Priority Climate Action Plan

for Southeastern Louisiana (New Orleans—Metairie MSA)

March 2024

Demographic Data Citation: Unless otherwise noted, Data compiled from the American Community Survey (ACS) 5 Year Summary File (2017 – 2021) published December 2022 by the US Department of Commerce, Economics and Statistics Administration, US Census Bureau. Data received in text format, and joined to spatial geography files by the New Orleans Regional Planning Commission (RPC). Specific tabular data relating to RPC activities formatted for mapping and analytical purposes. For further information please contact RPC, Lynn Dupont, GIS Manager.

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List of Acronyms

ACS	American Community Survey
CCAP	Comprehensive Climate Action Plan
CEJST	Climate and Economic Justice Screening Tool
CIRA	Climate Change Impacts and Risk Analysis
CO_2E	Carbon Dioxide Equivalent
CPRG	Climate Pollution Reduction Grant
EJScreen	Environmental Justice Screening Tool
EPA	Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
LADOTD	Louisiana Department of Transportation and Development
LGGIT	Local Greenhouse Gas Inventory Tool
LIDAC	Low Income and Disadvantaged Community
LPSC	Louisiana Public Service Commission
MMT	Million Metric Tons
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MT	Metric Tons
PAT	Project Advisory Team
PCAP	Priority Climate Action Plan
RPC	Regional Planning Commission
SELA	Southeast Louisiana
SOV	Single Occupant Vehicle
TDM	Travel Demand Management
TSMO	Transportation Systems Management and Operations
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled

Executive Summary

Executive Summary

The Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, and Tangipahoa Parishes (RPC) has produced this Priority Climate Action Plan (PCAP) to support future investment in policies, practices, and technologies that reduce greenhouse gas (GHG) pollution and other harmful pollutant emissions across the region's communities.

Overview of the Climate Pollution Reduction Grant Program

Across the country, cities, states and regions alike have ramped up their efforts to reduce GHGs in order to protect human health, the environment, and slow down human-caused climate change. To support these efforts, the federal government has made funding available to communities through the Inflation Reduction Act, including the Climate Pollution Reduction Grant (CPRG) Program administered by the Environmental Protection Agency (EPA).

The CPRG program provided non-competitive planning grants to states, regions, tribes, and territories to fund climate action plans. The RPC accepted this grant to develop plans for a region of nine parishes in southeast Louisiana (SELA): Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany, and Tangipahoa. The State of Louisiana also accepted a state planning grant. Over the next four years the RPC will complete the following deliverables as part of the CPRG program:

1. **Priority Climate Action Plan (this document):** A preliminary assessment of regional GHG emissions, community impacts, and high priority measures for reducing GHGs in the near term. The PCAP must be complete by March 1, 2024.

2. **Comprehensive Climate Action Plan (CCAP):** A more thorough review of emissions, including projections and targets, followed by detailed analyses of community impacts and long-term, sustainable strategies for reducing GHGs. The CCAP is due in September 2025.

3. **Status Report:** An assessment of climate action achievements to date, updates to CCAP elements, and recommendations for next steps. The Status Report will be completed at the end of the grant period in August 2027.

An additional $4.6 million in competitive CPRG grants will be available in 2024 to implement GHG reduction measures. To be eligible for the implementation grant funding, potential emission reduction measures must be listed in this PCAP, or the State's PCAP.

PCAP Elements

This PCAP includes the following elements:

1. **Analysis of Low Income and Disadvantaged Communities (LIDACs):** Identification of communities throughout the region meeting specified criteria to be described as low income or disadvantaged.
2. **GHG Inventory:** An analysis of GHG emissions sources across the region, with estimates of total emissions by economic sector.
3. **Priority GHG Reduction Measures:** Potential strategies and actions that may be implemented to reduce GHGs in the near term.

Analysis of Low Income and Disadvantaged Communities

Certain communities are more vulnerable to the impacts of climate change because of longstanding socioeconomic inequities, health and environmental disparities, systemic discrimination, and years of underinvestment. In pursuing climate action, there are opportunities to mitigate the risks these communities face and lessen their burdens through policy design. The first step is identifying these communities. The White House Council on Environmental Quality developed the Climate and Economic Justice Screening Tool (CEJST) using several indicators of vulnerability and environmental burden to help policy makers identify where disadvantaged populations and communities are located. Using the CEJST tool, 215 of 425 census tracts within the nine-parish region are identified as "disadvantaged." There are approximately 642,062 people living in these disadvantaged tracts which represent 46% of the total population in the nine-parish region.

The EPA's Environmental Justice Screening and Mapping Tool (EJScreen), a second disadvantaged community identification tool, combines environmental and socioeconomic indicators to pinpoint communities as potential candidates for additional consideration or engagement in policymaking. In addition to the communities identified as disadvantaged by CEJST, there are approximately 135,364 more people living within these areas considered more vulnerable to climate-related impacts and disasters.

The PCAP's Priority GHG Reduction Measures section identifies the potential benefits that may accrue to LIDACs through implementation of measures within climate action plans.

GHG Inventory

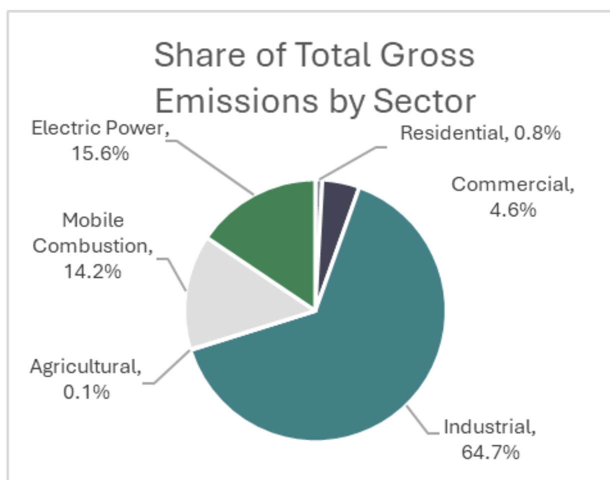
The regional GHG inventory surveys and estimates GHG emissions by activity type and economic sector. This analysis is the first GHG inventory completed specifically for the southeast Louisiana region. The results provide valuable insight into the region's major sources of GHG emissions, which will be used to guide planning efforts and policy development.

RPC staff developed the inventory using the EPA's Local Greenhouse Gas Inventory Tool (LGGIT) and a series of input data from a variety of state and federal sources. The inventory uses 2019 emissions in its calculations. That year was selected as a baseline for comparison because (1) it is the year in which the greatest amount of data is available, and (2) it was the last full year prior to the COVID-19 pandemic, thereby avoiding emissions anomalies caused by the pandemic.

The inventory estimates that the region's total gross GHG emissions in 2019 were approximately 64 million gross metric tons of CO_2 equivalent (MMT CO_2E). Urban forestry captures atmospheric GHGs, reducing emissions by 3.9 MMT CO_2E and resulting in approximately 60 MMT CO_2E net total annual emissions.

Industrial emissions (excluding electric power generation) comprise about 65% of total gross GHG emissions, electric power contributes approximately 16%, and mobile sources are responsible for approximately 14% of emissions. Commercial sources, which include solid waste and wastewater treatment, contribute approximately 5% of emissions, while residential and agricultural sources contribute substantially less, about 1% combined. The overall breakdown is illustrated below.

These results are similar to the statewide GHG inventory completed as part of the Louisiana Climate Action Plan and State PCAP. In both regional and state inventories, industrial sources are responsible for most emissions. These results indicate that strategies to reduce industrial GHGs should be a high priority for both statewide and regional planning efforts.



Priority GHG Reduction Measures

The GHG reduction measures in the PCAP have been identified as priority measures for the purposes of pursuing funding through CPRG implementation grants. The measures vary in levels of specificity, from broad recommended activities to discreet, location-specific projects. The list is not exhaustive of the region's priorities. Instead, measures were selected for inclusion in the PCAP because they were identified as a high priority by one or more regional stakeholders and they can be reasonably expected to be implemented in the near term.

Measures are organized by economic sector, and each sector includes one or more broad strategies to accomplish GHG reductions. The sectors and strategies are listed in the table below. Each strategy includes a series of specific actions that may be completed by regional stakeholders to advance implementation. The strategies also include quantified GHG reductions that may be realized through their completion, an evaluation of the authorities required to implement the strategies, and metrics for tracking progress.

The priority measures in this PCAP, though intended to provide GHG emission reductions in the short-term, also provide several enhancements to the overall quality of life for residents within identified LIDACs, including :

1. **Air Quality and Health Improvements**
2. **Cost Savings and Opportunities to Build Wealth**
3. **Expanded Transportation Access and Safety**
4. **Reduced Climate Related Vulnerabilities and Risks**
5. **Education, Training, and High-Quality Job Creation**

Next Steps

The PCAP is a significant step towards reducing regional GHG emissions and their associated climate change impacts. Following its completion regional stakeholders may pursue opportunities to implement the measures identified in the plan through the CPRG discretionary grant program or other funding mechanisms.

The upcoming CCAP will allow the RPC to produce a more robust inventory, create GHG emissions projections and future targets, and come up with additional reduction measures. The CCAP process will involve substantial outreach to stakeholders and community members, with an emphasis on LIDACs. A detailed public participation and involvement strategy will be one of the first items addressed after the release of this PCAP.

The CCAP will guide future planning efforts around climate mitigation, incorporate goals from the community to create a holistic climate action plan for southeast Louisiana, identify additional funding sources for mitigation measures, and include a full workforce planning analysis to ensure the region is prepared to engage and support a greener economy. At the end of the CPRG planning process, the region will be better prepared to address climate change, contributing to a healthier, safer, and more sustainable future.

Sector	Strategies
Transportation	Reduce vehicle miles traveled by increasing the use of public transit. Reduce vehicle miles traveled by supporting non-motorized transportation. Reduce vehicular congestion. Transition to low emissions vehicles.
Industry	Decarbonize industrial processes. Mitigate emissions at industrial facilities.
Energy	Expand clean and renewable electric power generation. Improve the efficiency and resilience of the power grid. Make buildings more energy efficient.
Agriculture	Transition to low emissions agricultural processes.
Wastewater	Create more efficient wastewater treatment systems. Reduce emissions from wastewater treatment processes.
Materials Management	Reduce community waste. Reduce emissions from waste management processes.
Carbon Removal and Storage	Use natural processes to capture and store atmospheric carbon dioxide. Implement carbon capture technologies and processes.

1. Introduction

1.1 Climate Pollution Reduction Grant Program

The Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, and Tangipahoa Parishes (RPC) has produced this Priority Climate Action Plan (PCAP) to support future investment in policies, practices, and technologies that reduce greenhouse gas (GHG) pollution and other harmful pollutant emissions across the region's communities.

This work is funded and directed by the Environmental Protection Agency (EPA) via the Climate Pollution Reduction Grant (CPRG) program. Created by the Inflation Reduction Act, CPRG provides $1 million in formula planning grants to the nation's 67 largest Metropolitan Statistical Areas (MSAs) to conduct climate action planning. CPRG additionally provides planning grants to states, tribes, and territories to complete similar work within their jurisdictions. Over the course of four years recipients of CPRG planning grants will develop three primary deliverables:

- **Priority Climate Action Plan (PCAP):** An initial assessment of GHG emissions and reduction strategies that will include a GHG inventory, analysis of benefits to Low Income and Disadvantaged Communities (LIDAC), and a list of prioritized GHG reduction measures. The reductions measures must include quantified GHG emission reduction benefits as well as a review of authorities required to implement each measure. The PCAP must be complete by March 1, 2024.

- **Comprehensive Climate Action Plan (CCAP):** A more thorough investigation of emissions and reduction strategies that will include updates to the original PCAP elements, as well as GHG emissions projections, GHG reduction targets, a review of overall community benefits, an assessment of funding availability, and a workforce planning analysis. The CCAP is due for completion in September 2025.

- **Status Report:** An assessment of climate action achievements to date and future needs. The Status Report will include updates to CCAP elements as well as recommendations for next steps. The Status Report will be completed at the end of the grant period in August 2027.

Plan Element	PCAP	CCAP
GHG Inventory	✓	✓
GHG Emissions Projections		✓
GHG Reduction Targets		✓
Quantified GHG Reduction Measures	✓	✓
Community Benefits Analysis		✓
Low Income/Disadvantaged Communities Benefits Analysis	✓	✓
Review of Authority to Implement	✓	✓
Intersection with Other Funding Availability		✓
Workforce Planning Analysis		✓

Table 1: Required PCAP and CCAP Elements

1.2 Regional Scope

Regional CPRG planning grants were awarded to metropolitan areas based on the MSA boundaries defined by the 2010 US Census. For the New Orleans – Metairie MSA, these boundaries include eight parishes: Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, and St. Tammany Parishes. The RPC has also included Tangipahoa Parish in its CPRG planning due to its close economic, social, and regional planning ties to the New Orleans – Metairie MSA. Throughout this plan, these nine parishes will be referred to as the "Study Area" or as the southeast Louisiana (SELA) region (Figure 1).

The nine-parish region is home to just over 1.4 million people[1] and includes a mix of urban, rural, and coastal communities, all at risk at varying degrees to some of the projected impacts of climate change, including extreme weather and sea level rise. The measures contained herein, outlined in Section 4 of this plan, are aimed at reducing harmful GHG pollution and thereby minimizing the risks to these communities from human-caused climate change. The measures also aim to enhance the livelihoods of those most vulnerable to the impacts of climate and repair environmental injustices.

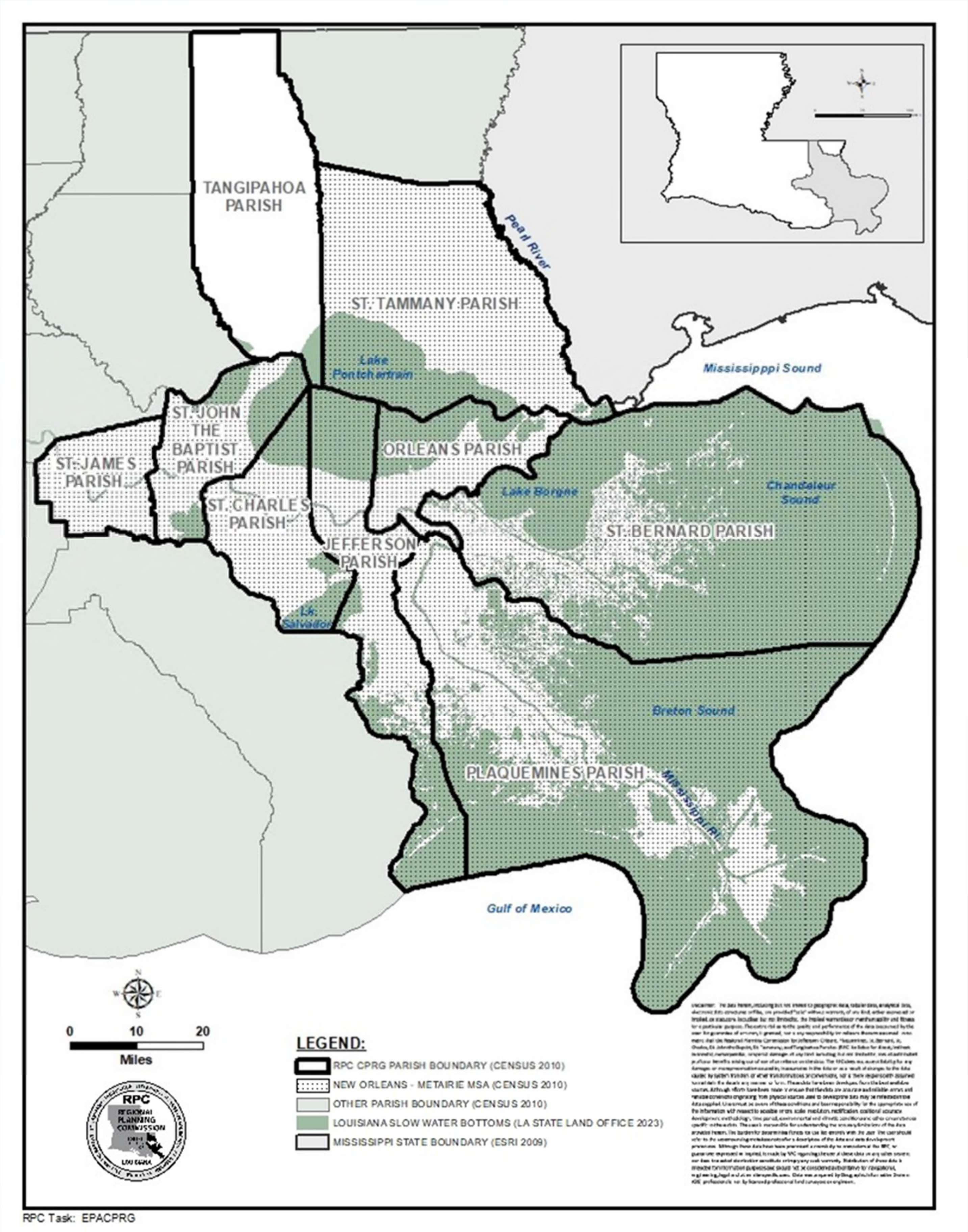


Figure 1: SELA CPRG Region and New Orleans - Metairie MSA

1.3 Other Efforts Underway Supporting Climate Action

As a region that already faces some of the greatest effects of climate change, many climate action efforts are already underway within the state and community, with a large emphasis on adaptation and resilience. In an effort to identify emissions reduction measures, the RPC reviewed existing plans, met with local governmental entities, and hosted workshops to gather proposed plans and measures. The RPC will continue to look to these identified plans as work for the CCAP progresses and more goals and reduction measures are identified.

The City of New Orleans is the only parish within the region with an adopted Climate Action Plan and a greenhouse gas reduction target; however, many parishes in the region are carrying out GHG reduction efforts through their regular planning work. Multiple projects identified throughout various planning documents and proposals include climate pollution mitigation measures. Many of these proposals, such as adaptation strategies, are corollary emissions reduction measures and offer emissions reductions as a secondary goal such as increasing green infrastructure to add tree plantings and bike paths to increase ridership and decrease congestion. Reducing greenhouse gas emissions also greatly contributes to the regional resilience by lessening the impacts of climate change, thereby reducing the need for certain adaptation measures and decreasing the region's vulnerability.

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Local entities such as Jefferson Parish have created a Green Infrastructure Plan which works as an adaptation guide for mitigating the effects of climate change and reducing risk.

In response to widespread flooding in 2016, Tangipahoa Parish created a Community Recovery Plan which incorporates numerous adaptation and resilience strategies to mitigate climate change effects such as flooding. Utilizing funding from the National Disaster Resilience Competition, the LA SAFE Program, another program developed in response to the 2016 floods and additional federally declared flood events, assisted Plaquemines, St. John the Baptist, Jefferson, and St. Tammany Parishes in developing adaptation plans and mitigation strategies to reduce overall flood risk. These plans utilized a holistic approach that accounted for multiple sectors to build resilience and reduce flooding including stormwater management, housing and development, transportation, culture and recreation, and education, economy, and jobs. At the state level, the Coastal Master Plan acted as the largest state level measure to address resilience and climate adaptation prior to the State of Louisiana's 2022 adoption of the Climate Action Plan. The first Coastal Master Plan was adopted in 2007 following Hurricanes Katrina and Rita; it has since been updated three times, the most recent adoption in 2023. The Coastal Master Plan outlines long-term solutions for restoring Louisiana's coastline which has suffered extreme land loss in recent decades and is predicted to lose more with sea level rise.

Many other non-public entities throughout the region have also created climate action plans or plans that include emissions reduction measures.

Tulane University developed a climate action plan and created an annual GHG inventory, updated in 2021, which aims to reduce emissions on campus. The Greater New Orleans Foundation, in partnership with the City of New Orleans and the Deep South Center for Environmental Justice, and local stakeholders developed a report, “Taking Steps Together on Equity & Climate Change,” which sets goals for ensuring equitable climate action work in the New Orleans region. The report’s focus is to incorporate equity into the goals of the New Orleans Climate Action Plan, including ways to increase equity in modernizing energy use, improving transportation options, reducing waste, and creating a culture and workforce that addresses climate action.

The RPC will reference and utilize these plans, building upon this existing work in the region occurring at the community level. This ongoing work and input from the public will shape portions of the upcoming CCAP.

City of New Orleans Climate Action Plan

The City of New Orleans, which represents all of Orleans Parish, completed a Climate Action Plan and a GHG inventory in 2017 that recommended reducing the city’s GHG emissions 50% by 2030. The City recently completed a 2022 update to this plan, including a progress report, and will be updating their inventory again soon.[2]

This plan used 2014 as its baseline for counting GHG emissions and built on existing resilience goals the City adopted in 2015.

This plan recognizes the importance of resilience in mitigating climate change through emissions reductions but emphasizes that “adaptation is also climate action.”

The plan recognizes that due to the high number of natural disasters exacerbated by climate change, adaptation and climate mitigation measures are already in progress. This plan recognizes the importance of resilience in mitigating climate change through emissions reductions but emphasizes that “adaptation is also climate action.”

The GHG inventory results reported the energy sector accounts for 50% of all emissions in the parish, followed by transportation accounting for 44%. The remaining 6% of emissions within the city are waste production (Figure 2). The City’s inventory did not include sources from “industrial processes agriculture and forestry, aviation, and off-road transportation.”

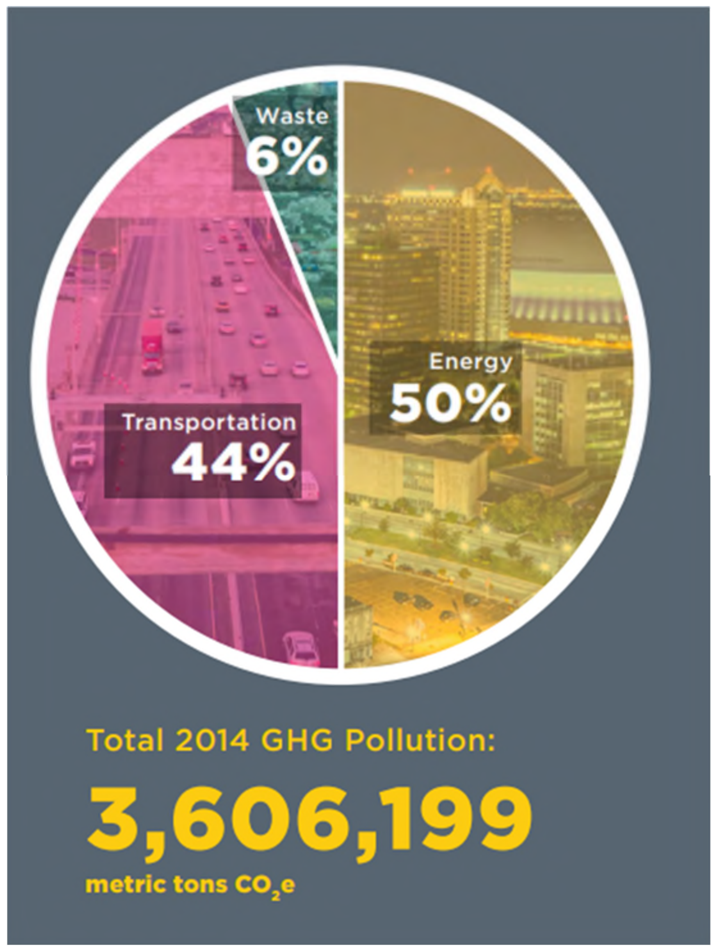


Figure 2: City of New Orleans 2017 GHG Inventory (Source: City of New Orleans Climate Action Plan, 2017. Calculations based on cdp.net data from 2016)

The City's proposed climate actions center around the three sectors accounted for in the GHG emissions inventory and include strategies to reduce carbon emissions from these sectors and changing the city's culture to respond to these changes. For the energy sector, actions include reducing reliance on carbon-intensive fuels, saving energy, reducing the energy burden of low-income residents, and increasing resilience of the energy, water, and sewer infrastructure. Actions for the transportation sector include strategies to transform infrastructure to reduce car dependence, encourage active transportation, and increase fuel efficiency, clean fuel use, and shared-use mobility services. Reducing emissions in the waste sector includes strategies to launch a comprehensive recycling and waste reduction initiative and generate value from waste. The final strategies center around cultural changes that include growing the local low-carbon economy, enabling data-driven decision-making and collaboration, and connecting culture and climate action.

In 2023, the City released a progress report on its goal to reduce GHGs 50% by 2030, updating the 2017 goals to reduce emissions 50% by 2035, and achieve net-zero emissions by 2050. This shift to reduce GHG emissions 50% by 2035 aligns with national and state policies that provide similar targets. The report lays out existing barriers to reaching these goals and the corresponding entities that control relevant authorities (Figure 3). This breakdown of the existing policy measures illustrates the need to account for how local entities can implement specific measures and the regional, state, and national coordination needed. The report also updates the original core priorities, adding two more: (1) ramp up the local climate action economy and (2) utilize adaptation and nature-based solutions as key goals for climate action in New Orleans. The report details how the City will meet these priorities with actions for each category.

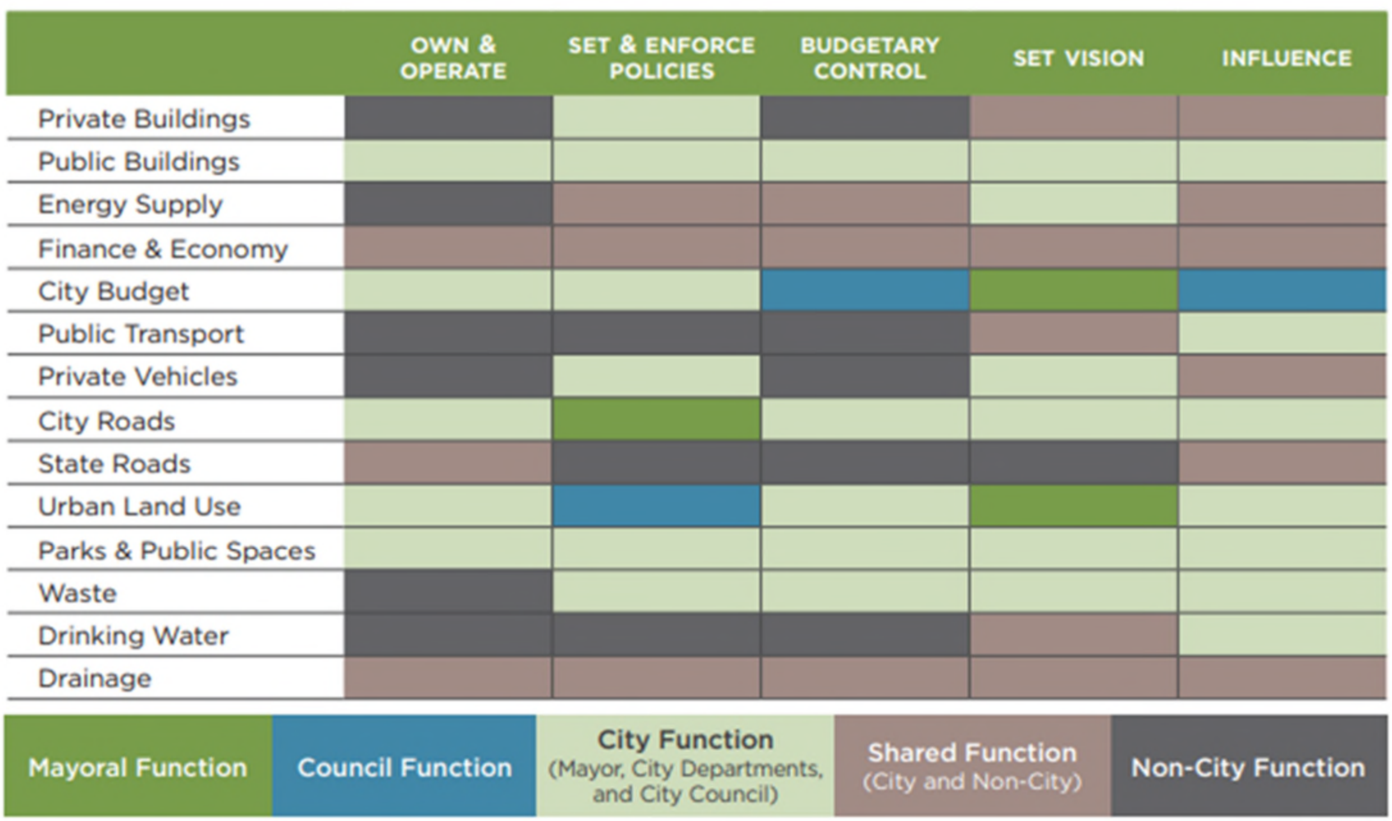


Figure 3: Existing barriers and review of authority of climate actions. (Source: A Priority List for Climate Action in New Orleans, 2022).

State of Louisiana Climate Action Plan and Greenhouse Gas Inventory

In 2021, the State of Louisiana produced a GHG Inventory in collaboration with Louisiana State University.[3] The State adopted a robust Climate Action Plan in 2022 with guidance from the governor's Climate Initiative's Task Force. The Climate Action Plan combines the original 2021 GHG Inventory with strategies to reduce emissions and utilized public input to create future targets and action items.

