MOVE 2050

APPENDIX #2

Capital Region Planning Commission



Technical Report #2

State of Current Systems

July 2026

Prepared by:

NEEL-SCHAFFER



Capital Regional Planning Commission

2050 Metropolitan Transportation Plan
MOVE 2050

This Plan was prepared as a cooperative effort of the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Louisiana Department of Transportation and Development (LaDOTD), and local governments in partial fulfillment of requirements in Title 23 USC 134 and 135, amended by the IIJA, Sections 11201 and 11525, October 1, 2021. The contents of this document do not necessarily reflect the official views or policies of the USDOT.

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1.0 Introduction

The Capital Region Planning Commission (CRPC) Metropolitan Transportation Plan (MTP), also known as MOVE 2050, is comprised of multiple technical reports and a main summary document. This *State of Current Systems* (SoCS) report serves as the foundation for data analysis and planning efforts of MOVE 2050 by providing an overview of the existing conditions throughout the transportation network. This report also describes elements which impact the network within the Metropolitan Planning Organization's (MPO) planning area.

Topics included in this report are:

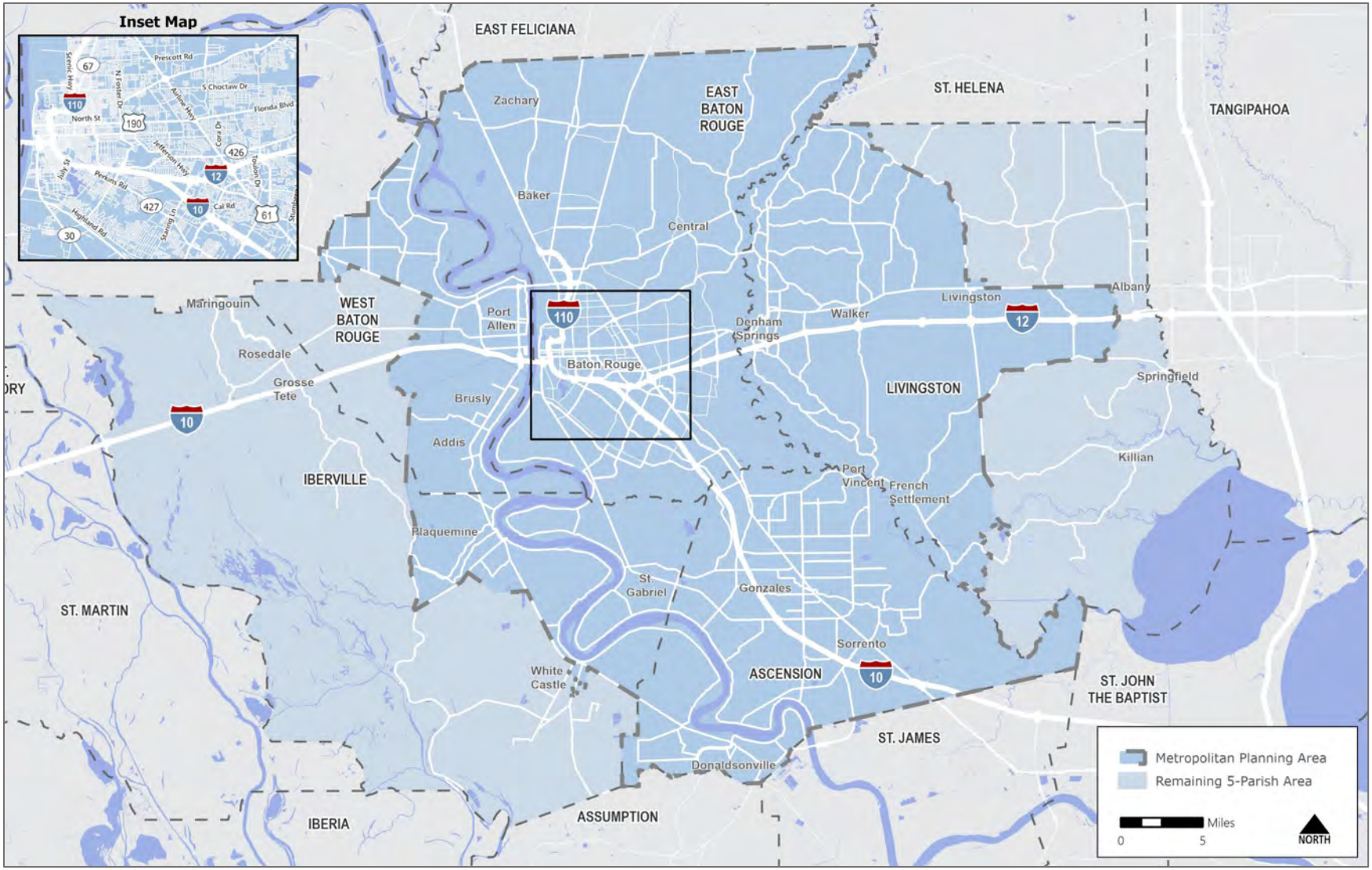
- Populations and People
- Roadway and Bridge Infrastructure
- Freight Infrastructure and Growth
- Bicycle and Pedestrian Infrastructure
- Public Transportation
- Existing Technologies
- Upcoming and Future Technologies

To promote coordination between agencies and support the success of metropolitan planning efforts, key participants within the MPO region were identified for their role in the transportation planning process. These participants include representatives from the jurisdictions and agencies listed in the box below.

- **The Parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge**
- **The Cities of Addis, Baker, Baton Rouge, Brusly, Central, Denham Springs, Gonzales, Livingston, Plaquemine, Port Allen, Port Vincent, Sorrento, St. Gabriel, St. George, Walker, and Zachary**
- **Capital Area Transit System**
- **Louisiana Department of Transportation and Development (LADOTD)**
- **Federal Highway Administration (FHWA) and Federal Planning Partners**

This introductory chapter provides an overview of the CRPC and its role as the Baton Rouge MPO, related federal policies and regulations, and requirements of the MTP. The geographical scope of MOVE 2050 is the MPO planning area illustrated in **Figure 1.1.**

Figure 1.1: MPO Planning Area



Source: Capital Region Planning Commission (CRPC)

1.1 MPO Overview

The CRPC serves as the MPO for the Baton Rouge urbanized area (UZA) which is comprised of the following parishes:

- Ascension
- East Baton Rouge
- Iberville (partial)
- Livingston (partial)
- West Baton Rouge (partial)

An MPO is a federally mandated transportation policy-making body made of local governments and transportation agencies who have authority and responsibility within a designated urbanized area.

As the MPO, it is guided by additional federal policies and regulations. The primary regulation affecting MPOs is the Federal-Aid Highway Act of 1962 which requires metropolitan transportation planning as a condition for receipt of federal transportation funding for urbanized areas with a population of 50,000 or greater.

3-C – A continuing, **cooperative**, and **comprehensive** approach to transportation planning.

PBPP - Performance-based planning and programming; this practice applies performance management standards to the long-range planning process.

This Act and subsequent regulations encourage a 3-C approach to the transportation planning process. It applies to transportation agencies within the urbanized planning area, including public transit providers, state agencies, and the MPO.

The use of PBPP is also integrated within MOVE 2050. It is used to apply performance management procedures to the long-range planning and programming processes by using data-derived indicators about the current and desired transportation system to determine how to best allocate limited funding and to evaluate program outcomes.

The FHWA defines metropolitan transportation planning as:

"...the process of examining travel and transportation issues and needs in metropolitan areas. It includes a demographic analysis of the community in question, as well as an examination of travel patterns and trends. The planning process includes an analysis of alternatives to meet projected future demands, and for providing a safe and efficient transportation system that meets mobility while not creating adverse impacts to the environment".

1.2 Metropolitan Transportation Plan

The MTP is a forward-looking, long-range transportation plan that aims to address both current and future transportation needs over the next 25 years. It incorporates both the 3-C approach and PBPP strategies to consider:

- The most current information
- Regional needs and priorities
- All modes of transportation
- Other relevant planning efforts

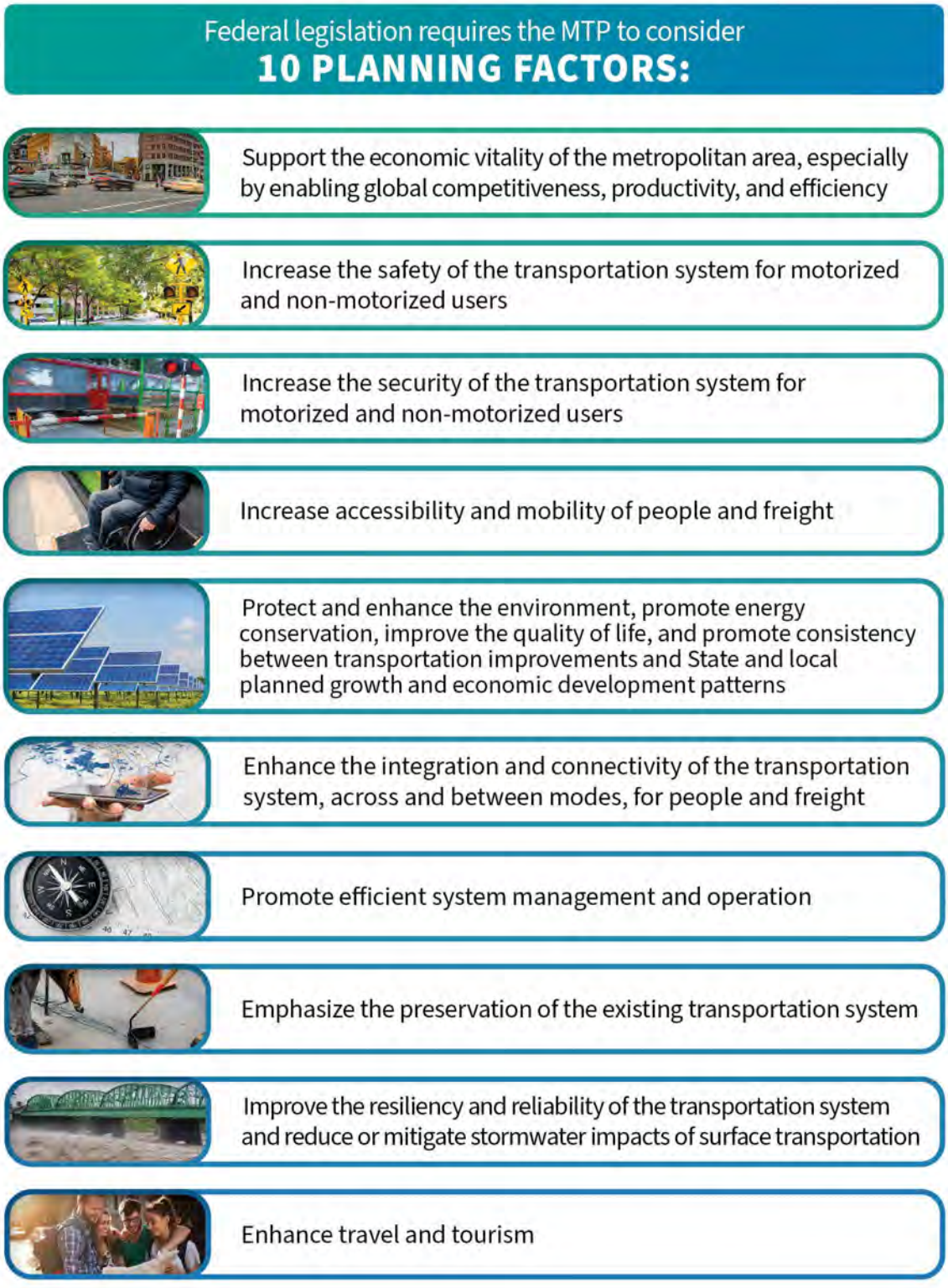
Project Implementation

Projects that are regionally significant or that are expected to receive federal funding must be identified within an adopted MTP before implementation. Following adoption, a project can be included in the Transportation Improvement Program (TIP). The TIP then identifies the funding sources, estimated amount of funding, and implementation timeline for the project.

Federal Requirements

Federal law requires each MPO to prepare and update a fiscally constrained long-range transportation plan. These plans must be updated at least every five years and consider, at minimum, a twenty-year horizon. Additionally, there are ten planning factors which must be considered, shown in **Figure 1.2**.

Figure 1:2: MTP Planning Factors



Source: https://www.ecfr.gov/current/title-23/section-450.206

In addition to fiscal constraint and planning factor requirements, air quality standards are also regulated by the federal government and can impact transportation projects. The Environmental Protection Agency (EPA) designates areas exceeding air quality standards for transportation-related pollutants as either an air quality nonattainment area or maintenance area. If an MPO includes either designation, it must update their plans every four years, as opposed to every five years and show that projects within its MTP and TIP, as well as federally funded projects, conform to the State Implementation Plan (SIP) for air quality.

Although the region meets current federal air quality standards, each Parish is currently listed as a maintenance area due to past air quality attainment challenges. For all five parishes within the planning area, the last non-conformance designation occurred in 2016 for 8-Hour Ozone under 2008 EPA standards. All parishes were designated as Maintenance Areas in March of 2017[1].

Additional information about requirements for maintenance and non-attainment areas can be found on the EPA's website at: https://www.epa.gov/green-book.

Planning Consistency

The MTP is required to be consistent with other plans, including:

- the statewide transportation planning process,
- the state's Strategic Highway Safety Plan (SHSP),
- other safety and security plans,
- the State Transportation Improvement Program (STIP), and
- the TIP.

STIP – State Transportation Improvement Program.

TIP – Transportation Improvement Program (MPO-level).

Additionally, the MTP should also be developed to be consistent with:

- the coordinated public transit human services transportation plan (FTA's Section 5310 Program)
- the regional Intelligent Transportation Systems (ITS) architecture, and
- locally adopted planning documents.

An overview of the previous plans, studies, and related documents which influence planning or impact the MPO planning area are included in **Chapter 2**.

[1] https://www3.epa.gov/airquality/greenbook/anayo_la.html

2.0 Previous Plan and Study Review

Previous plans, studies, and related documents influence which planning and development strategies are best suited for the CRPC region. To understand how these documents have impacted the region and continue to guide improvements and development, this chapter provides an overview of the most recent and applicable regional, local, and statewide plans, programs, and studies.

The following is a list of the plans which impact, or are expected to impact, the CRPC planning region. These plans are described in more detail throughout this chapter.

- Regional Plans
    - MOVE 2046; Metropolitan Transportation Plan (2022)
    - Unified Planning Work Program (2025)
    - Transportation Improvement Program (2022)
    - Congestion Management Plan (2022)
    - Safe Streets for All Regional Safety Action Plan (2025)
    - Intelligent Transportation Systems Architecture Plan (2022)
    - Coordinated Human Services Transportation Plan (2020)
    - Title VI Plan (2023)
    - Public Participaction Plan (2023)
- Local Plans
    - Ascension Parish Long-Range Transportation Master Plan (2024)
    - FUTUREBR Comprehensive Plan (2024)
- Statewide/Federal Plans
    - LA Strategic Highway Safety Plan (2022)
    - LA State Transportation Improvement Program (2022)
    - Louisiana State Freight Plan (2024)

In addition to these, plans which focus on bicycle and pedestrian considerations are included within *Chapter 6: Active Transportation*, and plans which discuss public transit are included in *Chapter 7: Public Transportation*.

2.1 MPO and Regional Plans and Policies

MOVE 2046, CRPC (2022)

The current long-range plan, MOVE 2046, outlines a long-range, fiscally constrained strategy for developing and maintaining a multimodal transportation system for the Baton Rouge MPO planning area through 2046.

This plan identifies investment priorities based on current system performance, projected growth, and funding forecasts with an emphasis on enhancing regional mobility, safety, and sustainability.

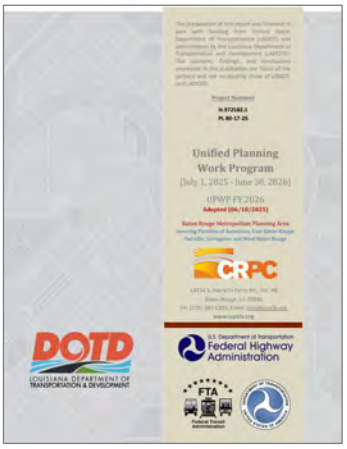
MOVE 2046 is guided by six overarching goals:

1. expanding transportation choices,
2. improving safety and security,
3. ensuring a reliable and efficient system,
4. supporting regional economic vitality,
5. promoting sustainability and environmental stewardship, and
6. fostering equity and access for all users.



Key findings of the plan highlight the need to balance capacity expansion with system preservation and address potential funding disruptions. The plan also identifies various fiscally constrained roadway projects and provides a visionary list of unfunded needs to support long-term regional goals.

Unified Planning Work Program, CRPC (2025)



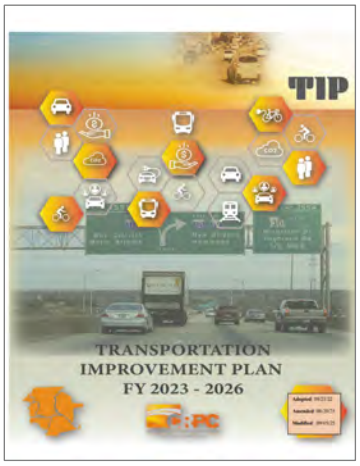
The 2025 - 2026 Unified Planning Work Program (UPWP) serves as the federally required blueprint for all transportation planning activities in the region over the fiscal year. Grounded in the 3-C planning process, the UPWP supports the implementation of both long- and short-range transportation goals. The program aligns with federal requirements, addresses ten federal planning factors and seven national performance goals, and includes a strong focus on safety, system performance, and sustainability.

Key objectives of the program include improving transportation choice, enhancing system resiliency, promoting economic vitality, and supporting access across all transportation modes. Findings highlight the importance of strengthening regional coordination, expanding data capabilities, and increasing capacity for complete streets and multimodal investments.

Transportation Improvement Plan, CRPC (2022)

The 2023–2026 Transportation Improvement Plan (TIP) is the region's fiscally constrained short-range programming document. Updated every two years, the TIP is developed through a collaborative and performance-driven process with input from local governments, LADOTD, FHWA, FTA, and the public. The purpose of the TIP is to

translate the long-range vision of MOVE 2046 into implementable transportation projects and serve as the link between planning and construction by advancing priority investments identified in Stage I of the MTP.



The TIP is guided by eight regional goals:

1. State of Good Repair,
2. Congestion Management,
3. Safety & Security,
4. Livability,
5. Equity,
6. Economic Competitiveness,
7. Clean & Green Communities, and
8. Education & Outreach

Key projects include major interstate expansions, urban corridor enhancements, transit fleet modernization, and pedestrian safety improvements. Recommendations emphasize adaptive project management through timely amendments, sustained public engagement, and continued integration of data-informed performance measures.

Congestion Management Plan, CRPC (2022)



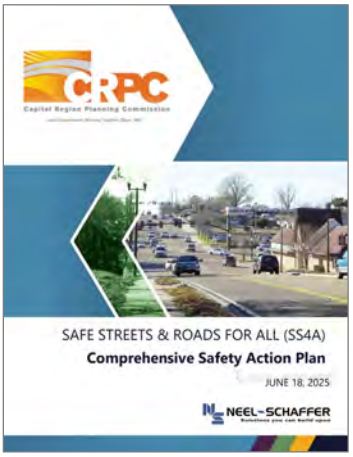
The 2022 Congestion Management Plan (CMP) is a performance-based strategy document designed to monitor, assess, and address both recurring and non-recurring congestion across the region's multimodal transportation network. Closely aligned with the goals of MOVE 2046 and the UPWP, the CMP supports improved mobility, safety, travel time reliability, and system efficiency through data-driven analysis and ongoing performance monitoring.

The plan recommends strategies across five primary areas:

1. Transportation demand management
2. Traffic operations
3. ITS
4. Enhanced public transportation
5. Targeted capacity improvements

Key findings identify persistent congestion on interstates, freight bottlenecks, and projected increases in vehicle hours of delay and congestion-related costs through 2046. The plan highlights the impact of non-recurring congestion caused by incidents, reinforcing the need for improved safety and traffic incident management.

Safe Streets & Roads for All Regional Safety Action Plan, CRPC (2025)



The Safe Streets & Roads for All (SS4A) Safety Action Plan aims to enhance traffic safety across the Capital Region by promoting equitable, multimodal transportation options and reducing fatalities and serious injuries on roadways. The plan's overarching goals focus on creating safer streets through improved infrastructure, increased public awareness, data-driven decision-making, and collaboration among local governments and stakeholders. Guidance within the plan focuses on expanding multimodal networks, implementing targeted safety improvements, engaging communities, and advancing education initiatives.

The plan emphasizes a comprehensive, region-wide approach to addressing systemic safety challenges to support all users in their ability to travel securely. It highlights critical corridors with elevated crash rates, disparities in safety outcomes among vulnerable populations, and infrastructure issues that compromise safety. Identified recommendations include intersection redesigns, traffic calming measures, enhanced crosswalks, and safety-focused land use policies.

Intelligent Transportation Systems Architecture Plan, CRPC (2022)



The Baton Rouge Intelligent Transportation Systems (ITS) Architecture Plan establishes a comprehensive framework for integrating technology into the region's transportation network. The plan's overarching purpose is to guide the coordinated deployment, operation, and maintenance of intelligent transportation technologies that enhance regional mobility, safety, efficiency, sustainability, and equity while maintaining compliance with federal requirements.

The ITS Architecture Plan aligns with the MOVE 2046 goals and focuses on six primary objectives:

1. expanding transportation choices,
2. improving safety and security,
3. maintaining a reliable and efficient system,
4. supporting regional economic vitality,
5. promoting environmental sustainability, and
6. advancing equitable access.

ITS projects identified within the plan include traffic signal optimization, adaptive ramp metering, incident detection, transit coordination, and connected vehicle infrastructure. Recommendations call for continued investment in ITS infrastructure, funding partnerships between CRPC and DOTD, enhanced data integration through the Regional Architecture Development for Intelligent Transportation (RAD-IT) tools, and expanded ITS-related programs under the statewide annual ITS funding allocation.

Coordinated Human Services Transportation Plan, CRPC (2020)



The 2020 – 2022 Coordinated Human Services Transportation Plan (CHSTP) provides a federally compliant framework for enhancing transportation services for seniors, individuals with disabilities, and other underserved populations across the eleven-parish Capital Region. The plan emphasizes improved coordination, efficiency, and accessibility among public, private, and nonprofit transit providers. The plan is guided by the following goals:

- improved efficiency of transit service,
- eliminating service duplication,
- centralizing resource planning,
- strengthening data collection, and
- reporting and promoting cost-sharing among agencies.

Short-term objectives include expanding quarterly coordination meetings, utilizing GIS analysis to identify service gaps, supporting region-wide training, increasing public awareness, and improving pedestrian infrastructure to enhance transit access. Long-term strategies focus on establishing a One-Click/One-Call service center, forming a statewide interagency coordination council, exploring insurance pooling options, and developing a volunteer driver program.

Title VI Plan, CRPC (2023)



The Title VI Plan, prepared by the CRPC, outlines the agency's commitment to implement all federally funded programs, services, and activities without discrimination. The plan's primary purpose is to prevent disproportionate adverse impacts of CRPC projects on minority and low-income populations and maintain meaningful access for all residents, including Limited English Proficient (LEP) individuals.



Public Participation Plan, CRPC (2023)

The CRPC's Public Participation Plan (PPP) outlines a comprehensive framework to support equitable access for all citizens, stakeholders, and interested parties in the regional transportation planning process. The plan's primary goals are to increase transparency, foster early and continuous public involvement, and foster inclusive outreach that meets federal requirements under the FAST Act.

Objectives include broadening outreach through multiple media platforms, hosting accessible public meetings, leveraging online engagement tools, and maintaining open channels for feedback throughout all major planning processes. The PPP also includes detailed procedures for document review timelines, accommodations for individuals with disabilities, and coordination with underserved populations.

2.2 Local Plans and Policies

Long-Range Transportation Master Plan, Ascension Parish (2024)



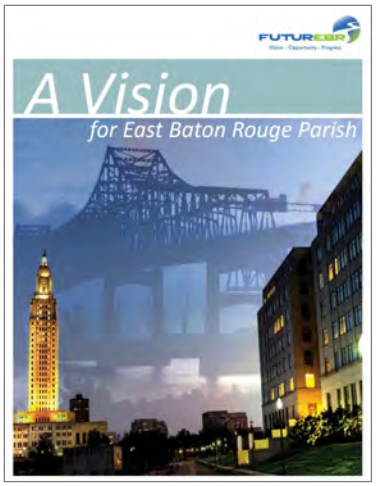
The Ascension Parish Long-Range Transportation Master Plan presents a comprehensive and fiscally constrained vision and implementation framework to guide transportation infrastructure investments and policy decisions. Anchored in principles of mobility, safety, and sustainability, the plan identifies current system deficiencies, forecasts future demand, and prioritizes strategic infrastructure improvements to guide a connected, efficient, and resilient multimodal network.

Major recommendations include capacity expansions on key corridors, targeted intersection improvements, multimodal enhancements, and policies to promote complete streets and context-sensitive design.

FUTUREBR Comprehensive Plan, East Baton Rouge Parish (2024)

The FUTUREBR Comprehensive Plan, adopted by the East Baton Rouge City-Parish, serves as a long-range vision and policy framework to guide growth, development,

and quality of life improvements across the parish. Building on the Horizon Plan and rooted in extensive public engagement, FUTUREBR addresses nine key elements:



1. Land use
2. Transportation
3. Housing
4. Community design and neighborhoods
5. Environment and conservation
6. Parks and recreation
7. Infrastructure
8. Economic development
9. Public services

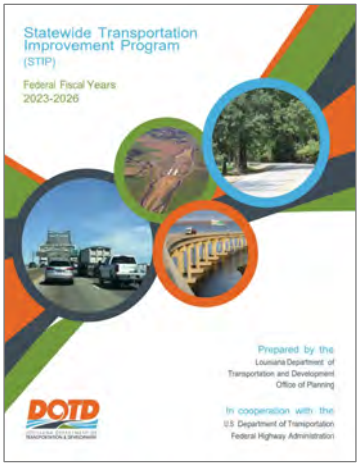
The plan envisions a thriving, inclusive parish with vibrant neighborhoods, walkable streets, accessible transit, protected natural resources, and a resilient economy. It emphasizes the need to balance growth with reinvestment in declining areas, protect environmental assets like the Mississippi River, and address service demands created by population shifts. Recommendations include promoting infill and mixed-use development, improving multimodal connectivity, enhancing downtown vitality, and strengthening neighborhood identity.

2.3 State and Federal Plans

As mentioned previously, a requirement of the MTP is consistency with other plans and processes, including the State's Strategic Highway Safety Plan and the State Transportation Improvement Program. Due to their impact on planning in the region, an overview of these plans is provided on the following page.

State Transportation Improvement Program, LADOTD (2022)

Louisiana's State Transportation Improvement Program, or STIP, is the fiscally sound capital improvement plan for the state's surface transportation program. It was developed by the LADOTD through a coordinated and cooperative process that involved the public, elected officials, tribal governments, and other state and federal agencies, each MPO within Louisiana, and other interested parties.



The STIP establishes schedules for a variety of projects, including[2]:

- Highways and bridges
- Bicycle and pedestrian facilities
- Highway safety
- Congestion mitigation and air quality improvement
- Railroad crossing safety
- Highway operations and motorist services
- Public transportation
- Capacity Expansion

Within the STIP, the Baton Rouge MPO has 57 identified projects, which include studies, sidewalks and bikeways, roadway repair, new road construction, and other transportation improvements.

Strategic Highway Safety Plan, LADOTD (2022)



The Strategic Highway Safety Plan (SHSP) aims to reduce fatalities and serious injuries by 50% on all Louisiana roadways between 2010 and 2030. To accomplish this, it provides a data-driven framework to address four emphasis areas, which include: distracted driving, impaired driving,

Multiple strategies were identified to address each emphasis area with a focus placed on Parishes with high rates of serious injury and fatal crashes. At least one Parish within the Baton Rouge MPO was identified as a focus area in each emphasis area, as shown in **Table 2.1**.

Table 2.1: MPO Parishes Identified as Focus Areas in the SHSP

Focus Area	Emphasis Area			
	Distracted Driving	Impaired Driving	Occupant Protection	Infrastructure and Operations
Ascension	X	--	X	--
East Baton Rouge	X	X	X	X
Livingston	--	--	X	--

Source: LADOTD SHSP
Note: West Baton Rouge and Iberville Parishes were not identified within the SHSP as areas with high rates of serious injury and fatal crashes related to the analyzed emphasis area.s

[2] https://dotd.la.gov/about/office-of-project-delivery/planning/transportation-planning/state-transportation-improvement-program/

Louisiana State Freight Plan, LADOTD (2024)



The 2024 Louisiana State Freight Plan (SFP) provides a comprehensive, multimodal strategy to enhance freight mobility and economic competitiveness across the state. Developed in partnership with public and private stakeholders, the SFP evaluates existing conditions and identifies critical freight needs on Louisiana's highway, rail, maritime, air cargo, and pipeline networks.

The plan is guided by seven overarching goals:

1. Improving freight safety and security,
2. Enhancing system performance and reliability,
3. Supporting economic growth and competitiveness,
4. Maintaining infrastructure in a state of good repair,
5. Enhancing multimodal connectivity,
6. Promoting environmental sustainability and resilience, and
7. Fostering performance and accountability.

The plan highlights deficiencies along the Louisiana Highway Freight Network (LHFN) related to safety, infrastructure condition, freight bottlenecks, truck parking, and design constraints, as well as rail capacity issues, limited air cargo access, and ongoing dredging and maintenance challenges at smaller ports. Additionally, it outlines implementation strategies, timelines, and DOTD's role in advancing key initiatives.

Priority projects identified within the plan include rail infrastructure improvements, freight corridor upgrades, truck parking expansions, and grade separation at high-risk rail crossings. The SFP aligns with state and federal guidance and advances infrastructure solutions that improve freight efficiency, reduce costs, and support economic resilience across Louisiana's multimodal freight system.

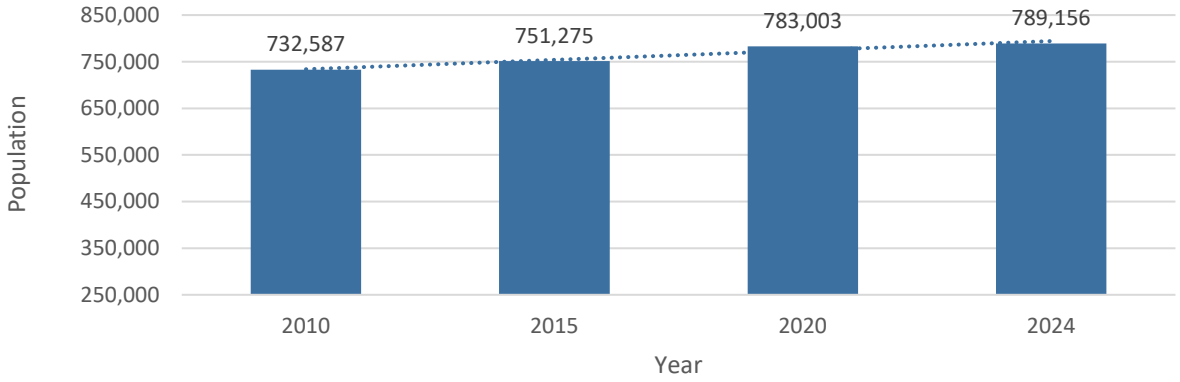
3.0 Demographic Profile

Demographic data trends can provide insight into historical region growth and how the region may grow and change over time. The data within this chapter is primarily derived from the most recent American Community Survey (ACS) 5-Year Estimates (2024), the 2020 US Census, and the Bureau of Labor Statistics.

3.1 Populations and People

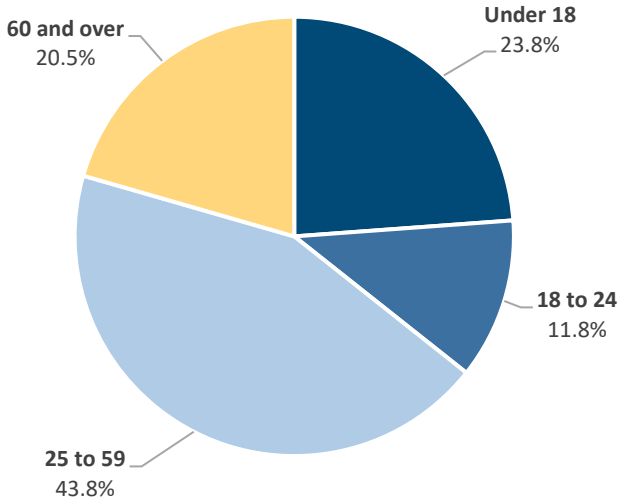
Over the last 14 years, the region has experienced a steady increase in population, increasing from 732,587 people in 2010 to 789,156 in 2024 as displayed in **Figure 3.1**.

Figure 3.1: Total Population Within Planning Area



Source: 2010 & 2020 US Census; ACS 5-Year Estimates Block Groups

Figure 3.2: Population by Age

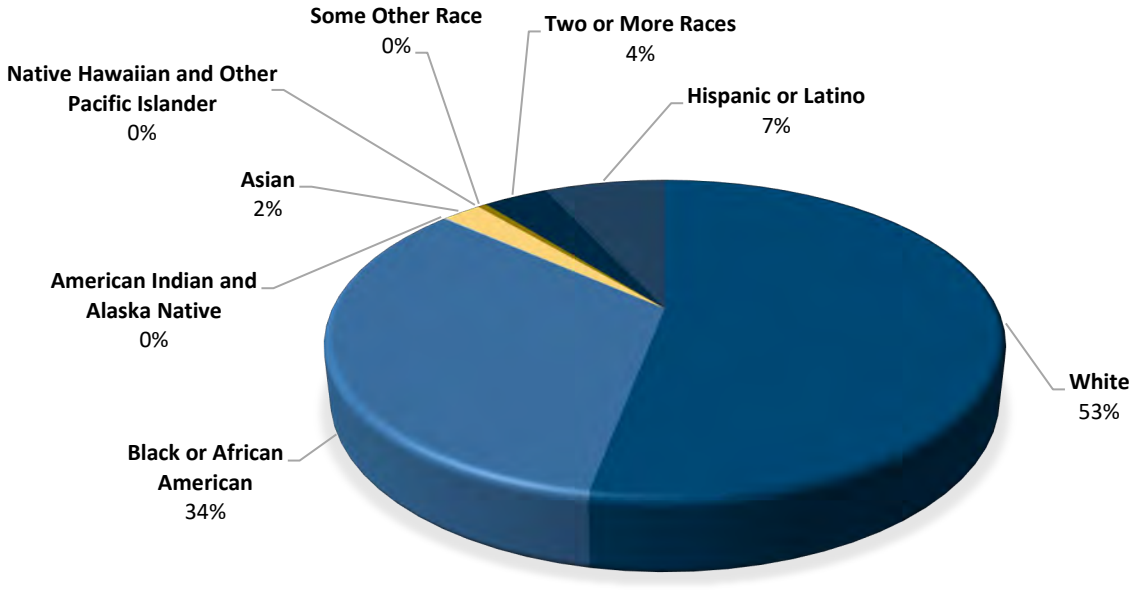


Nearly half the residents within the region (43.8%) are in the 25-59 age group which is commonly considered the working-age population. Nearly a quarter of the population (23.8%) are under the age of 18, while 20.5% are age 60 and older. **Figure 3.2** displays the age breakdowns within the region.

Source: ACS 2024 5-Year Estimates Block Groups

Within the five-parish area, more than half of the population identifies as White and not Hispanic or Latino, while nearly one-third of the population (34%) identifies as Black or African American. Additionally, 7% of the population identifies as Hispanic or Latino. The racial and ethnic makeup of the region is displayed in **Figure 3.3**.

Figure 3.3: Population by Race/Ethnicity



Source: ACS 2024 5-Year Estimates Block Groups

3.2 Regional Socioeconomic Makeup

Travel within a region is influenced by the socioeconomic characteristics of its residents and workers. Understanding the housing and employment conditions provides some insight into how people travel within the region.

Housing

Most trips within the region are based on household needs, including commuting to work, transporting children to and from school, shopping, and participating in recreation activities. Household population data, which was used in the Travel Demand Model (TDM), is displayed in **Table 3.1**. Additional information about the TDM and its development can be found in *Appendix #1: Model Development*.

Table 3.1: Study Area Households and Population

Variable	Parish					Model Study Area Total
	Ascension	East Baton Rouge	Iberville	Livingston	West Baton Rouge	
Dwelling Units	49,635	194,884	11,357	57,431	10,868	**324,175**
Occupied Dwelling Units	45,888	178,875	10,104	52,776	10,104	**297,747**
Household Population	130,104	451,499	27,090	147,297	27,236	**783,226**

Source: 2020 Census Block Data; ACS 5-Year Estimates

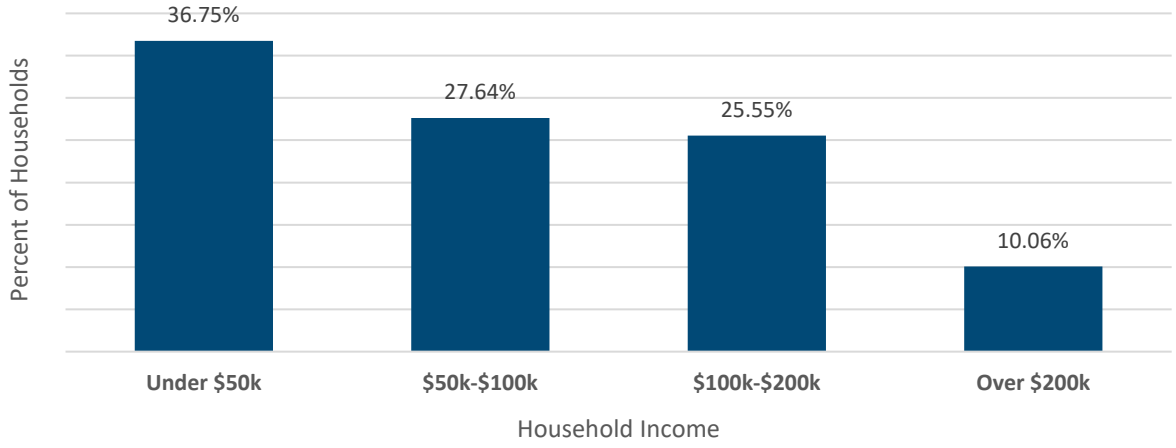
The average household size in the region is 2.6 persons per household. Over two-thirds of households within the study area are occupied by the homeowner and over one-third of area residents make less than $50,000 per year as shown in **Figure 3.4**. The combination of relatively high homeownership and a substantial share of lower-income residents suggests that many households may face financial constraints, underscoring the need for affordable and accessible transportation options.

Income constraints may limit a resident's ability to pay for housing, transportation, and utility costs. Limited funds for transportation can restrict access to employment, education, and essential services. These conditions underscore the importance of responsible transportation planning, including affordable transit, safe walking and biking infrastructure, and strategies to connect residents to key destinations without undue financial strain. Addressing these challenges supports not only mobility but also the region's overall economic resilience and quality of life, aiming that transportation investments effectively meet community needs.



Source: ACS 2024 5-Year Estimates Block Groups

Figure 3.4: Study Area Household Income



Source: ACS 2024 5-Year Estimates Block Groups

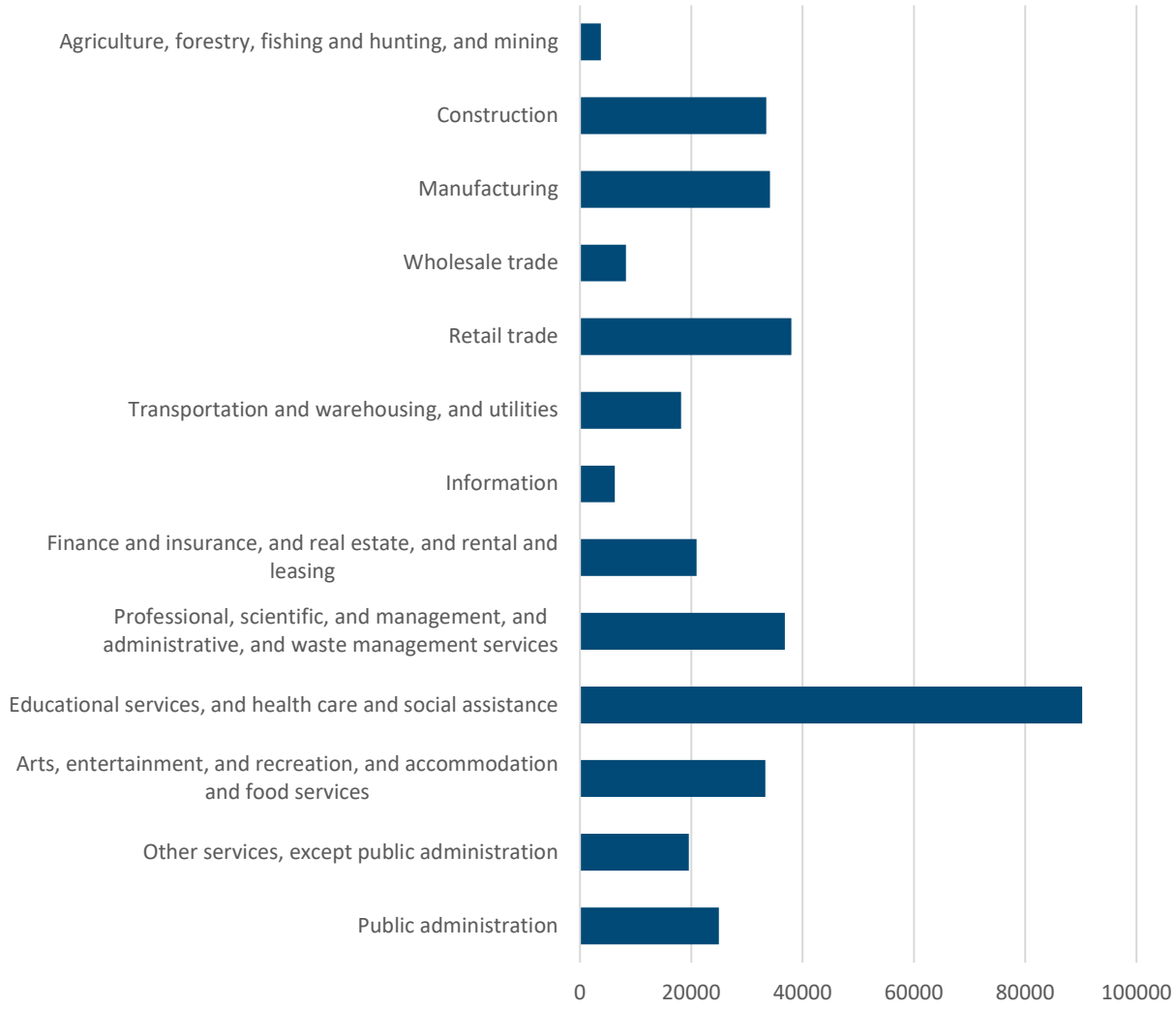
Employment

A region's employment options attract most trips as people commute to their workplace or travel to procure necessary goods and services. Employment is also responsible for the economic health of the region's member jurisdictions, and a growing employee base is a sign of good health.

