

Workplan Outline for General Competition

1 Overall Project Summary and Approach

The Virginia Beach-Norfolk-Newport News (Hampton Roads) community is committed to addressing climate change and providing clean air and water to all residents. Through the Advancing Clean Transportation (ACT) in Hampton Roads Program, the Hampton Roads Planning District Commission (HRPDC) and its partners aim to reduce transportation-related emissions and meet electric vehicle (EV)-charging needs throughout the Hampton Roads region, with a particular emphasis on serving low-income and disadvantaged communities (LIDACs). HRPDC proposes three measures totaling \$98,101,393, based on their emissions reduction potential in the transportation sector and on HRPDC's ability to quickly implement them. As described in the Priority Climate Action Plan (PCAP) for the Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area (Hampton Roads MSA), the transportation sector accounted for approximately 45% of emissions in the Hampton Roads MSA in 2019. These high emissions in the transportation sector demonstrate the need for effective reduction measures, and by implementing shovel-ready projects included in the ACT Program, the Hampton Roads MSA will quickly realize benefits to the environment, public health, and the economy. Per HRPDC's approved workplan, the geographic scope of this implementation grant aligns with the region's PCAP and includes the Hampton Roads MSA, along with Southampton County and the City of Franklin.

The ACT Program focuses on three key components for reducing transportation-related emissions in the Hampton Roads region:

- **Reduction Measure 1 – Electric Vehicle Supporting Equipment Network (EVSE):** This measure aims to encourage EV adoption by providing reliable and convenient access to charging and will support the growing number of EVs in local government fleets. Meant to complement and leverage funding from other federal programs (such as the National Electric Vehicle Infrastructure [NEVI] Program and the Charging and Fueling Infrastructure [CFI] Grant Program), investments under this measure will include developing an EVSE network plan for the region and directly supporting installations of publicly accessible EVSE at initially identified locations via a regional subgrant program.
- **Reduction Measure 2 – Trail Expansion:** Aimed at reducing vehicle miles traveled and increasing the use of active transportation methods such as walking and biking, this measure will focus on providing funding to localities to fill gaps in the region's multimodal trail network to encourage mode shifts.
- **Reduction Measure 3 – LED Streetlight Conversions:** Prioritizing streetlights in LIDACs, this regional subgrant will help localities pay for converting existing inefficient streetlights (such as those using mercury vapor and high-pressure sodium) to more efficient LED technology.

These measures are designed to benefit the entire Hampton Roads community, with a particular focus on benefiting LIDACs and improving public health. Co-benefits of these measures will include improved air quality from the reduced use of internal combustion engine vehicles (ICEVs), money saved on fuel for transportation, and an increase in the number of jobs in the clean energy workforce, money saved by localities on streetlight operation, improved health from increased physical activity, and more. Representing the first region-wide emissions reduction effort in the Hampton Roads area, the ACT Program is essential to catalyze transportation electrification efforts and EV purchases in a region where

a key barrier to EV purchasing is a lack of available charging. Laying the groundwork for transformative emissions reductions, this program supports crucial projects that have struggled to receive funding.

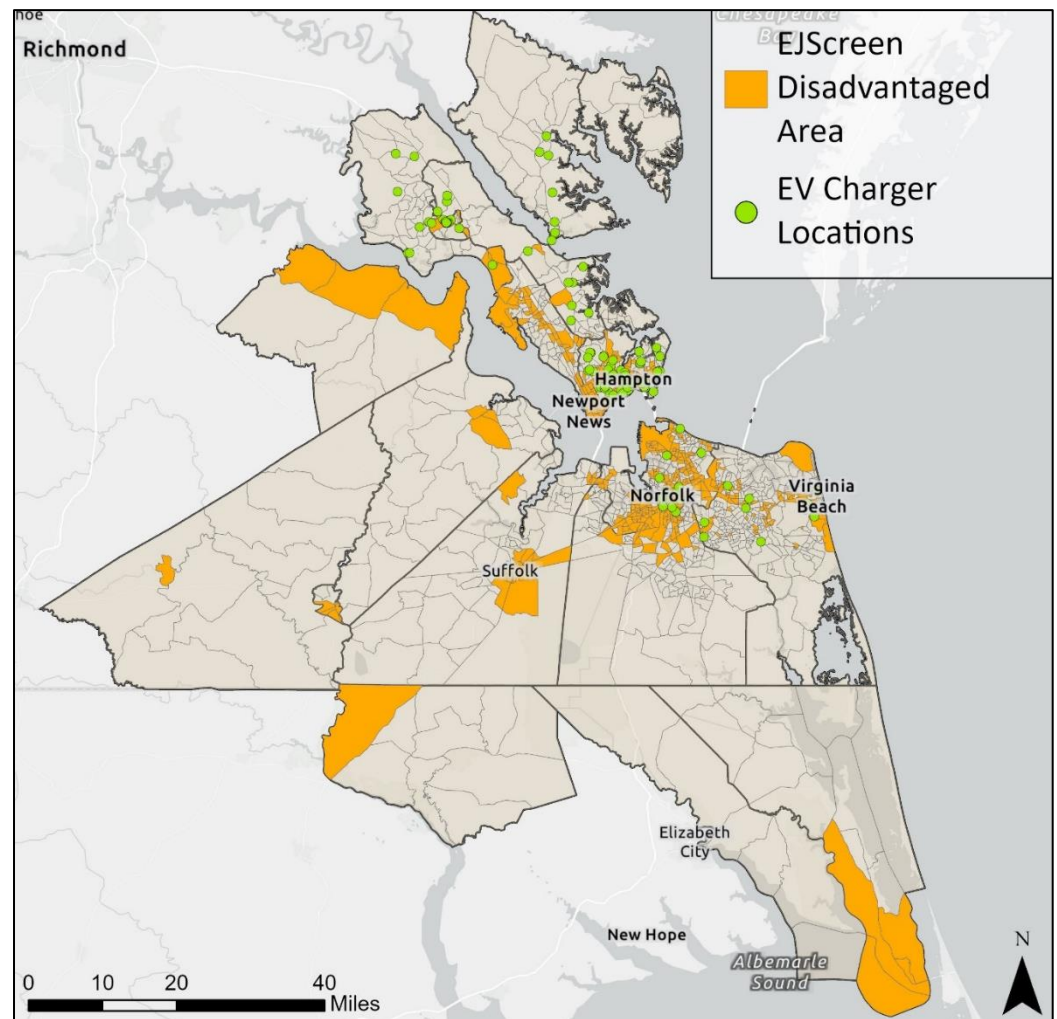
1.a Description of Greenhouse Gas (GHG) Reduction Measures

Reduction Measure 1: Electric Vehicle Supporting Equipment (EVSE) Network

Measure 1 is focused on accelerating the deployment of electric vehicles in the Hampton Roads area by expanding EV charging infrastructure. This measure will expand the 261 EV charging stations that exist in the Hampton Roads MSA (as of December 2023) and will fill gaps in funding left by the NEVI program. Existing charging stations demonstrate the capacity of localities and the workforce to implement charging infrastructure which will be further expanded by the two primary efforts in Measure 1.

1. The ACT Program will develop an **EVSE network plan** for the Hampton Roads region, setting the stage for regional collaboration and identifying critical supporting electric grid improvements. This plan will identify and map additional needed (and most optimal) locations for EVSE, focusing on commercial corridors and improving resiliency by serving critical shelters and evacuation routes.
2. To maximize GHG reductions over the short-term, this program component will also include a **regional subgrant program** to directly support **installations of publicly accessible EVSE** at strategic locations already identified by localities. CPRG grant funds will be subgranted to localities to pay for EV

Figure 1. Anticipated EV Charger Installation Locations



chargers and other supporting infrastructure expenses, and charging equipment will be owned and maintained by localities. Approximately 51% of anticipated charging locations are expected to be located within LIDACs. Charging equipment is anticipated to be used by locality fleets but most all anticipated projects will also be accessible to the public for use with personal EVs. A map of anticipated EV charging locations is included in Figure 1.

Tasks and Milestones:

Key tasks in this measure include procuring consultant support for developing the regional EVSE network plan, awarding subgrants to localities, along with purchasing and installing new EV chargers. One key milestone will be the completion of the regional EVSE network plan which is for the end of Year 2 of the period of performance. Please see Section 3.c for more information.

Potential Risks:

Risk	Solution
Supply chain delays	Production of EVs and of EV chargers is increasing to keep up with demand. HRPDC expects this trend to continue throughout the period of performance.
Siting and permitting	HRPDC will conduct community engagement to consider siting and permitting concerns and community preferences when developing the regional EVSE network plan.
Underdeveloped workforce	HRPDC and subgrantees will partner with local workforce training programs to identify opportunities for collaboration and share best practices on how to develop a qualified workforce. See Job Quality for additional information.

PCAP Priority Reduction Measure Alignment:

This reduction measure relates to the priority GHG reduction measure identified in Measure 3 of HRPDC MSA's PCAP: *Develop an EV procurement plan and EVSE deployment strategy to support the adoption of EVs*. HRPDC selected this measure as a priority because of the GHG reduction potential that HRPDC can quickly realize through enabling residents to adopt EVs and because clean transportation projects were identified as a significant area of interest during PCAP engagement.

