



BATON ROUGE PASSENGER RAIL STATION MASTER PLAN

DOWNTOWN & SUBURBAN STATIONS

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East Baton Rouge Redevelopment Authority (RDA)

John Noland, Chairman – Board of Commissioners
 R. Brian Haymon, Vice Chairman – Board of Commissioners
 Theodore Major, Secretary – Board of Commissioners
 Susan Turner, Treasurer – Board of Commissioners
 Rodney Braxton – Board of Commissioners
 Christopher Tyson, President & CEO
 Tara Titone, Vice President
 Tasha Smith-Saunders, Grants Administrator
 Marla Muse-Morris, Grants Coordinator
 Debora Washington, Administrative Assistant



Steering Committee

Bill Deville, CEO – Capital Area Transit System
 Rachel DiResto, Vice President – CPEX
 Frank Duke, Planning Director – Baton Rouge City-Parish
 Ryan Holcomb, Assistant Director – Baton Rouge City-Parish
 Rev. Jennifer Jones, Reverend – Shiloh Baptist Church
 Dyke Nelson, Owner – DNA Workshop Architects
 Fred Raiford, Director – Baton Rouge City-Parish
 Davis Rhorer, Executive Director – Downtown Development District
 Sam Sanders, Executive Director – Mid City Redevelopment Alliance

Suzy Sonnier, Executive Director – Baton Rouge Health District
 John Spain, Vice President – Baton Rouge Area Foundation

Consultant Team

HNTB Corporation
 Center for Neighborhood Technology (CNT)
 Franklin Associates
 Fregonese Associates
 Manning Architects
 Stantec

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Downtown Station Transit Oriented Development Concept



Suburban Station Transit Oriented Development Concept



CHAPTER 1: INTRODUCTION

The East Baton Rouge Redevelopment Authority (RDA) led the development of this master plan to conduct planning and design activities for the placement of two state-of-the-art, multimodal passenger rail stations in Baton Rouge, LA for the proposed Baton Rouge to New Orleans intercity passenger rail corridor. The Downtown Station will serve as a terminus rail station, connecting users to downtown destinations and providing the area with numerous economic benefits. The Suburban Station will enhance the Health District's appeal as a destination and serve a variety of users as part of a well connected, vibrant healthcare center. Both stations are intended to enhance current revitalization efforts and offer well designed, quality facilities with amenities that will create a seamless, efficient and pleasant experience for all train riders.

1.1 BACKGROUND

The downtown and suburban Baton Rouge station plans are part of an ongoing effort to re-establish passenger rail service between Baton Rouge and New Orleans. The implementation of this corridor is a top priority for parish and business leaders and is critical to the continued economic growth of the southeast Louisiana Super Region which includes more than 2.2 million people and nearly 1 million jobs. Connecting the two largest and most populous metros with passenger rail will mitigate growing traffic congestion and aging infrastructure issues while providing a reliable, efficient transportation option for regional and intercity travel.

The proposed intercity rail service will utilize the 80-mile corridor between the two cities that is owned and operated by Kansas City Southern (KCS) and

Canadian National Railway (CN) for freight operations. The proposed seven passenger station locations, as shown in **Figure 1.01**, include: downtown Baton Rouge, suburban Baton Rouge, Gonzales, LaPlace, Kenner, Jefferson Parish and New Orleans. The service is expected to be an attractive alternative for commuters going to work and for business and pleasure travelers to conveniently travel between Baton Rouge and New Orleans.

The proposed Baton Rouge-New Orleans service is expected to advance national transportation goals. This

route will link with the Gulf Coast Corridor, as shown in **Figure 1.02**, one of the nation's eleven federally-designated high-speed rail corridors. The development of service between Baton Rouge and New Orleans will provide a critical link in the regional network of passenger rail service stretching from Houston through New Orleans to Mobile and Atlanta.

Figure 1.01: Baton Rouge to New Orleans Passenger Rail Corridor



Source: Baton Rouge to New Orleans Intercity Rail Feasibility Study: Strategic Business Plan, 2014

Prior studies for the Baton Rouge-New Orleans passenger rail corridor include:

- Service Development Plan (2010) – This plan analyzed incremental, higher speed service along the corridor starting at four daily round trips with maximum speeds of 79 miles per hour increasing to eight daily round trips with maximum speeds of 110 miles per hour. Ridership was estimated at 461,000 for four round trips and 886,400 for eight round trips. The cost to implement this service was estimated at \$450 million. (Southern Rail Commission, 2010)
- Strategic Business Plan (2014) – This plan focused on strategies to implement startup service with two daily round trips with maximum train speeds of 79 miles per hour. This plan estimated the capital cost at \$250 million to implement service. (HNTB, 2014)

Figure 1.02: Gulf Coast Corridor

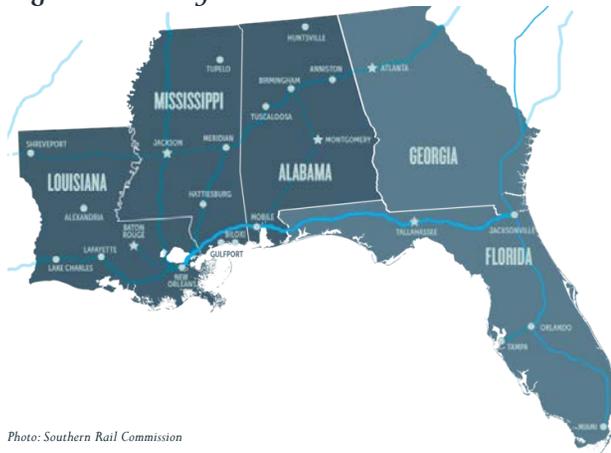


Photo: Southern Rail Commission

This master planning effort represents a continuation of these past efforts and will allow Baton Rouge to determine station area details for the Downtown and Suburban Station locations. The next step for the corridor service is to complete environmental studies in accordance with the National Environmental Policy Act (NEPA) and initiate engineering studies.

1.2 MASTER PLAN PROCESS

The completion of the master plan for the Baton Rouge stations involved the evaluation and selection of station site options, the preparation of conceptual design plans for the selected sites and the development of funding and implementation strategies with public and stakeholder input. **Figure 1.03** shows the key tasks for each step of the master planning process.

The results of the master plan process will allow RDA and its partners to advance the passenger rail planning

Figure 1.03: Station Master Plan Process

SITE EVALUATION AND SELECTION

- Review existing conditions and local plans
- Identify station site options
- Evaluate site alternatives
- Select recommended station sites

CONCEPTUAL DESIGN PLANS

- Station program elements
- Station design and layout
- Transit oriented development
- Multimodal planning
- Equitable growth strategies

FUNDING AND IMPLEMENTATION STRATEGIES

- Identify phasing strategies
- Determine key action steps
- Prepare conceptual cost estimates
- Identify funding options

process for the corridor and begin to implement station facilities or the proposed rail service.

1.2.1 Outreach Summary

The outreach approach for the station master plan involved several rounds of meetings to obtain input from local stakeholders and the public on the station site selection and design process including:

- Steering committee meetings
- Downtown and suburban stakeholder group meetings
- Local, state and federal agency coordination
- Individuals meetings with stakeholders and property owners

Round One Meetings – January 2018

Conducted stakeholder group, steering committee and individual meetings to introduce the rail station master plan, confirm station site options and learn about local preferences for station design.

Round Two Meetings – March 2018

Conducted stakeholder group, steering committee and individual meetings to present results of station site analysis, identify recommended station sites and present preliminary design concepts.

Public Meeting – June 2018

Open house meeting for all members of the public to review station site options and provide input on station design concepts. Input will be used to confirm station sites and finalize station concepts.

See **Appendix B** for Public Involvement stakeholders list and **Appendix C** for Public Meeting summary.

Key Outreach Themes for Stations

DEVELOPMENT

- Create transit oriented development with a mixture of uses and modes
- Catalyze additional development

MULTIMODAL

- Provide a multimodal transportation experience
- Create first and last mile connectivity to downtown and the airport

CONTEXT SENSITIVE

- Respect the existing development context (downtown)
- Create a signature station consistent with local plans (suburban)

BUILD MOMENTUM

- Advance the visions expressed in local planning documents
- Provide an amenity for the community

FLEXIBLE

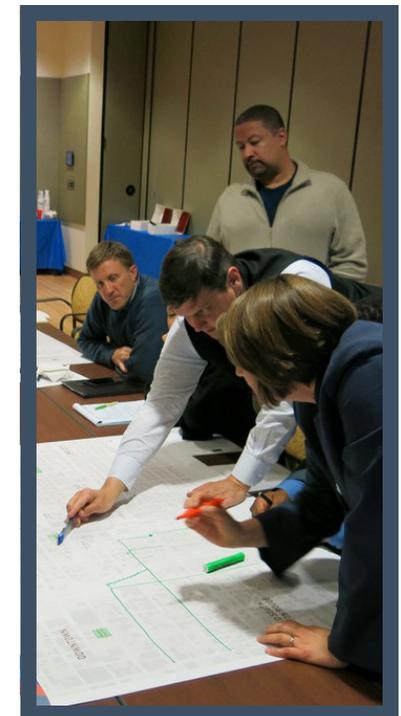
- Develop multifunctional plans that work even if rail never happens
- Prepare for future trends (i.e. autonomous vehicles)

INCLUSIVE

- Create opportunities for existing residents and businesses to benefit from station area development (downtown)
- Create opportunities to expand housing and workplace choices (suburban)

IMPLEMENTABLE

- Select a functional and implementable site
- Encourage public-private partnerships



1.2.2 Master Plan Guiding Principles

The following guiding principles for station site selection and design were developed based on feedback from the steering committee and stakeholders:

- True transit oriented development – integration into the site
- Fully multimodal – respecting all modes of transportation/ travel
- Sized and scaled appropriately to fit the context of the area for the Downtown Station
- Sized and scaled appropriately to fit multiple use opportunities for the Suburban Station within the Health District
- Opportunity for a phased approach
- Accommodate flexibility now and into the future



CHAPTER 2: STATION PROGRAM ELEMENTS

This chapter reviews the anticipated rail service and ridership assumptions to determine the general program for the downtown and suburban Baton Rouge stations. This establishes the framework for evaluating station site options and for completing the conceptual design plans for the selected station sites at both locations. These elements will need to be confirmed and refined as the passenger rail corridor service is advanced through its project phases.

2.1 RAIL SERVICE & RIDERSHIP ASSUMPTIONS

Table 2.01 summarizes the rail service levels and ridership assumptions for the corridor and the Baton Rouge stations. These preliminary estimates are based on prior studies completed for the corridor including the Service Development Plan (2010) and the Strategic Business Plan (2014). Initially, startup service will include two daily round trips with one train in each direction in the morning and reverse service in the evening. The estimated annual corridor ridership for two round trips is 210,240. As service is expanded to eight daily round trips, ridership is estimated to increase to 886,400 annual passengers.

Previous studies indicate that 65 percent of the total corridor inbound boardings will be at the two Baton Rouge stations. These boardings were distributed 70 percent to the Downtown Station and 30 percent to the Suburban Station. Daily riders are calculated using Amtrak's formula (daily riders = annual ridership / 270) that accounts for peak conditions, seasonal fluctuations and weekly variations in riders. Startup service is

estimated to generate 350 daily riders at the Downtown Station and 150 riders at the Suburban Station. The long-term (2045) projection will generate 1,500 daily riders at the Downtown Station and 640 daily riders at the Suburban Station. Ridership estimates will be updated when NEPA and preliminary engineering studies are advanced for the corridor. The rail station program assumptions may need to be updated at that time.

Service Development Plan (2010): http://www.norpc.org/assets/pdf-documents/studies-and-plans/BR-NO_Pass_Rail-Vol-1-2010.pdf

Strategic Business Plan (2014): http://www.norpc.org/assets/pdf-documents/studies-and-plans/BR-NOLA%20Rail_Strategic%20Business%20Plan_FINAL_February%202014.pdf



Fort Worth, TX

Source: <http://steelreeman.com/projects/intermodal-transportation-center/>

Table 2.01: Rail Service and Ridership Assumptions

SERVICE/STATION	START UP (2025)	MID-TERM (2035)	LONG-TERM (2045)
CORRIDOR SERVICE LEVELS			
Round Trips	2	6	8
Train Speeds	79 mph	90 mph	110 mph
Annual Riders	210,240	644,200	886,400
DOWNTOWN STATION			
Annual Riders	96,000	290,000	400,000
Daily Riders	350	1,000	1,500
SUBURBAN STATION			
Annual Riders	41,000	126,000	173,000
Daily Riders	150	460	640

Notes:

- Ridership estimates are based on the Strategic Business Plan (2014) and Service Development Plan (2010) which states 65 percent of the total corridor inbound boardings will be at the two Baton Rouge stations. The Baton Rouge boardings were distributed 70 percent to the Downtown Station and 30 percent to the Suburban Station.
- Daily riders are based on formula from the Amtrak Station Guidelines (2013).

2.2 STATION PROGRAM ELEMENTS & DESIGN CRITERIA

The ridership estimates in **Table 2.01** were used to size the stations and determine the Downtown and Suburban Station program elements in accordance with the Amtrak Program and Planning Guidelines (Amtrak, 2013). For the purposes of this master plan, the station program elements for the Downtown and Suburban Stations were sized to accommodate the long-term (2045) service and ridership assumptions. This will ensure that the selected station sites can accommodate service expansion and ridership growth over time.

The Baton Rouge passenger rail stations will be designed to meet the needs of a modern intercity passenger rail service that will include an enclosed station building, platform, on-site parking and multimodal transportation access. All stations will be accessible and will comply with the Americans with Disabilities Act (ADA).

Both stations are being designed as Amtrak Category 2 medium stations. This classification is appropriate for city centers and suburban locations and is typically used for stations along state corridor routes that serve between 100,000 and 400,000 annual passengers (Amtrak, 2013). Category 2 stations can be staffed by Amtrak employees and have climate-controlled enclosed waiting areas, a ticket office, baggage service and restrooms. Staffing, ticketing and baggage services will not be required for the initial startup levels of service. The need for these services should be evaluated in coordination with the owner of the rail service since these services can substantially increase costs and are usually not required for relatively short intercity passenger corridors. Complementary uses such as retail, restaurants and other services also commonly accompany medium stations.

Table 2.02 summarizes the basic program elements required for the Downtown and Suburban Stations. It is assumed a 500-foot long platform will be provided at each station. This will accommodate the proposed

Table 2.02: Station Program Elements and Space Requirement Assumptions - Year 2045

PROGRAM ELEMENTS	DOWNTOWN	SUBURBAN
Station Type	Terminal	Intermediate
Track	Second track for platform	Platform along mainline
Platform	500-foot long and 12-foot wide	500-foot and 12-foot wide
Waiting Area	2,600 square feet	1,100 square feet
Total Building Area	4,355 square feet	2,855 square feet
Parking Spaces	390	240
Other	Train storage and routine cleaning and service can be accommodated on platform track	Emergency evacuation space

Note: Final program elements to be determined in subsequent design phases.

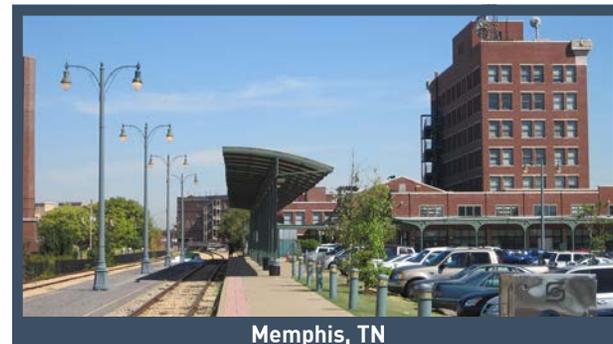
passenger train that will consist of a locomotive, cab car and three passenger cars that will be approximately 400 feet in length.

Typically, the slope along the platform length is level with a cross slope of approximately 1 to 1.5%. The cross slope of the platform should slope away from the tracks to prevent strollers, baggage carts and other items from rolling towards the train.

Since the Downtown Station is a terminal station, it should include a second track off the mainline that serves the platform. This will provide operational flexibility to store up to two trains on the track at night and allow for routine train cleaning and servicing requirements. It has been confirmed by Amtrak that train maintenance and repairs will occur in New Orleans.

The design of the canopies shall provide all required clearances, including maintaining a minimum distance of 6-feet from the edge of platform to any obstruction.

The entire route is on the Strategic Rail Corridor Network (STRACNET) and structures must meet minimum setbacks from track center and vertical clearances to accommodate over-dimensional military



Memphis, TN

Photo: Central Station (Amtrak) on South Main Street in Memphis, Tennessee - Thomas R. Machnitzk



Addison, TX

Source: <http://wolverineinterests.com/addison-circle/>

shipments. In certain routes there are also civilian over-dimensional shipments that may exceed the military's requirements. Determination of the specific offsets and clearance requirements will be determined as the design for the facility advances by coordinating with the operating railroad (KCS in this case), the Federal Railroad Administration (FRA) and the Department of Defense (DOD).

According to Amtrak space calculations, a 4,355-square foot building with a 2,600-square foot passenger waiting area will be required to accommodate the Downtown Station functions. The Suburban Station building will require a 2,855-square foot building with a 1,100-square foot passenger waiting area. See **Appendix D** for Amtrak's Station Functional and Space Requirement Guidelines.

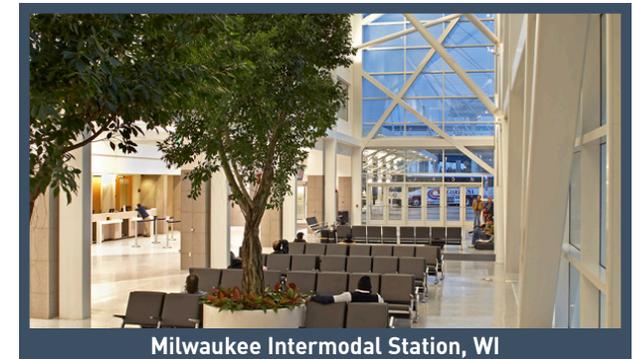
On-site parking requirements were estimated for each station. The estimates are based on passenger rail stations guidelines used by comparable stations in the United States, the availability of transit, and the ratio of business and leisure travelers. It is estimated that the Downtown Station will initially require about 130 spaces for startup service, increasing to 390 spaces in 2045. The Suburban Station will initially require about 50 spaces for startup service, increasing to 240 spaces by 2045. The station parking could be accommodated at the station or at adjacent shared parking facilities. Increases in local transit services over time could reduce the number of required parking spaces at the stations.

Other station elements include space for a dedicated passenger drop off/pick up lane; multimodal access for transit, taxis, bikes and pedestrians, and other modes; lighting and signage.

These station program elements were used to help select a station site and were refined during the conceptual design process for the selected site option.



Photo: One of the Cawthra Station shelters. - Bryon Johnson



Source: <https://www.eua.com/projects/milwaukee-intermodal-station/>

2.3 EMERGENCY PREPAREDNESS

Louisiana's history of hurricanes, flooding, and hazardous material incidents is well understood. In response, Louisiana and Federal officials are actively pursuing ways to prevent, mitigate, prepare, respond and recover from disasters and emergencies.

The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) has a vital role in coordinating the efforts of local governing authorities and grant administration. All Federal Emergency Management Agency (FEMA) Public Assistance (PA), Hazard Mitigation Grant Program (HMGP) funding and homeland security grants are administered through GOHSEP to Louisiana grant applicants.

Each of the 64 Louisiana Parishes has an Office of Homeland Security and Emergency Preparedness (OHSEP). The East Baton Rouge Parish Mayor's Office of Homeland Security and Emergency Preparedness (MOHSEP) provides the citizens of East Baton Rouge Parish with a comprehensive, integrated and coordinated public safety program to ensure natural and man-made risks are reduced, emergency services delivered and consequences of events managed to provide a safe, livable and sustainable community. The MOHSEP has an Emergency Operations Plan (EOP) and is involved in continuity of operations planning, healthcare emergency

planning and business emergency planning.

The establishment of a passenger rail service between New Orleans and Baton Rouge adds an important transportation mode that could prove essential for evacuation of coastal areas and in addressing local emergencies. The station planning along this route should consider ways to make the stations better adapted to use patterns during emergencies. This might include defining locations for temporary facilities and establishing connections to other transportation routes. Further coordination with rail officials should be undertaken to better define how passenger service would be operated during times of emergency and if there are ways to leverage normal service into an expanded service during large-scale evacuations.

Recent planning efforts for the Baton Rouge Health District includes a focus on resiliency and disaster preparedness. A major concern of the plan is "Limited access points into the District, and the disconnected District street network are impediments to timely evacuation of hospitals and threaten hospital access during mass casualty incidents". As site planning for the Suburban Station moves forward addressing the need for improved hospital access should be a key focus. Rail service from the Downtown Station to the Suburban Station offers one example of expanding access to medical resources in the Health District.



CHAPTER 3: STATION SITE EVALUATION & SELECTION PROCESS

The purpose of this chapter is to document the station site evaluation process for the downtown and suburban site options. The evaluation used the criteria in **Table 3.01** to confirm the feasibility and functionality of the station locations and compare the site options. Preliminary track and platform layouts and site plan sketches were used to support the evaluation process.

The steps involved in the station site evaluation process include:

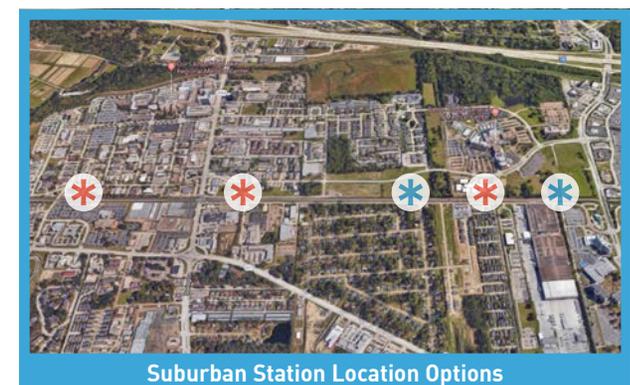
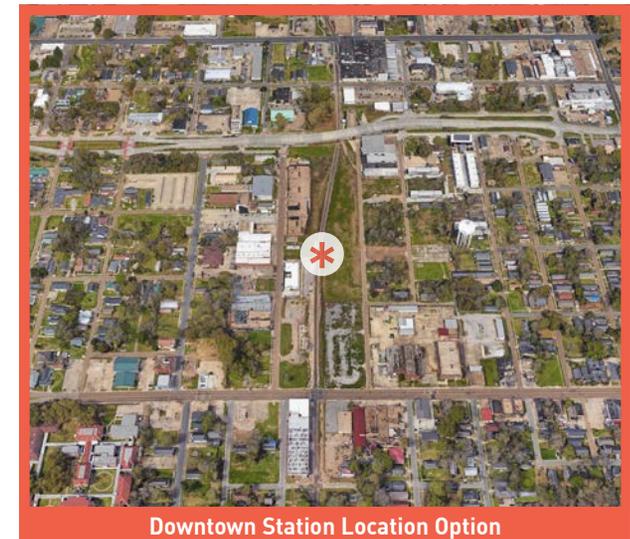
- Review existing conditions and relevant plans and policies
- Identify and confirm site options for each station location
- Evaluate site options based on a range of criteria and functionality tests

- Obtain input from stakeholder and steering committee groups
- Select a recommended site at each location based on the evaluation and stakeholder input

The result of the station evaluation process was the selection of a recommended site for each station location (downtown and suburban) that were advanced to the conceptual design phase for more detailed evaluation and design.

Table 3.01: Evaluation Criteria for Station Sites

CRITERIA	DESCRIPTION
Site use and ownership	What is the site currently used for? Who owns the site?
Transportation access and multimodal connectivity	Is the site connected to the local and regional transportation networks? Does the site allow multimodal connectivity?
Land use and development	Is the site compatible with existing land use and local land use plans? Does the site generate complementary development opportunities?
Activity generators	What activity generators are in proximity to the site?
Physical site features	Does the site have major constraints such as topography or utilities?
Railroad operations	What are the railroad operations at the site? Are there any potential conflicts?
Environmental resources	Does the site impact any natural, historic or community resources?
Public/stakeholder input	What have the public and local stakeholders indicated about the site?
Site size and configuration	Does the site accommodate the station program elements?



3.1 DOWNTOWN STATION

3.1.1 Site Identification

The proposed Downtown Station is located along Government Street to the east of the Baton Rouge central business district in an area known as Mid City. The streets in this area tie directly into downtown, the Capitol Complex, Spanish Town, Beauregard Town and the Garden District. As shown on **Figure 3.01**, the Government Street station site is north of Government Street, south of North Boulevard, east of 14th Street and west of 15th Street. Two options were evaluated for this station location. One option will place the station on the west side of the railroad tracks and the other option will place the station on the east side of the tracks.

The Government Street site was identified for the Downtown Station as part of the Baton Rouge-New Orleans Intercity Rail Feasibility Study (HNTB, 2014). The steering committee and downtown stakeholder group for this Station Master Plan Study confirmed the Government Street location for the Downtown Station because it will create synergies with the new Electric Depot development and help advance local land use and economic goals to revitalize Mid City.

Sites to the north of North Boulevard were not considered due to potential freight operations conflicts associated with the KCS yard and KCS switching activities. Station sites in the central business district were also not considered including the historic railroad depot at the Louisiana Art & Science Museum as these sites are not located along the Baton Rouge to New Orleans corridor.



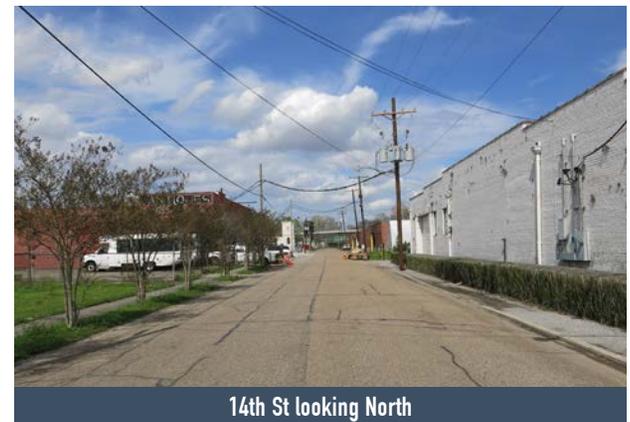
Parking under North Blvd



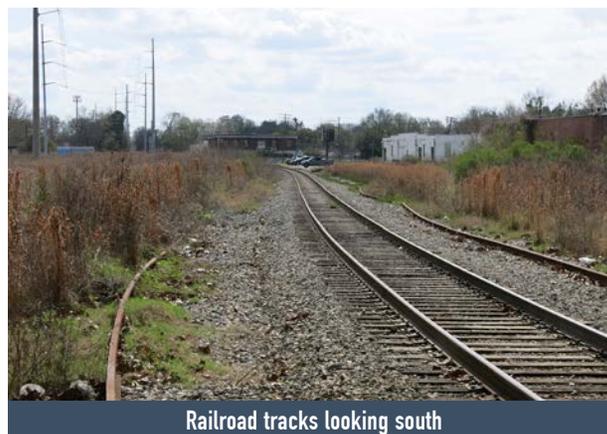
15th St at Spain



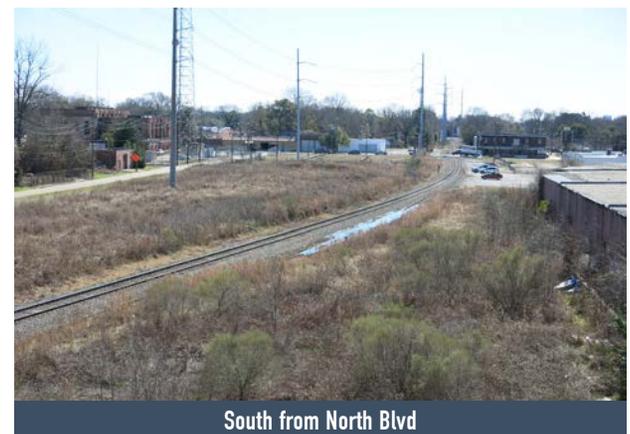
14th St looking South



14th St looking North



Railroad tracks looking south



South from North Blvd

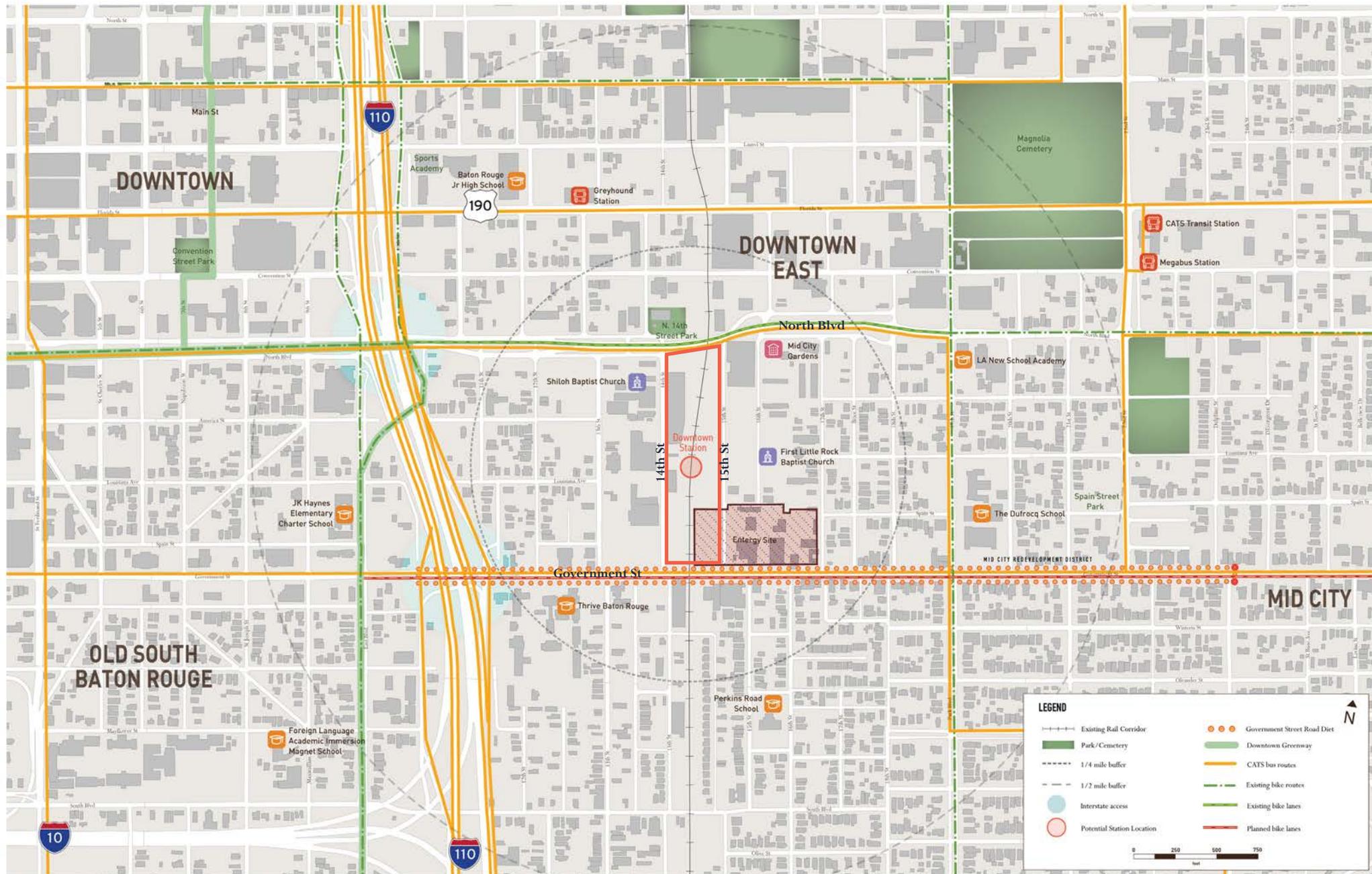


Figure 3.01: Downtown Station Location and Site Context

3.1.2 Site Evaluation

The following sections summarize the evaluation of the Downtown Station sites based on the criteria in **Table 3.01**. The evaluation identifies challenges and opportunities for station development and tests the functionality of the station sites at this location.

Site Use and Ownership

As shown on **Figure 3.02**, the west side of the tracks contains two former warehouse buildings. One of the buildings is occupied by a local architecture and development firm and was recently renovated. The other structure is a former warehouse that is likely used for storage. The east side of the tracks is currently vacant and/or undeveloped, as shown in **Figure 3.03**. The Electric Depot development is planning to construct a parking lot at the northwest corner of Government Street and 15th Street on the east side of the tracks.

Nearly all the parcels on both the east and west sides of the tracks are privately owned and property acquisition will be required for both site options. The only publicly-owned parcel is located on the west side of the tracks under the North Boulevard viaduct.

Figure 3.02: Land Under Common Ownership

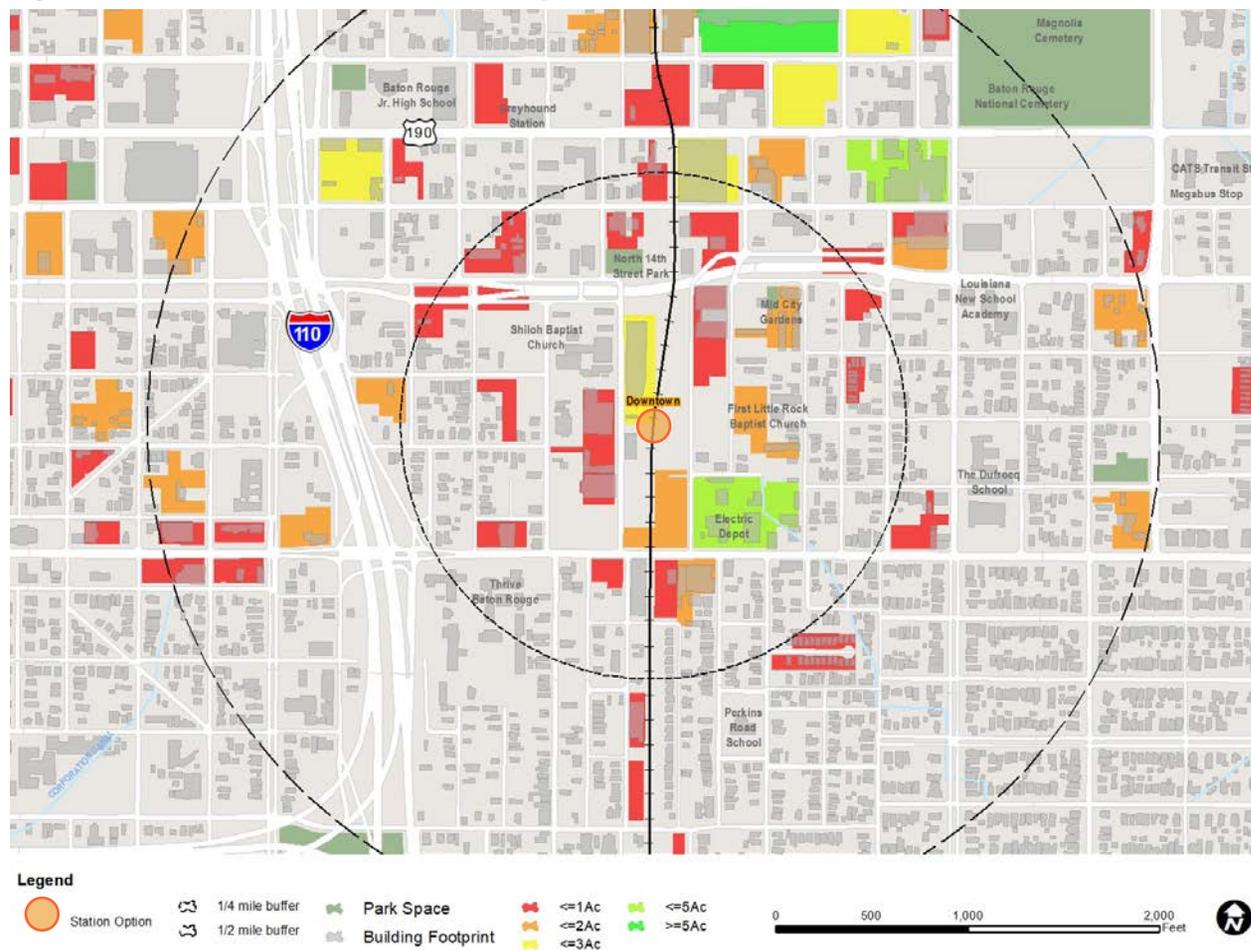
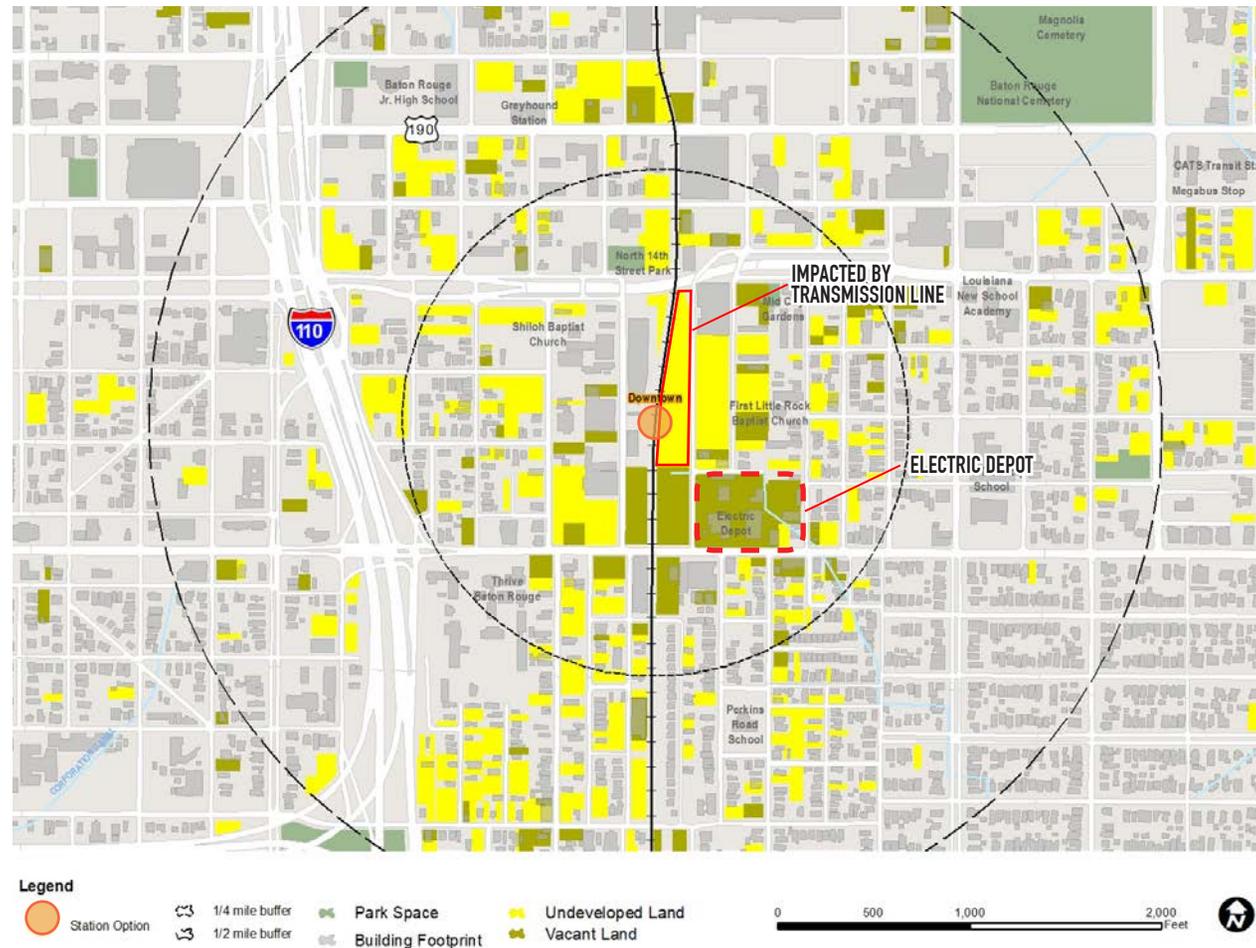


Figure 3.03: Vacant and Undeveloped Land



Transportation Access

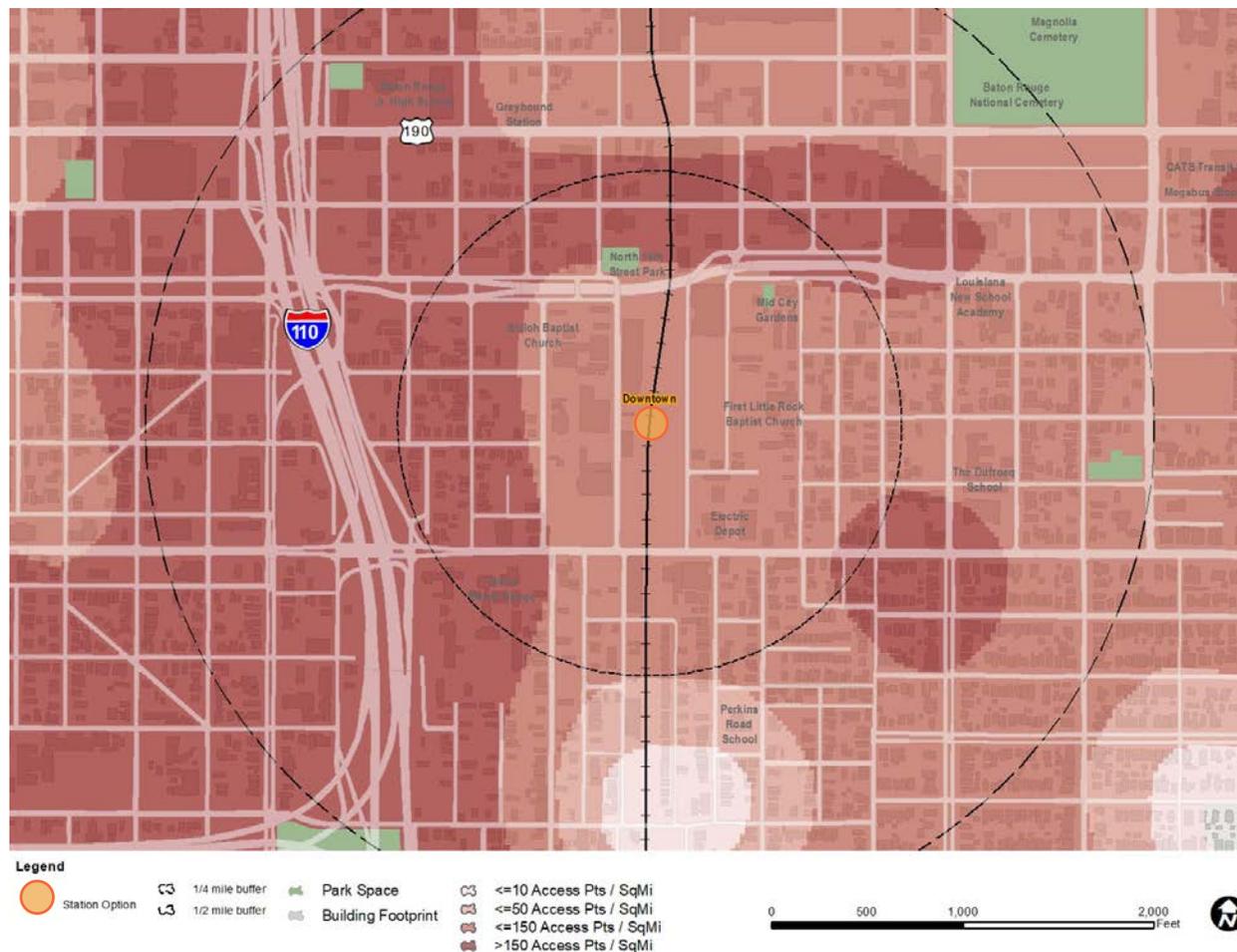
As shown on **Figure 3.04**, the Downtown Station site has regional transportation access from the I-110 interchanges with Government Street and North Boulevard. Government Street is a main east/west arterial in Baton Rouge that funnels traffic to downtown and connects with the Jefferson Highway to the east. North Boulevard is also a significant regional access point that provides access to I-110 and downtown. North Boulevard is grade separated from the

railroad crossing and Government Street has an at-grade railroad crossing.

Local traffic circulation can be challenging within the immediate vicinity of the station area because the street grid is disconnected in some areas. The street grid between 13th Street and 17th Street and North Boulevard and Government Street is disconnected since several east-west streets such as America, Louisiana and Spain are not connected. North-south connectivity is challenging at the

north end of the station sites because the street grid to the north and south of North Boulevard does not line up. North Boulevard becomes a viaduct between 12th Street and 18th Street allowing for a grade separated railroad crossing. The bridge section extends beyond the railroad allowing vehicles and pedestrians to cross under North Boulevard at 14th Street and 16th Street. No crossing movements can occur at the bridge approaches, defined by retaining walls, east of 12th Street and west of 14th Street and east of 16th Street and west of 18th Street.

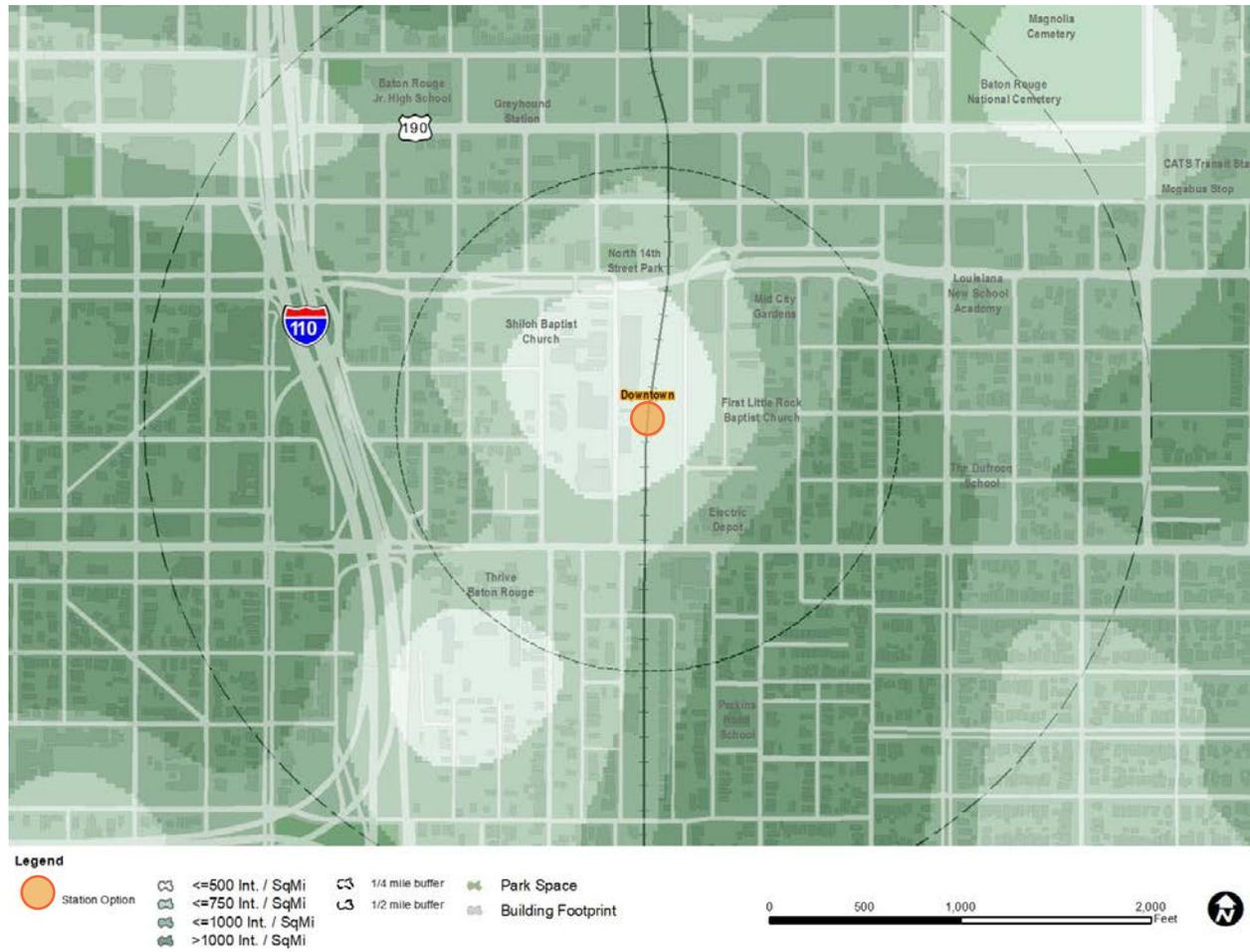
Figure 3.04: Regionally - Significant Roadway Access Points



See **Figure 3.05**. Sidewalks are generally provided along the local street grid within the station study area. Within a half-mile radius area of the station site, the average block length is shorter than in most East Baton Rouge districts, which indicates a generally walkable street grid. However, some gaps in sidewalk coverage are present and some sidewalks are in poor condition. The density of pedestrian accessible intersections is low within the immediate vicinity of the station sites due to interruptions in the street grid and the railroad tracks. Adjacent to the station sites, sidewalks are available along 14th Street and Government Street and missing along 15th Street. Along North Boulevard, sidewalks are present under the viaduct, but pedestrians must cross the railroad tracks at a non-signalized intersection with no railroad warning devices. No sidewalks are available on the viaduct itself.

A station for the former KCS Southern Belle rail line that ran between Kansas City and New Orleans during the 1940s-1960s was located to the north of Government Street.

Figure 3.05: Density of Pedestrian - Accessible Intersection

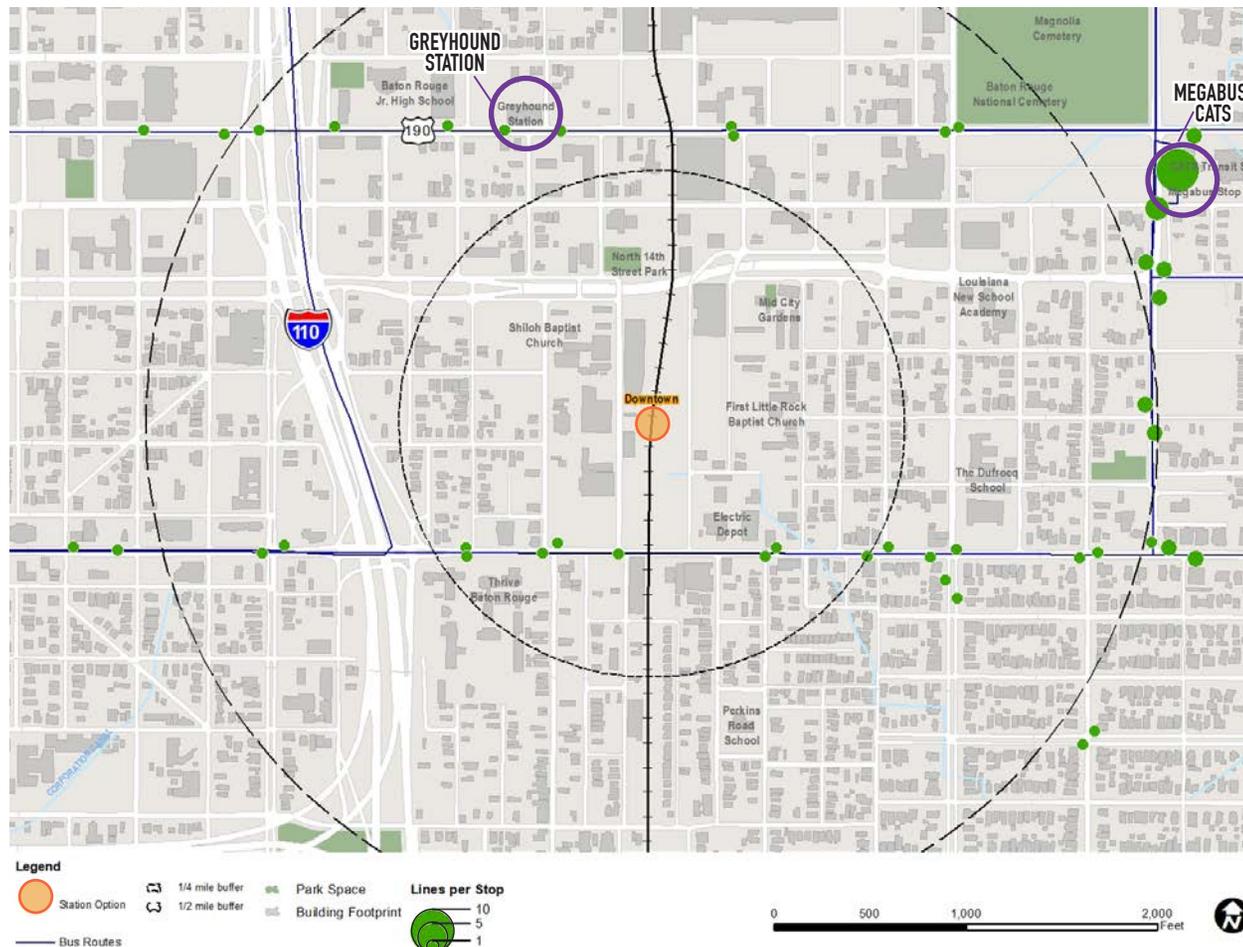


The Louisiana Department of Transportation and Development (DOTD) started construction on a “road diet” plan for Government Street (LA 73) in early 2018 to calm traffic and improve safety along this corridor. The 4.2-mile project along Government Street extends from East Boulevard in downtown to Lobdell Avenue near Independence Park. The project will reduce traffic lanes from four to three and add on-street bike lanes and sidewalks along Government Street.

The closest bike facilities to the station site are part of the Downtown Greenway System and includes segments along North Boulevard and East Boulevard. A planned Louisiana Avenue connector will link with the greenway system at East Boulevard and extend to 13th Street, one block from the station sites, where it will head south and connect with the bike lanes being constructed along Government Street. A bike share station is proposed along Government Street at the station site and is expected to be implemented during the project’s second phase.

Existing local transit access is available near the station site along Government Street (Route 12) and Florida Street (Route 44). See **Figure 3.06**. Also, several local routes converge at the Capital Area Transit System (CATS) transit hub at 22nd Street and Florida Street. Regional bus access near the station includes the Megabus at the CATS 22nd Street transit hub and a Greyhound Bus Station at Florida Street and 13th Street. A potential bus rapid transit route could also serve the station area in the future, but no definitive plans are currently in place.

Figure 3.06: Existing Transit Access



In all, 12 bus routes cross the area within a half mile of the station site. Through these routes, residents of the station area could reach approximately 98,000 jobs within half an hour during peak service periods, and approximately 39,000 workers in the region could reach jobs in the station area during peak hours. However, only 7.2% of the station area’s 1,400 employed residents commute via transit, indicating that the service is not sufficiently robust to serve the needs of many of the area’s workers.

Land Use and Development

Existing land uses in the immediate station area, shown on **Figure 3.07**, include industrial, institutional, vacant/undeveloped and commercial. The land use to the west, east and south of the station sites is predominately residential scattered with several vacant/undeveloped parcels. The land use character to the north of North Boulevard contains more commercial and office uses along with scattered residential uses and institutional uses as well as vacant/undeveloped land.

The future land use map for the FUTUREBR Comprehensive Plan designates the station sites as a “Regional Center” that is planned as a mid-rise, mixed-use area that attracts workers and visitors from around the region (City of Baton Rouge-Parish of East Baton Rouge, 2015). According to the plan, Regional Centers should support a high level of pedestrian access and include a transit hub. The Mid City Predevelopment Plan anticipates a rail station in this area and encourages a walkable mixed-use neighborhood with many transportation options (Duany Plater-Zyberk & Company, LLC, 2014). See **Figure 3.08**.

Both the east and west side of the tracks at the station site are currently zoned M1, Industrial (City of Baton Rouge-Parish of East Baton Rouge, 2018). A zoning change will be required to accommodate the station and to encourage complementary development near the proposed station site. See **Figure 3.09**.

The Downtown Station site will provide opportunities to facilitate complementary development since a large amount of vacant and/or underutilized land exists near the proposed station site. Plus, recent developments along Government Street such as the Electric Depot, Square 46 and the Government Village shopping center have demonstrated a market for redevelopment and small business creation in the area. See **Figure 3.10** for development activity.

Figure 3.07: Existing Land Use

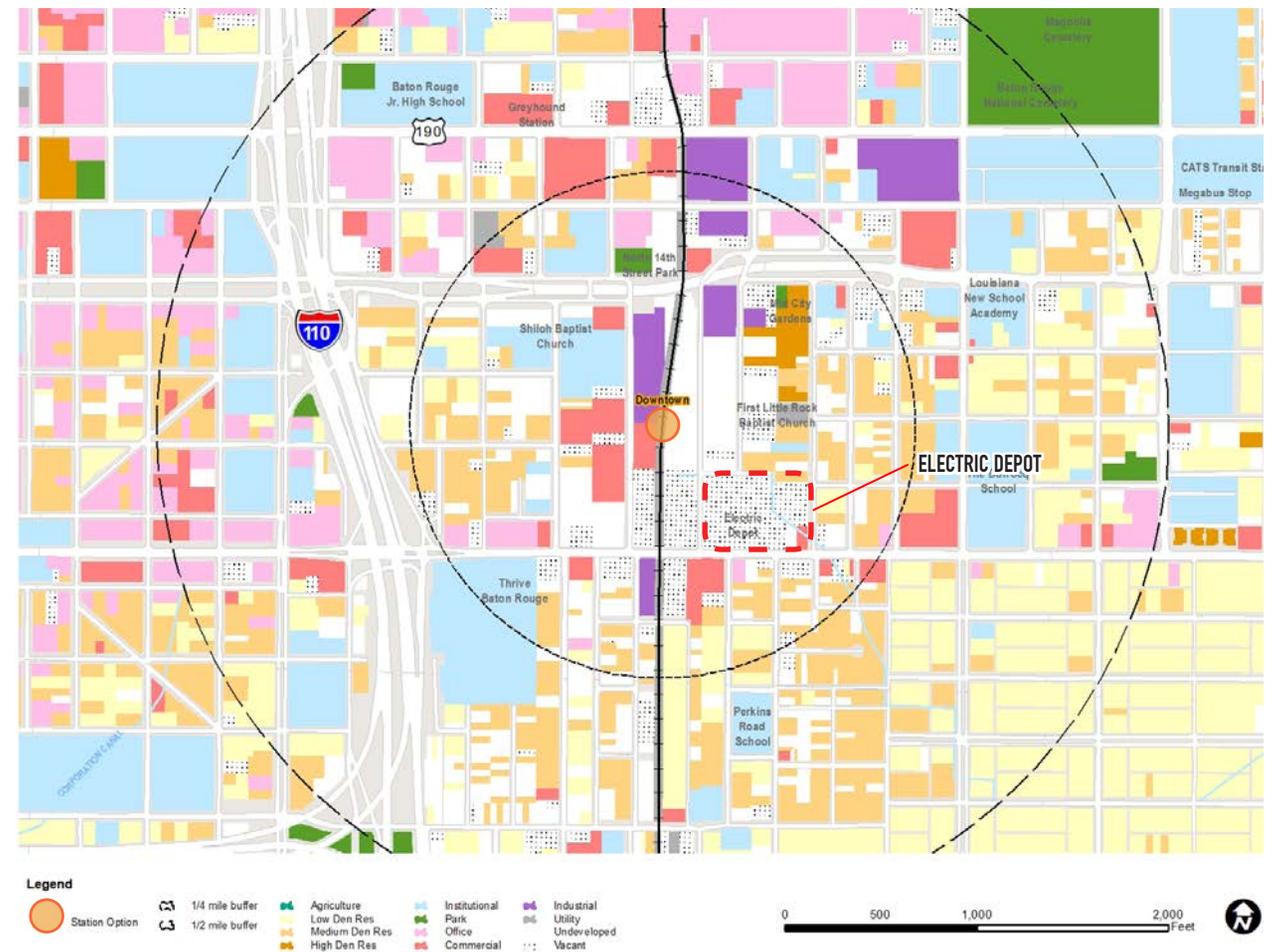


Figure 3.08: Future Land Use

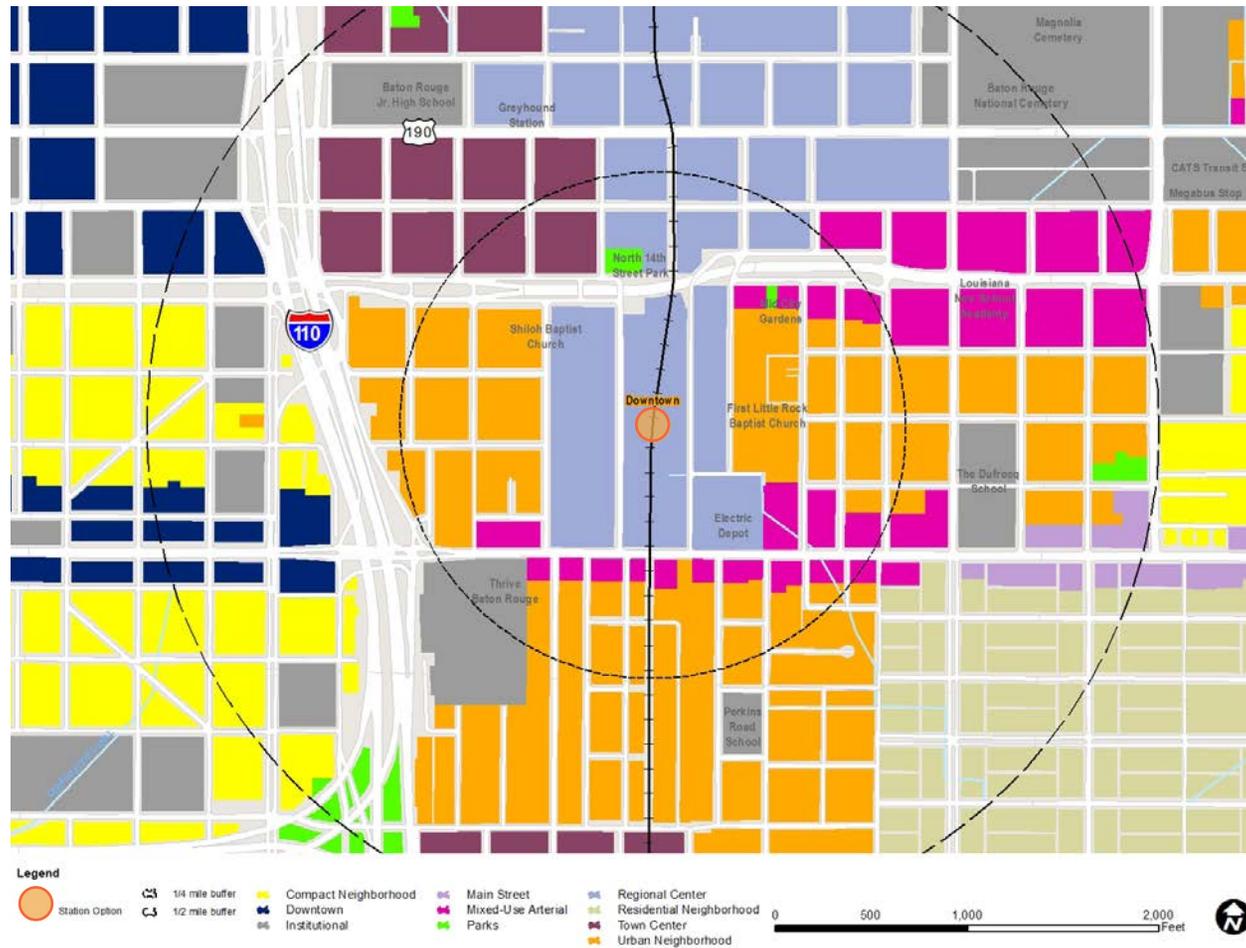


Figure 3.09: Zoning

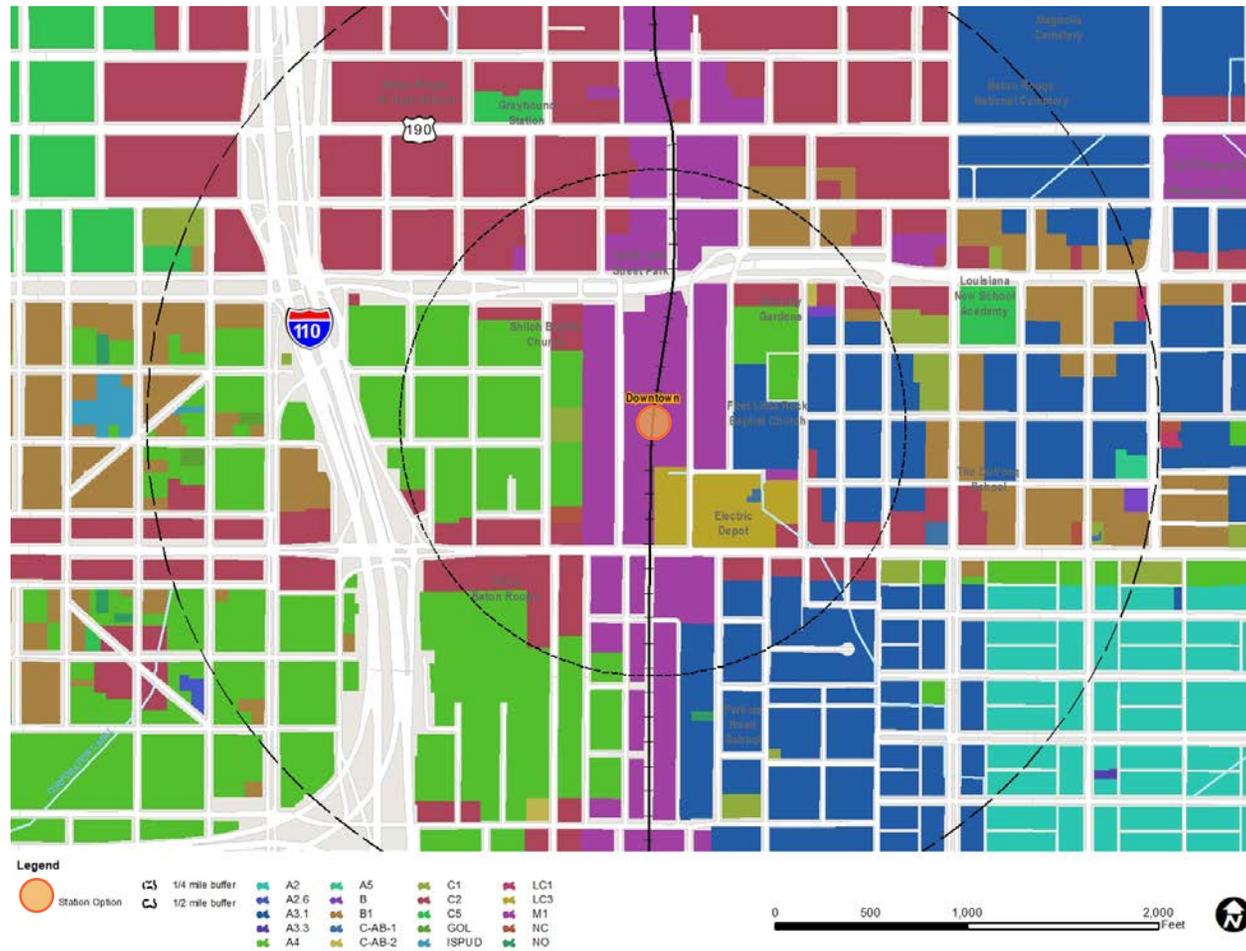


Figure 3.10: Development Activity (value per acre)



Activity Generators

Population and employment density within the immediate vicinity of the station area is currently low since the area has a large amount of vacant and/or undeveloped uses. See **Figure 3.11** and **Figure 3.12**. Within the half-mile radius station study area, population density is between 4 and 16 residents per acre. Job density throughout the half-mile radius station area is relatively low, less than 10 jobs per acre, since the area is predominately residential.