The most common employment categories within the Capital Region are in educational services, health care, and social assistance with 90,254 employees. Retail trade is the second largest employee classification with 37,973 employees. The full breakdown of employment categories within the study area is displayed in **Figure 3.5**.

Employment data used in the Travel Demand Model can be found in *Appendix #1: Model Development*.

Figure 3.5: CRPC Employment Categories

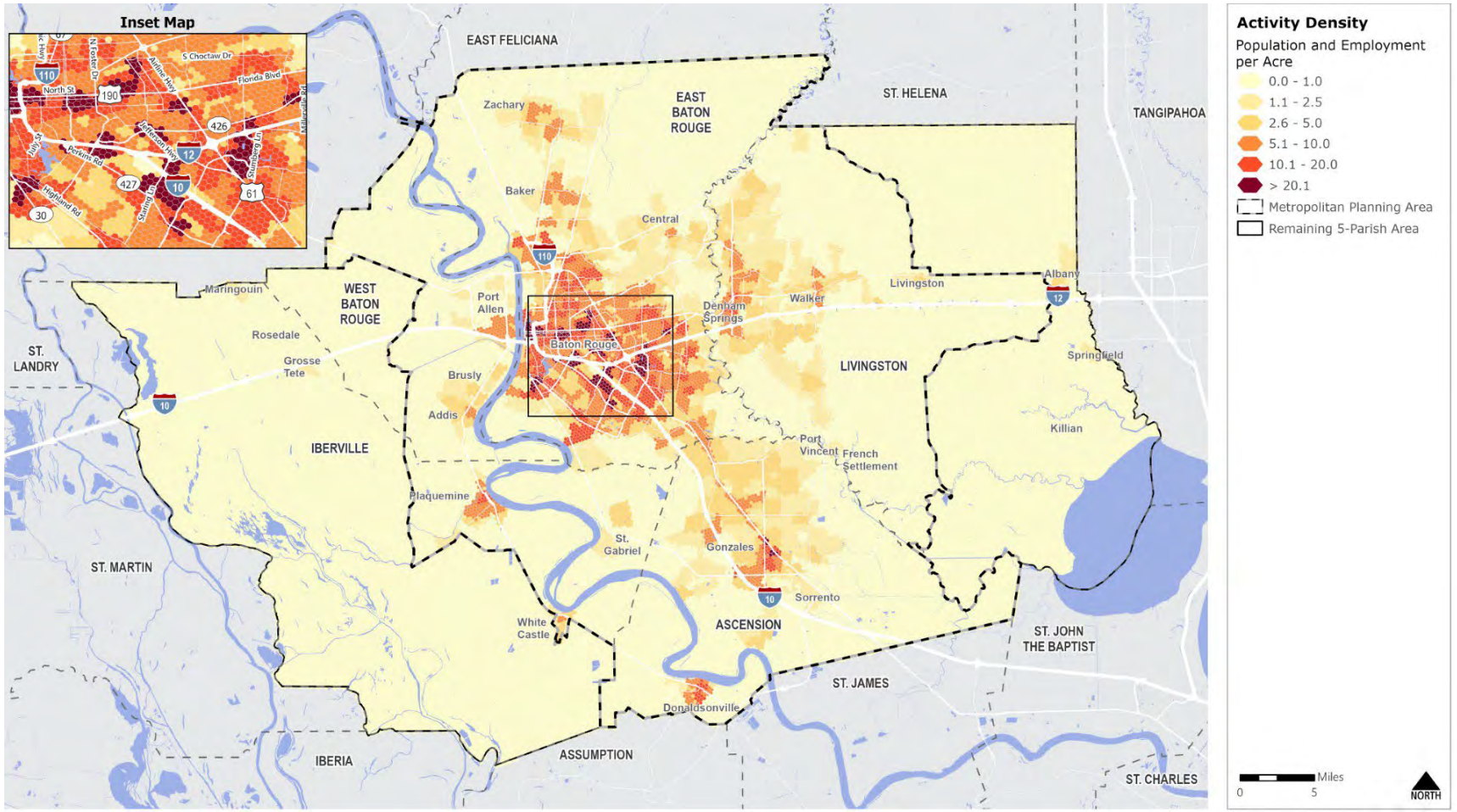


Source: ACS 2024 5-Year Estimates Block Groups

Activity Density

An area's activity density is the sum of its population and employment divided by its physical area. Activity density displays areas which may not have a significantly high population or employment density on their own yet still have significant activity due to a mixed use of developments. **Figure 3.6** displays the activity density within the study area, which is greatest in East Baton Rouge Parish near Downtown Baton Rouge, Lobdell/Woodal, and Westminster.

Figure 3.6: Activity Density

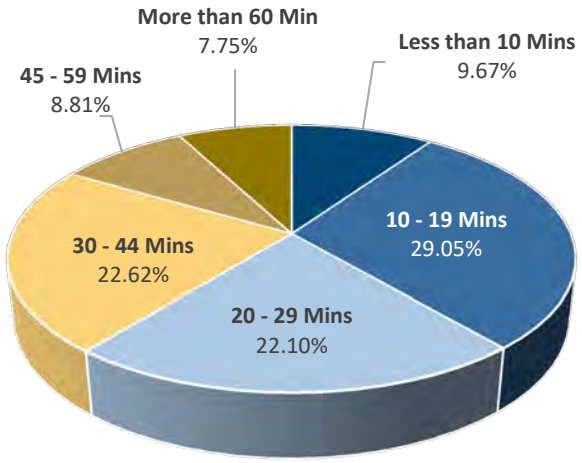


Source: US Census Bureau. 2025; QCEW, 2025

3.3 Existing Travel Patterns

Commuting patterns within the region can also provide insight into overall travel patterns. Data from the ACS 5-Year Estimates indicates that travel times to work are generally short within the study area with just under two-fifths of workers commuting less than 20 minutes and with more than six in ten workers commuting less than 30 minutes as shown in **Figure 3.7**.

Figure 3.7: Length of Travel Time to Work

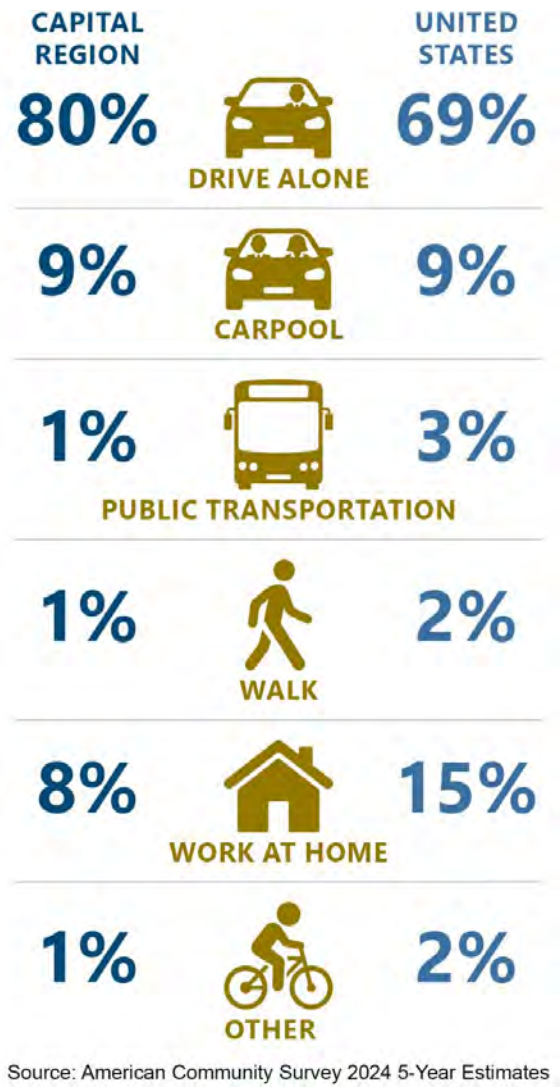


Source: American Community Survey 2024 5-Year Estimates

Based on the 2024 ACS 5-Year Estimates, about 80% of commuters in the study area drove alone to work while less than 10% carpooled. Walking, biking, or using public transit to commute to work was uncommon, as shown in **Figure 3.8**.

While most residents have relatively short commutes, a significant number of workers experience longer travel times. These long commutes, combined with the high percentage of commuters who drive alone to work, underscore the need for transportation planning strategies that improve transit accessibility and support regional mobility.

Figure 3.8: Means of Transportation to Work



Source: American Community Survey 2024 5-Year Estimates

3.4 Housing and Transportation Affordability Index

The Housing and Transportation Affordability (H&T) Index is a tool that uses the combined cost of housing and transportation to provide a comprehensive understanding of a location's affordability. The H&T Index divides housing and transportation costs by income, illustrating the burden that these expenses place on a typical household.

While housing is traditionally considered affordable when consuming no more than 30% of income, the H&T Index incorporates transportation costs which are typically the household's second-highest expense. The combined cost index, at 45% of income, offers an expanded view of affordability. Housing and transportation expenses that exceed this benchmark signify a lack of affordability and a larger financial burden on households.

Regional Overview

When referencing the "regional typical household," the H&T Index identifies a block group's region as the Core-Based Statistical Area (CBSA) where it is located. All five parishes within the study area (Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge) are located within the Baton Rouge CBSA.

> **A Core-Based Statistical Area (CBSA)** is a U.S. geographic area defined by the federal Office of Budget and Management. These areas include a core metropolitan center and are used in regional analysis to describe certain trends which may go beyond traditional jurisdictional boundaries such as economic, population, and social trends.

[3]

Table 3.2 displays the CBSA typical household income, housing affordability threshold (30%), transportation affordability threshold (15%), and combined affordability threshold (45%).

[3] https://www.congress.gov/crs-product/IF12704#:~:text=Core%20Based%20Statistical%20Areas%20(CBSAs,with%20a%20population%20of%2050%2C000.

Table 3.2: CRPC Region CBSA Thresholds

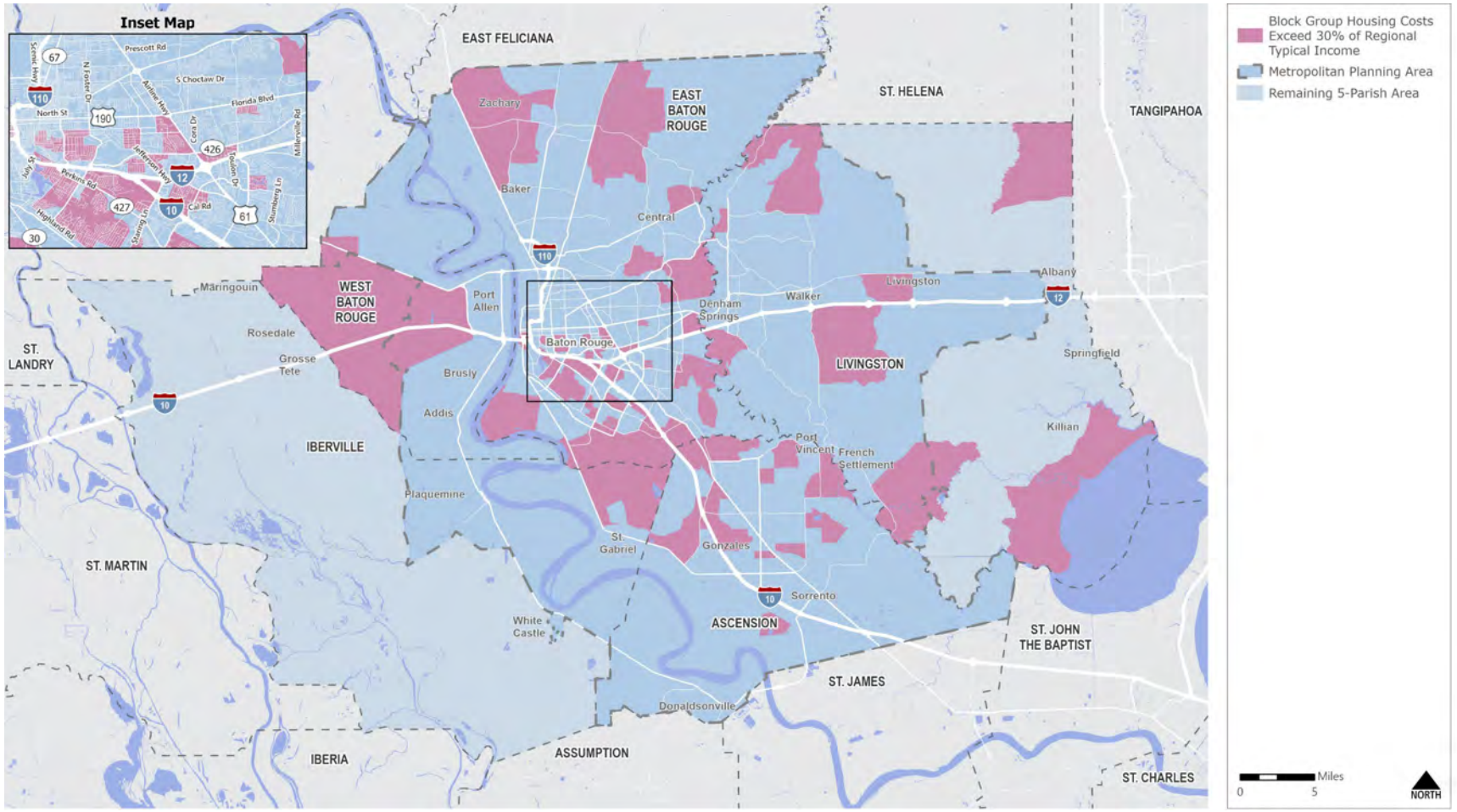
Geographic Area	Typical Household Income	Housing Affordability Threshold	Transportation Affordability Threshold	Combined Affordability Threshold
Baton Rouge CBSA	$67,979	$20,394	$10,197	**$30,591**
United States	$75,149	$22,545	$11,272	**$33,817**

Source: H&T Index

Figure 3.9 compares housing affordability based on the Regional Typical Household income, while **Figure 3.10** compares it to the National Typical Household income. **Figure 3.11** and **Figure 3.12**, respectively, compare H&T affordability based on the Regional Typical Household income and the National Typical Household income when both housing and transportation are considered.

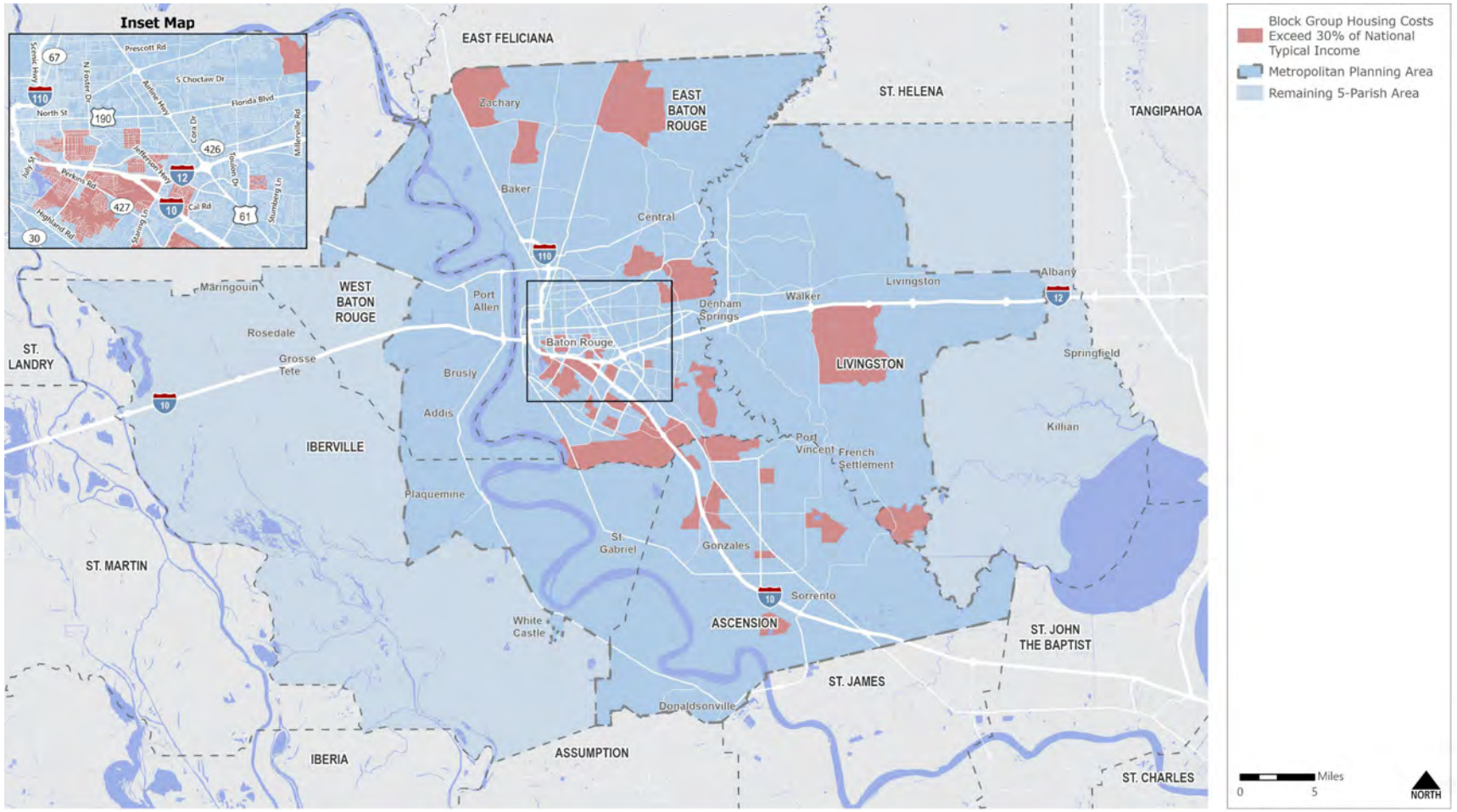
Since the typical household income used for analysis comes from regional and national data sets, it does not account for household income variability by jurisdiction. While income may vary across jurisdictional boundaries, this analysis allows for costs to be compared to a single typical income metric, supporting affordability analysis.

Figure 3.9: Housing Affordability Compared to Regional Typical Household Income



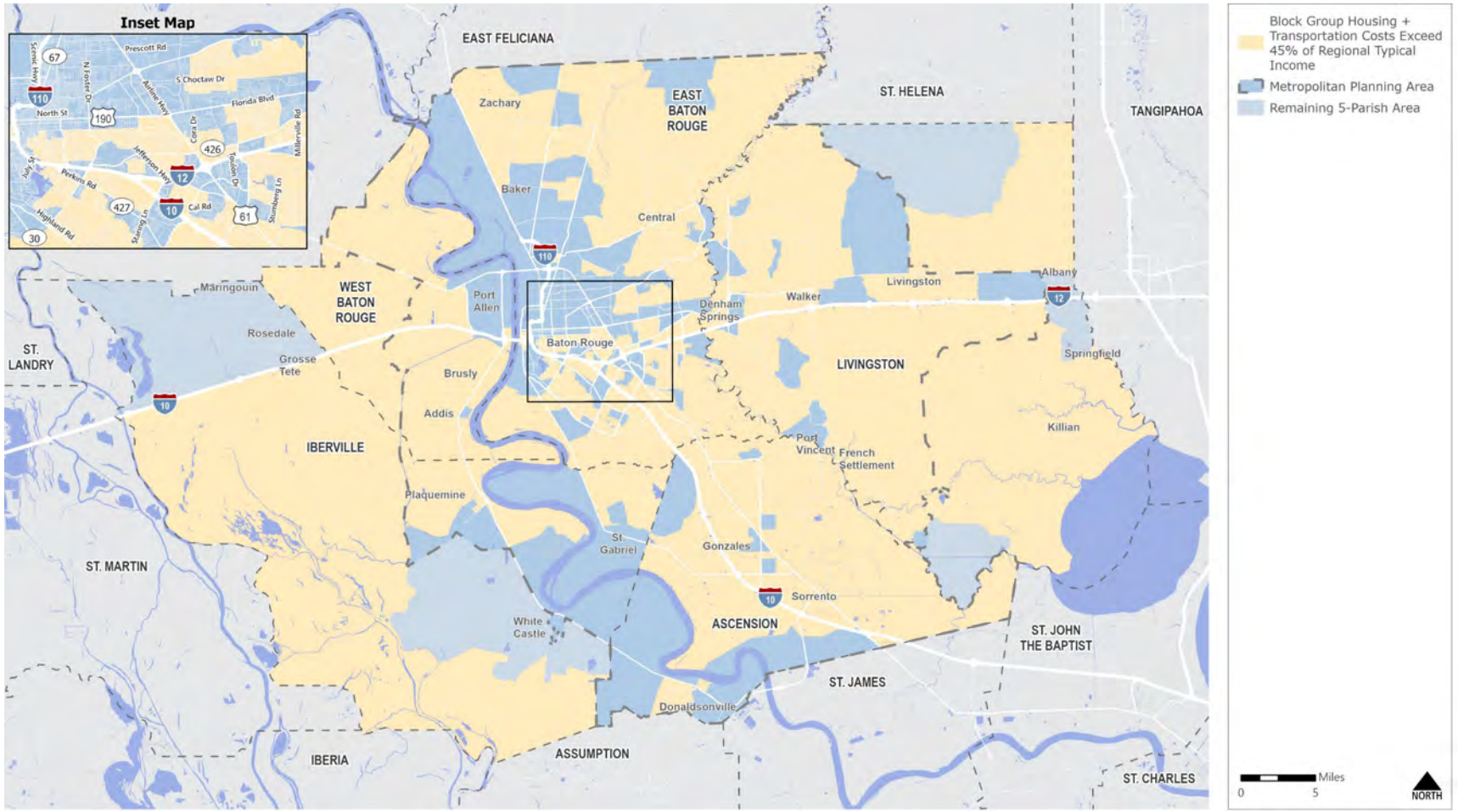
Source: Housing and Transportation Affordability Index, 2022

Figure 3.10: Housing Affordability Compared to National Typical Household Income



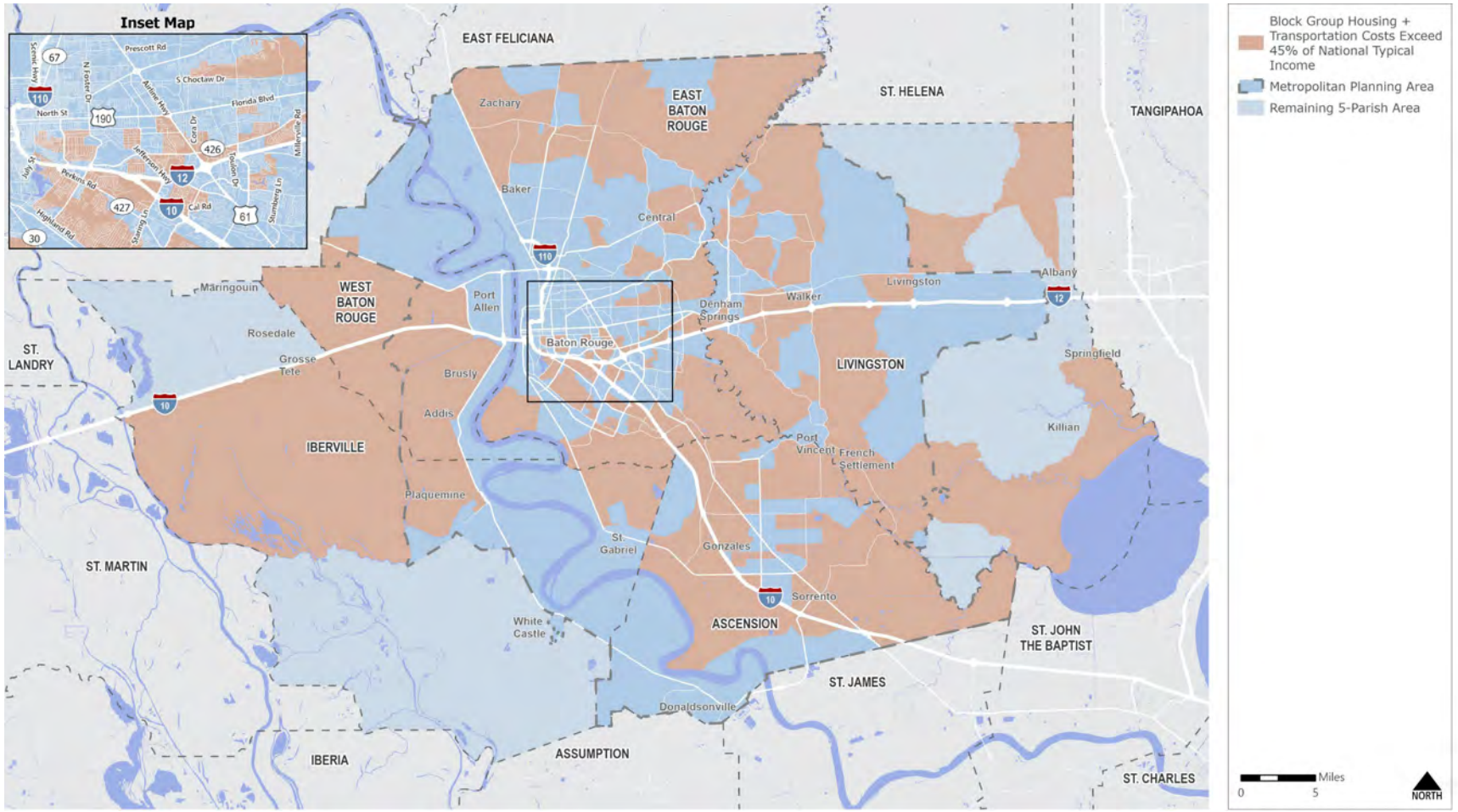
Source: Housing and Transportation Affordability Index, 2022

Figure 3.11: Combined Affordability Compared to Regional Typical Household Income



Source: Housing and Transportation Affordability Index, 2022

Figure 3.12: Combined Affordability Compared to National Typical Household Income



Source: Housing and Transportation Affordability Index, 2022

Parish Overview

Ascension Parish

The average household in Ascension Parish spends 53% of income on housing and transportation, exceeding the affordability threshold of 45%. Housing accounts for 27% of household income, remaining below the benchmark, while transportation accounts for 26% and drives the overall exceedance of the H&T threshold. This information indicates that transportation costs pose affordability challenges within Ascension Parish.

East Baton Rouge Parish

In East Baton Rouge Parish, households spend 47% of income on housing and transportation. While housing remains under the 30% threshold at 22%, transportation costs exceed the threshold and cause the parish to exceed the H&T threshold. This information demonstrates that transportation costs, rather than housing costs, are the main contributor to affordability challenges in East Baton Rouge Parish.

Iberville Parish

Households in Iberville Parish spend approximately 44% of their income on housing and transportation, the lowest in the study area. Overall, the parish remains just below the commonly accepted combined affordability threshold of 45%. Within the parish, only 18% of income is spent on housing, which is well below the housing threshold. However, transportation accounts for 26% of household spending and exceeds the housing cost. Similar to Ascension and East Baton Rouge, transportation is the key driver of affordability challenges in Iberville Parish.

Livingston Parish

Households in Livingston Parish spend 49% of income on housing and transportation. The average household in Livingston Parish spends 24% on housing and 25% on transportation. Housing is below the benchmark, while transportation exceeds it. Transportation is the primary driver of affordability burdens in Livingston Parish.

West Baton Rouge Parish

Households in West Baton Rouge Parish spend 48% of income on housing and transportation, exceeding the commonly accepted affordability threshold of 45%. Housing accounts for 23% of household income, remaining below the benchmark, while transportation accounts for 25% which makes it the primary contributor to affordability burdens in West Baton Rouge Parish.

Table 3.3 summarizes housing and transportation costs as percentages of household income across the study area. The plan includes strategies and short-term projects that can help address these challenges, which are discussed in *Appendix #4: Needs Assessment*.

Table 3.3: Housing and Transportation Affordability

Area	Housing Cost %	Transportation Cost %	H&T Cost%	Key Challenge
Ascension Parish	27	26	53	**Transportation**
East Baton Rouge Parish	25	22	47	**Transportation**
Iberville Parish	18	26	44	**Transportation**
Livingston Parish	24	25	49	**Transportation**
West Baton Rouge Parish	23	25	48	**Transportation**
Baton Rouge MPO	25	23	48	**Transportation**
Baton Rouge CBSA	24	24	48	**Transportation**

Source: Housing and Transportation Affordability Index, 2022

According to the H&T Index data, transportation costs exceed affordability thresholds in every parish and regional geography, making it a potential focus for policy and planning. Across the region, transportation costs are often the largest contributor to household affordability challenges, since housing costs generally remain below the 30% benchmark. While many households in the region spend more on transportation than on housing, Ascension Parish and East Baton Rouge Parish spend more on housing than transportation.

Transportation Costs

Table 3.4 displays the typical household transportation costs across the CRPC region. Typical household income values for the Baton Rouge MPO, Baton Rouge CBSA, and United States are included in the table for reference and comparison. **Table 3.4** further illustrates why **Table 3.3** shows high H&T burdens as personal vehicle ownership and maintenance are the largest contributors to transportation costs, exceeding affordability benchmarks in every parish.

Table 3.4: Transportation Costs per Household

Area	Typical Annual Income	Average Annual Cost			Total Average Annual Costs	
		Transit Only	Vehicle Payment	Fuel & Upkeep	Personal Vehicle Only	All Transportation
Ascension Parish	$67,979	$6	$13,201	$4,327	**$17,528**	**$17,534**
East Baton Rouge Parish	$67,979	$27	$11,633	$3,314	**$14,947**	**$14,974**
Iberville Parish	$67,979	$6	$13,332	$4,445	**$17,777**	**$17,783**
Livingston Parish	$67,979	$9	$13,053	$4,230	**$17,283**	**$17,291**
West Baton Rouge Parish	$67,979	$7	$12,811	$4,002	**$16,813**	**$16,820**
Baton Rouge MPO	$67,979	$19	$12,165	$3,660	**$15,825**	**$15,845**
Baton Rouge CBSA	$67,979	$18	$12,339	$3,783	**$16,122**	**$16,140**
United States	$75,149	-----	-----	-----	-----	**$12,295**

Source: Housing and Transportation Affordability Index, 2022
*State of Louisiana average annual transportation costs per household were not included in this analysis as the Housing and Transportation Affordability Index no longer provides State-level comparative data within its most recent update.
*Portions of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge parishes within the study area are within the Baton Rouge CBSA.

Analysis Findings

Across all five parishes, car ownership and maintenance exceed the 15% benchmark for transportation spending. High transportation costs can be attributed to the car-dependent means of travel within the region. Notably, the national annual transportation cost per household is $12,295, a value largely influenced by U.S. cities that are heavily reliant on public transit. When considering personal vehicle costs before fuel and upkeep, each parish surpasses the affordability benchmark of 15% through the cost of ownership alone.

Across the five parishes, transportation costs consistently exceed affordability benchmarks due to high dependence on personal vehicles and limited access to alternative travel options. Transportation affordability varies largely depending on access to transit and development patterns. Areas characterized by lower transit usage, limited walkability, and minimal bicycle infrastructure experience the greatest affordability challenges, particularly in lower-density areas with longer travel distances.

East Baton Rouge Parish households utilize comparatively better transit access and average 25 transit trips annually, which is relatively high for the region. While this helps lower costs, transportation still consumes 22% of household income. In contrast, Ascension Parish households average only 6 transit trips per year, which may reflect limited public transportation access, among other barriers. Iberville Parish experiences the highest transportation burden with households spending 26% of income on transportation and averaging only 5 transit trips per year. These numbers may indicate vehicle dependence and limited public transportation.

Livingston Parish and West Baton Rouge Parish households face high transportation burdens, spending 25% of income on transportation. These high costs are likely due to low density, limited walkability, and minimal transit access with households averaging just 8 (Livingston Parish) and 6 (West Baton Rouge Parish) transit trips annually. In Ascension, Iberville, Livingston, and West Baton Rouge Parishes, limited public transportation, low walkability, and minimal bicycle infrastructure reinforce auto dependency and contribute to elevated transportation costs across the CRPC region.

As shown in **Table 3.3** and **Table 3.4**, transportation costs are the dominant driver of household affordability concerns across the region, exceeding the 15% benchmark by 2 to 8%. Addressing these challenges will require coordinated strategies that reduce reliance on personal vehicles through improved transit access, safer and more connected pedestrian and bicycle networks, and land use policies that support compact and multimodal development.

When planning land use and transportation projects, greater emphasis should be placed on accommodating pedestrians, bicyclists, and transit users. In areas subject to high summer heat, design strategies such as shade, passive cooling, and heat-reducing materials at transit stops and along active transportation corridors can improve usability and support long-term mode shift. Together, these approaches can help improve overall affordability across the CRPC.

4.0 Roadways and Bridges

4.1 Introduction

This chapter discusses the roadways and bridges within the MPO planning area. Other transportation modes are discussed in their own chapters. The most recent American Community Survey 5-year estimates show that commuting by motor vehicle without carpooling is the most common form of commute within the region. As a result, most household travel is affected by the condition of the roadways and bridges within the planning area.

80% of households in the planning area commute by driving alone in a motor vehicle.

4.2 The Roadway Network

Numerous federal and state highways serve the study area and comprise its main roadway network. The most significant highways include:

- I-10
- I-12
- I-110
- US 190
- US 190 BUS
- US 61
- LA 1
- LA 19
- LA 30
- LA 37
- LA 42
- LA 44
- LA 67
- LA 408
- LA 426

Roadways by Functional Classification

Each type of roadway serves a function in the overall roadway network. Roadways are divided into functional classes, shown in **Figure 4.1**, based on their intended balance of mobility (speed) and access to adjacent land. Their designs vary in accordance with their functional classification. **Table 4.1** summarizes this information by centerline and lane miles. **Figure 4.2** illustrates the functional classification of the study area's roadways.

Figure 4.1: Roadway Functional Classifications



Interstates

- These are divided highways with full access control and grade separations at all intersections.
- Their controlled access character results in high lane capacities, three times greater than the individual lane capacities of urban arterials.



Expressways

- They provide for movement of large volumes of traffic at relatively high speed, and are primarily intended to serve long trips.
- These have some grade separated intersections, and the majority of the intersections are widely spaced and signalized.



Arterials

- These serve both as feeders to Interstates and expressways, and as principal travel ways between major lane use concentrations within the study area.
- These are typically divided facilities (undivided where right-of-way limitations exist) with relatively high traffic volumes and traffic signals at major intersections.
- Their primary function is to move traffic; they are the main means of local travel, with a secondary function of land access.



Collectors

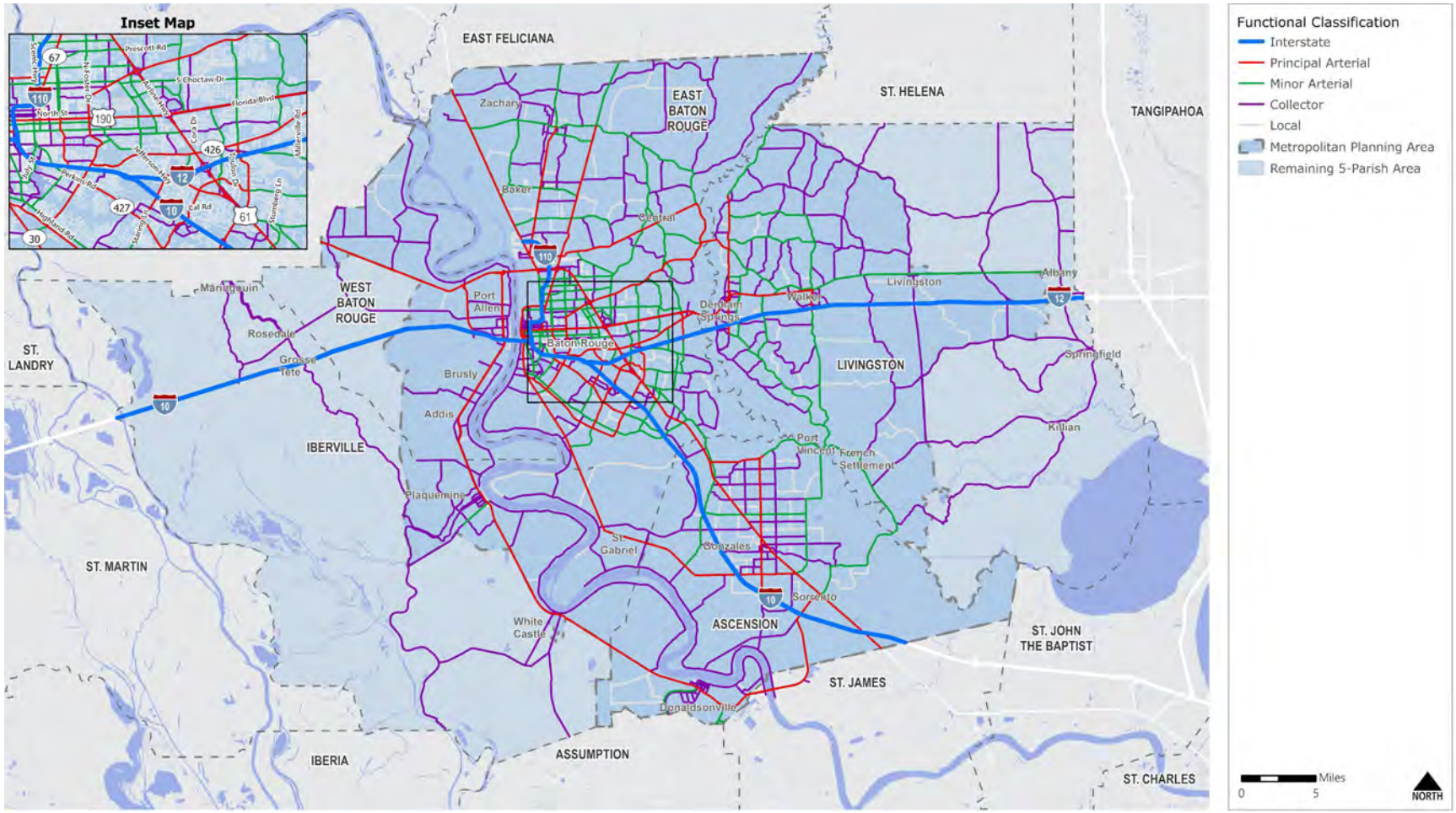
- They provide both land service and traffic movement functions.
- These facilities serve as intermediate feeders between arterials and local streets and primarily accommodate short distance trips.
- Collectors are generally not continuous for any great length since they serve few through trips.



Local Streets

- These provide access to immediately adjacent land.
- Local street classifications have three subclasses to indicate the type of area served: residential, industrial, and commercial.

Figure 4.2: Study Area Functional Classification of Roadways



Source: CRPC Travel Demand Model (TDM)

Arterials are further subdivided into principal and minor subclassifications. Principal arterials in both rural and urban areas serve as high volume traffic corridors. They provide access to the major centers of activity from a metropolitan area's furthest points. Minor arterials connect the principal arterials and provide a lower level of travel mobility for shorter travel lengths.

Collectors are further subdivided into major and minor subclassifications. Major collectors carry low-medium traffic volumes and connect arterials and local streets. These roadways typically carry more volume than minor collectors. Minor collectors perform the same function as major collectors but carry less volume.

Table 4.1: Roadway Model Network Line mileage by Functional Class, 2024

Functional Classification	Centerline Miles		Lane Miles	
	Miles	Percent	Miles	Percent
Interstate	106.5	3%	522.5	7%
Principal Arterial	300.8	10%	1,086.3	15%
Minor Arterial	326.8	10%	838.0	11%
Collector	986.2	31%	2,011.0	28%
Local	1,417.9	45%	2,845.0	39%
Total	**3,138.2**	**99%**	**7,302.8**	**100%**

Source: CRPC Travel Demand Model
Notes: Centerline miles do not include ramps Not all local roadways are included in the travel demand model. Total lane mileage for all roads within region will be greater than what is listed.