Developing an EV procurement plan and EVSE deployment strategy will catalyze future adoption of EVs in the Hampton Roads MSA. Expanding EV charging infrastructure will extend the range that residents can travel in EVs, making the transition to EVs more feasible. This will ensure the successful adoption of EVs, resulting in more significant GHG reductions. Additionally, GHG reductions resulting from this measure will continue in the region beyond the 5-year period of performance and will benefit the entire region, including LIDACs. The planning process will integrate regional coordination to ensure that electrical infrastructure is updated to support the electrification of on-road transportation.

CPRG Program Alignment

Developing an EV procurement plan and EVSE deployment strategy will meet the goals of the CPRG program as described below:

Implement ambitious measures that will achieve significant reductions by 2030 and beyond.

From 2025 to 2030, this measure will result in 34,212 MTCO₂e of GHG reductions, approximately 51% of which will be located in LIDACs. These reductions will be realized quickly due to the shovel-ready nature of the projects. The EVSE deployment plan will allow localities to continue enabling residents of HRPDC to permanently transition from ICEVs to EVs and reduce their emissions from on-road transportation beyond 2030.

Pursue measures that will achieve substantial community benefits (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs)), particularly in LIDACs.

EVSE will be strategically deployed in LIDACs so that the health benefits of reducing CAPs reaches these communities. Developing an EVSE network plan that prioritizes EV charging infrastructure in LIDACs will reduce the use of ICEVs in LIDACs, particularly for communities near highways and other high traffic corridors. From 2025 to 2030, reduced usage of ICEVs will result in an estimated 23 MT reduction of nitrogen oxide (NOx) emissions, an estimated 0.29 MT reduction in emissions of fine particle pollution (PM2.5), and an estimated 389 MT reduction in carbon monoxide emissions, approximately 51% of which are anticipated to be directly in LIDACs. Reducing these CAPs may potentially lead to substantial improvements in public health for LIDACs- reducing the number of new cases of asthma, hospital admissions, and emergency department visits.

Complement other funding sources to maximize these GHG reductions and community benefits.

See Section 1.b for information.

Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions.

The EV procurement plan and EVSE deployment strategy will allow funding to be scaled across the region. Table 1 shows an anticipated distribution of chargers across the region. Once the EVSE strategy is developed, localities can scale charging infrastructure according to the strategy, enabling a cohesive regional deployment of EVSE infrastructure.

Table 1 Anticipated Chargers by Locality

Locality	Anticipated Charging Infrastructure
Gloucester County	21 Level 2 chargers
Hampton	85 chargers
James City County	8 Level 2 chargers
Norfolk	50 Dual Port 9.6 kW chargers, 1 Dual Port 150 kW charger, 10 Dual Port 14.4 kW chargers
Virginia Beach	4 fast chargers, 148 Level 2 chargers
York County	29 Blink Series 7 chargers
Williamsburg	80 chargers
Total	446 chargers

With a goal of installing at least 400 EV chargers (approximately 90% of the identified potential), final charger numbers supported by the subgrant program in Measure 1 could vary from the estimates above depending on market fluctuations in equipment and installation costs and on the final type of equipment selected.

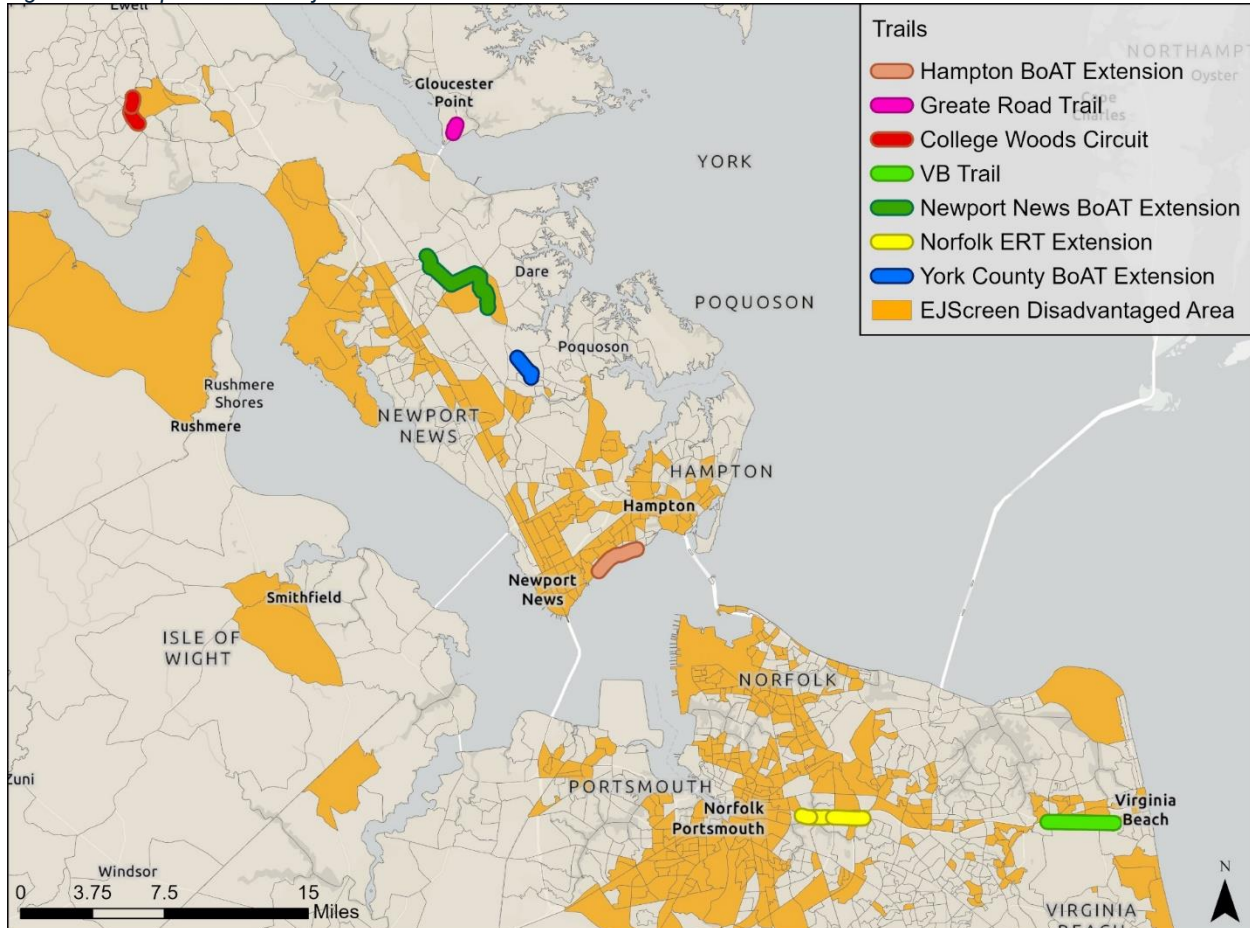
Reduction Measure 2: Trail Expansion

Measure 2 of the ACT Program is focused on promoting active transportation and reducing vehicle miles traveled (VMT) in the Hampton Roads area by creating a regional subgrant program to expand cyclist and pedestrian infrastructure.

Anticipated trail segments to be funded via this subgrant program include the Birthplace of America Trail (BoAT)/Virginia Capital Trail Extension and the Elizabeth River Trail, constructing 62,832 feet (11.9 miles) of new multipurpose trails. The aim of this measure is to build on the existing cyclist and pedestrian trail network in the Hampton Roads MSA, further encouraging mode switch and VMT reductions. Subgrant

funds will be targeted at design and construction activities that fill key gaps in the trail network to allow for improved regional connectivity. A map of anticipated trail projects to be supported by this measure is shown below in Figure 2. CPRG funding, if obtained, would be subgranted to localities, who will own the trails and be responsible for their construction and maintenance.

Figure 2. Anticipated Trail Projects and their Relation to LIDACs



Tasks and Milestones:

Key tasks in this measure include awarding subgrants, procuring and completing trail engineering design activities, along with procuring construction support and building trail improvements. Milestones could include design milestones (30%, 60%, etc.) along with trail construction completion. Please see Section 3.c for more information.

Potential Risks:

Risk	Solution
Permitting and construction delays	Permitting and construction delays can occur depending on staff availability. Supporting workforce development activities in the region should help address these issues, while localities can work directly with their permitting staff to ensure timely reviews.
Lack of community	HRPDC has conducted community engagement as part of the planning for trail projects that would be implemented using CPRG funding. When conducting community engagement for the BoAT project, the local community expressed strong support for a network of sidewalks,

interest in using trails	shared-use paths, and nature trails that provide options for non-automotive travel and recreation and promote healthy lifestyles. Additionally, Measure 3: Streetlights will increase interest in using trails by providing the community with a safe and well-lit environment.
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PCAP Priority Reduction Measure Alignment:

This measure reduction relates to the priority GHG reduction measure identified in Measure 4 of HRPDC MSA's PCAP: *Reduce VMT and support alternative modes of transportation through bike/pedestrian investments*. HRPDC selected trail expansion as a priority because it increases active transportation, reduces VMTs and associated GHGs and air pollutants, improves public health, and fills key gaps in the trail network to improve accessibility and feasibility as an alternative mode of transportation. Additionally, numerous anticipated trail projects serve LIDAC communities, and improved regional connectivity via nonvehicle modes especially supports those who cannot afford vehicle ownership. Lastly, outreach efforts have been conducted regarding planned trail projects such as the Elizabeth River and BoAT projects that indicate significant community interest in trails.

