved public health (through improved air quality, EV charging, healthy homes, active transportation, local food and heat island reduction), increased social and human capital (through resilience hubs, capacity-building and collaborative management), reduced energy burdens (through building energy measures in single and multi-family homes), enhanced food security (through reduced food waste, urban orchards, riparian agroforestry and an energized urban food system), and improved mobility (through alternative transportation infrastructure). Table 2 discusses the expected outputs and outcomes.

Table 2: Expected Outputs and Outcomes			
	Key Activities/Milestones	Expected Outputs	Outcomes
Building Efficiency and Energy Efficiency			
B-1	Resilience Hubs		
	Bluford Library anchor project	1 Resilience Hub	GHG reduction; decreased energy burden; decreased neighborhood pollution; increased physical exercise; community building
	Community Resilience Hubs	14 Resilience Hubs	
B-2	Quality Housing		
	Single-family retrofits	600 dwellings retrofits by Home Modification Coalition	GHG reduction; improvements to region's older housing building stock; landfill diversion; increased energy efficiency; market adoption of new building practices; increased neighborhood capacity; improved home health; workforce development; job creation and business growth
	Weatherization projects	12,000 households provided with weatherization kits	
	Multi-dwelling retrofits	15 multi-unit dwelling buildings retrofits	
BE-3	High-Performance Buildings		
	Public including schools	16 public building or school retrofits	GHG reduction; increased energy efficiency; curricula developed; workforce development; job creation and business growth; improved education from cost savings; leadership by example
	Commercial buildings	15 building retrofits	
	Urban farms	6 urban farm building retrofits	
	Grant technical assistance and application support	100 finalists of building scaling projects receive energy audits; 150 prizes to CBOS/NGOs across four competitions to support application development	Targeted insight for next steps and interventions
B-4	Renewable Energy		
	Vicinity (KCMO) heating/cooling	3,000 ton, renewably-powered electric chiller 2 new transformers	GHG reduction; grid burden relief; energy burden reduction; increased community leadership; increase in NGO investment in mission-driven programming (due to cost savings); workforce development; job creation; business growth; growth of regenerative agricultural operations; increased local food production
	Grandview solar	515 kW installations across four sites	
	Solar installations	30 kW system installed at 15 resilience hubs and 25 NGO/CBO locations, 8 kW system at 6 urban farms	
	Grant Management/admin/technical assistance	Help building owners understand improvement processes, technologies, funding options	Increased subrecipient capacity; decreased risk; leveraged funding; new partnerships

(Continued)

Table 2: Expected Outputs and Outcomes (Continued)			
	Key Activities/Milestones	Expected Outputs	Outcomes
Transportation Alternatives and Technologies			
T-1	Green corridors	10 miles of developed green corridors: 300 LED streetlights and 10 miles of trails/bikeways (see T-2)	Reduced particulate matter (PM) along corridors; mode shift and reduced vehicle miles traveled; reduced energy consumption; urban heat mitigation; increased connectivity; enhanced mobility; improved health outcomes; increased knowledge and interest of green corridor build-out; skill building for planners/designers
CS-4	Professional development	150 local government engineers and planners trained	
T-2	Bike lanes	15.5 miles of connected bike lanes and trails (in addition to T-1 outputs)	
T-3	E-bike (subsidy + shared)	5402 e-bikes deployed (5,000 personal e-bikes, 100 deployed to NGOs/CBOs, 300 deployed to local governments, 2 adaptive cargo bikes); 10 NGO/CBO partners; ~40 new bike hubs	GHG reduction; PM reduction; increased personal exercise; reduced vehicle congestion; affordable, inclusive transportation options for LIDACs; expansion of e-bike infrastructure with legacy potential from 2026 World Cup transportation options; job creation
T-4	EV charging level 2	126 level 2 ports, or 35 charging stations accessible 24/7 in areas where no services currently exist	GHG reduction; improved air quality; economic development and job creation; operating cost reduction
T-5	Fleet transition	82 low/no emission vehicles (from internal combustion engine vehicles to clean, low-carbon vehicle)	GHG reduction; improved air quality (reduced NOx, PM, and VOCs); reduced noise; improved public health outcomes; economic development opportunities
Urban Greening			
UG-1	Tree planting	10,667 trees planted on residential land & public realm (2,640 trees planted along 10 miles of green corridor; 2,640 trees planted along 10 miles of bikeway trails)	GHG reduction; heat island reduction; reduction in household energy burden; improved air quality and public health; reduced noise pollution; job creation
	Native landscaping	20 neighborhoods (600 parcels) planted; 15 native plant workshops held spurring the planting of 75,000 native plants; 50 youth/small-business mentorships/year; 100 acres landscapes installed/managed on regional parkland from scaling projects	GHG reduction; increased capacity; of homeowners, neighborhoods, and communities around native planting and maintenance; job creation and workforce development; increased food security; increased pollinator habitat and biodiversity
UG-2	Riparian and native areas	95 acres of former cropland and forested wetland habitat restored; 150 workforce development training sessions; 25 youth trained in riparian restoration	GHG reduction; improved air and water quality; carbon sequestration; workforce development; improved community infrastructure; reduction of flood risk;
UG-3	Stormwater standards	20 local governments adopt APWA standards; 500 local govt. and consulting engineers & planners trained	reduced urban heat islands; precedent for large riparian corridor restoration

