



# LaPlace Multi-Modal Transportation Center Plan

St. John the Baptist Parish

June 6, 2019

**[Page Intentionally Left Blank]**

# LaPlace Multi-Modal Transportation Center Plan



## St. John the Baptist Parish

Natalie Robottom, Parish President  
LaVerne Toombs, Chief Administrative Officer  
René C. Pastorek, Planning and Zoning Director

## AECOM

Tom Hunter, Planning Group Manager  
Derek Chisholm, Principle Planner  
Vivek Shah, Transportation Planner  
Robert Evans, Transportation Planner  
Anne Watkins, Economist  
Lawrence Agu, Urban Planner & Designer

## Urban Systems Inc

Alison Catarella-Michel, Principal  
Alben Cooper, P.E., PTOE

# Table of Contents

- 1. Introduction.....1-1**
  - Background ..... 1-1
  - Progress Towards Passenger Rail Service ..... 1-2
- 2. Supportive Parish Initiatives.....2-1**
  - LaPlace Historic District ..... 2-1
  - LA SAFE Streetscape Improvements ..... 2-2
- 3. Community Engagement.....3-1**
  - Survey Results ..... 3-1
- 4. Basis of Design.....4-1**
  - Passenger Equipment .....4-2
  - Station Category.....4-2
  - Site Guidance .....4-3
  - Platform Configuration ..... 4-4
  - Multi-Modal Planning ..... 4-5
  - Context.....4-6
- 5. Comparable Stations .....5-1**
  - Davis, California .....5-1
  - Saratoga Springs, New York .....5-2
  - Fort Edwards, New York.....5-3
  - Lafayette, Louisiana .....5-4
- 6. Market Analysis .....6-1**
  - Introduction ..... 6-1
  - Data Summary ..... 6-1
  - Community Household Data..... 6-4
  - Consumer Spending Summary..... 6-7
  - Business Data ..... 6-8
  - Top 20 Tapestry Segmentation Profiles..... 6-9
  - Market Gap Analysis and Leakage Factor ..... 6-10
- 7. Transit Oriented Development [TOD] .....7-1**

|  |             |
|--|-------------|
| Introduction .....   | 7-1         |
| TOD Principles.....  | 7-1         |
| TOD Typologies .....   | 7-5         |
| TOD Typology #1 and #2: Urban Centers and Regional Centers .....       | 7-6         |
| TOD Typology #3: Town Centers.....                                     | 7-7         |
| TOD Typology #4: Neighborhood Centers .....                            | 7-10        |
| TOD Typology #5: Main Street .....                                     | 7-12        |
| <b>8. Scenarios .....</b>  | <b>8-1</b>  |
| Main Street Scenario .....   | 8-1         |
| Town Center Scenario.....  | 8-1         |
| Neighborhood Center Scenario .....                                     | 8-2         |
| Development Form and Intensity.....                                    | 8-6         |
| <b>9. Economic &amp; Traffic Impact of Potential Development .....</b> | <b>9-1</b>  |
| Economic Impact .....  | 9-3         |
| Traffic Impacts .....  | 9-7         |
| <b>10. Recommendations.....</b>  | <b>10-1</b> |
| A Great Public Realm .....   | 10-1        |
| Density and Mix of Uses .....  | 10-2        |
| Make the Most of the “Corner Parcel” .....                             | 10-2        |
| Pedestrian Scale Design .....  | 10-3        |
| Phased Parking Development.....  | 10-4        |
| Value Capture .....  | 10-5        |
| Zoning Changes.....  | 10-7        |
| Green Infrastructure .....   | 10-7        |
| Shelter.....   | 10-8        |
| Support for Local Farmers and Small Businesses .....                   | 10-11       |
| Improving Street Connectivity .....                                    | 10-11       |
| <b>11. Conclusion .....</b>  | <b>11-1</b> |
| Development Scenarios .....  | 11-1        |
| Market Analysis.....   | 11-2        |
| Economic & Traffic Impact of Potential Development .....               | 11-2        |
| Recommendations .....  | 11-6        |

# Appendices

**Appendix A: LPMMTC – Public Meeting Presentation Boards: Proposed Development Scenarios**

**Appendix B: LaPlace Multi-Modal Transportation Center: Existing and Projected Network Conditions Analysis**

**Appendix C: Market Analysis – Tapestry Profile Summaries**

---

# 1. Introduction

---

Through a grant from the Federal Rail Administration via the Southern Rail Commission, St. John the Baptist Parish commissioned the Feasibility Study and Conceptual Plan for a Passenger Rail and Multi-Modal Transportation Center in LaPlace in order to reshape the LaPlace area to become more accommodating to development through a smarter regional transportation system and land use plan. The Feasibility Study and Conceptual Plan focuses on the area bound by Airline Highway, Main Street, Cardinal Street and the Kansas City Southern (KCS) owned railroad line as a potential location for a train station, and the surrounding area, including the historic Main Street corridor, between Airline Highway and West 5<sup>th</sup> Street, for potential development. This study and plan will ensure that St. John the Baptist Parish has the capacity to accommodate current and future residents in a safe and resilient manner while building on the unique character of the community. As the State of Louisiana plans for passenger rail service between New Orleans and Baton Rouge with a planned stop in LaPlace, this study and plan will help demonstrate the need for passenger rail service and capacity for improved development along the planned corridor.

The goals for this project include:

- To plan for a multimodal transportation center that provides flexible space for multiple uses such as retail, public meetings and other civic uses, as well as a staging area and shelter during disaster events.
- To determine a preferred location of the transit station, to best integrate with local transit service and provide public amenities, and to provide a conceptual plan for development of the station area.
- To develop a long range plan for smart growth around the train station.

## Background

St. John the Baptist Parish lies on the western outskirts of the New Orleans Metropolitan Area in Southeast Louisiana. Located to the west of St. Charles Parish and to the east of St. James Parish, the Mississippi River bisects the Parish into East and WestBank sections, with a majority of the population living on the EastBank.

From 1960 to 2008, St. John the Baptist Parish saw steady population growth. Growth accelerated between 2005 and 2008 following the devastation of Hurricane Katrina in Southeast Louisiana as people from damaged areas moved to the Parish. The population peaked in 2008, reaching almost 48,000 residents.<sup>1</sup> Since that time, the Parish's population declined and, as of 2017, sits at 43,441.

---

<sup>1</sup> St. John the Baptist Parish. (2014). *St. John the Baptist Comprehensive Land Use Plan - One Parish, One Future*.

**Table 1-1: St. John the Baptist Parish - Annual Population Estimates: 2010-2017**

| Geography  | April 1, 2010 |           | Population Estimate (as of July 1) |        |        |        |        |        |        |        |
|------------|---------------|-----------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|            | Census        | Estimates | 2010                               | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   |
| SJB Parish | 45,924        | 45,817    | 45,606                             | 45,052 | 44,728 | 43,578 | 43,743 | 43,585 | 43,480 | 43,441 |

Source: US Census Bureau - Annual Estimates of the Resident Population, April 1, 2010 to July 1, 2017, 2017 Population Estimates

Historically, St. John the Baptist Parish has been a rural parish with an agrarian based economy, supplemented in more recent years with heavy commercial, industrial, petrochemical, and manufacturing based jobs. Development of the area around the train station can take advantage of the fact that the site is located on some of the Parish’s highest ground and is therefore less susceptible to flooding from storm surge and sea level rise.

## Progress Towards Passenger Rail Service

Passenger rail was a primary mode of travel until the 1930s when automobile use became more widespread. Rail ridership continued to decline in the 1950s and 1960s after the creation of the Interstate Highway System and advancements in air travel further eroded ridership and mode share. Passenger rail service between New Orleans and Baton Rouge existed until the late 1960s, when the service was discontinued. At the time private railroads were increasingly unable to compete with publically funded highway and airport transportation.<sup>2</sup>

**Figure 1-1: Main Street, Grapevine TX**



In 1971, the United States Congress created Amtrak to operate a national passenger rail system. Since its inception, Amtrak retained service throughout Louisiana on only three routes radiating from New Orleans, none of which provided service to Baton Rouge or the parishes between the two cities.

The re-introduction of passenger rail service between New Orleans and Baton Rouge has been the subject of planning efforts and studies as early as 1983 when the Louisiana-Mississippi-Alabama Rapid Rail Transit Commission was formed to study the feasibility of a proposed commuter rail service linking New Orleans to Baton Rouge, Slidell, and Mobile in anticipation of the 1984 World’s Fair.<sup>3</sup> A follow-up study was conducted by the City of New Orleans in 1986.

In 2003, the potential for a New Orleans-Baton Rouge passenger rail connection was again explored in the Louisiana Statewide Rail Plan created by the Louisiana Department of Transportation and Development (DOTD). Referring to a report written by DOTD in 1998, the Statewide Rail plan identified the Kansas City Southern rail corridor as the identified potential corridor for a New Orleans-Baton Rouge passenger rail service<sup>4</sup>. Preliminary analysis of a potential passenger rail line was conducted; however, it wasn’t until 2010 that a comprehensive, in-depth analysis occurred.

<sup>2</sup> LA DOTD (2003). *Louisiana Statewide Rail System Plan*.

<sup>3</sup> Southern Rail Commission (2018). *History*. Retrieved July 20, 2018. <http://www.southernrailcommission.org/history/>

<sup>4</sup> LADOTD (2003). *Louisiana Statewide Rail Plan*. P. 1-51



In 2010, the Southern High-Speed Rail Commission (SHRC), which later became the Southern Rail Commission, produced the *Baton Rouge-New Orleans Intercity Passenger Rail Summary Report*. The report explored all aspects of passenger rail service between the two cities including potential stops, forecasted ridership, and expected capital and operational costs<sup>5</sup>. Further, the report identified LaPlace as a stop on the rail line.

In 2014, the New Orleans Regional Planning Commission (NORPC), Capital Regional Planning Commission (CRPC), and the Baton Rouge Area Foundation commissioned the *Baton Rouge-New Orleans Intercity Rail Feasibility Study*. The purpose of the study was to strengthen support for passenger rail service between Baton Rouge and New Orleans by developing a clearly-defined process for moving the project towards implementation<sup>6</sup>. The document provided an inventory of previous and on-going work in the corridor with the intention of building upon previous efforts.

In addition to statewide and regional planning efforts, St. John the Baptist Parish adopted a comprehensive land use plan in 2014 titled “One Parish, One Future.” The land use plan discusses the possibility of passenger rail service in the parish and identifies rail service as an opportunity to increase and improve transportation, housing, and economic options and opportunities for parish residents. The plan also recommends the creation of a sub-area plan around the station site in LaPlace, which proposes amended ordinances that promote walkable, mixed-use development within the vicinity of the station. Finally, the plan identifies the Kansas City Southern tracks near Main Street in LaPlace as a preferred station location. In 2018, the Parish secured grant funds to complete a LaPlace Multi-Modal Transportation Center Plan and selected AECOM to complete the plan.

**Figure 1-2: Rendering of Potential Station, Farmers Market and Retail Center**



<sup>5</sup> Southern High-Speed Rail Commission (2010). *Baton Rouge-New Orleans Intercity Passenger Rail: Vol 1 Summary Report*.

<sup>6</sup> New Orleans Regional Planning Commission (2014). *Baton Rouge-New Orleans Intercity Rail Feasibility Study*.

---

## 2. Supportive Parish Initiatives

---

Over the course of the last several years, the Parish, under the leadership of Parish President Natalie Robottom, has successfully leveraged opportunities and initiatives which support the development of a transit station and corresponding mixed-use neighborhood. More specifically, the creation of a historic district in the project area and upcoming implementation of resilient streetscape improvements along Main Street will ensure future development progresses in accordance with the goals of this plan. These initiatives are described in greater detail below.

### LaPlace Historic District

The Parish, in partnership with the Louisiana Division of Historic Preservation, recently established an historic district along Main Street and the surrounding neighborhood to preserve and enhance the historic architectural fabric of the area. The LaPlace Historic District, staffed and administered by the St. John the Baptist Parish Historic District Commission, requires approval for demolition of historic structures and for the construction of new buildings or additions along Main Street. Moreover, the Parish intends to develop design review guidelines for new construction along this street to ensure all new development supports a historically-appropriate, pedestrian-friendly atmosphere.

In addition to regulation of development, the Parish has concurrently worked with the Louisiana Office of Cultural Development to establish the same area as a Louisiana Cultural Products District. Establishment of this district opens up key redevelopment incentives aimed at restoration of historic structures and creation of a cultural hub of activity. More specifically, property owners of historic structures are entitled to state historic tax credits associated with redevelopment projects in this district. Further, artists who sell their work in this district, whether in a fixed location or temporary festival, are not required to pay state or local sales taxes associated with their sale. As the Parish continues to work towards revitalization of the project area, officials hope to establish additional mechanisms for redevelopment such as a Main Street organization or restoration loan programs.



Figure 2-1: Main Street Rendering from Previous Studies (Source: Moffat & Nichol)

# LA SAFE Streetscape Improvements

In December 2018, Louisiana Governor John Bel Edwards announced 10 flood resilience projects in six parishes developed and funded through Louisiana’s Strategic Adaptations for Future Environments (LA SAFE) initiative. LA SAFE is a planning effort launched by the governor as part of the National Disaster Resilience Competition to create strategies and fund projects which address anticipated problems associated with coastal land loss and increased flood risk.

One of the projects selected for funding is the Airline and Main Complete Streets project in LaPlace<sup>7</sup>, in and around the proposed transit station area. This project is a Resilient Infrastructure and Community Nonstructural Mitigation/Flood Risk Reduction project to design and install streetscape improvements such as bike lanes, sidewalks, drainage improvements, and banners. This project strives to be an example of how to plan for a future of heightened flood risk in a low risk area by incorporating stormwater management strategies into public infrastructure projects that also provide residents enhanced transportation options.

### Project Description:

*“The proposal suggests a 1.3-mile street improvement on Airline Highway and a 0.3-mile improvement on Main Street. Funding is currently available for off-street pedestrian and cyclist paths, a green median and shade trees. This proposal adds green infrastructure components to hold and filter runoff and extends improvements to Main Street, adding new bioretention cells, sidewalks, permeable parking, native plantings and historic light poles and banners. Complete street designs like this one aim to attract reinvestment in commercial corridors, alleviate drainage systems and reduce flooding. Improved safety for pedestrians and cyclists enhance connectivity, aesthetics and urban identity.”*

**Figure 2-2: LA SAFE - Main Street Complete Street Diagram**

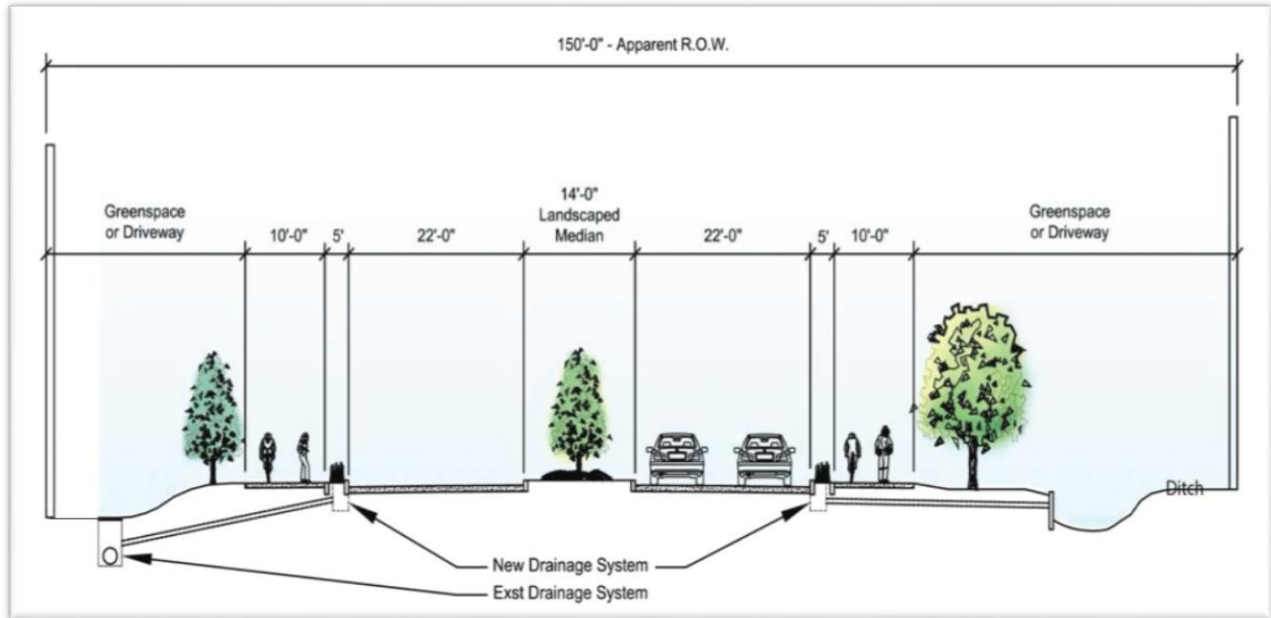


The Airline and Main Complete Streets project will directly address residents’ concerns by creating better-connected, more inclusive transportation along a main artery through town. The project enjoys the support of both parish officials and residents. Upon project completion, the project area will have a suite of public infrastructure improvements which support the smart growth and development of the project area.

<sup>7</sup> LA SAFE. “St. John the Baptist Parish Projects Selected for 2018 Funding.” Web. Accessed Dec. 10, 2018. <https://lasafe.la.gov/engagement/st-john-baptist-parish/>

As the Parish moves forward with revitalization efforts associated with historic district enhancement and installation of key infrastructure upgrades, the project area will be ready and able to leverage the investment associated with a multi-modal transit center.

**Figure 2-3: LA SAFE – Airline Highway (US 61) Proposed Cross Section**



[Remainder of Page Intentionally Left Blank]

---

## 3. Community Engagement

---

Community input for this plan has been solicited through the use of an online survey and community meetings and engagement events. The goal of these events was to determine the kind of amenities Parish residents would like to have around the rail station.

The first community stakeholder meeting was held on June 27, 2018 at the Norris Millet, Sr. Main Parish Library in LaPlace. Invitees included business and property owners along Main Street in the project area, members of the Parish President's Advisory Committee on Neighborhood and Community Development, and representatives from both the local Economic Development Committee and River Parish Transit Authority.

The second community engagement event was held at the local Andouille Festival on October 20, 2018. Members of the project team were present from 11am to 5pm and presented draft development scenarios, results from traffic analysis, and proposed streetscape improvements to festival attendees. Community members had the opportunity to provide comments on the proposed development scenarios and traffic recommendations.

The third community meeting was held in conjunction with the Old LaPlace Town Hall Meeting on October 24, 2018. Attendees, which included residents of the project area, were given a brief presentation of proposed development scenarios and their feedback was solicited.

For the fourth community meeting the project team presented at the St. John Parish Business Association meeting on November 14, 2018. Invitees included business and property owners along Main Street and those from the greater St. John the Baptist Parish.

### Survey Results

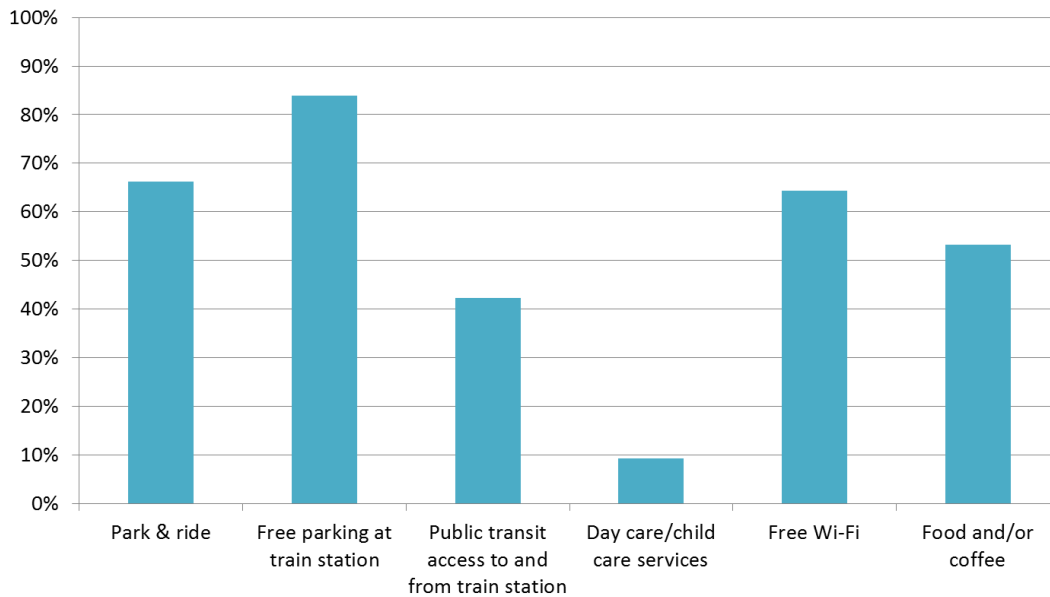
In May of 2018, the Parish administered an online survey to solicit feedback on the proposed rail station and station area plan. The survey was designed to gain community feedback regarding how they would like a passenger rail station to function and what amenities they would like to see in the station area. The survey was active from May 7<sup>th</sup> to June 5<sup>th</sup>, and yielded 378 responses.

The survey respondents were almost entirely from St. John the Baptist Parish with the majority, 81%, being from LaPlace. Sixty percent (60%) of respondents said they would prefer the rail station and surrounding area to serve as a town center and community hub as opposed to having only a simple rail platform and train station. Furthermore, forty-five percent (45%) of respondents work in an area potentially served by the New Orleans-Baton Rouge Passenger Rail Line.

When asked what amenities and services would encourage use of the rail service, parking, public transit access, free Wi-Fi, and food services were most requested. Also high on the list was the provision of day-care/child care services. See Figure 3-1.

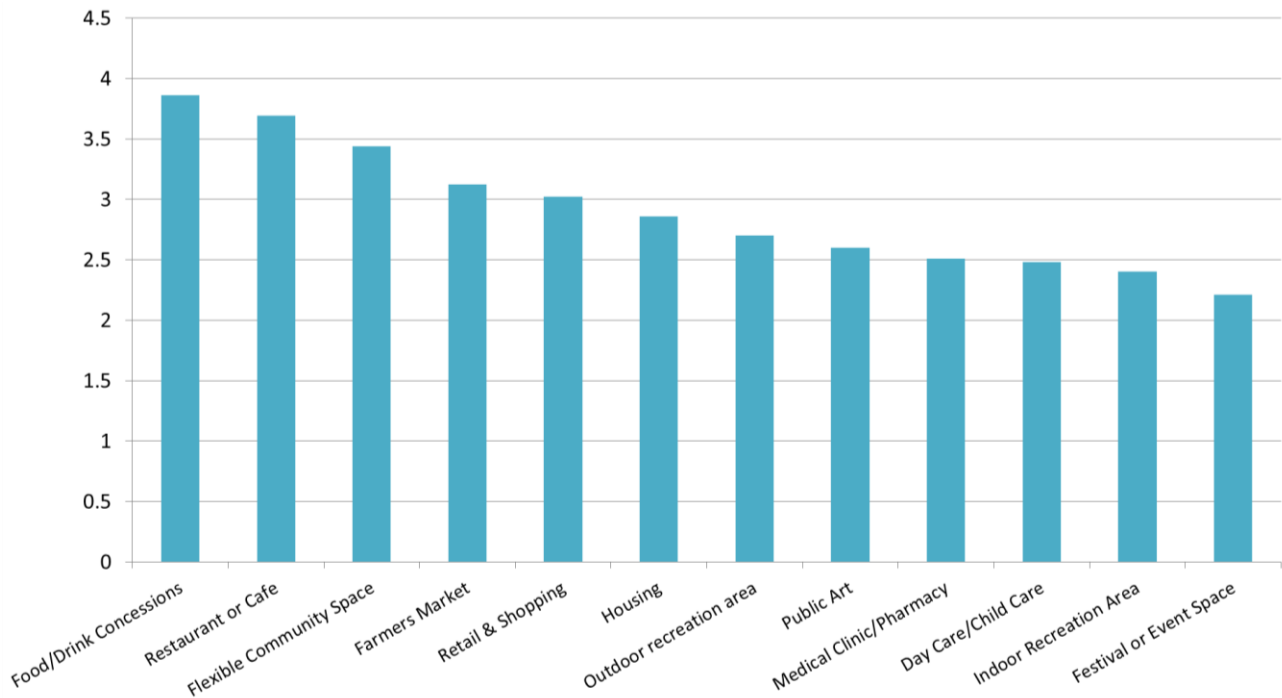
When asked to list the amenities and uses they would like to see in and around the rail station, respondents stated they would prefer food concessions, restaurants or cafes, flexible community space, a farmers' market, and retail and shopping. See Figure 3-2).

**If you could take a train from LaPlace to work, what features at the LaPlace station would encourage this behavior? Check all that apply.**



**Figure 3-1: Survey Results - What features would encourage you to use the rail service?**

**What would you like to see in and around the station site? Select your top 5 choices.**



**Figure 3-2: Survey Results - Station and Area Amenities**

---

## 4. Basis of Design

---

The following section summarizes ridership estimates from previous studies, and describes potential rolling stock, station category designation and platform parameters, which provides a basis of design for the potential rail station layout, features, and amenities.