CPRG Program Alignment

Converting streetlights to LEDs will meet the goals of the CPRG program as described below:

Implement ambitious measures that will achieve significant reductions by 2030 and beyond.

From 2025 to 2030, this measure will result in 23,158 MTCO₂e of GHG reductions by 2030, approximately 68% of which will be located in LIDACs. This measure will continue to reduce emissions well beyond the 5-year period of performance by enabling residents to convert trips that would have otherwise occurred by vehicle to active transportation for the entire lifespan of the trail infrastructure.

Pursue measures that will achieve substantial community benefits (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs)), particularly in LIDACs.

From 2025 to 2030, this measure is anticipated to result in an estimated 20 MT reduction in NO_x emissions, an estimated 28 MT reduction in emissions of hydrocarbons (HC), and an estimated 333 MT reduction in carbon monoxide emissions, approximately 68% of which are anticipated to be directly in LIDACs. The benefits of improved air quality will be especially salient in areas near highways and other roads with large volumes of traffic, which tend to overlap with LIDACs.

Complement other funding sources to maximize these GHG reductions and community benefits.

See Section 1.b for information.

Pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions.

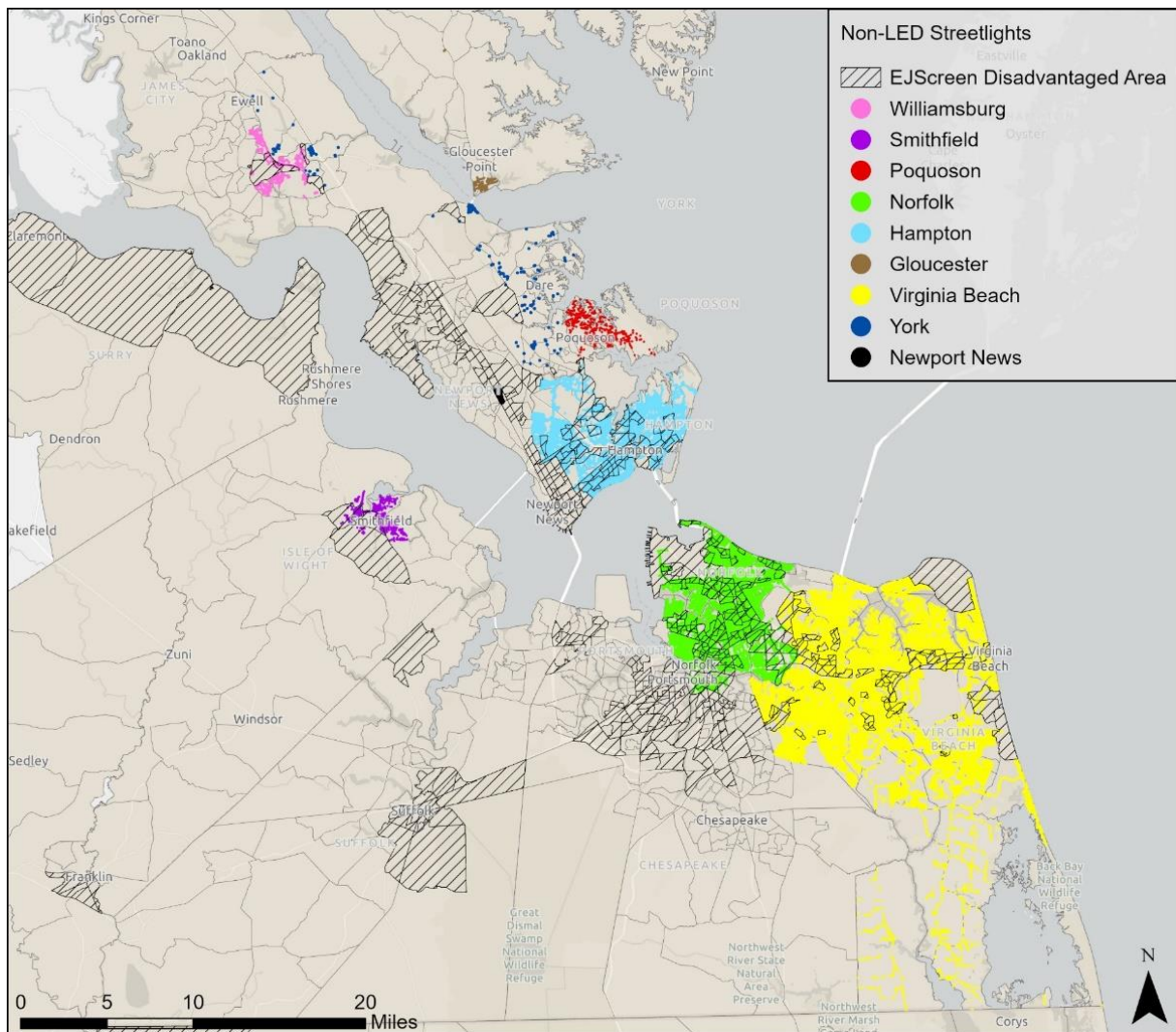
This measure will build on the existing trail network in the Hampton Roads MSA. By filling key gaps in the trail network, local jurisdictions that scale up trails in the future can more effectively extend trails as part of a cohesive system, allowing residents and visitors to travel within the region more easily.

Reduction Measure 3: Streetlight Conversion

Measure 3 will focus on providing funding via subgrants to localities converting streetlights to LEDs to reduce energy consumption, especially in LIDACs. The majority of streetlights in the MSA are owned and maintained by Dominion Energy (Dominion), with a smaller set owned and maintained by the localities. CPRG funds would be subgranted to localities to pay Dominion's fee for converting streetlights to LEDs and to support select conversions for locality-owned streetlights. HRPDC plans to support conversion of

approximately 1,500 streetlights to LEDs per month, prioritizing conversions in LIDACs, aiming for a goal of at least 75,000 conversions. Additionally, the subgrant program will support associated site work and grading necessary for LED conversion for select sites of locality-owned streetlights. Figure 3 shows locations of non-LED Streetlights that will be eligible for funding support via the subgrant program established in this measure.

Figure 3. Non-LED streetlights eligible for conversion to LED and their relation to LIDACs



Tasks and Milestones:

Key tasks include distributing subawards and replacing current streetlight fixtures with new LED, along with associated sitework for locality-owned lights. Please see Section 3.c for more information.

Potential Risks:

Risk	Solution
Underdeveloped workforce	HRPDC will collaborate with Dominion to identify partnership opportunities for workforce development. See Job Quality for additional information.

PCAP Priority Reduction Measure Alignment:

This reduction measure relates to the priority GHG reduction measure identified in Measure 2 of HRPDC MSA's PCAP: *Reduce energy consumption and increase building and facility decarbonization through programs to support and incentivize energy efficiency and electrification measures*. HRPDC selected streetlight conversion as a priority because it will quickly reduce energy consumption of transportation supporting systems and associated GHGs. Additionally, this measure was selected because the numerous LED projects are shovel-ready, will capitalize on the established administrative infrastructure of the existing Dominion LED conversion program, and will demonstrate within the region the effectiveness of LED conversion to quickly produce GHG reductions and positively impact local government operational budgets with cost-savings.

CPRG Program Alignment

Converting streetlights to LEDs will meet the goals of the CPRG program as described below:

Implement ambitious measures that will achieve significant reductions by 2030 and beyond.

From 2025 to 2030, this measure will result in 11,099 MTCO₂e of GHG reductions. These reductions will be realized quickly due to the shovel-ready nature of the projects.

Pursue measures that will achieve substantial community benefits (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs)), particularly in LIDACs.

Converting streetlights to LEDs will benefit communities by reducing the amount of electricity needed to power streetlights and thus reducing the indirect emissions from local government operations. This will result in improved air quality, especially in LIDACs that are near the source of electricity generation. From 2025 to 2030, this measure is anticipated to result in an estimated 14.6 MT reduction NO_x emissions and an estimated 3.69 MT reduction of sulfur dioxide emissions, approximately 31% of which are anticipated to be directly in LIDACs.

Complement other funding sources to maximize these GHG reductions and community benefits.

See Section 1.b for information.

Pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions.

Table 2, below, shows the distribution of the number of possible streetlight conversions that could occur by locality. The lessons learned from implementation can be used to inform the scaling up of streetlight conversions in these and other localities in the MSA.

Table 2 Anticipated Streetlight Conversions by Locality

Locality	Potential Streetlights Converted
Gloucester County	467
Hampton	10,148
James City County	3,916
Newport News	678
Norfolk	25,826
Poquoson	410
Smithfield	609
Virginia Beach	38,853

York County	756
Total	82,818

With a goal of converting at least 75,000 streetlights (approximately 91% of the identified potential), final conversion numbers supported by the subgrant program in Measure 3 could vary from the estimates above depending on market fluctuations in equipment, contractor/skilled worker availability, installation costs, and on the final type of equipment selected.

1.b Demonstration of Funding Need

Hampton Roads has diligently pursued other funding opportunities at the state and federal levels, as well as private funding opportunities to achieve these critical infrastructure improvements, with limited success. Ultimately, CPRG implementation funding will give momentum to these projects that have been otherwise excluded or underfunded from other funding opportunities (see Table 3).