(Continued)

Table 2: Expected Outputs and Outcomes (Continued)			
	Key Activities/Milestones	Expected Outputs	Outcomes
Food, Agriculture and Waste			
FA-1	Regenerative agriculture facility development	Complete food system stakeholder inventory; 50 farm tours & workshops by urban growers network; 5-10 energy efficient equipment purchased (lifts and refrigerators)	GHG reduction; carbon sequestration; increase in number of regenerative agricultural facilities; increased number of farmers trained in regenerative techniques and technologies
FA-2	Regenerative ag system development	50 new school/community gardens planted and 35 orchards planted in LIDACs; 25 workshops held to enroll 1,500 new low-income home gardeners; 10 school partnerships formed; cross measure (BE-4) output of solar installation at farms; 8-12 new urban farms and farmers	GHG reduction; carbon sequestration while restoring soils; increased regional food production; new curricula; increased knowledge of regenerative agriculture; development of new farmland; increased access to land for food production; bolstering the urban food systems and building community
FA-3	Composting & circular economy	2-3 commercial composting facilities supported; 1 gasification units supported for natural gas and biochar production	GHG reduction; reduced methane emissions; reduced food waste; landfill workforce development opportunities; increased capacity to produce compost, power facilities, and produce zero-emission, sustainable building materials
FA-4	Food waste reduction	2,000 tons food waste diverted to NGOs/CBOs/schools	GHG reduction; reduced food waste; increased agencies receiving healthy food
Cross-Sector Measures			
CS-1	Public policy & partnerships	Code adoption (IECC 2024, IECC 2027, Solar- and EV-ready; stormwater standards and related ordinances)	Collectively, these cross-sector outputs will enhance the likelihood of achieving the magnitude of the measure-specific outcomes above.
CS-2	Equitable green workforce	745 disadvantaged workers supported through career coaching, training, apprenticeships and other services	
CS-3	Empower Individuals to act	Regional climate communications; encourage behavior change to reduce 224,567 tons of CO ₂ e by 2030	
CS-4	Professional dev. and community education	5 green corridor workshops; 10 stormwater/urban greening workshops; dozens of community events	
CS-5	Co-creational capacity bldg.	LIDAC participation in program design and evaluation	

b. Performance Measures and Plan

A comprehensive performance measurement framework will assess project and program efficacy and long-term impacts. Performance measures will utilize quantitative and qualitative measures to scrutinize the subgrant allocation process against intended programmatic goals. Together with UMKC’s Co-LEAD effort, the framework will be a collaborative approach with project partners for evaluating formative and summative outcomes in a way that also supports program and community learning. The collaborative co-creation of all project elements – from framing to fund allocation, implementation to evaluation – is viewed holistically to ensure full community buy-in, and to ensure that performance measures facilitate shared learning and course corrections along the way. Formative assessment, paired with strategic professional development and peer-to-peer learning about alternative practices (e.g., street design, building management), will lead to iterative project adjustments.

Deep engagement will create new mechanisms to understand how projects best meet neighborhood needs. UMKC’s data-sharing platform will allow residents and NGOs/CBOs to share photos and local experiences, providing textured qualitative data, complementing the quantitative emissions data that will give voice to LIDAC communities adjustments. MARC and UMKC will analyze 1) specific GHG emissions reduction measure outcomes and 2) broader pattern outcomes including community leadership capacity, public health, land stewardship and community behavior change. Performance measure data will be collected in various ways. MARC will secure climate data services to obtain data to model regional program outcomes. Modeled and actual data will enable system-level assessments of GHG reduction, and of performance metrics. Additional indicator data compiled by program managers will come from measure-specific software programs (e.g., i-tree), activity reports, subrecipient reports, participation logs and compiled survey results.