### Ridership Projections:

The proposed passenger rail service can begin by operating four round trip trains per day (8 trips total per day) with the goal of increasing trips and ridership incrementally. Prior studies provide annual ridership forecasts for initial service and for future service scenarios (Table 4-1). Based on information available from Amtrak and the Federal Rail Administration (FRA), the ridership projections developed by Amtrak in 2010 will be used for station planning purposes.

Estimated annual ridership forecasts indicate that four (4) round trips per day will generate 330,600 annual boardings<sup>8</sup>. Previous studies estimate that 18 percent of forecasted boardings will originate from the Gonzales and LaPlace stops<sup>9</sup>. A ratio comparing 2010 US Census population data for LaPlace (29,872) and Gonzales (9,781) indicates approximately 75 percent of these combined annual boardings originate from LaPlace. Therefore, ridership specifically originating from LaPlace will account for 44,631 boardings annually (Table 4-2).

**Table 4-1: Estimated Annual Boardings - NO-BR Line**

| Round Trips Per Day | Time Horizon        | SHRC (2010) |
|---------------------|---------------------|-------------|
| 2 (4 trips)         |                     | -           |
| 4 (8 trips)         | 4 years out (2013)  | 461,000     |
| 6 (12 trips)        | 9 years out (2018)  | 644,200     |
| 8 (16 trips)        | 15 years out (2023) | 886,400     |

\*Ridership projections based on an opening year of 2013.

**Table 4-2: Estimated Annual Boardings - LaPlace Station**

| Round Trips Per Day | Time Horizon        | SHRC (2010) |
|---------------------|---------------------|-------------|
| 2 (4 trips)         |                     | -           |
| 4 (8 trips)         | 4 years out (2013)  | 62,235      |
| 6 (12 trips)        | 9 years out (2018)  | 86,967      |
| 8 (16 trips)        | 15 years out (2023) | 119,664     |

\*Ridership projections based on an opening year of 2013.

---

<sup>8</sup> New Orleans Regional Planning Commission (NORPC), Capital Region Planning Commission. *Baton Rouge – New Orleans Intercity Rail Feasibility Study: Technical Memoranda – Final Report*. Feb. 2014.

<sup>9</sup> Southern High-Speed Rail Commission (SHRC). *Baton Rouge – New Orleans Intercity Passenger Rail: Volume 1 Summary Report*. Dec 2010.

Daily ridership is calculated using the methodology provided in Amtrak’s *Station Program and Planning Guidelines*.

$$\text{Daily Ridership} = \text{Annual Ridership (On/Off)} / 270$$

This formula provides a number that is higher than typical daily ridership to account for peak conditions on busy travel days, variations in weekday/weekend, and seasonal travel.

**Table 4-3: Estimated Daily Boardings - LaPlace Station**

| Round Trips Per Day | NORPC/CRPC (2014) | Amtrak (2010) | SHRC (2010) |
|---------------------|-------------------|---------------|-------------|
| 2 (4 trips)         | 105               | -             | -           |
| 4 (8 trips)         | 157               | 165           | 230         |
| 6 (12 trips)        | 210               | 284           | 322         |
| 8 (16 trips)        | -                 | 343           | 443         |

## Passenger Equipment

Passenger equipment assumptions are based on previous reports and guidance from Amtrak and the Federal Rail Administration (FRA) and consultation with officials from FRA.

- Each train consists of a locomotive and three passenger coaches utilizing a Cab Car to operate the train in each direction<sup>10</sup>.
- Amtrak would likely initiate service using bi-level coaches like other existing intercity services<sup>11</sup>.
- One locomotive and three passenger bi-level coaches would provide each trip with capacity for approximately 240 seats<sup>12</sup>.

## Station Category

Amtrak station categories are based on annual passenger volume, station staffing, and the amenities and customer service components as it relates to passenger volume at the station. The station categories are an important tool for use in planning and programming the size and amenities of a station to meet local needs, and in understanding the underlying factors that determine the station’s role in the transportation system.

With four round trips per day, the LaPlace station would have an annual projected ridership of 44,361, making it a Category 3 station – a station with 20,000 to 100,000 annual passengers. Category 3, or Caretaker, stations are not staffed by Amtrak agents, but include an interior waiting facility, with restrooms, and are maintained by an Amtrak employee or staffed by another entity. This categorization remains if rail service increases to six round trips per day with estimated ridership increasing to 86,967 per year. At eight round trips per day estimated annual

<sup>10</sup> Southern High-Speed Rail Commission (SHRC). *Baton Rouge – New Orleans Intercity Passenger Rail: Volume 1 Summary Report*. Dec 2010.

<sup>11</sup> Ibid.

<sup>12</sup> New Orleans Regional Planning Commission (NORPC), Capital Region Planning Commission. *Baton Rouge – New Orleans Intercity Rail Feasibility Study: Technical Memoranda – Final Report*. Feb. 2014



ridership increases to 119,664, making LaPlace a Category 2 station – a station with 100,000 to 400,000 annual passengers.

Category 3, or Caretaker stations serve long distance routes and state corridors with limited rail service<sup>13</sup>. Caretaker stations are typically supported by the local community or a state agency. This station category is maintained by a part-time custodian, who may or may not be an Amtrak employee, or a community stakeholder responsible for staffing and managing the station. The Caretaker station does not offer baggage or ticketing window services, and does not provide passenger boarding/de-boarding assistance, but may be equipped with Quik-Trak self-service ticketing machines.

If the frequency of rail service were to increase to eight round trips per day, the projected annual ridership of 119,664 will elevate the LaPlace station to a Category 2, Medium Station. Medium stations are primarily oriented to serving state corridor routes, but also frequently accommodate long distance service. Medium stations include a waiting area, ticket office, restrooms, and often a community space for other tenants providing services during business hours. On routes offering baggage service the station will incorporate baggage facilities. Medium stations are staffed by Amtrak, although staff costs are often supported by state and/or local stakeholder partners where passenger volume and revenue do not support the cost of staffing<sup>14</sup>.

## Site Guidance

The station area and buildings are the links between the rail service and the surrounding community. Amtrak's Program and Planning Guide provides the following general guidance for station and site design<sup>15</sup>:

- Prioritize the development of intercity passenger rail stations as multi-modal transit centers to increase transportation options and make the rail service available to more potential riders.
- Create a pedestrian oriented interface between the community and the station, with the station entrance tied as closely to its urban setting as possible.
  - Design vehicular circulation for low speeds near the station.
  - Minimize widths of roads and cart-ways at pedestrian crosswalks and station entrances
  - Utilize design elements – pavement design, signage, etc. – to give priority to pedestrians over cars.
- Provide equal or better access from public transit to the station, compared to access from parking lots;
- Minimize impervious surfaces to minimize storm water runoff, and use native plants to assist in groundwater recharge; maximize tree canopy where possible to reduce urban heat island effect; capture rain water for site irrigation.
- Provide loading areas for trash and recycling;
- Provide visual screening of service and loading areas and at-grade mechanical equipment;

---

<sup>13</sup> Ibid, p. 32

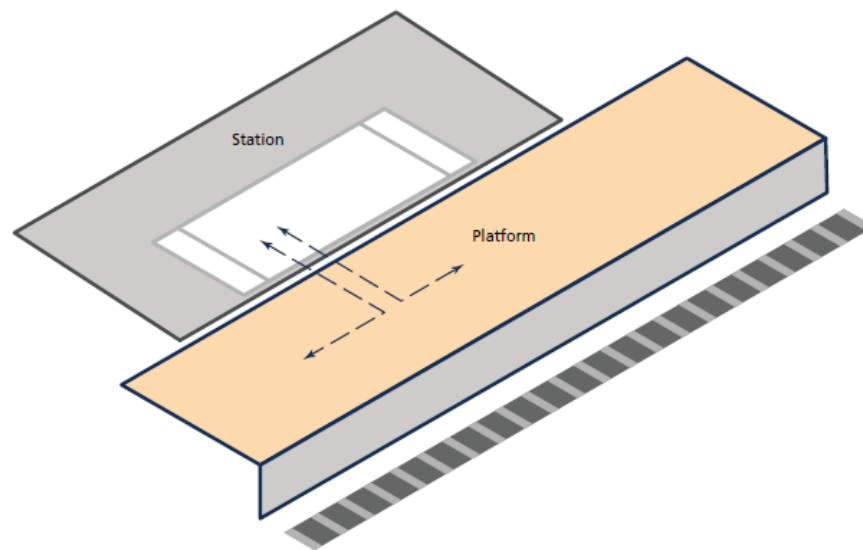
<sup>14</sup> Amtrak. *Amtrak Station Program and Planning Guide*. 2013, p. 31

<sup>15</sup> Ibid, "Chapter 6: Site"

- Provision of a secure perimeter around the service and loading areas controlling and limiting vehicular access;
- Ensure emergency egress from platforms;
- Determine if additional site area is required for Amtrak service and official vehicles;
- Ensure compliance with all universal design standards such as the Americans with Disabilities Act (ADA) and rules found in local and state building codes.

## Platform Configuration

Due to the orientation of the railroad tracks, a side configuration for the station platform will be used. The side configuration is found at the majority of Amtrak stations. The station is located to the side of the tracks and platforms, and is linked to the platforms either at-grade, or through a tunnel or platform bridge. Based on consultation with officials from the FRA, the LaPlace station is expected to consist of a single side-platform: therefore, no link between multiple platforms will be necessary. However, the FRA will have to complete a Future Service Development Plan before platform configuration can be finalized. Amtrak requires a minimum platform length of 300 feet, only to be utilized at stations with low ridership and short trains of four or fewer passenger coaches<sup>16</sup>. For a State Corridor Service, the preferred platform length is 700 feet. The station site can accommodate a platform of up to 650 feet in length. The minimum required width of the platform is 12 feet if baggage service is present, 10 feet if only passenger services are provided. The preferred platform widths are 15 feet and 12 feet for baggage service and passenger service only, respectively.



*One Side platform*

**Figure 4-1: Amtrak - One-Side Platform Configuration (Amtrak, 2013)**

To the greatest extent possible, platform heights should provide level boarding. Because Amtrak is likely to begin service using bi-level trains, a platform height of eight inches Above Top of Rail

<sup>16</sup> Amtrak. *Amtrak Station Program and Planning Guide*. 2013, p. 87

(ATR) will be sufficient. If passenger service is provided using a different type of rail car, platform height requirements will vary. The tracks adjacent to the passenger platform will be used by freight trains, making level boarding only feasible if excessive dimension freight cars (i.e. high and wide) are prohibited. Because such freight cars are permitted, the platform would interfere with clearances required for safe passage of the freight cars. The adjacent tracks, owned by Kansas City Southern, are part of the United States' Strategic Rail Corridor Network (STRACNET), meaning that excessive dimension freight cars, those that exceed the standard width of 10 feet 8 inches, are permitted. Therefore, a maximum platform height of eight inches above the top of rail (ATR) will have to be used<sup>17</sup>. Furthermore, as a privately owned railroad that also serves as a main line for freight operations, level boarding is not required<sup>18</sup>.

Amtrak's standard offset for 15 and 48 inch ATR platforms is 5'7" from the centerline of the track. For 8 inch ATR platforms the standard offset is 5'1".

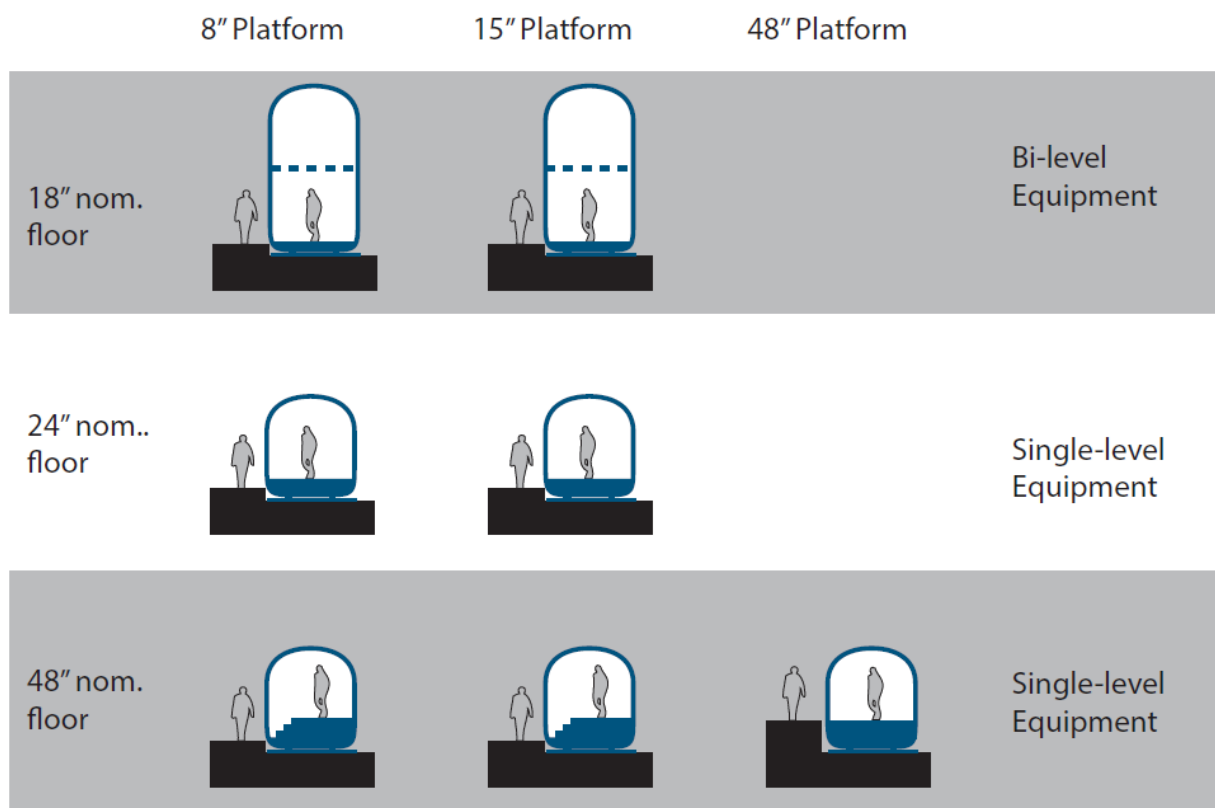


Figure 4-2: Amtrak - Platform Height Configurations & Nominal Floors (Amtrak, 2013)

## Multi-Modal Planning

The development of intercity passenger rail stations as multi-modal transit centers increases transportation options and makes Amtrak more available and accessible to potential riders. Amtrak encourages Transit-Oriented Development (TOD), with mixed-use, high-density development located around stations served by High-Speed Rail (HSR) and Corridor services. A

<sup>17</sup> Ibid. p. 89

<sup>18</sup> Per 49 CFR Part 37 – Transportation Service for Individuals with Disabilities (ADA), Subpart C – Transportation Facilities.

master plan should be developed for the station vicinity, to plan for low-density locations growing to medium density, and medium density sites transforming to high-density urban locations as they mature, or the preservation of rural or historic community adjacent to a station<sup>19</sup>. Further discussion of existing and proposed multi-modal connections can be found in Section 9: Economic and Traffic Impact of Potential Development.

## Context

The station location and characteristics of the surrounding area play an important role in determining the station size, configuration, and ridership. Creating a pedestrian-oriented interface between the city and the station, with the station entrance as closely tied to the urban setting as possible will help increase safety for riders going to and from the station and improve multi-modal transit connections. To this end, parking should be located to the side of the station, rather than in front of it, to provide for safe and easy pedestrian access to the station.

[Remainder of Page Intentionally Left Blank]

---

<sup>19</sup> Amtrak. *Amtrak Station Program and Planning Guide*. 2013, p. 56

---

## 5. Comparable Stations

---

The following rail stations are examples of existing commuter rail stops in the United States that can serve as models for the LaPlace Multi-Modal station due to ridership levels and expected rail service levels.

### Davis, California

The Amtrak station in Davis, CA was first built by California Pacific Railroad in 1868 as a rail depot at what was then called Davisville Junction<sup>20</sup>. The current station was built in 1913 by Southern Pacific railroad to serve the University Farm School, today known as University of California at Davis. The train depot and control tower adopted the Mission Revival style, based on designs created by the Santa Fe Railway at the time. Now a historic landmark, the Davis, CA Amtrak station serves over 375,626 passengers per year.

The station features a ticket sales office, ticket kiosks, and an indoor waiting area. Amtrak provides checked baggage service and shipping services. However, there are no food and drink services available beyond vending machines. Davis prides itself on being an eco-friendly community where bicycling is a common mode of transportation. Therefore the station has many bicycle racks available for bicycle parking. There is also access to three transit routes, A, O, and Z, operated by UniTrans just outside the station on the corner of H Street and 2<sup>nd</sup> Street.

The Davis station is served by the California Zephyr, Capitol Corridor, and Coast Starlight train lines.

#### Station Features

- Ticket Sales Office
- Quik-Trak Kiosks
- Indoor Waiting Area
- Checked Baggage Service
- Short & Long Term Parking
- Bicycle Parking
- Local Transit Access

Annual Ridership (FY 2017):  
**375,626**



---

<sup>20</sup> Amtrak. (2018). *Great American Stations – Davis, California (DAV)* Washington, D.C. Retrieved 11 April 2018  
<http://www.greatamericanstations.com/stations/davis-ca-dav/>

## Saratoga Springs, New York

The Amtrak station in Saratoga Springs was originally built in 1956 for the Delaware and Hudson Railway, which was succeeded by the Canadian Pacific Railway (CPR). The station underwent extensive renovations between 1997 and 2004.

Officially reopening on March 15, 2004, the newly renovated Amtrak station cost roughly \$5.7 million. Federal funding, secured by Congressman John Sweeny and his predecessor, Gerald B.H. Solomon, accounted for \$4.7 million of the total cost. The New York Department of Transportation, CPR, the city of Saratoga Springs, and the Capital District Transportation Authority provided the remaining \$1 million.

The project to renovate the train station was led by the Saratoga County Economic Development Corporation and the city's West Side Neighborhood Association, as part of a larger "neighborhood renaissance" effort. New station amenities included a coffee/news stand, ATM machine, art displays, information kiosk, and an outside patio with benches and a children's play area.

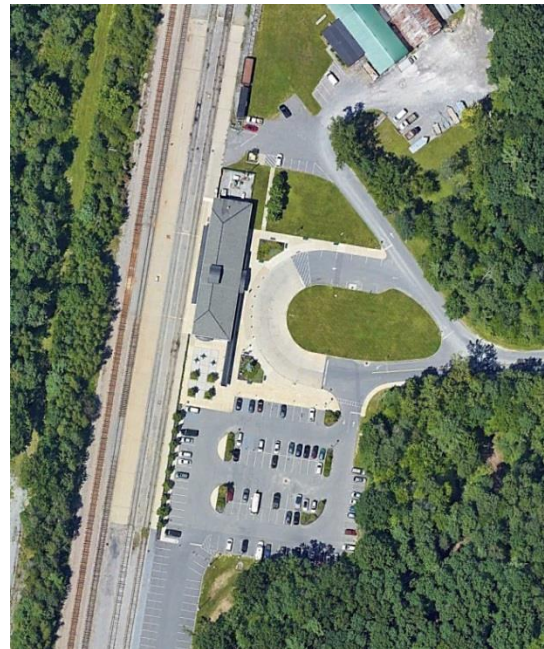
The station provides a limited number of long and short term parking spaces and has connections to local transit service provided by the Capital District Transportation Authority and regional bus service provided by Greyhound. The station is served by Amtrak's Adirondack line.

### Station Features

- Ticket Sales Office
- Indoor Waiting Area
- Coffee/News Stand
- Checked Baggage Service
- Short & Long Term Parking
- Local Transit Access
- Intercity Bus Services
- Public Art
- Outdoor Patio and Children's Play Area

### Annual Ridership (FY 2017):

**36,835**



## Fort Edwards, New York

The Amtrak stop at Fort Edward consists of a historic station building, constructed in 1900, and a concrete platform served by the Adirondack and Ethan Allen Express lines. The station underwent numerous phases of renovation and restoration between 1999 and 2009. In 2005 the restoration project received \$291,532 from the Federal Transportation Enhancement Program, \$36,442 from New York State, and \$40,000 from local sources to create a café, store area, accessible bathrooms, and for structural improvements to the existing building. The restored station reopened in April 2009 and now consists of a gallery and gift shop accompanied by a coffee stand.

### Station Features

- Local Gallery and Gift Shop
- Community Meeting Space
- Entertainment Venue
- Coffee Stand

### Annual Ridership (FY 2017):

**9,917**

The gallery and gift shop within the station created an income generating enterprise for more than 50 local artisans and visual artists<sup>21</sup>. The station waiting room space is now used as a community meeting and function space, and also serves as a venue for musical entertainment, charitable functions and fundraisers. The train station itself consists of just a train platform. There are no ticketing services or indoor waiting areas.

The station is served by the Amtrak's Adirondack line.



<sup>21</sup> Amtrak. (2018). *Great American Stations – Fort Edward, New York (FED)* Washington, D.C. Retrieved 11 April 2018  
<http://www.greatamericanstations.com/stations/fort-edward-ny-fed/>

## Lafayette, Louisiana

The Amtrak station in Lafayette, LA is a multi-modal transportation hub that provides connections to intercity and local bus services. The City of Lafayette uses the building as a city transit office (RideLTS), a waiting room for city bus and Amtrak passengers, an intercity bus station, and the city-parish Traffic and Transportation Department offices.

In 2001, a fire severely damaged the train station, which was abandoned until 2002 when restoration work began. The \$11 million restoration maintained the original walls and canopy of the depot and created a pedestrian gateway leading up to the building that tied into a larger streetscape improvement project in Downtown Lafayette. The multi-modal transportation center was named the Rosa Parks Transportation Center upon its completion in 2007. The station is served by the Sunset Limited line.

### Station Features

- Ticketing services
- Indoor waiting area
- Short term parking
- Local Transit Center & Hub
- Intercity bus service

### Annual Ridership (FY 2017):

**6,154**





---

## 6. Market Analysis

---

### Introduction

Assessing the various economic data sets together reveals that while LaPlace has maintained steady population, housing, and income growth over the last decade, the community still leaks a significant amount of commercial business outside of its immediate trade area and spends less than the national average across almost every major expenditure category. The data reveals that there is consistently more demand than supply across the various retail categories, reflecting a general need for more commercial and retail development. The primary exception is in the grocery category, which sees significant surplus in overall expenditure relative to the national average, meaning that it is very likely that other surrounding rural communities utilize LaPlace as their grocery destination.

Based on the overall market conditions and demographic tapestry segments, LaPlace appears to be currently operating primarily as a point of origin rather than a destination for retail activity. However, the significant retail leakage and associated demand for goods and services also means there is a strong opportunity to bundle commercial development as part of the concepts for the station area. If given a compelling vision and implementation strategy, LaPlace possesses the foundational market conditions to reasonably aspire towards a more town-center TOD typology rather than just a commuter rail TOD typology.

### Data Summary

The data below details the existing and projected market conditions of LaPlace through the application of several research methods including trade area mapping, consumer tapestry profiles, and market gap analysis. The combination of these analyses coalesces into a portrayal of LaPlace's market profile in support of the planning and economic development decisions to be made throughout the advancement of proposed TOD strategies in LaPlace.

Trade area mapping, which divided the study area into 10-minute, 20-minute and 30-minute drive sheds, helped analyze both the local and sub-regional market and population trends. Households within LaPlace show marginal but steady growth through each of the analyzed drive sheds, in addition to a stable increase of home values and projected median household incomes over the past 7 years. Yet despite the steady growth, the trade area for LaPlace within a 10-minute drive shed still spends approximately 10% less than the national average in almost every major consumer expenditure category. This trend is continued throughout the 20 to 30-minute drive shed areas.

**“A net retail gap of approximately \$150 million between all industry groups presents a business opportunity for retailers within the parish.”**



**Figure 1: Third St, Alexandria LA**

Business data analysis identified the top labor force industries within the 10-minute drive shed being comprised of the retail trade and services industries, which both make up 62% of the employee pool and 64% of total businesses. This trend holds true as the drive shed increases to the 20 and 30-minute sheds.

Tapestry Segmentation, which is a market segmentation system used to classify US neighborhoods based on their socioeconomic and demographic compositions, identified the top five tapestry segments in LaPlace as making

up approximately 1/3 of the population, which is dramatically higher than the national composition of 10%. In general, this cluster of residents own a single-family residence built around the 1970s, have an average household size of 2.5, and work within the manufacturing industry.