Louisiana's greatest share of GHG emissions is produced by the industrial sector. The industrial sector accounts for 66% of the State's total emissions, most of which come from chemical manufacturing. This is in contrast with the U.S. as a whole, for which industry accounts for about 17% of all GHG emissions. The second largest emitting sector in the state is transportation with light-duty vehicles producing the largest amount of GHG transport emissions (Figure 4).

The State's Climate Action Plan details the definitive need to reduce GHG emissions due to Louisiana's significant vulnerabilities to climate change. Due to Louisiana's coastal geography, rate of land loss, and vulnerable populations, the state faces greater risk than others to increasing global GHGs and their resulting impacts. The plan emphasizes that inaction will only exacerbate climate risks for the state.

With a majority of Louisiana GHGs produced from the industrial sector, actions to address these emissions will have the greatest impact. The State's Plan proposes policy shifts in renewable electricity generation, industrial electrification, and switching industrial fuels to low- and no-carbon hydrogen. The Plan put together 28 strategies and 84 actions accounting for all emissions sectors with a focus on:

1. **Clean Energy Transition**
2. **Industrial Decarbonization**
3. **Actively Managed Methane Emissions**
4. **Transportation, Development, and the Built Environment**
5. **Natural and Working Lands and Wetlands**
6. **An Inclusive, Low-Carbon Economy**
7. **Collaboration and Partnership to Ensure Successful Implementation**
8. **Accountability and Adaptability to Ensure Lasting Success**

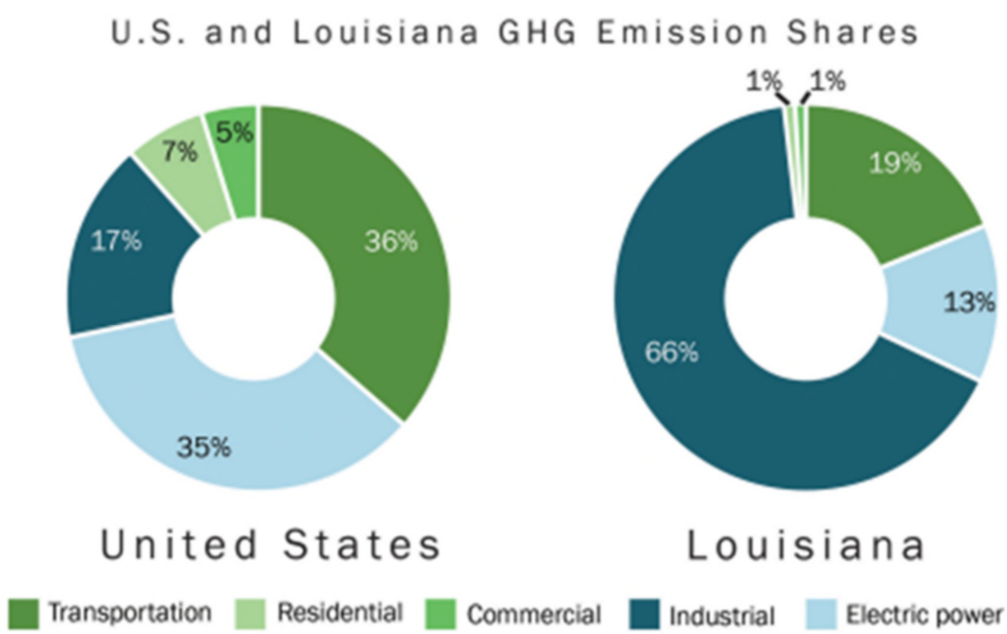


Figure 4: US and LA GHG Emissions (Source: Louisiana State Climate Action Plan, 2022)

State of Louisiana PCAP

The State of Louisiana is also participating in the EPA's CPRG Program and released their PCAP in January 2024.[4] This PCAP, which builds upon the existing Climate Action Plan and its priorities, supplements the original and continues efforts to reduce emissions and climate change impacts. The PCAP identifies 13 key focus areas to reduce emissions that include:

1. **Off-Shore Wind**
2. **Community Solar**
3. **Community Resilience Hubs**
4. **Transmission Planning**
5. **Industrial Decarbonization**
6. **Methane Emissions**
7. **Fleet Transition**
8. **Clean Ports**
9. **Regional Transit**
10. **Built Environment Retrofits**
11. **Community Forestry and Greening**
12. **Sustainable Agriculture**
13. **Land Protection and Restoration**

Each of these focus areas includes actionable measures, quantified potential benefits, intersection with federal funding, and the impacts to LIDACs.

The State conducted several rounds of public engagement which helped prioritize five categories of public benefits from reducing GHGs:

1. **Air Quality and Public Health Improvements**
2. **Energy Cost Savings**
3. **Increased Climate Resilience**
4. **Jobs and Workforce Development**
5. **Improved Access to Services and Amenities**

Both the State of Louisiana and City of New Orleans' Climate Action Plans create valuable frameworks and best practices for the region. Both plans recognize the importance of reducing GHGs, mitigating climate change, adapting to changing conditions, and building resilience. RPC staff will use these plans and additional work in the region to create reduction measures and coordinate climate policies with input from State and local parishes. This planning process will continue these overarching regional goals that treat climate mitigation and adaptation as two closely related actions and recognize the work underway within the region in response to a changing climate.

1.4 Approach to Developing the PCAP

Developing this regional plan required the planning team to research and adopt climate action planning best practices from around the country to determine potential emissions reduction measures for the region. EPA resources such as informational webinars, guidance documents, and the CPRG Technical Assistance Forum proved invaluable during this process. The planning team also reviewed and incorporated recommendations from guidance documents such as the Global Protocol for Community-Scale GHG Inventories.[5]

The RPC staff also worked with staff from the State throughout the development of this plan, using the State's work as a resource and guide. The State PCAP and Climate Action Plan will help the RPC align priorities, ensuring that coordinated policies lead to greater emissions reduction benefits. To continue regional collaboration, the RPC created a Project Advisory Team (PAT) to help guide the PCAP development, and review results and measures for both the PCAP and CCAP. This advisory team includes representatives from the nine-parish area and climate planning professionals. Results of the GHG inventory and proposed reduction measures were presented to the PAT for input and further guidance. The PAT will also help RPC staff in further identifying regional stakeholders and community members who should be involved in regional climate action planning.

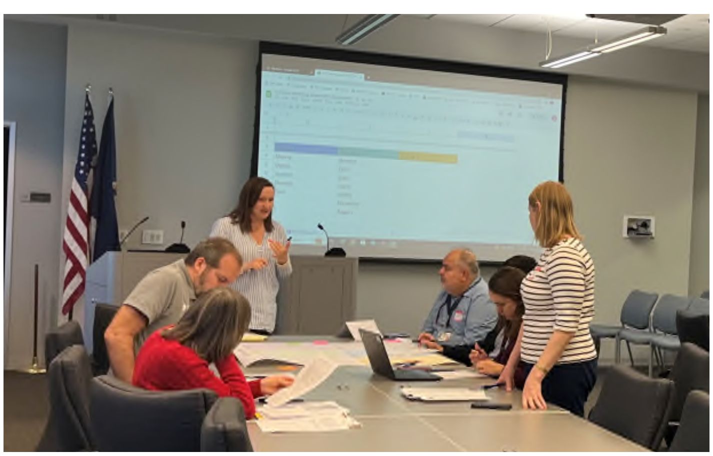
RPC staff conducted outreach to eligible public entities. These included an October 2023 Kick-Off meeting, several rounds of surveys and questionnaires, and two potential project identification workshops for CPRG implementation funding.

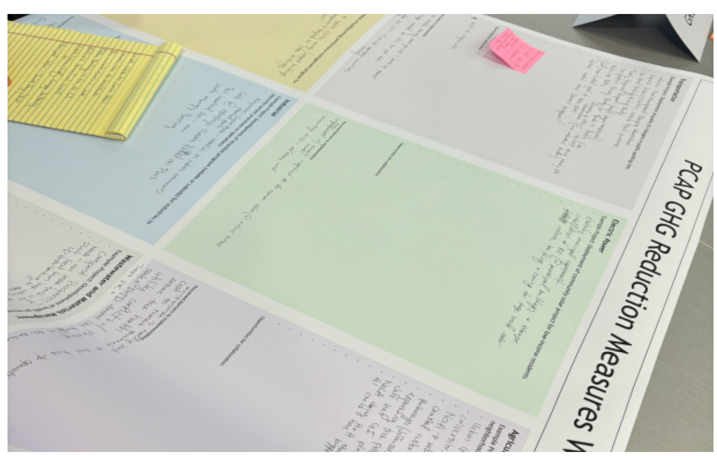
The two workshops hosted in December 2023 helped identify potential emissions reduction measures by creating a space for regional public entities to collaborate. These workshops included public entities eligible for CPRG implementation funding and included representation from across the nine-parish region. The seven sectors identified in the EPA's Implementation Grant guidance helped guide the identification of these measures and included:

1. **Transportation**
2. **Electric Power**
3. **Buildings**
4. **Industry**
5. **Waste Water, and Sustainable Materials Management**
6. **Agriculture**
7. **Carbon Removal Measures**

A questionnaire also went to eligible entities in the region requesting proposed or current projects that may qualify for implementation funding and need to be included in this PCAP.

By participating in the CPRG planning process, the RPC aims to identify emissions reduction measures, help reduce the region's GHG emissions, and provide a regional inventory to guide future climate mitigation efforts in southeast Louisiana. The public will also be a large part of this planning effort and future outreach and engagement efforts are outlined in the following sections.





2. Analysis of Low-Income and Disadvantaged Communities

2.1 Identification of Low-Income and Disadvantaged Communities

Certain communities are more vulnerable to the impacts of climate change because of longstanding socioeconomic inequities, health and environmental disparities, systemic discrimination, and years of underinvestment. In pursuing climate action, there are opportunities to mitigate the risks these communities face and lessen their burdens through policy design. The first step is identifying these communities. The White House Council on Environmental Quality developed the Climate and Economic Justice Screening Tool (CEJST) using several indicators of vulnerability and environmental burden to help policy makers identify where disadvantaged populations and communities are located. Using the CEJST tool, 215 of 425 census tracts within the nine-parish region are identified as "disadvantaged." Tracts meeting this designation are listed in Appendix A. These tracts meet the low-income threshold and rank at or above the 90th percentile for at least one environmental, socioeconomic, or climatic indicators of burden. The CEJST assesses indicators of climate burden and vulnerability by analyzing several demographic and environmental data in the following eight areas:

1. **Climate**
2. **Energy**
3. **Water and Wastewater**
4. **Workforce**
5. **Transportation**
6. **Housing**
7. **Legacy Pollution**
8. **Health**

There are approximately 642,062 people living in these disadvantaged tracts which represent 46% of the total population in the nine-parish region. This means almost half of the region's population lives in communities which are likely to be disproportionately impacted by climate change and future hazards. Approximately 417,237 people reside in disadvantaged tracts in Jefferson and Orleans Parishes alone.

Almost half of the region's population lives in communities which are likely to be disproportionately impacted by climate change and future hazards.

Some specific CEJST indicators (within the eight categories introduced above) include, among others:

1. **Exposure to Air Pollution**
2. **Exposure to Diesel Particulate Matter**
3. **Proximity to Superfund Sites**
4. **Proximity to Hazardous Waste Facilities**
5. **Housing Cost Burden**
6. **Energy Cost Burden**
7. **Asthma Prevalence**
8. **Diabetes Prevalence**
9. **Low Life Expectancy**
10. **Formerly Redlined Areas**
11. **Projected Flood Risk**
12. **Expected Population Loss Rate**

There are some communities within the region that rank over the 90^{th} percentile in a majority of the categorical burdens. These areas tend to be located in densely populated tracts of the region and are majority African American. A common attribute of these tracts is that many are divided by and/or directly adjacent to freeways, which may account for their higher levels of air pollution. Construction of these freeways through existing neighborhoods involved the demolition of black-owned businesses and residences, and the disruption of long-standing community networks, resulting in decades of subsequent area disinvestment and blight.[6]

The EPA's Environmental Justice Screening and Mapping Tool (EJScreen) is another mapping tool that combines environmental and socioeconomic indicators to pinpoint communities as potential candidates for additional consideration or engagement in policymaking. The EJScreen Supplemental Indexes look at 13 different environmental indicators, some of which are included in the CEJST analysis. They include particulate matter, ozone, air toxics cancer risk, air toxics respiratory hazard index, toxic releases to air, traffic proximity, lead paint, Risk Management Plan facility proximity, hazardous waste proximity, Superfund proximity, underground storage tanks, and wastewater discharge.

Figures 5 and 6 display the CEJST disadvantaged tracts with block groups that score at or above the 90th percentile for at least one of the EJScreen supplemental indices. In addition to the communities identified as disadvantaged by CEJST, there are approximately 135,364 more people living within communities with at least one comparatively high environmental marker as indicated in the EJScreen supplemental indices, meaning these areas could also be considered more vulnerable to climate-related impacts and disasters. These areas, highlighted in yellow on the map, are scattered throughout the nine-parish region in what appear to be less populated census tracts overall. Many of these tracts do not meet the threshold of "disadvantaged" per the CEJST criteria but do score above the 90th percentile in the EJScreen supplemental indices. Both of these tools help highlight the vulnerability of the region and identifying these populations is the first step in decreasing the potential burdens of climate change.

2.2 Risks and Impacts Associated with Climate Change

Climate change is causing rising sea levels, rising temperatures, and changing weather patterns. Many of these changing weather patterns are already apparent in southeastern Louisiana and have caused major disruptions within rural, coastal, and urban communities alike.

To recount several extreme events in just the past few years, in 2020 alone, there were five named storms to hit South Louisiana, with three classified as major hurricanes.[7] The following year, in 2021, three named storms hit Louisiana, including one major hurricane with catastrophic impacts to southeastern Louisiana communities.[8] In addition to the more frequent and severe tropical storms, in late 2023, almost the entire state of Louisiana experienced a period of exceptional drought as well as extreme heat, prompting the Governor to declare a heat-related state of emergency.[9, 10] The drought spurred a cascade of further threatening environmental events including wildfires in marshes near Lafitte and Bayou Sauvage as well as a saltwater intrusion event, where salt water from the Gulf of Mexico came upstream the Mississippi River due to extended drought and extremely low water levels in the river.[11, 12] The saltwater event impacted the drinking water for several communities in Plaquemines Parish. Similar future events pose the risk of impacting additional communities farther upriver.

Some of the most harmful impacts from more severe and extreme weather in southeastern Louisiana include heat-related illness and death, costly damages to property, strain on water systems which threaten availability of safe drinking water, and degraded air quality from more severe wildfires.[13] While climate change impacts all of us, the impacts to marginalized groups can be more devastating and exacerbate already severe inequities, contributing to persistent disparities in the resources needed to prepare for, respond to, and recover from climatic events such as those described above.[14] In addition, people of color and those with low incomes are more likely to live in areas with more exposure to pollution and man-made or natural hazards, such as in areas more susceptible to flooding, and are therefore more likely to live in areas where future impacts from climate change are projected to be highest.[15, 16, 17]

The EPA's Climate Change Impacts and Risk Analysis (CIRA) estimated the degree to which socially vulnerable groups were more susceptible to, or more likely to experience harmful adverse outcomes from climate change. There are several instances where certain risks affect socially vulnerable groups in the region disproportionately. Some of what they found include the following:

- With respect to air quality impacts, children in low-income households are 12% more likely to live in areas with the highest projected increases in childhood asthma diagnoses from climate-driven changes in particulate matter and minority children are 10% more likely to live in these areas than non-minority children.

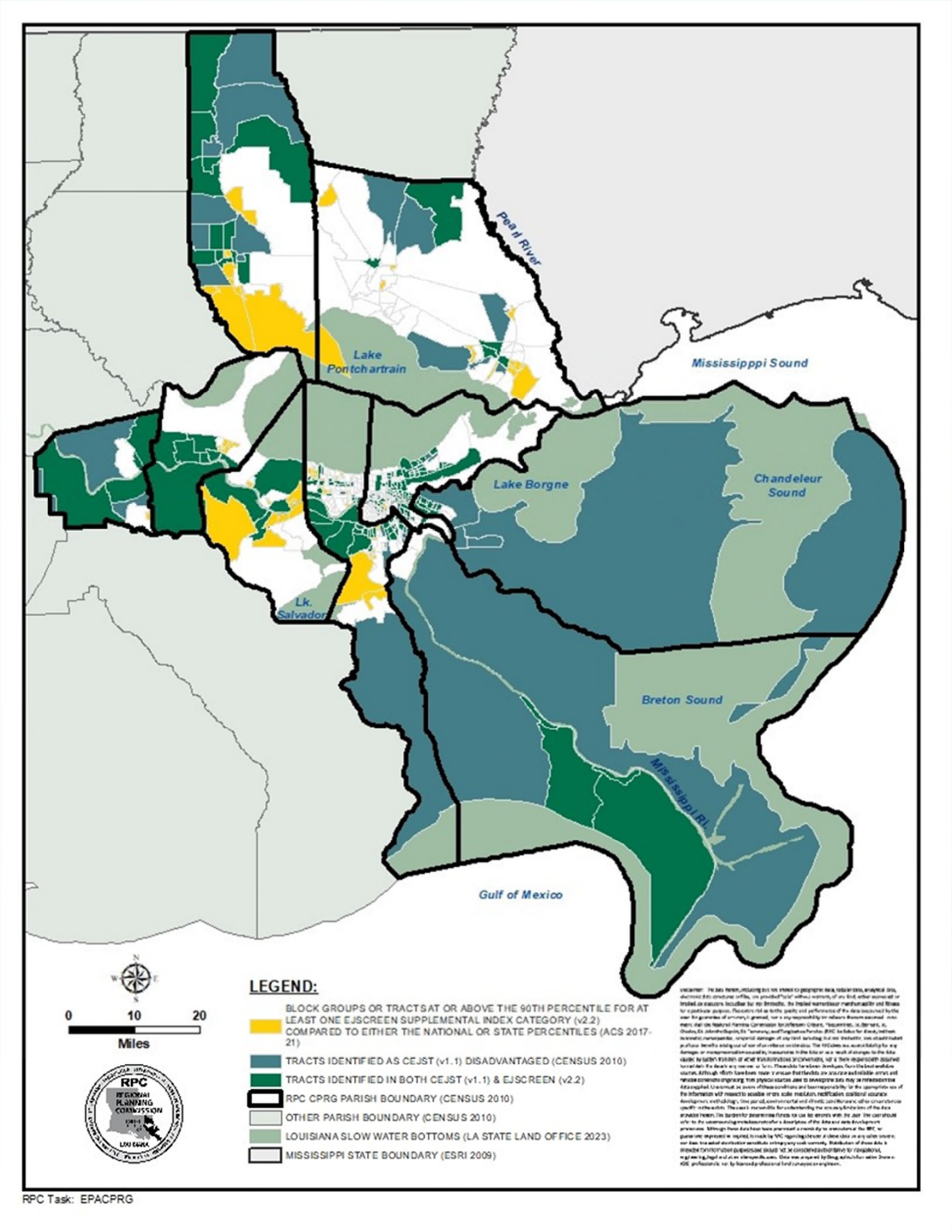


Figure 5: Low Income and Disadvantaged Communities identified by CEJST and EJScreen

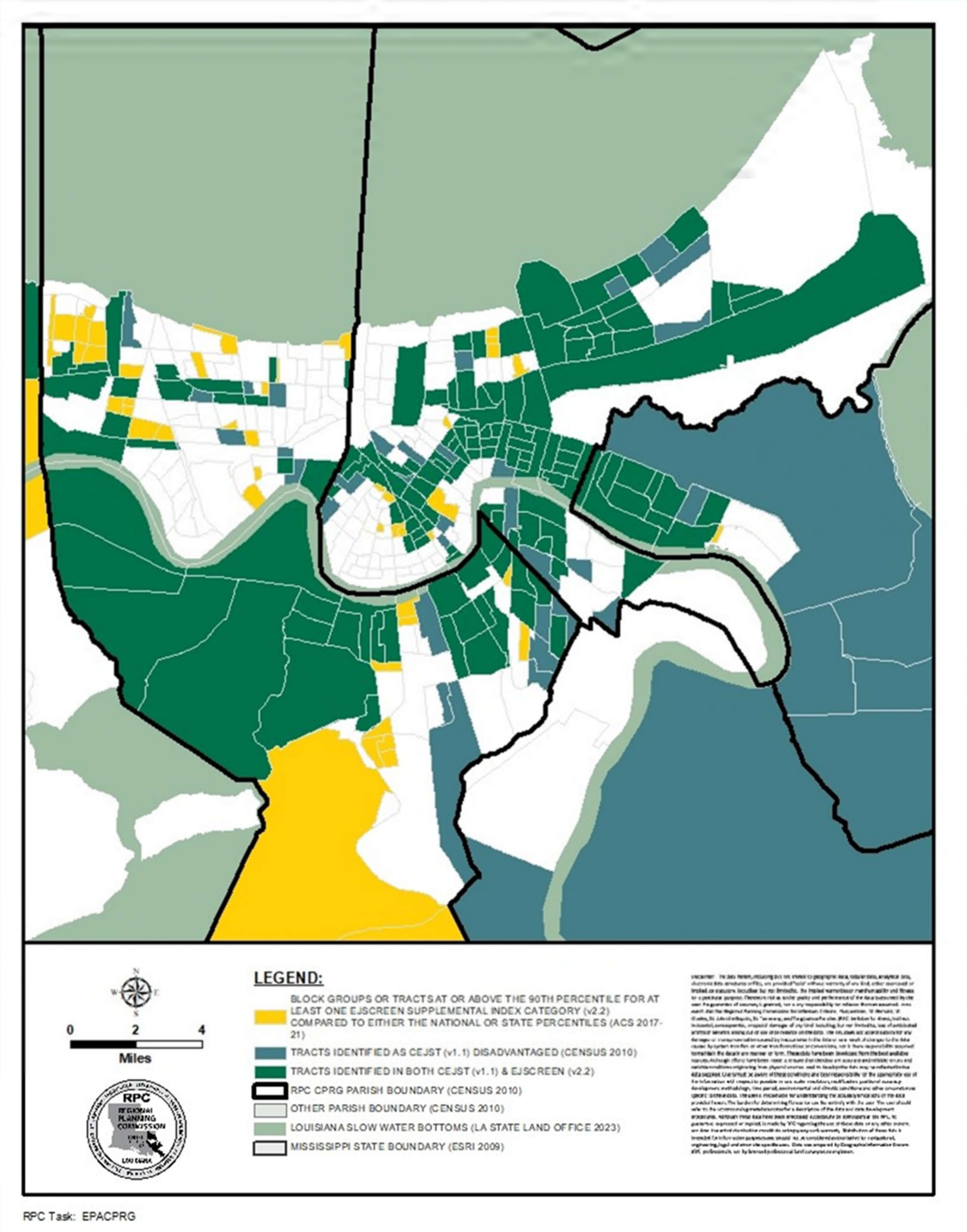


Figure 6: Low Income and Disadvantaged Communities identified by CEJST and EJScreen (detail)

- With respect to air quality impacts, African American individuals are 41-60% more likely than non-African American individuals to currently live in areas with the highest projected increases in premature deaths from climate-driven changes in particulate matter.
- With respect to extreme heat impacts, African American individuals are 40% more likely than non-African American individuals to currently live in areas with the highest projected increases in deaths due to climate-driven changes in extreme temperatures.
- Regarding extreme heat, minorities, those with low income, and those without a high school diploma are all estimated to be over 20% more likely to currently live in areas that are projected to have the greatest labor hour losses due to climate change. Hispanic and Latino individuals have the highest comparative risk and are 43% more likely to experience labor hour losses with extreme heat.
- With respect to sea level rise, American Indian individuals are 48% more likely to live in areas where the highest percentage of land is projected to be inundated due to sea level rise.
- With respect to sea level rise, those with no high school diploma are 31% more likely to live in areas with the highest percentage of land lost to inundation.

It is anticipated that the GHG reduction measures identified in this plan, and those to be included in the CCAP, will mitigate or eliminate the impacts described above. Section 4 of this plan articulates how each GHG reduction strategy may benefit LIDACs.

2.3 Explanation of Engagement with Low-Income and Disadvantaged Communities

As the lead agency overseeing the planning effort, the RPC in partnership with its PAT is currently developing and implementing an outreach and engagement process to enhance citizen participation in the development of the region's climate action strategies, especially among those residents of low-income and disadvantaged communities. The overarching goal of the process is to design robust strategies to reduce GHG emissions which address and ameliorate environmental injustices within these communities.

The process is ongoing as the region develops its CCAP and incorporates the following elements which are detailed below.

Outreach and Engagement Objectives

Consistent with the Regional Planning Commission's 2024 Public Participation Plan, the objectives for the outreach and engagement process for the development of the region's climate action strategy involve multiple levels and are as follows:

1. Inform – Create a platform for timely and transparent information sharing throughout the planning process which includes relevant information on the need for GHG emissions reductions and information on climate action strategies or potential GHG reduction measures. Use a variety of educational tools to achieve a broader understanding of community needs and develop a communal vision for the regional climate action effort, acknowledging that climate action has wide-ranging impacts, opportunities, and concerns.

2. Collaborate – *Create inclusive opportunities for the public to provide comments and feedback for consideration at key decision-making points in the planning process. Employ a variety of techniques to meaningfully engage low-income and disadvantaged communities as well as youth and older adults in the decision-making process.*

3. Engage Specific GHG Emission Sectors – Identify and engage specific stakeholders from the primary sectors contributing to the region's GHG emissions including subject matter experts, private sector representatives, and government agencies to identify multiple alternative strategies for climate action with an emphasis on addressing environmental justice.

4. Involve – Develop democratic methods of gathering and incorporating feedback from all target audiences in a way that is useful in constructing and building public support for the final climate action strategy.

Community Leadership Teams

As part of its strategy to ensure meaningful engagement with impacted community members, the RPC will follow a similar organizing model implemented by members of the Climate Action Equity

Group in New Orleans. The RPC will coordinate with local officials to engage leaders of local neighborhood organizations and community groups, who will be asked to participate in Community Leadership Teams. These teams will be organized based on geographic proximity or organizational focus and will meet periodically throughout the CCAP development process. The Community Leadership Teams will be integral to the development of the climate action plan, weighing in on the participation process itself as well as developing GHG pollution reduction strategies. The Community Leadership Teams will also provide a feedback loop between the RPC and citizens within each community they represent. These teams will serve in addition to other subject-area focus groups and the RPC's PAT.

Communications Tools & Events

The RPC is coordinating the development of the following communications materials to aid in targeting stakeholders as well as in providing information and education which will enable more effective and inclusive participation in the climate action planning process: ongoing development of a comprehensive stakeholder database; development of multiple online surveys to gauge support for particular GHG reduction measures; development of an online ideas platform for submission of climate action feedback; development of fact-sheets and informational brochures to describe GHG emissions processes and methods/policies for emissions reduction; and informational material for newspaper or radio media outlets.

The RPC is also currently planning multiple types of events to encourage involvement and engagement in the planning process. In addition to convenings of the Community Leadership Teams and the PAT, the RPC will plan listening sessions across the region to build awareness of local needs and develop communal visions for climate action. The RPC will employ community facility mapping to identify strategic and accessible locations for events targeting disadvantaged communities. These meetings will be held at times and in areas convenient to potentially affected citizens. In addition to listening sessions, the RPC will host sector-specific panel presentations and roundtable discussions to build knowledge and understanding of GHG sources and sinks, as well as alternative measures to reduce GHG pollution. Finally, the RPC will host a series of community workshops in pursuit of developing final comprehensive climate action strategies as a way to include community input into the decision-making process. Additional events and tools will be developed as needed to enhance the engagement process in alignment with engagement objectives.

Tracking Engagement Effectiveness

In order to track the effectiveness of the outreach and engagement process, the RPC is using measurable benchmarks and monitoring and collecting the following information throughout the planning process:

1. Census tracts targeted for each meeting, workshop, or event
2. Census tracts represented at each meeting, workshop, or event
3. Demographic representation, as indicated by voluntary disclosure of income range, age, sex, and race from each engagement method utilized (i.e., surveys, meetings, events)
4. Indigenous groups targeted and represented at each meeting, workshop, or event
5. Method of advertisement for each meeting, workshop, or event
6. Number of total participants at each meeting, workshop, or event
7. Number of responses collected from online and in-person surveys
8. Zip codes from survey respondents
9. Number of events held with resources for Limited English Proficiency in accordance with Language Assistance Plan
10. Number of and type of news media outlets engaged
11. Number of website hits
12. Number of communications received

By regularly monitoring the above information, the RPC will be able to assess whether engagement goals are being met and can adjust outreach and engagement methods as necessary.

3. GHG Inventory

3.1 GHG Inventory Introduction

The regional GHG inventory surveys and estimates GHG emissions by activity type and economic sector. This analysis is the first GHG inventory completed specifically for the southeast Louisiana region. The results provide valuable insight into the region's major sources of GHG emissions, which will be used to guide planning efforts and policy development.

RPC staff developed the inventory using the EPA's Local Greenhouse Gas Inventory Tool (LGGIT) and a series of input data from a variety of state and federal sources. The inventory is calculated based on emissions in 2019, with that year selected as a baseline because (1) it is the year in which the greatest amount of data is available, and (2) it was the last full year prior to the COVID-19 pandemic, thereby avoiding emissions anomalies caused by the pandemic. A detailed methodology and description of data sources can be found in Appendix B.

