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**CPRG IMPLEMENTATION GRANTS COMPETITION
COVER PAGE FOR APPLICATION**

APPLICANT INFORMATION

Organization

Primary Contact Name

Phone Number

Email Address

TYPE OF APPLICATION Individual Applicant Lead Applicant for a Coalition

If lead applicant for a coalition, provide a list of the coalition members below.

FUNDING REQUESTED: *Provide total EPA CPRG Implementation Grant funding requested.*

APPLICATION TITLE: *Provide the title of your proposed project.*

BRIEF DESCRIPTION OF GHG MEASURES: *Describe each GHG reduction measure contained in the application (1-2 sentences each).*

SECTORS: *Identify the sector(s) associated with the GHG reduction measures included in the application.*

Industry	Commercial and Residential Buildings
Electricity Generation	Agriculture/Natural and Working Lands
Transportation	Waste and Materials Management
Other (please describe)	

EXPECTED TOTAL CUMULATIVE GHG EMISSION REDUCTIONS

For all proposed measures combined, provide the estimated cumulative GHG reductions:

Estimated cumulative GHG reductions for 2025-2030 (in metric tons)

Estimated cumulative GHG reductions from 2025-2050 (in metric tons)

LOCATIONS: *List the primary location(s) where the proposed measures will be implemented*

City

State; Territory; Federally recognized Tribe

APPLICABLE PRIORITY CLIMATE ACTION PLAN(S) (PCAP) ON WHICH MEASURES ARE BASED

PCAP Lead Organization(s):

PCAP Title(s):

PCAP Website link(s) (if applicable):

List of GHG reduction measures and PCAP page reference for each measure:

Section 1. Overall Project Summary and Approach

a. Description of GHG Reduction Measures

Forsyth County, Georgia will reduce Greenhouse Gas (GHG) emissions by converting public transportation diesel and gasoline fleet vehicles to propane vehicles. This GHG reduction measure (the Measure) features the installation of one propane filling station, the purchase of 12 propane-fueled cutaway buses, and the delivery of on-demand public transportation service for Forsyth County residents using the propane-fueled buses over a performance period of five years. Forsyth County's public transportation service, Access Forsyth, provides rides on-demand Monday – Friday from 8:30 am to 3:30 pm and accommodates mobility devices such as wheelchairs and walkers.

Tasks

The initial task for this GHG reduction measure is for the site of the filling station to undergo the National Environmental Policy Act (NEPA) review process to ensure the installation of the propane filling station will not cause any significant environmental effects.

Next, a comprehensive procurement process for the propane filling station infrastructure and propane-fueled cutaway buses will be initiated. Upon award, Forsyth County will procure all twelve buses under the State of Georgia's existing contract. Funds for all buses will be obligated through this initial procurement process. Forsyth County will have a phased approach to converting its Access Forsyth bus fleet, replacing its gasoline/diesel-powered vehicles according to the current replacement plan which takes place over five years. The schedule for procurement and replacing gasoline/diesel buses with propane buses is depicted in Figure 1.

Figure 1

Phase	Year of Conversion	Number of Buses
1	2025	2
2	2026	3
3	2027	2
4	2029	5

The filling station will be bid out and procured according to the Office of Management and Budget's 2 CFR 200 guidance, specifically 2 CFR 200.317-200.327. Forsyth County's Procurement Policy can be found in Other Attachments.

Once the NEPA is completed and the procurement process is underway, Forsyth County Public Facilities Department will construct a concrete slab on which buses will park while utilizing the propane filling station.

After the bidding process is completed, the filling station will be constructed and the first phase of propane cutaway buses will be purchased. Propane buses will replace gasoline-powered buses currently in use.

Ongoing tasks beyond the initial construction and procurement required for the GHG reduction measure include using the propane filling station and propane buses to provide daily on-call public transportation service, performing vehicle maintenance according to the Federal Transit Administration's (FTA) Circular C5300.1 federally mandated vehicle maintenance schedule, for Forsyth County residents through the Access Forsyth program. The procurement process will be repeated each year according to the conversion schedule for buses (Figure 1).

The Forsyth County Public Transportation Department and Fleet Services Division will perform the ongoing collection of data related to ridership, operations, and vehicle maintenance. The Forsyth County Grants Department will use data collected through the program and internal financial reports to complete the mandated reporting requirements.

Milestones

Milestones for the GHG reduction measure include the following:

- Completion of a NEPA and equity analysis (if required);
- completion of the procurement process for the propane buses (all phases) and filling station equipment;
- completion of the construction of the filling station;
- filling station equipment installation;
- Driver training;
- the successful integration of propane buses (all phases); and
- collection of data and completion of required semi-annual grant reporting.

Risks

Two factors that could potentially have a significant negative impact on the Measure include the availability of propane cutaway buses and rising costs of vehicles and fuel. Both factors could delay obtaining the buses, leading to a decrease in GHG emission reductions in 2025-2030 and 2025-2050. Drastic increases in costs may reduce cost savings associated with the conversion from gasoline to propane.

The County will perform the procurement process for the propane bus filling station construction and propane service contract as soon as possible to avoid any delay in service. Long wait times for buses could potentially be avoided by utilizing the State of Georgia's existing procured contract to obligate funding for all 12 buses at the beginning of the grant period, so buses can be ready for service in subsequent phases of fleet conversion. This will also avoid the possibility of increased costs due to inflation for identical equipment over the period of performance.

Priority GHG Measure Justification

Forsyth County's selected GHG Measure relates to the "Convert Fleet Vehicles from Diesel to Cleaner Fuels" measure listed in the Priority Climate Action Plan (PCAP) for the Atlanta Metropolitan Statistical

Area (MSA) prepared by the Atlanta Regional Commission (ARC). According to the Department of Energy's Alternative Fuel Data Center, compared with vehicles fueled by conventional diesel and gasoline, propane vehicles can produce lower amounts of harmful air pollutants and greenhouse gases. Propane fuel has a lower carbon content than conventional gasoline and diesel fuel, making it a "cleaner" fuel. Forsyth County indicated an interest in seeking funding for this measure through the Emission Reduction Measure Identification survey distributed by the ARC.

The Measure is selected as a priority due to the immediate reduction of emissions yielded and the scheduled imminent replacement of Access Forsyth fleet vehicles from 2025-2029. Access Forsyth has experienced significant increases in ridership over the past 12 months. The program is poised to continue to experience significant growth over the next several years. The timing of this Measure, its alignment with the scheduled replacement of vehicles, and the predicted growth in ridership create an ideal opportunity to further reduce GHG emissions in Forsyth County.

Climate Pollution Reduction Grant (CPRG) Goals

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

Converting 12 buses from gasoline to propane from 2025-2029 will reduce GHG emissions by 144 metric tons CO₂ by 2030 and at least 914 metric tons CO₂ by 2050. Calculations are based on the conversion of 12 of Access Forsyth's current buses. Calculations do not consider the projected growth of the program over the next five years and beyond. According to the Forsyth County Chamber of Commerce, the County's population will experience a 50% increase by the year 2040, adding to the already significant demand for public transportation. Implementing the Measure now will prevent a significant amount of GHG emissions due to the increase in population of the area over the next 25 years.

2. Pursue measures that will achieve substantial community benefits (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs)), particularly in low-income and disadvantaged communities

The Measure will decrease the use of gasoline, which will decrease the emission of four Criteria Air Pollutants (CAPs) and eight Hazardous Air Pollutants (HAPs) (Figure 2). Because Access Forsyth services all of Forsyth County, the Measure will achieve substantial community benefits. According to the EJScreen tool, Forsyth County has two low-income areas that will benefit from the reduction of air pollutants, while approximately 87% of Access Forsyth's ridership are disabled or senior citizens.