While the overall density of the half-mile radius station area is low, it hosts an employment center with 236 businesses and 3,300 jobs. The composition of this employment center is highly diverse including: 900 jobs in public administration, 752 jobs in health and social services, 520 jobs in professional and technical services, and 514 jobs in what are sometimes called production and maintenance industries (encompassing manufacturing, construction, utilities, and logistics). Currently fewer than 100 of the station area's residents are employed in the station area.

As shown on **Figure 3.13**, most retail and service destinations exist to the north and west of the proposed station site generally in the direction of the Baton Rouge central business district. The Government Street corridor also contains a concentration of retail and service uses especially to the east of the station site. The development of the Electric Depot, **Figure 3.14**, is expected to create more retail and service activities within the immediate vicinity of the station site and help to spur additional investment that will bring more activity to the area.

Figure 3.11: Population Density per Acre



Figure 3.12: Job Density per acre

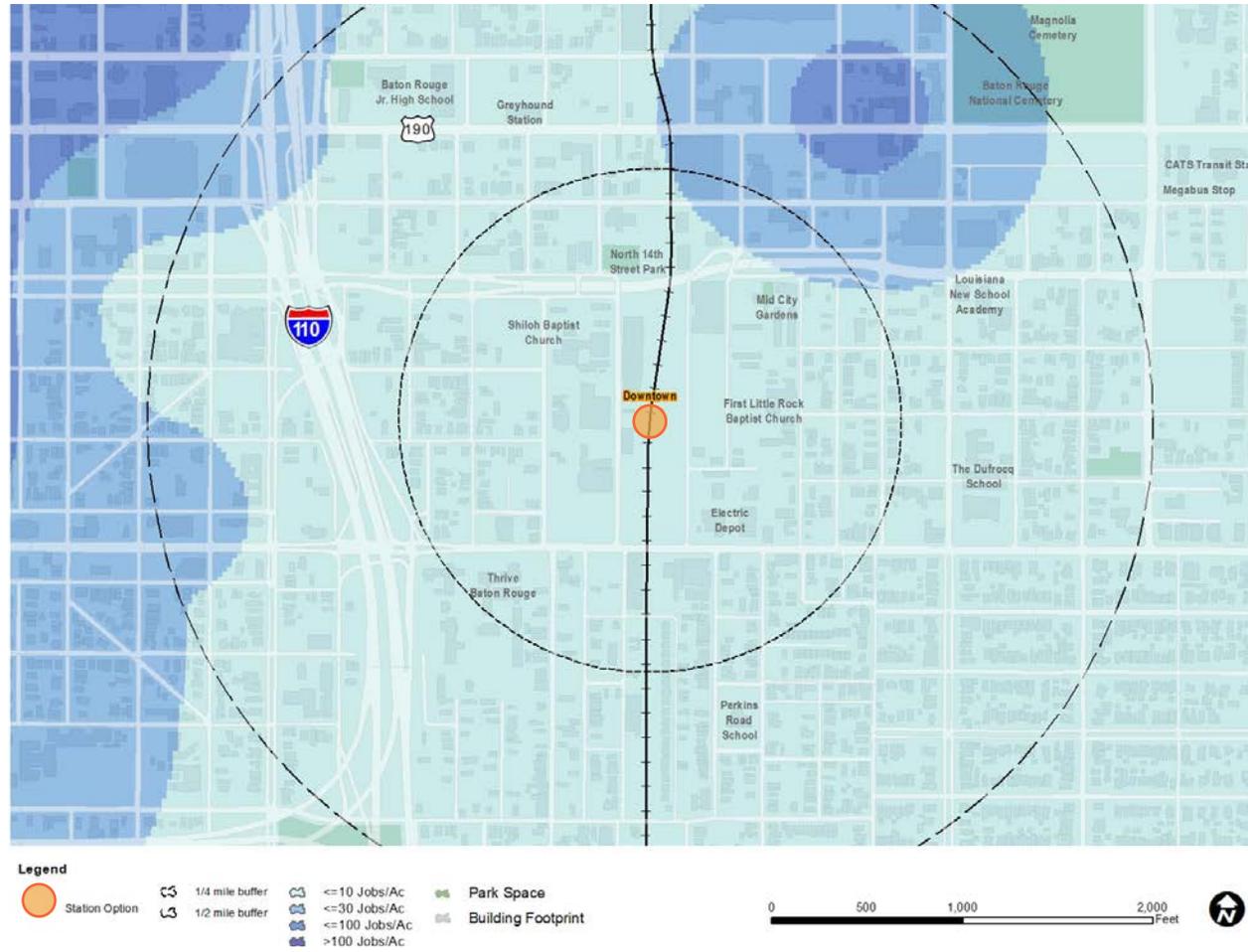


Figure 3.13: Density of Retail / Service Destinations

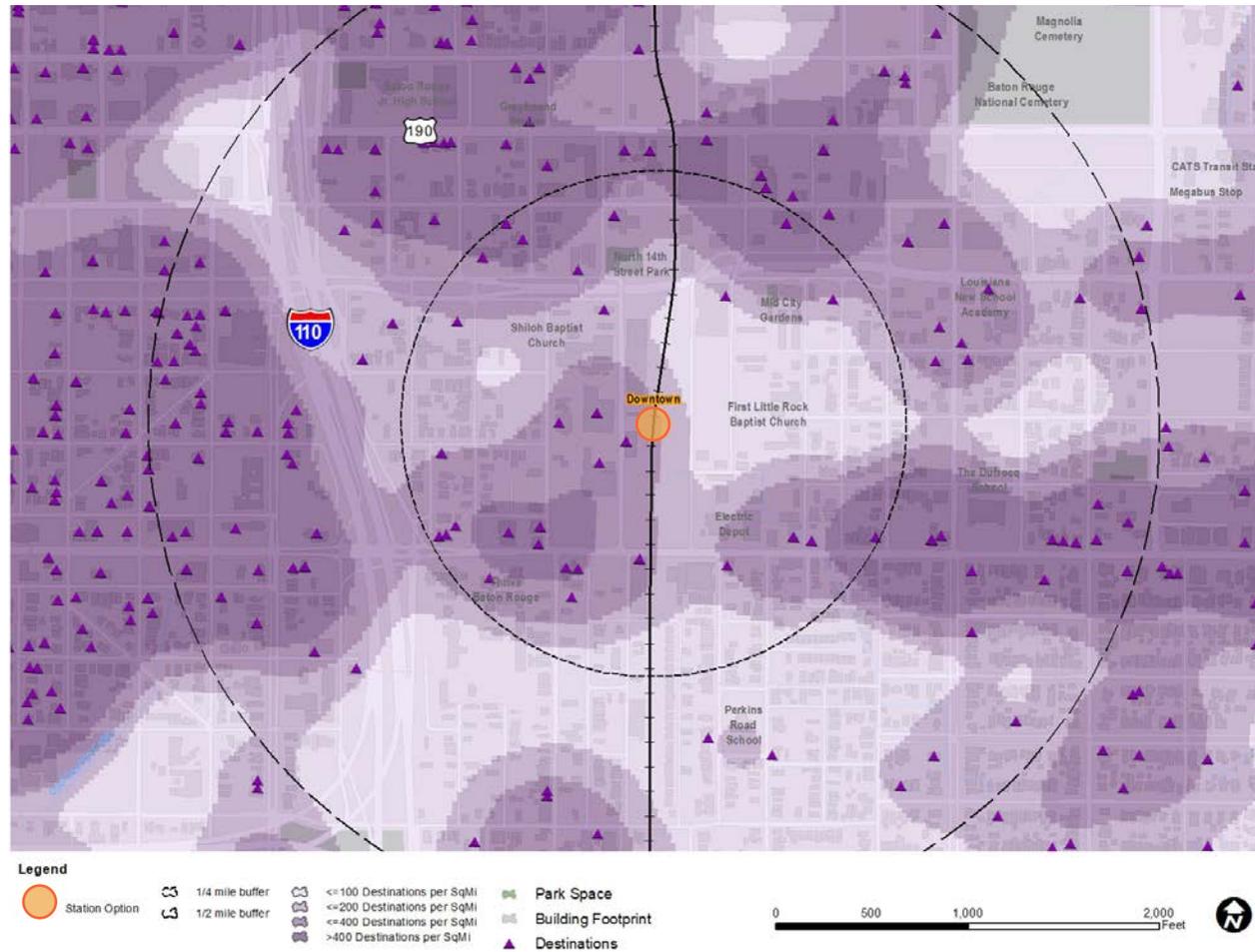


Figure 3.14: Future Development - Electric Depot Development Rendering



Source: <http://www.waterspettit.com/electric-depot/>

Physical Site Features

The Downtown Station sites is generally flat with little to no change in topography.

Appendix E includes a preliminary investigation of water, sewer, and electric utilities for the Downtown Station site. The option east of the railroad tracks contains a 230 kilovolts transmission line that runs through the center of the site. According to Entergy, the high voltage transmission line cannot be buried and has a 75-foot servitude width on both sides of the line. Moving the poles, at a cost, is an option if a suitable location could be found. No major conflicts with sewer and water utilities were identified.

Railroad Operations

The station site is located along a single-track active freight corridor owned and operated by Kansas City Southern (KCS). At the Government Street crossing, where the station is located, a total of eight trains were observed in a 24-hour period in 2016 (<https://safetydata.fra.dot.gov/officeofsafety/publicsite/crossing/crossing.aspx>). This includes three day-time (6 a.m. to 6 p.m.) trains, three night-time (6 p.m. to 6 a.m.) trains and two switching trains.

In 2017, Louisiana DOTD initiated a railroad crossing project in Baton Rouge that includes rehabilitation of 10 crossings and closure of six crossings along the KCS railroad (Louisiana DOTD, 2018). The crossing at Government Street will be rehabilitated as part of the project and include construction of medians on the east and west sides of the crossing along Government Street and the installation of new flashers and crossing gates/arms.

Environmental Resources

The Government Street station site is located within an urbanized area and does not contain any natural resources, floodplain, wetlands or streams.

Community resources nearest to the station site include the Shiloh Baptist Church to the west of the station and the

North 14th Street Park to the north of the station. Other community resources in the vicinity include several places of worship, the Louisiana New School Academy, the Dufrocq School and Thrive Baton Rouge.

No historic resources are located on the station site. The Electric Depot, adjacent to the station site, was recently added to the National Register of Historic Places as the Baton Rouge Electric Company (BRECO) Public Utilities Complex. A proposed historic district that will include the station is centered along Government Street between Terrace Avenue and Convention Street and is tentatively called the Eddie Robinson Sr. Historic District. The proposed historic district is currently being evaluated by the National Park Service. Other historic resources on the National Register of Historic Places within a half-mile of the station include the Prince Hall Masonic Temple, Dufrocq School, Roseland Terrace Historic District and Beauregard Town Historic District.

The station site is part of the Mid City Cultural District that roughly extends from I-110 on the west to Kenwood Avenue on the east, Fuqua Street/North Street on the north and, Broussard Street/Claycut Road to the south. In March 2018, the Metro Council voted to apply to the state to expand the Mid City Cultural District.

Public Input

Input from the Master Plan's steering committee and stakeholder groups indicate that the location of the station has broad support. The site is in an "up-and-coming" location and will generate synergies with new developments such as the Electric Depot to create a center of activity. Based on input from local stakeholders, the station should be sensitive to the existing scale and context of the area, which is in a historic warehouse district. Also, stakeholders expressed a desire for the station to be a fully integrated into a transit oriented development that contains a mixture of uses and transportation choices. See **Appendix C** for Public Meeting summary.

Site Size and Configuration

Preliminary concepts for the platform and track were prepared and station site plan sketches were completed to test the functionality of the east (**Figure 3.15**) and west (**Figure 3.16**) options at the Downtown Station. A station east of the tracks will have sufficient space to accommodate the station program elements and it will allow the most direct connection with the Energy Depot development. However, the high-voltage transmission lines on the east side of the tracks will restrict development within Entergy's 75-foot servitude easement for the high voltage transmission lines. The lines will need to be relocated, which could add substantial cost and potential delay to station implementation. In addition, it may be difficult to find a suitable location to relocate the poles since the servitude width will likely encumber private property.

A station west of the tracks will have sufficient space to accommodate the station program elements and it will not be encumbered by the servitude of the high voltage transmission lines. This option could utilize the existing parking lot that is located under the North Boulevard viaduct, reducing the footprint of parking on land that could be developed.

Figure 3.15: Downtown Station East of Tracks

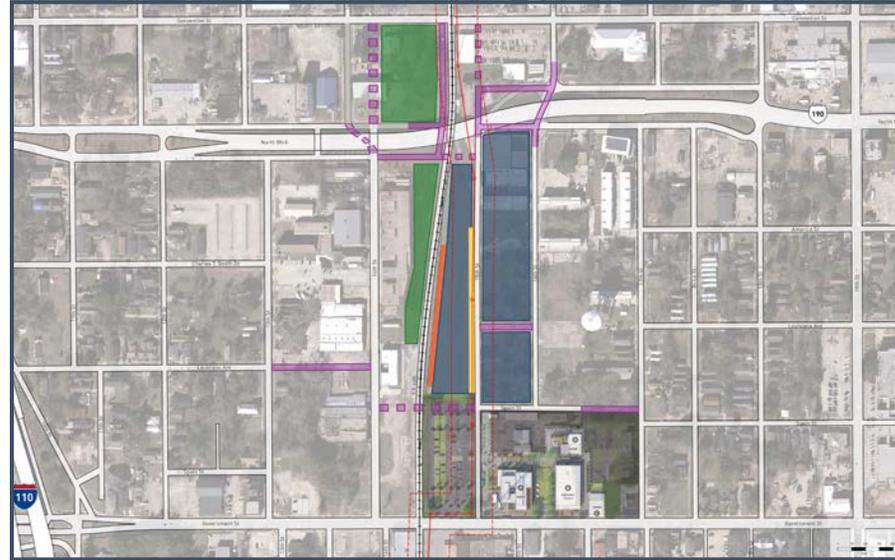
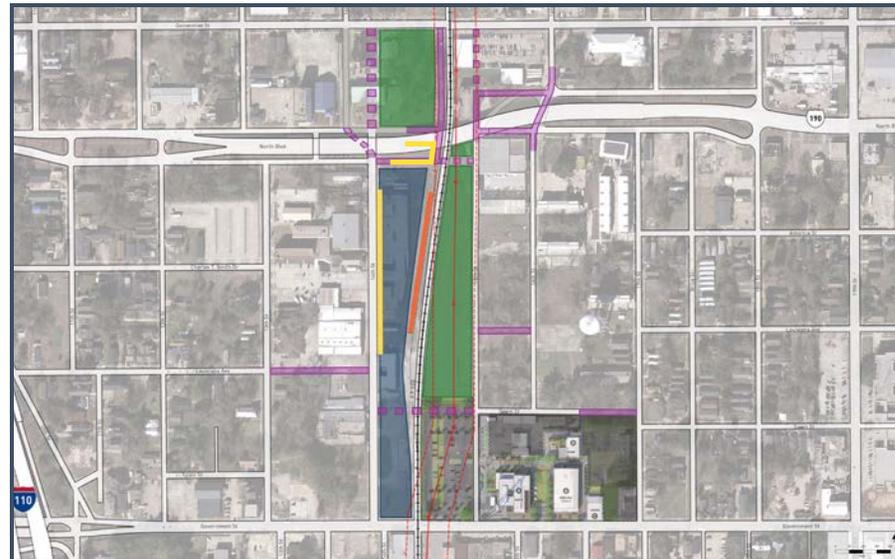


Figure 3.16: Downtown Station West of Tracks



- Proposed Street Grid
- Potential Platform Location
- Bus Terminal
- New Development
- Green Space/Park

3.1.3 Site Selection

Based on the site evaluation process, a station west of the railroad tracks is the recommended site for the Downtown Station. This location meets the requirements for an intercity passenger rail station and can accommodate the station's basic program elements. The site has access to regional transportation connections and it has access to existing and planned multimodal transportation facilities. The site is consistent with local land use plans and could help facilitate complementary development opportunities on adjacent vacant and/or underutilized properties. The west side of the tracks is recommended over the east side of the tracks because it avoids the cost and implementation obstacles associated with the high voltage transmission lines that are on the east side of the tracks. Also, it activates the space under North Boulevard and utilizes the existing surface parking under the viaduct. It can help transition 14th Street into a more walkable urban street.

The west side of the tracks was selected as the recommended site for the Downtown Station because it avoids the transmission lines, can help facilitate complementary development, activates the space under North Boulevard and can transition 14th Street into a walkable urban street.

3.2 SUBURBAN STATION

3.2.1 Site Identification

The proposed suburban station is in the Baton Rouge Health District southeast of downtown Baton Rouge and about eight miles southeast of the Downtown Station site. The Master Plan for the Baton Rouge Health District, identified three station site options: West of Essen Lane (N), East of Essen Lane (O) and East of Midway Boulevard (P) (Baton Rouge Area Foundation, 2015). These sites, plus two additional sites, West of Midway Boulevard and West of Bluebonnet Boulevard, were evaluated for this study. The suburban site options are shown on **Figure 3.17**.

3.2.2 Site Evaluation

The following sections summarize the evaluation of the Suburban Station site options based on the criteria in **Table 3.01**. The evaluation identifies challenges and opportunities for station development at each site and tests the functionality of a suburban station.



West of Essen Lane (N) Site



East of Essen Lane (O) Site



West of Midway Boulevard Site



East of Midway Boulevard (P) Site



West of Bluebonnet Boulevard Site

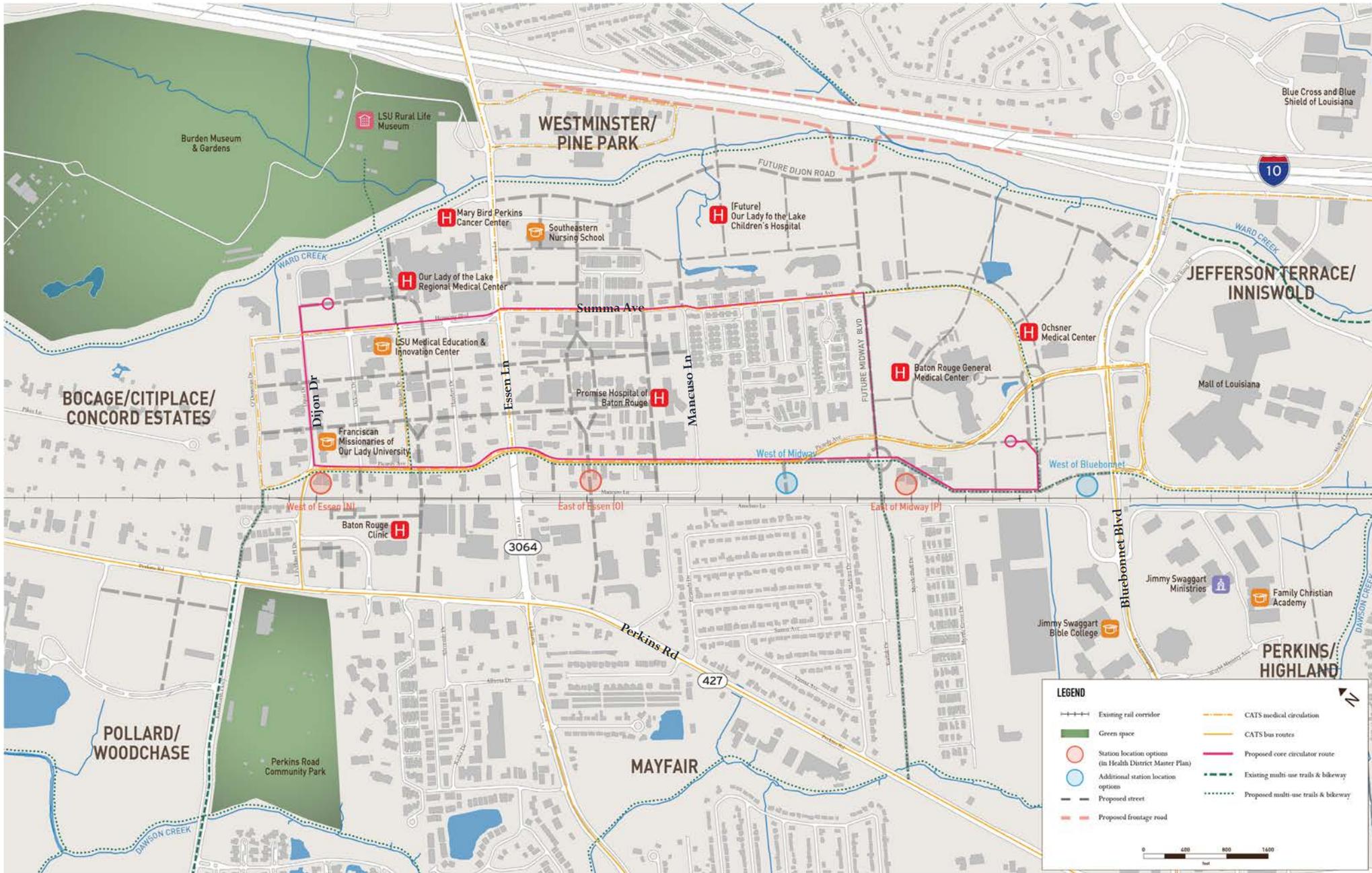


Figure 3.17: Suburban Station Site Options and Site Context

Site Use and Ownership

All the Suburban Station sites are located on privately-owned property. The West of Essen Lane (N) and East of Essen Lane (O) site options have multiple property owners and contain several existing medical clinics and offices that will need to be relocated to accommodate a station. See **Figure 3.18**. The West of Midway Boulevard site is vacant and the East of Midway Boulevard (P) site contains a medical clinic and offices owned by the Baton Rouge General Hospital that will need to be relocated to accommodate a station at this site. The West of Bluebonnet Boulevard site is vacant and is owned by the Baton Rouge General Hospital. See **Figure 3.19**.

Figure 3.18: Land Under Common Ownership

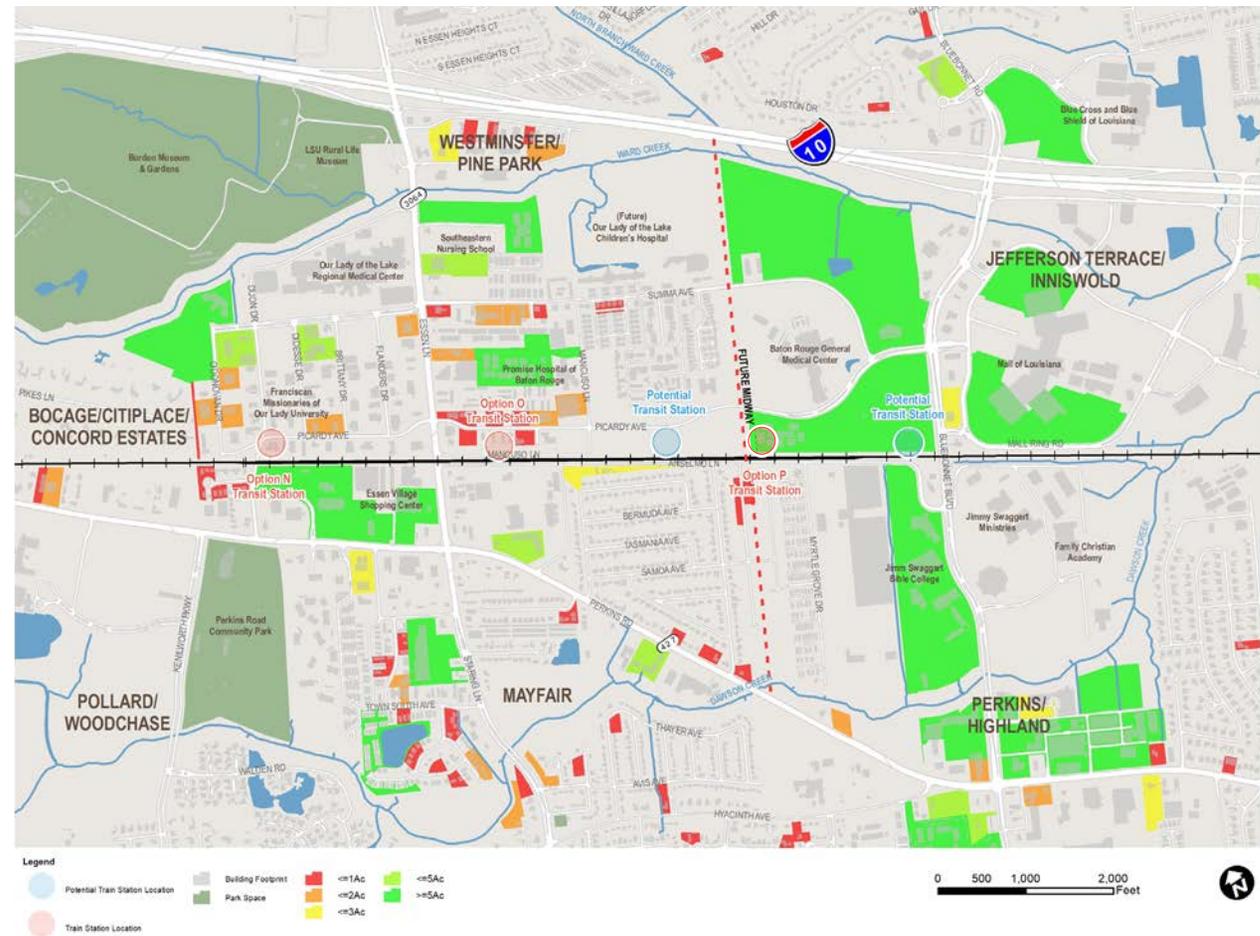
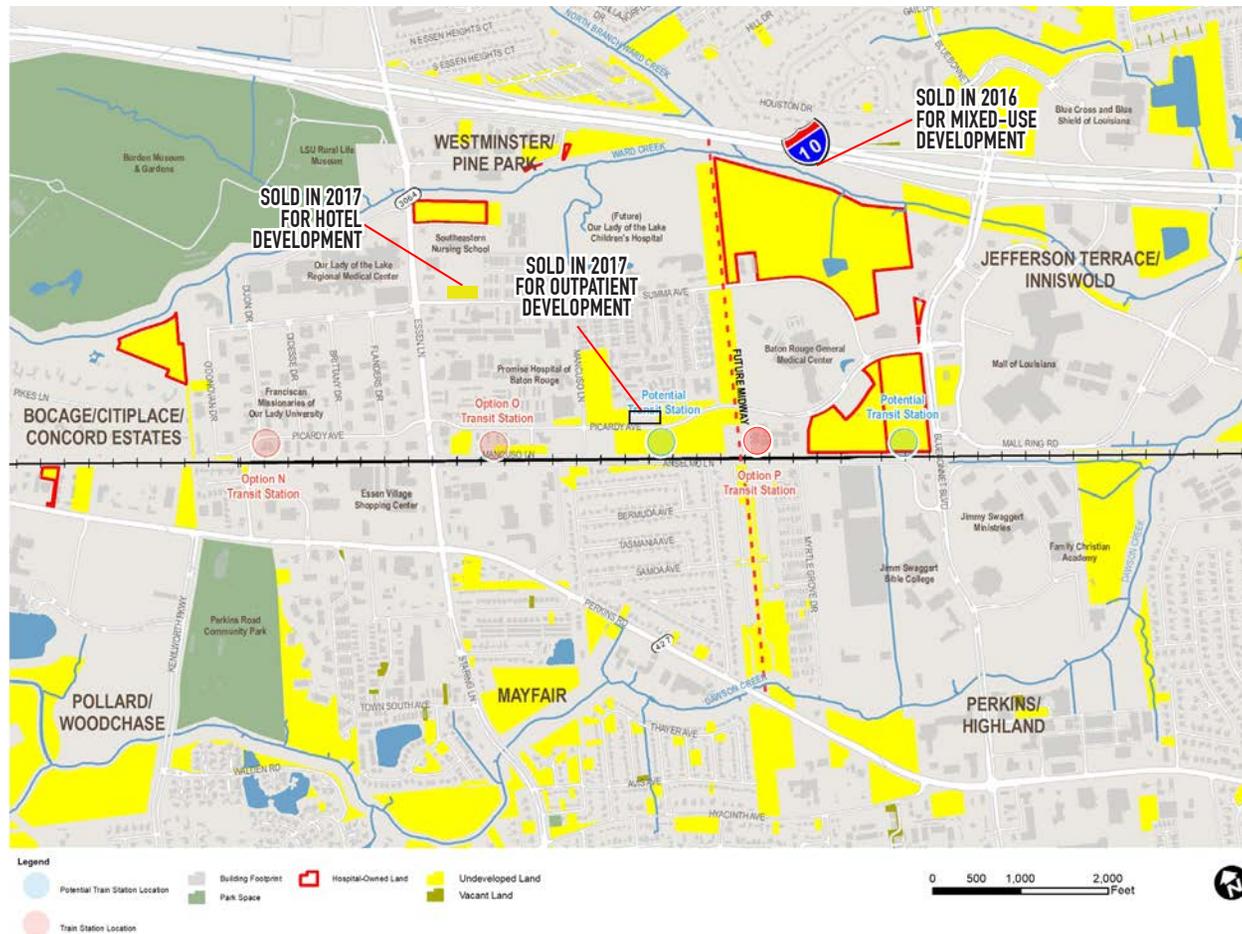


Figure 3.19: Vacant and Undeveloped Land



Transportation Access

As shown on **Figure 3.20**, regional access to all the Suburban Station site options is available from the I-10 interchanges via Essen Lane to the west and Bluebonnet Boulevard to the east. Essen Lane and Bluebonnet Boulevard are the major north/south arterials that bisect the Health District. These corridors both carry over 42,000 cars per day and experience congestion during peak hours of travel. The Louisiana DOTD is in the process of reconstructing Essen Lane from Perkins Road to I-10 to address congestion. The project includes widening the road from five-lanes to six-lanes and providing a continuous two-way center turn lane (Louisiana DOTD, 2018).

Picardy Avenue provides local access to all the station site options in the Health District and links Essen Lane with Bluebonnet Boulevard. Summa Avenue parallels Picardy Avenue to the north and provides a second east/west local access street within the Health District. Overall, the street network in the Health District is limited due to a lack of connected streets. Also, the Health District has a limited sidewalk network with sidewalks primarily available along Summa Avenue and Picardy Avenue. See **Figure 3.21**.

To help improve connectivity in the Health District, several local street network enhancements were recommended as part of the Baton Rouge Health District Master Plan (Baton Rouge Area Foundation, 2015). These include a new frontage road along I-10 between Bluebonnet Boulevard and Essen Lane; a new Midway Boulevard from I-10 frontage road to Perkins Road; a new Dijon Drive extension from Essen Lane to Bluebonnet Boulevard; a reconfiguration of Picardy Avenue to align with Mall of Louisiana Boulevard; and a new connector road between Picardy Avenue and Perkins Road. Phase 1 of the Dijon Road extension from Essen Lane to Future Midway Boulevard is under construction and phase 2 from Future Midway Boulevard to Bluebonnet Boulevard is under design with construction expected to start in 2019. Phase 1 of Future Midway

Figure 3.20: Regionally - Significant Roadway Access Points

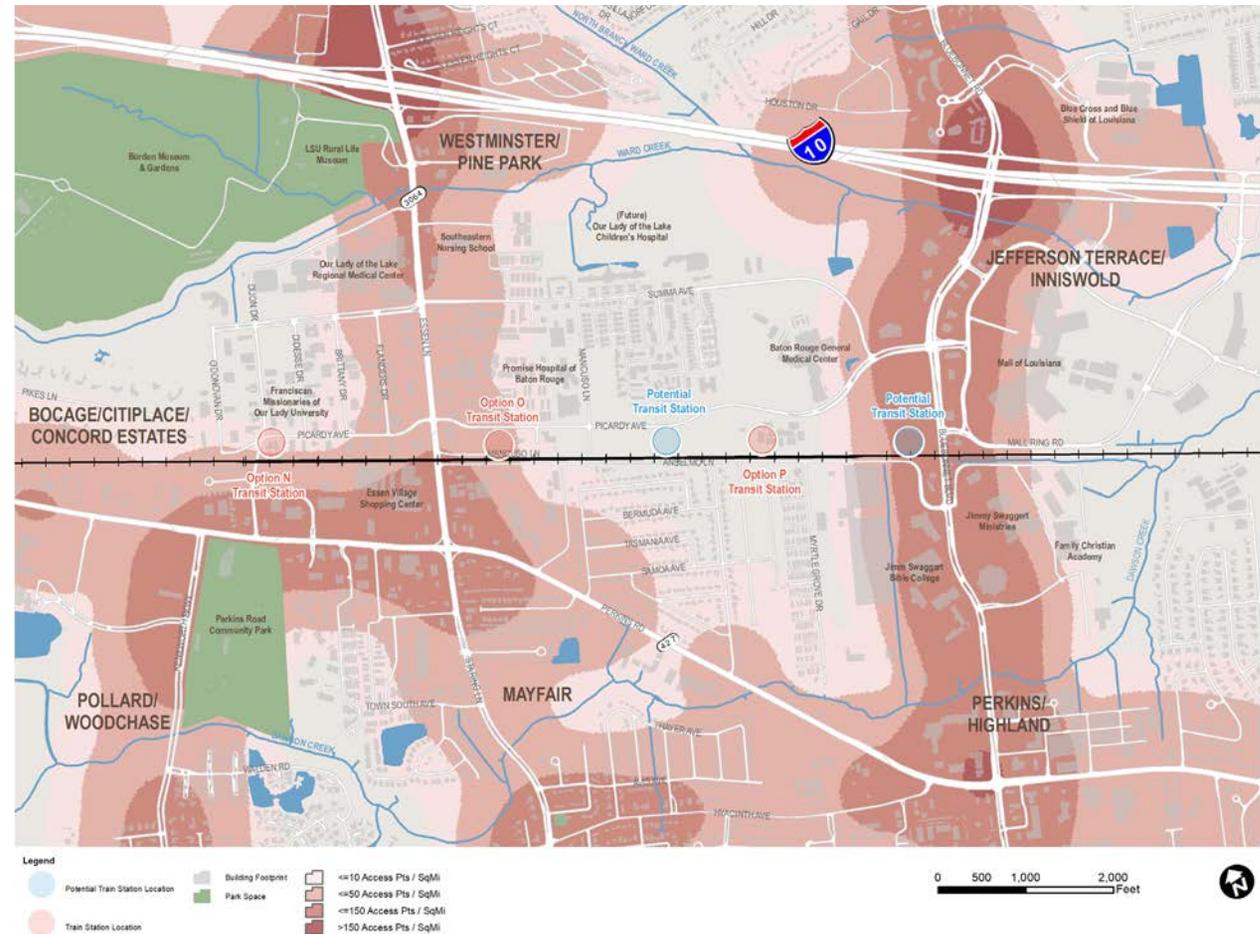
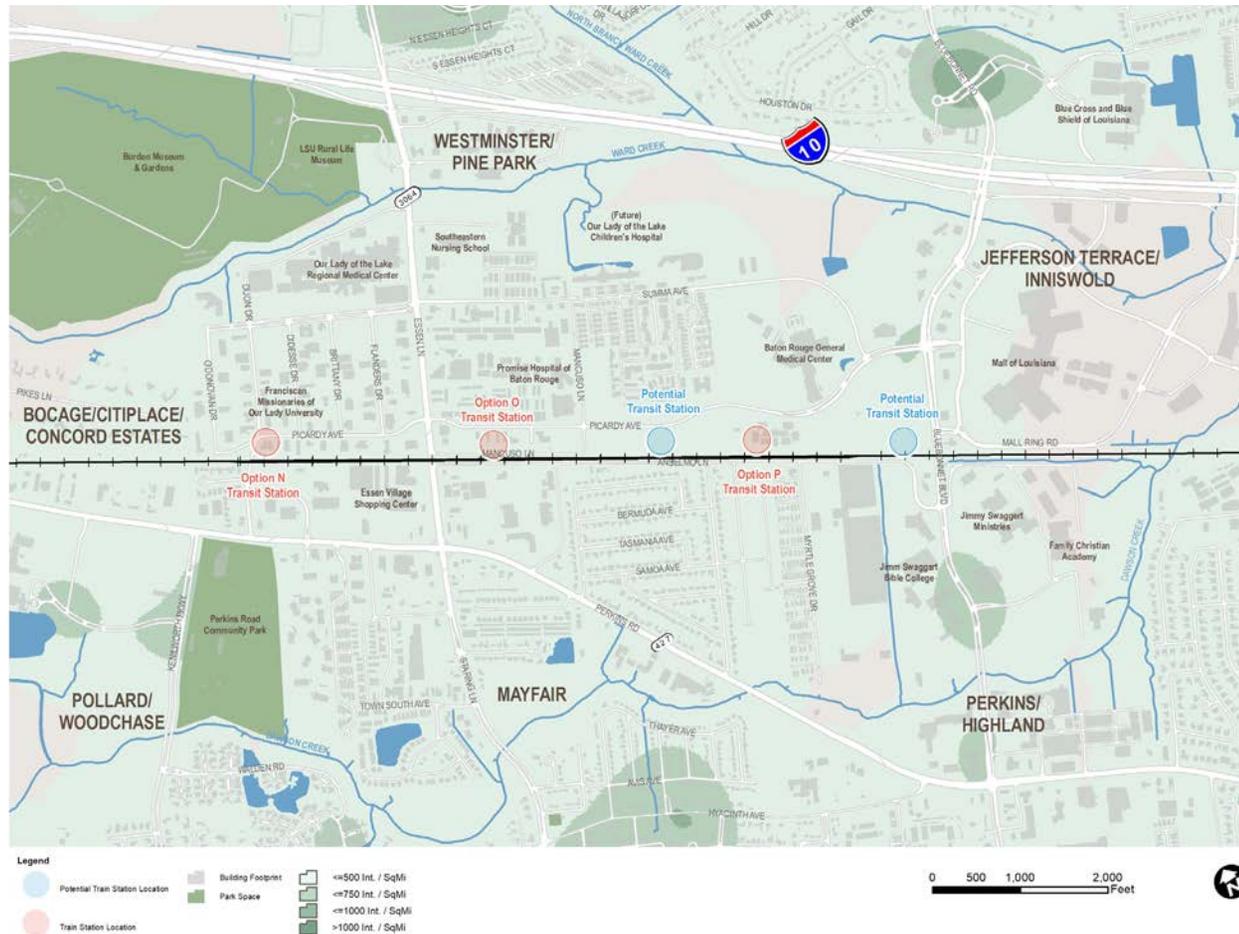


Figure 3.21: Density of Pedestrian - Accessible Intersection



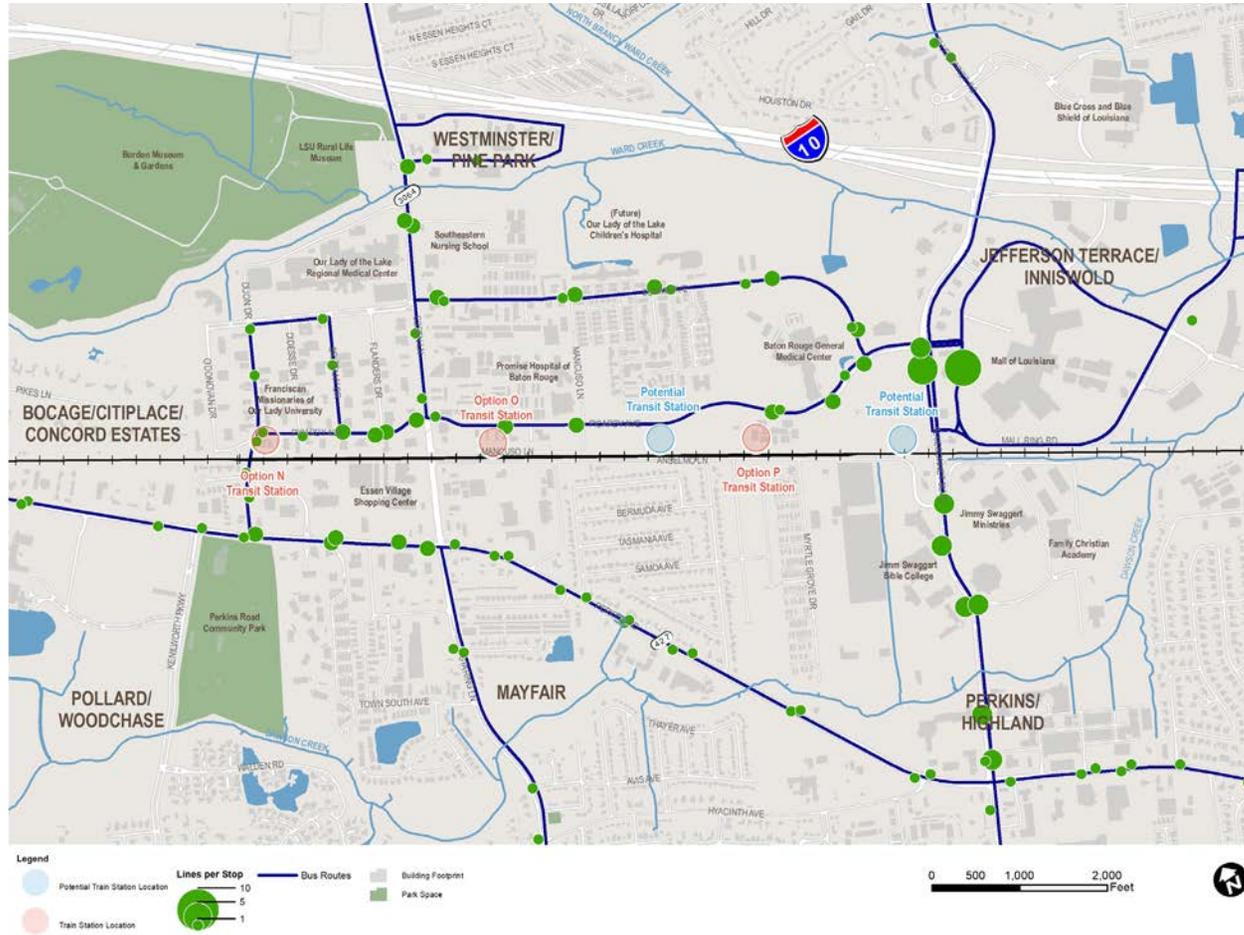
Boulevard from Dijon Drive to Picardy Avenue is under design but no construction date has been set at this time. No other proposed roads are funded for design or construction at this time.

BREC is in the process of implementing the Health Loop Trail (BREC, 2018). The multi-use pathway is a 7.4-mile loop around the Health District that generally follows Dawson Creek and Ward Creek. The segment along Ward Creek to the west of Bluebonnet Boulevard between the Mall of Louisiana and The Grove was completed in 2013 and the Perkins/Pennington segment was completed in 2016. The extension of the trail from Bluebonnet Boulevard to Our Lady of the Lake campus is under construction as part of the Dijon Road extension project.

As shown on **Figure 3.22**, the station site options have access to the local transit network along Picardy Avenue. CATS Route 60, Medical Circulator, circulates between Our Lady of the Lake Regional Medical Center, the Baton Rouge General Bluebonnet campus, the Mall of Louisiana, and the new Woman’s Hospital on Airline Highway. According to CATS, they are planning to make some near-term schedule adjustments to improve on-time performance and frequency of this route. Route 46, Gardere - OLOL - L’Auberge, also runs along Picardy Avenue in the Health District and links to the Mall of Louisiana. In addition to these routes, Route 47, Route 12 and Route 17 converge at the Mall of Louisiana just east of the Health District.

Although all site options are served by the existing and planned regional and local transportation connections, the West of Midway Boulevard and East of Midway Boulevard (P) site options are more interior to the district and slightly less accessible to regional thoroughfares. The construction of Midway Boulevard will improve access to these sites. On the other hand, the location of these sites makes them more central to existing Health District medical facilities and clinics.

Figure 3.22: Existing Transit Access



Land Use and Development

The suburban site options are compatible with existing and planned land uses. The area is comprised of a mixture of institutional, office, commercial, and residential land uses, shown on **Figure 3.23**. The west side of the Health District is predominately office and institutional uses. The area between Essen Lane and the Future Midway Boulevard is the only section of the Health District with residential uses but also contains office and institutional uses. The eastern side of the Health District is primarily institutional and undeveloped/vacant land.

See **Figure 3.24**. FUTUREBR, the East Baton Rouge Parish Comprehensive Plan, shows the planned land use for the Health District as primarily “Employment” with “Mixed-Use Arterial” along Essen Lane (City of Baton Rouge-Parish of East Baton Rouge, 2015). The Master Plan for the Health District recommends building a multimodal transit center that accommodates the passenger rail service to New Orleans (Baton Rouge Area Foundation, 2015).

As shown on **Figure 3.25**, the station site options in the Health District are zoned C2, commercial, which allows both commercial and residential development (City of Baton Rouge-Parish of East Baton Rouge, 2018). The West of Midway Boulevard site is the only site zoned M1, Industrial, which will likely require a zoning change to accommodate transit oriented development.

The station sites were reviewed to determine their potential to facilitate complementary development opportunities. The station site options on the west side of the Health District, West of Essen Lane (N) and East of Essen Lane (O), have more limited opportunities since the land is highly built out in this area. Relocation of several businesses and demolition of existing structures will be required to facilitate complementary development opportunities. The station site options on

the east side of the Heath District, including the Future Midway Boulevard sites and the Bluebonnet Boulevard site, present more opportunities for complementary development since more vacant/undeveloped land is available. The West of Bluebonnet Boulevard site presents the greatest opportunities for complementary development due the large amount of undeveloped contiguous land around this site option. See **Figure 3.26** for development activity.

Figure 3.23: Existing Land Use

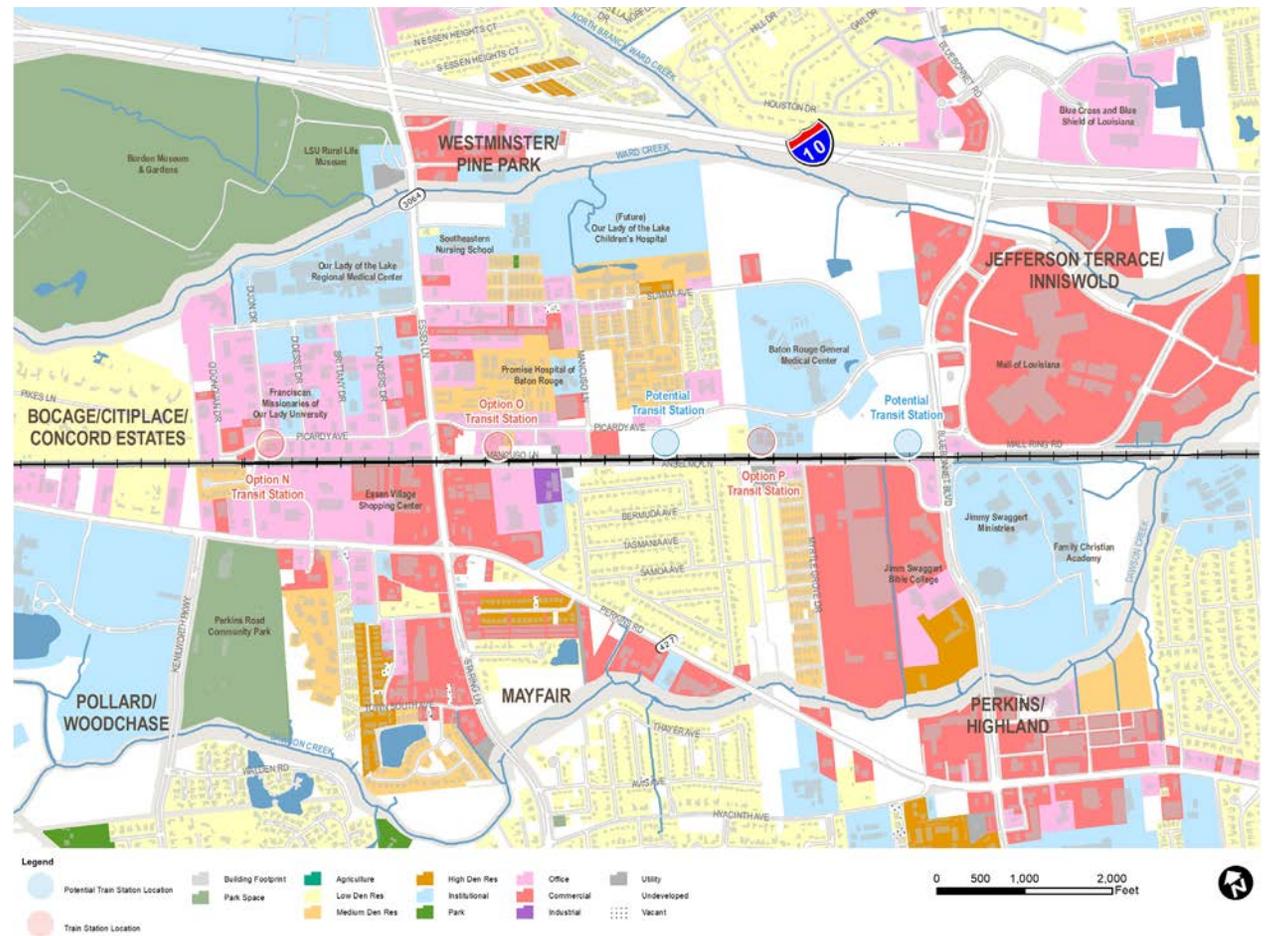


Figure 3.24: Future Land Use

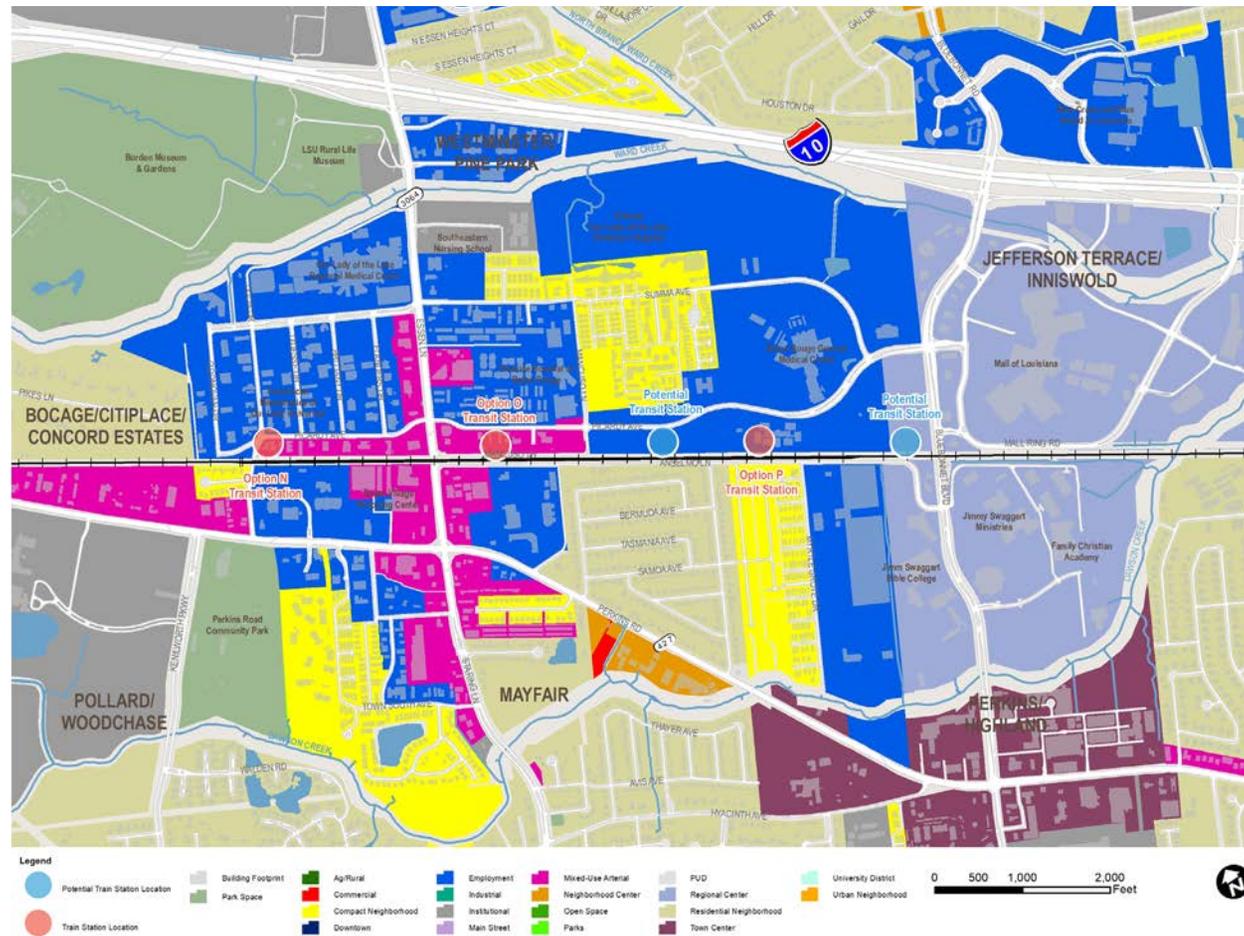


Figure 3.25: Zoning

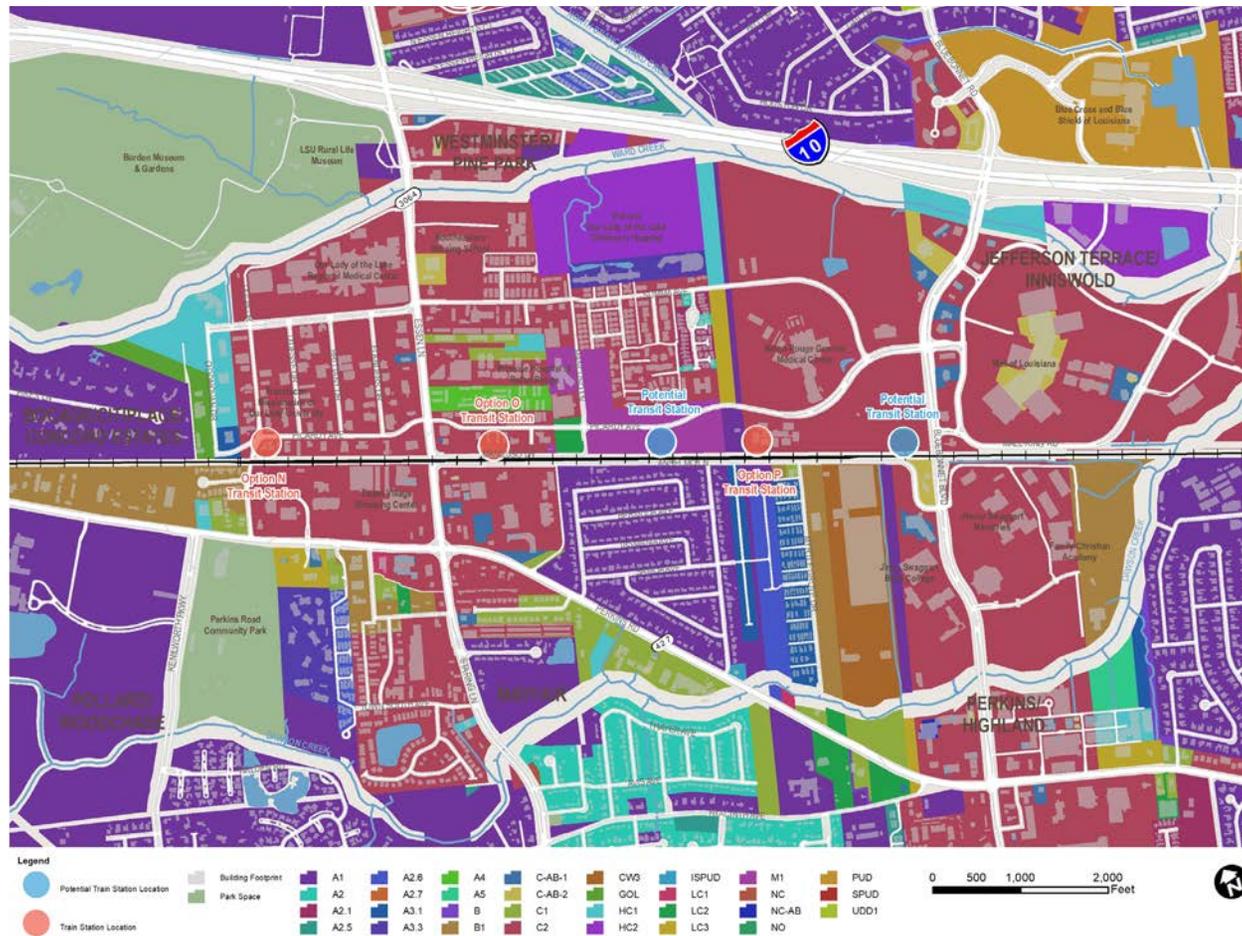


Figure 3.26: Development Activity (value per acre)



Activity Generators

The East of Essen Lane (O) and West of Midway Boulevard station sites are closest to residential densities associated with the existing multifamily uses to the north of Picardy Avenue and the residential areas to the south of the railroad tracks. Population density is low near the sites on west and east ends of the Health District (West of Essen Lane and West of Bluebonnet Boulevard since these areas generally lack residential uses. See **Figure 3.27**.

The West of Essen Lane (N) and East of Essen Lane (O) site options are closest to the highest concentrations of jobs and service activities in the Health District and are closest to the Our Lady of the Lake Regional Medical Center, the districts largest medical facility. See **Figure 3.28** and **Figure 3.29**.

Figure 3.27: Population Density per Acre

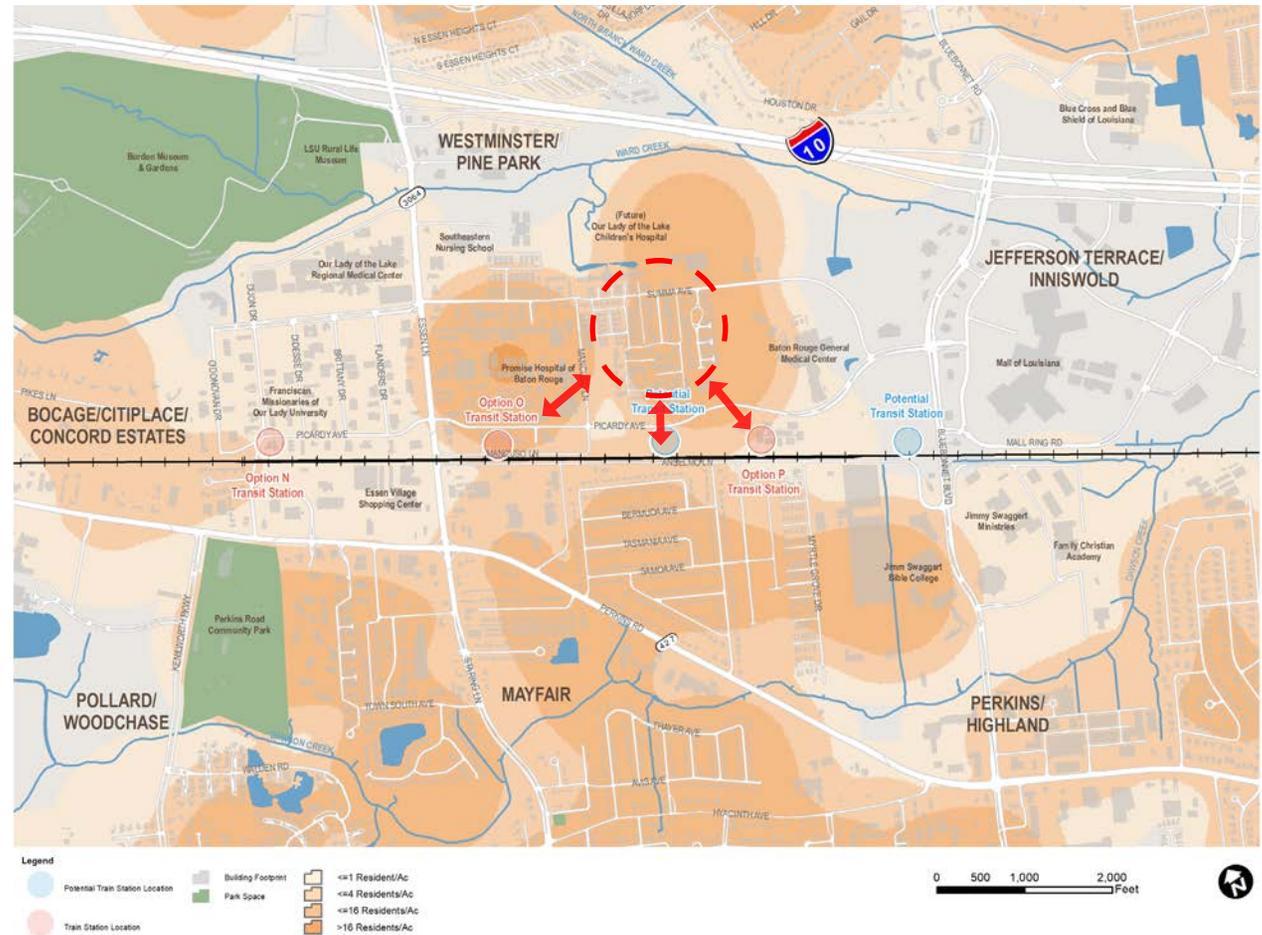


Figure 3.28: Job Density per Acre

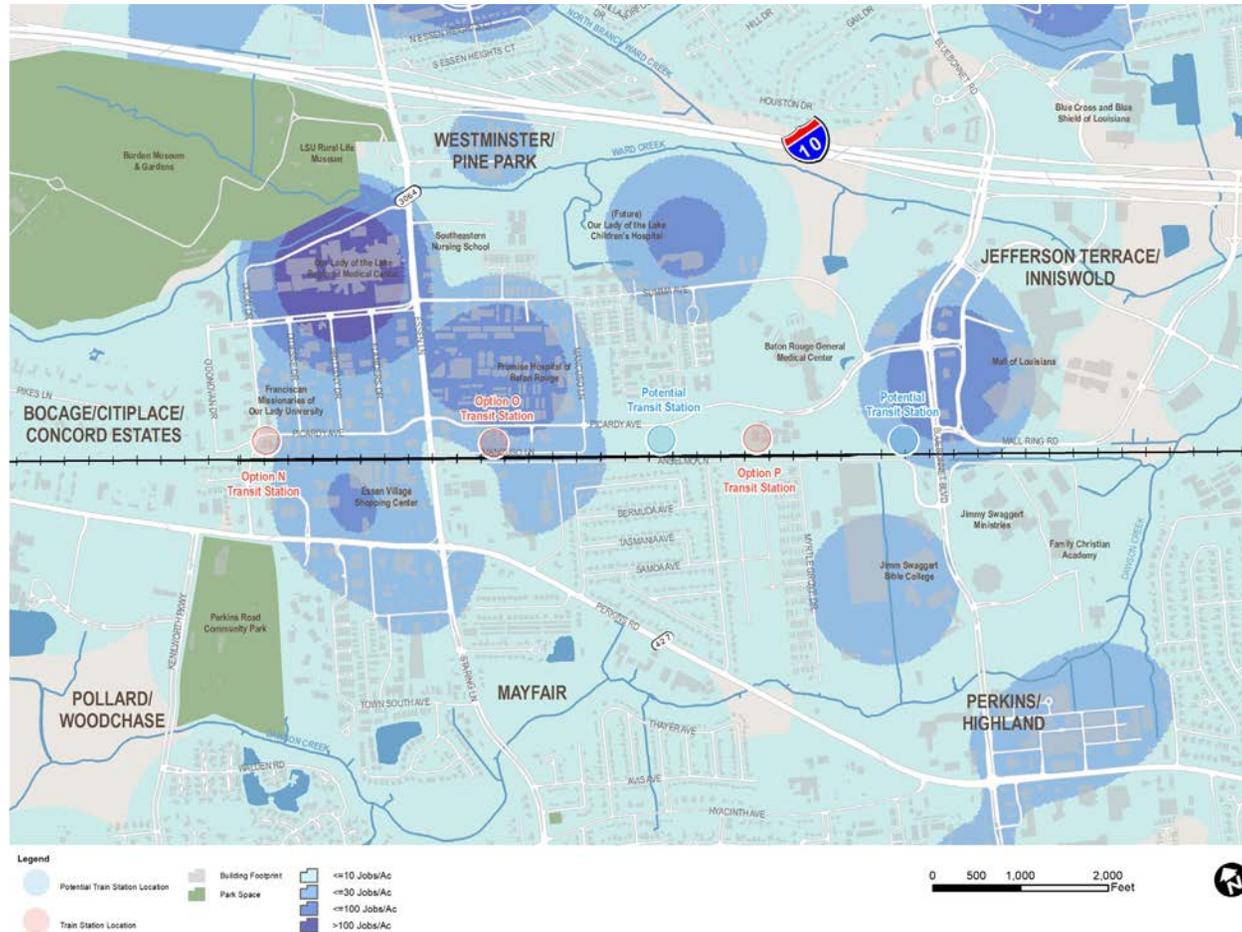


Figure 3.29: Density of Retail / Service Destinations



Physical Site Features

All the Suburban Station sites are generally flat with little to no change in topography. The elevation of the West of Bluebonnet Boulevard site option is higher than Bluebonnet Boulevard. This will not affect station development but it may introduce some site grading and access challenges if the planned Picardy Avenue realignment and connection to the Mall of Louisiana Boulevard is implemented.

