

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

**Section 1: Overall Summary and Approach**

**A. Description of GHG Reduction Measures**

The proposed reduction measure for Orange County, Florida's CPRG application focuses on the High Impact Action of "Reduced Vehicle Miles Travelled (VMT)" within the East Central Florida's Priority Climate Action Plan (PCAP). The regional inventory within the PCAP indicates, that the Transportation sector accounts for 39.4% of CO<sub>2</sub>e emissions throughout the region and will require a reduction of at least 12% of gasoline-related VMT and 6% of diesel-related VMT. To achieve a reduction in VMT, the County, in alignment with the regional PCAP recognizes that improving access to transit options and reducing personal vehicle use are key strategies to achieve this goal. The East Central Florida PCAP's High Impact Action for Reducing VMT focuses on two main strategies, "Increase and improve transit ridership and options, routes, and operating hours" and "Reduce reliance/dependence on personal vehicles" (*East Central Florida PCAP* Attached). These strategies are foundational in achieving project goals for reducing greenhouse gas (GHG) emissions and thus, were identified as priority measures in the PCAP.

The PCAP introduces the identified high-impact actions and priority measures resulting from the commitment to achieve science-based targets identified to maintain global temperatures below 1.5°C as laid out in the Paris Climate Agreement. These actions and measures detail the carbon reduction goals, the key implementation authorities, and the actions, policies, and commitments already in progress. These have been captured to encompass the whole east central Florida region to allow collaboration, leverage expertise, and accelerate action between local governments, businesses, and organizations.

As recognized in the PCAP that counties and transportation agencies are two of the primary implementing agencies to drive these types of changes, the County has collaboratively created the Clean Commute Orange County: The Express Route to Lower GHGs with the Central Florida Regional Transportation Authority, LYNX, to impact VMT, reduce emissions, and provide reliable and frequent transportation options to its residents and visitors. Thus, achieving the goal of the CPRG program to implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond.

Established in 1972, LYNX, the Central Florida Regional Transportation Authority, serves as the public transportation system for three (3) of the counties within the central Florida region, Orange, Osceola, and Seminole. It provides a range of services including fixed-route buses, paratransit services, and commuter assistance programs to facilitate mobility and reduce traffic congestion in the Greater Orlando area. Within Orange County, LYNX transit options provide more than 20,527,108 miles of service annually with over 219 buses in operation providing 748,291 annual service hours. With tourism as a leading economic industry, transit provides our lower-wage workforce an opportunity to reach tourist destination jobs without the time and unpredictability of traveling congested highways as well as the costs of vehicle ownership.

To identify opportunities to reduce personal vehicle miles traveled and increase and improve transit ridership, several LYNX bus transit routes were reviewed. Many factors related to ridership were considered including, but not limited to, current routes and the communities being served, the size and demographics of the population, income levels, workforce categories, and vehicle ownership. The data captured for consideration in evaluating routes is included in attached spreadsheet *Route 301 Ridership and Population\_GHGcalcs supporting document\_Orange County*.

After consideration, one specific route, Route 301, was selected as an opportunity to transform the ridership experience and eliminate the need for personal vehicle travel. This newly established route not only aims to minimize the need for personal car use but also introduces strategic locations and stops designed to positively impact existing transit routes. By enabling passengers to streamline their journeys and bypass inconvenient, out-of-the-way transfers, Route 301 addresses a significant pain point.

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

Traditionally, since LYNX utilizes a hub-and-spoke model, passengers have been required to transfer at the Downtown Transfer Center, often resulting in additional, unnecessary travel when trying to go north-south throughout the county, easily adding at least an additional 30 minutes, if not more, to an individual's commute. Route 301 will provide a direct north-south express route to the attractions area, originating in a low-income and disadvantaged area- key features of this proposed GHG reduction measure.

This strategic redirection is expected to create a beneficial ripple effect, potentially decreasing ridership on other routes and allowing for reduced service frequency. Such changes promise to enhance overall community convenience while simultaneously lowering vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions. The introduction of Route 301 exemplifies a forward-thinking approach to public transit, aiming to make it a more attractive and efficient option for the wider community.

For residents and visitors traveling from Pine Hills to Walt Disney World and Disney Springs, the current commute is fraught with challenges, including the necessity of multiple bus transfers and durations exceeding two hours at peak times. The forthcoming launch of Route 301 is poised to transform this scenario dramatically, offering a seamless, non-stop service that slashes travel time to a mere 65 minutes. This innovation is set to have a profound effect, especially for the numerous employees dependent on public transit for their commutes to theme park roles, and is likely to entice the estimated *75 million tourists* annually—who traditionally favor personal vehicles, rentals, and ride-sharing—to consider this efficient alternative. By providing a direct link to their destinations, Route 301 stands as a pivotal step toward reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

For the community around the nearby Valencia State College, which is their largest campus serving around 70,000 students and located along proposed Route 301, it will herald a new era of accessibility. The proposed route's direct connection, via the new Pine Hills Transfer Center, is projected to cut the commute to the Valencia College campus from a cumbersome two hours to an efficient 30 minutes, bypassing the current lengthy detour through downtown. Moreover, Valencia offers students, faculty, and staff the benefit of free rides to classes or work by covering the cost of LYNX bus tickets. Thus, with Clean Community Orange County, members of the Valencia community can ride the route for free, with commute times that are competitive with driving.

Route 301 will directly serve several historically disadvantaged and low-income communities within the Pine Hills area of the county along the eastern edge of the City of Orlando (view *Figure 1*). The local workforce predominantly consists of individuals

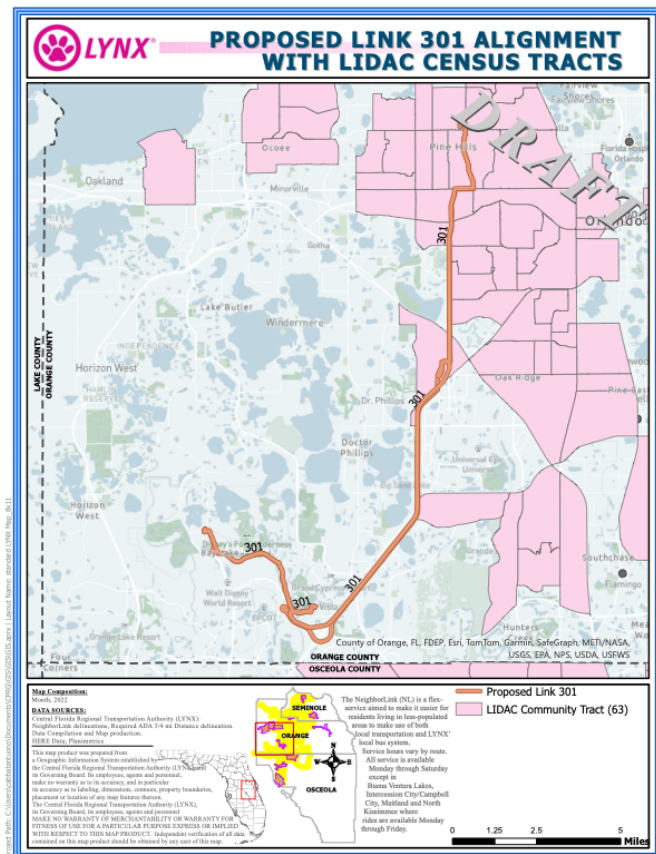


Figure 1. Route 301 Low Income Disadvantaged Communities (LIDAC)

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

employed in the service and commercial sectors. The proposed transportation route offers reliable access for this demographic, connecting them to nearby theme parks and tourist attractions, thereby enhancing their commute and supporting the region's economic vitality. The route's convenience and reliability are expected to resonate with individuals currently dependent on personal gas vehicles, fostering a welcome transition to public transportation. This shift not only promises a cleaner, more sustainable future but also positions public transit as a more attractive option for everyday travel.

The Clean Commute Orange County proposed route will utilize the new multi-modal Pine Hills Transfer Center scheduled to be completed and opened in January 2025. The center will focus on eight routes within that area, simplifying transit connections and fostering a more efficient first/last mile system through the introduction of vanpools, e-bikes, e-scooters, and improved walkability.

A key feature of the new Route 301 is its *express service* to tourist hotspots, enabling local communities to access numerous job opportunities with a minimum wage of \$15 or higher. These positions are common, stable, and provide health and wellness benefits, all without the financial burden of owning and operating a vehicle. The route will have only 30-minute bus headways and with limited stops. It will require nine (9) CNG fueled buses throughout the day with 19 hours of continued service resulting in 48,614 service hours, using only 2,185.48 standard cubic feet of CNG fuel and resulting in only 98 MT CO<sub>2</sub>e emissions, 96% less than a diesel counterpart bus. The new buses purchased to support this route will contain an engine designed to eliminate 90% of the nitrous oxide emissions. Additionally, through its fuel distribution service contract, LYNX has access to renewable compressed natural gas and routinely receives a report identifying the amount of RNG received. With the combination of low NO<sub>x</sub> engines and the use of RNG for this route, it is estimated that CO<sub>2</sub>e emissions can be reduced as much as 50%, making it possible for a better net emissions reduction and a better cost per reduction of MT CO<sub>2</sub>e ratio. The route will realize GHG savings by creating a decrease in gasoline-powered vehicles traveling to the same locations along very congested roadways during peak times of the day. Based on ridership and survey data, it has been estimated once at peak capacity, more than 160,000 gasoline-powered vehicle miles will be removed from roadways, as much as 126,942 gallons of gasoline will be saved, and 1,122 MT CO<sub>2</sub>e emissions will be eliminated, annually.