In keeping with the purpose of the PCAP, the inventory analyzes high priority activity types and economic sectors rather than attempting to comprehensively document all possible emissions sources. The priority activity types and sectors were identified by stakeholders and through a review of existing state and local GHG inventories, and include:

Residential: Onsite combustion of natural gas at residential buildings.

Commercial: Onsite combustion of natural gas at commercial buildings, as well as emissions from solid waste and wastewater facilities.

Industrial: Onsite combustion of natural gas at industrial facilities, as well as emissions from industrial facilities that are required to report to the EPA's Greenhouse Gas Reporting Program (GHGRP).[18]

Agricultural: GHG emissions resulting from fertilizer use at agricultural sites.

Mobile Combustion: Emissions from on- and off-road vehicles and equipment.

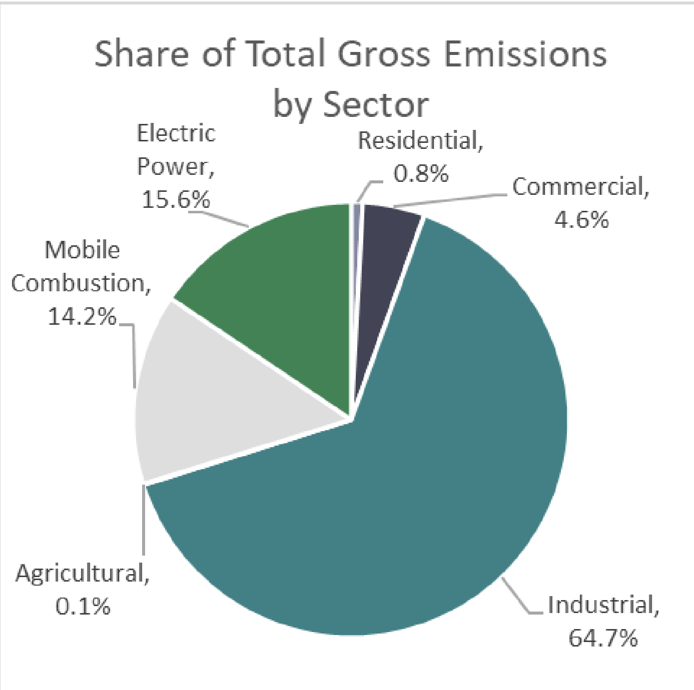
Electric Power: Emissions from generation and consumption of electric power.

Urban Forestry: GHG reductions from vegetation capturing atmospheric carbon.

3.2 Results

The inventory estimates that **the region's total gross GHG emissions in 2019 were approximately 64 million metric tons of CO_2 equivalent (MMT CO_2E).** Urban forestry captures atmospheric GHGs, reducing emissions by 3.9 MMT CO_2E and resulting in approximately 60 MMT CO_2E net total annual emissions (Figure 7).

Industrial emissions excluding electric power generation comprise about 65% of total gross GHG emissions, electric power contributes approximately 16% of emissions, and mobile sources are responsible for approximately 14% of emissions. Commercial sources, which include solid waste and wastewater treatment, contribute approximately 5% of emissions, while residential and agricultural sources contribute substantially less emissions, at about 1% combined.



Sector	MT CO_2E	% of Gross
Residential	541,364.90	0.8%
Commercial	2,935,831.44	4.6%
Industrial	41,224,374.58	64.7%
Agricultural	46,144.79	0.1%
Mobile Combustion	9,048,845.60	14.2%
Electric Power	9,922,028.05	15.6%
Gross Total	**63,718,589.37**	
Urban Forestry	-3,850,131.06	-6.0%
Net Total	**59,868,458.31**	

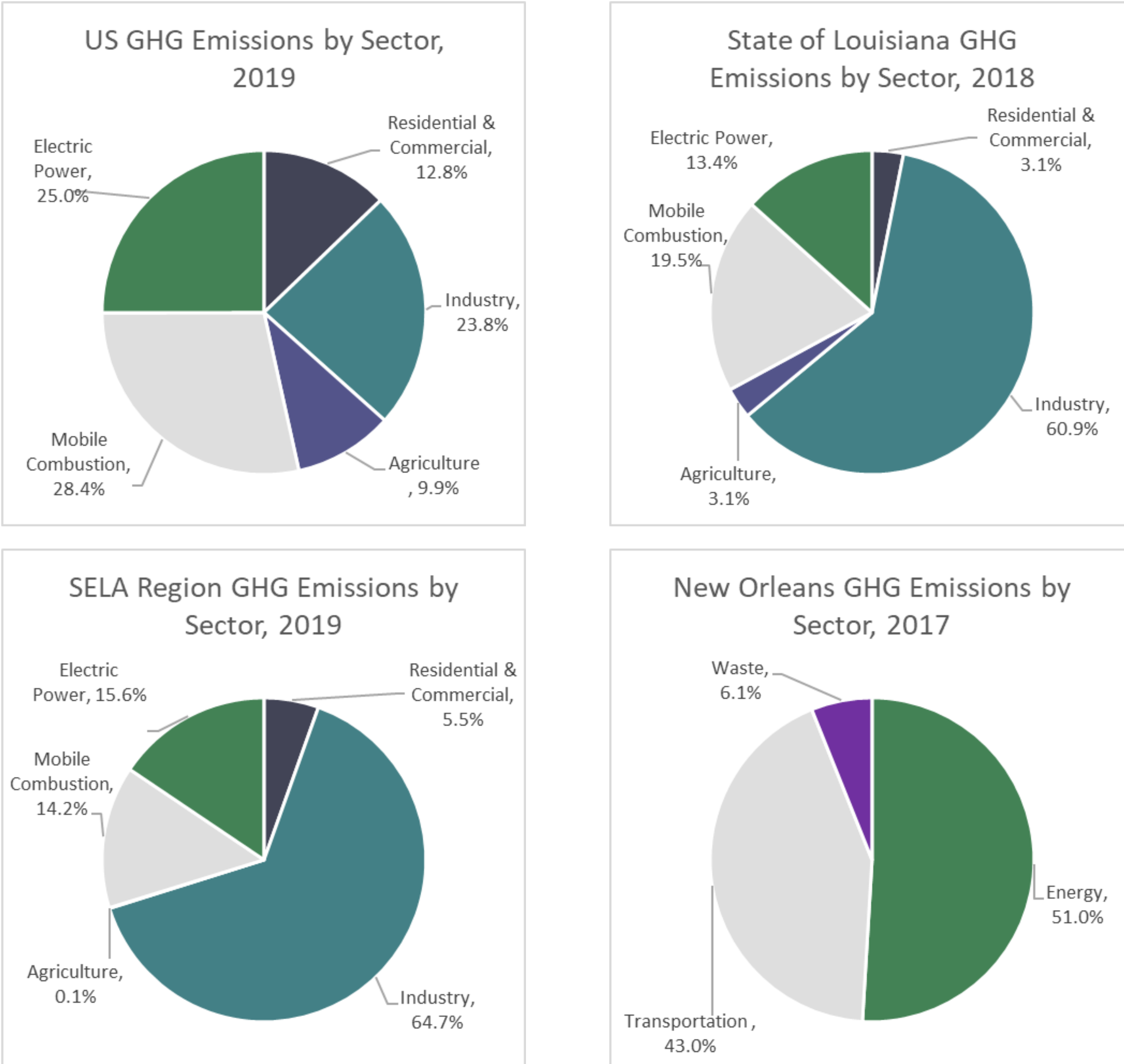
Figure 7: GHG emissions by sector (Source: Regional Planning Commission Greenhouse Gas Inventory, 2024.)

3.3 Comparison with Other Inventories

Comparing the regional GHG inventory to state and national inventories provides valuable insights about the region's emissions profile and potential GHG reduction measures (Figures 8-11). The statewide inventory, published in 2021 and reflecting a base emissions year of 2018, closely matches the regional profile. Industry represents the highest emitting sector, contributing approximately 61% of total gross emissions.[19] Mobile combustion and electric power contribute about 20% and 13% of the total, respectively, while residential, commercial, and agricultural sources combined represent approximately 6%.[20]

Notably, the state and regional inventories differ starkly from nationwide estimates of GHG emissions. While industry is the largest source of emissions in both Louisiana and the region, nationwide industrial emissions contribute only about 24% of the gross total according to estimates of a 2019 base year.[21] For the US as a whole, mobile combustion and electric power both generate more emissions than industry, at 28% and 25% of the gross total, respectively. Residential, commercial, and agricultural sources also generate proportionally more emissions nationally than regionally, combining to contribute about 23% of the gross total. These differences between state and regional estimates and the national inventory likely reflect the substantial number of industrial facilities located in Louisiana and specifically the southeast Louisiana region.

The regional inventory also differs from the City of New Orleans's analysis of GHG emissions within city limits. In a 2017 update to its inventory, the City estimates that energy generation and consumption comprise approximately 51% of total GHG emissions, while transportation and waste contribute 43% and 6%, respectively.[22] It is important to note that the New Orleans inventory does not include estimates of industrial emissions outside of energy consumption, which may account for some of the discrepancies from the regional inventory. However, a large number of the region's industrial facilities are located outside of the New Orleans city limits, suggesting that even if industrial emissions were to be included in the City's inventory, they would likely be proportionally lower than they are for the region as a whole.



Figures 8-11: GHG Emissions by sector for US, Louisiana, SELA, and New Orleans (Sources: EPA Greenhouse Gas Inventory Explorer, 2024; Louisiana Greenhouse Gas Inventory, 2021; Regional Planning Commission, 2024; City of New Orleans, 2017.

3.4 Conclusion

By assessing the region's major sources of GHG emissions, the inventory is an important first step towards identifying potential GHG reduction measures. The results will be used to inform this PCAP, set the stage for future planning efforts, and develop the CCAP. As discussed in the GHG Reduction Measures section of this plan, the inventory clearly indicates that industrial sources must be addressed to achieve meaningful decreases in GHG emissions.

Strategies that reduce emissions from mobile sources and electric power can also be expected to have a significant impact. Though residential, commercial, and agricultural sources contribute relatively smaller amounts of emissions to the regional total, measures that decrease emissions from these sources will be an important component of overall regional GHG reductions. Finally, it is anticipated that the next iteration of the inventory, to be completed in advance of the CCAP, will provide additional details for future planning efforts.

4. Priority GHG Reduction Measures

GHG Reduction Strategies

1. Reduce vehicle miles traveled by increasing the use of public transit.
2. Reduce vehicle miles traveled by supporting non-motorized transportation.
3. Reduce vehicular congestion.
4. Transition to low emissions vehicles.

5. Decarbonize industrial processes.
6. Mitigate emissions at industrial facilities.

7. Expand clean and renewable electric power generation.
8. Improve the efficiency and resilience of the power grid.
9. Make buildings more energy efficient.

10. Transition to low emission agricultural processes.

11. Create more efficient wastewater treatment systems.
12. Reduce emissions from wastewater treatment processes.

13. Reduce community waste.
14. Reduce emissions from waste management processes.

15. Use natural processes to capture and store atmospheric carbon dioxide.
16. Implement carbon capture technologies at industrial facilities.

4.1 Priority GHG Reduction Measures

The measures in this section have been identified as priority measures for the purposes of pursuing funding through CPRG implementation grants. This list of measures is not exhaustive of the region's priorities. Instead, the selected priority measures included in this PCAP meet the following criteria:

1. **The measure has been identified by regional stakeholders as one which they are considering implementing in the near term.**
2. **The measure is implementation-ready, meaning that the design work for the policy, program, or project is complete enough that a full scope of work and budget can be included in a CPRG implementation grant application.**
3. **The measure can be completed in the near term, meaning that all funds will be expended and the project completed within the five-year performance period for the CPRG implementation grants.**
4. **One or more entities within the region has, or can obtain, the authority to implement the measure.**
5. **It can be reasonably expected that the measure can be implemented using existing local, state, or federal funding sources.**

The GHG reduction measures identified as part of this plan vary in levels of specificity, from broad recommended activities to discreet, location-specific projects. Individual projects identified by stakeholders are listed separately in Appendix C. The remaining GHG reduction measures may be implemented by multiple agencies and on varying scales, and unless otherwise noted it is assumed that the measures may be implemented in multiple geographic locations across the region.

The GHG reduction measures are organized among the following seven sectors:

1. **Transportation**
2. **Industry**
3. **Energy**
4. **Agriculture**
5. **Wastewater**
6. **Materials Management**
7. **Carbon Removal and Storage**

These sectors represent the overall economic or GHG emissions category to which the measure is most closely related. Some measures may be associated with multiple sectors. Under each of the sectors, more specific GHG reduction measures are outlined as strategies and implementation actions. They are described further in the following format:

Strategy: A related collection of programs, projects, and initiatives that, once implemented, will result in measurable reductions in GHG emissions. Each Strategy described in the PCAP includes the following information:

Implementation Actions: Specific activities that may be undertaken by regional stakeholders to advance implementation of the strategy.

GHG Reduction Benefits: The potential decrease in GHG emissions that may result from implementation of the strategy. Potential GHG reductions are described to the greatest level of detail possible; however, the actual reductions realized will vary depending on the specific circumstances of the measure's implementation, including variables such as geographic location, scope, and technologies used. In many cases, GHG reduction benefits are described as a potential rate of reduction if a certain strategy is implemented, or as the results of a hypothetical project or policy. Methodologies for calculating benefits are described in Appendix D.

Authority to Implement: The agency or agencies responsible for implementing the Strategy, and milestones for obtaining implementing authority, if applicable. It is assumed that agencies that have authority to implement measures also have the requisite budget authorities. Measures that may be implemented on private property are likely to require close coordination with property owners.

Metrics for Tracking Progress: Quantifiable measures that may be used to evaluate the Strategy's success over time.

Additional Considerations: Other descriptive information as applicable.

Following the description of each of the priority GHG reduction measures, an analysis of benefits to LIDACs enumerates the potential benefits that may accrue to these communities through implementation of these priority measures.

Transportation

Strategy 1

Reduce vehicle miles traveled by increasing the use of public transit.

Alternatives to single occupant vehicles (SOVs) such as public transit reduce total regional vehicle miles traveled (VMT) by allowing multiple travelers to share a single transit vehicle. When transit vehicles are fueled with low or no-carbon fuels, additional GHG reduction benefits can be realized. Transit use may be increased through infrastructure and service improvements as well as projects and policies that make transit easier to use. Such measures are detailed below.

Implementation Actions

T-1.1	Expand and improve existing bus service.
T-1.2	Study and implement fare capping policies for low-income transit riders.
T-1.3	Develop bus rapid transit routes.
T-1.4	Develop new ferry routes, especially connecting rural areas to activity or employment centers.
T-1.5	Develop regional light rail and/or commuter rail.
T-1.6	Develop and expand inter-city rail service, particularly between New Orleans and Baton Rouge.
T-1.7	Improve walking and biking access to transit, including stops that comply with the Americans with Disabilities Act and transit routes that are connected to a safe and comfortable walking and biking network.
T-1.8	Create transit stops and facilities that are safe and comfortable to use. Facilities may also incorporate improvements that have other GHG reduction benefits, such as solar powered and climate adaptive bus shelters.
T-1.9	Conduct land use planning that supports and encourages the development of transit-oriented communities.

Transportation

GHG Reduction Benefits

The following example scenarios show the marginal GHG reduction benefit of each one percent reduction in annual VMT as well as the potential GHG reductions of transit service improvements:

Scenario	GHG Reduction
Reduce regional VMT by 1%.	43,471.29 MT of CO_2E per year
Expand regional transit by 10% (resulting in a 5% reduction in VMT).	278,399 MT CO_2E per year

Authority to Implement

The actions listed under Transportation Strategy 1 can be implemented with existing authorities through Louisiana Department of Transportation and Development (LADOTD), local governments, transit operators, and/or the Metropolitan Planning Organization (MPO).

Metrics for Tracking Progress

Transit Ridership.

Strategy 2

Reduce vehicle miles traveled by supporting non-motorized transportation.

Supporting non-motorized transportation can help reduce VMT as people replace trips they would normally take in a motor vehicle and instead use a non-motorized mode, thus reducing tailpipe emissions and GHGs. Similar to public transit, non-motorized transportation can be encouraged through the development of safer infrastructure, policies to encourage safe behavior, as well as programs to improve the public's access to non-motorized modes of transportation.

Implementation Actions

T-2.1 Develop more biking and walking infrastructure, including multi-use paths, bike lanes, crosswalks, and high visibility striping.

T-2.2 Enhance public places to make walking and biking safer and more comfortable, such as the provision of more shade and better lighting.

T-2.3 Develop jurisdictional walking and biking plans, and continued implementation of existing plans.

T-2.4 Develop complete streets policies.

T-2.5 Create policies and programs to encourage safe driving behavior and to improve drivers' awareness of laws regarding walking and biking.

T-2.6 Expand or develop bike share programs.

T-2.7 Provide subsidies for bikes or ebikes.

Transportation

GHG Reduction Benefits

The following example scenario shows the potential GHG reductions resulting from a change in transportation mode to biking:

Scenario	GHG Reduction
Increase protected bicycle infrastructure that encourages 50 employees to commute to work on a bicycle once a week	1.15 MT CO_2E per year

Authority to Implement

The actions listed under Transportation Strategy 2 can be implemented with existing authorities through LADOTD, local governments, and/or the MPO.

Metrics for Tracking Progress

Pedestrians and cyclists at non-motorized transportation counting stations; Bike share ridership.

Strategy 3

Reduce vehicular congestion.

Mitigating vehicular congestion can lessen GHG emissions by reducing idle times and shortening travel times, which in turn improves fuel efficiency. Some congestion mitigation measures, such as roadway capacity increases, may ultimately cause an increase in VMT and thereby result in higher emissions. However, other mitigation measures, such as those that enhance network connectivity, manage travel demand, or improve system management and operations, may reduce both congestion and its associated emissions.

Implementation Actions

T-3.1 Improve roadway network connectivity.

T-3.2 Implement Transportation Systems Management and Operations (TSMO) to improve the way existing roadways are used by drivers.

T-3.3 Develop jurisdictional walking and biking plans, and continued implementation of existing plans.

T-3.4 Add or expand managed lanes such as High Occupancy Vehicle (HOV) lanes or High Occupancy Toll (HOT) lanes on highly congested roadways such as the Crescent City Connection and Pontchartrain Expressway.

T-3.5 Improve traveler information systems to allow drivers to choose more efficient routes, including time of arrival estimates and notifications of closed railway crossings.

T-3.6 Conduct on-street parking pricing studies to more efficiently use on-street spacing and thereby reduce the amount of time drivers spend looking for parking spaces.

T-3.7 Study and implement curb-use management to designate and use passenger and freight loading zones more efficiently.

T-3.8 Explore incentives for large employers to implement travel demand strategies such as remote work, employer vanpools, and subsidized public transit passes.

T-3.9 Expand and improve incident response and clearance programs.

Transportation

GHG Reduction Benefits

The GHG reductions realized through congestion mitigation strategies can vary considerably based on the circumstances of individual projects. The combination of strategies implemented, roadway characteristics, vehicle mix, and travelers impacted can all affect the degree to which GHGs will be reduced. A variety of tools are available to assess these benefits on a project-by-project basis. Some examples of potential reductions include:

Scenario	GHG Reduction
Implement left turn lanes and left turn signals at an intersection of two, six-lane roadways that each carry around 20,000 vehicles per day.	78 MT of CO_2E per year
Synchronize 10 traffic signals on a five mile stretch of roadway with three lanes in each direction.	655 MT CO_2E per year
Add a separated HOV lane that diverts 10% of traffic from the general purpose lanes for five miles during peak hours, on a five-lane expressway carries 1,000 vehicles per lane per peak hour.	1,056 MT CO_2E per year
Allow 250 workers at a single place of employment with an average commute distance of 10 miles to switch to remote work.	206 MT CO_2E per year

Authority to Implement

The actions listed under Transportation Strategy 3 can be implemented with existing authorities through LADOTD, local governments, transit operators, and/or the MPO.

Metrics for Tracking Progress

Regional VMT; Congestion as defined and measured by the RPC's Congestion Management Process.

Transportation

Strategy 4

Transition to low emissions vehicles.

Fuel Conversion/Efficiency: Replacing existing vehicles with more fuel efficient or alternative fuel vehicles reduced GHGs by reducing or eliminating vehicular emissions. Projects that increase fuel efficiency of existing vehicles can similarly be expected to reduce GHG emissions.

Implementation Actions

T-4.1	Replace public fleet vehicles with higher efficiency or alternative fuel vehicles, including electric vehicles (EV). Fleets may include but are not limited to public transit, paratransit, school buses, and local government vehicles.
T-4.2	Replace off-road vehicles and equipment with higher efficiency, electric, or other alternative fuel vehicles and equipment. Such vehicles and equipment may include but are not limited to port equipment, ferries and other maritime vehicles, landscaping equipment, and construction equipment.
T-4.3	Develop a region-wide EV deployment strategy in order to coordinate the strategic placement of EV infrastructure across the region.
T-4.4	Develop fleet EV charging infrastructure or other alternative fuel stations.
T-4.5	Deploy public EV chargers and other alternative fuel stations.
T-4.6	Facilitate the procurement of alternative fuel vehicles through revised procurement policies at the local and state level, and/or participation in vehicle purchasing cooperatives.
T-4.7	Establish incentive programs for private individuals and fleets to convert vehicles to alternative fuels.
T-4.8	Establish workforce training programs for alternative fuel vehicle maintenance.
T-4.9	Institute idle reduction policies and programs for private and public fleet vehicles.
T-4.10	Deploy shore power for maritime vessels at ports, including tugboats and cruise ships.

Transportation

GHG Reduction Benefits

Several tools were used to calculate the benefits of switching to low-emissions vehicles and adopting idle reduction strategies:

Scenario	GHG Reduction
Replace 50 light-duty Internal Combustion Engine Vehicles with Electric Vehicles.	136 MT of CO_2E per year
Create an idle free zone which results in the use of Auxiliary Power Units (APUs) and reduces 1,752 hours of idling a year in diesel trucks.	10.81 MT CO_2E per year
Create an idle free zone which results in engines turning off and reducing 1,752 hours of idling a year in diesel trucks.	12.85 MT CO_2E per year

Authority to Implement

The actions listed under Transportation Strategy 4 can be implemented with existing authorities through LADOTD, local governments, transit operators, ports, and/or the MPO.

Metrics for Tracking Progress

Number of vehicles replaced or converted; Number of charging or alternative fuel stations deployed; Number of non-road alternative fuel or idle reduction projects implemented.

Additional Considerations

In recent years RPC stakeholders have expressed a desire to transition fleets to alternative fuel vehicles but have frequently noted difficulties in doing so due to limited vehicle availability, high purchase costs, and procurement policies that do not address or allow the purchase of alternative fuel vehicles. In addition to the strategies listed above, RPC will work with state and local stakeholders to review and revise policies as necessary and to track vehicle availability. RPC will also identify and promulgate methods for vehicle purchase return on investment calculations that are based not just on purchase price but also total lifetime savings due to reduced fuel and maintenance costs. These efforts will be aided by the Southeast Louisiana Clean Fuel Partnership (SLCFP), a US Department of Energy designated Clean Cities Coalition that is housed within the RPC. The SLCFP convenes regional stakeholders in the public and private sectors to facilitate the transition to more efficient and cleaner technologies, and is ideally suited to aid in regionwide alternative fuel adoption and fleet conversion.

Industry

Strategy 1

Decarbonize industrial processes.

Industrial decarbonization refers to avoiding the combustion of fossil fuels to reduce emissions from the industrial process chain.

Implementation Actions

I-1.1	Establish incentive programs for the use of low embodied carbon materials.
I-1.2	Establish incentive programs to promote projects that accelerate energy and operational efficiency at industrial facilities.
I-1.3	Develop programs to support and incentivize the utilization of clean energy at industrial sites.
I-1.4	Implement waste-to-energy planning.
I-1.5	Work with individual companies and facilities to plan and implement GHG reduction strategies.

GHG Reduction Benefits

The actual amount of ghg reductions per industrial facility will vary based on each site's processes.

Scenario	GHG Reduction
Reduce regional industrial process emissions by 10% by adopting various efficiency standards, fuel switching, or waste-to-energy processes.	2,751,100 MT CO_2E per year

Authority to Implement

The actions listed under Industry Strategy 1 can be implemented with existing authorities held by local governments, though effective mitigation of industrial emissions will require partnership with state and federal agencies. See Additional Considerations below.

Metrics for Tracking Progress

Programs implemented; Facility plans developed; Tons of waste diverted.

Additional Considerations

While the actions described above can be implemented by local governments, the most effective strategies for reducing industrial GHG emissions require authorities that lie within state and federal agencies. As noted in the GHG Inventory, the majority of the region's GHG emissions are caused by industrial sources, but local governments have limited authority to regulate industrial emissions. Reducing industrial GHG emissions is a high priority for the region, but effectively addressing the issue will require close coordination with and leadership by state and federal partners. For this reason, this plan recommends implementation of the Industrial Decarbonization strategies described in the State of Louisiana PCAP in addition to the actions described above. The state's PCAP emphasizes the need for government agencies, industry partners, and communities to establish clear lines of communication that allow for continued coordination. It is recommended that local, regional, and state entities create mechanisms such as working groups or advisory committees that allow industry partners, government agencies, and community members to work together to develop mutually beneficial solutions.

Industry

Strategy 2

Mitigate emissions at industrial facilities.

In addition to removal of carbon from industrial processes, certain actions may be taken to reduce or capture carbon emitted at industrial facilities. These mitigation activities seek to add features to industrial sites that reduce GHGs without directly altering industrial processes.

Implementation Actions

I-2.1 Implement green infrastructure for carbon capture at industrial facilities.

I-2.2 Convert post-industrial facilities to carbon sinks using strategies such as urban forestry and green infrastructure.

GHG Reduction Benefits

Scenario	GHG Reduction
Plant 50 tree seedlings at a single facility that will grow for at least 10 years at postindustrial or operating facilities.	3 MT CO_2E per year

Authority to Implement

The actions listed under Industry Strategy 2 can be implemented with existing authorities held by local governments, though effective mitigation of industrial emissions will require partnership with state and federal agencies. See Additional Considerations below.

Metrics for Tracking Progress

Land area converted to green infrastructure or other carbon sinks.

Additional Considerations

As described in the prior industry strategy, the most effective strategies for reducing industrial emissions require state and federal action. This plan recommends implementation of the industrial GHG emissions measures described in the State of Louisiana PCAP as well as mechanisms to create continuous coordination and collaboration between government, industry, and community partners.

Energy

Strategy 1

Expand clean and renewable electric power generation.

Clean energy generation emits little to no pollution, including GHGs, while renewable energy is generated from sources which are replenished naturally over time. Clean energy reduces GHG emissions caused by power generation, while renewable energy provides a sustainable, continuous source of power for future generations. Some power generation sources are clean but not renewable, such as nuclear; other sources are renewable but not clean, such as biomass. As such, this plan recommends expanded use of power generation sources that are both clean and renewable, such as solar and wind.

Implementation Actions

E-1.1	Implement and expand community solar sites.
E-1.2	Create or update local ordinances to ease and encourage the implementation of community solar.
E-1.3	Study opportunities to install community solar on the roofs of large facilities or underutilized agricultural sites.
E-1.4	Convert brownfields to “bright fields”: develop clean and renewable energy generation at underutilized and contaminated sites.
E-1.5	Work with state and local regulators to expand net metering for rooftop solar and other on-site renewable energy generation.
E-1.6	Install solar energy generation and battery backup storage on public buildings.
E-1.7	Create programs to incentivize solar adoption on privately owned facilities.
E-1.8	Implement a municipal solar incentive program with direct pay eligibility.
E-1.9	Enhance community resilience through the use of solar power at community resilience hubs.
E-1.10	Implement on-site, clean and renewable energy generation at large facilities such as ports.
E-1.11	Work with local utilities and relevant regulators to plan for wind power infrastructure and transmission.
E-1.12	Utilize facilities such as abandoned offshore wells for wind power and existing pipeline rights of way for electric power transmission.

GHG Reduction Benefits

Scenario	GHG Reduction
Each additional one megawatt (MW) of solar capacity to the power generation grid (e.g., through the implementation of community solar).	1,461 MT CO_2E per year
Install solar energy equipment (e.g., on public buildings, at ports, on privately-owned buildings) capable of generating one MW.	1,242 MT CO_2E per year

Energy

Authority to Implement

Local governments, utility providers, and the Louisiana Public Service Commission (LPSC) currently hold the authorities required to implement the actions described in Energy Strategy 1.

Metrics for Tracking Progress

Share of electricity produced from renewable sources; Added clean and renewable energy capacity to the portfolios of local utilities; Number of renewable energy generation sites.

Strategy 2

Improve the efficiency and resilience of the power grid.

As the region transitions to clean and renewable power generation, and increasingly electrifies transportation, industrial processes, and other systems, the power transmission grid will need to adapt accordingly. Moreover, the grid must be prepared for changing climate conditions. The actions below will help develop a power grid that can support a clean energy transition and withstand increased climate-related hazards.

Implementation Actions

E-2.1 Plan for and implement projects to address transmission needs resulting from the transition to clean and renewable power sources.

E-2.2 Make the electric power grid more resilient through grid hardening, backup storage, and renewable redundancy.

E-2.3 Implement microgrids for communities and critical facilities.