Figure 2

Criteria Air Pollutants (CAPs)	Hazardous Air Pollutants (HAPs)
Carbon Monoxide	Benzene
Nitrogen Oxides	Hexane
Particulate Matter	Toluene
Unburned Hydrocarbons	Xylene
	Ethylbenzene
	2,2,4-Trimethylpentane
	Cumene
	Napthalene

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

Within the past six months, Forsyth County has explored the possibility of converting its public transportation fleet from diesel/gasoline to propane. Since this decision, other funding sources have been researched and are currently being pursued. Through the Department of Energy's Energy Efficiency Community Block Grant (EECBG) Program, Forsyth County is pursuing an application for allocated funds that will be used to purchase two propane-fueled buses to replace two gasoline-fueled buses in 2024. Funding is also being pursued through the Department of Transportation's No and Low Emissions Grant Program for the proposed GHG measure. Neither of these funding sources have been confirmed; however, any combination of awarded funding will be used to maximize GHG reductions through the conversion of fleet vehicles to propane. Forsyth County has funds budgeted for operations for this project to maximize sustainability of the project after the grant period.

All funding awarded will be used to maximize community benefits, including improving air quality through lower tailpipe criteria air pollutants (NOx and SOx), and public health, through reduced asthma, heart attacks, and strokes, especially in LIDAC communities who are at greater risk due to increased exposure.

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

Converting to propane-fueled vehicles is a viable alternative for organizations looking to reduce their GHG emissions. In some instances, local governments and other organizations that require light-, medium-, and heavy-duty vehicles for their specific operational needs may choose to convert their fleets from conventional fuels to propane, especially if their budget or infrastructure cannot accommodate conversions to EV. According to the ARC's PCAP, if this project were "scaled up" across the Atlanta MSA, it could potentially reduce GHG emissions by 24,700 MTCO₂e through 2030 and 180,400 MTCO₂e through 2050.

b. Demonstration of Funding Need

Need for CPRG Implementation Funding

From 2025-2029, the Forsyth County Public Transportation Department must replace twelve buses. This substantial cost is significantly increased when converting the fleet to propane-fueled buses, with propane buses costing anywhere from \$20,000 to \$30,000 more than their gasoline-fueled counterparts. Although costly at the outset, propane vehicles are less expensive to fuel and maintain, producing cost savings over time. Forsyth County's Public Transportation Department budget cannot support the added cost of purchasing propane buses and installing a propane filling station without CPRG implementation funding. The population of Forsyth County is rapidly increasing, which requires more funding in other sectors, including public safety, staffing, administrative expansion, and maintenance.

Forsyth County has been exploring the possibility of converting its Access Forsyth fleet from gasoline/diesel to propane for the last several months. During this time, other funding sources have been explored. There is not currently funding in the Forsyth County FY24 budget for propane vehicles

and a propane filling station, and local funding is not feasible for the project in the coming years. Federal funding sources have been explored, including opportunities listed on the White House BIL guidebook and IRA websites. One opportunity from the BIL list is being considered for application, while the County is not eligible for other opportunities, such as the Grant for Buses and Bus Facilities due to a lack of a fixed-route bus service. Grants for zero-emission infrastructure are not compatible with Forsyth County's public transportation plans at this time.

Other Funding Sources

Forsyth County does have a funding allocation available through the Energy Efficiency and Conservation Block Grant Program in the amount of \$259,710. The application for these funds is currently in progress. The allocation from this grant will be used in 2024 to convert two gasoline-fueled buses scheduled for replacement to propane. These funds are not included in the budget for the GHG Measure proposed for CPRG funding due to the schedule of replacement vehicles in 2024 and the timing for use of CPRG funding from 2025-2029. This funding source will also not provide enough funding to construct the propane filling station, which is critical to the conversion of the Access Forsyth fleet.

The Grant for Low and No Emissions is another possible funding source for the Measure. The grant program has funded propane public transportation projects in the past. However, federal grant funding is not guaranteed, and the County must pursue all possible funding sources. If the County were to be awarded both CPRG funds and Low and No Emissions funding, CPRG funds would be prioritized over Low and No Emissions funding. To date, the county has not secured any funding to implement the Measure.

c. Transformative Impact

Forsyth County's GHG Measure has the potential to create transformative impacts that can lead to significant additional GHG emissions reductions through 2030, 2050, and beyond. The increased demand for Access Forsyth services and the projected sizable increase in the Forsyth County population over the next 25 years create opportunities to further reduce GHG emissions. The purchase of propane vehicles and the construction of a propane filling station with CPRG funds will create future cost savings. Cost savings over time will create funding to hire more drivers, extend service hours, and purchase more propane buses as the Access Forsyth program continues to expand along with Forsyth County's rapidly increasing population. If awarded CPRG funding, the implementation of this Measure will have an exponential effect on the County's ability to reduce GHG emissions.

As of December 2023, Access Forsyth's annual number of trips has increased by over 50%, from 23,552 rides in 2022 to 35,652 rides in 2023. Miles traveled also increased by over 29%, from 271,668 miles traveled in 2022 to 351,183 miles traveled in 2023. Forsyth County's population of approximately 267,000 people is projected to grow to 400,000 by 2040. It continues to be one of Georgia's fastest-growing counties year after year. The Access Forsyth program projects operations will double by 2030, citing the increasing demand for public transportation and the continuing population growth of Forsyth County.

The initial costs associated with the conversion to propane for Access Forsyth are not feasible for the local budget in the near future. Receiving CPRG funding now would jump-start a transformative reduction in GHG emissions that will carry on for decades. Operating with propane buses from 2024-2029 will enable Access Forsyth to use cost savings to hire more drivers to meet an already overwhelming service demand. In 2023, Access Forsyth was forced to deny 1,032 rides due to a lack of available buses and/or bus drivers. Demand for the service is projected to increase with more denied, forcing potential riders to utilize other forms of transportation, including gasoline-powered vehicles. Securing more bus drivers, extending service hours, and purchasing more propane vehicles beyond 2030 will ensure all Access Forsyth riders are transported using propane fuel. These transformative impacts will decrease GHG emissions beyond current projections and create a new standard of air quality for Forsyth County as it continues to grow.

Forsyth County will encourage surrounding communities to consider the conversion to propane if EV infrastructure is not feasible. The Director of Public Transportation can present the Measure at local and regional conferences. The Measure will also be publicized through the Forsyth County newsletter and social media accounts. Sharing the transformative impact of the CPRG implementation funds and our experience converting to propane throughout the Atlanta MSA and north Georgia can lead to more communities adopting the infrastructure and further reducing GHG emissions in the State.

Section 2. Impact of GHG Reduction Measures

Converting gasoline-fueled vehicles to propane will yield significant near-term and long-term cumulative GHG emission reductions that are relatively cost-effective. The following sections demonstrate the reasonableness and quality of the assumptions and calculations used to determine the reductions and cost-effectiveness of those reductions.

The Measure is estimated to reduce the following GHG emissions by the following approximate amounts.