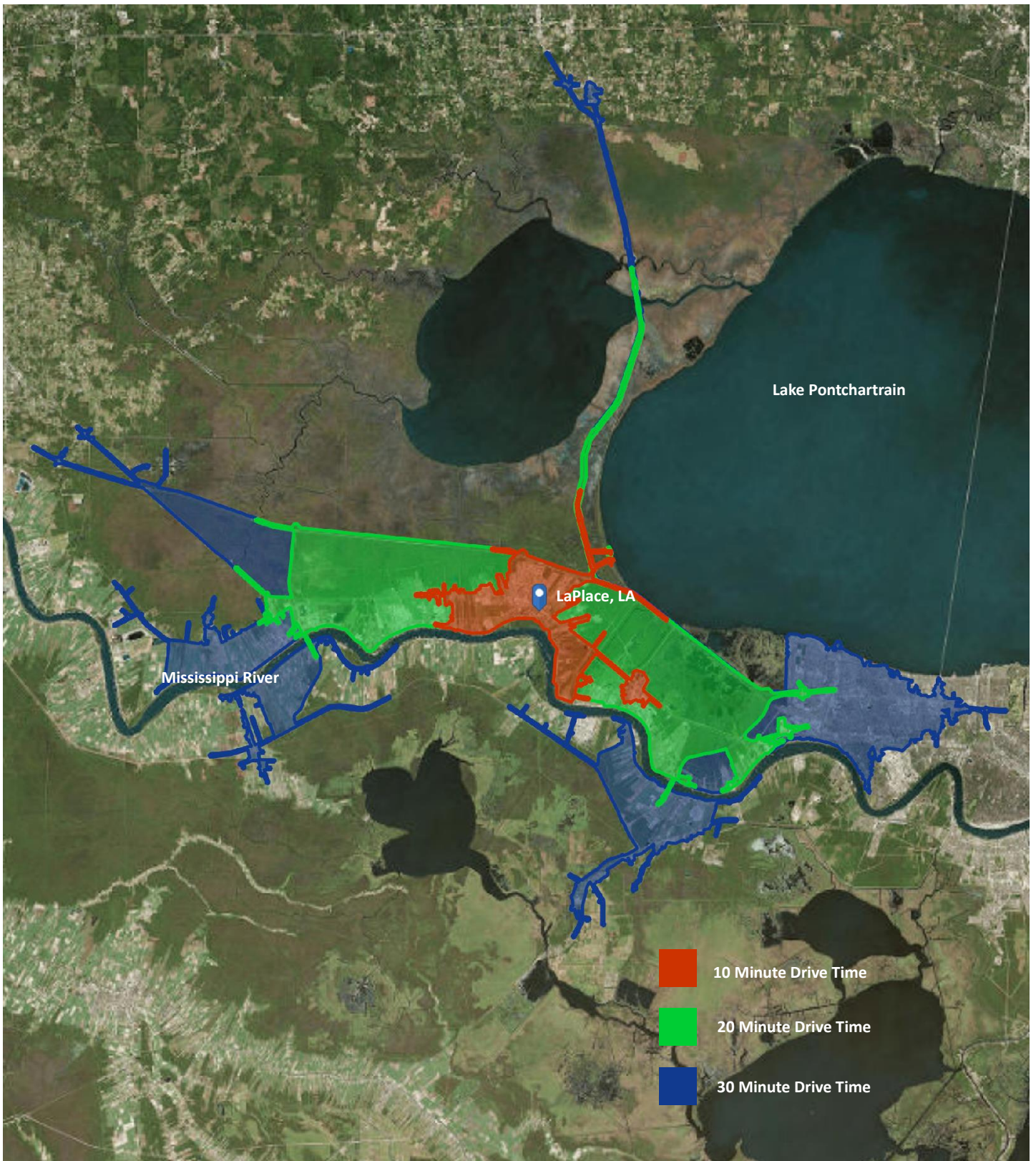
The market gap and leakage factor analysis identified approximately 2/3 of the major industry subsectors, which are within a 15-minute drive-shed, exhibit a condition where demand is higher than supply (i.e. market leakage). A net retail gap of approximately \$150 million between all industry groups presents a business opportunity for retailers within these industries, especially for the home furnishings, hobby, and motor vehicles subsectors. These “leaking” subsectors which primarily sell local convenience goods will need an increased resident population to actualize the potential market. However, the food and beverage, in addition to non-store retailers, represent the largest market surpluses within the drive shed.

#### Retail Emphasis Areas

The three retail areas with the largest potential market in the LaPlace 15-minute trade area, based on the market gap analysis, include:

- Motor vehicle and auto retail services
- Home furnishings and furniture
- General merchandise.

Figure 2: LaPlace, LA Drive Time Map



# Community Household Data

Households within LaPlace have shown marginal but steady growth through each of the analyzed drive sheds, in addition to a stable increase of home values and projected median household incomes over the past 7 years. Household size within a 10-minute drive shed have made gains of 8.5% during this time, which is higher than the gains within the 10 to 30-minute drive sheds. These data indicate growing demand for additional retail services and a growing commuter population that would be well served by passenger service and a multi-modal hub. Table 2 shows continued growth in multi-family housing, which has been considered in planning the station area and surrounding property.

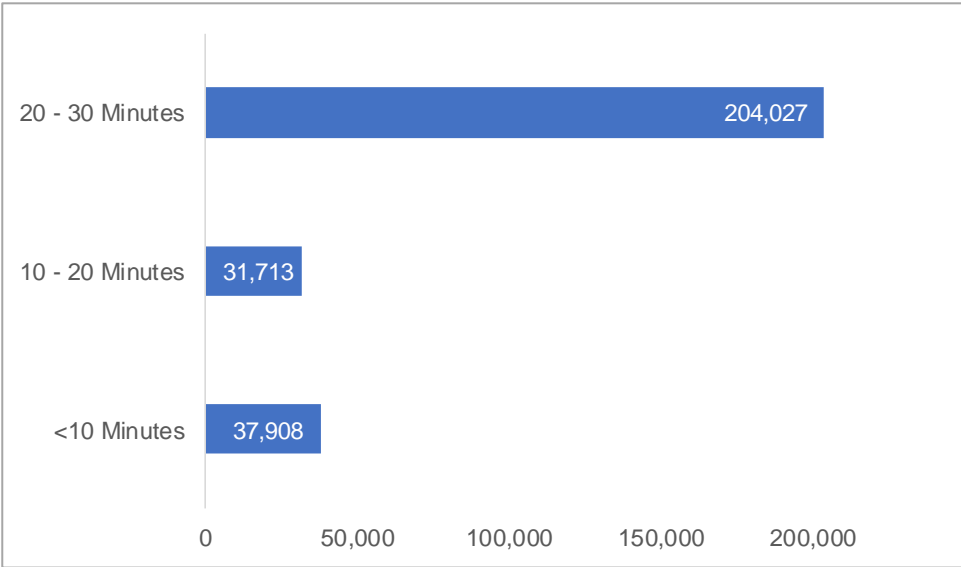
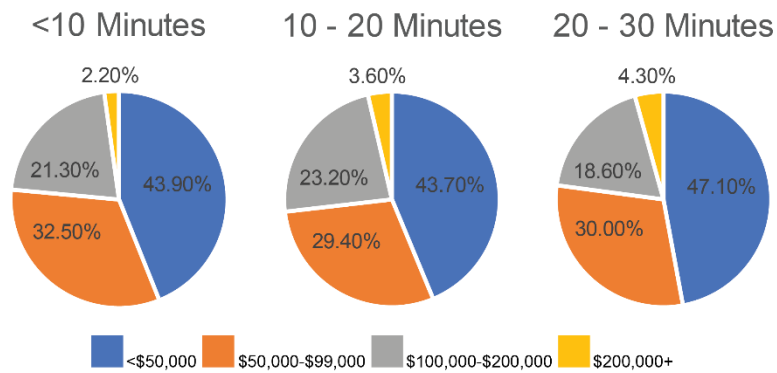


Figure 3: Population by Commute Time, 2017

Table 1: Population and Households within a 10, 20, and 30 minute Drive Shed

|  | 0 - 10 minute | 10 - 20 minute | 20 - 30 minute |
|--|---------------|----------------|----------------|
| <b>Population Summary</b>              |               |                |                |
| 2000 Total Population                  | 34,928        | 29,026         | 209,738        |
| 2010 Total Population                  | 38,233        | 30,299         | 201,874        |
| 2017 Total Population                  | 37,908        | 31,713         | 204,027        |
| 2017 Group Quarters (like dormitories) | 350           | 128            | 969            |
| 2022 Total Population                  | 37,588        | 32,505         | 206,137        |
| 2017-2022 Annual Rate                  | -0.17%        | 0.49%          | 0.21%          |
| 2017 Total Daytime Population          | 34,342        | 37,323         | 195,829        |
| Workers                                | 13,876        | 20,672         | 92,368         |
| Residents                              | 20,466        | 16,651         | 103,461        |
| <b>Household Summary</b>               |               |                |                |
| 2000 Households                        | 11,605        | 9,859          | 83,489         |
| 2000 Average Household Size            | 2.97          | 2.92           | 2.49           |
| 2010 Households                        | 13,145        | 10,853         | 81,118         |
| 2010 Average Household Size            | 2.88          | 2.78           | 2.48           |

|                             |        |        |        |
|-----------------------------|--------|--------|--------|
| 2017 Households             | 13,118 | 11,405 | 82,571 |
| 2017 Average Household Size | 2.86   | 2.77   | 2.46   |
| 2022 Households             | 13,043 | 11,713 | 83,706 |
| 2022 Average Household Size | 2.86   | 2.76   | 2.45   |
| 2017-2022 Annual Rate       | -0.11% | 0.53%  | 0.27%  |
| 2010 Families               | 10,140 | 8,265  | 52,584 |
| 2010 Average Family Size    | 3.29   | 3.17   | 3.05   |
| 2017 Families               | 9,983  | 8,563  | 52,452 |
| 2017 Average Family Size    | 3.28   | 3.18   | 3.05   |
| 2022 Families               | 9,866  | 8,745  | 52,694 |
| 2022 Average Family Size    | 3.28   | 3.18   | 3.05   |
| 2017-2022 Annual Rate       | -0.24% | 0.42%  | 0.09%  |



**Figure 4: Commute Time by Household Income, 2017**

**Table 2: Housing Units, Home Values, Income, Age within Drive Sheds**

|                                | 0 - 10 minute | 10 - 20 minute | 20 - 30 minute |
|--------------------------------|---------------|----------------|----------------|
| <b>Housing Unit Summary</b>    |               |                |                |
| 2000 Housing Units             | 12,526        | 10,471         | 88,508         |
| Owner Occupied Housing Units   | 75.0%         | 74.0%          | 59.3%          |
| Renter Occupied Housing Units  | 17.7%         | 20.2%          | 35.0%          |
| Vacant Housing Units           | 7.4%          | 5.8%           | 5.7%           |
| 2010 Housing Units             | 14,242        | 11,708         | 89,485         |
| Owner Occupied Housing Units   | 73.4%         | 70.1%          | 57.5%          |
| Renter Occupied Housing Units  | 18.9%         | 22.6%          | 33.2%          |
| Vacant Housing Units           | 7.7%          | 7.3%           | 9.4%           |
| 2017 Housing Units             | 14,424        | 12,153         | 91,229         |
| Owner Occupied Housing Units   | 68.9%         | 68.1%          | 53.9%          |
| Renter Occupied Housing Units  | 22.0%         | 25.8%          | 36.6%          |
| Vacant Housing Units           | 9.1%          | 6.2%           | 9.5%           |
| 2022 Housing Units             | 14,652        | 12,519         | 92,529         |
| Owner Occupied Housing Units   | 67.5%         | 68.0%          | 53.9%          |
| Renter Occupied Housing Units  | 21.5%         | 25.6%          | 36.6%          |
| Vacant Housing Units           | 11.0%         | 6.4%           | 9.5%           |
| <b>Median Household Income</b> |               |                |                |
| 2017                           | \$56,478      | \$57,867       | \$52,919       |
| 2022                           | \$62,640      | \$64,937       | \$58,187       |
| <b>Median Home Value</b>       |               |                |                |
| 2017                           | \$172,071     | \$190,518      | \$200,633      |
| 2022                           | \$187,915     | \$214,408      | \$221,836      |
| <b>Per Capita Income</b>       |               |                |                |
| 2017                           | \$25,050      | \$27,370       | \$29,827       |
| 2022                           | \$27,999      | \$30,334       | \$33,463       |
| <b>Median Age</b>              |               |                |                |
| 2010                           | 34.8          | 36.3           | 39.0           |
| 2017                           | 36.3          | 37.3           | 40.0           |
| 2022                           | 37.8          | 38.5           | 40.9           |

**Table 3: Household Income and Housing Unit Values**

|   | 0 - 10 minute | 10 - 20 minute | 20 - 30 minute |
|---|---------------|----------------|----------------|
| <b>2017 Households by Income</b>                  |               |                |                |
| Household Income Base                             | 13,118        | 11,405         | 82,571         |
| <\$15,000   | 11.3%         | 11.0%          | 12.1%          |
| \$15,000 - \$24,999                               | 8.9%          | 10.6%          | 10.9%          |
| \$25,000 - \$34,999                               | 9.8%          | 9.4%           | 10.7%          |
| \$35,000 - \$49,999                               | 13.9%         | 12.7%          | 13.4%          |
| \$50,000 - \$74,999                               | 17.8%         | 15.8%          | 17.6%          |
| \$75,000 - \$99,999                               | 14.7%         | 13.6%          | 12.4%          |
| \$100,000 - \$149,999                             | 14.9%         | 17.4%          | 13.3%          |
| \$150,000 - \$199,999                             | 6.4%          | 5.8%           | 5.3%           |
| \$200,000+  | 2.2%          | 3.6%           | 4.3%           |
| Average Household Income                          | \$71,511      | \$75,693       | \$73,463       |
| <b>2022 Households by Income</b>                  |               |                |                |
| Household Income Base                             | 13,043        | 11,713         | 83,706         |
| <\$15,000   | 11.7%         | 11.3%          | 12.4%          |
| \$15,000 - \$24,999                               | 8.5%          | 10.2%          | 10.4%          |
| \$25,000 - \$34,999                               | 9.0%          | 8.7%           | 9.8%           |
| \$35,000 - \$49,999                               | 11.2%         | 10.2%          | 10.7%          |
| \$50,000 - \$74,999                               | 16.1%         | 14.2%          | 16.2%          |
| \$75,000 - \$99,999                               | 16.4%         | 15.3%          | 14.0%          |
| \$100,000 - \$149,999                             | 17.0%         | 19.7%          | 15.6%          |
| \$150,000 - \$199,999                             | 7.5%          | 6.4%           | 6.0%           |
| \$200,000+  | 2.6%          | 4.0%           | 4.9%           |
| Average Household Income                          | \$79,808      | \$83,749       | \$82,220       |
| <b>2017 Owner Occupied Housing Units by Value</b> |               |                |                |
| Total   | 9,939         | 8,275          | 49,189         |
| <\$50,000   | 5.9%          | 6.5%           | 3.2%           |
| \$50,000 - \$99,999                               | 8.9%          | 10.5%          | 6.2%           |
| \$100,000 - \$149,999                             | 23.0%         | 14.4%          | 13.7%          |
| \$150,000 - \$199,999                             | 27.6%         | 23.0%          | 26.6%          |
| \$200,000 - \$249,999                             | 18.3%         | 19.1%          | 20.7%          |
| \$250,000 - \$299,999                             | 7.6%          | 9.0%           | 12.1%          |
| \$300,000 - \$399,999                             | 5.7%          | 9.6%           | 9.3%           |
| \$400,000 - \$499,999                             | 1.7%          | 5.1%           | 3.4%           |
| \$500,000 - \$749,999                             | 0.6%          | 2.2%           | 3.1%           |
| \$750,000 - \$999,999                             | 0.3%          | 0.6%           | 0.9%           |
| \$1,000,000 +                                     | 0.4%          | 0.1%           | 0.7%           |
| Average Home Value                                | \$186,498     | \$211,668      | \$233,224      |
| <b>2022 Owner Occupied Housing Units by Value</b> |               |                |                |
| Total   | 9,893         | 8,512          | 49,869         |
| <\$50,000   | 4.1%          | 4.2%           | 2.0%           |
| \$50,000 - \$99,999                               | 6.5%          | 7.4%           | 4.2%           |
| \$100,000 - \$149,999                             | 19.5%         | 11.3%          | 10.4%          |
| \$150,000 - \$199,999                             | 26.2%         | 21.1%          | 23.7%          |
| \$200,000 - \$249,999                             | 20.8%         | 20.9%          | 22.1%          |
| \$250,000 - \$299,999                             | 9.3%          | 10.2%          | 13.6%          |
| \$300,000 - \$399,999                             | 7.9%          | 12.6%          | 10.9%          |
| \$400,000 - \$499,999                             | 3.2%          | 7.3%           | 5.1%           |
| \$500,000 - \$749,999                             | 1.2%          | 3.9%           | 5.4%           |
| \$750,000 - \$999,999                             | 0.5%          | 1.0%           | 1.5%           |
| \$1,000,000 +                                     | 0.7%          | 0.1%           | 1.0%           |
| Average Home Value                                | \$211,335     | \$244,294      | \$266,188      |

# Consumer Spending Summary

The trade area for LaPlace within a 10-minute drive shed spends approximately 10% less than the national average on almost every major consumer expenditure. This trend is indicative of the regional 20 to 30-minute drive shed which has similar consumer spending averages. These data can be used by officials and future developers to ascertain the most-needed types of services and products which could influence zoning regulations and the types of tenants for the station area redevelopment. The Spending Potential Index (SPI) compares the average amount spent locally for a product to the average spent nationally. An index of 100 reflects the average. An SPI of 90 indicates that average spending by local consumers is 10 percent below the national average.

**Table 4: 2017 Consumer Spending by Category**

| <b>2017 Consumer Spending</b>                          | <b>0-10 Minutes</b>  | <b>10-20 Minutes</b> | <b>20-30 Minutes</b>   |
|--|----------------------|----------------------|------------------------|
| <b>Apparel &amp; Services: Total \$</b>                | <b>\$24,886,831</b>  | <b>\$23,016,620</b>  | <b>\$161,963,299</b>   |
| Average Spent  | \$1,897.15           | \$2,018.12           | \$1,961.50             |
| Spending Potential Index                               | 88                   | 93                   | 91                     |
| <b>Education: Total \$</b>                             | <b>\$15,121,743</b>  | <b>\$14,908,804</b>  | <b>\$110,407,223</b>   |
| Average Spent  | \$1,152.75           | \$1,307.22           | \$1,337.12             |
| Spending Potential Index                               | 79                   | 90                   | 92                     |
| <b>Entertainment/Recreation: Total \$</b>              | <b>\$37,051,451</b>  | <b>\$33,625,817</b>  | <b>\$234,329,878</b>   |
| Average Spent  | \$2,824.47           | \$2,948.34           | \$2,837.92             |
| Spending Potential Index                               | 91                   | 95                   | 91                     |
| <b>Food Away from Home: Total \$</b>                   | <b>\$38,883,454</b>  | <b>\$35,593,357</b>  | <b>\$251,925,415</b>   |
| Average Spent  | \$2,964.13           | \$3,120.86           | \$3,051.02             |
| Spending Potential Index                               | 89                   | 94                   | 92                     |
| <b>Health Care: Total \$</b>                           | <b>\$68,177,321</b>  | <b>\$60,896,821</b>  | <b>\$421,688,636</b>   |
| Average Spent  | \$5,197.23           | \$5,339.48           | \$5,106.98             |
| Spending Potential Index                               | 93                   | 95                   | 91                     |
| <b>HH Furnishings &amp; Equipment: Total \$</b>        | <b>\$23,093,495</b>  | <b>\$20,967,012</b>  | <b>\$146,338,708</b>   |
| Average Spent  | \$1,760.44           | \$1,838.41           | \$1,772.28             |
| Spending Potential Index                               | 91                   | 95                   | 91                     |
| <b>Personal Care Products &amp; Services: Total \$</b> | <b>\$9,202,902</b>   | <b>\$8,474,177</b>   | <b>\$60,069,571</b>    |
| Average Spent  | \$701.55             | \$743.02             | \$727.49               |
| Spending Potential Index                               | 88                   | 93                   | 91                     |
| <b>Shelter: Total \$</b>                               | <b>\$182,016,582</b> | <b>\$170,143,703</b> | <b>\$1,233,993,146</b> |
| Average Spent  | \$13,875.33          | \$14,918.34          | \$14,944.63            |
| Spending Potential Index                               | 85                   | 92                   | 92                     |
| <b>Travel: Total \$</b>                                | <b>\$23,480,467</b>  | <b>\$22,033,643</b>  | <b>\$154,293,800</b>   |
| Average Spent  | \$1,789.94           | \$1,931.93           | \$1,868.62             |
| Spending Potential Index                               | 86                   | 93                   | 90                     |
| <b>Vehicle Maintenance &amp; Repairs: Total \$</b>     | <b>\$12,902,597</b>  | <b>\$11,572,636</b>  | <b>\$81,028,782</b>    |
| Average Spent  | \$983.58             | \$1,014.70           | \$981.32               |
| Spending Potential Index                               | 92                   | 95                   | 92                     |



# Business Data

The top labor force industries within the 10-minute drive shed are comprised of the retail trade and services industries, which both make up 62% of the employee pool and 64% of total businesses. This trend holds true as the drive shed increases to the 20 and 30-minute sheds. These data may also inform local officials and developers as station-area plans evolve, zoning regulations are revised, and tenants are pursued leasable commercial spaces.

**Table 5: Business and Employee Data within Drive Sheds**

| SIC Codes                                      | 0-10 Minutes |              |              |              | 10-20 Minutes |              |              |              | 20-30 Minutes |              |               |              |
|--|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|
|  | Businesses   |              | Employees    |              | Businesses    |              | Employees    |              | Businesses    |              | Employees     |              |
| Agriculture & Mining                           | 17           | 1.6%         | 207          | 1.8%         | 12            | 1.2%         | 201          | 1.2%         | 125           | 1.4%         | 918           | 0.9%         |
| Construction                                   | 64           | 6.0%         | 644          | 5.5%         | 98            | 9.5%         | 1,355        | 8.3%         | 726           | 8.2%         | 6,305         | 6.1%         |
| Manufacturing                                  | 26           | 2.5%         | 1,271        | 10.8%        | 47            | 4.5%         | 2,732        | 16.6%        | 213           | 2.4%         | 4,736         | 4.6%         |
| Transportation                                 | 33           | 3.1%         | 338          | 2.9%         | 76            | 7.3%         | 1,353        | 8.2%         | 274           | 3.1%         | 2,795         | 2.7%         |
| Communication                                  | 13           | 1.2%         | 57           | 0.5%         | 7             | 0.7%         | 43           | 0.3%         | 93            | 1.1%         | 853           | 0.8%         |
| Utility  | 1            | 0.1%         | 18           | 0.2%         | 6             | 0.6%         | 76           | 0.5%         | 17            | 0.2%         | 430           | 0.4%         |
| Wholesale Trade                                | 30           | 2.8%         | 249          | 2.1%         | 73            | 7.1%         | 1,847        | 11.3%        | 356           | 4.0%         | 3,434         | 3.3%         |
| <b>Retail Trade Summary</b>                    | <b>245</b>   | <b>23.1%</b> | <b>3,053</b> | <b>25.9%</b> | <b>216</b>    | <b>20.9%</b> | <b>2,682</b> | <b>16.3%</b> | <b>1,963</b>  | <b>22.2%</b> | <b>27,193</b> | <b>26.3%</b> |
| Home Improvement                               | 10           | 0.9%         | 278          | 2.4%         | 15            | 1.4%         | 113          | 0.7%         | 73            | 0.8%         | 1,043         | 1.0%         |
| General Merchandise Stores                     | 13           | 1.2%         | 426          | 3.6%         | 14            | 1.4%         | 226          | 1.4%         | 70            | 0.8%         | 3,142         | 3.0%         |
| Food Stores                                    | 37           | 3.5%         | 669          | 5.7%         | 33            | 3.2%         | 379          | 2.3%         | 186           | 2.1%         | 4,601         | 4.4%         |
| Auto Dealers, Gas Stations, Auto Aftermarket   | 24           | 2.3%         | 148          | 1.3%         | 38            | 3.7%         | 474          | 2.9%         | 275           | 3.1%         | 3,188         | 3.1%         |
| Apparel & Accessory Stores                     | 18           | 1.7%         | 70           | 0.6%         | 7             | 0.7%         | 252          | 1.5%         | 170           | 1.9%         | 1,467         | 1.4%         |
| Furniture & Home Furnishings                   | 9            | 0.8%         | 33           | 0.3%         | 11            | 1.1%         | 34           | 0.2%         | 144           | 1.6%         | 1,334         | 1.3%         |
| Eating & Drinking Places                       | 84           | 7.9%         | 1,120        | 9.5%         | 62            | 6.0%         | 782          | 4.8%         | 614           | 6.9%         | 8,896         | 8.6%         |
| Miscellaneous Retail                           | 51           | 4.8%         | 308          | 2.6%         | 36            | 3.5%         | 421          | 2.6%         | 431           | 4.9%         | 3,522         | 3.4%         |
| <b>Finance, Insurance, Real Estate Summary</b> | <b>117</b>   | <b>11.0%</b> | <b>582</b>   | <b>4.9%</b>  | <b>69</b>     | <b>6.7%</b>  | <b>423</b>   | <b>2.6%</b>  | <b>989</b>    | <b>11.2%</b> | <b>7,485</b>  | <b>7.2%</b>  |
| Banks, Savings & Lending Institutions          | 37           | 3.5%         | 175          | 1.5%         | 10            | 1.0%         | 61           | 0.4%         | 190           | 2.1%         | 1,496         | 1.4%         |
| Securities Brokers                             | 6            | 0.6%         | 18           | 0.2%         | 10            | 1.0%         | 29           | 0.2%         | 116           | 1.3%         | 469           | 0.5%         |
| Insurance Carriers & Agents                    | 34           | 3.2%         | 156          | 1.3%         | 14            | 1.4%         | 69           | 0.4%         | 285           | 3.2%         | 2,847         | 2.8%         |
| Real Estate, Holding, Other Investment Offices | 39           | 3.7%         | 232          | 2.0%         | 36            | 3.5%         | 264          | 1.6%         | 397           | 4.5%         | 2,672         | 2.6%         |
| <b>Services Summary</b>                        | <b>438</b>   | <b>41.3%</b> | <b>4,283</b> | <b>36.3%</b> | <b>369</b>    | <b>35.7%</b> | <b>4,981</b> | <b>30.3%</b> | <b>3,631</b>  | <b>41.1%</b> | <b>45,552</b> | <b>44.0%</b> |
| Hotels & Lodging                               | 15           | 1.4%         | 141          | 1.2%         | 5             | 0.5%         | 189          | 1.2%         | 55            | 0.6%         | 1,695         | 1.6%         |
| Automotive Services                            | 39           | 3.7%         | 163          | 1.4%         | 40            | 3.9%         | 458          | 2.8%         | 296           | 3.3%         | 1,671         | 1.6%         |
| Motion Pictures & Amusements                   | 23           | 2.2%         | 155          | 1.3%         | 29            | 2.8%         | 341          | 2.1%         | 211           | 2.4%         | 2,657         | 2.6%         |
| Health Services                                | 67           | 6.3%         | 1,016        | 8.6%         | 37            | 3.6%         | 390          | 2.4%         | 659           | 7.5%         | 15,266        | 14.7%        |
| Legal Services                                 | 19           | 1.8%         | 88           | 0.7%         | 13            | 1.3%         | 47           | 0.3%         | 199           | 2.2%         | 1,400         | 1.4%         |
| Education Institutions & Libraries             | 25           | 2.4%         | 1,053        | 8.9%         | 25            | 2.4%         | 1,128        | 6.9%         | 152           | 1.7%         | 4,904         | 4.7%         |
| Other Services                                 | 250          | 23.6%        | 1,667        | 14.1%        | 220           | 21.3%        | 2,428        | 14.8%        | 2,059         | 23.3%        | 17,957        | 17.3%        |
| <b>Government</b>                              | <b>52</b>    | <b>4.9%</b>  | <b>1,021</b> | <b>8.7%</b>  | <b>32</b>     | <b>3.1%</b>  | <b>700</b>   | <b>4.3%</b>  | <b>207</b>    | <b>2.3%</b>  | <b>3,742</b>  | <b>3.6%</b>  |
| <b>Unclassified Establishments</b>             | <b>24</b>    | <b>2.3%</b>  | <b>66</b>    | <b>0.6%</b>  | <b>31</b>     | <b>3.0%</b>  | <b>23</b>    | <b>0.1%</b>  | <b>250</b>    | <b>2.8%</b>  | <b>80</b>     | <b>0.1%</b>  |

# Top 20 Tapestry Segmentation Profiles

Tapestry Segmentation is a market segmentation system used to classify US neighborhoods based on their socioeconomic and demographic compositions. The following profiles represent the top 20 tapestry segments that best summarize the socioeconomic and demographic composition of LaPlace. These data can be used to determine the types of products and services most likely to flourish in new commercial development or along the redeveloped Main Street corridor.