If awarded the requested CPRG funds, Route 301 can begin implementation in January 2025. Several tasks and milestones for this new route have been identified that will serve emissions reduction effectively almost immediately after funding is received. These are described here, as well as in more detail in Section 3 of this workplan. The first task is to identify existing LYNX buses that can be used to start the new route, while orders are being placed for nine (9) new buses to make this route permanent. Backup reserve buses are already part of the LYNX inventory, the risk of not having available buses immediately is extremely low. The turnaround time to order and receive the new CNG buses is estimated to take 19 months.

To staff Route 301, Orange County plans to initially deploy existing personnel, complemented by the active recruitment of 23 Bus Operators, two Mechanics, and one Service Island Attendant. Despite the competitive market for certified drivers, a potential risk, LYNX's comprehensive staffing strategy, and high-quality unionized jobs, bolstered by active recruitment efforts and collaborations with local commercial driving programs, assures the county's capability to meet these staffing demands successfully.

The County anticipates a positive start with an estimated initial ridership of 96,349 in the first year, using strategic marketing initiatives and leveraging positive ridership testimonials aiming to increase the figure to 321,162 by 2030. This growth is poised to make a significant contribution to environmental targets, eliminating over 11 million gasoline vehicle miles from Central Florida's highways and achieving a net GHG emissions reduction of 3380 MT CO<sub>2</sub>e by the end of the grant reporting period.

To mitigate the risk of not meeting ridership targets, especially from individuals who typically rely on personal vehicles, which could affect GHG reductions, Orange County has developed an extensive

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

strategy entailing marketing, incentives, and local collaboration. Targeted marketing campaigns will particularly focus on tourists near the Universal stop, highlighting Express Route 301 as a convenient and cost-effective alternative to the substantial parking fees (\$30+ Daily USD) at Walt Disney destinations. The route's enhanced accessibility, supported by real-time bus tracking integrated into popular platforms like Google and Apple Maps, eliminates the need to download additional applications.

In collaboration with major employers along the route, the county aims to spotlight existing programs currently at Valencia College and the City of Orlando that offer employee benefits such as subsidized passes for free LYNX bus service fares. Additionally, the county will partner with programs such as the Florida Department of Transportation's reThink Your Commute, which works to encourage professionals to opt for public transit over personal vehicles and offers incentives and rewards for this behavior modification. These collaborative initiatives are designed to enhance route ridership and contribute to the quality of life for the local communities especially the vast number of LIDAC along Route 301. The project team is deeply committed to exploring a wide array of innovative strategies to boost ridership and ensure the success of Clean Commute Orange County.

### **B. Demonstration of Funding Need**

In 2019, under the leadership of Mayor Jerry L. Demings, Orange County launched a pivotal initiative to tackle the region's transportation challenges through a comprehensive transportation survey and the facilitation of over 200 community meetings. This effort, aimed at directly capturing residents' needs and concerns regarding transportation, was temporarily paused due to the COVID-19 pandemic but was revitalized in January 2022 with an updated online survey and renewed community engagement efforts. The overwhelming response from over 19,000 residents and engagement in more than 270 meetings yielded invaluable insights into the community's urgent transportation priorities, highlighting critical issues such as traffic congestion, the imperative need for an expanded mass transit system, and enhanced pedestrian and bicycle safety.

The feedback underscored a compelling demand for significant improvements to LYNX service calling for more accessible routes, broader coverage, increased service frequency, and the introduction of express routes. Amid discussions, Orange County explored the potential for funding through the Charter County and Regional Transportation Sales Tax, which aimed to generate an estimated \$600 million annually over 20 years. This funding was intended to provide a flexible resource for the capital investment, operations, and maintenance of the transit systems and infrastructure. Despite its potential, the initiative was NOT passed by the electorate in the November 8, 2022, vote.

Facing continuous rapid growth and escalating transportation challenges, Orange County presented an Accelerated Transportation Safety Program in June 2023, aimed at addressing critical needs through existing revenue sources. Mayor Demings has stressed the ongoing search for a dedicated funding source as a top priority, but in the interim, the county is determined to utilize available resources to make necessary transportation safety and infrastructure enhancements. The county has committed \$100 million over five years to funding \$55 million for roadway lighting, sidewalks, and safety improvements and \$45 million for transit projects to enhance LYNX operational frequency and bus shelters. However, through the analysis on Orange County's transportation needs, approximately \$20 billion in unfunded needs were identified. With more than 1,000 people moving to Central Florida every week, this Accelerated Transportation funding is a stop-gap to meet critical infrastructure needs and improve headways for existing routes, of which 49% have service frequency of 60 minutes or greater.

Additionally, Orange County was one of three government partners with MetroPlan Orlando to receive funding from the Federal Highway Administration (FHWA) under the 2022 Safe Streets and Roads for All Action Plan, to develop a Vision Zero Safety Action Plan. The focus on this \$3.79 million grant is to increase the safety of our streets and roads across three counties and is not focused on reducing vehicle miles traveled.

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

In conjunction with these initiatives, LYNX has been diligently applying for the FTA's Low or No emission grant program, with four applications submitted since 2018. The Clean Commute Orange County initiative, is a collaborative effort between the Orange County government and LYNX, designed to improve connectivity within a notably congested area of the city. Starting at the Pine Hills Transfer Center, this project aims to create seamless links to major employment and educational hubs, including Universal Studios, Walt Disney World, and Valencia State College. The goal extends beyond merely enhancing access; it's about significantly reducing greenhouse gas (GHG) emissions by encouraging the community to shift away from reliance on personal vehicles.

Previous funding attempts have only yielded modest advancements, highlighting the urgent need for the EPA CPRG implementation funding to accelerate the shift to a low-emission fleet, notably through the acquisition of Compressed Natural Gas buses and providing a direct north-south express route along a major corridor to employment opportunities and attractions. While other funding streams have been explored—including attempts to secure 'low-no' emissions grants which have resulted in the procurement of 32 EVs over four years—these efforts have fallen short of meeting the expansive needs of the county's transportation system. The EPA grant emerges as a critical opportunity to fill this gap, offering a path to implement GHG reduction measures effectively. Orange County and LYNX's commitment to exploring both federal and non-federal funding sources remains unwavering, as they continue to seek comprehensive solutions to enhance the region's transportation infrastructure and environmental sustainability.

### **C. Transformative Impact**

The introduction of Express Route 301 by LYNX is a strategic move toward creating a robust, all-day express service that will not only connect residents to key employment centers but also provide a sustainable travel option for the significant tourist population visiting Orange County, estimated at 75 million annually. This route, targeting popular attractions like Walt Disney World, Disney Springs, and Universal Studios, offers both residents and tourists viable alternatives to gasoline vehicles, thereby playing a crucial role in mitigating GHG emissions from a sector that has been traditionally dependent on fossil fuels.

With nearly half of the current bus services in Orange County operating with a headway of 60 minutes or more, the new express route stands to dramatically reduce waiting and travel times for public transit users. This enhancement is particularly transformative for low-income and disadvantaged households, potentially alleviating the financial burden of acquiring a first or second automobile and reshaping consumer behavior towards sustainable travel practices.

As the region's transit services expand and improve, they begin to appeal to a wider demographic, including non-transit dependent residents. The convenience and efficiency of these services encourage a shift from single-occupant vehicle use to public transit, contributing to reduced traffic congestion and pollution.

Moreover, the demographic change in Central Florida, with an influx of residents accustomed to more established public transit systems, positions the Express Route 301 as a familiar and preferred mode of transportation. It not only facilitates easier acclimation for newcomers but also supports a cultural shift towards public transit use in the region. Such a shift is imperative for accommodating the transportation demands of a growing population and advancing towards a future with reduced GHG emissions and enhanced public transportation infrastructure.

The Clean Commute Orange County initiative is a strategic step towards realizing the transformative ambitions set forth in the Orange County Transit Plan - Refined in the 2018 Transit Development Plan Update Network. This comprehensive plan lays the groundwork for a future-focused transit network within Orange County, drawing from the vision established by the LYNX Vision Plan of 2017, which outlined key corridor enhancements for premium transit services. Within this strategic

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

framework, Express Route 301 emerges as a pivotal element—conceived as a new High-Speed Regional Express Route. Its introduction is expected to greatly enhance regional connectivity, offering rapid, efficient, and high-quality transit options that are anticipated to catalyze a significant shift in travel behaviors, thus contributing to a more sustainable and accessible transit system for the community.