Carbon Dioxide: 12%

Nitrogen Oxide: 20%

Carbon Monoxide: 60%

**World Liquid Propane Gas Association, January 2003; California Energy Commission, January 2003*

The Measure will result in a permanent reduction in cumulative GHG emissions. The CPRG investment in the Measure will establish the funding needed to fully convert the Access Forsyth fleet from gasoline/diesel to propane. Resulting reductions in emissions and cost savings will enable the organization to continue providing public transportation to the Forsyth County area, with a high probability of expanding the fleet and service hours beyond current levels.

a. Magnitude of GHG Reductions from 2025-2030

The cumulative emission reduction of the Measure from 2025-2030 is calculated to be 144 metric tons CO₂. Twelve gasoline buses will be converted to propane from 2025-2029, resulting in increased emissions reductions each year throughout this period. The tools and assumptions used to calculate the magnitude of GHG reductions from 2025-2030 are available in the Technical Appendix Document.

$$\text{Total GHG Reductions 2025-2030} = 144 \text{ metric tons CO}_2$$

b. Magnitude of GHG Reductions from 2025-2050

The cumulative emission reduction of the Measure from 2025-2050 is calculated to be 914 metric tons CO₂. By 2030, all twelve gasoline buses will be converted to propane, eliminating the use of gasoline. After the initial short-term implementation of the Measure (2025-2030), consistent emissions reductions should occur year after year, assuming consistent annual average mileage through 2050. The tools and assumptions used to calculate the magnitude of GHG reductions from 2025-2030 are available in the Technical Appendix Document.

$$\text{Total GHG Reductions 2025-2030} = 914 \text{ metric tons CO}_2$$

c. Cost Effectiveness of GHG Reductions

The conversion to propane-fueled buses is a cost-effective measure, reducing substantial amounts of GHG relative to the total investment of the project. This Measure is best suited for the structure of Forsyth County's on-call public transportation system and the topographical profile and size of the service area compared to other options such as electric vehicles. The initial cost to convert to propane is also less than electric. The cost-effectiveness of the Measure is quantified below.

$$\frac{\$2,446,223}{144 \text{ metric tons CO}_2} = \frac{\$16,987.66}{1 \text{ metric ton CO}_2}$$

$$\text{Cost per metric ton CO}_2 \text{ reduced from 2025-2030} = \$16,987.66$$

d. Documentation of GHG Reduction Assumptions

Assumptions used to determine fuel efficiency (g/vehicle/mile) for propane and gasoline/diesel in GHG reduction calculations for the Measure were derived from the [EPA Moves Model](#), "a state-of-the-science emission modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics." The Forsyth County Public Transportation Department provided additional information using its vehicle replacement schedule and average trip data. These assumptions include number of vehicles replaced, the conversion schedule, average annual miles driven, annual average speed, average model year of existing vehicle, and average model year of replacement vehicle. These assumptions were input into the [ARC CMAQ Calculator v3](#) to

calculate the total GHG reductions for the Measure. Additional documentation regarding assumptions for these calculations can be found in the Technical Appendix.

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

The outputs and outcomes of the proposed Measure will support EPA's Fiscal Year 2022-2026 Strategic Plan, specifically Goal 1 to "Tackle the Climate Crisis" and Objective 1.1 to "Reduce Emissions that Cause Climate Change." The Measure will reduce GHG emissions, including Criteria Air Pollutants (CAPs) and Hazardous Air Pollutants (HAPs) by converting Forsyth County's Public Transportation buses from gasoline/diesel fuel to propane fuel over five years. The following outputs, outcomes, and performance measures will be used to ensure the above goal and objective of the EPA are met.

a. Expected Outputs and Outcomes

Outputs

Output 1 – Convert 12 buses from gasoline/diesel to propane fuel

This output quantifies how many buses are using propane fuel. The Measure is projected to have a total output of 12 buses by the end of the period of performance.

Output 2 – Construct one propane filling station

This output quantifies the number of propane filling stations constructed. The Measure is projected to have a total output of one filling station by the end of the period of performance.

Output 3 – Travel an average of 26,594 miles per vehicle per year

This output quantifies the number of vehicle miles traveled for each of the 12 vehicles scheduled for replacement throughout the period of performance. Mileage for both vehicles converted to propane and those not yet converted to propane will be quantified to reflect the actual GHG emissions throughout the grant period. The Measure is projected to reflect an average of 26,594 miles traveled per vehicle per year.

Outcomes

Outcome 1 – Reduction in cumulative metric tons of GHG emissions from 2025 through calendar year 2030

Converting gasoline/diesel-fueled vehicles to propane-fueled vehicles will reduce the amount of gasoline/diesel fuel used by Access Forsyth public transportation buses, reducing GHG emissions from 2025 through 2030. The Measure is projected to reduce GHG emissions by 144 metric tons by 2030.

Outcome 2 - Reduction in cumulative metric tons of GHG emissions from 2025 through calendar year 2050

Converting gasoline/diesel-fueled vehicles to propane-fueled vehicles will reduce the amount of gasoline/diesel fuel used by Access Forsyth public transportation buses, reducing GHG emissions from 2025 through 2050. The Measure is projected to reduce GHG emissions by 914 metric tons by 2050.

Outcome 3 – Reduction in the annual amount of CAP and/or HAP emissions in 2030

The Measure will reduce the annual amount of CAP and HAP emissions produced by Access Forsyth gasoline/diesel-fueled engines. The Measure is projected to reduce the following CAPs: carbon monoxide, nitrogen oxides, particulate matter, and unburned hydrocarbons; and the following HAPs: benzene, hexane, toluene, xylene, ethylbenzene, 2,2,4-trimethylpentane, cumene, and naphthalene.

Outcome 4 – Reduction in the annual amount of CAP and/or HAP emissions in low-income and disadvantaged communities in 2030

The Measure will reduce the annual amount of CAP and HAP emissions produced by Access Forsyth gasoline/diesel-fueled engines in low-income and disadvantaged communities. The Measure is projected to reduce the following CAPs: carbon monoxide, nitrogen oxides, particulate matter, and unburned hydrocarbons; and the following HAPs: benzene, hexane, toluene, xylene, ethylbenzene, 2,2,4-trimethylpentane, cumene, and naphthalene.

To fulfill the requirements of the semi-annual progress reports and final report, Forsyth County will use the priorly discussed assumptions and current mileage to calculate, quantify, and disclose the Measure's actual GHG emission reductions and track progress toward achieving Outcomes 1-4.

All programming and financial reports will be reviewed and approved by Forsyth County's Finance Director prior to submittal to the EPA.

b. Performance Measures and Plan

The following performance measures will be tracked, measured, and used to report progress toward achieving the expected outputs and outcomes for the proposed GHG reduction Measure.

Performance Measure 1 – Propane buses successfully procured at the beginning of the grant period

This performance measure will be tracked through quarterly reports generated through Forsyth County's Procurement Division. The report will reflect the number of buses procured to date as well as the stage of procurement for purchases currently in process at the time of the report. Success will be measured by the number of buses procured in the first six months of the grant period.

This performance measure will track, measure, and report progress toward achieving Output 1 and Outcomes 1-4.

Performance Measure 2 – Construction of propane filling station within one year of grant award

This performance measure will be tracked through monthly reports generated by Forsyth County's Public Transportation Division. The report will reflect the propane filling station's stage of procurement

construction each month until completion. Success will be measured by the completion of the awarded contract for construction of the propane filling station within the first six months of the grant award, and the completion of construction within the first year of the grant period.

This performance measure will track, measure, and report progress toward achieving Output 2 and Outcomes 1-4.

Performance Measure 3 – Provide transportation with Access Forsyth propane vehicles

This performance measure will be tracked through Forsyth County's Public Transportation Division's mileage tracking software. The report will reflect the number of miles driven each month by propane vehicles purchased through CPRG. Success will be measured by propane buses meeting or exceeding the current average number of miles traveled (26,594) per vehicle each year.

This performance measure will track, measure, and report progress toward achieving Output 3 and Outcomes 1-4.