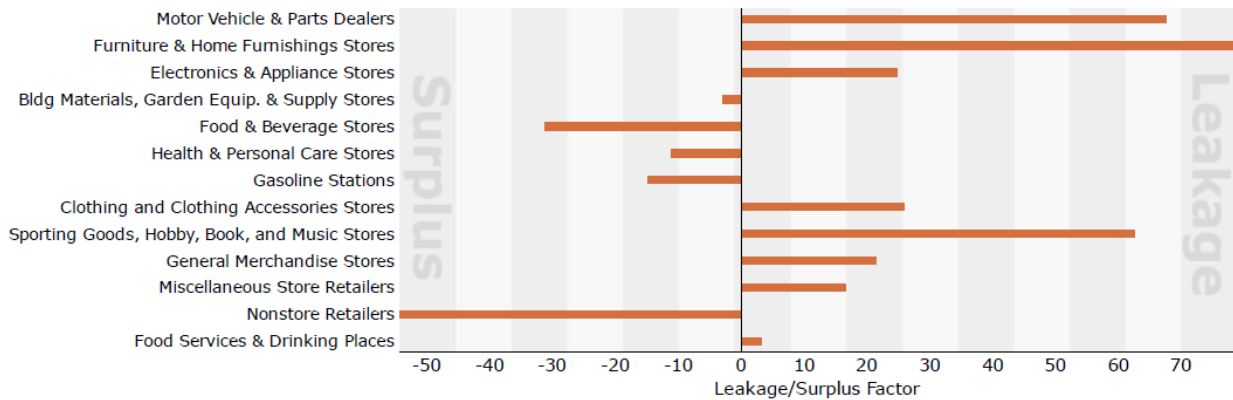
Comfortable Empty Nesters are the largest tapestry profile at just under 10%. The average age of residents within this profile is 48 years of age, which is significantly higher than the LaPlace median age of 36.3. The top five tapestry segments make up about 1/3 of the population which is dramatically higher than the nation composition of 10%. In general, this cluster of residents own a single-family residence built around the 1970s, have an average household size of 2.5, and work within the manufacturing industry.

| Rank | Tapestry Segment               | Percent      | Cumulative Percent | Percent      | Cumulative Percent | Index      |
|------|--------------------------------|--------------|--------------------|--------------|--------------------|------------|
| 1    | Comfortable Empty Nesters (5A) | 9.4%         | 9.4%               | 2.5%         | 2.5%               | 384        |
| 2    | Home Improvement (4B)          | 7.8%         | 17.2%              | 1.7%         | 4.2%               | 455        |
| 3    | Parks and Rec (5C)             | 7.1%         | 24.3%              | 2.0%         | 6.2%               | 358        |
| 4    | Rustbelt Traditions (5D)       | 5.8%         | 30.1%              | 2.2%         | 8.4%               | 264        |
| 5    | Front Porches (8E)             | 5.5%         | 35.6%              | 1.6%         | 10.0%              | 348        |
|      | <b>Subtotal</b>                | <b>35.6%</b> |                    | <b>10.0%</b> |                    |            |
| 6    | Young and Restless (11B)       | 5.4%         | 41.0%              | 1.7%         | 11.7%              | 311        |
| 7    | American Dreamers (7C)         | 5.3%         | 46.3%              | 1.5%         | 13.2%              | 357        |
| 8    | Rural Bypasses (10E)           | 4.6%         | 50.9%              | 1.3%         | 14.5%              | 342        |
| 9    | Savvy Suburbanites (1D)        | 4.3%         | 55.2%              | 3.0%         | 17.5%              | 144        |
| 10   | Midlife Constants (5E)         | 3.6%         | 58.8%              | 2.5%         | 20.0%              | 146        |
|      | <b>Subtotal</b>                | <b>23.2%</b> |                    | <b>10.0%</b> |                    |            |
| 11   | In Style (5B)                  | 3.6%         | 62.4%              | 2.2%         | 22.2%              | 162        |
| 12   | Family Foundations (12A)       | 3.0%         | 65.4%              | 1.1%         | 23.3%              | 285        |
| 13   | Soccer Moms (4A)               | 3.0%         | 68.4%              | 2.9%         | 26.2%              | 104        |
| 14   | Old and Newcomers (8F)         | 2.9%         | 71.3%              | 2.3%         | 28.5%              | 124        |
| 15   | Green Acres (6A)               | 2.7%         | 74.0%              | 3.2%         | 31.7%              | 84         |
|      | <b>Subtotal</b>                | <b>15.2%</b> |                    | <b>11.7%</b> |                    |            |
| 16   | Exurbanites (1E)               | 2.6%         | 76.6%              | 1.9%         | 33.6%              | 135        |
| 17   | Modest Income Homes (12D)      | 2.5%         | 79.1%              | 1.3%         | 34.9%              | 193        |
| 18   | Salt of the Earth (6B)         | 2.4%         | 81.5%              | 2.9%         | 37.8%              | 84         |
| 19   | Retirement Communities (9E)    | 2.4%         | 83.9%              | 1.2%         | 39.0%              | 198        |
| 20   | Metro Fusion (11C)             | 2.4%         | 86.3%              | 1.4%         | 40.4%              | 168        |
|      | <b>Subtotal</b>                | <b>12.3%</b> |                    | <b>8.7%</b>  |                    |            |
|      | <b>Total</b>                   | <b>86.5%</b> |                    | <b>40.4%</b> |                    | <b>214</b> |

# Market Gap Analysis and Leakage Factor

Approximately 2/3 of the major industry subsectors within a 15-minute drive-shed exhibit a condition where the demand is higher than the supply. A net retail gap of approximately \$150 million between all industry groups presents a business opportunity for retailers within these industries, especially for the home furnishings, hobby, and motor vehicles subsectors. These “leaking” subsectors, which primarily sell local convenience goods, will need an increased resident population to actualize the potential market. However, the food and beverage, in addition to non-store retailers, represent the largest market surpluses within the drive shed.

Leakage/Surplus Factor by Industry Subsector



| <b>Industry Summary</b>                       | <b>NAICS</b> | <b>Demand</b><br>(Retail Potential) | <b>Supply</b><br>(Retail Sales) | <b>Retail Gap</b> | <b>Leakage/Surplus</b><br>Factor |
|---|--------------|-------------------------------------|---------------------------------|-------------------|----------------------------------|
| Total Retail Trade and Food & Drink           | 44-45,722    | \$573,159,112                       | \$509,663,136                   | \$63,495,976      | 5.9                              |
| Total Retail Trade                            | 44-45        | \$519,168,110                       | \$459,179,552                   | \$59,988,558      | 6.1                              |
| Total Food & Drink                            | 722          | \$53,991,002                        | \$50,483,584                    | \$3,507,418       | 3.4                              |
| <b>Industry Group</b>                         | <b>NAICS</b> | <b>Demand</b><br>(Retail Potential) | <b>Supply</b><br>(Retail Sales) | <b>Retail Gap</b> | <b>Leakage/Surplus</b><br>Factor |
| Motor Vehicle & Parts Dealers                 | 441          | \$115,751,170                       | \$22,224,440                    | \$93,526,730      | 67.8                             |
| Automobile Dealers                            | 4411         | \$90,756,609                        | \$13,611,763                    | \$77,144,846      | 73.9                             |
| Other Motor Vehicle Dealers                   | 4412         | \$14,491,606                        | \$2,678,662                     | \$11,812,944      | 68.8                             |
| Auto Parts, Accessories & Tire Stores         | 4413         | \$10,502,955                        | \$5,934,015                     | \$4,568,940       | 27.8                             |
| Furniture & Home Furnishings Stores           | 442          | \$15,776,615                        | \$1,865,791                     | \$13,910,824      | 78.8                             |
| Furniture Stores                              | 4421         | \$9,808,366                         | \$146,277                       | \$9,662,089       | 97.1                             |
| Home Furnishings Stores                       | 4422         | \$5,968,249                         | \$1,719,514                     | \$4,248,735       | 55.3                             |
| Electronics & Appliance Stores                | 443          | \$13,588,695                        | \$8,142,105                     | \$5,446,590       | 25.1                             |
| Bldg Materials, Garden Equip. & Supply Stores | 444          | \$35,466,093                        | \$37,578,759                    | -\$2,112,666      | -2.9                             |
| Bldg Material & Supplies Dealers              | 4441         | \$33,446,267                        | \$36,794,940                    | -\$3,348,673      | -4.8                             |
| Lawn & Garden Equip & Supply Stores           | 4442         | \$2,019,826                         | \$783,819                       | \$1,236,007       | 44.1                             |
| Food & Beverage Stores                        | 445          | \$82,993,296                        | \$158,143,388                   | -\$75,150,092     | -31.2                            |
| Grocery Stores                                | 4451         | \$74,737,061                        | \$155,543,583                   | -\$80,806,522     | -35.1                            |
| Specialty Food Stores                         | 4452         | \$4,772,090                         | \$2,599,805                     | \$2,172,285       | 29.5                             |
| Beer, Wine & Liquor Stores                    | 4453         | \$3,484,145                         | \$0                             | \$3,484,145       | 100.0                            |
| Health & Personal Care Stores                 | 446,4461     | \$33,226,968                        | \$41,492,716                    | -\$8,265,748      | -11.1                            |
| Gasoline Stations                             | 447,4471     | \$62,097,732                        | \$83,751,315                    | -\$21,653,583     | -14.8                            |
| Clothing & Clothing Accessories Stores        | 448          | \$21,332,047                        | \$12,518,646                    | \$8,813,401       | 26.0                             |
| Clothing Stores                               | 4481         | \$14,221,667                        | \$9,081,116                     | \$5,140,551       | 22.1                             |
| <b>Industry Group</b>                         | <b>NAICS</b> | <b>Demand</b><br>(Retail Potential) | <b>Supply</b><br>(Retail Sales) | <b>Retail Gap</b> | <b>Leakage/Surplus</b><br>Factor |
| Shoe Stores                                   | 4482         | \$3,036,058                         | \$1,695,324                     | \$1,340,734       | 28.3                             |
| Jewelry, Luggage & Leather Goods Stores       | 4483         | \$4,074,321                         | \$1,742,205                     | \$2,332,116       | 40.1                             |
| Sporting Goods, Hobby, Book & Music Stores    | 451          | \$17,485,851                        | \$3,997,846                     | \$13,488,005      | 62.8                             |
| Sporting Goods/Hobby/Musical Instr Stores     | 4511         | \$15,455,722                        | \$3,323,656                     | \$12,132,066      | 64.6                             |
| Book, Periodical & Music Stores               | 4512         | \$2,030,129                         | \$674,190                       | \$1,355,939       | 50.1                             |
| General Merchandise Stores                    | 452          | \$96,131,430                        | \$61,805,159                    | \$34,326,271      | 21.7                             |
| Department Stores Excluding Leased Depts.     | 4521         | \$71,437,169                        | \$46,396,325                    | \$25,040,844      | 21.3                             |
| Other General Merchandise Stores              | 4529         | \$24,694,261                        | \$15,408,834                    | \$9,285,427       | 23.2                             |
| Miscellaneous Store Retailers                 | 453          | \$21,703,408                        | \$15,456,339                    | \$6,247,069       | 16.8                             |
| Florists                                      | 4531         | \$1,261,148                         | \$700,567                       | \$560,581         | 28.6                             |
| Office Supplies, Stationery & Gift Stores     | 4532         | \$5,126,552                         | \$2,964,709                     | \$2,161,843       | 26.7                             |
| Used Merchandise Stores                       | 4533         | \$3,062,223                         | \$2,295,116                     | \$767,107         | 14.3                             |
| Other Miscellaneous Store Retailers           | 4539         | \$12,253,484                        | \$9,495,947                     | \$2,757,537       | 12.7                             |
| Nonstore Retailers                            | 454          | \$3,614,806                         | \$12,203,048                    | -\$8,588,242      | -54.3                            |
| Electronic Shopping & Mail-Order Houses       | 4541         | \$1,363,749                         | \$0                             | \$1,363,749       | 100.0                            |
| Vending Machine Operators                     | 4542         | \$418,171                           | \$8,649,186                     | -\$8,231,015      | -90.8                            |
| Direct Selling Establishments                 | 4543         | \$1,832,887                         | \$3,553,862                     | -\$1,720,975      | -31.9                            |
| Food Services & Drinking Places               | 722          | \$53,991,002                        | \$50,483,584                    | \$3,507,418       | 3.4                              |
| Special Food Services                         | 7223         | \$1,001,955                         | \$456,022                       | \$545,933         | 37.4                             |
| Drinking Places - Alcoholic Beverages         | 7224         | \$1,788,322                         | \$3,373,552                     | -\$1,585,230      | -30.7                            |
| Restaurants/Other Eating Places               | 7225         | \$51,200,726                        | \$46,654,010                    | \$4,546,716       | 4.6                              |

**[Remainder of Page Intentionally Left Blank]**

---

# 7. Transit Oriented Development [TOD]

---

## Introduction

Transit Oriented Development (TOD) is a type of community development that includes a mixture of housing, office, retail, community space, and/or other amenities and uses in close proximity to quality public transportation to create a walkable, integrated neighborhood or town center. By orienting development around transit, TODs leverage the access provided by public transportation to support higher density developments, while simultaneously leveraging higher density development to generate public transportation ridership and development efficiency.

Transit Oriented Development comes in many types. This typology analysis contains two primary sections for understanding and determining an appropriate typology for LaPlace. The first section presents principles for TOD. These principles will help guide St John the Baptist Parish (SJBP) in choosing a particular development type and creating a development strategy. The second section describes five TOD types, the key characteristics of each type, and how three of these typologies would apply in LaPlace. The purpose of this report is to provide a basis for the criteria and principles used to develop the LaPlace Multi-Modal Transit Center Area Plan.

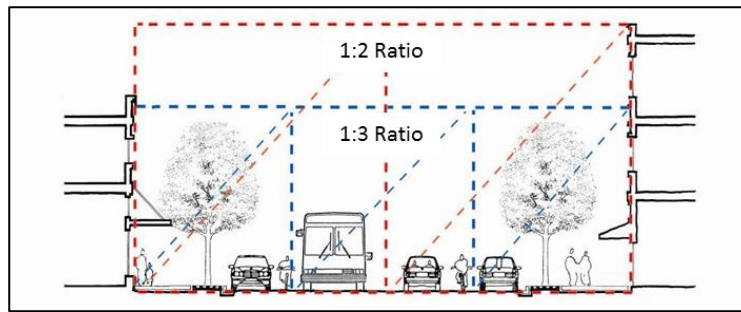
## TOD Principles

The following principles are meant to help organize and focus potential typologies and designs for the LaPlace Multi-Modal Transportation Center. They reflect a combination of TOD best practices and local knowledge, goals, and priorities. Therefore, it is important that each principle be given careful consideration and applied to the LaPlace Multi-Modal Transportation Center Plan.

### **1) *Orient and scale buildings for pedestrians***

Buildings oriented to local streets create a pedestrian-friendly environment, which can help drive activity to the development. The main entrances should face the street; larger windows invite pedestrians to slow down to look to see what is happening inside the stores. Shallow setbacks should be required in the station area to direct visual connections to the buildings from sidewalks. Additionally, the building height to street width ratio should be human-scaled, as shown in Figure 5. The building height to street width ratio should be at least 1:3. Using the appropriate ratio will allow the pedestrian to perceive a sense of enclosure within a specific area.

**Figure 5: Building Height to Street Width**



Source: ITE, Context Sensitive Solutions, 2011. <https://www.ite.org/css/>

## **2) *Get the parking right***

Successful TODs will provide the right amount of parking in order to maximize development potential of the station area. Too much parking can reduce developable land and development interest, but not enough parking may reduce the attractiveness of the area. Therefore, it is important for communities to assess the amount of parking based on development goals and station area design visions. Some communities have created parking districts to establish separate parking controls within a TOD. Parking garages are expensive, but allow for more parking spaces per acre when developable land is at a premium. Parking lots and garages should be designed to conceal parked automobiles from public view as much as possible, as well as incorporate parking for bicyclists, and provide safe walkways between the lot and adjacent uses.

## **3) *Provide safe and easy access to the transit station***

Successful TODs require multimodal infrastructure within and connecting to the area. At least one of the primary streets should be capable of providing space for automobiles, bicyclists, transit, and pedestrians. Dedicated bicycle routes along primary thoroughfares enhance safety for its users, as well as motorists. Safe access for pedestrian may be provided by constructing sidewalks at least five feet wide and with adequate lighting. Additionally, crosswalks near stations should have enhanced safety designs, such as distinctly designed crosswalks, additional signage, and pedestrian hybrid beacons (HAWK beacon).

Increasing access within areas of larger blocks or undeveloped blocks can be created by constructing pedestrian sidewalks or pedestrian mews, if streets for automobiles are not required or affordable (Figure 6).

**Figure 6: Example of a Pedestrian Mew**



Source: *Urban Street Design Guidelines, National Association of City Transportation Officials, 2016*

**4) Review and revise local development and land use codes to help meet the goals of the TOD**

This principle is crucial for nearly all of the other principles to work in conjunction. Without the support of local regulations and policies, TOD ideas may only sit on the shelf rather than be constructed. Local agencies and private partners should engage the public early and often in order to determine community visions for a TOD, and create a sense of ownership of the development.

**5) Provide multiple housing options for a variety of income classes**

Customers, residents, or transit riders within a proposed TOD represent incomes and age groups across all cohorts. Therefore, a TOD should supply multiple housing option types for different populations and lifestyle stages. TODs can reduce household transportation costs, but may also increase property values, limiting housing options to certain income brackets. To minimize displacement, communities can provide regulatory policies which incentivize mixed-income housing, such as reducing parking requirements or discounting impact fees for lower-income housing units.

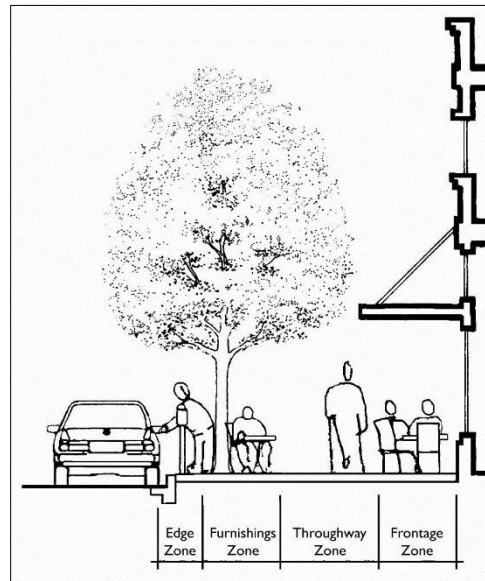
**6) Enhance the area with public amenities**

The design within the transit station and around the station should be accessible and pedestrian-friendly. Ample shelter should be provided for waiting areas outside of buildings and adequate lighting should be incorporated to increase visibility at night.

Parks and open space also provide public amenities by supplying areas to congregate, eat, or relax. TODs should provide plenty of space for pedestrians to attract attention. Public amenities along sidewalks are equally important and may create unique places, such as dining areas along a sidewalk. As shown in Figure 7: Sidewalk Design Zones, sidewalks may contain two areas (Furnishings Zone and Frontage Zone) for communities to supply pedestrian amenity enhancements, including lighting, vegetation, seating, or shelter.



**Figure 7: Sidewalk Design Zones**



Source: ITE, *Context Sensitive Solutions Presentation*, 2011. <https://www.ite.org/css/>

**7) *Emphasize public spaces, especially areas which may be used as multiuse spaces***

Public spaces can help enhance the attractiveness of an area. Multiuse public spaces are especially beneficial because it allows different parts of the station area to focus on other supportive land uses. Multiuse spaces may work best when located adjacent or within the transit station or public space.

Spaces that are quasi-public can also benefit TOD while not requiring public funding and maintenance. Expanded plazas and tables for outdoor dining can provide vibrant gathering places and be developed as part of private developments. A small retail development within adjacent public plaza could provide the space needed for a farmers market.

**8) *Assemble fragmented parcels and zone appropriately***

Many of our favorite places were planned and designed by a master developer with a unifying vision. Developing a great place is not easy when multiple property owners pursue their individual designs overlooking opportunities to leverage each others investments. These private individuals can work together, side by side with local government, toward a greater collective vision. They may share parking lots or structures, agree to consistent site signage and street furnishings, and agree to work from an agreed to master plan.

Communities can also start TOD by assembling parcels and working to rezone the property to a land use supportive of the local TOD policy. Putting together parcels with land uses approved by the local community can help enhance developer attention because it signals the area is supportive of a particular type of development.

**9) *Develop a regulatory process which incentivizes station area planning principles***

In additional to parcel assembly, creating a favorable regulatory environment which provides incentives for certain types of development may attract private development. One method to

change the regulatory process is expediting development review based upon specific guidelines. The guidelines should incentivize TOD visions and goals for a particular station area type, such as:

- Land use mix
- Density threshold
- Minimum affordable housing requirements
- Built environment standards
- Parking policy

## TOD Typologies

This section describes five TOD typologies and their key characteristics. The typologies vary based on the location, mix of land uses, and density of development. Depending on the context, land use ranges from primarily residential to primarily commercial, or a balanced mix of the two. At the same time, the density of development can range from low to high density as different contexts can support different intensities of development.

The Five Typologies are:

- Urban Centers\*
- Regional Centers\*
- Town Centers
- Neighborhood Centers
- And Main Streets

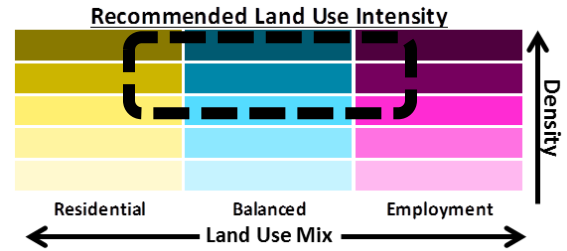
*\* These two typologies will be briefly discussed because they are less applicable in LaPlace.*

The following pages are dedicated to narrative and pictorial descriptions of the typologies to be considered for the LaPlace Multimodal Transit Station Area. These typologies are used to discuss the general direction and intensity of the different plan scenarios developed as part of the Station Area planning project.

# TOD Typology #1 and #2: Urban Centers and Regional Centers

These typologies are described to provide context to the discussion of TODs, though these two likely are too urban and dense to apply at present in LaPlace.