Appendix E includes a preliminary investigation of water, sewer, and electric utilities for the Suburban Station site options. No major conflicts that will preclude development were identified at all the Suburban Station sites. A 230-kilovolt transmission line runs along the south side of the railroad corridor throughout the Health District. Although the station sites will not directly impact the transmission line, future coordination with Entergy will be required to build a station platform within the 75-foot servitude of the transmission line.

Railroad Operations

The Suburban Station site options are located along an active freight corridor owned and operated by KCS. A total of six freight trains travel through the Health District each day (<https://safetydata.fra.dot.gov/officeofsafety/publicsite/crossing/crossing.aspx>). The single-track railroad has a siding that begins just west of Bluebonnet Boulevard and extends to just west of Dijon Drive. The siding could allow freight trains to bypass the passenger train while at the station. Depending on future coordination with KCS, the siding may need to be extended approximately 500 feet to the east for the West of Bluebonnet Boulevard station site.

Environmental Resources

The Suburban Station site options are located within a built/previously disturbed environment that is between Ward Creek to the north and Dawson Creek to the south. The sites do not contain any known natural or historic resources.

The Health District contains several community facilities including a concentration of medical related facilities, clinics and hospitals. Major medical facilities include Our

Lady of Lake Regional Medical Center, the new Our Lady of the Lake Children's Hospital, Promise Hospital of Baton Rouge, Baton Rouge General Medical Center and the Ochsner Health Center. The west side of the Health District has the greatest concentration of medical facilities. Also, several educational facilities are located on the west side of the Health District including the Southeastern Nursing School, Our Lady of the Lake College - School of Nursing, Franciscan Missionaries of Our Lady University and the LSU Medical Education and Innovation Center.

Although none of the Suburban Station sites will impact any major medical or educational facility, some sites could impact smaller medical clinics and offices. West of Essen Lane (N) and East of Essen Lane (O) site options are both located within areas that have existing development and will require relocation of existing uses for station development including medical offices and clinics. The East of Midway Boulevard site will impact an urgent care facility and other medical offices at the Baton Rouge General Hospital's Picardy Plaza building.

Public Input

Input from the Master Plan's steering committee and stakeholder groups indicate support for a station in the Health District. The suburban stakeholders expressed a desire for a multimodal station that is integrated into a transit oriented development. Meeting participants indicated that the sites on the west side of the Health District may be difficult for station development due to the existing built environment, multiple property owners and small parcel sizes. Sites on the east side of the district with more vacant land and fewer property owners should be targeted for station development. Stakeholder input discussed how the Health District will require an internal transit circulator servicing the various institutions and destinations from the station to make sure all users benefit from the station. See **Appendix C** for Public Meeting summary.

Site Size and Configuration

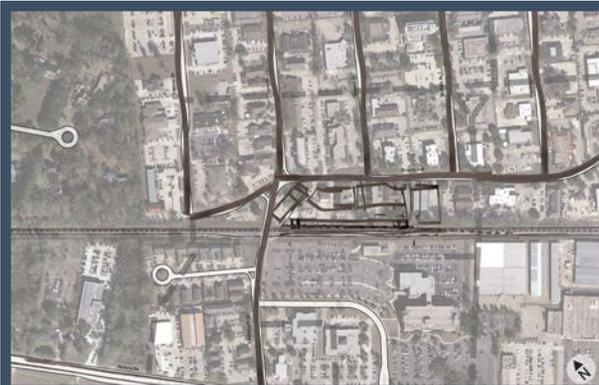
Preliminary concepts for the platform and track were prepared and site plan sketches were completed to test the functionality of all the Suburban Station site options. See **Figure 3.30**. All sites are feasible from a track and platform standpoint and no major physical constraints such as utilities and topography will preclude any of the station sites. Three of the sites, West of Essen Lane (N), East of Essen Lane (O) and East of Midway Boulevard (P), will require the relocation of existing businesses to accommodate the station program elements. The West of Midway Boulevard and West of Bluebonnet Boulevard site options are currently vacant and all station program elements could be accommodated without relocating existing businesses at these sites.

3.2.3 Site Selection

The West of Essen Lane (N) and East of Essen Lane (O) sites are closest to Our Lady of the Lake Regional Medical Center, the largest medical facility in the Health District, and closest to a concentration of employment and service activities in the Health District. However, the heavily built out nature of these sites will require the relocation of several businesses and demolition of existing structures to achieve a station that is integrated with a transit-oriented development, which is a priority expressed by local stakeholders and the steering committee. Therefore, these sites were eliminated from additional evaluation.

The West of Bluebonnet station site is recommended for the suburban rail station. This site provides the greatest potential for a truly integrated transit oriented development that could be led by a public-private partnership. The station could be the impetus for a mixed-use development that provides new housing options for Health District employees, creates new public space amenities, and provides additional retail and office uses. The West of Midway Boulevard and East of Midway Boulevard (P) sites are also viable options for station development.

Figure 3.30: Site Plan Sketches



West of Essen Lane (N)

LOCATION

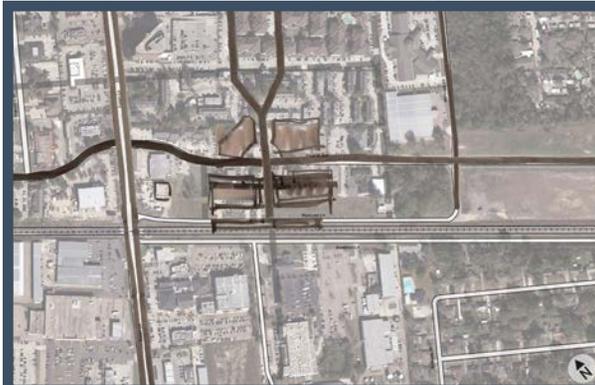
- West side
- South of Picardy Avenue
- East of Dijon Drive
- North of railroad tracks

SITE OPPORTUNITIES

- High concentration of adjacent commercial and medical uses
- Multimodal connections present/planned
- No high voltage transmission lines north of tracks

SITE CHALLENGES

- Site currently developed
- Multiple property owners
- Business relocations required
- Not centrally located to district
- Difficult regional access
- Local street grid challenges
- Less likely to spur adjacent catalytic projects



East of Essen Lane (O)

LOCATION

- West/central
- East of Essen Lane
- South of Picardy Avenue
- North of railroad tracks

SITE OPPORTUNITIES

- Centrally located to district
- High concentration of adjacent commercial and medical uses
- Close proximity to multi-family
- Multimodal connections present/planned
- No high voltage transmission lines north of tracks

SITE CHALLENGES

- Site mostly developed
- Multiple property owners
- Business and residential relocations required
- Station platform located between Mancuso Lane and tracks | requires at-grade street crossing
- Regional access form Essen Lane highly congested
- Local street grid challenges
- Adjacent catalytic development challenging



West of Midway Boulevard

LOCATION

- Central
- West of proposed Midway Boulevard
- South of Picardy Avenue
- North of railroad tracks

SITE OPPORTUNITIES

- Centrally located to district
- Currently undeveloped land
- Adjacent to proposed Midway
- Fewer property owners
- Adjacent to residential uses
- Multimodal connections present/planned
- Potential to spur adjacent catalytic projects
- No high voltage transmission lines north of tracks

SITE CHALLENGES

- Less direct regional access
- Construction of Midway Boulevard not funded
- Low visibility
- Limited local street network



East of Midway Boulevard (P)

LOCATION

- Central/east side
- East of proposed Midway Boulevard
- South of Picardy Avenue
- North of railroad tracks

SITE OPPORTUNITIES

- Currently undeveloped land
- Adjacent to proposed Midway Boulevard
- Single property owner (General)
- Multimodal connections present/planned
- Potential for adjacent catalytic projects (vacant land present)
- No high voltage transmission lines north of tracks

SITE CHALLENGES

- Less direct regional access
- Bluebonnet Boulevard is congested
- Construction of Midway Boulevard not funded
- Low visibility
- Limited local street network
- Demolition of existing buildings



West of Bluebonnet Boulevard

LOCATION

- East side
- West of Bluebonnet Boulevard
- South of Picardy Avenue
- North of railroad tracks

SITE OPPORTUNITIES

- Placemaking opportunity
- Currently undeveloped land
- Single property owner (General)
- Regional access along Bluebonnet Boulevard
- Multimodal connections present/planned
- Avoids Picardy realignment
- Potential for adjacent catalytic projects (vacant land present)
- Preserves high value corner land
- No high voltage transmission lines north of tracks

SITE CHALLENGES

- Not centrally located in district
- Bluebonnet is congested during peak periods
- Limited local street network
- May need to extend double track to east slightly

The West of Bluebonnet Boulevard station site is recommended for the Suburban Station because it provides the greatest potential for a truly integrated transit oriented development that could be led by a public-private partnership.

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CHAPTER 4: STATION & TRANSIT ORIENTED DEVELOPMENT PLANS

This chapter presents the conceptual design plans for the Downtown and Suburban passenger rail stations at the selected sites. It also identifies complementary development opportunities and equitable growth strategies to demonstrate how the stations can fit into a cohesive master planned station area that will help advance local economic development and revitalization plans. The conceptual design plans are based on the guiding principles established for this planning process per Chapter 1, the station program elements identified in Chapter 2 and the site analysis completed in Chapter 3.

4.1 DOWNTOWN STATION

The Downtown Station site is in Mid City to the west of the tracks, east of 14th Street and between Government Street to the south and North Boulevard to the north. Based on the site evaluation process described in **Section 3.1**, the west side of the railroad tracks is the recommended site for the Downtown Station. The following sections describe the conceptual design plans, complementary development opportunities and equitable growth strategies for the Downtown Station.

4.1.1 Conceptual Station Design

Figure 4.01 shows the conceptual site plan for the Downtown Station. The station is integrated into a larger multimodal transit oriented development (TOD) project that will be achieved through a public-private partnership. The station TOD concept features two new mixed-use, multi-story buildings fronting on South 14th Street. The ground level of the north building will include space for the train station and waiting area functions along with

complementary commercial and retail uses. Passenger parking, transit access and drop off and pick up lanes will be immediately north of the waiting area, allowing users to seamlessly move between the station facilities and the platform. A large mid block cut out between the TOD buildings allows convenient access from 14th Street to the rail station and platform.

Station Building and Waiting Area

As shown on the conceptual design plan, the station building functions are incorporated within the footprint of the larger TOD development and mixed-use building at the station site. The station building and climate-controlled waiting area for the Downtown Station will be located on the first floor of the TOD building with easy access to the station's parking, drop off and platform facilities.

The interior station area is based on the program elements for an Amtrak Category 2 Medium terminal station as described in Chapter 2 of this report. The space requirements for the year 2045 ridership estimate includes a total enclosed building area of 4,355 square feet that incorporates a 2,600 square foot passenger waiting room, a ticket office, baggage service, restrooms and storage space. See **Appendix D** for Amtrak's Station Functional and Space Requirement Guidelines. A smaller unstaffed station with approximately 2,000 square feet could serve the initial startup level of service. This could be realized as a stand alone structure or within the larger development building footprint shown on the conceptual design plan. The station footprint within the TOD building will be expanded as ridership increases. See **Section 5.1** for station phasing plans.

Staffing, ticketing and baggage functions of the station will be determined by the owner of the passenger rail service in coordination with Amtrak. At many medium stations it is common for a single agent to manage the station operations and handle ticket sales and baggage services. Smaller stations, that are categorized as Amtrak Category 3, which are suitable for 20,000 to 100,000 passengers annually, are typically maintained by a part-time custodian, who may or may not be an Amtrak employee. The caretaker will be responsible for cleaning the waiting area and restrooms and opening and closing the station. Customers will purchase tickets by using self-service ticketing machines and/or web-based ticket applications.

Prototypical floor plans for Medium and Caretaker stations are similar with two functional halves, passenger waiting and station support areas, that are organized around a central circulation axis. Views from the ticketing to customer areas should be maximized. The station envisions an open and inviting waiting area with high ceilings, an exposed structural system, and a large amount of window area allowing views into the space from vehicular drop offs and views from the waiting area to the platform and trains.

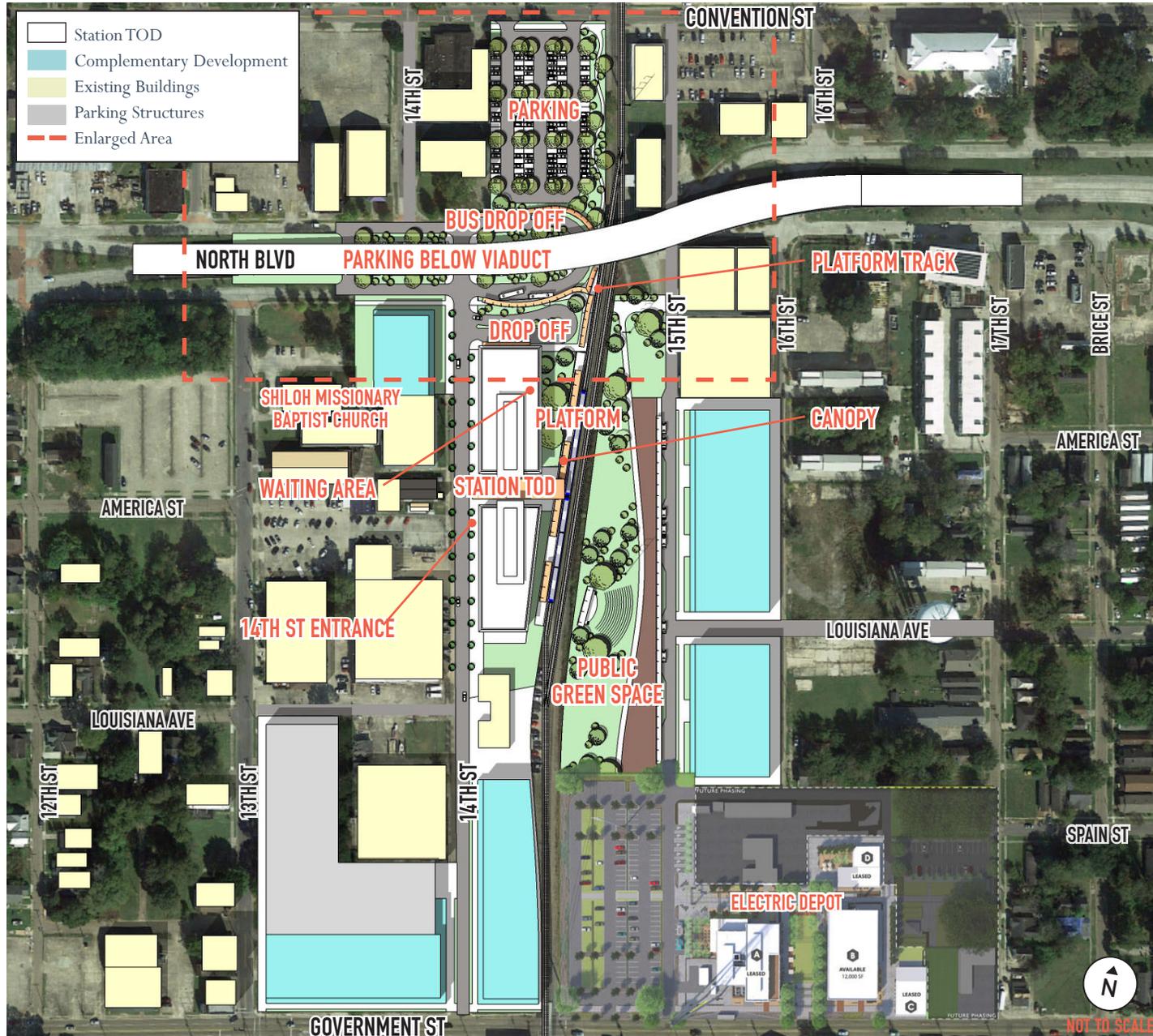


Figure 4.01: Downtown Station - Site Plan

Platform and Canopy

The conceptual design plan for the Downtown Station has a dedicated second track for a single platform located on the station side of the track. It is assumed the platform will be 500-feet long by 12-feet wide. The platform should be designed to provide safe and convenient movement of passengers getting on and off the trains. The specific platform height and horizontal offset will be determined for the type of equipment used for passenger trains and any clearances required for freight train equipment, if applicable. The final platform dimensions will be determined during a subsequent project phase for the corridor and applied to all the station platforms along the corridor. Canopies will be distributed along the length of the platform to provide cover for passengers waiting to board trains.

Parking Requirements

The Downtown Station will require 390 parking spaces to accommodate the estimated 2045 ridership. The number of spaces can be reduced to about 130 spaces for startup service. The conceptual design plan includes 66 covered parking spaces under the North Boulevard viaduct and an additional 144 spaces in a proposed surface parking lot north of North Boulevard. These spaces total 210 which exceeds the criteria for startup service. An additional 180 spaces will be needed for year 2045 ridership. It is assumed these additional spaces will be provided in a parking structure that serves the station and other development in the area. Additional study will be required to determine if all or a portion of the parking spaces will be actively managed and if a user fee is collected. See **Figure 4.02** for an enlargement of the parking and drop off areas for the station.

The TOD concept plan will require additional parking spaces based on minimum parking requirements in the Baton Rouge Development Code. The number of spaces will be based on the type of uses proposed.

Access, Circulation and Traffic Patterns

The design concept emphasizes access to the Downtown Station by a variety of modes including bus, automobile, bicycle and pedestrian modes. Since the station is to the east of downtown, it will be important for the station to incorporate existing and planned transportation options and work with local agencies to improve last mile connectivity to the central business district, the Baton Rouge Airport, local colleges and universities and other key local destinations.

The primary circulation routes serving the station will be 14th Street, Government Street and North Boulevard. The drop off and pick up lane off 14th Street will accommodate autos, taxis and ride sharing services. Bike

Figure 4.02: Downtown Station - Enlargement Area



racks could also be placed in this area. See **Figure 4.03**.

The conceptual plan includes a dedicated transit access lane that could accommodate up to four bus bays. Further coordination with CATS is recommended as the planning and design process moves forward to determine the space requirements for local buses and potential access for a future bus rapid transit route.

A network of canopies is shown on the conceptual design plan to provide cover for bus patrons and for pedestrians walking from the north parking lot site to the train platform and station. This canopy will provide a strong visual connection to link the site north and south of the North Boulevard viaduct. See **Figure 4.04**.

Pedestrians will be able to access the station from 14th Street from a central open-air corridor that will be provided between the two TOD buildings. On-street parking will be provided on 14th Street with an emphasis on quick turnover to allow for deliveries, drop offs and shoppers.

The Downtown Station will require several roadway and intersection improvements that will benefit access to the rail station and improve traffic circulation. See **Appendix F** for a traffic memo that was completed for the station.

The entire length of 14th Street will require upgrades in the form of roadway rehabilitation, striping, curbing, sidewalks, and potentially bike lanes. See **Figure 4.05**. Due to the high pedestrian and bicycle usage anticipated, traffic calming measures along 14th Street should be put in place to keep vehicle speeds low and in scale with the existing neighboring developments and Shiloh Baptist Church activities. Connections to the bike lane along Government Street and a planned Louisiana Avenue Connector trail should be considered in the design of 14th Street.

The Government Street road diet and complete street

Figure 4.03: Downtown Station - 14th Street View South at Drop Off



project currently under construction includes an unsignalized, full access median opening at 14th Street. An analyses should be completed to determine if the additional traffic generated by the rail station warrants a signal.

Improvements to the North Boulevard and 12th Street intersection may be necessary to accommodate additional users attempting to access the at grade portions of North Boulevard. Currently this intersection is an unsignalized, full access median opening. The geometry of this intersection should be further investigated to determine potential improvements. Two potential options are signalizing the intersection (if warranted by Manual on Uniform Traffic Control Devices (MUTCD)) or implementation of a roundabout to manage conflicts between the different approaches. Whichever treatment is selected, it should emphasize the intersection as a key entry point to the rail station.

Train Service and Maintenance

The Downtown Station is a terminal station and will include a dedicated, second track for the platform. This allows for operational flexibility to store up to two trains on the track at night and for routine cleaning and servicing requirements. Maintenance and repairs of trains is expected to be performed at a facility in New Orleans.

Lighting, Signage and Security

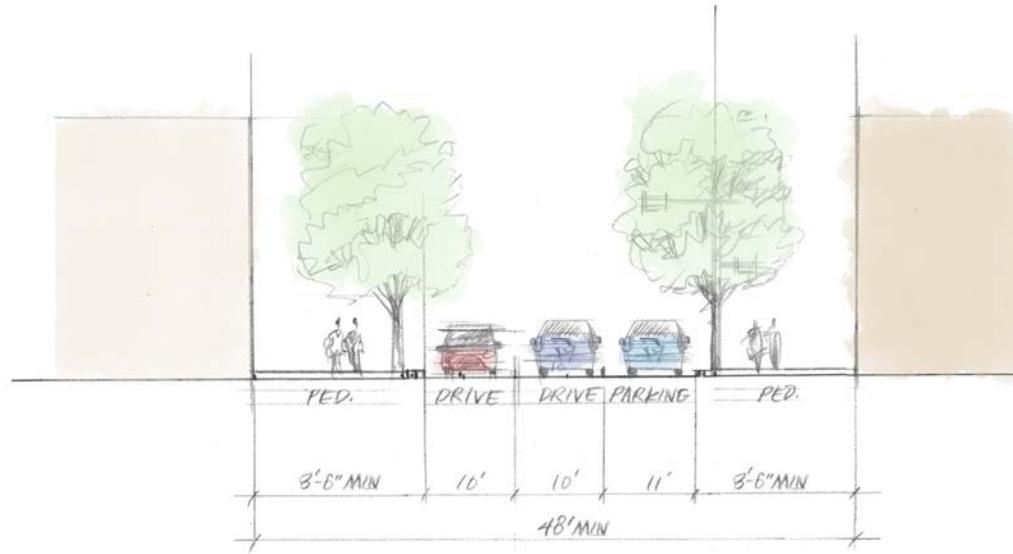
The station will contain adequate lighting fixtures to properly illuminate parking areas, the platform, access points and walkways. Station signage will consist of site identification signage at entrances to the site, directional signage, warning signs, bus stop signs and other signage that may be required for a station.

Passenger security and protection of property against theft and vandalism are important factors in the design of a station. Potential security measures to be taken at the Downtown Station include closed-circuit TV cameras, coordination with local police and the use of best practices recommended by Crime Prevention Through Environmental Design.

Figure 4.04: Downtown Station - Bus Drop Off



Figure 4.05: 14th Street - Proposed Cross Section



Downtown Station - View to Northwest

KEY LOCATIONS

- 1 Station platform
- 2 Public plaza
- 3 Public gathering / green space
- 4 Food trucks
- 5 Parking below viaduct



Downtown Station - View to Southwest



Downtown Station - View to Southeast

KEY LOCATIONS

- 1 Station platform
- 2 Public plaza
- 3 Public gathering / green space
- 4 Food trucks
- 5 Parking
- 6 Bus drop off
- 7 Vehicular drop off
- 8 Parking below viaduct

4.1.2 Station & Neighborhood TOD Opportunities

The Downtown Station site provides opportunities to facilitate complementary development opportunities since a large amount of vacant and/or underutilized land exists near the site. Plus, recent developments along Government Street such as the Electric Depot have demonstrated a market for redevelopment and small business creation in the area. Using a TOD approach, the synergy of compact, walkable livable communities located near a high-quality train system can be captured to make each component more successful.

Figure 4.06: Downtown Station - Station TOD



The complementary development analysis presents land use and development concepts for two areas 1) a Station TOD concept that incorporates station facilities and mixed-use buildings and 2) a Neighborhood TOD concept that includes properties most “development ready” within a 5-minute walk of the station site. For each area, land use and development assumptions were created based on interviews with local developers, prototypical development examples, local plans and zoning regulations and other market factors. These concepts were prepared to demonstrate the development potential of the station area and to show how the station can fit into a cohesive neighborhood development pattern. The following

sections summarize the analysis. See **Appendix G** for more details.

Station TOD Concept

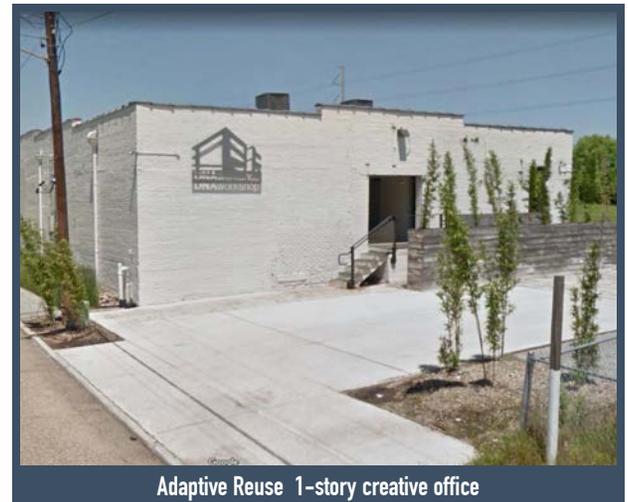
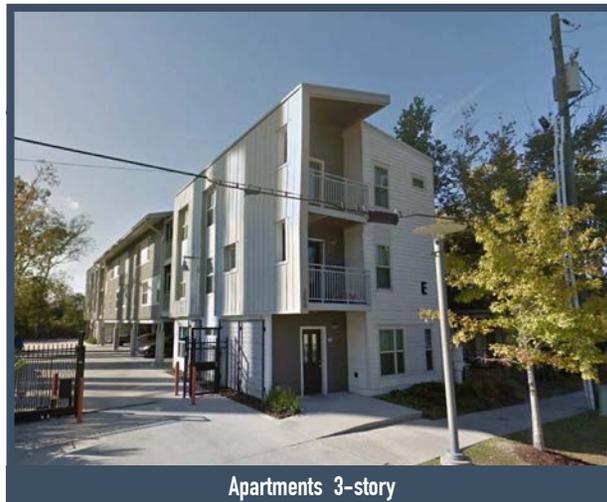
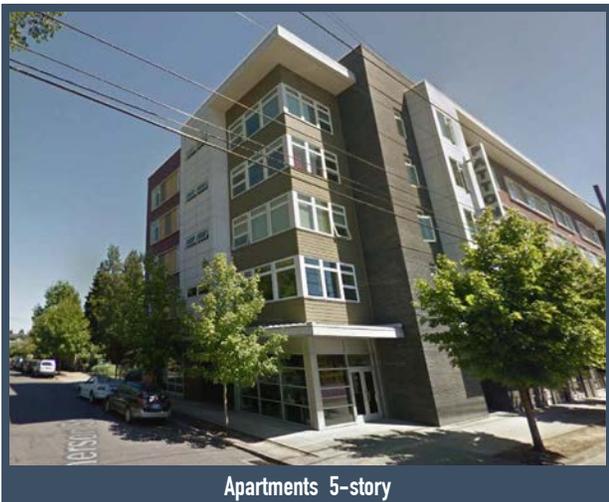
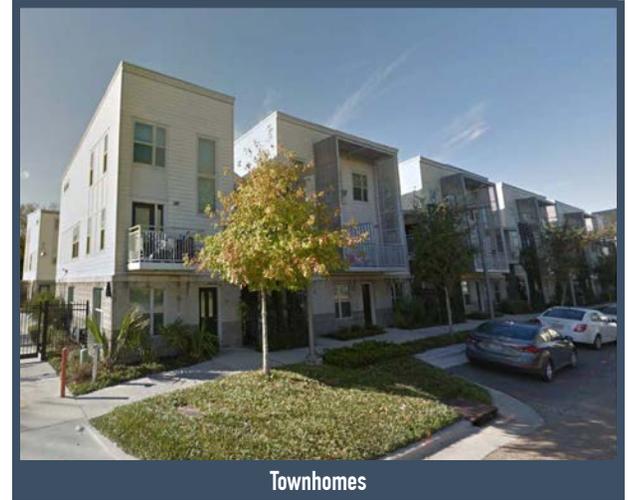
Land use and development assumptions were prepared for the Station TOD concept area. This concept incorporates planned station facilities as part of a larger TOD project. See **Figure 4.06**.

The Station TOD concept assumed two mixed-use buildings will be constructed at the station site that include retail and rail station facilities (start-up size) on the ground level and residential units on levels two to four. This concept will provide space for 125 new dwelling units and 25,750 square feet of retail. The TOD should emphasize locating storefronts and outdoor dining uses along the 14th Street to improve vibrancy and walkability. The development will generate 27 new retail jobs and have an estimated value of \$35 million. Using the reduced downtown parking requirements for Baton Rouge, the development concept will require 164 parking spaces to serve the private development. As ridership for the rail service increases over time, ground floor retail space will be converted to station uses to accommodate the eventual need for 4,355 square feet of enclosed space for station functions.

STATION TOD CONCEPT FEATURES

- Two mixed-use buildings
- 125 dwelling units
- 25,750 square feet of retail
- 27 retail jobs
- 164 parking spaces
- \$35 million development value

Prototypical Development Examples for Downtown Station Area



Photos: Google Maps streetview

Neighborhood TOD Concept

The Neighborhood TOD concept builds upon the Station TOD concept and presents a land use scenario for how the greater station area could develop over time. See **Figure 4.07**. This concept will be achieved through a mixture of new construction and adaptive reuse projects that will complement the station and other catalytic activities in the area.

The analysis for the Neighborhood TOD concept assumes the area will become a mixed-use district with a variety of retail, office and residential uses. Heights and intensity of uses are concentrated at the station area and along Government Street and taper down as it transitions to existing neighborhood areas.

In total, the Neighborhood TOD concept will include 38 buildings with 576 new dwelling units, 56,000 square feet of retail and 27,230 square feet of creative office space. The Neighborhood TOD concept will generate over 130 new retail and office jobs and have an estimated value of \$137 million. The Neighborhood TOD concept will require 700 parking spaces to serve the private development if the downtown parking requirements are used, which require only 1 space per dwelling

NEIGHBORHOOD TOD CONCEPT FEATURES

- 38 buildings offering a range of uses
- 576 dwelling units
- 56,000 square feet of retail
- 27,230 square feet of office
- 130 retail and office jobs
- 700 parking spaces
- \$137 million development value

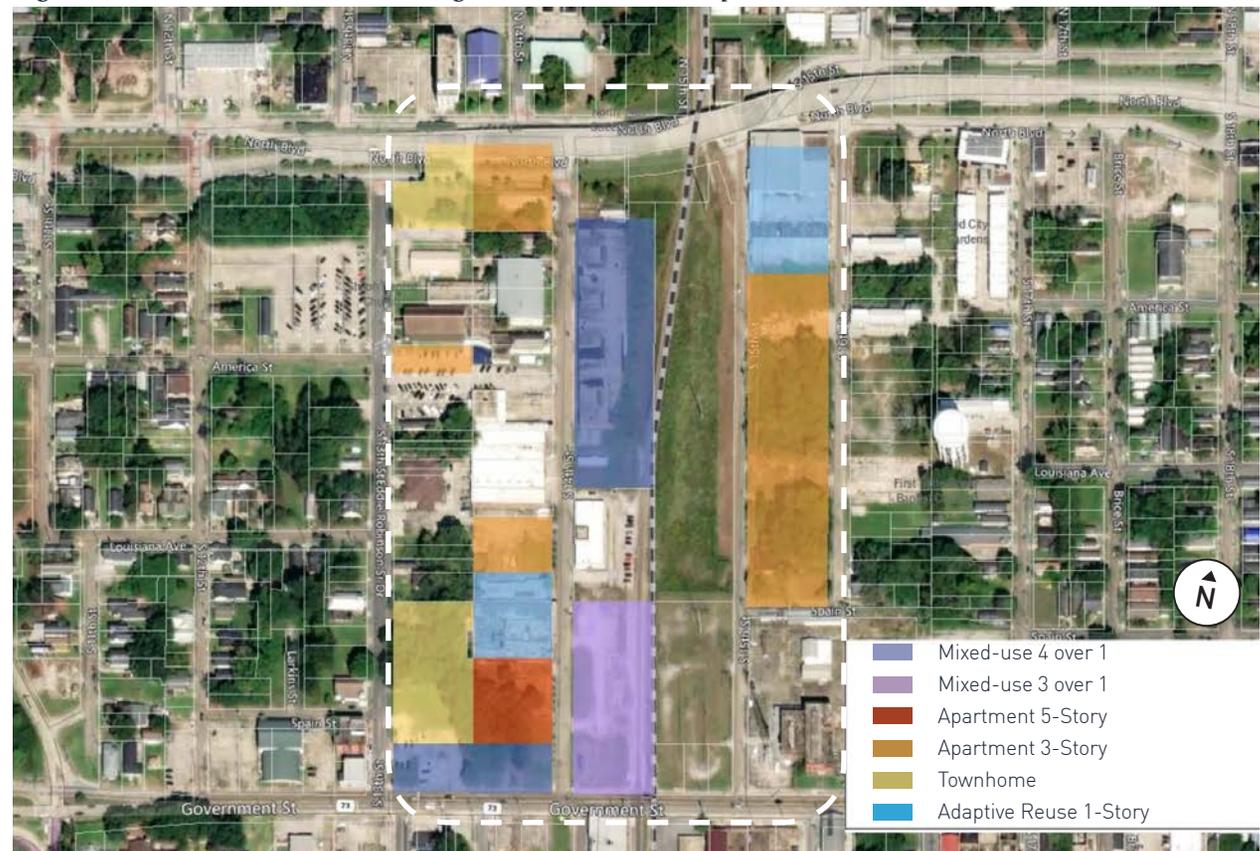
unit. District level parking solutions will be needed to minimize the footprint of parking on the landscape and maximize the developable area.

One of the biggest challenges affecting the development of the Neighborhood TOD concept are the numerous small lots with multiple property owners that will need to be assembled to create developable parcels. This is typical of central city areas and may require government interventions to facilitate development. Also, given the relatively low-income levels of this station area, it is a suitable place for affordable housing unit set asides within mixed-income developments. A local developer in the

area has voluntarily chosen to do 15 percent of units for households at 80 percent area median income. This demonstrates it is feasible to achieve affordable units even without specific regulations in place.

Public investment is key to help attract people and private investment to the area. Public investment, in combination with private development, should focus on improving the area's aesthetics through streetscape improvements and improved multimodal connections similar to the Government Street plan that is under construction.

Figure 4.07: Downtown Station - Neighborhood TOD Concept



4.1.3 Equitable TOD Analysis

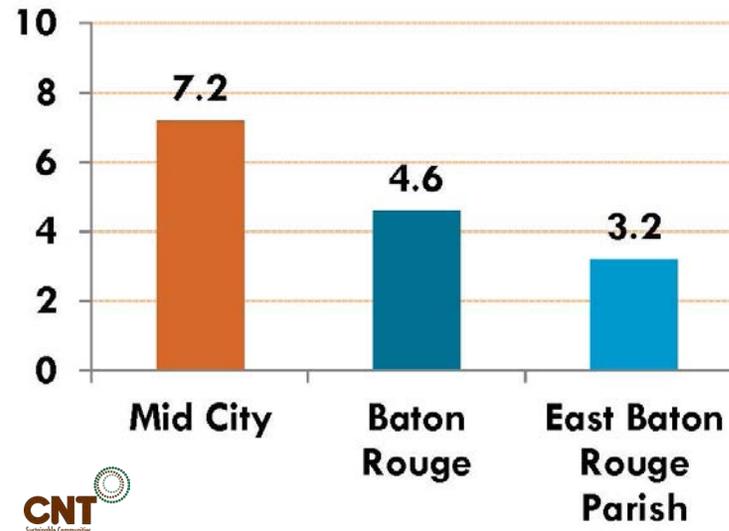
The establishment of new passenger rail service and enhanced bus service in the Baton Rouge station areas, along with local planning and development efforts, is intended to facilitate transit oriented development (TOD). TOD is characterized by increased housing density in a community where residents can conveniently walk to an array of amenities and reach a broad range of jobs by walking, biking, or transit. While TOD can provide many benefits to a community, consideration of equitable TOD (eTOD) strategies can help deliver those benefits to most of the current station area residents, rather than passing them by or displacing them.

The following sections summarize the eTOD analysis for the Downtown Station. The full analysis is in **Appendix H**. In addition, **Appendix H** includes a peer cities comparison that examines patterns of development as it relates to public transportation and related public policies in five U.S. cities (Durham, NC; Portland, Maine, Sacramento, CA; Santa Fe, NM; and Savannah, GA). These cities are comparable to Baton Rouge in that they anchor Amtrak lines linking to two-mid-sized cities and are largely car dependent cities that lack extensive rapid transit systems. **Appendix H** also includes information about Employer Assisted Housing Programs.

DOWNTOWN STATION EXISTING CONDITIONS & TRENDS WITHIN A HALF-MILE OF THE STATION:

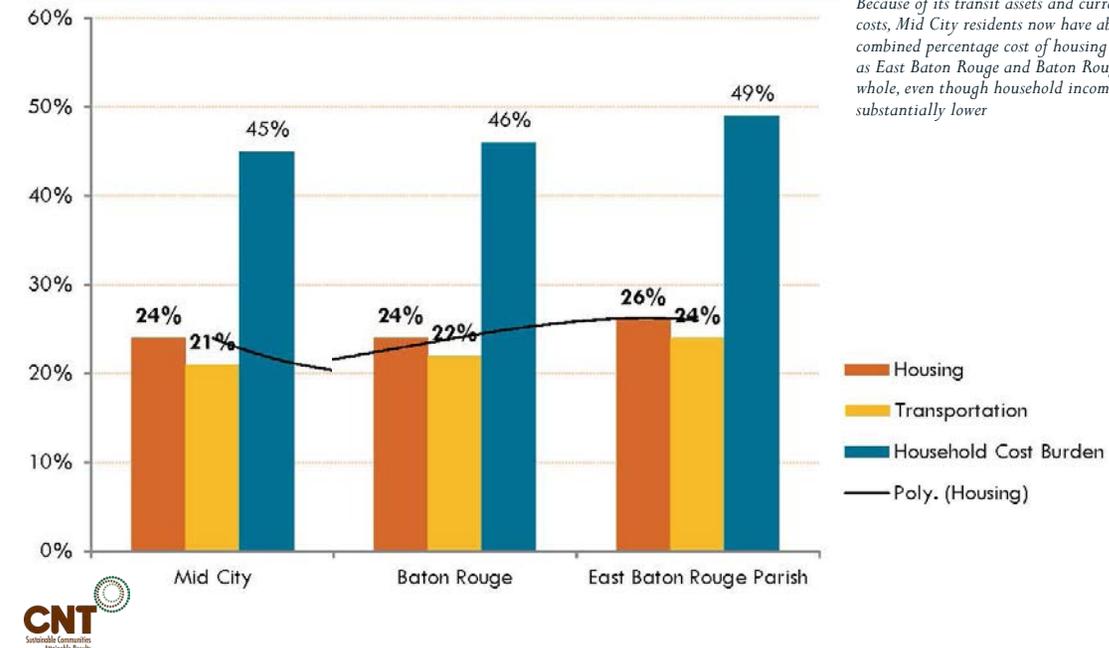
- 78% of the housing units are single family dwellings
- 58% of residents are African-American and 40% are white
- Median household income of \$27,407 is far below the median income of \$52,487 for the metro area

Downtown Station - AllTransit™ Performance Scores



Transit service that is extensive relative to the rest of Baton Rouge is one of this community's key assets. By an index that considers all aspects of transit service on a national scale, Mid City probably ranks higher than any other Baton Rouge community. Of course, with the addition of Amtrak and enhanced bus service, this asset will become more valuable.

Downtown Station - Household Cost Burden Comparison



Because of its transit assets and currently low housing costs, Mid City residents now have about the same combined percentage cost of housing and transportation as East Baton Rouge and Baton Rouge Parish as a whole, even though household income in Mid City is substantially lower

Downtown Station eTOD Analysis

The Downtown Station eTOD analysis focuses on two basic strategies to preserve and improve Mid City as a TOD community: 1) build the community's base of employed residents and 2) maintain and build affordable housing.

The analysis, which is for a half-mile study area around the station, is organized into three sections: Community context for eTOD; Business and Job Development Opportunities; and Affordable Residential Development.

DOWNTOWN STATION WORKFORCE CHARACTERISTICS WITHIN A HALF-MILE OF THE STATION:

- Fewer than 4% of jobs in the half-mile study area are held by area residents
- Educational levels are 14% Bachelor or advanced degree; 67%, associate degree, some college, or a high school diploma; and 13% lack a high school diploma.
- 50% of jobs are considered professional jobs that require higher educational levels
- 33% of the occupations include skilled and semiskilled manual labor production functions
- 5.3% of jobs are in building construction
- Retail/hospitality sector includes 24 businesses, employing 245 workers, and generating over \$45 million per year in sales
- 35,000 jobs are accessible by bus within a half hour commute during rush hours

Community Context for eTOD

The Downtown Station area in Mid City is a predominately residential area that contains an economically and ethnically diverse community at the center of Baton Rouge with excellent access to jobs and amenities through transit and proximity to the central business district. The station area is on a logical path of expansion for the central business district that has added more than 7,000 jobs in recent years.

Although the community has some economic diversity, it is predominantly low income. A desirable rise in median household income should be anticipated with TOD; but to maintain the community's economic diversity, this increase should be spread across all groups in the income spectrum.

eTOD strategies for the Downtown Station area should focus on maintaining the diverse character of the station area through implementation of urban design, job creation, and housing strategies, planned and executed in coordination with the homegrown institutions of the community, including its churches. If the station area maintains its current character, it will gain moderate residential density and add jobs while providing attractive homes near the places where residents are employed.

Business and Job Development Opportunities

This section considers the community context for eTOD and explores additional workforce data to identify business and job development opportunities that can build employment for residents and raise the incomes of the station area residents.

Paraprofessional Job Opportunities

Fewer than 4% of jobs in the half-mile station study area are held by area residents. One reason for this is that few residents have the advanced education required for the area's many professional jobs. However, many professional service jobs are performed by paraprofessional or support workers who have an associate degree or high school education with

skills training. Most station area residents have this level of education or could attain it without long years of effort.

A realistic initiative for raising the percentage of area residents in area jobs will be to engage Baton Rouge's workforce development organizations to focus trainee recruitment, employer outreach activities, and branch training facilities on paraprofessional positions and residents in the Downtown Station area. Such an initiative will train aspiring workers for jobs close to their homes, which they could reach without cumbersome or expensive transportation requirements

Production Job Opportunities

Another strategy for capitalizing on station area's job base and proximity to the Central Business District (CBD) is to expand the number of "Production Jobs" in the station area. Production jobs fulfill the need for skilled and semiskilled manual labor in tasks that are necessary for the maintenance of a city and especially a CBD.

A recommended action is to undertake a study of current and projected need for production business services in the Baton Rouge CBD, including current and optimal locations for production businesses. The study will indicate the scale of production job opportunities for station area residents, which might be considerable.

Building Construction Job Opportunities

An expanding CBD, new transit services, and new infrastructure are driving demand for the construction and rehabilitation of buildings in the station area. Building construction is an important job opportunity for station area residents. A recommended action is to create, maintain, and promote a database of minority and local building contractors and skilled workers who can be recommended to perform good work in building construction. Target building trades training and placement programs to area residents similar to recommendations for paraprofessional workforce initiative

Retail and Service Job Opportunities

New job opportunities, transit services, and a rise in middle class residents will increase demand for retail and service sector businesses in the station area. Retail and service enterprises generally have the lowest barriers to entry of any business categories; so, they are the types of businesses most commonly owned by local, independent individuals. Also, retail and service jobs are often avenues through which young people or discouraged workers enter or reenter the workforce.

To help station area residents' benefit from the growth of retail and service demand, engage the Baton Rouge workforce organizations to connect the area's small business owners and entrepreneurs who want to launch new businesses with the US Small Business Administration and the Baton Rouge Area Chamber of Commerce for sound advice and access to capital. Also, engage with Baton Rouge workforce organizations to arrange training in work place "soft skills" for new or discouraged workers.

Opportunities for Improved Job Access through Transit

Center for Neighborhood Technology's (CNT) AllTransit™ analytical tool shows that residents of the station area can reach approximately 35,000 jobs by bus within half an hour if commute trips are made during rush hours. However, the hours and frequency of service may not be sufficient to provide a reliable commuting option for many workers. To make commuting by transit a more viable option for many area residents, transit planning for the area should consider the needs of station area residents by providing linkages to major employment areas in Baton Rouge such as:

- Improved bus service to connect the Downtown Station to the Baton Rouge CBD
- The addition of a local rail service between the two stations that will be more frequent than the intercity service
- Creation of an express bus service between the CBD, Downtown Station and the Suburban Station.
- Refine routes and/or increase the frequency of services that could connect station area workers to production job locations

These strategies will advance the objective of stakeholders in both station areas to make the rail stations intermodal transportation hubs.

Affordable Residential Development

The same basic factors that are driving job creation in the Downtown Station area - proximity to Baton Rouge's growing CBD, new transit services and infrastructure, and the subsequent arrival of new middle-class residents - could also generate pressure for the displacement of current residents.

If residents can remain in the station area they will enjoy appreciation of real estate that they own, a more attractive neighborhood environment, and enhanced job opportunities. However, several existing conditions make the area population especially vulnerable to displacement: many low-income households, aged housing stock with many deteriorated buildings, and predominant renter occupancy.

DOWNTOWN STATION HOUSING CHARACTERISTICS WITHIN A HALF-MILE OF THE STATION:

- 47% of households have incomes of \$25,000/year or less and are eligible for housing assistance programs
- 67% of the housing was built before 1960, and 49% was built before 1949
- 20% of the housing units are vacant
- 60% of housing units are occupied by renters
- The condition of residential housing is deteriorating
- The station area has a sizable population of people experiencing homelessness

Affordable housing development strategies for the Downtown Station area will require concerted, collaborative efforts by the private development industry, not-for-profit housing corporations, and public agencies to preserve the essential character and current population of the community as it redevelops. The following strategies, which are explained in detail in **Appendix H**, are recommended for the Downtown Station area:

- Encourage voluntary mixed income development by private investors
- Support not-for-profit development of affordable housing and prioritize resources to the Downtown Station area
- Use right size parking strategies to increase the capacity of affordable housing development to construct housing and secure passage of an ordinance that will permit developers to build with right size parking as a matter of right in Mid City and other TOD locations.
- Encourage sustainable practices to reduce costs for developers and occupants including sustainable choices about transportation, energy, and protection from flooding

The timing of this section of the Station Area Master Plan may be fortunate as it coincides with an early stage in the creation of an affordable housing strategy for the Parish of East Baton Rouge, if not the entire Baton Rouge metropolitan area. Some 30 organizations engaged in various aspects of affordable housing are participating in this initiative, meeting as the Capital Area Affordable Housing Alliance. Additional strategies to consider for this initiative that will apply to the Downtown Station area but also have broader applications and could only be undertaken by a regional coalition include:

- Make the Downtown Station Area the Region's eTOD Blueprint
- Explore Creation of a Baton Rouge Regional Fund Devoted to Affordable Housing
- Explore Value Capture and Other Leveraging Strategies
- Explore Opportunities for Employer Assisted Housing
- Explore Community Land Trusts for Affordable Housing Preservation

Information about people experiencing homelessness and the Baton Rouge network working to change their situations indicates several principles for the strategy to provide affordable housing in the Downtown Station area:

- Some long-term housing that provides a safety net for people who might otherwise fall into homelessness have a place in the diverse Mid City community. These housing situations might include well-run single-room-occupancy (SRO) apartment buildings, housing for families far below area median income, and group homes for people in special need conditions. The community's expectations for these facilities will be that they are well-managed, with residents receiving casework counseling and other professional services as required.
- Mid City should not be a magnet for emergency shelters, although it may accept its "fair share" of such services, which will be a part of Baton Rouge society until basic public policy and economic conditions in the country improve. Again, the community's expectations for these facilities will be that they are well-managed, with clients being referred to and tracked in programs that address their long-term needs for housing, health care, counseling and employment

Frequently the types of implementation measures recommended in this plan – both in regard to employment and affordable housing - are either not taken or tried ineffectually for lack of productive connections between professional service providers and community residents. For these reasons, community engagement should be directed through respected local organizations, including the area's churches, which are well established and significant institutions in the lives of many community residents. Community engagement should include: a voice in planning and monitoring community development programs and a role in the dissemination and explanation of information about employment and housing programs. Recognizing the value of such connections, program budgets should include compensation for the planning and outreach work of local organizations.



Figure 4.08: Suburban Station - Site Plan

4.2 SUBURBAN STATION

The Suburban Station site is in the Health District. As described in **Section 3.2**, the West of Bluebonnet Boulevard site, to the north of the railroad, south of Picardy Avenue and west of Bluebonnet Boulevard, is the recommended station site. This site presents the greatest opportunity to achieve a TOD that will bring new uses and new amenities that can be used by all Health District visitors.

The West of Midway Boulevard site and the East of Midway Boulevard (P) site are also viable options for the Suburban Station if the West of Bluebonnet Boulevard site cannot be secured for future station purposes. The following sections describe the conceptual design plans, complementary development opportunities and equitable growth strategies for the Suburban Station.

4.2.1 Conceptual Station Design

Figure 4.08 shows the conceptual design plan for the Suburban Station that is integrated into a larger transit-oriented development (TOD) that will be achieved through a public-private partnership. The design concept features a new boulevard (Summa Avenue extension) that intersects with Picardy Avenue and links with the passenger rail station. The new boulevard is envisioned as a focal point of the station area with residential and mixed-use development along its frontage and public gathering spaces. The station is proposed as a standalone building placed between two other mixed-use buildings adjacent to the platform. This station should be well integrated into the campus setting of the TOD with complementary retail and restaurant uses in the other nearby buildings.

Station Building and Waiting Area

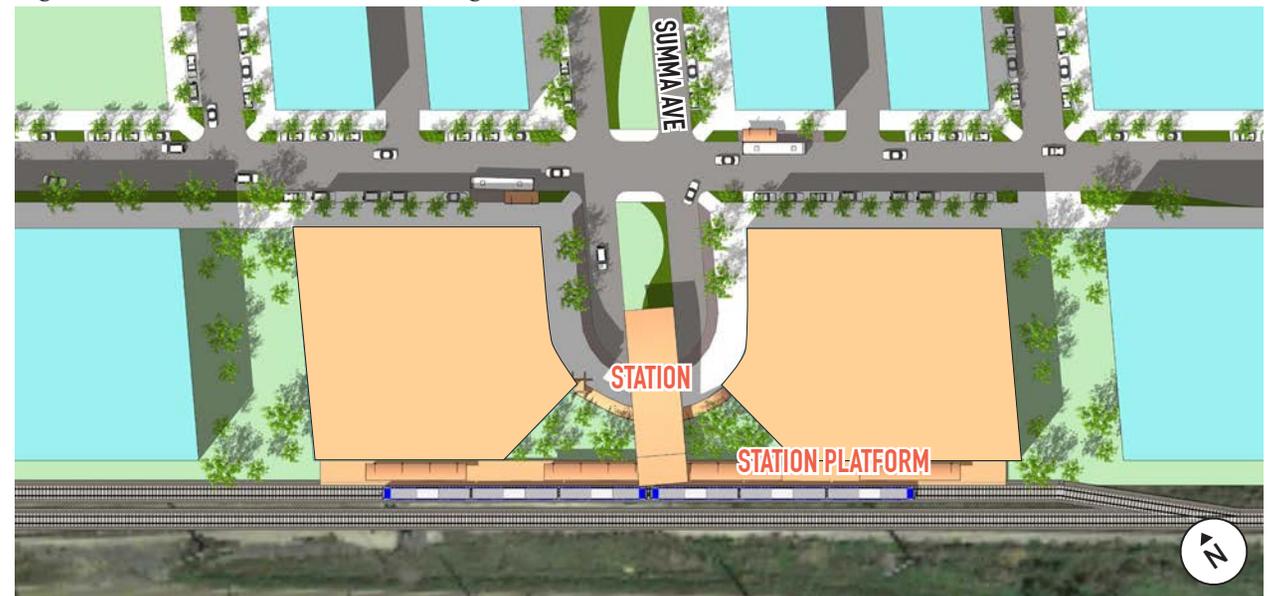
The design of the Suburban Station is based on the program elements for an Amtrak Category 2 Medium station as described in Chapter 2 of this report. The space requirements for the year 2045 ridership estimate includes a total building area for the station of 2,855 square feet that incorporates a 1,100 square foot passenger waiting area, ticket office, baggage service, restrooms and storage space. A smaller station with approximately 1,000 square feet could be constructed for the initial startup level of service. As shown on **Figure 4.09**, the station building could be realized as a stand alone structure or within the larger development building footprint shown in the conceptual design plan.

Staffing, ticketing and baggage functions at the Suburban Station will be determined by the owner of the passenger rail service in coordination with Amtrak and local stakeholders. At many medium stations there is a single agent who manages the station operations and handles ticket sales and baggage services. Smaller stations, that

are categorized as Amtrak Category 3, stations are suitable for 20,000 to 100,000 passengers annually. These stations are typically maintained by a part-time custodian, who may or may not be an Amtrak employee. The caretaker will be responsible for cleaning the waiting area and restrooms and opening and closing the station. Customers will purchase tickets by using self-service ticketing machines and/or web-based ticket applications. A caretaker station will be adequate for startup levels of service at the Suburban Station.

Prototypical floor plans for Medium and Caretaker stations are similar with two functional halves, public waiting and station support, that are organized around a central circulation axis. Views from the ticketing to customer areas should be maximized. The station should include an open and inviting waiting area with high ceilings, an exposed structural system, and a large amount of window area allowing views into the space from vehicular drop-offs and views from the waiting area to the platform and trains.

Figure 4.09: Suburban Station - Enlargement Area



Platform and Canopy

The existing railroad has a single mainline track over Bluebonnet Boulevard with a siding beginning approximately 900 feet west of the crossing. Additional study and coordination with the railroad is needed to determine if it is feasible and desirable to extend the siding track east of the proposed platform closer to Bluebonnet Boulevard to allow freight to bypass passenger trains at the platform.

The conceptual design plan for the Suburban Station has a single platform along the mainline track that will be located on the station side of the track. The size of the platform will be approximately 500-feet long by 12-feet wide. The platform should be designed to provide safe and convenient movement of passengers getting on and off the trains. The specific platform height and horizontal offset will be determined for the type of equipment used for passenger trains and any clearances required for freight train equipment, if applicable. The final platform dimensions will be determined during subsequent project phases for the corridor and applied to all the station platforms for the corridor. Canopies will be distributed along the length of the platform to provide cover for passengers waiting to board trains.

Parking Requirements Station

A total of 240 parking spaces for the Suburban Station are identified in the design assumptions for year 2045 ridership. The number of spaces can be reduced to about 50 spaces for startup service. These parking spaces will be planned in conjunction with the TOD, which will require additional spaces to serve development. It is assumed that the initial parking needs for the station could be provided as surface parking near the station. Then, as ridership increases, and the station area is developed, parking will be shared among several users and consolidated into parking structures to maximize developable sites.

Figure 4.10: Suburban Station - View to East



Access, Circulation and Traffic Patterns

The Suburban Station will be accessible from Picardy Avenue via Bluebonnet Boulevard and Essen Lane, see **Figure 4.10** and **Figure 4.11**, which are connected to interchanges along I-10. The conceptual plan recommends a new system of connected roadways within the station area to create complementary development opportunities and provide station access. The proposed new roadways in the station area should include sidewalks and on-street bike facilities where feasible to link the station with the BREC Health Loop Trail.

The main focal point of the station area and primary access road to the station is a new road that will intersect with Picardy Avenue at Summa Avenue and extend south to the entrance of the station. See **Figure 4.12**. The new road (Summa extension) is envisioned as a pedestrian oriented boulevard with a wide median, sidewalks and on-street parking.

The conceptual design plan will accommodate the proposed re-routing of Picardy Avenue to align with the Mall of Louisiana Boulevard as envisioned in the Master Plan for the Baton Rouge Health District. The conceptual site plan modifies the planned realignment by shifting it away from the railroad to better accommodate the rail station and having it connect with the existing Picardy Avenue at a T-intersection. The station area plan assumes the existing Picardy Avenue will remain.

As shown on **Figure 4.13**, The passenger drop off and pick up lane for the Suburban Station will be at the end of the new boulevard that is aligned with Summa Avenue. The lane will accommodate autos, taxis and ride sharing services and have sidewalks that are connected to the proposed street network in the station area.

The conceptual design plan incorporates on-street bus stops next to the station, shown on **Figure 4.14**. These could be used by local and regional bus operators and

serve a planned Health District bus circulator that will make stops through the district.

With the increased trips generated by the rail station and other future developments in the area, it is likely that some of the new intersections with Picardy Avenue may warrant signalization after the rail station is complete. Capacity improvements such as additional turn lanes and signal timing optimization will need to be investigated as traffic volumes increase in and around the Health District. See **Appendix F**.

Midway Boulevard, proposed in the Master Plan for the Baton Rouge Health District, will extend from the new Dijon Road to Picardy Avenue and ultimately Perkins Road. This potential future road, although not specifically part of the station area, will provide an opportunity for a new railroad crossing that will increase pedestrian, bike, transit and vehicular accessibility to the Health District and the station area. This will benefit residents to the south of the tracks that currently can only access the Health District from circuitous vehicular routes.

Figure 4.11: Suburban Station - View to Southwest



Figure 4.12: Suburban Station - View to South



Figure 4.13: Stand Alone Suburban Station at Vehicular Drop Off - Close Up View



Figure 4.14: Stand Alone Suburban Station at Vehicular Drop Off



Lighting, Signage and Security

The station will contain adequate lighting fixtures to properly illuminate parking areas, the platform, access points and walkways. Station signage will consist of site identification signage at entrances to the site, directional signage, warning signs, bus stop signs and other signage that may be required for a station.

Passenger security and protection of property against theft and vandalism are important factors in the design of a station. Potential security measures to be taken at the Suburban Station include closed-circuit TV cameras, coordination with local police and the use of best practices recommended by Crime Prevention Through Environmental Design.



Suburban Station - View to Southwest

KEY LOCATIONS

- 1 Station platform
- 2 Street parking
- 3 Bus drop off
- 4 Vehicular drop off



Suburban Station - View to North

4.2.2 Station & Neighborhood TOD Opportunities

The recommended station site for the Suburban Station is surrounded by over 26 acres of contiguous vacant land. This presents an opportunity to create a large infill development that will provide a compact, mixed-use and walkable area in the Health District that is near the passenger rail station and other local transit connections. In addition, the site will provide space for new medical offices and space for new residential units that can increase the number of people living and working in the Health District at a range of income levels.

The complementary development analysis presents land use and development concepts for two areas: 1) a Station TOD concept that incorporates station facilities and mixed-use buildings, and 2) a Neighborhood TOD concept that includes properties most “development ready” within a 5-minute walk of the station site.

For each area, land use and development assumptions were created based on interviews with local real estate professionals, prototypical development examples, local plans and zoning regulations and other market factors. The following sections summarize the analysis. See **Appendix G** for more details.

Station TOD Concept

Land use and development assumptions were prepared for the Station TOD concept area. This concept incorporates planned station facilities as part of a larger TOD project. See **Figure 4.15**.

The Station TOD concept assumed a single mixed-use building will be constructed that includes first floor retail and station facilities and residential on the upper three floors. This concept will generate space for 77 dwelling units and 21,200 square feet of retail. Based on local regulations, over 200 parking spaces will need to serve the private development. The development concept will generate 22 new retail jobs and have an estimated value of nearly \$25 million. As ridership for the rail service

increases over time, some of the ground floor retail space will be converted to station uses to accommodate the eventual need for 2,855 square feet of enclosed space for station functions. The Station TOD concept could also accommodate two separate mixed-use buildings separated by a stand alone station building along the platform. These TOD buildings are illustrated as two story structures on the artist rendering, but could be planned as four story structures as proposed in this section.

STATION TOD CONCEPT FEATURES

- Mixed-use building(s)
- 77 dwelling units
- 21,200 square feet of retail
- 22 retail jobs
- 216 parking spaces
- \$25 million development value

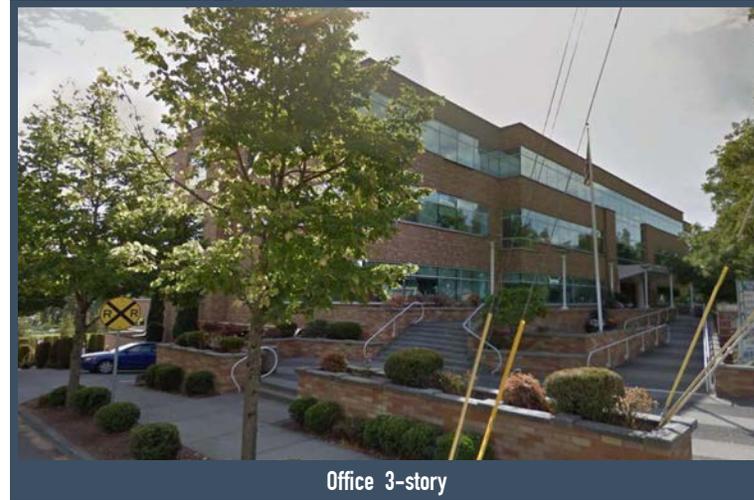
Figure 4.15: Suburban Station - Station TOD Concept



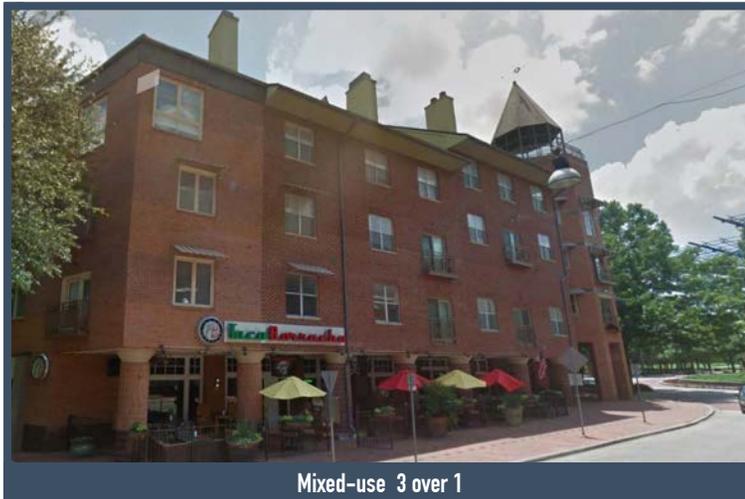
Prototypical Development Examples for Suburban Station Area



Medical Office 3-story



Office 3-story



Mixed-use 3 over 1



Apartments 3-story

Photos: Google Maps streetview

Neighborhood TOD Concept

The Neighborhood TOD concept builds upon the Station TOD concept and presents a land use scenario for how the greater station area could develop over time. See **Figure 4.16** for proposed land use types. The concept will present an opportunity to implement a large infill development that will bring new live-work-recreate opportunities to the Health District.

