

1. Overall Project Summary and Approach

1A. Description of GHG Reduction Measures

The City of New Orleans is one of the world's most iconic cities, famed for its music, food and architecture, but is also one of the world's most vulnerable cities to the impacts from climate change. As a result, over the last decade, the City has engaged in extensive planning processes to take action to reduce our emissions and prepare our City for extreme weather. In 2015, the City released one of the world's first resilience plans, [Resilient New Orleans](#), and, in 2017, released its first climate action plan, with an [updated version](#) published in 2022.

As a part of this grant application, the City has chosen seven measures that the City believes will address the EPA's goals to urgently address the GHG pollution contributing to climate change and are also consistent with the [Southeastern Louisiana Primary Climate Action Plan](#) (PCAP) established for the New Orleans - Metairie MSA by the Regional Planning Commission, as well as the City's own Climate Action Plan (CAP) goals to reduce GHG pollution.

Those measures, their features, tasks, and milestones, as well as the underlying assumptions and risks for each measure, are as follows:

Protected Bikeways

Features: This measure will construct six centerline miles of protected bikeways and create an interconnected web of opportunities for people to sustainably travel between employment, education, entertainment, and other destinations in downtown New Orleans and surrounding residential neighborhoods, many of which are disadvantaged and underserved. These roadways currently provide either traditional (unprotected) bicycling facilities, or no facility at all for bicycling. Emphasis will be on modal priority (raised or curbed throughout), comfort (separated, and smooth), and safety (distinguished,

Tasks	Milestones
Procure Design Firm, Public Engagement & Complete Design Plans	Q1-Q4 Year 1
Procure Construction Firm	Q1-Q2 Year 2
Construction of Protected Bikeways	Q3 Year 2 - Q2 Year 3

consistent physical format).

Assumptions: The City anticipates protected bikeway facilities will replace 3% to 4% of existing motorized vehicle trips on these roadways based on usage from similar roadways in the City.

Risks: Resident and/or business push back on the installation of protected bikeways. The City will mitigate this by holding at least two community engagement meetings per facility and presenting to the City Council in advance of construction.

Bike Share Expansion

Features: This measure will expand the City's "Blue Bikes" bike share system, operated by the City's non-profit partner, Blue Krewe, by increasing the footprint of the current system into underserved neighborhoods by adding 4.3 square miles to the existing service area of 10.5 square miles, an expansion of 41%. The expansion will improve network connectivity by doubling the number of stations from 114 to 262 and increase e-bike availability by growing the fleet from 800 to 2,000 in-service vehicles, including the purchase of 2,500 new e-bikes, 2,000 of which will be next generation in-field station charging e-bikes. Purchasing a larger number of bicycles than the 2,000 in-service goal is due to having approximately 25-30% of the fleet typically in need of service at any given time. The measure also will achieve net-zero operations by installing solar panels on Blue Krewe's warehouse and purchasing a fleet of e-vans for operations.

Assumptions: The expansion into majority BIPOC and low-income communities assumes that

Tasks	Milestones
Procure & Deploy 1st Generation Bikes and Renovate Warehouse	Q1 Year 1 - Q4 Year 1
Deploy Generation Infield Charging Bikes	Q1 - Q4 Years 2 - 4
Addition of Bikeshare Stations	Q1 - Q4 Years 1 - 5
Purchase & Deploy E-Vans	Q1 Years 1,3,5
Hire Additional Staff	Q1 - Q4 Years 1 & 3

investment will reach latent demand for bike share.

Risks: Potential supply chain disruptions could slow the delivery of equipment.

E-Bike Rebates

Features: The E-Bike Rebate incentive program will replace vehicle miles traveled by internal combustion engine vehicles with electric bicycle trips by incentivizing residents to purchase and use them. The program will provide an estimated 2,000 rebates to LMI residents at a maximum amount of \$1,200 and an estimated 1,000 rebates to all other residents at a maximum amount of \$600. The City will hire a third-party administrator who will provide reimbursements to city-based e-bicycle retailers so that those vendors can provide a seamless experience in which customers receive discounts at the time of purchase from e-bicycle retailers.

Assumptions: The estimated number of rebates assumes that the cost of the e-bikes is greater than the value of the rebate. However, the City recognizes that there are some e-bike models that cost less, which means that the City may be able to offer a greater number of rebates than assumed.

Risks: Potential risks leading to delays include: Resident demand isn't high enough to reach 3,000 rebates; E-Bike vendors are unable to meet resident demand; Recipients may not utilize e-bikes at anticipated rates. The City will mitigate these risks by using its communication platforms and outreach offices to ensure widespread knowledge of the rebate program.

Tasks	Milestones
Procure Third-Party Administrator & Develop Program Guidelines	Q1 - Q2 Year 1
Hold Lottery for E-Bike Rebates	Q3 of Years 1-5
Issue Survey to Rebate Recipients & Issue Remaining E-Bike Rebates	Q4 of Years 1-5

Benchmarking Program Support

This measure will create a portfolio of building related programs that support the decarbonization of large buildings, centered around the passage of commercial building energy benchmarking legislation, which the City plans to pass in 2024 (please see Letter of Commitment from Council President Helena Moreno in Appendix H). In March of 2023, the City joined the [National BPS Coalition](#) - the first policy step the city is taking to reduce emissions in the city's largest buildings, such as office, multifamily, schools/universities, and hospitals. The benchmarking ordinance, and program management, will provide insights and data into the performance of the large buildings in New Orleans and set the stage for the subsequent passage of a Building Performance Standard legislation, which will set GHG reduction targets for all buildings required to submit benchmarking data to the city.

The Office of Resilience & Sustainability (ORS) will manage the program, which will require one full time employee (FTE) to handle outreach, technical assistance, and data verification and management. It also requires a data management and communication software for outreach and data verification. The FTE and the City IT department will build a website that provides guidance to building representatives on the steps required to gather, enter, and submit data to the City. The FTE will also be responsible for piloting 1-1 building decarbonization strategy technical assistance (TA). This 1-1 TA will work directly with building operators in the benchmarking program who are either the highest energy users or located in disadvantaged census tracts to provide a customized pathway to building decarbonization.

Assumptions: Building sub-sectors selected for the model include a majority of buildings that are over 20,000 square feet.

Risks: The most impactful risk for the benchmarking program would be the untimely passage of the benchmarking ordinance with the City Council. The City is mitigating this by bringing on a one-year FUSE fellow in April 2024 to manage the stakeholder engagement process for passage by the end of 2024.

Tasks	Milestones
Hire FTE for Benchmarking Program & Procure IT System	Q1 Year 1
Collect & Publish Energy Use Data	Q1 - Q3 of Years 1-5
Develop & Implement 1-1 Building Decarbonization TA Program	Q3 - Q4 of Year 1

Municipal Building Decarbonization

Features: Between 2016 and 2020, the City conducted ASHRAE Level I energy audits at approximately 50 properties, resulting in a list of energy efficiency upgrades, primarily HVAC and lighting related, for the City to make, as well as cost estimates. The City has already implemented 39 energy efficiency projects since 2018 which decreased overall energy use in City buildings by 23%. In 2020, the City conducted a solar feasibility study with C40 Cities to estimate the size and cost of rooftop solar photovoltaic (PV) installations at City-owned buildings. The major features of this measure are the implementation of the remaining energy efficiency recommendations at 41 City-owned buildings and the installation of rooftop solar on 14 buildings that were assessed in the solar feasibility study.

Assumptions: The model assumes that implementation of each measure will be spread out over 3 years between 2026-2028, with the first year of implementation (2025) being design and scoping for the projects. By year 4 (2028), the model assumes all projects will be completed and that the GHG reductions will reoccur in perpetuity.

Risks: One risk for this measure is that the cost estimates for both the energy retrofits and solar installations are between 4 to 8 years old. As such, the City has included a 14% inflationary rate based on the Bureau of Labor figures of inflation since 2020. Another risk would be any sort of structural modifications the City would need to make to its roof systems to support solar installations with the required wind loading in a hurricane-prone area. The City is including a 10% construction contingency in its budget for this measure to mitigate this risk.

Tasks	Milestones
Hire FTE for Municipal Decarbonization Project	Q1 Year 1
Procure Engineering Firm to Design Bid Packages	Q1-Q2 Year 1
Release Construction Bid Packages	Q3 Year 1 - Q2 Year 2
Implement Energy Efficiency & Solar PV Projects	Q1 Year 2 - Q4 Year 3

Solar for All NOLA Bridge Subsidies

Features: The City of New Orleans will provide bridge subsidies through its existing [Solar for All NOLA](#) program to cover the remaining cost of rooftop residential solar PV panels that may be partially subsidized if the EPA successfully awards the state of Louisiana's Solar for All (LSFA) application through the Greenhouse Gas Reduction Fund. Given the recent political change in the Governor's office in Louisiana, the city wants to ensure it can provide residents financial incentives regardless of the EPA's decision or, should the state be awarded funds, the Governor's decision to accept those funds. The SFA NOLA subsidies will be restricted to low-to-moderate income homeowners. The City's existing Solar for All program is a partnership between the City of New Orleans, two local solar developers, and the Greater New Orleans Foundation (GNOF). The program does not currently offer financial incentives apart from free feasibility studies and the opportunity to take advantage of the Federal Income Tax Credit (ITC) for eligible homeowners

opting to purchase their systems. The subsidy amount will be capped at \$5,000, which represents the estimated bridge financing needed after factoring in the proposed state SFA incentive program.