It is critical to note that funding distributed through the Virginia Commonwealth Transportation Board favors existing road maintenance and expansion projects as the evaluation process only places a minor emphasis on low-carbon transportation alternatives. SMART Scale is a process that helps Virginia meet its most critical transportation needs using limited tax dollars. It evaluates potential transportation projects based on key factors like how they improve safety, reduce congestion, increase accessibility, contribute to economic development, promote efficient land use, and affect the environment. After existing maintenance and existing state-wide programs are funded, remaining funding goes to SMART Scale with 45% of these SMART Scale funds going toward existing pavement and road rehabilitation.¹ The SMART Scale formula is used to give a score for each remaining local project that has applied for funding to determine which are High Priority. While there have been positive bias-corrections to favor more pedestrian and biking projects, the demand for transportation funding in the state to address existing roadway infrastructure weaknesses limits funding for climate-forward projects. In addition, SMART Scale is a significantly under-resourced program that is not equipped to meet the Commonwealth's transportation funding needs.

Table 3 Federal and Non-Federal Funding Sources

Funding Source	Relevant Measure(s)	Availability Status and Sufficiency Challenges
Energy Efficiency and Conservation Block Grant (EECBG) Program	1, 2, 3	In FY21, \$1.38 million was granted under the Infrastructure Investment and Jobs Act to 6 Hampton Roads cities/counties: Hampton, Newport News, Norfolk, Portsmouth, Suffolk, and Virginia Beach. No further funding has been issued in subsequent fiscal years under this act.
Surface Transportation Block Grant (STBG) Program	1, 2	Virginia received \$371,711,115 in FY24 to be allocated, in part, through the state's SMART Scale programs. HRTPO applied for Round 5 SMART scale funding for the BoAT trail but did not clear the pre-application. See sufficiency concerns about SMART Scale above.
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	1, 2, 3	HRPDC applied for shared-use path projects totaling \$109,072,051 and charging infrastructure projects totaling \$6,933,075 that could not be funded due to limited CMAQ availability.
Utility Rebate Programs: Dominion	1	Available, see notes below.

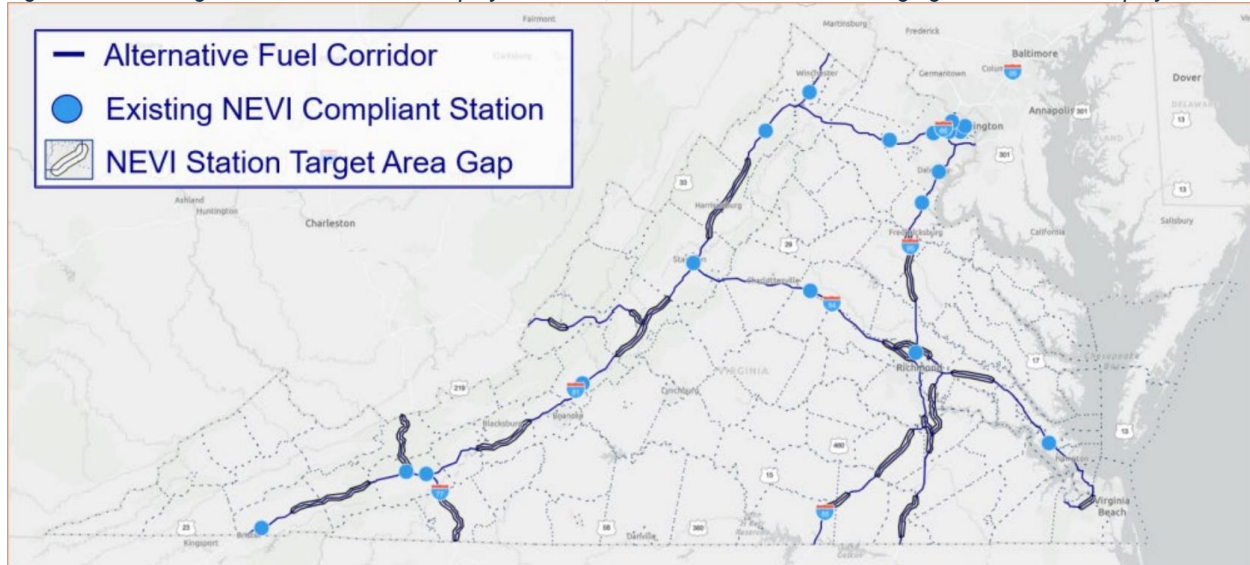
¹ https://www.ctb.virginia.gov/planning/smart_scale/default.asp

Direct pay for EV chargers (IRS 30C Alternative Fuel Vehicle Refueling Property Credit)	1	Available, see notes below.
Bloomberg Sustainable Cities Initiative	1, 2	The Cities of Newport News and Hampton, VA are selected for 3-year technical assistance and funding program to support efforts like the One City, One Future 2040 Comprehensive Plan and transit-based sustainability goals for EVs, pedestrian, and biking supports, as coordinated through HRT. Funding amount for efforts not yet disclosed.
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	2	One project granted in 2022 for City of Portsmouth Complete High Street Innovation Corridor for \$19.3 million, including efforts for pedestrian and biking infrastructure expansion. Other VA regions allocated funding for trail expansion (Three Notched Trail Shared Use Path Master Plan).

Measure 1: EVSE

CPRG funding would complement funding from other federal, state, and private programs that are currently being implemented. Currently, Dominion (which serves a significant amount of the Hampton Roads MSA) offers a rebate for customers who install EV chargers that can be used to help offset costs of the EV charging installation included in the ACT Program. Various localities have applied for other funding that would complement CPRG funds – the City of Hampton applied for the Charging and Infrastructure Grant Program and Gloucester County applied to Bay Transit to fund and install EV charging stations.

Figure 4. 2023 Virginia EV Infrastructure Deployment Plan, Focus Areas for Initial Charging Infrastructure Deployment

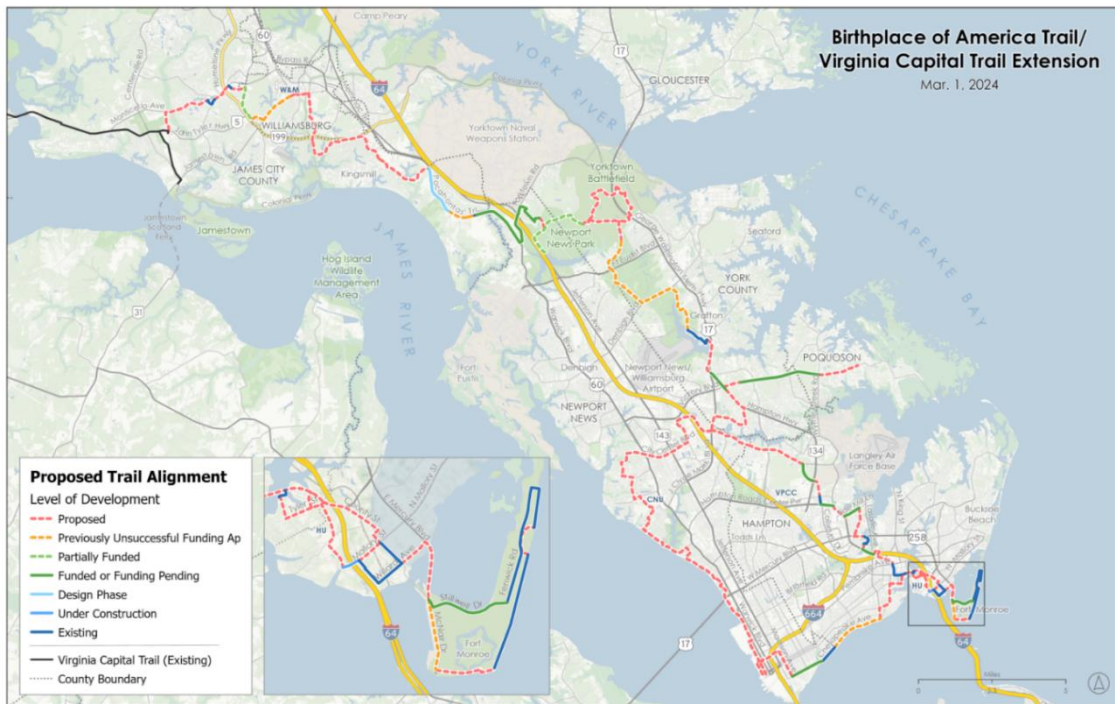


The Commonwealth of Virginia also receives funding from NEVI, Congestion Mitigation and Air Quality (CMAQ) grants, and Regional Surface Transportation (RSTP) Program Funding. However, the planned charging corridor expansions at the state level under NEVI only include limited expansion in the Hampton Roads region (1 out of 17 proposed gaps to fill, see Figure 4). Suffolk Transit/City of Suffolk applied for CMAQ funding for EV charging infrastructure totaling \$6,933,075 that could not be funded due to limited CMAQ availability.

Measure 2: Trail Expansion

Planning, initial community outreach, and preliminary design for the Birthplace of America (BoAT) Trail, also referred to as the Virginia Capital Trail Extension (VCTE), has been conducted, but full construction of the trail has not yet begun and key connecting segments remain unbuilt and unfunded. Figure 5 below depicts the funding status for construction of the trail by section. Gloucester, VA is also developing a multimodal path along Main Street that is currently under development. The City of Hampton has received \$13 million from the Federal Emergency Management Agency (FEMA) and \$4 million from Virginia Department of Transportation (VDOT) for trail maintenance and development. The City of Portsmouth has won Rebuilding American Infrastructure with Sustainability and Equity (RAISE) funding for \$19.2 million for their Complete High Street Innovation Corridor. All these funds will be leveraged to support regional trail expansion, which is the goal of the ACT Program.