The Forsyth County Grants team will work with the Georgia Environmental Protection Division to calculate and track the actual CAP and HAP emissions. To calculate and track the emission of CAPs and HAPs in low-income and disadvantaged communities, the County's Public Transportation department will track the mileage traveled within the county's two LIDACs and use the mileage to calculate the emissions in those areas.

c. Authorities, Implementation Timeline, and Milestones

Authorities

Forsyth County has the authority to carry out the Measure. Several departments within the County government structure will work together to ensure tasks are completed within the implementation timeline and milestones are achieved so the grant is successful. Their roles and responsibilities are described below.

The role of the Forsyth County Public Transportation Department is to oversee and execute the operation of the GHG implementation Measure. The department provides transportation to County residents through the on-call Access Forsyth program. In addition to operating propane buses, the department will also be responsible for collecting and providing quarterly data such as miles traveled and trip destinations to be used to internally track progress and fulfill the reporting requirements of the grant.

The role of the Forsyth County Procurement Department is to oversee and execute the procurement of the twelve propane buses and the procurement of the contractor to install the equipment for the filling station. It is the responsibility of the Procurement Department to follow the Federal Procurement Guidelines outlined in 2 CFR 200. It is also the responsibility of the department to procure propane buses and the fill station contractor per the implementation timeline. The department will collect and maintain documentation of fair and open competition throughout the life of the grant.

The role of the Forsyth County Fleet Services Department is to oversee and execute the maintenance of the propane buses. Fleet Services is responsible for performing preventative scheduled maintenance as

well as any necessary repairs to keep the buses operating efficiently throughout the performance period of the grant and beyond. Fleet will also collect and maintain maintenance data and perform annual inspections required by the Federal Transit Authority (FTA).

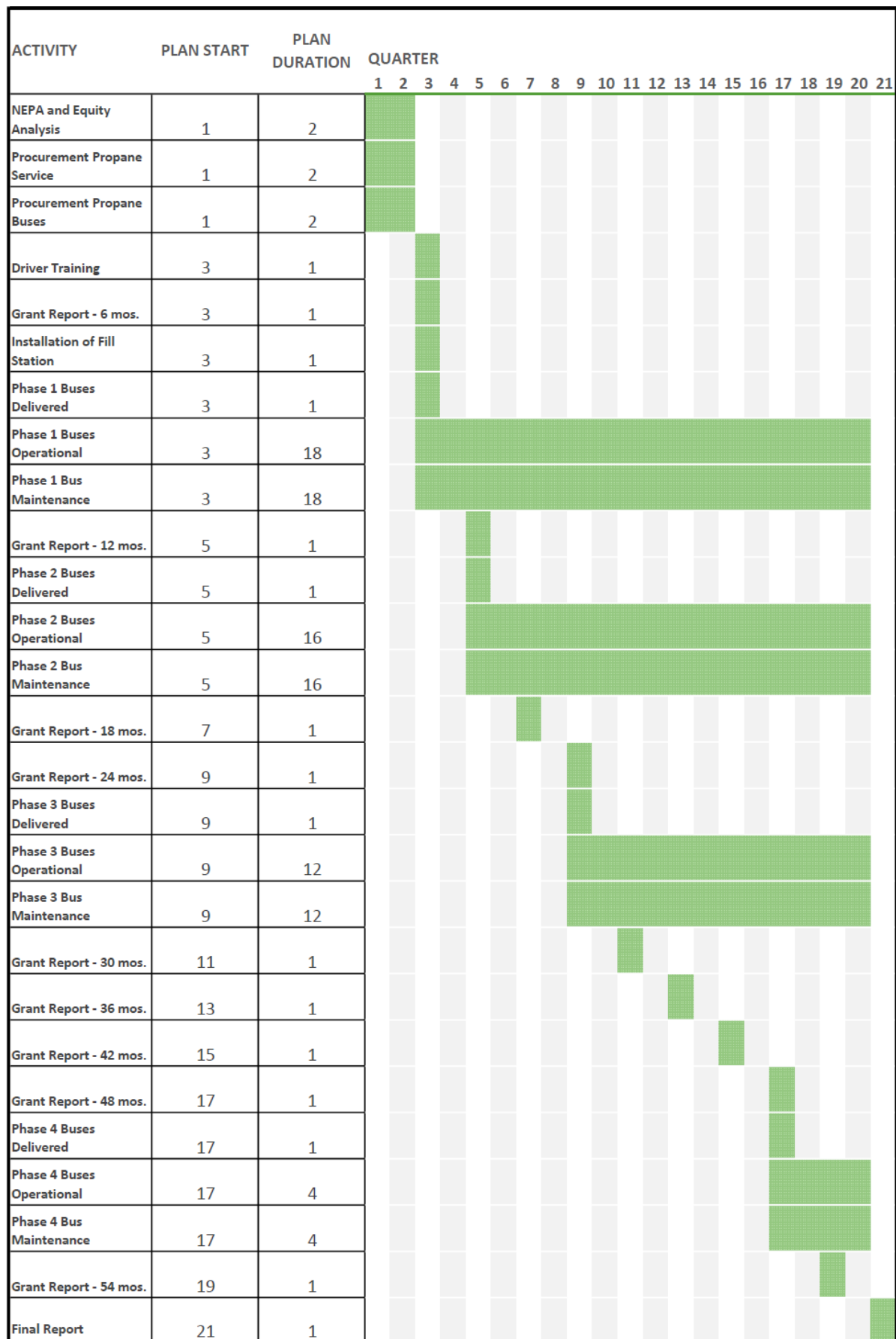
The role of the Forsyth County Grant Department is to oversee and execute the timely completion of the required grant reporting every six months throughout the period of performance. Responsibilities include gathering data related to grant outputs and outcomes, compiling reports, and ensuring compliance with grant guidelines throughout the life of the grant. The department will maintain grant records throughout the grant period and will also oversee the completion of the required NEPA and equity analysis (if required) before the construction of the propane filling station.

Implementation Timeline

The implementation timeline includes several key tasks and milestones to be completed throughout the period of performance. In addition to the timely completion of required semi-annual reports, the timeline also includes several tasks to implement, such as training, procurement, maintenance, and operation of the vehicles from October 1, 2024 – September 30, 2029. The timeline provided in Figure 3 (also added as an attachment in the Other Documents section) reflects items completed each quarter throughout the life of the grant.

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Figure 3



Milestones

Milestones of the grant include the initial procurement of the propane buses, the procurement and construction of the propane fill station, driver training, the annual transition of newly acquired propane buses into operation, the ongoing inspection and maintenance of propane buses in operation, administration of surveys for rider feedback, and the timely completion of required grant reports every six months and the Final Report after the period of performance has ended. These key actions will lead to the successful implementation of the Measure.