In the regional context, the Central Business District (CBD) of the most populous cities can be classified as the Urban Core. This station area will attract the greatest number of regional residents, including those living downtown, commuters to work, tourists, and people looking for entertainment, shopping, and places to eat. The development intensity is often noticeably greater within a quarter-mile radius of the station. Streets provide space for multiple forms of transportation.

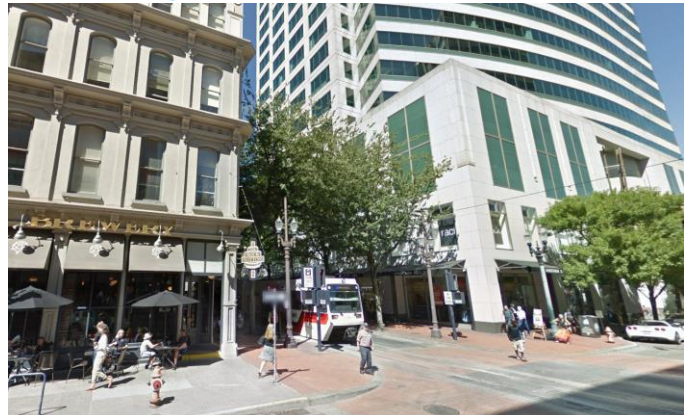


A Regional Center station area is similar to an Urban Core station area, but typically has lower densities and less intensity of land uses. The primary difference from the Urban Core is Regional Centers typically contain at least one or more major regional attractions (hospital district, large office park, or regional entertainment/shopping district).

Figure 8: Urban or Regional Center Conceptual Town Center Development<sup>1</sup>



Figure 9: Urban Center Representative Image Portland Oregon



## Application for LaPlace

Based on existing conditions these typologies are not as applicable in LaPlace because the intensity of development in this typology is likely too dense and urban to apply at the present.

<sup>1</sup> Street Design Guidelines, National Association of City Transportation Officials; 2016

## TOD Typology #3: Town Centers

Town Centers provide an area where people can live, work, and play, but with less intensity than the Urban Core or Regional Centers. The density of development is usually noticeably greater within a quarter-mile of transit stations than the half-mile radius. The station area is frequented by local residents, or those living within a short travel to the station. There may be a few attractions within the Town Center which receive visitors from farther distances, but the Town Center will mostly rely on local and adjacent residents. Key characteristics include:

- Density is lower than in the previous station area types, ranging from low to moderate; however, the area contains a mix of multifamily and single-family residential, as well as a combination of retail, office space, and civic uses. (Figure 10)
- These town centers serve local economic and community activity, but may attract some regional residents to specific areas within the station area.
- A variety of transit modes and multimodal connections are available at Town Centers, primarily commuter service to jobs in the region. The station may contain multi-purpose space or parks to support the local population, but at a small scale and integrated with the site.

**Figure 10: Conceptual Town Center Development**



Source: *Transit Street Design Guidelines*, National Association of City Transportation Officials, 2016.

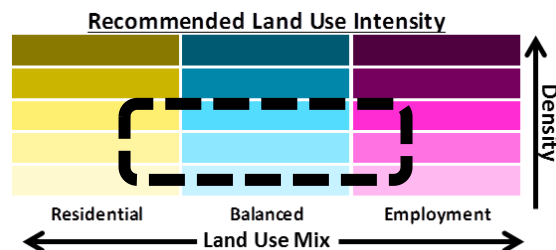


Figure 11: Town Center Representative Image: Miami FL



### **TOD Typology #3: Town Centers - Application for LaPlace**

Although the identified station area is not now an urban focal point or a town center, the market analysis indicates an opportunity for commercial and retail development growth to meet the demand across several retail categories including:

- Home furnishings and furniture
- General merchandise and hobby stores
- Clothing and shoe stores
- Electronics and appliance stores
- Specialty food and beverage

In the survey administered by the Parish in 2018, 60 percent of respondents stated they would like the proposed station area to serve as a Town Center for LaPlace. As long as local regulations and policies are aligned with the same vision for development, the community can leverage the transit station to support Town Center conditions.

While the immediate area around the transit station would be moderately dense with mixed land uses, residential neighborhoods surrounding the core could be less dense with more single-family residential units. Numerous improvements (local bus service and bike facilities) and significant new development would be needed to attain the goals of a Town Center.

The following bullets provide opportunities and constraints for developing a Town Center:

**Opportunities**

---

- Market survey indicated demand for retail and commercial growth
- Community survey indicated 60% preferred a Town Center
- Land available for conceptual development is adequate for initial phases
- Multiple-purpose station will provide a distinct center for Town Center initial development
- Current transportation network is adequate for initial phases of development

**Constraints**

---

- Land use and development regulations may require amendments
- Requires development investment and coordination from private and/or public sources
- Full Town Center development would require the development of land outside the immediate station area and require the parish to assemble a larger number of privately-owned parcels
- The coordination and implementation of multimodal transportation infrastructure will be required to support the full Town Center development
- Requires additional population to support retail and commercial growth

**[Remainder of Page Intentionally Left Blank]**

## TOD Typology #4: Neighborhood Centers

Neighborhood Centers are similar to Town Centers in density, but zoning regulations require mostly residential land-use (Figure 12). Other types of land uses are developed to support some of the basic needs of the local population. Rather than attract people from other parts of the region, these station area types provide commuters to the rest of regional stations. Unlike the Town Centers, this type of TOD is not meant to attract visitors, shoppers, or any additional traffic to the area. Key characteristics include:

- Density is the lowest of the station area types, but there is still a mix of multifamily residential, as well as some retail, smaller-scale employment, and civic uses nearer to the station.
- Local-serving centers of economic and community activity attracting the fewest regional residents.
- A variety of transit modes and multimodal connections are available at Neighborhood Centers, primarily commuter service connecting to the station. There is less local transit service than the previous place types.
- The station may only provide transportation connections, but may supply multi-purpose space to support the local population.



Figure 12: Conceptual Neighborhood Center Development<sup>2</sup>

<sup>2</sup> Urban Street Design Guidelines, National Association of City Transportation Officials, 2016

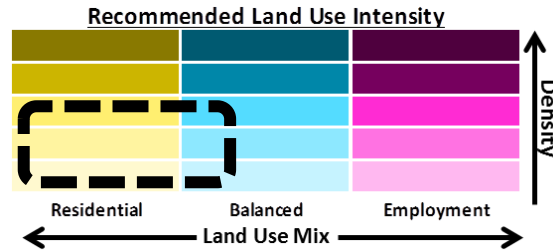


Figure 13 Neighborhood Center Representative Image: Vancouver, WA



## TOD Typology #4: Neighborhood Centers - Application for LaPlace

The Neighborhood Center typology provides LaPlace with the opportunity to locate affordable, residential housing options in a walkable center with commercial development limited to the size and quantity desired by the Parish. This typology would require less land than a Town Center because the amount of commercial and retail is limited to support the basic needs of the local area. The immediate area around the transit station could be the densest, with mixed-use developments surrounding the multi-purpose transit station; however, the rest of the station area would be mostly composed of low density residential.

Provided LaPlace committed to a vision and implementation strategy, the foundations for a Neighborhood Center are available in the study area. This study will provide one Neighborhood Center development concept to illustrate the potential of this typology.

The following bullets provide opportunities and constraints for developing a Neighborhood Center:

### Opportunities

- Current transportation network is adequate for initial phases of development
- Doesn't require as much population growth to support retail and commercial land uses

### Constraints

- Land use and development regulations require amendments (much of area is currently zoned commercial)
- Requires development investment from private and/or public sources



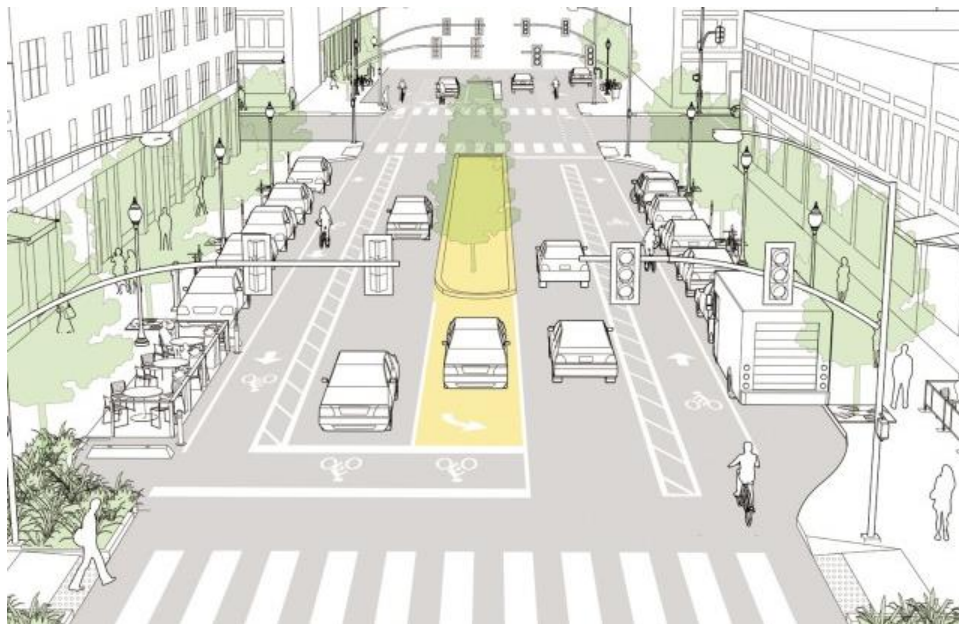
- Land available for conceptual development is good for all phases
- Multiple-purpose station will provide a good foundation for Neighborhood Center development
- Additional multimodal transportation infrastructure – bike lanes, fixed route transit, etc. – will be required for full development
- Fails at providing town center place making
- Will require nearby supporting retail and services to facilitate low-density residential development

## TOD Typology #5: Main Street

Lacking a distinct center of activity, Main Streets are more linear than Neighborhood Centers. Main Streets are typically characterized by a mixture of economic and community services with low to moderate density, as shown in Figure 14: Conceptual Main Street Development. Developments are most dense along the Main Street and placed close to sidewalks facing the street. These station areas have less residential within the station area than Neighborhood Centers or Town Centers. Key characteristics include:

- Residential development is low-density and located just off the main strip or above shops and stores on the primary street, although a small amount of multi-family residential may exist in these station areas
- Main Streets provide opportunities for infill and mixed-use development, creating more intense development within a quarter-mile of the primary transit station
- The transit station is less distinct than other station areas but provides multimodal connections to the Main Street, as well as multi-purpose space for the community.

**Figure 14: Conceptual Main Street Development<sup>3</sup>**



<sup>3</sup> Urban Street Design Guidelines, National Association of Transportation Officials, 2016

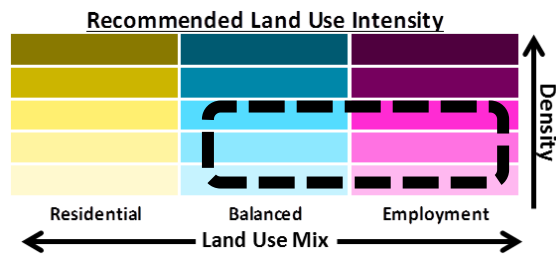


Figure 15: Main Street Representative Image: Hendersonville, NC



## TOD Typology #5: Main Street - Application for LaPlace

The Main Street typology provides LaPlace with the opportunity to locate affordable, residential housing and new commercial businesses in a walkable corridor with new development limited to the size and quantity desired by the Parish. This typology builds on the momentum for Main Street, with the planned streetscape improvements and new designation as a cultural and historic district.

This typology would require less land overall and less parcel assembly since the Main Street corridor would serve as the primary area for new development. However, this also requires more coordination since many property owners and business owners would need to coordinate their actions to successfully achieve the vision and fully leverage the value of the train station.

The following bullets provide opportunities and constraints for developing a Main Street TOD:

### Opportunities

- Planned streetscape improvements and bike lane on Main Street will support TOD redevelopment
- This typology builds on local history by putting the focus not on new construction, but on the historic

### Constraints

- Land use and development regulations require amendments (much of the area is currently zoned commercial)
- Certain redevelopment would need to occur along Main Street so that there are not gaps between active uses.

corridor, with new development along its length

- Little land is needed for conceptual development of station area
- Multiple-purpose station will provide a good anchor for the North end of the Main Street corridor
- Requires coordination among many property owners and businesses
- Fails at providing town center place making

---

## 8. Scenarios

---

Alongside the question of what amenities are included in the passenger rail station, there is a question of how the surrounding land is to be developed to support the station and create the town center and community hub parish residents would like to see. Based on the TOD typologies from the previous section, three land use scenarios were developed for the project area: a Main Street scenario, Town Center scenario, and a Neighborhood Center scenario.

### Main Street Scenario

In the Main Street Scenario, development is focused along Main Street to create a walkable, mixed use corridor with a balance of residential and commercial uses. Mixed use development around the train station will include housing above retail, service, and dining. A public plaza provides a flexible open space for community events. The parking lot adjacent to the train station can also be designed for use as a flexible space for events like a farmer's market.

Focusing development in a linear fashion along Main Street, as opposed to radiating development from the train station, requires the station and surrounding developments to be oriented towards Main Street. To make Main Street a unique place, mixed-use developments are suggested for the intersection of Main Street and Airline Highway. These developments will create a gateway to the corridor and establish the form of the street.

### Town Center Scenario

In the Town Center Scenario, the focus is on creating a special place at the station with a central plaza, usable for farmers markets and events. There is a balance between housing and commercial uses in a walkable, mixed-use format, with greater development density within a quarter-mile of the train station. Mixed-use development around the train station will include housing above retail, services, and dining. The train station itself is oriented to focus inward on the block, with the main entrance oriented towards the central plaza, looking towards Airline Highway.

The goal of this scenario is to create a commercially focused center around the train station. While housing is an important part of this scenario, it is not the primary focus. As such, commercial and mixed-use development is focused on the block bounded by Airline Highway, Main Street, Cardinal Street, and the rail road tracks. Depending on development demand, there are opportunities for additional development outside of the main focus block, particularly on Main Street.

This scenario does not preclude redevelopment along Main Street, and in fact supports it. But unlike the Main Street scenario this focuses the resources of the Parish on redevelopment of the primary block where the station will be built.

## Neighborhood Center Scenario

In the Neighborhood Center Scenario, the focus is on housing – building a neighborhood around the station. Some highway commercial uses would continue on Airline Highway. Mixed use development around the train station will include housing over retail, services, and dining. The focus on housing means areas for potential development outside of the immediate train station vicinity need to be considered to allow for residential development that fits within the character of LaPlace and housing density that isn't needlessly high, but still high enough to support a walkable, transit-oriented development.

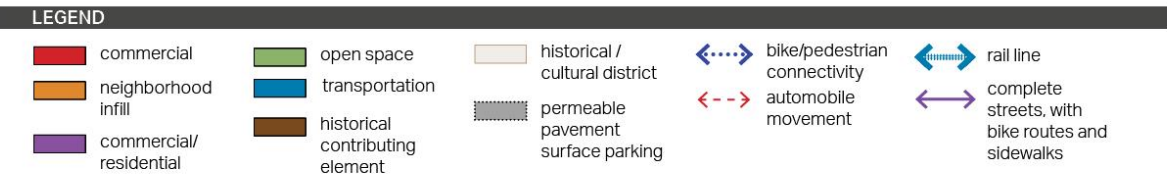
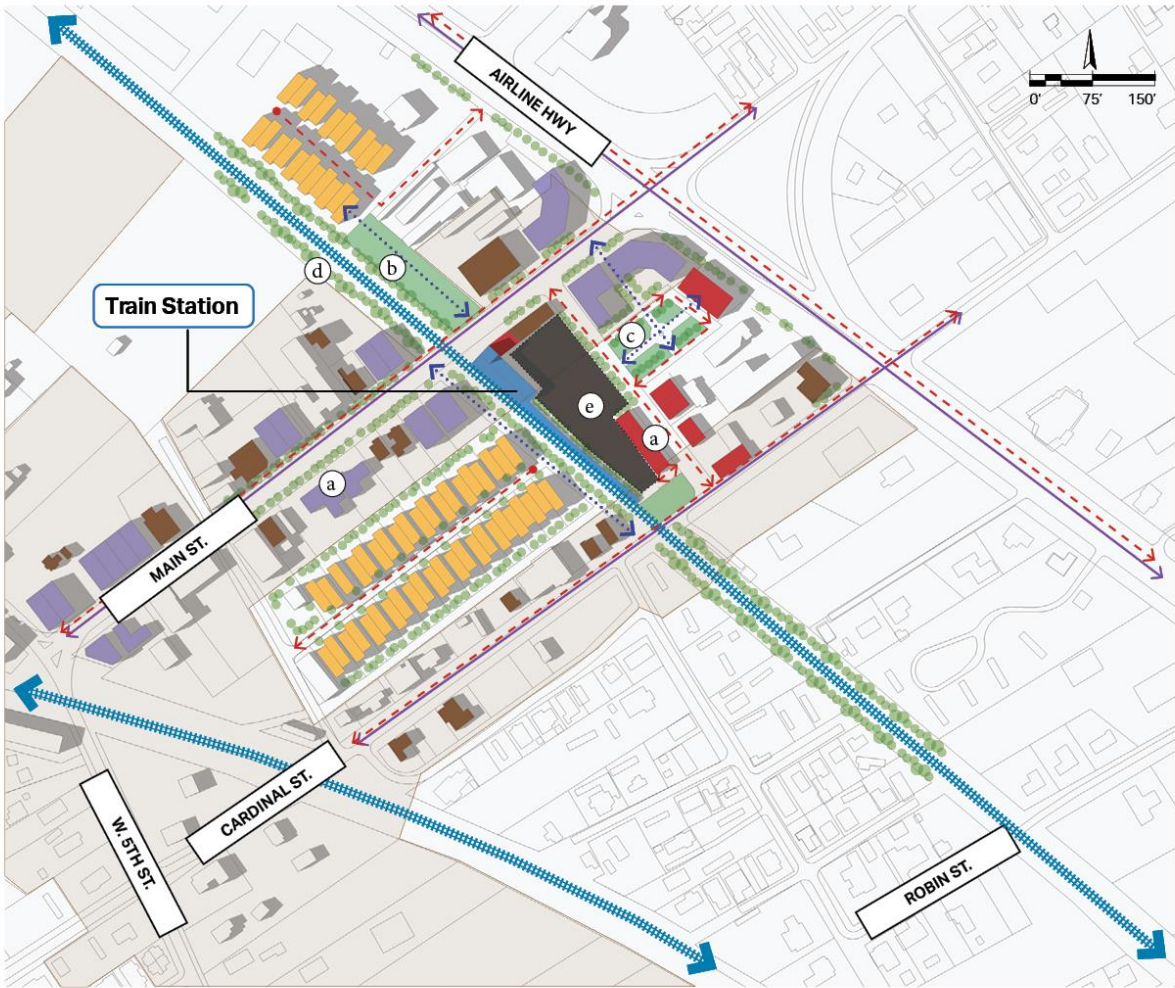
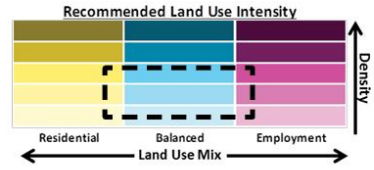
**[Remainder of Page Intentionally Left Blank]**

C

# MAIN STREET SCENARIO

## SCENARIO IMPROVEMENT NOTES

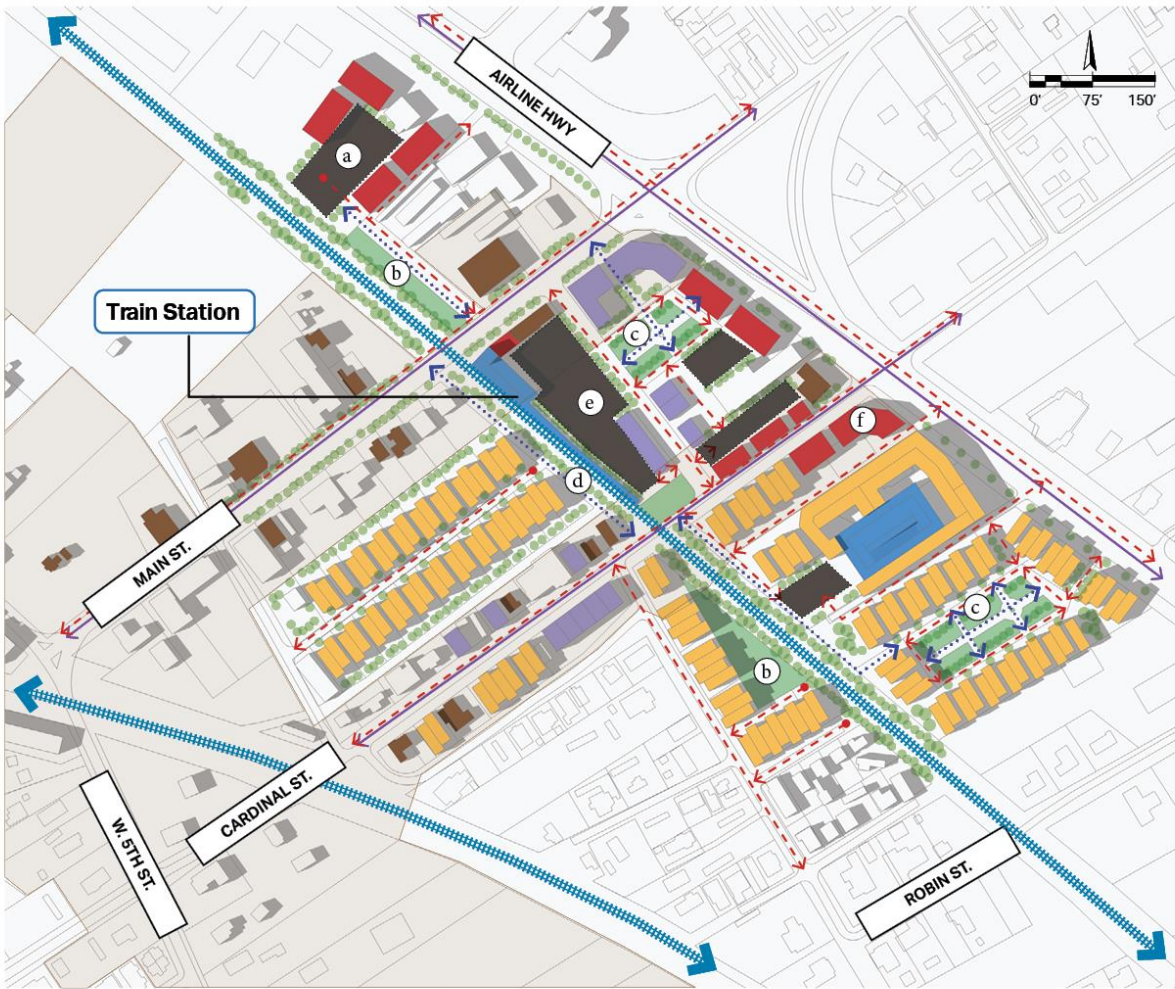
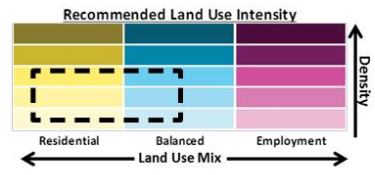
- (a) smaller commercial functions to compliment existing context
- (b) green pocket park to serve as buffer between residential development and rail line; pocket parks provide visual screening and stormwater management
- (c) pedestrian plaza
- (d) trees along railroad tracks to serve as visual screening
- (e) parking lot to serve both rail and vehicular commuters



# NEIGHBORHOOD CENTER SCENARIO

## SCENARIO IMPROVEMENT NOTES

- (a) commercial parking can also serve as phase 1 satellite parking
- (b) green pocket park to serve as buffer between residential development and rail line; pocket parks provide visual screening and stormwater management
- (c) pedestrian plaza
- (d) trees along railroad tracks to serve as visual screening
- (e) parking lot to serve both rail and vehicular commuters
- (f) smaller commercial functions to compliment existing context