The SFA NOLA subsidy program will require one FTE to manage the program. The City will hire a third-party administrator who will provide reimbursements to SFA NOLA installers so that those vendors can provide customers discounts at the time of purchase from city-based vendors. The Solar Subsidy program will also work in tandem with a city-wide Green Energy Outreach & Education Campaign that will be funded through Energy Efficiency Conservation Block Grant (EECGB) funding that will have a 1-1 technical assistance outreach arm by providing stipends to train 10+ community leaders as Community Energy Advisors. This measure is requesting to extend the EECGB funding for the Community Energy Advisors for the duration of the grant. The FTE will also be responsible for managing the Community Energy Advisor program.

Assumptions: Residential sub-sectors utilized accurately represent the types of homes that will be part of the subsidy program; There is a steady rate of adoption during the subsidy period; There is no substantial electric load growth in the residential sector; and electric use that occurs overnight is equalized by the amount of excess energy sent back to the grid via net-metering.

Risks: Setting up a program that can co-manage any potential LFSA subsidies as well as SFA NOLA

Tasks	Milestones
Hire FTE for SFA NOLA Subsidy Program	Q1 Year 1
Procure Third-Party Administrator & Develop Program Guidelines	Q1 - Q2 Year 1
Update Marketing Materials & Train Community Energy Advisors	Q2 - Q4 Year 1
Distribute SFA NOLA Subsidies to LMI Homes	Q4 Year 1 - Q4 Year 5

subsidies. The City is mitigating this by including a FTE to ensure capacity to manage interfacing with the all relevant parties. Permitting backlogs due to high demand for solar subsidies could also be a risk, but the City is working outside of this grant to implement SolarAPP+ in our permitting office.

Reforestation Plan

Features: In early 2023, the City worked with a local non-profit, SOUL, to publish the [New Orleans Reforestation Plan](#), which echoed the reforestation goals laid out in City's CAP, including 40,000 trees planted by 2030 and 10% canopy coverage in every neighborhood. The Reforestation Plan identified corridors in underserved areas across the City in need of trees to help equitably grow the tree canopy. This measure seeks to plant 7,500 trees over three years, split between the Department of Parks and Parkways (DPP) and community planting partners. DPP will be primarily responsible for planting in parks and neutral grounds while community partners will focus on plantings in the roadway rights-of-way in neighborhood areas.

DPP will plant 5,000 trees across the city using contractors over three years solely in those underserved areas. Roughly 1,666 trees will be planted each fall for three years during the local planting season (October to March). Contractors will supply, install, and provide two years of maintenance for trees that are 3-inch caliper and 12 to 14 feet tall. DPP Arborists will inspect each tree and planting area to ensure it adheres to department tree planting detail and specifications. Inspections will occur during plantings, and again two years after planting, to ensure that goals and milestones are met. An additional 2,500 trees will be planted by leveraging the City's existing annual grant program managed by GNOF to non-profit planting partners to plant in neighborhoods with less than 10% canopy coverage. An additional \$500,000 per year over three years will be used to supplement the annual \$250,000 grant program. Non-profit partners through the program will track every tree planted with DPP's software and monitor and maintain each tree for three years after planting. Non-profit partners will be required to submit detailed work and maintenance plans to be eligible for grant awards through the program.

An additional \$750,000 will be distributed to local nonprofit organizations specializing in urban forestry workforce development. The City has established relationships with several of these organizations and has secured funding through philanthropic and federal funds to grow their programs. This measure also requires one FTE within the DPP to manage the project.

Tasks	Milestones
Procure a Tree Planting Contractor & Update Agreement with GNOF	Q1 - Q2 Year 1
Plant Trees in Disadvantaged Communities	Q4 - Q1 Years 1 - 5
Workforce Development Partners Provide On-Site Training	Q1 Year 1 - Q4 Year 5
Maintain & Replace Trees as Needed	Q1 Year 4 - Q4 Year 5

Assumptions: Assumes that approximately 2,500 trees are planted annually and a tree survival rate of 15% over the first 5 years and a survival rate of 35% over 25 years

Risks: DPP will continue to monitor each tree for three years after planting and provide maintenance as needed to mitigate against risks such as drought, heat waves, and vandalism.

The measures' alignment to the regional PCAP and local CAP, the rationale for prioritizing each measure and how they will meet the goals of the CPRG program can be found on page 6.

1b. Demonstration of Funding Need

The City has a demonstrated need for funding from the CPRG program that is unmet by other programs. See below for a list of funding sources attempted, secured, or deemed unaligned for each measure:

Protected Bikeways

Funding Attempted: In recent years, local capital bond funds have been utilized for bikeway specific projects and complete streets oriented roadway projects. But there is not a regular dedicated local funding source for the expansion and maintenance of protected bikeways.

Funding Secured: The City's program for installing protected bikeways is funded by a combination of local bond funds and federal grant programs, such as the Safe Routes to Public Places, Transportation Alternatives Programs, and the Surface Transportation Block Grant Program. Approximately \$5.5 million of local funds are dedicated to the resurfacing and repair of the streets identified for protected bikeway expansion.

Funding Deemed Unaligned: The New Orleans metropolitan area is not eligible for Congestion Mitigation Air Quality funds, a common source of non-motorized transportation funding in other communities.

Bike Share Expansion

Funding Attempted: New Orleans' bike share has never received public capital or operational funding. Without the subsidy of their corporate sponsorships, which can be [tenuous](#), the system operates at a loss from ridership revenue. Blue Bikes requires public investments to fund the capital costs to expand equitably.

Funding Secured: The City was awarded FHWA Planning Funds through our Metropolitan Planning Organization in February 2024 to develop a detailed plan for the next 5 years of bike share in New Orleans. This study will serve as a guide for the specific expenditures proposed for this reduction measure.

Funding Deemed Unaligned: Other funding sources have been explored, such as the Safe Streets for All grant program and the Transportation Alternatives Program, yet the expansion is not eligible. Carbon Reduction Program formula funds have not been allocated as of yet in our urbanized area, but could be a potential, though small source of funds.

Measure	PCAP Relation	Local CAP Goal Relation	Prioritization Rationale	How Measure Meets CPRG Goals
Protected Bikeways	T-2.1: Develop more biking and walking infrastructure, including paths, bike lanes, crosswalks, and striping.	50% non-auto trips by 2030	City established the Moving New Orleans plan & the Bikeway Blueprint to study feasibility of type of bicycle facility in each area	1,676 metric tons of carbon dioxide equivalent removed by 2030
Bike Share Expansion	T-2.6: Expand or develop bike share programs.	50% non-auto trips by 2030, expansion of bikeshare infrastructure in underserved neighborhoods	Established partnership with non-profit bike share operator & operational subsidies needed to expand in underserved neighborhoods	2,042 metric tons of carbon dioxide equivalent removed by 2030
E-Bike Rebates	T-2.7: Provide subsidies for bikes or e-bikes.	50% non-auto trips by 2030	Established success of similar programs in other cities	4,592 metric tons of carbon dioxide equivalent removed by 2030
Benchmarking Program Support	E-3.6: Establish building energy benchmarking and performance standards, particularly for large buildings with high energy demand.	Benchmarking Ordinance passed in 2024 & 3% annual energy savings by 2030	Initial program needed on pathway to establishing local Building Performance Standards	8,611 metric tons of carbon dioxide equivalent removed by 2030
Municipal Building Decarbonization	E-1.6: Install solar energy generation and battery backup storage on public buildings.	Reduce energy use in City buildings by an additional 17% for a cumulative reduction of 40% by 2030	Demonstrate energy efficiency and renewable energy leadership with City's own properties	7,173 metric tons of carbon dioxide equivalent removed by 2030
Solar for All NOLA Bridge Subsidies	E-1.7: Create programs to incentivize solar adoption on privately owned facilities.	255 MW of distributed solar by 2030 & 1,400 installs through SFA NOLA	Ensure most cost-burdened residents are still provided financial incentive to install rooftop solar systems	12,900 metric tons of carbon dioxide equivalent removed by 2030
Reforestation Plan	C-1.2: Implement urban forestry programs with an emphasis on native plants, expanding the urban tree canopy, & developing tree protection districts.	40,000 trees planted by 2030 & 10% canopy coverage in all neighborhoods	City established a Citywide Reforestation Plan with non-profit partner and has existing programs in place to build upon	1,099 metric tons of carbon dioxide equivalent removed by 2030

E-Bike Rebates

Funding Attempted: The E-Bike Rebate program currently has no dedicated funding source.

Funding Secured: No other funds have been secured at this time.

Funding Deemed Unaligned: Other funding sources have been explored, such as the U.S. Department of Transportation Safe Streets for All grant and Transportation Alternatives Program, yet the rebate is not an eligible expense. Other localities have passed voter-supported referenda for funding climate action programs - however, New Orleans does not have a dedicated such fund.

Benchmarking Program Support

Funding Attempted: Currently there is no budget in place for an in-house Benchmarking program as the legislation is pending.

Funding Secured: The City will receive technical assistance from the Institute for Market Transformation (IMT) through the Department of Energy (DOE) Resilience & Efficient Code Implementation (RECI) Grant. IMT was awarded \$5,000,000 to support jurisdictions pursuing benchmarking and building performance standard policies but does not financially support the efforts beyond providing policy support and building related analyses.

Funding Deemed Unaligned: The City is considering advancing a concept paper for the DOE's Assistance for the Adoption of the Latest and Zero Building Energy Codes program, but that application would only be eligible for implementing Building Performance Standards and not benchmarking solely.

Municipal Building Decarbonization

Funding Attempted: The City has funded energy efficiency upgrades at City buildings from municipal bonds. However, cost escalations and overruns in other parts of the capital budget have strained the City's ability to fully fund these upgrades.