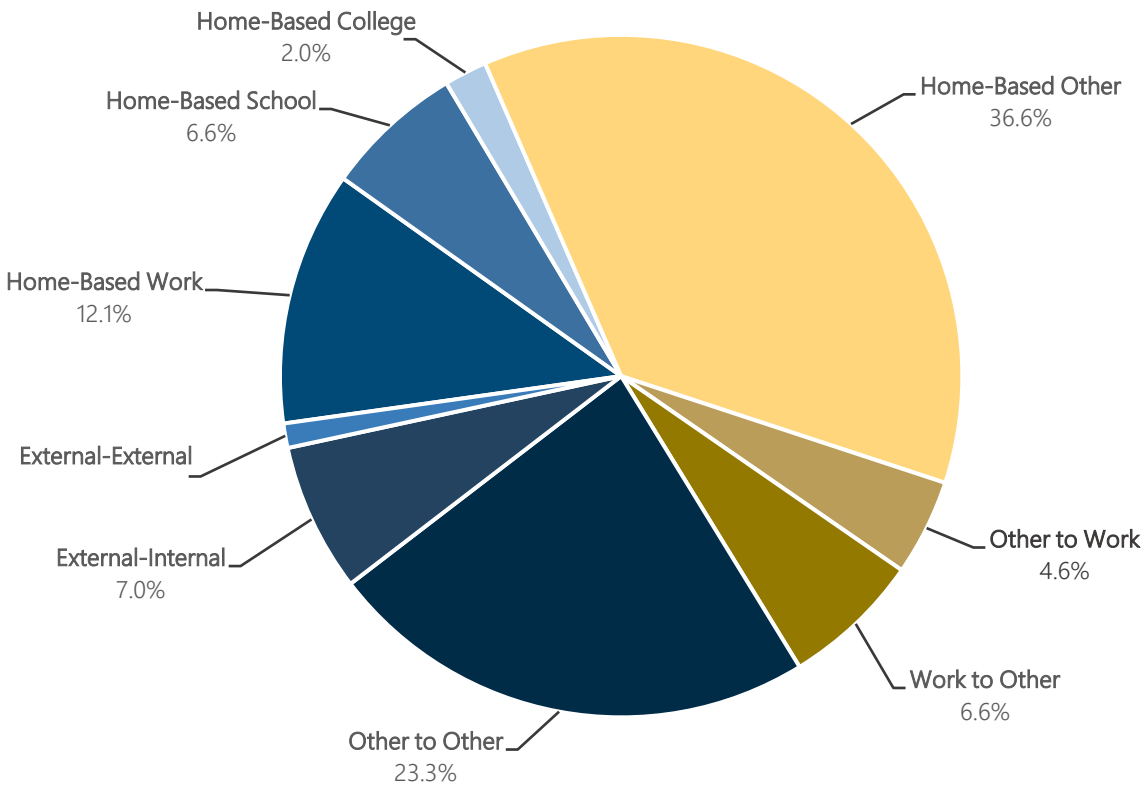
4.3 Traffic and Congestion

3,290,576
daily trips are taken on planning area roadways.

The number of daily trips estimated by the Travel Demand Model by trip purpose in 2025 is summarized in **Figure 4.3**. Approximately 1% of vehicle trips pass through the planning area. The majority of vehicle trips in the planning area begin or end at home (57.3%).

Table 4.2 presents how these trips are distributed onto the modeled transportation network. Within the planning area, interstates account for 37.3% of daily vehicle miles traveled and 31.3% of daily vehicle hours traveled. Interstates also account for 42.6% of total delay. Almost half of the total delay is estimated to occur on principal and minor arterials. This delay coincides with locations where the most vehicle miles and vehicle hours are traveled. Comparatively little delay is estimated to occur on collectors and local roads.

Figure 4.3: Study Area Trips by Trip Origin, Destination, and Purpose



Source: CRPC Travel Demand Model
Note: The model encompasses the entirety of the five parishes that comprise the planning area.

Table 4.2: Roadway System Travel Characteristics, 2025

Functional Class	Daily Vehicle Miles Traveled (VMT)		Daily Vehicle Hours Traveled (VHT)		Daily Vehicle Hours of Delay (VHD)	
	Number	Percent	Number	Percent	Number	Percent
Interstate	8,304,988	37.3%	168,949	31.3%	45,787	42.6%
Principal Arterial	6,604,463	29.6%	177,488	32.9%	36,571	34.0%
Minor Arterial	3,712,662	16.7%	100,191	18.6%	16,267	15.1%
Collector	3,285,098	14.7%	81,755	15.2%	8,244	7.7%
Local	375,175	1.7%	10,926	2.0%	605	0.6%
Total	**22,282,387**	**100.0%**	**539,311**	**100.0%**	**107,474**	**100.0%**

Source: CRPC Travel Demand Model

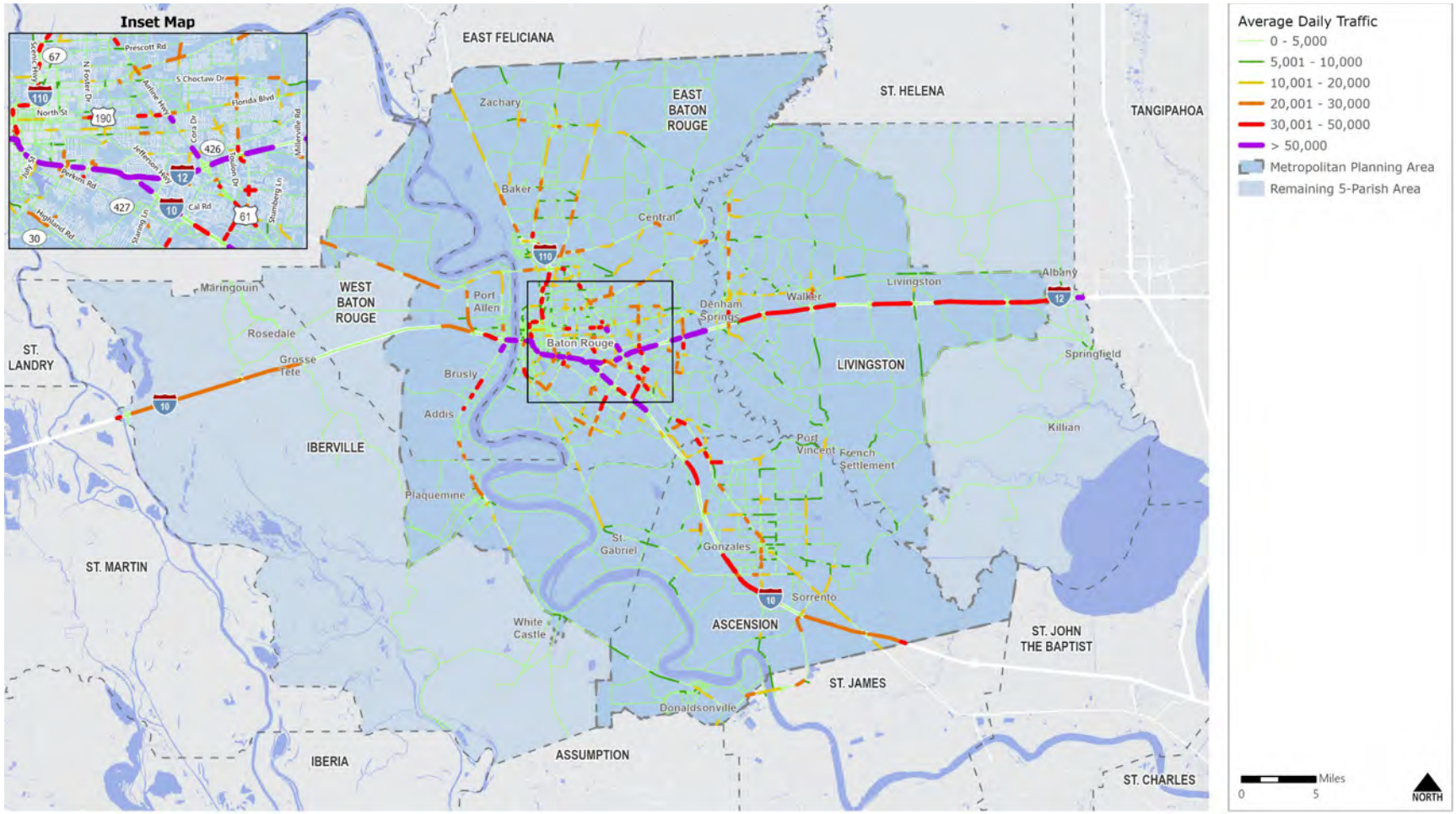
Figure 4.4 displays the vehicular traffic in the planning area, which is greatest on:

- I-12 from US61 to Sherwood Forest Blvd
- I-10 from I-110 to I-12
- I-10 from I-12 to Bluebonner Blvd
- US 61 from Commonwealth Blvd to LA 426

These areas have estimated average daily traffic volumes exceeding 60,000 vehicles.

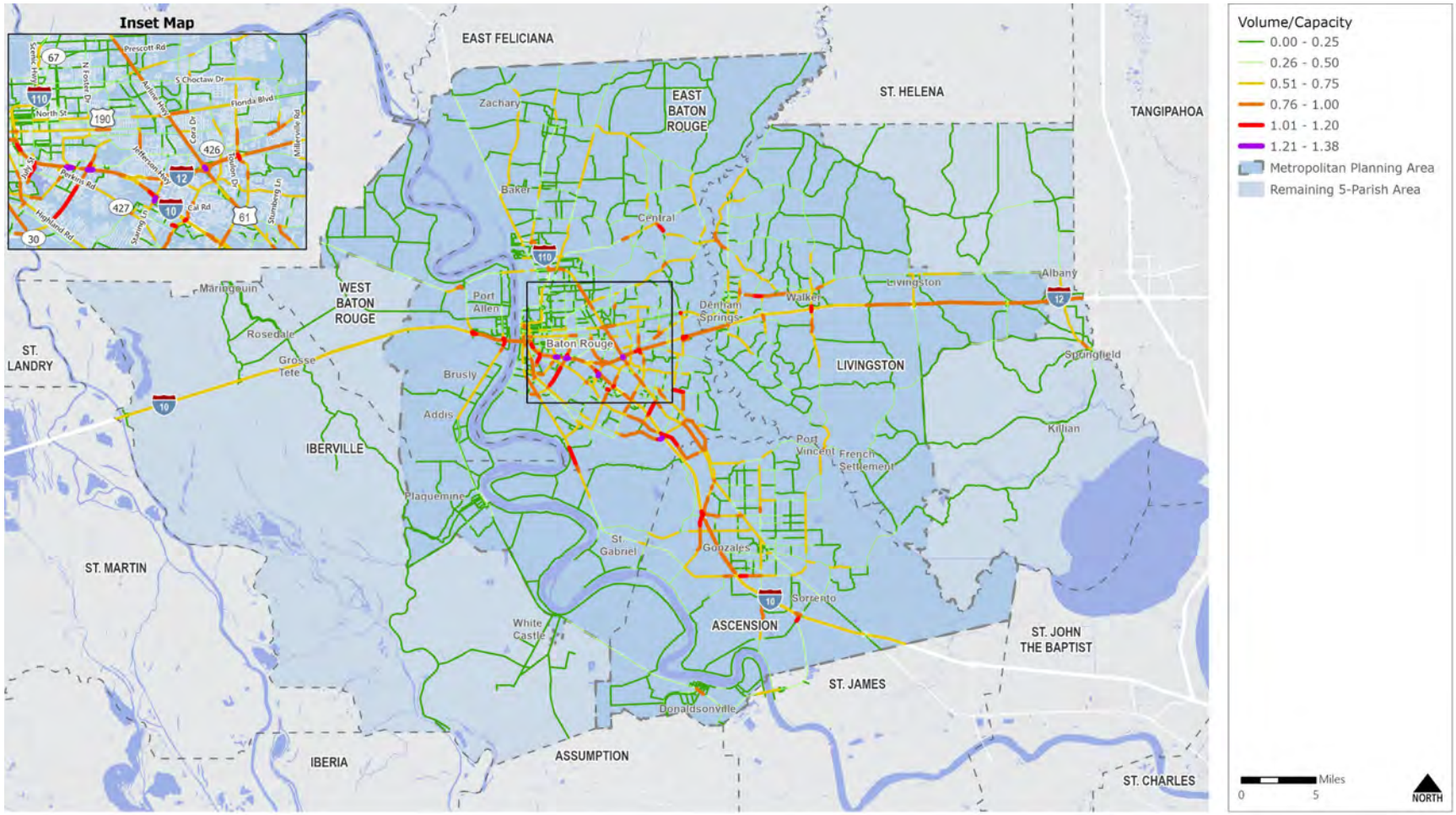
Figure 4.5 displays the volume to capacity (V/C) ratios for the major roadways in the planning area. Currently, several roadway segments in the planning area experience a V/C ratio of 1.0 or greater and are considered to be congested segments. **Table 4.3** presents those segments and suggests that peak period congestion is currently an issue in the planning area.

Figure 4.4: Average Daily Traffic on Roadways, 2025



Source: CRPC Travel Demand Model (TDM)

Figure 4.5: Existing Roadway Congestion, 2025



Source: CRPC Travel Demand Model (TDM)

Table 4.3: Roadway Corridors with Volumes Exceeding Capacity, 2025

Roadway	Segment	Length (miles)
I-10	Lorri Burgess Ave to I-10/I-110 Ramp	0.54
US 190	Eden Church Rd to LA 1026 (Juban Rd)	0.56
LA 22	LA 70 (Crawford Leblanc Blvd) to Race Trac	0.21
LA 30	LA 1248 (Bluebonnet Blvd) to University Club Dr	1.59
LA 30	Veterans Blvd to S Darla Ave	0.40
LA 42	Memorial Avenue to LA 427 (Perkins Rd)/Highlandia Dr	0.31
LA 73	Cobblestone Ave to C Braud Rd	0.56
LA 427	LA 42 to Santa Maria Pkwy	1.05
LA 3064	Essen Park Ave to SB I-10 On/Off Ramp	0.13
College Dr	EB I-10 On/Off Ramp to Corporate Blvd	0.24
Lee Dr	Little Caesars Pizza to Arrowhead St	1.33
Picardy Ave	Summa Ave to LA 1248 (Bluebonnet Blvd)	0.14
Dalrymple Dr	E State St to EB I-10 Off Ramp	0.56
Tiger Bend Rd	Jones Creek Rd to Antioch Rd	0.68
Pecue ln	NB I-10 On/Off Ramp to Old Pecue Ln	0.79

Source: CRPC Travel Demand Model

4.4 Roadway Reliability

Travel time reliability is a measure of how congested travel times compare to free-flow conditions.

The Level of Travel Time Reliability (LOTTR) is defined as:

$$\text{Segment LOTTR} = \frac{\text{"Longer" 80th Percentile Travel Time}}{\text{"Normal" 50th Percentile Travel Time}}$$

LOTTR data was collected in 15-minute segments during all time periods between 6 a.m. and 8 p.m. local time, and the worst LOTTR was used to determine segment reliability. The most recent travel time data available was obtained from FHWA's National Performance Management Research Data Set (NPMRDS) and used to calculate the reliability of Interstate and Non-Interstate reliability. Roadway segments with a LOTTR score of less than 1.5 are defined by the FHWA as reliable. **Figure 4.6** displays the reliability scores of the monitored segments within the planning area. The

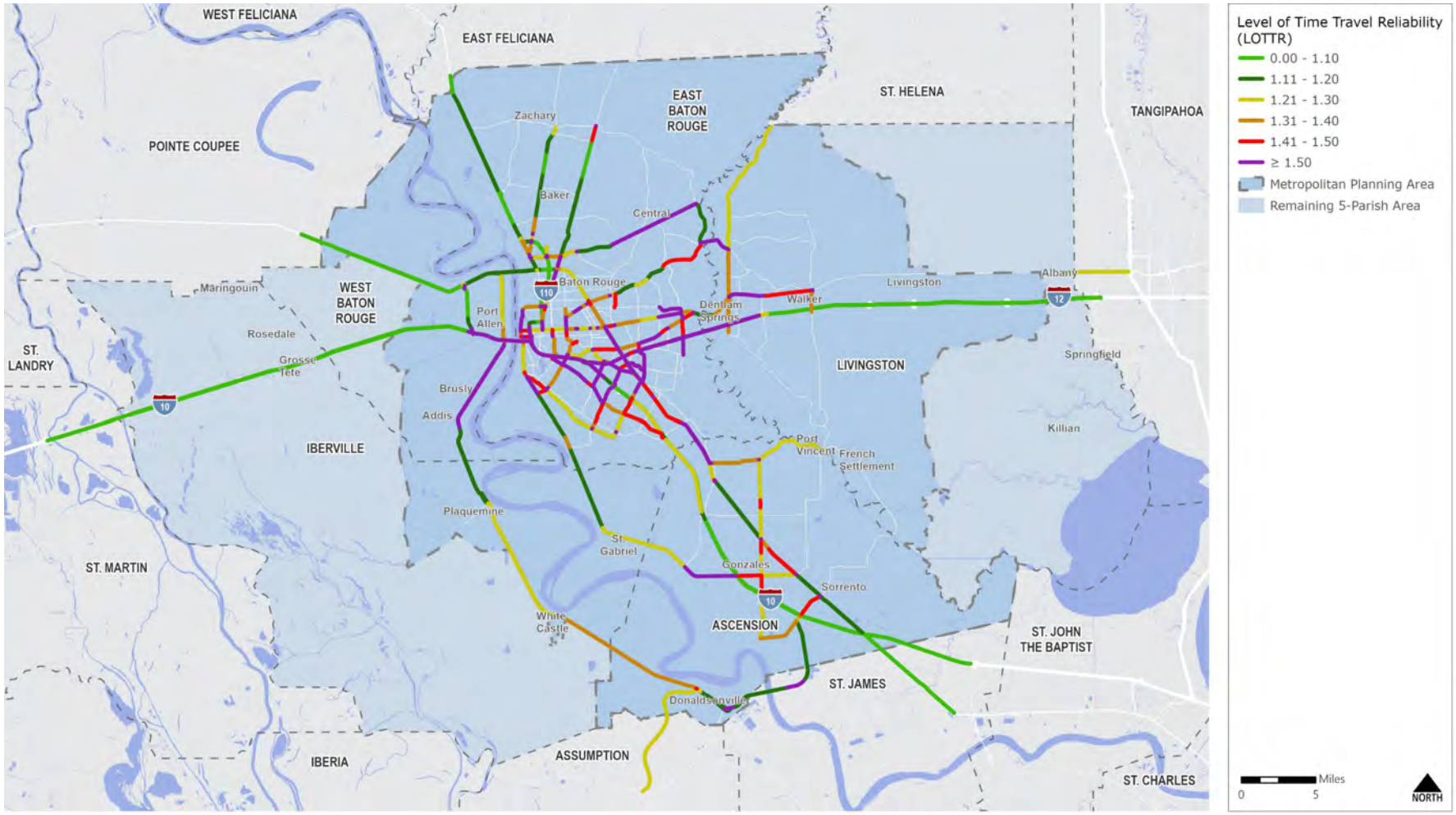
87.1% of **non-interstate** NPMRDS reported NHS person-miles traveled are reliable.

80.5% of **interstate** NPMRDS reported NHS person-miles traveled are reliable.

figure only displays the LOTTR value and does not reflect a value expressed in person-miles.

Within the region, most interstate and non-interstate National Highway System Roadways are somewhat reliable. However, reliability for Interstate routes still falls below the statewide reliability target of 88.4%. Managing congestion on roadways, particularly through the application of the Congestion Management Process, will be necessary to support the State target.

Figure 4.6: Level of Travel Time Reliability on National Highway System Routes, 2024



Source: NPMRDS, 2024 Conflation

4.5 Pavement Condition

Maintaining sufficient pavement conditions allows roadways to operate at their full capacity. Good pavement conditions provide roadway users with safe, comfortable travel experiences while minimizing vehicle wear and tear.

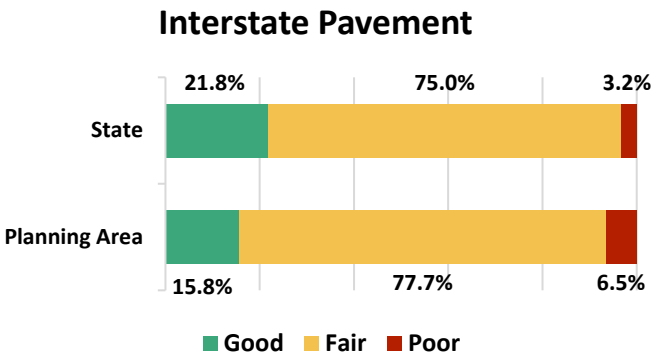
Pavement condition ratings for the planning area's roadways were obtained from data submitted by the LADOTD and found in the Highway Performance Monitoring System (HPMS). This system is a national level highway information system that includes data on the extent, condition, performance, use, and operating characteristics of the nation's highways. HPMS data is a sample dataset collected across the entire federal-aid eligible system for interstate, arterial, and collector networks.

Pavement condition data is based on the International Roughness Index and includes cracking, rutting, and faulting.

The planning area has slightly poorer pavement conditions when compared to the State of Louisiana. While over 6% of interstate pavements within the planning area are in Poor Condition, less than 10% of non-interstate pavements on the National Highway System (NHS) are in Poor Condition.

Figure 4.7 illustrates the most recent pavement condition data for NHS roadways within the study area. Major roadways with segments of poor pavement conditions include:

- I-10
- I -110
- US 190 BUS
- US 190
- US 61
- LA 1
- Lee Dr
- LA 67



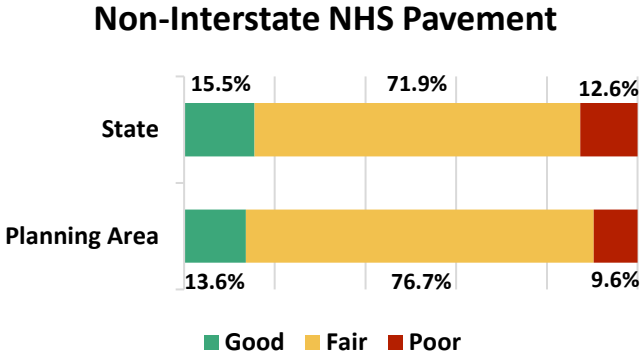
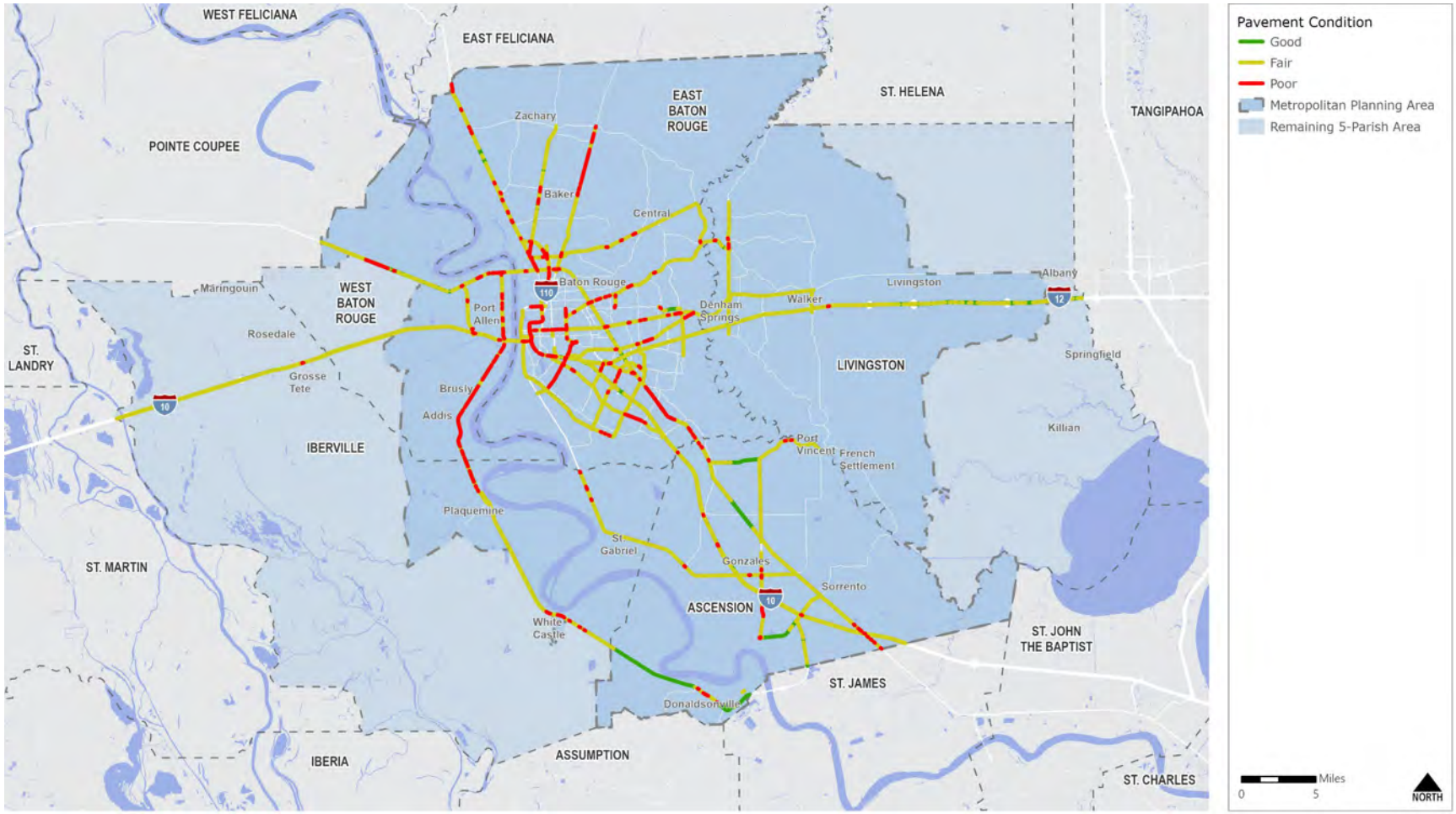


Figure 4.7: Roadway Pavement Conditions, 2024



Source: LADOTD Highway Performance Monitoring System (HPMS), 2024

4.6 Bridge Conditions

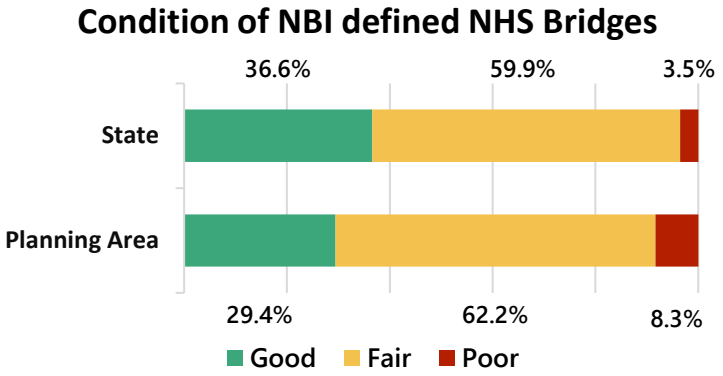
Bridges are a critical part of the overall transportation network. They must be maintained and upgraded when needed to help prevent safety or environmental hazards, bottlenecks, or limitations to freight movement.



Over 1,170 bridges are located within or border the study area. Although most of these bridges cross waterways, some bridges cross over other roadways or railroads.

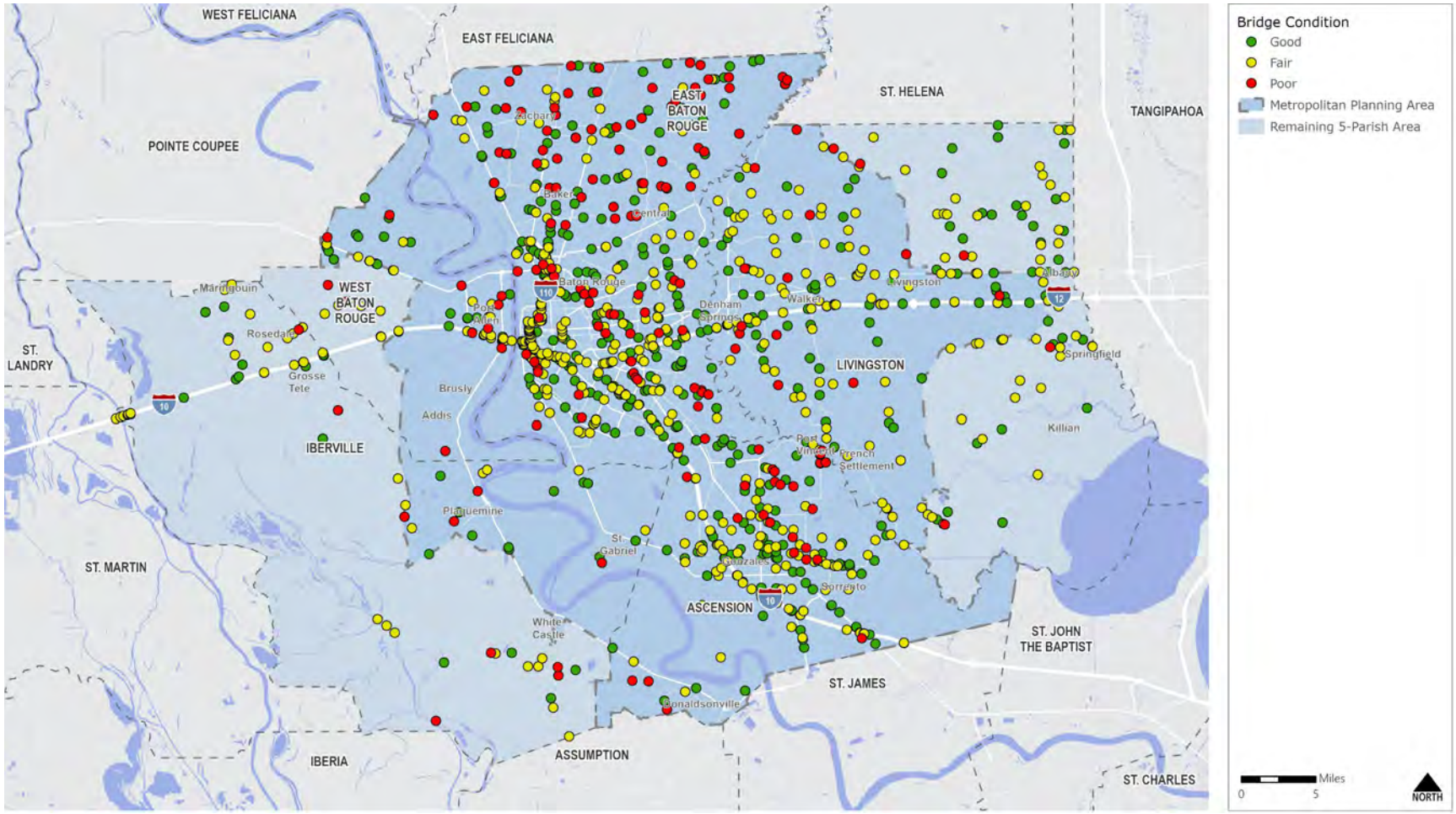
Bridge Conditions and Scoring

The National Bridge Inventory provides bridge condition data for all bridges and bridge-length culverts located on public roads, including Interstate Highways, U.S. Highways, State and county roads, and publicly accessible bridges on Federal lands.



The condition of the bridge is determined by the lowest rating of deck, superstructure, substructure, or culvert. If the lowest rating of these categories is greater than or equal to seven, the bridge is classified as in good condition. If the score of the bridge is less than or equal to four, the classification is poor. The 2025 National Bridge Inventory data, the most recent available, was used for bridge condition analysis. **Figure 4.8** displays the condition of each bridge within the study area. This figure includes all bridges, not just bridges along the NHS.

Figure 4.8: Bridge Conditions in the Planning Area, 2025



Source: National Bridge Inventory (NBI)

4.7 Safety

The MTP safety analysis focused on gathering and analyzing available safety data and identifying hazardous locations. Due to the limited scope of this study, location-specific recommendations have not been developed.

Disclaimer:

"This correspondence and the information contained herein is prepared solely for the purpose of identifying, evaluating, and planning safety improvements on public roads which may be implemented utilizing federal aid highway funds; and is therefore exempt from discovery or admission into evidence pursuant to 23 U.S.C. 407"

Supporting Documents

Highway Safety Improvement Program (HSIP)

The Infrastructure Investment and Jobs Act (IIJA) requires each state to maintain an annually updated Highway Safety Improvement Program (HSIP). The HSIP must include the FHWA performance measures for roadway safety and the development of a Strategic Highway Safety Plan (SHSP). The required safety performance measures, state targets, and the planning area's existing performance are discussed in *Appendix #3: Transportation Performance Management*.

Strategic Highway Safety Plan (SHSP)

A Strategic Highway Safety Plan (SHSP) is a statewide coordinated safety plan developed and maintained by each state to identify strategies to reduce fatalities along all state highways and public roads. Louisiana updated its SHSP in 2022[4]. The SHSP uses the 4Es of traffic safety:

- Engineering
- Enforcement
- Emergency Response
- Education

The Louisiana SHSP uses a data-driven approach to focus on the state's most severe traffic safety problems and identifies strategies with the greatest potential to reduce crash severity. The Louisiana SHSP emphasis areas and associated strategies are shown in **Table 4.4**.

[4] https://destinationzerodeaths.com/Images/Site%20Images/ActionPlans/SHSP.pdf

Table 4.4: Louisiana SHSP Emphasis Areas

Emphasis Area	Strategies
Distracted Driving	1. Increase public information, engagement, and education efforts regionally and statewise. 2. Strengthen laws and public policies to prohibit distracted driving. 3. Increase distracted driving enforcement. 4. Reduce distracted driving through infrastructure/operational improvements and utilizing technology.
Impaired Driving	1. Reduce the number of impaired driving crashes involving drivers under the legal age to drink. 2. Conduct education and community outreach programs. 3. Reduce the number of repeat Driving While Intoxicated (DWI) offenders. 4. Increase the number of high visibility enforcement DWI programs and improve support for enforcement related to DWI patrolling and arrests. 5. Reduce drugged driving. 6. Identify, develop, and deploy engineering solutions along corridors found to experience severe crashes related to impaired driving.
Occupant Protection	1. Increase occupant restraint use rate through sustained enforcement. 2. Increase public compliance through systems support. 3. Increase the number of cild passenger safety (CPS) and CarFit technicians in the state. 4. Prioritize efforts geographically and by target populations with low use rates. 5. Improve marketing, education, and outreach efforts. 6. Improve occupant restraint use through regulatory and legistative enhancements.
Infrastructure & Operations	1. Identify or develop sources of information that assist with the selection of safety projects and provide outreach and training to all SHSP/HSIP stakeholders. 2. Improve data collection, quality, analysis, mapping, and reporting for all public roads and educate users on how to access the information for evaluation, project selection, and prioritization. 3. Standardize the consideration of substantive safety of non-motorized users within the project development process for all projects. 4. Increase statewide education and awareness via social media and other forms of communication. 5. Reduce non-motorized user fatalities and serious injuries on all public roads through targeted investments and outreach. 6. Reduce crashes at intersections for drivers, pedestrians, and bicyclists. 7. Reduce the number of fatalities and serious injuries related to vehicles leaving the roadway.

Source: 2022 Louisiana SHSP

Crash Impacts

Every crash, regardless of the severity, costs money and time in damages, emergency services, and delays. One goal of the MTP process is to improve travel safety by reducing the risk of crashes on the roadways. The first step toward meeting this goal was accomplished by analyzing the data and determining the most common crash safety challenges within the region.

The crash records used in the analysis were obtained from the Center for Analytics and Research in Transportation Safety (CARTS) database which included all reported crashes from 2020 through 2024.

The crash records include:

1. **Severity**
2. **Location**
3. **Alcohol involvement**
4. **Vehicle type**
5. **Time of day**
6. **Roadway surface condition**
7. **Collision type**

Crash Trends

This section discusses the observed trends regarding all crashes that occurred within the MPO planning area during the analysis period.

Crashes by Year

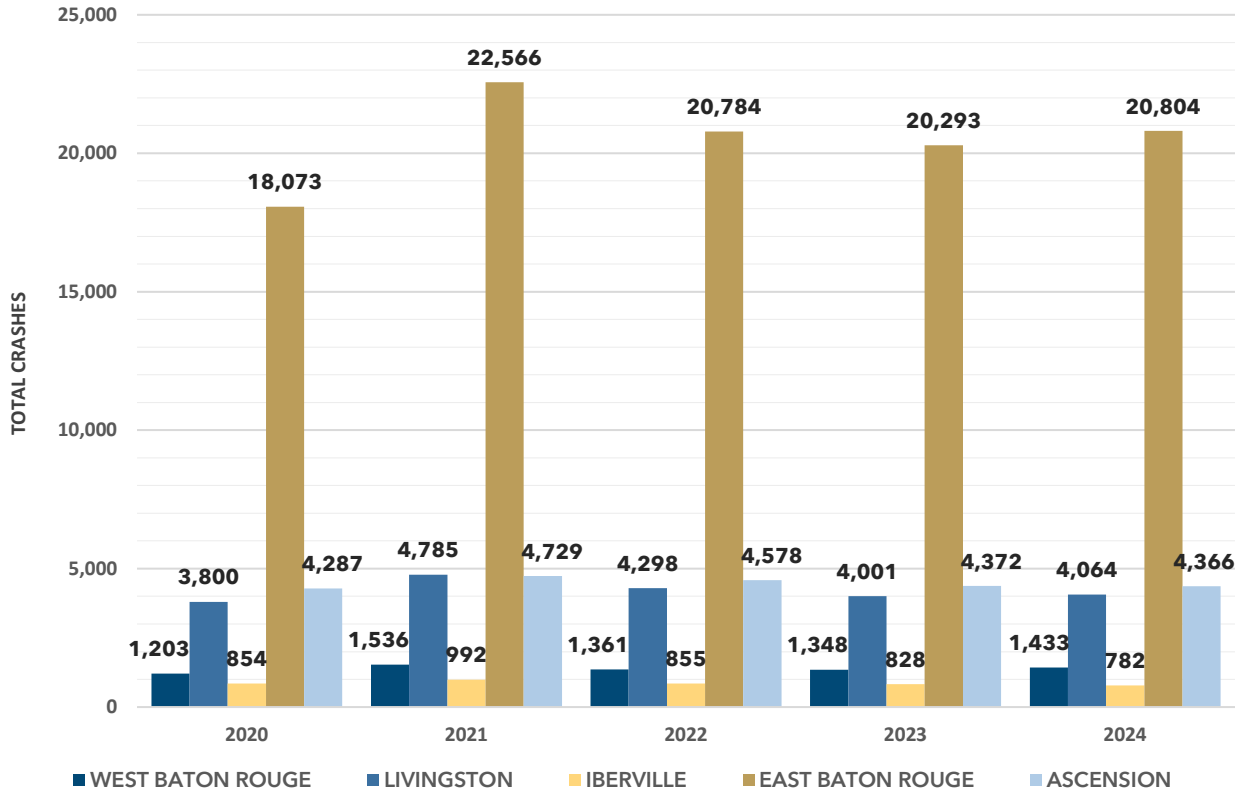
From 2020 through 2024, a total of 156,992 crashes occurred within the planning area. **Figure 4.9** displays the total number of crashes within the planning area by year and by parish.

Crash Severity

Crash severity reveals the extent to which crashes in the planning area pose a safety risk to roadway users. Within the planning area, 727 fatal crashes and 2,035 suspected serious injury crashes occurred during the analysis period. Approximately 1.8% of the total crashes resulted in a fatality or serious injury. **Figure 4.10** displays the severity breakdown of the crashes within the planning area.

74.0% of study area crashes resulted in Property Damage Only.

Figure 4.9: Crashes by Year and Parish, 2020 - 2024



Source: CARTS, 2026

The National Highway Traffic Safety Administration (NHTSA) uses the following criteria to define crash severities:

"K" Fatal injuries include deaths which occur within thirty days following injury in a motor vehicle crash.

"A" Severe injuries include skull fractures, internal injuries, broken or distorted limbs, unconsciousness, severe lacerations, severe burns, and unable to leave the scene without assistance.

"B" Moderate injuries include visible injuries such as a "lump" on the head, abrasions, and minor lacerations.

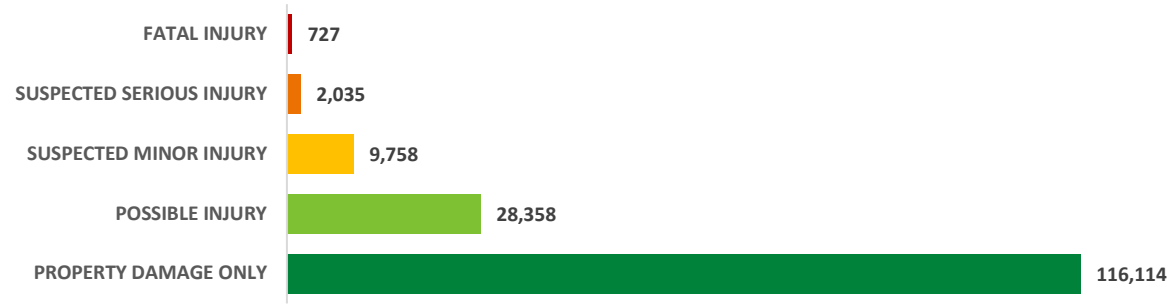
"C" Minor injuries include hysteria, nausea, momentary unconsciousness, and complaint of pain without visible signs of injury.

"O" No fatality or injury; property damage only.

"Unk Severity" Severity of injury unknown.