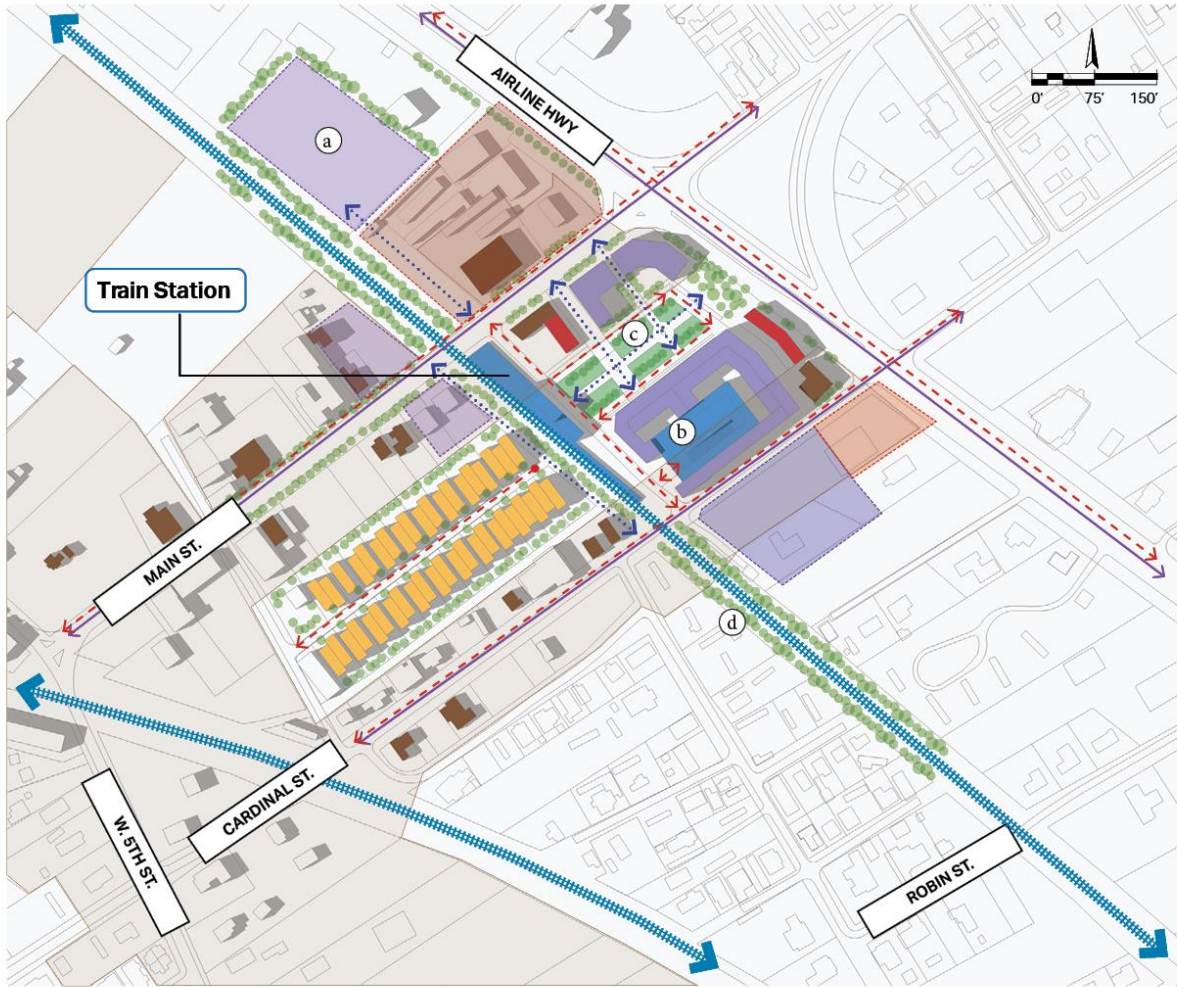
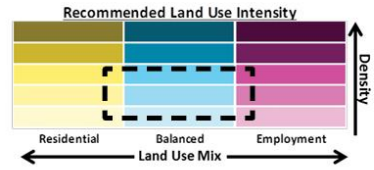


| LEGEND   |  |  |  |  |  |
|--|--|--|--|--|--|
| <span style="color: red;">■</span> commercial                | <span style="color: green;">■</span> open space                      | <span style="border: 1px solid gray;">■</span> historical / cultural district      | <span style="color: blue;">↔</span> bike/pedestrian connectivity | <span style="color: blue;">↔</span> rail line  |  |
| <span style="color: orange;">■</span> neighborhood infill    | <span style="color: blue;">■</span> transportation                   | <span style="border: 1px dashed gray;">■</span> permeable pavement surface parking | <span style="color: red;">↔</span> automobile movement           | <span style="color: purple;">↔</span> complete streets, with bike routes and sidewalks |  |
| <span style="color: purple;">■</span> commercial/residential | <span style="color: brown;">■</span> historical contributing element |  |  |  |  |

# TOWN CENTER SCENARIO

## SCENARIO IMPROVEMENT NOTES

- (a) area to serve as phase 1 satellite surface parking using permeable pavement
- (b) parking garage to serve town center customers and commuters, and built with upper-floor evacuation shelter
- (c) pedestrian plaza
- (d) trees along railroad tracks to serve as visual screening



| LEGEND   |  |  |  |  |  |
|--|--|--|--|--|--|
| <span style="color: red;">■</span> commercial                | <span style="color: green;">■</span> open space                      | <span style="border: 1px solid gray;">■</span> historical / cultural district      | <span style="color: blue;">↔</span> bike/pedestrian connectivity | <span style="color: blue;">↔</span> rail line  |  |
| <span style="color: orange;">■</span> neighborhood infill    | <span style="color: blue;">■</span> transportation                   | <span style="border: 1px dashed gray;">■</span> permeable pavement surface parking | <span style="color: red;">↔</span> automobile movement           | <span style="color: purple;">↔</span> complete streets, with bike routes and sidewalks |  |
| <span style="color: purple;">■</span> commercial/residential | <span style="color: brown;">■</span> historical contributing element |  |  |  |  |



# Development Form and Intensity

While the three scenarios differ in their placement of land uses, they are built on similar notions of development form and intensity. The following are examples of the development types and features found in all three scenarios.

## Traditional Main Street

Traditional Main Street development is characterized by two and three story, mixed use buildings set back only a short distance from the street. The ground floor of buildings usually contains retail and restaurants, while the upper floors have office space and apartments or condos. The design promotes and supports walking with ample sidewalk space and clearly marked crosswalks, with traffic on the adjacent street calmed to slower speeds. Street side parking is available and parking lots are located either behind or the side of buildings instead of in front. Many municipalities will provide a single, shared parking lot for a Main Street corridor to limit the need for private developers to provide parking.

**Figure 8-1: Traditional Main Street: Downtown Hammond, LA (left), Ryan Street, Lake Charles, LA (right)**



## Single Family Housing

In the three development scenarios, there are two types of single-family housing that are proposed: detached single family homes and townhomes. Detached single-family homes are type of housing traditionally found in St. John the Baptist Parish and many other communities in the United States. They are characterized by a single dwelling unit within a free-standing residential building. Residential density in neighborhoods with single family housing can vary greatly depending on the size of parcels and various local building requirements like setback rules.

In all scenarios the detached single-family housing is on small parcels with small setback requirements, which promotes greater density of development. Driveways are small or non-existent, allowing for residential neighborhoods built at a pedestrian scale to promote walking.

**Figure 8-2: Single Family Residential - Algiers, LA (left); River Ranch, LA (right)**



A townhome is a multi-story house in a modern housing development which is attached to one or more similar houses by shared walls. This kind of development allows residents to enjoy the benefits of a single-family home, while allowing the community to enjoy the benefits of development that is denser than the traditional single-family detached housing that is common in suburban communities.

**Figure 8-3: Examples of Townhomes**



## **Multi-Family Housing**

Multi-family housing is type of housing where multiple, separated housing units are contained within one building. Apartments and condominiums are two of the most common types of multi-family housing found in the United States. Examples of multi-family housing buildings range in density and intensity from simple duplexes and triplexes found in the inner-ring suburbs of older cities to apartment or condominium buildings exceeding 20 stories in height. For LaPlace, the development scenarios propose multi-family housing built two to three stories high.

**Figure 8-4: Examples of Multi-Family Housing<sup>1</sup>**



## **Mixed-Use Development**

Mixed-use development is a type of development that blends residential, commercial, cultural, institutional, or entertainment uses. The development form of mixed-use development can vary with uses mixed either vertically with multiple floors to each building, or horizontally with a mix of uses in adjacent parcels. Traditional Main Street developments are a type of mixed-use commonly found in historic towns and cities. In LaPlace there is an opportunity for mixed use development in the project area close to Airline Highway.

**Figure 8-5: Examples of Mixed Use Developments**



<sup>1</sup> St. Paul, MN; Fayetteville, AR

## Public Plaza and Greenspace

In all three scenarios, the proposed train station overlooks a public plaza and community greenspace. This feature is very important because it provides a flexible community space was desired by majority of community members and stakeholders in the initial public survey. The public space can be designed to accommodate a farmer's market, concerts, festivals, and other community events.

**Figure 8-6: Tillamook Farmers Market, Tillamook OR**



**[Remainder of Page Intentionally Left Blank]**

---

## 9. Economic & Traffic Impact of Potential Development

---

To assess the economic and traffic impacts of the transportation center the project team undertook an analysis using IMPLAN economic analysis software and Synchro traffic analysis software. Based on input from community members, stakeholders, and parish officials, the project team developed a Hybrid Scenario for economic and traffic impact analysis.

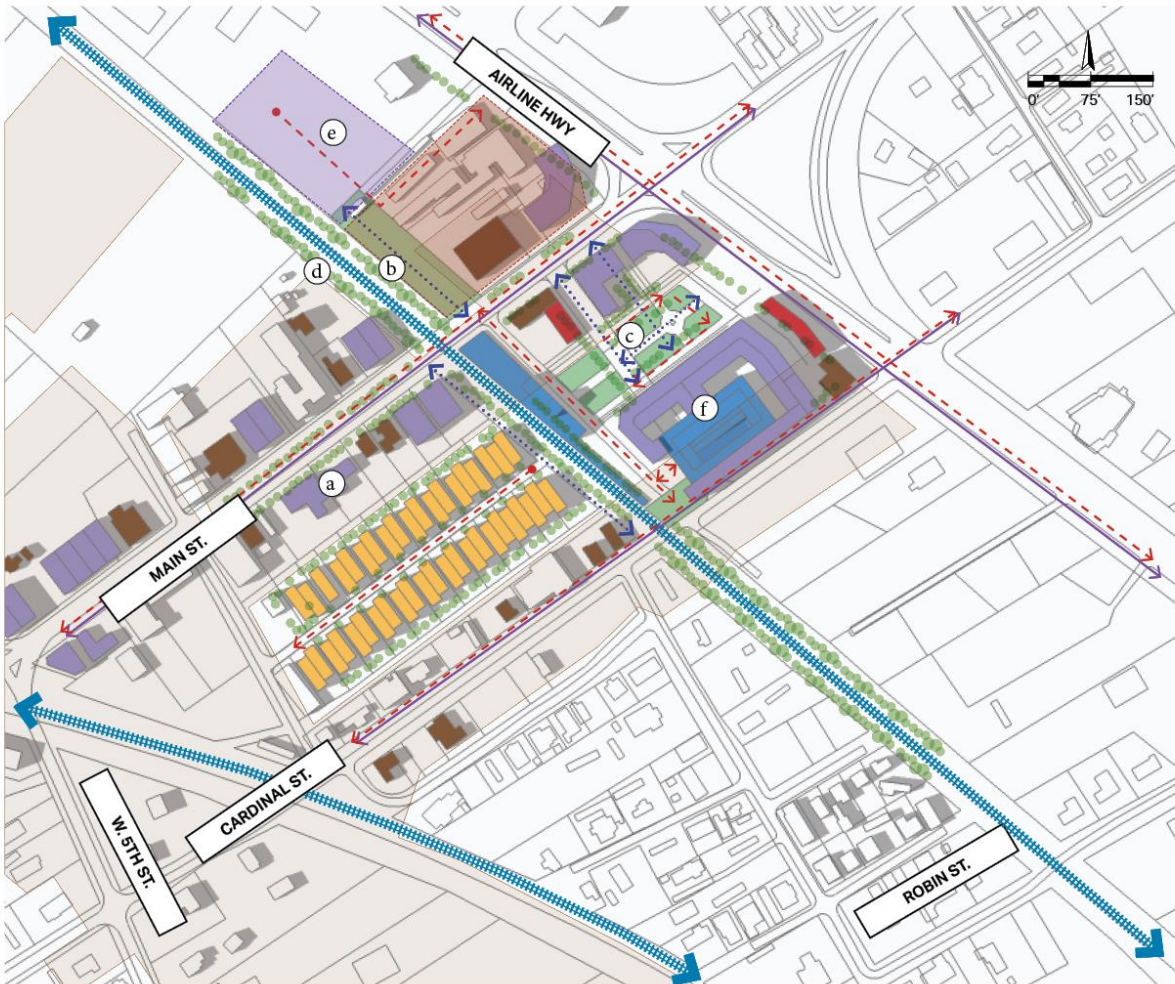
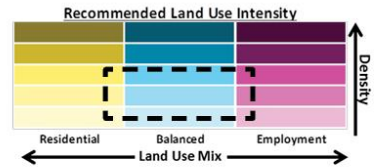
The focus of development in the Hybrid Scenario is on two areas: Main Street and the train station block area. Borrowing from the Main Street Scenario, the Hybrid Scenario shows development of mixed-use space along the Main Street corridor in a traditional, pedestrian friendly manner. Assumed development of the station block – bound by Airline Highway, Main Street, Cardinal Street, and the railroad tracks – is as a town center with development focused a train station overlooking a public plaza and greenspace surrounded by mixed use development as found in the Town Center scenario.

**[Remainder of Page Intentionally Left Blank]**

# Refined Main Street Scenario

## SCENARIO IMPROVEMENT NOTES

- (a) smaller commercial functions to complement existing context
- (b) green pocket park to serve as buffer between residential development and rail line; pocket parks provide visual screening and stormwater management
- (c) pedestrian plaza
- (d) trees along railroad tracks to serve as visual screening
- (e) area to serve as phase 1 satellite surface parking using permeable pavement
- (f) parking garage to serve town center



| LEGEND   |  |  |   |  |  |
|--|--|--|---|--|--|
| <span style="color: red;">■</span> commercial                | <span style="color: green;">■</span> open space                      | <span style="border: 1px solid black; background-color: #f0f0f0;">■</span> historical / cultural district      | <span style="color: blue;">⬅⋯⋯➡</span> bike/pedestrian connectivity | <span style="color: blue;">⬅⬆⬇⬆➡</span> rail line  |  |
| <span style="color: orange;">■</span> neighborhood infill    | <span style="color: blue;">■</span> transportation                   | <span style="border: 1px dashed black; background-color: #f0f0f0;">■</span> permeable pavement surface parking | <span style="color: red;">⬅- - -➡</span> automobile movement        | <span style="color: purple;">⬅⬆⬇⬆➡</span> complete streets, with bike routes and sidewalks |  |
| <span style="color: purple;">■</span> commercial/residential | <span style="color: brown;">■</span> historical contributing element |  |   |  |  |

# Economic Impact

The project team assessed the likely impacts of the project and the related redevelopment, including the economic impacts to provide the Parish with a baseline understanding of the potential benefits and costs of development. IMPLAN derives its data, ratios, and multipliers from the U.S. Department of Commerce Bureau of Economic Analysis Regional Economic Accounts; U.S. Department of Labor, Bureau of Labor Statics Census on Employment and Wages; U.S. Census Bureau County Business Patterns; and the Leontief inversion of the IMPLAN data matrices (i.e., the input-output methodology).

The economic impact measures reported by IMPLAN are:

**Economic Output:** In IMPLAN, annual sales or revenues are equivalent to annual economic output or the value of production by industry. Output can be measured either by total value of purchases by intermediate and final consumers or by intermediate outlays plus value added. Economic output is the sum of intermediate inputs - the materials and services (other than employment) required by an industry to create its products - and value added.

**Employment:** The total annual average jobs includes self-employed and wage and salary employees, and all full-time, part-time, and seasonal jobs, based on a count of full-time/part-time averages over twelve months. (This is the same definition used by Quarterly Census of Employment and Wages, Bureau of Labor Statistics, and Bureau of Economic Analysis nationally).

**Labor Income:** Labor income represents all forms of annual employment earnings; it is the sum of employee compensation and proprietor (self-employed) income.

**Value Added or Gross Regional Product:** Value added consists of employee compensation, proprietary income, other property type income (which includes industry profits), and indirect business taxes. Value-added is an estimate of the gross regional or state product.

Impact measures include: direct effects, secondary (multiplier) effects, and the total economic effects (the sum of the direct and the secondary effects). The secondary effects include both indirect and induced effects. The types of effects are defined as follows:

**Direct Effect:** In the impact area in which a project or economic activity is located, direct output (i.e., sales or revenues) effect represents that proportion of the spending or sales in each industry that flows to material and service providers in the impact area. For employment, labor income, and Gross Regional Product measures, the direct effect represents the jobs, labor income, and gross regional product associated with the directly affected industry.

**Indirect Effect:** The indirect effects include the backward-linked industry suppliers for goods and services that support the directly affected industries, supporting indirect jobs, labor income, value added, and economic output. For example, if construction activity is the direct effect, indirect business supporting construction would include architectural and engineering, lumber suppliers, trucking, steel manufacturers, among others; these are considered backward-linked industries supporting the construction activity.

**Induced Effect:** The induced effect occurs from household expenditures or consumer spending associated with the direct and indirect workers spending their earnings within the impact area, supporting induced economic output, jobs, labor income, and gross regional product.

## Construction Impacts

Analysis was conducted to describe the impacts from both the construction of the transportation center and related development as well as the lasting impacts associated with the ongoing operations.

Table 9-1 shows data from the construction impact analysis for construction of the train station block. This does not include construction of the other related commercial and residential developments along Main Street or the Chickadee Street residential development. The table shows four impact types, the employment associated with them, the resulting labor income, the total value added, and the total output.

**Table 9-1: Station Block Construction Impact Summary**

| Impact Type     | Employment | Labor Income | Total Value Added | Output       |
|-----------------|------------|--------------|-------------------|--------------|
| Direct Effect   | 167        | \$8,481,000  | \$9,829,000       | \$21,493,000 |
| Indirect Effect | 36         | \$1,935,000  | \$3,084,000       | \$5,120,000  |
| Induced Effect  | 42         | \$1,838,000  | \$3,382,000       | \$5,631,000  |
| Total Effect    | 246        | \$12,255,000 | \$16,295,000      | \$32,245,000 |

Construction of the train station and surrounding block would support 167 direct jobs, 37 indirect jobs, and 42 induced jobs. Taken together, the total effect of the construction of the LPMBTC would be just under 250 jobs.

Direct labor income is expected to be \$8.4 million being generated over the entire construction process, considered one year in this analysis. Indirect labor income amounts to \$1.9 million and induced labor income is \$1.8 million. In total, just over \$12 million in labor income would be generated from the construction of the Station Block.

Each of the impacts associated with the construction of the train station block are interpreted as occurring in one year. Figures in Table 9-1 would be divided by the total number of years required for construction – for instance, if the project takes two years the total employment effect of 246 jobs would be scaled to 123 jobs each year.

Housing is an integral part of the construction impacts for this project. Table 9-2 displays the location, number, and type of housing units that are included in the construction impacts analysis.

**Table 9-2: Housing**

| Location         | Number of Units | Type of Units             |
|------------------|-----------------|---------------------------|
| Chickadee Street | 42              | Single Family, Town Homes |
| Main Street      | 13              | Apartments, Condominium   |
| Station Block    | 88              | Town Homes, Apartments    |



Table 9-3 shows the total construction impacts of all segments of the project.

**Table 9-3: Total Construction Impacts**

| Segment          | Jobs Supported (Direct) | Jobs Supported (Indirect & Induced) | Jobs Supported (Total) | Total Output  |
|------------------|-------------------------|-------------------------------------|------------------------|---------------|
| Station Block    | 167                     | 79                                  | 246                    | \$32,245,000  |
| Main Street      | 242                     | 105                                 | 347                    | \$42,926,000  |
| Chickadee Street | 142                     | 68                                  | 210                    | \$25,633,000  |
| Total            | 551                     | 252                                 | 803                    | \$100,804,000 |

## Commercial Impacts

Similar to the construction impacts, the project team ran an analysis of the commercial impact that would result from the expanded retail center, new restaurants, etc. This analysis includes all commercial activities related to this development, including those directly located in the Station Block as well as in the other developments along Main Street. The analysis is based on estimated revenue, which is based on the expected square footage by industry sector. The analysis assumes that these commercial activities will start in 2021. The results of the analysis follow the same framework showing results for impact type, employment associated with the project, income from that labor, total value added, and output.

In terms of employment, the commercial impacts of the LPMBTC will generate a total of just over 1,180 part-time and full-time jobs. Direct employment activity related to the new and renewed businesses amounts to support for 940 part- and full-time jobs. The indirect and induced employment activity related to the commercial impacts of the development is estimated at 102 indirect jobs and 137 induced jobs.

**Table 9-4 Commercial Impacts of LPMBTC**

| Impact Type     | Employment* | Labor Income | Total Value Added | Output       |
|-----------------|-------------|--------------|-------------------|--------------|
| Direct Effect   | 940         | \$28,436,000 | \$30,219,000      | \$49,681,000 |
| Indirect Effect | 102         | \$5,627,000  | \$9,718,000       | \$16,051,000 |
| Induced Effect  | 137         | \$5,976,000  | \$10,995,000      | \$18,306,000 |
| Total Effect    | 1,180       | \$40,040,000 | \$50,931,000      | \$84,039,000 |

\*Employment number includes both part-time and full-time jobs

Total labor income associated with the commercial impacts of the transportation center amount to \$40 million. Within the total, \$28.4 million in labor income is associated with the direct impact, \$5.6 million is associated with the indirect impacts, and \$5.9 million is associated with the induced impacts.

Output associated with the commercial impacts of the transportation center, which reflects the total revenues of the commercial endeavors located in the development, total over \$84 million per year over the life of the project. This is comprised of \$49.6 million from direct effects, \$16 million from indirect effect, and \$18.3 million from induced effect.

Table 9-5 displays the commercial impacts of the development along Main Street as well as the development on Airline Highway and Main Street. This isolated portion of the LaPlace Multi-Modal Transportation Center (LPMMTC) Plan would generate a total of 630 jobs, \$21.3 million in labor income, and an output of \$44.6 million each year over the life of the project.

**Table 9-5 Main Street Commercial Impacts**

| <b>Impact Type</b>  | <b>Employment*</b> | <b>Labor Income</b> | <b>Total Value Added</b> | <b>Output</b>       |
|---------------------|--------------------|---------------------|--------------------------|---------------------|
| Direct Effect       | 502                | \$15,197,000        | \$15,932,000             | \$26,301,000        |
| Indirect Effect     | 54                 | \$3,001,000         | \$5,156,000              | \$8,527,000         |
| Induced Effect      | 73                 | \$3,194,000         | \$5,875,000              | \$9,782,000         |
| <b>Total Effect</b> | <b>630</b>         | <b>\$21,392,000</b> | <b>\$26,963,000</b>      | <b>\$44,610,000</b> |

*\*Employment number includes both part-time and full-time jobs*

Table 9-6 displays the commercial impacts of the station block isolated from the rest of the LPMMTC Plan. In terms of total effect, the station block will have a commercial impact amounting to 550 jobs, \$18.6 million in labor income, and \$39.4 million in output.

**Table 9-6 Station Block Commercial Impacts**

| <b>Impact Type</b>  | <b>Employment*</b> | <b>Labor Income</b> | <b>Total Value Added</b> | <b>Output</b>       |
|---------------------|--------------------|---------------------|--------------------------|---------------------|
| Direct Effect       | 438                | \$13,239,000        | \$14,287,000             | \$23,381,000        |
| Indirect Effect     | 48                 | \$2,626,000         | \$4,562,000              | \$7,524,000         |
| Induced Effect      | 64                 | \$2,783,000         | \$5,119,000              | \$8,524,000         |
| <b>Total Effect</b> | <b>550</b>         | <b>\$18,648,000</b> | <b>\$23,968,000</b>      | <b>\$39,429,000</b> |

*\*Employment number includes both part-time and full-time jobs*

Table 9-7 shows the employment and economic output impact of the commercial development by location.

## **Tax Impacts**

This section describes the state and local commercial tax impact of the LPMMTC Plan modeled by the project team using IMPLAN Software. These figures reflect the state and local taxes collected due to the commercial development associated with the transportation center and the ongoing operation of those commercial entities yearly for the life of the project.

**Table 9-7 Total Commercial State and Local Tax Impact of the LPMBTC**

| Description         | Employee Compensation | Tax on Production and Imports | Households | Corporations | Total       |
|---------------------|-----------------------|-------------------------------|------------|--------------|-------------|
| State and Local Tax | \$97,000              | \$3,389,000                   | \$681,000  | \$21,000     | \$4,188,000 |

Employee compensation derived from commercial activities at the transportation center would collect a total of \$97,000 in state and local taxes each year. Production and imports associated with the commercial development from the transportation center would accrue an estimated \$3.4 million per year in state and local taxes. State and local taxes collected from households as a result of the commercial operation of the transportation center amount to over \$680,000 per year. Taxes on corporations amount to \$21,000 associated with the commercial development in the transportation center.

## Traffic Impacts

The findings, presented below, describe the traffic related impacts of development of Main Street and the Transportation Center. Included is an assessment of existing conditions and an analysis of future conditions based on projected traffic demands created by the Transportation Center and related development.

### Existing Traffic Conditions

**US 61 (Airline Highway)** is oriented in a general east-west direction. Airline Highway is a four-lane divided highway with 8-10 foot paved shoulders and no sidewalks. The posted speed limit is 45 mph. Airline Highway is generally surrounded by commercial land use.

**Main Street and Cardinal Street** are two-lane undivided roadways oriented in a general north-south direction with posted speed limits of 30 mph and 20 mph, respectively. Cardinal Street is a narrow roadway approximately 18-19 feet wide with no shoulders or sidewalks. Main Street has paved shoulders and a short section of sidewalk along the west side adjacent to the AT&T building. South of the railroad tracks, sidewalk is present along the west side of the roadway, but ADA ramps are not provided at intersections.