Funding Secured: The City will receive approximately \$2.4M as a subaward from the state

of Louisiana's \$250M award from U.S. Department of Energy Grid Resilience and Innovation (GRIP) Program to install solar and battery systems at nine recreation and library facilities to serve as part of a network of resilience hubs around the City. The City is also seeking to use \$2.25M of U.S. Department of Housing and Urban Development Community Development Block Grant program under the \$33M of formula funds awarded to the City in response to Hurricane Ida to construct solar & battery resilience hubs at four other City facilities.

As a part of the budget for this measure, the City is planning to leverage approximately \$1.2M from municipal bonds to use on each solar installation, which equates to 40% of the cost of the solar installation at each site, or the same amount of elective pay tax incentives the City would be eligible for given the base 30% rate and the entire city being designated as an "Energy Community" as defined by DOE.

Funding Deemed Unaligned: The City acknowledges that energy efficiency upgrades could take advantage of the 179D tax deduction by assigning it to the designer, but the scale of these upgrades would not reduce overall consumption by greater than 25% and therefore would be ineligible.

Solar For All NOLA Bridge Subsidies

Funding Attempted: The City of New Orleans was an active participant in stakeholder engagement for the state of Louisiana's EPA Solar for All application, submitted in 2023. With or without the funding provided through the state program, the City of New Orleans, which has the most progressive net-metering policy in the state, will require additional funding to ensure that solar can be equitably distributed across the city. The proposed subsidy program will bridge a funding gap for the purchase or lease of solar pv systems as modeled in the state's proposed Solar for All Louisiana program, providing subsidies for an estimated 25% of the cost of a 7kw solar system, on top of approximately 45% of cost covered by the state Solar for All program, making the remaining costs significantly more manageable in

a City with a high percentages of disadvantaged residents.

Funding Secured: The modeling for this subsidy program assumes that LMI households will be able to take advantage of the Federal ITC for installations at a rate of 15%, as a large number of households will have a tax burden so low that they would be eligible for very small amounts or no amount. This was the same assumption the state used in their LFSA application. The subsidy has been modeled to not to duplicate either the LFSA subsidy or the ITC.

Funding Deemed Unaligned: No funding sources have been deemed unaligned at this time.

Reforestation Plan

Funding Attempted: There are no pending funding applications under this measure.

Funding Secured: The City of New Orleans was awarded \$8 million from the Urban and Community Forestry program from the U.S. Department of Agriculture (USDA) Forestry Service in September 2023. Funding will be used to plant trees in underserved areas of the city and expand urban forestry workforce training. While the award was monumental for the city, the \$8M award will cover plantings for just a small portion of the City. The roughly 9,000 trees to be planted through the program will help reach the goal of over 26,000 trees planted in the city by the end of the period of performance in 2029, well short of the 40,000 tree goal set by the City's Climate Action Plan. Additional CPRG funding will be used to close that gap, or potentially surpass this goal. This project will also leverage a current \$4M bond funded city-wide tree planting project currently underway that is slated to plant 4,000 trees over the next three years as well as the \$250,000 annual community planting partner grant program.

Funding Deemed Unaligned: No funding sources have been deemed unaligned at this time.

1C. Transformative Impact

Protected Bikeways

As a significant source of the city's greenhouse gas emissions, the transportation system requires transformation to lower its impact on air quality. The proposed protected bikeways will raise the standard for a "complete" New Orleans street through the transformation of eleven street segments. Emphasis will be placed on cyclist safety and comfort through grade-separation. These features will distinguish the updated streets from prior applications of protected bikeways in New Orleans. Achieving maximum impact of CPRG funds was the driving criterion for selecting specific segments to upgrade with protected bikeways. These are streets that currently provide critical connections between downtown activity centers and adjacent residential neighborhoods, but currently offer only unprotected bike lanes. We anticipate upgrading these critical connector routes will achieve the greatest rate of conversion of automobile trips to bicycling trips.

Bike Share Expansion

Investing in the Bike Share expansion supports the City's goal of reaching 50% trips by non-automobile modes, like bicycling. This transformational investment will capture latent demand and increase total trips from 300,000 in 2024 to 1,500,000 by 2030, avoiding roughly 3,700,000 vehicle miles traveled during the five-year period. This investment will equitably expand the Blue Bikes to roughly 8,200 low-income community members in seven underserved majority BIPOC neighborhoods. For the roughly [1 in 5 Black New Orleanians](#) who don't have access to a vehicle, the Bike Share expansion represents a life-changing opportunity to expand a reliable and sustainable form of transportation into their neighborhoods.

E-Bike Rebates

Greenhouse gas emission emissions from the transportation sector make up over 40% of the city's total emissions. The E-bike incentive program will feed a virtuous cycle of bicycling activity and environmental improvements. Equipping

3,000 New Orleans households with e-bikes will encourage higher rates of bicycling in New Orleans and increase demand for bicycling infrastructure - the provision of which will further encourage more cycling in New Orleans. Coupled with the prior measures, these three investments would represent the City's largest ever investment in non-automobile transportation options.

Benchmarking Program Support

The passage of a benchmarking ordinance and creation of an implementation program and 1-1 decarbonization TA program would be pioneering in the state of Louisiana and make the City the [second one in the Deep South](#) to have achieved this measure. In funding a benchmarking program, the City can begin engaging large commercial, residential, and industrial buildings to bring down energy use, lower emissions, and provide pathways to whole building decarbonization, leading towards the future passage of a building performance standard legislation which will set emission reduction targets for buildings based on the energy data provided through the benchmarking requirement.

Municipal Building Decarbonization

This measure allows the City to lead by example in decarbonizing our own large buildings and is complementary to the Benchmarking program measure. The City has been benchmarking municipal building energy use since 2016 and will publish that data on the Benchmarking program website prominently as a way to demonstrate the purpose of transparently reporting data. Furthermore, implementing the 41 energy efficiency and 14 solar projects at City buildings allows the City to share our successes and struggles with the commercial building managers in the benchmarking program and share best practices and resources for successful ways to reduce their own energy use.

Solar for All NOLA Bridge Subsidies

The Department of Energy's LEAD (Low-income

Energy Affordability Data) Tool illustrates that homeowners earning between 0-30% of the Area Median Income (AMI) suffer from extremely high energy burden. Low-income households in New Orleans suffer from [one of the highest energy burdens](#) in the country and energy burden disproportionately affects people of color, specifically the Black/African American community of New Orleans who often live in EPA designated Disadvantaged Communities. Providing subsidies for solar PV systems to low-to-moderate income households in New Orleans will have a significant impact on reducing levels of energy burden across the city for some of the most socioeconomically vulnerable communities and households. Reducing energy burden allows for households to make critical expenditures in other areas such as healthcare, childcare, and education.

Similarly, the need for residential energy related jobs is high in New Orleans. By offering solar subsidies, this program will build demand for more local solar developers and installers, equipment installers, operation and maintenance jobs, as well as jobs related to residential retrofits and energy efficiency measures.

Reforestation Plan

New Orleans' iconic oak-lined avenues of St. Charles and Esplanade portray New Orleans as a heavily canopied city. However, trees are barometers of wealth, and New Orleans' overall landscape has a mere 18.5% canopy coverage, a reflection of our 25% poverty rate. The city faces an array of environmental challenges, including increasingly stronger hurricanes and rainfall events, soil subsidence, coastal erosion, and extreme heat, all of which can be mitigated by a stronger tree canopy. These issues pose risks to public health, safety, economic security, and livability. The most vulnerable communities of color (2/3 of New Orleans is nonwhite) most often bear the burden of these environmental injustices due to historical discriminatory housing practices like redlining that situated them in the lowest, most flood-prone areas that subsequently suffered from disinvestment, including tree plantings. New Orleans also has the worst heat island effect in the United States.

[A study from Climate Central](#) showed that some areas of the city can be nearly nine degrees hotter than other areas of the city due to a lack of green space and shade.

Trees can act as a natural solution to many of these issues. Unfortunately, Hurricane Katrina devastated the urban canopy, with some estimates of the number of lost trees upwards of 200,000, and a [9.6% canopy loss](#). The Reforestation Plan showed that the City's 18.5% tree canopy is much lower than comparable southern cities, including Memphis (37%), Austin (38%), and Atlanta (47%).

Reaching and exceeding the City's CAP goal of 40,000 new trees to be planted by 2030 and 10% canopy coverage in 10 years in all neighborhoods would be game changing. Not only would this measure sequester carbon and help achieve EPA's goal to address the GHG pollution contributing to the climate crisis, but it would also provide the co-benefits of providing underserved neighborhoods with more resilience against the stronger storms and heat waves the City is now experiencing.

2. Impact of GHG Reduction Measures

2a. Magnitude of GHG Reductions from 2025 through 2030

The City's proposed measures combined will eliminate 38,093 metric tons of CO₂-equivalent emissions from 2025 through 2030.

Measure	mtCO ₂ e
Protected Bikeways	1,676
Bike Share Expansion	2,042
E-Bike Rebates	4,592
Benchmarking Program Support	8,611
Municipal Building Decarbonization	7,173
Solar for All NOLA Bridge Subsidy	12,900
Reforestation Plan	1,099
Total	38,093

Durability of Reductions

The measures proposed were selected partly for their durability and likelihood to make permanent changes that result in sustained reductions in climate pollution:

The **Protected Bikeways** measure will establish permanent changes in concrete and asphalt to the design and function of critical downtown connecting routes, which will enable safe, convenient, and comfortable bicycle travel for decades to come.