Figure 5. Funding Status of BoAT Extension Project



Additionally, the City of Newport News was awarded funding for the construction of a new multi-use path on Elmhurst Road (from Yorktown Road to Warwick Boulevard) via the VDOT Transportation Alternatives Set-aside Program. The City of Newport News was also awarded partial funding for the BoAT segment from Newport News Park Office to CNHP via a Federal Land Access Program (FLAP) Grant through the Federal Highway Administration.

Measure 3: Streetlight Conversion

The majority of streetlights in the Hampton Roads area are owned and maintained by Dominion Energy (Dominion), with the localities paying a standard flat monthly fee per lighting fixture as part of their negotiated rate contract. When a light fixture becomes nonfunctional, Dominion is able to replace it with an LED model at no additional cost to the locality. In order to accelerate conversion to LEDs,

however, localities need to pay a per fixture fee. While Dominion has awarded a grant to at least one locality in Northern VA to support the conversion of streetlights to LEDs, grant funding and a suitable funds matching program in the Hampton Roads area are not currently present. CPRG funding for this effort could catalyze similar results and accelerate the installation of LED streetlight replacements across the region.

Streetlamps are challenging to fund en masse under the competitive umbrella of transportation funding as transportation projects often have lengthy approval and development timelines with lighting being included as a small component. Unlike other transportation projects though, streetlight replacement can scale as a unit-by-unit infrastructure project, benefiting from any level of funding support rather than requiring a set sizable amount of minimum funding to produce a return on investment, such as is the case with full road expansions.

1.c Transformative Impact

Hampton Roads has been overlooked and excluded from other climate planning and funding efforts across the state and thus needs a clear inroad to make real progress on these emerging plans that will make a tangible impact in the region and beyond. The measures proposed for implementation will progress regional cooperative climate planning efforts and provide funding to which the region has not previously had access. Two cities in the Hampton Roads region were recently awarded funding from the Bloomberg Sustainable Cities Initiative,² demonstrating national recognition of local leadership in sustainability and climate planning. CPRG funding, in conjunction with funding from the Bloomberg Sustainable Cities Initiative, will enable regional expansion of these efforts to stand out as a leader in implementing climate action.

Measure 1: EVSE

Expanding planning efforts across the Hampton Roads region for EVSE infrastructure is the next step in advancing the deployment of EVs in the region, as supported by existing planning efforts and community feedback. Planning efforts have already begun in Hampton Roads; Chesapeake, Hampton, Newport News, Norfolk, Suffolk, Virginia Beach executed a detailed EVSE plan in 2021 detailing the demand for expanded EV access in the region, growth potential into new regions, and existing resources already operational for EV users to identifying charging locations like plugshare.com.³ In addition to existing planning efforts, stakeholder engagements have shown a resounding community desire for expanded EV access (see section 4.b). These full regional plans are critical to creating an interconnected network of EVSE infrastructure that supports the overall state-planned EV corridors while integrating local needs.

Deployment of EVs in the region has the potential to open up economic opportunities while preserving the shared environment for human and ecological health. Installation and maintenance of EVSE infrastructure will open up opportunities for new jobs in the region needed for this infrastructure build out; in support of such efforts, Virginia passed tax credits of \$500 for every new climate job a company adds to the workforce for up to 3,500 new jobs.⁴ Additionally, this measure will make the region easier to travel to and through for travelers opting for hybrid/EV driving which will help support climate friendly tourism. Finally, EVs are a guaranteed reduction of GHG emissions, moving Hampton Roads and

² "Newport News Selected for Bloomberg American Sustainable Cities." n.d. Newport News, VA. Accessed March 28, 2024.
<https://www.nnva.gov/CivicAlerts.aspx?AID=2285>.

³ <https://vacleancities.org/wp-content/uploads/2021/07/Virginia-Beach-Area-EV-Charging-Report.pdf>

⁴ <https://afdc.energy.gov/laws/all?state=VA>

Virginia overall closer to their GHG reductions targets while also providing direct community health benefits. These benefits are especially significant for LIDACs located near major roadways like I-64 by reducing air pollution from traditional fossil fuel combustion engines.

Measure 2: Trail Expansion

Hampton Roads is positioned well for widespread trail use based on its flat geography and the local enthusiasm behind non-motored transit. The entire coastal region is very flat, making it an ideal environment for biking and walking; however, most of the region lacks safe biking infrastructure, leaving community members and tourists alike with a desire to bike and limited options to do so safely. Additionally, the region already suffers from over-trafficked roads that are at high risk for flooding and storm surge damages. Trails designed with resilience in mind could offer opportunities for commuters and tourists to travel, unburdened by roadway traffic while also achieving numerous health benefits from increased exercise and reduced air pollution from idling cars. Over 50% of residents in Chesapeake, Hampton, Newport News, Norfolk, Suffolk, Virginia Beach commute less than a 20 minute-drive away from their home in traffic, making bike or walk commuting a viable alternative.⁵

Tourism in Hampton Roads is a critical economic sector that has recovered remarkably well after the devastating impacts of COVID-19 on the tourism industry in 2020. Studies demonstrated that as early as 2021, hotels in Hampton Roads had recovered business faster than most other beach regions in the state, as well as the nation overall, indicating the region's industry savvy and resilience.⁶ Expanding trailways throughout the region can help expand ecotourism in the region, bringing in more biking and hiking for travelers. Ecotourism has taken on a new importance in the industry overall as travel after the COVID-19 pandemic has shifted to more locally-focused travel with an emphasis on health, safety, and sustainability.

Measure 3: Streetlight Conversion

This measure will improve public safety and increase community pride—LED lamps provide brighter, more reliable streetlights making roadways and pathways safer for residents and travelers alike. This will also support Measure 2, ensuring trails are well lit for safety and increased access during seasons of limited daylight hours, enabling further GHG reductions and reduced VMTs as residents are able to safely replace on-road transportation with active transportation. LED streetlights will also adhere to the highest standards of energy efficiency in Virginia, creating an opportunity for the region to set an example of best practices within the Commonwealth and encouraging other localities to follow suit. The measure will enable energy cost savings that localities can invest back into the community. LED light fixtures use 75 percent less energy than traditional bulbs, and their lifespan outlasts traditional lamps by five times. Energy and maintenance cost savings will outpace the cost of the new feature and installation in 4-12 years, enabling those cost savings to be invested into other local projects and community priorities.⁷

⁵ <https://vacleancities.org/wp-content/uploads/2021/07/Virginia-Beach-Area-EV-Charging-Report.pdf>

⁶ https://digitalcommons.odu.edu/cgi/viewcontent.cgi?article=1184&context=sor_reports

⁷ <https://www.fallschurchva.gov/2161/LED-Streetlight-Replacement-Project>

2 Impact of GHG Reduction Measures

2.a & 2.b Quantification of GHG Reductions

The estimated GHG reductions resulting from the ACT Program are summarized in the table below.

Measure	GHG Reductions from 2025 to 2030 (MTCO ₂ e)	GHG Reductions from 2025 to 2050 (MTCO ₂ e)
1	34,212	69,001
2	23,158	191,506
3	11,099	39,707
TOTAL	68,469	300,214

These GHG reductions are expected to be long lasting over both the short- and long-term. For example, EVSE installation will reduce vehicle emissions in the short-term, encouraging EV adoption. Reliable access to EV charging will make it less likely that EV adopters will switch back to fossil-fuel powered alternatives. VMT reductions from trails are also anticipated to be lasting and take into account projected business-as-usual VMT changes anticipated from population growth. Energy reductions from LED streetlight conversions will last for the entirety of the equipment's lifespan after which even more efficient streetlights may be available.

2.c Cost Effectiveness of GHG Reductions

The cost effectiveness (calculated as requested CPRG implementation grant dollars divided by the quantified GHG emission reductions for the period 2025-2030 calculated the CPRG funding request) for each measure and this application overall are:

Measure	Cost Effectiveness (\$/mtCO ₂ e) 2025-2030
1	\$312
2	\$2,887
3	\$1,852
Combined Cost Effectiveness	\$1,432.79

2.d Documentation of GHG Reduction Assumptions

Please see the Technical Appendix and GHG Reduction Calculation Spreadsheets attachments for detailed information.

3 Environmental Results

3.a Expected Outputs and Outcomes

The emissions reduction measures outlined in this grant will contribute to achieving local, state, and national climate objectives while reducing co-pollutants, such as CAPs and HAPs, that adversely affect the Hampton Roads MSA and its environment. Upgrading infrastructure and incentivizing alternative vehicle use will reduce emissions and generate environmental, public health, and socioeconomic advantages.

The expected outputs from the three measures in the ACT Program are detailed in the table below.