GHG Reduction Benefits

Scenario	GHG Reduction
For each one MW of capacity developed within a microgrid.	1,461 MT CO_2E per year

Authority to Implement

Local governments, utility providers, and the LPSC currently hold the authorities required to implement the actions described in Energy Strategy 2.

Metrics for Tracking Progress

Number of grid resilience projects implemented; System redundance and resilience as defined and measured by local utility providers; Number and location of microgrids created.

Additional Considerations

Improvements to the transmission system do not result in direct GHG benefits, but they complement the actions in Energy Strategy 1 which do result in direct GHG reductions.

Energy

Strategy 3

Make buildings more energy efficient.

Though the proportion of regional GHG emissions caused by commercial and residential buildings is substantially less than other sources, strategies that reduce such emissions through enhanced energy efficiency can be achieved incrementally on a small scale and at relatively low cost.

Implementation Actions	
E-3.1	Implement energy efficiency improvements such as LED lights and passive heating and cooling at public buildings.
E-3.2	Develop incentive and bridge subsidy grant or loan programs in coordination with local green banks to provide additional funding for residential, multifamily, commercial, and institutional energy efficiency, electrification, weatherization, and renewable energy adoption efforts.
E-3.3	Develop home-improvement subsidy program for low-income property owners to help fund necessary construction repairs needed to bring older housing stock up to code and position the owners to take full advantage of other energy efficiency incentive programs.
E-3.4	Create green roofs programs.
E-3.5	Create community resilience hubs with grid-interactive, carbon-free distributed energy resources and long-duration storage for use during and after disaster events.
E-3.6	Establish building energy benchmarking and performance standards, particularly for large buildings with high energy demand.
E-3.7	Create energy code training programs for building inspectors.
E-3.8	Create Energy Authorities within local governments to manage standards, programs, and incentives related to energy efficiency.
E-3.9	Create education and outreach efforts to inform disadvantaged communities about financial incentives and opportunities for home repairs and upgrades related to solar & battery, electrification, energy efficiency, and weatherization.

Energy

GHG Reduction Benefits

Scenario	GHG Reduction
Reduce residential electricity consumption by 5% through energy efficiency upgrades.	136,154 MT CO_2E per year
Reduce commercial electricity consumption by 5% through energy efficiency upgrades.	237,148 MT CO_2E per year

Authority to Implement

The actions listed under Energy Strategy 3 can be implemented with existing authorities held by local governments.

Metrics for Tracking Progress

Number of energy efficiency projects implemented; Number of dollars invested in energy efficiency upgrades; Number of energy efficiency events or trainings held.

Agriculture

Strategy 1

Transition to low emissions agricultural processes

Actions that reduce agricultural emissions focus on sustainable and regenerative farming techniques. These aim to protect and enhance farm ecosystems while reducing reliance on non-renewable resources and high emissions practices. In addition to low-emissions agricultural processes, the agricultural sector can contribute to reduced GHG emissions through the creation of new agricultural lands and innovative uses of existing farms.

Implementation Actions

A-1.1 Study opportunities to reduce or eliminate emissions from agricultural processes, such as crop residue burning, through the use of natural processes.

A-1.2 Establish incentive programs to replace agricultural equipment with more efficient or alternative fuel models.

A-1.3 Implement urban agriculture programs to reduce reliance on commercially transported produce.

A-1.4 Convert former or underutilized agricultural sites to solar or other renewable energy generation sites.

GHG Reduction Benefits

The actual amount of GHG reductions per facility will vary based on each site's processes.

Scenario	GHG Reduction
Reduce sugarcane residue burning at sugar mills by 10%.	46,679 MT CO_2e per year
Switch to using renewable diesel instead of diesel to power tractors.	2.63 MT CO_2e per year per tractor

Authority to Implement

The actions listed under this strategy can be implemented with existing authorities held by local governments.

Metrics for Tracking

Agricultural emissions reduction programs implemented; Number of vehicles or equipment replaced or converted; Land area converted to community gardening or renewable energy.

Wastewater

Strategy 1

Create more efficient wastewater treatment systems

Several stakeholders indicated that inefficiencies in existing regional wastewater treatment systems are contributing to higher GHG emissions. The actions described in this strategy aim to create systems that more effectively serve the region while also reducing overall emissions.

Implementation Actions

W-1.1 Implement green infrastructure to reduce the energy expended draining and pumping stormwater.

W-1.2 Consolidate and centralize wastewater treatment facilities.

GHG Reduction Benefits

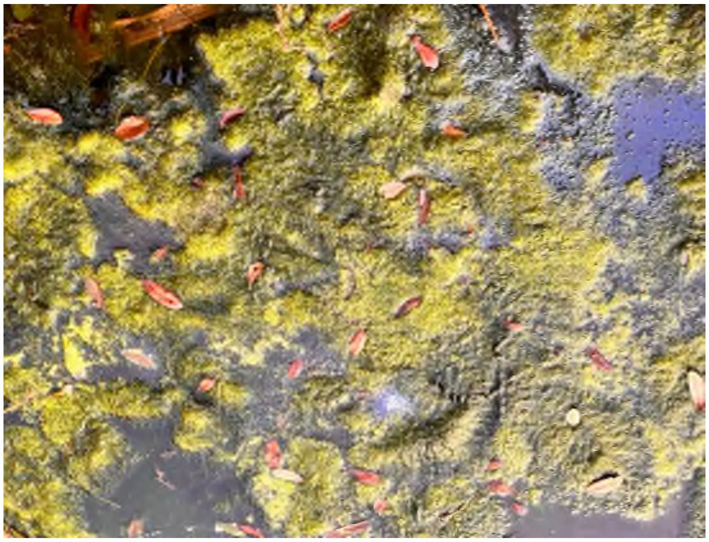
Scenario	GHG Reduction
Reduce the number of people using septic systems by 10%.	6,926 MT CO_2e per year

Authority to Implement

The actions listed under this strategy can be implemented with existing authorities held by local governments.

Metric for Tracking

Percentage of regional households using septic or other on-site wastewater treatment; Number of wastewater consolidation or centralization projects implemented.



Wastewater

Strategy 2

Reduce emissions from wastewater treatment processes

While the actions described in the previous strategy aim to improve overall system efficiencies, additional emissions reductions may be achieved through improvements may be made to individual facilities and processes.

Implementation Actions

W-2.1 Implement projects for the beneficial reuse projects of biosolids to eliminate incineration of residuals.

W-2.2 Establish Implement technologies to improve the efficiency of anaerobic digestion at wastewater treatment plants.

W-2.3 Replace equipment to improve blower efficiency at wastewater treatment plants.

W-2.4 Install renewable energy sources for pumps and wastewater treatment facilities.

GHG Reduction Benefits

Scenario	GHG Reduction
Improve the efficiency of digester systems across the region by 10% so that more methane is captured in the wastewater treatment process.	26,138 MT CO_2e per year

Authority to Implement

The actions listed under Wastewater Strategy 2 can be implemented with existing authorities held by local governments.

Metric for Tracking

Biosolids diverted from incineration; Kilowatt hours and/or fuel consumed at wastewater treatment facilities.

Materials Management

Strategy 1

Reduce community waste

Waste reduction actions that can reduce GHG emissions through decreased waste transportation and processing. Activities that seek to reuse or repurpose waste can further reduce emissions by lessening the need to manufacture and transport new materials.

Implementation Actions

M-1.1	Develop and expand community recycling programs.
M-1.2	Establish programs to measure and set standards for sustainability in materials management, particularly at large facilities such as ports.
M-1.3	Create plastic reduction and waste removal programs.
M-1.4	Reuse waste such as glass bottles converted to sand, oyster shells, and Christmas trees for use in coastal restoration projects.
M-1.5	Utilize materials of opportunity such as crushed concrete to construct shoreline protection projects.
M-1.6	Establish community composting programs with community-wide compost pickup.
M-1.7	Create programs to encourage composting in community gardens.
M-1.8	Develop programs to distribute unused food to communities in need.
M-1.9	Produce compost from waste materials such as ditch dirt, woody debris, and sewer press solids for use in coastal restoration activities.

GHG Reduction Benefits

Scenario	GHG Reduction
Divert 10% of regional trash from landfills to recycling.	1 million MT CO_2E per year
Divert 100 tons of organic waste from landfills to compost facilities .	44 - 62 MT CO_2E per year

Authority to Implement

The actions listed under Materials Management Strategy 1 can be implemented with existing authorities held by local governments.

Metric for Tracking

Tons of waste diverted from landfills.

Materials Management

Strategy 2

Reduce emissions from waste management processes

In addition to waste reduction, emissions resulting from waste management can further be reduced through more efficient waste processing practices and enhanced technologies.

Implementation Actions

M-2.1 Implement and expand landfill gas recovery systems, and utilize captured methane for power generation or transportation purposes.

M-2.2 Replace waste management equipment such as incinerators and transport vehicles with lower emissions or higher efficiency equipment.

M-2.3 Construct a regional, modern materials recovery facility.

GHG Reduction Benefits

Scenario	GHG Reduction
Implement methane capture at regional landfills that currently do not have such systems.	5,915 MT CO_2E per year

Authority to Implement

The actions listed under Materials Management Strategy 2 can be implemented with existing authorities held by local governments.

Metric for Tracking

Quantity of gas recovered from landfills; Facilities constructed; Equipment Replaced.

Carbon Removal and Storage

Strategy 1

Use natural processes to capture and store atmospheric carbon dioxide

Tree canopy and other vegetation have the beneficial effect of removing carbon dioxide and other pollutants from the atmosphere, in addition to co-benefits such as urban heat island reduction, and quality of life improvements. Southeast Louisiana's prevalence of wetlands and shorelines also offers the opportunity to increase natural wetlands while concurrently achieving other regional goals such as land restoration and storm surge protection.

Implementation Actions

C-1.1	Expand green infrastructure through the implementation of local plans and conversion of impervious surfaces such as parking lots.
C-1.2	Implement urban forestry programs with an emphasis on native plants, expanding the urban tree canopy, and developing tree protection districts.
C-1.3	Study the potential for public spaces such as neutral grounds and underutilized pavement to be used for green infrastructure or urban forestry.
C-1.4	Expand programs for plant cultivation on vacant lots and other underused properties.
C-1.5	Construct and expand living shorelines on Lake Pontchartrain, Bayou Sauvage, and other major water bodies.
C-1.6	Implement marsh and wetlands creations projects such as the New Orleans East Landbridge and Central Wetlands.
C-1.7	Implement and expand coastal planting programs to reduce wave action and coastal surge, create carbon sinks and protect vulnerable inland communities.

GHG Reduction Benefits

Scenario	GHG Reduction
Increase urban tree cover across the region by 10%.	19,261 MT CO_2e per year
Create 100 acres of wetlands.	650 MT CO_2e per year

Authority to Implement

The actions listed under Carbon Removal and Storage Strategy 1 can be implemented with existing authorities held by local governments and state agencies.

Metric for Tracking

Land area converted to green infrastructure; Land area under canopy; Wetlands and shorelines creation.

Carbon Removal and Storage

Strategy 2

Implement carbon capture technologies and processes

Technologies for capturing, storing, and reusing GHG pollutants have developed rapidly in recent years. Implementing such processes across the region can provide additional GHG reductions.

Implementation Actions

C-2.1 Study and incentivize new carbon capture and storage technologies at industrial facilities and large sites such as ports.

C-2.2 Develop carbon capture programs and use solidified carbon rock for community infrastructure such as flood protection and road bases.

GHG Reduction Benefits

Scenario	GHG Reduction
Capture 10% of industrial GHG emissions through carbon sequestration.	4.1 million MT CO_2e per year

Authority to Implement

The actions listed under Carbon Removal and Storage Strategy 2 can be implemented with existing authorities held by local governments and state agencies.

Metric for Tracking

Tons of carbon captured from industrial facilities.

4.8 Benefits of Measures to Low-Income and Disadvantaged Communities

The priority measures in this PCAP, though intended to provide prompt GHG emission reductions in the short-term, shall also provide several enhancements to the overall quality of life for residents within identified LIDACs, including those described below.

Air Quality and Health Improvements

Many of the processes that produce GHG emissions also release other air pollutants. A reduction of GHG emissions, through the reduction in VMT, electrification of vehicle fleets, conversion to higher efficiency or alternative fuel vehicles, adoption of less carbon-intensive industrial processes, and use of more renewable and clean energy sources for electricity generation, can result in improvements to air quality helping improve the health of LIDACs.

Measures that result in less combustion of fossil fuels by industrial facilities and through tail pipe emissions will improve environmental air quality by reducing the quantity of hazardous air pollutants released, such as fine particulate matter. EPA research has also shown that exposure to particulate matter and ozone is associated with increased cases and intensity of lung and heart disease diagnoses, children and the elderly being especially susceptible.[23] Many regional LIDACs rank above the 90th percentile for diesel particulate matter exposure according to the National Air Toxics Assessment as compiled by EPA's EJScreen. Regionally, this may be due to living adjacent to the region's largest industry emitters and/or major thoroughfares and interstate routes. More vehicular traffic produces greater transportation emissions, resulting in higher quantities of diesel particulate matter.[24] Reducing VMT, converting private and public fleets to electric, and decreasing vehicular idling would all help minimize exposure to air pollutants from transportation emissions. The improvement in air quality would result in direct health benefits, reduce susceptibility to heart or lung disease, and minimize premature deaths.[25] Generating electricity from clean and renewable sources also improves air quality and reduces negative public health impacts to communities living near power plants.

LIDACs within the region's urban areas often lack tree canopy resulting from years of local underinvestment, making them susceptible to heat-island effects. The implementation of urban forestry programs in low-income areas can help reduce GHG emissions, minimize the heat-island effect, and help improve local ambient air quality by naturally filtering CO_2 and other air pollutants (i.e., PM_{10}, NO_2, SO_2, CO).[26] Measures related to residential energy efficiency upgrades also improve indoor air-quality, equally important for community health.

Cost-Savings and Opportunities to Build Wealth

Many regional LIDACS experience energy burden, meaning a larger proportion of a person's income is spent on energy and electricity use.[27] Efforts to reduce GHG emissions by making residential buildings more energy efficient can directly benefit disadvantaged residents by lowering their monthly utility costs. Specific programs that assist low-income property owners with renovations to bring their homes up-to-code in order to install energy efficient appliances, or roof-top solar installation, provide the opportunity for these households to build equity in their home, and subsequently their family wealth. With a net-metering policy in place, roof-top solar can occasionally provide homeowners with additional profits from their extra energy generation.

Low-income communities also face barriers to accessing certain clean and renewable energy technologies that help make energy more affordable. Measures to expand access to the use of renewable energy, such as community solar programs that target low-income electric customers, can further help cut utility costs for residents. Microgrid development, strategically located within certain disadvantaged neighborhoods, could provide residents with more energy cost-savings, greater energy reliability during storm events, and potential independence from a utility provider.

Expanded Transportation Access and Safety

Improvements to transit facilities and enhancements to expand bicycle and pedestrian infrastructure across the region would increase access to destinations, provide more efficient routes, and reduce travel times for residents who do not own a car. More connected and accommodating routes help individuals maximize their personal time, which benefits overall quality of life. Development of dedicated biking and walking facilities across LIDACs also improves safety for individuals who do not own a vehicle, reduces crashes, and lessen travel-induced stressors. Pedestrian and cyclist deaths have increased across southeast Louisiana in recent years, and expanded and improved development of protected bicycle and pedestrian infrastructure within disadvantaged communities can help reduce these numbers.[28]

Reduce Climate Related Vulnerabilities and Risks

Southeast Louisiana is at elevated risk for extreme climate change impacts. A net reduction in GHG emissions will have long-term benefits that reduce the region's overall threats. However, many of these projects can reduce climate risks and vulnerabilities in the near-term. Historical policies such as red-lining and modern-day disinvestment in LIDACs resulted in less greenspace and tree canopies.[29] As a result, these neighborhoods typically have hotter surface and air temperatures which create a heat island effect that can lead to heat-related illnesses and higher energy bills. Projects such as planting trees will reduce GHG emissions and help lessen the heat island effect present in many disadvantaged neighborhoods. Heat islands can also have compounding impacts. Power outages from tropical storms or hurricanes create more exposure to extreme heat causing deaths during and after weather events.[30]

Investing in resilience hubs and community solar projects targeted within LIDACs can reduce exposure to extreme heat by creating spaces for cooling centers and electronics charging during weather related power grid failures.

GHG reduction projects have the added benefits of increasing regional adaptation and resilience. Carbon capture projects (i.e., tree planting, green infrastructure, and wetland restoration) reduce precipitation-, storm- or tidal-event flood risks though stormwater absorption and shoreline creation. Together, these implementation measures will not only help reduce GHG emissions, but will help the region adapt, building long-term resilience.

Education, Training, and High-Quality Job Creation

Additionally, many of these recommended measures will help contribute to greater job access in the region. Fleet conversion, energy efficiency upgrades, switching to low- or no-carbon energy sources, grid hardening, solar installation, and carbon capture all have potential to create good, quality, higher paying jobs. These new jobs, many of which will require a highly skilled labor force, will also require new education and training requirements. Ensuring that these types of jobs and their corresponding training go to disadvantaged communities will be a large part of the CCAP planning process.

5. Next Steps

5. Next Steps

While this PCAP truly acts as Priority Climate Action Plan with a specialized list of implementation-ready GHG reduction measures, the upcoming CCAP will allow staff to produce a more robust inventory, create GHG emissions projections and future targets, and come up with additional reduction measures. This PCAP utilized public sector and member parish input, but the abbreviated timeline for completing the plan and its associated deliverables did not allow for meaningful public and sector-specific stakeholder engagement.

The CCAP process will involve substantial outreach to stakeholders and community members, with an emphasis on LIDACs. A detailed public participation and involvement strategy will be one of the first items addressed after the release of this PCAP. The CCAP will guide future planning efforts around climate mitigation, incorporate goals from the community to create a holistic climate action plan for southeast Louisiana, identify additional funding sources for mitigation measures, and include a full workforce planning analysis to ensure the region is prepared to engage and support a greener economy.

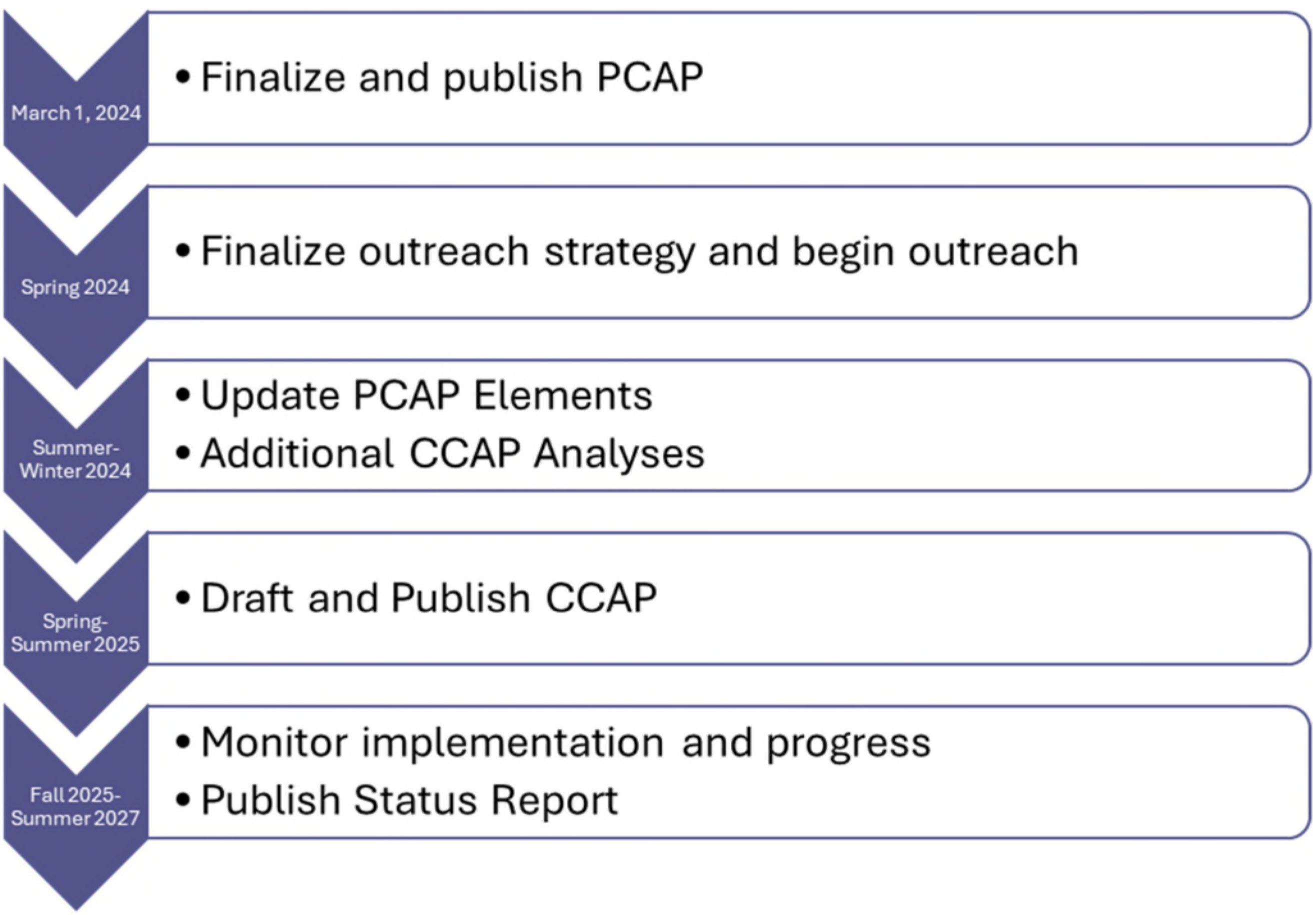


Figure 9: Timeline of CPRG Next Steps

Endnotes

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Appendix A: Disadvantaged Census Tracts

The Census tracts listed below met the criteria to be identified as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST).

Parish	Census Tract 2010 ID
Jefferson Parish	22051020202
Jefferson Parish	22051020502
Jefferson Parish	22051020505
Jefferson Parish	22051020513
Jefferson Parish	22051020516
Jefferson Parish	22051020600
Jefferson Parish	22051020700
Jefferson Parish	22051021000
Jefferson Parish	22051021200
Jefferson Parish	22051021500
Jefferson Parish	22051021600
Jefferson Parish	22051021803
Jefferson Parish	22051021804
Jefferson Parish	22051022001
Jefferson Parish	22051022303
Jefferson Parish	22051023100
Jefferson Parish	22051023700
Jefferson Parish	22051024600
Jefferson Parish	22051024700
Jefferson Parish	22051024900
Jefferson Parish	22051025001
Jefferson Parish	22051025003
Jefferson Parish	22051025103
Jefferson Parish	22051025104
Jefferson Parish	22051025201
Jefferson Parish	22051025202
Jefferson Parish	22051025400
Jefferson Parish	22051025500
Jefferson Parish	22051025700
Jefferson Parish	22051025800
Jefferson Parish	22051025900
Jefferson Parish	22051026000
Jefferson Parish	22051026100

Parish	Census Tract 2010 ID
Jefferson Parish	22051026200
Jefferson Parish	22051026300
Jefferson Parish	22051026700
Jefferson Parish	22051026800
Jefferson Parish	22051026900
Jefferson Parish	22051027000
Jefferson Parish	22051027100
Jefferson Parish	22051027200
Jefferson Parish	22051027501
Jefferson Parish	22051027502
Jefferson Parish	22051027601
Jefferson Parish	22051027602
Jefferson Parish	22051027701
Jefferson Parish	22051027703
Jefferson Parish	22051027803
Jefferson Parish	22051027811
Jefferson Parish	22051027812
Jefferson Parish	22051027902
Jefferson Parish	22051028100
Jefferson Parish	22051028200
Jefferson Parish	22051025002
Orleans Parish	22071000200
Orleans Parish	22071000300
Orleans Parish	22071000400
Orleans Parish	22071000601
Orleans Parish	22071000602
Orleans Parish	22071000603
Orleans Parish	22071000604
Orleans Parish	22071000605
Orleans Parish	22071000611
Orleans Parish	22071000613
Orleans Parish	22071000615
Orleans Parish	22071000617
Orleans Parish	22071000701
Orleans Parish	22071000702
Orleans Parish	22071000800
Orleans Parish	22071000901
Orleans Parish	22071000902
Orleans Parish	22071000903
Orleans Parish	22071000904

Parish	Census Tract 2010 ID
Orleans Parish	22071001100
Orleans Parish	22071001200
Orleans Parish	22071001301
Orleans Parish	22071001302
Orleans Parish	22071001401
Orleans Parish	22071001402
Orleans Parish	22071001500
Orleans Parish	22071001701
Orleans Parish	22071001720
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Orleans Parish	22071002501
Orleans Parish	22071002700
Orleans Parish	22071002800
Orleans Parish	22071002900
Orleans Parish	22071003000
Orleans Parish	22071003100
Orleans Parish	22071003303

Parish	Census Tract 2010 ID
Orleans Parish	22071003304
Orleans Parish	22071003307
Orleans Parish	22071003308
Orleans Parish	22071003400
Orleans Parish	22071003500
Orleans Parish	22071003600
Orleans Parish	22071003900
Orleans Parish	22071004000
Orleans Parish	22071004401
Orleans Parish	22071004402
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Orleans Parish	22071012900
Orleans Parish	22071013100
Orleans Parish	22071013200
Orleans Parish	22071013700
Orleans Parish	22071013800
Orleans Parish	22071013900
Orleans Parish	22071014000
Orleans Parish	22071014100
Orleans Parish	22071014300

Parish	Census Tract 2010 ID
Orleans Parish	22071014500
Orleans Parish	22071980000
Orleans Parish	22071013600
Plaquemines Parish	22075050100
Plaquemines Parish	22075050400
Plaquemines Parish	22075050500
Plaquemines Parish	22075050600
Plaquemines Parish	22075050700
Plaquemines Parish	22075050800
St. Bernard Parish	22087030103
St. Bernard Parish	22087030104
St. Bernard Parish	22087030105
St. Bernard Parish	22087030203
St. Bernard Parish	22087030204
St. Bernard Parish	22087030206
St. Bernard Parish	22087030207
St. Bernard Parish	22087030300
St. Bernard Parish	22087030400
St. Bernard Parish	22087030500
St. Bernard Parish	22087030601
St. Bernard Parish	22087030602
St. Bernard Parish	22087030603
St. Bernard Parish	22087030700
St. Bernard Parish	22087030800
St. Charles Parish	22089062200
St. Charles Parish	22089062400
St. Charles Parish	22089062700
St. Charles Parish	22089062800
St. James Parish	22093040200
St. James Parish	22093040400
St. James Parish	22093040500
St. James Parish	22093040600
St. John the Baptist Parish	22095070500
St. John the Baptist Parish	22095070600
St. John the Baptist Parish	22095070700
St. John the Baptist Parish	22095070800
St. John the Baptist Parish	22095070900
St. John the Baptist Parish	22095071000
St. John the Baptist Parish	22095071100
St. Tammany Parish	22103040103

Parish	Census Tract 2010 ID
St. Tammany Parish	22103040104
St. Tammany Parish	22103040501
St. Tammany Parish	22103040704
St. Tammany Parish	22103040801
St. Tammany Parish	22103040900
St. Tammany Parish	22103041102
St. Tammany Parish	22103041103
St. Tammany Parish	22103041202
Tangipahoa Parish	22105953200
Tangipahoa Parish	22105953300
Tangipahoa Parish	22105953400
Tangipahoa Parish	22105953500
Tangipahoa Parish	22105953600
Tangipahoa Parish	22105953800
Tangipahoa Parish	22105953900
Tangipahoa Parish	22105954001
Tangipahoa Parish	22105954002
Tangipahoa Parish	22105954101
Tangipahoa Parish	22105954102
Tangipahoa Parish	22105954300
Tangipahoa Parish	22105954400
Tangipahoa Parish	22105954502

Appendix B: GHG Inventory Methodology

The Regional Planning Commission (RPC) used the Environmental Protection Agency's (EPA's) Local Greenhouse Gas Inventory Tool (LGGIT) community module to complete the regional greenhouse gas (GHG) inventory. This tool is provided by EPA to allow local governments to calculate community-wide GHG emissions by sector, and the RPC applied it to the nine-parish region. To complete an inventory, users input emissions and activity data from a variety of sources into several modules. The tool then generates estimated GHG emissions, including carbon dioxide, methane, and nitrous oxide. For the Southeast Louisiana (SELA) inventory, the RPC used the following modules:

1. Control Sheet: Establishes basic parameters for the analysis.
2. Stationary Units: Calculates emissions from fuel consumption at stationary locations. For the SELA inventory this consisted of natural gas consumption at residential, commercial, and industrial sites.
3. Solid Waste: Calculates emissions from landfills.
4. Wastewater: Calculates emissions from wastewater treatment facilities, including treatment plants and septic systems.
5. Electricity: Calculates emissions from electricity generation, transmission, and consumption.
6. Agriculture & Land Management: Calculates emissions from fertilizer use at agricultural sites.
7. Urban Forestry: Calculates emissions captured by urban vegetation.
8. Additional Emissions Sources: Calculates emissions from user-defined sources. For the SELA inventory these sources include:
    a. Industrial processes, excluding electric power, waste, and natural gas consumption.
    b. Mobile sources, including aviation, on- and off-road vehicles, but excluding locomotives.

The input data sources and calculation methodologies for each LGGIT module are described below, followed by a review of additional summary analyses completed by the RPC.