The 25-year lifespan of the solar energy system and 15-year lifespan of purchased electric vans as part of the **Bike Share Expansion** will generate operational savings that can be reinvested into the sustainability of the nonprofit Blue Bikes operation. Although purchased e-bikes are assumed to have only a 5-year lifespan, due to wear and tear from sustained sharing, the expanded system will increase user fee revenue that can further be reinvested into the next round of bicycle purchases.

Quality, well-maintained e-bikes typically last ten years, and so we assume that bikes purchased with **E-Bike Rebates** will last this long. This length of time will cause permanent behavioral changes that sustain mode shift from motor vehicles to e-bikes.

The **Benchmarking Program Support** will track and publicly disclose building performance and emission data and will provide 1-1 technical support to buildings with low performance metrics in order to improve operations and reduce energy use and emissions over time. Increasing the accountability and resources available to building operators will promote an increased rate of adoption of whole building retrofits that will permanently bring down the amount of emissions generated from operating large commercial and residential buildings.

Municipal buildings represent some of the largest and most energy intensive buildings in the city. Strategically upgrading building systems and installing solar panels will significantly bring down grid energy demand through the use of updated, efficient pieces of equipment and solar powered energy, and in return, reduce emissions for years to come.

The use of residential solar panels offered through **Solar for All NOLA Bridge Subsidies** will drastically reduce grid energy demand in participating homes between 20-90% per household. Most manufacturers and solar installers will warranty systems for 20-25 years - therefore, households participating in the program will help reduce energy related emissions for prolonged periods of time given solar PVs are adequately operating and maintained.

The Department of Parks and Parkways will monitor each tree funded by the **Reforestation Plan** for three years after planting and provide maintenance as needed to mitigate against potential risks such as drought, heat waves, and vandalism. This will ensure planted trees fully mature and absorb carbon dioxide for decades to come.

2b. Magnitude of GHG Reductions from 2025 through 2050

The City's proposed measures combined will eliminate 197,702 metric tons of CO₂-equivalent emissions from 2025 through 2050.

Measure	mtCO ₂ e
Protected Bikeways	7,567
Bike Share Expansion	4,480
E-Bike Rebates	10,305
Benchmarking Program Support	41,223
Municipal Building Decarbonization	43,039
Solar for All NOLA Bridge Subsidy	77,400
Reforestation Plan	13,688
Total	197,702

Durability of Reductions

The permanent nature of street design upgrades ensures long-term return on investment from **Protected Bikeways**. Over time, usage should increase gradually in response to growing local knowledge of the bikeways and network-effect increases in citywide rates of bicycling that result

from expanding the supply of safe, shaded, and lit protected bikeways.

The 25-year lifespan of the solar energy system and 15-year lifespan of purchased electric vans will generate operational savings that can be reinvested into the sustainability of the nonprofit Blue Bikes operation and **Bike Share Expansion**. Although purchased e-bikes are assumed to have only a 5-year lifespan, due to wear and tear from sustained sharing, the expanded system will increase user fee revenue that can further be reinvested into the next round of bike purchases.

Quality, well-maintained personal e-bikes typically last ten years, and so we assume that bikes purchased with **E-Bike Rebates** will last this long. This length of time will result in permanent behavioral changes that sustain mode shift from motor vehicles to e-bikes.

The GHG reductions achieved by the **Benchmarking Program Support** reduction measure in the initial years to 2030 will maintain at that level for the period through 2050 as the reduced energy use from efficiency improvements and retrofits will persist.

Similarly, the energy efficiency and solar installations included in the **Municipal Building Decarbonization** measure will bring GHG reductions in the early years that persist over the period to 2050. This will build a sizable cumulative annual reduction over the anticipated lifespan of the improvements.

As with the other building related reduction measures, the early years of **Solar for All NOLA Bridge Subsidies** GHG reductions will be durable in the period through 2050 as the anticipated lifespan and warranties of the solar systems are 20-25 years, allowing long term cumulative reductions to build.

The Department of Parks and Parkways will monitor each tree funded by the **Reforestation Plan** for three years after planting and provide maintenance as needed to mitigate against potential risks such as drought, heat waves, and vandalism. This will ensure planted trees fully mature and absorb carbon dioxide for decades to come.

Measure	Factors Affecting Cost Effectiveness		
Protected Bikeways	<ul style="list-style-type: none"> Roadway construction cost increases beyond the City's control may impact the anticipated construction budget. Differing mode split outcomes for the proposed bikeways than the observed mode splits on existing protected bikeways 		
Bike Share Expansion	<ul style="list-style-type: none"> Changes in prevailing wages for maintenance and outreach staff Changes in the average number of trips per bicycle deployed 		
E-Bike Rebates	<ul style="list-style-type: none"> Potential variability in customer demand for e-bikes Differences between the predicted and actual rates of motor vehicle trip displacement 		
Benchmarking Program Support	<ul style="list-style-type: none"> Change in cost of data management software/IT costs Need for additional support staff or consultant support 		
Municipal Building Decarbonization	<ul style="list-style-type: none"> Change in price of solar and/or battery system costs Changes in prevailing wages for building retrofits labor force 		
Solar for All NOLA Bridge Subsidy	<ul style="list-style-type: none"> Change in price of solar pv systems Supply chain issues for solar pv parts effecting timeliness of implementation Changes in prevailing wages for solar installation Workforce development budget included in overall budget 		
Reforestation Plan	<ul style="list-style-type: none"> Changes in the cost of tree acquisition Threats to tree health, such as vandalism, drought, disease, and wind damage Workforce development budget included in overall budget 		
Measure	Cost	2025-2030 Reduction (mtCO ₂ e)	Cost Effectiveness (\$/mtCO ₂ e)
Protected Bikeways	\$10,668,463	1,676	\$6,365.43
Bike Share Expansion	\$11,801,337	2,042	\$5,779.30
E-Bike Rebates	\$3,837,206	4,592	\$835.63
Benchmarking Program Support	\$1,467,525	8,611	\$170.42
Municipal Building Decarbonization	\$5,334,444	7,173	\$743.68
Solar for All NOLA Bridge Subsidy	\$9,111,522	12,900	\$706.32
Reforestation Plan	\$7,755,093	1,099	\$7,056.50
Total	\$49,975,589	38,093	\$1,311.93

Table A: Cost Effectiveness by Measure

2c. Cost Effectiveness of GHG Reductions

The combined cost of all measures (\$49,975,589) divided by the sum total emissions reduced from 2025-2030 (38,093) equals \$1,3911.93 per metric ton of CO₂ equivalent emissions. Table A on page 12 presents factors that may affect the cost and cost effectiveness of each measure.

2d. Documentation of GHG Reduction Assumptions

The City of New Orleans employed a variety of methodologies to quantify the anticipated reduction in greenhouse gas emissions resulting from the proposed measures. The Technical Appendix and GHG emission reduction calculations spreadsheet contain the full details of these methodologies and assumptions.

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

3a. Expected Outputs and Outcomes

Protected Bikeways

Reductions: 1,676 MTCO₂ from 2025-2030, 7,567 MTCO₂ from 2025-2050

Outputs: 67% increase in protected bike lanes, 630 new street lights, 630 street trees planted

Outcomes: 3.85% drop in average daily vehicular traffic

Bikeshare Expansion

Reductions: 2,042 MTCO₂ from 2025-2030, 4,480 MTCO₂ from 2025-2050

Outputs: 2,500 new e-bikes, 37% increase in bike stations, 6 e-vans, increased renewable energy use, 9 new full time and part time positions

Outcomes: Expanding service to 8,200 low-income community members in disadvantaged

communities, 76.5% increase in ridership, increased low-income ridership

E-Bike Rebates

Reductions: 4,592 MTCO₂ from 2025-2030, 10,305 MTCO₂ from 2025-2050

Outputs: Increase in 2,500 e-bikes

Outcomes: Higher rates of motor vehicle trips replaced, reduction in tailpipe emissions.

Benchmarking Program Support

Reductions: 8,611 MTCO₂ from 2025-2030, 41,223 MTCO₂ from 2025-2050

Outputs: 1 FTE, engagement with ~700 building representatives including those from low-to-moderate income multifamily buildings, passage of Building Performance Standards policies, growth in whole building retrofit workforce, 12 meetings annually with Climate Action Equity Project Working Group

Outcomes: Lower energy expenditures for low-income residents, decrease in air pollutants, increased staff capacity to target the largest emissions sector

Municipal Building Decarbonization

Reductions: 7,173 MTCO₂ from 2025-2030, 43,039 MTCO₂ from 2025-2050

Outputs: 41 energy efficiency retrofit projects at city buildings, 14 rooftop solar pv installations, 1 FTE added

Outcomes: Reduction of energy costs valued at approximately \$1,000,000 annually, increased staff capacity to implement energy efficiency and solar projects at municipal buildings

Solar for All NOLA Bridge Subsidies

Reductions: 12,900 MTCO₂ from 2025-2030, 77,400 MTCO₂ from 2025-2050

Outputs: 1400+ solar installations between 2025-2030, 1 FTE, increased energy resilience in LMI communities, reduction in energy burden levels, increased solar workforce

Outcomes: Lower residential energy demand,

lower residential energy expenditures for LMI and Disadvantaged Communities, Increased staff capacity, 10+ community leaders engaged as Community Energy Advisors

Reforestation Plan

Reductions: 1,099 MTCO₂ from 2025-2030, 13,688 MTCO₂ from 2025-2050

Outputs: 7,500 trees planted in Disadvantaged Communities, 100 individuals trained in urban forestry and solar pv installation

Outcomes: Reduction in urban heat island, reduction in energy bills in disadvantaged communities

3b. Performance Measures and Plans

As a member of C40 Cities, the City biannually conducts a citywide GHG inventory to monitor the City's overall progress in reducing our carbon footprint. The City also uses the Carbon Disclosure Project (CDP) platform to annually report progress on the City's emissions reductions targets as well as other related metrics, such as renewable energy production, transportation mode shift and air quality indicators. At a citywide level, the City will continue tracking our progress through these platforms and use the applicable metrics as part of our grant reporting to the EPA.