Table 3: Performance Metrics by Measure Area	
	Performance Metrics
BE	# of resiliency hubs created; # of buildings/homes retrofitted and weatherized; avg. efficiency improvement at buildings/homes; dollars leveraged and dollars saved; # of applications for project competitions; # and dollar amount of subawards; # and size of solar arrays installed; # of projects receiving technical assistance; # of energy audits conducted for finalists, # of workshops/trainings for building owners and service providers; # of job seekers enrolled in workforce development programs and placed in green workforce apprenticeships, training/education, and jobs; # additional buildings/homes benefitting from IRA energy incentives; examples of coordination among single-dwelling implementation partners; # and attendance at resilience hub programs; community survey results for climate-related behavior change; stories shared through Co-LEAD app; E.g. of NGO cost savings applied to mission
T	# of miles of green streets, bike lanes, trails; # of clean vehicles, EV charging ports; # of rebate incentives distributed/distributed to low-income individuals; # of job seekers enrolled in green workforce development programs, placed in green workforce apprenticeships, training/education and jobs; usage of shared e-bikes; # and participants at bike skills and safety education workshops; # of e-bike hubs in LIDACs; # of partnerships with social service agencies for e-bike programs; # of local governments participating in bike-share programs; integration and utilization of Co-LEAD app for performance measurement
UG	# trees planted; # native landscapes; # riparian acres restored; # miles of green streets; # of communities for which investment occurs across measure areas; # youth employed; # of acres of GSI installed; passage of APWA standards; # local governments adopting standards; # stormwater professionals trained; # of community workshops; \$ invested by local governments in GSI; # of youth earning SGI maintenance training certification; integration and utilization of Co-LEAD app for performance measurement
FA	# awards to food waste and composting firms; tons of compost, biochar and mulch produced; # of gardens/orchards planted; # and impact of solar and building retrofits at urban farms; # of new farms established and acres farmed; food grown and distributed to LIDACs; # times compost curriculum delivered; pounds of food redirected; # additional corner stores providing fresh food; energy saved from efficient equip.
CS	# of stakeholders and meetings convened; # of local governments and population served by adopting measures; # of people trained; # of apprenticeships and jobs created; # of attendees at workshops; frequency/duration of use with Co-LEAD app; % increase of homeowners changing behavior (e.g. IRA clean energy/energy efficiency tax incentives or planting trees); # and % of underserved job seekers enrolled in workforce development programs, including supportive services, training and education, and on-the job learning and apprenticeships.
Grant Admin	# of funding competitions; # of CAB members recruited; # of applications for scaling projects; examples and depth of technical assistance resources provided to applicants; dollars requested/awarded for scaling projects; # of grant reports completed

c. Authorities, Implementation Timeline, and Milestones

The project director(s), in coordination with MARC’s finance team, will administer CPRG subawards to parties with authority to carry out featured strategies. MARC has experience in administering federal funding and executing federal and state subawards to implement large projects. MARC will vet subrecipients and create subrecipient contracts with compliance indicators to mitigate risk over the performance period and ensure that subawards are awarded consistent with 2 CFR 200 regulations. As needed, MARC will offer technical assistance to subrecipients at higher risk for non-compliance.

Local governments have the authority to carry out proposed measures taking place on public land within their jurisdiction. Building owners have the authority to carry out proposed measures within their facilities and on their own land. All entities responding to competitive calls for projects involving buildings must provide proof of building ownership or building owner permission. One criterion for anchor projects was pre-approval from authorizing bodies; each of these projects is named in a letter of commitment. All subrecipients delivering project activities on public land will provide proof that the landowner and any other regulating body (municipality, neighborhood association) supports the project.