The introduction of Route 301 heralds a transformative shift in the public transit landscape, designed to significantly lessen the community's reliance on personal vehicles by introducing strategically placed stops and routes. This initiative directly addresses and aims to eliminate the cumbersome need for extended, out-of-the-way transfers, especially those at the Downtown Transfer Center that contribute to unnecessary travel times. Promising to streamline the commuting process by reducing the need for downtown transfers, Route 301 stands as a catalyst for change. It's expected to lead to a decrease in ridership on other routes, which could result in reduced service frequencies, thereby enhancing overall community convenience, and making strides towards reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

Specifically, for travelers from Pine Hills to Walt Disney World and Disney Springs, Route 301 is set to revolutionize their commuting experience from a daunting journey of over two hours and multiple transfers to a direct, non-stop service taking just 65 minutes. Moreover, for the Valencia State College community, the introduction of Route 301, with a direct link via the new Pine Hills Transfer Center, promises to cut the commute to campus from two hours to a mere 30 minutes, bypassing the lengthy detour through downtown.

By offering a sustainable alternative to personal vehicles, particularly for disadvantaged communities, and aligning with regional growth patterns, this route stands to decrease greenhouse gas emissions and foster a cultural shift towards public transit, serving as a scalable model for future transit development.

### **Section 2: Impact of GHG Reduction Measures**

#### **A. Magnitude of GHG Reductions from 2025 through 2030**

The reduction measure being implemented should result in a net emissions reduction of 3,380 MT CO<sub>2</sub>e emissions reductions over the 2025-2030 period. The measure includes the placement of nine (9) new CNG fueled buses in service 48,614 hours, traveling 966,155 miles, using 2,185.48 standard cubic feet of compressed natural gas (CNG) as fuel, and resulting in 98 MT CO<sub>2</sub>e emissions, annually. Additionally, each year, emissions reduction will occur through a reduction of gasoline-powered vehicle trips due to the frequency and accessibility of this new transit route, which will result in a decrease of 3,871 MT CO<sub>2</sub>e over the five-year implementation period.

Assumptions for this estimated reduced vehicle usage came from LYNX transit route mileage estimates and from DOE, Vehicle Technologies Office for vehicle MPG at 25.3 on average. Over the period of 2025 – 2030, a total of five (5) years, 3380 MT CO<sub>2</sub>e emissions savings will be the net result. The emissions calculations over this period were based on the IPCC's Fifth Assessment Report of the global warming potential for carbon dioxide, methane, and nitrous oxide. The ICELI ClearPath tool was used to calculate emissions resulting from the combustion of compressed natural gas (CNG) for a transit bus. Specifically, the **Emissions from Public Transit** calculator was used. This calculator was also used to estimate the emissions resulting from a transit bus burning diesel fuel in order to provide an accurate comparison of the reduced emissions from a cleaner fuel like CNG. Additionally, the emissions for gasoline-powered passenger vehicles were calculated using the ICELI ClearPath tool with the **On-Road Transportation** calculator. All of the emissions data points were entered into an Excel spreadsheet where the net CO<sub>2</sub>e emissions calculations were completed. The uploaded *GHGcalcs\_OrangeCounty* spreadsheet contains both the downloaded calculations from the ClearPath tool as well as the final net

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

emissions calculations. As the intended Route 301 is planned to be a permanent route within the LYNX transit system, calculations can only fluctuate by the change in ridership through the five-year period.

**B. Magnitude of GHG Reduction from 2025 through 2050**

The reduction measure being implemented should result in a net emissions reduction of 23,858 MT CO<sub>2</sub>e emissions reductions over the 2025-2050 period. The measure includes the use of nine (9) new CNG fueled buses in service 48,614 hours, traveling 966,155 miles, using 2,185.48 standard cubic feet of compressed natural gas (CNG) as fuel, and resulting in 98 MT CO<sub>2</sub>e emissions, annually. Additionally, over this same course of time, an estimated 75 million vehicle miles traveled by gasoline-powered vehicle trips will be eliminated due to the frequency and accessibility of this new transit route, which will result in a decrease of 26,311 MT CO<sub>2</sub>e over the twenty-five years.

Assumptions for this estimated reduced vehicle usage came from LYNX transit route mileage estimates and from DOE, Vehicle Technologies Office for vehicle MPG at 25.3 on average. No additional assumptions were made for fuel efficiency over the twenty-five year period. Over the period of 2025 – 2050, a total of twenty-five (25) years, 23,858 MT CO<sub>2</sub>e emissions savings will be the net result. The emissions calculations over this period were based on the IPCC's Fifth Assessment Report of the global warming potential for carbon dioxide, methane, and nitrous oxide. The ICLEI ClearPath tool was used to calculate emissions resulting from the combustion of compressed natural gas (CNG) for a transit bus. Specifically, the **Emissions from Public Transit** calculator was used. This calculator was also used to estimate the emissions resulting from a transit bus burning diesel fuel in order to provide an accurate comparison of the reduced emissions from a cleaner fuel like CNG. Additionally, the emissions for gasoline-powered passenger vehicles were calculated using the ICLEI ClearPath tool with the **On-Road Transportation** calculator. All of the emissions data points were entered into an Excel spreadsheet where the net CO<sub>2</sub>e emissions calculations were completed. The uploaded *GHGcalcs\_OrangeCounty* spreadsheet contains both the downloaded calculations from the ClearPath tool as well as the final net emissions calculations.. As the intended Route 301 is planned to be a permanent route within the LYNX transit system, calculations can only fluctuate by the change in ridership through the twenty-five year period.

**C. Cost Effectiveness of GHG Reductions**

Over the period of 2025-2030, the funding period of this grant, the cost per MT CO<sub>2</sub>e emissions reduced is \$10,181.72. The requested CPRG funding is \$34,418,477 and the expected reductions over that five-year period are 3,380 MT CO<sub>2</sub>e, yielding this cost effectiveness number. The costs are due in large part to the purchase of 9 new buses to support this route – 7 in operation and 2 as reserve (as required by federal law). As these buses are permanent and will stay in service, it is expected that the cost effectiveness of this investment over the 25 years, through 2050, is increased as emissions continue to be avoided.

**D. Documentation of GHG Reduction Assumptions**

The following list of assumptions were necessary to predict CO<sub>2</sub>e emissions reductions with this reduction measure. View Attachment GHG Emission Reduction Calculations for calculations, assumptions, and documented sources for assumptions.

- 1) For calculating reduced VMT measure:
  - a. Ridership estimates for route vary per year based on phasing in of riders to reach the estimated ridership of 321,162 (LYNX)

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

- b. Estimated vehicle trips reduced based on ridership estimates = 50% of ridership
  - c. Gasoline consumption rate for passenger vehicles = 25.3 MPG (DOE)
  - d. Miles eliminated based on distance of route = 20 miles (LYNX)
  - e. Emissions factors for combustion of gasoline - CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O (U.S National Defaults)
- 2) For calculating emissions from buses in use:
- a. MPG estimate for a diesel bus = 4.3 (LYNX)
  - b. Total annual service miles based on 365 days of operation – 966,155 (LYNX)
  - c. Emissions factors for combustion of diesel - CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O (U.S National Defaults)
  - d. Emissions factors for combustion of CNG - (Table G.1 of ICLEI Local Government Protocol)
  - e. SCF/mile use for CNG bus = 442.08 (LYNX)
- 3) For calculating cost/MT CO<sub>2</sub>e removed over 5 year and 25 year periods:
- a. Total annual service hours = 48,614 (LYNX)
  - b. Cost per hour for operating costs = \$105.43 (LYNX)
  - c. Cost increases for hourly operating costs = 3% (LYNX)
  - d. Number of vehicles needed to support route = 9 CNG buses (LYNX)
  - e. Cost per CNG bus purchased = \$759,130 (LYNX)
  - f. Global warming potential for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O (IPCC 5<sup>th</sup> Assessment 100-year values)

**Section 3: Environmental Results – Outputs, Outcomes, and Performance Measures**

**A. Expected Outputs:**

1. **Transportation and Equipment Installation:** Procurement and operational deployment of 9 Compressed Natural Gas (CNG) buses. These vehicles represent a direct effort to reduce GHG emissions through the utilization of cleaner fuel technology in public transportation.
2. **Workforce Development and Job Creation:**
  - Creation of 23 additional positions for LYNX bus operators, specifically trained for the operation of CNG buses and the enhanced service offerings of Express Route 301.
  - The hiring of 2 mechanics with specialized skills in maintaining CNG vehicles, ensuring the sustainability and reliability of the new fleet.
  - Employment of 1 Service Island Attendant to support the operational efficiency of the CNG buses, contributing to the overall effectiveness of GHG reduction measures.
3. **Public Outreach and Community Engagement:** Implementation of a comprehensive public outreach campaign aimed at promoting the use of the new Express Route 301 and educating the community on the many benefits of opting for public transportation over personal vehicle use. This qualitative output will support increased ridership and broader community awareness of GHG reduction efforts.
4. **GHG Reduction Reporting:**
  - Development and execution of a detailed evaluation and reporting framework to assess the GHG emission reductions achieved through the implementation of the new CNG buses and enhanced service routes. This includes the collection of quantitative data on fuel usage, miles traveled, ridership, and emissions saved.
  - Progress reports detailing the ongoing assessment of GHG reductions and the effectiveness of implemented measures. These reports will be critical for understanding the project's environmental impact and guiding future sustainable transportation efforts.