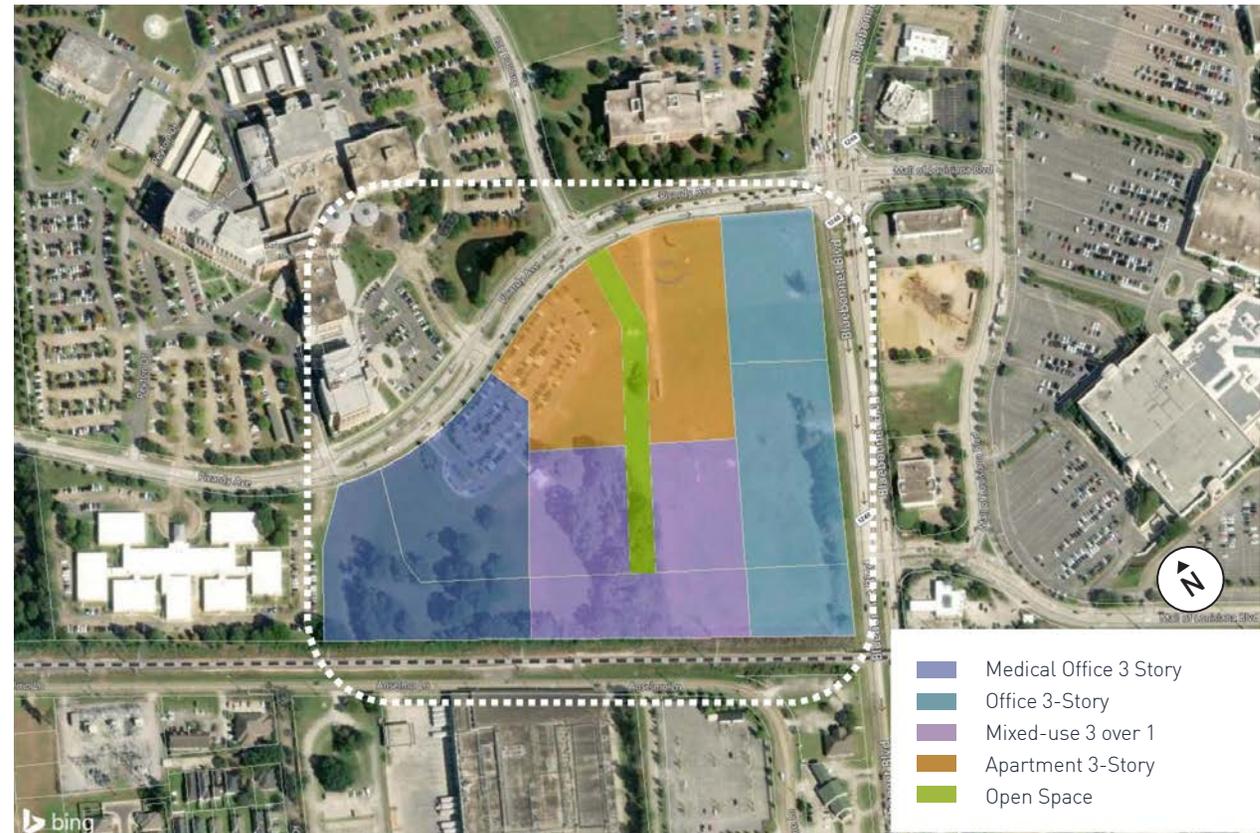
The Neighborhood TOD concept assumes the area will become a mixed-use district with a variety of retail, medical and general offices and residential uses that are built along a new connected grid roadway system with sidewalks and bike

amenities. Although a maximum of 5-stories is proposed in the concept, taller structures will not be out of context for the Health District.

In total, the Neighborhood TOD concept includes 16 new buildings, 424 new dwelling units, 77,000 square feet of retail, 190,000 square feet of medical office and 223,000 square feet of general office. This concept expands the uses in the Health District, but also accounts for the strong demand for medical office space. The Neighborhood TOD concept will generate nearly 1,150 new jobs (retail and office) and have an estimated value of \$248 million. A development of this magnitude will likely be phased over time.

Current parking regulations for the Health District will require a total of 2,700 parking spaces to serve the private development. District level parking solutions will be needed to minimize the footprint of parking on the landscape and maximize space for development. Modifications to the parking requirements should be evaluated and opportunities for shared parking facilities should be encouraged within the TOD area.

Figure 4.16: Suburban Station - Neighborhood TOD Concept



NEIGHBORHOOD TOD CONCEPT FEATURES

- 16 buildings offering a range of uses
- 424 dwelling units
- 190,000 square feet of medical office
- 223,000 square feet of general office
- 77,000 square feet of retail
- 1,150 retail and office jobs
- 2,695 parking spaces

Recommendations and Observations

- Mix of residential and mixed-use in the spine. This concept includes mixed-use buildings at the station area and along the central spine. Residential apartment buildings assume some commercial space (10%), which will be dedicated to resident-serving uses such as leasing office, gym, and child care.
- Mixed income development. The concept does not include any affordable unit set aside, but this area is a very good candidate for mixed-income developments to serve the range of employees and income levels working in the Health District.
- Open Space Corridor. Using the Addison Circle (Dallas, TX) as a visual example of urban open space, the concept includes a narrow spine of open space through the central corridor. Additional public spaces should be identified at key locations in the station area.
- Prime Office and Medical Office. This site is in a prime location for high quality office expansion, including medical. The market has generated a lot of recent activity in the Health District including new hospital facilities, and lease rates are strong.
- Parking requirements should be evaluated to avoid “over parking” the station area and to encourage district-wide parking strategies instead of individual building parking requirements.
- Connected streets. As part of station area development, a regular connected grid of streets will be crucial for navigation and traffic management. Securing street funding has been an issue in the past, and has hampered potential development.
- Health-focused Improvements. Baton Rouge Area Foundation (BRAAF) will be assisting with health-focused streetscaping that supports active and healthy lifestyles – walking, biking.
- Aesthetics. Investments in the Health District’s aesthetics – open space, street trees and vegetation, bike facilities, sidewalks and trails – will all raise the profile of the Health District.

4.2.3 Equitable TOD Analysis

The establishment of new passenger rail service and enhanced bus service in the Baton Rouge station areas, along with local planning and development efforts, is intended to facilitate transit-oriented development (TOD). TOD is characterized by increased housing density in a community where residents can conveniently walk to an array of amenities and reach a broad range of jobs by walking, biking, or transit. While TOD can provide many benefits to a community, consideration of equitable TOD (eTOD) strategies can help deliver those benefits to most of the current station area residents, rather than passing them by or displacing them.

The following sections summarize the eTOD analysis for the Suburban Station. The full analysis is in **Appendix H**. In addition, **Appendix H** includes a peer cities comparison that examines patterns of development as it relates to public transportation and related public policies in five U.S. cities (Durham, NC; Portland, Maine, Sacramento, CA; Santa Fe, NM; and Savannah, GA). These cities are comparable to Baton Rouge in that they anchor Amtrak lines linking to two mid-sized cities and are largely car dependent cities that lack extensive rapid transit systems. **Appendix H** also includes information about Employer Assisted Housing Programs.

This section summarizes an eTOD analysis for the Suburban Station in the Health District to address equitable development strategies for the station area. Core eTOD issues for the Suburban Station are: 1) retain and enhance job and housing opportunities for the resident community and 2) deliver the benefits of transit connectivity for worker and patient communities.

The eTOD analysis considers a half-mile study area around the station and is organized into the following two sections: current conditions and recommended strategies.

Current Conditions

The current conditions section summarizes the existing worker population characteristics and the existing residential population characteristics, which are discrete groups in the Suburban Station area.

Worker Population Characteristics

The Suburban Station is in a major employment center with 4,700 jobs within a half-mile radius and 14,500 jobs within a one-mile radius of the station. Medical services throughout the Health District, retail businesses focused in the Mall of Louisiana, hospitality and service businesses on the district's arterial streets, and a major logistics center south of the KCS tracks support thousands of jobs in the area. However, less than 1% of the jobs are held by residents. This indicates a separation between the community of workers and the community of residents in the Health District.

About 12% of workers in the station area commute via transit. This will not be a high percentage in cities with more extensive transit systems, but it is higher than most Baton Rouge neighborhoods. The large majority of Health District workers drive to work, creating challenges in traffic congestion and parking. Transit ridership to and from the Health District could be larger if a high frequency level of service was provided.

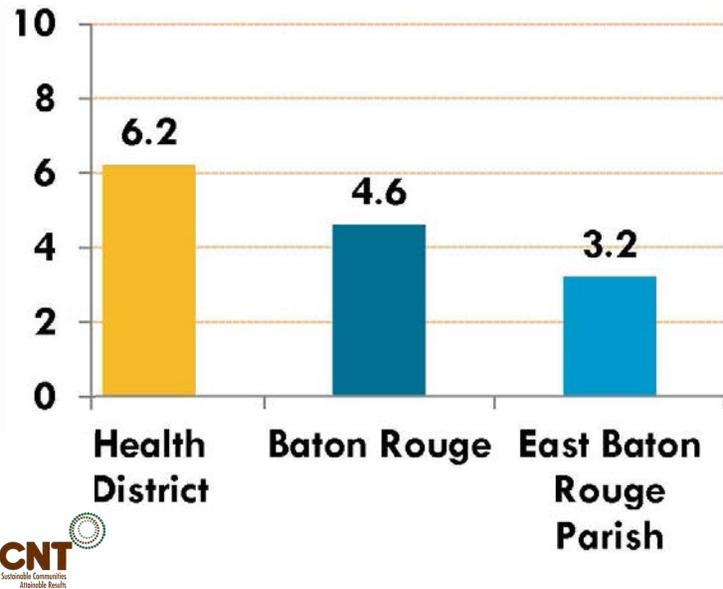
SUBURBAN STATION WORKER POPULATION WITHIN A HALF-MILE OF THE STATION

- Major employment center with 4,700 jobs
- Less than 1% of jobs held by residents
- Healthcare, retail and hospitality are dominate industries
- 12% of workers commute via transit

SUBURBAN STATION RESIDENTIAL POPULATION WITHIN A HALF-MILE OF THE STATION

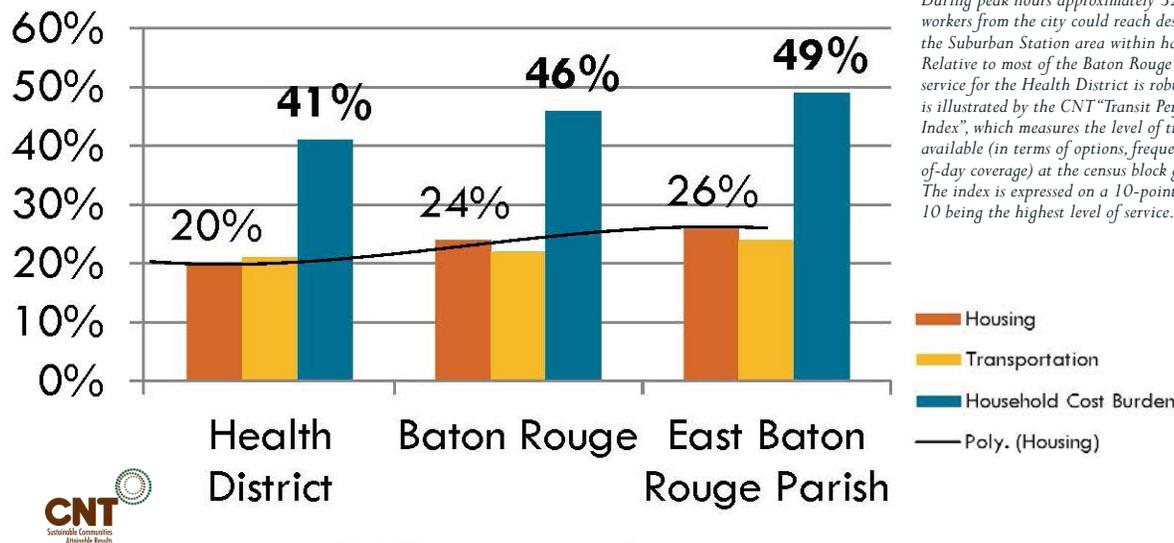
- 52% residents are African-American and 45% are white
- Median household income of \$62,249 is above the median income of \$52,487 for the metro area
- 20% of households have median household incomes less than \$15,000
- 35% of residents have completed high school, some college, or an associate degree
- 39% of housing units are in large apartment buildings of 20 or more units
- 20% of housing units are vacant
- Low-income residents to the south of the tracks are not able to practically access the station via walking and biking

Suburban Station - AllTransit™ Performance Scores



During peak hours approximately 32,000 workers from the city could reach destinations in the Suburban Station area within half an hour. Relative to most of the Baton Rouge area, transit service for the Health District is robust. This is illustrated by the CNT “Transit Performance Index”, which measures the level of transit service available (in terms of options, frequency, and time-of-day coverage) at the census block group level. The index is expressed on a 10-point scale, with 10 being the highest level of service.

Downtown Station - Household Cost Burden Comparison



During peak hours approximately 32,000 workers from the city could reach destinations in the Suburban Station area within half an hour. Relative to most of the Baton Rouge area, transit service for the Health District is robust. This is illustrated by the CNT “Transit Performance Index”, which measures the level of transit service available (in terms of options, frequency, and time-of-day coverage) at the census block group level. The index is expressed on a 10-point scale, with 10 being the highest level of service.



Residential Population Characteristics

The residential community of the Suburban Station area is racially diverse with an ethnic composition that generally mirrors the city and the parish. Station area residents are generally prosperous with a median household income above the metro area. Yet, the area contains substantial pockets of poverty.

Levels of educational attainment among station area residents are probably lower than those of the working community. However, only a third of residents have completed high school, some college, or an associate degree, appropriate for paraprofessional or support positions in medical service.

Many of the housing units in the station area are in large apartment buildings of 20 or more units. This housing density can be helpful in providing affordable homes for lower-income households and is consistent with eTOD. Currently the station area has a high vacancy rate that should be explored to understand the reasons.

Currently much of the station area is not practically accessible by active transportation (walking or biking) for residents. The station area is effectively cut in two by the KCS track, isolating the southern half of the area, which contains most of the area's low-income households. Heavily trafficked arterials and the I-10 Expressway place barriers on the east, west, and north sides of the District.

Recommended eTOD Strategies

This section summarizes the recommended eTOD strategies for the Suburban Station. These recommendations are intended to help increase the number of residents employed in the station area and increase the number Health District employees who commute by public transit, especially employees from lower income communities. By pursuing these lines of action, the Health District and the station area will realize several benefits, both from an eTOD standpoint and in meeting the broader goals of the Health District's master plan.

Develop a Regional Workforce Development Strategy

Create a regionally-focused workforce development strategy by working with the Baton Rouge area workforce development organizations and the Baton Rouge Area Chamber of Commerce to target recruitment and training for health care paraprofessionals and support staff for the Health District and to low-income communities closely connected to the Health District by transit

Increase Transit Access to and in the Health District

The following strategies are recommended to increase transit access to and within the Suburban Station area:

- Establish more frequent transit access between the Downtown and Suburban Stations
- Intensify local bus service between Suburban Station and nearby low-income communities
- Reduce employees' federal tax burden for income spent on transit
- Explore shared mobility options such as car sharing and bike sharing
- Provide employee education on the scale of benefits from transportation cost savings

Increase Accessibility through Active Transportation

Increasing accessibility through active transportation is important to achieving eTOD for the station area. Key recommendations for the Suburban Station include:

- Prioritize the construction of Midway Boulevard as a complete street that will cross the KCS tracks per the Health District master plan to increase access to the area's lower income communities.
- Expand the multi-use path (Health Loop) - through the district and connect it with the new transit station and other district destinations.
- Provide bicycle lanes and sidewalks on Picardy Avenue north of the new station.
- Study the creation of safe pedestrian and bicycle crossings of Essen Lane and Bluebonnet Boulevard

Support and Participate in Affordable Housing Development and Transit-Accessible Communities

The development of affordable housing that could serve Health District workers will complement and reinforce all other strategies for achieving eTOD in the station area. Several following strategic actions will optimize the potential of success and full benefits from the Health District's involvement in such development

- Partner with experienced multi-unit, affordable housing development organizations to ensure high quality in affordable developments
- Explore options for an employer assisted housing (EAH) program to ensure that affordable housing development is successful and serves the best interests of the Health District (Appendix G includes more information about EAH)
- Explore options for the support of amenities for residential communities to attract thoughtful residents who have options in choosing their homes
- Explore employer assisted housing and community development investments in transit-connected communities

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CHAPTER 5: STATION IMPLEMENTATION PLAN

This chapter describes the implementation plan for the downtown and suburban passenger rail stations in Baton Rouge. The chapter includes a phasing strategy, milestones and key action steps, a preliminary financial plan and station ownership and governance options. The purpose of the implementation plan is to establish a framework that the East Baton Rouge Redevelopment Authority (RDA) and its local partners can work from to coordinate station development with the implementation of the passenger rail service for the Baton Rouge to New Orleans corridor.

5.1 PHASING STRATEGY

This section lays out a phasing strategy, as shown in **Figure 5.01** and **Figure 5.02**, for the Downtown and Suburban Stations to demonstrate how the stations and multimodal connections will be expanded overtime as funding becomes available and ridership increases on the Baton Rouge-New Orleans corridor service. The phasing strategy also demonstrates how the station will be integrated into a catalytic Station TOD project and larger Neighborhood TOD plan as described in Chapter 4. The phasing strategy assumes the stations and the TOD plans will be implemented over a 20-year timeframe between 2025 and 2045.

Phase 1 represents the minimal amount of station facility improvements that will be required for start-up passenger rail service at each station location. Phase 1 includes the construction of a platform, station access, drop off/pick up lanes and parking facilities. This phase does not include an enclosed station building or enhanced multimodal connections. Phase 1 should only be pursued if sufficient

local funds are not available to implement Phase 2 improvements at the time of start-up service.

Phase 2 includes additional station improvements and mode connections at each station to provide comprehensive station facilities that are integrated into Station TOD projects as part of public-private partnerships. Phase 2 assumes an enclosed station building with a climate-controlled passenger waiting area, restrooms and self-serve ticket kiosks will be provided at each location as part of the Station TODs. Under Phase 2, additional improvements to local roadways are implemented and connections to transit services are expanded.

Phase 3 for each station will maximize the station facilities and passenger waiting areas to serve expanding passenger service and ridership levels and provide additional station area improvements to facilitate the Neighborhood TOD vision discussed in Chapter 4. The station facilities in Phase 3 are sized to accommodate on-site Amtrak staffing needs for ticketing and baggage service. However, the need for these services should be evaluated in coordination with the owner of the passenger rail service as these services can significantly increase costs for the corridor service and are not typically required for relatively short intercity passenger rail corridors such as the proposed Baton Rouge-New Orleans service. However, other factors and the needs of the corridor service should be considered during this phase to assess the necessity for these services.

The phasing plans for each station will be influenced by several factors including the availability of funding sources and the ability of the Baton Rouge-New Orleans

rail service to obtain state and federal commitments and funding approvals. Also, local market demand will play a key role in phasing. The current phasing strategy assumes station facilities and private development will occur incrementally and simultaneously over time. However, early demand for private development at the stations could expedite some of the transportation and site improvements needed for the stations and the build out of TOD.

One of the main benefits to the conceptual design plans for the stations is that they are designed to be flexible and integrated into larger mixed-use districts. This will allow private development to precede rail service if an executed public-private partnership agreement has provisions in place to reserve station-related space in anticipation of corridor service.

Figure 5.01: Station Phasing Strategy

DOWNTOWN STATION PHASING STRATEGY

PHASE 1: START UP STATION FACILITIES (2025)

- Construct new track off mainline, platform and canopy
- Construct vehicular access/drop off lanes for passengers, taxis, ride-hail services, and station wayfinding signage along 14th Street or as part of Phase 1 parking
- Utilize existing parking under North Boulevard viaduct and additional surface/street parking spaces (130 spaces)
- Construct pedestrian walkways from parking and drop off areas to platform
- Repave/minor improvements to 14th Street
- Provide separate bus transit lanes/stops

PHASE 2: EXPANDED STATION FACILITIES AND STATION TOD (2035)

- Provide station with an enclosed, climate-controlled passenger waiting area, restrooms and self-service ticket kiosks on first floor of TOD building and/or standalone facility (2,000 SF interior station space)
- Construct Station TOD building(s) with public-private partnership
- Construct dedicated vehicular drop off and pick up lanes for passengers, taxis, ride-hail services and expand wayfinding signage.
- Expand parking facilities to north of North Boulevard to provide a total of 260 spaces for station purposes
- Expand pedestrian walkways to connect parking, vehicular and transit access, platform and station waiting area
- Reconstruct 14th Street into complete street with sidewalks and pedestrian amenities (landscaping, street lights, colored pavement, etc.)
- Provide signature intersection treatment at North Boulevard/12th Street and upgrade Government Street/14th Street intersection to accommodate increasing traffic.

PHASE 3: BUILD-OUT STATION FACILITIES AND NEIGHBORHOOD TOD (2045)

- Expand the enclosed passenger waiting area and evaluate need for on-site ticketing and baggage services (4,300 SF interior space)
- Facilitate private development in greater station area
- Improve adjacent roadways and sidewalks
- Provide bike connections to Downtown Greenway System via planned Louisiana Connector
- Transition surface parking to structured parking to serve station and private development (390 total spaces required for station)
- Provide pedestrian access across tracks just south of North Boulevard
- Provide public space amenities on east side of tracks
- Expand transit service (enhanced bus, or Bus Rapid Transit (BRT)) to provide last-mile connectivity to central business district, BR airport and other key destinations in Baton Rouge

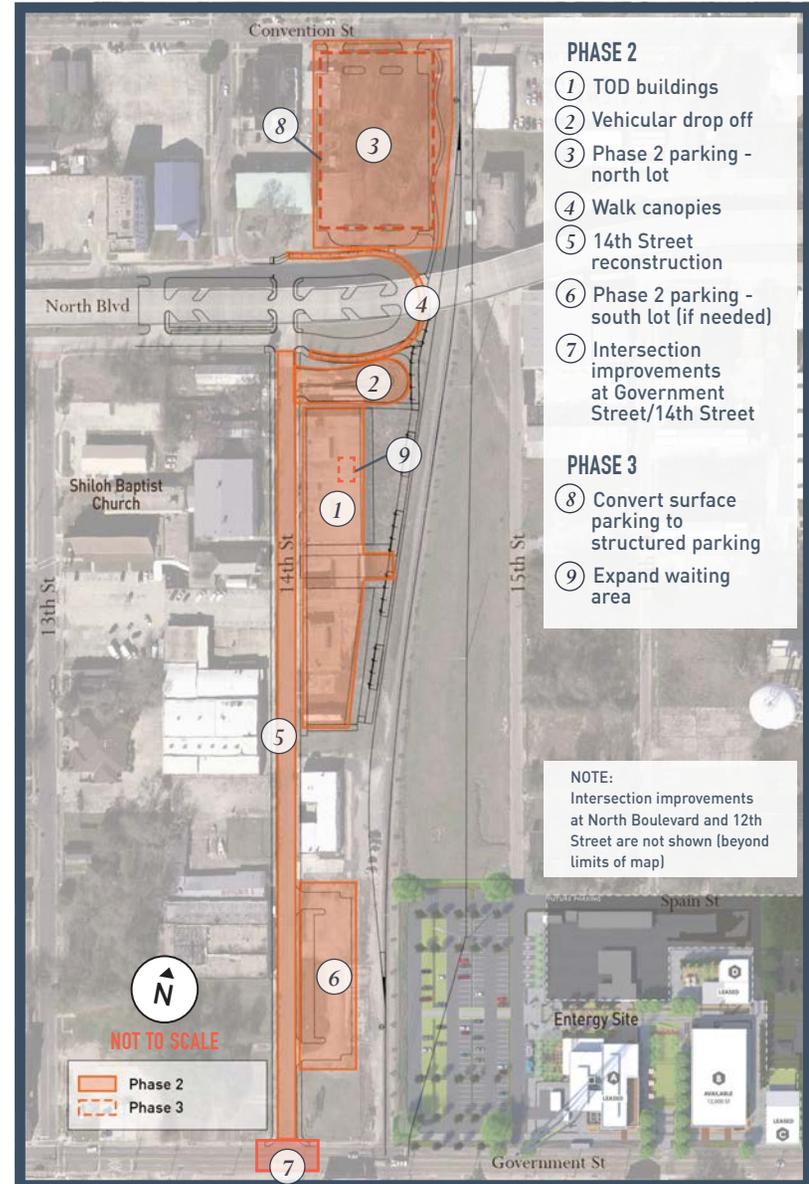
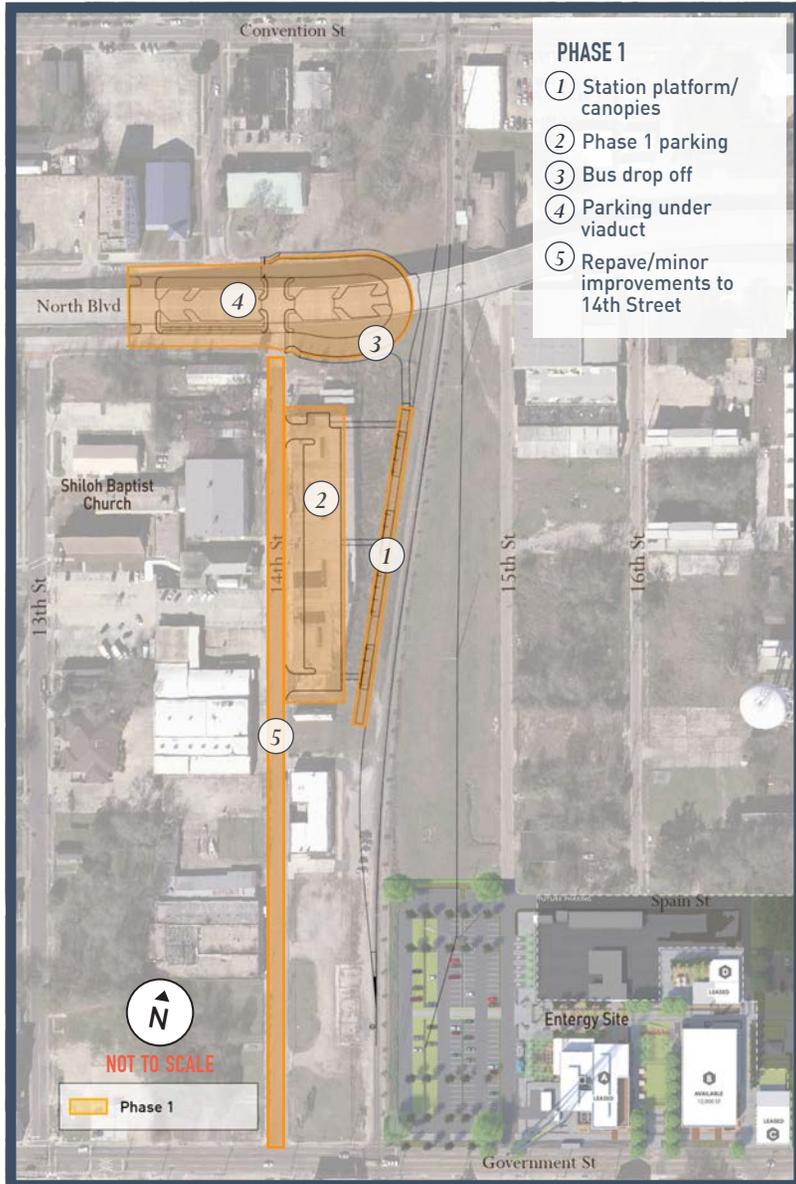


Figure 5.02: Station Phasing Strategy

SUBURBAN STATION PHASING STRATEGY

PHASE 1: START UP STATION FACILITIES (2025)

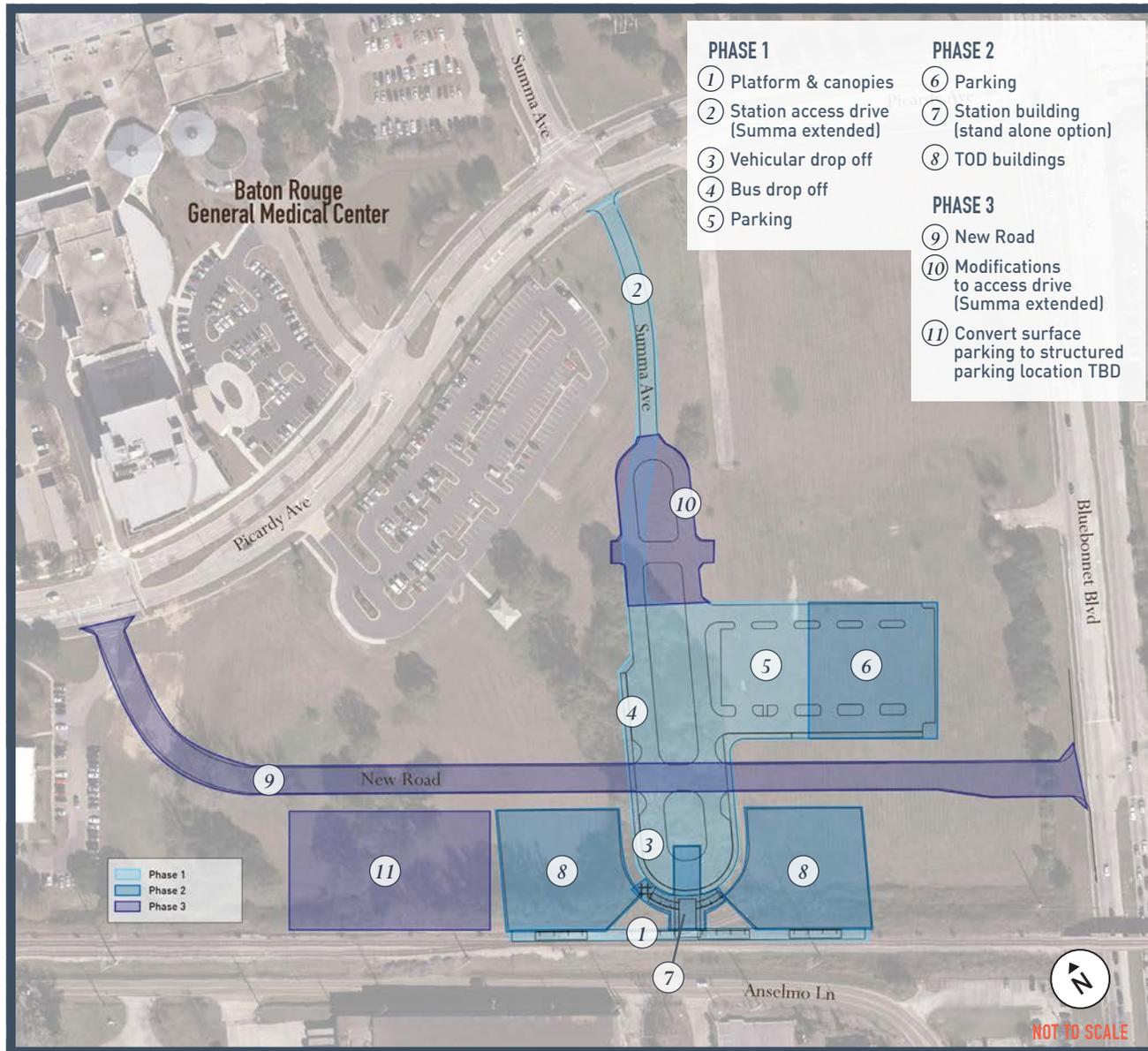
- Construct platform and canopy
- Construct vehicular access/drop off lanes for passengers, taxis, ride-hail services and station signage
- Provide surface parking spaces (50 spaces)
- Construct pedestrian walkways from parking and drop off areas to platform
- Construct access road between Picardy Avenue and station (Summa Avenue extension)
- Construct bus transit lanes/drop off area

PHASE 2: EXPANDED STATION FACILITIES AND STATION TOD (2035)

- Provide station with an enclosed, climate-controlled passenger waiting area, restrooms and self-service ticket kiosks on first floor of TOD building and/or standalone facility (1,000 SF interior space)
- Construct Station TOD building(s) with public-private partnership
- Provide vehicular drop off and pick up lanes for passengers, taxis, ride-hail services and expand wayfinding signage.
- Provide on-street bus lanes/stops for local transit and proposed Health District shuttle service
- Expand parking facilities to provide a total of 124 spaces for station purposes
- Provide pedestrian walkways to connect parking, vehicular and transit access, platform and station waiting area

PHASE 3: BUILD-OUT STATION FACILITIES AND NEIGHBORHOOD TOD (2045)

- Expand the enclosed passenger waiting area and evaluate need for on-site ticketing and baggage services (2,855 SF interior space)
- Facilitate private development in greater station area
- Expand Summa Avenue extension into boulevard with wide median that can accommodate public gathering space
- Construct roadway between Picardy Avenue and Bluebonnet Boulevard with bus stops
- Construct the planned Midway Boulevard with vehicular and pedestrian connections over railroad tracks
- Transition surface parking to structured parking to serve station and private development (240 total spaces required for station purposes)
- Provide public space amenities
- Provide bike connections to Health Loop Trail
- Expand local transit connections



5.2 MILESTONES, ACTION ITEMS & SCHEDULE

This master plan lays out a bold vision for the Baton Rouge stations that includes a variety of public transportation elements and private development components. As a result, implementation of the two Baton Rouge stations and their associated TOD will be a complex endeavor that will require a lead local agency, such as the RDA, that is supported by strong local partners.

The lead agency must have experience with complex projects and be able to usher the political, financial and organizational resources that are needed to accomplish a dynamic and multifaceted project. It is recommended

that the lead agency create a steering committee that will meet regularly to discuss plan implementation progress. The committee should assist the lead agency with key decisions at project milestones, help identify funding sources, coordinate with the implementation agency for the corridor service and update the implementation plan as additional information and resources become available. The steering committee should include representation from the RDA, City-Parish, Louisiana DOTD, CATS, Health District and other key stakeholders that will have oversight over certain aspects of the station and its associated facilities. Public and stakeholder input should also be an integral part of the ongoing planning and design efforts for the stations.

Table 5.01 summarizes the project development milestones for the two Baton Rouge stations through

construction. It also identifies key action steps that must be implemented by the responsible agency for each milestone. The action steps are integrated with the typical milestones for corridor service implementation and are geared to carrying out Phase 2 station level improvements discussed in **Section 5.1**.

The schedule, shown on **Figure 5.03**, shows a timeline for the station project development milestones through construction. Although no timeline for the corridor service has been established, the schedule incorporates typical corridor service milestones and timeframes to demonstrate critical coordination elements between the agencies responsible for the corridor service and the agencies responsible for implementing the station components. The schedule should be updated once a definitive corridor service schedule is known.

Table 5.01: Implementation Milestones & Action Steps for Downtown & Suburban Stations

PROJECT DEVELOPMENT MILESTONE	ANTICIPATED RESPONSIBLE AGENCY	KEY ACTION STEPS
Prepare conceptual planning and design concepts (WE ARE HERE)	RDA	Identify recommended station sites, develop conceptual design plans and prepare initial implementation and funding plan.
Develop local agreements	RDA	Develop agreements between RDA, City-Parish, CATS, BREC and Louisiana DOTD to establish roles and responsibilities for stations, transit services, bike and pedestrian connections, TOD and rail service.
Conduct studies to identify TOD plan and policy changes and local transportation improvements	City-Parish	Conduct studies to identify local policy and regulatory changes to facilitate TOD. This may include updating neighborhood plans, amending the comprehensive plan, developing affordable housing strategies, and identifying changes to zoning and parking regulations. Prepare a plan for local roadway improvements, sidewalks, streetscaping and bike connections. Evaluate the feasibility of an Economic Development District to support station area improvements.
Identify local funding match	RDA	Work with local partners and steering committee to identify local match funds for federal grants. Most federal applications require a minimum of 20 percent local funds that are committed at the time of application. Federal applications with at least a 50 percent committed local match are more competitive.
Submit federal grant application in coordination with corridor service	BRAF/Louisiana DOTD (corridor) RDA (Stations)	Work with BRAF/Louisiana DOTD to include stations in Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant application in coordination with corridor service in 2019. Local cost share requirement for station components should be approved at time of application.
Conduct environmental analysis and NEPA documentation	Louisiana DOTD (corridor) RDA (stations)	Conduct environmental study of stations in accordance with the National Environmental Policy Act (NEPA) as part of the environmental analysis for the corridor service. This action assumes a federal grant award for the corridor service. It is assumed NEPA will be completed concurrently with preliminary engineering.

Table 5.01 Continued

PROJECT DEVELOPMENT MILESTONE	ANTICIPATED RESPONSIBLE AGENCY	KEY ACTION STEPS
Conduct preliminary engineering studies	Louisiana DOTD (corridor) RDA (stations)	Develop preliminary plans for rail station improvements in coordination with preliminary plans and design criteria developed for corridor service. Louisiana DOTD will be responsible for track and platform design at stations and RDA will be responsible for station building and local transportation access for the station.
Secure additional funding sources for station area improvements and transit expansion to station	CATS City-Parish RDA	Secure additional funding resources that are required for station implementation, local transportation connections and transit expansion. Potential federal sources may include the BUILD grant program and FTA discretionary and formula grants for transit stations. A partnership with CATS will be required to access FTA funding programs.
Implement TOD plan and policy changes and local transportation improvements	City-Parish	Obtain approvals for local policy and regulatory changes to facilitate TOD including neighborhood plans, amending the comprehensive plan, developing affordable housing strategies, and changes to zoning and parking regulations. Advance approvals to fund local roadway improvements, sidewalks, streetscaping and bike connections. Advance approvals for Economic Development District to support station area improvements if determined to be feasible.
Identify development partner and prepare development agreement for Station TOD	RDA	Develop RFP and solicit proposals for development partner to form a public-private partnership agreement to implement Station TOD project. The agreement should identify who is responsible for property acquisition, design and construction of station facilities and TOD elements; and ongoing operations and maintenance.
Secure land for station facilities and Station TOD	RDA/Development Partner	Acquire land and/or obtain long-term lease agreement for station TOD footprint. Consider using the development partner for property negotiations if feasible.
Prepare final design plans	Louisiana DOTD (corridor) RDA (stations)	Develop final plans for rail station improvements in coordination with final plans and design criteria for corridor service. Louisiana DOTD will be responsible for track and platform design at stations and RDA will be responsible for station building/waiting area and local transportation access to station.
Construct Station TOD components	RDA/Development partner	Since the Station TOD construction is not likely to take as long as the rail corridor infrastructure improvements, the construction of the Station TOD buildings could be advanced.
Construct corridor infrastructure and station platform and track	Louisiana DOTD (corridor) RDA/Development partner (stations)	Construct all the necessary infrastructure elements to enable operation of a passenger rail station and construction of TOD buildings. Louisiana DOTD will be responsible for construction of track and platforms at the stations. RDA and development partner will be responsible for station building/waiting area and local transportation access to station and TOD.

The schedule assumes the Baton Rouge stations will be part of a potential Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant submission in 2019. This will require the lead agency for the stations to coordinate closely with its local partners and those responsible for corridor implementation over the next six months to develop a project scope for the grant proposal and identify requirements for local match

funds. Assuming funding for the corridor and stations is secured in 2019, the stations could be ready to open in conjunction with the corridor service in 2025. Since the construction of the Station TOD components are not likely to take as long as the corridor service improvements, the private development components associated with the Station TOD could be on an expedited schedule.

Figure 5.03: Station Implementation Schedule

ACTION ITEMS	MONTHS	2018				2019				2020				2021				2022				2023				2024			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Prepare conceptual planning and design concepts (WE ARE HERE)	12	█	█	█	█																								
Develop local agreements	12					█	█	█	█																				
Conduct studies to identify station Neighborhood TOD plan and policy changes and local transportation improvements	18					█	█	█	█	█	█	█	█																
Identify local funding match	9			█	█	█	█	█	█																				
Submit federal grant application in coordination with corridor service	6							█	█																				
Conduct environmental analysis and NEPA documentation	24									█	█	█	█	█	█	█	█												
Conduct preliminary engineering studies for station and corridor	24									█	█	█	█	█	█	█	█												
Secure additional funding sources for stations	12									█	█	█	█	█	█	█	█												
Implement station Neighborhood TOD plan and policy changes and local transportation improvements	24													█	█	█	█	█	█	█	█								
Identify development partner and prepare development agreement for Station TOD	12													█	█	█	█												
Secure land for station facilities and Station TOD	18													█	█	█	█	█	█	█	█								
Prepare final design plans for station and corridor	12																	█	█	█	█								
Construct Station TOD components	12																					█	█	█	█				
Construct corridor infrastructure and station platform and track	24																					█	█	█	█	█	█	█	█

5.3 FUNDING PLAN

The section identifies potential funding sources for the stations and estimates preliminary capital and operating costs for the construction and operation of passenger rail stations in Baton Rouge. This section focuses on costs associated with station facilities and does not address costs related to private development.

Table 5.02: Potential Station Funding Sources

TYPE	FUNDING PROGRAM/SOURCE	ADMINISTRATOR	ELIGIBLE COSTS	CONSIDERATIONS
Federal	Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants	US DOT	Capital	Flexible funding source that could provide up to 80 percent of needed funds; highly competitive program
	Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program	FRA	Capital	Funding source specifically for passenger and freight rail modes; begin to prepare now for potential joint application with corridor service in 2019
	Bus and Bus Related Equipment and Facilities Program (Section 5339)	FTA	Capital	Funding source is only applicable if the stations include an integrated bus component in partnership with CATS
	Urbanized Area Formula Program (Section 5307)	FTA	Capital	Funding source is only applicable if the stations include an integrated bus component in partnership with CATS
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Louisiana DOTD	Capital; operations (startup only)	Administered by Louisiana DOTD; best pursued if station is an intermodal center and upgrades to the facility are projected to produce increased ridership and a corresponding reduction in automobile travel
	Community Development Block Grant (CDBG)	City-Parish	Capital	Funds administered by City-Parish; potential source if station is part of a larger mixed-use development designed to revitalize an economically distressed neighborhood
State	State legislative appropriation for corridor service and stations	Louisiana DOTD	Capital	Requires approval by Louisiana State Legislature; could include grants to station communities to provide some basic station elements such as platforms
	Economic Development District (EDD)	City-Parish	Capital; operations	Conduct feasibility study to determine revenue projections and potential impacts and benefits to area; can be used as local match for federal grant programs
Local	Public-Private Partnerships	RDA	Capital; operations	Can be used to leverage the value created in surrounding real estate by high quality passenger rail and transit systems; requires strong development partner
	Station Parking Fees	RDA	Operations	Dedicated station parking facilities may be able to generate revenue to offset some station operations and maintenance costs

5.3.1 Funding Sources

This section describes potential federal, state and local funding sources that could be used to implement the Downtown and Suburban Stations. A summary of the funding sources is provided in **Table 5.02**.

Federal Funding Sources

The following sections describe the most commonly used federal funding programs for rail and transit stations.

USDOT – Build Grant

The U.S. Department of Transportation administers the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants, formerly known as TIGER. BUILD grants are for capital investments in surface transportation (roads, rail, transit, ports, intermodal facilities), which are awarded annually on a competitive basis. These grants provide the most flexibility since a range of transportation projects for several modes are eligible including capital costs for multimodal passenger rail stations.

The amount of funding for BUILD grants fluctuates since it is appropriated by Congress annually. In fiscal year 2018, Congress appropriated \$1.5 billion for the grant program with a maximum award of \$25 million for all projects. The minimum award for urban projects is \$5 million. This means the total project cost must be at least \$6.25 million to meet match requirements.



Capital Area Multimodal Gateway, MI

Source: <http://www.wkar.org/post/new-cata-multimodal-station-begins-intercity-bus-service#stream/0>

BUILD grants are very competitive, and the application must address all the requirements of the Notice of Funding Opportunity including the evaluation criteria. To increase the chance of an award, the application should:

- Exhibit strong project readiness to show funds can be obligated within the statutory timeframe.
- Identify strong funding partnerships with other government agencies and/or private entities.
- Provide a 50 percent non-federal match with committed (approved) funds. (A minimum of 20 percent is required by law, but applications with higher percentages are more competitive).
- Demonstrate a positive benefit-cost-ratio.
- Show community revitalization efforts, economic development and job growth opportunities

Given the competitive nature of these grants and the need for local resources and partnerships, the RDA should begin to prepare for a BUILD grant well in advance of the application deadline.

FRA – CRISI Grant

The Federal Railroad Administration (FRA) administers the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program. It is a new discretionary funding source that authorized \$65.2 million in fiscal year 2017 and \$318.4 million in fiscal year 2018. The purpose of this program is to support infrastructure for intercity passenger and freight rail to improve railroad safety, enhance multimodal connections and lead new or substantially improved intercity passenger rail corridors. Passenger rail stations are eligible for CRISI grants.

CRISI applicants must identify one of the following four tracks for the eligible project: Track 1—Planning; Track 2—PE/NEPA; Track 3—FD/Construction; or Track 4—Safety Programs and Institutes. CRISI is one of the few federal grant programs that provides funding for planning and PE/NEPA project phases.

The program does not have predetermined minimum or maximum dollar thresholds for awards. The federal share

cost share for the program is 80 percent. However, FRA stresses that applications with a federal cost share of 50 percent or less are more competitive and will be given selection preference. FRA also encourages applicants to include other state, local, public or private entities as funding partners to increase the competitiveness of the grant application. A positive benefit-cost ratio is required similar to BUILD grants.

The implementation plan assumes the RDA and its local partners will apply for CRISI funds in 2019, as part of the application for the corridor service. Several actions are required to prepare for this application submittal, as described in **Section 5.2**.

FTA – Bus and Bus Related Equipment and Facilities Program

FTA's Section 5339 Bus and Bus Facilities program could be a funding option if the rail stations include an integrated bus component in partnership with CATS. Eligible applicants include recipients that allocate funds to fixed route bus operators, and to states, and local governmental authorities that operate fixed route bus service.

This program uses a competitive allocation process for states and transit agencies to replace, rehabilitate and purchase buses and to construct bus-related facilities including maintenance facilities and transportation centers. Section 5339 funds are for capital projects only and are intended for major improvements to bus transit systems that will not be achievable through formula allocations.

A total of \$264 million was awarded to 139 projects during fiscal year 2017. Individual funding awards ranged from \$32,000 to \$6 million. The federal share of eligible capital costs is 80 percent.

FTA – Section 5307 Urbanized Area Formula Program

A portion of costs may be eligible for funding under the Section 5307 Urbanized Area Formula Program if the rail stations include an integrated bus component in partnership with CATS. This program makes federal resources to designated recipients, such as CATS, for a wide variety of planning, design and construction projects including construction of passenger facilities. Funding is apportioned on the basis of legislative formulas. The federal share is not to exceed 80 percent of the net project cost for capital expenditures.

Congestion Mitigation and Air Quality (CMAQ) Improvement Program

The FAST Act provides CMAQ funding to states in non attainment or maintenance for ozone, carbon monoxide, and/or particulate matter. CMAQ funds may be used to establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation infrastructure, congestion relief efforts and diesel engine retrofits. Other CMAQ projects include operating assistance for new transit services, travel demand management (TDM) strategies, traffic flow improvement programs that reduce emissions and bicycle/pedestrian facilities and programs. Grants through CMAQ are best pursued by communities where the station is an intermodal center and upgrades to the facility are projected to produce increased ridership and a corresponding reduction in automobile travel. The FAST Act provides from \$2.3 billion to almost \$2.5 billion in CMAQ funding for each year of the authorization - 2016 through 2020.

Although this is a federal program, it is administered by the Louisiana DOTD who is responsible for the selection process. The program typically funds capital projects, but it can also be used for startup operational costs for intermodal facilities up to three years. Since this is a federally funded program, it will not count towards the local match requirements for federal grant programs.

According to Louisiana DOTD's website, as of 2017, no new applications are being accepted for this program

Community Development Block Grants

U.S. Housing and Urban Development (HUD) allocates Community Development Block Grant (CDBG) funds to states, which then redistribute funds to local governments such as Baton Rouge. The purpose of the CDBG program is to ensure decent affordable housing, to provide services to the most vulnerable people and to create jobs through the expansion and retention of businesses. CDBG funds may be used for activities such as the acquisition of real property, rehabilitation of non-residential structures and the construction of public facilities and improvements. Depending on availability, CDBG funds could potentially be used for a passenger rail station which is part of a larger mixed-use development designed to revitalize an economically distressed neighborhood such as the Downtown Station in Mid City. The City-Parish Office of Community Development administers CDBG funds in Baton Rouge.

State Funding Sources

A potential source of state funds could be through a special state appropriation for the corridor service. This will require approval by the Louisiana State Legislature. The corridor-wide cost estimate completed for the Baton Rouge-New Orleans Strategic Business Plan (2014) assumed \$1.5 million will be provided for each station along the route to assist with the construction of a basic station facility including a platform, shelter and parking. Additional enhancements, such as the construction of a signature terminal station in Baton Rouge, will require additional funds in each locality.

Local Funding Sources

This section reviews potential local funding sources that could be used for the implementation of the two stations in Baton Rouge.

Economic Development District

Economic Development Districts (EDD), which are enabled by Louisiana State Statutes (33:9038.31 and 33:9038.32), allow municipalities to capture incremental and supplemental property and sales tax revenues within a defined boundary. An EDD will require approval from the City-Parish Metropolitan Council. A property owner referendum may also be required.

Within an EDD, up to four different revenue streams are enabled by state law as shown in **Table 5.03**. State law allows the use of one or all these streams to generate revenues for an EDD.

EDDs can be used as a local funding source to help pay for station-related infrastructure and to help fund a local match for federal funding applications. It can also be used to support the Station and Neighborhood TOD concepts by providing funding for roadway improvements, multimodal transportation connections, streetscaping and other enhancements that will improve the station area and help attract additional private investment. If one of the supplemental revenue streams is used, it can be used to support annual operations and maintenance costs for the stations.

A feasibility study for an EDD will need to be prepared by the City-Parish to determine potential revenue streams and their potential impacts and benefits to existing and future residents in the district.

The use of the incremental property and/or sales tax revenue streams may have the least impact on property owners and taxing jurisdictions since it directs only new tax revenues above a baseline year from future development to the EDD. It does not change current property mil rates and/or sales tax rates in the district. However, the incremental revenue streams are less

certain since they depend on future development occurring in the district. Also, since property taxes are relatively low in Baton Rouge, the revenues generated by incremental property tax may not be sufficient to support required improvements.

The use of supplemental property and/or sales tax revenue streams in an EDD are more certain since they levy new taxes on existing property and sales tax bases and are not dependent solely on revenues from future development. Also, supplemental revenues can be used to support annual operating and maintenance expenditures for the stations. Supplemental taxes may, however, increase property taxes for existing owners and could discourage some people from shopping in the district due to higher sales tax rates. These potential impacts may be offset by the benefits the EDD could bring to the area and will need to be closely evaluated to determine what's best for residents and businesses in the district.

Public-Private Partnerships

A public-private partnership can be used to leverage the value created in surrounding real estate by high quality passenger rail and transit systems. The lead agency for station implementation can capitalize on this increased value by partnering to develop the land near the stations. In doing so, the lead agency can create revenue streams to support transit and rail improvements and facilitate the Station TOD plan. **Table 5.04** summarizes three common types of public-private partnerships. All scenarios will require the solicitation of a development partner through a competitive RFP process.

Station Parking Fees

The Downtown Station is programmed to have 390 station spaces and the Suburban Station is programmed to have 240 station parking spaces by 2045. If fees are collected from station parking facilities, the revenues could be used to offset station operations and maintenance costs. The fees could come directly to the owner of the station or they could be collected by a private development partner in exchange for management of the parking and other grounds at the station site. This may be cost effective since the Station TOD will likely require additional parking for the private development.

Table 5.03: EDD Revenue Streams

TYPE	DESCRIPTION	ELIGIBLE EXPENSES
Incremental property tax	Captures incremental property tax above baseline year in district	Capital
Incremental sales tax	Captures incremental sales tax above baseline year in district	Capital
Supplemental property tax	Levies up to an additional 5 mils on all taxable property in district	Capital and operating
Supplemental sales tax	Levies up to 2 percent additional sales tax on eligible purchases in district	Capital and operating

Table 4: Public-Private Partnership Scenarios

TYPE	DESCRIPTION	CONSIDERATIONS
Fee-Simple Sale and Lease Back Scenario	<ul style="list-style-type: none"> • Lead agency acquires land and sells it to developer • Lead agency enters into a long-term lease agreement with developer for station facilities and utilizes proceeds of the sales to offset lease cost 	Under this option the developer will be responsible for ongoing site maintenance in return for a negotiated lease price. This scenario reduces the number of contracts that the lead station agency will be required to oversee including grounds maintenance and daily cleaning services. This option will give the lead agency the least control over the Station TOD, but it places nearly all the risk on the developer.
Land Lease Scenario	<ul style="list-style-type: none"> • Lead agency acquires land and maintains ownership • Lead agency leases land to developer for either upfront payment or a steady stream of long-term income, or some combination of the two. 	This option will spread the risk between the lead agency and the developer. It also provides opportunities for both entities to generate ongoing revenue streams. This option is familiar to the RDA since it is similar to the Electric Depot development partnership
Joint Development Scenario	<ul style="list-style-type: none"> • Lead agency acquires land and uses it as an equity stake in partnership with developer. • Lead agency will participate in project net cash flows in proportion to their share of equity contribution. • Cash flows will pay for station facilities and ongoing station operations and maintenance 	This option gives the lead agency the greatest control of the development and has the highest potential rate of return. However, this option also comes with the highest risk associated with fluctuations in the real estate market. It is important that the selected development partner has sufficient financial resources and demonstrated development capabilities to minimize risk.

5.3.2 Cost Estimates

Capital Costs

The section identifies capital costs for the Downtown Station and Suburban Station for the three phases identified in **Section 5.1**, as shown in **Table 5.05** and **Table 5.06**. The Build-Out capital cost estimate is \$29 million for the Downtown Station and \$23 million for the Suburban Station. The cost estimates include costs for the platform, station building, parking facilities, transportation access and other site development elements required for the stations. The tables show the cost to build the phase including the costs that may have already been incurred in a prior phase. Cost savings will be possible if initial construction begins with Phase 2.

Cost estimates are based on conceptual plans. The costs will be updated during the subsequent preliminary engineering/NEPA project phase when more details are identified and design criteria for the corridor are established. The cost estimates do not include costs for private development.

Table 5.05: Estimated Capital Cost – Downtown Station

Downtown Station	Professional Services	Property Acquisition	Construction	Total Cost for Phase
Phase 1 Estimate	\$1,101,000	\$513,000	\$4,074,000	\$5,688,000
Phase 2 Estimate (includes Phase 1)	\$2,775,000	\$1,440,000	\$10,120,000	\$14,335,000
Phase 3 Estimate (includes Phase 1 and 2)	\$5,611,000	\$1,440,000	\$21,937,000	\$28,988,000

Notes

1. All costs are 2018 dollars.
2. Cost estimates do not include railroad track and signal work.
3. Cost estimates do not include facilities required for train maintenance and cleaning.
4. Cost estimates do not include Transit Oriented Development (TOD) construction costs for buildings, Downtown Station center canopy, parking and related infrastructure.
5. Cost estimate should be considered conceptual and is subject to change. A 30% contingency was applied.

Table 5.06: Estimated Capital Cost – Suburban Station

Suburban Station	Professional Services	Property Acquisition	Construction	Total Cost for Phase
Phase 1 Estimate	\$1,489,000	\$1,636,000	\$4,567,000	\$7,692,000
Phase 2 Estimate (includes Phase 1)	\$1,902,000	\$2,104,000	\$5,820,000	\$9,826,000
Phase 3 Estimate (includes Phase 1 and 2)	\$4,437,000	\$2,104,000	\$16,385,000	\$22,926,000

Notes

1. All costs are 2018 dollars.
2. Cost estimates do not include railroad track and signal work.
3. Cost estimates do not include facilities required for train maintenance and cleaning.
4. Cost estimates do not include Transit Oriented Development (TOD) construction costs for buildings, Downtown Station center canopy, parking and related infrastructure.
5. Cost estimate should be considered conceptual and is subject to change. A 30% contingency was applied.

Operating Costs

The section identifies annual operating and maintenance (O&M) costs for the Downtown Station and Suburban Station for the three phases identified in **Section 5.1**, as shown in **Table 5.07**. The Build-Out O&M cost estimate is \$118,200 for the Downtown Station and \$95,000 for the Suburban Station. The cost estimates include annual operating and maintenance costs for janitorial/cleaning services, landscaping/grounds maintenance and utilities.

Amtrak staffing costs for ticketing and baggage services are not assumed in the operations and maintenance cost estimate because it is assumed that these costs will be paid for by the owner of the corridor service and will not be a local cost. Also, any operations and maintenance costs associated with the trains will be provided by the corridor service and is not included in this estimate.

The annual operating and maintenance costs for the stations will likely be influenced by the structure of the public-private partnership agreement between the lead agency and the TOD development partner. Since the stations are envisioned to be part of a larger TOD project, some of the annual maintenance costs, such as grounds maintenance, may be assumed by the property manager.

Potential revenue sources for annual operating and maintenance costs may be generated by station parking fees; rent revenues from a public-private development partnership; and supplemental sales tax and/or property tax from an Economic Development District. Operations and maintenance cost could also be shared with CATS if the rail station includes an integrated transit component with CATS as a partner.

Table 5.07: Annual Operations & Maintenance Cost Estimates for Conceptual Design Plans

Phase Categories	Phase 1		Phase 2		Phase 3	
	Downtown	Suburban	Downtown	Suburban	Downtown	Suburban
Janitorial/Cleaning	\$ -	\$ -	\$ 36,500	\$ 27,400	\$ 45,700	\$ 36,500
Landscaping/Grounds Maintenance	\$ 29,400	\$ 24,000	\$ 34,200	\$ 28,800	\$ 40,500	\$ 33,600
Electricity	\$ 1,000	\$ 800	\$ 4,000	\$ 2,600	\$ 7,400	\$ 5,400
Water/Sewer	\$ 400	\$ 300	\$ 3,500	\$ 2,700	\$ 5,000	\$ 3,800
Total	\$ 30,800	\$ 25,100	\$ 78,200	\$ 61,400	\$ 98,500	\$ 79,200
20% contingency	\$ 6,200	\$ 5,100	\$ 15,700	\$ 12,300	\$ 19,700	\$ 15,900
Grand Total	\$ 36,900	\$ 30,100	\$ 93,800	\$ 73,600	\$ 118,200	\$ 95,000

Notes

1. Annual station operating and maintenance costs estimated for utilities, janitorial/cleaning services, landscaping/grounds maintenance only
2. Costs associated with Amtrak staffing are not included; it is assumed these costs would be paid for by service owner and are not a local responsibility
3. Costs associated with train maintenance and cleaning are not included; it is assumed these costs would be paid for by service owner and are not a local responsibility
4. These costs are for station specific facilities and do not account for potential cost savings that may be realized from a public-private partnership agreement between the lead station agency and a TOD development partner
5. These cost estimates are based on the conceptual designs prepared for the stations and will be refined as more detailed station designs and plans are prepared during future project phases
6. A 20% contingency was included to account for the preliminary nature of station design plans

5.4 STATION OWNERSHIP & GOVERNANCE

To prepare for station operations, the lead station agency should begin to consider options for the long-term ownership and governance of the station. Typically, stations for state-sponsored passenger rail service are owned by a local government entity and/or non-profit group. Some stations are also owned by transit agencies, state departments of transportation, and sometimes freight railroads. Amtrak typically does not own stations except on certain long-distance routes. **Table 5.07** shows station ownership examples for several stations around the U.S. The table demonstrates the varied ownership models used throughout the country and shows how station buildings, parking, platforms and tracks can be

owned by separate entities within at the same station.

In Baton Rouge, it is assumed a local agency, such as the RDA or the City-Parish, will maintain ownership of the passenger rail station buildings and parking facilities jointly with a development partner. It is assumed the platforms at both stations and the dedicated platform track at the Downtown Station will be held by the owner of the corridor service. The mainline tracks will remain under KCS ownership.