Measure	Outputs	Outcomes
1	446 new EV chargers installed.	<ul style="list-style-type: none"> Cumulative GHG emissions reduction of 34,212 MTCO₂e between 2025 and 2030 and 69,001 MTCO₂e between 2025 and 2050. Estimated 23 MT reduction of nitrogen oxide (NO_x) emissions, an estimated 0.29 MT reduction in emissions of fine particle pollution (PM_{2.5}), and an estimated 389 MT reduction in carbon monoxide emissions, approximately 51% of which are anticipated to be directly in LIDACs between 2025 and 2030. Reduced number of new cases of asthma, hospital admissions, and emergency department visits.
2	62,832 feet of trail constructed.	<ul style="list-style-type: none"> Cumulative GHG emissions reduction of 23,158 MTCO₂e between 2025 and 2030 and 191,506 MTCO₂e between 2025 and 2050. Estimated 20 MT reduction of NO_x emissions, an estimated 28 MT reduction in emissions of hydrocarbons (HC), and an estimated 333 MT reduction in carbon monoxide emissions, approximately 68% of which are anticipated to be directly in LIDACs between 2025 and 2030. Reduced VMT per capita. Reduced number of new cases of asthma, hospital admissions, and emergency department visits.
3	82,818 streetlights converted to LEDs.	<ul style="list-style-type: none"> Cumulative GHG emissions reduction of 11,099 MTCO₂e between 2025 and 2030 and 39,707 MTCO₂e between 2025 and 2050. Estimated 14.61 MT reduction of NO_x emissions and an estimated 3.69 MT reduction of sulfur dioxide emissions, approximately 31% of which are anticipated to be directly in LIDACs between 2025 and 2030. Reduced number of new cases of asthma, hospital admissions, and emergency department visits. Estimated cumulative reduction in energy use of over 51,790 MWh between 2025 and 2030

Short-Term Co-Benefits

- Enhance indoor and outdoor air quality, leading to reduced asthma cases, hospital admissions, and emergency department visits.
- Foster opportunities for public education, social capital, and cohesion.
- Create high-quality, clean energy-related jobs, allowing Hampton Roads to offer related job training which will generate long-term economic opportunities, especially within Environmental Justice communities.

Long-Term Co-Benefits

- Reducing GHG emissions will mitigate climate impacts and provide intergenerational public health benefits to the population of Hampton Roads MSA.
- Improve the overall socioeconomic wellbeing of Hampton Roads residents, particularly LIDACs.
- Facilitate EV ownership, an increasingly economical choice as gas prices continue to rise, to reduce the financial stress of rising transportation costs.
- Lessen the economic and physical impact of extreme weather events on Hampton Roads communities.
 - Interest in EVs is increasing in the face of extreme weather events and associated grid failures, as EV batteries can serve as effective generators in a power outage.⁸

⁸ [How electric vehicles offered hope as climate challenges grew \(sciencenews.org\)](https://www.sciencenews.org/article/how-electric-vehicles-offered-hope-as-climate-challenges-grew)

- Trail expansion will increase the area’s maintained pervious surfaces, which will effectively absorb rainfall and make the region more resilient to flooding.
- As LIDACs are more vulnerable to such events, building resilience is crucial to ensure equitable safety during and recovery from climate hazards.

3.b Performance Measures and Plan

The following metrics are anticipated for evaluating the three measures included in the ACT Program.

	Measure 1	Measure 2	Measure 3
Performance Measures	Number of EV charging ports installed. Share of projects located in LIDAC Census tracts and blocks. Expenditure tracking.	Feet of trail constructed. Share of projects located in LIDAC Census tracts and blocks. Expenditure tracking.	Number of streetlights converted to LED technology. Share of projects located in LIDAC Census tracts and blocks. Expenditure tracking.
Tracking Approaches & Reporting	HRPDC will require quarterly progress reports from partners, including granted localities, who will be responsible for tracking and collecting the requested program activity data. In addition to the performance measures above, HRPDC will oversee subgrantees and ensure they oversee the performance of their selected contractors and vendors. Partners will report supporting activity data from which GHG reductions can be calculated. Using emission factors for the grid in each year (historical data from EIA or EPA eGRID factors as available) and pollutant contents for mobile and stationary fuels, GHG emissions will be estimated based on the CPRG funding activity levels in each year of the program. HRPDC will compile these reports and submit them to EPA as part of the bi-annual reporting process. At grant closeout, HRPDC will also prepare a final report for EPA regarding grant progress and performance to be submitted within the final three months of the period of performance.		

3.c Authorities, Implementation Timeline, and Milestones

Table 4 presents the schedule for the overall implementation of the measure.

Table 4 Tasks and Milestones

Measure	Task	Implementing Entities	Milestone	Timeline
1	1	HRPDC	Scope and procure consultant support to develop a regional EVSE network plan	Year 1
	2	HRPDC, Subgrantees	Permit new charging sites & complete necessary site work	Years 1-2
	3	HRPDC, Subgrantees	Complete regional EVSE network plan	Year 2, End of Q4
	4	HRPDC, Subgrantees	Install chargers at first round of locations	Years 3-5
2	1*	HRPDC, HRTPO, subgrantees	Land acquisition	Years 1 and 2
	2*	HRPDC, HRTPO, subgrantees	Permitting & detailed design for trail segments	Year 3

	3	HRPDC, HRTPO, subgrantees	Trail construction	Years 4 and 5
3	1	HRPDC, Dominion	Develop conversion timeline	First 3 months
	2	Dominion	Complete 1500 LED conversions	Monthly
All	1	HRPDC	Completed workplan, performance management plan, reporting templates and systems, quality management plan and quality assurance performance plan	Year 1
	2	HRPDC, subgrantees	Established subgrants with partners, finalized reporting templates and procedures, etc.	Year 1
	3	HRPDC	Administer and manage CPRG grant and subgrants	Years 1-5
	4	HRPDC, subgrantees	Submitted subgrantee reports to HRPDC, biannual and final reports to EPA	Bi-annually starting Q1 2025
	5	HRPDC, subgrantees	Final grant report	Last 3 months of grant period

*Tasks 1 and 2 will depend on the specific projects, as land acquisition and/or permitting may already be complete for some projects.

Roles and Responsibilities

HRPDC will be responsible for reporting to EPA and administering the subgrant programs to localities, including review of subgrant applications. HRPDC will work with localities selected for subgrants to ensure successful measure implementation and will also support coordination efforts with Dominion as needed. HRPDC will lead the development of the EVSE network plan in Measure 1 and will procure consultant support for its development.

Subgrantees will be responsible, in accordance with grant terms, conditions, and applicable regulations, for expending and tracking subgrant funds and providing information required for reporting to construct improvements, purchase equipment, and hire contractual or installation support for approved projects.

Implementation Authority

Measure 1: Local governments within the MSA have the authority to implement EV projects on their property, per this measure, within their respective jurisdictions. This measure falls under the local governments' regulatory authority to protect public health and welfare.

Measure 2: City and County governments in the MSA have the authority to implement public transportation projects, policies, and/or pilot programs. To enact specific decarbonization projects, policies, and/or pilot programs, local governments may need to gain approval from a City or County Council or other administrative authority that oversees budgets and/or regulations. No additional authority needs to be obtained.

Measure 3: City and County governments, working with Dominion, have the authority to convert all Dominion-owned streetlights to LEDs. City and County governments also have the authority to convert their own streetlight equipment to LED technology. HRPDC will create a subgrant that each local government will be eligible to apply for. The granted communities will locally lead implementation of this measure within their jurisdiction.

4 Low-Income and Disadvantaged Communities

The Hampton Roads MSA has a history of engaging with LIDACs when implementing transportation projects. Hampton Roads Transportation Planning Organization (HRTPO) has developed the ‘Hampton Roads 2045 Long-Range Transportation Plan: Title VI/Environmental Justice Candidate Project Evaluation’ framework in 2020. This report identifies transportation projects based on how they will impact Census Blocks with high proportions of underrepresented populations. These populations include carless households, disabled populations, elderly populations, female head of households, households receiving food stamps, households receiving cash public assistance, limited English proficiency populations, low-income households, and minority populations. From 2012 to 2016, the regional average proportion of households in the MSA receiving food stamps was approximately 11%, approximately 9% of households were low-income, approximately 41% of households were minorities, approximately 10% of the population was disabled, and 13% of the population was elderly.⁹

HRPDC used EJScreen to identify LIDACs for analysis during the development of the PCAP and LIDACs during CPRG implementation planning (shown in Figure 6).

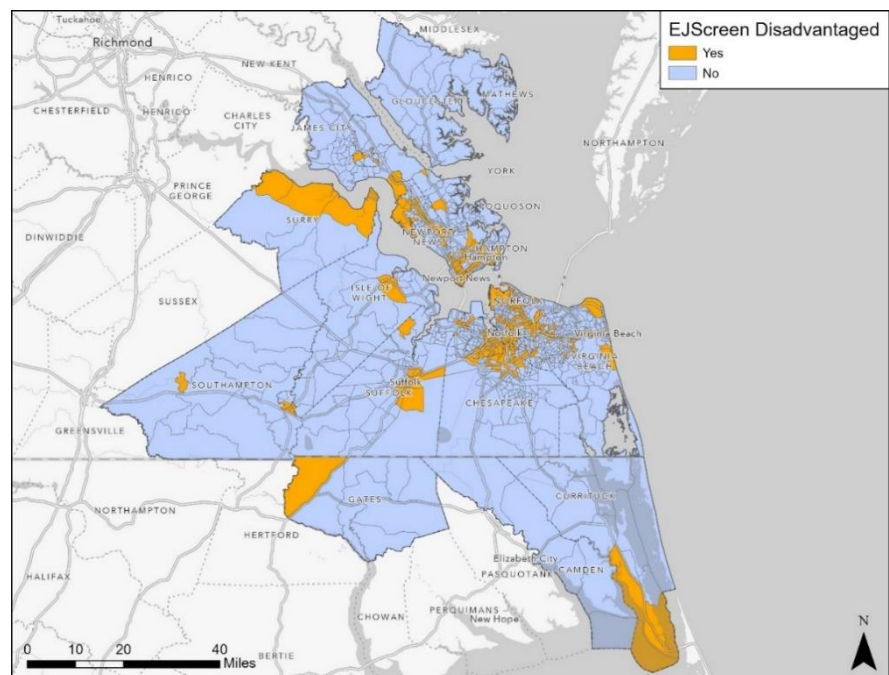
4.a Community Benefits

LIDAC census block groups anticipated to be served by projects funded by the ACT Program are included in the attachment: *Areas_HamptonRoadsPlanningDistrictCommission.xlsx*. Where possible, HRPDC will preference use of workers from these LIDACs and will encourage clean transportation workforce development in these communities through existing partnerships with Tidewater College and other local organizations.