Additional specific performance measures for each GHG measure are as follows:

Protected Bikeways

Success of this measure will be evaluated on average annual traffic counts of bicycle, pedestrian, and motor vehicle traffic on each of the bikeways. The City will perform updated existing traffic counts prior to construction to establish a baseline against which to measure progress.

Bikeshare Expansion

Proposed performance measures include monitoring solar system kWh production from Blue Krewe headquarters, distance traveled by e-vans, bikeshare ridership levels, and city-wide trips by driving.

E-Bike Rebates

The key performance metric will be the number of motor vehicle trips replaced by e-bikes sold through the rebate program. Bike shop vendors and participants will be required to respond to a questionnaire upon purchasing the e-bike, asking how many trips per week they take by motor vehicle, and how many of these trips they anticipate they will be replaced. Administrators will collect contact information and follow up with participants one year after purchase to verify whether fewer, more, or about the same number of vehicle trips were replaced than anticipated.

Benchmarking Program Support

Through whole building aggregate data collected from participating buildings, the city can track energy use and emissions trends over time and publish the data in the form of a report and interactive map for public disclosure. The City will specifically look for energy use reductions in Kwh, a decrease in site energy use intensity, and an increase in Energy Star Score where applicable for each building and as a whole.

Municipal Building Decarbonization

The key performance measure will be the kWh avoided at each of the 41 City buildings, which will be tracked through the City's individual utility bills and the energy data platform, WegoWise. The City will specifically look for energy use reductions in Kwh, a decrease in site energy use intensity, and an increase in Energy Star Score where applicable.

Solar for All NOLA Bridge Subsidies

The solar subsidy program will track performance by the annual amount of solar PV systems installed, with the annual goal being 280 installations between 2026-2030. Information on number of installations as well as size of individual systems will also allow the City to track the total KWh production of solar power in New Orleans.

Reforestation Plan

Reforestation efforts will be measured by the number of trees planted by the DPP and non-profit partners. DPP will be responsible for meeting the goal of 1,666 trees planted annually, while non-

profit partners are expected to plant 833 trees each, totaling 2,500 annually. Tree plantings will be logged using software provided by DPP and non-profit partners will submit this data to DPP, along with work & maintenance plans for grant funded work.

3c. Authorities, Implementation Timeline, and Milestones

Please see the Gantt chart on pages 16-17 for information on Authorities, Implementation Timelines, and Milestones

4. LMI and Disadvantaged Communities

4a. Community Benefits

Approximately 57% of all census tracts in Orleans Parish are considered disadvantaged communities as defined by the Climate and Economic Justice Screening Tool. Within these communities, some of the most vulnerable households are spending between 13-16% of their monthly income on energy bills and are considered extremely energy burdened. These households are over-represented by Black/African-American households. Many households within the identified Disadvantaged Communities also face higher barriers to public transportation. Historic redlining, tree loss going back to Hurricane Katrina, and other socioeconomic factors have exacerbated the city's urban heat island effect in poorer neighborhoods, with some disadvantaged neighborhoods experiencing a nine degree difference than their non-disadvantaged counterparts during the summer months.

The measures identified in this application aim to address the needs of disadvantaged communities in New Orleans that often face high energy burden, lower access to clean, reliable, public transportation options, and experience hotter temperatures in the increasingly warming summer months. The need to lower barriers to green alternatives, reduce and sequester emissions, and equitably bring the benefits of resilience and

sustainability to the residents of New Orleans is critical as the city faces increased risks from extreme weather events.

Protected Bikeways

Protected bikeways will improve quality of life in ten disadvantaged census tracts. Direct benefits include reduced noise pollution caused by motor vehicle trips, improved traffic safety through lower traffic volume, improved public health resulting from reductions in co-pollutants, and increased access to transportation alternatives.

Bike Share Expansion

Bike Share Expansion will directly benefit nearly 9,000 low-income and historically disadvantaged communities by expanding transportation access in 44 disadvantaged census tracts, supporting climate resilience through renewable energy powered bikeshare, and advancing environmental justice through GHG reductions. Blue Krewe has grown the Blue Bikes For All (BBFA) program – a \$4 discounted monthly membership for residents who qualify for SNAP or Medicaid. As a result of these efforts, BBFA riders represented 20% of all trips taken in 2023, demonstrating that Blue Krewe is committed to providing equitable access to active transportation for residents of New Orleans. The expansion will indirectly benefit disadvantaged communities by improving health outcomes through reduced GHG emissions and supporting modal shift to active transportation.

E-Bike Rebates

A minimum of 60% of the total funding allocated to this measure will be reserved for low-income and disadvantaged participants, identified through enrollment in SNAP or Medicaid benefit programs. Participant home neighborhoods will be recorded and reported on an annual basis to determine whether expanded outreach to disadvantaged communities is needed to increase awareness of and participation in the program. Anticipated benefits to these communities include, reduced air and noise pollution caused by motor vehicle trips, improved traffic safety, and improved public health resulting from reductions in GHG and co-pollutant emissions

Measures	Q1 Year 1	Q2 Year 1	Q3 Year 1	Q4 Year 1	Q1 Year 2	Q2 Year 2	Q3 Year 2	Q4 Year 2	Q1 Year 3	Q2 Year 3	Q3 Year 3	Q4 Year 3	Q1 Year 4	Q2 Year 4	Q3 Year 4	Q4 Year 4	Q1 Year 5	Q2 Year 5	Q3 Year 5	Q4 Year 5	Milestones	Responsible for Implementation	Authority to Implement
1) Protected Bikeways																					1a) Complete 30% of necessary designs for first tranche of protected bikeways 1b) Complete 100% of design & begin releasing projects out to bid 1c) Protected bikeways are completed and operational	The Department of Public Works, The Office of Resilience & Sustainability, The Office of Transportation	The City owns and has the authority to construct these projects in the right of way.
a) Begin procurement for design and planning & conduct public																							
b) Begin Procurement for Construction																							
c) Construction & Striping																							
2) Bike Share Expansion																					2a) 500 first generation bikes are deployed and e-van charging stations and solar panels are installed at warehouse 2b) 500 infield-charging bikes deployed in years 2,3,4 & 5 (2000 total) 2c) Install 110 traditional bikeshare stations over in Y1, 3, 4, 5, install 40 infield-charging stations in Y2, 4, 5 2d) Hire 1 Fleet Manager and 1 Grant Manager in Year 1, Hire 1 Warehouse Manager and 1 Fleet Manager in Year 3 2e) E-vans are purchased, branded, and deployed for fleet operations	Blue Krewe, Office of Resilience & Sustainability	Blue Krewe is lead project manager, responsible for working with contractors to install the warehouse solar system and e-van charging stations in year one, along with sourcing and deploying new bikes, stations, and e-vans throughout the grant period. The City of New Orleans will support station site permitting.
a) Deploy first generation bikes & renovate warehouse																							
b) Deploy second generation infield charging bikes																							
c) Addition of bikeshare stations																							
d) Hire additional staff																							
e) Purchase & deploy e-vans																							
3) E-Bike Rebates																					3a) Have TPA in place before Y1 Q3 lottery is held 3b) Hold annual lottery to disperse 600 rebates for e-bikes, 60% of which account for low-to-moderate income participants 3c) Follow-up with participants annually to understand adoption trends	The Office of Resilience & Sustainability, Contracted Third Party Administrator, local bike stores	The Office of Resilience and Sustainability will be responsible for procuring and managing the vendor who will process rebates in concert with local bike shops.
a) Procure Third Party Administrator & develop program guidelines																							
b) Hold e-bike lottery																							
c) Disperse rebates at local bikeshops & issue feedback surveys																							
4) Benchmarking Program Support																					4a) Hire 1 full-time employee for Benchmarking Program Support 4b) Collect benchmarking data annually in July and publish results in January of following year 4c) Utilizing historical data, begin prioritizing lowest performing buildings and buildings within Disadvantaged Communities for 1-1 technical assistance	The Office of Resilience & Sustainability	The City Council currently has authority to pass legislation enabling both programs and their necessary budget ordinances and has indicated a willingness to pass them.
a) Staff Benchmarking Program																							
b) Collect & Publish Energy Use Data																							
c) Develop & begin 1-1 Building Decarbonization Technical Assistance																							
5) Municipal Building Decarbonization																					5a) Hire full time employee to manage 41 projects over 5 years 5b) Create RFPs from contract with Engineering Firm to procure energy efficiency and solar installation 5c) Construction packages to be released on a rolling basis to move forward several projects at once 5d) Implementation of projects will commence in Y2-3 of grant	The Office of Resilience & Sustainability, Capital Planning, third-party contractors	The City will be the primary party responsible for implementing this GHG measure and has the authority to implement them at our own properties.
a) Staff Program																							
b) Procure Engineering Firm to design bid																							
c) Release Construction Bid Packages																							
d) Implement Energy Efficiency & Solar PV Installations																							
6) Solar for All NOLA Bridge Subsidies																					6a) Hire 1 full-time employee to oversee Solar for All NOLA Program and management of TPA 6b) Hire TPA to communicate with FTE and oversee the timely disbursement of solar bridge subsidies 6c) Marketing and outreach materials to reflect new bridge subsidy feature of the program to attract 280 installations annually 6d) Distribute 280 bridge subsidies annually between 2025-2030	The Office of Resilience & Sustainability, Solar Developers, Greater New Orleans Foundation	Solar Developers participating in the program will be required to respond to an RFQ stating the ways in which they meet eligibility criterion and are able to provide services in a timely manner to subsidy recipients. The Greater New Orleans Foundation currently oversees multiple grant funds and award processes and will oversee the Green Workforce Development fund as it oversees other funds.
a) Staff Measure																							
b) Procure Third Party Administrator (TPA) for Solar Subsidies																							
c) Update marketing materials & train Community Energy																							
d) Distribute Solar Subsidies to LMI homes																							