Table 5.07: Station Facility Ownership Examples

	LAFAYETTE, LA	DURHAM, NC	PORTLAND, ME	SACRAMENTO, CA	FORT WORTH, TX	BATTLE CREEK, MI	MILWAUKEE, WI
Station building owner	City of Lafayette	Fuller Street Redevelopment, LLC	Concord Coach Lines	City of Sacramento	Fort Worth Transportation Authority	City of Battle Creek	Wisconsin Department of Transportation
Parking lot owner	City of Lafayette	Fuller Street Redevelopment, LLC	Concord Coach Lines	City of Sacramento	Fort Worth Transportation Authority	City of Battle Creek	Wisconsin Department of Transportation
Platform owner	BNSF Railway	North Carolina Railroad Company	Pan Am Railways, Maine DOT	City of Sacramento	Fort Worth Transportation Authority	Canadian National Illinois Central	Wisconsin Department of Transportation
Track owner	BNSF Railway	North Carolina Railroad Company	Pan Am Railways	Union Pacific Railroad	Fort Worth Transportation Authority, BNSF Railway	Canadian National Illinois Central	Canadian Pacific Railway
Route served	Sunset Limited	Carolinian Piedmont	Downeaster	California Zephyr Capitol Corridor Coast Starlight San Joaquins	Heartland Flyer Texas Eagle	Blue Water Wolverine Service	Empire Builder Hiawatha
Ridership (FY 2017)	6,154	71,924	171,257	1,073,584	114,231	42,301	605,351

Source: Great American Stations

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APPENDICES

APPENDIX A: REFERENCES

STATION PROGRAM AND PLANNING GUIDELINES (2013)

Amtrak

A MASTER PLAN FOR THE BATON ROUGE HEALTH DISTRICT: TREATMENT PLAN (2015)

Baton Rouge Area Foundation

CAPITAL AREA PATHWAYS PROJECT (2018, APRIL 26)

BREC

FUTUREBR COMPREHENSIVE PLAN LAND USE CHAPTER (2015)

City of Baton Rouge - Parish of East Baton Rouge

UNIFIED DEVELOPMENT CODE ZONING DISTRICTS (2018)

City of Baton Rouge - Parish of East Baton Rouge

MID-CITY PREDEVELOPMENT PROJECT REPORT (2014)

Duany Plater-Zybkerc & Company

HIGHWAY-RAIL CROSSING INVENTORY (APRIL 16, 2018)

Federal Railroad Administration

LOUISIANA ELECTED OFFICIALS EMERGENCY MANAGEMENT MANUAL (2016)

Governor's Office of Homeland Security and Emergency Preparedness

LOUISIANA EMERGENCY PREPAREDNESS GUIDE (2016)

Governor's Office of Homeland Security and Emergency Preparedness

BATON ROUGE-NEW ORLEANS INTERCITY RAIL FEASIBILITY STUDY: STRATEGIC BUSINESS PLAN (2014)

HNTB

ESSEN LANES WIDENING PROJECT (2018, APRIL 16)

Louisiana DOTD

KCS RAIL CROSSINGS BATON ROUGE (H.012449) (APRIL 16, 2018)

Louisiana DOTD

EAST BATON ROUGE PARISH EMERGENCY OPERATIONS PLAN (2018)

Mayor's Office of Homeland Security and Emergency Preparedness

BATON ROUGE – NEW ORLEANS INTERCITY PASSENGER RAIL SERVICE DEVELOPMENT PLAN (2010)

Southern Rail Commission

APPENDIX B: PUBLIC INVOLVEMENT

Downtown / Mid City Stakeholders

Michael Acaldo – Society of St. Vincent de Paul
 Keith Cunningham, Executive Director – Louisiana Housing Corporation
 Mary Fontenot, Office of Neighborhoods – City of Baton Rouge
 Peyton Grant – Baton Rouge General Medical Center
 Tyler Hicks – Capital Heights Civic Association
 Whitney Hoffman Sayal – Downtown Development District
 Garret Kemp – The Market @ Circa 1857
 Rev. Levert Kemp – Old South Baton Rouge Civic Association
 Adam Knapp, President and CEO – Baton Rouge Area Chamber of Commerce
 Jeff Kuehny – Beaugard Town Civic Association
 Lauren Lambert-Tompkins, Managing Director – Downtown Business Association
 Lauren Lambert-Tompkins – Ogden Park Civic Association
 Justin Lemoine, Owner – ELS Landscape Architecture Studio
 Gordon Levine – Louisiana Housing Corporation
 Mary Jane Marcantel, Chairman – Spanishtown Civic Association
 Dyke Nelson, Owner – DNA Workshop Architects
 Randy Nichols, Executive Director – Capital Area Alliance for the Homeless
 Chad Ortte – Commercial Realtor / Developer
 Claire Pittman, Boardmember – Bike Baton Rouge / Garden Dist. Civic
 Mary Robvais, Principal – The Dufrocq School
 Jonathan Rose, Owner – Desselle Funeral Home
 Martha Salomon – WHLC Architecture
 Paul Sawyer, Chief of Staff – Office of Congressman Garret Graves
 Rev. Fred Smith, Head Pastor – Shiloh Baptist Church
 Christine Sparrow – Old South Baton Rouge Civic Association
 Herbert Sumrall, President – Baton Rouge Bike Club
 Nicole Sweazy, Housing Program Administrator – Mid City Gardens

Casey Tate – Downtown Development District
 Eric Troutman – Garden District Civic Association
 Gabe Vicnaire – Downtown Development District
 Martha Weems, Chairman – Bernard Terrace Civic Association
 Tara Wicker, Metro Councilwoman – Baton Rouge City-Parish
 John Williams – Garden District Civic Association

Health District Stakeholders

Rex Cabaniss – WHLC Architecture Owner
 Richard Carmouche, Owner – The Village & The Settlement at Willow Grove
 Kelley Criscoe Stein, President – Pollard Estates HOA
 Terri Fontenot, CEO – Woman's Hospital
 Barbara Freiberg, District 12 – EBR Metro Council
 Charles Gilbert, Vice President – Blue Cross Blue Shield of Louisiana
 Peyton Grant – Baton Rouge General Medical Center - Bluebonnet
 Steve Jones, Associate – Spradley & Spradley
 Jeff Kuehny, Director – Burden Plantation Museum & Gardens
 Scott Mabry – Ochsner
 Jeff Mosely, Vice President of Facilities and Construction – Our Lady of the Lake
 Megan Parrish – Baton Rouge General Medical Center - Bluebonnet
 Gerard Schonekas, Director, Facilities Management – Ochsner
 Paula Sonnier, Construction Project Manager – Our Lady of the Lake
 Todd Stevens, CEO – Mary Bird Perkins Cancer Center President
 Edgardo Tenreiro, CEO – Baton Rouge General Medical Center - Bluebonnet
 Vicky Tiller, President – Kenilworth Civic Association
 Matt Watson, District 11 – EBR Metro Council
 Jacob Wilson, General Manager – Mall of Louisiana
 Tim Mercer, President – Inniswold, Jefferson Terrace HOA

Cooperating Agencies

Ryan Morson, Stations & Facility Planning – AMTRAK
 Kathy Stites, Landscape Architect, Trails Planner – BREC
 Joe Popadic, Landscape Architect – BREC
 Thomas Clark, Commissioner – DOTD
 Joseph Goodell, Freight and Passenger Rail Director – DOTD
 Frank Duke, Planning Director – Baton Rouge City-Parish
 Fred Raiford, Director – Baton Rouge City-Parish
 Bill Deville, CEO – Capital Area Transit System
 Rodney Goldman, Chief Operating Officer – Capital Area Transit System
 James Baker, Facilities Manager – Capital Area Transit System
 James Setze, Executive Director – Capital Region Planning Commission
 Marc Dixon, Southern Regional Manager – Federal Railroad Administration (FRA)

Utilities

Celeste Gross – Entergy
 David Burge – AT&T Transmission
 Don Mason – Atmos Energy
 Melissa Glascock – Baton Rouge Sewer
 Cyndi Pennington – Baton Rouge Traffic / Fiber
 Sarah Edel – Baton Rouge Traffic
 Ryan Scardina – Baton Rouge Water
 Daryl Deshotel – Detel Wireless
 Chase Justilien, District 61 – DOTD Fiber
 Richard Daniels – Entergy
 Richard West – Entergy Distribution
 Todd Varner – Entergy Distribution
 James Dillard – Entergy Gas
 Dominic East – Level 3 Communications

Kyle Tostenson – LightCore, a CenturyLink Co.
 Donald Cooper – Southern Light LLC
 Lester Rutherford – Verizon (MCI Communications)
 Frank Glenn – Verizon

APPENDIX C: PUBLIC MEETING SUMMARY



6/26/2018

Public Meeting Summary

Baton Rouge Passenger Rail Stations Master Plan

For HNTB

Franklin Associates, LLC

Franklin Associates, LLC

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Acronyms

- DOTD – Louisiana Department of Transportation and Development
- FAST Act – Fixing America’s Surface Transportation Act, Dec. 2015
- FTA – Federal Transit Administration
- FHWA – Federal Highway Administration
- HUD – United States Department of Housing and Urban Development
- MAP-21 – Moving Ahead for Progress in the 21st Century Act, July 2012
- NAACP – National Association for the Advancement of Colored People
- NEPA – National Environmental Policy Act of 1969
- NLCOG – Northwest Louisiana Council of Governments
- PSAs – Public Service Announcements
- SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users
- USACE – United States Army Corps of Engineers
- FRA – Federal Railroad Administration
- SRC – Southern Rail Commission

Public Meeting Summary

Baton Rouge Passenger Rail Stations Master Plan

A Project of the East Baton Rouge Parish Redevelopment Authority

June 2018 Meeting Summary

Following two rounds of stakeholder engagement and elected official briefings, a public meeting was scheduled for the evening of Tuesday, June 19th, 2018 in the community center building of Shiloh Missionary Baptist Church. The purpose was to provide the public a general project overview and share conceptual planning work accomplished to date.



Promotion

Meeting promotion began a month in advance through non-paid modes including email marketing and press releases. Three rounds of email notices were sent to all persons invited to participate in project stakeholder meetings, and to all elected officials interviewed. Press releases were circulated to local news outlets, resulting in pre-event coverage through The Advocate, Baton Rouge Business Report, and "BR Proud" the local TV news (WVLA 33 / WGMB 44). In total, sixty-five persons signed in to the meeting, though a few more attended, declining to sign-in.

Venue

Shiloh was selected due to its proximity to the downtown / Mid City passenger rail site on N. 14th Street – across the street from the church campus. Also, the venue's community room was spacious, comfortable, and offered adequate on-site free parking to attendees. Shiloh Baptist is an advocate of the redevelopment of the "Energy Depot" just two blocks east on Government Street and is recognized as a safe and welcoming place for residents of the surrounding community to gather. The consultant team is grateful to church administration and elders for hosting this meeting.



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Presentation

The project presentation was delivered by the RDA's prime urban planning consultant: James Frye, ASLA of HNTB. Frye was accompanied by Bryan Jones, also of HNTB for the Q&A session.



The presentation itself is contained in prime contractor HNTB's report, but at a high level the on-screen show clarified the scope of this project to be the conceptual design of two passenger rail stations within Baton Rouge, one serving as the northern terminus of a proposed passenger service linking Baton Rouge to New Orleans with stops at several communities in between. All of this is proposed to occur along the Kansas City Southern line which is a more direct route to New Orleans than the Illinois Central line that more closely follows the Mississippi River.

Site #1 is the **Downtown Station** located between Government Street and North Boulevard and between S. 14th and S. 15th Streets. This is immediately west of the "Electric Depot" site – a redevelopment of the defunct Entergy power station on Government Street. The rail road is flanked by vacant property in these blocks, and historically, the corner of S. 14th and Government served as Baton Rouge's second passenger rail station, the first being on River Road downtown and now serving as the Louisiana Arts & Science Museum.

Site #2 is the **Suburban Station** and multiple specific sites are being examined and analyzed along the KCS rail line in the vicinity of Bluebonnet Blvd. This is Baton Rouge's "Health District" and is also proximate to the Mall of Louisiana to the east. Each of several specific properties in this district were analyzed and evaluated for their appropriateness to be developed as a suburban passenger rail station.

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Various station positions and rough sketch plans for each site were presented, along with a list of station program elements – features and amenities desirable at each station. Below is an example of a preliminary sketch plan for the downtown station site.



The public attending the meeting were informed of topics, concerns and trends revealed during the consultant team's numerous meeting with stakeholder groups during preceding months. These insights guide the refinement of conceptual plans for each rail station, anticipated to be completed by late 2018.

Comments and Questions

The meeting concluded with a question and answer session. Below are notes from the this session and responses provided by the consultant team or agency representative.

Concern expressed about trains idling: diesel fumes and noise from locomotives.

Essentially, the trains won't be sitting at the station(s) for long durations. It is anticipated that existing facilities in New Orleans would be the maintenance yard. Noise, air and other environmental factors will be studied in a future state which will include a full NEPA Phase 1 study. In some cities, these impacts are alleviated by using external power and A/C service supplied to the passenger cabins, much like that used with jet air travel.

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Will the project website be ADA accessible? Your presentation wasn't always clear as to places and locations because you used many pronouns and referenced places saying "here". I assume you were pointing but I'm unable to see.

(This question was asked by a vision-impaired gentleman.)

While our current stage in this project does not have a website, we anticipate future, more in-depth studies would provide a website meeting accessibility guidelines.



What do you expect the ridership breakdown to be? What might prices be?

An earlier study provided estimates of ridership. We anticipate one-way fares might be \$10.

Comment: I like the idea of being able to take the train to New Orleans.

Where did the money come from for this study?

Grant funds from the Federal Railroad Administration and the Southern Rail Commission, with a local match from EBR City-Parish. Additional, complimentary studies are occurring across the Gulf coast.

Where in New Orleans will the corresponding passenger rail station be located?

We anticipate three stations in the greater New Orleans area. Proceeding from northwest into downtown they are:

1. New Orleans (MSY) Airport
2. Kenner / Jefferson Parish station – location to be determined
3. Downtown New Orleans: Union Passenger Terminal – east of Smoothie King Center at Loyola Avenue

How long will the ride take?

We estimate 1:25 from downtown to downtown, with brief stops in between. While not "high speed" rail, this is competitive with automobile travel and would not be subject to the highway congestion. Also, passengers would enjoy Wi-Fi and other amenities during their trip.

How will people get from the train station to their final destinations? Are you considering that?

Yes. This is what we call the "last mile" travel and it is why, in Baton Rouge, we are planning in partnership with CATS, so that public transit will be a vital amenity at the stations. We anticipate these passenger rail stations will be fully multi-modal, accommodating public transit, ride-share, bicycle, pedestrian, and personal vehicle pick-ups and drop-offs.

The design team views these as "multi-modal" terminals, but not as a full-blown bus transit hub. It will accommodate two or three busses at various times during the day, but would not be a large bus transfer facility accommodating five to ten busses at a time – like CATS' 22nd @ Florida Blvd. terminal because of the adverse impacts upon the surrounding properties.

Will there be "ride on" service for bikes? New Orleans is a "top 10" bike friendly city.

We agree that this would be a desirable feature. This also informs the design and amenities of the passenger cars, and also the elevation and design of the depot itself. Also, making train cars "ride on" friendly for bikes will likely also make them ADA accessible, so there are other benefits.

Level boarding?

Yes, you're right. This is referred to as "level boarding" which easily allows bikes, wheel chairs, baby strollers, etc. to roll right on. The design of the passenger car, however, must provide a location to store bicycles in a rack or similar safe position.

What effect would station plans in Gonzales and the River parishes have upon our Baton Rouge stations?

Baton Rouge is ahead of the others, although Gonzales is making progress. We do not anticipate design of the other stations to steer the design of Baton Rouge stations.

What about emergency evacuation?

Yes, the suburban Baton Rouge location – in the Health District – will need to be designed with a capacity to accommodate storm evacuation passengers.

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Update by John Spain – President, Southern Rail Commission

SRC was created in the 1980s. Its purpose is 1) to restore passenger rail service east of New Orleans (along the I-10 corridor) which ended with hurricane Katrina; and 2) to implement inter-city passenger rail on spurs such as between New Orleans and Baton Rouge.

One reason we are optimistic at this time is that our governor is in favor of passenger rail service. Also, the FASTACT includes federal funding for passenger rail service. We must act quickly while this law is in effect.

Comment Forms

During the meeting a form requesting written comments was distributed to attendees. They were asked to fill it out and turn it in before leaving, or they may complete the form within two weeks and mail or email it to the consultant team. Below are comments received during the meeting.

Comment 1

"Much thought has gone into the beginning of this plan, obviously more is needed. I think the existing building adjacent to the tract (brick warehouses) are eligible for listing on the National Registry of Historic Places. Please do try to incorporate these, in a more meaningful way, in the [Electric] Depot complex than "Salvaging & reusing of bricks. ADA is not really an issue since access to the train will need to also be accommodated.

Existing views of the rail system from Louisiana Science Museum building over a depot is very dramatic. Obviously, we do not have to view it here, but it would be nice for any design to son consider the new out as well as function.

[This constituent seems to be referring to the downtown train area, located on River Road. In his comment above, he mentions "views of the rail system from the LASM". Wrong location. The downtown depot will be incorporated into the Entergy site.]

Good luck with delivering a concept that the community can buy into.

Improvements, particularly pedestrian, along Government Street from the "[road] diet" section through Beauregard town, to the center plex and adjacent hotels would be welcomed as part of the overall concept."

Comment 2

"Has zoning, safely and environment been considered for sites' refueling offline power and smoke abatement.

Consider SU Baton Rouge Urban Forestry for Noise and carcinogenic and exhaust abatement."

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Comment 3

"Please consider roll-on services for bicycles to help with first and last mile. This would also be beneficial for the tourism aspect. Thanks."

Comment 4

"I think the rail will succeed, because it's so reasonable. The car commute to New Orleans is so difficult & unreliable. I do not know, I am just a schmuck, but I'm smart enough to find a train station and I love N.O.

My wife even had to commute to N.O. for 3 years. She hated the drive so much she rented an apartment in N.O. She still hated the twice a week drive.

The customer base is there. If they build it, they will come. You already seem to know that. Perhaps you could even raise the fare enough so that no one could call it welfare.

Its good Keynesian's economics, too. Good for anti-Chinese baiting.

Media Coverage

Baton Rouge Business Report 2018-06-15: Burkes, Caitie. [Plans for two Baton Rouge rail stations to be unveiled Tuesday](#)

The Advocate 2018-06-19: Karlin, Sam. [First look: Proposed Baton Rouge- New Orleans rail service includes greenscapes, development.](#)

BR Proud TV 2018-06-19 7:30 am (video):

<http://www.brproud.com/news/local-news/proposed-br-to-new-orleans-rail-service-open-for-discussion-at-meeting/1248412180>

BR Proud TV 2018-06-19 5:20 pm (video):

http://www.brproud.com/news/new-rail-stations-coming-to-baton-rouge_20180619222124/1249662196

Baton Rouge Area Foundation 2018-06-25: A topical follow-up email to the meeting: [eCurrents](#)

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Attendees

Twenty-two persons preregistered their attendance to the meeting via the Constant Contact event link published through the email marketing campaign. Of these, only two did not attend. An additional forty persons added their name to the event sign-in sheets. Some of these were news media or elected officials.

Terri Austin	Mathew Laborde	Elfin Realty
Samuel Ayers	Emmy Langlois	
Marissa Bahan	Johnathan Lemaire	BRAC
Tom Barton	Stephanie Mattox	Kenilworth Civic Assn
Ryan Benton CPEX	Girard Melancon	Baton Rouge
Gorge Bonvillian Elfin Realty	Community College	
E. Burns South Baton Rouge Civic Assn.	Doug Moore	Bike BR
Rex Cabaniss WHL Architecture	Perry Musgrow	GBR Civic Associations
Dan Claitor Property Owner	Kimberly Odkins	
Rob Claitor Property Owner	Barbara Pate	
Cordia Clark Council District 10	Paulfrey Elouise	Shiloh Baptist
Edselle Cunningham	Davis Rhorer	DDD
Nancy Curry GBR Civic Associations	Theo Richards	CATS
Michelle Deshotels Beauregard Town	Pat Robinson	FEMBC
Bill Deville CATS	Martha Salomon	Garden District
Eric Dexter Civil Solutions	Marc Samuels	
Frank Duke EBR Planning Dept.	Samuel Sanders	Mid City Redev. Corp.
William Farris Shiloh Baptist	Hildry Scheinuk	Media: The Advocate
Mary Fontenot EBR Office of Neighborhoods	Suzy Sonnier	BR Health District
Barbara Freiburg Council District 12	John Spain	BRAF
Gerald Gaines Council District 5	John Spain	BRAF
Whitney Hoffman Sayal DDD	Christine Sparrow	South Baton Rouge
Rosemary Jackson Gardere	Civic Assn.	
Gerri John-Louise	Christine Sparrow	
Jennifer Jones Shiloh Baptist	Kathleen Stites	BREC
Bryan Jones HNTB (consultant)	Vicky Tiller	Kenilworth Civic Assn
Ben Jumonville Zeeland	Tara Titone	EBR Redevelopment Authority
Lauren Jumonville BRAF	Chase Toombs	
Sam Karlin Media: The Advocate	Chris Toombs	
Anthony Kimble Kimble Properties	Joan Turner	Shiloh Baptist
Victor Kirk	Chris Tyson	EBR Redevelopment Authority
Jeff Kuehny Spanishtown Neighborhood		

Councilwoman Tara Wicker Council
District 10
Nayita Wilson

Alex Young Evans Graves Engineers
Samear Zaitoon

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Appendix 1 - Media Coverage

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Plans for two Baton Rouge rail stations to be unveiled Tuesday

CAITIE BURKES
JUNE 15, 2018

While officials still haven't determined how to pay for the proposed passenger rail service between Baton Rouge and New Orleans, they have a general idea of what the rail stations might look like in the Capital Region.

On Tuesday, preliminary concepts for multimodal rail stations expected to be located in Mid City and the Baton Rouge Health District will be on display for public viewing at a meeting hosted by the East Baton Rouge Redevelopment Authority.

The RDA and its planning consultant, [HNTB](#), have been working on a rail station master plan since November. Bryan Jones, HNTB Gulf Coast district deputy office leader, says his team sketched the stops as multi-modal transportation hubs, reflecting prevailing [stakeholder input from past meetings](#).

"They want to ensure that these rail stations have the potential to be more than just a rail stop, and more of a comprehensive catalyst for development," Jones says.

Stations would be surrounded by mixed-use developments with easy access to the Capital Area Transit System and rideshare opportunities, he says.

After the meeting—will take place from 6 to 8 p.m. at [Shiloh Baptist Church](#)—HNTB will finish its draft implementation plans in July 2018, says RDA Vice President Tara Titone, noting follow-up meetings with its steering committee will take place concurrently.

The final study for both stations, which includes the final master plan and implementation plan, is scheduled for completion in September, Titone says.

When Baton Rougeans will be able to hop on a passenger rail to New Orleans is not clear, mostly because the end date hinges on securing more project funding. Titone says it'll be a few years at best.

"I don't think anybody could give you an honest answer about it," says James Taylor, an urban planner with Franklin Associates. "The money's just not there."

Project leaders need \$260 million to get the ball rolling, most of which [Department of Transportation and Development secretary Shawn Wilson has predicted will be federally funded](#), but the rest of which is unaccounted.

SOURCE: <https://www.businessreport.com/article/stakeholder-meetings-explore-passenger-rail-station-locations-transit-options>

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First look: Proposed Baton Rouge-New Orleans rail service includes greenscapes, development

- BY SAM KARLIN | SKARLIN@THEADVOCATE.COM
- JUN 19, 2018 - 8:00 PM

A few dozen Baton Rouge residents on Tuesday got a first look at what rail stations for a long-discussed passenger rail service to New Orleans might look like, as a consulting firm unveiled preliminary concepts for Baton Rouge locations downtown and in the suburban health district.

The plans detail the ambitious multi-use developments surrounding the proposed rail stations, calling for several new commercial buildings, greenscapes and infrastructure improvements to integrate the stations with bus, ride-sharing and other modes of transportation.

But the rail service itself — which would cost upwards of \$260 million to start, according to the most recent estimates — is still in its infancy, around a decade after the state conducted a study of the idea.

Chris Tyson, president and CEO of the East Baton Rouge Redevelopment Authority, said the station plans are separate from the actual rail service itself. Instead, Tyson said, the master plan gives the RDA and other local leaders the opportunity to look at key areas that can be transformed into transit-oriented developments, regardless of when or if the rail service happens.

"We hope to have a rail service between Baton Rouge and New Orleans," he said. "But these are principles of revitalization that remain regardless."

Plans outlined Tuesday have several potential sites in the health district, and different options for what the downtown station development would look like. But all the plans include new commercial buildings that could potentially house residential, retail or office uses, as well as loops for CATS services, bike-sharing and pedestrian routes.

A master plan to be finalized later this year will have more details, said Bryan Jones, project manager with HNTB, and will also propose one specific site for the health district station.

Funding has remained the largest obstacle to the passenger rail service, which would include stops in Baton Rouge, Gonzales, LaPlace, at the Louis Armstrong International Airport and in New Orleans. Initial estimates for the service pegged the costs at \$400 million, but an HNTB study from 2014 estimated it would cost around \$260 million to start.

That study also said it would take around \$7 million in annual subsidies to operate the service early on, when it would run two times per day.

Last fall, the East Baton Rouge Redevelopment Authority hired HNTB, an engineering consulting firm, to design the train stations and identify funding to pay for them, a task set to be completed later this year. The East Baton Rouge Metro Council then spent \$250,000 to match the federal grant funding the train station study.

Jones said the team is evaluating federal, local, state and grant funds to pay for the train stations, the cost of which remains undetermined at this point. He also indicated local funding districts — like

economic development districts or tax increment financing districts — could be part of the financing solution.

"We're leaving no stone unturned in terms of funding," he said.

Local officials have pointed to the rail stations as a driver of economic development, especially in the Mid City area that is also part of the new Downtown East boundaries of the Downtown Development District. Jones floated the idea of retail, residential and commercial developments intertwined with the stations, as well as sponsorship and other public-private partnership opportunities.

John Spain, the Baton Rouge Area Foundation executive who has long spearheaded the passenger rail proposal, said he's bullish on the prospects of the rail service, despite the fact it has been discussed for more than a decade.

"I've been working on this project for 10 years," he said. "I'm optimistic this thing is real for a couple reasons."

Gov. John Bel Edwards' administration supports the plan, Spain noted, a departure from the Jindal administration, which chose not to pursue \$300 million in federal stimulus funding to help pay for the project in 2009, citing high annual operating costs to taxpayers. Spain also said new federal dollars are available for the next two years specifically for inter-city rail service, which Louisiana could tap into.

The federal funds are available for infrastructure improvements and operating costs, Spain said, but only through 2019. Spain was tapped for the Southern Rail Commission by the governor and is now chairman of the group, which is dedicated to improving rail service between Mississippi, Alabama and Louisiana.

Spain said the commission will likely hire a project manager for the New Orleans-Baton Rouge service soon.

The Southern Rail Commission is also working on establishing rail lines east of New Orleans, and Spain said possible lines between New Orleans and Mississippi could be up and running in the next 18 months.

SOURCE: https://www.theadvocate.com/baton_rouge/news/business/article_5df651ea-73e9-11e8-9887-f7d0849c1893.html

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Proposed BR to New Orleans rail service open for discussion at meeting

By: **Michael Scheidt**

Posted: Jun 19, 2018 07:31 AM CDT

Updated: Jun 19, 2018 07:34 AM CDT

[online story includes video]

BATON ROUGE, La. (LOCAL 33) (FOX 44) - It might become easier to get from Baton Rouge to New Orleans and back in the future thanks to the East Baton Rouge Redevelopment Authority.

The East Baton Rouge Redevelopment Authority has plans for rail stations in Baton Rouge that will link the two cities.

EBRRA will be joined by the planning consultant for this project, HNTB and they will "present preliminary concepts for two state-of-the-art, multi-modal rail stations in Baton Rouge."

One of the planned station stops would be in the Mid City area and according to the East Baton Rouge Redevelopment Authority, "it will serve as the terminus station for the corridor service and facilitate the revitalization of Mid City."

The second station would be in the Baton Rouge Health District and EBRRA said, "it will serve as an intermediate stop along the corridor and add to the vibrancy of the Health District."

If you are interested in learning more about the designs and want to offer ideas or opinions, plan on attending the public meeting scheduled for Tuesday night at the Shiloh Baptist Church from 6 p.m. to 8 p.m.

The Shiloh Baptist Church is located at 185 Eddie Robinson Sr. Dr.

SOURCE: <https://www.brproud.com/news/local-news/proposed-br-to-new-orleans-rail-service-open-for-discussion-at-meeting/1248412180>

New rail stations coming to Baton Rouge

Posted: Jun 19, 2018 05:21 PM CDT

Updated: Jun 19, 2018 05:21 PM CDT

[Story by Deon Guillory is entirely video, posted online]

SOURCE: https://www.brproud.com/news/new-rail-stations-coming-to-baton-rouge_20180619222124/1249662196

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E-currents - BR train stations, Tax for treating addictions, mental illness, Smartest interse... Page 1 of 7

eCURRENTS

news from the baton rouge area foundation

[Click here to sign up to receive our weekly newsletter](#)

AT THE FOUNDATION



In Baton Rouge, your train trip to New Orleans could start at one of two locations.

You could board at the downtown station on 14th Street, or the suburban station just west of Bluebonnet Boulevard. Those two sites were recommended by HNTB to the East Baton Rouge Redevelopment Authority, which hired the planners to site and design stations for an inter-city rail line linking Louisiana's two largest metro areas. HNTB's first reveal shows the stations would be multimodal, meaning they would serve buses, rideshare, cyclists, pedestrians. The stations would be built to catalyze additional development surrounding them, as they have in other cities.

mhtml:file://C:\Users\jamestaylor\AppData\Local\Microsoft\Windows\INetCache\Conten... 10/31/2018

Train service on upgraded rails between Baton Rouge and New Orleans is among projects of the Baton Rouge Area Foundation in partnership with state and local officials from across South Louisiana, as well as economic development groups.

*Baton Rouge
Area Foundation*

Looking to do some good today?

Renew your membership or join the Baton Rouge Area Foundation.

Memberships start at \$200 and support our civic projects. Members get one main benefit: they get to make the world a better place. [CLICK TO JOIN NOW](#)

AROUND THE REGION

Baton Rouge elected leaders are backing a small property tax to pay for a mental health treatment center. People in crisis with mental illness or drug abuse challenges would be diverted for treatment to the center, sparing them from being jailed or hospitalized. As well, residents could take their family or friends who need mental health services to the center.

The nonprofit Bridge Center would operate the facility. It is overseen by a board that includes top parish law enforcement officials and mental health experts, and chaired by former Louisiana Department of Health and Hospitals Secretary Kathy Kliebert.

Formed by the Baton Rouge Area Foundation, the Bridge Center was created after research and public input over several years. It's modeled after a program in San Antonio that has successfully treated people with mental illness and drug addictions, keeping them out of costly incarceration.

The Metro Council is scheduled to hold a public hearing on Aug. 8 to consider adding

APPENDIX D: AMTRAK'S STATION FUNCTIONAL & SPACE REQUIREMENT GUIDELINES

Baton Rouge - Downtown

Station Functional and Space Requirement Guidelines

	Required	Notes
1 Amtrak Exclusive		
1a. Waiting Room	2600 SF	As per passenger counts provided by HNTB; 400,000 passengers; half with baggage and requiring seating
1b. Restrooms	250 SF	Per code; Recommend addition of at least 1 WC above requirements based on assembly area; includes custodian closet with mop sink
1c. Ticket Office	150 SF	2 ticket workstations; 1 baggage check-in
1d. Cash Out Area	15 SF	Niche out of view of passengers for cash-out activities
1e. Agent Office	120 SF	Lead Clerk office; includes safe and closet.
1f. Record Storage	40 SF	
1g. Employee ADA Restroom	50 SF	
1h. EmployeeLocker/Lunch Area	100 SF	
1i. Equipment Room Revenue, Business; PIDS and CCTV)	80 SF	Locked room with 24 hour access. Revenue equip. to be separated for PCI compliance. 120 SF
1j. Baggage Handling	800 SF	Clean area for baggage carts, luggage storage (skis, Golf clubs etc.), secure cage (size TBD), area for carts, tugs, including charging stations.
1k. Baggage Claim/Service	150 SF	
Total	4,355 SF	
4 Exterior		
4a. Covered Exterior Storage	650 SF	Baggage carts, plow, ice melt, trash/food waste
4b. Parking	TBD	Required within vicinity of station; can be in public or private lots
4c. Signage		See Amtrak Signage Manual (greatamericanstations.com)
Total	650 SF	

NOTES:

- 1 Based on 2013 Station Program and Planning Guidelines and Amtrak Standards
- 2 Excludes pedestrian walkways and platforms.
- 3 The data presented here represents the minimum space requirement projections for the indicated Amtrak functions based on anticipated passenger counts and Amtrak operations. The requirements are subject to revision due to regulatory changes, changes in Amtrak policy, and other factors. Each component must be confirmed with any and all applicable codes, covenants, deed restrictions, zoning requirements, licensing requirements, and other legal obligations. Compliance with these space requirement projections does not ensure Amtrak approval and/or agreement regarding any proposed station improvements, and does not eliminate the need for coordination with Amtrak during all phases of the station design project.

Baton Rouge - Suburban

Station Functional and Space Requirement Guidelines

	Required	Notes
1 Amtrak Exclusive		
1a. Waiting Room	1100 SF	As per passenger counts provided by HNTB; 173,000 passengers; half with baggage and requiring seating
1b. Restrooms	250 SF	Per code; Recommend addition of at least 1 WC above requirements based on assembly area; includes custodian closet with mop sink
1c. Ticket Office	150 SF	2 ticket workstations; 1 baggage check-in
1d. Cash Out Area	15 SF	Niche out of view of passengers for cash-out activities
1e. Agent Office	120 SF	Lead Clerk office; includes safe and closet.
1f. Record Storage	40 SF	
1g. Employee ADA Restroom	50 SF	
1h. EmployeeLocker/Lunch Area	100 SF	
1i. Equipment Room Revenue, Business; PIDS and CCTV)	80 SF	Locked room with 24 hour access. Revenue equip. to be separated for PCI compliance. 120 SF
1j. Baggage Handling	800 SF	Clean area for baggage carts, luggage storage (skis, Golf clubs etc.), secure cage (size TBD), area for carts, tugs, including charging stations.
1k. Baggage Claim/Service	150 SF	
Total	2,855 SF	
4 Exterior		
4a. Covered Exterior Storage	650 SF	Baggage carts, plow, ice melt, trash/food waste
4b. Parking	TBD	Required within vicinity of station; can be in public or private lots
4c. Signage		See Amtrak Signage Manual (greatamericanstations.com)
Total	650 SF	

NOTES:

- 1 Based on 2013 Station Program and Planning Guidelines and Amtrak Standards
- 2 Excludes pedestrian walkways and platforms.
- 3 The data presented here represents the minimum space requirement projections for the indicated Amtrak functions based on anticipated passenger counts and Amtrak operations. The requirements are subject to revision due to regulatory changes, changes in Amtrak policy, and other factors. Each component must be confirmed with any and all applicable codes, covenants, deed restrictions, zoning requirements, licensing requirements, and other legal obligations. Compliance with these space requirement projections does not ensure Amtrak approval and/or agreement regarding any proposed station improvements, and does not eliminate the need for coordination with Amtrak during all phases of the station design project.

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APPENDIX E: UTILITY INFORMATION





Baton Rouge Rail Station Utility Investigation

Proposed Downtown Site

- **BR Water**

- 12" cast iron water main on North side of Government Street
- 6" cast iron water main on west side of 14th Street with service connections to existing properties
- Does not appear to cause any conflicts with proposed development



Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**

- 8" sewer main in 14th Street
- 8" sewer main in Government Street
- Does not appear to cause any conflicts with proposed development



Image: Sewer Main Map from City-Parish Sewer

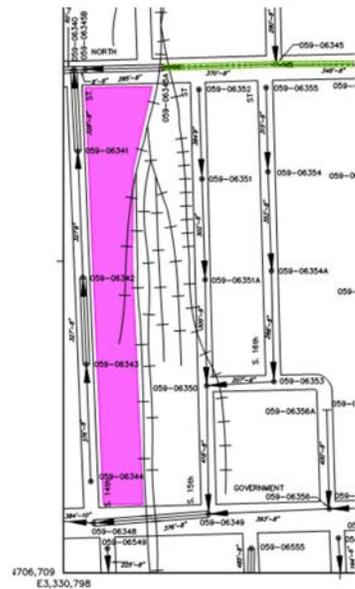


Image: EBROSCO Map



- **Energy**
 - Overhead transmission line on East side of tracks
 - **DEVELOPMENT OF EAST SITE AFFECTED BY OVERHEAD TRANSMISSION LINES**
 - Overhead distribution lines on East side of 14th Street
 - Overhead service lines on West side of 14th Street
 - Overhead distribution lines on South side of Government Street
 - Overhead service lines on North side of Government Street
 - Potential conflict with distribution lines along 14th; can be relocated



Image: Electrical Service Map from Entergy





Baton Rouge Rail Station Utility Investigation

Proposed West of Essen Lane (N) Site

- **BR Water**

- 8" concrete water main on corner of Dijon Dr. and Picardy Ave.
- Does not appear to cause any conflicts with proposed development



Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**

- 8" sewer main north of Railroad tracks.
- Does not appear to cause any conflicts with proposed development



Image: Sewer Main Map from City-Parish Sewer



Image: EBROSCO Map



- Entergy
 - Underground electric lines run south of site but north of the tracks



Image: Electrical Service Map from Entergy



Baton Rouge Rail Station Utility Investigation

Proposed East of Essen Lane (O) Site

- **BR Water**
 - 8" PVC water main on North side of Mancuso Ln.
 - Does not appear to cause any conflicts with proposed development

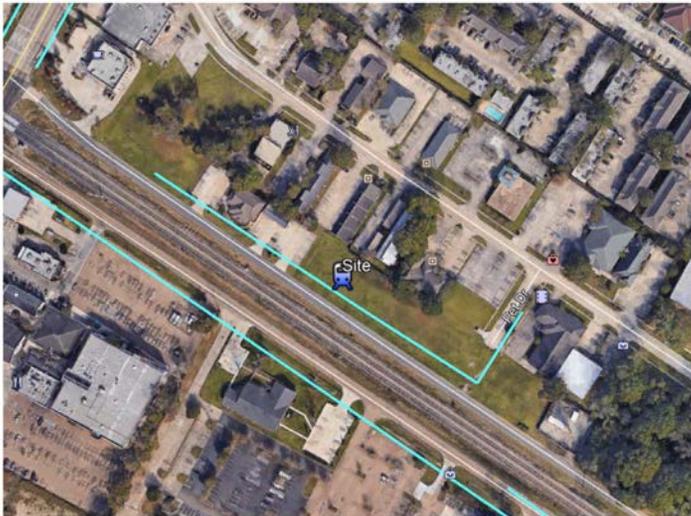


Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**
 - 8" sewer main in Mancuso Ln.
 - 8" sewer main in Picardy Ave.
 - Does not appear to cause any conflicts with proposed development

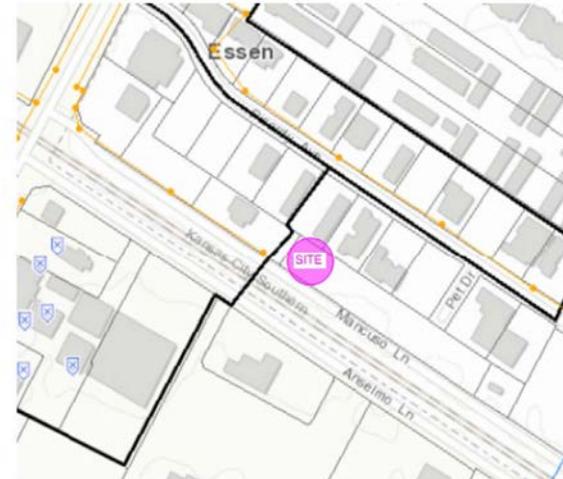


Image: Sewer Main Map from City-Parish Sewer

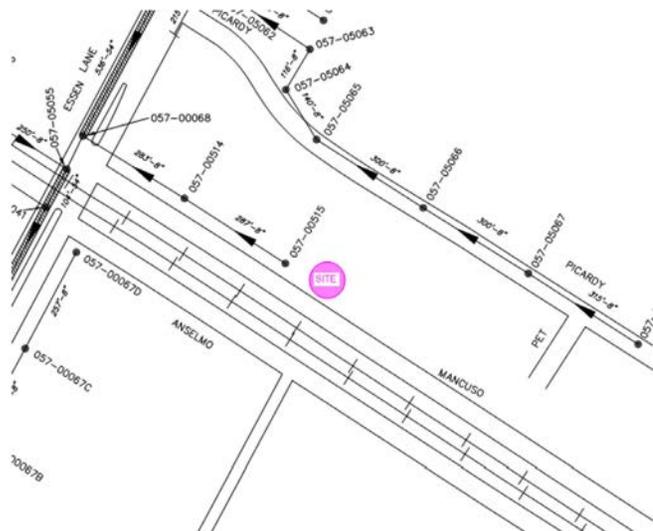


Image: EBROSCO Map



• **Entergy**

- Overhead distribution lines on south side of Mancuso Ln.
- Underground electric lines north of Mancuso Ln.



Image: Electrical Service Map from Entergy





Baton Rouge Rail Station Utility Investigation

Proposed West of Midway and East of Midway (P) Sites

- **BR Water**

- 24" ductile iron water main south of railroad tracks, not on site.
- Does not appear to cause any conflicts with proposed development

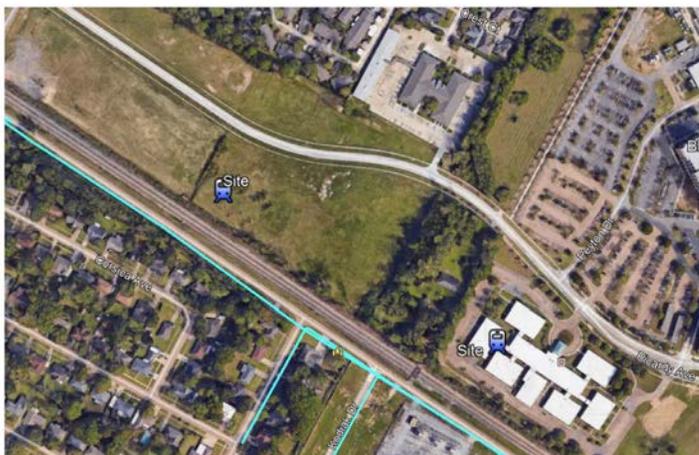


Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**

- 8" sewer main south of railroad tracks, not on site
- 8" sewer main in Picardy Ave. northeast of site, near BRGMC.
- Does not appear to cause any conflicts with proposed development



Image: Sewer Main Map from City-Parish Sewer

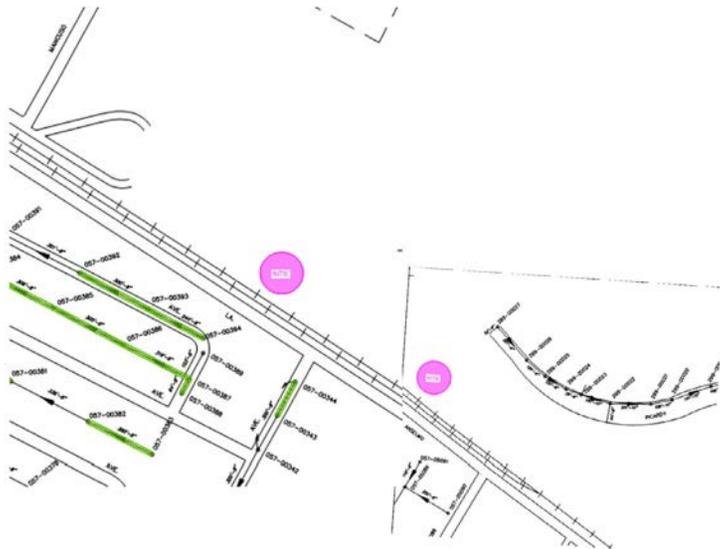


Image: EBROSCO Map



- **Energy**

- Overhead distribution lines north of tracks near site

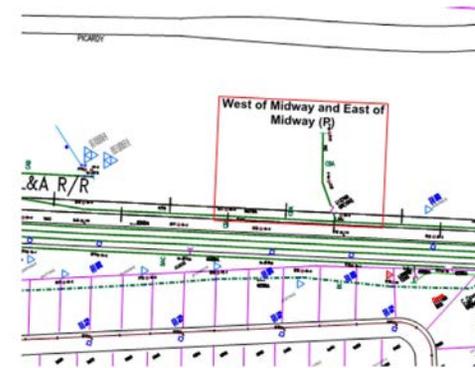
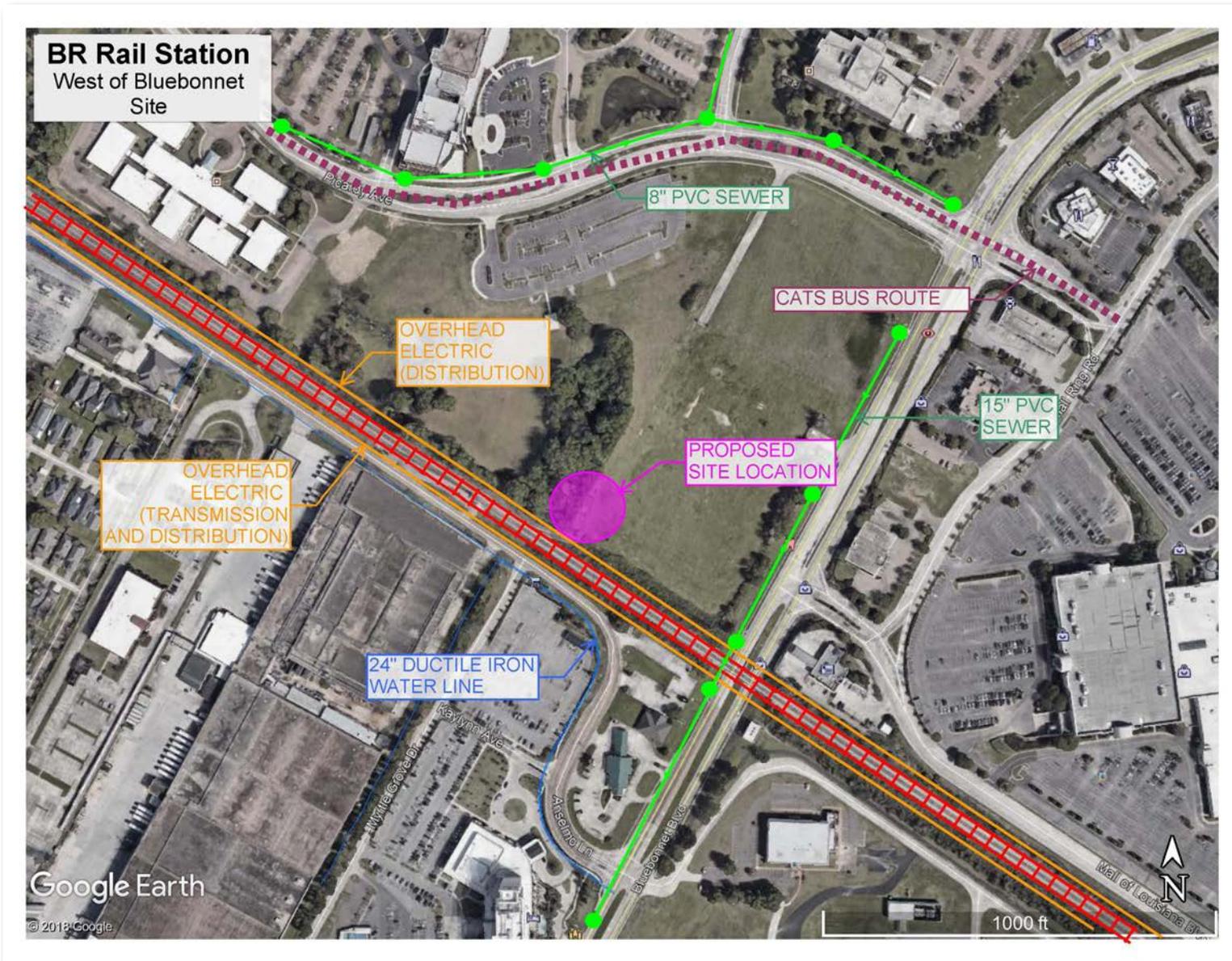


Image: Electrical Service Map from Entergy





Baton Rouge Rail Station Utility Investigation

Proposed West of Bluebonnet Blvd. Site

- **BR Water**
 - 12" PVC water main on south side of tracks, none near site
 - Does not appear to cause any conflicts with proposed development

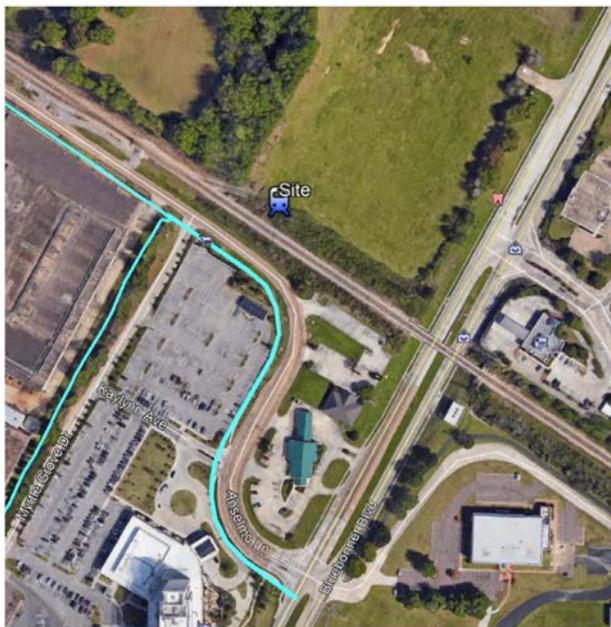


Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**
 - 8" sewer main in Picardy Ave.
 - 8" sewer main in Bluebonnet Blvd.
 - Does not appear to cause any conflicts with proposed development

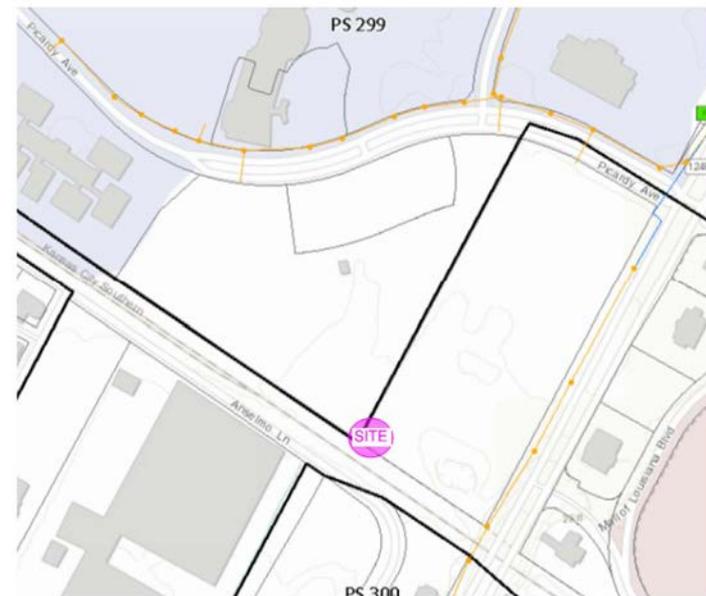


Image: Sewer Main Map from City-Parish Sewer

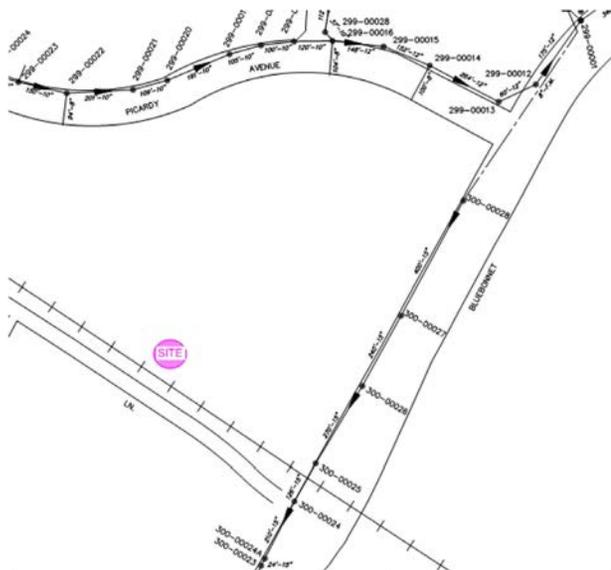


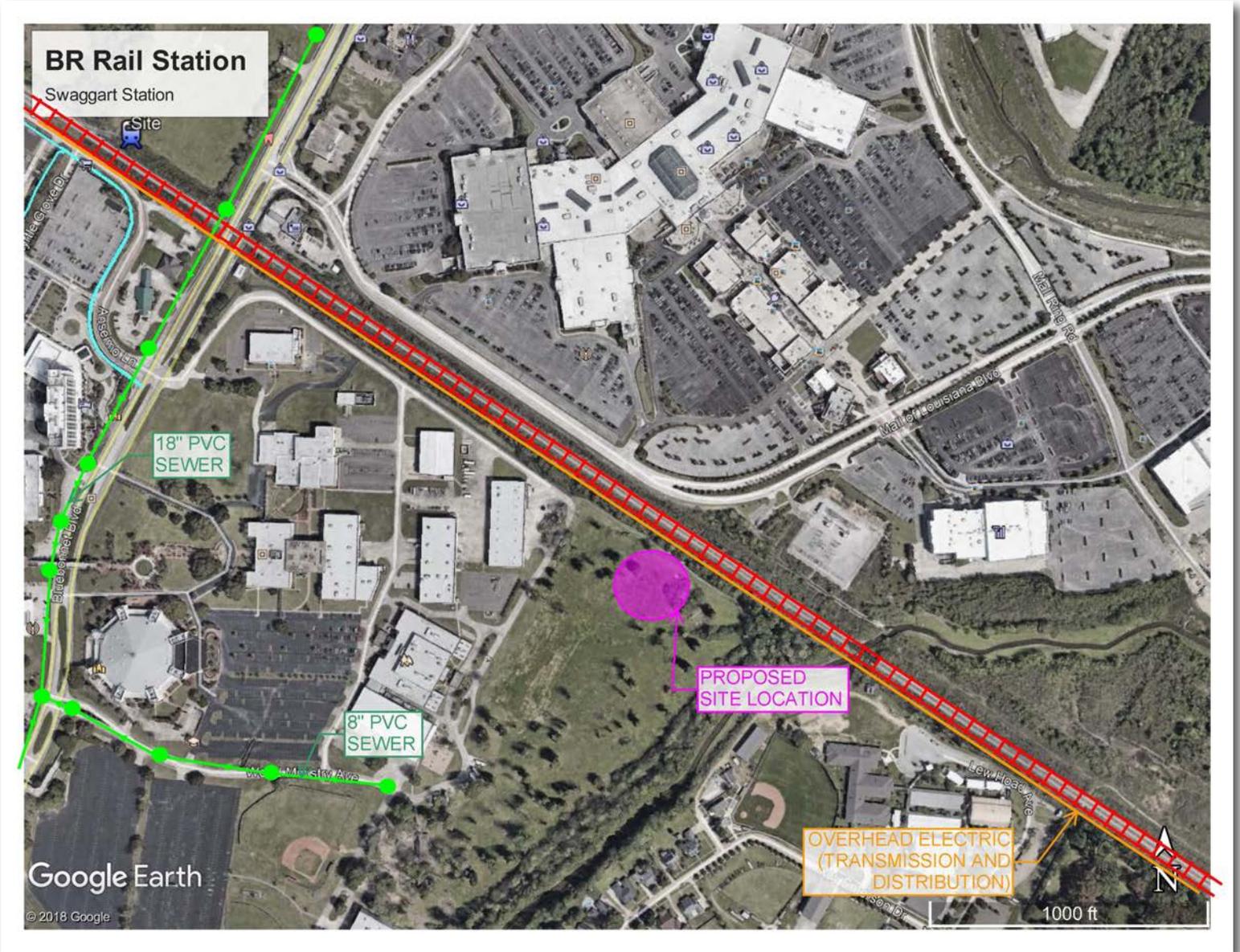
Image: EBROSCO Map



- **Energy**
 - Overhead distribution lines on north side of tracks near site



Image: Electrical Service Map from Energy





Baton Rouge Rail Station Utility Investigation

Proposed Swaggart Site

- **BR Water**

- No waterline near proposed site
- Does not appear to cause any conflicts with proposed development



Image: GIS Overlay in Google Earth from BR Water



- **City-Parish Sewer**

- 18" sewer main along Bluebonnet Blvd
- Does not appear to cause any conflicts with proposed development



Image: EBROSCO Map



- **Entergy**

- Overhead transmission line on south side of tracks is a potential conflict.

APPENDIX F: TRAFFIC MEMO



Memo

To: James Frye
 HNTB
 File: 201802792
 Baton Rouge Rail Station Master Plan

From: Joey Lefante
 New Orleans LA Office
 Date: July 27, 2018

Reference: Traffic Investigation

The purpose of this memo is to document existing traffic data that is available for use for the Baton Rouge Rail Station Master Plan. Information included in this memo has been compiled from various sources including, but not limited to:

- Planning-level studies that have been conducted within the Study Area
- Traffic studies that have been completed within the Study Area
- Design plans for construction projects that have been initiated/completed within the Study Area

DOWNTOWN STATION

Figure 1 shows the site for the proposed Downtown Station in blue. Figure 2 shows the proposed site plan for the Downtown Station.

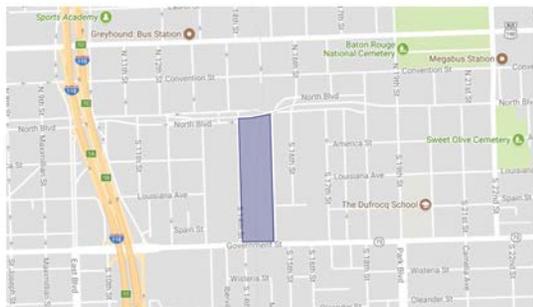


Figure 1: Downtown Station Site

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July 27, 2018
 James Frye
 Page 2 of 14

Reference: Traffic Investigation



Figure 2: Proposed Downtown Station Site Plan

MAJOR STREETS

14th Street

South of Government Street, 14th Street is an urban, one-way local street with one (1) NB lane and space for roadside parking. North of Government Street, 14th Street is an urban, two (2) lane, two-way local street with one (1) thru lane in each direction. No speed limit signs were found in the area, so the posted speed is unknown. The adjoining developments include Shiloh Missionary Baptist Church, Dyke Nelson Architecture / DNA Workshop, and ThreeSixtyEight advertising agency.

Government Street

Government Street is an urban, four (4) lane undivided arterial that runs in an east-west direction. It connects downtown Baton Rouge to Mid-City and Independence Park. The average daily traffic (ADT) on this roadway ranges between 14,000 – 25,500 vehicles and the posted speed limit is 40mph. The adjoining developments include residential homes, schools, shops and light commercial facilities. Several schools are located along the Government Street corridor -- Catholic High School, Baton Rouge High School, DuFrocq Elementary School, Our Lady of Mercy Catholic School, and Bernard Terrace Elementary.

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Reference: Traffic Investigation

The FuturEBR report specifically identified Government Street as a preferred location to implement a Complete Street. Construction is currently underway to convert Government Street from a four-lane undivided roadway to a three-lane roadway with a center left turn lane and bicycle lanes in each direction. Plan Sheets depicting the proposed Government Street Corridor Complete Street Implementation have been included in **Appendix A**.

North Boulevard

North Boulevard is an urban, four (4) lane divided arterial that runs in an east-west direction. It connects downtown Baton Rouge to Mid-City and Baton Rouge Community College. Near the proposed Downtown Station Site, North Boulevard features an overpass structure, with parking underneath the overpass and only a pedestrian sidewalk crossing the railroad at ground level. Access to both the eastbound and westbound directions is maintained from 14th Street via service roads underneath the overpass. The posted speed limit is 40 mph.

AREA TRAFFIC VOLUMES

Traffic volumes along Government Street were obtained from *Government Street Traffic and Safety Analyses, East Boulevard to Lobdell Boulevard, S.P. No. H.011295*. The 2014 Proposed Volumes have been included in **Appendix B**.

DOWNTOWN STATION ACCESS MAPS

Maps were created to show the potential access options that will be provided to vehicle, transit, bike, and pedestrian traffic at the Downtown Station. The maps can be found in **Appendix C**.

POTENTIAL FUTURE IMPROVEMENTS

Key access points for the Downtown Station will be located at the intersections of Government Street with 14th Street and North Boulevard with 14th Street. Future improvements to these intersections that could benefit access to the rail station include, but are not limited to:

- 14th Street will likely require upgrades in the form of roadway rehabilitation, striping, curbing, sidewalks, and bike lanes. Due to the high pedestrian and bicycle usage anticipated, traffic calming measures should be put in place to keep vehicle speeds low and in scale with the existing neighboring developments.
- There is potential to relocate the existing CATS hub at Florida Boulevard and 22nd Street to the vicinity of the new rail station. This will require some reworking of bus routes, most of which can occur along North Boulevard. Further coordination with CATS is recommended as the planning process moves forward.
- The proposed Government Street Complete Street includes an unsignalized, full access median opening at 14th Street. Warrant analyses should be completed to determine if the additional traffic generated by the rail station warrants a signal. If not, operations should be closely monitored to determine if any access modifications become necessary in the event of increases in crash frequency.

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Reference: Traffic Investigation

- The portion of North Boulevard that intersects with 14th Street will, for the most part, only be utilized by roadway users accessing the rail station. This is due to the overpass structure on North Boulevard that begins at 12th Street. Improvements to the North Boulevard and 12th Street intersection may be necessary to accommodate additional users attempting to access the at grade portions of North Boulevard. Currently this intersection is an unsignalized, full access median opening. Of particular concern are potential conflicts between westbound ground-level traffic and the westbound traffic descending from the North Boulevard overpass. The geometry of this intersection should be further investigated to determine potential improvements. Two potential options are signalizing the intersection (if warranted by MUTCD) or implementation of a roundabout to manage conflicts between the different approaches. It is recognized that whichever treatment is selected should emphasize the intersection as a key entry point to the rail station.

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Reference: Traffic Investigation

SUBURBAN STATION

Figure 3 shows the site for the proposed Suburban Station in blue. Figure 4 shows the proposed site plan for the Suburban Station.

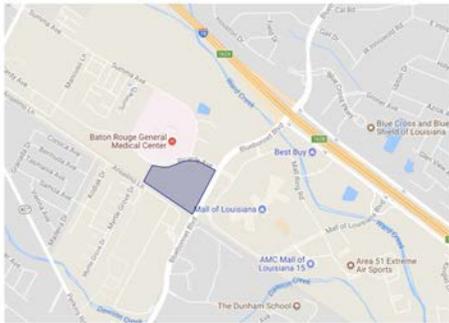


Figure 3: Suburban Station Site



Figure 4: Proposed Suburban Station Site

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Reference: Traffic Investigation

MAJOR STREETS

Essen Lane

Essen Lane is an urban, six (6) lane undivided arterial that runs in a north-south direction within the project area. Essen Lane features three (3) thru lanes in the SB direction, two (2) thru lanes in the NB direction, and one (1) continuous two-way left turn lane (TWLTL). It provides access to both I-10, I-12, and Our Lady of the Lake Hospital facilities. The posted speed is 45 mph. The adjoining developments include health facilities and commercial properties. Construction is almost complete to widen Essen Lane by adding a third continuous NB lane and additional turn lanes at the I-10 interchange.

Bluebonnet Boulevard

Bluebonnet Boulevard is an urban, six (6) lane divided arterial that runs in a north-south direction within the project area. Bluebonnet Boulevard features three (3) thru lanes in both the NB and SB direction with intermittent turn lanes at median openings. It provides access I-10, Baton Rouge General Medical Center facilities, and the Mall of Louisiana. The adjoining developments include health facilities, commercial properties, and some residential areas.

Picardy Avenue

Picardy Avenue is an urban, four (4) lane divided collector that runs in an east-west direction within the project area. Picardy Avenue features two (2) thru lanes in each direction with intermittent turn lanes at median openings. It provides circulatory access between Essen Lane and Bluebonnet Boulevard. The adjoining developments include Baton Rouge General Medical Center, health facilities, and commercial properties. As part of the *Baton Rouge Health District Master Plan*, a potential future project would realign Picardy Avenue to connect with Mall of Louisiana Boulevard. Excerpts of the *Baton Rouge Health District Master Plan*, showing the proposed realignment, can be found in **Appendix D**.

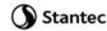
Summa Avenue

Summa Avenue is an urban, three (3) lane undivided collector that runs in an east-west direction. Summa Avenue features one (1) thru lane in each direction and a continuous TWLTL. It connects Essen Lane to Picardy Avenue at Baton Rouge General Hospital. The adjoining developments include Baton Rouge General Medical Center, health facilities, and commercial properties. As part of the *Baton Rouge Health District Master Plan*, Summa Avenue is proposed to be extended in conjunction with the realignment of Picardy Avenue. Excerpts of the *Baton Rouge Health District Master Plan*, showing the proposed extension, can be found in **Appendix D**.

Dijon Drive

Currently, Dijon Drive is an urban, two (2) lane undivided collector that connects Perkins Road to Essen Lane around the backside of Our Lady of the Lake Hospital. Dijon also provides access to other health facilities near the hospital. As part of the *Baton Rouge Health District Master Plan*, Dijon Drive is proposed to be extended from Essen Lane to Bluebonnet Boulevard. **Figure 5** shows the preliminary alignment for the Dijon Drive extension. Additionally, Excerpts of the *Baton Rouge Health District Master Plan*, showing the proposed extension, can be found in **Appendix D**.

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Reference: Traffic Investigation

MAJOR STREETS

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Essen Lane is an urban, six (6) lane undivided arterial that runs in a north-south direction within the project area. Essen Lane features three (3) thru lanes in the SB direction, two (2) thru lanes in the NB direction, and one (1) continuous two-way left turn lane (TWLTL). It provides access to both I-10, I-12, and Our Lady of the Lake Hospital facilities. The posted speed is 45 mph. The adjoining developments include health facilities and commercial properties. Construction is almost complete to widen Essen Lane by adding a third continuous NB lane and additional turn lanes at the I-10 interchange.

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Reference: Traffic Investigation

POTENTIAL FUTURE IMPROVEMENTS

Key access points for the Suburban Station will be located at the intersections of the realigned Picardy Avenue with Bluebonnet Boulevard at Mall of Louisiana Boulevard and the relocated intersection of Summa Avenue with Picardy Avenue. Future improvements to these intersections that could benefit access to the rail station include, but are not limited to:

- Currently, both intersections are signalized. With the increased trips generated by the rail stations and other future developments in the area, it is likely that these intersections will continue to warrant signalization after the rail station is complete. Capacity improvements (additional turn lanes, signal timing optimization, etc.) would likely need to be investigated as traffic volumes increase.
- The possible relocation of Picardy Avenue could be expected to reduce the traffic demand at the existing intersection of Bluebonnet Boulevard and Picardy Avenue. The existing intersection is centrally located for both Baton Rouge General Medical Center and the Mall of Louisiana, and provides a key opportunity for an improved pedestrian crossing across Bluebonnet Boulevard.
- The future Transit-Oriented Development (TOD) surrounding the rail station will be developed by others. The development of the TOD should take care not to preclude any currently proposed roadway projects, including the potential realignment of Picardy Avenue.

Stantec Consulting Services Inc.