Model Minimum Uniform Crash Criteria (MMUCC) Guideline, 4th Edition. 23 CFR § 1300.3 KABCO

Figure 4.10: Severity of Fatal and Injury Crashes, 2020 - 2024



Source: CARTS, 2026

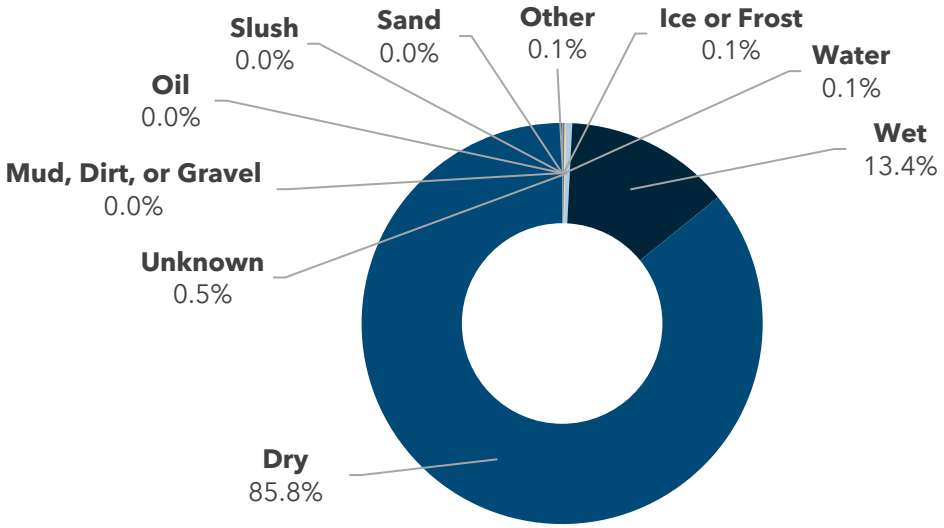
Driving Under the Influence (DUI) Crashes

From 2020 through 2024, 8,674 crashes, just under 6%, involved drivers under the influence of a substance (i.e., alcohol, drugs, etc.). However, DUI-related crashes accounted for 33% of fatal crashes within the area. While this proportion is consistent with statewide trends in Louisiana, the disproportionate number of fatal crashes associated with impaired driving displays an ongoing need for targeted enforcement and education efforts.

Roadway Surface Condition

The roadway surface can contribute to a crash when it experiences adverse conditions such as rain, oil, debris, or other sources. These conditions temporarily reduce the safety of the roadway. However, nearly 86% of the reported crashes occurred during dry conditions which means the roadway surface condition was not a contributing factor in most crashes. The distribution of crashes by surface condition is displayed in **Figure 4.11**.

Figure 4.11: Crashes by Roadway Surface Condition, 2020 - 2024



Source: CARTS, 2026

Nearly 140 crashes per year occurred during ice, frost, and slush conditions suggesting that adverse winter weather may present a safety challenge for drivers within the region.

Crash Times

Identifying when crashes occur can assist with developing countermeasures for crash locations affected by lighting, congestion, or other factors. The hour when the crashes occurred is displayed in **Figure 4.12**.

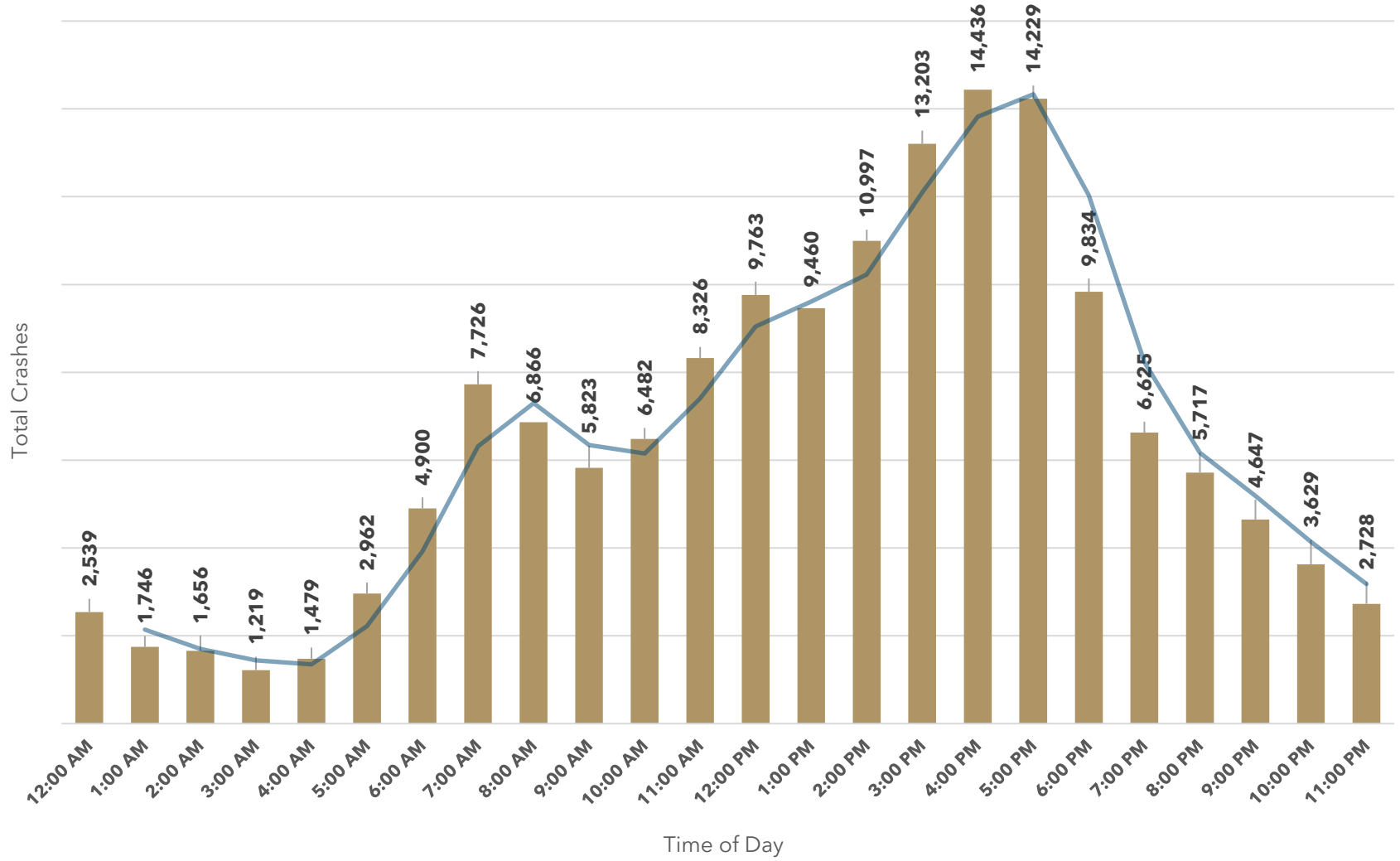
In general, the CRPC region experiences normal temporal trends for crashes within the planning area.

- Nearly 5% of crashes occurred during the morning commute from 7:00 AM to 8:00 AM.
- The lunch peak from 12:00 PM to 1:00 PM experienced approximately 6% of the daily crashes.
- The largest percentage of crashes based upon hour occurred during the evening commute from 4:00 PM to 5:00 PM, accounting for nearly 9% of the crashes.

Collision Type

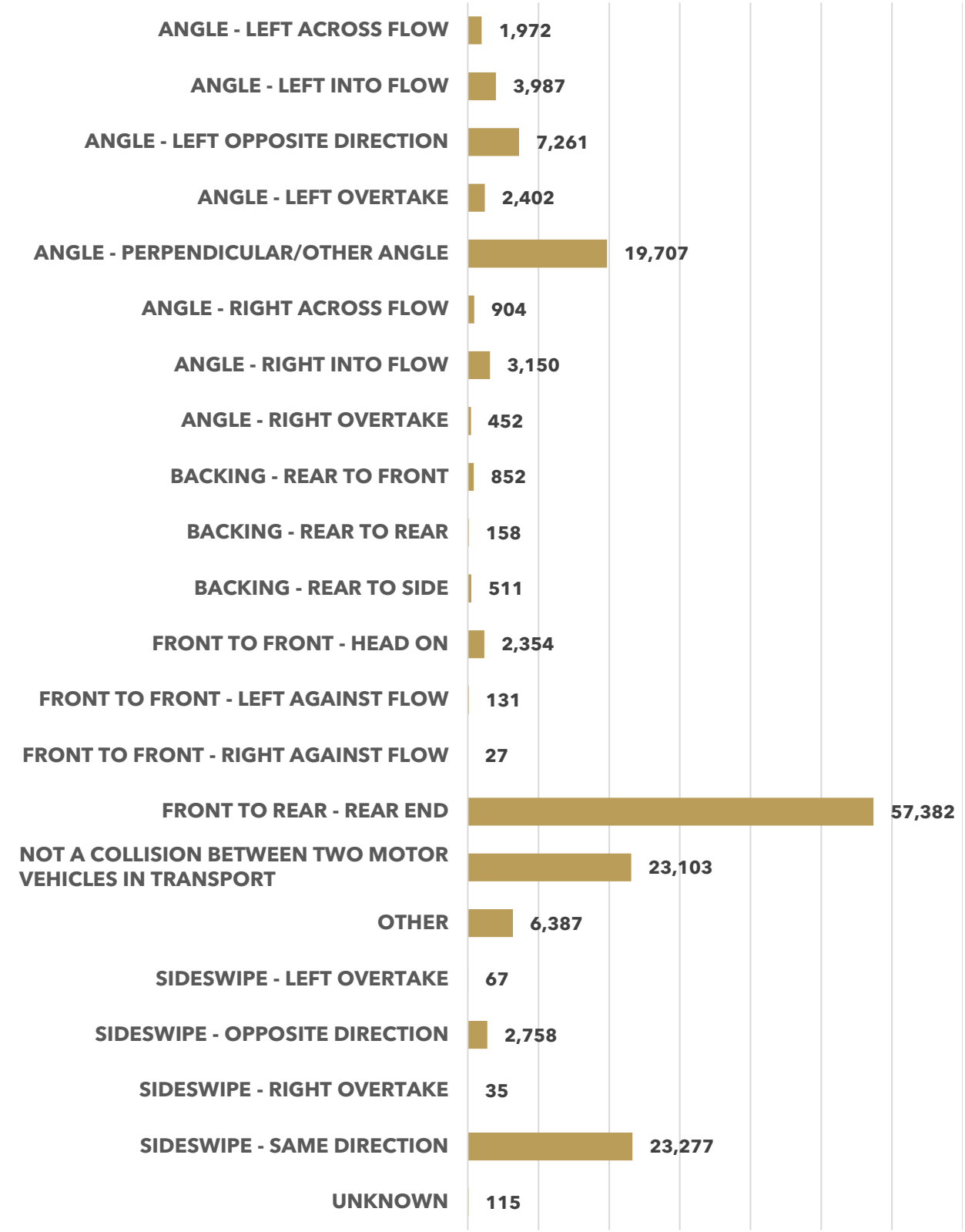
This study also considered collision types that occurred. **Figure 4.13** displays the crashes by collision type. The most common collision types, accounting for over three-quarters of crashes within the planning area, were rear end (37%), angle crashes (25%), "not a collision between two motor vehicles in transport" [likely single vehicle run-off-road, animals, debris] (15%), and sideswipe same direction (15%).

Figure 4.12: Crashes by Hour, 2020 – 2024



Source: CARTS, 2026

Figure 4.13: Crashes by Collision Type, 2020 – 2024



Source: CARTS, 2026

Crash Locations

The nature of this study is to identify trends. To support trend analysis, individual hazardous locations and corresponding crash records were not analyzed for specific solutions. Instead, the analysis focused on identifying corridor segment and intersection locations that experience the highest crash frequencies.

Crash frequencies reflect how often crashes occur at a given location and are expressed in crashes per year.

Segment Crashes

For this study, roadway segments are defined in two ways:

- A roadway link between two significant roadways.
- A roadway link between a significant roadway and a specific distance from that point.

Crashes on segments can occur due to roadway design, pavement condition, lighting, or other factors. A segment identified in this analysis should be further analyzed in additional studies to determine what contributes to the high crash frequency it experiences. These studies should also be used to develop site-specific countermeasures.

Table 4.5 displays the roadway segments in the CRPC region that have the highest crash frequencies. These locations are shown in **Figure 4.14**.

Disclaimer:

The hazardous locations shown in this report do not imply a ranking or prioritization of these locations but rather a list developed for informational purposes.

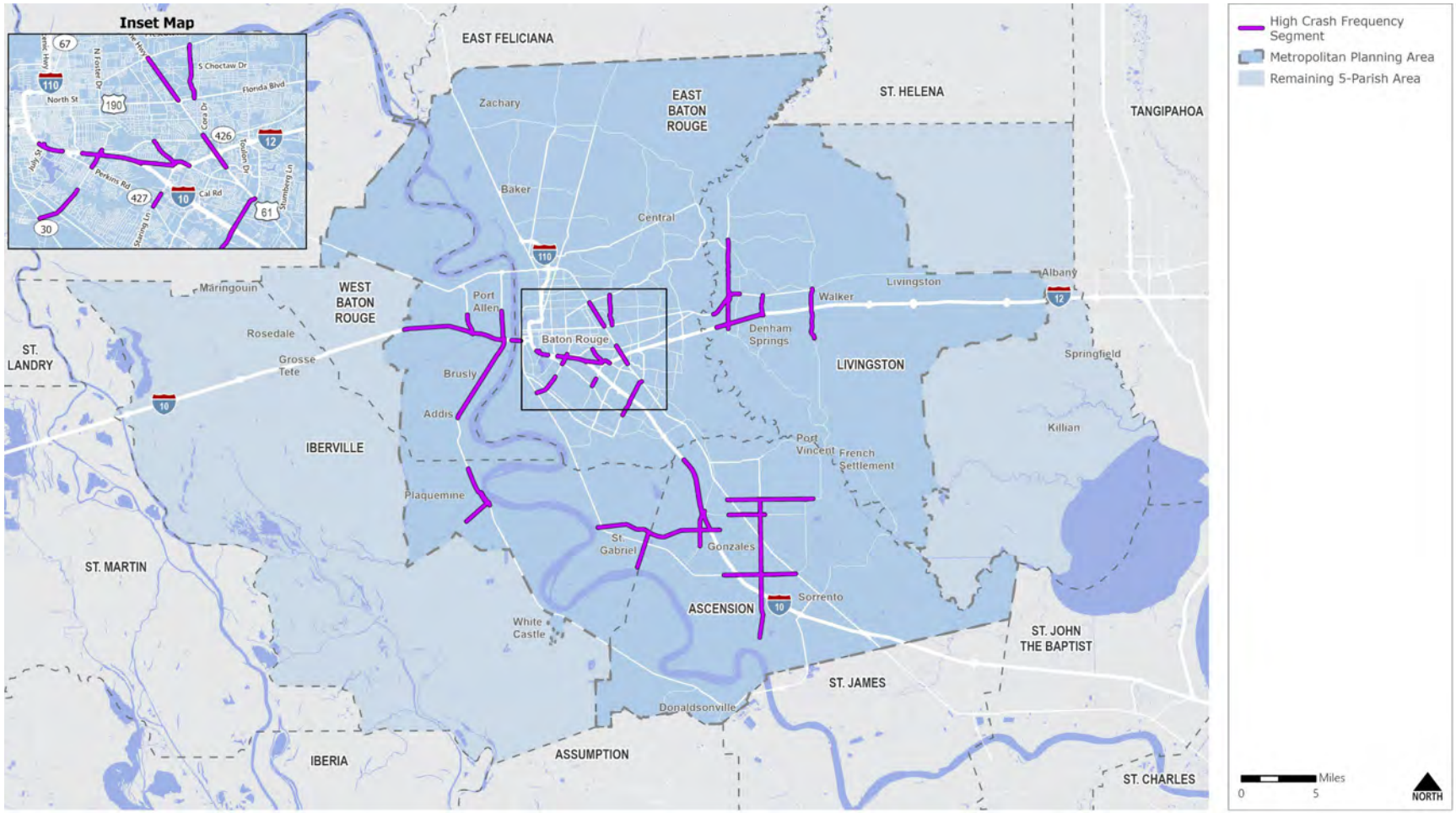
Table 4.5: Top Crash Frequency Segments, 2020 - 2024

Segment Roadway	From	To	Length (miles)	Total Crashes	Annual Average Crash Frequency	Average Annual Crash per Mile
Siegen Ln	I-10	Airline Hwy	1.8	3,094	618.8	353.2
W Hwy 30	Ashland Rd	Hwy 44 / Burnside Ave	5.3	2,025	405.0	76.9
Hwy 44 / Burnside Ave	I-10	Hwy 931 / Germany Rd	7.7	1,910	382.0	49.5
Airline Hwy	Coursey Blvd	Hammond Aire Plaza Parking Lot	2.8	1,904	380.8	133.6
Hwy 1 S	Bird Heights Ave	I-10	6.2	1,855	371.0	59.8
S Range Ave	Brass Pro Dr	US 190 / Flordia Ave	2.9	1,843	368.6	129.3
College Dr	Perkins Rd	Corporate Blvd	1.4	1,601	320.2	222.5
Walker South Rd	I-12	Burgess Ave	1.5	1,543	308.6	205.1
W Lee Dr	Nicholson Dr	Bennett Dr	1.9	1,187	237.4	127.1
Hwy 16 / N Range Ave	US 190 / Flordia Ave	Arnold Rd	6.5	1,122	224.4	34.3
I-10 WB	Perkins Rd	Dalrymple Dr	1.0	1,099	219.8	225.0
Airline Hwy	US 190	Greenwell Springs Rd	3.7	1,051	210.2	56.2
Hwy 73	Cornerview Rd	Hwy 621	2.6	1,006	201.2	76.6
Siegen Ln	Perkins Rd	I-10	1.4	963	192.6	142.3
I-10 WB	I-12 Split	College Dr	2.1	923	184.6	90.0
Jefferson Hwy	I-12	Corporate Blvd	1.6	883	176.6	112.1
Essen Ln	Perkins Rd	Suma Ave	0.5	795	159.0	298.0
I-10 WB	College Dr	Acadian Thruway	0.8	789	157.8	201.4
I-10 EB	Parish Line	Nicholson Dr	0.6	770	154.0	250.0
Hwy 1	Barrow St	Woodlawn Rd	5.8	760	152.0	26.4
Oak Villa Blvd	Tom Dr	Greenwell Springs Rd	2.9	710	142.0	49.4
US 190 / Florida Ave	4-H Club Rd	Pete's Hwy	2.4	703	140.6	59.4
Hwy 931 / Germany Rd	Airline Hwy	Hwy 931	5.9	687	137.4	23.3
Juban Rd	Buddy Ellis Rd	US 190 / Flordia Ave	1.9	680	136.0	72.6
Hwy 74	Hwy 3115	Chester Diez Rd	5.3	582	116.4	22.1
Hwy 415	I-10	Rosedale Rd	2.0	577	115.4	57.4
I-10 WB	Essen Ln	I-10 Split	1.2	523	104.6	87.2
Hwy 1 S	I-10	Rosedale Rd	3.7	496	99.2	26.7
Hwy 44 / Burnside Ave	I-10	Hwy 22	3.6	451	90.2	25.0

Segment Roadway	From	To	Length (miles)	Total Crashes	Annual Average Crash Frequency	Average Annual Crash per Mile
Hwy 621	J D Broussard Rd	Hwy 44 / Burnside Ave	2.4	448	89.6	36.9
I-10 EB	Bluff Rd	Hwy 73	4.3	360	72.0	16.8
I-10 EB	Hwy 415	Hwy 1	2.2	355	71.0	32.1
Walker South Rd	Drakeford McMorris Rd	I-12	1.9	354	70.8	37.7
I-12 WB	Juban Rd	Range Ave	2.9	322	64.4	22.5
I-10 EB	Sabine Ln	Hwy 415	4.9	314	62.8	12.9
I-10 WB	Hwy 73	Bluff Rd	4.2	309	61.8	14.9
Belleview Rd	Church St	Tenant Rd	2.0	289	57.8	29.4
I-12 EB	Range Ave	Juban Rd	2.8	201	40.2	14.6
I-10 WB	Hwy 74	Hwy 73	1.5	154	30.8	20.8
I-12 WB	Range Ave	Parish Line	1.0	149	29.8	29.2
I-12 EB	Parish Line	Range Ave	0.8	125	25.0	30.4
Hwy 74	Hwy 75	Hwy 3115	3.5	111	22.2	6.3
Hwy 3115	Hwy 75	Hwy 74	2.5	101	20.2	8.1

Source: CARTS, 2026

Figure 4.14: High Crash Frequency Corridor Segments, 2020 - 2024



Source: CARTS, 2026

Intersection Crashes

Nearly 16,000 intersection crashes occurred in the study area during the analysis period from 2020 to 2024. **Table 4.6** shows the seven intersections in the MPO planning area with the highest crash frequency. These locations are displayed in **Figure 4.15**.

Additional studies should be conducted on these intersections to identify the cause of the crashes and countermeasures to reduce the severity and types of crashes they experience.

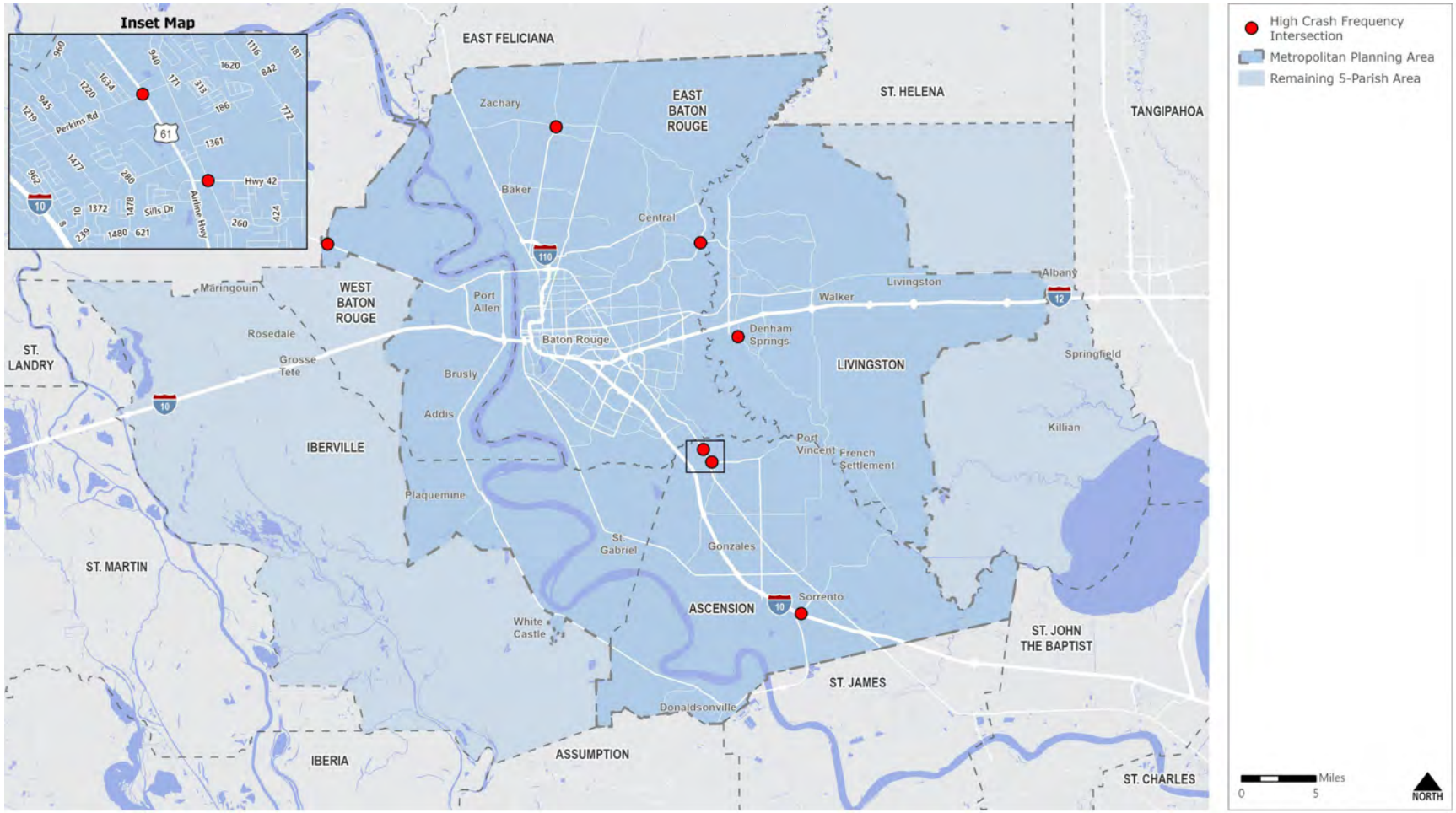
Table 4.6: Top Crash Frequency Intersections, 2020 - 2024

Intersection	Total Crashes	Annual Average Crash Frequency
Hwy 19 at Main St	178	35.6
Greenwell Springs Rd at Magnolia Bridge Rd	176	35.2
Hwy 73 at Hwy 42	163	32.6
Airline Hwy at Perkins Rd	138	27.6
Hwy 22 at I-10 NB Ramp	112	22.4
US 190 at Poydras Bayou Dr	82	16.4
Vincent Rd at Pete's Hwy	71	14.2

Source: CARTS, 2026

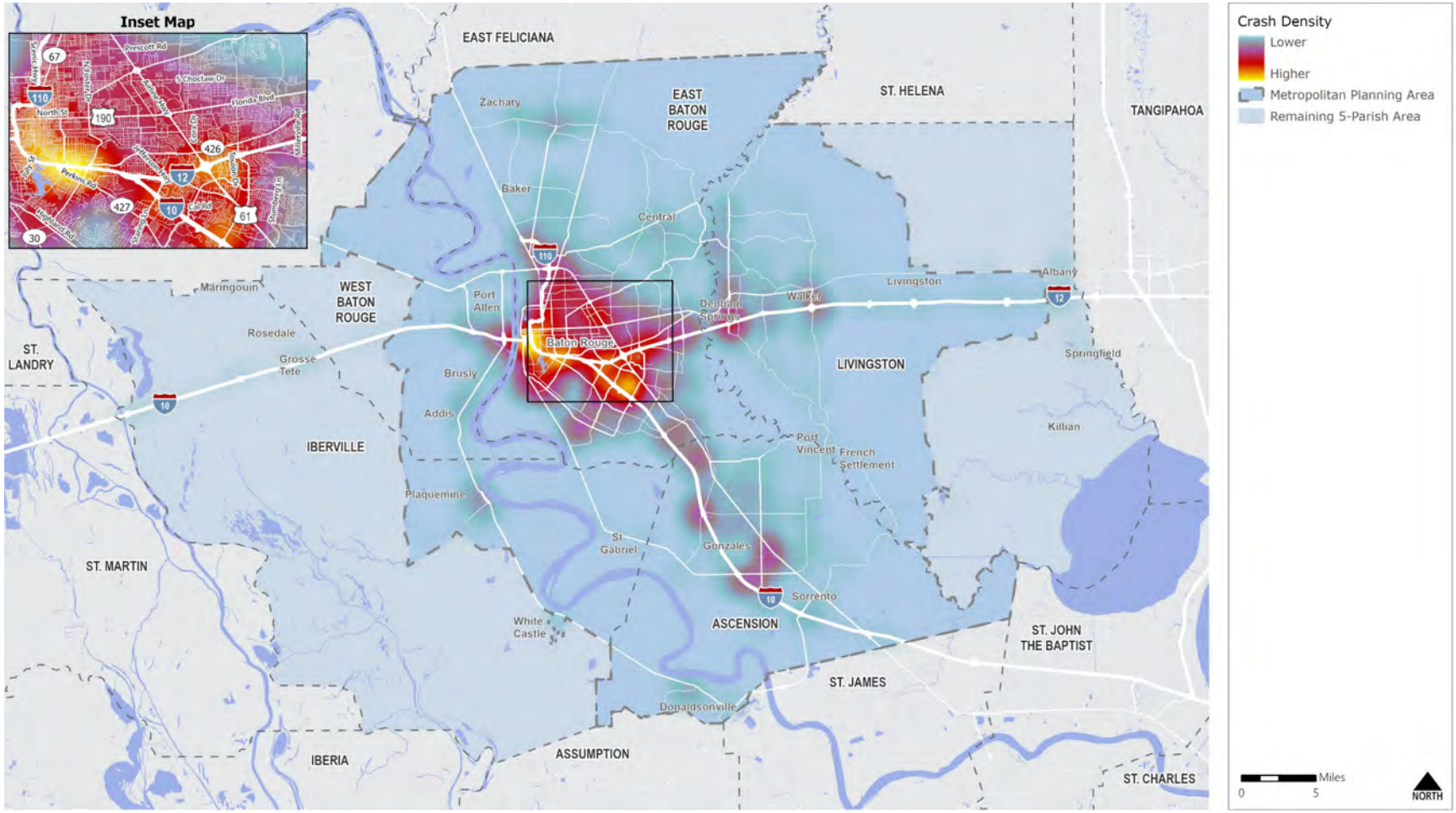
In addition to corridor and segment crash locations, all crashes were analyzed to understand relative crash density within the study area. This, displayed as a heat map, can be seen in **Figure 4.16.**

Figure 4.15: High Crash Frequency Intersections, 2020 - 2024



Source: CARTS, 2026

Figure 4.16: Crash Density Heat Map, 2020 – 2024



Source: CARTS, 2026

4.8 Security

While safety and security are closely related, they are differentiated by the cause of the harm from which the transportation system and its users are being protected. Transportation network safety concerns involve:

- vehicular crashes
- train derailments
- slope failures
- sudden destruction of roadways
- non-motorized user injuries

Security often involves the prevention, management, and response to intentional harm to the transportation system or its users including:

- theft or dismemberment of elements of the transportation infrastructure
- assault on users of the system or acts of violence
- large-scale attacks/terrorism intended to disrupt the movement of people and goods

Security concerns can also include natural disasters such as hurricanes, earthquakes, or extreme weather.

MPO Role in Security

The MPO's main role in planning for security is to coordinate with relevant agencies regarding prevention, management, response, and recovery efforts. These include:

- emergency management agencies
- police and sheriff's departments
- fire departments
- first responders

Prevention

When discussing security, prevention refers to efforts to limit access to resources that may be compromised or efforts to increase surveillance. Examples of prevention measures include:

- security alarms
- fencing
- locks
- access control systems
- architectural barriers
- CCTV systems

The design of facilities and public spaces can also incorporate features that deter security breaches.

Protection

Protection involves physical and cybersecurity measures, and, as such, often overlaps with prevention. Facilities that are high-risk and vulnerable should consider additional security and design measures to mitigate potential security risks. Protection efforts could also include law enforcement where necessary.

Response

Redundancy of transportation facilities should be encouraged in capital project planning. It allows for emergency evacuations or detours if a particular segment of the transportation network becomes unavailable. Redundancy is particularly important for the planning area due to the risk of hurricanes. The use of Intelligent Transportation Systems (ITS) can assist in security responses by controlling traffic signals and other traffic control devices.

Recovery

Transportation decision-makers should be familiar with both short-term and long-term recovery plans for the CRPC region. These plans can include everything from evacuations to restoring local businesses and neighborhoods.

Key Security Participants

The MPO serves in a support role when responding to security events and concerns. The MPO can coordinate between the agencies including the key agencies and organizations listed below.

State and Local Governments

Within the State of Louisiana, the Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP) provides plans and services for emergency management. The stated vision of GOHSEP is "to serve as an extension of the Office of the Governor and provide sound leadership during crisis events while also enhancing the day-to-day state agency programs servicing Louisiana residents, businesses, and organizations."[5] More information about GOHSEP's services and operations can be found on their website.[6]

Within the planning area, emergency preparedness planning for each parish is coordinated by the respective Parish Office of Homeland Security and Emergency Preparedness (OHSEP).

[5] GOHSEP Vision, Mission, and Goals - GOHSEP | Governor's Office of Homeland Security & Emergency Preparedness
[6] Home - GOHSEP | Governor's Office of Homeland Security & Emergency Preparedness

More information can be found at the following links:

- **Ascension Parish –** Emergency Preparedness
- **East Baton Rouge Parish -** Emergency Preparedness
- **Iberville Parish -** Emergency Preparedness
- **Livingston Parish -** Emergency Preparedness
- **West Baton Rouge Parish -** Emergency Preparedness

Louisiana State University (LSU)

The University's Office of Emergency Preparedness (OEP) is responsible for mitigation, preparedness, response, and recovery activities related to natural, technological, and human-caused disasters[7]. The emergency plan includes:

- Active Threat Emergency Response Plan
- Continuity of Operations Plan
- Emergency Operations Plan
- Medical Response Plan
- 911 Cellular Desktop Panic Alarm Procedure
- Building Emergency Action Plans

Southern University and A&M College

The university maintains an emergency preparedness plan that includes elements for[8]:

- Fire or explosion
- Severe weather / storms
- Flooding
- Bomb threats
- Armed Intruder/Assailant
- Hazardous Material Incident
- Terrorist Attacks

Baton Rouge Community College (BRCC)

The college has an Emergency Preparedness and Response Plan[9] which is executed by the Crisis Management Team in response to any planned or unplanned events or incidents at BRCC locations.

Riverside Parish Community College (RPCC)

All RPCC campuses maintain an Emergency Preparedness Plan that provides guidance for responding to a variety of emergencies that may occur on or near campus [10].

[7] LSU Office of Emergency Preparedness
[8] Southern University and A&M College Campus Safety
[9] Emergency Preparedness Response Plan | BRCC
[10] RPCC ALL-HAZARDS EMERGENCY RESPONSE PLAN

Integration of Intelligent Transportation Systems (ITS)

Through the Baton Rouge Regional Architecture Plan[11], the MPO supports investment in ITS technologies that includes surveillance and security related elements.

Strategic Highway Network (STRAHNET)

The STRAHNET is a portion of the NHS considered vital to the nation's strategic defense. The current STRAHNET:

- Includes approximately 61,000 miles of roadway
- Includes all Interstate routes
- Links military installations with roadways that provide for the mobility of strategic military assets

Within the planning area the STRAHNET facilities currently included are I-10, I-12, and I-110. These facilities will need additional considerations, such as maintaining roadway pavements and bridges in a State of Good Repair, prioritizing maintenance, and providing congestion management.

[11] Baton Rouge Regional ITS Architecture

5.0 Freight

5.1 Introduction

Freight movement throughout the planning area affects both the regional and national economy. The region is a generator of freight as well as a distribution and processing center for many goods. It is home to many freight facilities including major highways, Class I railroads, and Port of Greater Baton Rouge.

This chapter provides an overview of freight facilities within the planning area using big data sets like the National Transportation Atlas Database (NTAD) and the Freight Analysis Framework (FAF). It also uses data from existing plans and datasets, local partner agencies, and LADOTD. The chapter discusses how various transportation modes affect travel within the planning area and the region's infrastructure.

5.2 Supporting Plans and Goals

Federal

Federal legislation has increased incentives for states to focus on freight transportation investments. The provisions embodied in the 2021 Infrastructure Investment and Jobs Act (IIJA) established new dedicated freight programs and funding sources intended to address freight needs that produce public benefits.

National Freight Goals

The current transportation legislation is the IIJA. Per 49 U.S.C. 70101 (b) of the FAST Act which was amended in the IIJA, ten National Multimodal Freight Policy Goals[12] were identified:

1. Identify infrastructure improvements, policies, and operational innovations that -
    a. Strengthen the contribution of the National Multimodal Freight Network to the economic competitiveness of the United States.
    b. Reduce congestion and eliminate bottlenecks on the National Multimodal Freight Network.
    c. Increase productivity, particularly for domestic industries and businesses that create high-value jobs.
2. Improve the safety, security, efficiency, and resiliency of multimodal freight transportation.

[12] BILLS-117hr3684enr.pdf

3. Achieve and maintain a state of good repair on the National Multimodal Freight Network.
4. Use innovation and advanced technology to improve the safety, efficiency, and reliability of the National Multimodal Freight Network.
5. Improve the economic efficiency and productivity of the National Multimodal Freight Network.
6. Improve the reliability of freight transportation.
7. Improve the short- and long-distance movement of goods that –
    a. Travel across rural areas between population centers.
    b. Travel between rural areas and population centers.
    c. Travel from the Nation's ports, airports, and gateways to the National Multimodal Freight Network.
8. Improve the flexibility of States to support multi-State corridor planning and the creation of multi-State organizations to increase the ability of States to address multimodal freight connectivity.
9. Reduce the adverse environmental impacts of freight movement on the National Multimodal Freight Network.
10. Pursue the goals described in this subsection in a manner that is not burdensome to State and local governments.

State



The *2024 Louisiana State Freight Plan*[13] is Louisiana's statewide comprehensive freight plan. Freight transportation is a critical part of economic development, job creation, and global growth for the State. Efficient movement of goods to, from, and through Louisiana is also closely linked with manufacturing which supports jobs throughout the state.

Due to state economy's reliance on freight transportation, LADOTD recognizes the importance of planning, designing, and constructing freight networks. The freight plan was developed to provide guiding principles for the efficient movement of people and freight.

13 http://www.dotd.la.gov/Inside_LADOTD/Divisions/Multimodal/Misc_Documents/2024%20Louisiana%20State%20Freight%20Plan.pdf

The purpose of this freight plan is threefold:

1. Define strategic goals for the Louisiana freight system.
2. Establish a strategy to achieve freight-related goats that align with LADOTD's guiding principles.
3. Fulfill the requirements of the FAST Act and subsequent IIJA.

5.3 Trucking

Data for this analysis was derived from the FAF and the region's travel demand model. The FAF provides data for the Baton Rouge area which offers insights into the region's freight patterns. According to the FAF, freight transported by truck accounts for nearly one-quarter of the total freight tonnage within the planning area as shown in **Table 5.1**.

Table 5.1: Means of Transportation Freight in Baton Rouge Region, 2024

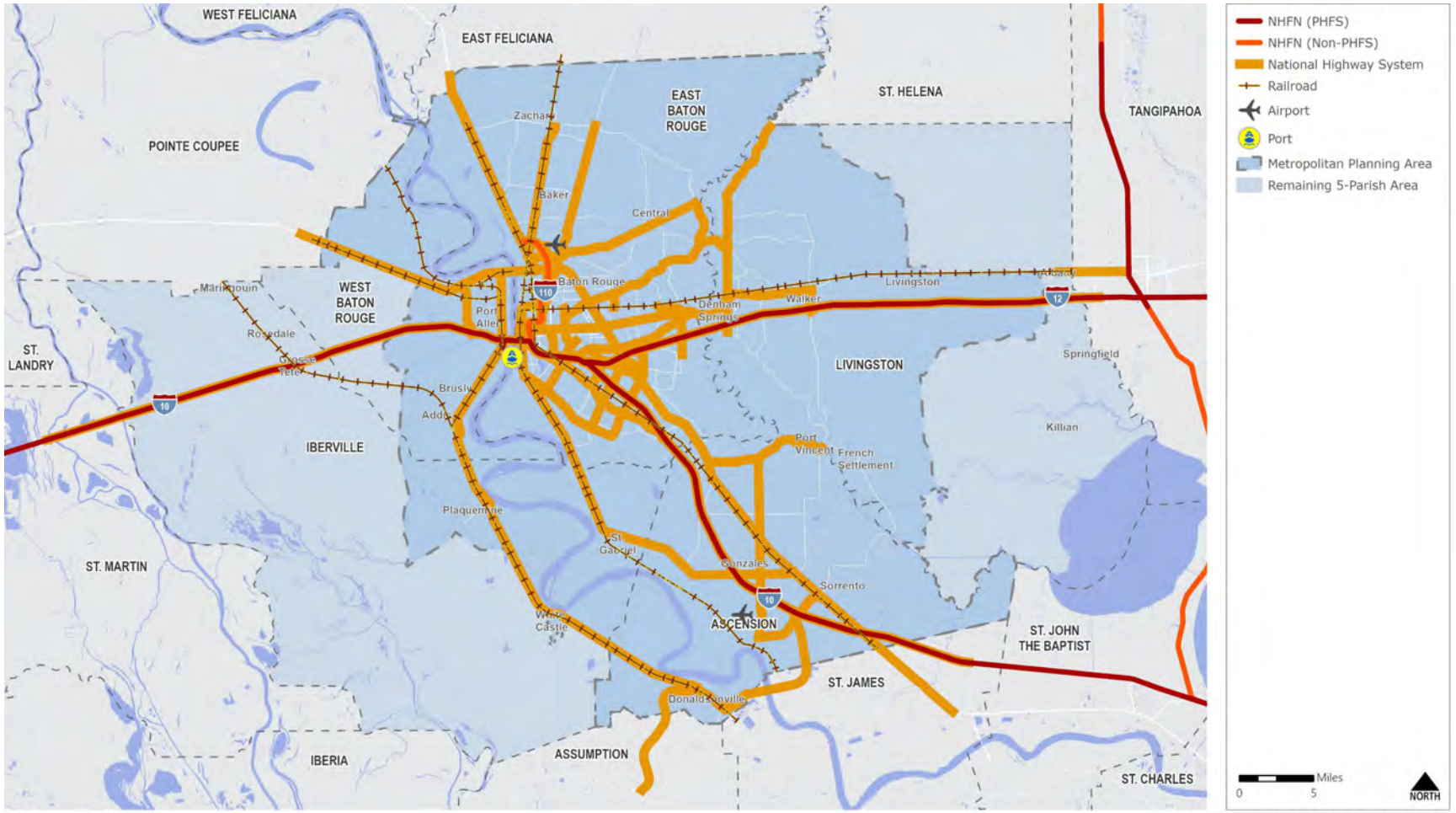
Mode	Domestic Origin		Domestic Destination	
	Thousand Tons	Percent	Thousand Tons	Percent
Truck	46,144	24.3%	46,585	19.7%
Pipeline	63,356	33.4%	120,154	50.7%
Rail	23,907	12.6%	25,392	10.7%
Multiple modes & mail	11,708	6.2%	7,192	3.0%
Water	44,465	23.5%	37,636	15.9%
Air (includes truck-air)	9	< 0.1%	3	< 0.1%
Other and unknown	7	< 0.1%	4	< 0.1%
Total	**189,597**	**100%**	**236,966**	**100%**

Source: Freight Analysis Framework 5.5, 2024

The planning area contains several roadways that are part of the state freight network as shown in **Figure 5.1**. I-10, I-12, and I-110 pass through the region and provide critical access for freight transportation. Among these interstates, I-10 and I-12 are part of the Primary Highway Freight System (PHFS), while I-110 is part of the Non-Primary Highway Freight System (Non-PHFS)[14]. The planning area also includes one major intermodal facility, the Port of Baton Rouge, which is connected to the National Highway System (NHS) and provides direct access to multiple freight modes including ship, barge, truck, and rail[15].