Timelines for Measures	Q1 Year 1	Q2 Year 1	Q3 Year 1	Q4 Year 1	Q1 Year 2	Q2 Year 2	Q3 Year 2	Q4 Year 2	Q1 Year 3	Q2 Year 3	Q3 Year 3	Q4 Year 3	Q1 Year 4	Q2 Year 4	Q3 Year 4	Q4 Year 4	Q1 Year 5	Q2 Year 5	Q3 Year 5	Q4 Year 5	Milestones	Responsible for Implementation	Authority to Implement
7) Reforestation Plan																					7a) DPP to procure a contractor not later than Q2 of Y1 for DPP tree plantings 7b) Department of Parks & Parkways to plant 1,666 trees and Non-Profit Partners to plant 833 trees annually over the course of the grant 7c) Non-Profit Partners will recruit and train staff to plant trees and gain accreditations in green stormwater infrastructure and urban forestry 7d) DPP & Partners will begin assessing replacement and maintenance of planted trees	Department of Parks & Parkways (DPP), Office of Resilience & Sustainability,	DPP has the authority to plant and oversee contracted plantings within the city of New Orleans. DPP will utilize in house staff to provide project management, communications and outreach, and coordinate interdepartmentally and with non-profit partners to achieve goals. ORS will coordinate partnerships, track progress on plantings, and communicate benefits with the public.
a) Procure tree planting contractor																							
b) Plant Trees in Disadvantaged Communities																							
c) Partner Organizations to Provide on-site Workforce Training																							
d) Maintain & Replace Trees as Needed																							
Timelines for Reporting	Q1 Year 1	Q2 Year 1	Q3 Year 1	Q4 Year 1	Q1 Year 2	Q2 Year 2	Q3 Year 2	Q4 Year 2	Q1 Year 3	Q2 Year 3	Q3 Year 3	Q4 Year 3	Q1 Year 4	Q2 Year 4	Q3 Year 4	Q4 Year 4	Q1 Year 5	Q2 Year 5	Q3 Year 5	Q4 Year 5	Q1 Year 6	Responsible for Implementation	
Semi-annual reporting																						Project Delivery Unit	
Final Reporting																							

Benchmarking Program Support

Through Benchmarking Program Support, the entire jurisdiction will benefit from improved public health, such as lower asthma rates and hospital admissions, resulting from the reduction of GHG emissions and co-pollutants associated with reduced energy and emissions from large buildings in the jurisdiction. The 1-1 building decarbonization technical assistance will also assist in reducing energy costs in multifamily properties located within disadvantaged census tracts by prioritizing these buildings for 1-1 technical assistance and guiding them towards low-to-no-cost retrofit solutions that can lower energy bills for tenants and building owners, as well as improve housing quality and comfort for these tenants. Through the Benchmarking program, the city will have a comprehensive and up-to-date inventory of direct and indirect emissions from the city's largest buildings, including multifamily buildings. Through this data, the city will be able to measure building specific and city wide reductions in GHG emissions, better understanding which neighborhoods are and are not benefitting from these building programs.

Municipal Building Decarbonization

26 of the 41 City properties that will receive energy efficiency upgrades or solar PV installations are located in 20 disadvantaged census tracts throughout the City. Residents in these areas will benefit from increased comfort and indoor air quality within the identified buildings, as well the overall benefits of reduced air pollution from GHG emissions that will benefit all residents. Municipal Building Decarbonization will also set the example for large, private buildings to pursue whole building retrofits that will also contribute to a reduction in energy demand and greenhouse gas emissions in the building sector. The municipal buildings targeted in this measure will reduce energy expenditures for the city by \$1,000,000 annually, providing extra financial resources to further fund supplementary emission reduction measures such as continued municipal building retrofits and the development of a green fund within City Hall with the goal of bringing equitable climate mitigation funding across a variety of areas and neighborhoods.

Solar For All NOLA Bridge Subsidies

The Solar for All NOLA Bridge Subsidy program is designed to bring the benefits of solar to households that would otherwise be unable to own or lease solar panels. Participants in the Solar for All NOLA Bridge Subsidy program will be LMI households located within Disadvantaged Communities in New Orleans, who will benefit from decreased energy costs, increased energy resilience in the face of extreme weather events such as hurricanes and extreme temperatures, improved housing quality and comfort, and increased access/awareness to high paying jobs in the green workforce.

Reforestation Plan

The Reforestation Plan will operate within disadvantaged communities where there is less than 10% tree canopy cover. Non-profit partners will focus their workforce recruitment in underserved areas of the city and have strong histories of engaging underserved, BIPOC communities. Historically, 95% of all trainees through Louisiana Green Corp (LAGC) identify as Black, while 40% of LAGC participants have been involved with the justice system. All three partners will emulate a similar engagement model to ensure that benefits of reforestation and green workforce development are felt in the city's least green and most underserved areas. Plantings in disadvantaged areas will result in reduction of "heat island" effect in low canopy areas, cleaner air, reduction of energy bills in neighborhoods with increased canopy coverage, more community green space, and reduced flooding during rain events. Workforce training will result in more job and career opportunities in a regionally important green industry.

4b. Community Engagement

Starting in 2018, the City began a collaborative effort with 10 different community-based organizations to make recommendations about how the City's Climate Action Plan (CAP) could be implemented more equitably. Partnering with the Greater New Orleans Foundation (GNOF) and the Deep South Center for Environmental Justice

(DSCEJ), the City and its partners released the [Taking Steps Together on Equity & Climate Change](#) report in 2019 and utilized the recommendations from that plan, as well as feedback from the Climate Action Equity Project Working Group (CAEPWG), on its draft 2022 CAP. All of the measures included in this application align with one or more of the recommendations in the 2019 report. Since its inception, the CAEPWG has convened periodically with the assistance from GNOF, which provides participation stipends.

As a part of this grant, the City is requesting \$90,000 annually, or \$450,000 over the 5-year grant period to provide participant support costs to the CAEPWG. This request is listed under the benchmarking measure for reporting purposes but would advise the City on implementing the entire CPRG grant to ensure the benefits of these funds prioritize disadvantaged communities in the City and will be one of the primary mechanisms the City will use to ensure disadvantaged communities are continuously engaged in grant implementation and feedback processes.

Protected Bikeways

Beginning in 2019, several hundred residents participated in a two-week series of "open house" neighborhood workshops that engaged residents about the plan to expand and improve the City's bike network as part of the Moving New Orleans Bikes plan. More than 300 residents participated in the open houses, while more than 160 responded to the online survey and interactive mapping tool. In the summer of 2019, the City hosted a second round of public meetings to share the city-wide, low-stress bikeway network created through stakeholder feedback. Attendees learned which corridors are likely to undergo biking and walking improvements, the criteria used to determine where new facilities will be located, and what feedback residents gave from previous public meetings and surveys. The process culminated in the release of the [New Orleans Bikeway Blueprint](#) map in September 2020, which established recommended bikeway measures citywide. Pre-design and pre-construction meetings will be held in neighborhoods identified for improvement

projects and household surveys will be conducted to determine satisfaction and attitudes toward the executed measures, including protected bikeways.

Bike Share Expansion

Blue Krewe elevates community voices in decision-making through equitable, intentional, and data-driven community engagement efforts, like yearly surveys and biannual equity studies. Community feedback informs plans to expand the service area into low-income and disadvantaged communities. Through engagement and plans to expand bikeshare infrastructure into disadvantaged communities, the residents of these communities will actively shape decisions through Blue Bikes' Rider Input Group.

E-Bike Rebates

The E-Bike Rebate program will set aside 60% of annual stipends to LMI households, identified through participation in Medicaid, SNAP, and other aid programs. Program staff will conduct surveys of low income participants sixty days after making e-bike purchases to assess the success of the e-bikes in shifting trip modes. Findings from these outreach efforts will help determine whether targeted outreach to disadvantaged communities is needed to expand awareness of and participation in the program and to ensure that mode-shift strategies are reaching communities with fewer reliable and/or clean transportation options.

Benchmarking Program Support

A critical component of establishing a Benchmarking ordinance is stakeholder engagement involving leaders from architecture and engineering firms, market rate and affordable housing real estate developers, facility owners and managers, operations and maintenance staff, trade allies/contractors, and more, to gain insight into policy features and barriers to compliance. Including representatives from buildings in disadvantaged communities, as well as affordable multifamily housing, will provide feedback necessary to tailor the program to the needs and constraints of this portion of the building sector. This stakeholder engagement process

will assist in crafting the legislative language and program design. City staff are currently working with the Institute for Market Transformation (IMT) on the creation and implementation of a Community Advisory Board (CAB). CABs appoint diverse representatives from different areas of the building, design, and real estate markets to serve as oversight to building performance policies and are critical in ensuring the policies operate within an equitable framework. Through the stakeholder engagement process, participants can outline what an ideal CAB will do and what stakeholders must be represented to ensure equity in oversight. The CAB may work in unison or underneath the CAEPWG, which will be funded through the Benchmarking Program Support measure in order to provide stipends to participants of CAEPWG/CAB.