Joey Lefante PE, PTOE
Traffic Engineer

Phone: (504) 654-1760
Fax:
Joey.Lefante@stantec.com

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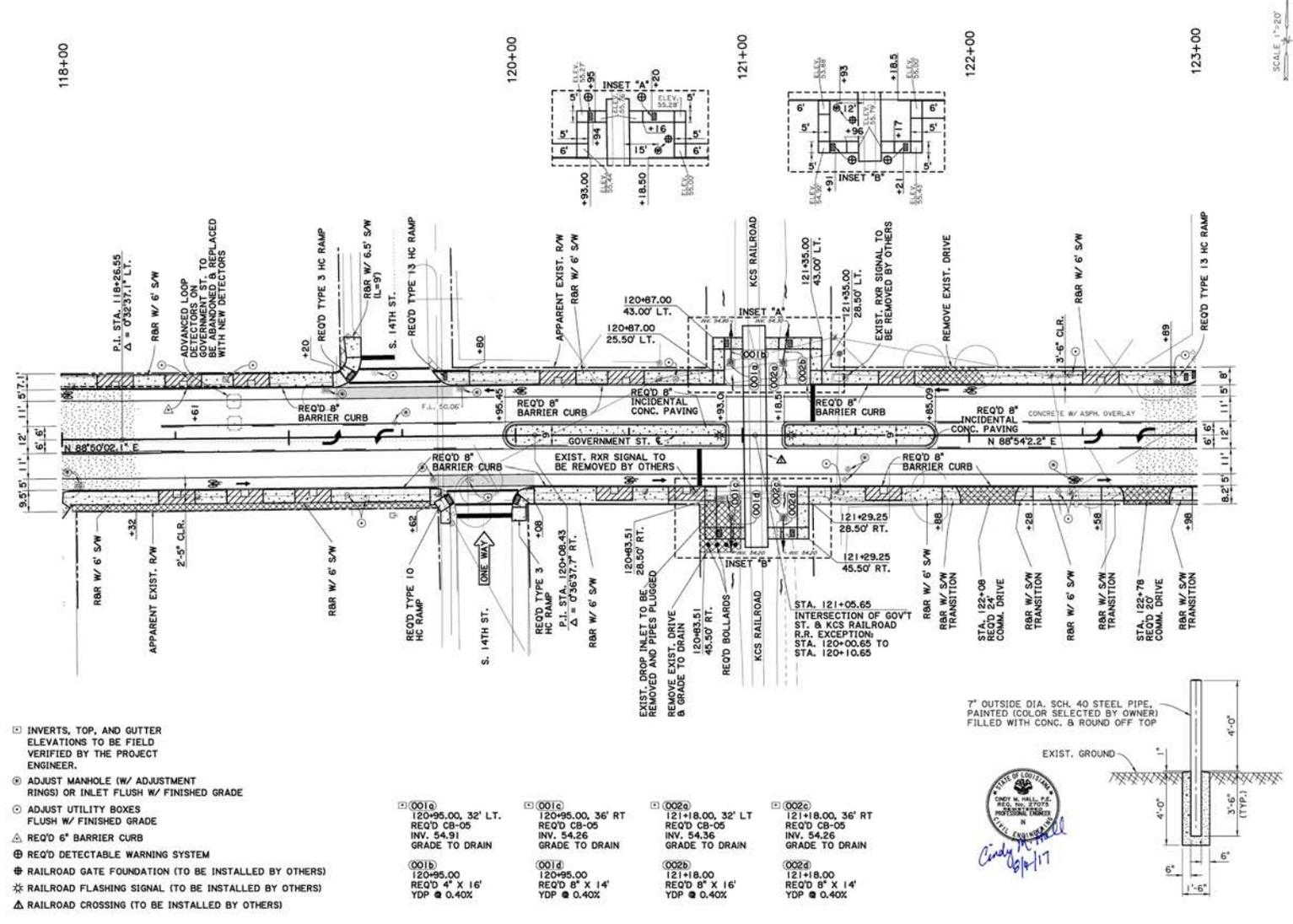


Memo

APPENDIX A: GOVERNMENT STREET COMPLETE STREET DESIGN PLANS

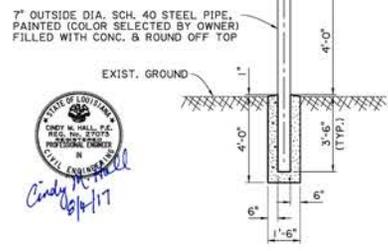
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FINAL PLANS
 F:\Projects\1201802384_05\03 dtdiscip\lines\highway\plan_development\drawings\0008_axrpp.dgn 10:33
 04-AUG-2017



- INVERTS, TOP, AND GUTTER ELEVATIONS TO BE FIELD VERIFIED BY THE PROJECT ENGINEER.
- ⊙ ADJUST MANHOLE (W/ ADJUSTMENT RINGS) OR INLET FLUSH W/ FINISHED GRADE
- ⊙ ADJUST UTILITY BOXES FLUSH W/ FINISHED GRADE
- △ REQ'D 6" BARRIER CURB
- ⊕ REQ'D DETECTABLE WARNING SYSTEM
- ⊕ RAILROAD GATE FOUNDATION (TO BE INSTALLED BY OTHERS)
- * RAILROAD FLASHING SIGNAL (TO BE INSTALLED BY OTHERS)
- ▲ RAILROAD CROSSING (TO BE INSTALLED BY OTHERS)

- 001a 120+95.00, 32' LT. REQ'D CB-05 INV. 54.91 GRADE TO DRAIN
- 001b 120+95.00 REQ'D 4' X 16' YDP @ 0.40X
- 001c 120+95.00, 36' RT. REQ'D CB-05 INV. 54.26 GRADE TO DRAIN
- 001d 120+95.00 REQ'D 8' X 14' YDP @ 0.40X
- 002a 121+18.00, 32' LT. REQ'D CB-05 INV. 54.36 GRADE TO DRAIN
- 002b 121+18.00 REQ'D 8' X 16' YDP @ 0.40X
- 002c 121+18.00, 36' RT. REQ'D CB-05 INV. 54.26 GRADE TO DRAIN
- 002d 121+18.00 REQ'D 8' X 14' YDP @ 0.40X



SCALE 1"=50'

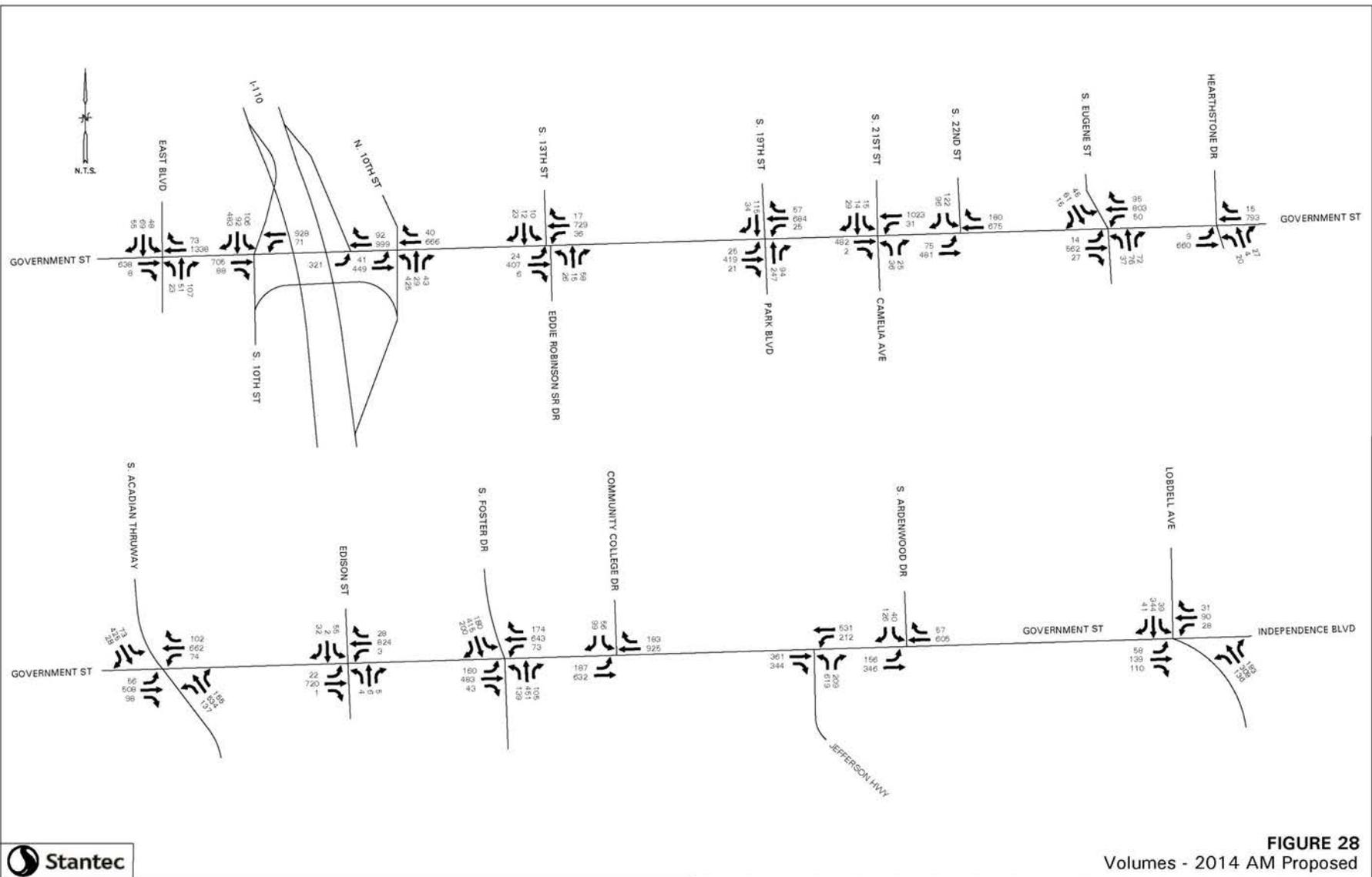
PLAN SHEET GOVERNMENT ST. LA 73 (607) ST1 EAST BLVD - LOBBELL AVE			
SHEET NUMBER 08	PROJECT H.O11295	CONTROL SECTION 077-05 B. 000-17	EAST BATON ROUGE
DRAWN BY KKH	CHECKED BY KKH	DATE 5 OF 49	PROJECT H.O11295

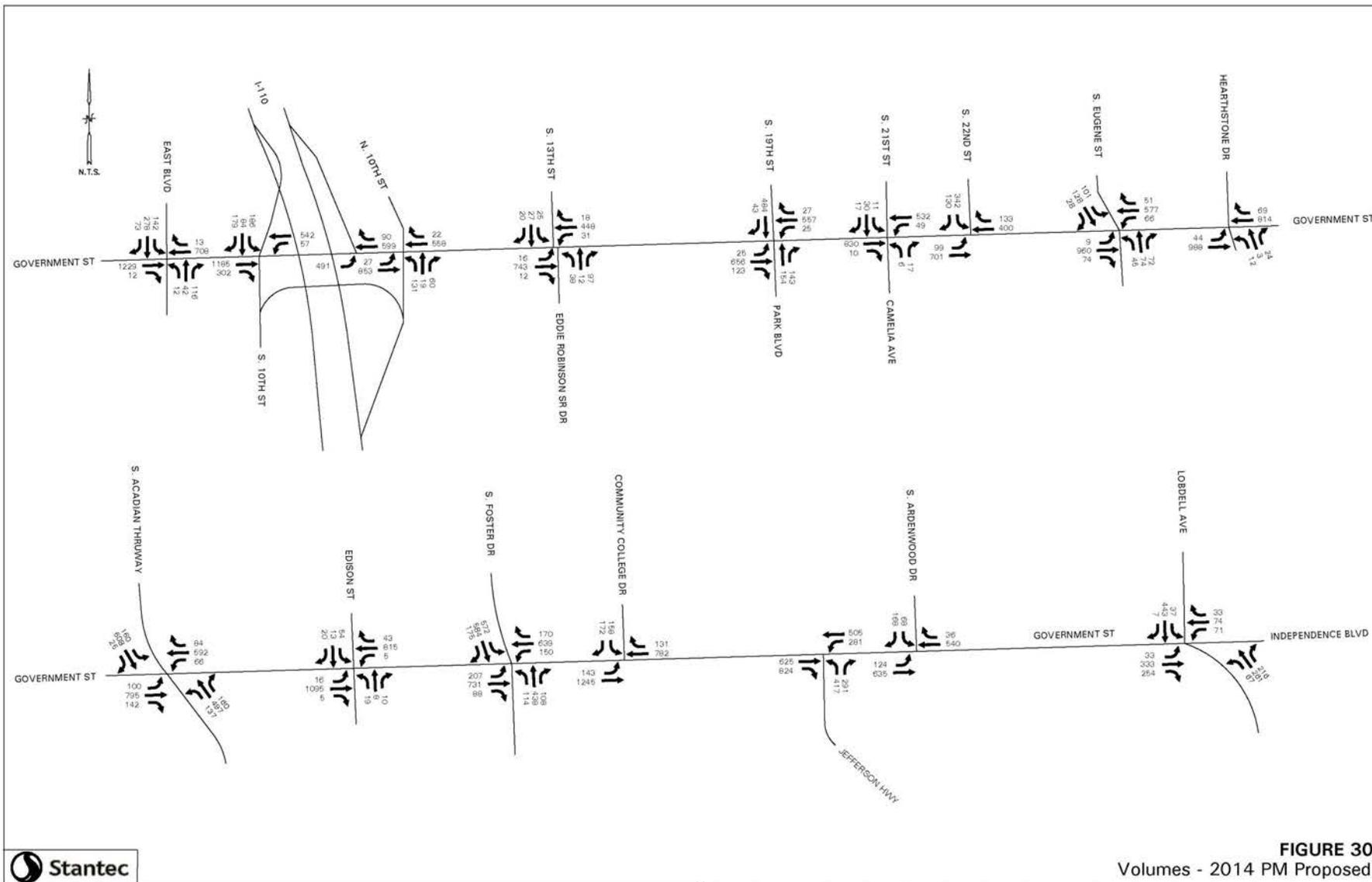


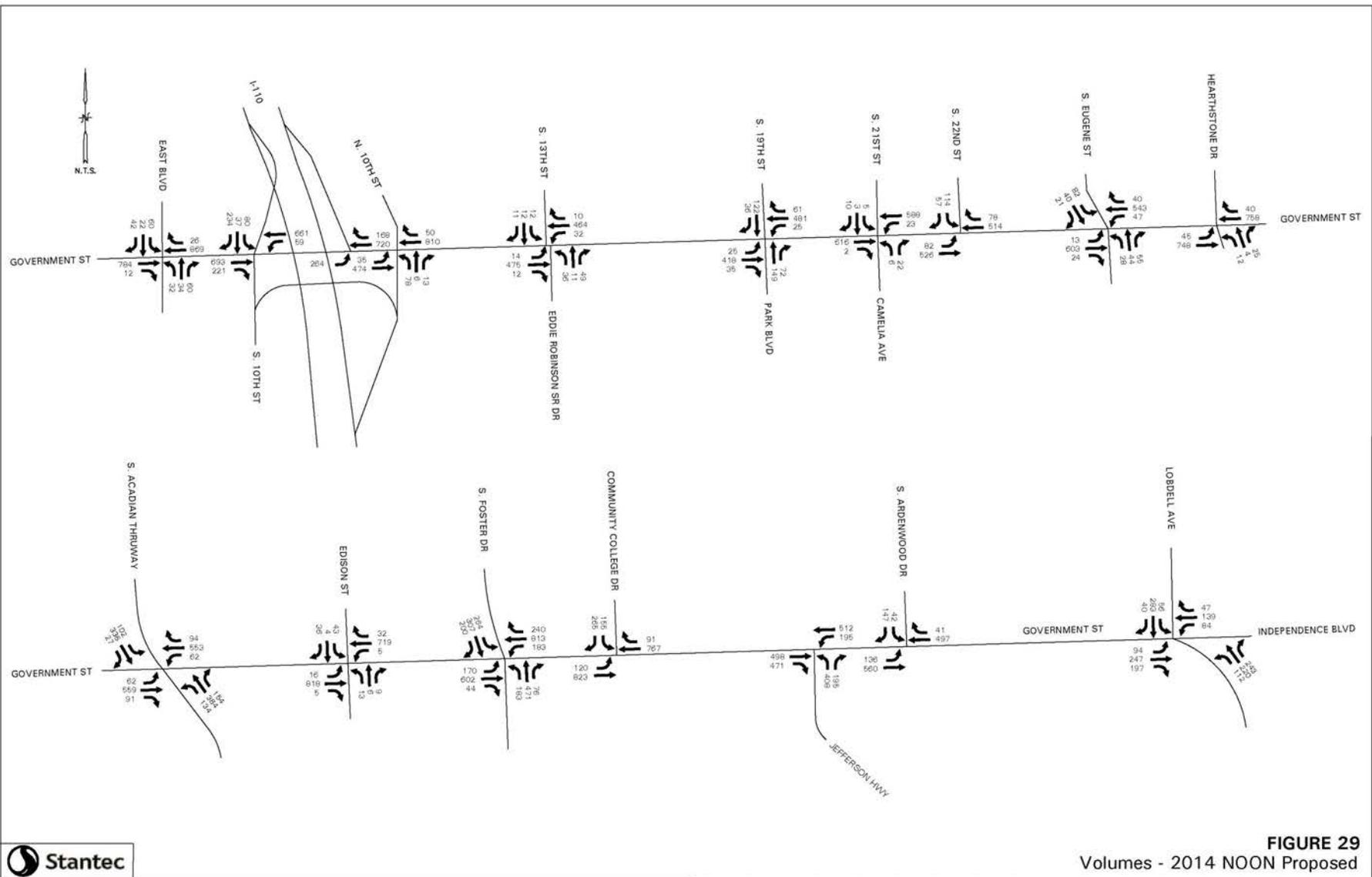
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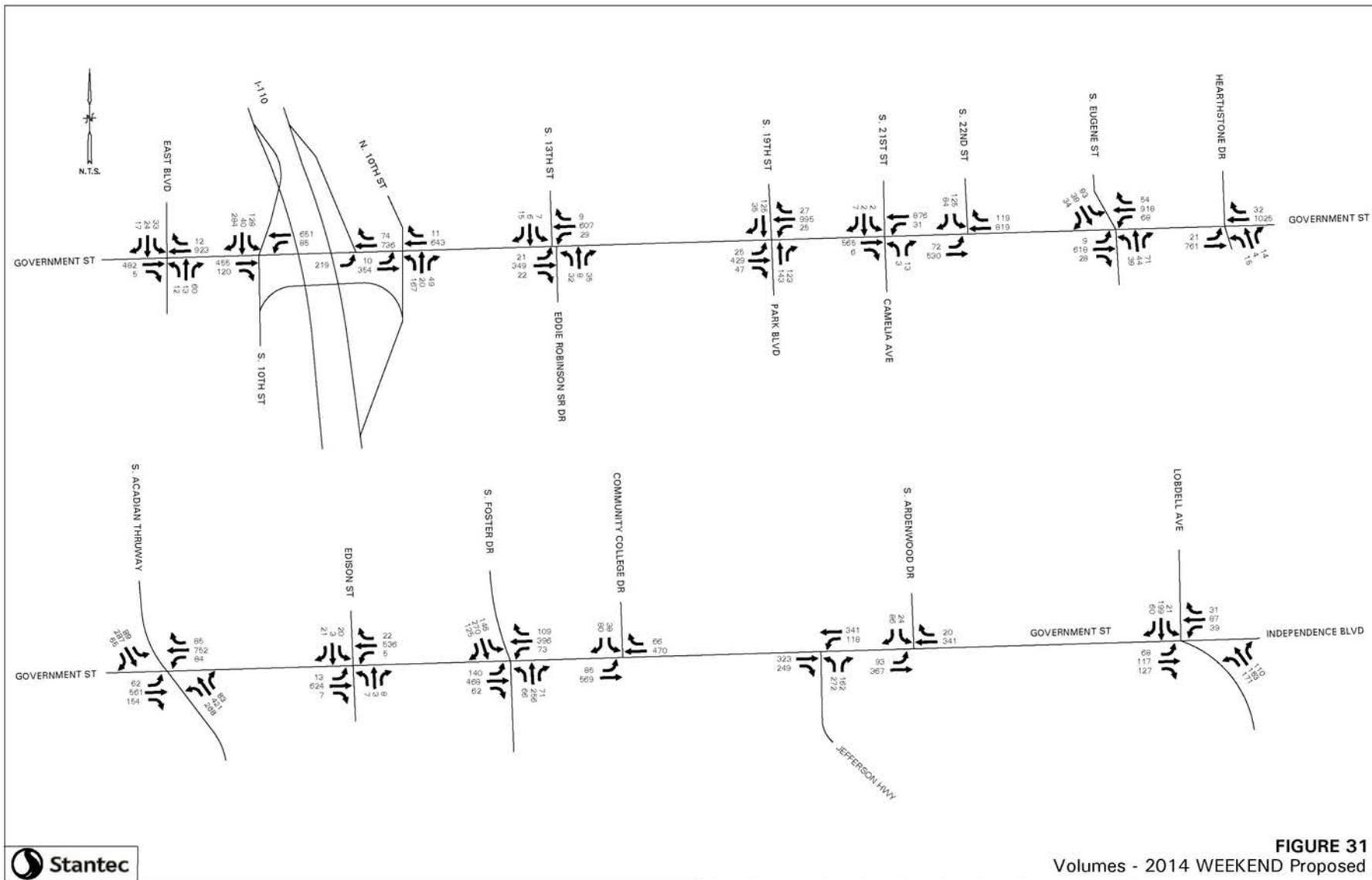
APPENDIX B: GOVERNMENT STREET 2014 TRAFFIC VOLUMES

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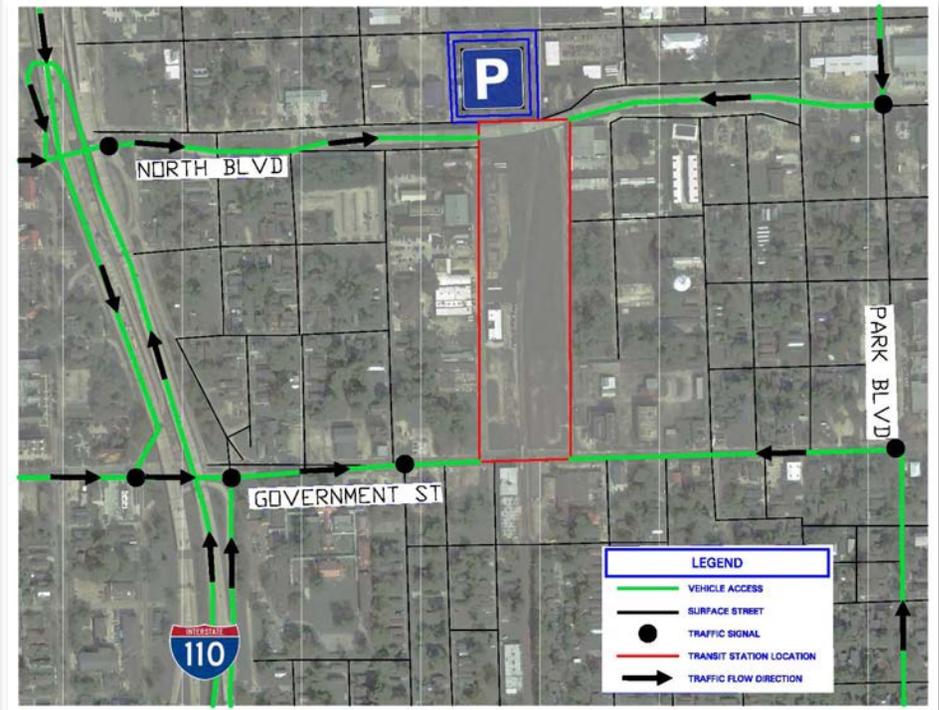


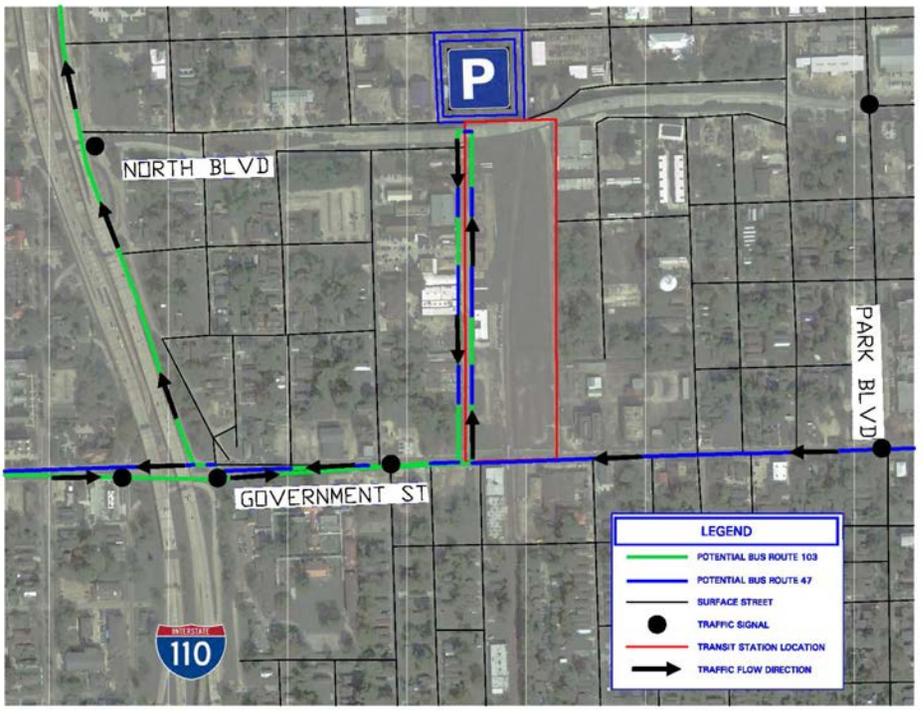






APPENDIX C: DOWNTOWN STATIONS ACCESS MAPS





Rx PRESCRIPTION

A well-connected street framework is the foundation of a successful Health District that supports institutional growth and community development.

1. Create connections for efficient circulation and access.

- 1.1 Adopt a Street Framework Plan.
- 1.2 Strengthen arterial network.
- 1.3 Manage access on arterials.
- 1.4 Improve unsafe intersections.
- 1.5 Add rail crossings.

1.1 Adopt a Street Framework Plan.

No silver bullet solutions exist for the systemic congestion problem currently experienced in the BRHD. Multiple solutions must be advanced simultaneously to make progress over time. Key to these solutions is the phased construction of new infrastructure guided by a clear vision of the desired outcome. The Street Framework Plan (Figure 12) provides guidance towards achieving this vision.

A Street Framework Plan is a long-term vision illustrating where future streets can be added to an existing network to improve access and circulation. It also establishes an organizational hierarchy of streets based on primary function. It is not meant to be viewed as a blueprint but as a guide; detailed engineering studies and in some cases impact studies will be required to set the exact location and route of planned streets.

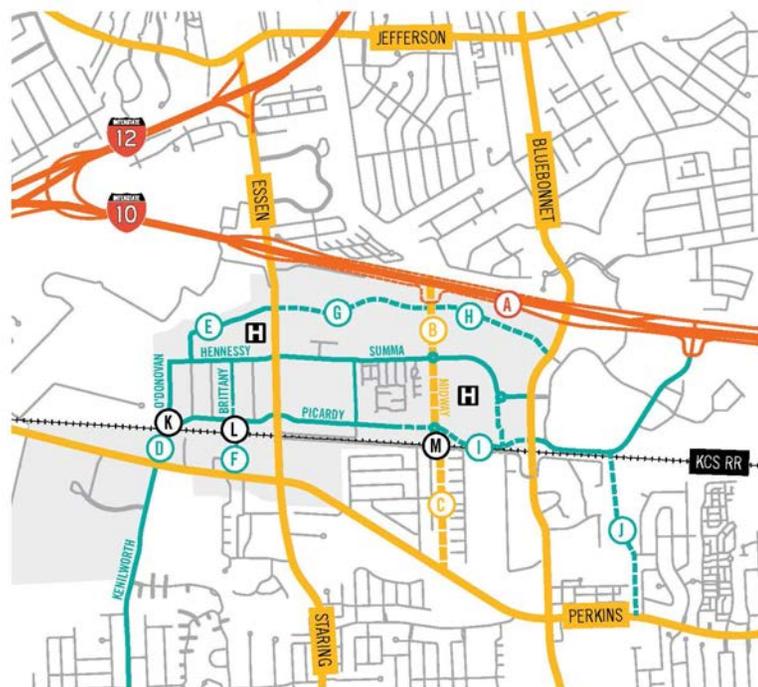
The BRHD Street Framework Plan builds on the foundation of FutureEBRP to establish a road map for future infrastructure investments that benefit not only those in cars, but also those who walk or bike between destinations. The plan proposes a well-connected network of major streets, urban arterials, and highway frontage roads that have been optimized through high-level testing of future development scenarios. To

support this, the study team performed a planning-level traffic analysis to understand current traffic conditions and estimate how a more robust street network could help prepare the Health District for future growth. This analysis was a modified traffic impact study that calculated expected number of trips from new development, as well as potential reductions owed to the development, over time, of a more walkable and well-connected district environment through district planning activities.

The East Baton Rouge Parish (EBRP) Major Street Plan should be amended to include the urban arterials and major streets illustrated on the BRHD Street Framework Plan. Doing so will enable timely implementation through government, District, and landowner initiatives. Establishing this network should be a high-level priority for District institutions.

The illustrated version of the Framework Plan (see page 52) also includes a vision for an enhanced local street network interwoven with a district-wide network of public open spaces and trails. The implementation of this fine-grain, more pedestrian-scale network requires close coordination between the District governance, organization, local landowners and the City-Parish government. The BRHD must act

12 BRHD Street Framework Plan: Organizational Hierarchy of Existing and Proposed Streets



HIGHWAY	URBAN ARTERIALS	MAJOR STREETS	RAIL CROSSINGS
PROPOSED A I-10 frontage roads between Essen Ln. and Bluebonnet Blvd.	EXISTING Essen Ln. Bluebonnet Blvd. Perkins Rd. PROPOSED M Midway Blvd. to frontage road C Midway Blvd. to Perkins Rd.	EXISTING Picardy Ave. Kenilworth Pkwy. Mall of Louisiana Blvd. PROPOSED G Kenilworth-O'Donovan connection E Service road (Dijon) upgrade B Brittany Dr. extension to Perkins Rd D Dijon Dr. extension to Midway Blvd I Dijon Dr. extension to Bluebonnet Blvd L Picardy Ave. rerouting to Mall of LA Blvd. O Picardy-Perkins Connector	EXISTING Essen Ln. (at grade) Bluebonnet Blvd. (underpass) One Perkins Pl. (at grade) - see K below PROPOSED K O'Donovan Dr. (underpass) replaces One Perkins Pl. at-grade crossing J Brittany Dr. (underpass) N Midway Blvd. (underpass)

proactively to secure new local street connections as parcels get redeveloped.

1.2 Strengthen Arterial Network.

One of the key strategies the Street Framework Plan employs to optimize road capacity is to provide east-west travel alternatives to motorists who would typically turn onto Essen and Bluebonnet to get to I-10. Turning these time-consuming turn movements into faster through movements (i.e., going straight) will help move traffic at key intersections while also shifting traffic volumes away from urban arterials.

The street alignments described below differ from the projected streets published in the EBRP Major Street Plan.¹ The BRHD should work with the City-Parish Planning Commission (GPPC) to update the Major Street Plan as a first step towards street implementation.

1.2.1. Extend Dijon Drive / Service Road to Bluebonnet Boulevard.

Today, Dijon Drive is a well-utilized north-south route that carries traffic from Perkins Road (via One Perkins Place Drive) to Hennessy Boulevard. Past Hennessy, Dijon becomes a hospital service road for the OLOL Regional Medical Center. Extending Dijon Drive / Service Road to Bluebonnet Boulevard creates a new major street that adds a key east-west route.

The Dijon Drive extension will provide efficient intra-campus flow between Our Lady of the Lake Regional Medical Center and the planned OLOL Children's Hospital to the east of Essen Lane. It will create an additional street that will enable traffic to bypass the Baton Rouge General Medical Center, eliminating cut-through traffic from the campus.

¹ EBRP Major Street Plan. <https://brgov.com/department/planning/pdf/majorstreetplan.pdf>.

Extending this major road to the Mall of Louisiana Road on Bluebonnet will provide a new access point into the District. This connection also gives eastbound motorists an option to use the mall's loop road to access I-10.

Improvements to Dijon should support safe pedestrian and bicyclist access to Ward's Creek Trails, including a safe crossing to a future bridge to Burden Center.

1.2.2. Connect Picardy Avenue to the Mall of Louisiana Boulevard.

The Street Framework recommends the re-routing of Picardy Avenue between Midway Boulevard and Bluebonnet Boulevard. The re-routed segment aligns with Mall of Louisiana Boulevard to create a continuous street. This connection provides eastbound vehicles on Picardy an alternative route to and from I-10 on Mall of Louisiana Boulevard, while also adding a new access point into the District on Bluebonnet Boulevard.

The re-routing of Picardy will also improve safety for pedestrians on the Baton Rouge General Medical Center's campus by channeling high-speed through traffic to the periphery of the campus. The existing intersection of Picardy at Bluebonnet will be maintained as the gateway into the medical campus. A roundabout can also be added at the intersection of Picardy Avenue and Midway Boulevard to slow traffic speeds.

1.2.3. Connect Picardy Avenue and Perkins Road with a New Street

The proposed Picardy-Perkins Connector will extend the connectivity of the re-routing of Picardy even further. This project will provide a new street connection from Perkins Road to the Picardy Avenue/I-10 Interchange. This new street will start at Perkins Road

between Wimbledon Subdivision and Perkins Rowe and then connect to Mall of Louisiana Boulevard.² The project has been funded by the City-Parish Green Light Plan. Construction is expected to begin in early 2016 and take 2-3 years to complete.

1.3 Manage Access On Arterials.

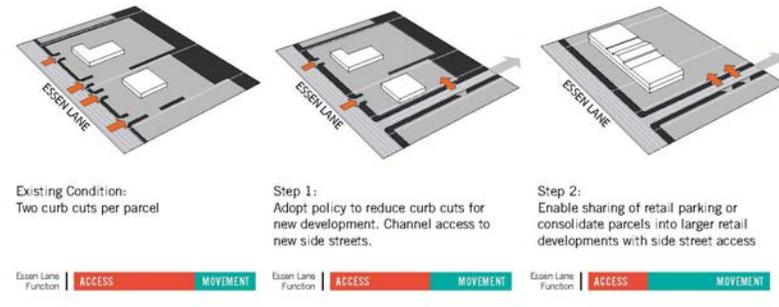
The primary purpose of urban arterials, like Essen Lane and Bluebonnet Boulevard, is to move regional traffic efficiently. High volumes of traffic found on these arterials often attract car-oriented businesses that depend on easy access for their customers. The result is a conflict of purpose between motorists trying to move through and those trying to turn into businesses, with an increased potential for vehicular accidents. In addition to slowing down traffic, the frequency of curb cuts also creates an unsafe environment for pedestrians. It's a no-win situation that is ultimately bad for business.

The Treatment Plan recommends phased implementation of an access management plan on Essen Lane and Bluebonnet Boulevard that includes the transfer of curb cuts to new east-west streets to be inserted in between Hennessy/Summa Avenue and Picardy Avenue (Figure 13).³ While the utility of these local access streets is clear, the subdivision patterns on either side of Essen Lane, in particular, do not currently allow for them to be put in place. The BRHD is the perfect

² The Green Light Plan. Transportation and Street Improvements Program for East Baton Rouge City-Parish. 2015.

³ Future EBRP recommends the implementation of access management strategies on state routes such as Essen Lane in East Baton Rouge Parish. The Louisiana Department of Transportation and Development (LADOTD) has adopted policies that favor access management strategies as part of a larger Complete Streets Policy.

13 Proposed Access Management Strategy for Arterials (Essen Lane, Bluebonnet Boulevard and Perkins Road)



mechanism to facilitate discussions between multiple parties including the LADOTD, the City-Parish, utility companies, and local land and business owners towards the implementation of such transformative changes.

The outcome, ultimately, should be transformation of Essen Lane and Bluebonnet Boulevard into well-designed gateway corridors reflecting the excellence of the healthcare anchors that share the District. Properly designed and executed, the strategy could also serve as a model for other arterials in the District such as Perkins Road and (future) Midway Boulevard.

1.4 Improve Unsafe Intersections.

1.4.1. Improve the Intersection of Kenilworth Parkway and Perkins Road.

Kenilworth Parkway is a residential boulevard with multi-use pathways that currently terminates at Perkins Road. Motorists desiring access to the District turn right at this intersection and form a long queue to make an immediate left onto One Perkins Place Drive. This congested intersection is one of the most dangerous in Baton Rouge for

pedestrians, bicyclists, and motorists.

The EBRP Major Street Plan shows Kenilworth Parkway extending northward behind O'Donovan Drive to reach Essen Lane, cutting through the Burden Museum and Gardens. While addressing the problematic intersection, this alignment is detrimental to the outdoor museum, with potential negative impacts to adjoining neighborhoods. The BRHD Street Framework Plan includes an alternative solution whereby Kenilworth Parkway and its multi-use pathways are connected directly to O'Donovan or Dijon Drive with a new railroad underpass.⁴ This alignment enables safe vehicular and pedestrian / bicycle connections between the Kenilworth subdivision, Pennington Biomedical Research Center, Perkins Road Community Park, and the Health District and improves flow on Perkins Road at this location.

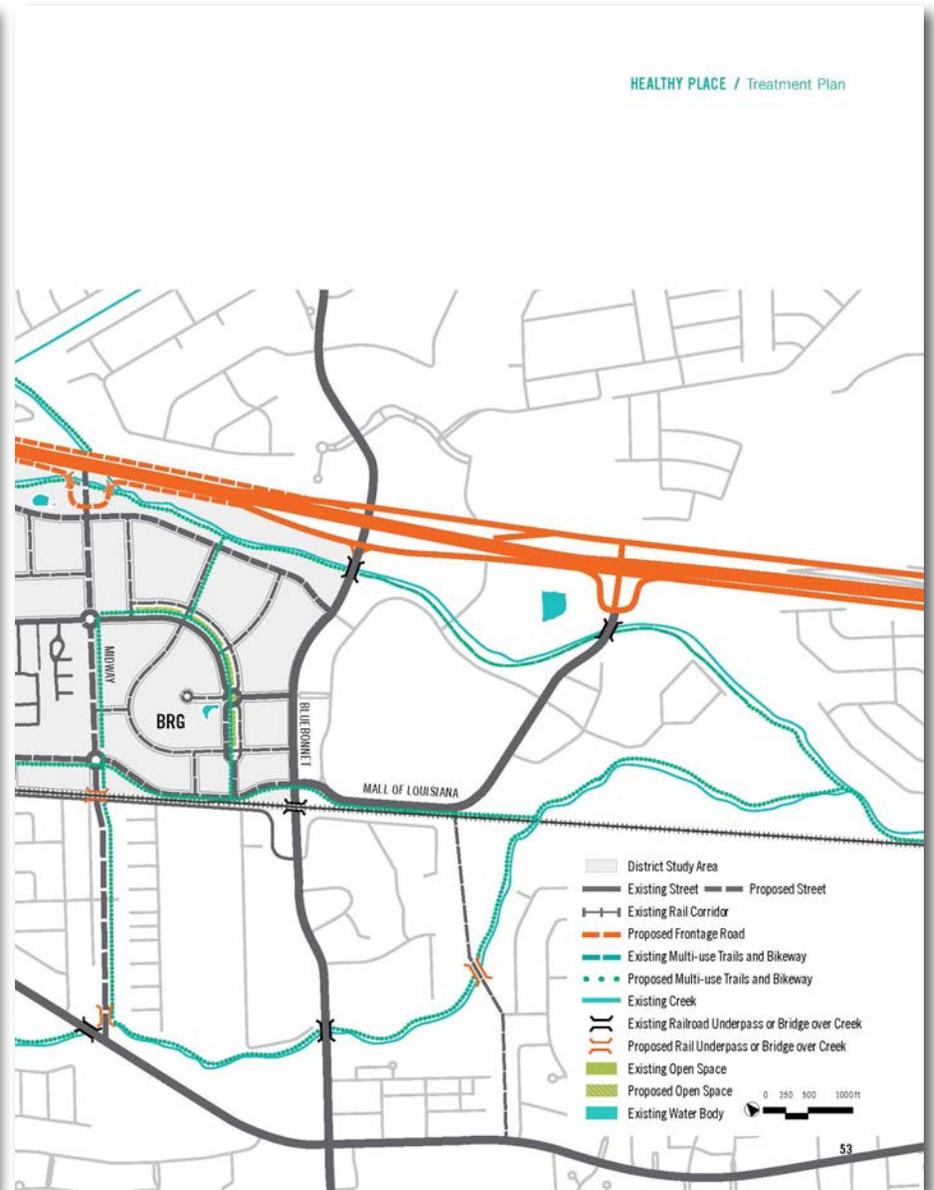
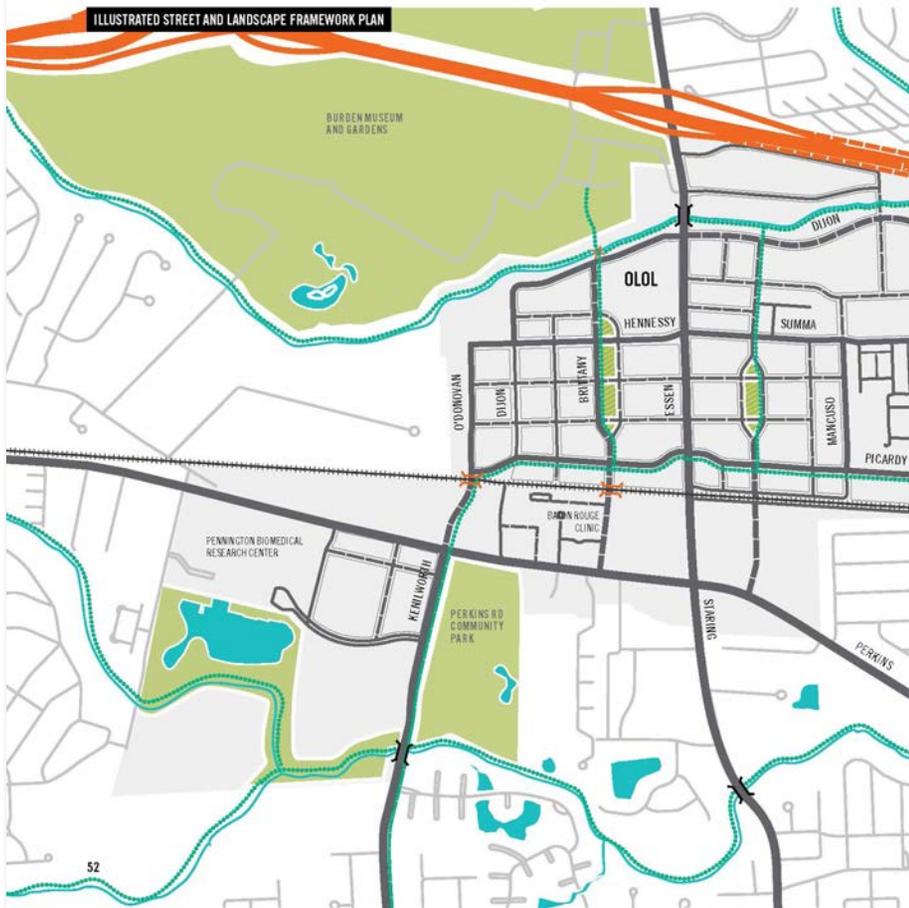
⁴ The intent is to have one railroad underpass at this location, either at O'Donovan Drive or at the current location of the at-grade crossing with linkage to Dijon Drive.

1.5 Add Rail Crossings.

The Street Framework Plan has identified the high-level feasibility of three below-grade crossings of the KCS railroad: at O'Donovan or Dijon Drive (as a replacement for the existing at-grade crossing), at Brittany Drive, and at Midway Boulevard. While costly to implement, access options not encumbered by rail traffic are critical for improved access, growth potential, and long-term resilience.

Converting the existing at-grade rail crossing at Essen Lane to an above- or below-grade crossing is technically possible but not recommended. Constructing such an over- or underpass would have significant traffic impacts across the Baton Rouge area. Taking Essen Lane above or below the railroad would also permanently limit access to adjacent built-up parcels, which may experience construction impacts. A rail underpass or overpass on Essen Lane, in short, is expected to be more expensive, time-consuming, and disruptive than the alternatives identified in the Street Framework Plan.

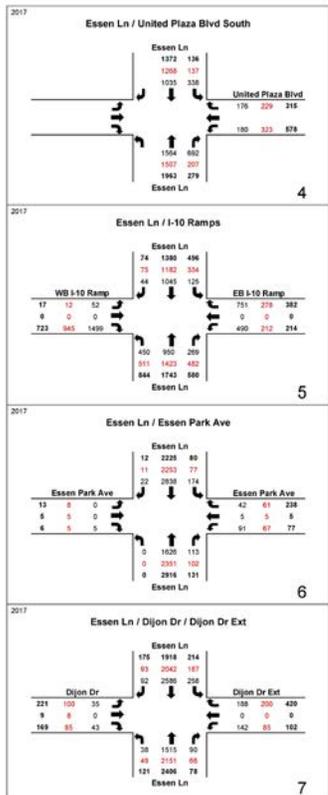
The Health District will be the hub of a well-connected and efficient transportation network that supports the daily operations of the District and serves the region.



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

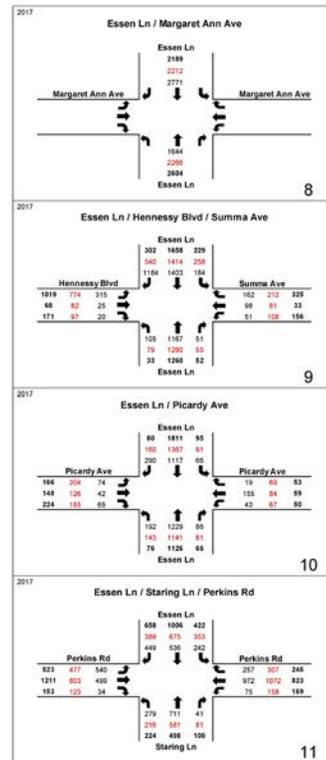
Figure 29: Essen Lane 2017 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

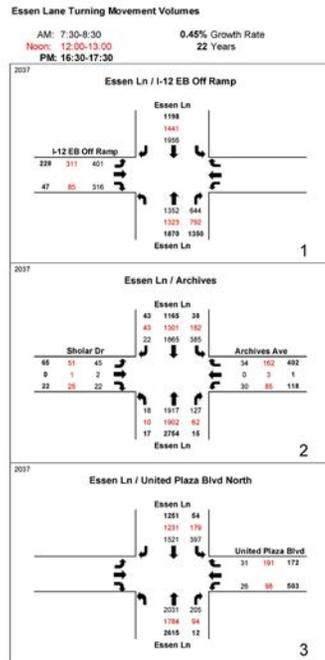
Figure 30: Essen Lane 2017 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

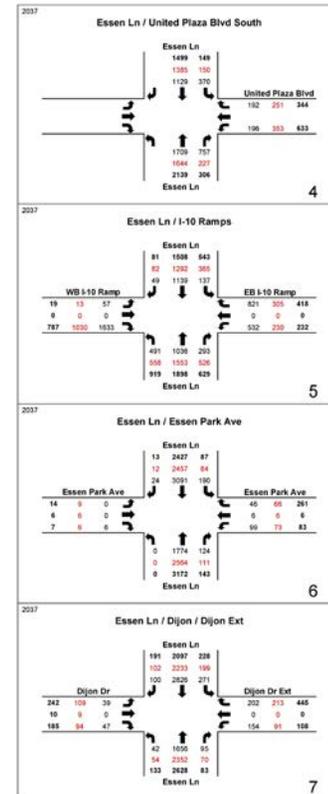
Figure 31: Essen Lane 2037 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

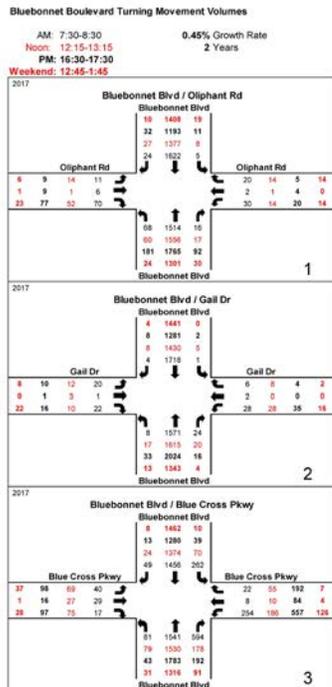
Figure 32: Essen Lane 2037 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

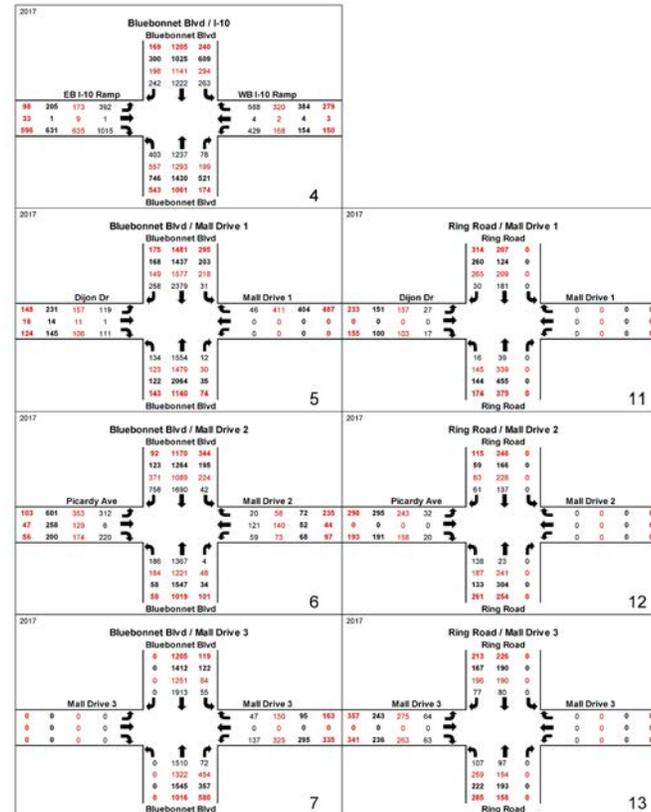
Figure 34: Bluebonnet Blvd 2017 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

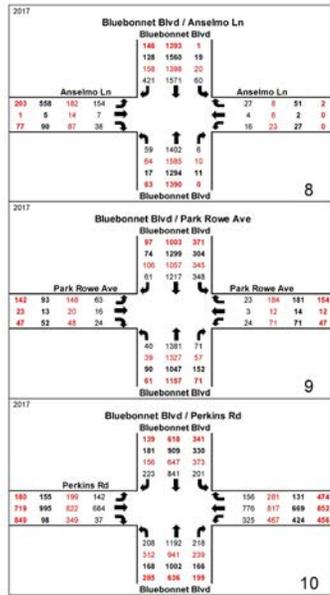
Figure 35: Bluebonnet Blvd 2017 Build Peak Hour Volumes



H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

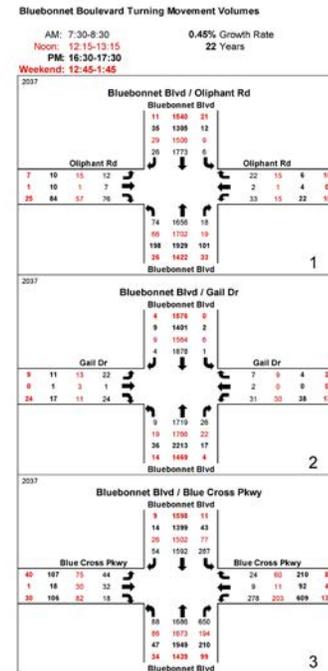
Figure 36: Bluebonnet Blvd 2017 Build Peak Hour Volumes

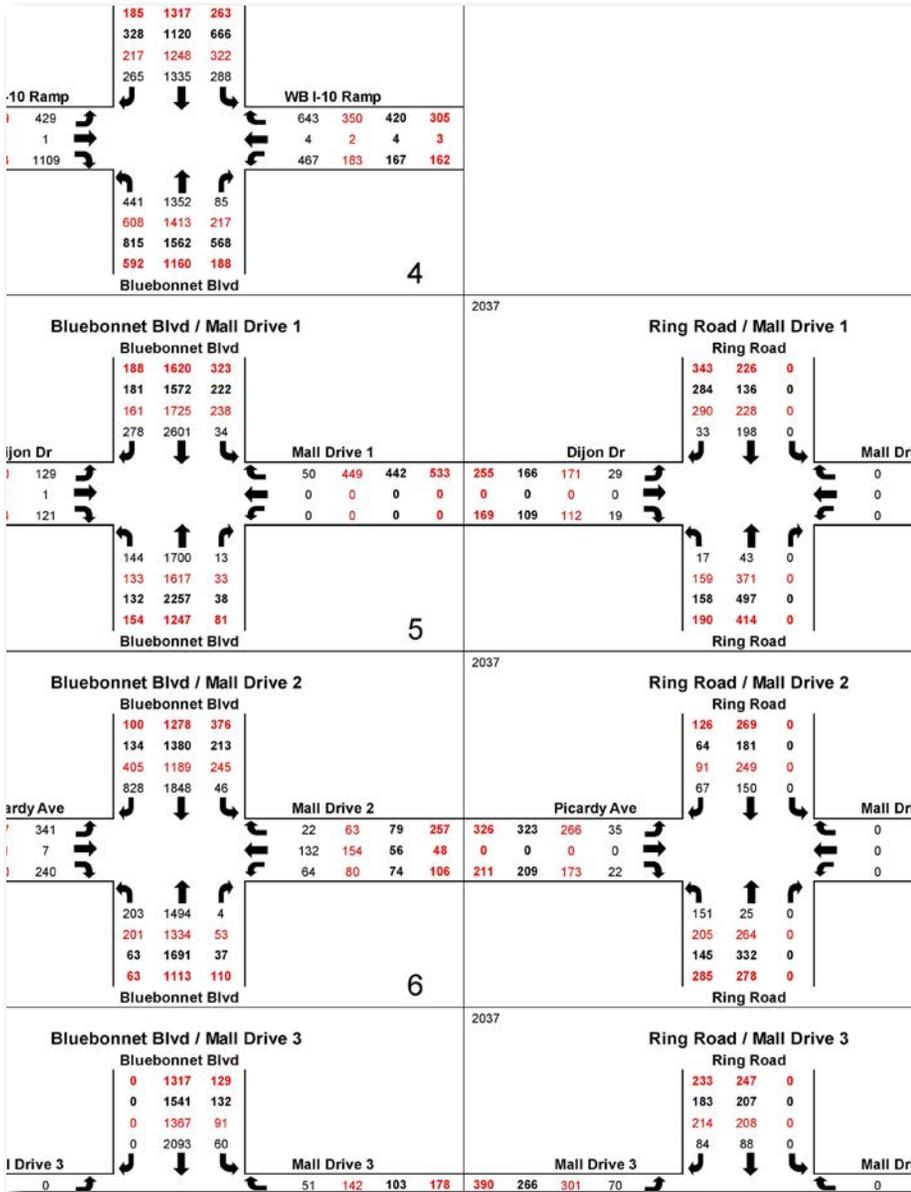


H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

Figure 37: Bluebonnet Blvd 2037 Build Peak Hour Volumes

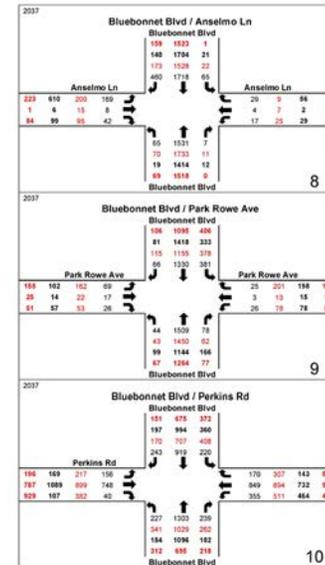




H.012232/3:
DIJON EXTENSION TRAFFIC STUDY
(LA 3064 TO LA 1248)

Scenarios
August 10, 2016

Figure 39: Bluebonnet Blvd 2037 Build Peak Hour Volumes

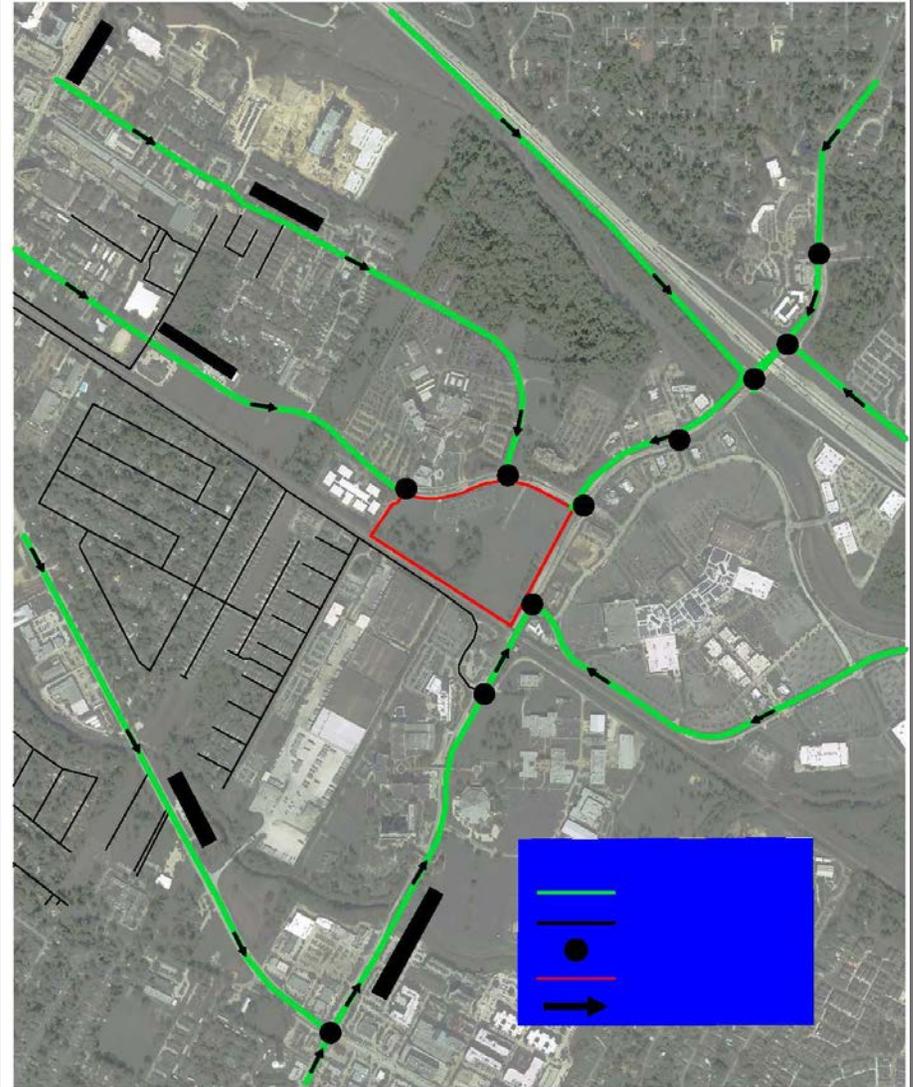


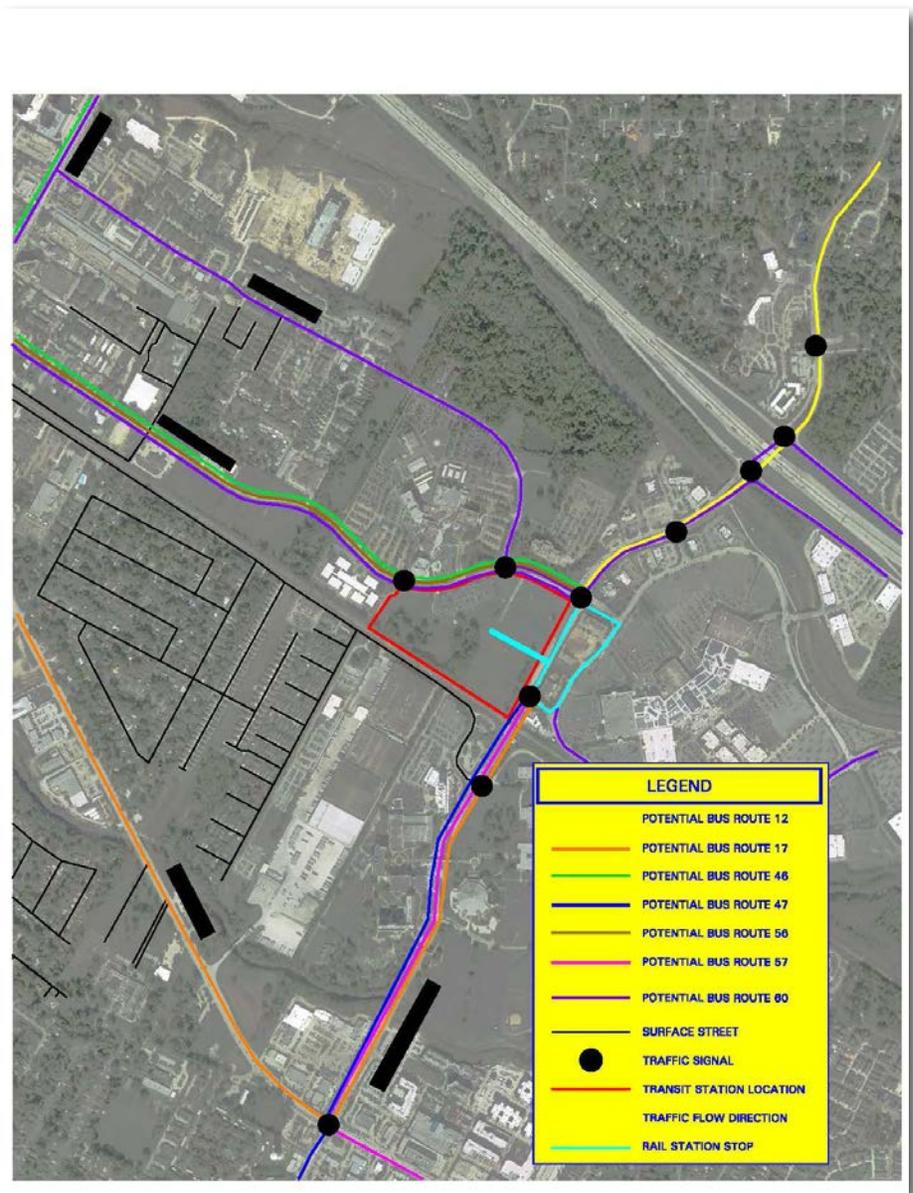
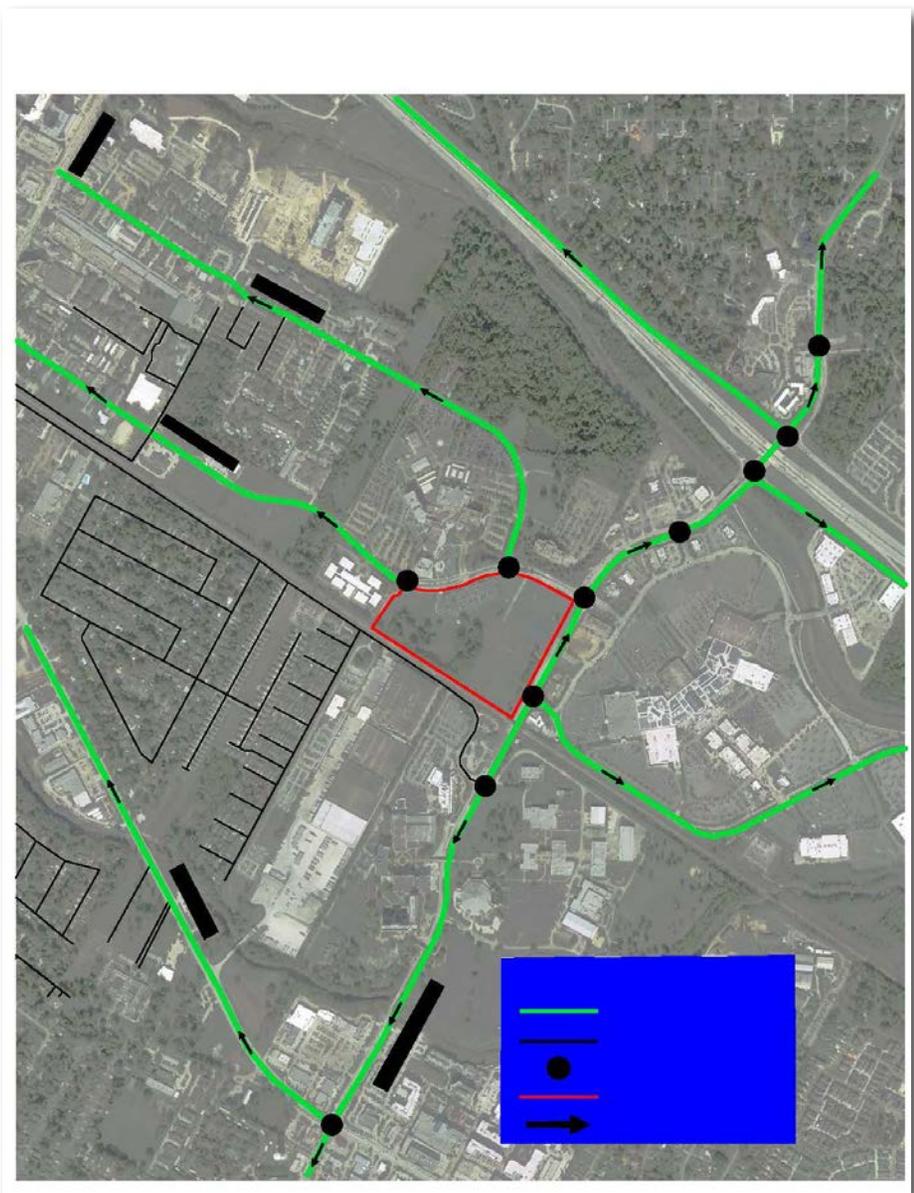


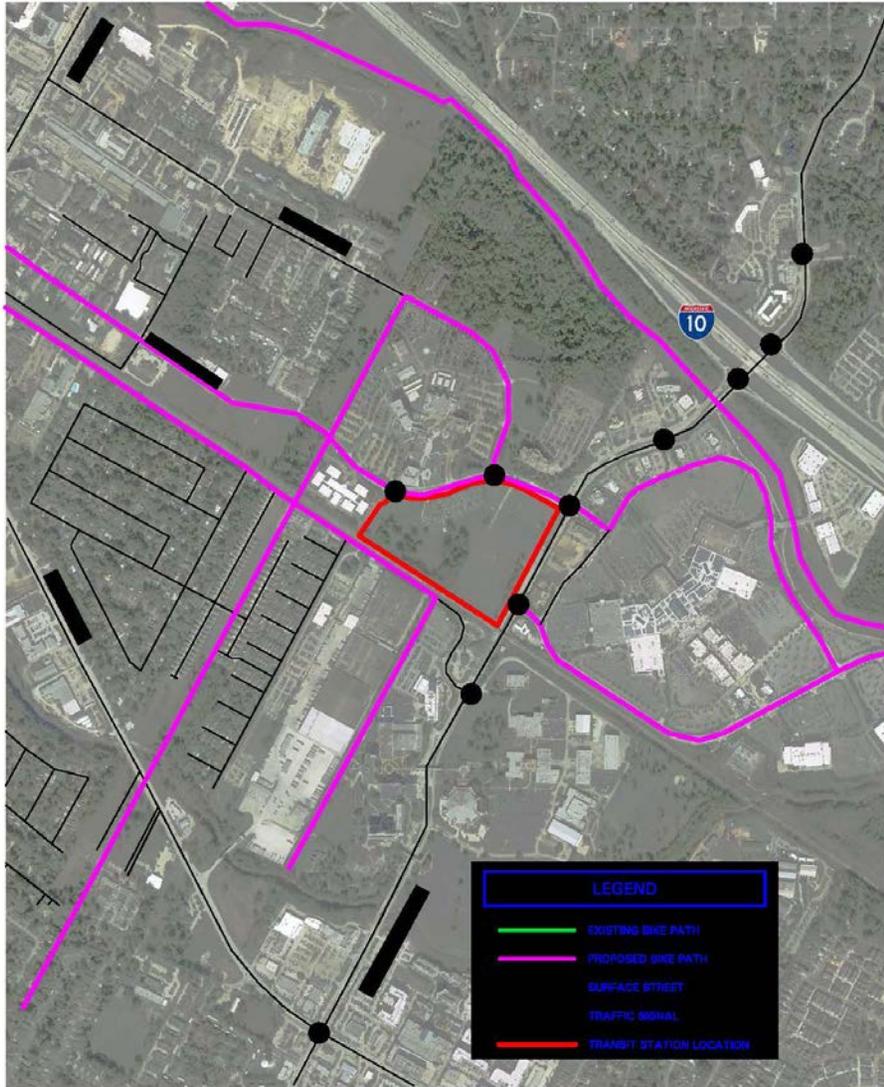
Memo

APPENDIX F: SUBURBAN STATION ACCESS MAPS

Design with community in mind







APPENDIX G: LAND USE & REDEVELOPMENT ANALYSIS

Local Market Assumptions

- Assumptions based on developer interviews:
 - Land costs:
 - \$8.00 per square foot for raw land
 - \$40 per square foot for adaptive reuse building
 - Construction costs:
 - \$200 per square foot if TYPE I podium with elevator
 - \$150 per square foot if TYPE V wood frame walkup
 - Achievable rents:
 - \$1.50 per square foot of residential
 - \$18 per square foot per year, triple net commercial
 - \$355,676 sales price - owner-occupied townhomes



Scenario Indicators

- Assumptions:
 - Land cost
 - Construction costs
 - Rent/lease rates
 - Sales price (townhomes)
- Buildings:
 - Number of units
 - Unit size
 - Expected rents
 - Parking (type & total count)
- Scenario:
 - Number of buildings of each type
 - Total number of units
 - Total sq ft by type
 - Number of jobs
 - Number of parking spaces



MID CITY STATION – DESIGN – Option 1




MID CITY STATION – Station Building




Station Building Indicators

- **Station Building:**
 - **\$34,741,724** total value of new development
 - **2** total new buildings
 - **125** total new dwelling units
 - Total square feet of new development by type:
 - **103,015** square feet of residential
 - **25,754** square feet of retail
 - **1,500** square feet of station facilities (tickets/waiting room/restrooms)
 - **27** total jobs (retail)
 - **164** total parking spaces added (using reduced Downtown parking requirements)



MID CITY STATION – Scenario 1



Scenario 1 Indicators

- **Scenario 1:**
 - **\$61,122,016** total value of new development
 - **19** total new buildings
 - **3** mixed-use 5-story (4 over 1)
 - **1** mixed-use 4-story (3 over 1)
 - **15** apartment 3-story
 - **267** total new dwelling units
 - Total square feet of new development by type:
 - **220,051** square feet of residential
 - **28,703** square feet of retail
 - **30** total jobs (retail)
 - **621** total parking spaces added



Scenario 1 Building Data

- **Scenario 1 Building Program:**
 - Mixed-use buildings:
 - **29 - 33** units per building
 - **700sf** average unit size
 - **\$1,050** monthly rent per DU
 - **2** off-street parking spaces per residential unit using a combination of surface and tuck under strategies
 - **3** off-street parking spaces per 1,000 square feet of commercial retail space
 - Residential-only apartments:
 - **6-12** units per building
 - **700sf** average unit size
 - **\$1,050** monthly rents
 - **2** off-street surface parking spaces per residential unit



MID CITY STATION – Scenario 2 & 2a



DOWNTOWN STATION – Scenario 2



Scenario 2 Indicators

- **Scenario 2:**
 - **\$94,314,350** total value of new development
 - **35** total buildings
 - **3** mixed-use 5-story (4 over 1)
 - **1** mixed-use 4-story (3 over 1)
 - **1** apartment 5-story
 - **17** apartment 3-story
 - **9** townhomes (4-5 DU per building)
 - **4** adaptive reuse 1-story creative office
 - **359** total new dwelling units
 - Total square feet of new development by type:
 - **312,139** square feet of residential
 - **34,160** square feet of retail
 - **21,827** square feet of creative office
 - **93** total jobs (36 retail, 56 office)
 - **875** total parking spaces added



Scenario 2 Building Data

- **Scenario 2 Building Program:**
 - Mixed-use:
 - **29 - 33** units
 - **700sf** average unit size - mainly 1 bed, 1 bath
 - **\$1,050** monthly rents
 - **2** off-street parking spaces per residential unit using a combination of surface and tuck under strategies
 - **3** off-street parking spaces per 1,000 square feet of commercial retail space
 - Adaptive Reuse Creative Office Space
 - **1 story.** An eclectic variety of tenant types (startups, design firms, light manufacturing)
 - Residential only apartments:
 - **6-12** units
 - **700sf** average unit size
 - **\$1,050** monthly rents
 - **2** off-street surface parking spaces per residential unit
 - Townhomes
 - **4-5** units per building
 - **1200sf** average unit size
 - **\$355,000** sales price



Scenario 2a (Reduced Parking) Indicators

- **Scenario 2:**
 - **\$137,197,741** total value of new development
 - **38** total buildings
 - **3** mixed-use 5-story (4 over 1)
 - **3** mixed-use 4-story (3 over 1)
 - **1** apartment 5-story
 - **17** apartment 3-story
 - **10** townhomes (4-5 DU per building)
 - **4** adaptive reuse 1-story creative office
 - **576** total new dwelling units
 - Total square feet of new development by type:
 - **500,000** square feet of residential
 - **56,000** square feet of retail
 - **27,233** square feet of creative office
 - **130** total jobs (59 retail, 70 office)
 - **701** total parking spaces added



Scenario 2a (Reduced Parking) Building Data

- **Scenario 2 Building Program:**
 - Mixed-use:
 - **24 - 58** units
 - **700sf** average unit size - mainly 1 bed, 1 bath
 - **\$1,050** monthly rents
 - **1** off-street parking spaces per residential unit using a combination of surface and tuck under strategies
 - **1.5** off-street parking spaces per 1,000 square feet of commercial retail space
 - Adaptive Reuse Creative Office Space
 - **1 story**. An eclectic variety of tenant types (startups, design firms, light manufacturing)
 - Residential only apartments:
 - **6-12** units
 - **700sf** average unit size
 - **\$1,050** monthly rents
 - **1** off-street surface parking spaces per residential unit
 - Townhomes
 - **4-5** units per building
 - **1200sf** average unit size
 - **\$355,000** sales price



Recommendations & Observations

- **Recommendations & Observations:**
 - **Mix of residential-only and mixed-use.** We included mixed-use buildings at the station area and along Government Street, which are also the tallest buildings (5 story). Other buildings are residential only. Scenario 2 includes adaptive reuse of some existing commercial buildings.
 - **Parking requirements are high.** We followed parking standards for the Mid-City area as they are today. Parking requirements are high leading to large portions of undevelopable site area.
 - **Extend downtown parking requirements to Mid City.** If the City extends the downtown parking requirements to this station area (reduce from 2 spaces per DU to 1 space per DU), more land would be available for development, leading to more units and greater overall project value.
 - **Density profile.** Heights and intensity of uses are concentrated at the station area and taper down as it transitions to existing neighborhood areas.