**Expected Outcomes:**

1. **Reduction in Greenhouse Gas Emissions:**
  - Quantifiable decrease in cumulative metric tons of GHG emissions from the year 2025 through to 2030, projected reduction of 3,380 MT CO<sub>2</sub>e emissions.



Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

- Continued reduction in cumulative metric tons of GHG emissions extending from the year 2025 through to 2050, with projected figures 23,858 MT CO<sub>2</sub>e.

**2. Reductions in Co-Pollutant Emissions:**

- A potential reduction in the annual amount of criteria air pollutants (CAP) emissions by 2030, with an emphasis on quantifiable outcomes in low-income and disadvantaged communities. This includes detailed reporting frameworks to quantify emission reductions.

**3. Community Engagement Enhancement:**

- Enhanced level of community engagement, measured by an increase in initiatives and programs designed to engage organizations, residents of disadvantaged communities, and other stakeholders. This outcome aims to foster community-led environmental stewardship and participatory governance.

**4. Job Creation:**

- Creation of 26 high-quality, unionized jobs within the jurisdiction of the applicant and specifically within low-income and disadvantaged communities, as a result of the expanded public transportation services and related infrastructure improvements.

**B. Performance Measures and Plan**

To effectively gauge the success of the four project outcomes, comprehensive performance measures have been defined below:

**1. Reduction in Greenhouse Gas Emissions:** The collaborative efforts of the Orange County Office of Sustainability and Resilience and LYNX will focus on gathering and reporting performance measures for Express Route 301 through a variety of methods and tools. Semi-annually, LYNX will compile a comprehensive Progress Report, detailing critical data such as passenger numbers, fuel consumption, vehicle miles, revenue hours, route miles, passengers who selected the bus over personal or alternative vehicular transportation and operating costs. This data will enable the Orange County Office of Sustainability and Resilience project team to accurately quantify the reductions in greenhouse gases. The project team utilizes multiple tools to calculate emissions.

The ICLEI ClearPath tool is an emissions management software suite developed by ICLEI-USA and allows the calculation of greenhouse gas emissions for local government and community scales. Within the ICLEI ClearPath tool, there are multiple ClearPath modules for inventory capture, forecasting, action planning, and monitoring of emissions and emissions reduction scenarios. For this emissions reduction measure, there are two specific calculators being used from the Transportation & Mobile Sources Sector; **On Road Transportation and Emissions from Public Transit.**

For estimating ridership and services hours for the new route, LYNX used the TBEST (Transit Boardings Estimation and Simulation Tool) program to model estimated ridership for the proposed route. TBEST is a Transit Planning Software developed as a partnership between the Florida Department of Transportation, Service Edge Solutions, and the University of South Florida Center for Urban Transportation Research (CUTR). The tool uses transit data analytics to support Transit Service Planning and strategic transportation planning initiatives such as route optimization studies, mobility analysis, and transit development plans. The support data is pulled from Census/ACS data as well as parcel level land use GIS data and is updated annually. LYNX has also incorporated APC Stop-Level ridership numbers to further bolster the accuracy of the model for operations and performance analyses.

**2. Reduction in Co-Pollutant Emissions:** To assess and address the monitoring and reduction of Criteria Air Pollutants (CAPs) over the course of implementation, the County will utilize existing resources and partnerships to capture, assess, and report data. These resources provide the equipment and expertise

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

necessary for detailed analysis and with access to the data gathered about the route, service hours, miles traveled, and fuel usage, will be able to provide input to grant reports.

- The first of these resources is Orange County's Environmental Protection Division (EPD), responsible for the Ambient Air Monitoring Stations within the region. These stations monitor a mixture of CAPs including particulate matter and nitrogen dioxide. With two stations fully operational and two new stations currently coming on-line in 2024, including one in proximity to the new bus route, more criteria pollutant data will be available. Available air quality data will be reviewed to determine if it can be used to represent air quality in areas along the proposed bus route. If so, this information will be helpful for understanding the pre-intervention levels of various pollutants and for designing targeted monitoring strategies.
- Integration with the UCF STAIR Program: In collaboration with the University of Central Florida's Smart & Trustworthy Air Quality (STAIR) Program, Orange County will utilize Particulate Matter sensors, including those installed at strategic locations like Valencia State College, to gather detailed data on PM concentrations. This sensor, part of a broader network, aims to monitor particulate matter concentrations using advanced sensor technology. This specialized data will inform our understanding of the PM landscape and its responsiveness to our intervention. We will research and assess available tools to quantify and report on PM from CNG buses and passenger vehicles.
- Emissions Comparison and Analysis: Our adoption of buses equipped with low-emission NOx engines—producing 90% less NOx than EPA standards—provides a unique opportunity to study the impact on air quality. We will research and employ available analytical tools, emissions factors, and calculators to compare emissions from our fleet with those from traditional passenger vehicles, thereby estimating potential reductions.
- Exploratory Study on RNG/Biogas Use: The incorporation of RNG/biogas as potentially part of the fuel source for our buses presents an opportunity for further emission reductions. An exploratory study will be conducted to assess the feasibility and potential impact of this, utilizing analytical tools to estimate possible reductions in additional CAP and HAP emissions.

With the expertise of EPD scientists and the assessment of the available air quality monitoring efforts and data collected through these, assessment and reporting on CAPs and/or HAPs will be completed.

**3. Community Engagement Enhancement:** Community engagement efforts will be further supported by the LYNX Marketing Department through the distribution of flyers, social media campaigns, and informational sessions across the region. A key milestone in promoting Express Route 301 will be the launch of the Pine Hills Transfer Center, marking the commencement of this new express service. LYNX will actively engage with riders to identify ridership trends on the new route, using business cards with QR codes linked to surveys and leveraging social media platforms. This outreach aims to understand rider satisfaction, track the shift from personal vehicle use to public transit, and solicit input on service quality. Additionally, Orange County and LYNX will work with major employers and educational institutions along this route to help promote it to their employees and/or students.

**4. Job Creation:** An early action item for the LYNX team will be to advertise 26 new full-time unionized positions, initiating the hiring process in November 2024 to ensure staff readiness by January 2025. This aligns with the objective to meet the first EPA-required reporting milestone within six months.

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

For grant administration purposes, the project team is committed to utilizing these methodologies and data collection strategies to fulfill all EPA semi-annual reporting requirements and provide detailed final reports. These semi-annual reports will highlight technical progress, key accomplishments, milestones reached, and outline plans for the ensuing six months.

<b>Performance Measure</b>	<b>Year 1 (2025)</b>	<b>Year 2 (2026)</b>	<b>Year 3 (2027)</b>	<b>Year 4 (2028)</b>	<b>Year 5 (2029)</b>
Reduction in GHG Emissions (annually)	239	463	743	912	1024
Co-Pollutant Emissions	Research, evaluate, assess, and determine CAPs and/or HAPs expected to have direct emission changes. Report on applicable ones. Identify forecasted reductions based on ridership model.	Report on applicable CAP and HAP emission reductions compared to forecasted reductions.	Report on applicable CAP and HAP emission reductions compared to forecasted reductions.	Report on applicable CAP and HAP emission reductions compared to forecasted reductions.	Report on applicable CAP and HAP emission reductions compared to forecasted reductions.
Community Engagement; Surveys	2 survey campaigns; 1 every 6 months	2 survey campaigns; 1 every 6 months	2 survey campaigns; 1 every 6 months	2 survey campaigns; 1 every 6 months	2 survey campaigns; 1 every 6 months
Community Engagement: Promotion	<ul style="list-style-type: none"> <li>* 3 informational sessions</li> <li>* Number of attendees at transfer center ribbon cutting event.</li> <li>* Marketing campaign promoting new Pine Hills Transfer Center and new route. Report on reach, impressions, engagement, daily effective circulation (as applicable) and other key metrics.</li> </ul>	<ul style="list-style-type: none"> <li>* Promote route through Social Media with at least 12 posts and report on engagement with posts.</li> <li>* Review ridership and adjust promotional efforts as needed, expanding to additional platforms and media, if needed.</li> </ul>	<ul style="list-style-type: none"> <li>* Promote route through Social Media with at least 12 posts and report on engagement with posts.</li> <li>* Monitor ridership data and adjust, if needed.</li> </ul>	<ul style="list-style-type: none"> <li>* Promote route through Social Media with at least 12 posts and report on engagement with posts.</li> <li>* Monitor ridership data and adjust, if needed.</li> </ul>	<ul style="list-style-type: none"> <li>* Promote route through Social Media with at least 12 posts and report on engagement with posts.</li> <li>* Monitor ridership data and adjust, if needed.</li> </ul>
Job Creation	26	0	0	0	0

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

**C. Authorities, Implementation Timeline, and Milestones**

Orange County, Florida, through its Office of Sustainability & Resilience, is the principal applicant responsible for initiating and managing the project. The Central Florida Regional Transportation Authority, doing business as LYNX, will be tasked with acquiring the new buses and filling the newly created job positions. Additionally, LYNX will collaborate closely with the Office of Sustainability & Resilience to meticulously report on the project's greenhouse gas (GHG) emission reductions, ensuring precision and efficiency in their tracking and reporting.