[14] National Highway Freight Network
[15] NHS Intermodal Freight Connectors - FHWA

Figure 5.1: Freight Truck Network and Facilities



Data Sources: USACE

Disclaimer: This map is for planning purposes only.

Volumes and Commodity Flows

To better understand the planning area's freight needs, the travel demand model's daily truck volumes were reviewed. These volumes are illustrated in **Figure 5.2**. The greatest truck volumes are on:

- I-10
- I-12
- I-110
- US 61
- Sherwood Forest Blvd
- Bluebonnet Blvd
- US 61 BUS
- LA 1248
- LA 30
- LA 42

These corridors play an important role in supporting freight mobility within the planning area. However, the concentration of heavy vehicle traffic also has implications for infrastructure performance. The weight of heavy vehicles, such as freight trucks, places significant strain on pavement structures. This pavement degradation is further amplified during periods of extremely hot weather when the pavement becomes softer and more susceptible to deformation (e.g., rutting).

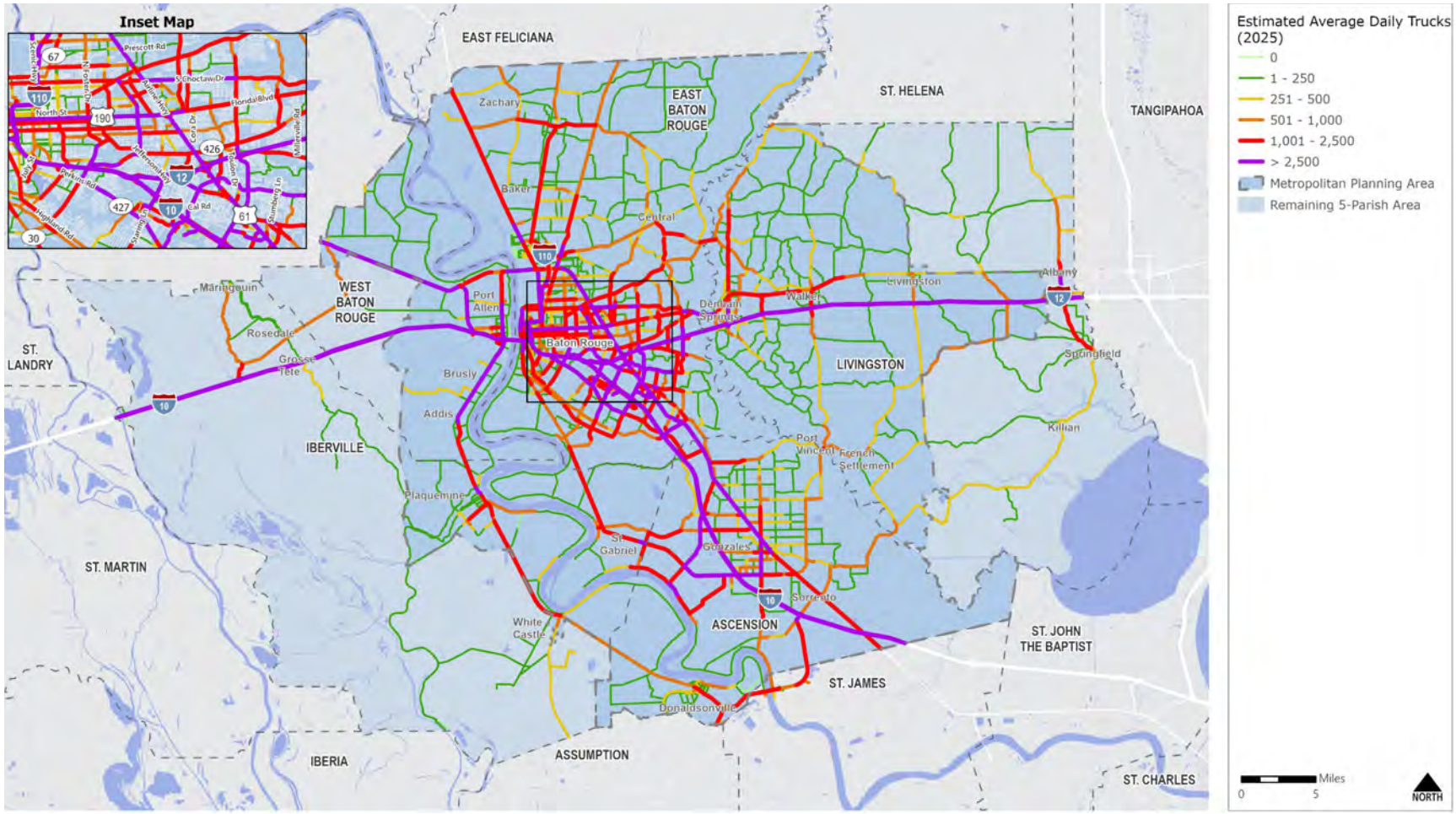


Example of rutting
Source: pavementinteractive.org

Corridors with high freight truck volumes require ongoing monitoring and maintenance to keep pavements in good condition and to avoid potential safety concerns, increased operational costs, or unplanned emergency closures.

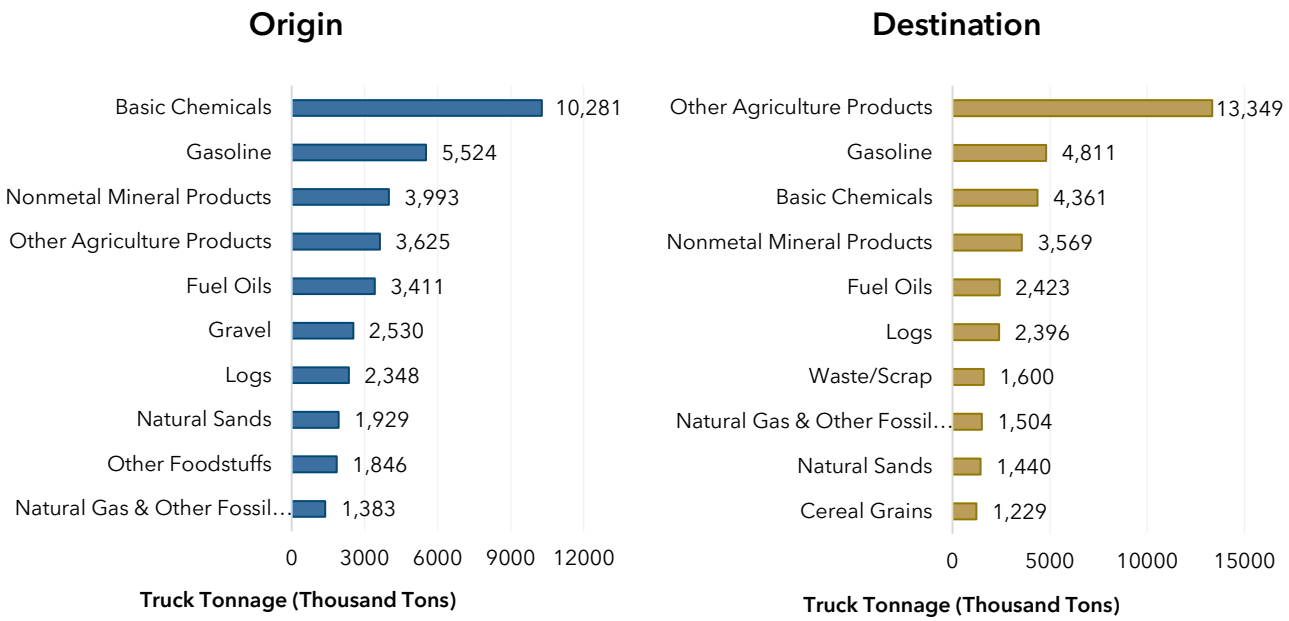
The FAF provides data on commodity flows by truck, including freight originating from and destined to the planning area. **Figure 5.3** presents the top commodities transported by truck to and from the planning area based on total tonnage.

Figure 5.2: Freight Truck Traffic, 2025



Source: CRPC Travel Demand Model (TDM)

Figure 5.3: Top Commodities by Truck Tonnage, 2025



Source: Freight Analysis Framework 5.5, 2025

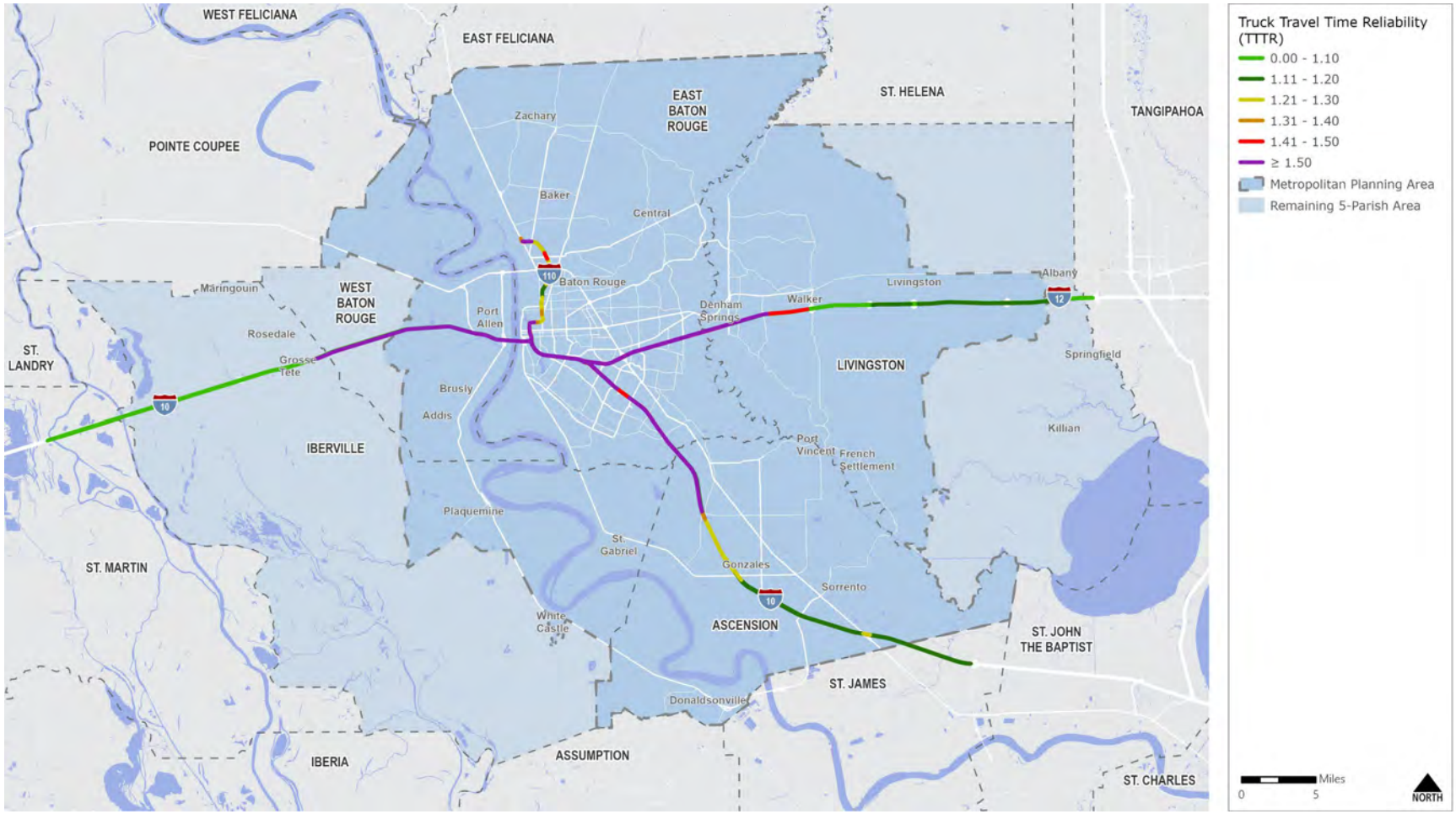
Truck Travel Time Reliability

The FHWA has established a freight performance measure to capture truck travel time reliability on the Interstate highway system: the Truck Travel Time Reliability (TTTR) index[16]. Three interstate routes, I-10, I-12 and I-110, serve as the primary corridors for truck freight movement within the planning area. **Figure 5.4** displays the index rating for all interstate routes in the planning area. For this index, a rating of 1 is the lowest possible rating and signifies no delay. Higher scores, especially scores over 1.5, signify less reliability and greater delay.

In 2025, the TTTR Index within the region is 1.91. The state's freight performance targets and the progress towards meeting them within the planning area are discussed in *Appendix #3: Transportation Performance Management*.

16 https://www.fhwa.dot.gov/tpm/rule/pm3/freight.pdf

Figure 5.4: Truck Travel Time Reliability, 2025

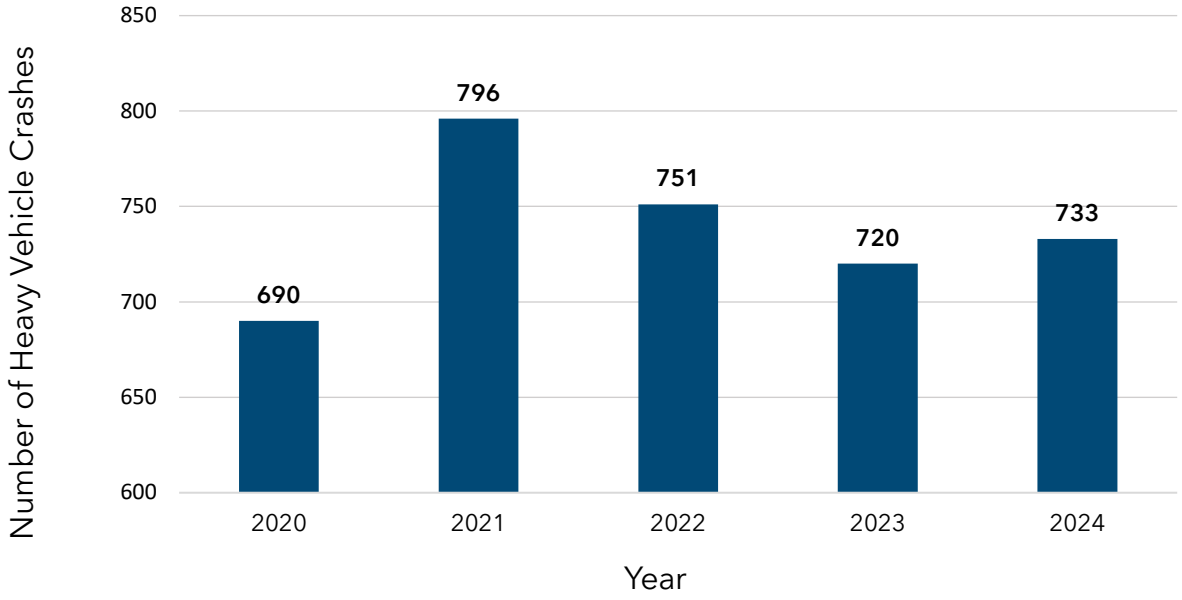


Source: FHWA National Performance Management Research Data Set (NPMRDS), 2025

Safety

Crashes involving heavy vehicles were analyzed using crash records from 2020 to 2024 obtained from LADOTD. A total of 3,690 crashes involving heavy vehicles occurred within the planning area as shown by year in **Figure 5.5**. Within the planning area, heavy vehicle crashes accounted for just over 2% of total crashes and 9% of total fatal crashes in the region.

Figure 5.5: Heavy Vehicle Crashes by Year, 2020-2024



Source: LADOTD

Bottleneck Segments and Truck Freight Network

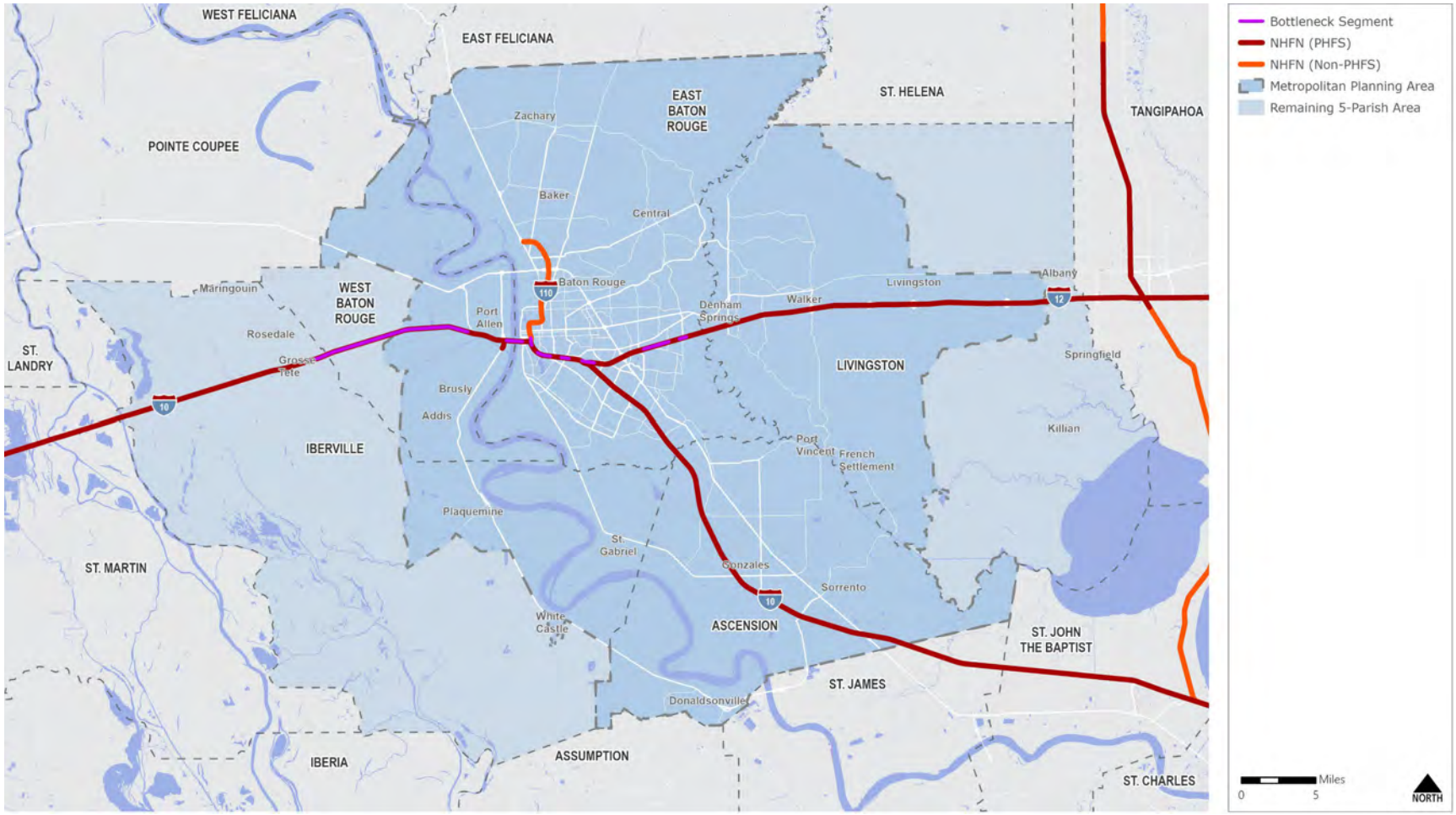
Traffic bottlenecks disrupt vehicular traffic and can result from several conditions. These conditions, listed to the right, become concerns for freight movement as they result in unreliable traffic, increased travel time, and scheduling challenges.

Figure 5.6 displays the top bottleneck segments that overlap the state freight network within the planning area.

Common bottleneck conditions:

- Lane Reductions
- Weaving Areas
- Freeway On/Off Ramps
- Freeway-to-Freeway Interchanges
- Changes in Roadway Alignment
- Tunnels and Underpasses
- Narrow Lanes or Lack of Shoulders
- Traffic Control Devices/Signals

Figure 5.6: Bottleneck Segments and Truck Freight Network



Source: National Highway Freight Network (NHFN), 2025

5.4 Railways

The Louisiana freight rail system consists of over 2,900 route miles and is operated by six large Class I railroads and 15 smaller local, switching, and terminal railroads. Union Pacific (UP), Canadian National (CN), and Kansas City Southern (KCS) are the Class I railroads operating within the planning area. These railroads are displayed in **Figure 5.7** and have a combined total length of approximately 226 miles.

Volumes and Commodity Flows

The number of rail trips within the planning area is not readily available. Additional information can be obtained by contacting the region's rail partners and LADOTD. According to FAF data presented earlier in **Table 5.1**, rail accounts for approximately 13% of outbound freight movements and approximately 11% of inbound freight movements within the region.

Safety

According to the LADOTD crash database, 62 crashes in the planning area involved automobiles and trains between 2020 and 2024.

Train Incidents

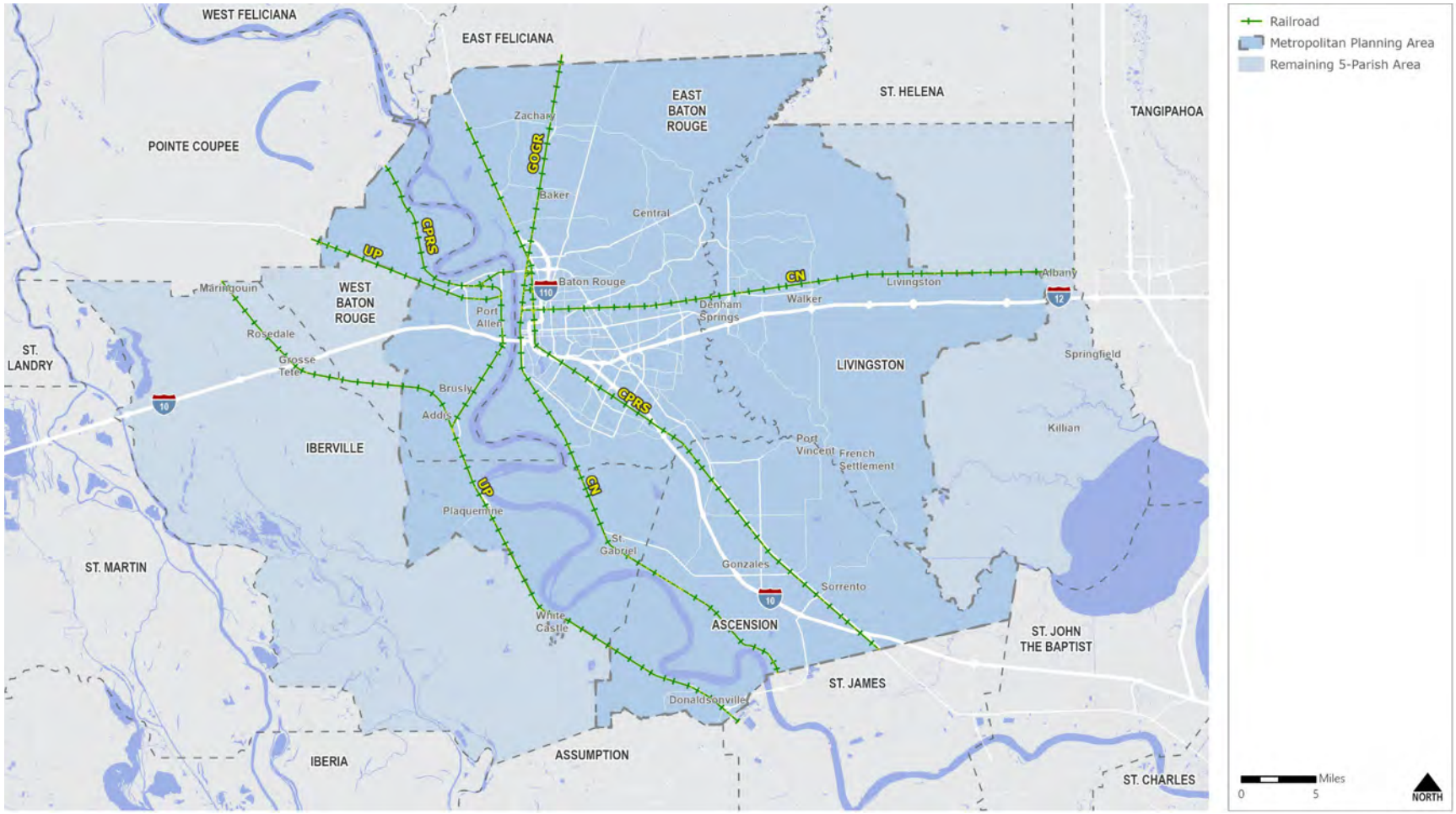
According to the FRA, 45 reported train incidents occurred in the planning area between 2020 and 2024 that were not at highway-rail crossings[17].

Control Devices at Railroad Crossings

Highway–railroad grade crossings are locations where a highway crosses a railroad at-grade. Due to the potential for conflicts between trains and roadway users, warning/control devices are required at these crossings to avoid collisions. Warning devices are either passive or active. Passive devices include crossbucks, yield or stop signs, and pavement markings as shown in **Figure 5.8(a)**. Active devices include flashing lights, bells, and gates in addition to most passive warning devices as shown in **Figure 5.8(b)**. **Table 5.2** shows the breakdown of public at-grade highway-railroad crossings within the planning area.

[17] FRA Safety Data – Train Accidents

Figure 5.7: Freight Rail Network and Facilities



Source: Federal Railroad Administration (FRA)

Figure 5.8: Railway Crossing Control Devices



(a) Passive control devices (b) Active control devices

Image Source: Openstreetmap.us, okSolar.com

Table 5.2: Planning Area Public At-Grade Highway-Railroad Crossings

Crossing Type	Number	Percent
Active (Flashing lights)	52	17
Active (All other gates)	136	45
Passive (Stop signs)	8	3
Passive (Crossbucks only)	109	36
Total	**305**	**100**

5.5 Air Cargo

Inventory

Airports serve as distribution and manufacturing hubs for air freight. The planning area includes one regional airport in Baton Rouge: Baton Rouge Metropolitan Airport (BTR). BTR is a public-use airport located approximately 5 miles north of downtown Baton Rouge [18].

[18] Baton Rouge Metropolitan Airport

The airport is adjacent to Interstate 110 and is accessible via Veterans Memorial Boulevard and Captain Ryan Drive. It is owned and operated by the City of Baton Rouge, Parish of East Baton Rouge, and the Baton Rouge Metropolitan Airport Commission. The airport offers air cargo operations through its 33,000-square-foot cargo facility.

While only a small amount of freight is shipped by air, **the commodities transported by this mode tend to be high-value and time sensitive.**

Louisiana Regional Airport, located in Gonzales, Louisiana, is also within the planning area. However, it does not provide commercial air service and functions as a general aviation facility.

Volumes and Commodity Flows

Cargo data is not readily available for BTR. As presented in **Table 5.1**, freight moved by air within the planning area accounts for less than a tenth of a percent of tonnage.

5.6 Waterway Network

Inventory

Louisiana has 17 major waterway corridor segments that are categorized as either deep-draft, inland, or coastal. Some of these waterways pass through the planning area. The Port of Greater Baton Rouge serves as the primary maritime freight hub in the region. It is located at the convergence of the Mississippi River and the Gulf Intracoastal Waterway[19]. This location provides connectivity to major ports between north Florida and south Texas as well as access to the broader Mississippi River inland waterway system. As the head of deepwater navigation on the Mississippi River, the port is supported by a maintained 45 to 50-foot shipping channel extending to the Gulf of Mexico. It offers strong intermodal connectivity with direct access to ship, barge, truck, and rail. Ranked 8th in the nation and 65th globally in total tonnage, the port handles over 73 million tons of cargo annually according to 2023 data[20].

Volumes and Commodity Flows

Waterways account for nearly a quarter of inbound freight and approximately 16% of outbound freight in the region, totaling over 80,000 thousand tons, as presented in **Table 5.1**.

[19] Port of Greater Baton Rouge
[20] Port Report: 2024 Annual Comprehensive Financial Report

5.7 Pipeline Network

Inventory

Approximately 50,000 miles of pipelines are located in the state according to the Department of Natural Resources (DNR). Within Louisiana, the highest concentration of pipelines is found in the coastal parishes such as Lafourche and Terrebonne Parishes.

The planning area's pipeline network is primarily composed of gas transmission pipelines and hazardous liquid pipelines[21].

Volumes and Commodity Flows

As presented in **Table 5.1**, pipelines within the planning area account for over 30% of inbound and half of outbound freight. Gasoline is the top commodity for freight movements originating from the planning area, while natural gas and other fossil products are the top commodities for freight movements destined to the planning area.

[21] National Pipeline Mapping System

6.0 Active Transportation

This chapter provides an overview of the existing active transportation facilities within the planning area including , facility classifications, locations, and safety considerations, A discussion of previous plans and studies which focus on bicycle and pedestrian infrastructure is also included.

The active transportation network directly affects **how people move, engage, and interact** within their communities. .

6.1 Classification of Bicycle and Pedestrian Facilities

Active transportation facilities provide dedicated or shared spaces for people to walk and bike for transportation or recreation. While all facilities aim to provide safe, convenient, and comfortable access, different facilities are used for differing contexts, functions, and anticipated users. Existing and proposed bicycle and pedestrian facilities in the CRPC planning area are defined in the Capital Regional Bicycle and Pedestrian Plan (CRBAPP, 2022)[22].

While pedestrian facilities refer to sidewalks, bicycle facilities are grouped into the following classifications:

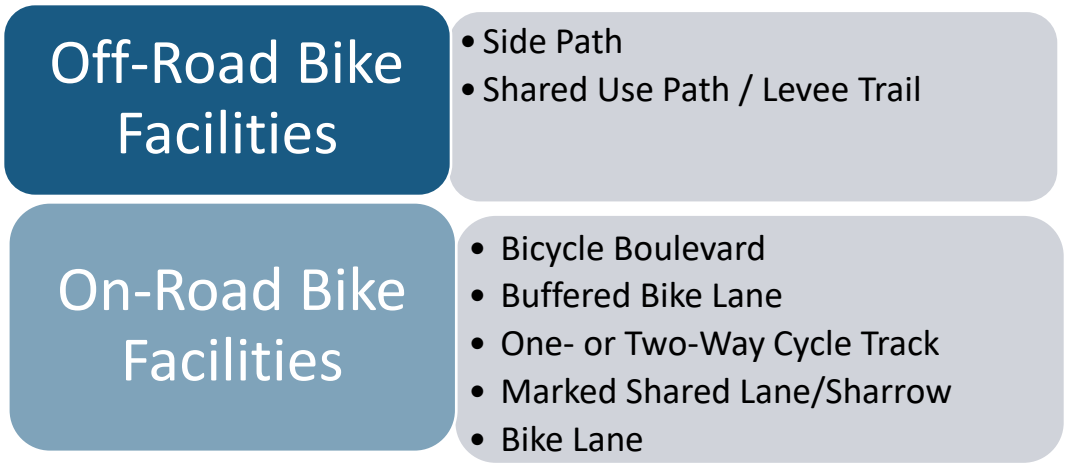
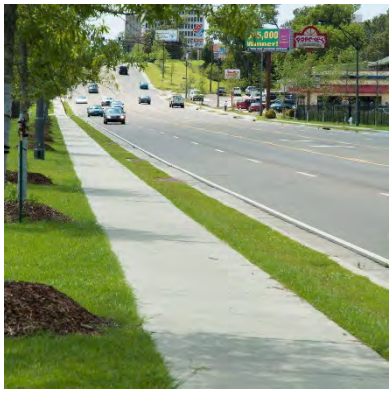


Figure 6.1 provides a brief explanation of these facility classifications.

[22] Capital Regional Bicycle and Pedestrian Plan. (2022). https://www.crpcla.org/bicycle-and-pedestrian-plan.

Figure 6.1: Bicycle and Pedestrian Facility Types



Sidewalk

A sidewalk is a dedicated space for use by pedestrians that is safe, comfortable, and accessible. Sidewalks typically have a minimum width of 5' and are constructed of concrete. They are physically separated from the roadway by a curb or unpaved buffer space. When placed directly adjacent to the curb, an additional 2' of width acts as a buffer.

Wider sidewalks can be used to accommodate anticipated higher pedestrian volumes and provide ample space for street furniture, signage, and seating.



Shared Use Path

Shared Use Paths are paved paths that are independent of the roadway network for bicyclists, pedestrians, skaters, wheelchair users, joggers, and other users. Shared Use Paths can provide a low-stress experience for a variety of users using the network for transportation or recreation.

Shared Use Paths are typically paved, bi-directional, and a minimum of 10' in width. An example of a Shared Use Path in the CRPC planning area is the Mississippi River Trail (MRT).



Side Path

Side Paths are Shared Use Paths that run adjacent to a roadway with physical separation for use by both pedestrians and cyclists.

Side Paths are typically paved, bi-directional, and a minimum of 10' in width.



Marked Shared Lane

In Louisiana, bicyclists are allowed to use roads and have the same rights and responsibilities as motor vehicle drivers unless signed otherwise. “Marked Shared Lanes” are bikeways that are signed and marked with a bicycle icon and directional arrows (a.k.a., sharrows) to indicate the correct direction of travel, preferred lane positioning, and to remind everyone to share the road safely and ride predictably.



Bicycle Boulevard

A bicycle boulevard is a low speed, low volume roadway that is designed to be a comfortable street environment for shared use by vehicles and bicylists. In addition to sharrows and signage, additional traffic calming elements are often used to provide speeds slow enough for a safe shared street.



Bike Lane

On-street bike lanes create an exclusive space for bicyclists through striping, pavement markings, and signage. The bike lane is located directly adjacent to motor vehicle travel lanes and is used in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street between the adjacent travel lane and curb, road edge, or parking lane.



Buffered Bike Lane

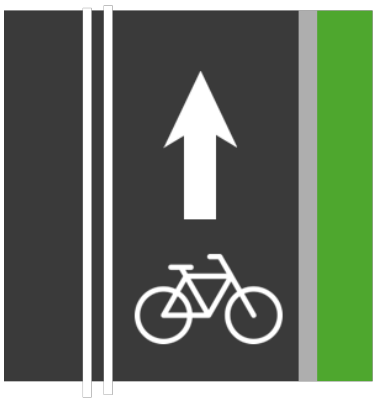
A Buffered Bike Lane is a conventional bike lane paired with a designated buffer space separating the bike lane from moving traffic or parked cars. This configuration improves safety and comfort by increasing the distance between bicycles and motor vehicles. Several buffer styles are shown below.



Protected Bike Lane

Protected Bike Lanes, also known as Separated Bike Lanes or Cycle Tracks, are located on street facilities for exclusive use by bicyclists. They are separated from motor traffic by barriers such as curbs, posts, or parked cars, and provide cyclists with a safer and more comfortable space to ride. Protected bike lanes can be one- or two-way. When a physical barrier is used, they can provide a lawful path of travel that allows bicyclists to travel in the opposite direction from general traffic on a roadway.

Narrow Buffer



Standard Buffer



Wide Buffer



6.2 Existing Inventory

The Baton Rouge MPO has a multimodal network with a high concentration of bicycle and pedestrian facilities near the downtown core of Baton Rouge, LA. While this area has the most multimodal infrastructure, multiple cities and neighborhoods outside of Baton Rouge have clusters of sidewalk infrastructure.

The diagram below shows the MPO's multimodal mileage within the planning area.

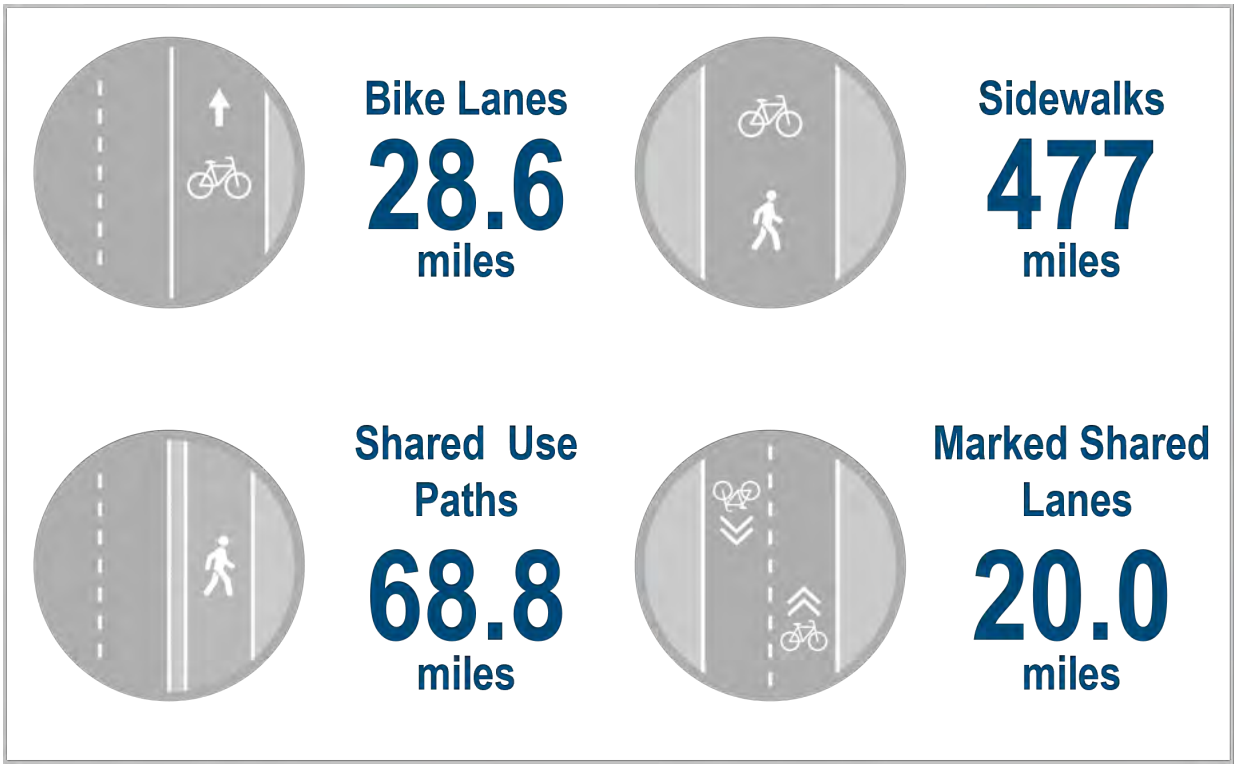
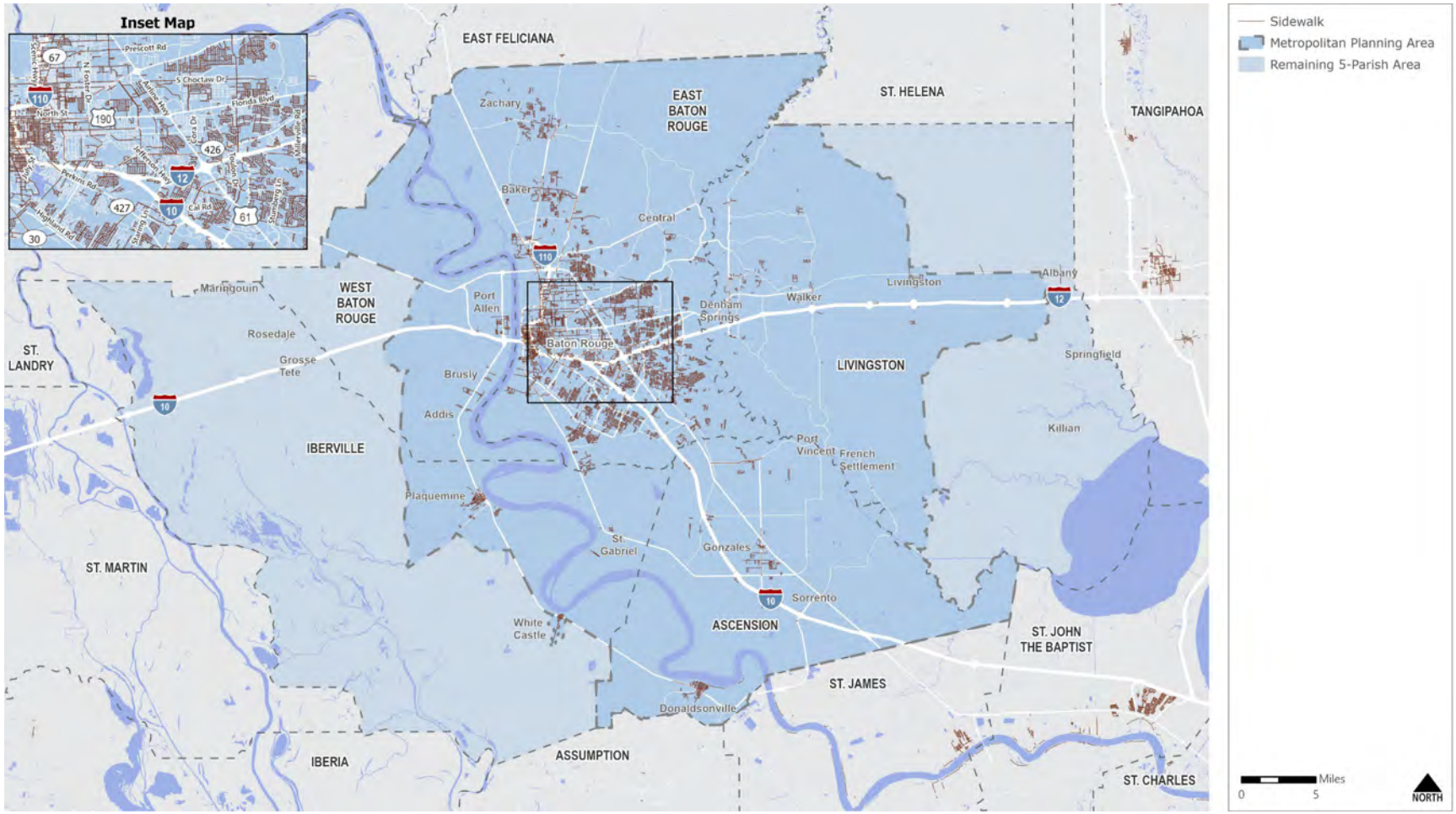


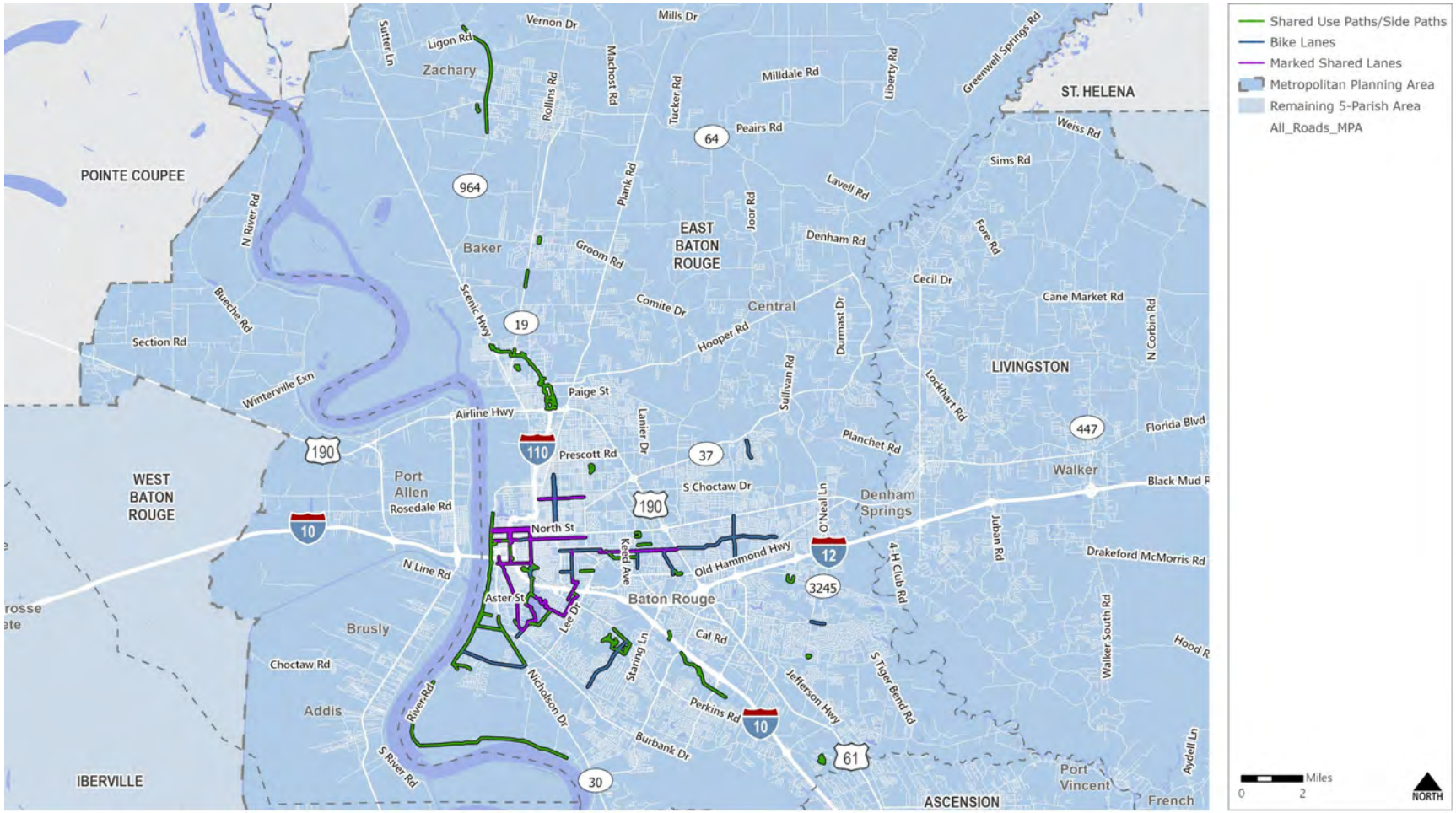
Figure 6.2 details the pedestrian sidewalk network. **Figure 6.3** illustrates the location of bicycle facilities including on-street bike lanes, shared lanes, and shared-use paths.