	<u>Partner</u>	<u>Role/Responsibility</u>
BE-1	KC Public Library (KCPL)	Provides educational and social services to the urban population of KCMO, including a wide diversity of patrons, including historically marginalized communities. Ten physical locations serve 500,000 visitors annually. Their facility master plan will address system-wide energy-efficiency upgrades at their ten facilities. Bluford Library will then become the flagship Resilience Hub.
BE-2	Habitat for Humanity - KC	Habitat KC, a member of MARC’s Regional Housing Partnership (RHP), builds energy-efficient homes and conducts energy-saving minor and critical home repairs. Habitat KC will coordinate a local coalition to streamline home retrofit and weatherization efforts (e.g., common intake processes, education, procurement), including on hundreds of pre-identified homes/buildings.
BE-3	CAKC/ Building Energy Exchange (BE-Ex)	BE-Ex KC will build and lead the ecosystem of partners (e.g., designers, contractors, lenders, owners) focused on delivering building energy efficiency improvements across all building types, but focusing on low-income multi-family housing. BE-Ex will 1) administer a platform to provide high-quality technical and financial assistance, data and tools to public, nonprofit, and commercial building decision-makers, and track GHG reduction/energy data (to support performance measurement, see Section 3b); 2) leverage its contractor network to connect participating contractors with job opportunities; and 3) implement a revolving loan fund to inject capital for catalytic commercial retrofit projects where other federal funding and private financing are lacking.
BE-1-3	Evergy	The region’s largest electric utility received utility commission approvals for new rounds of demand-side management programs to begin in 2025 that will benefit building owners. Evergy will help BE-EX provide technical assistance and link building owners to energy solutions incentives (BE 1-3), will help Habitat link homeowners/landlords to weatherization assistance (BE-2), and support urban heat island reduction measures in additional neighborhoods beyond their initial pilot (UG-1, 2).
BE-4	Vicinity Energy	Vicinity Energy owns and operates downtown KC’s thermal energy network. Vicinity has invested \$4.125 million to expand the existing cooling system auxiliaries to support the future installation of an additional electric chiller and power transformers.
BE-4	City of Grandview	The City of Grandview, a majority-minority community in southeast Jackson County, Missouri, will install a combined 515kw solar investment at city hall, a community center, and two fire stations to boost local leadership on climate action.

(Continued)

Table 4: Measure-Specific Partnerships (Continued)

	<u>Partner</u>	<u>Role/Responsibility</u>
T-1	Unified Gov't of WyCo/KCK (KCK)	KCK has a high concentration of LIDACs. Multiple community planning initiatives identified the expansion of the Riverfront Heritage Trail as a top priority, and KCK will advance the project through a design/build process. KCK will also participate in projects across all measure areas, with a strong interest in a resilience hub near the Quindaro ruins at the trail's terminus.
T-3	BikeWalkKC (BW)	BW facilitates the RideKC Bike system, a 24-hour bike sharing system. This project will double the size of their existing system, focusing on providing accessibility to underserved LIDACs. If possible, investments will be installed prior to the World Cup.
UG-1	Bridging the Gap (BTG)	The region's leading 30-year old nonprofit environmental organization, with programming on urban forestry, natural area restoration, workforce development and residential energy efficiency. BTG will lead corridor plantings and support neighborhood efforts in other parts of the region. BTG is also a member of the home repair consortium (BE-2).
UG-1	Deep Roots (DR)	DR is a nonprofit that will offer hands-on learning opportunities (e.g., tours and workshops) and individual consultations to spur native landscapes. DR is a collective impact organization with a network of over 60 partner organizations and communities.
UG-2	Heartland Cons. Alliance (HCA)	Heartland Conservation Alliance is an Ambassador in EPA's Urban Waters Federal Partnership. They recently convened partners to develop a Water Equity Roadmap for the Blue River watershed and a Blue River Greenway vision case statement.
FA-2	KC Community Gardens (KCCG)	A nonprofit, 501c3 helping low-income households, community groups and schools to grow their own vegetables and fruit to address food security and land restoration. They have planted over 500 orchards at schools, churches and community centers.
CS-2	FEC (MO)	Full Employment Council (FEC) in Missouri, and Workforce Partnership (WP) in Kansas are the region's workforce entities. The two workforce investment boards leverage state and federal funds to enroll eligible job seekers into training, pre-apprenticeship, and apprenticeship programs, including those that culminate in specializations or certificates in sectors and industries to respond to employers and market demand. Workforce partners will work closely with regional employers to align the supply/demand.
CS-2	WP (KS)	
CS-5	University of Missouri-Kansas City	UMKC is the region's urban university. Their involvement through CO-LEAD will supplement MARC's policy, planning, and management expertise to build CBO leadership and organizational capacity, undertake collaborative performance measurement, and elevate and connect community engagement efforts to program management and implementation. UMKC's Center for Neighborhoods will support community engagement. UMKC's Midwest Center for Nonprofit Leadership will support evaluation.