**Clean Commute Orange County Timeline and Responsibilities:**

**October 2024: Grant Award Funding**

- Roles and Responsibilities: Orange County is responsible for overseeing the overall project management and ensuring compliance with grant requirements. LYNX will handle the operational aspects, including the procurement of buses and the launch of Express Route 301.
- Authority and Planning: Both parties possess the necessary authority to commence their respective tasks. Any required additional permissions or agreements will be sought immediately following the grant award announcement to avoid delays.
- Key Actions: Official public announcement; detailed project planning and scheduling meetings between Orange County and LYNX.

**November- December 2024: Execution of Grant Agreements and Project Kickoff**

- Roles and Responsibilities: Orange County will finalize and execute grant agreements. LYNX will begin the procurement of nine new buses and initiate recruitment for essential service positions. The marketing team will start community outreach efforts.
- Authority and Planning: LYNX will coordinate with bus manufacturers and HR department to ensure timely procurement and hiring. If additional approvals are required for bus procurement or job creation, plans will be in place to secure these by end of November 2024.
- Key Actions: Signing grant agreements; launching procurement and hiring processes; initiating marketing campaign.

**January 2025: Launch of Express Route 301**

- Roles and Responsibilities: LYNX oversees the operational launch of the new express route, ensuring buses and staff are ready. Orange County supports with public relations. The Pine Hills community is engaged to maximize initial ridership.
- Authority and Planning: LYNX has full operational authority to launch the service. Any infrastructural enhancements at the Pine Hills Transfer Center required for the route's success will be managed by LYNX.
- Key Actions: Commencement of Express Route 301; monitoring initial service uptake and resolving any issues.

**February 2025: Initiation of GHG Emission Reduction Reporting**

- Roles and Responsibilities: LYNX is tasked with collecting operational data necessary to monitor GHG emission reductions. Orange County is responsible for compiling this data into comprehensive environmental impact reports.
- Authority and Planning: LYNX will establish a reporting framework, if not already in place, to measure and report operational data accurately. Orange County will ensure alignment with environmental reporting standards and requirements.
- Key Actions: Begin GHG emission reduction reports; analyze initial data for insights into environmental impact.

**Throughout the Grant Period**

- Continuous Engagement and Monitoring: Both Orange County and LYNX will engage in ongoing monitoring of project progress and adapt strategies as necessary to meet objectives. Quarterly

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

ridership counts on Express Route 301 quantifying route performance and tracking alignment with 5-year ridership projections, will be provided by LYNX for analysis and incorporation into six-month reports. Additionally, ride-along surveys will be conducted every six months to assist in determining the number of vehicles left at home in favor of the new route, which is critical data for assessing GHG emissions reductions. Marketing efforts such as flyers at local community and educational centers, Downtown Transfer Center and Pine Hills Transfer Center, along with social media blasts, and Information Sessions will be conducted by the LYNX Marketing Team, making adjustments based on quarterly performance and ridership data. Materials are translated into Spanish and Haitian Creole as needed.

- **Responsibility for Success:** The partnership between Orange County and LYNX is pivotal. While LYNX manages day-to-day operations and monitoring, Orange County provides the strategic framework and support to ensure the project's alignment with broader environmental and community goals. The unity of the teams will allow for accurate and timely completion of all required semi-annual and final reports.

### **Project Milestones:**

#### **Milestone 1: Grant Award Acknowledgment**

- **October 2024:** Officially announce the award of the grant. This marks a pivotal moment for the project as it secures the necessary funding and sets the stage for the forthcoming activities.

#### **Milestone 2: Formalization and Initiation**

- **November- December 2024:** Finalize and execute the grant award agreement. This step solidifies the financial backing and contractual obligations, enabling the project to move forward. EPA will establish the schedule for submitting reports during this step.
- **Begin the procurement process** for nine new buses that are essential for the operational needs of Express Route 301.
- **Initiate the recruitment process** to fill new job positions, ensuring the route has sufficient personnel for smooth operations.
- **Launch a marketing campaign** to raise awareness within the community about the new Express Route 301, emphasizing its benefits and service offerings.

#### **Milestone 3: Service Commencement**

- **January 2025:** Commence operations of Express Route 301 from the newly established Pine Hill Transfer Center. This milestone is a major deliverable of the project, showcasing the transition from planning to execution.

#### **Milestone 4: Performance Tracking and Reporting**

- **January 2025- June 2025:** Assess monthly ridership information from LYNX, making appropriate adjustments to community engagement and promotional efforts to develop ridership to meet yearly targets. Quarterly ridership counts on Express Route 301 quantifying route performance and tracking alignment with 5-year ridership projections, will be provided by LYNX for analysis and incorporation into six-month reports. Additionally, ride-along surveys will be conducted every six months to assist in determining the number of vehicles left at home in favor of the new route, which is critical data for assessing GHG emissions reductions.
- **September 2025 - September 2029:** Start quarterly assessments of ridership reports on the reduction of GHG emissions achieved through the operation of Express Route 301. Utilizing this data, team members will develop internal forecasts for future quarterly ridership and quantify GHG emissions savings. These analyses will inform marketing strategies for the upcoming quarter, making adjustments to improve community engagement as needed. Leveraging the gathered data, the project team will prepare and submit semiannual reports to the Environmental

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

Protection Agency (EPA). All reporting will adhere to the EPA's grant administration guidelines and will be submitted punctually throughout the five-year grant duration.

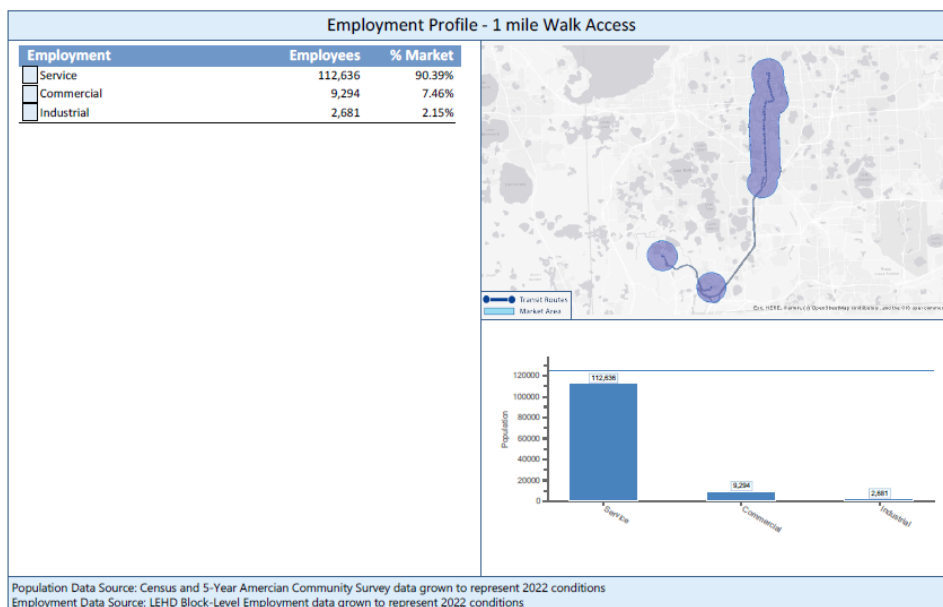
- December 2029: Submit to EPA a detailed final report of Clean Commute Orange County project accomplishments, outputs, outcomes, and expenditures. The report will summarize the GHG reduction measures implemented, total GHG emissions and other pollutants reduced, and a discussion of the problems, successes, and lessons learned.

### **Section 4: Low-Income and Disadvantaged Communities**

#### **A. Community Benefits**

The proposed greenhouse gas (GHG) reduction measures, principally through the implementation of Express Route 301 is anticipated to yield significant benefits for the low-income and disadvantaged communities within Orange County, Florida. By enhancing the frequency of public transport connections between residential areas, major employment hubs, and educational institutions, the measures directly support increased accessibility and reduce reliance on personal vehicles.