**US 51** is oriented in a general north-south direction. US 51 is a five-lane section divided by a two-way left turn lane without shoulders or sidewalks. The posted speed limit is 45 mph. US 51 provides connectivity between US 61 and I-10/I-55.

Just west of the Main Street signal is another signalized intersection at US 51. US 51 travels from Airline Highway to the north where it provides access to I-10 and I-55. The intersection of Cardinal Street at Airline Highway is a two-way unsignalized intersection with left-turn lanes on Airline Highway in both directions. The intersection of Main Street at Airline Highway is a signalized intersection. Both approaches of Main Street consist of a shared through-left lane and a channelized right turn lane. The westbound approach of Airline Highway consists of a left turn lane, two through lanes and a shared through-right lane. The eastbound approach of Airline Highway consists of a left turn lane, two through lanes and a channelized right turn lane.

## Pedestrian Accommodations

Pedestrian accommodations such as cross-walks or pedestrian signal heads are not provided at any of the subject intersections. The lack of safe multimodal transportation options was a reoccurring theme during public meetings held for the LASAFE Program project.

## Transit Services

The River Parishes Transit Authority (RPTA) currently operates a fee-based demand response system. RPTA operates three 12 passenger buses, as shown here, between 5:00 AM and 7:30 PM Monday-Friday and two 12 passenger buses between 5:30 AM and 7:30 PM on Saturdays. Passengers must call 24-hours in advance to schedule pick-up. Fare is currently \$2.00 one-way and children under 4 ride for free. There are no fixed transit routes currently operating in the area.

## Data Collection

Forty-eight-hour volume counts were collected with school in session on Main Street, Cardinal Street and Airline Highway. Based on the volume counts, the two critical peak hours were identified as 7:30 to 8:30 AM and 4:45 to 5:45 PM.

Peak hour turning movement counts were collected at the following intersections:

US 61 (Airline Highway) at:

- Cardinal Street
- Main Street
- US 51

The resulting AM and PM peak hour volumes for the existing conditions are presented in Figure 5. During the peak hour counts no pedestrians were observed navigating the intersections. The count data is included in the Appendix.

Existing volumes, geometry and intersection control data for the intersection around the station area were input into Synchro 8.0 software to generate Level of Service and delay estimates for the following intersections within the study area:

- US 61 (Airline Highway) at Cardinal Street
- US 61 at Main Street
- US 61 at US 51

The results of the complete analyses are included in the Appendix.

Currently, the US 61 (Airline Highway) at US 51 intersection operates with unacceptable Level of Service (LOS) during the PM peak (LOS F). Specifically, the eastbound left and southbound right movements are over capacity at this intersection with 523 seconds of delay and 172 seconds of delay respectively, in the PM peak period. These movements are not expected to be significantly affected by the trips related to the Transportation Center. However, any additional traffic at this intersection may affect the signal operation negatively. Mitigating improvements will be developed as needed.

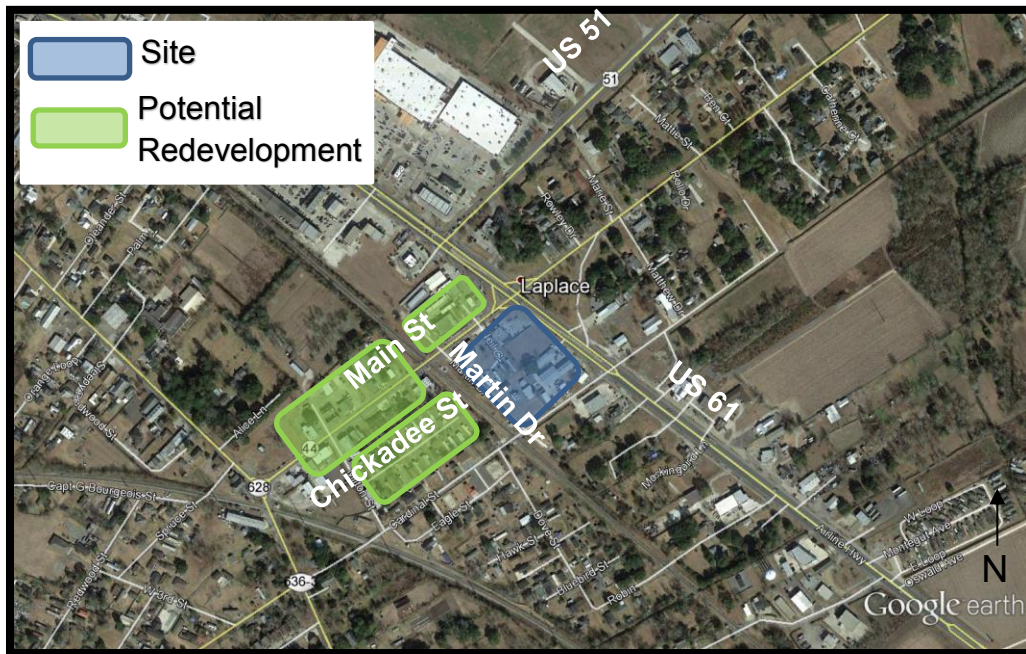
The northbound approach of Main Street is currently LOS E during the PM peak. Additional turn lanes and/or site circulation restrictions may be required to mitigate delays on this approach.

Roadway analysis indicated that the peak hour volumes on Main Street, Cardinal Street and Airline Highway are below the capacity of the current roadway conditions.

Consideration should also be given to improving east-west connectivity of local roads within the study area which could potentially alleviate demand at the subject intersections.

## Projected Traffic Conditions and Analysis

Utilizing the same development scenario as the economic impact analysis, an analysis of traffic impacts was conducted by Urban Systems Inc. The following is a summary of that analysis. The detailed report of the results of that analysis can be found in Appendix B.



**Figure 9-1: Proposed Site Location and Redevelopment**

For the purpose of the traffic analysis, the proposed development build-out was separated into two phases:

- Transportation Center Block Build-out
- Main Street redevelopment Build-out

The new trips expected to be generated by the redevelopment of the area were calculated for each phase.

### Traffic Capacity Analysis

The conditions capacity analysis for the subject intersections along US 61, Main Street, and the station area assumed both the increased development related to the train station and the

implementation of streetscape and signal improvements planned under the LASAFE program. Specifically, the following street and intersection improvements were included in the analysis:

- Additional left turn lane on Main Street northbound approach at Airline Highway. The configuration analyzed includes dual left turn lanes and a shared through-right lane.
- Modifying the Main Street southbound approach to consists of an exclusive left turn lane and a shared through-right lane.
- Signal phasing modifications including protected only northbound left turn movement, permitted protected lagging southbound left turn movement and an eastbound right turn overlap.
- Signal timing optimization.

With the above improvements, the current roadway network is expected to be able to accommodate the additional traffic anticipated with the redevelopment of the Transportation Center block and the areas along Main Street at LOS E during peak hours, which the parish deems acceptable. The length of queue on the Main St northbound approach is expected to be reduced significantly during both peak periods.

Roadway segment analysis was performed using traffic volumes anticipated from a complete build-out of the proposed development scenario. A review of the roadway segment capacity analysis indicates each subject street is expected to operate below capacity for the plan build-out. A full methodology and articulation of results can be found in the appendix.

## **Pedestrian/Bicycle Access Evaluation**

As part of the LASAFE Program, the Parish plans to construct a multi-use paths along US 61 west of Main Street and along Main Street between US 61 and LA 628. Pedestrian accommodations, such as crosswalks and pedestrian signals, will be provided at intersections along US 61 where appropriate.

Additionally, the *Land Use and Transportation Study: East Laplace: Sub-Area Analysis Stage 0 Feasibility Study* conducted in 2017 by Duplantis Design Group and Urban Systems Inc. evaluated enhancements to traffic circulation, walkability/ADA accessibility, and safety for all modes of transportation. Three routes were evaluated to connect the planned Main Street bicycle path to the existing Mississippi River Trail. Figure 9-2 presents the proposed bike path in relation to the proposed Transportation Center site.



**Figure 9-2: Proposed Bicycle Path**

Connecting the Mississippi River Trail to the planned Main Street and Airline Highway bicycle paths and the Transportation Center significantly changes the dynamics of the traffic in the area. The bicycle and pedestrian improvements begin to create a cohesive network of facilities that will allow residents the ability to access a variety of services, retail, and the Transportation Center without the need to drive an automobile.

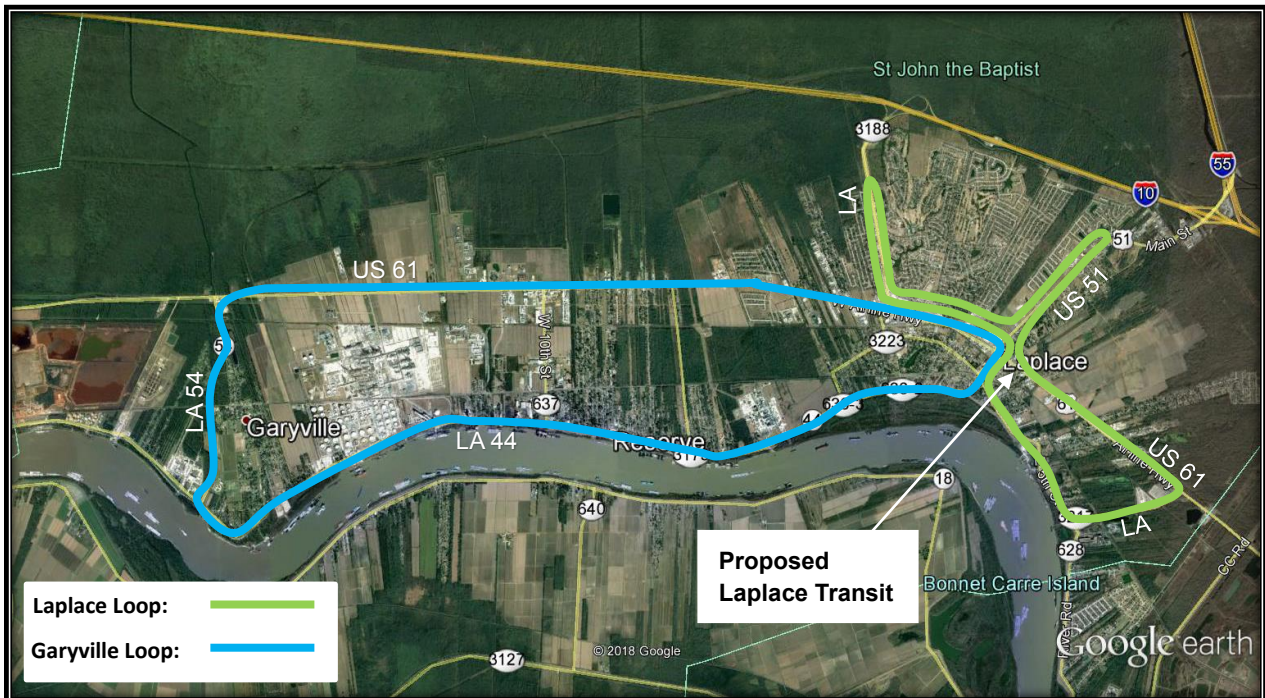
## Transit Route Evaluation

At the time of this study River Parishes Transit Authority (RPTA) was assessing potential for a fixed service on Airline Highway in the Parish. The proposed route will provide transit service on Airline Highway between the St. James Parish line and Ormond Blvd in Destrehan. It is anticipated to have eight round trips per day with 32 stops. The proposed fixed route in relation to the proposed Transportation Center is presented in Figure 9-3.



**Figure 9-3: Potential Airline Highway Transit Route (RPTA)**

The proposed service will stop at the LaPlace Multi-Modal Transportation Center. As part of this traffic analysis, neighborhoods and destinations throughout the Parish were considered for potential fixed route service. Areas of interest include, but are not limited to, public services (e.g. libraries), schools, shopping, and densely populated areas. Based on this analysis, two (2) potential transit routes were identified for further consideration and evaluation (Figure 9-4).



**Figure 9-4: Potential Fixed Route Transit Routes (Urban Systems)**

For the proposed Garyville and LaPlace Loops a minimum of two vehicles would be required per route to achieve service frequency of at least 45 minutes. These routes should be further



vetted through public involvement to refine the preferred routes, stop locations, ridership estimates and operating times. Furthermore, additional studies may be required based on funding sources. Local agencies and stakeholders should be consulted to refine the desired system operation and transit vehicle operation.



**Figure 9-5: Replica Trolley Bus**

Depending on the ridership needs and community desires, vehicles other than the standard, 40-foot transit bus may be considered for service. Smaller shuttle buses, or replica trolley buses can be used. As technology improves, automated vehicles are becoming increasingly viable for transit applications and may soon be an option worth considering for the Parish.

The operating cost for fixed route transit is approximately \$100 per operating hour for bus service. Assuming a transit

service operates five days a week for 14-hours per day, the annual cost of providing fixed route transit service will approximately \$364,000 per year, per bus.

**[Remainder of Page Intentionally Left Blank]**

---

## 10. Recommendations

---

This section presents recommendations to ensure the LaPlace Multi-Modal Transportation Center will support the development pattern desired by the Parish. In the Conclusion, Section 11, a summary of these recommendations as well as steps to implementation are provided.

### A Great Public Realm

A great public realm means that station areas have safe, interconnected walking environments with sidewalks, plazas, lighting, way-finding, and amenities. To the greatest degree possible, station area streets are complete streets, accommodating bicycles and feeder transit connections as well as pedestrians and cars. Station access is prioritized for pedestrians, transit riders, and cyclists.

A great public realm will achieve several inter-related objectives:

- Unifying the station area through a seamless pedestrian network that connects buildings to the station, the proposed bus stop, and to Main Street.
- Providing an amenity-rich environment that encourages people to walk within the station area and to gather in parks and plazas.
- Connecting the sidewalk and the ground floors of buildings with treatments and space that allow “public gathering” uses such as retail, restaurants, and cultural spaces.
- Providing full, Americans with Disabilities Act (ADA)-compliant accessibility for all pedestrians, including seniors, those with disabilities, and adults with baby carriages and strollers.
- Using a pattern of complete streets and small blocks to accommodate pedestrians, bicyclists, or feeder buses, and shuttles as well as automobiles.
- Where applicable, connecting “rail trails”, community paths, and other types of Alternative Transportation Corridors directly to stations; making sure to connect with the bike network and the Mississippi River Trail.
- Programming the shared space outside the train station, with a Saturday farmers market, movie nights, and other community events.



**Figure 10-1: Rendering of Public Plaza**

## Density and Mix of Uses

The first foundational principle of TOD is the concentration of higher-density, mixed-use development within walking distance of stations. Density places more homes, jobs, stores, offices, and recreational activities within walking distance of transit. It is essential to understand that TOD density is a relative goal, reflecting place and context. High-density development in downtown Boston and higher-density development in LaPlace will differ markedly in scale, but each generally exceeds the intensity of development in areas not directly served by transit.



**Figure 10-2: Example of Mixed Use**

When combined with mixed uses, density enables the transit system to make more efficient use of its vehicular and operational capacity. During peak commuting hours, the mix of origins and destinations creates demand for reverse commuting (from the system core outbound), and for commuting that occurs entirely outside the system core. When non-work destinations are added—cultural or athletic venues, “destination retail”, academic institutions—the station attracts off-peak riders from all directions.

Mixed-use development is not a cookie-cutter formulation. It can be achieved in several ways: vertically, where individual buildings combine active uses at street level with residential or commercial uses above; horizontally, where different uses are located within close walking distance of each other; or distributed, among nearby stations in a corridor segment. An added benefit of a walkable mixed-use environment is that some daily trips are taken not by automobile or by transit but on foot. In addition to people who can walk to work or to school, other routine activities—going to lunch, running errands—can also become “trips not taken”. Research has established conclusively that development which is dense, mixed-use, walkable, and transit-oriented results in significantly lower per capita vehicle miles traveled and greenhouse gas emissions.

## Make the Most of the “Corner Parcel”

Owned by St. John the Baptist Parish, the parcel of land located in the SE corner of Airline Highway and Main Street is a crucial element in every design scenario. Development of this parcel can make or break the



**Figure 10-3: Sample Rendering of Corner Parcel**

success of the LaPlace Multi-Modal Transportation Center (LPMMTC). This parcel is integral to the development, surrounding the station and makes a gateway for Main Street. The placement and design of a new building on the site is very important. The Parish should, even if this parcel is developed entirely by private entities, hold onto the property until agreements can be reached

that ensure quality design at this site.

From another perspective, making the most of this parcel would involve the Parish attracting an anchor tenant. This tactic would help set the stage for complementary tenants throughout the development ostensibly feeding an overall strategy. Taking the lead and developing what could be considered the most important part of the overall LPMMTC development strategy would help ensure that the site develops as the Parish intends.



**Figure 15: Corner Parcel**

From a form perspective, the Parish has the opportunity to encourage and ensure the type and quality of development that it expects from the rest of the site. While development regulation is an essential part of this strategy, high quality development of this parcel would increase the likelihood of high-quality design and construction.

## Pedestrian Scale Design

Encouraging the design of the LPMMTC to be “pedestrian scale” means that the structures, their design and orientation, and the infrastructure supporting them corresponds to humans on foot – as opposed to driving in cars. Practically, this translates to moderate sized buildings, narrow streets and driving lanes, and smaller spaces organized to create an intimate environment – one that is best digested by people on foot. Further, when traveling between two points located in the site, walking should be the default mode of transportation.

To this end, the sidewalk should be considered the primary means of internal circulation within the site. They should be continuous, provide clear and direct routes, and designed wide enough to comfortably accommodate foot traffic as well as street furniture and the extension of retail businesses onto the sidewalks – such as cafes. Pedestrian circulation should be buffered from vehicular circulation by infrastructural elements such as trees, bollards, and street furniture. Vehicle drop-off points should be concentrated

**Every transit rider is a pedestrian, and successful TOD is pedestrian-friendly. A high-quality public realm designed to support TOD and transit use is essential.**



**Figure 10-5: Pedestrian Space Designed by AECOM for “The Yards,” Washington DC**

Architecturally, pedestrian scale design would be achieved through activating all sides of each structure. This makes the most of each building frontage while negating any unsafe, unpopulated blind alley type locations. Further, building massing that breaks the frontage into smaller, denser segments – as opposed to a big, monolithic wall – makes pedestrians feel more comfortable. The orchestration of the structures and other architectural elements along the road should be sized and oriented such that they are relatable to humans on foot.

## Phased Parking Development

Overwhelmingly, station with comparable ridership levels throughout the United States devote most of their space to surface parking. Structured parking can be prohibitively expensive to build, even compared to purchasing land for surface parking at times. In the end, it makes sense why so many commuter rail stations take the easy road and simply turn into big parking lots. It is important to resist the urge to build surface parking and to build structured parking if at all possible. The primary tactic proposed is for the Parish to take the lead and build structured parking while simultaneously banning the other developments from building parking. This would take the pressure off of developers to build parking while providing them the freedom to explore a wider ranges of architectural and development options.

To meet this demand structure parking would need to serve the station’s daily riders as well as the parking demands of the retail, residential, and other commercial land uses located at the site. Projected demand will require the provision of approximately 350 parking spaces throughout the project area.

Where mixed-use development is clustered around transit, less parking is needed, for three distinct reasons. First, many people come and go by transit rather than driving. Second, the mix of uses allows some trips to be made on foot. And third, uses with different peak activity patterns can share parking facilities. For example, retail and entertainment activities whose peak demand occurs at night and on weekends can share parking with traditional workday uses like offices and park-and-rides. Parking is costly, consuming either land (about an acre per 140 spaces in surface lots) or money (from \$25-30,000 per space in above ground garages). By providing fewer physical spaces, TOD can help achieve more affordable density.

Today, when garages are built or replaced, a short walk to the entrance may be preferable—allowing the land immediately next to the station to be developed and offering park-and-ride customers a path lined with retail, coffee, or services. Where new park-and-ride garages are built next to the station, the effect should be to free up the most desirable frontage.



**Figure 10-6 Parking Garages Wrapped in Commercial and Residential Uses**

Because this parcel is owned by the Parish it can be used to take development pressure off of other parcels. For example, the parish could use this parcel to host structured parking while removing parking requirements (or banning parking) from the other parcels. Operating under this assumption would allow the Parish to develop high quality, high capacity structured parking that would otherwise be cost prohibitive to prospective developers – the result being an overall higher quality LPMBTC.

## Value Capture

Studies have found that transit projects, such as the New Orleans-Baton Rouge Passenger Rail Service, increase nearby property values by 30 to 40 percent and as much as 150 percent where conditions are ideal.<sup>2</sup> Local jurisdictions can utilize Value Capture strategies to generate sustainable, long-term revenue streams that can help pay for infrastructure improvements and/or operational and maintenance costs of transit systems.

Value Capture (VC) is a type of public financing mechanism or strategy that recovers some or all of the value that public infrastructure generates for private landowners. Usually applied by local jurisdictions, VC strategies allow said jurisdictions to collect revenue in specific areas and

<sup>2</sup> Federal Transit Administration (2018). *Value Capture: Value Created by Transit*. Web. Accessed Nov 6, 2018. <<https://www.transit.dot.gov/valuecapture>>

direct that revenue towards specific improvements. VC can be used for a wide range of projects, from targeted neighborhood street improvements to new public transit infrastructure.



**Figure 10-7 Baton Rouge Capitol Hilton Hotel**

Value capture is an important element of station area planning and development. It occurs when an infrastructure investment creates enhanced real estate value, a portion of which is “captured” as development occurs, to help finance or maintain the infrastructure in question. Joint development is one form of value capture. The other is district-based value capture, in which a district is drawn around the proposed public improvement and a share of the enhanced land value is captured from all affected properties, usually through tax increment financing or special assessment. Value capture is widely used in the United States for public infrastructure and in general, can also be used for transit projects.

### **Tax Increment Financing (TIF)**

Tax Increment Financing is the most common form of value capture in Louisiana. Local jurisdictions create sales TIF districts and then raise funds from the capture of the sales tax increment between pre-development sales and post-development sales. The Parish can then invest the money raised back into the district to spur more growth and support the success of the district. As the Parish invests in the district, the tax increment grows. New development brings more shops, more restaurants, and more activity to the area. That increase sales tax stays in the immediate area to pay for the improved public realm and help pay back investments in parking garages and other capital costs. For the sake of this project, the Parish could designate Main Street and the station area as a TIF district. A property TIF district could also be used in this development.

## Zoning Changes

Changes to the Parish zoning code should be made to ensure that land use regulations guide development along Main Street and in the station area such that a walkable and vibrant mixed use district is created while maintaining the historic and cultural character of LaPlace. Such changes, which can be developed and adopted by the Parish in the near term, can provide the initial framework for future development. The recommended zoning changes are:

### Rezone existing parcels

The Parish should consider rezoning parcels to permit higher density development with smaller setback requirements. The rezoning will not affect existing property owners seeking to remain, but will allow others more options to sell or develop their parcels.

### Creation of a Mixed-Use zoning district

The Parish should create a new zoning district that permits the kind of vertical, mixed-use development desired on Main Street and in other areas.

### Create a design overlay district

A design based overlay zone would allow the Parish to manage the form and style of future development in a manner that ensures a vibrant, pedestrian friendly corridor and take advantage of planned street improvements under the LA SAFE program.



Figure 10-8: Example of Residential Homes with Small Setbacks

### Develop a Historic District design review process

In conjunction with the creation of overlay district(s), the Parish should create a review process to maintain the cultural heritage of Main Street and the station area in accordance with the community and Parish priorities.

## Green Infrastructure

Bioswales may be incorporated with planting beds along the corridor where space permits. Bioswales will capture street runoff using interruptions in the roadway curb and gutter that directs water into the depressed planter areas. Downstream outlets discharge excess water back to the curb. All planter areas would be designed to capture rain water that falls within the planter. This would be accomplished by creating planting dishes around each plant or grouping of plants. Station areas would be graded to allow some water from the deck and structures to drain to planting areas. Sidewalk areas will be graded to the street curb in order to direct runoff to planter beds and be discharged downstream to the street.