Section 4: Low-Income and Disadvantaged Communities

a. Community Benefits

Access Forsyth is an on-call public transportation system servicing all of Forsyth County. According to the EJScreen Mapping Tool, Forsyth County has two low-income and disadvantaged communities (Figure 4). The following EJScreen Census block groups will be affected by the proposed measure:

Jurisdiction: Forsyth County, Georgia

Census Block Groups

131171301032

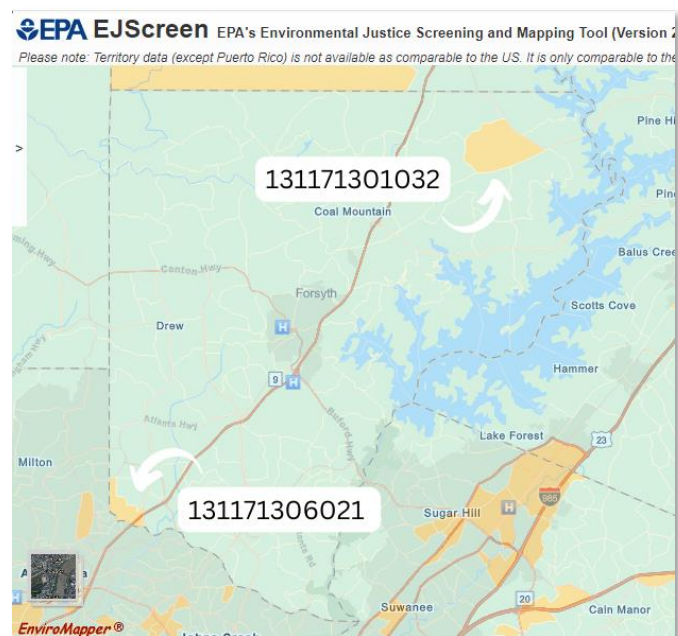
131171306021

These low-income and disadvantaged communities will experience improved public health resulting from reductions in co-pollutants, such as reductions in new asthma cases and reductions in hospital admissions and emergency department visits.

EJScreen's Census block group 131171301032 is 3.66 square miles of Forsyth County's 247 square mile footprint. As a percentage of the projected total GHG reduction in metric tons of CO₂ for the entire county, this block group will experience an estimated reduction of 2.13 metric tons of CO₂ from 2025-2030 and an estimated reduction of 13.54 metric tons of CO₂ from 2025-2050. The population of this Census block group is approximately .7% of the Forsyth County population.

EJScreen's Census block group 131171306021 is 3.66 square miles of Forsyth County's 247 square mile footprint. As a percentage of the projected total GHG reduction in metric tons of CO₂ for the entire county, this block group will experience an estimated reduction of .66 metric tons of CO₂ from 2025-2030 and an estimated reduction of 4.18 metric tons of CO₂ from 2025-2050. The population of this Census block group is approximately 1.2% of the Forsyth County population.

Figure 4



Because propane is a cleaner fuel than gasoline, vehicles require less maintenance. Buses can spend more time in service due to decreased time undergoing maintenance. In 2023, Access Forsyth denied 1,032 trips. Increasing bus availability will increase service availability for low-income and disadvantaged communities.

The program will continue to assess, quantify, and report benefits to these communities, including co-pollutant impacts, throughout the grant period by performing an annual anonymous survey of riders and their instances of asthma, hospital admissions, emergency department visits, and employment. The Public Transportation Department will continue to gather data to reflect the projected decrease in denied trips in low-income and disadvantaged communities.

b. Community Engagement

The Georgia Environmental Protection Division (EPD) conducted a survey for the Georgia PCAP. Data from respondents from the Atlanta MSA were isolated to reflect local opinions on climate pollution reduction. As part of the Atlanta MSA, it is reasonable to conclude that similar results would be extrapolated from Forsyth County communities.

The top three benefits from climate pollution reduction projects in order of importance to Atlanta MSA respondents:

1. Improved public health resulting from decreased air pollution.
2. Transportation improvements (e.g., bike lanes, walking paths, and transit options, electric vehicle charging.)
3. Community resilience, or the ability to withstand extreme weather (e.g., water stations to address heat waves, and resilience hubs for people impacted by blackouts or flooding.)

The selected GHG reduction measure will address the most important benefit according to respondents. Forsyth County and its residents have a history of demonstrating a passion for clean air. The County requires emissions testing for all vehicles registered to county residents. The County also has a Tree Ordinance and encourages larger lot sizes and less dense subdivisions. Forsyth's County Seat, Cumming, Georgia, is recognized as a member of the Tree City USA program by the Arbor Day Foundation.

Meaningful community engagement with low-income and disadvantaged communities will be demonstrated throughout the life of the grant. The County will develop an outreach and engagement strategy; promoting the use of a wide variety of techniques to create early, frequent, and continuing opportunities for community engagement. The strategy will educate low-income and disadvantaged communities on the direct impact of the Measure and create opportunities for individuals to provide feedback on the program. This engagement will yield quantifiable data on an annual basis, enabling the County to provide feedback on semi-annual reports.

Section 5. Job Quality

The Measure will use the County's existing workforce and is not projected to create any new jobs within the County government sector. Existing County staff will carry out the tasks and responsibilities of this grant. The Measure could create more jobs for propane bus manufacturers and propane fuel suppliers. The County actively recruits applicants. Those applicants are free from discrimination and are fairly evaluated. Forsyth County is an equal-opportunity employer. It is the policy of Forsyth County to provide equal employment opportunity to qualified persons without regard to race, color, religion, sex, national origin, age, disability, or any other legally protected category. This policy relates to all phases of employment, including, but not limited to, recruitment, placement, promotion, transfer, layoff, and return from layoff, training, education, compensation, and benefits.

In addition, Forsyth County will not discriminate against any qualified employee or applicant on the basis of a physical or mental disability. Forsyth County will strive to provide reasonable accommodations to assist disabled individuals to perform essential job functions, as long as the accommodation does not cause the County undue hardship.

The County offers a comprehensive benefits package including health insurance, a retirement plan, workers' compensation benefits, and work-family benefits such as paid leave and caregiving supports. Workers are empowered and encouraged to use these benefits.

All workers have equal opportunities. Workers are respected, empowered, and treated fairly. Workers have a safe, healthy, and accessible workplace with adequate hours and predictable schedules. They are free from harassment and are properly classified under applicable laws. All Forsyth County employees are valued and contribute meaningfully to the organization, and their voices are heard by leadership. The County engages in fair and equitable pay, providing a stable and predictable wage. The County recently conducted a pay study, comparing wages of similar positions to those in other local, similar-sized governments. Pay rates were adjusted, and in most cases, increased, to ensure Forsyth County employees receive a competitive wage. Cost of living adjustments (COLAs) are also provided yearly to County employees.

County employees are encouraged to progress to future good jobs. Advancement opportunities are available, and workers have access to quality training and education. For example, drivers for Access Forsyth complete Community Transportation Association of America (CTAA) Pass Training while fleet employees complete Automotive Service Excellence (ASE) training. The County also has a tuition reimbursement program to offset the cost for employees pursuing higher education.

Section 6. Programmatic Capability and Past Performance

Forsyth County has a history of successfully managing and completing federal grant agreements, demonstrating the programmatic capability of the entity and its employees.

a. Past Performance and b. Reporting Requirements

The following awards have been made to Forsyth County:

Project 1: HEAT Forsyth County Sheriff's Office
--

Assistance Agreement Number: GA-2024-402 PT-019,
Federal Funding Agency and Assistance Listing Number: State and Community Highway Safety, 20.600
Funding Amount: \$341,518.08
Description: The mission of the Georgia Governor’s Office of Highway Safety is to educate the public on safe driving behaviors; to implement highway safety campaigns and programs that reduce crashes and eliminate injuries and fatalities on Georgia roadways. Georgia Governor’s Office of Highway Safety has been granted federal funds from the National Highway Traffic Safety Administration (NHTSA) under the Fixing America’s Surface Transportation (FAST) Act to promote the development and implementation of innovative programs to address highway safety problems relating to alcohol/impaired driving, pedestrian & bicycle safety, motorcycle safety, occupant protection, and other highway safety programs.
Contact: Allen Poole, Director or Powell Harrelson, Planner/Grant Manager
Reporting Requirements: This grant funding started on October 1, 2023, and will end on September 30, 2024. While meeting the program goals, five acceptable interim expenditure reports have been submitted on time.