The increase in service frequency will facilitate employment opportunities for residents in these communities by providing reliable transportation to job-rich areas like Universal Studios and Walt Disney World. In the 1-mile radius of the proposed Express Route 301 the employment industries of the community are broken up into the following categories (90.39%) service industry, (7.46%) commercial industry, and (2.15%) industrial (view *Figure 2 Market Share Report*). Currently, residents traveling from Pine Hills to Walt Disney World and Disney Springs face a cumbersome journey requiring bus transfers and taking over two hours during peak times. The implementation of Express Route 301 promises to revolutionize this experience by offering a direct service that reduces travel time to just 65 minutes. This development has the potential to significantly impact the large number of employees who rely on public transit for their commute to theme park jobs. Disney is one of the largest employers in the state of Florida and is in fact the **largest** single-site employer in the United States thanks to its Orange County-based Walt Disney World Resort. Thus, reducing the commute time for workers by half will have a significant impact on the quality of life for members of the communities that will be served by this route. Moreover, the convenience and reliability offered by the express route are expected to appeal to individuals who typically use personal gas vehicles, encouraging a shift towards public transit.



*Figure 2 Market Share Report*

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

Valencia State College students, faculty, and visitors will enjoy significantly improved access thanks to the proposed Express Route 301, facilitating educational progress and enhancing opportunities for long-term socioeconomic growth. Traditionally, the journey from Pine Hills to the Valencia College campus by public transit has been a lengthy two-hour trek, largely due to a detour through downtown to the east. The introduction of Express Route 301, connecting through the Pine Hills Transfer Center, is set to reduce this commute to an estimated 30 minutes, streamlining access to the campus considerably.

Additionally, the community will benefit from improved access to stores and services since Pine Hills is a food desert. Express Route 301 will provide access to several major grocery stores along its route. Including a Super Wal-Mart.

The community will directly benefit from the proposed GHG reduction initiatives, notably through the creation of 26 high-quality, unionized job opportunities at LYNX. This initiative meets the increasing demand for stable, full-time employment with benefits, particularly within local Low-Income, Disadvantaged Communities (LIDAC). Specifically, the Clean Commute Orange County initiative will introduce positions for 23 Bus Operators, 2 Mechanics, and 1 Service Island Attendant.

Furthermore, reducing reliance on personal vehicles is anticipated to alleviate traffic congestion and decrease air pollution, which often disproportionately impacts low-income and disadvantaged groups. This enhancement of air quality is expected to confer significant health benefits to the residents, especially those within the LIDAC communities, contributing to a healthier living environment.

The project targets several low-income and disadvantaged communities identified through the Climate and Economic Justice Screening Tool (CEJST), (refer to page 2, *Figure 1*). The CEJST Census tract IDs that may be affected by the GHG reduction measures include, but are not limited to, the following areas proximal to the proposed Pine Hills Transfer Center and along the route of the new Express Service 301:

- CEJST Census Tract ID Along Route 301: 120, 121, 123.07, 124.03, 146.01, 146.06, 146.08, 146.09, 147.01, 147.02, 148.12
- Low Income and Disadvantaged Community (LIDAC) CEJST Census Tract ID: 104, 105, 116, 117.01, 117.02, 120, 121, 122.01, 122.02, 123.04, 123.05, 123.07, 124.02, 124.03, 142, 143.01, 143.02, 145.02, 145.03, 145.04, 146.01, 146.05, 146.06, 146.08, 146.09, 147.01, 147.02, 148.05, 148.12, 149.04, 149.08, 149.09, 150.01, 150.02, 150.03, 169.02, 169.03, 169.04, 169.06, 169.07, 170.04, 170.06, 170.08, 170.11, 173, 181, 183, 185, 187, 189

These IDs correspond to regions where residents are expected to reap the benefits of the GHG reduction strategies due to their proximity to the new service routes and their classification as economically vulnerable populations.

The following strategy has been developed to perform a thorough quantitative analysis of community benefits and co-pollutant emission reductions: Initially, we will establish a baseline of current GHG levels and a baseline for applicable CAPs, and/or HAPs, for which data is available. The strategy for identifying, assessing, quantifying, and reporting on CAPs and/or HAPs is outlined in section 3b. Performance Measures and Plan, number 2. **Reduction in Co-Pollutant Emissions** above. Following this, we will set up a system for continuous monitoring to track emission changes once Express Route 301 is operational. The data collected through this process will be rigorously analyzed to accurately quantify reductions in GHG emissions as well as CAPs and/or HAPs.

A transparent reporting framework will be established to communicate the methodology, results, and broader impacts of the analysis, ensuring clarity and accountability. Periodic reviews will also be integral to our approach, enabling us to refine our strategies and ensure the project delivers maximal benefit to the community.

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

This analytical approach is designed to yield a comprehensive, data-backed perspective on the benefits of the GHG reduction measures introduced, focusing on the enhanced environmental health and quality of life for the populations served by the new Express Route 301.

### **B. Community Engagement**

Due to the upcoming opening of the much-anticipated Pine Hills Transfer Center, project partner LYNX has actively engaged with the community through a series of workshops and public meetings, laying the groundwork for a deep understanding of the transportation needs and concerns prevalent within the area. These gatherings revealed a strong community desire for more reliable and frequent public transportation services, aiming to enhance access to jobs and educational opportunities. To gather a broad spectrum of insights, LYNX distributed surveys and feedback forms in both digital and paper formats, with the feedback received playing a crucial role in the development of the Express Route 301 service plan, ensuring it met the community's transportation priorities. As for ongoing community engagement, LYNX will continue to distribute surveys to its riders to identify ridership trends on the new Express Route 301.

Furthermore, LYNX engaged in meaningful collaborations with local organizations, such as the Pine Hills Community Council (Letter of Support attached) and Pine Hills Neighborhood Improvement District, fostering a dialogue that emphasized community needs. This cooperative approach extended to the design and planning phases, especially evident in the development of the Pine Hills Transfer Center, where stakeholder input influenced both its functionality and distinctive aesthetic features, including its notable wave roof design.

LYNX is dedicated to maintaining transparency, providing detailed updates on project developments and the effects of GHG emissions, and affirming the community's role as a key stakeholder for the duration of the project. LYNX will conduct at least three Information Sessions across Orange, Osceola, and Seminole Counties, aiming to keep the regional community abreast of service updates. These sessions, typically lasting an hour, are designed to disseminate important route changes and field community inquiries, ensuring public engagement and transparency.

Throughout the project, the LYNX Marketing team will leverage social media to promote the route, encouraging rider engagement and gathering feedback. Outreach initiatives will be conducted inclusively, provided in multiple languages and accessible formats, guaranteeing that all community members have the opportunity to engage fully with the project. LYNX will also conduct surveys of riders collecting feedback on the route to ensure it is meeting the needs of the communities it is serving. Through these efforts, LYNX demonstrates its unwavering dedication to fostering an inclusive, responsive, and sustainable transportation network that serves the diverse needs of Orange County's communities.

This holistic approach to community engagement underscores Orange County and LYNX's commitment to forming a lasting partnership with the region's low-income and disadvantaged communities. By prioritizing these communities' needs and voices, the project aims not only for successful implementation but also to leave a lasting, positive legacy. LYNX's dedication to building a transportation system that is inclusive and responsive to the community's needs highlights its broader goal of fostering a more equitable and sustainable transportation network in Orange County.

### **Section 5: Job Quality**

As part of Orange County's unwavering commitment to delivering first-rate public transportation services, particularly through the expansion of Express Route 301, we emphasize the importance of job quality, workforce diversity, and adherence to "high road" labor practices. The Clean Commute Orange County Express Route 301 initiative, in collaboration with LYNX, is set to generate approximately 26 high-quality, unionized job opportunities. These positions are vital for enhancing connectivity between our community and major centers of employment and education, such as Universal Studios, Walt Disney



## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

World, and Valencia State College, with 23 roles dedicated to bus operators. Additionally, the integration of nine new Compressed Natural Gas (CNG) buses into our fleet will necessitate the recruitment of two skilled mechanics, essential for maintaining the safety and operational integrity of these vehicles. A Service Island Attendant will also be added to our team to ensure efficient fleet management and service operation. These new roles underscore Orange County's dedication to fostering a safe, expert, and reliable work environment in line with rigorous labor standards.

We are proud to support LYNX in offering an exceptional benefits package to their employees, reinforcing the value we place on our workforce. This package guarantees full-time employment starting at an hourly rate of \$22.53, underscoring our commitment to fair compensation. To further support employees' well-being and balance between work and life, comprehensive health insurance, life insurance, and significant paid time off for vacations, holidays, and sick leave are provided at no cost to the employee.

Moreover, LYNX enriches its employment offerings with access to wellness centers, matched retirement contributions (401A), 100% coverage of Employee OnlyHealth Insurance, dental and vision insurance, and options for both short-term and long-term disability insurance. Reflecting a commitment to employee growth and development, eligible team members will receive annual salary increases as per the union contract and a \$1,500 tuition reimbursement for further education. Flexible Spending Accounts (FSA) are also available to help manage healthcare and dependent care expenses.