LIDACs served by the ACT Program will experience numerous community benefits, which are detailed below by measure:

Measure 1: EV charging will result in indirect and direct benefits that will extend to all LIDACs in the region. Reducing the use of fossil fuel-powered ICEVs will result in improved air quality across the region, improving health outcomes. These improved outcomes may include reductions in new asthma cases, hospital admissions, and emergency department visits. Additional benefits could include reduced

Figure 6. Census block groups in the Hampton Roads MSA, as identified by EJScreen



⁹ “Equity & Planning | Hampton Roads, VA.” n.d. Accessed March 27, 2024. <https://www.hrpdcva.gov/1164/Equity-Planning>.

noise pollution and reduction in fuel use by disadvantaged communities, particularly for LIDACs that are highway adjacent.

Measure 2: Trail expansion will lead to improved health outcomes for residents. This measure will reduce VMTs, reducing the emissions of GHG and CAP emissions across the region, especially in areas where higher proportions of trips in ICEVs are converted to cyclist and pedestrian trips. Constructing trails near LIDACs will also improve residents' ability to access key resources for economic opportunities.

Measure 3: Streetlight conversion will result in improved energy efficiency and subsequent improvements in air quality that will affect all LIDACs in the region. Increasing energy efficiency reduces the need for energy production from power plants, thereby reducing associated air pollution in overburdened communities, leading to public health benefits. Reduced energy via LED conversions may also reduce the costs of operating streetlights for localities, allowing them to invest in other programs that benefit LIDACs. Implementing streetlight conversions may also increase the number of employment opportunities available to LIDACs. Additionally, upgrading streetlights in green spaces and near active transportation paths near LIDACs will improve safety and enable residents to utilize these resources, expanding the extent to which the benefits to LIDACs of Measure 3 are realized.

Estimated GHG emissions specifically to LIDACs are included below.

Measure	Estimated LIDAC GHG Reductions from 2025 to 2030 (MTCO2e)	Estimated LIDAC GHG Reductions from 2025 to 2050 (MTCO2e)
1	17,448	35,191
2	15,666	129,548
3	3,441	12,309
TOTAL	36,555	177,048

4.b Community Engagement

Community engagement is key to ensuring that all community members can benefit from GHG reduction measures, especially in LIDACs that have limited infrastructure to support communication or have faced historic disinvestment and underrepresentation. HRPDC is also developing Comprehensive Climate Action Plan (CCAP) Community Engagement Plan, using the responses of a LIDAC survey distributed to the technical and steering committees and the Hampton Roads Community Advisory Committee (CAC) and will continue to seek input from a diverse audience. CPRG funding for these measures would allow the region to put community engagement plans into place and learn about the needs of the community, building relationships that will be critical in the continuation of this concerted climate planning effort.

HRPDC will continue to broadly engage the public throughout the implementation of this grant and during the development of the CCAP, with a focus on addressing Environmental Justice concerns and supporting historically underrepresented and overburdened communities. Where possible, HRPDC and localities will align community engagement practices during implementation grant funding with the framework developed in the CCAP Community Engagement Plan. Engagement may be conducted through a range of formats- including through surveys, committees, focus groups, advertisements, and notices, and/or engagement events.

During the PCAP process, HRPDC conducted engagement to help identify key LIDAC stakeholders and points of contact and began building more robust engagement channels for climate action work. Stakeholder mapping efforts were conducted in January and February of 2024, as part of a CAC meeting and via a survey that was sent to CPRG committee members (Steering, Technical, and Community Advisory). The LIDAC survey resulted in 22 responses from organizations throughout the MSA. Overall, participants emphasized the importance of engaging members of LIDACs in meaningful ways, ensuring that input is included in the CCAP, and communicating how the plans will positively impact their neighborhoods. Common themes included:

- Prioritize expanding clean transportation modes and EV infrastructure
- Increase funding for weatherization, retrofits, and solar installations in LIDACs
- Increase public education and create broader public awareness
- Apply efficient electrification in LIDAC residential areas as well as public buildings
- Restore tree canopy

Based on these themes, each of the measures for which HRPDC is seeking CPRG funding align with the priorities of community groups and LIDAC residents – to ‘Prioritize expanding clean transportation modes and EV infrastructure’ (Measures 1 and 2) and ‘Apply efficient electrification in LIDAC residential areas as well as public buildings’ (Measure 3).

Some community engagement has already been conducted for Measure 2, as trail locations have already been selected. When conducting community engagement for the BoAT project, the local community expressed strong support for a network of sidewalks, shared-use paths, and nature trails that provide options for non-automotive travel and recreation and promote healthy lifestyles. Planning for Measures 1 and 3 will include community engagement as well.

5 Job Quality

HRPDC will work to carry out projects in ways that produce high-quality work, avert disruptive and costly delays, and promote efficiency. In implementing the awarded project, HRPDC expects to use strong labor standards, including wages at or above the prevailing rate and include local hire provisions. HRPDC will engage with colleges and universities and the WorkForce Council to provide training, internship, and job placement opportunities for students and to increase awareness of careers within the renewable energy and clean transportation industries. For example, Tidewater Community College provides electrician training programs with specializations in renewable energy technologies.

HRPDC and partner localities will also prioritize contractors and subcontractors in their procurement decisions that demonstrate their workforce meets high safety and training standards (e.g., 206 professional certification, licensure, and/or robust in-house training), hire local workers and/or workers from historically-underserved communities, and who directly employ their workforce or have policies and practices in place to ensure contractors and subcontractors meet high labor standards. HRPDC frequently implements projects using state and federal grants with standards that meet requirements of Davis-Bacon, MBE/DBE, and other strong labor standards. Further prioritization will be offered to employers (including contractors and subcontractors) without recent violations of federal and state labor and employment laws.

These practices will promote effective and efficient delivery of high-quality projects that support economic resilience with strong employment opportunities for workers, especially workers in LIDACs. Such practices will reduce the likelihood of potential project challenges such as work stoppages or safety accidents, while ensuring a reliable supply of skilled labor while minimizing disruptions.

Furthermore, among other requirements contained in 2 CFR 200, Appendix II, all contracts made in excess of \$100,000 with respect to a capital expenditure that involve employment of mechanics or laborers must include a provision for compliance with certain provisions of the Contract Work Hours and Safety Standards Act, 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

6 Programmatic Capability and Past Performance

6.a Past Performance

Hampton Roads has efficiently and effectively used federal funding in the past, as illustrated by the five projects discussed below.

Project 1: OLDCC Military Installation Resilience Review

The Military Installation Resilience Review built upon the Norfolk-Virginia Beach Joint Land Use Study by expanding the analysis to include precipitation flooding and additional considerations for local utilities and infrastructure. The project resulted in updated recommendations for local and regional projects and development of an online platform for coordination and information sharing.

Assistance Agreement No.	CFDA	Contact	Interim and/or Final Reports	Progress Reports
HQ00052110012	12.003	Sweat, Jason E jason.e.sweat2.civ@mail.mil	Acceptable interim and final	Adequate

Project 2: OLDCC Flood Sensors

Funding was provided to develop a 15-sensor network to monitor roadway flooding and deliver real-time data to WAZE.

Assistance Agreement No.	CFDA	Contact	Interim and/or Final Reports	Progress Reports
HQ00052110034	12.003	Sweat, Jason E jason.e.sweat2.civ@mail.mil	Acceptable interim and final	Adequate

Project 3: NFWF Small Watershed Technical Assistance

Funding was provided to identify large-scale private industrial and business sites along waterways interested in improving water quality and providing flood protection with green infrastructure and best management practices (BMPs). The project identified willing partners interested in implementing BMPs, but also barriers that prevented others from showing interest.

Assistance Agreement No.	CFDA	Contact	Interim and/or Final Reports	Progress Reports
96358101	66.466	Jake Reilly jake.reilly@nfwf.org	Acceptable interim and final	Adequate

Project 4: NFWF Ches Bay Small Watershed Grants Implementation

Funding was provided to implement three BMPs at an industrial property along the Elizabeth River shoreline, in the Chesapeake Bay watershed. This pilot will demonstrate challenges with BMP implementation on private property with a history of contamination, highlight unique management strategies, reduce pollutants, and identify a path forward to grow this effort beyond the pilot.

Assistance Agreement No.	CFDA	Contact	Interim and/or Final Reports	Progress Reports
96397501	66.466	Jake Reilly jake.reilly@nfwf.org	Acceptable interim	Adequate

Project 5: Climate Pollution Reduction Grant

CPRG is a \$1 million, non-competitive planning grant to prepare a PCAP and a CCAP for the Virginia Beach -Norfolk-Newport News MSA.