Project 2: Forsyth County Section 5307 Urbanized Area Formula Grant
Assistance Agreement Number: GA-2022-003-00
Federal Funding Agency and Assistance Listing Number: U.S Department of Transportation, Passed through the Georgia Department of Transportation, 20.509
Funding Amount: \$645,000
Description: This program provides grants to Urbanized Areas 1 (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses.
Contact: Deja Velasquez, Compliance Program Manager
Reporting Requirements: This grant funding started on July 1, 2022, and ended on June 30, 2023. Throughout the life of the grant, one interim and one final expenditure reports were completed. Both reports were acceptable, meeting the goals of the grant’s terms and conditions.

Project 3: Bennett Park Revitalization Project, Improving Neighborhood Outcomes in Disproportionately Impacted Communities
Assistance Agreement Number: ID 0000000305
Federal Funding Agency and Assistance Listing Number: American Rescue Plan Act – State Fiscal Recovery Funds, 21.027
Funding Amount: \$2,000,000.00
Description: Investments in neighborhood features to improve physical and mental health outcomes.
Contact: Governor’s Office of Planning and Budget, Russell Ojers, INODIC Program Specialist
Reporting Requirements: This grant funding was awarded in June of 2023 and will end by December 31, 2026. To date, two acceptable interim quarterly reports have been completed on time.

Project 4: American Rescue Plan Act (ARPA)

Assistance Agreement Number: SLT-2784
Federal Funding Agency and Assistance Listing Number: U.S. Dept. of Treasury, American Recovery Fund, 21.027
Funding Amount: \$47,443,088
Description: This program is intended to provide support to state, territorial, local, and Tribal governments in responding to the economic and public health impacts of COVID-19 and in their efforts to contain impacts on their communities, residents, and businesses.
Contact: U.S. Dept. of Treasury and Office of Planning and Budget
Reporting Requirements: This grant funding was awarded in March 2021 and will end by December 31, 2026. So far 9 quarterly reports have been completed on time. Forsyth County is currently in the process of this funding and will continue to follow guidelines to meet the goals of the funding.

Project 5: Fowler Water Reclamation Facility Return Flow to Lake Lanier, Forsyth County
Assistance Agreement Number: ID:0000000008
Federal Funding Agency and Assistance Listing Number: American Rescue Plan Act – State Fiscal Recovery Funds, 21.027
Funding Amount: \$35,860,000
Description: “Same purpose as above”. Additional info, maximize benefits for all purposes and all users of Lake Lanier by keeping more water in the lake more often, producing higher lake levels.
Contact: Governor’s Office of Planning and Budget, Russell Ojers
Reporting: This grant funding was awarded in June 2023 and will end by December 31, 2026. To date, 2 quarterly reports have been completed on time. Forsyth County is currently in the process of this funding and will continue to follow guidelines to meet the goals of the funding.

c. Staff Expertise

Forsyth County’s capacity to fulfill the requirements of the CPRG is demonstrated through the history of the organization as well as the expertise, qualifications, knowledge, and resources of County staff. These characteristics of County staff holding roles and responsibilities within the proposed Measure are described below.

Roy Rickert, Public Transportation Director

Roy Rickert is responsible for the oversight and operations of the Forsyth County Department of Public Transportation. Mr. Rickert has 22 years of experience in the Public Transportation sector, including nine years in operations management, and nine years in executive management. During that time, he has completed numerous training courses including procurement, PASS training, and leadership, including the Leadership APTA program through the American Public Transportation Association (APTA).

Mr. Rickert was the Operations Director for Connect Transit when they were named the Best Small Transit System by APTA in 2015. In 2023, Forsyth County received the Innovation Award from the Georgia Transit Association (GTA) for customer service and technology.

Forsyth County Public Transportation Department drivers are required to have an incident-free driving record and complete CTAA Pass Training. Propane vehicles are fueled and operated more similarly to gas vehicles, so driving and upkeep will be an easy adjustment for drivers.

Mr. Hawk and the Forsyth County Public Transportation Department demonstrate the knowledge and capability to fulfill their roles in the proposed GHG reduction measure.

Marcus Hawk, Fleet Services Director

Marcus Hawk is responsible for the oversight and maintenance of Forsyth County's fleet vehicles. Mr. Hawk has 20 years of experience serving in positions such as Director, Regional Director of Maintenance, Service Manager, Transportation Supervisor, Productions Control, Lead Technician, and Technician. As former Regional Director, he helped manage six (Alternative Fuel/CNG) Class 8 Single Axel Tractors. As a former Transportation Supervisor, he managed the maintenance of a small fleet of alternative fuel buses. Experience in these roles provides valuable knowledge and insight for the maintenance of propane vehicles.

Mr. Hawk has completed the following trainings and certifications directly related to his role in the Measure: OEM and Factory Training for International, Cummins, Volvo, and Freightliner; Military Mechanic School; and the Production/Service and Parts certification.

Mr. Hawk manages fleet staff, who have training and certifications required to perform preventative maintenance on propane buses. The Fleet Department is in the process of incorporating the ASE certification in Alternative Fuels and propane for both Heavy/Medium Duty and Automotive into our training requirements along with the Transit Bus certification.

Mr. Hawk and Forsyth County Fleet demonstrate the knowledge and capability to fulfill their roles in the proposed GHG reduction measure.

Adrian Casey, Procurement Director

Adrian Casey is responsible for the authorization and oversight of Forsyth County's Procurement policies and process. Mrs. Casey's 20 years of public procurement experience and associated training and certifications reflect her knowledge and capability to oversee the procurement required in the proposed GHG reduction measure. Training and certifications include Georgia Certified Procurement Manager; Qualified Procurement Agent Certification- State of NJ; Procurement Bootcamp 2022(www.federalgrantstraining.com); NIGP Federal Grants Funding, January 2022; My Fed Trainer, January 2023; and FTA Procurement System Review Workshop, March 2024.

Nancy Smallwood, Grant Manager

Nancy Smallwood is responsible for the oversight and management of Forsyth County's grant applications and awards. Grant Professional Certified, having completed the Grant Professionals

Association certification. Mrs. Smallwood has 30 years of experience managing state and federal funding for local jurisdictions in Georgia. She leads a team composed of a Grant Administrator and Grant Coordinator. Team members have nine years of state and federal grant reporting, experience that will be used to complete all reporting requirements for this grant.

Section 7. Budget

The total projected cost for the Measure is \$2,446,223. Policies and procedures will ensure funds are drawn down in accordance with the budget schedule throughout the life of the grant. All costs are reasonable and essential to the successful implementation of the GHG reduction measure. An itemized cost description can be found in the budget narrative

a. Budget Detail

Contractual

Propane Service - \$511,643

Proposed Contract Activities: Contractor will install propane fuel storage tank and propane fueling equipment free of charge with the execution of a propane service contract. The propane service contract fee includes the maintenance of the propane tank and equipment along with supplying propane fuel.

Scope of Work: Initial installation and ongoing maintenance of propane fuel storage tank and propane fueling equipment, refilling propane fuel tank as needed

Duration: Duration of grant period, 2024-2029

Procurement Method: Competitive Sealed Bid

Cement Pad for Fill Station - \$6,848

Proposed Contract Activities: Contractor will install a cement pad for buses to be utilized while buses are being fueled with propane

Scope of Work: Construct a 16x25 sq ft cement pad and run electricity to site

Duration: 3 months for construction

Procurement Method: Micro-purchase, verbal quotes

Electrician/Piping for Propane Tank Installation - \$40,700

Proposed Contract Activities: Contractor will install electricity and piping required for the installation of the propane fueling tank and equipment

Scope of Work: Install electricity and piping for propane fill station

Duration: 3 months for construction

Procurement Method: Small purchase, written quotes

Total Contractual Cost: \$559,191

Equipment

Propane Buses (12)- \$1,887,032

(12) Champion Challenger 4-2A: 20 ft Light Transit Vehicle-11,500 GVWR Min HF

Total Equipment Cost: \$1,887,032

b. Expenditure of Awarded Funds

Following the grant award, the Forsyth County Procurement Department will promptly initiate the procurement process, required to contract the propane buses, filling station, and propane service contract required to facilitate the program. The established Forsyth County Procurement Policy, and additional federal procurement guidelines outlined in 2 CFR 200 will be followed to ensure awarded grant funds are spent in a timely and efficient manner.