Table 5: Implementation Timeline		<i>*Estimated to help alleviate labor and supply chain risks. Schedule subject to change.</i>								
		Year 1				Years 2-5				
		Q1	Q2	Q3	Q4	2	3	4	5	Milestone
Regional coordination										CEC meets at least 6x/year
	Accept award									Community announcement event
	Annual reports									Annual reports filed
	Final report/grant closeout									Final report submitted
Partner onboarding										
	Hire Grant Staff/Procure services									Contracts signed
	CAB recruitment and engagement									CAB members onboarded
	Subrecipient technical assistance									Partners receive support to mitigate risk
Anchor Projects/Scaling Projects										
	Bluford Library, Vicinity, Grandview Solar, Heritage Trail, Comm. Gardens									Case studies inform future scaling of projects
	Habitat KC, BikeWalkKC, Blue River Riparian, BTG, DR projects									Project benefits to LIDACs, LIDAC community members contribute to the Co-LEAD evaluation process with stories of impact. The anchor projects catalyze additional projects in LIDACs.
	Funding competitions for food, ag, waste projects and workshops									
	Funding competitions for transportation projects									
	Funding competitions for resilience hub projects									
	Funding competition for urban greening projects									
	Funding competitions for schools, nonprofits and farms retrofits									
	Funding competitions for multi-family and commercial retrofits									
Evaluation										
	Development of a collaborative evaluation tool									Beta test Co-LEAD app and launch tool
	Performance evaluation of scaling projects									Formative/summative evaluation
	Data collection (at the neighborhood, project, and measure levels)									Impact stories communicated
	Outcome measurement and evaluation									Outcome reports shared
Cross Measure Support										
	Community Workshops and Education									Community members engaged in action
	Professional Development and Training									New champions for climate action policy
	Workforce development and training									New job seekers, new apprenticeships

4. Low-Income and Disadvantaged Communities

a. Community Benefits

Within the MARC region, 141 census tracts meet EPA’s definition for LIDACs based upon the CJEST. These communities have been impacted by decades of segregation policies and disinvestment with many in need of improved housing, public facilities, pedestrian facilities, and green spaces. MARC conducted a benefits analysis of the measures for LIDACs using EPA’s CJEST to visualize projects. The anchor projects offer direct GHG emission reduction potential (table 6), and outcomes mentioned in 3a. (table 2). Indirect benefits to LIDACs are that hub-sponsored activities will lead to individual and community-level behavior change supporting GHG reduction and building resiliency in local institutions; new green jobs; improved air quality, which reduces asthma; improved health and well-being, as green spaces support stress reduction, improved mental health, increased physical activity, relaxation, and social interaction; and increased neighborhood connectivity and vitality. In addition, the cross-measure workforce development strategy anticipates helping 745 disadvantaged job seekers. Habitat for Humanity KC, BikeWalkKC, Kansas City Community Gardens, and many anticipated partners for scaling projects will concentrate their project milestones on the region’s LIDACs. These scaling projects may benefit any of the 141 census tracts in Cass, Clay, Jackson, Ray and Platte counties (in Missouri) and Johnson, Leavenworth and Wyandotte counties (in Kansas) and will significantly increase the direct and indirect benefits to LIDACs beyond those projected in table 6. Vicinity’s serviceable footprint does not currently include any LIDAC census tracts because the system is at its chiller capacity. The new chiller will allow additional service to more buildings, including to five buildings with approximately 1,000 housing units reserved for low-income families. KC-ACT may also address dispersed suburban/rural poverty not captured by the CJEST.

Table 6: Example GHG emission reduction direct benefits for Anchor Projects in LIDAC Census Tracts

Anchor Project	LIDAC Census Tracts	Census Tract Population	GHG Emissions Reduction Potential M-Tons CO ₂ e	
			2030	2050
Bluford Library Resilience Hub	29095016600 (Library location); surrounding LIDAC tracts include: 29095005400, 29095005601, 29095003800, 29095003700, 29095005602, 29095005500, 29095005602	6,632	586	2,933
Grandview Solar Project	29095013401, 29095013301, 29095013307, 29095013309, 29095013313, 29095013416, 29095013410	1,020	1,700	8,500
Unified Govt. Heritage Trail	20209044500, 20209040300, 20209040400, 20209040600, 20209041300, 20209041600, 20209041700, 20209041200, 20209041800, 20209041100, 20209041000, 20209040900, 20209040200, 20209040800, 20209040700	29,662	337	1,685
Blue River Riparian Rest.	29095013405	2,058	1,169	8,959
Kansas City Community Gardens	29095008800 (KCGC headquarters) *	3,684	15.5	180

b. Community Engagement

LIDAC input incorporation in the application

The RCAP and PCAP processes involved over 1,000 and 500 community stakeholders, respectively, ensuring that the plans prioritized environmental justice. MARC and CAKC formed a Climate and Environmental Council (CEC) in 2022 to coordinate RCAP implementation. The CEC is a diverse regional group comprised of 34 leaders/stakeholders. A CEC equity subcommittee guided the PCAP's engagement process through ten workshops, focus groups, small group discussions and webinars from September 2023 to March 2024. Approximately 20% of the participants in this process represented LIDACs. A call for projects ([See PCAP, page 33](#)) created a pool of scaling projects for the equity project pipeline.