Control Sheet

LGGIT requires users to input basic information about the region into its Control Sheet prior to completing the GHG inventory. RPC entered the following parameters into the Control Sheet:

1. City: Southeast Louisiana
    a. Data included in LGGIT includes all available data for the following parishes: Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany, and Tangipahoa.
2. Year: 2019
    a. RPC calculated the inventory using a base year of 2019 because it was (1) the last year prior to the COVID-19 pandemic, thereby avoiding pandemic-related anomalies in emissions data; and (2) it was the year in which most emissions data were

available. To the extent possible, data from 2019 was used to calculate emissions; however, in some instances such data was not available. Data sources and years are noted throughout this methodology.

3. Population: 1,399,834
   a. Data compiled from the American Community Survey (ACS) 5 Year Summary File (2015-2019) published December 2020 by the U.S. Department of Commerce, Economic and Statistics Administration, U.S. Census Bureau. Data received in text format and joined to spatial geography files by the RPC.
4. Sectors included in analysis: Residential, Commercial/Institutional, Industrial, Energy Generation
   a. These are the default, recommended sectors in LGGIT. RPC conducted summary analyses to provide additional detail on sectors in the Priority Climate Action Plan (PCAP), as described below.
5. eGRID subregion: SRMV
   a. LGGIT uses EPA's eGRID subregion emissions factors to calculate emissions from electricity generation.[1] The nine-parish region is included in both the SRMV and SPSO eGRID subregion; however, LGGIT does not allow multiple eGRID subregions to be used in the analysis. RPC staff chose to use the SRMV region because it includes a greater portion of the regional population.

Stationary Units

The RPC acquired 2019 usage data from the US Department of Energy (DOE), National Renewable Energy Laboratory (NREL), State and Local Planning for Energy (SLOPE) website[2]. The initial data download included electricity and natural gas consumption, in Millions of British Thermal Units (MMBtus), per sector (Commercial/Institutional, Residential, and Industrial), for every county in the United States. The procedure for processing and entering the data was as follows:

1. RPC staff pulled out the nine parishes needed, keeping the consumption per sectors as individual records.
2. The RPC then created Excel formulas acquired from the US Energy Information Administration (EIA)[3] to convert MMBtus to thousand cubic feet (mcf) for natural gas consumption per sector:

   1,000 cubic feet (mcf) of natural gas = 1.038 MMBtu.

3. The RPC created 27 unique Unit Descriptions for Stationary Units LGGIT data entry. These 27 units were created from the three sectors, per nine parishes and each of the 27 units' natural gas consumption in mcf. Examples include:
   a. Jefferson Parish Commercial/Institutional Sector became Unit JP C
   b. Jefferson Parish Industrial Sector became Unit JP I
   c. Jefferson Parish Residential Sector became Unit JP R
4. RPC staff entered natural gas consumption in mcf per individual Parish-Sector unit, selecting the matching LGGIT sector per unit. No data was entered for the Electrical Generation component of the Stationary Unit LGGIT module.

Solid Waste

The RPC acquired federal landfill data (2019) from the EPA's Landfill Methane Outreach Program (LMOP)[4] & Facility Level Information on Greenhouse Gases Tool (FLIGHT)[5] and state landfill data from the Louisiana Department of Environmental Quality's (LDEQ) Solid Waste Pemit and Landfills per parish data (2023),[6] and Landfill Capacity Reports (2011,[7] 2013,[8] 2015,[9] 2019,[10] and 2021[11]). The procedure for processing and entering the data was as follows:

1. From a combination of the above data sources, RPC staff created a spreadsheet containing the following information: landfill name, coordinate location, physical address, years of operation, methane collection (optional participation and amount collected), GHG and subparts emissions (in metric tons of CO_2e), type of landfill permit (Industrial, Non-Industrial, and Construction & Demolition waste), remaining landfill capacity, and acceptance rate (in annual tons). It should be noted that not all the above information was available for every landfill record. The final combination spreadsheet for the nine-parish region included 82 landfills and 43 data columns (2011-2023). Of these records, RPC staff pulled the ten landfills (due to LGGIT Solid Waste data record limit) that had the most complete record set (2019) for LGGIT data entry.
2. RPC entered "Yes" for LGGIT Solid Waste Control sheet questions 1) Is there a landfill treatment facility located within the geopolitical boundary of your community, and 2) Is it assumed… [the landfills] are either municipally or privately owned?
3. Three of the ten landfills RPC entered into LGGIT participate in a Landfill Gas (LFG) collection system (all partial). For LGGIT landfills with Partial LFG Collection Systems section data entry:
    a. The LFG Collected in millions of standard cubic feet per year (MMSCF/yr) was pulled from the EPA LMOP 2019 data, which is reported in MMSCF per day. These figures were multiplied by 365 then entered in the LGGIT data fields.
    b. LGGIT defaults were selected for Fraction of CH_4 in LFT and CH_4 Collection Efficiency column figures.
    c. Uncollected Area Factor was calculated by adding the Direct and Avoided amounts of Current Year Emission Reduction in metric tons of CO_2 equivalent per year (MMTCO2e/yr) found in the EPA LMOP data table (2019). This sum was then divided by the GHG metric tons of CO_2e for the same landfill, figures found in the EPA FLIGHT data (2019). The sum of collected/avoided CO_2e was divided by the total CO_2e emitted for the same landfill in 2019, then multiplied by 100 to give a percent. The figure was less than 1%, but as LGGIT does not allow partial data entry, the Uncollected Area Factor was rounded down to 99%.
4. Seven of the ten landfills did not have LFG collection systems. LGGIT landfills with No LFG Collection System section required CH_4 Emissions measured in metric tons of CO_2 equivalent ($MTCO_2$e). To find this figure RPC staff downloaded and used the Landfill Emissions Tool (v.1.3, 2011). Data entry required landfill, state, & parish names, years opened and closed (if applicable), tons of waste deposited, and a precipitation-based, default figure "k Value". The inputs for the Landfill Emissions Tool were:
    a. The landfill identification and operational data was pulled from the federal and state data source combination spreadsheet described in item 1. above.

b. The k Value was set to 0.057, representative of 40 or more inches of rain per year. RPC referenced NOAA's Weather Online Data (NOWData)[12], which reported approximately 62 inches of rain for the New Orleans Area (a National Weather Service nomenclature, which encompasses all nine parishes of the region) in 2019.

c. The Tons of Waste Deposited in 2019 required RPC staff to calculate estimated depositions based on the Remaining Capacity figures (as cubic yards) in the LDEQ reports (2011, 2013, 2015, 2019, & 2021). Using the reported Capacity Remaining figures, RPC staff first calculated average remaining capacity for the years 2012, 2014, 2016 to 2018, & 2020, based on the nearest previous- and future-reported figures (Eg. 2013 and 2015 averaged to 2014 estimated remaining capacity). Then, using both the reported figures and averaged-estimated figures for remaining capacity from 2011 to 2021, RPC staff calculated an estimated cubic yard deposited for 2012 to 2021, based on the remaining capacity difference of subsequent years (Eg. 2014 averaged estimate remaining capacity minus 2013 reported remaining capacity = 2014 estimated deposition). The Landfill Emissions Tool requires tons of waste, a weight metric, versus the volume metric of cubic yards (yd^3) reported by LDEQ. To account for this, RPC found two EPA resources[13] [14] which provided an estimated weight per cubic yard, based on types of solid waste material. LDEQ permit types for landfill materials figures were pulled from the EPA reports on tons per cubic yard. RPC settled on the following weights per landfill permit type:

   i. LDEQ Permit Type 1, Industrial Waste: $1yd^3$ = 450 lbs or 0.225 tons
   ii. LDEQ Permit Type 2, Non-Industrial Waste [Residential & Commercial]: $1yd^3$ = 2,000 lbs or 1 ton
   iii. LDEQ Permit Type 3, Construction & Demolition: $1yd^3$= 484 lbs or 0.242 tons

The estimated cubic yards deposited for 2019 were converted to tons (per permit type) and entered into the Landfill Emissions Tool which calculated CH_4 and CO_2 figures, which were then entered into the LGGIT landfills with No LFG Collection System section data fields.

Wastewater

LGGIT follows the methodology and formulas as outlined in the Local Government Operations Protocol (LGOP) for the calculation of GHG emissions from wastewater treatment and discharge.[15] Due to time constraints and the large quantity of wastewater treatment facilities within the region, the RPC was unable to obtain site-specific data for this inventory, including the amount of digester gas captured within anaerobic treatment systems, average BOD_5 load measurements of facultative treatment lagoons, and the nitrogen load (N load) of effluent discharge. Instead, the RPC used the general method as outlined in the LGOP, which relies on population served, to produce the wastewater emissions estimate. This inventory only accounts for residential and commercial wastewater treatment and does not factor in wastewater treatment from industrial sources. The following data and assumptions were input into the LGGIT wastewater module:

1. Anaerobic and aerobic treatment. The RPC assumed that half of the population served through central wastewater treatment facilities were served by anaerobic treatment systems and half were served by aerobic treatment systems. In the field, "Population Served by

Anaerobic Treatment Facilities," the RPC input: 699,917 people. In the field, "Population Served by Aerobic Treatment Facilities," the RPC input: 699,917 people.

2. Septic systems. Consistent with the State of Louisiana GHG Inventory, the RPC assumed that 19% of the nine-parish population treats wastewater with septic systems, though in some individual parishes this proportion is much higher. [16] In the field, "Population Served by Septic Systems," the RPC input: 265,969 people.
3. Nitrification/denitrification. The RPC assumed that all centralized wastewater treatment facilities conducted nitrification/denitrification processes. In the field, "Population Served by Facilities with Nitrification/Denitrification," the RPC input: 1,133,865 people.

Agriculture & Land Management

The RPC followed EPA guidance for incorporating agricultural data into LGGIT.[17] The agricultural emissions estimates in the inventory are based on fertilizer consumption in the nine-parish region, and include the following data inputs:

- Synthetic fertilizer use (short tons)
- Organic fertilizer use (short tons)
- Manure fertilizer use (short tons)

Fertilizer consumption data is not typically available at the regional level. To address this, RPC obtained state-level fertilizer consumption data and downscaled it to the nine-parish region. The process for obtaining and analyzing the data was as follows:

1. Obtaining state-level fertilizer data:
   a. State-level fertilizer data was obtained from the EPA's State Inventory Tool (SIT) Agriculture Module.[18]
   b. The data was then converted from metric tons to short tons, for each fertilizer type, using the conversion factor of:

      1 short ton = 0.907185 metric ton

   c. Per EPA guidance, the data was then converted from fertilizer year to calendar year, for each fertilizer type, using the following formula:

      (Year 1 Fertilizer t_m x 35%) + (Year 2 Fertilizer t_m x 65%) = $\text{Fertilizer}_{total}$

      Where:
      $\text{Fertilizer}_{total}$ = *total amount of fertilizer applied during the calendar year*
      Year 1 Fertilizer t_m = *total amount of fertilizer applied during Year 1 fertilizer year*
      Year 2 Fertilizer t_m = *total amount of fertilizer applied during Year 2 fertilizer year*
      t_m = *metric tons*

2. Downscaling state-level fertilizer data to regional data:
   a. RPC obtained the total cropland area for the state and for each regional parish from the US Department of Agriculture's (USDA) QuickStats database, then calculated the

proportion of statewide cropland that is located within the nine-parish region.[19] This proportion was then applied to the total statewide fertilizer consumption, for each fertilizer type, to derive regional fertilizer consumption.

3. The data was then entered into the LGGIT Agriculture Module for emissions calculations.

Electricity

The RPC acquired 2019 usage data from the US Department of Energy (DOE), National Renewable Energy Laboratory (NREL), State and Local Planning for Energy (SLOPE) website. The initial data download included electricity and natural gas consumption, in Millions of British Thermal Units (MMBtus), per sector (Commercial/Institutional, Residential, and Industrial), for every county in the United States. The procedure for processing and entering the data was as follows:

1. RPC staff pulled out the nine parishes needed, keeping the consumption per sectors as individual records.
2. The RPC then created Excel formulas acquired from the Inch Calculator website to convert MMBtus to kilowatt hours (kWh) for electricity consumption per sector:[20]

   1 MMBTU = 293.07107 kWh

3. The RPC created 27 unique Unit Descriptions for Stationary Units LGGIT data entry. These 27 units were created from the three sectors, per nine parishes and each of the 27 units' natural gas consumption in mcf. Examples include:
   a. Jefferson Parish Commercial/Institutional Sector became Unit JP C
   b. Jefferson Parish Industrial Sector became Unit JP I
   c. Jefferson Parish Residential Sector became Unit JP R
4. RPC staff entered electricity consumption in kWh per individual Parish-Sector unit, selecting the matching LGGIT sector per unit. No data was entered for the Electrical Generation LGGIT sector.

Urban Forestry

The RPC acquired one-meter resolution land cover of Canopy and inland Water raster datasets from the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management (OCM) Coastal Change Analysis Program (C-CAP) for south Louisiana.[21, 22] The raster datasets used for LGGIT data processing and entry are dated 2020-2021. However, these are identified as Version 2 because the raster pixels were re-classified from an earlier project (v.1) New Orleans Area Parishes, Louisiana C-CAP acquisition project, which lasted from 2016-2019.[23] Other layers used to calculate Urban Forestry included the Louisiana Department of Transportation and Development's (LADOTD) Parish boundary vector layer (2019) and the US Census Hydrography Tiger vector file (2019).[24, 25] The procedure for processing and entering the data was as follows:

1. RPC downloaded the NOAA C-Cap Canopy and Water raster datasets.
2. The nine-parish CPRG study boundary was exported as a new layer from the LADOTD Parish Boundary (2019) layer using a Definition Query, selecting for the nine parish names.
3. The raster pixels within the nine-parish boundary were removed using ArcMap v.10.7.1 Extract by Mask tool.

4. The Raster to Polygon tool was then executed for each nine-parish Canopy and Water datasets. Tool settings were:
    a. Multipart Polygons checked.
    b. Smoothed Lines unchecked.
5. The NOAA Water vector layer included only inland and coastal water areas, not open water which is a sizable portion of the nine-parish area. To account for large bodies of water (such as Lake Pontchartrain, Lake Borgne, Lake Salvador, and the Chandeleur Sound) RPC staff merged the NOAA water layer with the US Census Tiger Hydrography polygon vector layer (2019).
6. The results were three vector datasets from which square kilometers were calculated:
    a. Total Urban Area: the nine-parish boundary layer = 22,613.86 km^2
    b. Water Area: the merged NOAA inland and coastal water + Census Hydrography = 13,549.99 km^2
    c. Canopy Area: the NOAA C-CAP layer = 4,708.49 km^2
7. RPC subtracted the Water Area from the Total Urban Area, identifying the result as Total Land Area = 9,063.87 km^2
8. The Canopy Area was divided by the Total Land Area for the Total Urban Tree Cover represented as a percentage of 51.95%
9. This number was entered into the Urban Forestry LGGIT sheet (automatically rounded to 52%) under Residential Sector. RPC does not have recent Land Use data for all nine parishes, thus the percent canopy cannot be divided into the three separate LGGIT sectors: Residential, Commercial/Institutional, & Industrial.

Industrial Processes

To assess GHG emissions from industrial processes, excluding electric power and natural gas consumption, RPC obtained data from the EPA's Greenhouse Gas Reporting Program (GHGRP) via its Facility Level Information on Greenhouse Gases Tool (FLIGHT).[26] This dataset includes emissions reported by industrial facilities meeting the following criteria:[27]

- Certain facilities that emit 25,000 metric tons or more of GHGs
- Certain suppliers of fossil fuels, industrial GHGs, and products containing GHGs
- Facilities that inject CO_2 underground

The RPC completed the following steps to obtain and process data:

1. RPC downloaded 2019 state-level emissions data from FLIGHT, excluding power plant and waste sector emissions because these emissions are accounted for elsewhere in the inventory.
2. RPC then summed total GHG emissions for facilities located within the nine-parish region.
3. FLIGHT data includes emissions from natural gas purchased from local utilities, and this data is also included in the Stationary Combustion module of LGGIT. To eliminate potential redundancies in the inventory, RPC also downloaded and calculated regional emissions resulting from natural gas consumption from FLIGHT, and this figure was subtracted from the total emissions.

4. The processed FLIGHT data was entered into the Additional Emissions Sources module of LGGIT.

Mobile Sources

The RPC followed EPA guidance for incorporating mobile emissions data into LGGIT.[28] Mobile emissions data was obtained from the EPA's 2017 National Emissions Inventory (NEI), which provides detailed emissions data across a variety of sectors.[29] While EPA suggests using 2020 NEI data, RPC chose to use 2017 data because it does not include emissions potentially affected by the COVID-19 pandemic. The inventory's base year of 2019 was also prior to the pandemic; it is therefore assumed that 2017 emissions data is more similar to the base year than 2020 data.

The RPC completed the following steps to obtain and process data:

1. RPC downloaded mobile emissions data from the EPA's online NEI portal for all nine regional parishes. NEI provides mobile emissions data in multiple categories, some of which were combined in the inventory to simplify reporting, as follows:

<table>
<tr><th>NEI Data Category</th><th>SELA GHG Inventory Category</th></tr>
<tr><td>Mobile – Aircraft</td><td>Mobile – Aircraft</td></tr>
<tr><td>Mobile - Non-Road Equipment - Diesel</td><td rowspan="3">Mobile – Non-Road Equipment</td></tr>
<tr><td>Mobile - Non-Road Equipment - Gasoline</td></tr>
<tr><td>Mobile - Non-Road Equipment - Other</td></tr>
<tr><td>Mobile - On-Road Diesel Heavy Duty Vehicles</td><td rowspan="2">Mobile - On Road Heavy Duty</td></tr>
<tr><td>Mobile - On-Road non-Diesel Heavy Duty Vehicles</td></tr>
<tr><td>Mobile - On-Road Diesel Light Duty Vehicles</td><td rowspan="2">Mobile - On Road Heavy Duty</td></tr>
<tr><td>Mobile - On-Road non-Diesel Light Duty Vehicles</td></tr>
</table>

2. The data was then converted from short tons to metric tons using the conversion factor of:

   1 short ton = 0.907185 metric ton

3. The NEI data included emissions estimates for three GHGs: Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). These were converted to CO_2E using the following conversion factors provided by EPA:[30]

GHG	CO_2E Conversion Factor
CO_2	1
CH_4	28
N_2O	265

4. Finally, data for each parish was aggregated to the regional level and entered into the Additional Emissions Sources module of LGGIT.

Inventory Summary

GHG Data Reporting Unit: All GHGs in the PCAP are reported as CO_2E. While some inventory data sources included estimates of multiple GHGs (e.g., Carbon Dioxide, Methane, Nitrous Oxide, etc.), other sources only provided estimates for CO_2E. For this reason, estimates of emissions of all GHGs could not be provided and the PCAP only provides estimates of CO_2E.

Emissions Sectors: While LGGIT provides summaries of the inventory, the RPC conducted additional summary analyses on the results to clarify reporting in the PCAP and to aid in comparison to local, state, and national inventories. Some LGGIT sectors and modules were combined, while others were separated, as follows:

PCAP Sector	LGGIT Module / Sector
Residential	• Stationary Units (residential natural gas consumption only)
Commercial	• Stationary Units (commercial natural gas consumption only) • Solid Waste • Wastewater
Industrial	• Stationary Units (industrial natural gas consumption only) • Additional Emissions Sources (industrial processes excluding electric power, waste, and natural gas consumption)
Agricultural	• Agriculture and Land Management
Mobile Combustion	• Additional Emissions Sources (mobile combustion)
Electric Power	• Electricity (generation, transmission, and consumption for residential, commercial, and industrial sectors combined)
Urban Forestry	• Urban Forestry

Endnotes

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[20] Inch Calculator (2024). Kilowatt Hours to Million BTU Converter. https://www.inchcalculator.com/convert/kilowatt-hour-to-million-btu/
[21] NOAA (2024). 2020-2020 C-CAP Version 2 Canopy Cover. https://www.fisheries.noaa.gov/inport/item/70562
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[30] EPA (2023). Guidance for Accessing NEI Transportation Data: Incorporating National Emissions Inventory Data into the Local or Tribal GHG Inventory Tools. https://www.epa.gov/system/files/documents/2023-10/nei_emissions-data_county_and_regional_guidance_9.6.2023-508c.pdf

Appendix C: GHG Reduction Projects

The greenhouse gas (GHG) reduction measures in the Priority Climate Action Plan (PCAP) describe strategies and implementation actions that may be completed by multiple agencies and in multiple locations across the region. In addition to these, stakeholders identified agency- and location-specific GHG reduction projects that may be implemented in the near future. These projects informed development of the measures described in the PCAP. It is anticipated that regional stakeholders may seek Climate Pollution Reduction Grant (CPRG) implementation funds for some of the projects described in this appendix as well as projects that advance GHG reduction measures described in the PCAP. The list below includes the project name, description, location, timeframe for implementation, and the name of the agency that submitted the project. Additional information about each project may be obtained by contacting the Regional Planning Commission (RPC). Projects are listed alphabetically by submitting agency, then alphabetically by title.

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
BENCHMARKING PROGRAM SUPPORT	CNO TO PASS A BUILDING ENERGY BENCHMARKING ORDINANCE IN 2024 AND WILL REQUIRE FUNDING TO ACQUIRE AND UTILIZE DATA MANAGEMENT AND COMMUNICATION SOFTWARE AND STAFF.	CITY OF NEW ORLEANS	1 YEAR	CITY OF NEW ORLEANS
BIKE SHARE INFRASTRUCTURE EXPANSION - NEXT GEN	FUND THE INSTALLATION OF NEXT GENERATION ELECTRIC BICYCLE CHARGING STATIONS AND ACQUISITION OF COMPATIBLE BICYCLES	THROUGHOUT EXISTING AND PLANNED SERVICE AREA	12 MONTHS	CITY OF NEW ORLEANS
BIKE SHARE INFRASTRUCTURE EXPANSION - TRADITIONAL	FUND THE INSTALLATION OF NEW PARKING CORRALS, STATIONS, AND BICYCLE ACQUISITION	UPRIVER FROM LOUISIANA AVENUE AND DOWNRIVER FROM FRANKLIN AVENUE, AND POTENTIAL GEOFENCED AREAS AT AREA UNIVERSITIES AND COLLEGES.	12 MONTHS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
BIKE SHARE OPERATIONS SUPPORT	BOLSTER THE OPERATING BUDGET FOR BLUE BIKES BIKE SHARE SYSTEM TO ALLOW THE EXPANSION OF THE SERVICE AREA TO COVER ADDITIONAL DESTINATIONS AND LOW INCOME RESIDENTIAL NEIGHBORHOODS.	UPRIVER FROM LOUISIANA AVENUE AND DOWNRIVER FROM FRANKLIN AVENUE, AND POTENTIAL GEOFENCED AREAS AT AREA UNIVERSITIES AND COLLEGES.	12 MONTHS	CITY OF NEW ORLEANS
BRIDGE FUNDING FOR WEATHERIZATION, ELECTRFICATION, AND ENERGY EFFICIENCY PROJECTS IN LOW-TO-MODERATE INCOME HOMEOWNERS (AND SMALL BUSINESSES)	TAX INCENTIVES AND REBATES MAY NOT FULLY COVER THE COST OF A NECESSARY UPGRADE TO AN LMI HOME - WE CAN OFFER BRIDGE GRANTS TO CLOSE THE GAPS AND MAKE HOMES MORE COMFORTABLE AND EFFICIENT	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
BRIDGE SUBISIDES FOR SOLAR & BATTERY	PROGRESSIVE SUBSIDIES FOR RESIDENTIAL AND COMMERCIAL SOLAR INSTALLTIONS, INCLUDING GAP FINANCING FOR COMMUNITY SOLAR PROJECTS	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
CITY ENERGY DECARBONIZATION STRATEGY	WORK WITH TECHNICAL EXPERTS ON PATHWAYS TO ACHEIVING CLEAN ENERGY GOALS LAID OUT IN 2022 CLIMATE ACTION PLAN	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
FLEET EVS	PURCHASE CITY OF NEW ORLEANS FLEET ELECTRIC VEHICLES AND CHARGING INFRASTRUCTURE TO ACCELERATE TRANSITION TO ALL ELECTRIC VEHICLES.	DISTRIBUTE TO DEPARTMENT LOCATIONS, INCLUDING POLICE DEPARTMENT, PARKS AND PARKWAYS, PUBLIC WORKS, FIRE DEPARTMENT, EMERGENCY MEDICAL SERVICES, SANITATION, ETC.	24 MONTHS	CITY OF NEW ORLEANS
COMMERCIAL KITCHEN ELECTRIFICATION PROGRAM	COVER THE COST TO UPGRADE/REPLACE END OF LIFE GAS BURNING STOVES AND OTHER FOSSIL FUEL APPLIANCES WITH ELECTRIC APPLIANCES IN COMMERCIAL KITCHENS - RESTAURANTS, SHELTERS, SCHOOLS, HIGHER ED, ETC	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
COMMUNITY OUTREACH ENERGY ADVISORS	FUNDING TO PROVIDE TRAINING TO LOCAL COMMUNITY MEMBERS WHO WILL ACT AS TECHNICAL ASSISTANCE EXPERTS IN NAVIGATING FEDERAL, STATE, AND LOCAL ENERGY EFFICIENCY, ELECTRIFICATION, AND SOLAR INCENTIVES AND REBATES - THEY WILL HELP COMMUNTIY MEMBERS SIGN UP FOR PROGRAMS/OFFERINGS AND TRACK PARTICPATION IN PROGRAMS	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
COMPLETE STREETS ENHANCEMENT PROGRAM	FUND THE DESIGN, CONSTRUCTION OF COMPLETE STREET ENHACEMENTS IN PRIORITY CORRIDORS. EVALUATE SPEED REDUCTION MEASURES DESIGNED TO PROTECT PEDESTRIANS AND IMPROVE WALKING COMFORT, INCLUDING DATA COLLECTION AND EVALUATION. FUND THE INSTALLATION OF TRANSIT SHELTERS, SEATING, STREET TREES, SHADE STRUCTURES, AND OTHER STREET FURNITURE TO MAKE WALKING AND TRANSIT USAGE MORE COMFORTABLE AND DIGNIFIED.	PRIORITY CORRIDORS ARE HIGH TRAFFIC AND HIGH SPEED.	5 YEARS	CITY OF NEW ORLEANS
CREATE A CITY/REGIONAL ENERGY AUTHORITY	RUN ALL INCENTIVE PROGRAMS OUT OF THE ENERGY AUTHORITY AND EVENTUALLY EXPAND ALL PROGRAMS TO THE REGION UNDER THE AUTHORITY	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
E-BIKE SUBSIDY PROGRAM	OFFER SUBSIDIES TO LOW AND MODERATE-INCOME ORLEANS PARISH RESIDENTS TO PURCHASE E-BIKES FROM LOCAL VENDORS	CITYWIDE	5 YEARS	CITY OF NEW ORLEANS
EQUITABLE TRANSIT ORIENTED DEVELOPMENT (ETOD) PROGRAM	DESIGN AND DEPLOY A GAP-FINANCING PROGRAM THAT ENCOURAGES EQUITABLE TRANSIT-ORIENTED DEVELOPMENT IN TRANSIT CORRIDORS	HIGH FREQUENCY TRANSIT CORRIDORS	5 YEARS	CITY OF NEW ORLEANS
GO CUP SUSTAINABILITY	DEVELOP A PROGRAM FOR REUSABLE GO CUPS TO REDUCE PLASTIC WASTE AND LITTER	PILOT: FRENCH QUARTER; FULL PROGRAM: CITYWIDE		CITY OF NEW ORLEANS
INCREASE DROP-OFF COMPOSTING SITES	FUNDING TO INCREASE STAFFING FOR NON-PROFT PARTNERS INVOLVED IN DROP-OFF COMPOSTING SITES	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
LANDLORD RENOVATION PROGRAM	PROVIDE UP TO A CERTAIN DOLLAR AMOUNT OF FUNDING FOR SMALL LANDLORDS (1-4 UNITS) FOR REPAIRS TO STRUCTURE, INCLUDING ELETRICAL UPGRADES, WEATHERIZATION, ACCESSIBILITY, ENERGY EFFICIENT FIXTURES/APPLIANCES	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
LOW CARBON MATERIAL INCENTIVE	PROVIDE INCENTIVES TO BUILDINGS TO USE LOW TO NO EMBODIED CARBON MATERIALS FOR NEW BUILDINGS AND MAJOR RENOVATIONS	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LOW EMISSION DELIVERY PROGRAM	INTRODUCE A COMBINATION OF SMART CURB USE/LOADING ZONES, NO EMISSION DELIVERY ZONES, CARGO E-BIKES TO SHIFT DELIVERY IMPACTS	FRENCH QUARTER AND CENTRAL BUSINESS DISTRICT	1 YEAR	CITY OF NEW ORLEANS
MODE-SPLIT MONITORING PROGRAM	INSTALL TRAFFIC COUNTING SENSORS AT INTERSECTIONS TO MEASURE OVERALL MODE-SPLIT AND TRACK PROGRESS OVER TIME TO UNDERSTAND ENGINEERING COUNTERMEASURES THAT PROMOTE HIGHER RATES OF WALKING AND BICYCLING	HIGH TRAFFIC VOLUME CORRIDORS	5 YEARS	CITY OF NEW ORLEANS
NEW ORLEANS REFORESTATION PLAN	PLANTINGS IN UNDERSERVED NEIGHBORHOODS UNDER 10% CANOPY COVERAGE	ORLEANS PARISH	2030	CITY OF NEW ORLEANS
PATH TO CARBON ZERO ASSISTANCE PROGRAMS FOR ALL BUILDINGS	PROVIDE TECHNICAL ASSISTANCE TO BUILDINGS, INCLUDING INDUSTRIAL, TO CREATE UNIQUE PATHWAYS TO ZERO CARBON BUILDINGS/FACILITIES	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
PROTECTED BIKEWAYS INTIIATIVE	FUND THE PLANNING, DESIGN, AND CONSTRUCTION OF 43 REMAINING MILES OF PROTECTED BIKEWAYS TO ACHIEVE 75 MILES TOTAL	PRIORITY CORRIDORS THAT COMPLETE THE LOW-STRESS BIKEWAY NETWORK AND REQUIRE PROTECTED FACILITIES DUE TO TRAFFIC VOLUME, SPEED, AND OTHER SAFETY FACTORS	5 YEARS	CITY OF NEW ORLEANS
STRATEGIC ENERGY PLAN & IMPLEMENTATION FUNDING FOR MUNICIPAL BUILDING DECARBONIZATION & WEATHERIZATION	LAYOUT A FRAMEWORK AND TIMELINE FOR EACH BUILDING FOR UPGRADES THAT IMPROVE WEATHERIZATION AND ENERGY EFFICIENCY, AS WELL AS SOLAR AND BATTERY IF IDENTIFIED AS APPROPRIATE	CITY OF NEW ORLEANS	5 YEARS	CITY OF NEW ORLEANS
TRANSIT FARE CAPPING	INTRODUCE FARE CAPPING TO REDUCE FINANCIAL BARRIERS TO LOWER-INCOME TRANSIT RIDERS TO UTILIZE TRANSIT AND RECEIVE THE COST SAVINGS BENEFITS AVAILABLE FROM FARE PASSES.	RTA SYSTEMWIDE	2 YEARS	CITY OF NEW ORLEANS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
TRANSPORTATION DEMAND MANAGEMENT PROGRAM	IMPROVE ACCESSIBILITY OF DOWNTOWN/FRENCH QUARTER DESTINATIONS THROUGH COMMUTER SOLUTIONS AND IMPROVED MANAGEMENT OF ON-STREET AND OFF-STREET PARKING. STUDY AND IMPLEMENT CURB USE AND PARKING MANAGEMENT REFORMS, INCLUDING PRICING. SUPPORT CBD/FQ/UNIVERSITY/HOSPITAL EMPLOYEES WITH COMMUTER SOLUTIONS INCLUDING VANPOOL, PARKING CIRCULATOR, RIDE-MATCHING, TRANSIT PASSES. HIRE SPECIALIZED CONSULTANT TO REVIEW PARKING PRICING AND ENFORCEMENT POLICIES AND PROCEDURES AND EXPLORE VIABILITY OF DYNAMIC ON-STREET PARKING PRICING THAT INCREASES SPACE AVAILABILITY AND REDUCES "CRUISING"	FRENCH QUARTER & CBD, UNIVERSITIES AND HOSPITALS	5 YEARS	CITY OF NEW ORLEANS
ADA BUS STOP IMPROVEMENTS PARISHWIDE	JEFFERSON PARISH IS OVERSEEING AN 11 YEAR, MULTIMILLION-DOLLAR CIVIL CONSTRUCTION PROJECT TO BRING 80% OF ITS EXISTING FIXED-ROUTE BUS STOPS INTO ADA-COMPLIANCE.	JEFFERSON	18-24 MONTHS	JEFFERSON PARISH
CLEARY OVERPASS AT I-10	NEW BICYCLE & PEDESTRIAN BRIDGE OVER THE I-10 @ CLEARY AVE. FOR CURRENT BIKE & PED USERS OF CLEARY OVERPASS	CLEARY AVE. OVERPASS OVER THE I-10	18-24 MONTHS	JEFFERSON PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
PURCHASE FIXED ROUTE HYBRID VEHICLES	TO PURCHASE 4 HYBRID BUSES FOR FIXED ROUTE	JEFFERSON	18 MONTHS	JEFFERSON PARISH
PURCHASE MITS HYBRID VEHICLES	TO PURCHASE 6 MITS HYBRID VEHICLES FOR PARATRANSIT	JEFFERSON	18 MONTHS	JEFFERSON PARISH
PURCHASE PROPANE TANK	TO PURCHASE A LARGE PROPANE TANK TO STORE AT LEAST 7 DAYS OF PROPANE FOR VEHICLES IN CASE OF STORMS/EMERGENCIES	JEFFERSON	18 MONTHS	JEFFERSON PARISH
RETRO-FIT & ADD SOLAR PANELS TO BUILDINGS	RETRO-FIT & ADD SOLAR PANELS TO ALL EASTBANK & WESTBANK TRANSIT FACILITIES	JEFFERSON	18-24 MONTHS	JEFFERSON PARISH
SOLAR BUS SHELTERS	INSTALL SOLAR BUS SHELTERS ACROSS JEFFERSON PARISH	JEFFERSON	18-24 MONTHS	JEFFERSON PARISH
URBAN GARDENING AND COMPOSTING	WORK WITH THE LOCAL FARMERS MARKETS TO GET A COMPOST PILE SET UP AT THE FARMERS MARKET WHERE RESIDENTS CAN DROP OFF COMPOST AND PICK UP THE COMPOSTED SOIL TO USE IN THEIR PERSONAL GARDENS	THROUGHOUT JEFFERSON PARISH	1-2 YEARS	JEFFERSON PARISH
NOLA-PS COMMUNITY SOLAR	CREATING COMMUNITY SOLAR INFRASTRUCTURE AT PUBLIC SCHOOL SITES TO BENEFIT STUDENTS AND THE COMMUNITY.	GEORGE WASHINGTON CARVER HIGH SCHOOL, 3059 HIGGINS BLVD, NEW ORLEANS, LA 70126;	FALL 2024	NOLA PS