Figure 6.2: Existing Sidewalks



Source: CRPC; LADOTD, 2025

Figure 6.3: Existing On-Street Bicycle Facilities and Shared Use Facilities



Source: CRPC; LADOTD, 2025

6.3 Safety

Active transportation has unique safety considerations within crash data analysis. Compared to motorized road users, bicyclists and pedestrians are more vulnerable when traveling on, along, or across a roadway. Consequently, crashes that involve a bicyclist or a pedestrian are more likely to result in a severe injury or fatality.

Within the CRPC region, 1,687 crashes included a bicyclist or a pedestrian. Nearly a third of these crashes (30.8%) resulted in either a severe injury or a fatality as shown in **Table 6.1.**

Table 6.1: Severe and Fatal Bicyclist and Pedestrian Crashes (2020 – 2024)

Road User Type	Severe Injury	Fatality	Total	Percent of Bike/Ped Crashes
Bicycle	74	42	**116**	**6.9%**
Pedestrian	228	176	**404**	**23.9%**
Total	**302**	**218**	**520**	**30.8%**
Percent of Bike/Ped Crashes	**17.9%**	**12.9%**	**30.8%**	

Source: CARTS, 2026

Additionally, only 1.1% of all crashes involved a bicyclist or pedestrian. However, bicyclist and pedestrian crashes comprised 18.8% of all serious injury and fatal crashes.

6.4 Active Transportation Plan Review

Capital Region Bicycle and Pedestrian Plan

The Capital Region Bicycle and Pedestrian Plan (CRBAPP, 2022) establishes a unified, long-range vision for active transportation across the five-parish Capital Region (Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge). The plan aims to enhance transportation independence, safety, socio-economic factors, health, social connections, economic development, tourism, and resiliency.



The plan was developed with input from regional stakeholders, public workshops, advisory committee meetings, surveys, and online engagement. The process included an analysis of existing conditions, transportation access, demand, and safety, as well as a review of previous local and regional plans. Community input highlighted the need for improved connectivity, safer routes for children and university students, and traffic calming measures.

The plan recommends a region-wide network of over 600 miles of on-road and off-road bikeways, multi-modal corridors, and local connections. These recommendations integrate and expand upon existing local plans. Pedestrian priority areas were identified using socio-economic factors, demand, and crash data to guide investments toward areas of greatest need. A phased implementation strategy prioritizes projects based on readiness, connectivity, and regional impact with near-term, mid-term, and long-term project lists.

East Baton Rouge Parish Pedestrian and Bicycle Master Plan

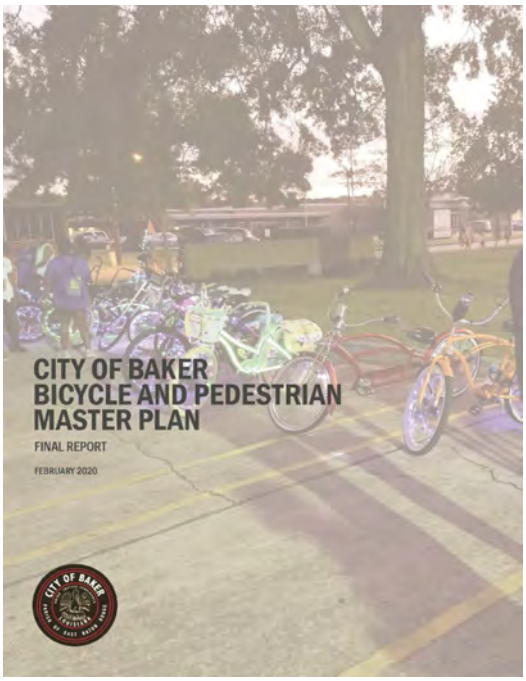
The East Baton Rouge Parish Bicycle and Pedestrian Master Plan Update (2024)[23] was prepared by the Baton Rouge Recreation and Park Commission. It sets forth a vision for a safe, comfortable, and connected network for walking and bicycling to provide healthy transportation and recreation choices. The planning process was guided by a multi-agency steering committee.

The process included a detailed analysis of existing conditions, demographic trends, crash data, and public feedback on barriers and desired destinations. The plan updated the Active Transportation Network from earlier planning efforts.

Facility types include bicycle boulevards, bike lanes, buffered and separated bike lanes, sidepaths, and shared-use trails. The plan identifies priority corridors, intersection improvements, and pedestrian enhancement areas with a focus on connectivity, safety, and accessibility. A phased implementation plan prioritizes projects based on demand, safety, connectivity, and socio-economic factors with short-, mid-, and long-term projects.

[23] Recreation and Park Commission for the Parish of East Baton Rouge. (2024). *East Baton Rouge Parish Bicycle + Pedestrian Master Plan Update*. https://www.brec.org/assets/PlanningandEngineering/Greenways/Front-Matter-BPMP-Update-Final-Report-9-27-24.pdf.

City of Baker Bicycle and Pedestrian Master Plan



The City of Baker Bicycle and Pedestrian Master Plan (2020)[24] was developed as a response to the August 2016 Flood as an initiative under the Baker United Strategic Recovery Plan. The plan's vision is to create a safer, more resilient, and accessible city by expanding active transportation options for all residents and visitors.

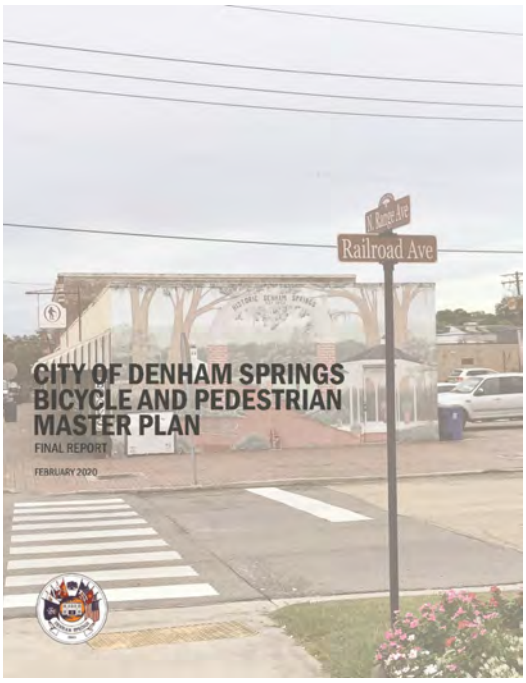
The planning process involved a steering committee, public workshops, and an interactive WikiMap for community input. The process included a thorough review of existing conditions, demographic trends, land use, transportation infrastructure, and crash data. Public engagement identified key destinations, barriers, and priorities for facility improvements.

The plan recommends a citywide network of 43 miles of bicycle routes and 23 miles of pedestrian facilities, including bike boulevards, separated bike lanes, shared-use paths, and sidewalks. Priority corridors include Main Street (LA 19), Plank Road (LA 67), Groom Road, and Lavey Lane. The plan also includes 32 intersection improvements and emphasizes the need for maintenance, signage, and enforcement.

[24] City of Baker. (2020). City of Baker Bicycle and Pedestrian Master Plan. https://cityofbakerla.com/wp/wp-content/uploads/2020/07/Baker_Final-Report_received-06232020.pdf

City of Denham Springs Bicycle and Pedestrian Master Plan

The Denham Springs Bicycle and Pedestrian Master Plan (2020)[25] aims to transform the city into a safe, connected, and active community for people of all ages and abilities. Developed in the aftermath of the August 2016 Flood and as part of the city's recovery strategy, the plan's vision is to provide mobility choice, improve economic opportunity, and promote healthier lifestyles through a robust active transportation network.



The plan was developed with stakeholder and public involvement, including a technical advisory committee and two rounds of public workshops. The process included an analysis of existing conditions, demographic trends, land use, and transportation system challenges.

The plan recommends a network of 31 miles of bicycle facilities and 13 miles of sidewalks, including shared-use paths, bike lanes, buffered and separated bike lanes, and sidewalks. Key corridors such as Range Avenue and Florida Boulevard are prioritized for improvements. The plan also identifies 24 intersection enhancements to improve safety and connectivity.

[25] City of Denham Springs. (2020). City of Denham Springs Bicycle and Pedestrian Master Plan. https://static1.squarespace.com/static/6526a2cd1822263deb066af4/t/65302340034a5259e28eb1c8/1697653577328/Denham%2BSprings_Final%2BReport.pdf

7.0 Public Transportation

Many people in the Baton Rouge MPO region use public transit to access opportunities; connect to employment, shopping, education, and healthcare; and fully participate in community life. While public transit is a convenient or cost-effective alternative to driving alone, it can be the only transportation option when age, economic limitations, or physical and mental disabilities limit access to personal transport.

Public transit provides significant community-wide benefits, including mobility choices, economic development, environmental protection, healthier lifestyles, and sustainable development.

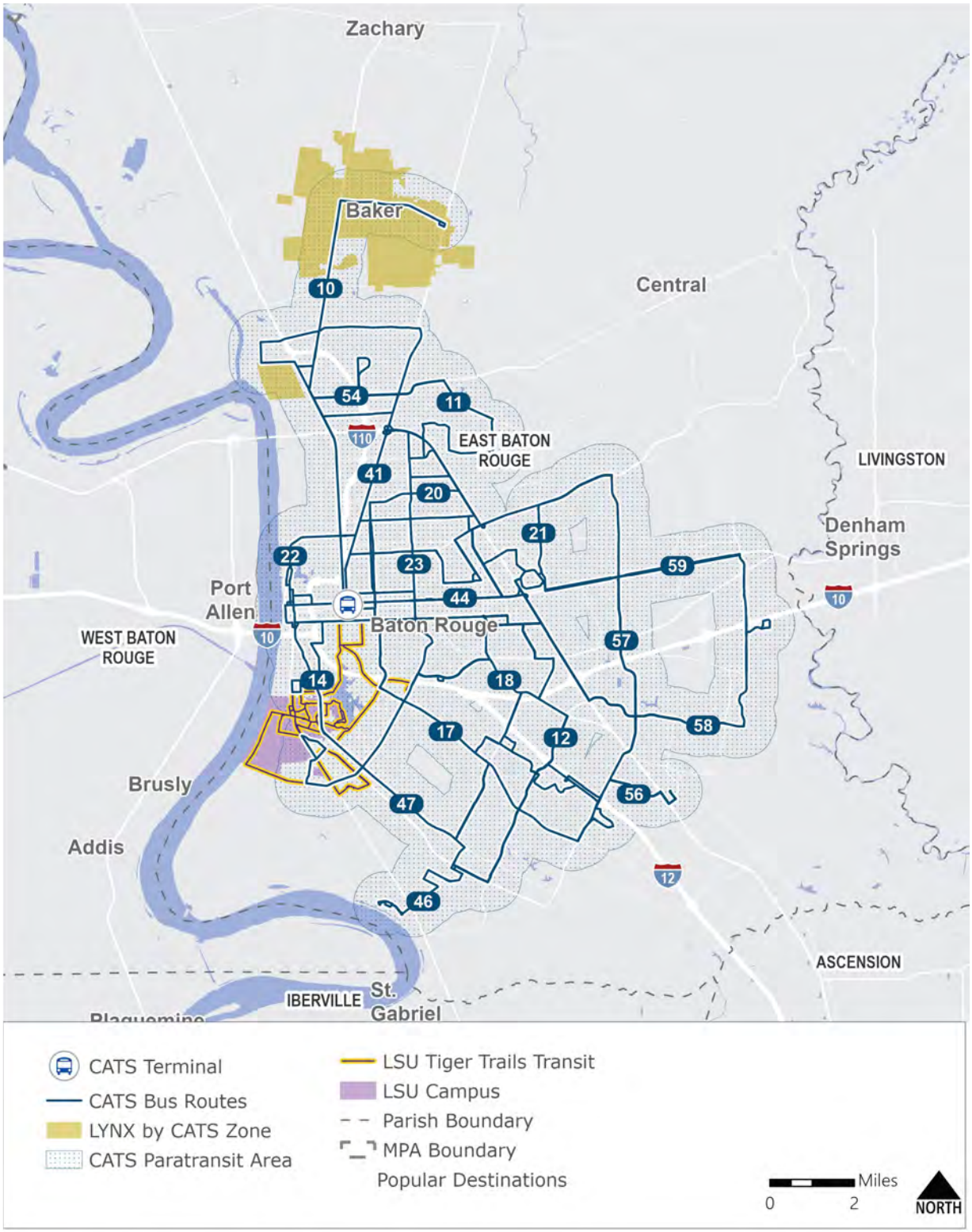
7.1 Transit Overview

The Baton Rouge MPO planning area includes both urban centers and rural communities that are connected by several public transit providers. The largest provider is the Capital Area Transit System (CATS) which was established in 1970. CATS is the primary public transportation provider for Baton Rouge, Baker, and surrounding areas within East Baton Rouge Parish. It provides regular fixed-route service, complementary paratransit services which meets Americans with Disabilities Act (ADA) requirements, and microtransit services.

Located south of downtown Baton Rouge, Louisiana State University (LSU) operates a free shuttle system serving campus and the surrounding community. However, LSU's Tiger Trails service is primarily intended for university students, faculty, staff, and visitors. It is not intended for public use.

Figure 7.1 displays the geographic coverage of CATS fixed-route bus route and microtransit service on weekdays. The figure also displays the paratransit service area which mirrors the footprint of the bus network with a three-quarter mile buffer centered on all routes. Additionally, LSU's Tiger Trails campus shuttle network is displayed on this map.

Figure 7.1: Baton Rouge Weekday Fixed-Route and Microtransit Services



Source: Baton Rouge Capial Area Transit System

The outlying four parishes in the planning area are served by limited demand-response transit providers offering specialized transportation services to seniors and/or people with disabilities. Two parishes also provide demand response service to the general public. Intercity bus services are available to the public as well as Transportation Network Companies (TNCs) that offer ride-sharing services.

The following sections describe the current conditions of regional public transit services.

7.2 Capital Area Transit System

Capital Area Transit System (CATS) is the primary public transit agency for the urbanized area of Louisiana's capital and the state's second largest city by population. As of early 2026, CATS operates 19 fixed-route bus routes and complementary CATS On Demand ADA paratransit service. Additionally, LYNX by CATS microtransit service is provided in and around the City of Baker.

According to recent federal filings,[26] CATS provided nearly 1.6 million annual passenger trips to a service area population of over 631,000 people within its 396 square-mile service area. Total annual transit service included over 243,000 revenue hours and 3.2 million revenue miles. During peak service, CATS used 57 vehicles across its two primary transit service modes of fixed-route and demand response (On Demand and LYNX). Most of these vehicles (38) were 40-foot diesel-powered buses used on the CATS fixed routes.

CATS Service Types

CATS Fixed-Route Bus Service

Fixed-route bus service is the largest component of the CATS transit network. These routes serve Baton Rouge and surrounding urban areas within East Baton Rouge Parish. While a few bus routes operate every 30 to 45 minutes, most routes have at least hourly headways. All routes except for two operate on weekends and holidays, though generally with less frequency than on weekdays.

The following tables show CATS scheduled bus service by day as of July 2025 and include the service schedules and typical headways during both peak and off-peak periods. **Table 7.1** summarizes routes in operation Monday through Friday. **Table 7.2** summarizes routes operating on weekends and holidays.

[26] National Transit Database (NTD), July 1, 2023 through June 30, 2024.

Table 7.1: CATS Weekday Bus Service Schedules and Average Headways

Route	Spans of Service	Peak	Off-peak
10 – Scenic Hwy/Baker	5:40 a.m. to 9:45 p.m.	60	60
11 - N. Baton Rouge	5:37 a.m. to 9:36 p.m.	60	60
12 - Government St	5:15 a.m. to 9:35 p.m.	45	45
14 - Thomas Delpit Dr / North	5:13 a.m. to 7:20 p.m.	90	90
17 - Perkins Rd	5:15 a.m. to 9:32 p.m.	45	45
18 - Amazon – Cortana Tigerland	5:15 a.m. to 9:55 p.m.	60	60
20 - N. Acadian Thwy	5:15 a.m. to 9:56 p.m.	60	60
21 - Fairfields Ave	5:15 a.m. to 9:49 p.m.	60	60
22 - Winbourne Ave	5:15 a.m. to 8:51 p.m.	60	60
23 - Foster Dr	5:45 a.m. to 9:08 p.m.	75	75
41 - Plank Rd	5:15 a.m. to 9:37 p.m.	30	30
44 - Florida Blvd	5:15 a.m. to 9:45 p.m.	30	30
46 - Mall LA / Gardere	5:20 a.m. to 9:29 p.m.	75	75
47 - Highland Rd / LSU	5:15 a.m. to 9:51 p.m.	35	35
54 - Airline Hwy	6:06 a.m. to 9:48 p.m.	60	60
56 - Amazon Connector	6:04 a.m. to 9:47 p.m.	60	60
57 - Sherwood Forest Blvd	5:00 a.m. to 9:44 p.m.	45	45
58 - Coursey Blvd	5:15 a.m. to 8:48 p.m.	90	90
59 - E. Florida Blvd	5:55 a.m. to 8:47 p.m.	90	90

"—" in the table above represents no service.

Table 7.2: CATS Weekend/Holiday Bus Service Schedules and Average Headways

Route	Spans of Service	Peak	Off-peak
10 – Scenic Hwy/Baker	6:20 a.m. to 7:55 p.m.	120	120
11 - N. Baton Rouge	--	--	--
12 - Government St	6:28 a.m. to 7:50 p.m.	90	90
14 - Thomas Delpit Dr / North	--	--	--
17 - Perkins Rd	7:05 a.m. to 7:55 p.m.	90	90
18 - Amazon – Cortana Tigerland	6:34 a.m. to 8:10 p.m.	60	60
20 - N. Acadian Thwy	6:15 a.m. to 8:49 p.m.	75	75
21 - Fairfields Ave	6:00 a.m. to 7:51 p.m.	120	120
22 - Winbourne Ave	7:45 a.m. to 7:23 p.m.	120	120
23 - Foster Dr	7:11 a.m. to 7:37 p.m.	75	75
41 - Plank Rd	6:51 a.m. to 8:54 p.m.	30	30
44 - Florida Blvd	7:30 a.m. to 6:39 p.m.	45	45
46 - Mall LA / Gardere	7:15 a.m. to 7:53 p.m.	75	75
47 - Highland Rd / LSU	6:06 a.m. to 7:48 p.m.	60	60
54 - Airline Hwy	7:04 a.m. to 7:47 p.m.	120	120
56 - Amazon Connector	5:57 a.m. to 8:45 p.m.	120	120
57 - Sherwood Forest Blvd	7:52 a.m. to 7:48 p.m.	60	60
58 - Coursey Blvd	7:18 a.m. to 7:47 p.m.	90	90
59 - E. Florida Blvd	6:20 a.m. to 7:55 p.m.	90	90

"—" in the table above represents no service

LYNX by CATS

LYNX by CATS was launched in 2022 and is operated by Via Transportation. It is an on-demand shared microtransit service available to the public. The service operates every day from 5:00 a.m. to 8:00 p.m. and primarily serves the City of Baker. Service is also provided to several major points within the city, including connections to the CATS bus network. Riders can book a trip through the LYNX app or by calling to schedule.

LYNX provides corner-to-corner service by assigning virtual bus stops and traveling to eight popular destinations. The current fares are $1.75 one way for single riders and $0.35 for additional passengers, seniors, youth ages six through 18, and passengers using wheelchairs. High school and university students, as well as children five and under, ride for free.

CATS On Demand

CATS On Demand ADA complementary paratransit service is operated by MV Transportation. It is designed for riders who have difficulty navigating the regular bus system. Rider eligibility is based on either physical assistance needs or environmental factors.

Fares are $1.75 each way for eligible riders and their additional passengers. Service operates Monday through Saturday from 4:00 a.m. to 11:30 p.m., and reservations are required. CATS on Demand also offers a subscription service allowing riders to schedule trips up to a week in advance.

CATS Ridership

CATS has several transit centers across its service area where multiple routes provide transfer opportunities, including the downtown CATS Terminal, the Earl K. Long Transit Center, and the Cortana Place Transfer Center. Other areas with high boardings include stops along Florida Avenue, areas around LSU, the Baton Rouge Medical Center, and the sports complex area south of LSU.

Recent stop level ridership and transit activity density data, illustrated in **Figure 7.2** and **Figure 7.3**, respectively, shows where demand is highest across the CATS service area.

Figure 7.2: CATS Weekday Stop-Level Ridership

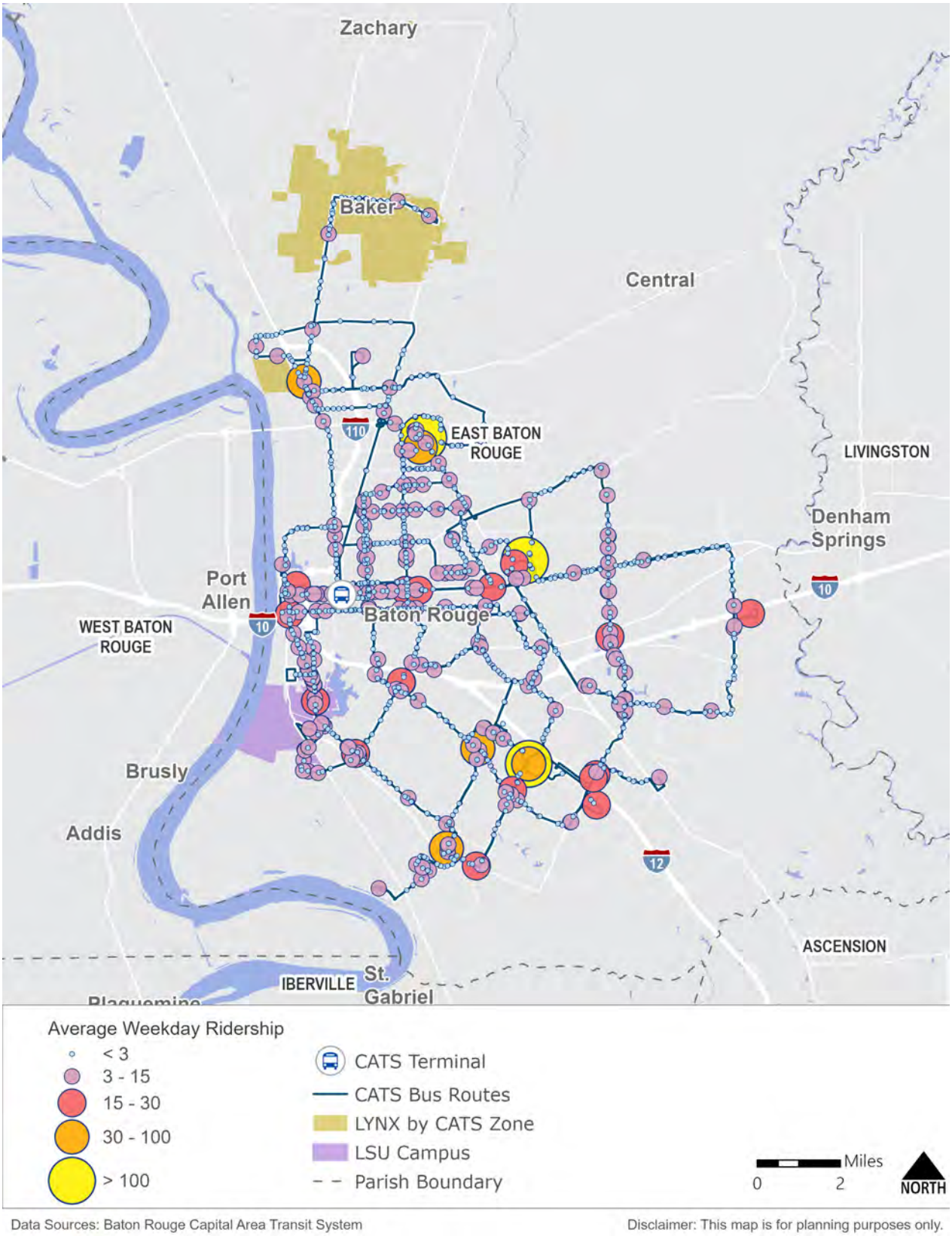
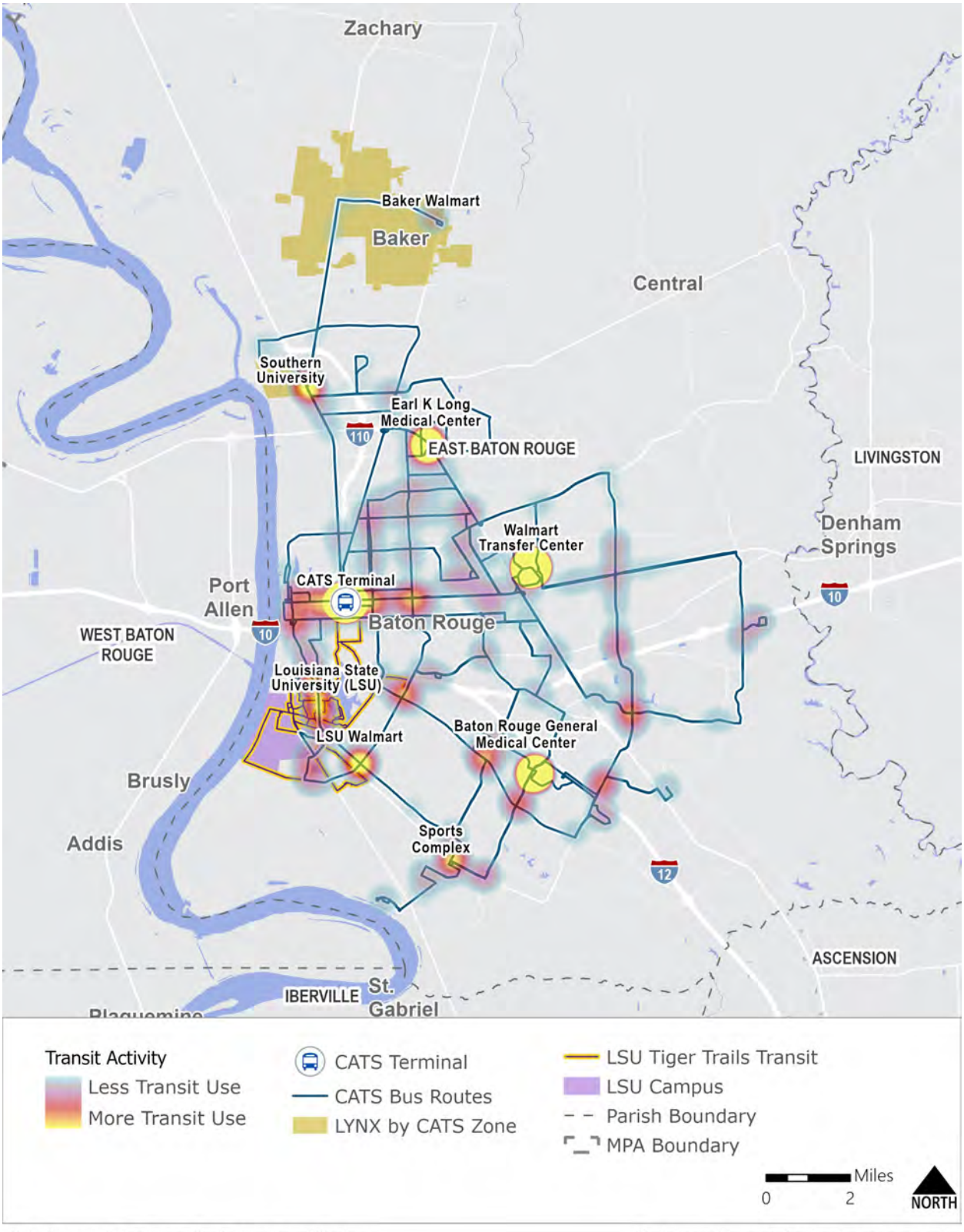


Figure 7.3: CATS Average Weekday Transit Activity Density



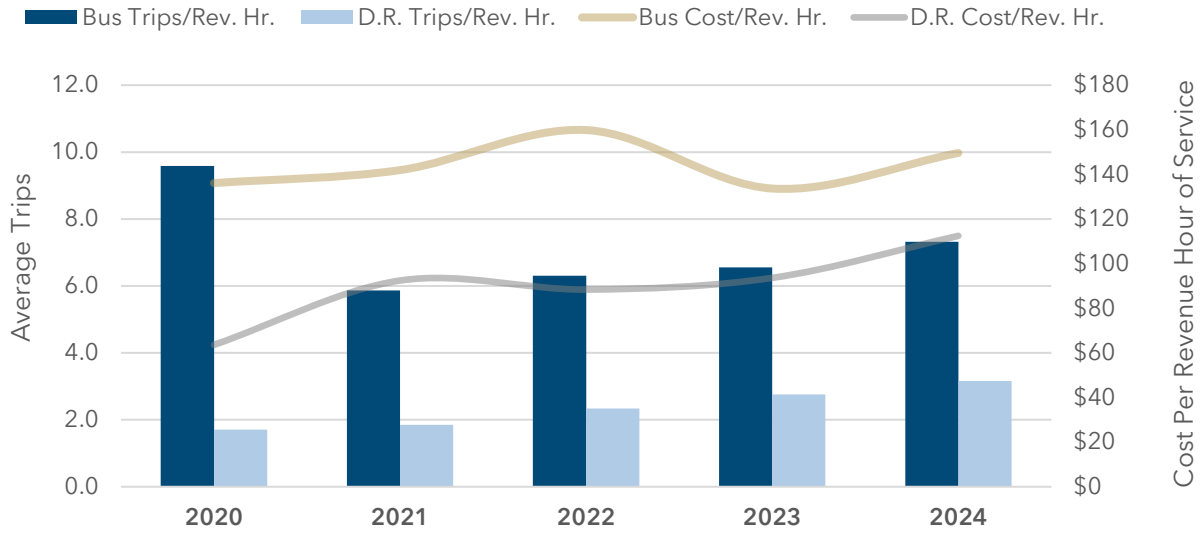
Data Sources: Baton Rouge Capital Area Transit System

Disclaimer: This map is for planning purposes only.

CATS Operational and Financial Assessment

Every year, transit agencies that receive federal funding must submit a report to the National Transit Database (NTD). This information was used to review transit service and operating costs for CATS for fiscal years (FY) 2020 through 2024. **Figure 7.4** presents the performance trends over the analyzed time period.

Figure 7.4: CATS Average Trips and Costs per Revenue Hour of Service



Note: FY 2020 represented the beginning of the COVID-19 pandemic, which had a severe negative impact to transit.

As seen above, systemwide service decreased from FY 2020 to FY 2024, while operational costs increased and the service population remained the same. Annual trips declined sharply, by nearly 40%, in 2021, which can be attributed to the impact of the COVID-19 pandemic on CATS transit services. The system responded to this decrease by slightly reducing peak vehicle counts and contracting services. Notably, this decrease in peak vehicle counts was accompanied by an increase in fare revenue per hour of service and fare recovery rate, a trend that continued through FY 2024.

Although fare revenue increased 156% between FY 2020 and 2024, total revenue remained lower by nearly a third when compared to pre-COVID revenue in FY 2019. CATS added 33 vehicles to peak service in FY 2022, and saw annual trips increase by nearly 18%, however, operating costs increased each year and ridership remained lower. Overall, system trends for these fiscal years show increased revenue hours, operational costs, and fares and lower ridership. While annual trips rose 37% between FY 2020 and 2024, they are still 16% below pre-pandemic totals.

Systemwide data is shown **Table 7.3**. Data for bus and demand response services, with the percent change over the study period, is shown in **Table 7.4** and **Table 7.5**, respectively.

Table 7.3: CATS Systemwide Trends, FY 2020 – FY 2024

Indicator	2020	2021	2022	2023	2024	*Change (2020-2024)*
Service Area Population	367,124	367,124	367,124	367,124	367,124	*0.0%*
Vehicles Operated in Maximum Service	82	60	93	62	57	*-30.5%*
Revenue Hours	227,205	217,425	244,705	252,062	243,362	*7.1%*
Revenue Miles	3,061,179	2,999,687	3,218,768	3,482,700	3,225,440	*5.4%*
Passenger Trips	1,897,456	1,162,064	1,367,438	1,461,232	1,593,166	*-16.0%*
Annual Operating Expense	$28,336,807	$29,462,129	$35,945,389	$31,672,671	$34,730,100	*22.6%*
Fare Revenue	$497,404	$641,546	$1,187,713	$1,295,508	$1,272,730	*155.9%*
Service Utilization and Productivity						
Passenger Trips per Capita	5.17	3.17	3.72	3.98	4.34	*-16.0%*
Passenger Trips per Revenue Hour	8.35	5.34	5.59	5.80	6.55	*-21.6%*
Passenger Trips per Revenue Mile	0.62	0.39	0.42	0.42	0.49	*-20.3%*
Cost Effectiveness and Efficiency						
Operating Expense per Passenger Trip	$14.93	$25.35	$26.29	$21.68	$21.80	*46.0%*
Operating Expense per Revenue Hour	$124.72	$135.50	$146.89	$125.65	$142.71	*14.4%*
Operating Expense per Revenue Mile	$9.26	$9.82	$11.17	$9.09	$10.77	*16.3%*
Farebox Recovery Rate	1.76	2.18	3.3	4.09	3.66	*108.0%*
Service Coverage						
Revenue Hours per Capita	0.62	0.59	0.67	0.69	0.66	*6.5%*
Revenue Miles per Capita	8.34	8.17	8.77	9.49	8.79	*5.4%*

Source: Baton Rouge Capital Area Transit System

Table 7.4: CATS Bus Service Trends, FY 2020 – FY 2024

Indicator	2020	2021	2022	2023	2024	*Change (2020-2024)*
Service Area Population	367,124	367,124	367,124	367,124	367,124	*0.0%*
Vehicles Operated in Maximum Service	63	44	44	43	38	*-39.7%*
Revenue Hours	191,547	189,254	200,294	201,700	198,281	*3.5%*
Revenue Miles	2,560,915	2,518,045	2,517,700	2,473,049	2,431,598	*-5.0%*
Passenger Trips	1,836,704	1,110,001	1,263,657	1,322,516	1,450,616	*-21.0%*
Annual Operating Expense	$26,069,382	$26,858,459	$32,020,206	$26,957,753	$29,660,813	*13.8%*
Fare Revenue	$453,029	$603,175	$1,054,929	$1,192,264	$1,199,859	*164.9%*
Service Utilization and Productivity						
Passenger Trips per Capita	5.00	3.02	3.44	3.60	3.95	*-21.0%*
Passenger Trips per Revenue Hour	9.59	5.87	6.31	6.56	7.32	*-23.7%*
Passenger Trips per Revenue Mile	0.72	0.44	0.50	0.53	0.60	*-16.8%*
Cost Effectiveness and Efficiency						
Operating Expense per Passenger Trip	$14.19	$24.20	$25.34	$20.38	$20.45	*44.1%*
Operating Expense per Revenue Hour	$136.10	$141.92	$159.87	$133.65	$149.59	*9.9%*
Operating Expense per Revenue Mile	$10.18	$10.67	$12.72	$10.90	$12.20	*19.8%*
Farebox Recovery Rate	1.74	2.25	3.29	4.42	4.05	*132.8%*
Service Coverage						
Revenue Hours per Capita	0.52	0.52	0.55	0.55	0.54	*3.8%*
Revenue Miles per Capita	6.98	6.86	6.86	6.74	6.62	*-5.2%*

Source: Baton Rouge Capital Area Transit System

Table 7.5: CATS Demand Response Service Trends, FY 2020 – FY 2024

Indicator	2020	2021	2022	2023	2024	*Change (2020-2024)*
Service Area Population	367,124	367,124	367,124	367,124	367,124	*0.0%*
Vehicles Operated in Maximum Service	19	16	22	19	19	*0.0%*
Revenue Hours	35,658	28,171	44,411	50,362	45,081	*26.4%*
Revenue Miles	500,264	481,642	701,068	1,009,651	792,842	*58.5%*
Passenger Trips	60,752	52,063	103,781	138,716	142,550	*134.6%*
Annual Operating Expense	$2,267,425	$2,603,670	$3,925,183	$4,714,918	$5,069,287	*123.6%*
Fare Revenue	$44,375	$38,371	$132,784	$103,244	$72,871	*64.2%*
Service Utilization and Productivity						
Passenger Trips per Capita	0.17	0.14	0.28	0.38	0.39	*134.6%*
Passenger Trips per Revenue Hour	1.70	1.85	2.34	2.75	3.16	*85.6%*
Passenger Trips per Revenue Mile	0.12	0.11	0.15	0.14	0.18	*48.1%*
Cost Effectiveness and Efficiency						
Operating Expense per Passenger Trip	$37.32	$50.01	$37.82	$33.99	$35.56	*-4.7%*
Operating Expense per Revenue Hour	$63.59	$92.42	$88.38	$93.62	$112.45	*76.8%*
Operating Expense per Revenue Mile	$4.53	$5.41	$5.60	$4.67	$6.39	*41.1%*
Farebox Recovery Rate	1.96	1.47	3.38	2.19	1.44	*-26.5%*
Service Coverage						
Revenue Hours per Capita	0.10	0.08	0.12	0.14	0.12	*20.0%*
Revenue Miles per Capita	1.36	1.31	1.91	2.75	2.16	*58.8%*

Source: Baton Rouge Capital Area Transit System

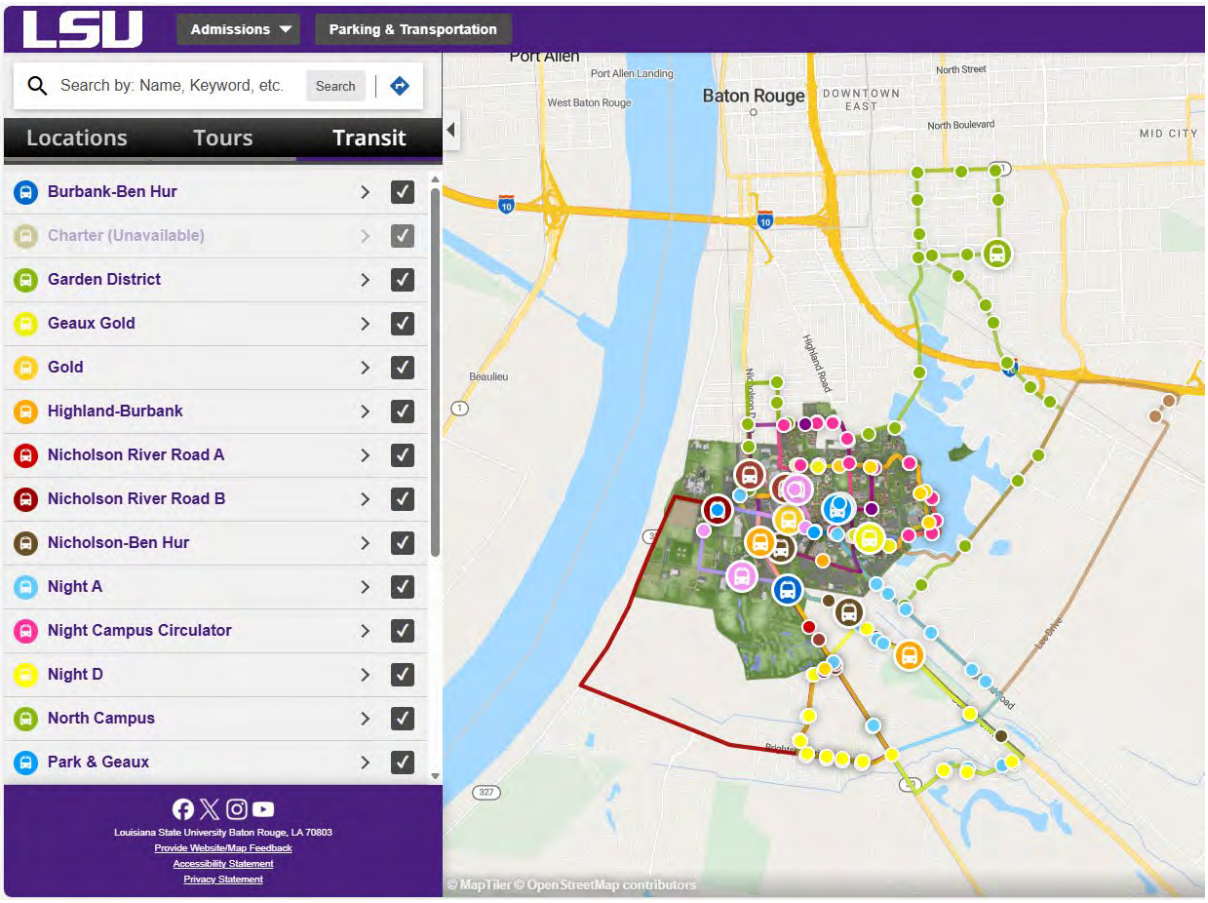
Since FY 2021, bus trends show increases in revenue hours invested into service, higher operating expenses, and higher fare revenues. While ridership experienced a significant decrease in FY 2021, it has increased in every subsequent year. However, as seen throughout the country, ridership has still not recovered to pre-COVID levels.