Assistance Agreement No.	CFDA	Contact	Interim and/or Final Reports	Progress Reports
95317901	66.046	Yongtian He (Tom), PhD EPA Region III Air and Radiation Division Permits Branch (Tel) 215-814-2339 He.Yongtian@epa.gov	Acceptable interim	Adequate

6.b Reporting Requirements

Included in each of the assistance agreements listed above (see Section 6.a) are indications of the HRPDC's history of acceptably meeting the associated interim and final reporting requirements.

6.c Staff Expertise

HRPDC staff have strong experience in regional planning and locality coordination, as well as managing region-wide projects. Profiles of staff anticipated to be involved in this effort are included below.



Whitney Katchmark joined the HRPDC in 2006. She was hired as the regional geologist and managed the development of a new, robust regional groundwater model which demonstrated the over withdrawal of water from the deep aquifer. She was also the project manager for the first regional water supply plan. In 2010, Whitney began leading the Water Resources department which coordinates multi-jurisdictional efforts in the areas of drinking water, wastewater, stormwater, sea level rise, coastal zone management and water quality. Currently, she is the project manager for Phase 1 of the Climate Pollution Reduction Grant for the Virginia Beach-Norfolk-Newport News MSA. She recently led the creation of a regional network of roadway flooding sensors to support the HRPDC Coastal Resiliency program and build on recommendations from two resiliency reports addressing coordination between military installations and their host localities.

Prior to joining HRPDC, she worked for the Naval Facilities Engineering Command for eight years. She received her Bachelor of Science in Environmental Engineering from the University of Notre Dame and a Master of Science in Civil Engineering from the University of Virginia.



Greg Grootendorst was born and raised in Vancouver, Canada. He came to the United States in 1992 to attend college, receiving a bachelor's degree in economics from Calvin College located in Grand Rapids, Michigan. After college, Greg worked with the AmeriCorps National Service Project, working to provide affordable housing opportunities with a non-profit housing development agency in the inner city. Upon completion of his AmeriCorps commitment, Greg returned to school where he received a master's degree from Michigan State University in Urban and Regional Planning. While at Michigan State, Greg worked with the University's Extension service, assisting in planning projects for downtown Grand Rapids. Greg also worked with the City of Lansing's Economic Development Department conducting economic impact analysis on various projects.

Greg began work with the HRPDC in 2001, working as the agency's Regional Economist. Greg created the organization's Benchmarking Study, which remains in publication, and produced numerous regional economic impact analysis. In 2007, Greg began serving as Chief Economist, providing short-term and long-term socioeconomic forecasts for Hampton Roads. Greg has led a diverse array of projects, including comprehensive economic development planning, organization data management, regional tax reform, transportation project prioritization, recycling & solid waste planning, comprehensive planning, and socioeconomic forecasting & analysis. Greg currently serves as the Deputy Executive Director of the HRPDC, overseeing the Emergency Management, Environmental Education, Housing & Human Services, Planning & Economics, and Water Resources program areas.



Quan McLaurin serves as the DEI & Title VI/Civil Rights Liaison for HRPDC and HRTPO. In this role, Quan supports the agency in exploring and integrating equity frameworks into the various planning duties of the agency, public involvement efforts that prioritize meaningful engagement, and compliance with Title VI of the Civil Rights Act of 1964 and other related nondiscrimination statutes and regulations. Quan received his B.S. in Psychology with a clinical, research, and counseling concentration in 2015 from Liberty University.

Quan co-founded LUQueerSpace, an enriching and supportive community group with a focus on protecting ostracized Queer people. Quan served as a board member for the Lynchburg Diversity Center, a non-profit community-based organization focused on uplifting, protecting, and proving community for Queer people in central Virginia. Quan served on the board of Many Voices – One Community in Lynchburg, VA, which focused on advancing social equity for socially vulnerable groups in the Lynchburg area. Quan was part of the planning committee for Many Voices – One Community's annual Race, Poverty, and Social Justice conferences and held workshops focused on social determinants of health for Queer people of color. Recently, Quan joined the board of the LGBT Life Center in Norfolk, VA.

In 2020, Quan began consulting for mental health professionals with a focus on highlighting the needs of clients with racial trauma and expanding therapeutic frameworks to account for impacts of structural and systemic oppression on marginalized people groups. Quan worked directly with licensed mental

health clinicians to examine how traditional behavioral sciences studies and approaches often exclude marginalized populations, their experiences, and how mental health conditions may present differently.

In February 2023, Quan joined HRPDC and HRTPO. He assists the agency in responding to civil rights compliance reviews, implementation planning, expanding public involvement opportunities, and fostering relations with community groups that focus on supporting the needs of underserved LIDACs. As a priority for CPRG, Quan is focusing on garnering feedback and engagement from communities impacted by proposed projects, specifically any communities that are experiencing Environmental Justice-related concerns. With Hampton Roads being a coastal region that is at the forefront of climate-related issues such as sea level rise, LIDAC and socially vulnerable communities must be especially considered in any plans made, as they are likely to incur the most risk and cost burden.

7 Budget

7.a Budget Detail

The total proposed budget for the ACT Program is \$98,101,393 with a budget breakdown provided in Table 5. Please refer to the Budget Narrative and Budget Calculations attachments for more detailed information about what is included in the budget and how it was developed.

Table 5 ACT Program Budget Breakdown

BUDGET BY YEAR							
COST TYPE	CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
Direct	PERSONNEL	\$164,195	\$164,195	\$92,954	\$92,954	\$92,954	\$607,254
	FRINGE BENEFITS	\$51,003	\$51,003	\$30,443	\$30,443	\$30,443	\$193,333
	TRAVEL	\$13,500	\$13,500	\$13,500	\$13,500	\$13,500	\$67,500
	EQUIPMENT	\$0	\$0	\$0	\$0	\$0	\$0
	SUPPLIES	\$0	\$0	\$0	\$0	\$0	\$0
	CONTRACTUAL	\$150,000	\$0	\$0	\$0	\$0	\$150,000
	OTHER	\$16,917,571	\$24,999,993	\$27,807,383	\$22,137,052	\$4,948,340	\$96,810,339
	TOTAL DIRECT	\$17,296,269	\$25,228,691	\$27,944,280	\$22,273,949	\$5,085,237	\$97,828,426
Indirect	TOTAL INDIRECT	\$74,747	\$74,747	\$41,158	\$41,158	\$41,158	\$272,966.95
TOTAL FUNDING		\$17,371,016	\$25,303,437	\$27,985,438	\$22,315,107	\$5,126,395	\$98,101,393

Personnel, Fringe Benefits, & Indirect Charges: HRPDC has budgeted for one full-time equivalent (FTE) grant program manager (Hybrid Class 4) for the entire ACT Program for five years and for one FTE grant program coordinating director (Class 1) dedicating approximately 20% of their time for two years to coordination and management of the advisory committees and activities associated with the three ACT Program measures. Total personnel costs, fringe benefits, and indirect costs for these staff are \$1,073,554.

Travel: Travel costs of \$67,500 include eligible expenses for grant program staff attendance at regional and local meetings, site visits, trainings, and coordination events.

Contractual: Contractual costs include \$150,000 for consultant support developing the regional EVSE Charging Plan, including GIS mapping and some outreach activities surrounding location identification.

Other: Other costs total \$96,810,339 include subawards to localities for equipment purchases, installation costs, along with site work, construction, and contractor support as applicable. Some EVSE purchases may be eligible for IRA tax credits. Though anticipated locations were identified for EVSE to determine potential impacts, final installation locations will be confirmed as part of the subgrant application process and informed by the developed EV charging plan. As a result, IRA credits were not deducted from the budget request for Measure 1. If chargers are eligible for tax credits, the resulting cost savings will be used to support installation of additional chargers expanding program impact and GHG reductions.

7.b Expenditure of Awarded Funds

HRPDC will expend and account for awarded funds in accordance with state laws and procedures for expending and accounting for the state's own funds. HRPDC complies in all material respects with the required implementation of all federal and state funds. It is the policy of HRPDC that appropriate internal controls and accepted best practices are utilized in the handling, receiving, safeguarding and the expending of all funds. HRPDC has established effective internal controls and assigned specified responsibilities to segregated duties to ensure accountability. HRPDC has an exemplary history of audit performance for the last fifteen plus years. There have been no material weaknesses or deficiencies in any internal control or financial activity. The HRPDC financial managements system complies with the requirements of 2CRF 200.302(b).

HRPDC will enter into a subaward agreement with each subgrantee prior to disbursement of subaward funds. These agreements will include all applicable pass-through requirements for subrecipients in accordance with [EPA's Subaward Policy](#) and [EPA's General Term and Condition for Subawards](#). The semi-annual reports and final report will include a breakdown of expenditures associated with implementation of this proposal.

7.c Reasonableness of Costs

As demonstrated in Section 6, Past Performance, HRPDC has ample experience managing federal grants. HRPDC staff time included will go to establishing, managing, and monitoring subgrants with partners, negotiating and administering the grant and reporting to EPA.

Other costs for Measures 1 through 3 are going toward subgrants for key projects identified by localities in the Hampton Roads regions. These other costs were provided directly to HRPDC by anticipated subgrantees. Therefore, other costs reflect local knowledge of unique community needs, costs, and workforce availability. In some cases, where anticipated equipment types were still being evaluated, other costs used current market prices to build up anticipated funding needs, particularly for dual head level 2 chargers and other EVSE.