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
NOLA-PS COMMUNITY SOLAR	CREATING COMMUNITY SOLAR INFRASTRUCTURE AT PUBLIC SCHOOL SITES TO BENEFIT STUDENTS AND THE COMMUNITY.	ABRAMSON SCI ACADEMY, 5552 READ BLVD, NEW ORLEANS, LA 70127	FALL 2025	NOLA PS
40 ARPENT TRAIL BIKE/PEDESTRIAN BRIDGE	GRADE SEPARATION TRAIL - BIKE/PED BRIDGE (LADOTD SPN H.013936)	ST. BERNARD	FFY 23-26	RPC
ALGIERSMRT:ODEON-CHALMETTE,ALGIERS FERRY	MISS RIVER BIKE TRAIL RAMPS (RPC PROJECT RPC_0822*)	ORLEANS	FFY 27-36	RPC
AMITE LA 16 PEDESTRIAN PROJECT - PHASE I	NEW SIDEWALKS (LADOTD SPN H.007598)	TANGIPAHOA	FFY 23-26	RPC
ANDREW HIGGINS: MAGAZINE TO CONVENTION	ROADWAY REHABILITATION; SIDEWALK, LIGHTING IMPROVEMENTS (LADOTD SPN H.013150)	ORLEANS	FFY 23-26	RPC
BAYOU VINCENT POND RD.	NEW ROADWAY (RPC PROJECT RPC_1196*)	ST. TAMMANY	FFY 27-36	RPC
BR - NO RAIL	FREIGHT AND PASSENGER RAIL IMPROVEMENTS (RPC PROJECT RPC_0014*)	ORLEANS	FFY 37-52	RPC
BROAD ST - READ BLVD PED IMPROVEMENTS	SIDEWALKS, MULTI-USE PATHS, RAMPS, PED. SIGNALS, STRIPING (LADOTD SPN H.013094)	ORLEANS	FFY 23-26	RPC
BUCKTOWN BRIDGE AND MULTI-USE PATH	BIKE/PED PATH AND BRIDGE (RPC PROJECT RPC_1198*)	JEFFERSON, ORLEANS	FFY 27-36	RPC
CAUSEWAY BLVD - EARHART EXPRESSWAY INTER	NEW INTERCHANGE (LADOTD SPN H.002861)	JEFFERSON	FFY 27-36	RPC
CAUSEWAY: OVERPASS OF US 90 (SHREWSBURY)	MODIFIED OVERPASS (RPC PROJECT RPC_1161*)	JEFFERSON	FFY 27-36	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
CEDAR STREET EXT. TO LA22 AND ROUNDABOUT	EXTENSION OF CEDAR ST AND A ROUNDABOUT AT CEDAR AND LA22 (LADOTD SPN H.014710)	ST. TAMMANY	FFY 23-26	RPC
CENTRAL AVE: NOPB RR XINGS (JEFFERSON)	UPGRADE WARNING FOR THE CROSSINGS (LADOTD SPN H.014910)	JEFFERSON	FFY 23-26	RPC
CITY PARK NATURE TRAILS (NOLA)	RESTORATION AND CONST OF A 6325' LONG X 10' WIDE TRAIL (LADOTD SPN H.013041)	ORLEANS	FFY 23-26	RPC
CITY PARK PALM DRIVE SIDEWALKS	SIDEWALKS (LADOTD SPN H.013364)	ORLEANS	FFY 23-26	RPC
COVINGTON COMMUNITY TRAIL (PH 2)	CONSTRUCTION OF BIKE PED TRAIL IN URBAN NETWORK (LADOTD SPN H.012242)	ST. TAMMANY	FFY 27-36	RPC
EARHART AT DAKIN	RAMP CONNECTOR (EB EARHART - DAKIN) (LADOTD SPN H.002956)	JEFFERSON	FFY 23-26	RPC
EAST CAUSEWAY APPROACH AT MONROE ST.	ROUNDABOUT (RPC PROJECT RPC_0796*)	ST. TAMMANY	FFY 27-36	RPC
EASY ST. EXT. (DUFRESNE-ASHTON PLANT.)	ROADWAY EXTENSION (RPC PROJECT RPC_1169*)	ST. CHARLES	FFY 27-36	RPC
FIRETOWER RD INTERCHANGE @ I-12	NEW INTERCHANGE (RPC PROJECT RPC_0734*)	TANGIPAHOA	FFY 37-52	RPC
GAUSE BLVD. SIDEWALK IMPROVEMENTS	SIDEWALK IMPROVEMENTS (RPC PROJECT RPC_1237*)	ST. TAMMANY	FFY 27-36	RPC
GRETNA BICYCLE ACCESS IMPROVEMENTS	SIGNING AND PAVEMENT MARKING WITH MULTI USE PATH AND RELATED WORK (LADOTD SPN H.009794)	JEFFERSON	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
GRETNA DOWNTOWN PEDESTRIAN IMPROVEMENTS	SIDEWALKS, ADA RAMPS, DRAINAGE STRUCTURES, PED ISLANDS (LADOTD SPN H.013090)	JEFFERSON	FFY 23-26	RPC
HAMMOND BIKE ROUTES	BIKE ROUTES IN HAMMOND (RPC PROJECT RPC_0743*)	TANGIPAHOA	FFY 23-26	RPC
HAMMOND: JW DAVIS, CM FAGAN SW	SIDEWALKS (LADOTD SPN H.011858)	TANGIPAHOA	FFY 27-36	RPC
HARVEY BLVD EXT (PETERS RD-MANHATTAN)PH1	NEW ROADWAY EXTENSION (LADOTD SPN H.007208)	JEFFERSON	FFY 23-26	RPC
HIGHWAY 61 STREETSCAPE IMPROVEMENTS	CONSTRUCT SIDEWALKS (LADOTD SPN H.013239)	ST. JOHN THE BAPTIST	FFY 23-26	RPC
HOWARD AVE EXTENSION	NEW 2-LANE ROADWAY (LADOTD SPN H.007272)	ORLEANS	FFY 23-26	RPC
I-10 @ GAUSE BLVD (US 190)	OPS/CAPACITY/ SAFETY IMPROVEMENT (RPC PROJECT RPC_0701*)	ST. TAMMANY	FFY 27-36	RPC
I-10: LOYOLA DR-BONNABEL CORRIDOR IMPROV	CORRIDOR IMPROVEMENT STUDY (LADOTD SPN H.011651)	JEFFERSON	FFY 27-36	RPC
I-12 @ LA 1077	INTERCHANGE IMPROVEMENTS (RPC PROJECT RPC_1193*)	ST. TAMMANY	FFY 37-52	RPC
I-12 @ LA 1085	NEW INTERCHANGE (RPC PROJECT RPC_0816*)	ST. TAMMANY	FFY 37-52	RPC
I-12 @ SALMEN-FRITCHIE, E. LACOMBE	NEW INTERCHANGE (RPC PROJECT RPC_0812*)	ST. TAMMANY	FFY 37-52	RPC
I-12 AT LA 3158 I/C	ROUNDABOUTS (RPC PROJECT RPC_1105*)	TANGIPAHOA	FFY 27-36	RPC
I-12 SERVICE RD S: LA 434 - AIRPORT RD	NEW SERVICE RDS. (RPC PROJECT RPC_0264*)	ST. TAMMANY	FFY 37-52	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
I-12 SERVICE RD: LA 445 TO FIRETOWER RD	NEW TWO LANE SERVICE RD (NORTH & SOUTH) (RPC PROJECT RPC_1109*)	TANGIPAHOA	FFY 37-52	RPC
I-12: SERVICE RD S: LA 1088 - LA 434	NEW SERVICE RDS. (RPC PROJECT RPC_0263*)	ST. TAMMANY	FFY 37-52	RPC
I-12:SERVICE RD N:LA1088 FISHHATCHERY RD	NEW SERVICE RDS. (RPC PROJECT RPC_0266*)	ST. TAMMANY	FFY 37-52	RPC
I-55 AT US 190	I/C IMPROVEMENTS (NW QUADRANT) (RPC PROJECT RPC_0739*)	TANGIPAHOA	FFY 37-52	RPC
JEAN LAFITTE PKWY: SW, SHARED USE PATH	SIDEWALKS AND SHARED USE PATH (LADOTD SPN H.011820)	ST. BERNARD	FFY 23-26	RPC
JEFFERSON AVE SHARED USE PATH COVINGTON	SHARED USE PATH (LADOTD SPN H.013408)	ST. TAMMANY	FFY 23-26	RPC
JEFFERSON WB MISS RIVER MU PATH 3B & 3C	MULTI-USE PATH (LADOTD SPN H.011805)	JEFFERSON	FFY 23-26	RPC
JUDGE DUFRESNE EXTENSION	ROADWAY EXTENSION TO LA 3127 (RPC PROJECT RPC_1156*)	ST. CHARLES	FFY 27-36	RPC
JUDGE TANNER BLVD. SIDEWALK	ROAD (RPC PROJECT RPC_1087*)	ST. TAMMANY	FFY 27-36	RPC
KAWANEE AVE. BIKE ROUTE PH 1	SIGNING, STRIPING AND BRIDGE (LADOTD SPN H.013345)	JEFFERSON	FFY 23-26	RPC
L&A RD IMPROVEMENTS	NEW ROADWAY & ALIGNMENT (LADOTD SPN H.007181)	JEFFERSON	FFY 23-26	RPC
LA 1040 (KLEIN DR. TO US 51)	CONSTRUCT SHARED USE PATH (RPC PROJECT RPC_0691*)	TANGIPAHOA	FFY 23-26	RPC
LA 1077 & BREWSTER RD ROUNDABOUT	ROUNDABOUT (LADOTD SPN H.015555)	ST. TAMMANY	FFY 27-36	RPC
LA 1077: US 190 - LA 1078	3 LANE SECTION (RPC PROJECT RPC_0251*)	ST. TAMMANY	FFY 37-52	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LA 1088: FOREST BROOK BLVD. ROUNDABOUT	CONSTRUCT ROUNDABOUT (LADOTD SPN H.012633)	ST. TAMMANY	FFY 23-26	RPC
LA 1088: I-12 ROUNDABOUTS	ROUNDABOUTS (LADOTD SPN H.012662)	ST. TAMMANY	FFY 27-36	RPC
LA 1088: SOULT AND TRINITY ROUNDABOUTS	CONSTRUCT ROUNDABOUTS (LADOTD SPN H.010116)	ST. TAMMANY	FFY 23-26	RPC
LA 1091: US 190 TO CCLUB BLVD SIDEWALKS	SIDEWALK IMPROVEMENTS (LADOTD SPN H.014363)	ST. TAMMANY	FFY 23-26	RPC
LA 18: 4TH ST BIKE PATH JEFFERSON PARISH	BIKE PATHS (LADOTD SPN H.013347)	JEFFERSON	FFY 23-26	RPC
LA 21 @ US 190B (TYLER @ BOSTON STREET)	INTERSECTION IMPROVEMENTS (RPC PROJECT RPC_0288*)	ST. TAMMANY	FFY 27-36	RPC
LA 21: INT IMPROVEMENTS AT LA 36	INTERSECTION RECONFIGURATION (LADOTD SPN H.014888)	ST. TAMMANY	FFY 23-26	RPC
LA 22 @ LA 1085 ROUNDABOUT	CONSTRUCT ROUNDABOUT (LADOTD SPN H.013872)	ST. TAMMANY	FFY 23-26	RPC
LA 22 CORRIDOR STUDY: ROU MAR NEI TO 1ST	CORRIDOR STUDY FOR ACCESS MGMNT/TRAFFIC (LADOTD SPN H.011618)	TANGIPAHOA	FFY 27-36	RPC
LA 22: ROUNDABOUT DUNSON RIDGEDELL RDS.	CONSTRUCT ROUNDABOUT @ LA 22/DUNSON/RIDGEDELL (LADOTD SPN H.010289)	TANGIPAHOA	FFY 23-26	RPC
LA 22:PINE ST CORRIDOR IMPRV PONCHATOULA	SIGNALS, LANDSCAPING, CURB AND GUTTER, PED IMPROVEMENTS (LADOTD SPN H.013372)	TANGIPAHOA	FFY 23-26	RPC
LA 23 REALIGNMENT FOR PORT OF PLAQ.	HWY RELOCATION FOR PORT ACTIVITY (RPC PROJECT RPC_1159*)	PLAQUEMINES	FFY 27-36	RPC
LA 3019 @ I-10 RAMP IMPROVEMENTS	TWO-LANE ROUNDABOUT (LADOTD SPN H.009419)	ORLEANS	FFY 27-36	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LA 3021: DUAL TURN LANES @ LA 39	ADD DUAL LEFT TURN LANES FROM LA 3021 TO LA 39 (LADOTD SPN H.014752)	ORLEANS	FFY 23-26	RPC
LA 3134: INTERSECTION IMP @ LA 45	ADD J TURNS & U TURNS AT INTERSECTION OF LA 3134 AND LA 45 (LADOTD SPN H.012594)	JEFFERSON	FFY 23-26	RPC
LA 3152 @ US 61	INTERSECTION IMPROVEMENTS (RPC PROJECT RPC_0158*)	JEFFERSON	FFY 27-36	RPC
LA 3152: LEFT TURNLANE @ VILLAGE EAST	ADD AN ADDITIONAL LEFT TURN LANE ON LA 3152 AT VILLAGE EAST (LADOTD SPN H.014759)	JEFFERSON	FFY 23-26	RPC
LA 3154 @ DOCK ST. ROUNDABOUT	ROUNDABOUT INSTALLATION (LADOTD SPN H.008065)	JEFFERSON	FFY 27-36	RPC
LA 3158: I-12 TO HIPARK RD.	TSM IMPROVEMENTS (LADOTD SPN H.013886)	TANGIPAHOA	FFY 23-26	RPC
LA 3213:GRAMERCY BRIDGE OVER UP RAILROAD	GRADE SEPARATE EXISTING AT GRADE CROSSING (LADOTD SPN H.002960)	ST. JOHN THE BAPTIST	FFY 37-52	RPC
LA 3241:I-12/LA 434 INTERCHANGE TO LA 36	NEW 4 LANE (LADOTD SPN H.004957)	ST. TAMMANY	FFY 23-26	RPC
LA 39: W. JUDGE PEREZ DR. ENHANCEMENTS	MULTI-USE PATH AND NEW BIKE/PED FACILITIES (LADOTD SPN H.014643)	ST. BERNARD	FFY 23-26	RPC
LA 406: ROUNDABOUT AT FE HEBERT	CONSTRUCT ROUNDABOUT (LADOTD SPN H.008220)	PLAQUEMINES	FFY 23-26	RPC
LA 406@HEBERT RD IMPROVEMENTS	INTERSECTION IMPROVEMENTS (RPC PROJECT RPC_0712*)	PLAQUEMINES	FFY 27-36	RPC
LA 428 PH 1: BEHRMAN AVE. TO MERRILL ST.	BIKE LANES (LADOTD SPN H.014344)	ORLEANS	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LA 428 PH 2: MERRILL ST. TO WILTZ LN.	ACCESS MANAGEMENT FOR BIKE/PED/TRANSIT (LADOTD SPN H.014345)	ORLEANS	FFY 23-26	RPC
LA 428 PH 3: WILTZ LN. TO WOODLAND DR.	BIKE/PED LANES (LADOTD SPN H.014346)	ORLEANS	FFY 27-36	RPC
LA 433@ CARROLL RD ROUNDABOUT	INTERSECTION IMPROVMENTS (RPC PROJECT RPC_1151*)	ST. TAMMANY	FFY 27-36	RPC
LA 46 @ WEINBERGER RD INTERSECTION	INTERSECTION IMPROVEMENTS (LADOTD SPN H.012752)	ST. BERNARD	FFY 23-26	RPC
LA 466: 5TH ST IMPROVEMENTS (GRETNA)	BIKE LANES, MULTI USE PATH, ADA SIDEWALKS (LADOTD SPN H.012885)	JEFFERSON	FFY 23-26	RPC
LA 48 PED. IMPROVEMENTS, CITY OF HARAHAN	SIDEWALKS, DRAINAGE (LADOTD SPN H.013411)	JEFFERSON	FFY 27-36	RPC
LA 48: KENNER LEVEE TRAILHEAD EXPANSION	SIDEWALKS, BICYCLE FACILITIES, LANDSCAPING AND BUS SHELTERS (LADOTD SPN H.013370)	JEFFERSON	FFY 23-26	RPC
LA 52: (PH2) US 90 - BLUEBERRY HILL	BIKE/PED - COMPLETE STREETS (LADOTD SPN H.013495)	ST. CHARLES	FFY 23-26	RPC
LA 52: (PH3) ANGUS DR. - LA 18	BIKE/PED - COMPLETE STREETS (LADOTD SPN H.013496)	ST. CHARLES	FFY 23-26	RPC
LA 59 AT HARRISON ROAD	CONSTRUCT ROUNDABOUT (RPC PROJECT RPC_0771*)	ST. TAMMANY	FFY 27-36	RPC
LA 59: KOOP DRIVE ROUNDABOUT	ROUNDABOUT (LADOTD SPN H.012658)	ST. TAMMANY	FFY 27-36	RPC
LA 59: LITTLE CREEK, I-12, DOVE RNBT	ROUNDABOUTS (LADOTD SPN H.012660)	ST. TAMMANY	FFY 37-52	RPC
LA21: LA1085 - PINNACLE, SHARED USE PATH	SHARED USE PATH (LADOTD SPN H.011822)	ST. TAMMANY	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LA22:CEDAR-MARINA DEL RAY (MADISONVILLE)	ENHANCED BIKE AND PEDESTRIAN SAFETY IMPROVEMENTS (RPC PROJECT RPC_0810*)	ST. TAMMANY	FFY 27-36	RPC
LA3234 EXT FROM LA1065 - HAMMOND AIRPORT	ROADWAY EXTENSION (LADOTD SPN H.008915)	TANGIPAHOA	FFY 27-36	RPC
LAFITTE LEVEE TRAIL	CONSTRUCTION OF A 7000 FOOT WALKING TRAIL (LADOTD SPN H.014650)	JEFFERSON	FFY 23-26	RPC
LAPALCO BRIDGE AT HARVEY CANAL	CAPACITY / NEW BRIDGE (LADOTD SPN H.004396)	JEFFERSON	FFY 27-36	RPC
LEAKE AVENUE IMPROVEMENTS	CORRIDOR IMPROVMENTS (LADOTD SPN H.009499)	ORLEANS	FFY 37-52	RPC
LEE ROAD IMPROVEMENTS	CORRIDOR ANALYSIS (RPC PROJECT RPC_1152*)	ST. TAMMANY	FFY 27-36	RPC
LIVABLE CLAIBORNE	CORRIDOR IMPROVEMENTS (RPC PROJECT RPC_1168*)	ORLEANS	FFY 27-36	RPC
LOWER ST. BERNARD LIT NETWORK STUDY	CORRIDOR ANALYSIS (LADOTD SPN H.015428)	ST. BERNARD	FFY 23-26	RPC
MACARTHUR INTERCHANGE COMPLETION PH. II	RELOCATE THE EXIT RAMP AND CONSTRUCT AN ENTRANCE RAMP (LADOTD SPN H.011309)	JEFFERSON	FFY 27-36	RPC
MELVYN PEREZ PKWY AT LA 46: NSRR PREEMP	CONNECT CROSSING WITH TRAFFIC SIGNAL FOR PRE-EMPTION (LADOTD SPN H.014031)	ST. BERNARD	FFY 23-26	RPC
MOTORIST ASSISTANCE PATROL (MAP) MC	MOTORIST ASSIST PATROL ALONG I-12 (LADOTD SPN H.013245.MC)	ST. TAMMANY	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
MOTORIST ASSISTANCE PATROL (MAP) NO	MAP FOR NOUZA (LADOTD SPN H.013245.NO)	JEFFERSON, ORLEANS, ST. CHARLES, ST. JOHN THE BAPTIST	FFY 23-26	RPC
MOTORIST ASSISTANCE PATROL (MAP) SL	MAP FOR I-12/ I-10 TO TWIN SPAN BRIDGE (LADOTD SPN H.013245.SL)	ST. TAMMANY	FFY 23-26	RPC
MOTORIST ASSISTANCE PATROL (MAP) ST	MAP PATROL ALONG I-12 AND I-55 (LADOTD SPN H.013245.ST)	TANGIPAHOA	FFY 23-26	RPC
MRT EXTENSION ST. JOHN PARISH	STAGE 0 FEASIBILITY STUDY (LADOTD SPN H.011136)	ST. JOHN THE BAPTIST	FFY 27-36	RPC
MRT TO US 61	BIKE/PED ACCESS (RPC PROJECT RPC_1166*)	ST. JOHN THE BAPTIST	FFY 27-36	RPC
N TANGIPAHOA PARISH PARK TRAILS	CONSTRUCTION OF 2900 FT OF TRAILS (LADOTD SPN H.009977)	TANGIPAHOA	FFY 27-36	RPC
NEW ORLEANS RAIL GATEWAY ANALYSIS	ENVR. GRADE X-ING. OPER. IMPROVEMENT (LADOTD SPN H.006517)	ORLEANS	FFY 27-36	RPC
NEW ORLEANS TULLIS-RIVER ROUTE	SHARED USE PATH, STRIPING, SIGNAGE (LADOTD SPN H.014042)	ORLEANS	FFY 23-26	RPC
NEW ORLEANS: LAKE VISTA, SIDEWALKS	SIDEWALKS (LADOTD SPN H.011836)	ORLEANS	FFY 23-26	RPC
NO - BR STATION STOP, LAPLACE	INTERMODAL FACILITY (RPC PROJECT RPC_1165*)	ST. JOHN THE BAPTIST	FFY 27-36	RPC
NO: LAKESHORE DR. REC, OPERATIONAL IMPR	PEDESTRIAN IMPROVEMENTS (LADOTD SPN H.011841)	ORLEANS	FFY 23-26	RPC
NOIA TO CBD FIXED GUIDEWAY	FIXED GUIDEWAY TRANSIT (RPC PROJECT RPC_0778*)	ORLEANS	FFY 37-52	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
NORTHSHORE PHASE 3 ITS DEPLOYMENT	NEW ITS EQUIPMENT, UPGRADE EQUIPMENT, FIBER OPTIC CABLE (LADOTD SPN H.013711)	ST. TAMMANY	FFY 27-36	RPC
NOUPT PLATFORM PLANT IMPROVEMENT PROJECT	IMPROVE / UPDATE BOARDING PLATFORMS / PHYSICAL PLANT UPDATES (RPC PROJECT RPC_0836*)	ORLEANS	FFY 23-26	RPC
OLD COV HWY IMPR: CYPRESS - CHESTNUT PH1	MINOR WIDEN/ ADA SIDEWALKS (RPC PROJECT RPC_1067*)	TANGIPAHOA	FFY 27-36	RPC
OLD COV HWY IMPR:CHESTNUT - PON. CRK. BR	MINOR WIDEN, ADA SIDEWALKS (RPC PROJECT RPC_1068*)	TANGIPAHOA	FFY 23-26	RPC
OLD COV HWY IMPR:PON. CRK. BR - LA 3158	MINOR WIDEN, ADA SIDEWALKS (RPC PROJECT RPC_1069*)	TANGIPAHOA	FFY 27-36	RPC
PARISH BIKE AND PED MASTER PLAN	ROAD (RPC PROJECT RPC_1074*)	ST. TAMMANY	FFY 23-26	RPC
PETERS RD BRIDGE, EXTENSION (PHASE 3)	NEW BRIDGE @ GIWW (LADOTD SPN H.008069)	PLAQUEMINES	FFY 27-36	RPC
PETERS RD. BRIDGE, EXT. PH 2B	APPROACHES FOR NEW BRIDGE (LADOTD SPN H.008068)	PLAQUEMINES	FFY 23-26	RPC
RAIL RELOCATION FROM LA 23 TO LA 3017	RAIL RELOCATION (RPC PROJECT RPC_1158*)	PLAQUEMINES	FFY 27-36	RPC
RANGE RD. AT OLD COVINGTON HWY	ROUNDABOUT (RPC PROJECT RPC_0732*)	TANGIPAHOA	FFY 27-36	RPC
REALIGN LA 46 FOR LIT, VIOLET	ROADWAY REALIGNMENT FOR LOUISIANA INTERNATIONAL TERMINAL (RPC PROJECT RPC_1164*)	ST. BERNARD	FFY 27-36	RPC
RESERVE TO I-10 CONNECTOR	US 61 TO I-10 CONNECTOR (LADOTD SPN H.004891)	ST. JOHN THE BAPTIST	FFY 37-52	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
ROBERT BLVD. AT COUNTRY CLUB DR.	ROUNDABOUT INTERSECTION IMPROVMENTS (RPC PROJECT RPC_0696*)	ST. TAMMANY	FFY 23-26	RPC
S. CARROLLTON AVE PED & BIKE IMPR (NO)	PEDESTRIAN FACILITY IMPROVEMENTS (LADOTD SPN H.015198)	ORLEANS	FFY 23-26	RPC
S. CARROLLTON: WASHINGTON TO CANAL ST.	PAVEMENT REHAB / ADA IMPROVEMENTS (RPC PROJECT RPC_1100*)	ORLEANS	FFY 23-26	RPC
SIGNAL UPGRADE:SGT ALFRED DR @ CLEVELAND	REPLACE TRAFFIC SIGNAL, UPGRADE SIDEWALKS & STRIPING (LADOTD SPN H.014737)	ST. TAMMANY	FFY 23-26	RPC
SLIDELL OLDE TOWNE STREETSCAPING	SIDEWALKS W/LIGHTING LANDSCAPING & RELATED WORK (LADOTD SPN H.009793)	ST. TAMMANY	FFY 23-26	RPC
SPARTAN DR. SHARED USE PATH	SHARED USE PATH (LADOTD SPN H.011799)	ST. TAMMANY	FFY 23-26	RPC
ST. BERNARD MISS RIVER TRAIL PH III	SHARED USE PATH ON LEVEE TOP (LADOTD SPN H.011800)	ST. BERNARD	FFY 23-26	RPC
ST. BERNARD MISS. RIVER TRAIL PH IV	SHARED USE PATH ON LEVEE TOP (LADOTD SPN H.013343)	ST. BERNARD	FFY 23-26	RPC
ST. BERNARD PEDESTRIAN IMPROVEMENTS	SIGNING, STRIPING, SIGNAL, CROSSWALK IMPROVEMENTS (LADOTD SPN H.014049)	ST. BERNARD	FFY 23-26	RPC
ST. BERNARD TRANSPORTATION CORRIDOR	NEW ROADWAY TO CONNECT LOWER ST. B. TO INTERSTATE (RPC PROJECT RPC_1163*)	ST. BERNARD	FFY 27-36	RPC
ST. CHARLES PARISH: DUFRESNE PKWY	CONNECTOR TO LA 52 (RPC PROJECT RPC_0151*)	ST. CHARLES	FFY 23-26	RPC
ST. CHARLES WB LEVEE PATH PH IV AND V	SHARED USE PATH (LADOTD SPN H.011801)	ST. CHARLES	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
ST. JOHN W. BANK MISS.R. TRAIL, PHASE 2	10' ASPHALT TRAIL, ADA RAMP, BONFIRE SHELVES AND BENCHES (LADOTD SPN H.014736)	ST. JOHN THE BAPTIST	FFY 23-26	RPC
ST. TAMMANY COMPLETE STREETS STUDY	CONDUCT COMPLETE STREETS STUDY; COST SHARE BETWEEN MANDEVILLE-COVINGTON AND SLIDELL UZAS ($350K EACH) (RPC PROJECT RPC_1225*)	ST. TAMMANY	FFY 23-26	RPC
TAMMANY TRACE TO HERITAGE PARK, PHASE 2	CONSTRUCTION OFA 1,462 FOOT WALKING TRAIL (LADOTD SPN H.014657)	ST. TAMMANY	FFY 23-26	RPC
US 11 & US 190 BICYCLE AND PED CROSSINGS	PED/BICYCLE CROSSWALKS, SIGNS AND SIGNALS (LADOTD SPN H.011775)	ST. TAMMANY	FFY 23-26	RPC
US 11 AT SPARTAN DR.	CONSTRUCT ROUNDABOUT (LADOTD SPN H.014374)	ST. TAMMANY	FFY 23-26	RPC
US 190 @ LA 25 ROUNDABOUT (PH 2A)	TWO LANE ROUNDABOUT (LADOTD SPN H.012398)	ST. TAMMANY	FFY 27-36	RPC
US 190 @ LA 433	ROUNDABOUT (RPC PROJECT RPC_1150*)	ST. TAMMANY	FFY 27-36	RPC
US 190 @ NORTHSHORE & CAMP VILLERE	ROUNDABOUT INTERSECTION IMPROVEMENTS (LADOTD SPN H.012812)	ST. TAMMANY	FFY 23-26	RPC
US 190 AT LA 3158	ROUNDABOUTS (RPC PROJECT RPC_1102*)	TANGIPAHOA	FFY 27-36	RPC
US 190 AT SOULT ST.	ROUNDABOUT (RPC PROJECT RPC_1148*)	ST. TAMMANY	FFY 27-36	RPC
US 190: E. CAUSEWAY TO CLAUSEL	MEDIAN INSTALLATION OF A 5 LANE SECTION (RPC PROJECT RPC_1064*)	ST. TAMMANY	FFY 23-26	RPC
US 190: US 11 - LA 433 PH 2	ACCESS MANAGEMENT (RPC PROJECT RPC_0341*)	ST. TAMMANY	FFY 27-36	RPC
US 190: US 11 - LA 433 PH 3	ACCESS MANAGEMENT (RPC PROJECT RPC_0342*)	ST. TAMMANY	FFY 27-36	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
US 190: US 11 - LA 433 PH 4	ACCESS MANAGEMENT (RPC PROJECT RPC_0343*)	ST. TAMMANY	FFY 27-36	RPC
US 190B (FREMAUX) BETH ST. TO HOOVER DR.	OPERATIONS STUDY (LADOTD SPN H.013618)	ST. TAMMANY	FFY 23-26	RPC
US 51 (YELLOW WATER CREEK TO LA 1064)	WIDEN TO 3 LANE SECTION (RPC PROJECT RPC_0733*)	TANGIPAHOA	FFY 27-36	RPC
US 51 BUS: I12 TO COLEMAN CORRIDOR STUDY	TRAFFIC/CORRIDOR STUDY FOR ACCESS MGMT A (LADOTD SPN H.011402)	TANGIPAHOA	FFY 27-36	RPC
US 51 CORRIDOR, I-10 TO SUNSET PARK	BIKE/PED ACCESS- MRT TO MANCHAC GREENWAY PH 2 (RPC PROJECT RPC_1155*)	ST. JOHN THE BAPTIST	FFY 27-36	RPC
US 51 CORRIDOR, US 61 TO I-10	BIKE/PED ACCESS- MRT TO MANCHAC GREENWAY PH 1 (RPC PROJECT RPC_1154*)	ST. JOHN THE BAPTIST	FFY 27-36	RPC
US 51: W UNIV AVE TO I55 CORRIDOR STUDY	CORRIDOR/TRAFFIC STUDY FOR ACCESSMAN AND (LADOTD SPN H.011401)	TANGIPAHOA	FFY 27-36	RPC
US 61 @ I-10 EB OFF RAMP PED IMPR (NO)	PEDESTRIAN FACILITY IMPROVEMENTS (LADOTD SPN H.013719)	ORLEANS	FFY 23-26	RPC
US 61 CORRIDOR PRESERVATION	ABANDONED RR R/W ACQ (LADOTD SPN H.006513)	JEFFERSON	FFY 37-52	RPC
US 90 PORT OF NO ACCESS IMP.	ACCESS IMPROVEMENTS (RPC PROJECT RPC_0821*)	ORLEANS	FFY 27-36	RPC
US 90 - US 61 - LA 611-9 CORRIDOR IMPROV	INTERSECTION IMPROVEMENT STUDY (LADOTD SPN H.011646)	ORLEANS	FFY 27-36	RPC
US 90/I-310 INTERCHANGE	INTERSECTION IMPROVEMENTS (LADOTD SPN H.010753)	ST. CHARLES	FFY 23-26	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
US 90: INTERSECTION IMP AT MLK BLVD	INTERSECTION IMPROVEMENTS ON US 90 AT MARTIN LUTHER KING BLVD (LADOTD SPN H.011447)	ORLEANS	FFY 23-26	RPC
US 90: LEFT TURN LANE AT TOLEDANO ST	LEFT TURN LANE ONTO WB US 90 FROM TOLEDANO ST (LADOTD SPN H.014080)	ORLEANS	FFY 23-26	RPC
US 90: TURN LANES @ WASHINGTON & JACKSON	ADD TURN LANES AT WB US 90 AT WASHINGTON AVE AND JACKSON (LADOTD SPN H.014755)	ORLEANS	FFY 23-26	RPC
US HWY 11 WIDENING	WIDEN W/ BIKE PATH (LADOTD SPN H.004983)	ST. TAMMANY	FFY 37-52	RPC
US190 (GAUSE) I-10EB OFFRAMP TO TYLER ST	OPS/CAPACITY/SAFETY IMPROVEENT (RPC PROJECT RPC_0817*)	ST. TAMMANY	FFY 23-26	RPC
US190: US11 - LA433 PH6 ST.TAM AVE-US11	ACCESS MANAGEMENT (RPC PROJECT RPC_0345*)	ST. TAMMANY	FFY 27-36	RPC
US190:US11-LA433 PH5 N.HARRISON-ST.TAM.A	ACCESS MANAGEMENT (RPC PROJECT RPC_0344*)	ST. TAMMANY	FFY 27-36	RPC
US190W ROUNDABOUTS, SLIDELL	CONSTRUCT ROUNDABOUTS AT WESTMINSTER, CARROLL AND MARIS STELLA RDS. (LADOTD SPN H.014375)	ST. TAMMANY	FFY 23-26	RPC
W. 11TH AVE. PED AND BICYCLE IMPR. (COV)	FEASIBILITY STUDY (LADOTD SPN H.013717)	ST. TAMMANY	FFY 27-36	RPC
WILLOWDALE EXT: US 90 - LA 18	NEW ROADWAY (RPC PROJECT RPC_0803*)	ST. CHARLES	FFY 37-52	RPC