Demand response trends mirror bus service trends over the same period. Revenue hours increased by 26% while ridership increased by 134%. Additionally, higher revenue hours and ridership have caused increased operational costs, while the farebox recovery rate declined by 27%. Overall, demand response service was more heavily utilized and more expensive but also more costly to operate.

7.3 Louisiana State University Tiger Trails Transit

The Louisiana State University (LSU) Tiger Trails Transit system provides free transportation for LSU students, faculty, staff and visitors. It serves the campus and surrounding communities in Baton Rouge. LSU provides live online tracking of its shuttles as shown in **Figure 7.5**.

Figure 7.5: Louisiana State University's Tiger Trails Transit Interactive Map



Tiger Trails Services and Hours of Operation

Tiger Trails is currently comprised of 21 routes, including fixed routes, express routes, on-demand service, and paratransit service. It operates seven days a week with varying service hours. Most services operate on weekdays with headways that range from every eight minutes to every half hour.

The Park & Geaux express shuttle program, introduced in 2019, offers commuters the option of parking in three different lots with service to campus via the Union Route and Lockett Route. The express shuttle program provides monthly transportation for $50 for students, faculty, and staff, and $75 for campus parters. Additionally, the LSU Paratransit program offers accessibility for riders with mobility challenges. Additional information about the hours of operation for each service type is included below.

Daytime Service	• Mon. - Sat. from 7 a.m. - 6 p.m. • Sun. from 9 a.m. - 6 p.m.Z
Night A Service	• Mon. - Wed. from 6 p.m.– Midnight; • Thurs. - Sat. from 6 p.m. - 1 a.m. • Reverse operates Mon. - Sat. 6 p.m. - 1 a.m.
Night D Service	• Sat. from 8 p.m. to 3 a.m. • Reverse operates Thurs. - Sat. from 8 p.m. to 3 a.m.
Park & Geaux Shuttle	• Weekday Service every 10 - 15 min. from 6 a.m. to 6 p.m. • After 6 p.m., wait may increase to 20 min.
LSU Paratransit	• Mon. - Fri. from 6 a.m. to 5 p.m. • On-demand available Mon. - Fri. from 5 p.m. to Midnight

Additionally, LSU promotes micromobility and sustainability with campus bicycles (requiring registration with Baton Rouge Police), bike racks, pumps, and an interactive map of amenities along with four electric vehicle charging stations installed through a 2011 Entergy grant.

7.4 Regional & Intercity Public Transportation

Regional and intercity public transportation serving Baton Rouge extends beyond the CATS network. Transit services located within the Baton Rouge urbanized area and surrounding rural communities operate primarily outside of the CATS service area boundary. A diverse network of intercity, regional, nonprofit, human-service, and private providers supports mobility for seniors, people with disabilities, and low-income residents as well as commuters traveling to downtown Baton Rouge.

CRPC aims to align the region's federally funded transportation programs within a single framework, including special funding grants administered by the Federal Transit Administration (FTA) within Section 5310 (Enhanced Mobility for Seniors and Individuals with Disabilities) and Section 5311 (Formula Grants for Rural Areas).

Demand-response services funded under these grant programs operate in the following parishes:

- Ascension – led by The Ascension Parish Council on Aging
- East Baton Rouge – led by the East Baton Rouge Council on Aging
- Iberville – led by The Iberville Parish Sheriff's Office
- Livingston – led by the Livingston Parish Council on Aging
- West Baton Rouge – led by the West Baton Rouge Council on Aging

The CRPC leads and supports each parish demand-response program. These programs primarily serve seniors age 60 and older and other eligible individuals with disabilities. They offer limited access for the public in select areas. In Iberville Parish and Livingston Parish, service is also available to the public. Services are provided on weekdays through reservations managed by local agencies with low fares or suggested donation-based pricing for affordability.

The Commuter Krewe is a travel demand program that serves East Baton Rouge, West Baton Rouge, Ascension, Livingston and Iberville Parishes. This program is led and funded by CRPC and includes carpooling, vanpooling, employer programs, and an Emergency Ride Home (ERH) program. Carpooling and vanpooling services and schedules are determined by riders, typically in groups of five to fifteen people who live and work in the same vicinity. They jointly decide pickup and drop-off locations and rely on volunteer drivers supported by Enterprise's Commute with Enterprise program.

Ascension Parish

The Ascension Parish Council on Aging, located in Donaldsonville, provides demand response transportation services for seniors and eligible individuals with disabilities in

the parish. The service operates on weekdays from 7:30 a.m. to 4:00 p.m. and is funded by a combination of federal and local sources. While fare-free, donations of $2–$4 per trip are requested with a suggested $10 amount for trips between the east and west banks. In addition, the Donaldsonville Area Arc provides transportation for people with intellectual and/or developmental disabilities.

East Baton Rouge Parish

In addition to the CATS and LSU transit services, the East Baton Rouge Council on Aging operates the Lotus Ride Line, a demand-response transportation service for seniors age 60 and over who meet program criteria. The service currently provides transportation to and from parish senior centers and plans to expand to other locations. Lotus Rides is funded by FTA Section 5310 and operates free of charge on weekdays from 8:00 a.m. to 4:30 p.m.

Iberville Parish

The Iberville Parish Sheriff's Office, located in Plaquemine, operates a free demand-response transportation service that is available to all parish residents regardless of their living or financial status. The service initially focused on transporting elderly residents to medical appointments, but it expanded in 2013 to provide transportation for all Iberville residents with continuing annual grants from the Louisiana Department of Transportation and Development, FTA Section 5311, and local sources. The service is provided on weekdays from 8:00 a.m. to 4:30 p.m.

Livingston Parish

The Livingston Parish Council on Aging, based in Denham Springs, operates the primary public transportation system for the parish by offering demand-response, curb-to-curb service for parish residents. The service operates Monday through Thursday from 7:00 a.m. to 3:00 p.m. and Fridays from 7:00 a.m. to 2:00 p.m. It is funded by a combination of FTA Section 5311 grants and local sources. The service extends from Denham Springs to Baton Rouge, throughout Livingston Parish, and into Tangipahoa Parish. Seniors age 60 and older ride free with a suggested donation of $1. Fares for residents under age 60 are $5 one-way and $10 round-trip within Livingston Parish or $8 one-way and $16 for roundtrips out of the parish.

West Baton Rouge Parish

The West Baton Rouge Council on Aging, located in Port Allen, provides transportation services to West Baton Rouge Parish residents age 60 and older who meet program criteria. Transportation can be provided to doctor appointments in West Baton Rouge Parish and Baton Rouge, VA hospitals, Hubben's Supermarket, and Walmart. The free

service is available Monday through Thursday from 7:30 a.m. to 5:30 p.m. Funding is provided through FTA Section 5310 and local sources.

Regional Intercity Service

Regional Intercity transportation in Baton Rouge is provided by both Greyhound and FlixBus. Greyhound operates daily service based out of the downtown Baton Rouge Greyhound bus station, the Chevron bus stop at 2915 Highland Rd, and the Park & Ride at 2950 College Dr. FlixBus, which began serving Baton Rouge in 2019, also utilizes these three locations. Both transportation services provide direct service to 43 cities for low fares, and both services are supported by FTA Section 5311 funds.

7.5 Existing Plans and Projects

The Baton Rouge MPO region benefits from a comprehensive framework of transportation plans and projects that span local, parish, and regional levels. These plans collectively guide development of transit services across the five-parish Capital Region. The plans range from operational and strategic documents like the *CATS Strategic Plan*, *CATS Service and Design Standards* (2022), and the Comprehensive Operations Analysis (2022) to broader land use and transportation master plans like FUTUREBR and the Ascension and Livingston Parish Master Plans.

Specialized projects and studies that address specific needs are also included such as the Plank-Nicholson Bus Rapid Transit project that is currently underway; the passenger rail initiative to connect Baton Rouge with New Orleans; studies assessing the feasibility of microtransit, vanpools, and ferry service; and the region's *Coordinated Human Services Transportation Plan*.

CATS Strategic Plan, 2021-2026

Transit Coordination Goal:

Continuously improve the efficiency with which limited transportation resources are utilized to offer the safest and most convenient transit options possible, improving quality of life in the Capital Region.

The *Capital Area Transit System (CATS) Strategic Plan, 2021-2026* identifies the agency's priorities and steps to improve Baton Rouge's transit system. These steps include developing key strategic partnerships and investing in the agency's human and physical capital. The plan focuses on the following four strategic priorities:

- Mobility and Ridership
- Management and Financial Sustainability

- Capital Investment
- Community Stewardship

For each strategic priority, the plan identifies related goals. Each goal is supported by objectives, performance measures and targets, and action items. The following action items are especially relevant to the *MOVE 2050* plan:

- Develop a Comprehensive Operations Analysis (COA) to establish a short-term plan for CATS service and operations.
- Implement the Plank-Nicholson Bus Rapid Transit (BRT) corridor.
- Evaluate additional opportunities and markets for microtransit beyond the City of Baker's pilot project.
- Evaluate transit accessibility for disadvantaged populations with limited transportation options.
- Identify towns and parishes likely to partner with CATS to expand transit services across the region.
- Pursue additional funding opportunities.
- Coordinate with other agencies to advance CATS capital projects.

CATS Service & Design Standards (2022)

In September 2022, CATS completed revisions to its *Service & Design Standards*. The purpose of the standards is to provide a policy framework to guide staff in the design, operation, and management of current and new transit services.

Objectives of the standards include promoting the improvement of CATS transit services, increasing mobility benefits to the community, and meeting federal requirements such as Title VI of the Civil Rights Act of 1964. The standards cover all transit service categories currently provided by CATS and its future BRT, bus stop amenities, service quality measures, service performance evaluation, the service change process, and the route development process.

SmartCATS – A Blueprint for Stronger Communities CATS Comprehensive Operations Analysis (2022)

In late 2022, CATS completed a Comprehensive Operations Analysis (COA) to guide effective delivery of new and existing transit services over the next ten-year period. The 2022 COA, *SmartCATS – A Blueprint for Stronger Communities*, was developed through a comprehensive process with three key elements of public outreach, an existing conditions assessment, and final recommendations. The COA also included assessments of CATS facilities, operations, and technology; a financial plan; and evaluation of future service integration.

The process of developing final COA recommendations included the creation and evaluation of three scenarios for CATS transit service. Each scenario emphasized different points and assumed future operation of the Plank-Nicholson BRT. Following a comparison of the scenarios and discussions, a final system recommendation was created that incorporated components of each scenario. Key improvements identified in the final recommendations include:

- enhancing service on core routes to improve frequency and reliability
- four new bus routes
- four bus routes to be consolidated with other routes or eliminated
- continuation of the Baker microtransit zone and introduction of four additional microtransit zones
- establishing time transfers at key locations to improve connections
- advancing work to ensure all bus stops meet Americans with Disabilities (ADA) standards for accessibility

Since completion of the COA, CATS has been advancing the final recommendations. The implementation of recommended route changes and new routes began on July 13, 2025. Upon completion of the new North Transit Center in mid-2026, all routes serving the current Earl K. Long Transfer Center will be rerouted to the new transit center.

One of the key recommendations, Plank-Nicholson BRT, is currently under construction as discussed below. Additionally, construction of fully ADA-accessible bus stops, referred to as the All Stop Access Program (ASAP), was initiated in 2023 and will be completed by 2033.

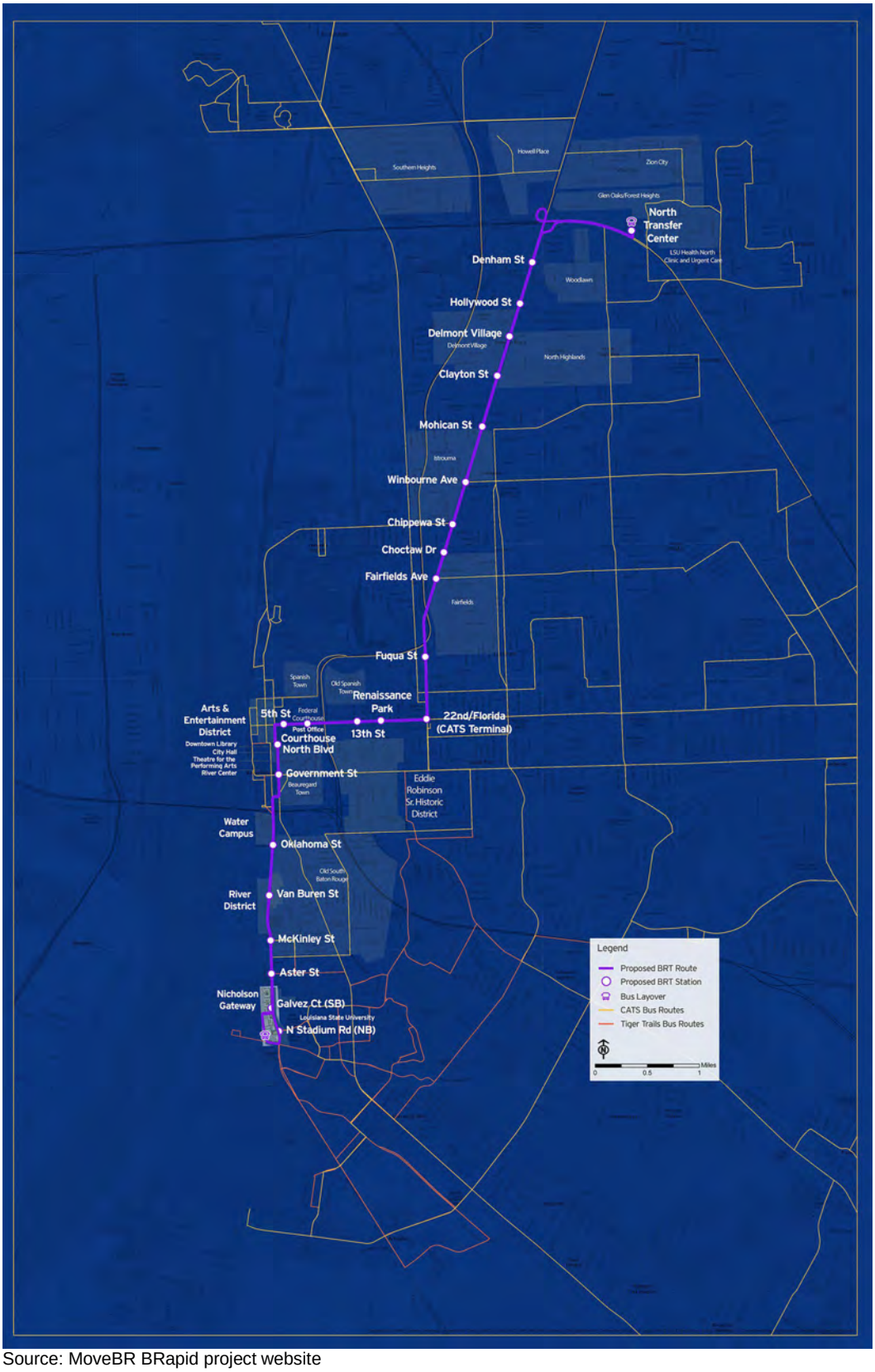
Plank-Nicholson Bus Rapid Transit (BRapid)

This project is a joint effort between the City of Baton Rouge, Parish of East Baton Rouge, CATS, and Build Baton Rouge. It introduces BRT service along Plank Road and Nicholson Drive in Baton Rouge from the CATS North Transfer Center to Downtown to LSU as shown in **Figure 7.6**.

The Plank-Nicholson Bus Rapid Transit (BRapid) is planned to open to the public by the end of 2026. It will connect many neighborhoods, employment centers, medical facilities, and major destinations. BRapid will be the first BRT line in the area and will offer fast, frequent, and reliable transit service combining physical and operating improvements into the CATS transit network. It will incorporate the following enhanced features and amenities that are typical of BRT service:

- Enhanced stations with improved lighting
- Unique branding
- Improved pedestrian and bicycle connections
- Fewer stops
- Specialized vehicles
- Real-time arrival information displays
- Fare vending and off-board fare collection
- Level boarding platforms
- Traffic Signal Priority (TSP)

Figure 7.6: BRapid/Plank-Nicholson BRT Route Map



Source: MoveBR BRapid project website

Baton Rouge – New Orleans Intercity Passenger Rail and Station Area Plans

This project envisions Amtrak providing four daily round trips at full build-out with stops in Downtown Baton Rouge, the Health District in Baton Rouge, Gonzales, LaPlace, Kenner/Louis Armstrong New Orleans International Airport (MSY), Suburban Jefferson Parish, and the Union Passenger Terminal next to the Superdome in New Orleans. This route will be part of the Gulf Coast Passenger Rail Network, so the development of attractive and reliable passenger rail service between Baton Rouge and New Orleans could serve as a catalyst for economic development.

This project is still in the planning and design phase. Local jurisdictions are performing the station planning. Detailed station area plans are completed for Baton Rouge, Gonzales, and LaPlace, while planning is ongoing for Kenner/MSY and Suburban Jefferson Parish.

In October 2023, the 2014 feasibility study was updated to include new projections for costs and ridership. The purpose of this *Baton Rouge-New Orleans Intercity Passenger Rail Feasibility Study 2023* was to identify a clearly defined process for moving the project toward implementation. It identifies infrastructure improvements necessary for passenger rail service between Baton Rouge and New Orleans and a phased implementation plan.

Major challenges noted in the 2023 study include the need for consistent and reliable state funding to support long-term service operations and the poor condition and cost to replace the nearly 100-year-old Bonnett Carré Spillway railroad bridge. Finally, the study identifies next steps for the project.

Capital Region Coordinated Human Services Transportation Plan, 2020-2023

The *Capital Region Coordinated Human Services Transportation Plan (CHSTP)* identifies a framework for coordination among the various transit providers in the region. The plan is intended to improve the overall accessibility and quality of service for everyone. An updated CHSTP is required at least every five years to maintain eligibility to apply for funding under FTA's Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities program. CRPC coordinates with transportation agencies throughout the region to update the region's strategies for enhancing transportation for seniors, individuals with disabilities, and low-income populations.

The CHSTP assesses existing conditions within each of the 11 parishes in the Capital Region, including key demographic characteristics of the total population, seniors, and

individuals with disabilities. An inventory of existing transit services is included with a focus on providers that specialize in senior and/or disabled transport. Gaps in funding, temporal, spatial, and institutional service were also assessed throughout the region. Building off the existing conditions assessment, the CHSTP identifies objectives and specific strategies to meet the region's transit coordination goal.

Capital Region Microtransit & Vanpool Feasibility Study (2024)



This recent study was completed to evaluate the potential for microtransit and vanpool service in the region. These options are commute alternatives that could assist in meeting the trip reduction expectations of the region's travel demand management (TDM) program, Commuter Krewe. The study area included all five MPO parishes.

Study elements included:

- Research and documentation of case studies for vanpool and microtransit
- Development and application of methodologies for vanpool and microtransit analysis
- Identification of macro-level locations with the highest propensity for microtransit service and origin-destination (OD) trip pairs for vanpool service
- Administration of a "rethinking your commute" survey and documentation of results
- Strategies for marketing and public outreach when new services are launched
- Identification of potential funding sources for implementation of services
- Keys to implementing successful microtransit service

The top 10 locations that are best suited for microtransit service include at least one community in each parish. Four locations were identified in East Baton Rouge Parish, and two locations were identified in both Ascension Parish and Livingston Parish. One location was identified in both West Baton Rouge and Iberville parishes.

For vanpooling, the top 10 OD trip pairs consisted of trips that originated in one parish and terminated in another parish. For these pairs, the top origins were concentrated in Denham Springs (Livingston Parish) and Prairieville and Gonzales (Ascension Parish). Top destinations were all located in Baton Rouge, including the Health District, Sherwood/Coursey/Millerville area, and Louisiana State University.

CRPC Ferry Feasibility Study (2022)

In 2022, CRPC completed a study to examine the feasibility of reestablishing Baton Rouge ferry service connecting the east and west banks of the Mississippi River. This service is a possible remedy for increased congestion and travel times for vehicles currently limited to the two existing bridges across the river. CATS expressed a desire to operate and maintain ferry service along the east and west banks of the Mississippi River while also connecting it to transit routes and the Plank-Nicholson BRT. Study tasks included public participation, an analysis of existing conditions and ferry case studies, a needs assessment and demand analysis, and development of an implementation strategy. As part of the needs assessment and demand analysis, the study recommended landing site locations and ferry service routes.

The preliminary recommended ferry route is a four-stop route serving three landing sites from Port Allen/Court Street to Downtown Baton Rouge/Paper Clip to Brusly/Phillips Lane to Downtown Baton Rouge/Paper Clip to Port Allen/Court Street. This service could be operated by two passenger vessels. The study did not include a ferry rider demand analysis due to missing and inconsistent data. Since the feasibility of the recommended ferry route could not be determined with current data, the study's implementation strategy focused on a framework of short-term or interim ferry routes and on-demand land transit options. These potential options could be implemented in response to river crossing travel delays during the I-10 widening construction project.

FUTUREBR Comprehensive Plan Transportation Element (2024)

FUTUREBR is the comprehensive plan for the entire unincorporated area of East Baton Rouge Parish and the city of Baton Rouge. Adopted in March 2024, *FUTUREBR* consists of nine elements including transportation. The vision for transportation in East Baton Rouge Parish encourages the development of a multi-modal transportation system that recognizes the need for additional roadway facilities while also acknowledging the needs of transit users, cyclists, and pedestrians. The plan acknowledges that additional mode choices can help offset some of the vehicular congestion issues throughout the parish.

The overall future goal is to build a system that will lead to improved quality of life and the opportunity to fully achieve the region's economic potential. To help reach that goal, public transit must be improved to serve the riders of need while attracting riders of choice.

To advance the vision for transit and attract new riders, *FUTUREBR* emphasizes the need for a strong network of bus routes that provide fast, frequent, and reliable service with quality facilities and amenities. Identified needs include:

- A network of high-frequency routes at a minimum of 20-minute frequencies in the peak periods and 30 minutes at off-peak times
- Improved access between job centers, educational institutions, convention centers and other key areas of the city
- Express routes serving park-and-ride lots to expand the coverage area to the full City/Parish
- A backbone system of higher capacity transit corridors connecting with foundational bus service to support desired development within targeted growth centers of activity and employment
- Use of technology and on-demand transportation to eliminate first mile/last mile barriers and connect to CATS fixed route services
- Transit access improvements for riders with mobility impairments and disabilities, such as correction of ADA deficiencies at transit stops

Elements for the parish's expanded future transit network include:

- Bus Rapid Transit (BRT)
- High Frequency Bus
- Regional Commuter Rail
- Light Rail
- Park and Ride lots

These transit needs and elements are supported by the transportation goal to develop a modern and choice-rider transit system and its objectives to:

- Build and fund a robust transit network that serves as a backbone to future system expansion
- Identify high-capacity transit corridors for future implementation

Ascension Parish Transportation Master Plan (2020)

The *Ascension Parish Transportation Master Plan* has several recommendations related to developing public transit and ride-share services. The following priorities were identified:

- Developing one or two park and ride facilities near I-10 interchanges to allow regional commuters to carpool/vanpool or transfer to transit services.
- Coordinating with CATS to assess the feasibility of a commuter/express transit service, specifically an I-10 commuter express bus route that would connect park and ride facilities in the parish with major employment areas in East Baton Rouge Parish.

- Continuing to support Baton Rouge to New Orleans intercity passenger rail with a station in Downtown Gonzales.
- Evaluating local transit shuttles, potentially fixed- or flex-route service, in three key corridors (Northwest, Industry, and Sorrento/Donaldsonville) or on-demand microtransit service.
- Exploring technology-based transportation solutions like demand response routes, microtransit, partnerships with TNCs, and autonomous vehicle shuttles.

Livingston Parish Master Plan (2025)

In 2025, Livingston Parish updated its Comprehensive Master Plan which provides a framework for the parish's growth, development, and resilience over future decades. This plan reflects the values, aspirations, and voices of parish residents. It acknowledges that public transportation within Livingston Parish is currently limited and recognizes the need to integrate and enhance its multimodal transportation network, including transit, to support economic growth and quality of life for the long-term resilience of Livingston Parish.

The plan includes goals, objectives, and strategies to improve system reliability, efficiency, and connectivity and contribute to safety, security, and resilience.

MOVEBR Program

The MOVEBR Transportation and Infrastructure Improvements Program, developed by the City-Parish of East Baton Rouge, represents the most significant transportation investment in parish history.

The program is guided by a vision to deliver safe and sustainable transportation solutions with an emphasis on innovation, collaboration, and accountability. Identified MOVEBR goals include reducing congestion, improving traffic flow, expanding multimodal access, modernizing infrastructure, promoting Complete Streets and green infrastructure principles, and supporting compliance with ADA standards.

The program establishes consistent design approaches for more than 70 projects, including over 40 new capacity improvements and 30 community enhancements, while considering drainage, environmental, and right-of-way implications.

Plan Analysis Overview

These plans have significant implications for CATS as they establish near-term operational improvements and compile long-term expansion strategies. Current transit service provided by CATS incorporated route-level recommendations from the 2022 COA in July 2025. The ongoing All Stop Access Program aims to achieve full ADA compliance in the next seven years, and the upcoming North Transit Center is anticipated to open mid-2026.

The Plank-Nicholson BRT Corridor, currently under construction, represents a transformational upgrade to Baton Rouge and the region. This BRT corridor will introduce frequent service, improved reliability, enhanced stations, and specialized vehicles connecting key destinations from north Baton Rouge through downtown and to Louisiana State University. Construction on this project is expected to be complete by the end of 2026.

Looking to the future, these plans identify transit expansion opportunities across the region to serve emerging growth patterns and previously identified critical travel corridors. FUTUREBR emphasizes the development of a network of high-frequency corridors with service every 20 minutes, express routes serving park-and-ride lots across the parish, and a backbone system of higher-capacity corridors including potential BRT and rail connections.

Parish-level plans in Ascension and Livingston Parishes identify opportunities for commuter express service along Interstate 10, local or microtransit services in key activity centers, and coordination with CATS to extend service across the region, particularly to communities like Denham Springs, Prairieville, and Gonzales where demand analysis shows strong commuter connections to Baton Rouge and other employment centers. The proposed Baton Rouge-New Orleans intercity passenger rail service would further expand regional connections with stations in both parishes, while last-mile services like microtransit and vanpool options would offer flexible solutions where fixed-route service is less viable.

Collectively, **these plans establish a vision** for transforming the region's current transit network from a limited, primarily central-city system to a truly multi-centric and multimodal transportation network **that serves the full range of travel needs** for the planning area communities.

8.0 Travel Demand Management

Transportation Systems Management and Operations (TSMO) is a data-oriented, performance-based set of strategies focused on operational improvements. These strategies work alongside other transportation system improvements to help reduce the burden of traffic on local roadways and sustain the benefit of investments made to improve roadway infrastructure.

Historically, transportation professionals have focused on roadways and bridges, moving vehicles, and modal initiatives to address travel demand. However, this focus led to infrastructure projects that increased capacity which led to increased demand and congestion. While capacity projects are still warranted, the greater focus is now on connecting communities, moving people and goods, and meeting the needs of all road users. By prioritizing system efficiency, TSMO can play a pivotal role in enhancing the transportation network's overall performance.

Transportation networks should connect people with each other, with services, and with opportunities, while adapting to the unique context of each community.

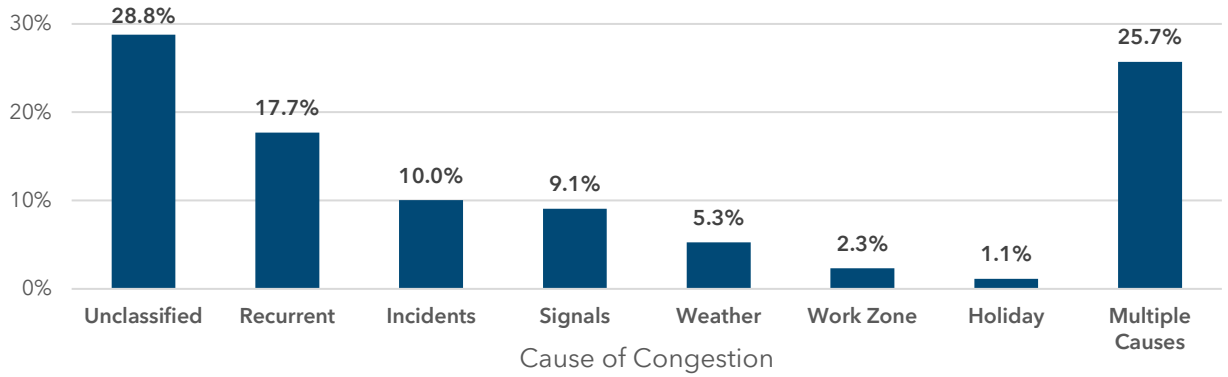
8.1 Baton Rouge Area Roadway Congestion Overview

The greater Baton Rouge area is facing a significant transportation challenge as congestion imposes substantial economic and mobility burdens on residents, businesses, and regional infrastructure. In 2025, roadway delays were responsible for an estimated $441 million in user delay costs and 10.5 million hours of vehicle delay[27]. These numbers underscore the far-reaching impacts of inefficiencies throughout the network.

As shown in **Figure 8.1**, these delays stem from a variety of congestion contributors that affect daily travel across the region, including recurring bottlenecks, non-recurring incidents, roadwork, weather conditions, and other systemic stressors. A substantial portion of the delay falls under the category of Multiple Causes of Congestion which includes situations where several factors overlap to amplify the severity and duration of traffic congestion.

[27] Regional Integrated Transportation Information System (R.I.T.I.S.)

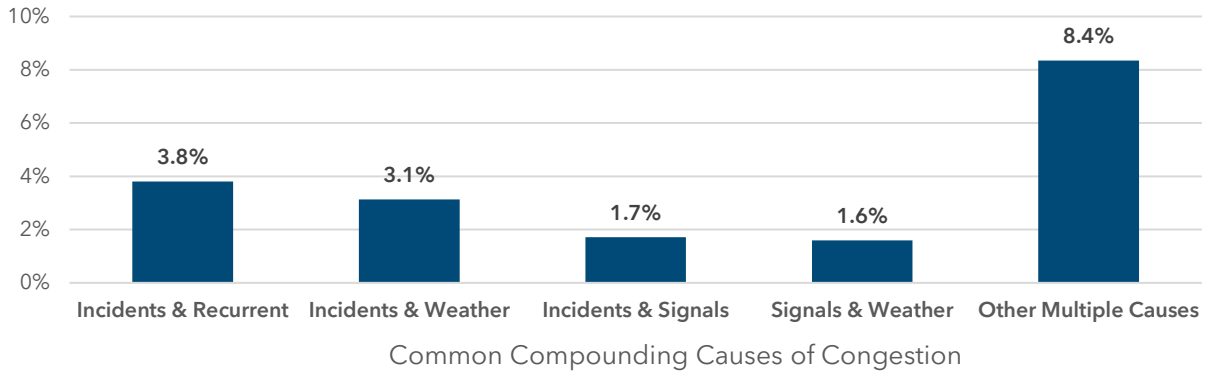
Figure 8.1: Causes of Congestion (2025)



Source: Regional Integrated Transportation Information System (R.I.T.I.S.)

Figure 8.2 breaks down the individual elements contained within the "Multiple Causes of Congestion" category. By isolating the interactions between different congestion types, the figure reveals the layered nature of the region's mobility challenges.

Figure 8.2: Common Multi-Factor Causes of Congestion (2025)



Source: Regional Integrated Transportation Information System (R.I.T.I.S.)

This chart demonstrates that congestion in Baton Rouge is rarely the result of a single issue. Instead, it is the outcome of interconnected factors that are increasingly difficult to manage without coordinated planning and targeted infrastructure investment.

8.2 Regional TSMO Framework

A regional TSMO Framework provides a strategic and collaborative approach to managing and operating transportation systems across a defined region.

A Regional TSMO Framework supports the ability of agencies to deliver efficient and reliable transportation services while focusing on improving system performance, enhancing mobility, and mitigating safety risks.

Regional Framework Components

For TSMO efforts to support the delivery of safer, smarter, and more reliable transportation services, certain components are necessary. **Table 8.1** details the eight critical components that support the success of a regional TSMO framework.

Table 8.1: TSMO Framework Components

Component	Description/Role
Vision, Goals, Objectives	Strategic direction and clear targets
Institutional Collaboration	Partnerships and governance
Business Processes	Planning, resource allocation, integration in programs
Systems & Technology	ITS, data platforms, emerging mobility solutions
Performance Measurement	KPIs, monitoring, continuous improvement
Operational Strategies	Day-to-day TSMO tactics (traffic, incident, traveler info)
Workforce Development	Training and capacity building
Public Outreach	Stakeholder and public engagement

Capability Maturity Model and TSMO

The TSMO framework incorporates the Capability Maturity Model (CMM) process to evaluate program effectiveness over time. This process includes a structured self-assessment, adopted by the American Association of State Highway Transportation Officials, or AASHTO, to guide the successful implementation and institutionalization of TSMO as a formal program. Additionally, CMM provides a way for transportation agencies to:

- Evaluate their current strengths and weaknesses across key institutional and technical areas critical to advancing TSMO.
- Pinpoint targeted actions that will support effective implementation and long-term enhancement of the TSMO program.
- Monitor progress over time and align with national best practices and federal guidance.

CMM Dimensions

The CMM is organized around six key dimensions and subdimensions, shown in **Figure 8.3,** which are widely recognized as essential to advancing TSMO as a program.

Figure 8.3: CMM Dimensions and Sub Dimensions



While the CMM dimensions each play a distinct role in supporting a strong TSMO foundation, the greatest value comes from advancing all dimensions concurrently. Concurrent development allows progress in one area to reinforce and accelerate growth in other areas. This approach creates a more balanced, adaptable, and resilient program and improves the agency's ability to deliver consistent and reliable outcomes, manage change, and sustain long-term improvements.

The dimensions are also assessed within the CMM framework based on their level of maturity. Within the assessment, each dimension is graded on a four-level maturity scale, ranging from Level 1 (performed) to Level 4 (optimized). This scale, detailed below, helps to describe the implementation of each dimension within the framework.

Level 1 – Performed: Activities and relationships are informal, champion-driven, and mostly outside other transportation activities.

Level 2 – Managed: Basic strategy applications are understood and identified requirements are supported; key technologies, capabilities, and structure are under development but have limitations.

Level 3 – Integrated: Standardized strategy applications are implemented and managed; TSMO processes are developed, documented, and integrated; partnerships are aligned.

Level 4 – Optimized: TSMO is a full, sustainable core DOT program priority, established in the basis of continuous improvement with top level management status and formal partnerships.

8.3 Integrating ITS Tools in TSMO

Intelligent Transportation Systems (ITS) serve as the operational backbone of modern TSMO programs. These technologies include advanced sensors, communication systems, and automated control tools. While they provide essential capabilities on their own, their true value is realized when they are woven into a broader framework of effective business processes, comprehensive performance measurement, and strong collaboration among stakeholders.

Intelligent Transportation Systems (ITS) refers to the integrated application of advanced sensing, communication, computing, and control technologies to surface transportation systems.

Fully integrated ITS creates a powerful and interdependent relationship within the larger TSMO system. Data-driven insights generated by ITS infrastructure support more informed decision-making, while automated systems enhance the effectiveness and responsiveness of day-to-day operations. These combined elements work together to optimize traffic flow, deliver timely and accurate travel information, and strengthen incident detection, verification, and response.

ITS Tools and Considerations

ITS tools work dynamically to respond to real-world challenges as they evolve. Examples of these tools and how they are applied are listed below.

- **Adaptive Traffic Signal Control Systems** dynamically adjust signal timing based on real-time traffic conditions. In many cities, these systems have reduced corridor delays, improved travel-time reliability, and lowered vehicle emissions.
- **Advanced Traffic Management Systems (ATMS)** give traffic operators a unified platform to monitor cameras, sensors, and roadway conditions. Operators can quickly detect incidents and adjust strategies to reduce secondary crashes and minimize delays.
- **Road Weather Information Systems (RWIS)** combine pavement sensors, atmospheric monitors, and forecasting tools to guide maintenance crews during, before, and after severe weather events.
- **Dynamic Message Signs (DMS)** provide real-time alerts on crashes, congestion, travel times, and road closures. These traveler-information tools enable drivers to make informed route choices and reduce the impact of unexpected disruptions.

- **Transit Signal Priority (TSP)** detects approaching buses and adjusts signal timing to improve schedule reliability and reduce travel times, especially along heavily used corridors.
- **Connected Vehicle (CV) Pilot Deployments** allow vehicles and infrastructure to exchange safety messages, such as warnings about sudden braking or hazardous road conditions. This coordination can help prevent collisions and enhance situational awareness for both drivers and traffic operators.

The result of incorporating these tools is a safer, more reliable, and more efficient transportation network that allows for operational strategies to be continuously refined by real-time data and supports seamless coordination between agencies and partners. This coordination is essential to meet the evolving mobility needs of communities and to advance the overall performance of the transportation system.

Standard Operating Procedures

Standard Operating Procedures (SOPs), event and incident response plans, and data management protocols are foundational elements to well-defined business processes. Their functions within TSMO are listed below.

- Operators receive guidance for responding consistently to data from ITS.
- Event and incident response plans are pre-planned actions based on real-time ITS triggers.
- Data management protocols define roles for data collection, quality assurance, sharing, and archiving to maximize ITS benefits.