Multiple MARC committees, including the Board of Directors, CEC, air quality, transportation, and sustainable land use policy committees, supported the development of the KC-ACT proposal. Partnerships with multiple CBOs, complemented by outreach to additional CBO leaders generated diverse participation. Organizations like the Groundworks NRG, Westside Housing Organization, Habitat for Humanity KC, Urban Neighborhood Initiative, Jerusalem Farms, the Historical East Neighborhoods Coalition, UMKC Center for Neighborhoods, and Bridging The Gap connected regional planning and neighborhood interests. See attached letters of commitment and support.

Ongoing meaningful engagement with LIDAC communities

Continuous engagement with LIDACs will occur in multiple ways. The CEC will guide overall project implementation. Significant funds will be directed to CBOs to meet local needs and priorities consistent with KC-ACT criteria. CABs and community facilitators will ensure deep community engagement guides program development, funding determinations, and project implementation. Electronic media (e.g., e-news, data dashboards, social media) and in-person community presentations will help disseminate information. MARC will engage community facilitators with deep relationships with NGO/CBOs from LIDACs to identify forums. UMKC will train and resource neighborhood leaders and connect its network of NGOs (through its Center for Neighborhoods and Midwest Center for Nonprofit Leadership) to KC-ACT.

Co-creation with community members will be embedded in program management, design, fund allocation, shared/applied learning, and performance evaluation. Centering community-based organizations will ensure that disadvantaged community benefits are realized and sustained through a durable collaborative framework, one that ensures early and consistent inclusion of various linguistic, cultural, institutional, geographic, and other perspectives. The development, prototyping, and launch of the Co-LEAD App, along with a data dashboard, will significantly enhance engagement, data collection, evaluation, and management due to the ability for community members to upload qualitative project data such as pictures and stories about impact to compliment the GHG reduction data. MARC will contract with a communications firm to develop a five-year strategy to support all the measure areas.

5. Job Quality

KC-ACT incorporates workforce development and training strategies and investments to generate high-quality jobs with a diverse, highly skilled workforce consistent with the US Dept. of Labor's Good Jobs Principles. Specific strategies build capacity for generating high-quality jobs in climate related occupations and strengthen or enhance career pathways for a diverse and fairly paid professional workforce.

MARC has ongoing relationships with bi-state workforce development entities and understands the regional job market. Existing education and training programs in the building- and energy-related occupations are available through the three metropolitan community college systems, the buildings and trades councils, labor associations, and local union halls. MARC will make subawards to the bi-state workforce entities to conduct outreach and enroll potential workers in their programs for training and placements with employers (existing and emerging) in occupations that align with KC-ACT measures.

KC-ACT will expand the number of job seekers registered in the workforce entities' portals and served through training and placement beyond what they can do with other funding streams. Any CPRG-funded placements will be tied to priority occupations; outreach and career coaching will be focused on connections to employers in the energy- or climate-action related sectors. Investments may lead to new training programs for emerging technologies and new market demand in such areas as electric vehicles, charging stations, electric batteries, solar panel installation and farm operations. An immediate risk is that there are no local in-person EV installation/maintenance programs, only virtual.

MARC and workforce entities will facilitate new referral pathways for job seekers. This includes job seekers from LIDACs where KC-ACT projects take place, or job seekers who are clients of NGOs/CBOs that respond to calls for projects. BE-EX will help connect job seekers to MBE/DBE/WBE contractors through the RTCN. Some partners implementing anchor programs will enhance their employment services and/or workforce development for their constituents through CPRG. Habitat's program model embeds skill development opportunities. BTG offers difficult-to-employ client opportunities on green infrastructure crews. Cultivate KC and KC Can Compost provide training to people interested in farming or composting, respectively. The Vicinity anchor project (B-4) will train and employ 30 people, including 21 skilled labor job opportunities through training and apprenticeships at local unions as electricians, pipefitters, operators, carpenters, millwrights, and iron workers.