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
EAST-WEST BUS RAPID TRANSIT ROUTE	IMPLEMENT BUS RAPID TRANSIT SERVICE IN NEW ORLEANS TO ENCOURAGE MODE SHIFT TOWARDS TRANSIT AND AWAY FROM PRIVATE VEHICLE USE. THIS PROJECT IS PARTIALLY FUNDED, ADDITIONAL FUNDS WOULD SUPPORT FURTHER INFRASTRUCTURE IMPROVEMENTS.	ORLEANS PARISH, ROUTE FROM NEW ORLEANS EAST HUB THROUGH THE CBD, ACROSS THE CRESCENT CITY CONNECTION TO THE ALGIERS PARK AND RIDE	2024-2027	RTA
BELLE TERRE STREETSCAPE AND STORMWATER ENHANCEMENTS	THE BELLE TERRE STREETSCAPE AND STORMWATER ENHANCEMENTS PROJECT AIMS TO REJUVENATE A KEY PARISH CORRIDOR FOR ECONOMIC GROWTH, WHILE INCORPORATING GREEN INFRASTRUCTURE TO MITIGATE LOCALIZED FLOODING IN THE LAKE PONTCHARTRAIN BASIN. THIS INITIATIVE, MIRRORING THE LA SAFE AIRLINE AND MAIN COMPLETE STREETS PROJECT, INTEGRATES ECONOMIC, ENVIRONMENTAL, AND SOCIAL GOALS, FOCUSING ON SUSTAINABLE URBAN DEVELOPMENT AND SERVING AS A MODEL FOR FUTURE PROJECTS, WITH EXPECTED OUTCOMES OF ECONOMIC REVITALIZATION, FLOOD RESILIENCE, ENVIRONMENTAL IMPROVEMENTS, AND ENHANCED COMMUNITY WELL-BEING.	BELLE TERRE BOULEVARD, LAPLACE, LA / BETWEEN I-10 AND HIGHWAY 61	18 -24 MONTHS	ST. JOHN THE BAPTIST PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
SJBP GOVERNMENT FLEET ELECTRIFICATION AND EV CHARGING STATIONS	ST. JOHN THE BAPTIST PARISH'S "ELECTRIFYING ST. JOHN THE BAPTIST PARISH" PROJECT AIMS TO TRANSFORM ITS TRANSPORTATION INFRASTRUCTURE BY REPLACING 25% OF ITS GOVERNMENT VEHICLE FLEET WITH ELECTRIC VEHICLES (EVS) AND INSTALLING A COMPREHENSIVE NETWORK OF EV CHARGING STATIONS, INCLUDING RAPID AND STANDARD CHARGERS POWERED PARTIALLY BY SOLAR ARRAYS. THIS INITIATIVE, ADDRESSING THE PARISH'S SIGNIFICANT COMMUTING NEEDS, FOCUSES ON REDUCING CARBON EMISSIONS, PROMOTING SUSTAINABLE COMMUTING PRACTICES, AND GENERATING REVENUE FOR CONTINUED ENVIRONMENTAL EFFORTS, THEREBY SETTING A PRECEDENT IN ENVIRONMENTAL STEWARDSHIP AND CLIMATE CHANGE MITIGATION.	MAIN CHARGING BANK: SJBP GOVERNMENT COMPLEX 1811 W AIRLINE HWY, LAPLACE, LA 70068, RAPID CHARGING STATIONS - THROUGHOUT THE PARISH ON BOTH EASTBANK AND WESTBANK	28 MONTHS	ST. JOHN THE BAPTIST PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
TRANSITIONING TO GREEN WASTE MANAGEMENT	THE "TRANSITIONING TO SUSTAINABLE WASTE MANAGEMENT" PROJECT IN THE PARISH FOCUSES ON REPLACING ITS TRADITIONAL INCINERATOR SYSTEM WITH AN INDUSTRIAL SHREDDER, A MORE ENVIRONMENTALLY FRIENDLY AND EFFICIENT WASTE MANAGEMENT SOLUTION. THIS TRANSITION NOT ONLY SIGNIFICANTLY REDUCES AIR POLLUTION BY PROCESSING VARIOUS WASTE MATERIALS INTO SMALL CHIPS, BUT ALSO ENHANCES OPERATIONAL EFFICIENCY AND COST-EFFECTIVENESS, REFLECTING THE PARISH'S COMMITMENT TO SUSTAINABLE PRACTICES AND POLLUTION REDUCTION.	ST. JOHN THE BAPTIST PARISH GOVERNMENT'S BIO-MASS AND WOOD WASTE DISPOSAL FACILITY, AIRPORT ROAD, RESERVE, LA	12- 18 MONTHS	ST. JOHN THE BAPTIST PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
BOTTLES TO BEACHES	THE OBJECTS ARE TO SET UP DROP OFF LOCATIONS AND PICK UP SERVICES AND HELP FACILITATE SAFE, CURBSIDE, CONTACTLESS, RESIDENTIAL AND BUSINESS GLASS COLLECTION. FROM THERE, THE GLASS WILL BE TAKEN TO A LOCAL FACILITY WHERE IT WILL BE PROPERLY MILLED INTO A SAND CALLED RECYCLED GLASS AGGREGATE (RGA). POTENTIAL BENEFITS OF RGA: ROADWAY FILLER, CONCRETE/CEMENT MIXING, COASTAL EROSION, BEACH RESTORATION, WATER FILTRATION, EMERGENCY SANDBAGS, KAYAK LAUNCHES, GOLF COURSE DIVOT REPAIR AND BUNKER SAND, SAND-BLASTING, UTILIZATION OF LANDFILL SPACE, COMPOSTING, ENERGY SAVING BY MAKING NEW GLASS MORE ENERGY EFFICIENTLY, MARINE LIFE HABITATION, ETC. THESE ARE ALL IMMEDIATE USAGES AND PROPERTIES THIS RGA CAN BE USED FOR AND CAN BE DONE SO BY REPLACING THE OLDER LESS ENERGY EFFICIENT WAYS OF IMPORTING SAND AND WASTING LANDFILL SPACE.	PARISHWIDE	0-2 YEARS	ST. TAMMANY PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
DESIGN & CONSTRUCT NEW REGIONAL WASTEWATER TREATMENT PLANT IN THE BAYOU LIBERTY WATERSHED TO TIE-IN 3,000 INDIVIDUAL HOME WASTEWATER TREATMENT SYSTEMS	INSTALL GRAVITY SEWER LINES, SEWER LIFT STATIONS AND SEWAGE FORCE MAIN TO CONNECT 3,000 ON-SITE RESIDENTIAL SEWER TREATMENT SYSTEMS TO A NEW 1.2 MGD REGIONAL CENTRAL WASTEWATER PLANT IN THE BAYOU LIBERTY WATERSHED (WEST OF OZONE WOODS SUBDIVISION). (THERE ARE CURRENTLY NO CENTRAL SEWER SYSTEMS IN THE AREA WITH CAPACITY TO TIE-IN THESE ON-SITE SYSTEMS). REMOVAL OF ANOXIC SEWAGE EFFLUENT FROM PARISH DITCHES WILL RESULT IN SUBSTANTIAL REDUCTION OF CH4, NOX AND CO2, ABATE THE BOD/LOW DO TMDL IN THE WATERSHED, AND RESULT IN BETTER PUBLIC HEALTH & QUALITY OF LIFE FOR THE PREDOMINANTLY LOW-INCOME RESIDENTS WHO WILL BE SERVICED. IF THE PLANT IS ANAERAOBIC, THIS WILL ALLOW ADDITIONAL C-CAPTURE POTENTIAL AT THE FACILITY. THE PROJECT IS SCALABLE.	BAYOU LIBERTY WATERSHED IN SLIDELL, LA	2-5 YEARS	ST. TAMMANY PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
LIVING SHORELINES FOR OXYGEN CREATION	ADDING LIVING SHORELINES (LS) ALONG SEVERAL SECTIONS OF LAKE PONTCHARTRAIN AS A MEANS TO SLOW DOWN TRENDS IN SHORELINE RETREAT. ARRESTING WAVE ENERGY BEFORE THE WAVE ENERGY IMPACTS THE FRAGILE SHORELINES, QUITE ZONES WILL ALLOW FOR INCREASED GROWTH OF SUBMERGED AQUATIC VEGETATION AND ENCOURAGE INCREASED BENTHIC BIOMASS, THE AREAS OF LOWER WAVE ENERGY WILL ALSO CAUSE SOME SUSPENDED SOLIDS TO FALL OUT AND BE CAPTURED IN THAT ZONE OR ALONG THE SHORELINE. HUNDREDS OF ACRES OF CREATED WETLANDS WOULD BE PROTECTED AND ALLOWED TO PROLONG THEIR CARBON BENEFITS. EMERGENT MARSH WILL BE PROTECTED, SHORELINE RETREAT SLOWED, AND GRASS AND CLAM BEDS INCREASED. ALL OF THESE FACTORS WILL ACT TO CAPTURE AND/OR SEQUESTER CO_2. S T. TAMMANY IS ALSO PROPOSING UTILIZING "MATERIALS OF OPPORTUNITY" TO REPLACE LIMESTONE AND OTHER MATERIALS THAT WOULD NORMALLY BE BROUGHT IN.	LAKE PONTCHARTRAIN COASTLINE IN ST. TAMMANY PARISH. MAY INCLUDE USFWS BIG BRANCH WMA IN LACOMBE, LA.	0-5 YEARS	ST. TAMMANY PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
MARSH RESTORATION USING MATERIALS OF OPPORTUNITY FOR CARBON SEQUESTRATION & COMMUNITY RESILIENCE	COASTAL AREAS OF ST. TAMMANY PARISH BELOW I-10 AND I-12 (MADISONVILLE, MANDEVILLE, LACOMBE, AND SLIDELL (3) AREAS) ARE PARTICULARLY VULNERABLE TO COASTAL SURGE AND RIVERINE INUNDATION. IT IS HOME TO >160,000 ST. TAMMANY PARISH CITIZENS (>60% OF THE PARISH POPULATION), THAT ARE VULNERABLE TO COASTAL SURGE AND EROSION, WHERE 1,268 UNMITIGATED RL/SRL STRUCTURES ARE LOCATED AMONG THE MANY "POCKETS" OF HUD-DETERMINED LMI RESIDENTS AND OTHER AREAS OF HIGH SOCIALLY VULNERABLE AREAS ("NORTHSHORE HURRICANE/FLOOD PROTECTION AND RESTORATION PLAN," CPRA 2012). ST. TAMMANY PARISH PROPOSES TO CREATE AND PLANT LIVING SHORELINES THAT COST-EFFECTIVELY PROTECT VALUABLE, YET VULNERABLE COASTAL AREAS AND VULNERABLE, UNDERREPRESENTED & LOW-INCOME COMMUNITIES INLAND FROM THEM.	LAKE PONTCHARTRAIN COASTLINE IN ST. TAMMANY PARISH. MAY INCLUDE USFWS BIG BRANCH WMA IN LACOMBE, LA.	0-2 YEARS	ST. TAMMANY PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
SLEMMER ROAD CENTRAL SEWER INSTALLATION (STPG)	INSTALL GRAVITY SEWER LINES, A SEWER LIFT STATION AND SEWAGE FORCE MAIN TO CONNECT 93 ON-SITE RESIDENTIAL SEWER TREATEMENT SYSTEMS TO A REGIONAL CENTRAL WASTEWATER PLANT. REMOVAL OF ANOXIC SEWAGE EFFLUENT FROM PARISH DITCHES WILL RESULT IN SUBSTANTIAL REDUCTION OF CH4, NOX AND CO2.	PONCHITOLAWA CREEK WATERSHED IN COVINGTON, LA	2 YEARS	ST. TAMMANY PARISH
ST TAMMANY TRANSPORTATION GHG MITIGATION ACTION: INSTALLING PUBLIC EV CHARGERS	ADDING A TESLA SUPERCHARGER STATION IN MANDEVILLE/COVINGTON, INCREASING THE NUMBER AND OF EV CHARGING STATIONS IN ST TAMMANY PARISH BY 10% - 25%, AND MAKING THE STATIONS AVAILABLE TO ALL AREAS THROUGHOUT THE PARISH. CONVERTING 10% - 25% OF PARISH VEHICLES FROM GAS/DIESEL TO EVS. ST TAMMANY WISHES TO REDUCE OVERALL EMISSIONS BY REPLACING SOME OF ITS FLEET WITH NEW DIESEL TECHNOLOGY EQUIPMENT, RESULTING IN IMPROVED OPERATIONAL EFFICIENCY OF ITS FLEET WITH INCREASED RELIABILITY AND REDUCED DOWNTIME OF EQUIPMENT.	PARISHWIDE, PARTICULARLY ALONG THE I-12/ I-10 CORRIDORS	0-5 YEARS	ST. TAMMANY PARISH

TITLE	DESCRIPTION	LOCATION	TIMEFRAME	SUBMITTING AGENCY
F.P.A. ELECTRIFICATION	ELECTRIC / AUTOMONOUS TRACTOR FOR AGRICULTURAL FACILITY AIMED AT REDUCUING DIESLE DEPENDENCE AND REPAIR COSTS DUE TO VENDOR UTILIZATION OF EQUIPMENT.	AMITE, LA	24 MONTHS	TANGIPAHOA PARISH
INTER-PARISH BIKE PATH	PONCHATOULA TO TAMMANY TRACE BIKE PATH CONNECTION	PONCHATOULA, LA	48 MONTHS	TANGIPAHOA PARISH
MANCHAC BIKE PATH	PONCHATOULA TO MANCHAC GREENWAY BIKE PATH	PONCHATOULA, LA	48 MONTHS	TANGIPAHOA PARISH
T.P.G. CHARGING NETWORK	EV CHARGERS AT TPG OFFICES AIMED AT REDUCING GHG EMISSIONS, PROMOTING EV UTILIZATION AMOUNGST EMPLOYEES, AND HAVING ON SITE CHARGING TO ALLOW FOR IMMEDIATE OPERATION DURING THE EMERGENCIES/DISASTERS.	TANGIPAHOA	36 MONTHS	TANGIPAHOA PARISH
T.P.J. SOLAR ROOF	SOLAR SHINGLE INSTALLATION AT TANGIPAHOA PARISH JAIL, AIMED AT REDUCING GHG EMISSIONS AND UTILITY BURDEN ON TANGIPAHOA PARISH GOVERNMENT. (MICRO-GRID POTENTIAL).	AMITE, LA	48 MONTHS	TANGIPAHOA PARISH

Appendix D: GHG Reduction Measures Benefits Methodologies

The Regional Planning Commission (RPC) used a variety of tools and data sources to quantify potential greenhouse gas (GHG) reduction benefits resulting from the measures proposed in the Priority Climate Action Plan (PCAP). All benefits are expressed as a reduction in metric tons (MT) of carbon dioxide equivalent (CO_2e). The methods for calculating benefits are described below.

Transportation

Transportation Strategy 1: Reduce Vehicle Miles Traveled by increasing the use of alternative transportation modes.

To calculate the benefits of **reducing regional Vehicle Miles Traveled** (VMT) by 1%, the RPC completed the following procedures:

1. Determine the average fuel efficiency of vehicles from EPA's 2023 Automotive Trends Report: 26.4 miles per gallon (mpg). [1]
2. Calculate the average gallons of fuel consumed per mile travelled:

   1 mile ÷ 26.4 mpg =.0378 gallons of fuel per mile traveled

3. Use the EPA's Carbon Equivalencies calculator to estimate the GHG emissions per mile travelled: .0003 MT CO_2e per mile traveled.[2]
4. Determine the total annual regional VMT using RPC's Southeast Louisiana Travel Demand Model (SELATRAM): 14,490,428,708.58 miles.[3]
5. Calculate the estimated GHGs produced by regional travel, as follows:

   .0003 MT CO_2e x 14, 14,490,428,708.58 VMT = 4,347,128.61 MT CO_2e

6. Calculate the potential GHG reduction benefits of reducing VMT by 1%, as follows:

   4,347,128.61 MT CO_2e x 1% = 43,471.29 MT CO_2e

The RPC used the Federal Highway Administration (FHWA) Congestion Mitigation and Air Quality (CMAQ) Emissions Calculator Toolkit to calculate potential GHG reduction benefits resulting from **increasing regional transit service and expanding bicycle infrastructure and**. This toolkit includes multiple tools that may be used to evaluate the emissions impact of various transportation strategies. It is important to note that the tools are designed to evaluate specific, real-world projects; however, currently the RPC does not have sufficient detail about all potential projects to evaluate them on a case-by-case basis. To estimate the potential benefits of transportation strategies without having detailed information on the specific projects that may be implemented, the RPC evaluated the impacts of hypothetical projects. Parameters for the hypothetical projects were derived and generalized from existing regional transportation data maintained by the RPC. The results of the analysis, while not related to any specific project, are illustrative of the GHG reduction benefits that may be realized through implementation of similar strategies in the real world. The process for calculating GHG reduction benefits from expanded regional transit and bicycle infrastructure was as follows:

1. Expand Regional Transit: RPC used FHWA's Transit Bus Service and Fleet Expansion Tool in the CMAQ Emissions Toolkit to calculate GHG reduction benefits resulting from increasing transit vehicle revenue miles by 10%, resulting in a 5% reduction in VMTs. The tool was set up as follows:
    a. Evaluation Year: 2022 (utilized based on the year transit data was retrieved)
    b. Number of days the bus service is operated annually: 365
    c. Proposed Conditions:
        i. Transit Bus Miles Traveled Before Project: 10,486,809[4]
        ii. Transit Bus Miles Traveled After Project: 11,535,490 (a 10% increase)
        iii. Allocations of Model Years: Used Tool Defaults
        iv. Allocations of Fuel Types: Used Tool Defaults
        v. Allocations of Fuel Types: Use Tool Defaults
        vi. Passenger Vehicle Activity Type: Passenger Vehicle Miles Traveled
        vii. Passenger Vehicle Activity Before project: 14,490,428,708 (based on regional VMT total)
        viii. Passenger Vehicle Activity After project: 13,765,907,273 (a 5% reduction)
        ix. Average One-Way Trip Distance: 4.52 (national Default value)
        x. The expansion will eliminate full passenger vehicle trips
    d. Results:

        762,737.649 kg CO_2e per day x 365 days= 278,399.24 MT CO_2e per year

2. Expand Bicycle Infrastructure: RPC used FHWA's Bicycle and Pedestrian Improvements tool in the CMAQ Emissions Toolkit to calculate GHG reduction benefits resulting from increasing bicycle infrastructure, which may result in more commutes taking place by bicycle. The tool was set up as follows:
    a. Evaluation Year: 2024
    b. Daily Passenger Vehicle Trips
        i. Before Project: 100
        ii. After: 80
    c. Distribution: National Defaults Used
    d. Typical Trip Distance: 3 miles one way
    e. Results:

        22.150 kg CO_2e per day x 52 days (i.e., one trip per week) = 1.1518 MT CO_2e per year

Transportation Strategy 2: Reduce vehicular congestion.