The successful facilitation of the procurement process is critical to the timely implementation of tasks and milestones associated with the grant. The State of Georgia has a contract for vehicles that is available to Forsyth County for use. This existing contract is in compliance with state and federal procurement guidelines. Use of this existing contract will expedite the delivery of propane buses and avoid delays putting them into operation according to the implementation schedule.

A competitive sealed bid process will be initiated for the propane service contract. Prior to bidding, an independent cost analysis will be obtained. Public notice of an Invitation to Bid will be advertised as required by State law. Bids will be opened and evaluated prior to the contract/purchase order award and all reviewers' comments will be recorded. The Procurement Director will present the bid information to the Forsyth County Board of Commissioners and be recorded in the minutes of the meeting before the procurement staff issues the appropriate documents to the selected bidder. Forsyth County will fulfill all Davis Bacon Prevailing Wage requirements and Build America, Buy America (BABA).

The procurement policy is included with this application in "Other Documents."

To ensure funds are drawn down as anticipated, the County will refer to semi-annual financial reports submitted to the EPA and a single audit that will be performed each year by an external auditing firm. All reports are reviewed by the Forsyth County Finance Director prior to submittal, creating an additional internal control for the expense of grant funds.

c. Reasonableness of Cost

Proposed expenditures are reasonable for accomplishing the goals, objectives, and measurable environmental outcomes described in the application. The utilization of propane buses has an increased cost at the outset, with a higher price point than their gasoline-fueled counterparts. However, the cost of fuel and maintenance for propane vehicles is traditionally lower than gasoline, producing cost savings over time. The reasonableness of each budget item is explained below.

Contractual Costs

Propane Service - \$511,643

The propane filling station infrastructure, as well as the propane fuel, provides a readily available source of propane fuel for buses converted from gasoline/diesel to propane for this Measure. Public propane fueling stations are not common, and if they were, the size of the propane fueling equipment can vary from vehicle to vehicle. It is critical that the Measure includes costs to provide the propane service. The propane service contract provides the propane storage tank and filling equipment at no cost, with an annual fee for equipment maintenance and a bulk supply of propane. This cost is based on information provided from a local propane dealer.

Cement Pad for Fill Station - \$6,848

A cement pad will be constructed for buses to rest while being fueled. Access Forsyth vehicles need safe access to the propane fuel pump to operate. This cost is based on a quote from a Forsyth County on-call contractor.

Electrician/Piping for Propane Tank Installation - \$40,700

Electricity infrastructure and piping will be constructed to provide electricity to the propane tank and fuel pump equipment at the propane fill station. Electricity is needed to provide fuel to propane buses, which is needed to operate. This cost is based on a quote from a Forsyth County on-call contractor.

Equipment

Propane Buses (12) - \$1,887,032

The conversion of gasoline/diesel to propane fuel requires the purchase of propane-fueled buses. Existing gasoline buses are approaching end of life, and the propane buses would be integrated into the Access Forsyth Fleet in accordance with the gasoline bus replacement schedule.

Budget Narrative – Climate Pollution Reduction Grant



Consolidated Budget Table BUDGET BY YEAR							
COST-TYPE	CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
Direct Costs	TOTAL PERSONNEL	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL FRINGE BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL TRAVEL	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL EQUIPMENT	\$314,505	\$471,758	\$314,505	\$0	\$786,264	\$1,887,032
	TOTAL SUPPLIES	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL CONTRACTUAL	\$78,557	\$77,522	\$108,530	\$108,530	\$186,052	\$559,191
	TOTAL OTHER	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL DIRECT	\$393,062	\$549,280	\$423,035	\$108,530	\$972,316	\$2,446,223
	TOTAL INDIRECT	\$0	\$0	\$0	\$0	\$0	0
TOTAL FUNDING		\$393,062	\$549,280	\$423,035	\$108,530	\$972,316	\$2,446,223

BUDGET BY PROJECT			
Project Number	Project Name	Total Cost	% of Total
1	Propane Fleet Conversion	\$2,446,223	100%
2	Name 2	\$0	0%
3	Name 3	\$0	0%
4	Name 4	\$0	0%
5	Name 5	\$0	0%
Total		\$2,446,223	100%

Detailed Budget Table BUDGET BY YEAR							
COST-TYPE	CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
Direct Costs	Personnel						
							\$0
	TOTAL PERSONNEL	\$0	\$0	\$0	\$0	\$0	\$0
	Fringe Benefits						
							\$0
	TOTAL FRINGE BENEFITS	\$0	\$0	\$0	\$0	\$0	\$0
	Travel						
							\$0
	TOTAL TRAVEL	\$0	\$0	\$0	\$0	\$0	\$0
	Equipment						
	Propane Bus (12)	\$314,505	\$471,758	\$314,505	\$0	\$786,264	\$1,887,032
							\$0
	TOTAL EQUIPMENT	\$314,505	\$471,758	\$314,505	\$0	\$786,264	\$1,887,032
	Supplies						
							\$0
							\$0
	TOTAL SUPPLIES	\$0	\$0	\$0	\$0	\$0	\$0
	Contractual						
	Propane Service	\$31,009	\$77,522	\$108,530	\$108,530	\$186,052	\$511,643
	Fill Station Cement Pad	\$6,848	\$0	\$0	\$0	\$0	\$6,848
	Electrician/Piping for tank installation	\$40,700					\$40,700
							\$0
	TOTAL CONTRACTUAL	\$78,557	\$77,522	\$108,530	\$108,530	\$186,052	\$559,191
	OTHER						
							\$0
	TOTAL OTHER	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL DIRECT	\$393,062	\$549,280	\$423,035	\$108,530	\$972,316	\$2,446,223
Indirect Costs	Indirect Costs						
							\$0
	TOTAL INDIRECT	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL FUNDING		\$393,062	\$549,280	\$423,035	\$108,530	\$972,316	\$2,446,223

Equipment

Propane Buses (12) - \$1,887,032

\$142,957/bus x 12 buses x 1.10 contingency cost = \$1,887,032

The cost of one propane bus is \$142,957. Twelve buses will be purchased for \$1,715,484. A 10% contingency of \$171,548 is added for a total of \$1,887,032. Cost is distributed incrementally over the five-year period of performance.

Propane Buses

\$142,957						
Year	2025	2026	2027	2028	2029	
Buses	2	3	2	0	5	
Bus Cost	\$285,914	\$428,871	\$285,914	\$0	\$714,785	\$1,715,484
10% Contingency	\$28,591	\$42,887	\$28,591	\$0	\$71,479	\$171,548
Total	\$314,505	\$471,758	\$314,505	\$0	\$786,264	\$1,887,032

Contractual Costs*Propane Service - \$511,643*

$877,602 \text{ miles traveled} / 6 \text{ miles per gallon} = 146,267 \text{ gallons} \times \$3.18/\text{gallon} = \$465,129 + \$46,513 \text{ (10\% contingency cost)} = \$511,642$

Access Forsyth buses are projected to travel an average of 26,549 miles per year and get approximately 6 miles per gallon of propane. Buses are converted to gasoline over five years, with a projected mileage total of 877,602 miles, requiring 146,267 gallons of propane purchased at an average of \$3.18 per gallon. A 10% contingency of \$46,513 is added for a total of \$511,642. Cost is distributed incrementally over the five-year period of performance.