Performance measurement is the key to transforming data into meaningful and actionable insights that drive continuous improvement. By translating ITS information into clear performance measures, indicators can be used to help agencies understand how well the transportation system is operating, where gaps exist, and which strategies are most effective in enhancing mobility and safety.

Identifying ITS Performance Targets

Operational, **safety**, and **customer satisfaction** measures work together to establish meaningful baselines, guide performance targets and decision-making, and form a comprehensive framework. This helps to support accountability and allows agencies to prioritize investments that deliver the

Key features of ITS include:

- Safety Enhancements
- Mobility and Traffic Efficiency
- Environmental and Cost Benefits
- Convenience and Personalization
- Data-Driven Advantages

greatest benefit. By harnessing ITS data in this structured way, agencies can continuously refine operations and create a transportation network that is safer, smarter, and more responsive to the needs of the traveling public.

Additional information about each performance measure is included below.

Operational	• Includes travel times, speed reliability, incident clearance durations, and queue lengths • Allows operators to evaluate congestion, assess the impact of management strategies, and optimize traffic flow during both routine and peak conditions
Safety	• Tracks crash rates, identifies secondary incidents, analyzes near-miss detections, and helps agencies pinpoint where safety risks are elevated • Provides insights to enable proactive mitigation, such as adjusting signal timing, deploying targeted enforcement, or refining incident response
Customer Satisfaction	• Metrics include traveler information accuracy, system uptime, and timely response to incidents or disruptions, reflecting how well the public is served • Transportation operators can improve communication, minimize uncertainty for travelers, and maintain trust in the system's dependability

The success of incorporating ITS tools into operational strategies relies on **well-defined business processes** for timely and coordinated actions, **performance measures** to assess effectiveness and drive continuous improvement, and **stakeholder collaboration** to align resources, share information, and deliver seamless services.

Stakeholder Collaboration

Stakeholder collaboration maximizes the benefits of ITS and TSMO. Complex transportation networks require collaboration across agencies and jurisdictions. To facilitate real-time exchange of traffic, incident, and weather data, agencies should develop and execute data sharing agreements. Cohabitated operations centers enable multi-agency use of shared common operating platforms to quickly address or respond to incidents. Developing Public-Private Partnerships (P3) allows stakeholders to collectively engage third-party data providers and technology vendors for broader

coverage and innovation. Lastly, communication protocols give travelers consistent and accurate information regardless of agency boundaries.

ITS Technological Toolkit

ITS provides the technological toolkit and backbone that brings modern TSMO programs to life. However, the real impact comes from embedding these tools within strong business processes, robust performance management, and collaborative stakeholder frameworks. Together, these elements enable agencies to move from reactive to proactive operations by transforming data into actionable strategies and ultimately delivering a safer and more reliable transportation system for all users.

ITS tools will continue to enable innovative and data-driven solutions to TSMO strategies and challenges. **Table 8.2**. illustrates a few examples of ITS-enabled TSMO strategies in practice.

Table 8.2: ITS-Enabled TSMO Strategies in Practice

TSMO Strategy	ITS Tools	Business Process	Performance Measure	Collaboration Example
Active Traffic Management	Sensors, variable speed limits	Dynamic adjustment protocols	Travel time reliability	Regional DOT coordination
Incident Management	CCTV, incident detection software	SOPs for detection, verification, response	Incident clearance time	Law enforcement, towing, DOT
Traveler Information	DMS, web/mobile apps, ATIS	Real-time data integration, public messaging	User satisfaction	DOTs, transit, private data firms
Work Zone Management	Portable sensors, queue warning	Construction coordination, real-time alerts	Queue length, delay	DOT, contractors, local agencies
Integrated Corridor Management	Data hubs, adaptive signals	Joint operational planning	Corridor throughput	DOT, transit, local governments

Table 8.3 displays the ITS hardware assets that exist within the planning region and some of the ITS services offered at the statewide level. It should be noted that not all statewide ITS services may be found within the Baton Rouge MPO area.

Table 8.3: Inventory of ITS Hardware Assets

Device/Service	Description	Availability
Closed-Circuit Television Cameras[28] [29]	CCTV Cameras provide coverage on high-traffic corridors, feeding back to TMCs, allowing for quick response times to road network incidents.	284
Dynamic Message Signs (DMS)[2]	DMSs display important messages to drivers on key corridors.	30
Vehicle Detection Sensors (VDS)[3]	Consist of several different vehicle detector technologies on the roadways including microwave radars, Bluetooth, and video.	524
Weigh-in-Motion (WIM)[30]	The WIM systems allow for the prescreening of axle loads at highway speed.	4
License Plate Readers (LPR)[31]	High-speed, computer-controlled camera systems automatically capture and record license plate information.	245
Traffic Signals (TS)[32]	Signaling devices manage the flow of traffic at intersections and pedestrian crossings.	525
Connected Vehicle Sensors	Roadside sensors combine Bluetooth, Cellular, and Dedicated Short Range Communications to provide vehicle-to-everything interconnectivity.	4
Ramp Meters[2]	Signals are placed on freeway on-ramps to regulate the flow of vehicles entering the highway.	13
Automatic Vehicle Location (AVL)	GPS based units are used to track buses, trains, and emergency response vehicles.	Utilized within the region.

[28] Louisiana Statewide ITS Asset Management System
[29] MOVEBR City of Baton Rouge, LA
[30] www.dotd.louisiana.gov/about/office-of-operations/dotd-police/weigh-stations
[31] https://lprmaps.com
[32] https://catalog.data.gov/dataset/traffic-signal-80af8

Software Systems

The primary ITS software system is the iNET Advanced Traffic Management System (ATMS). iNET is a next-generation, cloud-enabled platform designed to integrate, monitor, and manage complex transportation networks in real time. This software is utilized statewide by all DOTD Traffic Management Centers (TMC) as the backbone of its statewide ITS operations, including the Baton Rouge metropolitan area.

Built on an open architecture, iNET provides a centralized environment for traffic operators to oversee roadway conditions, coordinate incident response, and optimize mobility across multiple jurisdictions. Its modular design supports scalability, enabling agencies to incorporate emerging technologies such as connected and automated vehicles, adaptive signal control, and integrated traveler information systems.[33] **Table 8.4** illustrates iNET's core capabilities, while **Table 8.5** illustrates iNET's use cases and benefits realized by the DOTD.

Table 8.4: iNET Core Capabilities

Core Capability	Description
Real-Time Traffic Monitoring	Aggregates data from sensors, cameras, and connected devices to deliver actionable insights
Incident and Event Management	Streamlines detection, verification, and response workflows to reduce clearance times and improve safety
Traveler Information Integration	Disseminates accurate and timely updates via dynamic message signs, 511 systems, and mobile applications
Performance Analytics	Provides dashboards and reporting tools for operational efficiency, planning, and federal compliance.

Table 8.5: iNET Use Cases and Benefits Realized by Louisiana DOTD

Use Cases	Benefits
Incident Management and Congestion Reduction	iNET enables DOTD's TMCs to detect and respond to roadway incidents faster to reduce secondary crashes and minimize congestion impacts on major corridors.
Integrated Traveler Information	Through iNET, DOTD delivers real-time travel alerts via LA 511, dynamic message signs, and social media to improve route planning and reduce travel uncertainty for commuters and freight operators.

[33] https://www.parsons.com/products/inet/

Use Cases	Benefits
Event and Emergency Coordination	The system supports coordinated response during hurricanes, flooding, snow, ice, and major events by integrating data feeds and communication channels across agencies to enhance resilience and public safety.
Data-Driven Planning and Performance Reporting	iNET's analytics tools allow DOTD to evaluate corridor performance, prioritize investments, and comply with MAP-21 and FAST Act performance-based planning requirements.

The ATMS.now platform supports iNET and provides advanced traffic management solutions designed to provide cities with real-time visibility and control over their signalized intersections and arterial networks. ATMS.now is built on a robust and scalable architecture that integrates traffic signal operations, data analytics, and system monitoring into a single interface to enable agencies to optimize traffic flow, enhance safety, and improve traveler information services.

The City of Baton Rouge has deployed ATMS.now to modernize its traffic signal system and improve mobility across key corridors. **Table 8.6** illustrates ATMS.now's core capabilities, while **Table 8.7** illustrates ATMS.now's use cases and benefits realized by the City of Baton Rouge.

Table 8.6: ATMS.now Core Capabilities

Core Capability	Description
Centralized Signal Control	Allows operators to monitor and adjust signal timing across the network from a unified dashboard
Adaptive Signal Management	Supports dynamic timing plans based on real-time traffic conditions to reduce congestion and improve travel times
Data Collection and Analytics	Captures high-resolution traffic data for performance reporting, planning, and compliance with federal requirements
Incident/Event Coordination	Facilitates rapid response to traffic disruptions, special events, and emergencies through integrated workflows

Table 8.7: ATMS.now Use Cases and Benefits Realized by City of Baton Rouge

Use Cases	Benefits
Congestion Management on Urban Arterials	ATMS.now enables real-time signal adjustments on major corridors to reduce peak-hour delays and improve travel time reliability.
Adaptive Signal Control for Dynamic Conditions	The system supports adaptive strategies that respond to fluctuations in traffic demand, including school zones, event traffic, and construction detours.
Enhanced Incident Response	Integration with traffic sensors and cameras allows for the quick implementation of timing changes during crashes or lane closures to minimize secondary congestion impacts.
Data-Driven Planning and Reporting	ATMS.now provides detailed performance metrics, such as travel time, delay, and intersection throughput.

Communication Systems

Communications systems support ITS by allowing agencies to:

- **Enable Real-Time Operations**: Support continuous monitoring and rapid incident response through high-bandwidth data transmission
- **Integrate Advanced Technologies**: Facilitate connected vehicle applications, adaptive signal control, and video analytics for safety and mobility improvements
- **Implement Scalability and Resilience**: Provide a future-ready platform that accommodates growing data demands and emerging smart city applications

Table 8.8 illustrates each communication type and availability across the planning region.

Table 8.8: Communication Systems

Device/ Service	Description	Availability
Fiber Optic Cable[34]	Transmits large volumes of data at high speeds over long distances for reliable and real-time connectivity between traffic management centers and field devices.	176+ mi.

[34] MOVEBR City of Baton Rouge, LA

Device/ Service	Description	Availability
Wireless radio	Enables point-to-point or point-to-multipoint communication between ITS devices without physical cabling to support traffic signal coordination, sensor data transmission, and dynamic message sign control	12
Cellular modem	Leverages commercial networks to provide flexible and wide-area connectivity for ITS components to allow rapid deployment and remote management where wired infrastructure is impractical	1

Fiber optic cable serves as the backbone of modern Intelligent Transportation Systems (ITS) by providing the high-speed, high-capacity communication infrastructure necessary for real-time traffic management and data exchange.

Unlike traditional copper wiring, fiber optics transmit data using light signals which enable extremely fast and reliable connectivity over long distances with minimal signal loss. This capability is critical for linking traffic management centers, field devices, and roadside equipment such as cameras, sensors, dynamic message signs, and adaptive signal controllers.

Wireless radio technology enables communication between field devices, traffic management centers, and connected vehicles. Two primary categories of wireless radio are used: licensed spectrum and unlicensed spectrum.

Leveraging both licensed and unlicensed wireless radios supports real-time traffic management, incident response, and future connected vehicle applications.

Licensed Wireless Radios operate on frequencies regulated by the Federal Communications Commission (FCC) and provide dedicated bandwidth for transportation applications. These frequencies provide minimal interference and high reliability for mission-critical functions such as traffic signal coordination, dynamic message sign control, and emergency communications.

Unlicensed Wireless Radios, such as those operating in the 900 MHz, 2.4 GHz, and 5 GHz bands, offer cost-effective connectivity for ITS devices where interference risk is manageable. These radios are commonly used for applications like traffic detection sensors, CCTV video feeds, and short-range communications between roadside units.

Benefits of Wireless Radio in ITS include:

- **Rapid Deployment**: Eliminates the need for extensive trenching or fiber installation in certain corridors
- **Scalability**: Supports expansion of ITS coverage to rural or hard-to-reach areas
- **Redundancy**: Provides backup communication paths to enhance system resilience

Cellular modems provide a flexible, cost-effective communication solution for ITS by enabling real-time data exchange without the need for extensive wired infrastructure. Leveraging 5G LTE and emerging 6G networks, these devices connect field equipment, such as traffic signal controllers, detection sensors, dynamic message signs, and CCTV cameras, to traffic management centers and cloud-based platforms.

Key advantages include:

- **Rapid Deployment** for temporary installations, work zones, and corridors where fiber or wired connectivity is impractical
- **Wide Coverage** that utilizes existing cellular networks to extend ITS functionality to rural or underserved areas
- **Scalability and Future-Readiness** to support integration with connected vehicle applications and edge computing for advanced analytics

Cellular-enabled ITS devices enhance system resilience, provide redundancy for critical communications, and enable cost-effective expansion of smart transportation services.

Third-Party Systems

Third-party systems help to support ITS by providing data and information integration structures. The primary third-party systems that support ITS efforts include RITIS, INRIX, and DriveWyze.

Regional Integrated Transportation Information System (RITIS)

RITIS provides a broad spectrum of advanced analytics for transportation agencies to share, analyze, and visualize real-time and historical traffic data for better situational awareness, operations, and planning by integrating data from various sources like traffic sensors, incidents, and private probes to provide comprehensive network views and support emergency response.

Key functions and features of RITIS include:

- **Data Fusion:** Combines data from multiple agencies (i.e., DOTs, law enforcement, etc.) and private sources (probe data)
- **Situational Awareness:** Offers real-time dashboards and maps showing traffic speeds, incidents, and events
- **Performance Measurement:** Provides tools to analyze congestion, travel times, and system performance
- **Archived Data Analysis:** Allows access to data for historical analysis for research and long-term planning
- **Enhanced Communication:** Facilitates information sharing with the public (i.e., 511, media, etc.) and other responders

"RITIS is a platform that consolidates transportation-related data from multiple agencies, standardizes it, fuses it, and makes it available both in real-time and in historic analytics."

[35]

INRIX Probe Data

INRIX probe data is a comprehensive traffic information solution derived from millions of connected vehicles, GPS-enabled devices, and mobile applications. Unlike traditional fixed sensors, INRIX aggregates anonymized location and speed data from a vast network of sources to provide highly accurate, real-time, and historical insights into roadway performance across local streets, arterials, and highways.[36]

For the Baton Rouge planning region, INRIX probe data supports performance-based planning, congestion management, and investment prioritization to align with federal requirements under MAP-21 and FAST Act and reduce reliance on costly roadside sensors.

35 tetcoalition.org/projects/ritis-pda-suite
36 https://inrix.com

Key functions and features of INRIX include:

- **Real-Time Traffic Monitoring:** Delivers current speed, travel time, and congestion data for corridors without requiring physical sensors
- **Historical Data Analysis:** Offers archived traffic patterns for planning, performance measurement, and project evaluation
- **Origin-Destination (O/D) Analysis:** Enables understanding of travel behavior, route choice, and demand shifts for regional planning
- **Incident Detection and Impact Assessment:** Identifies sudden speed drops and congestion spikes to support rapid response and post-event analysis
- **Coverage Beyond Instrumented Corridors:** Provides data for areas lacking ITS infrastructure for comprehensive network visibility

DriveWyze

DriveWyze is a connected vehicle platform designed to improve freight mobility and roadway safety through advanced weigh station bypasses and real-time driver alerts. Operating via cellular connectivity and integrating with commercial vehicle telematics systems, DriveWyze provides carriers and drivers with tools to reduce delays, enhance compliance, and improve operational efficiency.

Key functions and features of DriveWyze include:

- **Weigh Station Bypass:** Allows enrolled commercial vehicles to bypass participating weigh stations and inspection sites when safety and compliance criteria are met.
- **Safety Notifications:** Delivers proactive alerts for high-risk areas such as steep grades, sharp curves, low bridges, and work zones.
- **Integration with Fleet Management Systems:** Works seamlessly with existing telematics platforms by enabling carriers to monitor bypass activity and compliance performance

For the Baton Rouge CRPC region, Drivewyze enhances freight efficiency, reduces congestion near weigh stations, and improves roadway safety to align with long-range goals for freight mobility and system reliability.

Traffic Management Facilities

Traffic Management Centers (TMCs) deliver traveler-focused and performance-driven services to facilitate reliable and safe movement of people and goods within an area. Two TMCs are located within the planning region and include the Baton Rouge Advanced Traffic Management/Emergency Operations Center (ATM/EOC) and the Statewide TMC facility which is also located in Baton Rouge.

The Baton Rouge ATM/EOC is a cohabitated facility serving the local Baton Rouge area and the LADOTD Regional area. This facility is a collaboration between LADOTD, FHWA, City of Baton Rouge, local Parishes, State Police, the Sheriff's office, and the U.S. Coast Guard. The facility provides 911 services for police, fire, and emergency services, as well as traffic management and emergency preparedness/response functions, including dispatch for the Motorist Assistance Program (MAP). Operators staff the center 24/7 to monitor and manage traffic flow, respond to incidents, and provide real-time traveler information.

The Statewide TMC is operated 24/7 by LADOTD. It primarily focuses on incident management, work zone management, and emergency management disruptions to the interstate system. The facility works in collaboration with the local TMCs across Louisiana to facilitate other services, such as arterial management, event management, and freight management, as they are impacted by interstate closures and special events. The TMC works with MAP to help maximize roadway throughput and efficiency, minimize impacts of roadway incidents, and assist incident and emergency responders by directing resources to needed locations.

These two facilities together form the cornerstone of an integrated and resilient transportation network. By leveraging real-time data, coordinated incident response, and advanced ITS technologies, these centers deliver measurable improvements in safety, mobility, and reliability across the Capital Region and statewide corridors. Their combined capabilities allow rapid decision-making during daily operations and emergencies, reduce congestion and secondary crashes, and provide a future-ready platform for connected and automated vehicle integration which positions Louisiana to meet its long-term transportation goals through 2050.

9.0 Emerging Technologies

This chapter discusses the emerging transportation and ITS technologies that currently impact, or could potentially impact, transportation and land use patterns in the MPO planning area. While the impacts of technological advancements to passenger travel have historically been a focus area within planning, this discussion also investigates potential impacts to freight transportation. Trends that increase or alter how goods move could result in more freight moving through the CRPC region, create new challenges, and/or exacerbate existing challenges. Understanding transportation technology trends is important for identifying potential operational solutions to the region's mobility challenges.

9.1 Connected and Autonomous Vehicles

The Society of Automation Engineers' automation levels classification scheme is the industry standard for measuring the degree of automation in a vehicle as shown in **Table 9.1**.

- Levels 1 through 3 include Advanced Driver Assistance Systems (ADAS) which consist of features such as blind spot monitoring, lane centering, and adaptive cruise control.
- Levels 4 and 5 are more commonly referred to as autonomous vehicles with systems referred to as Automated Driving Systems (ADS).
    - These vehicles are driverless under certain conditions with higher levels referring to the degree in which the driver must assume control of the vehicle.

Table 9.1: Society of Automotive Engineers (SAE) Automation Levels

Level	Title	Description
0	No Automation	Vehicle has zero autonomy.; The driver performs all driving tasks.
1	Driver Assistance	Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.
2	Partial Automation	Vehicle has combined automated functions, like acceleration and steering, but the driver must be ready to take control of the vehicle at all times with notice.

Level	Title	Description
3	Conditional Automation	Driver is a necessity but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.
4	High Automation	The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.
5	Full Automation	The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.

Source: Society of Automotive Engineers

Investments in CAV technology have been made at the federal, state, and regional level. At the federal level, USDOT has funded the Ann Arbor Connected Vehicle Environment, Connected Vehicle Pilots Program, and the Advanced Transportation and Congestion Management Technologies Deployment Program to advance vehicle communications technologies.[37]

USDOT also released its *Federal Automated Vehicle Policy* in 2016, the *Automated Driving Systems 2.0: Vision for Safety* in 2017, and *Preparing for the Future of Transportation: Automated Vehicle 3.0* in 2018. These documents provide more detailed guidance and best practices i for testing and deployment of automated technologies.

CAVs for Passenger Transport

The Capital Region is currently piloting the Iteris BlueTOAD/VantageARGUS connected vehicle field hardware and software platform. This solution combines BlueTooth, Cellular, and Dedicated Short Range Communications technologies to transmit and receive essential vehicle-to-everything (V2X) information to improve safety and mobility.

The associated benefits[38] and applications include:

- Travel time and speed data collection, management, and performance measurement
- Intelligent signal timing applications, including Signal Phase and Timing (SPaT) data transmission

[37] https://www.transportation.gov/sites/dot.gov/files/docs/policy-initiatives/automated-vehicles/320711/preparing-future-transportation-automated-vehicle-30.pdf
[38] www.transportation.gov/research-and-technology/how-connected-vehicles-work

- Transit and freight signal priority and mobility efficiency
- Emergency vehicle priority and preemption
- Pedestrian and bicycle mobility and safety

A major application of autonomous vehicles has been for personal vehicles. These vehicles utilize LiDAR or RADAR, as well as various cameras, to navigate the environment around them. Several vehicle manufacturers have developed Level 2 systems that are available to consumers, such as Tesla "Autopilot" and Cruise "Super Cruise". While these systems control steering and acceleration, drivers must be prepared to take control of driving.

True fully autonomous vehicles are still being tested in controlled testbed facilities and on public roadways across the country. One prominent example within the U.S. is the University of Michigan's Mcity which features more than 25 partners across both the private and public sectors who are leading AV testing. Some companies, such as Ford via the Fusion hybrid autonomous test vehicle, are testing on roadways across Washington State, California, and New Jersey. The Test Tracking Tool, developed by the National Highway Traffic Safety Administration (NHTSA), has become a helpful resource for tracking deployments.

Many AV testing efforts are also centered around ride hail or ridesharing applications. These vehicles utilize the same technology as personal AVs but are focused on moving passengers to ridesharing models of operation. Ridesharing has the potential to improve mobility for many user groups, similar to personal AVs, but they can also result in lower user costs due to their shared nature.

Autonomous shuttles are also shared and focused on moving passengers. They are AVs designed for specific lower-speed routes. These vehicles, also referred to as specialized transit, are different because they are built without a traditional driver's seat and operate at lower speeds, usually under 25 mph. They can be ideal for servicing urban corridors or providing first or last mile connections to larger transportation systems. Many AV shuttle deployments exist across the U.S., beginning with the AAA Free Self-Driving Shuttle which operated in Las Vegas for one year and served over 32,000 riders.

Shared AV applications tend to focus on providing mobility solutions through ridesharing vehicles or autonomous shuttles. However, AV technology has the potential to improve traditional public transportation vehicles as well. For instance, some companies have explored autonomous transit buses. One company is the Canadian electric bus manufacturer, New Flyer, which has released an electric, Level 4

autonomous bus. The Connecticut Department of Transportation (CTDOT) purchased 3 of these buses with federal funding in an effort to decarbonize its fleet by 2035.[39]

CAVs for Freight Transport

While much attention on CAV technology has focused on passenger cars and the movement of people, an increasing number of trucks are utilizing these technologies including sensor, communications, and/or processing software technologies for both steering and braking assistance. Due to ongoing industry challenges to attract new drivers and the continued need to improve safety, the benefits of greater vehicle automation to the trucking industry are substantial. Multiple companies are actively engaged in the development of autonomous trucks.

On a per-mile basis, labor and fuel are the two highest operational costs for the trucking industry. Autonomous trucks would significantly reduce both costs. Truck platoons use vehicle-to-vehicle (V2V) communications and autonomous vehicle control technology to electronically "tether" tractor-trailers together in a convoy formation, known as platooning, to reduce drag and improve fuel efficiency, especially over large distances. Other visions of connected vehicle technology incorporate vehicle-to-infrastructure (V2I), or vehicles equipped with transceivers that communicate with roadside infrastructure. This concept seeks to improve vehicle operation, safety, mobility, and impacts to the environment.

Personal Delivery Devices (PDD)

Personal delivery devices (PDDs) are small, autonomous, or remote-controlled robots designed for last-mile delivery of food, groceries, and small packages. They typically operate on sidewalks and crosswalks. PDDs use cameras and sensors to navigate which allows them to improve delivery efficiency in urban areas while reducing reliance on traditional vehicles.

Examples of PDD companies include FedEx Roxo, Amazon Scout, and various sidewalk robots used for food delivery.







[39] Battery Electric Buses Return to Service on Connecticut Roadways

Key Aspects of PDDs:

- **Functionality:** PDDs are generally used for short-distance deliveries in urban and campus settings. They often require a mobile app or code to unlock the secure cargo area.
- **Safety and Operation:** While some PDDs operate fully autonomously, many still require human oversight for monitoring. They are required to yield to pedestrians, follow traffic rules, and are often restricted to lower speeds.
- **Regulation:** PDDs are not regulated under federal motor vehicle codes, so oversight is left to state and local governments which often create rules regarding their use on sidewalks and in rights-of-way.
- **Impact:** PDDs offer advantages like zero-emission and contactless delivery. Challenges include operating in poor weather and maneuvering around varied built environments (e.g., narrow sidewalks).

Unmanned Aerial Systems (UAS)

Unmanned Aerial Systems (UAS), also known as drones, can also be considered a personal delivery device that utilizes airspace for faster last-mile deliveries. Large companies have invested in drone programs, such as Amazon Prime Air initiative and the IPS Flight Forward Drone Delivery Program. However, drone testing continues to largely occur in public sector testing grounds, such as the Ohio Unmanned Aircraft Systems Center and the Lone Star UAS Center of Excellence and Innovation in Texas.

9.2 Alternative Fuels

Vehicle Electrification

Advances in battery and fuel cell technology have allowed electric vehicles (EV) for both passenger and freight use. The main advantage to these vehicles is their generally lower operating and fuel costs. Numerous vehicle manufacturers have launched electric vehicles into the U.S. market, including Nissan, General Motors, Volkswagen, and Ford. However, electric vehicles require charging and need widely available charging infrastructure, such as charging stations, to be effective. This need

has prompted the federal government and many state DOTs to prioritize electric vehicle infrastructure investments.

The 2021 passing of the IIJA allocated over $30.7 billion towards EV and charging infrastructure. These funds are delivered directly to state and local governments. The bill also directs two key agencies, the Department of Energy and the Department of Transportation, to create a new joint office to support the allocation of funds and infrastructure development. At the state level, departments of transportation have launched programs to prepare for EVs and fund electric vehicle purchases.

For example, Tennessee initiated the Drive Electric Tennessee program in 2018 as a strategic planning effort to guide EV adoption within the state. Other states have formed strategic partnerships to advance regional EV goals, such as the Regional Electric Vehicle for the Midwest Memorandum of Understanding (REV Midwest MOU). REV Midwest MOU includes five states: Illinois, Indiana, Michigan, Minnesota, and Wisconsin. It seeks to accelerate electrification of both personal and freight vehicles in the region by investing in necessary infrastructure and removing any policy barriers.

While passenger cars have generated the majority of electric vehicle shares, electric trucks are seen as vital to reducing emissions and the environmental impact of the transportation sector. Electrification provides an opportunity to address multiple challenges attributed to the freight transportation sector. For example, while medium- and heavy-duty vehicles represented only about 5% of registered vehicles in 2018, they were responsible for over 26% of the U.S. transportation sector's fuel consumption[40] and 23% of the sector's greenhouse gas (GHG) emissions[41]. Electrification could also help address public health. Respiratory diseases attributed to tailpipe emissions disproportionately affect disadvantaged communities due to their proximity to major highways, rail yards, trucking terminals, and other freight-intensive land uses.[42]

Beyond the ability of freight vehicle electrification to mitigate the negative externalities attributed to goods movement, potential fuel cost savings is a motivating factor behind this trend. Fuel typically represents the second highest cost to motor carriers (about 24% of total cost) behind driver wages on a per mile basis.[43] Historically, electricity prices have been lower and more stable than gasoline and diesel prices and

[40] FHWA, Table VM-1 - Highway Statistics 2018 – Policy: Federal Highway Administration, https://www.fhwa.dot.gov/policyinformation/statistics/2018/pdf/vm1.pdf

[41] Environmental Protection Agency – Office of Transportation and Air Quality, Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990-2018, https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100ZK4P.pd

[42] American Lung Association, American Lung Association Energy Policy Development: Transportation Background Document, 2015, www.lung.org/getmedia/10333ba7-8f6f-472e-8392-1388cd5fd754/transportation-backgrounder.pdf.pdf

[43] American Transportation Research Institute, Operational Costs of Trucking, 2019.

offer the opportunity for an industry characterized by tight profit margins to achieve considerable cost savings. Due to the multiple potential benefits of electrification, several operators of private and for-profit fleets have made investments to achieve electric and zero-emission fleets.[44]

Ease of charging is essential to EV adoption. Currently, three levels of electric charging exist:

- **Level 1** – This level is considered "standard" charging and takes about 20 hours to charge a vehicle for a distance of 120 miles. It is equivalent to using a wall plug to charge a vehicle.
- **Level 2** - These chargers are capable of charging at a rate five to seven times faster than a Level 1 charger and take 3 to 4 hourse to provide charge for approximately 120 miles.
- **Level 3** - These chargers are capable of providing a charging rate of 3 to 20 miles per minute.[45]

The CRPC region offers 72 charging locations. All chargers are either Level 2 or Level 3. **Table 9.2** outlines the locations of the 59 Level 2 and 13 Level 3 chargers.

Table 9.2: Electric Vehicle Charging Stations

Level	Location	Address
2	Waters Heritage Storage	609 St. Francis Pkwy, Gonzales
2	Ralph Sellers Jeep	14215 Airline Hwy, Gonzales
2	Demco EV Galvez	15095 LA-931, Gonzales
2	Geaux Chevrolet West	23085 LA-1, Plaquemine
2	Sweetwater Apts.	3476 Sweetwater Blvd, Addis
2	L'Auberge Casino	777 L'Auberge Ave, Baton Rouge
2	Arlington Marketplace	636 Arlington Creek Centre Dr, Baton Rouge
2	LSU Old Front 9 Lot	Engineering Ln, Baton Rouge
2	LSU South Stadium	47 S. Quad Dr, Baton Rouge
2	LSU South Stadium Lot A85	15 Stadium Dr, Baton Rouge
2	LSU Natatorium	779-799 W Chimes St, Baton Rouge

[44] Ronan, D., "Trucking Industry Making Strides Toward Electrification," Transport Topics, March 11, 2021, https://www.ttnews.com/articles/trucking-industry-making-strides-toward-electrification
[45] Level 1, Level 2, or Level 3? EV Chargers Explained

Level	Location	Address
2	LSU Cypress Station	Gov Claiborne Dr, Baton Rouge
2	Perkins Village	12732 Perkins Rd, Baton Rouge
2	Calandro's	12732 Perkins Rd, Baton Rouge
2	ProCharge EV Juicebox Pro	11019 Perkins Rd, Baton Rouge
2	Park Rowe Village Apts.	10202 Park Rowe Ave, Baton Rouge
2	The Addison	10231 The Grove Blvd, Baton Rouge
2	Picardy Club B1	8300 Picardy Ave, Baton Rouge
2	Picardy Club	8340 Picardy Ave, Baton Rouge
2	Picardy Club B2	8316 Picardy Ave, Baton Rouge
2	Element Hotel	8649 Summa Ave, Baton Rouge
2	Harris Porsche	12326 Airline Hwy, Baton Rouge
2	Tru by Hilton	10960 Siegen Holiday Cir, Baton Rouge
2	Baton Rouge South Lot	5740 Siegen Ln, Baton Rouge
2	GSE Integrated	6441 Jones Creek Rd, Baton Rouge
2	Hi Nabor Jones Creek	5383 Jones Creek Rd, Baton Rouge
2	ASAG Coursey	10101 Coursey Blvd, Baton Rouge
2	Royal Palms Apts.	10245 Airline Hwy, Baton Rouge
2	Green Park	590 Lafayette St, Baton Rouge
2	Green Park	550 Main St, Baton Rouge
2	City of Baton Rouge	550 Main St, Baton Rouge
2	Green Park	291 Convention St, Baton Rouge
2	Green Park	151 Lafayette St, Baton Rouge
2	City of Baton Rouge	151 Lafayette St, Baton Rouge
2	Green Park	351 Louisiana Ave, Baton Rouge
2	City of Baton Rouge	351 Louisiana Ave, Baton Rouge
2	Crowne Plaza	4728 Constitution Ave, Baton Rouge
2	Baton Rouge Marriott	5500 Hilton Ave, Baton Rouge
2	Best Western Plus	2683 Energy Dr, Baton Rouge
2	Cadence Bank	6889 Corporate Blvd, Baton Rouge

Level	Location	Address
2	Tapestry Bocage Arlington Properties	7857 Jefferson Hwy, Baton Rouge
2	Whole Foods Market	7539 Corporate Blvd, Baton Rouge
2	Gerry Lane Chevrolet	6505 Florida Blvd, Baton Rouge
2	Gerry Lane Chevrolet	6505 Florida Blvd, Baton Rouge
2	Richards Honda	13413 Millerville Greens Blvd, Baton Rouge
2	All Star Genesis	13000 Florida Blvd, Baton Rouge
2	Demco EV	1810 S Range Ave, Denham Springs
2	Denham Springs City Court	116 N Range Ave, Denham Springs
2	Exchange at Juban	10293 Cassle Rd, Denham Springs
2	Best Plus	13600 Hartman Ln, Walker
2	Demco EV	16262 Wax Rd, Central
2	Demco EV	29466 S Frost Rd, Livingston
2	Demco EV	20100 Plank Rd, Zachary
2	Comfort Inn & Suites	1686 Mount Pleasant, Zachary
2	Demco EV	6823 LA-10, Greensburg
2	Best Western False River	2125 Memorial Blvd, New Roads
2	St Francisville Town Hall	11936 Ferdinand St, St Francisville
2	The St Francisville Inn	5720 Commerce St, St Francisville
2	Demco RV	6843 US-61, St Francisville
3	Tesla	2121 Louisiana 30 W, Gonzales
3	Ralph Sellers Jeep	14215 Airline Hwy, Gonzales
3	Geaux Chevrolet West	23085 LA-1, Plaquemine
3	Circle K	18149 Highland Rd, Baton Rouge
3	All Star Hyundai	12730 Airline Hwy, Baton Rouge
3	Harris Porsche	12326 Airline Hwy, Baton Rouge
3	Acadian Village Shopping Center	3535 Perkins Rd, Baton Rouge
3	Gerry Lane Chevrolet	6505 Florida Blvd, Baton Rouge
3	Hammond Aire Plaza	9650 Airline Hwy, Baton Rouge

Level	Location	Address
3	Pilot Travel Center	2601 S Range Ave, Denham Springs
3	All Star Motors	2590 Range park Dr, Denham Springs
3	DES EV	1810 S Range Ave, Denham Springs
3	Gerry Lane CDJR	19900 Samuels Rd, Zachary

Source: U.S. Department of Energy – Alternative Fuels Data Center

Vehicle Electrification Challenges

Despite the potential for electrification to generate personal and industry cost savings and positive environmental and community impacts, it is not without challenges. Some of the key barriers to vehicle electrification include[46]:

- **Higher Upfront Vehicle Costs:** High vehicle purchase price is perceived as one of the largest barriers to freight electrification. Besides batteries, which are the most expensive component of an electric vehicle, other parts and components such as electric motors are also costly compared to their diesel and gasoline equivalents. High upfront costs particularly impact smaller carriers and owner-operators as they are not likely to have the capital or confirmed client demand to invest in electric vehicles.
- **Costly and Complex Charging Infrastructure Processes:** Planning and installing electric vehicle infrastructure is another large barrier to deploying an electric fleet. To address this barrier, some automotive, utility, and infrastructure companies are testing technology that allows electric vehicles to charge while in motion via under-road pads that wirelessly transmit electricity to receivers mounted underneath vehicles or using overhead wires.[47] The process, known as dynamic charging, could reduce the cost of charging infrastructure.
- **Commercial and Industrial Electricity Rate Structures:** Electricity charging costs in the U.S. are, on average, comparatively lower than diesel fueling costs.[48] However, the substantial electricity demand requirements can greatly reduce the financial savings of electricity over diesel or gasoline. Without greater flexibility in rate structures, it may be financially challenging for fleet operators to consider electrifying their fleets.

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[46] Electrification Coalition, Electrifying Freight: Pathways to Accelerating the Transition, https://www.electrificationcoalition.org/wp-content/uploads/2020/11/Electrifying-Freight-Pathways-to-Accelerating-the-Transition.pdf.
47 Hodari, D., "These Companies Want to Charge Your Electric Vehicle as You Drive," Wall Street Journal, January 18, 2021.
48 "Fuel Prices." Alternative Fuels Data Center: Fuel Prices, U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Office, afdc.energy.gov/fuels/prices.html.

- **Limited Availability of Certified Service Centers and Technicians:** Without certified facilities and technicians, many fleet operators and users may be resistant to electrify their fleets/vehicles until they can be assured that timely repairs can be made to their vehicles to prevent extended periods of downtime.
- **Concerns with Grid Resiliency:** As electric trucks and personal vehicles become more common, significant investments will be needed to upgrade utilities to current grid infrastructure. Otherwise, local grid networks could be pushed beyond their current distribution capacity causing service disruptions or a slowdown of electrification efforts. Evaluating the need for increasing grid distribution capacity is essential for providing sufficient reliability to support a fully electrified transportation system.

Ethanol (E85) Fuel Vehicles

E85 ethanol fuel is a blend of up to 85% ethanol and 15% gasoline. Ethanol fuel burns cleaner than other fuel types and supports cleaner transportation options amid growing infrastructure needs. The Greater Baton Rouge area features 6+ E85 fueling stations which contribute to Louisiana Clean Fuels' efforts to deploy alternative fuels across fleets, providers, and communities. The Baton Rouge MPO collaborates with Louisiana Clean Fuels on alternative fuel corridors to align statewide carbon reduction strategies and transportation planning.

Opportunities for long-range integration include expanding station networks along key corridors to cut emissions and idling. This effort can be encouraged and prioritized through partnering agreements with retailers, like RaceTrac, at high traffic sites. Promoting E85 usage in public fleets and traffic demand management programs that leverage federal funds for incentives are other ways to accomplish long-range integration goals. The locations of ethanol fueling stations within the planning area are listed in **Table 9.3**.

Table 9.3: Ethanol (E85) Stations

Location	Address
RaceTrac #2476	7648 Perkins Rd, Baton Rouge
RaceTrac	7332 LA Highway 1 S, Addis
RaceTrac	11677 Coursey Blvd, Baton Rouge
RaceTrac	18313 Highland Rd, Baton Rouge
RaceTrac #2352	16300 Airline Hwy, Prairieville
RaceTrac	27877 Juban Rd, Denham Springs

Source: U.S. Department of Energy – Alternative Fuels Data Center

Performance Benefits	• A higher octane rating can enhance engine performance in compatible vehicles. • Flex-fuel vehicles are designed to optimize operation with E85 or gasoline blends.
Supports Compliance and Alternative Fuel Mandates	• Use of E85 helps public fleets and organizations meet alternative fuel requirements as outlined by the Energy Policy Act and state renewable fuel standards.
Infrastructure Compatibility	• E85 can be distributed using existing fuel infrastructure with minor modifications, allowing for relatively easy adoption at fueling stations.

Key benefits of ethanol fuel include:

Reduced Greenhouse Gas Emissions	• E85 burns cleaner than conventional gasoline, resulting in lower carbon monoxide, particulate matter, and certain greenhouse gas tailpipe emissions. • E85 supports regional air quality improvement and compliance with federal/state environmental goals.
Renewable and Domestic Source	• Ethanol is produced from renewable plant materials, reducing dependence on imported petroleum. • E85 promotes local and national energy security.
Economic Development	• E85 supports local agriculture and biofuel industries, creating jobs and stimulating rural economies. • E85 keeps more fuel dollars circulating within the regional economy.
Potential Cost Savings	• E85 is often priced lower than regular gasoline, offering operational savings for high-mileage fleets. • Government incentives and grants may further reduce costs for public agencies and private adopters.

Hydrogen Fuel Cell Vehicles

Hydrogen fuel cell vehicles (HFCVs) have emerged as a promising technology within the sustainable mobility landscape. Unlike conventional internal combustion engines, HFCVs utilize hydrogen gas to generate electricity through an electrochemical

process, producing only water vapor and heat as byproducts. This zero-emission process positions HFCVs as a critical complement to battery-electric vehicles (BEVs), particularly in applications where long range, rapid refueling, and heavy-duty performance are essential.

Hydrogen fuel cell technology offers several advantages for metropolitan transportation systems. Vehicles powered by hydrogen can achieve ranges comparable to gasoline-powered cars and refuel in approximately five minutes which minimizes downtime for fleet operations. These characteristics make HFCVs well-suited for urban transit fleets, regional freight corridors, and high-utilization services such as taxis and ride-hailing. Furthermore, hydrogen can be produced from diverse sources, including renewable energy, to support energy diversification and resilience.

Challenges with HFCV Adoption

Widespread adoption of HFCVs face significant challenges. Infrastructure remains limited with hydrogen fueling stations concentrated in select regions such as California and parts of Europe. High capital costs for production, storage, and distribution, combined with the current reliance on fossil-based hydrogen, present environmental and economic hurdles. Safety considerations related to high-pressure storage and public awareness also require attention. Additionally, the rapid advancement of battery technology and charging networks may outpace hydrogen deployment without strategic investments.

Despite these obstacles, the potential benefits of HFCVs are compelling. They offer zero tailpipe emissions, reduced noise pollution, and operational flexibility for sectors where BEVs face limitations, such as heavy-duty trucking, transit buses, and cold-weather operations. As metropolitan areas plan for future mobility, integrating hydrogen fuel cell technology into long-term strategies can diversify clean transportation options, reduce dependence on petroleum, and accelerate progress toward net-zero emissions.