Municipal Building Decarbonization

The City requires all contractors to meet a 35% Disadvantaged Business Enterprise (DBE) requirement for all projects bidded out by the City of New Orleans. In order to ensure that local DBE companies bid on projects for the Municipal Building Decarbonization measure, the City will hold public engagement days where local DBE firms representing contractors, electricians, solar installers, and more can learn more about the projects, working with the City, and how to successfully submit a project bid to be considered for hire. Pursuing at least 35% DBE representation in contractors will also spur growth in green jobs related to energy efficiency, HVAC, and solar - all of which are underrepresented in New Orleans when compared to national averages. The City will also send out public notices to wider community to ensure that as many DBE firms are tuned into the opportunities to support Municipal Building Decarbonization.

Solar For All NOLA Bridge Subsidies

The Solar Subsidy program will largely be supported by the community engagement initiative created through Energy Efficiency Conservation Block Grant (EECBG) funding called Community Energy Advisors. Community Energy Advisors will not only assist residents in navigating

the solar subsidy application process, but will also follow up with technical assistance recipients to understand if the measures they discussed were adopted, helping the City better understand what is and is not working in subsidy program design. Community Energy Advisors will be leaders in their respective communities and will provide free 1-1 technical assistance to catalyze a just, clean energy transition in New Orleans. Community Energy Advisors will be compensated for their time as they complete a 3-class training module (\$150/class), and as they provide technical assistance to community members (\$40/hour for up to 10 hours a month). The Community Energy Advisors initiative is an avenue to work with community leaders, including communities with varying language needs, increase their education and involvement in a clean energy transition while compensating for their time, and helps bridge gaps between city employees and communities facing higher rates of energy burden.

Reforestation Plan

The City of New Orleans will lead communications efforts for the overall project and help amplify efforts of partner organizations through use of official channels from the City of New Orleans and City departments. The City will ensure that signage and messaging is consistent across all partners and programs. Each partner group will perform direct engagement and education with the neighborhoods where they will work. DPP will work in tandem with the Mayor's Office of Communications to educate the public on the health benefits of continual planting, maintenance, and protection of the New Orleans urban forestry and highlight the tree diversification planting projects of DPP and the non-profit tree planting partners. Marketing collateral will include items such as an informative project page on the City's website that outlines the project funding from EPA, project sites, and participating partners, joint press releases from the City and partners, Mayoral and City Council proclamations, collaborative social media campaigns with partners, and 250 campaign branded lawn signs to be displayed at City and partner project sites.

5. Job Quality

Several measures rely on contracting to deliver proposed services, including Protected Bikeways, Bike Share Expansion, E-Bike Rebates, Municipal Building Decarbonization, Solar for All NOLA Bridge Subsidies, and the Reforestation Plan. The City's robust Disadvantaged Business Enterprises (DBE) participation goal of 35% underscores its dedication to sustaining and expanding its equitable business landscape. In pursuing this target, the NOCARBON project leverages the city's commendable track record, as detailed in the [EBOs scorecard](#), which includes over \$20 million awarded to DBEs as prime contractors and more than \$173 million in commitments to DBEs as subcontractors in the 2021-2022 period. The project's comprehensive approach encompasses outreach and engagement, capacity building, and streamlined processes for certification and prequalification. A strategic focus will be on ensuring prime contractors provide ample subcontracting opportunities to DBEs, with the city actively overseeing compliance and creating avenues for connections between businesses. This concerted effort not only aims to reach the DBE participation goal but also to reinforce the city's overarching commitment to nurturing a diverse and equitable economic community.

In our efforts to create good-paying jobs, all NOCARBON contractors will be required to adhere to the City of New Orleans's [Living-Wage Ordinance](#), guaranteeing that all employees involved in the project receive wages that not only meet but exceed the minimum requirements. This commitment ensures that the workforce benefits from fair compensation that reflects the skill and dedication they bring to their roles. Moreover, by advocating for a free and fair choice to join a union, we are supporting workers' rights to collective bargaining, enhancing job security, and ensuring workplace safety standards are upheld. The Bike Share expansion measure will directly create 4 union jobs, and likely more, as Blue Krewe, the non-profit operator, has voluntarily recognized a union petition and is working in good faith towards its first collective bargaining agreement. The City also intends to include a

[project labor agreement](#) (PLA) provision in each eligible NOCARBON project, underscoring our dedication to upholding high labor standards throughout the project's duration. PLAs will facilitate the efficient completion of the project while ensuring that workers are compensated fairly for their labor. This approach not only benefits the workers directly involved in the project but also stimulates the local economy by ensuring that the wages earned are spent within the community, supporting local businesses and services. Through these measures, the proposed measures are not just an investment in climate pollution reduction but also a catalyst for sustainable economic development and community well-being, reflecting New Orleans' commitment to social equity and economic justice.

This NOCARBON proposal also includes a \$2M request over 3 different measures (Bike Share Expansion, SFA NOLA subsidies, and Reforestation Plan) to fund 4 different local workforce development organizations throughout the City who focus on training BIPOC and/or justice-involved individuals in the green infrastructure, solar and bike repair industries. This funding will be used to train an additional 20 trainees annually, so approximately 100 over the period of performance. Thrive New Orleans, Louisiana Green Corps, and Groundwork New Orleans have all provided Letters of Commitment for this project which can be found in Appendix H. The City intends to also partner with a bike repair training program, like the Youth Empowerment Project's Bike Works program, or a similar program, should the EPA fund this proposal and will formalize that relationship upon award.

The City of New Orleans' Office of Workforce Development is poised to play a pivotal role in promoting local and economic hiring preferences throughout the duration of NOCARBON measures. A strong emphasis will be placed on fostering hiring policies and workplace cultures that are inclusive and supportive of underrepresented populations. By prioritizing local talent and providing opportunities for those often marginalized in the workforce, the Office of Workforce Development is committed to creating pathways for sustainable employment and career

progression. These efforts will help in retaining valuable local talent, thus strengthening the economic fabric of the city while ensuring that the project's workforce reflects the diversity and dynamism of New Orleans.

6. Programmatic Capability & Past Performance

6a. Past Performance

The City of New Orleans has extensive experience managing federal funds generally, including hundreds of millions of dollars in FEMA funds associated with hurricane recovery activities. In recent years since the debut of additional federal discretionary grant funds from the IIJA and IRA, the City has successfully secured multiple awards as the primary applicant, including awards from the EPA.

- **New Orleans Recycling Expansion and Planning.** Assistance number 4Z-02F51501-0, Environmental Protection Agency, CFDA Number: 66.920. This award will fund the shift to universal curbside recycling in the City and the creation of a solid waste master plan to guide City efforts to reduce waste and the associated climate impacts. Contact: Sean Stanton, sean@epa.gov.
- **Naval Support Activity Complex Brownfields Clean Up.** Assistance number: 02F44601, Environmental Protection Agency, CFDA Number: 66.818. This award funds environmental cleanup activities at the former Naval Support Activity Complex, which the City will be redeveloping as a mixed-use development. Contact: Michael Kennedy, kennedy.michael@epa.gov.
- **Connecting New Orleans East for Pedestrian and Bicyclist Safety and Mobility.** Assistance number pending, US Dept of Transportation, CFDA Number: 20.205. This award will provide for non-motorized safety and mobility by constructing new shared-use trails along the I-10 Service Roads, improving

connections at the existing interchanges, adding lighting to the Service Roads, and constructing new non-motorized bridges over the interstate. Contact: Nikita Poche, nikita.poche@dot.gov.

- **New Orleans Transportation Safety Action Plan.** Assistance Number: 693JJ32440064, US Dept of Transportation, CFDA Number 20.939. This award will fund the creation of a comprehensive safety plan to address roadway fatalities and severe injuries. It will also fund new functionalities for the Safer Streets Priority Finder, an analysis tool previously created in partnership with the USDOT.
- **Bayou Bienvenue Central Wetlands Restoration.** Assistance Number: 0318.23.076117, National Fish and Wildlife Foundation. This award funds the preliminary design and planning of the marsh restoration at Bayou Bienvenue, a priority restoration project in the Louisiana Coastal Master Plan. Contact: Caleb Hall-Arnett, caleb.hall-arnett@nfwf.org.

The specific grant awards listed above are all in progress. However, the City's experience managing federal funds from agencies such as FEMA and HUD have resulted in a robust grant management structure and experienced staff for managing the aspects of a federal grant. Project managers within the relevant department manage the day-to-day implementation of grant deliverables. In support of the project manager, a specialized team of grant managers in the Project Delivery Unit lead the reporting and financial aspects of the grants.

6b. Reporting Requirements

The five grants identified above are all active grants, either being implemented by the City or have a federal funding agreement in development with the relevant funding agency.

The Brownfields and NFWF grants are executed and work is underway. The project managers are conducting activities within the scope of the projects and in conjunction with the grant

management team, all required reporting and invoicing are being prepared and submitted on consistent with the grant terms. At this time, no unexpected delays have arisen that have required notification or correction.

The EPA Recycling and Expansion award's funding agreement has been submitted to the City for review and acceptance. The accompanying Quality Assurance Project Plan and Quality Management Plan are in development.

The Comprehensive Safety Action Plan's award document is routing through the approval process for execution. In parallel to that, the City has been preparing the procurement documents to procure consultant assistance through competitive selection. Work activities and regular reporting are expected to begin in the second quarter of 2024.