Propane Service

	26594	average annual miles driven				
Year	2025	2026	2027	2028	2029	
Buses	2	5	7	7	12	
Mileage	53188	132970	186158	186158	319128	877602
Gallons	8,865	22,162	31,026	31,026	53,188	146,267
Total	\$28,190	\$70,474	\$98,664	\$98,664	\$169,138	\$465,129
10% Contingency	\$2,819	\$7,047	\$9,866	\$9,866	\$16,914	\$46,513
Total	\$31,009	\$77,522	\$108,530	\$108,530	\$186,052	\$511,642
	6	Miles per gallon				
	146267	Total gallons of propane				
	3.18	Georgia average cost per gallon				
	\$465,129	Cost of Propane over 5 years				
	\$46,513	10% Contingency Cost				
	\$511,642	Toal Cost				

Cement Pad for Fill Station - \$6,848

\$6,225 cost to construct cement pad + \$623 (10%) contingency cost = \$6,848

The construction for the cement pad was quoted at \$6,225. A 10% contingency of \$623 is added for a total of \$6,848. All costs are incurred in the first year of the period of performance.

Cement Pad						
Year	2025	2026	2027	2028	2029	
Fill Station Cement Pad	\$6,225	\$0	\$0	\$0	\$0	\$6,225
10% Contingency	\$623	\$0	\$0	\$0	\$0	\$623
Total	\$6,848	\$0	\$0	\$0	\$0	\$6,848

Electrician/Piping for Propane Tank Installation - \$40,700

\$37,000 cost to construct electricity and piping + \$3,700 (10%) contingency cost = \$40,700

The construction for the electricity and propane tank was quoted at \$37,000. A 10% contingency of \$3,700 is added for a total of \$40,700. All costs are incurred in the first year of the period of performance.

Electrician/Piping for Tank Installation						
Year	2025	2026	2027	2028	2029	
Electrician/piping	\$37,000	\$0	\$0	\$0	\$0	\$37,000
10% Contingency	\$3,700	\$0	\$0	\$0	\$0	\$3,700
Total	\$40,700	\$0	\$0	\$0	\$0	\$40,700

Total Cost

\$1,887,032 Total Equipment Cost + \$559,191 Total Contractual Cost = \$2,446,223

Total Cost for the Measure includes total costs from all budget categories.

Total Cost						
	2025	2026	2027	2028	2029	
Equipment	\$314,505	\$471,758	\$314,505	\$0	\$786,264	\$1,887,032
Contractual	\$78,557	\$77,522	\$108,530	\$108,530	\$186,052	\$559,191
Total	\$393,062	\$549,280	\$423,035	\$108,530	\$972,316	\$2,446,223

Proper Management of Grant Funds

The Forsyth County Finance Director is responsible for establishing and maintaining policies and procedures to identify and assess grant programs. Under the direction of the Finance Director, Finance Department grant staff, including Grant Manager, Grant Administrator, Grant Coordinator, and Grant Analyst, supports other County staff members and helps them to identify and assess grant programs, analyze funding opportunities, and develop grant-seeking strategies relevant to the mission and priorities of the County. The department also ensures the County follows applicable statutes, regulations, policies, procedures, and contracts established on all awarded grants.

The Forsyth County Finance Department has developed a comprehensive Grant Administration Policy and Procedures Handbook. This document outlines the County's sequential processes in the pursuit and management of external grant funding. The Handbook addresses the BOC policy, federal and state laws and regulations, and other relevant information pertaining to grants administration processes for the County's workforce engaged in grants administration. Staff adhere to the Handbook and any additional fiduciary guidelines of the grant to ensure the proper management of grant funds. This document can be found in the Other Attachments section of the grant application.

Technical Appendix

Measure-Specific Documentation

GHG Reduction Estimate Method

The following information provided in Figure 1 by the Forsyth County Public Transportation Department was used to calculate GHG emissions reductions using the [ARC CMAQ Calculator v3](#):

Figure 1

Inputs		
Data Type	Value	Units
Average Model Year of Alternative Vehicle	2018	-
Type of Alternative Vehicle	Gas Passenger Truck	-
Average Model Year of Existing Vehicle	2027	-
Type of Existing Vehicle	Propane Passenger Truck	-
Number of Vehicles to be Replaced	12	Vehicles
Annual Average Mileage of each Vehicle	26,594	Miles
Annual Average Speed	20	mph

Constants		
Data Type	Value	Units
Number of Weekdays per Year	250	Days

Models/Tools Used

The [EPA MOVES Model](#) was used to gather data regarding gas truck emissions and propane truck emissions.

Gas truck emissions (g/veh/mile) = 381.412

Propane truck emissions (g/veh/mile) = 260.837

Measure Implementation Assumptions

Miles Traveled per Vehicle Per Year – 26,594

Forsyth County utilized historical data from calendar year 2023 gathered by the Public Transportation Department to decipher the assumed average number of miles traveled per year per vehicle for the life of the grant period. This figure is used to calculate the emissions emitted per year for both gasoline/diesel and propane vehicles.

Propane Bus Cost Per Bus - \$142,957

10% Contingency - \$14,296

The cost of the propane buses is derived from an estimate provided by Forest River Bus. The cost is consistent with those listed within the state of Georgia's Vehicle Procurement contract. A 10%

contingency is added to offset pricing increases between the time of grant application and the time of award.

Propane Fuel Cost - \$3.18 per gallon

The cost of propane fuel is derived from the [U.S. Energy Information Administration's Weekly Petroleum and Other Liquids](#) cost rate for Georgia.

Propane Miles Per Gallon – 6 miles per gallon

The estimated miles per gallon is based on estimates provided by local propane dealers.

Construction of Cement Pad for Propane Fill Station and Installation of Electricity and Piping - \$43,225

10% Contingency - \$3,323

The cost of the construction of the cement pad for the propane fill station is derived from an estimate provided by Forsyth County's on-call contractor. A 10% contingency is added to offset pricing increases between the time of grant application and the time of award.

GHG Reduction Estimate Assumptions

Emission rates are calculated using the [ARC CMAQ Calculator v3](#).

The following assumptions are used as part of the method for estimating GHG emission reductions:

Gas truck emissions (g/veh/mile) = 381.412

Propane truck emissions (g/veh/mile) = 260.837

These assumptions are derived from the [EPA MOVES Model](#). Other assumptions listed in Figure 1 are based on data regarding the current Access Forsyth Fleet and buses scheduled for replacement from 2025-2029.

Reference Case Scenario

The calculations made to determine future GHG emissions reductions are based on Business As Usual (BAU) GHG emissions. Calculations use the assumption that each bus will continue to travel the same average miles per year from 2025-2030 and 2025-2050. The BAU projection does not include the effect of non-CPRG federal incentives.

Measure-Specific Activity Data

Average miles traveled per year per vehicle is the activity data used for estimating the GHG emission reductions for the Measure. The fleet vehicles to be replaced by the Measure average 26,594 miles per year.

GHG Emissions Reduced

	2030	2050
Replacement Plan (metric tons CO2)	586	2,251
No Replacements (metric tons CO2)	730	3,165
GHG Reduction (metric tons CO2)	144	914

GHG Emissions Reductions Calculations

Calculations are located in a separate file attachment in the “Other Documents” section of the application.