CPRG funds will help colleges/community colleges, building and trade councils and unions expand pre-apprenticeship and apprenticeship training, and training in fields leading to credentials and connections with employers for the classroom training associated with apprenticeships and participant supports. This will broaden the pipeline beyond the eligibility limitations of the workforce development entities. The educational institutions will be engaged to design new curricula and career pathways and build capacity for the region to mitigate some of the labor shortage risks identified within the measure areas.

6. Programmatic Capability and Past Performance

a. Past Performance

Head Start Program - Core Operating Support for Head Start & Early Head Start, 9 3.600 USHHS

Grant Number: 07CH010610-05-03, **Federal Funds:** \$27,886,444.00

Date: Annual Grant received 11/01/2021-10/31/2022 (have served as Head Start Grantee since 2005).

Summary: An annual grant is awarded for a 5-year timeframe for a total of approximately \$110 million. MARC serves as the Head Start and Early Head Start grantee for 3 Missouri counties (Jackson, Clay and Platte) with ~ 2,400 children and their families receiving early education and comprehensive supports.

Contact: Ms. Jennifer Curtiss, Grants Management Officer, jennifer.curtiss@acf.hhs.gov, 816-426-2991

Climate Resilience – Climate Pollution Reduction Planning Grant

66.306 US Environmental Protection Agency,

Grant Number: 5D96704301, **Date:** 8/1/23-7/31/26, **Federal Funds:** \$1,000,000

Summary: Funds are being used to develop Comprehensive and Priority Climate Action Plans over the 3-year timeframe of the grant and prepare a grant application to EPA for a CPRG Implementation grant.

Contact: Allyson Prue, EPA Project Officer, prue.allyson@epa.gov, 913-551-7277

Kansas City Regional Brownfields Assessment Cooperative Agreement

66.818 US Environmental Protection Agency

Grant Number: 99782401, **Date:** 10/1/20-9/30/24; **Federal Funds:** \$600,000

Summary: Funds are being used to pay for assessment and planning for reuse of brownfield properties in Kansas City and Jackson County, MO Kansas City, KS.

Contact: Susan Klein, EPA Region 7 Brownfields Coordinator, klein.susan@epa.gov, 913-551-7786

Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

Operation Green Light: Regional Traffic Signal Performance Measures.

20.941 US Department of Transportation, Office of the Secretary

Grant Number: SMARTFY22N1P1G36; **Date:** 08/01/2023 - 02/01/2025; **Federal funds:** \$734,653.00

Summary: Project is evaluating different data sources and performance measure solutions throughout the region to prioritize roadway corridors for traffic signal retiming.

Contact: Christopher M. Walston, Grants Mgt. Specialist, christopher.walston2@dot.gov, 770-715-5987

Regional Planning Partnership

11.302 US Economic Development Administration

Grant Number ED21DEN3020029, **Federal Funds:** \$175,000

Date: 7/1/21 - 3/31/24 - Three-year grant received 7/1/21 (have received funding since 2006).

Summary: Supports MARC's role as the Kansas City region's Economic Development District; conducts economic development planning, convening of economic and workforce development partners and prepares comprehensive economic development plan every five years.

Contact: Daniel Kojetin, Program Officer, dkojetin@eda.gov, 720-392-9249

MARC receives annual grants and secures competitive grants from SAMHSA, DOJ, DHS, DOT (FTA, FHWA), EPA, and HHS. Some of the federal grants are directed for MARC through a state agency. A major share of MARC's annual budget is sub-granted to subrecipients and contractors to carry out its work.

b. Reporting Requirements

Each grant and/or assistance agreement awarded to MARC and its 501c3, MARC CSC, is assigned a grant manager. MARC's finance department establishes a grant account in the organization's grant management system to track revenues (reimbursements, contributions, matching resources) and expenditures consistent with the grant budget monthly. The finance department keeps a record of required reports and works with grant managers to ensure that all program and financial reports are submitted promptly. Documentation on expenditures is retained and provided upon request to the grantor agency as a part of reimbursement request documentation. MARC has received an annual certification of excellence from the Government Finance Officers Association for its financial audit and accounting for 39 consecutive years, and a certification from GFOA for excellence in budget presentation for the last four years. MARC posts its annual budget and work plan documents and its annual audits on its website to ensure transparency and accountability in its programmatic and financial work. MARC has consistently received a clean audit with no audit findings. MARC strives to meet all deadlines for interim and final reports, and that all reports submitted are determined by the grantor agency as acceptable.