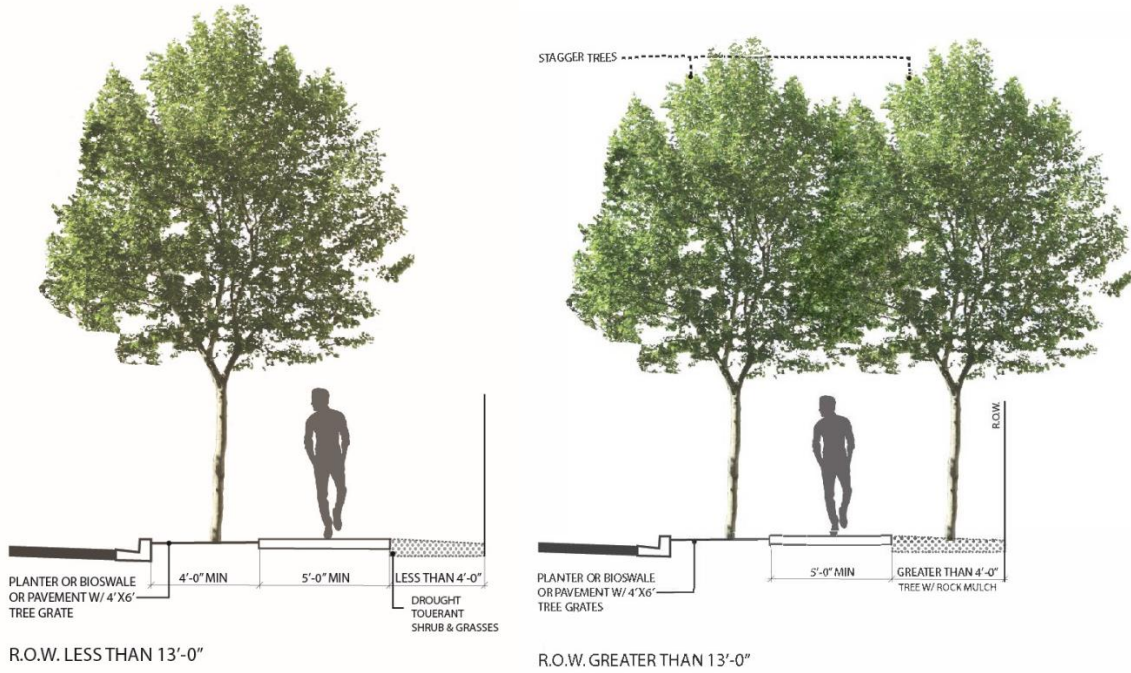




**Figure 10-9: Examples of Green Infrastructure**

## Shelter

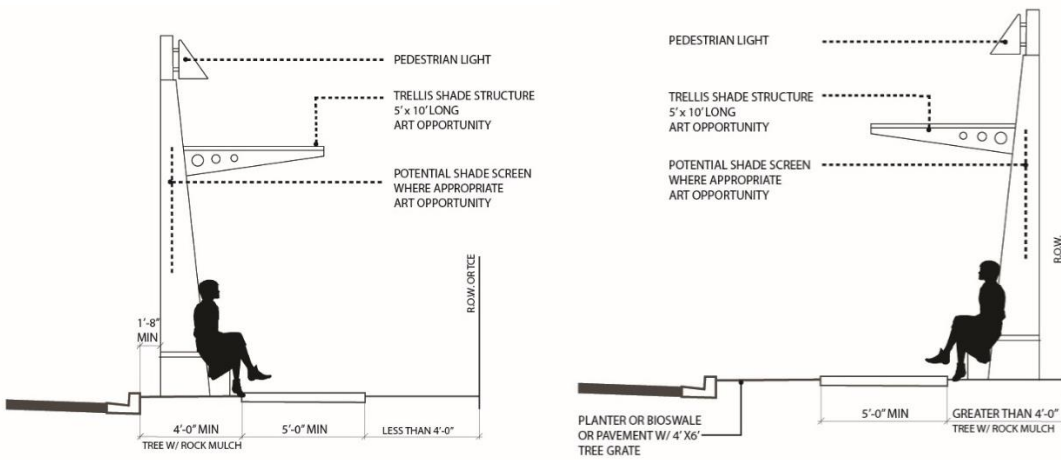
To promote a sense of comfort, inviting folks to dwell and enjoy their time in a public space, thought must be given to their comfort, especially related to environmental factors. For example, a Farmers Market needs a roof over parts. Heat can be mitigated by providing shade, taking advantage of breeze and reducing the use of materials that either reflect sun glare or retain heat. Shade can be provided through the use of deciduous canopy trees, overhead structures, or vertical screen walls where adjacent buildings are not present. The project proposes to utilize shade trees wherever possible (as space and budget allow). Shade trees will be compliant with the plant selection for each character zone. The uses of shade trees are illustrated below in Figure 10-10.



**Figure 10-10: Uses of Shade Trees in Pedestrian Zone**

The use of shade structures provide immediate coverage and can include seating and benches. The length and spacing of the structures is critical in order to not dominate the streetscape. Diagrammatic representations of shade structures with benches are illustrated below in Figure 10-11.

**Figure 10-11: Representations of Shade Structures**





Materials selected for these areas should be selected with the following considerations:

- o Light-colored decomposed granite is good for planting beds.
- o Medium-broom finish texture for concrete sidewalks helps to reduce reflectivity.
- o Light-colored furnishings reduce heat absorption and retention.

## Support for Local Farmers and Small Businesses

The public plaza adjacent to the train station will be an ideal space to host a weekend farmer's market. However, the Parish should do more than provide a physical space. The Parish should work with local and regional organizations to develop a publicly support market system that allows small, local farmers to successfully operate.

The Parish can go one step further and establish a small business incubator to support local ventures. By first helping a local vendor set up a table at the farmer's market, the Parish can help support a local business until the venture is able to graduate to a fixed location, such a small retail space on Main Street or near the train station.

Figure 10-12: Local Farmers at the New Orleans Market



## Improving Street Connectivity

During the community meetings held by LA SAFE<sup>3</sup>, the lack of street connectivity was mentioned as an important issue affecting the growing traffic and congestion problems in the parish. A review of the existing network revealed a lack of connectivity in the areas adjacent to the proposed train station site. This lack of connectivity forces traffic to the few streets that do provide some level of access: Main Street, Airline Highway, E 5<sup>th</sup> Street. Many other streets are dead ends and the majority of developments on Airline Highway and Main Street are only accessible by those streets. The location of two rail lines between Airline Highway and the Mississippi River contribute to this issue.

Providing east-west connectivity between streets parallel to Main Street could potentially reduce traffic volumes at intersections in the study area. Specifically, Martin Drive, which runs parallel to the KCS rail line between Main Street and Cardinal Street, should be extended. Martin Drive should be extended to the west to Alice Street, with a connection to Airline Highway at US-51. To the east the street should be extended to Walnut Street. These are illustrated by the yellow lines in Figure 10-13.

<sup>3</sup> Louisiana's Strategic Adaptations for Future Environments

Figure 10-13: Proposed Extension of Martin Drive (in yellow)



# 11. Conclusion

The Southern Rail Commission and regional partners are advancing plans for passenger rail service from Baton Rouge to New Orleans, with stations at select locations. St. John the Baptist Parish is currently developing a conceptual plan for a Passenger Rail and Multi-Modal Transit Center on Main Street south of Airline Highway near the existing KCS rail line in LaPlace. Proposed rail service is expected to have at least 4 round trips per day.



In a survey of 400 residents, most respondents expressed a desire for a Town Center or community hub, in addition to a train station. A collection of ideas for the station area include a farmer’s market, flexible community space, restaurants, and shopping.

The LaPlace Multi-Modal Transportation Center Plan focuses on the potential location for a passenger train station in the area bound by Airline Highway, Main Street, Cardinal Street and the Kansas City Southern (KCS) owned railroad line. This plan also addresses the surrounding area, including the historic Main Street corridor, between Airline Highway and East 5<sup>th</sup> Street, for potential development. The study and plan ensure that St. John the Baptist Parish has the necessary capacity and guidance to accommodate current and future residents and businesses in a safe and resilient manner while building on the unique character of the community.

## Development Scenarios

Alongside the question of what amenities are included in the passenger rail station, there is a question of how the surrounding land is to be developed to support the station and create the town center that parish residents would like to see. Based on the Transit Oriented Development typologies, three land use scenarios were developed for the project area: a Main Street scenario, Town Center scenario, and a Neighborhood Center scenario.

The preferred scenario is based on the Main Street Scenario and leverages recent Parish accomplishments including the establishment of the LaPlace Main Street Historic District. In the Main Street Scenario, development is focused along Main Street to create a walkable, mixed use corridor with a balance of residential and commercial uses. Mixed use development around the train station will include housing above retail, service, and dining. A public plaza provides a flexible open space for community events. The parking lot adjacent to the train station can also be designed for use as a flexible space for events like a farmer's market.

## Market Analysis

While LaPlace has maintained steady population, housing, and income growth over the last decade, the community still leaks a significant amount of commercial business outside of its immediate trade area and spends less than the national average across almost every major expenditure category. The data reveals that there is consistently more demand than supply across the various retail categories, reflecting a general need for more commercial and retail development. The primary exception is in the grocery category.

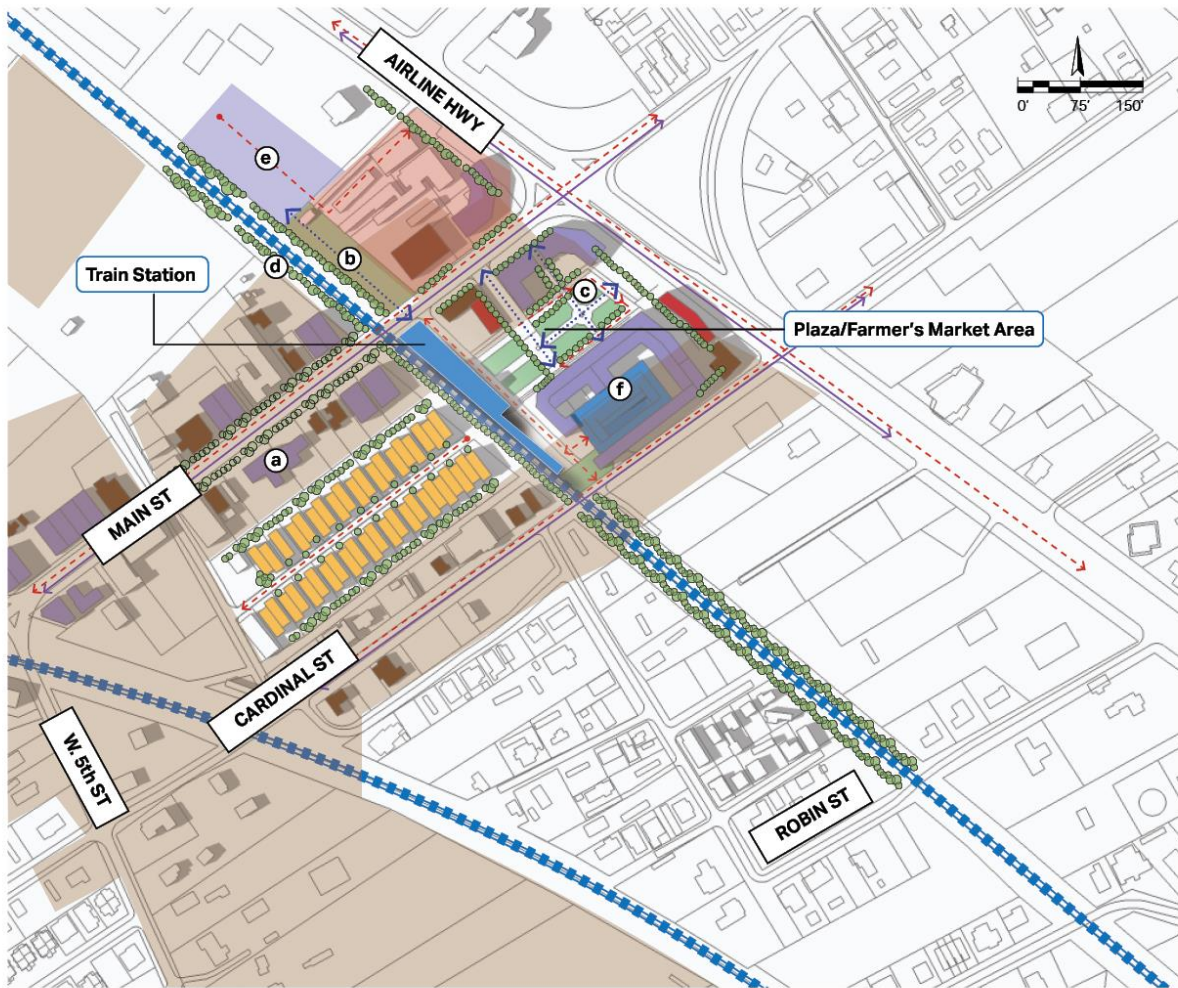
Based on the overall market conditions and demographic segments, LaPlace appears to be operating primarily as a point of origin rather than a destination for retail activity. However, the significant retail leakage and associated demand for goods and services also means there is a strong opportunity to bundle commercial development with the development of a commuter rail station. With a compelling vision and implementation strategy, LaPlace possesses the foundational market conditions to reasonably aspire towards a more town-center Transit Oriented Development (TOD) typology rather than just a commuter rail TOD typology.

## Economic & Traffic Impact of Potential Development

To assess the economic and traffic impacts of the transportation center the project team undertook an analysis using IMPLAN economic analysis software and Synchro traffic analysis software. Based on input from community members, stakeholders, and parish officials, the project team developed a Refined Main Street scenario for economic and traffic impact analysis.

The focus of development in the Refined Main Street Scenario is on two areas: Main Street and the train station block area. Borrowing from the Main Street Scenario, the Refined Main Street Scenario shows development of mixed-use space along the Main Street corridor in a traditional, pedestrian friendly manner. Assumed development of the station block – bound by Airline Hwy, Main and Cardinal Streets, and the railroad tracks – is a town center with development focused inward with a train station overlooking a public plaza and greenspace surrounded by mixed use development as found in the Town Center scenario.

# Refined Main Street Scenario

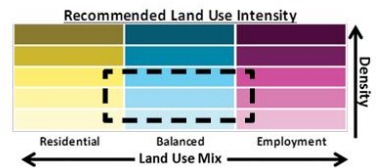


## LEGEND

|                        |                                 |                                    |                              |  |
|------------------------|---------------------------------|------------------------------------|------------------------------|--|
| commercial             | open space                      | historical / cultural district     | bike/pedestrian connectivity | rail line  |
| neighborhood infill    | transportation                  | permeable pavement surface parking | automobile movement          | complete streets, with bike routes and sidewalks |
| commercial/residential | historical contributing element |                                    |                              |  |

## SCENARIO IMPROVEMENT NOTES

- (a) smaller commercial functions to complement existing context
- (b) green pocket park to serve as buffer between residential development and rail line; pocket parks provide visual screening and stormwater management
- (c) pedestrian plaza
- (d) trees along railroad tracks to serve as visual screening
- (e) area to serve as phase 1 satellite surface parking using permeable pavement
- (f) parking garage to serve town center





## Economic Impacts

The potential economic impacts of the LaPlace Multi-Modal Transportation Center fall into three categories: Impacts from construction, impacts of commercial activity, and impacts to tax revenue. Construction of new buildings on the station block, Main Street, and Chickadee Street would create approximately 1180 job years.

**Table 11-1: Total Construction Impacts**

| Segment       | Jobs Supported (Direct) | Jobs Supported (Indirect & Induced) | Jobs Supported (Total) | Total Output |
|---------------|-------------------------|-------------------------------------|------------------------|--------------|
| Station Block | 438                     | 112                                 | 550                    | \$39,429,000 |
| Main Street   | 502                     | 127                                 | 630                    | \$44,610,000 |

In terms of employment, the commercial impacts of the LPMMTC will generate a total of just over 1,180 part-time and full-time jobs. Direct employment activity related to the businesses located in the Station Block amounts to support for just over 940 part- and full-time jobs per year. The indirect and induced employment activity related to the commercial impacts of the development is estimated at 102 indirect jobs and 137 induced jobs. However, unlike the construction impacts the commercial impacts are assumed to be ongoing for the life of the project.

**Table 11-2 Commercial Impacts of LPMMTC**

| Impact Type     | Employment* | Labor Income | Total Value Added | Output       |
|-----------------|-------------|--------------|-------------------|--------------|
| Direct Effect   | 940         | \$28,436,000 | \$30,219,000      | \$49,681,000 |
| Indirect Effect | 102         | \$5,627,000  | \$9,718,000       | \$16,051,000 |
| Induced Effect  | 137         | \$5,976,000  | \$10,995,000      | \$18,306,000 |
| Total Effect    | 1,180       | \$40,040,000 | \$50,931,000      | \$84,039,000 |

*\*Employment number includes both part-time and full-time jobs*

Total labor income associated with the commercial impacts of the transportation center amount to \$40 million. Within the total, \$28.4 million in labor income is associated with the direct impact, \$5.6 million is associated with the indirect impacts, and \$5.9 million is associated with the induced impacts.

Employee compensation derived from commercial activities at the transportation center would collect a total of \$97,000 in state and local taxes each year. Production and imports associated with the commercial development from the transportation center would accrue an estimated \$3.4 million per year in state and local taxes. State and local taxes collected from households as a result of the commercial operation of the transportation center amount to over \$680,000 per year. Taxes on corporations amount to \$21,000 associated with the commercial development in the transportation center.

**Table 11-3 Total Commercial State and Local Tax Impact of the LPMMTC**

| Description               | Employee Compensation | Tax on Production and Imports | Households | Corporations |
|---------------------------|-----------------------|-------------------------------|------------|--------------|
| Total State and Local Tax | \$97,000              | \$3,389,000                   | \$681,000  | \$21,000     |

## Traffic Impacts

An analysis of traffic impacts was conducted by Urban Systems Inc. The following is a summary of that analysis. The detailed report of the results of that analysis can be found in Appendix B.



Projected conditions capacity analysis for the subject intersections along US 61, Main Street, and the station area assumed both the increased development related to the train station and the implementation of streetscape and signal improvements planned under the LASAFE program. Specifically, the following street and intersection improvements were included in the analysis:

- Additional left turn lane on Main Street northbound approach at Airline Highway. The configuration analyzed includes dual left turn lanes and a shared through-right lane.
- Modifying the Main Street southbound approach to consists of an exclusive left turn lane and a shared through-right lane.
- Signal phasing modifications including protected only northbound left turn movement, permitted protected lagging southbound left turn movement and an eastbound right turn overlap.
- Signal timing optimization and pedestrian crossing improvements.

With the above mentioned improvements, the current roadway network is expected to be able to accommodate the additional traffic anticipated with the redevelopment of the Transportation Center block and the areas along Main Street.

Roadway segment analysis was performed using traffic volumes anticipated from a complete build-out of the proposed development scenario. A review of the roadway segment capacity analysis indicates each subject street is expected to operate below capacity for the plan build-out. A full methodology and articulation of results can be found in the appendix.

## Recommendations and Actions

In order to take advantage of the opportunities presented by the introduction of passenger rail service, the Parish should consider the following recommended actions:

### ***Provide for Increased Development Density and a Mix of Uses.***

When combined with mixed uses, density enables residents to walk and bicycle to destinations, and allows for the more efficient use of public transit.

Implementation:

- Initiate changes to development requirements (see below).
- Utilize existing authority and regulation to improve design for any near-term development in the area.
- Consider outreach to master developers, share this plan, and meet with interested parties.

### ***Pedestrian Scale Design.***

The sidewalk should be considered the primary means of internal circulation within the train station block and along Main Street. They should be continuous, provide clear and direct routes, and be designed wide enough to comfortably accommodate foot traffic as well as street furniture and the extension of retail businesses onto the sidewalks – such as cafes.

Architecturally, pedestrian scale design would be achieved through activating all sides of each structure. Building massing that breaks the frontage into smaller, denser segments – as opposed to a big monolithic wall – is preferred and should be encouraged.

Implementation:

- Require greater-than minimum sidewalks on both sides of any nearby street improvements.
- Work with any near-term development to provide improved pedestrian access and circulation.
- Be sure that new configurations for Airline Highway and Main Street include wide sidewalks and high-visibility crosswalks. Consider removal of the free-right movements allowed now, as these detract from pedestrian safety and comfort.
- See steps related to Zoning.

### ***Phased Parking Development.***

In order to prevent much of the area around the station from becoming surface parking lots, the Parish should take the lead and build structured parking while simultaneously limiting or banning other developments from building parking.

Implementation:

- Add parking structure to capital projects / capital facilities plans.

- Explore use of disaster recovery and related funds from FEMA, HUD, and others, to advance plans for a parking structure that also serves as an elevated emergency shelter.
- Be sure to include in discussions with master developers or in any Requests for Proposals for master developers.
- Establish a fee-in-lieu program that allows developers and business owners to pay a fee to the Parish instead of providing parking. These fees can be used to offset costs of the structure.
- Minimize the parking provided as part of any near-term development in the immediate area.
- Be sure to update zoning ordinance as appropriate to reduce parking minimums, set parking maximums, allow parking structures and allow mixed use structures wrapped in retail.

### ***Value Capture & Tax Increment Financing.***

The Parish should employ a value capture scheme, such as tax increment financing, to recover some of the value that public infrastructure generates for private landowners and use those funds to pay for maintenance and improvement of public spaces, drainage, and more.

Implementation:

- Explore the feasibility of a Tax Increment Financing District for the immediate study area including the entire length of Main Street.
- Explore the feasibility of a business improvement district (BID). Funds raised by the District could be used for local enhancements like flower baskets, street banners, small public plazas, or evening security. A District could also include the formation of a small transportation management area which would help to guide development and manage parking challenges.

### ***Changes to the Zoning Code.***

Changes to the Parish zoning code should be made to ensure that land use regulations guide development along Main Street and in the station area such that a walkable and vibrant mixed-use district of appropriate density is created while maintaining the historic and cultural character of LaPlace.

Implementation:

- Initiate changes to development requirements:
  - As part of a development code rewrite project,
  - As a newly developed mixed-use district specially for the study area, or
  - As an overlay district that could be applied to the study area.

### ***Employ Green Infrastructure.***

The Parish should focus on employing green infrastructure as a way to manage stormwater and run-off while improving the environmental quality of the development area. Green infrastructure can be mandated on private developments through changes to the Parish's development regulations and can be installed and maintained directly by the Parish in public spaces and right-of-ways.

Implementation:

- Ensure that the new designs for Main Street and Airline Highway incorporate green infrastructure (GI).
  - Require on-street bio-infiltration/ GI features along Main Street that do not constrain the pedestrian through-zone and include small interpretive signs.
- Consider use of Envision or LEED green rating systems as an analytical tool to optimize the environmental performance of new development.
- Be sure that GI features and greater stormwater management is required in new development regulations.
- For review of near-term developments utilize the new GI feature standard drawings from the City of New Orleans Planning Commission.

### ***Improve Street Connectivity.***

A review of the existing network revealed a lack of connectivity in the areas adjacent to the proposed train station site. This lack of connectivity forces traffic to the few streets that do provide some level of access: Main Street, Airline Highway, E 5<sup>th</sup> Street. Providing east-west connectivity between streets parallel to Main Street, specifically Martin Drive, could potentially reduce traffic volumes at intersections in the study area, provide a greater number of route options for pedestrians, cyclists, and drivers.

Implementation:

- Modifying the Main Street southbound approach at Airline Hwy to consist of an exclusive left turn lane and a shared through-right lane.
- Signal phasing modifications at Main St and Airline Hwy should include a protected only northbound left turn movement, permitted protected lagging southbound left turn movement and an eastbound right turn overlap.
- Connect bike lane (or similar protected facility) to new Main Street design.
- Provide east-west cross connectivity between the streets that currently connect Airline Hwy to LA 628. Martin Dr, which runs along the rail line, now terminates at Main St and Cardinal St instead of extending farther west to Alice St or east to Walnut St.
- Additional improvements to the existing north-south connections could also be considered such as extending US 51 across US 61 to Martin Dr.
- If needed, in the future, add an additional left turn lane on Main Street northbound approach at Airline Highway (providing dual left turn lanes and a shared through-right lane.)

## **Develop a Public Plaza and Farmers Market to Support Local Businesses**

A public plaza adjacent to the train station will be an ideal space to host a weekend farmer's market and other local events and festivals. The Parish should do more than provide a physical space; they should work with local and regional organizations to develop a publicly supported market system that allows small, local farmers to successfully operate.

The Parish can go one step further and establish a small business incubator to support local ventures. By first helping a local vendor set up a table at the farmer's market, the Parish can help support a local business until the venture is able to graduate to a fixed location, such a small retail space on Main Street or near the train station.



Implementation:

- Work with the St. John Parish Business Association to identify potential vendors.
- Partner with or establish a non-profit organization focused on developing a farmer's market at the site (potentially using the Parish's corner parcel in the beginning.)
- Develop a basic business plan using Small Business Administration resources and templates.

## **Implement Fixed Route Transit.**

The Parish should work with River Parish Transit Authority and neighboring parishes to develop fixed route transit to serve Airline Highway and communities within the Parish. Quality transit service will be a key contributor to the success of the passenger rail station because it will allow residents – particularly carless ones – to access the redeveloped area around the station and utilize the rail service to access jobs and opportunities in New Orleans and Baton Rouge.

Implementation:

- Partner with the River Parish Transit Authority regarding new service routes and times.
- Develop a pilot / demonstration project.

## **Coordinate and Cooperate with State and Regional Entities in Development of Passenger Rail Service.**

To ensure the success of the passenger rail service and the successful redevelopment of Main Street and the train station block the Parish should coordinate with state and regional entities - LA Department of Transportation and Development, Office of Community Development, Southern Rail Commission, New Orleans Regional Planning Commission,

Capital Regional Planning Commission, River Parish Transit Authority, etc. – and support progress of passenger rail service.

Implementation:

- Support the work of the Southern Rail Commission, FRA, and Transportation for America, in developing funding and implementation plans for the commuter rail service.
- Support the completion of environmental studies, consider being a Participating Agency.
- Utilize the planning and public engagement in this and other regional rail projects as pre-NEPA activities, thereby shortening the timeline for obtaining federal approvals.

Passenger rail service provides the Parish the opportunity to create a great town center around the proposed station and along Main Street with safe, interconnected walking environments with sidewalks, plazas, lighting, way-finding, and amenities. To the greatest degree possible, the station area streets need to be built as complete streets: accommodating bicycles and feeder transit connections as well as pedestrians and cars. Station access needs to be prioritized for pedestrians, transit riders, and cyclists..

**[Page Intentionally Left Blank]**