The RPC used the Federal Highway Administration (FHWA) Congestion Mitigation and Air Quality (CMAQ) Emissions Calculator Toolkit to calculate potential GHG reduction benefits resulting from congestion reduction strategies.[5] As with the alternative mode measures described above, the RPC does not have sufficient detail about all potential congestion reduction projects to evaluate them on a case-by-case basis. To estimate the potential benefits of congestion reduction strategies without having detailed information on the specific projects that may be implemented, the RPC evaluated the impacts of hypothetical projects. Parameters for the hypothetical projects were derived and generalized from existing regional transportation data maintained by the RPC. The results of the analysis, while not related to any specific project, are illustrative of the GHG reduction benefits that may be realized through implementation of a similar strategy in the real world. The process for calculating each of the benefits described under Transportation Strategy 2 in the PCAP was as follows:

1. **Implement Left Turn Lanes:** GHG reduction benefits resulting from the addition of left turn lanes are based on FHWA's Congestion Reduction and Traffic Flow Improvements tool, Intersections module, in the CMAQ Emissions Toolkit. The tool was set up as follows:
    a. Evaluation Year: 2024
    b. Area Type: Urban
    c. Business District: No
    d. Total Peak Hours Per Day (AM+PM): 4
    e. Existing Intersection Is Signalized
    f. Each roadway at the intersection was assumed to have the same characteristics:
        i. Average Annual Daily Traffic (AADT) (both directions): 20,000
        ii. Peak-Hour Volume (both directions): 2,000
        iii. Number of Lanes (one direction): 3
        iv. Truck Percentage: 6%
        v. Existing Delay per Vehicle: 28 sec/vehicle (Level of Service C)
        vi. Existing Left or Right Turn Phase: No
    g. Proposed conditions:
        i. 1 left turn lane added in each direction, with a left turn phase
        ii. No right turn phase added
        iii. Ratio of green time per cycle time: 0.5
    h. Results:

    212.773 kg CO_2E per day x 0.001kg per MT x 365 days per year = 77.7 CO_2E MT per year

2. **Synchronize Traffic Signals:** GHG reduction benefits resulting from traffic signal synchronization are based on FHWA's Congestion Reduction and Traffic Flow Improvements tool, Signal Sync module in the CMAQ Emissions Toolkit. The tool was set up as follows:
    a. Input Values:
        i. Evaluation Year: 2024
        ii. Area Type: Urban
        iii. Corridor Length: 5 miles
        iv. Number of Signalized Intersections: 10

v. Number of Lanes (one direction): 3
vi. Posted Speed Limit: 40 mph
vii. Average Cycle Length: 90 seconds
viii. Truck Percentage: 6%
ix. AADT (both directions): 30,000
x. Peak-hour Volume (both directions): 2,500
xi. Existing Corridor Travel Time: 10 minutes
xii. Total peak hours per day (AM+PM): 4

b. Results:

1,794.482 kg CO_2E per day x 0.001kg per MT x 365 days per year = 654.9 MT CO_2E per year

3. **New HOV Lane:** GHG reduction benefits resulting from construction of a new HOV lane are based on FHWA's Managed Lanes tool, New Facilities module in the CMAQ Emissions Toolkit. The tool was set up as follows:
    a. Input Values:
        i. Evaluation Year: 2024
        ii. Facility Type: Barrier separated
        iii. General Purpose (GP) Lanes: 5
        iv. Managed Lanes (ML): 1
        v. Peak Hour Traffic per Hour per Lane:
            1. Before (GP): 1,000
            2. After (GP): 900
            3. After (ML): 100
        vi. Peak Hour Free Flow Speed:
            1. Before (GP): 60 mph
            2. After (GP): 60 mph
            3. After (ML): 60 mph
        vii. Percentage Heavy-duty Vehicles in GP: 6%
        viii. Peak Hour Analysis with 4 Peak Hours per Day
        ix. Facility Length: 5 miles
        x. Area Type: Urban
    b. Results:

    2,894.510 kg CO_2E per day x 0.001kg per MT x 365 days per year= 1,056.5 MT CO_2E per year

4. **Allow Remote Work:** GHG reduction benefits resulting from an employer allowing remote work are based on FHWA's Telework tool in the CMAQ Emissions Toolkit. The tool was set up as follows:
    a. Input Values
        i. Evaluation Year: 2024
        ii. Total Employees: 1,000
        iii. Share of Employees that Telework:
            1. Before: 0%

        2. After: 25%
    iv. For Employees that Telework, Number of Days Teleworked:
        1. Before: 5
        2. After: 5
    v. Average Commute Distance: 10
    vi. Mode Share (used default tool value, national average from 2021 American Community Survey), same values before and after implementation:
        1. Single Occupancy Vehicle: 82.25%
        2. Carpool: 9.66%
        3. Transit: 4.72%
        4. Bike/Walk: 3.37 %
b. Results:
    i. Net reduction in vehicle miles traveled (VMT): 2,177
    ii. Estimated CO_2E reduction:

    791.569 kg CO_2E per day x 0.001kg per MT x 240 work days per year = 205.8 MT CO_2E per year

Transportation Strategy 3: Transition to low emissions vehicles.

To calculate the potential GHG reduction benefits resulting from purchasing 50 new **EVs instead of gasoline vehicles** the RPC used Argonne National Lab's Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) tool, which calculates the economic and environmental benefit of different vehicle fuels. [6] To calculate benefits, RPC completed the following procedures:

1. The tool was set up as follows:
    a. Inputs Tab:
        i. State: Louisiana
        ii. County: All 9 Parishes were compared with no difference in output values
    b. The Footprint-Onroad Calculator was used to compare gasoline vehicles to fully electric vehicles
        i. Model Year: 2022
        ii. Annual Vehicle Mileage: 12,400 (based on tool default data)
        iii. Gasoline:

        12,400 miles x 26.4 mpg = 470 gallons

        iv. Electricity:

        12,400 miles x 36kwh/100 miles = 4,464 kwh

    c. Results:
        i. Gasoline car creates 4.98 MTs CO_2E per year.
        ii. EV creates 2.26 MTs CO_2E per year.
        iii. Difference in emissions

4.98 MT CO_2E - 2.26 MT CO_2E = 2.72 MT CO_2E per vehicle per year
2.72 MT CO_2E x 50 vehicles = 136.07 MT CO_2E per year

The RPC used the Federal Highway Administration (FHWA) Congestion Mitigation and Air Quality (CMAQ) Emissions Calculator Toolkit to calculate potential GHG reduction benefits resulting from **idle reduction strategies**.[7] As with other benefits calculated using this tool, the RPC does not have sufficient detail about all potential projects to evaluate them on a case-by-case basis. To estimate the potential benefits of idle reduction strategies without having detailed information on the specific projects that may be implemented, the RPC evaluated the impacts of hypothetical projects. Parameters for the hypothetical projects were derived and generalized from existing regional transportation data maintained by the RPC. The results of the analysis, while not related to any specific project, are illustrative of the GHG reduction benefits that may be realized through implementation of a similar strategy in the real world. The process for calculating each of the benefits of idle reduction in the PCAP was as follows:

1. Idle Free Zones with Auxiliary Power Units (APUs): GHG reduction benefits resulting from creating an idle reduction or an idle free zone in which trucks use APUs are based on FHWA's Diesel Idle Reduction Technologies tool in the CMAQ Emissions Toolkit. The CMAQ tool was set up as follows:
    a. Evaluation Year: 2024
    b. Annual Operating Hours: 2,190 (by assuming 6 hours of truck traffic 365 days a year)
    c. Activity Calculator: Used Default Data
    d. Type of Idling: Diesel APU – used Default Data
    e. Results:

    29.64 kg CO_2E per day x 0.001kg per MT x 365 days per year = 10.8186 MT CO_2E per year

2. Idle Free Zones with Engines Off: GHG reduction benefits resulting from creating an idle reduction or an idle free zone in which truck engines are turned off are based on FHWA's Diesel Idle Reduction Technologies tool in the CMAQ Emissions Toolkit. The CMAQ tool was set up as follows:
    a. Evaluation Year: 2024
    b. Annual Operating Hours: 2,190 (by assuming 6 hours of truck traffic 365 days a year)
    c. Activity Calculator: Used Default Data
    d. Type of Idling: Engine Off – used Default Data
    e. Results:

    35.22 kg CO_2E per day x 0.001kg per MT x 365 days per year = 12.8553 MT CO_2E per year

Industry

Industry Strategy 1: Decarbonize Industrial Processes

To calculate potential GHG reduction benefits resulting from **decarbonizing industrial processes**, the RPC applied a rate of reduction to industrial process emissions estimates determined by the GHG inventory. Without more data on how each industrial facility operates, staff cannot determine emissions reductions on specific measures. To calculate benefits, RPC completed the following procedures:

1. Determine total industrial emissions from processes, as identified in the GHG inventory: 27,511,004 MT CO_2E per year
2. Apply a rate of reduction to industrial process emissions:

   27,511,004 MT CO_2E x 10% = 2,751,100.4 MT CO_2E per year

Industry Strategy 2: Mitigate Emissions at Industrial Facilities

The RPC utilized the EPA's Greenhouse Gas Equivalencies Calculator[8] to determine the carbon equivalence of **urban tree plantings** at industrial facilities to determine the carbon capture from green infrastructure.

1. Determine the rate of emissions reductions resulting from increasing urban tree plantings that survive for at least 10 year: Per the EPA's GHG Equivalencies Calculator – Calculations and References, on average each medium growth coniferous or deciduous tree planted in an urban setting and allowed to grow 10 years, sequesters 0.060 MT CO_2E per tree.[9]
2. Apply the rate of reduction to an assumed number of trees and period of time:

   .0060 MT CO_2E x 50 trees x 10 year = approximately 3 MT CO_2E over 10 years

Energy

Energy Strategy 1: Expand clean and renewable electric power generation.

The RPC used EPA's AVoided Emissions and geneRation Tool (AVERT) tool (Web Edition) to calculate an estimate for introduction of 1 megawatt (MW) of utility scale solar into the generation mix.[10] This estimation was used as a proxy for community solar adoption. For every 1 MW of solar integrated, the AVERT tool estimates approximately 1,460.57 MT CO_2e emissions are avoided annually. The tool also estimates that 1MW of utility scale solar added to the generation mix would displace 2 GWh of regional fossil fuel generation over the course of a year, which equals the annual electricity consumed by 170 average homes in the United States. The AVERT tool calculates emissions reductions in short tons, so for consistency purposes these were converted to metric tons.

To analyze the impact of more solar energy systems installed on the rooftops of public and private buildings, the RPC used the AVERT tool's distributed solar capacity analysis and found that approximately 1,242 MT CO_2e emissions would be avoided annually with 1MW of distributed solar capacity added.

The tool was setup as follows:

1. In "Select Geography," "Midwest" region was selected since this is where the nine parishes in Southeast Louisiana appear to reside.
2. In the "Set Energy Impact," "1" was input into the "Utility-scale solar PV total capacity" field, and energy impacts and results were obtained.
3. To look at distributed generation, the RPC reran the tool and input "1" into the "Distributed (rooftop) solar PV total capacity" field.

Energy Strategy 2: Improve the efficiency and resilience of the power grid.

The RPC could not calculate a direct GHG benefit for the actions related to improving the reliability of the power grid, though such actions complement and strengthen Energy Strategy #1, which emphasizes adding more renewable energy generation within the grid. However, Energy Strategy #2 does involve the **deployment of microgrids** to communities and to critical facilities. The RPC treated this action similar to the integration of more utility-scale solar, assuming that the microgrid would be supplied energy from solar renewable sources and the demand from the critical facility or community would be displaced from the utility provider. The RPC used the AVERT tool as explained above in Energy Strategy #1 and found that a one MW microgrid developed utilizing solar energy generation would result in an estimated 1,460.57 metric tons CO_2e emissions avoided annually.

Energy Strategy 3: Make buildings more energy efficient.

To calculate the potential GHG reduction benefits resulting from **energy efficiency improvements** to residential and commercial buildings, the RPC used the emission factors incorporated in the LGGIT tool for electricity consumption in the residential and commercial sectors. The RPC divided the total emissions from the residential and commercial sectors by the total number of kilowatt hours consumed in each sector, respectively. Then, the RPC calculated a 5% reduction in consumption (kwh) in both the residential and commercial sectors (from the 2019 values) and multiplied that figure by the emissions factor to estimate the amount of CO_2e emissions reduced annually in each sector.

1. Residential emissions factor (MT CO_2e/kwh) = .00036109
2. Commercial emissions factor (MT CO2e/kwh) = .00036721
3. Residential - 5% annual electricity reductions (kwh) = 377,065,906
4. Commercial - 5% annual electricity reductions (kwh) = 645,819,568
5. Results:
    a. Residential - 377,065,906 kwh x .00036109 MT CO2e/kwh = 136,154.44 MT CO2e reduced
    b. Commercial - 645,819,568 kwh x .00036721 MT CO2e/kwh = 237,148.34 MT CO2e reduced

Agriculture

Agriculture Strategy 1: Transition to low emission agricultural processes.

To calculate potential GHG reduction benefits resulting from **reduced sugarcane residue burning** at mills, the RPC used a similar methodology for bagasse reduction at found in the State of Louisiana's PCAP.[11] To calculate benefits, RPC completed the following procedures:

1. Determine the average sugarcane yield per acre: Per the State's PCAP, the average yield is 33.4 net tons per acre.
2. Determine the sugarcane acreage in the nine-parish region: Using the US Department of Agriculture's (USDA) QuickStats database, the RPC determined that there are 70,590 acres of sugarcane in the nine-parish region.[12]
3. Calculate the regional net sugarcane yield:

   33.4 average net tons per acre x 70,590 acres = 2,357,706 tons net yield

4. Determine the amount of bagasse delivered to sugarcane mills: Per the State's PCAP, bagasse is 31% of cane delivered to mills.
5. Determine the amount of carbon contained in bagasse: Per the State's PCAP, bagasse is composed of 19.2% carbon.
6. Calculate the amount of carbon released by bagasse:

   2,357,706 tons net yield of sugarcane x 31% bagasse x 19.2% carbon = 140,330.66 tons carbon

7. Calculate the GHGs emitted: RPC used the EPA's GHG Equivalencies calculator to determine that 140,330.66 short tons of carbon is equivalent to 466,788 MT CO_2E.[13]

To calculate emissions reductions **using alternative fuels in farm equipment** the RPC calculated the difference between using diesel and renewable diesel in farm tractors using Argonne National Lab's Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) tool, which calculates the economic and environmental benefit of different vehicle fuels.[14]

1. The tool was set up as follows:
   a. Inputs Tab:
      i. State: Louisiana
      ii. County: All 9 Parishes were compared with no difference in output values
   b. The Footprint-Offroad Calculator was used to compare diesel tractors to renewable diesel tractors
      i. Model Year: 2024
      ii. Annual Usage Hours: 475 (based on tool default data)
      iii. Rated Horsepower (hp): 50
      iv. Diesel: (318 based on default values)
      v. RD100 (renewable diesel): (318 based on default values)
   c. Results:
      i. Diesel Agricultural Tractor creates 3.99 MT CO_2e per year
      ii. Renewable Diesel Tractor creates 1.36 MT CO_2e per year
      iii. Difference in emissions = 2.63 MT CO_2e per year reduced

Wastewater

Wastewater Strategy 1: Create more efficient wastewater treatment systems.

To calculate the potential GHG reduction benefits resulting from consolidation and/or centralization of sewer systems, and thereby **reduced use of septic systems**, the RPC conducted a scenario analysis using the LGGIT tool. To calculate benefits, RPC completed the following procedures:

1. Set up LGGIT Wastewater module with identical inputs as the regional GHG inventory (see PCAP Appendix B).
2. In the LGGIT Wastewater module, adjust the percentage of population using septic systems to varying levels to determine the impact to total GHG emissions.
3. Results:
    a. 100% reduction of population on septic: 69,256.15 MT CO_2E reduced
    b. 50% reduction of population on septic: 34,628.08 MT CO_2E reduced
    c. 10% reduction of population on septic: 6,925.62 MT CO_2E reduced

Wastewater Strategy 2: Reduce emissions from wastewater treatment processes.

To calculate the potential GHG reduction benefits resulting from **improving the efficiency of wastewater treatment systems** so that more methane is captured during the treatment process, the RPC referred to the methane outputs in the background equations provided in the LGGIT tool.

1. Determine the estimated emissions from wastewater treatment systems from the GHG inventory: 261,381 MT CO_2e emissions for the 2019 base year.
2. Calculate a rate of reduction: The RPC assumed that actions to improve the efficiency of anaerobic digesters or to reduce the amount of emitted methane from treatment lagoons would equate to a 10% reduction of process methane emissions. This is a broad-based assumption which the RPC notes should be verified with more analysis into the treatment processes and practices at the major wastewater treatment facilities across the nine-parish region.

    261,381 MT CO_2e x 10% = 26,238.1 MT CO_2e per year

Materials Management

Materials Management Strategy 1: Reduce community waste.

To calculate the benefits of **recycling programs**, the RPC completed the following procedures:

1. Determine the rate of emissions reductions resulting from recycling: Per the EPA's GHG Equivalencies Calculator – Calculations and References, each ton of waste recycled instead of landfilled reduces GHG emissions by 2.88 MT CO_2E.[15]
2. Apply the rate of GHG reduction to regional waste: According to data acquired for the regional GHG inventory, regional landfills accepted 379,147.88 tons of waste in 2019. The RPC calculated the GHG emissions reductions of diverting 10% of this waste to recycling using the following formula:

    3,492,113 tons waste x 10% x 2.88 MT CO_2E reduced per ton = 1,005,728.54 MT CO_2E per year

To calculate the benefits of diverting organic waste from landfills to **composting**, RPC completed the following procedures:

1. Determine the potential GHG reduction of diverting one ton of organic waste from landfills to composting: Data regarding the potential GHG impacts of composting at the regional, state, and national levels is difficult to identify. However, the California Environmental Protection Agency (CAEPA) conducted a study in 2017 detailing potential GHG reductions resulting from composting organic waste.[16] The study indicates that GHGs may be reduced by 0.44 – 0.62 MT CO_2E per ton of organic waste diverted from landfills to compost facilities. While the study is specific to conditions in California it is the best available data source identified by the RPC. It is assumed that the exact benefits of composting may differ in the SELA region, but that the rates identified by CAEPA are indicative of the potential benefits that may be realized by composting organic waste.
2. Apply the rate of GHG reduction: RPC applied both the high and low potential reduction rates to a hypothetical amount of organic waste diverted from landfills (100 tons), as follows:

   0.44 MT CO_2E / ton of organic waste x 100 tons = 44 MT CO_2E per year
   0.62 MT CO_2E / ton of organic waste x 100 tons = 62 MT CO_2E per year

Materials Management Strategy 2: Reduce emissions from waste management processes.

To calculate the benefits of implementing **landfill gas recovery** at facilities that do not currently have such systems, the RPC completed the following procedures:

1. Determine the rate of GHG reductions per ton of waste when landfill gas recovery is implemented: According to the State's PCAP, the Louisiana Department of Environmental Quality (LDEQ) modeled the impact of implementing landfill gas recovery at a sample of landfills statewide using the EPA's Waste Reduction Model (WARM).[17] The RPC used the resulting data to determine potential GHG reduction rates of implementing regional landfill gas recovery systems.
   a. Landfills in the sample without gas recovery collect 260,000 tons of waste and emit 332,000 MT CO_2E. RPC calculated the GHGs emitted per ton of waste at these landfills as follows:

      332,000 MT CO_2E ÷ 260,000 tons of waste = 1.28 MT CO_2E ton of waste

   b. Landfills in the sample with gas recovery collect 1.6 million tons of waste and emit 683,000 MT CO_2E. RPC calculated the GHGs emitted per ton of waste at these landfills as follows:

      683,000 MT CO_2E ÷ 1,600,000 tons of waste = 0.43 MT CO_2E / ton of waste

   c. RPC calculated the reduction potential of implementing landfill gas recovery by calculating the rate of change between facilities that do not have recovery systems and those that do, as follows:

(1.28 MT CO_2E / ton – 0.43 MT CO_2E / ton) ÷ 1.28 MT CO_2E / ton = 66.6% reduction

2. Apply the rate of reduction to regional landfills without gas recovery: According to the regional GHG inventory, landfills that do not have gas recovery systems 17,694.27 MT CO_2E in 2019. RPC calculated the potential reduction by implementing gas recovery by applying the calculated rate of reduction to the waste collected, as follows:

   17,694.27 MT CO_2E – (17,694.27 MT CO_2E x 66.6%) = 5,915.19 MT CO_2E per year

Carbon Removal and Storage

Carbon Removal and Storage Strategy 1: Use natural processes to capture and store atmospheric carbon dioxide.

To calculate the potential benefits of increased **urban tree cover**, the RPC completed the following procedures:

1. Determine the rate of emissions reductions resulting from increasing tree cover: Per the EPA's GHG Equivalencies Calculator – Calculations and References, on average each acre of forest in the US reduces GHG emissions by 0.86 MT CO_2E per acre per year.[18]
2. Apply the rate of reduction to a proposed increase in regional canopy:
   a. According to data acquired for the regional GHG inventory, approximately 2,239,674.86 acres of land in the region are under tree canopy. RPC calculated a potential 1% increase in tree cover as follows:

      2,239,674.86 acres x 1% = 22,396.75 acres

   b. RPC then applied the proposed increase in urban tree cover to the assumed rate of GHG capture, as follows:

      22,396.75 acres x 0.86 MT CO_2E per acre = 19,261.20 MT CO_2E per year

To determine the potential benefits of **wetlands creation**, the RPC completed the following procedures:

1. Determine the rate of emissions reductions resulting from wetlands creation: Per the State of Louisiana's PCAP, each hectare of "fresh forested wetlands" created results in a reduction of 16.06 MT CO2e reduced per year.[19]
2. Convert reduction rate from hectares to acres: RPC converted the potential reductions per acre by converting the reduction rate from hectares to acres as follows:

   16.06 MT CO2e per hectare ÷ 2.47 acres per hectare = 6.50 MT CO2e per acre

3. Apply the rate of reduction to a proposed increase in wetlands acreage: RPC calculated the potential GHG reduction benefits of creating 100 acres of wetlands as follows:

   6.50 MT CO2e per acre x 100 acres = 650 MT CO2e per year

Carbon Removal and Storage Strategy 2: Implement carbon capture technologies and processes.

To determine the potential benefits of industrial **carbon sequestration** technologies, the RPC completed the following procedures:

1. Determine potential reduction benefits of adopting carbon sequestration technologies: The RPC reviewed existing guidance and literature regarding carbon sequestration. Existing and emerging technologies vary widely in their applicability and impact. While there are promising systems that can have real world impacts it is difficult to determine a reasonable rate of potential benefits given the wide range of implementable strategies. Rather than attempting to predict the impacts of a single sequestration method the RPC chose to calculate the potential GHG reductions resulting from the implementation of a hypothetical, undefined sequestration method.
2. Apply a rate of reduction to current industrial emissions: To calculate the potential benefits of sequestering 10% of current industrial GHG emissions, RPC applied a rate of reduction to the industrial emissions estimated in the regional GHG inventory. The industrial emissions include both industrial processes and stationary combustion of natural gas at industrial facilities, but do not include electric power generation, transmission, or consumption. The results were calculated as follows:

   41,224,374.58 MT CO2e x 10% = 4,122,437.458 MT CO2e per year

Endnotes

[1] EPA (2023). The 2023 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975. https://www.epa.gov/system/files/documents/2023-12/420r23033.pdf
[2] EPA (2024). GHG Equivalencies Calculator. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
[3] RPC (2024). Southeast Louisiana Travel Demand Model (SELATRAM).
[4] 2022 transit vehicle revenue miles data compiled for all regional transit operators by RPC using the Federal Transit Administration's National Transit Database: https://www.transit.dot.gov/ntd
[5] FHWA (2024). CMAQ Emissions Calculator Toolkit. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
[6] https://afleet.es.anl.gov/home/
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[8] EPA (2024). GHG Equivalencies Calculator. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
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[10] EPA (2024) AVERT. https://www.epa.gov/avert
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[12] USDA (2024). QuickStats. https://quickstats.nass.usda.gov/
[13] EPA (2024). GHG Equivalencies Calculator. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
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[15] EPA (2024). GHG Equivalencies Calculator – Calculations and References. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
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[17] State of Louisiana (2024). *Louisiana Priority Climate Action Plan*. *https://infrastructure.la.gov/media/l4cpshqj/pcap-final_with-appendices.pdf*
[18] EPA (2024). GHG Equivalencies Calculator – Calculations and References. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
[19] State of Louisiana (2024). *Louisiana Priority Climate Action Plan*. *https://infrastructure.la.gov/media/l4cpshqj/pcap-final_with-appendices.pdf*

Appendix E: Draft Comments

Prior to completion of the Priority Climate Action Plan (PCAP), the Project Advisory Team (PAT) reviewed and provided feedback on the draft plan. Comments received from the PAT and the Regional Planning Commission's (RPC's) responses are listed below.

Transportation Strategy 1: Reduce Vehicle Miles Traveled by increasing the use of alternative transportation modes.

Comment: Suggest using numbers to identify these, for easier reference in the implementation narratives

Response: Replaced bullet points with numbered lists.

Transportation Strategy 1, Implementation Action 1a: Expand and improve existing bus service.

Comment: Is this general enough to be inclusive of fare capping policies?

Response: Added Implementation Action 1b: "Study and implement fare capping policies for low-income transit riders."

Transportation Strategy 1, Metrics for Tracking Projects

Comment: Add "bike share ridership"

Response: Added suggested language.

Transportation Strategy 2, Implementation Action 6: Conduct on-street parking pricing studies to more efficiently use on-street spacing and thereby reduce the amount of time drivers spend looking for parking spaces.

Comment: Expand narrative to be more inclusive of curb-use management generally - loading zones, freight zones, etc.

Response: Added Implementation Action 7: Study and implement curb-use management to designate and use passenger and freight loading zones more efficiently.

Transportation Strategy 3: Use low emissions vehicles.

Comment: I would change "Use" low-emission vehicles to "Provide for" "Encourage" or "Facilitate the use of" low-emission vehicles.

Response: Revised strategy name to "Transition to low emissions vehicles"

Comment: There should be a mention of barriers & maybe work-arounds for fleet transitions, esp. government fleet transitions—either as "Additional Considerations" or maybe add implementation actions like "Improve availability of EVs for transition of parish and city government fleets"

Response:

1. Added Implementation Action 6: "Facilitate the procurement of alternative fuel vehicles through revised procurement policies at the local and state level, and/or participation in vehicle purchasing cooperatives.
2. Added Additional Considerations: "In recent years RPC stakeholders have expressed a desire to transition fleets to alternative fuel vehicles but have frequently noted difficulties in doing so due to limited vehicle availability, high purchase costs, and procurement policies that do not address or allow the purchase of alternative fuel vehicles. In addition to the strategies listed above, RPC will work with state and local stakeholders to review and revise policies as necessary and to track vehicle availability. RPC will also identify and promulgate methods for vehicle purchase return on investment calculations that are based not just on purchase price but also total lifetime savings due to reduced fuel and maintenance costs. These efforts will be aided by the Southeast Louisiana Clean Fuel Partnership (SLCFP), a US Department of Energy designated Clean Cities Coalition that is housed within the RPC. The SLCFP convenes regional stakeholders in the public and private sectors to facilitate the transition to more efficient and cleaner technologies, and is ideally suited to aid in regionwide alternative fuel adoption and fleet conversion."

Energy Strategy 3: Make buildings more energy efficient.

Comment: Another bullet point that could be added, "create education and outreach efforts to inform disadvantaged communities about financial incentives and opportunities for home repairs and upgrades related to solar & battery, electrification, energy efficiency, and weatherization." this is targeted towards CNO's future Community Energy Advisors program but is also something that could be adopted in other jurisdictions since it is an education/outreach campaign about federal tax incentives for the above mentioned measures.

Response: Added suggested text as Implementation Action 9.

Energy Strategy 3, Implementation Action 2: Develop incentives such as landlord energy efficiency renovation programs and commercial kitchen electrification programs to implement energy efficient retrofits in privately owned buildings.

Comment: For both this bullet point the language can be more broad so were not pigeon holed into these specific programs, such as, "Develop incentive and bridge subsidy grant or loan programs in coordination with local green banks to provide additional funding for residential, multifamily, commercial, and institutional energy efficiency, electrification, weatherization, and renewable energy adoption efforts."

Response: Revised Implementation Action to include suggested language.

Materials Management Strategy 1, Implementation Action 3: Convert glass bottles to sand for use in coastal restoration projects.

Comment: Generalize further to be inclusive of other reuse for coastal restoration or add additional points. Christmas trees and oyster shells are top of mind.

Response: Revised Implementation Action to state, “Reuse waste such as glass bottles converted to sand, oyster shells, and Christmas trees for use in coastal restoration projects.