Recommendations & Observations

- **Recommendations & Observations:**
 - **Major opportunity for mixed-income development.** Our scenario does not include any affordable unit set aside, but this area is a very good candidate for mixed-income developments. Private developer (DNA Workshop) has chosen to do 15% of units at 80% AMI – so it's both possible and important.
 - **Biggest challenge are small lots and multiple owners.** Typical of central city areas, challenge is to assemble lots and minimize time spent acquiring/negotiating.
 - **Public investment is key.** Government Street overlay plan for streetscape improvements and beautification will be very important for redevelopment of this area. Including: electric poles, visual clutter, bike facilities/routes, bus pull out locations



Scenario Indicators

- **Assumptions:**
 - Land cost
 - Construction costs
 - Rent/lease rates
 - Sales price (townhomes)
- **Buildings:**
 - Number of units
 - Unit size
 - Expected rents
 - Parking (type & total count)
- **Scenario:**
 - Number of buildings of each type
 - Total number of units
 - Total sq ft by type
 - Number of jobs
 - Number of parking spaces



Local Market Assumptions

- **Assumptions based on developer interviews:**
 - Land costs:
 - \$10.00 per square foot for raw land
 - Construction costs:
 - \$240 per square foot – medical office
 - \$130 per square foot – general office
 - \$200 per square foot – residential
 - Achievable rents:
 - \$22 per square foot per year, triple net – medical office
 - \$15 per square foot per year, triple – general office
 - \$1.50-1.65 per square foot of residential



SUBURBAN STATION – Station Building



Station Building Indicators

- **Scenario:**
 - **\$24,855,030** total project value
 - **1** new mixed-use 3 over 1 building
 - **77** total new dwelling units
 - Total square feet of new development by type:
 - **21,210** square feet of retail
 - **63,630** square feet of residential
 - **1,500** square feet of station facilities (tickets/waiting room/restrooms)
 - **22** total retail jobs
 - **216** total parking spaces needed



SUBURBAN STATION – Scenario



FREGONESE ASSOCIATES

Station Building Indicators

- **Station Building:**
 - \$247,638,529 total project value
- 16 total new buildings
 - 4 medical office 3-story
 - 4 office 3-story
 - 4 mixed-use 3 over 1
 - 4 apartment 3-story
- 424 total new dwelling units
- Total square feet of new development by type:
 - 189,553 square feet of medical office
 - 222,902 square feet of general office
 - 76,907 square feet of retail
 - 349,023 square feet of residential
- 1,147 total jobs (81 retail, 1,066 office)
- 2,695 total parking spaces needed

FREGONESE ASSOCIATES

Scenario 1 Building Data

- **Scenario 1 Building Program:**
 - Medical Office buildings:
 - 387sf per worker
 - 5 off-street structured parking spaces per 1,000 square feet of medical office space
 - Office buildings:
 - 387sf per worker
 - 3 off-street structured parking spaces per 1,000 square feet of general office space
 - Mixed-Use:
 - 20% Retail/ 80% Residential
 - 3 off-street structured surface parking spaces per 1,000sf of retail
 - 2 off-street structured surface parking spaces per residential unit
 - \$1,155 monthly rents
 - Residential-only apartments:
 - 10% Non-residential (ground floor, resident-serving commercial use)
 - 700sf average unit size
 - \$1,050 monthly rents
 - 2 off-street structured surface parking spaces per residential unit

FREGONESE ASSOCIATES

Recommendations & Observations

- **Recommendations & Observations:**
 - **Mix of residential and mixed-use in the spine.** This scenario includes mixed-use buildings at the station area and along the central spine. Residential apartment buildings also include some commercial space (10%), which would be dedicated to resident-serving uses such as leasing office, gym, child care.
 - **Mixed income development.** Our scenario does not include any affordable unit set aside, but this area is a very good candidate for mixed-income developments to serve the range of employees working in the medical district.
 - **Open Space Corridor.** Using the Addison Circle (Dallas, TX) as a visual example of urban open space, the scenario includes a narrow spine of open space through the central corridor.
 - **Prime Office and Medical Office.** This site is in a prime location for high quality office expansion, including medical. Market here has seen a lot of recent activity, and lease rates are strong.

FREGONESE ASSOCIATES

Recommendations & Observations

• Recommendations & Observations:

- **Building boom.** New hospital is under construction in the area. Seeing a lot of activity, expansion and lease deals.
- **Connected streets.** As part of district development, a regular connected grid of streets will be crucial for navigation and traffic management. Securing street funding has been an issue in the past, and has hampered potential development.
- **Health-focused Improvements.** BRAF (Baton Rouge Area Foundation) will be assisting with health-focused streetscaping that supports active and healthy lifestyles – walking, biking.
- **Aesthetics.** Investments in the district's aesthetics –open space, street trees and vegetation, bike facilities, sidewalks and trails – will all raise the profile of the "Health District"



Recommendations & Observations

• Recommendations & Observations:

- **Parking for Each Building.** This scenario assumes all parking is provided per-building, and includes a mix of structured parking (for office, medical office, and mixed use) and surface and tuck under parking (for apartments) at required levels for each type of use.
- **Consider District Parking Strategy.** A district-wide parking approach for this master-planned area would reduce overall parking requirements and costs; allow different uses and buildings to share common parking facilities; and allow for better use of transit-oriented land. Consider a shared parking lot (with use fees) that could fund the future construction of a parking garage.
- **Park & Ride.** As part of the district parking approach, a park and ride lot or garage might make sense when the station is running at full capacity (multiple round trips per day)



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APPENDIX H: EQUITABLE TRANSIT ORIENTED DEVELOPMENT ANALYSIS

Equitable Transit-Oriented Development

Downtown Station in Mid City

Baton Rouge, Louisiana

October 2018

Prepared by Center for Neighborhood Technology

For the East Baton Rouge Redevelopment Authority

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Introduction and Executive Summary

Introduction

An eTOD analysis was completed by the Center for Neighborhood Technology (CNT) for the Downtown Station as part of the planned Baton Rouge-New Orleans intercity passenger rail corridor.

The location of the Downtown Station study area is within the Mid City neighborhood of Baton Rouge. The eTOD section of this study typically describes the Downtown Station as being in the Mid City area for clarity. One aspect of the Mid City Station Area Master Plan is a consideration of equity in development that will accompany increased transit service. The establishment of new passenger rail service and enhanced bus service in the Mid City area is intended to stimulate change that commonly occurs in neighborhood-level transit-oriented development (TOD) -- increased housing density in a community where residents can conveniently walk to an array of amenities and reach a broad range of jobs by walking, biking, or transit. The new transit services planned for the Mid City area in combination with local planning and development efforts are likely to lead to this type of TOD. The question addressed by this section of the Master Plan is how development in the Mid City station area can be equitable TOD (eTOD), which delivers the benefits of TOD to the large majority of current station area residents, rather than passing them by or displacing them.

This section of the Plan discusses:

- *Existing Conditions and Trends* that constitute the baseline conditions for eTOD in the station area
- *Opportunities and Challenges* for eTOD that these conditions present
- *Recommended Strategies* for achieving eTOD in light of these opportunities and challenges

This information is summarized in an extensive chart that covers the next several pages. The chart is followed by a narrative that describes these conditions, opportunities, and strategies in more detail.

Executive Summary	eTOD Opportunities eTOD Challenges	eTOD Strategies
Existing Conditions Current Trends		
I. Mid City Community Context for eTOD		
An economically and ethnically diverse community at the center of Baton Rouge	Preserve the character of the community as it prospers.	Direct growth through a combination of urban design, job creation & housing strategies.
1. A predominantly residential community with excellent access to jobs and amenities, adjacent to the central business district of Baton Rouge		Facilitate growth with: <ul style="list-style-type: none"> • Moderate residential density and diverse housing stock • Diverse land uses, including retail and production businesses along with predominant residential use • Transportation services and infrastructure to drive development.
2. A majority African-American but diverse community		Prioritize job and housing development that serves current community residents.
3. An economically mixed but predominantly low-income community		Empower community institutions to guide development and connect residents to opportunities.
4. A community with strong local institutions		

Existing Conditions Current Trends

eTOD Opportunities eTOD Challenges

eTOD Strategies

II. Business and Job Development

Multiple factors are driving business & job development in the Mid City Station Area. *New and expanded incomes will allow more current residents to remain and thrive in the Mid City area.* **Gear job creation strategies to the location opportunities and capacities of current residents.**

- The station area now has a substantial job base:
 - Within a half mile radius of the new passenger rail station: 180 employers and 2,700 jobs;
 - Within a one-mile radius: 1,150 employers and 21,000 jobs.
 - Fewer than 4% of area jobs are held by area residents.
 - Many area residents are not educated for professional jobs.
 - The half-mile radius station area includes land zoned for industrial use and several "production" businesses (e.g. building construction & maintenance, office furniture & equipment supply, document printing & shipping) that serve office-based businesses.
- Engage regional workforce development organizations to target paraprofessional training programs to area residents.
- Retain and attract investments in "production" businesses within the station area, as employers of area residents without college degrees.

3

3. New transit services, active transportation infrastructure, and expansion of the CBD are driving new demand for building construction.

Capitalize on new building construction opportunities:

- Identify local, minority contractors and skilled workers who can be recommended for work in property development.
- Engage regional workforce development organizations to target building trades training programs to area residents.

5. The station area now serves a substantial market for retail goods and services, selling >\$45 MY in the half-mile radius area, >\$128 MY in the one-mile radius area. This market will expand as the area attracts a growing number of affluent residents.

Capitalize on the expanding retail and service market:

- Connect area business owners and aspiring entrepreneurs with small business support programs.
- Engage regional workforce development organizations to target "soft skills" training programs to prepare area residents for employment in businesses with intensive public contact.

6. New transit services and infrastructure may offer area residents practical connections to a broader job market.

Capitalize on and expand transportation investments to connect area residents to new job opportunities:

- Add frequency to the Baton Rouge - NOLA rail service so that it becomes a practical commuting option for area residents.
- Optimize job access for area residents in the addition of bus service to the passenger rail station, including: enhanced access to the CBD, express bus to the Health District in anticipation of more frequent rail service; increased access to production jobs east of the station area.
- Improve street connectivity within the station area and to the CBD, along with improvements to pedestrian and bike infrastructure, to make active transportation a viable commuting option to nearby locations.

4

III. Residential Development

Factors driving business and job development in the station area are also attracting middle class households to move into the area. Demographic patterns and housing conditions make the area vulnerable to displacement.

Residents who remain in the station area will experience:

- Appreciation of real estate that they own;
- Safer and more attractive neighborhood conditions;
- Improved access to jobs, and to retail and service amenities;

Higher property taxes and rents may displace many residents.

Implement multiple strategies to build and retain affordable housing.

1. Median household income in the half-mile radius station area is \$27,400, well below that of the City of Baton Rouge or East Baton Rouge Parish.

2. Most of the station area is occupied by single family homes. 60% of housing units were built before 1959, and many housing units are in poor condition.

Incentivize voluntary adoption of the private development practice modeled by the Electric Depot project: making at least 15% of built units affordable to households earning 80% AML.

Support and seek replication of successful not-for-profit housing development in the Mid City area, e.g. the development of >400 units of affordable housing by the Gulf Coast Housing Partnership.

3. 59% of the housing units are rented.

Encourage sustainable development practices to reduce the costs of housing and improve household net incomes, including:

- Transit use, active transportation, and shared mobility programs as alternatives to car ownership;
- Right size parking construction;
- Energy conservation in building rehab and construction;
- Green infrastructure to reduce flood risk and improve water quality.

4. Some Baton Rouge, LA public policies impede affordable housing development:

- Absence of inclusionary zoning
- State "Succession" laws

Collaborate with development and implementation of the parish-wide affordable housing plan being formed by the *Capital Area Affordable Housing Alliance*: Explore opportunities to build the scale and effectiveness of the affordable housing movement in Baton Rouge:

- Mid City station area as the regional blueprint for eTOD
- Regional affordable housing fund
- Value capture fund in eTOD area
- Employer assisted housing
- Land Trust for affordable housing preservation

5. The station area includes a large homeless population.

Support work of the *Capital Area Alliance for the Homeless* and its members that prevents and ends homelessness, including:

- Programs of counseling and direct support for households at risk of becoming homeless;
- Well-managed single-room-occupancy and group homes with social service case work support that replaces homelessness with stable homes.

Fund area churches and other local institutions to be points of information dissemination and participant recruitment for training, job opportunities, and affordable housing programs.

I. Community Context for eTOD

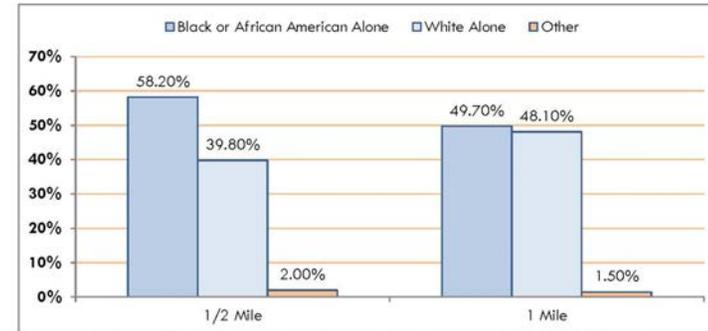
The Mid City area, within a half-mile radius of the planned Suburban Station (Figure 1), is a predominantly residential community in which 78% of the housing units are single family buildings and no building is more than five stories high. But the area also contains jobs and amenities, including industrial businesses, private schools, retail and service businesses. The one-mile radius area extends into the central business district (CBD) of Baton Rouge, which has added more than 7,000 jobs in recent years, primarily in public administration and professional service offices. Mid City is on a logical path of expansion for the CBD as it crosses the I-10 Expressway, and the addition of an intercity rail station, connected to enhanced bus service is likely to accelerate development. If the Mid City area maintains its current character, it will gain moderate residential density by filling in vacant lots, rehabbing buildings, and building a mixture of low-rise apartment buildings and town houses. It will add jobs while mainly providing attractive homes near the places where residents are employed.

Figure 1: Station Study Area



This Mid City Station area is a majority African-American but ethnically diverse community (Chart 1). In 2016, within the half-mile radius station area, approximately 58% of residents were African-American, 40% were White, and 2% identified with other ethnic backgrounds. Considering historic racial divisions and current disparities, some regional leaders think that this ethnic composition is significant. If a community can maintain racial diversity as it becomes more prosperous, this development will send a positive message about racial harmony to the wider community. If the African-American population is displaced during development, an opposite message would be perceived.

Chart 1: Population by Race

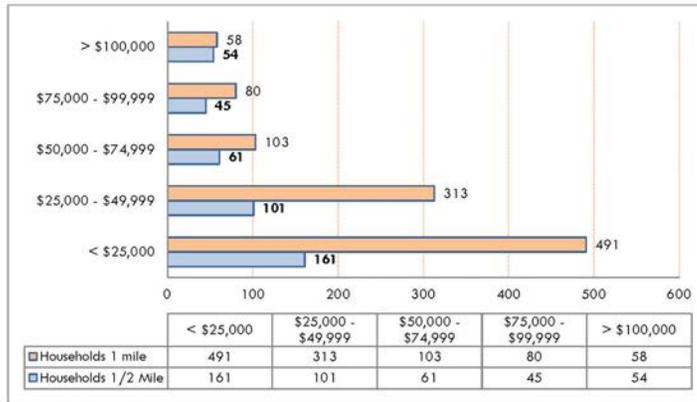


Data source: On the Map US Census Bureau Longitudinal Origin-Destination Employment Statistics (LODES), American Community Survey 2015, accessed 08.03.18. Other includes: Asian Alone, American Indian or Alaska Native Alone, Native Hawaiian or Other Pacific Islander Alone, and Two or More Race Groups.

The Mid City community is economically as well as ethnically diverse, although predominantly low-income (Chart 2). The half-mile radius station area's average household income in 2016 was \$27,407. Within the one-mile radius station area 47% of households had an income below \$25,000/year; 13% had an income above \$75,000 year; 40% had an income between \$25,000 and \$75,000. Distribution of households by income level in the half-mile radius area is very similar. A desirable rise in median income should be anticipated with TOD; but to maintain the community's economic diversity, this increase should be spread across all groups in the income spectrum. Even with a significant boost, many Mid City households would remain far below \$52,487, the median household income for the Baton Rouge metropolitan area. Maintaining economic diversity will require the creation of additional affordable housing as well as wide-spread gains in income. Such growth through eTOD would send another positive message to the broader Baton Rouge area -- community redevelopment is not for the affluent alone.

For these reasons, as well as for the welfare of most current Mid City residents and the wishes of new residents who will want to live in a diverse community, it will be desirable to maintain the character of the Mid City area as it develops. Maintaining this character will require implementation of coordinated urban design, job creation, and housing strategies, planned and executed in coordination with the homegrown institutions of the community, including its churches. These recommended strategies, along with a closer look at the base line conditions which call them out, are described in the following pages.

Chart 2: Station Area Incomes



Data source: CNT H+T Index tool, accessed 08.03.18, American Community Survey 5-year estimate 2014

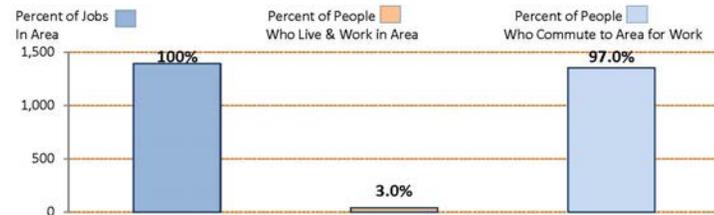
II. Business and Job Development

The following discussion of business and job opportunities leads directly to recommended actions such as attracting investors or training workers. Unless specified otherwise, this plan assumes that the East Baton Rouge Redevelopment Authority (EBRRDA) will be the primary initiator of these actions, engaging workforce development organizations, public agencies, or business support organizations that may be useful in planning and carrying out programs.

A. Paraprofessional Job Opportunities

Conditions for eTOD that require close examination include job opportunities that can raise the incomes of many current Mid City residents. The most recent data from ESRI Business Analyst show that there are approximately 180 employers and 2,700 jobs in the half-mile radius station area and 1,150 employers and 21,000 jobs within one mile of the station site. However, fewer than 4% of jobs in the half-mile radius station area are held by area residents; more than 96% of jobs in the station area are performed by workers who commute from outside the community (Chart 3).

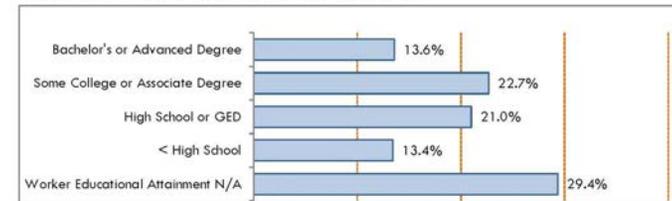
Chart 3: Job Population by Residence



Data Source: On the Map, LODS Version 7.3 US Census 5-year study 2015

One reason why few local residents are employed in the station area is that few have the advanced education required for the area's many professional jobs (Chart 4). For residents thirty years and older within the half-mile radius station area, fewer than 14% have a Bachelor or advanced degree; 67.3% have an associate degree, some college, or a high school diploma. About 13.4% lack a high school diploma.

Chart 4: Educational Attainment for Worker Residents*

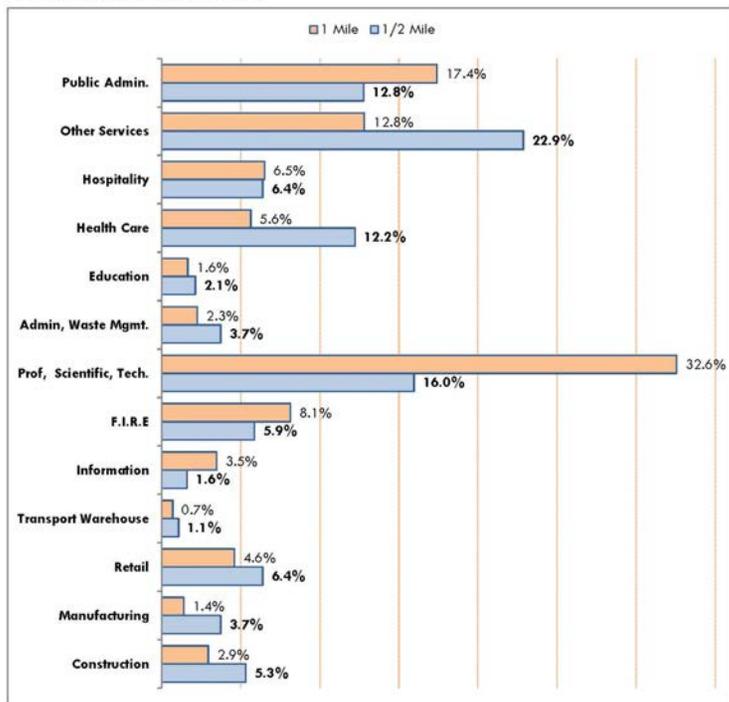


Data Source: On the Map, LODS Version 7.3 US Census 5-year study 2015

Note: The Census reports educational attainment data only for persons age 30 or older. The large majority of the 29.4% of worker residents for whom this data is not available are younger workers.

These levels of education are poorly matched with the requirements of many jobs in the station area, as indicated in the breakdown of jobs by type of employer on Chart 5. More than 50% of jobs in the one-mile area and 38% in the half-mile area are in the fields of "Professional Scientific and Technical Services" or "Public Administration." "Health Care" and "Finance, Insurance, and Real Estate (FIRE)" are also significant employers; "Education" and "Information Services" account for additional percentages of jobs. In total, these fields make up over 68% of jobs in the one-mile radius station area and over 50% of jobs in the half-mile radius area. Many jobs in these categories require a Bachelor or advance degree, which the majority of residents in the half-mile station area lack.

Chart 5: Occupations as a Percent



Data source: ESRI Business Analyst; downloaded 07/19/2018 using North American Industry Classification System

However, many of the jobs in these professional service categories are performed by paraprofessional or support workers who have an associate degree or high school education with skills training. Most station area residents have this level of education or could attain it without long years of effort. Many of these paraprofessional positions offer career ladders through which workers can gain the experience and additional training to reach full professional status. A realistic initiative for raising the percentage of area residents in area jobs would engage Baton Rouge’s workforce development organizations to focus trainee recruitment, employer outreach activities, and branch training facilities on paraprofessional positions and residents in the Mid City station area.

Such an initiative would offer advantages for reaching workforce development objectives of training program completion and successful placement. It would train aspiring workers for jobs close to their homes, which they could reach without cumbersome or expensive transportation requirements. Since these homes are in an improving community in which the trainees/new workers have strong reasons to remain, they would have incentives to excel at their local jobs and hold them for the long-term.

This focus of workforce services would also serve broader objectives in the Baton Rouge area’s long-term development plans: easing traffic congestion and improving air quality by permitting more workers to reach their jobs without driving; and expanding the solid core of CBD workers who live in the center of the metropolitan area.

B. Production Job Opportunities

Another strategy for capitalizing on Mid City’s job base and proximity to the CBD is to expand the number of “Production Jobs” in the station area. The concept of “Production Jobs” does not fit neatly into the traditional occupation classifications of the North American Industrial Classification (NAIC) system. Production jobs fulfill the need for skilled and semiskilled manual labor in tasks that are necessary for the maintenance of a city and especially a CBD, e.g.: building construction and maintenance, the operation of utilities, office machinery supply and maintenance, printing, and the expedited delivery of packages. Space-constrained cities, including San Francisco and Washington DC, have recognized the necessity of preserving land for production businesses close to their CBDs.

Various production jobs fall into detailed NAIC classifications for types of construction, manufacturing, transportation, warehousing, and other services. The Mid City half-mile radius station area contains land zoned for industrial businesses and some functioning businesses that might be classified as Production. Occupational categories that include Production functions account for 33% of jobs in the half-mile radius station area. For each of these categories the percent of total jobs is higher in the half-mile radius station area (adjacent to the CBD) than for the one-mile radius area (reaching into the CBD).

A recommended action for building employment for Mid City area residents is to undertake a study of current and projected need for production business services in the Baton Rouge CBD, including current and optimal locations for production businesses. The study would indicate the scale of production job opportunities for Mid City residents, which might be considerable.

C. Building Construction Job Opportunities

An expanding CBD, new transit services, and new infrastructure (such as the Complete Streets reconstruction of Government Street) are driving demand for the construction and rehabilitation of buildings in the Mid City station area. Building construction now underway with growing demand includes market rate residential development and not-for-profit development to build affordable housing. Demand for the rehabilitation and construction of commercial buildings will follow.

Building construction is an important job opportunity for Mid City residents. Currently 5.3% of jobs in the half-mile radius station area are in building construction, providing an industrial base that can be expanded. Recommendations include:

- Create, maintain, and promote a database of minority and local building contractors and skilled workers who can be recommended to perform good work in building construction.
- Target building trades training and placement programs to Mid City residents. Many of the reasons for a paraprofessional workforce initiative targeted to Mid City residents and employers apply equally to work in the building trades.

D. Retail and Service Job Opportunities

Table 1 shows that the half-mile radius station area includes approximately 24 businesses, employing 245 workers, and generating over \$45 M/y sales in the fields of retail and hospitality (including all types of restaurants). In the same fields, the one-mile station area includes approximately 128 businesses, employing over 1,700 workers, and generating over \$135M/y in sales. These figures demonstrate that the retail and service sector of the station area economy is significant, and that the half-mile radius station area is now weak in these categories relative to the broader station area that surrounds it.

Table 1: Business Summary of Retail Sales Activity

	Half Mile	Half to One mile	One Mile
Retail Businesses	12	41	53
Employees	187	229	416
Total Sales	\$43,925,059	\$63,126,829	\$107,051,888
Hospitality Businesses	12	88	100
Employees	158	2,019	2,177
Total Sales	\$1,663,250	\$26,274,226	\$27,937,476

Data sources, ESRI Business Analyst: downloaded 07/19/2018 using North American Industry Classification System and estimated on sales to consumers by establishment with sales to businesses excluded in current dollars

The impacts of new job opportunities, transit services, and middle-class residents will increase demand for retail and service sector businesses and will concentrate that demand in the half-mile radius area closest to the station. This demand will generate new jobs and wealth in the station area if the current residents are ready to take advantage of it.

Retail and service enterprises generally have the lowest barriers to entry of any business categories; so, they are the types of businesses most commonly owned by local, independent individuals. Also, while retail and service businesses commonly pay lower wages than other types of employers, they are often avenues through which young people or discouraged workers enter or reenter the workforce. Accordingly, it is likely that a number of the retail/service businesses in the half-mile radius station area

are held by local business owners and that aspiring entrepreneurs in the station area are most likely to start new businesses in these fields. It is also likely that unemployed and low-skilled residents of the station area are most likely to find employment in these types of businesses as demand for them expands.

In light of these considerations, the following types of systematic efforts are recommended to help station area residents' benefit from the growth of retail and service demand:

- Connect the area's small business owners with the US Small Business Administration and the Baton Rouge Area Chamber of Commerce for sound advice and access to capital, enabling them to upgrade their businesses and compete with more sophisticated businesses entering the area.
- Similarly, make such connections to advice and capital available to the station area's entrepreneurs who want to launch new businesses.
- Through engagement with Baton Rouge workforce organizations, arrange training in work place "soft skills" for new or discouraged workers.

E. Opportunities for Improved Job Access through Transit

CNT's AllTransit™ analytical tool shows that residents of the half-mile radius Mid City station area can reach approximately 35,000 jobs by bus within half an hour if commute trips are made during rush hours (Figure 2). However, the hours and frequency of service may not be sufficient to provide a reliable commuting option for many workers. Planned transit services from the Mid City station include both rail and enhanced bus, and these new services may make commuting by transit a more viable option for many Mid City residents. This benefit may be optimized through transit planning that considers the needs and capacities of station area residents.

The most likely improved bus service will connect the Mid City station to the Baton Rouge CBD. Such a service will be necessary to complete the intercity trip of many passengers using the Baton Rouge to New Orleans rail service. Last mile bus service will also provide an efficient way for many station area residents to reach the CBD, and ridership from local as well as intercity passengers will help to make this connecting service more cost efficient. The Mid City transit center that will be established by rail and multiple line bus lines converging at the planned station should also provide bus route connections to low-income communities to the north of Mid City. These connections will increase north side neighborhoods' access to the CBD and, through a long but potentially viable bus trip, to jobs and medical services in the Health District.

Another potentially valuable connection will be between the Mid City and the Health District stations. The Health District section of this plan shows that improved transit connections for workers and patients is a major objective of that district, and the Health District may provide a rich destination for Mid City residents seeking paraprofessional jobs. Of course, there will be a passenger rail connection between Mid City and the Health District. Long term plans call for this service to become more frequent. Higher frequency will make rail a more useful commute option for Mid City workers, and strong local ridership may accelerate upgrades in the frequency of service. Baton Rouge transit planners might consider two options for increasing the frequency of service between the two stations:

- The addition of an entirely local rail service between the two stations that would be more frequent than the intercity service, or
- Creation of an express bus service between the CBD, stopping at the Mid City station, and the Health District station.

Either option would advance the objective of stakeholders in both districts to make their rail station an intermodal transportation hub.

Another transit option of value for Mid City residents would refine routes and/or increase the frequency of services that could connect Mid City workers to production job locations, which are more numerous in census block groups to the east of the station area.

Figure 2: Jobs within 30 Minute Transit Ride



Data source AllTransit™, ACS 5 year study 2015. WGS 84/Pseudo Mercator 3857

III. Affordable Residential Development

A. Vulnerability to Displacement

The same basic factors that are driving job creation in the Mid City station area -- proximity to Baton Rouge's growing CBD, new transit services and infrastructure, and the subsequent arrival of new middle-class residents -- could also generate pressure for the displacement of current residents. If residents can remain in the station area they will enjoy appreciation of real estate that they own, a more attractive neighborhood environment, and enhanced job opportunities. However, several existing conditions (Table 2) make the current area population especially vulnerable to displacement, specifically: many low-income households, aged housing stock with many deteriorated buildings, and predominant renter occupancy.

Table 2: Housing Characteristics

Factors	Half-mile Buffer of Mid City Station Study Area	City of Baton Rouge	Parish of East Baton Rouge
Median Household Income	\$27,407	\$39,969	\$49,942
Vacant housing units	20%	14%	12%
Renter occupied housing	60%	51%	41%
Housing Built Prior to 1960	67%	24%	16%
Housing + Transportation Costs	45%	46%	50%

Data Sources: ACS 5-year survey 2016, CNT H+T Index downloaded May 2018

Low Household Income

In the introduction to this section of the Master Plan we noted that Mid City is an economically diverse community with a high percentage of low-income households. Median annual household income for the half-mile radius station area is \$27,407, which is far less than 80% of the Baton Rouge metropolitan area median household income (\$52,487). By the standard applied in most housing assistance programs of the US Department of Housing and Urban Development (HUD), the median household in the Mid City station area would qualify for housing assistance. Approximately 47% of Mid City households have

incomes of \$25,000/year or less. Even if most of the households in the Mid City area can raise their incomes substantially, many will need support from affordable housing programs to continue living in the station area as housing prices rise.

Age and Deterioration of Housing Stock

An additional concern is the age and condition of much of the station area's existing housing stock. Table 2 highlights key factors of concern regarding the housing in the Mid City half-mile radius station area, in relation to housing in the entire City of Baton Rouge and East Baton Rouge Parish. Sixty-seven percent of the station area's housing was built before 1960, and 49% was built before 1949; it is much older than most housing in the city or the parish. While older buildings can be well maintained, much of the station area's housing has not been kept well. Although some older buildings in the area have been beautifully rehabilitated in recent years, 20% of the area's housing units are vacant. Some public officials have estimated that half of the housing units in the station area are in deteriorated condition. Restoring the overall quality of the station area's housing stock would require the thorough rehab or replacement of hundreds of existing units, a process in which few current residents have the income to participate.

High Level of Renter Occupancy

For those station area households that own their homes, the rising value of property is generally a benefit. While they may see property tax increases, their net worth will climb, and improvements to their buildings might be financed in consideration of appreciating value. However, approximately 60% of housing units are occupied by renters, who will have sharp risks and few direct benefits from development. Rents will gradually rise in proportion to average property values in the neighborhood and rise sharply in buildings that are substantially improved. Tenants in buildings that undergo gut rehab or tear down for replacement will certainly be displaced from their current address and possibly from the neighborhood.

Policy and Legal Impediments to Affordable Residential Development

In addition to economic conditions that make much of the Mid City station area population vulnerable to displacement, some policies or laws of the State of Louisiana, pose impediments to efforts to create affordable housing that are not present in other states.

- *Absence of Inclusionary Zoning:* In a growing number of cities across the country, a major tool for the development of affordable housing is "Inclusionary Zoning." With variations from city to city, inclusionary zoning ordinances require developers of market rate housing to maintain a minimum percentage of newly developed units as "affordable" -- commonly with rents less than a third of income for households earning 80% or less of area median income. Inclusionary Zoning is most effective and widely applied in strong real estate markets, where economic competition for land is intense. The concept is foreign to Baton Rouge and most areas of Louisiana, which have not experienced severe competition for urban land. Recent debate in the Louisiana State Legislature narrowly avoided a measure to prohibit inclusionary zoning across the state. While the potential to authorize inclusionary zoning remains, it is not a tool that regional experts think is likely to be used or appropriate for Baton Rouge.

- *Succession:* The import of this complex body of law in Louisiana is that if property is transferred following the death of an owner who did not explicitly designate new ownership in a will, the permission of virtually every surviving relative must be secured before ownership of the property can be changed. Situations in which *Succession* becomes an impediment to redevelopment are most common in low-income communities where title to property is often unclear and property owners are less likely to secure competent legal counsel in making a will.

B. Strategies for Affordable Housing Development

Existing conditions in the Mid City station area make it clear that substantial displacement of current residents will occur unless there are concerted, collaborative efforts by the private development industry, not-for-profit housing corporations, and public agencies to preserve the essential character, and current population, of the community as it redevelops. In the following paragraphs, some strategies for this collaborative development are recognized and commended for support as they are being implemented now, and others are recommended.

Encourage Voluntary Mixed Income Development by Private Investors

We have noted that in the foreseeable future Baton Rouge area local governments are unlikely to adopt requirements for local developers to make a percentage of the housing units they build available under terms that are affordable to lower income households rather than market-based. However, the developers of the Electric Depot (currently the largest for-profit development in the half-mile radius station area) have decided to offer at least 15% of their units on terms that are affordable for households earning 80% of the metropolitan area's median household income. The Electric Depot owners are optimistic that other private developers in Mid City will follow their lead in this practice, from a similar desire to maintain community character and diversity. To further extend commercially funded mixed-income development, the EBRDA is performing a land banking function, gaining control of property and preparing it for private investment. The EBRDA plans to make the inclusion of some percentage of affordable housing a requirement for any land it would convey for for-profit development.

While Baton Rouge area local governments are unlikely to mandate such development practices, they are encouraged to incentivize them through such benefits as expediting approval processes or waiving some fees.

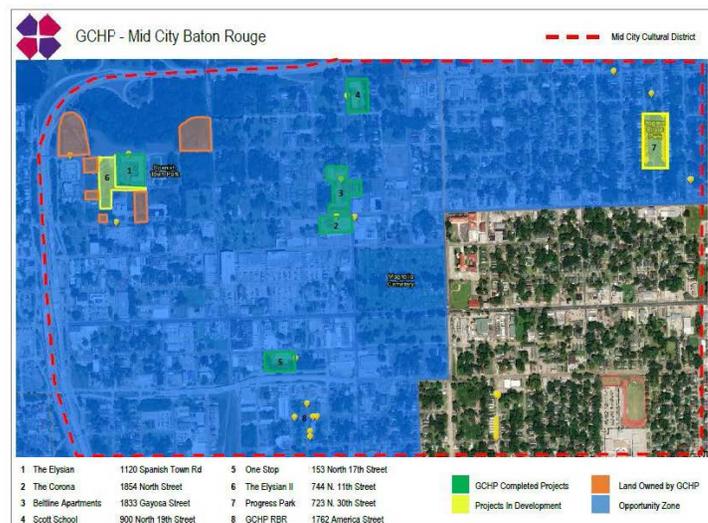
Support Not-for-Profit Development of Affordable Housing

In cities across America sophisticated not-for-profit organizations carry out the complex business of building and maintaining affordable housing. This work entails the integration of public and private resources in multilayered financing structures to secure and improve property, managing building construction or rehabilitation projects on tight budgets, and managing properties occupied by low/moderate income residents who may have more difficulty paying rent on time and maintaining their units than select groups of market-rate tenants.

Baton Rouge and the Mid City station area benefit from the work of several not-for-profit housing organizations. For example, the Gulf Coast Housing Partnership (GCHP), working with the Mid City

Redevelopment Alliance and other local partners has developed approximately 400 units of affordable housing within the one-mile radius station area over the last decade (Figure 3). The location of these projects is shown in the accompanying map provided by CGHP. A heat map is also provided to show the location of the GCHP projects in relation to job concentrations (Figure 4).

Figure 3: Affordable Housing Projects



Data source Gulf Coast Housing Partnership WGS 84/Pseudo Mercator: 385

The practices that not-for-profit housing organizations follow to perform their missions do not need to be detailed in this report. But it may be useful here to note that in Baton Rouge these organizations coordinate their work through the East Baton Rouge Redevelopment Authority (EBRRDA) and through the EBRRDA engage with city, parish, and state agencies to direct allocations from federal programs to affordable housing projects. These allocated resources include Low Income Housing Tax Credits (LIHTC), HOME Investment Partnership funds and other HUD programs, and, in the context of broader economic development projects, New Market Tax Credits (NMTC).

In keeping with this plan, we would encourage not-for-profit housing organizations and their supporters to prioritize the direction of resources to the Mid City station area for the same reasons that GCHP has concentrated much of its Baton Rouge activity in this area during recent years:

- Because affordable housing here puts occupants in the path of opportunity through employment in the CBD and other locations reached by transit;
- Because private as well as public resources can be marshalled here in an area of market opportunity;
- And because this opportunity may soon be lost if purely market driven development displaces appropriate recipients of affordable housing programs from the area.

Figure 4: Affordable Housing, Transit and Job Centers



Data source AllTransit™, ACS 5-year study 2015. WGS 84/Pseudo Mercator 3857

Sustainable Practices for Cost Savings

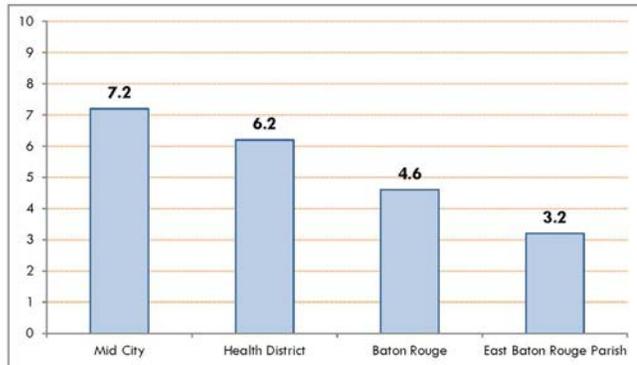
Another set of strategies to establish and maintain affordable housing in the Mid City station area involves using sustainable practices to reduce costs for developers and occupants. A household's capacity to afford housing is not only a matter of its income but also of its major expenses, which can be mitigated by sustainable choices about transportation, energy, and protection from flooding. Similarly, a developer's choices regarding sustainability can strongly influence the costs of construction and maintenance.

Transportation Costs

For most individual households, major potential savings lie in decisions about location and transportation. Transportation is the second largest expense for most American households. According

to AAA, the average annual cost of owning and operating a car in America is \$8,469/year. If a household with the Mid City station area's median income of \$27,400/year can live with one car instead of two or no car while enjoying good access to jobs and amenities, the difference in that household's ability to pay for housing or other essential needs is obviously large. Per 2016 census data, approximately 26% of households in the half-mile radius station area did not own or have regular access to a car, and 47% had access to only one car. These are remarkably low levels of car ownership for the Baton Rouge area. Living with less car dependence in the Mid City station area is possible because some amenities are in walking distance and transit service is far stronger than in other parts of the region. This is illustrated by Chart 6, which shows the ratings of several areas in metropolitan Baton Rouge by CNT's "Transit Performance Index", a metric in CNT's AllTransit™ on-line transit analysis tool <https://alltransit.cnt.org/metrics/#quality>. This index measures the level of transit service available (in terms of options, frequency, and time-of-day coverage) in all US urban areas, at the census block group level. The index is expressed on a 10-point scale, with 10 being the highest level of service.

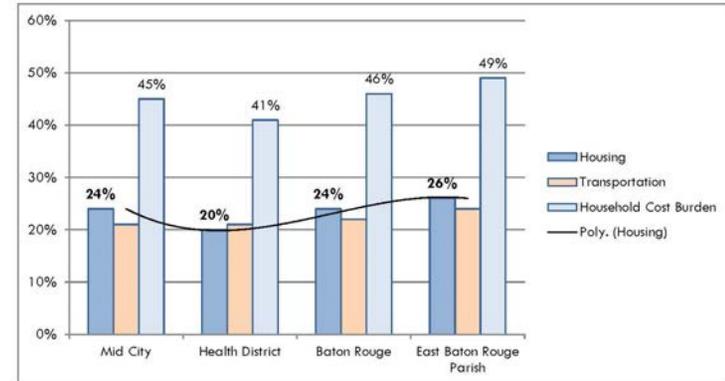
Chart 6: AllTransit™ Performance Scores



Data Source: AllTransit™, ACS 5-year study 2015.

Mid City's transit advantage is also reflected by CNT's Housing + Transportation Index <https://htaindex.cnt.org/>, which shows the combined costs of housing + transportation, as a percentage of income, for median households in all US census block groups (Chart 7). Mid City households have approximately the same combined costs of Housing + Transportation (45%) as the City of Baton Rouge and East Baton Rouge Parish, which have significantly higher median incomes. This difference is attributable in part to Mid City's greater transit accessibility. Mid City's advantage in transit accessibility will, of course, become even stronger with the addition of passenger rail and added bus service.

Chart 7: Housing + Transportation Index Cost Burden Community Comparison



Data source: H+T Index, ACS 5-year study 2015.

For-profit and not-for-profit housing developers and multi-unit housing owners in the Mid City station area may help residents capitalize on their transit access:

- They may negotiate bulk purchases of transit service, which would be resold to tenants and possibly packaged with rent for those tenants who would choose this as an option. Besides possibly securing discounted transit costs for their tenants, these arrangements could help to educate residents on the powerful economic advantage of transit use and reinforce the cost-saving choice of relying on transit.
- They may foster arrangements in shared use mobility, such as car sharing, through which residents can expand their transportation options without the heavy expense of car ownership.

Right Size Parking

Research by Dr. Shoup of the University of California at Los Angeles, CNT, and other investigators has demonstrated that parking for residential development in America is frequently overbuilt by a third or more, particularly in TOD areas. Considering land acquisition, design, paving, and maintenance, the costs of providing parking are thousands of dollars per car space, even if the spaces are built at ground level, without structures; and the allocation of land for parking precludes other uses of this space, such as more housing units.

Frequently, municipal building codes require the provision of more parking than is required, needlessly driving up housing costs and undermining affordability. However, in cities across the country advocates have rolled back parking requirements in TOD areas through the presentation of research and sample project analyses.

In Baton Rouge affordable housing developers could increase their capacity to construct housing by applying the research on right size parking to their projects and securing passage of an ordinance that would permit developers to build with right size parking as a matter of right in Mid City and other TOD locations. Minimally, such an ordinance would ensure that the entire one-mile radius station area would be subject to the City of Baton Rouge code which permits the construction of 1 parking space per housing unit in the CBD, rather than 2 spaces per unit as required elsewhere in the city.

Energy Conservation

The effectiveness of energy conservation retrofits in buildings as a means of reducing long-term operating costs in all US climates is widely recognized, with model programs and metrics available from the American Council for an Energy Efficiency Economy (ACEEE) and other organizations.

A systematic program to ensure that all new construction in the Mid City station area is energy efficient and that energy efficient retrofits are performed on virtually all residential buildings in the area is recommended as an affordable housing strategy. Several benefits are inherent in this strategic component:

- Federal tax credits are available to reduce the costs of energy efficiency retrofits including: modest credits for most energy efficiency measures, significant credits for retrofits that involve the installation of alternative energy, and business energy efficiency tax credits (managed locally through the East Baton Rouge Redevelopment Authority) that may be applicable in some cases.
- Energy efficiency retrofits may be performed on buildings under any ownership. Complex and expensive measures to achieve property control by a not-for-profit entity are not required. Because ownership change is not required, an energy efficiency program could reach a large segment of the many buildings in the Mid City area that are deteriorated.
- Energy efficiency retrofits may be, and often necessarily are, integrated with measures that will reverse overall deterioration in buildings. For this reason, energy efficiency may provide a wedge for remediating widespread conditions of housing deterioration in the community.
- Energy efficiency work will be performed most efficiently when the buildings receiving upgrades are concentrated in the same neighborhood, another potential advantage of a systematic program to retrofit the Mid City station area.
- Energy efficiency may provide employment in construction, in connection with recommendations to optimize local employment in construction presented earlier.

Energy efficiency retrofits will be conducted most efficiently if the several aspects of accomplishing these projects -- assessment, financing, construction, and monitoring -- are organized as a one-stop service. The Elevate Energy program of Chicago, which completes energy efficiency retrofits on several thousand housing units per year provides a model for this type of organization, although Elevate's scale of operations does not need to be replicated, <https://www.elevateenergy.org/>.

Flood Prevention -- Green Infrastructure and Rain Ready Retrofits

No Americans have a better understanding the risks of flooding -- both catastrophic and periodic heavy rainfall events -- than the residents of New Orleans and Baton Rouge. Especially in Louisiana, a strategy to upgrade an entire community, including its affordable housing, should include systematic measures to prepare for heavy rainfall and prevent or mitigate flooding.

Green Infrastructure -- scientific landscaping and planting to absorb rainfall and direct unabsorbed flow -- is an effective tool for flood prevention when developed in coordination with a robust storm sewer system. Some elements of green infrastructure are optimally applied in building-by-building, property-by-property retrofits that optimize such features as the direction of gutter run off and the integrity of building envelopes to prevent seepage. Such retrofits are comparable to energy efficiency upgrades for individual properties. Other elements of green infrastructure such as the optimal placement of swales, rain gardens, and detention ponds that relate to multiple properties are best planned at the neighborhood level.

A recommended element of the Mid City station area's affordable housing strategy is to seek public or philanthropic funding for a community-wide assessment of flood prevention readiness leading to an actionable plan for readiness, which would be likely to entail property retrofits and the planting of green infrastructure. In addition to the direct value of preparing the community to withstand flooding, there are several advantages to such a strategic thread:

- While public resources in Louisiana appear to be geared for reaction to flooding, federal funds are available through the Federal Emergency Management Agency (FEMA) pre-disaster planning program and as an eligible use of Department of Housing and Urban Development (HUD) Community Block Grant funding. National foundations are also interested in this issue. Funding that would not otherwise be available to support affordable housing might be secured for this purpose.
- Property-by-property and community-wide flood prevention measures may compliment a community-wide energy efficiency initiative and provide another component of construction work for community residents.
- Green infrastructure will add to the aesthetic appeal and quality of life in the community.
- Community-wide planning and the implementation of flood prevention measures that cross property boundaries may add to interpersonal communication and a sense of common purpose in this ethnically and economically diverse community.

Suggestions for the Capital Area Affordable Housing Alliance

The timing of this section of the Station Area Master Plan may be fortunate as it coincides with an early stage in the creation of an affordable housing strategy for the Parish of East Baton Rouge, if not the entire Baton Rouge metropolitan area. Some 30 organizations engaged in various aspects of affordable housing are participating in this initiative, meeting as the Capital Area Affordable Housing Alliance. The Greater New Orleans Housing Alliance is providing counseling for this effort, and the East Baton Rouge Redevelopment Authority is participating and may be a major implementor of the Alliance's plan.

An affordable housing strategy for the Mid City station area should certainly be an integral part of this parish-wide plan. All the affordable housing strategies recommended in this plan are offered for the consideration of the Capital Area Affordable Housing Alliance (the Alliance). To the strategies discussed above, we would add the following proposals, which would apply to the Mid City station area but have broader applications and could only be undertaken by a regional coalition.

Make the Mid City Station Area the Region's eTOD Blueprint

Alliance members view equitable transit-oriented development (eTOD) as one component of a broader affordable housing strategy for the region. As the preceding discussion has pointed out, the Mid City station area is the ethnically and economically diverse community in the region that has the best transit service, certainly one of the best opportunities for inclusive economic development, and the greatest threat of displacement of its lower-income residents. In light of these characteristics, Alliance members may view the Mid City station area as their model for eTOD. The lessons learned here will be applicable to other lower-income communities as transit services improve and as wealth and opportunity diffuse through other low-income neighborhoods. Accordingly, this station area may be the place where new strategies are tested and particular attention and resources may be devoted to making them work.

Explore Creation a Baton Rouge Regional Fund Devoted to Affordable Housing

As noted earlier, the development of affordable housing involves the creation of multilayered financing structures. In this process, public or philanthropic partners provide a base layer of capital by funding the steps that entail the greatest patience or risk, such as acquiring property that may be held dormant for long periods or assuming first position in the event of default. Then private partners, such as banks, provide larger amounts of capital, usually as debt, to build out the project.

Sophisticated participants in the Alliance, such as the Gulf Coast Housing Partnership, have networks of early and later stage capital partners to finance projects, and the East Baton Rouge Redevelopment Authority has some capacity to land bank properties. However, CNT is not aware of any regional entity dedicated to providing first tier funding for affordable housing projects in Baton Rouge. In other regions supportive partnerships of public agencies and foundations – such as the Bay Area Family of Funds or the Greater Minnesota Housing Fund – have assembled millions of dollars for early stage or first tier financing and leveraged larger capital infusions to finance the development of hundreds of affordable housing units. Creation of a regional first stage capital fund that could leverage other sources of sources of investment might be an appropriate objective for a regional affordable housing coalition. Some of the same national philanthropic funders that have supported affordable housing funds in other regions have made capacity building grants to not-for-profit housing organizations and some project investments in Baton Rouge, and these supporters might participate in a first stage fund and could raise the scale of affordable housing development in the region.

The Alliance may consider whether or not the creation of an early stage or first tier regional fund for launching affordable housing would be a desirable and feasible objective. A regional fund could provide an assembled resource that could be allocated to qualified projects. However, Alliance members may decide that working through the investor networks of member organizations on a project-by-project basis might be a more effective or necessary strategy. If the effort to create a regional fund is

undertaken, the Mid City station area could provide attractive sample projects for prospective investors to consider and a test bed for the fund's first projects.

Explore Value Capture and Other Leveraging Strategies

One reason for establishing a Baton Rouge regional eTOD Fund and launching its operation in the Mid City station area would be to capture the rising value of property in this area, using this value to build and preserve affordable housing.

A relevant, though not perfectly comparable, example of such a value capture strategy is the Denver TOD Fund. As Denver implemented development of its light rail system, civic leaders recognized that the value of land around transit stations would rise in a pattern that would displace low-income residents. The City of Denver, a coalition of local donors, and national funders of affordable housing, including Enterprise Community Partners, created the fund to acquire land before it hit peak value and provide first stage funding for affordable and mixed income housing projects. Since the Denver Fund's establishment in 2014, it has deployed over \$24 M in first stage capital, established a pathway to 1300 units of affordable housing and 100,000 square feet of amenity space, making 15 loans of which 11 have been repaid permitting fund capital to revolve <https://www.enterprisecommunity.org/financing-and-development/community-loan-fund/denver-regional-tod-fund>.

Of course, Baton Rouge is a smaller market than Denver, and Baton Rouge's rail station with additional bus service is a less powerful transit driver of value than a light rail system. Also, the property tax structure of Baton Rouge does not provide the same scale of potential investment from tax value capture as many other cities. However, the strategic situation of a neighborhood that will experience rising property values and needs affordable housing is similar in the Baton Rouge and Denver cases, and the limited value capture benefit available in Baton Rouge may add incremental value to other affordable housing investment resources.

Explore Opportunities for Employer Assisted Housing

Another potential strategy for building affordable housing in the Mid City station area is to explore possibilities for *employer assisted housing* with major employers that would benefit from their employees living in this neighborhood close to their location in the CBD or accessible to their campus by robust transit service. Considerations regarding *employer assisted housing* in East Baton Rouge are discussed at length in this plan's section of the Health District station area and an appendix on this subject.

Explore Community Land Trusts for Affordable Housing Preservation

Community land trusts are an option the Alliance and its members may consider ensuring that housing units remain affordable for the foreseeable future. According to the Lincoln Land Institute approximately 160 community land trusts with the mission of preserving affordable housing exist across the US. These land trusts follow a variety of structures, ranging from trusts that operate as active developers and property managers to trusts that settle many of the responsibilities and benefits of ownership on housing occupants, under the terms of a very long-term lease or a transfer of ownership

subject to certain covenants. In the latter case benefits to the seller from appreciation of property value are limited. <https://www.lincolnst.edu/publications/articles/community-land-trusts>

Optimally, a land trust may secure qualified, long-term housing occupants who are invested in their homes and enjoy appropriate benefits from their stewardship, as well as ensuring near permanent affordability. However, the complexities of ownership may impede the development or building management processes. Alliance members will need to decide if a land trust is appropriate for a segment of their development effort.

The Challenge of Homelessness

On any given day, some streets of the Mid City station area include a large population of homeless men, women, and sometimes children. Their presence raises several dilemmas. These people are members of the Baton Rouge and Mid City community; they are within our sphere of concern, both generally and for eTOD analysis. Their situation is distressing and unacceptable, both to themselves and to the residents and workers who share the public space with them. Their problems are rooted in the regional and national economy and are beyond the capacity of a community development project to fully resolve. However, conversations with managers in the Capital Area Alliance for the Homeless – Baton Rouge’s network of service providers for the homeless – and a review of the Alliance’s public materials offer two types of information that point to a strategy for mitigating the situation of the homeless in the Mid City station area.

First, it is useful to recognize that the homeless individuals on the street are a minority of people who are at risk of homelessness and that homeless men and women whose behavior is uncouth or offensive are a minority of those on the street. For every person living without shelter there are several who are at risk of losing their residence if they are cut off from one of their part-time jobs or if they argue with a friend or relative with whom they have been sharing a home. Frequently, people who lose their home due to one of these types of mishaps will improve their situation within a few days or weeks and be back in shelter. The homeless population churns, and most people who are in this situation are there temporarily, though perhaps repeatedly. Furthermore, the minority of homeless people on the street whose behavior is offensive are usually in need of mental health or solid social work counseling, as well as a stable living situation; they are not receiving help they need because there was no room for them on the caseload. In one respect, it is a terrible insight to realize how large, vulnerable, and under-served the very poor segment of our society is. From another perspective it is helpful to realize that the “homeless” are not a class apart. For the most part, they are simply some of the people performing minimum wage work and living in a low-income neighborhood, whose situation could be materially improved with the implementation of a good eTOD plan.

Second, it is helpful to know the range and character of the services provided by the 42-member organizations of the Capital Area Alliance for the Homeless. In Table 3, CNT has grouped these organizations into categories according to the primary service they provide. The table is a simplification in that most of these organizations provide several related services, and the categorization reflects only the service for which they are most noted; also, a number of the organizations provide services to

particular populations, for example: veterans, people with substance abuse problems, people with particular diseases. Nevertheless, the table provides a fair overview of the Alliance’s service scope.

Table 3: Capital Alliance for the Homeless, Service Specializations of Member Agencies

Category of Service	# Service Providers
Emergency Shelter	9
Health Care	6
Families with Children & Youth Services	4
Counseling\Mental Health	8
Affordable Housing	6
Group Homes	3
Other	6
Total	42

Source: Published Roster of Capital Alliance Members, Service categories proposed by CNT

The Alliance members collaborate in an intake and initial assessment service that refers homeless clients to service providers that can most appropriately address their needs. The type of service that is most visible to the broader community is emergency shelter, usually on an overnight basis, and indeed 9 organizations provide this vital support. But most of the work Alliance members perform addresses the underlying problems or needs of homeless people: treatment of physical disease, unstable family situations, practical counseling and/or treatment of addiction or mental illness, long-term housing or residence in a group home that combines a stable living situation with treatment of physical or emotional problems. Notably, at least 9-member organizations of the Alliance for the Homeless are providers of affordable housing, either apartments or places in a group living situation. Several of these organizations are also members of the Capital Area Alliance for Affordable Housing.