c. Staff Expertise

MARC has substantial staff capability related to climate action, as demonstrated by its leadership in engaging the broad regional community and providing technical context for three major regional climate action plans: the PCAP, RCAP, and the 2016 Climate Resilience Strategy. (The White House recognized MARC as a Climate Action Champion). In 2022, the American Planning Association recognized the RCAP as the national winner of the Award for Excellence in Sustainability. The plan was formally embraced by 19 local governments, representing 83% of the metro population. The EPA also recognized MARC for its Clean Air Action Plan. Other relevant regional initiatives: Regional Green Infrastructure Framework, Regional Transportation Plan, Natural Hazard Mitigation Plan, and the Regional Housing Partnership. Led by the Chief Resilience Officer, MARC's Environmental Department includes a staff of 12, including planners focused on air and water quality, climate action, green infrastructure and solid waste.

MARC is proficient at building community consensus on complex issues. With more than 100 employees, MARC has deep expertise with planning and community engagement, data and analytics, policy

development, professional development, and public education. MARC has extensive experience in helping local governments and NGOs administer federal grants, including construction projects funded through DOT, USDA, EDA and CDBG grants. MARC has supported local governments in administering federal EECBG funds and worked with school districts on bus retrofit projects. As the metropolitan planning organization (MPO), MARC convenes local and state transportation stakeholders to develop long-range plans and near-term capital improvement programs. MARC manages processes to solicit, evaluate and prioritize projects for funding through various federal programs. Over the last ten years, MARC has programmed over \$530 million for hundreds of projects. MARC’s public affairs department (8 staff), and research services (13 staff) support the analysis and dissemination of impact.

MARC’s Finance and Administration office (16 staff) support financial and grant management. At any point in time, MARC manages over 150 active grants from a variety of sources including more than ten federal agencies. Due to the number and diversity of subawards anticipated, an additional compliance management position will be added to the accounting group. MARC will provide technical assistance workshops before funding competitions and embed preliminary subrecipient risk assessment questions into RFPs. This is not to preclude small nonprofits with minimal experience administering federal dollars from applying, but rather to inform a plan for tiered technical assistance and subrecipient monitoring. MARC, or other NGOs/CBOs with sufficient experience and capacity, may provide fiscal agent services. Resumes and bio sketches of key MARC personnel and KC-ACT partners are uploaded.

7. Budget

a. Budget Detail

A Budget Narrative and Budget Spreadsheet are uploaded providing additional detail.

Measure/Budget Area	Cost
Building and Energy (BE)	\$101,391,835
Transportation (T)	\$42,615,187
Urban Greening (UG)	\$18,969,966
Food, Agriculture, & Waste (FA)	\$13,189,496
Workforce, Cross-Measure Program Support, & MARC Administration (CS)	\$21,656,732
Total	\$197,823,216

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Personnel	\$961,217	\$999,666	\$1,039,653	\$1,081,239	\$1,124,849	\$5,206,624
Fringe	\$486,393	\$505,847	\$526,083	\$547,124	\$569,081	\$2,634,528
Travel	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390	\$81,950
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Supplies	\$40,290	\$2,000	\$2,000	\$2,000	\$2,000	\$48,290
Contractual	\$9,885,224	\$5,495,596	\$5,516,328	\$4,468,935	\$4,208,412	\$29,574,495
Other	\$27,236,781	\$51,385,482	\$32,541,065	\$23,605,172	\$22,858,518	\$157,627,018
Direct Costs	\$38,626,295	\$58,404,981	\$39,641,519	\$29,720,860	\$28,779,250	\$195,172,905
Indirect	\$489,293	\$508,865	\$529,219	\$550,386	\$572,548	\$2,650,311
TOTAL	\$39,115,588	\$58,913,846	\$40,170,738	\$30,271,246	\$29,351,798	\$197,823,216

b. Expenditure of Awarded Funds

MARC's significant experience (6c) with administering large grants and sub awards, supplemented by additional grant staff, will ensure that awarded grant funds will be expended in a timely and efficient manner within the grant period. MARC will provide backbone support and coordinate a pool of technical support services (e.g., legal, audit, fiscal agent services, and support with compliance) to mitigate risk.

c. Reasonableness of Costs

All costs reflected in the budget were validated using market data, contractor estimates, relevant literature citations and organizational staffing projections regarding the level of effort to achieve stated goals. The budget justification details budget projections for all measures and subawards, by year.