LYNX's commitment to promoting sustainable commuting practices and a health-conscious workplace is evidenced by providing all employees with free access to the bus system and two exclusive on-site wellness centers. This comprehensive approach to employee benefits aligns with the Good Jobs Principles set forth by the U.S. Department of Labor and Department of Commerce, ensuring that CPRG grant funds contribute to creating high-quality jobs that meet exceptional labor standards—a key component in the successful realization of the Clean Commute Orange County project.

Clean Commute Orange County is dedicated to creating quality, unionized positions offering competitive wages, extensive training, and opportunities for professional growth. The LYNX positions are integral to achieving the GHG reduction goals of the project and building a workforce that reflects the diversity of our community. The employment landscape within a one-mile radius of the route's stops, detailed in the market share report, highlights our strategic focus on workforce development tailored to meet the specific needs of regional transit.

### **Section 6: Programmatic Capability and Past Performance**

#### **A. Past Performance and Reporting**

**(1) Project title:** Coronavirus State and Local Fiscal Recovery Funds – American Rescue Plan Act (ARPA);  
Period: 03/03/2021 – 12/31/2026

- Award number: SLT-1328
- Federal Assistance Listing number: U. S. Department of Treasury – 21.027
- 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 from Organization: SLFRF@treasury.gov.

Orange County is currently in the process of administering this grant. To effectively manage the grant thus far, they have strategically allocated the awarded funds into focused categories that address the pressing needs of residents, families, and neighborhoods most impacted by the COVID-19 public health emergency. Each category encompasses various programs and projects overseen by different departments within the county.

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

The Office of Management and Budget (OMB) has been instrumental in tracking and closely monitoring the progress of projects within each department to ensure that funds are utilized in strict accordance with Treasury's compliance and reporting guidelines. Regular meetings between OMB and county staff are held to provide updates on project statuses and to promptly address any issues or concerns that may arise. This collaborative approach ensures transparency and accountability in the management of the grant funds.

### **Reporting:**

The county submits quarterly project and expenditure reports to Treasury. The county diligently prioritizes timely and comprehensive reporting on progress towards achieving the expected outputs and outcomes that they've set forth for each program and every project that was approved by the County Administration. The reporting process involves the collection and analysis of relevant data and metrics to measure our performance against predetermined objectives. The team has implemented a tracking system to monitor the implementation of various programs and projects funded through the agreements. This allows the county to assess our progress, identify any challenges or obstacles encountered, and make necessary adjustments to ensure that we remain on track to achieve our goals.

Additionally, we have been proactive in addressing any issues or concerns that may arise during the reporting period. This includes regular communication with project managers and county administration to provide updates on our progress and to solicit feedback on our performance. By maintaining open lines of communication and fostering collaboration among all parties involved, we have been able to ensure that reporting on progress towards achieving the expected outputs and outcomes is both adequate and timely.

### **(2) Project title:** Air Pollution Control Program Support (Section 105)

- Assistance Agreement number: A - 95450420
- Federal agency and Assistance Listing number: Environmental Protection Agency 66.001
- The agreement is to provide funding assistance to Orange County in its efforts to implement air pollution control programs throughout Orange County, Florida including continuing development and implementation of stationary source regulations; continuing promulgation and update of enhanced mobile source regulations; improvement of emission inventories for modeling simulations; and to operate a monitoring network that collects air quality data. These activities are to improve and maintain the public's air quality.
- Contact from Organization:  
Maya Odeh-Adimah  
61 Forsyth Street SW  
Atlanta, GA 30303-8960  
Email: OdehAdimah.Maya@epa.gov  
Phone: 404-562-8415

AQM is a fully delegated program from the Florida Department of Environmental Protection (FDEP) with 15 full time staff that is funded entirely by State/Federal grants, permitting/asbestos fees, and enforcement penalties. The AQM staff performs all agreement requirements and provides documentation of metrics on an annual basis. The AQM staff coordinates with FDEP's Division of Air Resource Management and multiple Orange County departments/divisions/offices that assist with facilitation of the agreement.

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

**Reporting:**

AQM submits annually a Section 105 Grant Summary Report, Certification of Competency and enters annually the fiscal year commitments into the Air Planning Agreement system. All interim and/or final reports under the agreement were submitted and accepted in good standing since AQM began receiving the EPA 105 Section awards. Progress has been made in compliance with the grant agreement.

**(3) Project title:** Funding Assistance for Title V Activities at Approved at Local Programs

- Assistance Agreement number: TV028
- Federal or non-federal funding agency and assistance listing number: Florida Department of Environmental Protection.
- The agreement funds air permitting, engineering review, and compliance inspections associated with Title V facilities located in Orange County on FDEP's behalf.
- Contact from Organization:  
Marnie Brynes, FCCM  
Division of Air Resource Management, Office of Business Planning  
Office: 850-717-9029  
[Marnie.Brynes@FloridaDEP.gov](mailto:Marnie.Brynes@FloridaDEP.gov)

The AQM Permitting and Compliance/Enforcement staff performs all agreement requirements and provides documentation of metrics via entry of data into specified databases. AQM also submits quarterly journal vouchers of completed tasks to FDEP. The AQM staff coordinates with FDEP's Division of Air Resource Management and multiple Orange County departments/divisions/offices that assist with facilitation of the agreement.

**Reporting:**

AQM also submits quarterly journal vouchers (JV) of completed tasks to FDEP. The JVs include staff work hours for compliance, enforcement, permitting, and administration of the Title V agreement with the contract allotments and budget. The outputs and outcomes are monitored and assessed by FDEP monthly via database entries, monthly teleconferences and occasional AQM audits. Progress has been made in compliance with the grant agreement.

**(4) Project title:** Orlo Vista Flood Mitigation Project Phase II – Construction

- Assistance Agreement number: FEMA-DR-4337-23-A
- Federal or non-federal funding agency and assistance listing number: FEMA Hazard Mitigation Grant Program (HMGP) Contract Number H0816
- The HMGP grant agreement solidifies FEMA's commitment to be financially responsible for 75% of the overall project costs (construction phase) for the implementation of the proposed subdivision-wide flood mitigation improvements.
- Contact from Organization:  
Suzi Boydston  
Project Manager  
Bureau of Mitigation  
Florida Division of Emergency Management (FDEM)  
2555 Shumard Oak Blvd.  
Tallahassee, FL 32399-2100  
Telephone: 850-328-3332  
Email: [Suzi.Boydston@em.myflorida.com](mailto:Suzi.Boydston@em.myflorida.com)

## Clean Commute Orange County: The Express Route to Lower GHGs Work Plan

The project is currently under construction. The progress of the project is currently at 65% complete. Orange County has been effectively coordinating with the FDEM Project Manager throughout the duration of the project, which has proven invaluable for the success of this important flood mitigation project. The County has processed an extension request, and a budget increase request, both of which have been granted by FEMA. This project has also been inspected by FEMA representatives, who were very pleased with the progress achieved at the time of their visit. Successful completion is expected in Spring 2025.

### **Reporting:**

Throughout the construction phase, quarterly reports have been provided to FDEM to report the progress to date as well as any concerns with the project schedule, budget and/or scope of work. Final deliverables will be submitted to FDEM upon completion of the construction phase. The project has been progressing steadily. If a construction delay is identified, Orange County would promptly inform FDEM of such in order to keep the State's project manager aware of a potential need for a grant extension request, if needed.

### **C. Staff Expertise**

The applicant, Orange County, Florida has a rich history of proactive governance, community engagement, and sustainable development, serving as the administrative backbone of one of the most populous and dynamic regions in the state. Since 1990, Orange County has operated as a "strong mayor" form of charter government—a reflection of the County's urban character and driving economy. Under this structure, the Orange County Mayor serves as Chair of the Board of County Commissioners. Members of the Orange County Board of Commissioners are independently elected from six districts, and serve in a legislative capacity. The county operates with more than 8,000 employees and a \$4.4 billion budget.

Since its inception in 1972, the county's regional transit provider, LYNX, has emerged as the linchpin of public transportation serving across 2,500 square miles and over 2.3 million people in Orange, Osceola, and Seminole counties. Known for its dedication to improving accessibility and mobility, LYNX oversees a comprehensive array of transit services, including a broad network of bus routes, paratransit services, and forward-thinking solutions such as vanpools and community shuttles.

Together, the Orange County government and LYNX possess extensive experience and expertise in developing and executing transportation initiatives, marking them as uniquely qualified to lead the Clean Commute Orange County initiative. Their longstanding partnership, exceeding five decades, including having Orange County Mayor serve on the Board of Directors for LYNX, has yielded significant advancements in public transportation infrastructure, contributing to congestion reduction and regional economic enhancement.

The strategic methodologies employed by Orange County to address transportation challenges, evidenced by widespread community engagement and meticulous planning, in conjunction with LYNX's operational proficiency in fleet and route management, provide a robust foundation for the effective implementation of Clean Commute Orange County. This initiative is set to leverage their collective expertise in project administration, community collaboration, and the deployment of eco-friendly transit solutions, positioning it as a pioneering model for slashing GHG emissions and elevating the standard of public transportation.