The Reconnecting New Orleans East project is our most recent award and the initial engagement with program managers at USDOT is underway. Despite its early stages, the scale of the award, \$61.5 million, is similar to this CPRG proposal. We expect a fairly streamlined federal funding agreement process with USDOT, allowing us to move directly into procurement for the design phase of the project

6c. Staff Expertise

The City of New Orleans has assembled a diverse team inclusive of City staff and staff from a variety of community partners with the expertise and skill sets to successfully implement the various measures and achieve the anticipated GHG reductions over the 5 year project timeline.

Leadership

The City's Office of Resilience & Sustainability (ORS) serves as the lead department within City Hall for this proposal. Under the leadership of the Deputy Chief Resilience Officer Greg Nichols, the ORS team will lead the project management for five of the seven proposed reduction measures: bike share expansion, e-bike rebates, benchmarking program support, municipal building decarbonization, and the Solar for All NOLA Bridge Subsidy. Mr. Nichols

has led ORS for two years, prior to which he served four years as Deputy Director for the City's Department of Property Management providing him the experience to oversee the municipal decarbonization measure and support the benchmarking program and Solar for All NOLA bridge subsidy programs. ORS' Energy Policy & Program Manager, Sophia Winston, joined the Office in 2023 and previously worked on benchmarking and solar programs in Philadelphia. This background will serve Ms. Winston well in managing the benchmarking program and Solar for All NOLA bridge subsidy measures.

ORS' Transportation Policy & Program Manager, Matt Rufo, also joined the Office in 2023 after over 14 years in a number of public and private sector transportation planning roles. Mr. Rufo manages the City's relationship with our bike share provider and works with the Department of Public Works on a variety of bicycle transportation issues. This positions Mr. Rufo to lead the bike share expansion and e-bike rebate reduction measures. Finally, ORS' Infrastructure Projects Administrator, Dan Jatres, has over 17 years of transportation planning and implementation experience, including five years with the City. Mr. Jatres will apply this background in supporting the protected bikeways, bike share expansion, and e-bike rebate measures.

If this proposal is funded, ORS will bring in several new staff positions to implement the benchmarking program support, municipal building decarbonization, Solar for All NOLA bridge subsidies, and the e-bike rebate.

Departmental Expertise

The Department of Public Works (DPW) Mobility & Safety Division is managed by Jennifer Ruley, a professional engineer who has worked on complete streets projects for nearly 20 years with the City. Ms. Ruley and the team she manages, including a new protected bikeway project manager, will lead the protected bikeway reduction measure.

The Department of Parks & Parkways (DPP) manages and maintains over 2,000 acres of public green space and over 450,000 trees. Michael Karam, Director, will lead the reforestation plan

measure, including interdepartmental and non-profit tree planting partner coordination and the project's communications and outreach strategy. Mr. Karam has served as Director since 2020. Amanda Walker, Urban Forestry Manager, will provide project management and subject matter expertise. Hailey Bowen, Landscape Architect, will provide project planning and design management with the goal of improving human and environmental health. DPP will also bring on a new project manager for the reforestation plan reduction measure.

Grant management activities focused around reporting and invoicing will be led by the City's Project Delivery Unit (PDU) and Director LaNitrah Hasan. The PDU is a specialized unit established in the aftermath of Hurricane Katrina to manage the reporting and invoicing of federal recovery funds to ensure compliance with all requirements and regulations. This expertise has seen their charge expand to include grant management for all federal funds managed through the City. Ms. Hasan's team working on this proposal's grant management will include Federal Grants Manager Trey Nobles, Capital Budget Director Kyle Homan, Grants Management Lead Kelly Cryer, and Closeout Team Lead Sierra Franklin.

External Partners

Outside of City staff, there are several key personnel and community partners with existing partnerships with the City. For the bike share expansion measure, the City will work in lockstep with Blue Krewe, the local non-profit operator of the City's Blue Bikes bike share system. Chief Executive Officer Geoff Coats, was the founding executive of New Orleans bike share, leading the system since its 2017 launch. Director of Operations Django Szilagi has over five years of experience in transportation planning and bike share operations. Finally, Community Engagement Manager Patrick Urbine has led Blue Krewe's community activities for 3 years.

The City will expand workforce development opportunities with several local non-profits with previous experiences as a City partner. This includes Groundworks New Orleans under the leadership of Todd Reynolds, LA Green Corps

led by Ryan Mattingly, and Thrive New Orleans and their Director Chuck Morse for workforce development associated with the reforestation plan and Solar for All NOLA Bridge Subsidies. And the Youth Empowerment Project under the leadership of Melissa Sawyer will provide bicycle and e-bike related workforce development programming. Finally, the City will work with our community foundation, the Greater New Orleans Foundation to provide grants to tree-planting non-profits in support of the reforestation measure.

For additional details on all the individuals listed above, please see Appendix G for team resumes

7. Budget

7a. Budget Detail

The proposed budget for the seven GHG reduction measures totals \$49,975,589 over the five year period of performance. Summaries of the budget by reduction measure (Table B) and by budget category and year (Table C) are below and on page 25 respectively. A more detailed breakdown of the budget line items and descriptions of the lines can be found in Appendix A - Budget Narrative and Appendix B - Budget Spreadsheet.

Reduction Measure	Proposed Budget
Protected Bikeways	\$10,668,463
Bike Share Expansion	\$11,801,337
E-Bike Rebates	\$3,837,206
Benchmarking Program Support	\$1,467,525
Municipal Building Decarbonization	\$5,334,444
Solar for All NOLA Bridge Subsidies	\$9,111,522
Reforestation Plan	\$7,755,093
Total	\$49,975,590

Table B: Proposed Budget by Reduction Measure

7b. Expenditure of Awarded Funds

The City's proposed package of GHG reduction

measures were selected to address the primary sources of GHGs in New Orleans, transportation and buildings. Additionally, the specific measures are intended to build on previous and existing efforts and activities and align with staff expertise. As previously noted, the City staff that will work on implementing these reduction measures are located within three different city departments: the Office of Resilience & Sustainability (ORS), the Department of Public Works (DPW), and the Department of Parks & Parkways (DPP). The respective staff within these departments that will work on the reduction measures each bring background knowledge and experience relevant to the seven measures. Recognizing that this proposal would greatly expand the programs and activities of each of the three departments, our proposal includes and has budgeted for additional personnel costs to ensure ORS, DPW, and DPP have the sufficient staff capacity to implement the measures within the proposed 5-year period of performance.

Six of the seven reduction measures: e-bike rebates, protected bikeways, commercial building benchmarking, municipal building decarbonization, Solar for All subsidies, and reforestation all include new program managers funded through the grant proposal. These dedicated program managers will provide crucial staff capacity to ensure the successful and timely implementation of each of the measures.

In addition to direct City program managers, many of the measures will have additional support elements supporting implementation. The e-bikes rebate measure will utilize a competitively selected third-party administrator of the rebate process, working with participating retailers, processing rebates, and ensuring financial compliance. The Solar for All subsidies measure will also utilize a competitively selected third-party administrator of the subsidies process, working with the installers, processing subsidy payments, and ensuring financial compliance.

The protected bikeway measure will utilize a competitively selected A/E firm to conduct traffic study and design services and a competitively selected construction contractor(s)

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Personnel	\$649,962	\$663,023	\$663,023	\$478,523	\$386,273	\$2,840,806
Fringe Benefits	\$249,336	\$252,707	\$252,707	\$184,695	\$150,689	\$1,090,134
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$30,000	\$30,000	\$40,000	\$40,000	\$40,000	\$180,000
Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Contractual	\$2,505,118	\$8,520,307	\$7,797,056	\$1,504,786	\$115,200	\$20,442,468
Other	\$4,902,500	\$5,378,000	\$5,347,325	\$4,844,991	\$4,949,366	\$25,422,182
In-Direct	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$8,336,916	\$14,844,038	\$14,100,112	\$7,052,996	\$5,641,528	\$49,975,589

Table C: Proposed Budget by Reduction Measure

to construct the projects. This is consistent with DPW's standard project management and delivery processes. Similarly, the municipal building decarbonization measure will utilize a competitively selected A/E firm to design the projects at the 41 sites and a competitively selected construction contractor(s) to construct the projects. This is consistent with the City's standard project management and delivery processes for capital projects.

The reforestation measure includes capacity expanding components to ensure timely delivery of the proposed scope. A competitively selected contractor to plant and maintain trees under the management of DPP. The Department will also manage a relationship with the Greater New Orleans Foundation which will administer grants to non-profit tree planting partners which will plant and maintain trees. This measure will also include partnerships with three workforce non-profit organizations to expand their green infrastructure workforce training programs, providing the workforce necessary to support the Department's ongoing implementation and maintenance efforts.

The seventh measure, bike share expansion will be a partnership with the City's non-profit bike share operator, Blue Krewe. To support bike share operations, Blue Krewe would expand staff in years 1 and 3 to coincide with the expansion of the bike fleet and the service area.

Supporting the implementing departments, grant

management activities will be conducted by the City's Project Delivery Unit (PDU). PDU staff will coordinate with the department program managers to ensure all documentation of work completed is accurate and complete. PDU will prepare this documentation for the purposes of regular invoicing to the EPA for reimbursement of grant activities. And finally, PDU staff will prepare and submit all required reporting documentation throughout the period of performance and closeout documentation and reporting at the conclusion of the grant period.

7c. Reasonableness of Costs

As previously noted, the City of New Orleans has extensive background and experience in receiving and managing federal funding from a variety of federal entities. Part of this experience includes developing and implementing procurement procedures and policies in alignment with the requirements of 2 CFR 200. These procedures and policies address solicitation, award, contracting, amendments, etc. The policies also require the City to conduct a cost analysis for all federal contracts to determine the reasonableness. The complete policies can be found on the City's website: [Federal Grant Procurement Procedures](#) and [Federal Grant](#)