Over the grant lifetime, designated staff from the Orange County Office of Sustainability & Resilience and LYNX will be entrusted with specific roles and responsibilities. Presented below is an overview of the Clean Commute Orange County team, detailing each member's qualifications, expertise, and respective roles within the project.

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

**Orange County Office of Sustainability & Resilience Team Members:**

- **Byron W. Brooks, A.I.C.P., Authorized Representative:** As the current Orange County Administrator, Mr. Brooks, will serve as the project's Authorized Representative, bringing over 32 years of experience from the public sector. Notably, he has spent thirteen years as the Chief Administrative Officer for the City of Orlando, where he managed the operations of an organization comprising 3,600 employees and an operating budget of \$1.3 billion. His extensive background also includes roles such as the Deputy County Administrator for Orange County, where he contributed 14 years of service, and the Executive Director of LYNX. Mr. Brooks' academic credentials include a Master's degree from Clemson University and a Bachelor's degree from Furman University.
- **Carrie Black, Project Manager:** Carrie Black has been appointed Project Manager of Clean Commute Orange County, where her primary responsibilities as lead of the project will include coordinating with the LYNX team to ensure that all project milestones adhere to the established timeline and leading the grant administration in compliance with 2 CFR 200. In her current role as the Chief Sustainability & Resilience Officer for Orange County, the fifth most populous county in Florida, Carrie leads the sustainability efforts for the County. She is responsible for the execution of the county's Sustainability Operations & Resilience Action Plan, covering over 12 million square feet of county operations. Her leadership aims to source 100% of the county operations' electricity load from clean, renewable sources by 2035 and to cut greenhouse gas emissions by 30% by 2030. These operations include overseeing the nation's third-largest convention center. Carrie's qualifications are robust, holding a Green Globes Professional certification, a Bachelor's degree in psychology with a specialization in behavior change management from Washington University in St. Louis, and a Master of Science in Environmental Planning and Management from Johns Hopkins University.
- **Lori Forsman, Climate Lead:** Lori Forsman will take on the role of Climate Lead, leveraging her extensive experience in sustainability to oversee the accurate documentation of GHG emission reductions and the methodologies and assumptions used in reporting. As the Sustainability Programs Manager, she plays a crucial role in identifying and executing the sustainability and resilience goals, objectives, and policies set forth for the local county government. Working with appropriate LYNX staff, she leads efforts to monitor metrics that gauge progress, identify trends, and highlight areas needing improvement. Her responsibilities span both internal operations and broader community initiatives, fostering collaboration with other departments, municipalities, non-profits, and community groups. Additionally, Mrs. Forsman's involvement in completing the county government and community GHG inventories, as well as her leadership in regional GHG inventory development, are instrumental in the formation of local and regional Climate Action Planning.

**LYNX Team Members:**

- **James Boyle, Interim Chief Planning and Development Officer:** James D. Boyle is a seasoned transit and transportation planning professional with nearly two decades of experience. This experience lands him securely in a role to oversee his staff in strategic planning and project implementation for Clean Commute Orange County. Boyle's expertise spans a wide range of responsibilities, from managing highly skilled staff and coordinating long and short-range planning activities at the Central Florida Regional Transportation Authority (LYNX) to leading planning efforts at the Sacramento Regional Transit District (SacRT), where he managed strategic plans and the implementation of innovative services like "SmaRT Ride" microtransit. His tenure in public service also includes significant roles at the Alaska Department of Transportation and Public

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

Facilities, where he managed statewide planning efforts and coordinated updates to crucial transportation and infrastructure plans. Boyle's educational background includes a Bachelor of Science in International Affairs and a Master of Science in Urban and Regional Planning, both from Florida State University.

- **Myles O'Keefe, Manager of Strategic Planning:** Myles O'Keefe currently serves as the Manager of Strategic Planning at the Central Florida Regional Transportation Authority (LYNX) in Orlando, Florida. O'Keefe has accumulated over 11 years of experience at LYNX, reflecting a deep commitment to transportation planning and development. His tenure at LYNX began in January 2013, initially holding the position of Human Services Mobility Transportation Coordinator for over two years, followed by a promotion to Senior Planner, a role he held for nearly four years before stepping into his current position in October 2018. He is an alumnus of the University of Florida, where he earned a Master of Urban and Regional Planning with a specialization in Transportation and Land Use Planning.
- **Charles Abbatantuono, Senior Planner:** Charles Abbatantuono, an AICP-certified Urban Planner with over five years of experience, including but not limited to ArcGIS suite, land development code audits, comprehensive planning, and land conservation strategies. Currently, he serves as a Senior Planner at LYNX, focusing on senior-level transit planning and project management. He will work with the other members of the Planning Department on strategic planning and reporting on the implementation of Clean Commute Orange County. Previously, he worked as a Planner I at East Central Florida RPC, and as a Resilience Modeling GIS Research Assistant at Stetson University. Charles holds an MS in Urban and Regional Planning from the University of Central Florida and a dual BS and BA from Stetson University.
- **Bruce Detweiler, Manager of Service Planning:** Bruce J. Detweiler boasts extensive experience in public transit operations and planning, currently leading as Manager of Service Planning at the Central Florida Regional Transportation Authority (LYNX). With a rich background that includes managing bus service operations in Appleton, Wisconsin, and overseeing daily vehicle operations at the Chicago Transit Authority, Detweiler excels in route management, staff training, and service implementation. His expertise spans across management, customer service, and the application of planning tools like Trapeze and Remix. A Bachelor of Arts in Business Management from Northeastern Illinois University complements his professional accomplishments, highlighting his capability to navigate and enhance public transit systems effectively.
- **Maurice Jones, Director of Procurement:** Maurice A. Jones is a highly skilled and analytical procurement professional with over twelve years of experience specializing in government contracts, procurement, and process improvement projects. Currently holding the position of Manager of Procurement at the Central Florida Regional Transportation Authority since July 2019, Jones is responsible for overseeing RFQs, RFPs, IFBs, and the award of procurement contracts, ensuring compliance with federal, state, and local regulations. Prior to this, he served as the Procurement Manager at Palm Tran Inc., where he managed the development and administration of procurement policies and programs. His experience also includes roles as Sr. Contracts and Project Manager at Cobb County Department of Transportation/Transit Division and Procurement and Contracts Manager at Georgia Regional Transportation Authority. He holds an Associate of Arts in Business Administration from American InterContinental University and is pursuing a Bachelor of Applied Science in Business Administration at Valencia College.
- **Elvis Dovalles, Director of Maintenance:** Elvis Dovalles is a seasoned transit professional with twenty years of extensive experience in all facets of transit bus maintenance operations. Currently serving as the Maintenance Training Supervisor at LYNX/CFRTA in Orlando, Florida, since 2003, Dovalles has a proven track record in developing comprehensive technical training programs for vehicle systems and overseeing the implementation of asset management systems. His

Clean Commute Orange County: The Express Route to Lower GHGs  
Work Plan

achievements include collaborating in the development of a Technician Orientation Program (TOP) for new hires and working with FDOT and the Center for Urban Transportation Research on training programs. Prior to his current role, he was a Maintenance Technician Class A with LYNX/CFRTA, where he performed all aspects of basic and advanced transit bus maintenance from 1994 to 2003. Dovalles holds various certifications and OEM training certificates, underscoring his expertise in vehicle systems diagnosis, testing, and repair.

- **Rey Quinones, Director of Transportation:** Rey Quiñones is a seasoned professional in the transportation industry, currently the Director of Transportation position LYNX. With an extensive background starting from January 1990, Quiñones has progressed from a Bus Driver to Chief Supervisor/Superintendent of Transportation at LYNX. In regards to Clean Commute Orange County, Quiñones will work with the team overseeing operations and implementation. Quiñones has also played a vital role in emergency support functions and labor management meetings, bringing a wealth of experience in managing daily operations and emergencies, coaching and counseling, and hiring Transportation Supervisors. Quiñones is bilingual, fluent in both English and Spanish, and possesses a strong foundation in computer skills, underpinned by education in general computer courses and a GED/High School Diploma.
- **Jake Russell, Planning Data Analyst:** Currently serving as a Planning Data Analyst for the Central Florida Regional Transportation Authority (LYNX) since July 2022, Russell is the lead contact for the LYNX National Transit Database annual reporting, ensuring the timeliness and accuracy of various service metric reports. Russell will work closely with Lori Forsman, ensuring all reduction data is accurately reported and submitted. Before joining LYNX, he was a GIS Technician I at CHA Consulting in Indianapolis, IN, where he supported client needs in GIS and asset management, particularly for stormwater and wastewater systems. Jake graduated from Ball State University in May 2020 with a Bachelor of Science in Geography, serving as Vice President of Scholarship and Accreditation for Phi Sigma Kappa, earning a spot on the Dean's List at Ball State University in Fall 2019, and receiving the CHA Excellence Award in 2022.