The points about the Alliance for the Homeless network that are most relevant to the challenge of affordable housing in the Mid City area are these:

- Network members are primarily working to eliminate homelessness, not simply to ameliorate it. Ameliorative services, such as overnight shelters, are forced upon the network because its resources are overwhelmed by the scale of need.
- As the term “homeless” suggests, the problem is in part a lack of appropriate affordable housing, a need that organizations in the overlapping membership of the two Alliances are working to meet.

This information about homeless people and the Baton Rouge network working to change their situations indicates several principles for the strategy to provide affordable housing in the Mid City station area:

- Some long-term housing that provides a safety net for people who might otherwise fall into homelessness have a place in the diverse Mid City community. These housing situations might include well-run single-room-occupancy (SRO) apartment buildings, housing for families far below area median income, and group homes for people in special need conditions. The community’s expectations for these facilities would be that they are well-managed, with residents receiving casework counseling and other professional services as required.

- Mid City should not be a magnet for emergency shelters, although it may accept its “fair share” of such services, which will be a part of Baton Rouge society until basic public policy and economic conditions in the country improve. Again, the community’s expectations for these facilities would be that they are well-managed, with clients being referred to and tracked in programs that address their long-term needs for housing, health care, counseling and employment.

Opportunity Connections through Local Institutions

Frequently the types of implementation measures recommended in this plan – both in regard to employment and affordable housing -- are either not taken or tried ineffectually for lack of productive connections between professional service providers and community residents. Residents may not learn of resources available to them. The lack of a local meeting place may discourage contact. Service providers may be unaware of local impediments, and residents may not follow through for lack of a knowledgeable advocate.

For these reasons, community engagement should be directed through respected local organizations, including the area’s churches, which are well established and significant institutions in the lives of many community residents. Community engagement should include: a voice in planning and monitoring community development programs and a role in the dissemination and explanation of information about employment and housing programs. Recognizing the value of such connections, program budgets should include compensation for the planning and outreach work of local organizations.

Equitable Transit-Oriented Development

Suburban Station in Health District Baton Rouge, Louisiana

October 2018

Prepared by Center for Neighborhood Technology
For the East Baton Rouge Redevelopment Authority

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Introduction and Executive Summary

An eTOD analysis was completed by the Center for Neighborhood Technology (CNT) for the Suburban Station as part of the planned Baton Rouge-New Orleans intercity passenger rail corridor.

One aspect of the Health District Station Area Master Plan is a consideration of equity in development that will accompany increased transit service. The establishment of new passenger rail service and enhanced bus service in the Health District is intended to stimulate change that commonly occurs in neighborhood-level transit-oriented development (TOD) – increased housing density in a community where residents can conveniently walk to an array of amenities and reach a broad range of jobs by walking, biking, or transit. The question addressed by this section of the Master Plan is how development in the Health District station area can be equitable TOD (eTOD). Core questions for eTOD in the Health District are:

- (1) How can virtually all groups of current station area residents and workers realize the benefits of TOD, rather than having development pass them by or displace them?
- (2) How can TOD in the Health District have positive impacts on the broader Baton Rouge area?

A number of the Health District station area's salient existing conditions, need to be considered in operationalizing these questions:

- The Health District is a regionally significant employment center, with approximately 4,700 jobs within a half-mile radius area of the planned transit center, and 14,500 jobs within a one-mile radius. The District is also a regional service center with patients coming to its medical facilities from all Baton Rouge communities and far beyond.
- Fewer than 1% of the jobs in the Health District station area, at the half-mile or one-mile radius range, are held by residents of the area. It is necessary to think of the Health District in terms of worker and resident communities that are largely distinct. Workers outnumber resident households by more than 7 to 1.
- While medical services are the largest single field of employment in the one-mile radius station area, other types of employers support thousands of jobs. These include retail businesses focused in the Mall of Louisiana, hospitality and service businesses on the District's arterial streets, and a major logistics center south of the Kansas City Southern rail tracks.
- The residential community of the station area is racially diverse with an ethnic composition that contains in a half-mile radius area a microcosm of the city of Baton Rouge's ethnic mix.
- The residential community of the station area is generally prosperous with a median household income of \$62,200 in the half-mile radius and \$79,800 in the one-mile radius station area. Yet the District contains substantial pockets of poverty. Approximately 20% of households in the half-mile radius area and 22% of households in the one-mile radius area have annual incomes of less than \$15,000.
- Levels of educational attainment among station area residents are probably lower than those of the working community. Approximately 35% of residents in the station area do not have a bachelor or advanced degree but have completed high school, some college, or an associate degree. These

residents are educationally prepared to train for paraprofessional or support positions in medical service.

- Transit service for the station area currently includes 7 bus routes and is more extensive than service to most areas in the city or parish of Baton Rouge. However, existing transit does not provide a level of service frequency that is considered necessary to make transit a reliable means of commuting and a travel mode of choice in many American cities. The large majority of Health District workers and residents in this large employment center drive to work and to ancillary locations, creating challenges in traffic congestion and parking.
- Housing and transportation are the two largest categories of expense for households in Baton Rouge and throughout the US. In the Health District station area, the median combined costs of housing and transportation are 41% of median household income compared to 46% for the city of Baton Rouge and 49% for Baton Rouge parish. The lower percentage station area costs reflect a transportation cost advantage that will increase as new transit services come on line.
- Although the Health District has recently developed a multi-use path that connects several of its institutions, access to and through the station area by active transportation (walking or biking) faces major impediments. The station area is effectively cut in two by the Kansas City Southern rail track, isolating the southern half of the area, which contains most of the area's low-income households. Heavily trafficked arterials and the I-10 Expressway place barriers on the east, west, and north sides of the District.
- Approximately 39% of housing units in the Health District's half-mile radius station area and 25% in the one-mile radius area are in large apartment buildings of 20 or more units. Units in such large buildings are two to four times more common in the station area than in the city or parish of Baton Rouge as a whole. Such housing density can be helpful in providing affordable homes for lower-income households and is consistent with TOD, but the station area shows a 20% housing unit vacancy rate, which suggests management difficulties.

In light of these conditions, we can frame the questions of eTOD in the Health District in more specific and actionable terms:

- How can more of the station area's lower income residents remain in the area as it continues to improve, benefitting from its large job base, transit and housing opportunities?
- How can lower income residents remaining in the station area contribute to the workforce of the Health District, and help to sustain the ethnic and economic diversity of the community?
- How can transit access to and use in the District be significantly increased, contributing to the disposable incomes of residents and workers, making the district more accessible to patients, easing traffic congestion, and improving the environmental quality of the District?
- How can impediments to active transportation in the station area and District be removed, further encouraging complementary transit use and related household savings, reducing traffic congestion, and making the District a more healthy and desirable place to live and work?
- How can affordable housing in the station area be sustained, expanded, and improved, again helping to maintain a reliable workforce for the District and the ethnic and economic diversity of the community?

- Recognizing the scale of the Health District as an employment center and its need to draw workers at all professional levels from beyond the station area, how can employment, transportation savings, and affordable housing benefits developed in the station area be extended to other Baton Rouge communities?

To answer these questions our team recommends four basic strategies, each of which includes several specific lines of action. These recommendations are consistent with and in some cases build on the Health District’s strategic plan, *A Vision for the Baton Rouge Health District*.

Explore a Geographically Focused Workforce Development Strategy in partnership with regional workforce organizations and the Baton Rouge Area Chamber of Commerce to recruit and train medical paraprofessionals and support staff from the Health District station area and communities linked to the District by public transportation.

Increase Transit Access and Use in the Health District:

- Establish a high frequency transit connection between the Hospital District and Mid City transit stations, either through a local rail service or express bus.
- Intensify local bus service between the Health District station and nearby low-income communities.
- Reduce Health Care District employees’ federal tax burden through a combination of transit expense fringe benefits and pretax transit purchases.
- Explore the bulk purchase of transit service from CATS for Health District employees and station area residents.
- Provide employee and community education on the scale of benefits from transportation cost savings.

Increase Accessibility to and within the Health District by Active Transportation:

- Seek prioritization of the District’s request to build Midway Avenue as a “complete street” providing active transportation as well as car access across the KCS rail line.
- Ensure active transportation access to the Health District station
- Study the creation of safe pedestrian crossings of Essen Avenue and Blue Bonnet Road.

Support and Participate in Affordable Housing Development in the Health District and Transit-Accessible Communities:

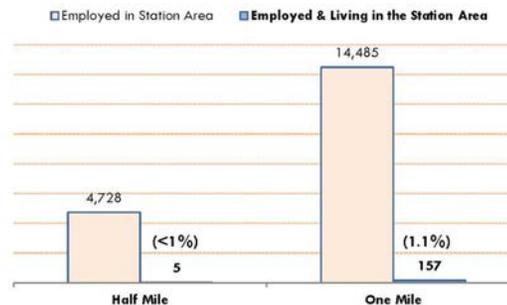
- Partner with experienced multi-unit affordable housing development organizations in Baton Rouge.
- Explore options for Health District investments in station area housing through an Employer Assisted Housing (EAH) program.
- Explore options for Health District partnerships in expanding amenities in neighborhoods selected for EAH investments.
- Explore EAH and community amenity investments in selected communities linked to the Health District by robust transit connections.

I. Current Conditions

A. A Major Employment Center

The Baton Rouge Health District is a major employment center with approximately 4,700 jobs within a half-mile radius of the planned passenger rail station and 14,500 jobs within a one-mile radius of the station. However, fewer than 1% of the jobs in the half-mile or one-mile radius areas are held by area residents. See Chart 1.

Chart 1: Labor Market



Data Source: On the Map, LODES Version 7.3 US Census 5-year study 2015.

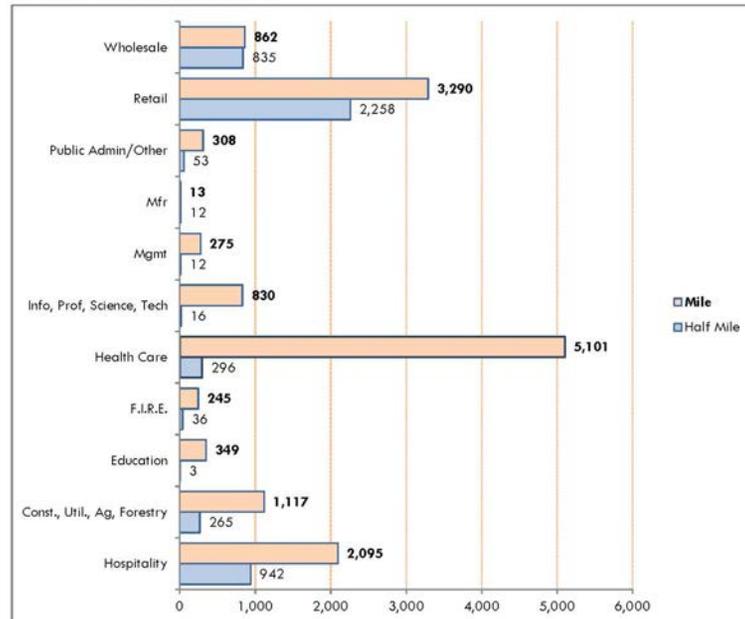
In keeping with the District’s identity as a job center, jobs outnumber residents in this area. The half-mile radius area contains approximately 4,700 jobs and 700 households, and in the one-mile radius area we find 14,485 jobs and 1,240 households. These numbers of station area workers compared to resident households help to explain the low percentages workers residing near their jobs. If every resident household had a family member with a job in the station area, they would hold fewer than 15% of the jobs. However, the extremely low level of jobs held by neighborhood workers indicates a more basic separation between the community of residents and the community of workers in the Hospital District.

These figures suggest major eTOD challenges for the Health District: how more residents can take the existing jobs in the District, how the additional workers who must come to the District can do so economically and sustainably, and how the residential and worker communities of the District might be better integrated.

Health Care is, of course, the predominant industry of the Health District, and this is clear when we consider the one-mile radius area around the selected station site (Chart 2). However, the selected station site is on the periphery of the Health District. The half-mile radius around this site contains a

wide assortment of industries with hundreds of jobs in other fields including: Retail in the Mall of Louisiana, Hospitality with restaurants and hotels along major arterial highways, and Logistics with a warehouse and distribution complex south of the Kansas City Southern rail line.

Chart 2: Area Jobs by NAICS Sectors



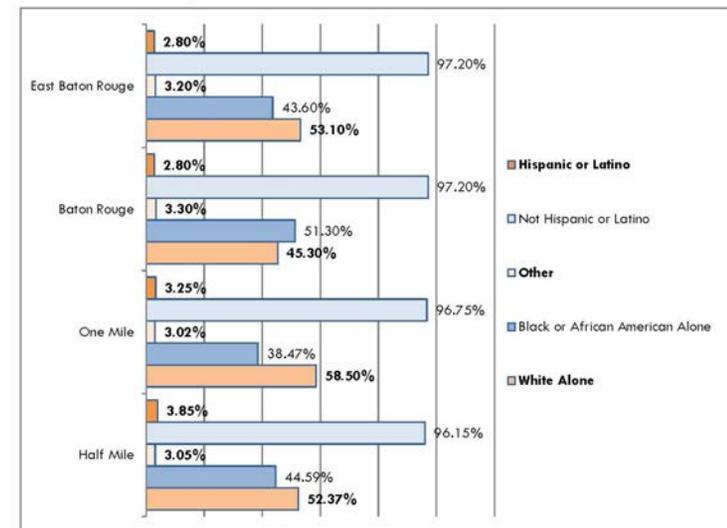
Data Source: On the Map, LODS Version 7.3 US Census 5-year study 2015

B. A Diverse Population

Ethnic Diversity

As Chart 3 indicates, ethnic composition of the residential community in the Health District’s half-mile radius station area virtually mirrors the ethnic composition of Baton Rouge, capturing the city’s economic diversity in one neighborhood. The one-mile radius station area contains somewhat larger White and smaller African-American populations but is also a highly diverse community. Maintaining this ethnic diversity as the area prospers and the residential and worker communities of the District becoming more integrated will be an important eTOD objective.

Chart 3: Ethnic Diversity

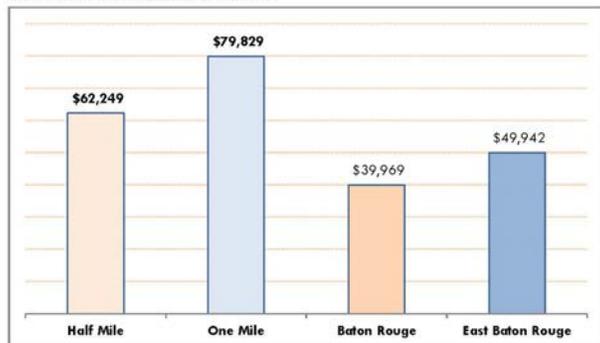


Data Source: On the Map, LODS Version 7.3 US Census 5-year study 2015

Economic Diversity

The Health District and the half-mile and one-mile radius station areas particularly, are located at the meeting point of wealthy and low-income communities. This fact is illustrated by the accompanying map (Figure 1) which shows the census block groups within and adjoining the station areas, shaded according to the median household income in these block groups. The median household income for the Health District station areas reflects this intersection of high and low-income neighborhoods. (Like other data gathered and analyzed for the half-mile and one-mile radius station areas, data on household income is based on a proportional sum of the land and population in the several census block groups that fall within the station area boundaries.) While the station area is generally prosperous with median household income levels that exceed those of the city of Baton Rouge or East Baton Rouge parish, lower income neighborhoods remain (Chart 4).

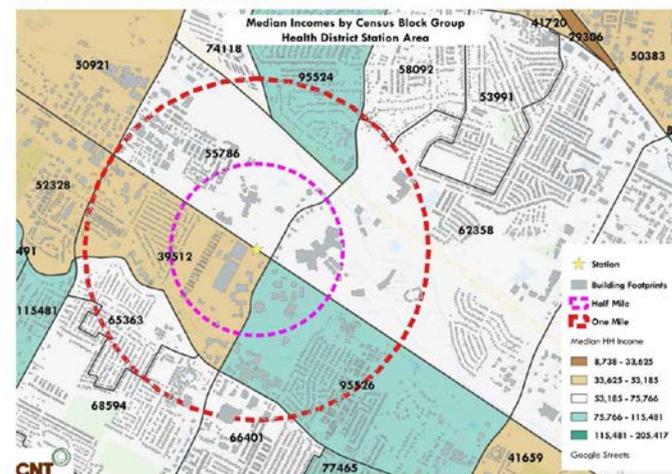
Chart 4: Median Household Income



Data Source: H+T Index, ACS Census 5-year study 2015.

These median household income figures balance not only more and less wealthy census block groups but households at various levels of income that are, to some extent, spread across neighborhoods. As Table 1 illustrates, just within the half-mile and mile radius station area, households vary widely with 22% of the population below \$15,000 and 50.80% above \$40,000 in annual household income, while 29% of households have incomes between these levels. This intermixture of households with different income levels within an area a person could walk through in ten to twenty minutes is an indication of a dynamic urban neighborhood and a diversity that an eTOD strategy will aim to preserve. In the unfolding of the Health District's eTOD strategy, we would want to see incomes increase in all brackets, while a wide range of incomes is maintained in the community.

Figure 1: Median Income by Census Block Group



Data Sources: ACS 5-year Survey 2015, H+T Index downloaded 08.15.2018

Table 1: Income Distribution

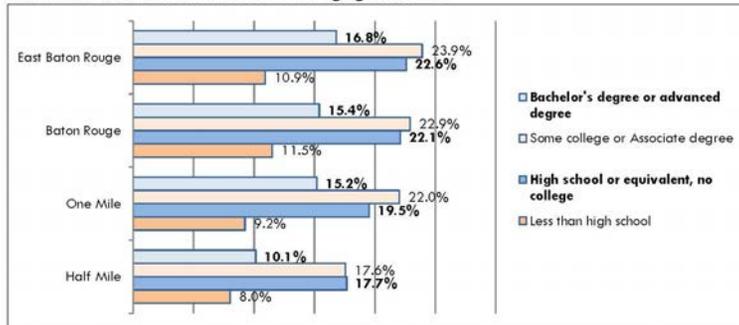
Annual Income	Half Mile Worker Population	Percent	One Mile Worker Population	Percent
Less than \$15,000	64	20.3%	601	21.8%
\$15,000 - \$39,999	91	28.9%	812	29.4%
More than \$39,999	160	50.8%	1,346	48.8%

Table 1. Data Sources: On The Map LODS Home Worker, ACS 5-year survey 2015

Levels of Educational Attainment

Levels of education for working age residents of the Health Care station area are generally lower than those residents in the City of Baton Rouge or East Baton Rouge Parish, and they are significantly lower for residents of the half-mile radius station area. This is another dimension along which the residential and working populations of the Hospital District diverge. However, even within the half-mile radius station area, over 35% of adults have a high school diploma or an Associate Degree or some college. These workers would qualify or could be trained quickly to perform a wide range of paraprofessional or support jobs, including jobs within the field of medical services.

Chart 5: Educational Attainment for Working Age Residents



Data Source: On the Map, LODES Version 7.3 US Census 5-year study 2015. Note: The Census does not track educational attainment for all residents of working. Attainment is not recorded for workers persons younger than 26 years of age.

C. Housing Patterns with Potential for Higher Density

Housing patterns in the Health District station area differ from those in most parts of the city of Baton Rouge and East Baton Rouge Parish in that apartment buildings with 20 or more units make up a larger share of the housing stock by two to three times. This pattern is most pronounced within the half-mile radius station area, which contains approximately 1,080 housing units (Table 2). Here single-family homes make up a much smaller percentage of all housing; rental units are more common than in the city or parish overall as are housing unit vacancies.

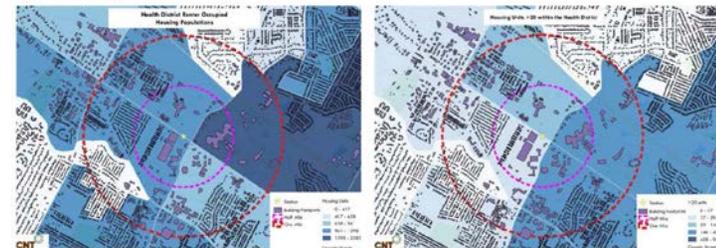
Large apartment buildings may be more common in the station area in part because such a large percentage of the area's land is occupied by commercial or institutional uses, limiting the footprint available for housing. However, significant acreage is available for further development, as in the area immediately around the planned rail station. If additional development of large apartment buildings was pursued in the station area, such development would fit more easily with existing housing stock here than in most parts of the city (Figure 2).

Table 2: Housing Factors

Factors	Half Mile	One Mile	Baton Rouge	East Baton Rouge
Median Household Income	\$62,249	\$79,828	\$43,853	\$53,787
Single Family Detached Housing Units	36%	62%	59%	65%
Housing with > 20 Units per Structure	39%	25.3%	12.2%	9%
Vacant Housing Units	20.2%	14%	13.8%	11.9%
Renter Occupied Housing	58%	42%	50.5%	41%
Housing + Transportation Costs	41%	48%	46%	49%

Table 3: Data Source: On the Map, LODES Version 7.3 US Census 5-year study 2015.

Figure 2: Comparison Housing Maps



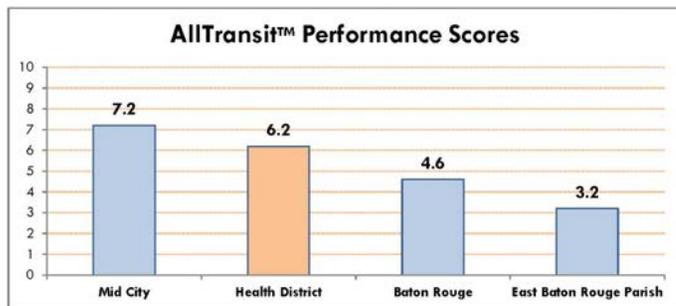
Data sources: ACS 5 Year Survey 2015, EBRGIS downloaded 08.15.2018, H+T Index. These choropleth maps show densities by renter occupied housing units and density of housing with 20 or more units within both a half mile and one-mile radius from the proposed station area for the Health District. Both maps include building footprints to capture potential future development possibilities.

D. Transportation System and Access Challenges

Transit System Coverage and Use

The Capital Area Transit System (CATS) provides 7 bus routes that serve the Health District’s half-mile radius station area, following major streets that bound and run through the center of the District. During peak hours approximately 32,000 workers from a broad swath of the city could reach destinations in the half-mile radius station area within half an hour. Relative to most of the Baton Rouge area, transit service for the District is robust. This is illustrated by the following chart, which shows the ratings of several areas in metropolitan Baton Rouge by CNT’s “Transit Performance Index”, a metric in CNT’s AllTransit™ on-line transit analysis tool <https://alltransit.cnt.org/metrics/#quality> (Chart 6). This index measures the level of transit service available (in terms of options, frequency, and time-of-day coverage) in all US urban areas, at the census block group level. The index is expressed on a 10-point scale, with 10 being the highest level of service.

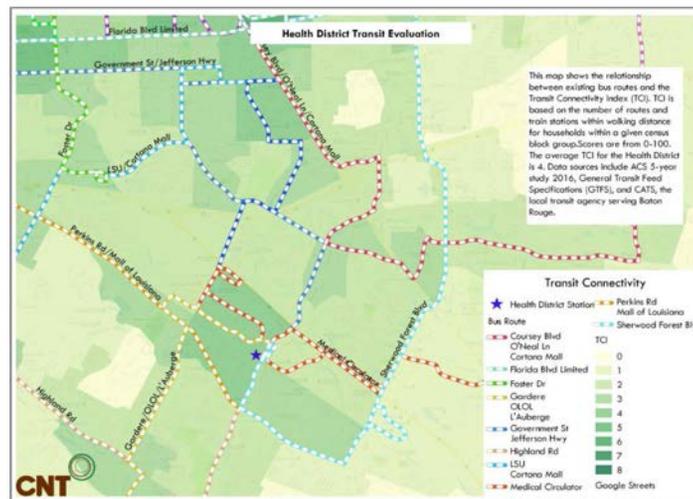
Chart 6: AllTransit™ Performance Scores



Data Source: AllTransit™, ACS 5-year study 2015.

With relatively strong transit service, 12.19% of workers in the half mile station area commute via transit. This would not be a high percentage in cities with more extensive transit systems, but it is higher than most Baton Rouge neighborhoods. Transit ridership by commuters, patients, and others who come to the Health District may be higher than local resident use, although data has not been gathered on transit trips specifically to and within the Health District. Transit ridership to and from the Health District could be larger if the level of service was high frequency. In CNT’s AllTransit analytical tool (Figure 3), high frequency transit is defined as providing service at least every 15 minutes during peak hours and at least every half hour, with scheduled service during midday and at very early and late hours. This level of service is generally sufficient to provide a reliable means of commuting and to make transit a travel mode of choice. While CATS’ service has generally been improving steadily over the last several years and while the system has tailored service specifically to the Health District, such as its #60 Health District Circulator bus, the level of service has not yet reached a level of high frequency.

Figure 3: Transit Evaluation



Data Sources: AllTransit™, ACS 5-year study 2015. EBRGIS bus route shapefile, created by N Hirsch 08.2018

Active Transportation Access to and within the Health District

Currently much of the area within which residents of the station area reside is not practically accessible by active transportation (walking or biking). The KCS rail track, on which Amtrak service will operate, is a barrier that cuts off access from the southern half of the area as seen in Figure 4. The only possible active transportation access would be an indirect route along Blue Bonnet or Essen, extremely busy multi-lane highways. The Mall of Louisiana and Blue Bonnet limit active transportation access from the east as does the I-10 Expressway to the north.

will effectively double the area within which people will have active transportation (i.e., pedestrian or bicycle) access to the Health District by providing access to the Health District from the residential areas to the south of the railroad tracks.

The strategies recommended in the concluding section of this eTOD component of the Station Area Plan build on the decisions made to date in the planning and ongoing development of the Health District. These recommendations also reinforce each other as well as recommendations made for the Mid City station area in the Baton Rouge Station Area Master Plan.

III. Recommended Strategies

A. Explore a Geographically Focused Workforce Development Strategy

Baton Rouge area workforce development organizations and the Baton Rouge Area Chamber of Commerce (BRAC) that works strategically with these agencies recognize paraprofessional and support positions in the health care field as an important area of job growth (BRAC, Regional Workforce Analysis 2017, p 17, <https://indd.adobe.com/view/1526f738-9af8-48a2-af9b-93270b170ccd>). The Health District may engage the region's workforce agencies and the BRAC in exploration of an initiative to target recruitment and training for health care paraprofessionals and support staff to the Health District station area and to low-income communities closely connected to the District by transit. There are several reasons why such an initiative would be an effective way of meeting workforce organization objectives as well as those of the eTOD initiative:

- Recruitment outreach would be made to an audience with strong specific reasons to respond. Recruited trainees would have access to potential job opportunities without complex or expensive transportation requirements and so would have compelling incentives to complete training, to compete for Health District positions, and to be diligent, long-term employees if hired.
- Expansion of a paraprofessional and support position workforce residing in the station area or communities conveniently connected by transit would contribute to virtually all of the potential benefits that the Health District may realize through an eTOD strategy.

B. Increase Transit Access to and Use in the Health District

Establish More Frequent Transit Access Between the Health District & Downtown Station

The primary value of the new passenger rail service will be the intercity transit connection between Baton Rouge and New Orleans. With an initial frequency of two round trips per day, this service will provide only limited improvement in connections between the Health District and the rest of the Baton Rouge metropolitan area. However, more frequent passenger rail service is planned for the long term, and augmentation of passenger rail service with a more frequent, entirely local service should be considered. Frequent transit service between the Health District and the Mid City station area, reaching into the central business district (CBD) of Baton Rouge, would create multiple benefits.

Frequent transit service can alter behavior and investment patterns. As noted in the earlier discussion of existing conditions, currently no high frequency transit routes serve the Health District. A high frequency

level of service is generally necessary to provide sufficient convenience and reliability to make transit widely used as a means of commuting and a travel mode of choice. When the infrastructure supporting this level of transit is permanent and visible, it can drive the investment decisions of home owners, developers, and business owners.

A high frequency transit corridor between the Health District and the Mid City\ Downtown station area would be particularly valuable, from eTOD and broader development considerations. Such a corridor would conveniently connect the Health District to an important customer market in the Baton Rouge central business district (CBD) and provide a business and recreational connection that might be valued by many Health District employees. From an eTOD perspective, frequent transit service would connect the Health District to the Mid City station area on the periphery of the CBD. This is a racially and economically diverse but predominantly Black and low-income community, and it adjoins and is connected by bus routes to communities with similar demographics. An important component of the Mid City community's strategy to avoid displacement and achieve eTOD is to train as many residents as possible in paraprofessional and support service job skills, including training for such positions in the medical field. Mid City could help to provide the Health District with greater connectivity to lower-income communities for workers and patients through transit.

Two options might be explored to establish a high frequency transit connection between the Health District and Mid City station areas:

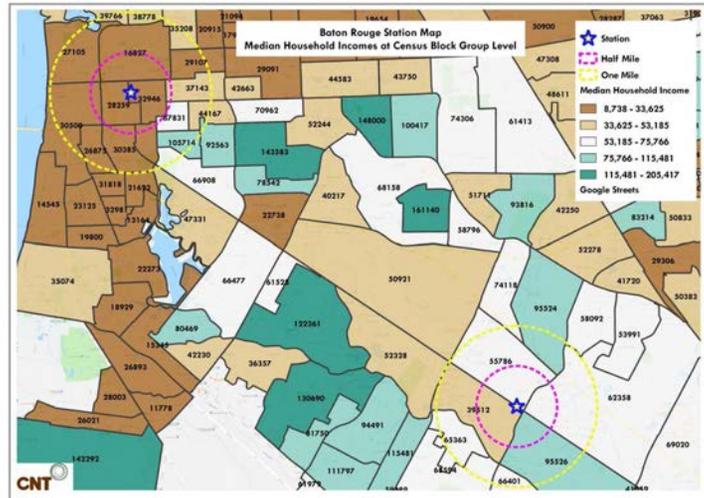
- The addition of an entirely local rail service between the two stations that would be more frequent than the intercity service, or
- Creation of an express bus service between the CBD, stopping at the Mid City station, and the Health District.

The accompanying choropleth map (Figure 5) illustrates gradations in median household income, by census block group, between the Health District and the Mid City station area. It shows that lower income areas relatively close to the Health District are generally aligned in a corridor between the Health District and the Mid City station. Considering this demographic geography, the optimal high frequency transit connection between the workers and patients of low-income communities and the Health District might be an express bus between the two passenger rail stations, making a limited number of stops in the communities to be served.

Intensify Local Bus Service Between Station and Nearby Low-Income Communities.

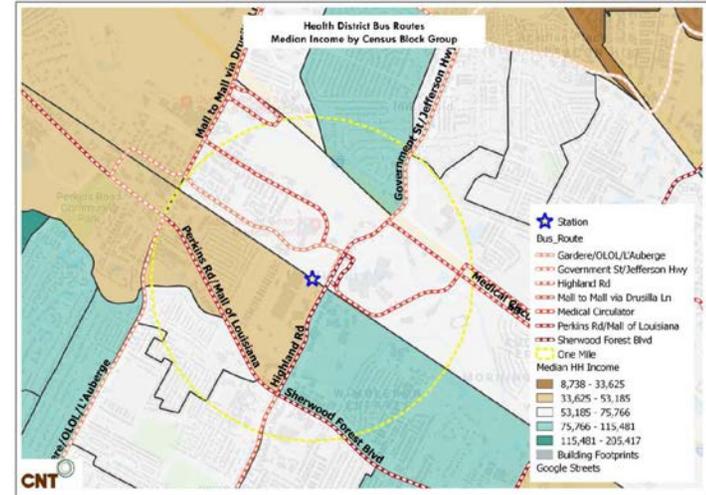
Plans for development of the Health District station call for multiple bus routes to connect at this point, making the station a multimodal transit center. To improve equity, these bus routes should increase service to lower-income communities within a one-mile radius of the planned station. As indicated by Figure 6, adding frequency to the Perkins Road and Highland Road routes may achieve this objective.

Figure 5: Median Household Income Gradations by Census Block Group between Stations



Data Sources: ACS 5-year Survey 2015, H+T Index downloaded 08.15.2018

Figure 6: Median Household Income by Census Block Group with Transit



Data Sources: ACS 5-year Survey 2015, H+T Index, EBRGIS downloaded 08.15.2018

Reduce Employees' Federal Tax Burden for Income Spent on Transit.

If the Human Resources departments of Health District institutions are not already using every available tax-related option to reduce their employees' transit costs, a holistic eTOD strategy would encourage such employer actions, which may include the following:

Provide Transit Expense Fringe Benefits: An employer may give an employee up to \$260/month for transit, car-pooling, or parking expenses. With revisions in the "Tax Cut and Jobs Act of 2017", if an employer provides these dollars as a tax-free fringe benefit, the employer cannot claim these costs as a tax-deductible expense. Alternatively, if the employer counts this benefit as taxable W-2 wages, the employer can deduct the expenses of providing this benefit.

Provide the Option of Pretax Transit Purchases: An employer may allow an employee to use up to \$260/month to pay for transit vouchers, commuter highway vehicle fares, or parking. An employer may reduce its payroll tax contribution for an employee's pretax income used for this purpose.

For further information on these options see the *National Center for Urban Transportation Research*, <https://www.nctr.usf.edu/programs/clearinghouse/commutebenefits/>.

Explore a Bulk Purchase of Transit Service Agreement with the Capital Area Transit System (CATS).

Universities across the country maintain "U-Pass" arrangements with their local transit agencies through which they purchase transit passes in bulk and distribute the passes to students as part of the basic services they purchase with their student fees. Louisiana State University provides a similar service through its "Tiger Trails" program, with services purchased from a private bus company. Cities including Seattle and Washington DC are encouraging housing developers to provide transit passes rather than parking spaces as amenities for their tenants <https://www.metrotransit.org/tod-developer-tools-and-resources>. Virtually any entity that organizes a large body of potential transit users may explore bulk purchases of transit services, and this is a recommended eTOD strategy for the Health District.

Explore Shared Mobility Options.

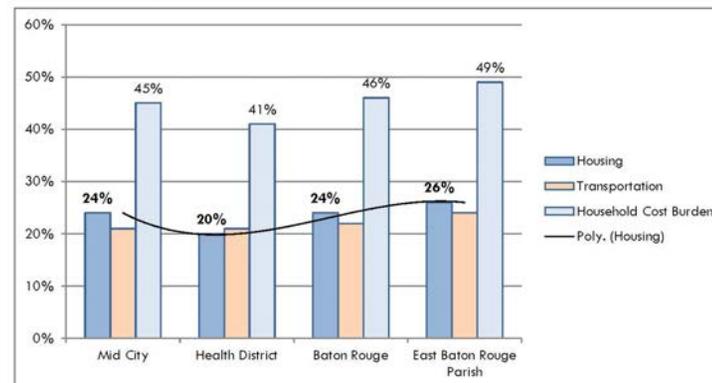
Programs such as car sharing and bike sharing are increasingly popular modes of transportation that are frequently coordinated for individual users, employers, or apartment building owners. These services that can make a car or bike available at need often permit an employee the freedom that he or she desires to commute by transit. The national Shared Use Mobility Center is a source of information regarding the organization of such programs <http://sharedusemobilitycenter.org/>.

Provide Employee Education on the Scale of Benefits from Transportation Cost Savings.

Transportation is the second largest expense for most American households. According to AAA, the average annual cost of owning and operating a car in America is \$8,469/year. If a household with the city of Baton Rouge's median income of \$43,800/year can live with one car instead of two or no car while enjoying good access to jobs and amenities, the difference in that household's ability to pay for housing or other essential needs is obviously large. Per 2015 census data, approximately 29.5% of households in the half-mile radius station area did not own or have regular access to a car, and 29.1% had access to only one car. These are remarkably low levels of car ownership for the Baton Rouge area. Living with less car dependence in the station area is possible because some amenities are in walking distance and transit service is stronger than in most parts of the region.

The Health District's transit advantage is also reflected by CNT's Housing + Transportation Index <https://htaindex.cnt.org/>, which shows the combined costs of housing + transportation, as a percentage of income, for median households in all US census block groups (Chart 7). Health District households have a significantly lower combined cost of Housing + Transportation, as a percentage of income (41%), than the City of Baton Rouge or East Baton Rouge Parish. This difference is attributable both to the predominance of multi-unit housing (which is generally less expensive per unit) and greater transit accessibility in the Health District. The Health District's advantage in transit accessibility will, of course, become even stronger with the addition of passenger rail and added bus service.

Chart 7: Housing + Transportation Index



Data source: H+T Index, ACS 5-year study 2015.

Health District managers may share this type of information with their employees in order to encourage transit use. These messages will be taken more to heart to the extent that the District undertakes some of the strategies recommended in this section of the plan, demonstrating that the District is prepared to take active steps to secure the advantages of transit use and active transportation for its institutions and employees. Strategies to increase transit use will also be reinforced to the extent that the District takes an active role in pedestrian infrastructure, housing and community development initiatives that will help to realize eTOD.

C. Increase Accessibility through Active Transportation

As noted in Section II, the Health District has taken critical steps to improve active transportation access (via walking or biking) within and to the Health District by:

- Creating a pedestrian and bicycle path running through the Health District, which the District plans to expand
- Strongly recommending the development of Midway Avenue as a "complete street" (providing bicycle lanes and broad sidewalks, as well as an automobile road) that will cross the KCS rail line.

The importance of these measures in achieving eTOD in the District would be difficult to exaggerate, particularly the creation of Midway Avenue. This street will effectively double the station area accessible by active transportation, and it will create such access from the part of the station area with the lowest median household income. In the District's negotiations with local and state government for

infrastructure improvement, the creation of Midway deserves a high priority. Other actions that the Health District is advised to take to further active transportation access in the interest of eTOD include:

- Ensure that the intra-District pedestrian and bicycle path connects with the new transit station and is otherwise accessible to pedestrians from the Baton Rouge General Hospital complex and other locations.
- Provide bicycle lanes and sidewalks on Picardy Street north of the new station.
- Study the creation of safe pedestrian and bicycle crossings of Essen Avenue and Blue Bonnet Road.

D. Support and Participate in Affordable Housing Development in the Health District and Transit-Accessible Communities

The development of affordable housing that could serve Health District workers would complement and reinforce all other strategies for achieving eTOD in the District's station area. Several strategic actions would optimize the potential of success and full benefits from the District's involvement in such development.

Partner with Experienced Multi-Unit, Affordable Housing Development Organizations

Our review of current conditions showed that apartment buildings with 20 or more units are common in the station area. Housing at this scale in an urban employment center has the potential to be affordable for working households with mid-to-lower income levels. However, maintaining high quality in affordable, multi-unit buildings requires special expertise, and the station area has a high housing vacancy rate, which could be a sign of poor management in some buildings.

As discussed in this plan's section on eTOD in the Mid City station area, some successful private developers in Baton Rouge are building projects in which they voluntarily include a percentage of units guaranteed to be affordable for low-to-medium income working households rather than being priced according to market demand. Baton Rouge also has a network of affordable housing developers and advocates, the Capital Area Affordable Housing Alliance, that is currently creating a regional plan for affordable housing. The Alliance includes not-for-profit housing organizations with an excellent track record for developing and maintaining multi-unit affordable projects, such as the Gulf Coast Housing Partnership. Affordable housing developers may be especially interested in undertaking projects in the Health District station area because of its strong connections to jobs and transit. Consultation with these organizations is advised in planning a housing initiative.

Explore Options for an Employer Assisted Housing Program

To ensure that affordable housing development in the station area is successful and serves the best interests of the Health District, the District may become an investor in the development through Employer Assisted Housing (EAH). In an EAH program an employer takes some financial position in the development of housing that its employees will occupy. An increasing number of hospitals across the US offer EAH programs as ways of locking in a dependable workforce and influencing their surrounding communities. EAH programs include a wide spectrum of investment strategies varying with the type of

support that is provided to participating employees, the type of commitments employees make to receive EAH support, and the form of financial investment that the employer provides in the project financing package. Considering the range of EAH options and the significance for the Health District in launching such a program, a range of relevant EAH programs is discussed in Appendix XX to this plan.

Explore Options for the Support of Amenities for Residential Communities

A housing development initiative may not be successful if the neighborhood of the project does not contain amenities that will attract thoughtful residents who have options in choosing their home. These amenities may include good neighborhood schools, child care, parks, recreation programs for children and adults, and a variety of nearby stores, restaurants, and other commercial services. As part of planning for any EAH program, the Health District should undertake a study to determine whether or not these types of amenities are present in the station area, or any other community in which the District might consider applying an EAH program. As part of this study the District should consider whether or not the amenities are actually accessible by active transportation to the residents who would use them, for example, young children. When important amenities are lacking, the analysis should also weigh whether or not the District would be able to attract investment or make joint investments with public or private partners to establish amenities that were considered inadequate.

Explore EAH and Community Development Investments in Transit-Connected Communities

Given the relative scales of the Health District station area's available residential land and the District's workforce, it is unlikely that an EAH program limited to the station area would be able to achieve its entire potential in this one community. Accordingly, the District may consider applying an EAH and community development program to communities that have strong transit service connections to the Health District. In making such decisions, the Health District would probably achieve the greatest benefit for its investment by concentrating on a limited number of communities in which its efforts would lead to still more intensive transit service, stronger cooperative relationships with community partners, and positive synergistic impacts in the communities.

Baton Rouge, LA Peer Cities Comparison

The following appendix examines patterns of development as these relate to public transportation and related public policies in five U.S. cities:

- Durham, North Carolina
- Portland, Maine
- Sacramento, California
- Santa Fe, New Mexico
- Savannah, Georgia

These cities are comparable to Baton Rouge in that they anchor Amtrak lines linking two mid-sized cities approximately 80 miles apart, akin to Baton Rouge and New Orleans. With one exception, these are southern or western cities. None of these cities has contained or been connected to extensive rapid transit systems in recent decades; they have been and remain largely car dependent cities. However, in each case the city is undergoing rapid redevelopment that is linked to Amtrak service and an improving public transportation system.

This appendix considers a range of factors regarding the relationship of public transportation to commuter behavior, household income and expenses, and patterns of development, but its focus is on equity in transit-oriented development. In each city the ongoing rapid redevelopment involves relatively affluent households moving into previously medium-income and low-income areas, with consequent increases in property values and economic pressures to displace long-time residents. In each city some public policy measures have been enacted to mitigate the loss of affordable housing and the displacement of average-income and lower-income households. These measures vary in their effectiveness, and some have been enacted so recently that their impacts cannot yet be assessed. These measures are not necessarily presented to thought leaders of Baton Rouge as effective strategies; best practices in the development of affordable housing and neighborhood preservation are provided in the Baton Rouge Station Areas Master Plan's sections on equitable transit-oriented development. What this appendix does provide are examples of how cities of comparable scale with similar transit systems are capturing transit benefits and dealing with potentially negative impacts of rapid urban redevelopment.

Information in this appendix is organized in five parts:

Part I presents snapshots of the peer cities and their development issues. These include physical street network barriers, anchor institutions, and how each peer city tries to maintain equity within existing urban redevelopment that each is facing when renovating building stock and infrastructure around their existing stations. This includes city-specific solutions to current or potential gentrification.

Part II begins with basic demographic comparisons for each comparable city using ACS 5-year data at the Census Place (city) level. A series of tables and charts follow these brief snapshots for each city. This report compares similarities in physical size, population, household, commuting behaviors, and income data at the city level.

Part III employs one of CNT's data modeling programs, the **H+T Index** tool. We can better inform true neighborhood affordability by modeling statistical information for both housing costs and transportation costs at the local level using ACS 2015 5-year Census study at the block group level. The Local Household level adopts the median income for the station site's block group, with the average household size for the station site's block group, and the average number of commuters per household for the station site's block group. *The H+T Index provides other options that feature Regional Typical Household data, Regional Moderate Household (80% of the regional median), and finally the National Typical Household (median income \$61,828, average household size of 2.72, and average commuters per household of 1.22).

Part IV evaluates potential for transit improvements and future development opportunities with the **GAP Finder** tool. Transit gaps can pinpoint neighborhoods where increased buses and trains could improve service where lots of people live or work. Gap Finder identifies potential market demand for populations most likely to commute using transit modes over single occupancy vehicles.

Part V breaks down levels of accessibility for each peer neighborhood using the **AllTransit™** tool. This tool develops a **Performance Score**, founded on six categories: jobs, economy, equity, health, transit quality, and mobility networks. The model captures the number of transit routes, frequency of stops, walkability, available urban amenities that include healthcare facilities, bike and car share stations plus farmer's markets, current housing and population data employing the ACS 2015 5-year Census study at the block group level for each peer station site as well as proposed station sites in Baton Rouge.

Features of Baton Rouge Comparison

Part I

Durham, North Carolina

Durham is dominated by “Eds and Meds” anchored by Duke University and Duke Hospital along with North Carolina Central University, situated within 2 miles of the Amtrak Station. Other anchor institutions at the citywide level include IBM, GlaxoSmithKline, BASF, and Cisco. The station’s study area street network is bifurcated by the Durham Freeway (147).

Durham has experienced significant growth since 2010, outpacing the nation with 2.3 percent gross regional product (GRP). Durham’s metro area also increased its job base by 27.4 percent between 2010 and 2017. Gentrification of older, historically disinvested, African American neighborhoods has created an affordable housing shortage, and Durham is trying to lessen this with a dedicated housing fund, [paid for with two cents per \\$100 of assessed value on the property tax](#). Durham also operates a program similar to Employer Assisted Housing through which Durham Public Schools will start building affordable homes for its teachers within the downtown area.

Portland, Maine

Portland’s primary employers include the City of Portland, Mercy Hospital, Mainehealth and the Maine Medical Center, University of New England, and the University of Southern Maine, which all lie within the Amtrak Station area of influence. Thompson’s Point, the district in which this station is located, is undergoing rapid growth. Physical boundaries for the station area are to the east: Interstate 295, US Highway 1, Fore River to the south, and Fore River Parkway to the north.

Beginning with a crumbling, partially abandoned urban form of aging brick buildings and rail yard within a half mile, the city is investing to leverage private capital in creating a center for arts and culture to attract young professionals to offset Maine’s aging population. Using [Tax Incremental Financing \(TIF\)](#) strategies, Portland earmarks property tax revenues to supporting infrastructure development such as roads and sewer lines for future businesses. Since Thompson’s Point kicked off its planned growth in 2015, the district has added breweries, restaurants, theaters, outdoor concert venues, a museum and hotels. Retail rent has [increased by double digits](#) in a single year. Mirroring Durham’s rapid growth, gentrification is occurring, displacing working class residents living on [fixed incomes](#). City officials are currently studying changes in zoning, property tax relief programs and incentives for building affordable housing in this rapidly growing region.

Sacramento, California

In the state capitol, Sacramento’s largest employers include Sutter Health, Kaiser Permanente, Dignity Health, Mercy Healthcare, the Sacramento City Unified School District, Intel Corp, Apple and the City of Sacramento. The study area around the Amtrak station is bounded by Interstate 5 and the Sacramento River to the west, Capital City Freeway to the south and marshland to the north.

Householders surrounding the Sacramento Amtrak Station have a combination of low residential density with higher numbers of low income housing units compared to other Amtrak stations in peer cities and the proposed station sites for Baton Rouge. To create one of the largest infill projects in the US, Central Pacific Railroad was granted 238 acres of marshland by the City to be developed, doubling the size of the existing business district. The plan includes relocating existing tracks, and improving intermodal circulation including light rail, seismic retrofits, and bike-pedestrian infrastructure. However, according to an analysis in 2017 conducted by [Realtor.com data](#), Sacramento is one of the top ten cities experiencing gentrification in the U.S. Since 2000 housing costs here have increased over 100%. As with all peer cities in this report, young, educated professionals are seeking cheaper housing opportunities with urban amenities. The current urban revival impacting Sacramento’s downtown has altered one former [hard-knock neighborhood](#), Midtown, which is in close proximity to the Amtrak station. Midtown has now seen rapid gentrification with pricey condominiums and upscale restaurants catering to new, affluent residents. California does have a robust [cap-and-trade](#) program where over \$6 billion has been allocated to 17 state agencies. Over 80 percent of these funds have leveraged \$6 for every dollar invested from other sources. Projects range from [affordable housing](#) development, preservation of coastal watershed and wetlands in addition to transit agency goals to become all-electric for reducing GHG emissions.

Santa Fe, New Mexico

Santa Fe’s [largest employers](#) are the state and county governments, the St Vincent regional medical center, tourism and the Los Alamos National Laboratory (LANL). Currently, thirty percent of LANL employees live in Santa Fe. Santa Fe’s workforce living outside the city has [grown to 51 percent](#). This includes more than half of the police force. The Amtrak station is the northern terminus for the Rail Runner commuter line and located within the “[Railyard](#)” renewal project. Major thoroughfares bounding the station include the six-lane St. Francis Dr. to the west and four-lane Alameda St. to the north.

Santa Fe's high cost of living has been a leading cause for the increase in employees opting to take longer commutes to live in Albuquerque and captures **over 15 percent** of Santa Fe's workforce. With so many people working in Santa Fe and commuting home to Albuquerque, locally earned dollars are being spent outside the city limits. According to a recent report in August 2017, Santa Fe is losing over **\$300 million** spending dollars annually. Santa Fe's version of inclusionary zoning has not relieved its shortages of affordable housing. While developers are encouraged to designate **20 percent of built units** as affordable, most opt to pay fees. As of this report, none of the **1,453 housing** units being proposed are considered affordable. Much local resistance to projects with affordable housing units is the result of no transparency and little neighborhood engagement.

Savannah, Georgia

Savannah's leading employers are dominated by medicine, education and government. According to the Chamber of Commerce, Memorial University Medical Center, St. Joseph's/Candler Hospital, Savannah-Chatham County Board of Education, Chatham County, City of Savannah and Savannah College of Art & Design (SCAD) account for almost 60 percent of Savannah's employees. The Amtrak station which is located south of U.S. Route 80 and west of Interstate 516 can only be reached via an access road within an industrial park.

Savannah is attracting business interest with a net **increase of 245 firms** since 2015. Young, educated professionals choosing to live and work in Savannah's urban core have provided a market trend to revitalize derelict industrial warehouses into popular **learning centers**. There have been **several waves of redevelopment** with changes to zoning and land use within the Historic District since 2008. Because the city has the capacity to expand development outside the Landmark District both the Savannah River Landing and Canal District Arena plans are moving forward, funded largely through the renewal of the "Special Purpose Local Option Sales Tax (SPLOST)" which allows sales tax to be increased in specially designated areas with anticipated revenues from this tax used to finance development. Both expansions will severely affect low income populations who are mostly African America. The city has not made any plans related to the exodus by city residents living at or below the poverty level to Southside Savannah.

Part II Basic Demographic Comparison

	Area in Square Miles	City Population Totals	Total Households	Median Household Incomes	Regional Median Household Income
Portland ME	69.44	67,067	30,211	\$ 48,259	\$60,486
Santa Fe NM	37.41	66,828	35,540	\$ 51,572	\$55,370
Savannah GA	108.7	146,763	53,865	\$ 37,108	\$52,115
Baton Rouge LA	88.12	228,694	87,789	\$ 39,969	\$51,191
Durham NC	108.3	263,016	103,076	\$ 52,115	\$54,842
Sacramento CA	100.1	484,530	179,865	\$ 52,071	\$58,884

Table 1. This table is a basic comparison of demographics using ACS 5 year 2016 data at the City level.

Means of Transportation to Work For Employees Aged 16 and Over

	Total Commuters	% *S.O.V.	% Carpool	% Transit	% Bike	% Walk	% Other	% Home	% Non SOV
Baton Rouge	105,381	79.2%	10.4%	2.9%	0.6%	3.3%	0.6%	2.8%	20.6%
Durham NC	127,109	74.6%	11.2%	4.7%	0.9%	2.8%	0.7%	4.9%	25.1%
Portland ME	37,368	65.8%	8.8%	3.2%	2.1%	12.8%	0.7%	5.7%	33.3%
Sacramento CA	209,254	73.8%	11.3%	3.7%	2.1%	3.1%	0.9%	4.8%	25.9%
Santa Fe NM	39,495	76.0%	10.6%	1.5%	1.1%	2.8%	0.9%	6.8%	23.7%
Savannah GA	63,227	73.8%	10.6%	4.4%	2.0%	4.2%	1.1%	3.3%	25.6%

Table 2. Data source: American Community Survey Data 5-Year study 2016 at the City level. *Single Occupancy Vehicle defined as a privately owned vehicle whose only occupant is the driver.

The City of Baton Rouge has the highest level of commuting by Single Occupancy Vehicle. **Table 2** highlights a travel commuting behavior comparison between peer cities and Baton Rouge. Please note that within this peer city review, **Durham** has the highest transit commuting population within this analysis at the citywide level, **4.7%**, and will be used to evaluate potential cost savings to each city within this group. **Portland's** lower SOV percentage correlates to its higher population of workers who walk to work.

Single Occupancy Vehicle (SOV) Commuters

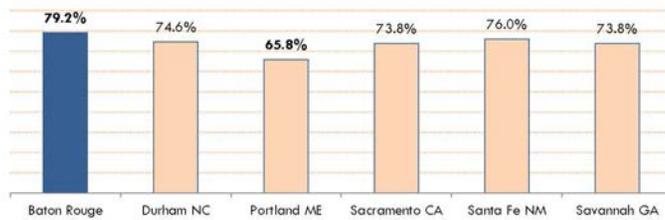


Chart 1. This chart isolates commuter patterns of single occupancy vehicle (SOV) travel for each city. Data source: American Community Survey Data 5-Year study 2016 at the City level.

If, after Baton Rouge established passenger commuting Amtrak line to New Orleans and subsequent development in connectivity to local transit and urban forms, the mode share was to change, and transit access was increased to the level of Durham, the following table represents the number of potential commuters moving from Single Occupancy Vehicle (SOV) travel to transit. This could allow for a reduction of auto ownership by one car for every commuter that moves from SOV to the proposed commuter rail.

Transit Commuting Increase & Cost Savings Projection

	Potential Increase in Commuters Using Durham Transit Populations	Cost savings through matching Durham transit usage if commuter reduced 1 car
Baton Rouge	1,897	\$ 5,542,961
Durham	-	-
Portland	.561	\$ 1,637,940
Sacramento	2,093	\$ 6,114,779
Santa Fe	1,264	\$ 3,693,168
Savannah	190	\$ 554,282

Table 3. Data source: American Community Survey Data 5-Year study 2016 at the Census City level.

Table 3 also shows the potential commuting cost savings for Baton Rouge, if the transit mode share was increased to the level of Durham, which in this peer city study has the highest percent of transit users. **Chart 2** shows this cost savings when calculated using \$2,922.18 per auto avoided per year. This is based on Location Affordability Index cost per auto for income cohort of \$40,000 to \$60,000 with a Consumer Price Index factor to account for inflation from 2010 to 2017 of 1.13.

Potential Commuter Cost Savings When Matched to Durham Transit Usage



Chart 2. Data source: American Community Survey Data 5-Year study 2016 at the Census Place level.

Part III

After comparing peer city data as a larger geographic region, we are now focused at the station area level. The following series of charts and tables were developed using the Center for Neighborhood Technology tool **H+T Index** to evaluate how both housing and transportation costs should be employed when assessing affordability. They will include the study area for the Mid City Station and Health District Station. All calculations are at the local block group level for each station area. The areas of focus reflect a half-mile buffer for walkability.

Comparison of Peer Cities Affordability Measures Using H+T Index



Chart 3. Data source: H+T Affordability Index accessed March 2018

Traditionally, affordability measurements were associated only with housing costs, and housing costs greater than 30 percent of a householder's income were considered unaffordable. Under this quantifier, less than 55% of American households are considered affordable, and this criterion does not include the second greatest household expense, transportation. When transportation costs are included to measure affordability, the number of affordable neighborhoods drops to 26% (htaindex.cnt.org/about). Location efficient neighborhoods have consistent physical characteristics: they are compact, mixed-use, and enjoy close proximity to jobs, services, transit and amenities. Neighborhoods that do not provide all these elements are location-inefficient and more likely to have higher transportation costs.

Housing + Transportation Affordability Evaluations of Peer Cities at Station Level

	Median Household Income	% of HH Income Used for Transportation	% of HH Income Used for Housing	% Total Housing & Transportation Costs
Sacramento	\$11,832	18%	6%	24%
Savannah	\$27,518	23%	14%	37%
BR Health District	\$62,249	21%	20%	41%
BR Mid City	\$27,407	21%	20%	41%
Portland	\$46,324	19%	26%	45%
Santa Fe	\$44,926	20%	24%	44%
Durham	\$62,917	18%	26%	44%

Table 3. Data source: H+T Affordability Index, Census block group level within a half mile buffer of peer station study areas

Transportation Costs per Household Comparison

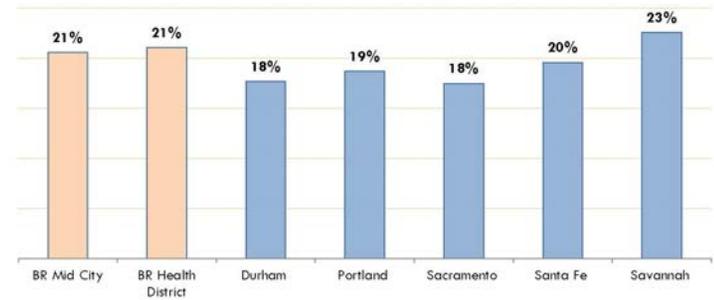


Chart 4. Data source: H+T Affordability Index using local costs at the Census Block Group Level within half mile of station

Percent of Station Area Workers Using Transit

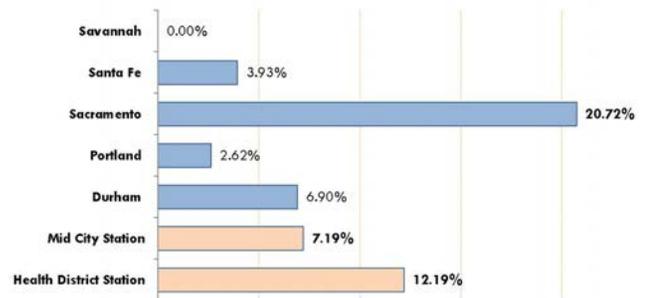


Chart 5. Data source: AllTransit™ tool using local data at the Census Block Group Level within half mile of station

Charts 4 & 5 highlight the percent of income spent on commuting for work and percent of total workers using existing transit.

Location Efficiency Score Card

	Median Household Income	AllTransit™ Performance Index	Job Access Score
Sacramento	\$ 11,832	9.1	10
Savannah	\$ 27,518	3.5	3.4
BR Mid City	\$ 27,407	7.2	6.1
BR Health District	\$ 62,249	6.2	7.6
Santa Fe	\$ 44,926	8	5.3
Portland	\$ 46,324	7.5	9.3
Durham	\$ 62,917	8.8	7.0

Table 4. Data source: H+T Affordability Index at the local level for each peer station study area.

Table 4 summarizes inputs into CNT's H+T Affordability Index using transportation and housing costs within a series of location efficiency standards. When a neighborhood is compact, i.e. close to jobs and services, residents can spend less money, time, and energy on commuting.

Physical barriers to transit access are also revealed in these analyses. Durham has an excellent combination of trips per week and number of accessible jobs allowing numerous workers to take transit to work, even though block sizes (within a half mile of transit) are longer in Durham (7.2 minutes to walk) than Baton Rouge at the Mid City station location (5.4 minutes to walk).

Part IV **Market Demand Analysis Using CNT's GAP Finder Tool**

The following series of tables and charts within this section evaluate the populations by household, age, and poverty and their ease of access to transit *within the entire city* using CNT's GAP Finder Tool. The following AllTransit™ Performance indicators compare a wide array of neighborhood qualities within transit services that are currently available. Markets, including retail and non-retail employment data, develop the Performance Score. To identify transit markets, benchmarks also focus on how much service is provided to a neighborhood, its urban form, and which populations are affected by irregular service or insufficient accessibility of transit options.

Percent of Households Underserved by Transit

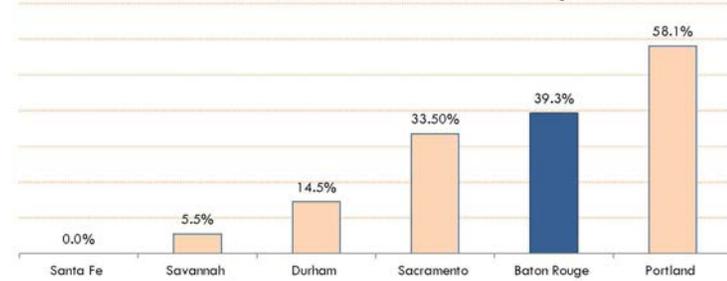


Chart 6. Data source: alltransit.cnt.org/gap-finder. The above chart looks at **citywide accessibility** at the Census Block Group level.

Literature reviews and statistical similarities across the United States identified drivers for transit demand. Those included populations most likely to use transit, compactness of urban form, population densities, current usage of transit, real-time connectivity to work or school, and ease of existing transit service.

Mix of Market Demand for Transit Development Average per Square Mile

	Persons in Poverty	School Children	Adults	Seniors
Santa Fe	524	653	2,319	235
Durham	844	687	2,532	120
Baton Rouge	1,186	874	3,025	206
Savannah	1,439	995	3,485	276
Sacramento	1,551	1,567	4,968	372
Portland	1,869	1,149	6,565	395

Table 5. Data source: AllTransit™ GAP Index at the Census Block Group level for each peer station study area ACS 2015 5-year

Part V

Peer City Station Area Analysis & Their Community Impacts Using AllTransit™ Data Analysis Tool

Station Area	Performance Score
Savannah	3.5
BR Health District	6.2
BR Mid City	7.2
Portland	7.5
Santa Fe	8.0
Durham	8.8
Sacramento	9.1

Score factors include household census data at the block group level for these station sites, within a half mile for commuters. The Performance Score is based on access to land area and jobs, frequency of transit services, and the percent of commuters who travel to work using transit. The following table highlights distinguishing factors that influence the AllTransit™ Performance Score to the left. For detailed information, go to <https://alltransit.cnt.org/>

Table 6. Data source: AllTransit™ tool at the Census Block Group level for each peer station study area ACS 2015 5-year

The higher the Performance Score equals the higher level of service for each location. This score was developed from an analysis of all Census block groups in the United States and becomes the foundation for the ranking.

Accessibility for an Average Household

	Trips per Week	Transit Routes	Accessible Jobs	Number of Agencies
Savannah	281	4	7,585	2
BR Health District	1,476	7	110,684	1
BR Mid City	2,910	12	98,473	1
Portland	1,073	10	88,597	2
Santa Fe	2,237	18	52,068	4
Durham	10,415	38	167,553	2
Sacramento	7,439	66	320,558	5

Table 7. Data source: AllTransit™ tool at the Census Block Group level for each peer station study area ACS 2015 5-year

Accessibility must be assessed by the relationship between the numbers of trips per week, available transit routes, transit access to jobs, transit access for area workers, and the Transit Access Shed. Transit Access Shed is defined as the optimal area accessible from any block group within 30 minutes by public transportation scaled by frequency of services.

Health Metrics for Successful Active Transportation

	Commute by Walking	Commute by Bike	Walkable Neighborhood	Farmers Markets near Transit	Accessible Farmers Markets
Sacramento	0.00%	8.11%	15.2 minutes	0	19
Health District	1.33%	0.00%	18.5 minutes	0	2
Mid City	2.88%	0.00%	5.4 minutes	0	4
Santa Fe	2.95%	0.00%	30.6 minutes	0	1
Portland	7.23%	3.25%	12.3 minutes	0	7
Savannah	19.24%	0.00%	23.8 minutes	0	0
Durham	19.45%	3.54%	7.2 minutes	1	10

Table 8. Data source: AllTransit™ tool at the Census Block Group level for each peer station study area ACS 2015 5-year

Table 8 is a comparison of features that encourage active transportation within a prescribed geography (one-half mile from transit). As seen in Baton Rouge, the correlation between smaller blocks and shorter times to walk around them are indications of superior walkability.

Employer Assisted Housing (EAH) Programs

Employee Assisted Housing

Definitions:

According to PolicyLink, a national research program which advances racial and economic equity, "EAH is a 'double bottom line' strategy: It helps working families secure affordable housing near their workplaces – while helping employers find and keep qualified workers, improve community relations, and revitalize neighborhoods... generally oriented towards households with incomes between 80-120 percent of the area median" (policylink.org/resources-tools/employer-assisted-housing Apr 2018).

EAH Benefits

Benefits to Employers:

1. Provides recruiting tool for new employees
2. Increased stability through lowered employee turnover with local talent tied to company objectives and mission
3. Reduced absenteeism, tardiness, and commuter-related problems
4. Stabilized deteriorating neighborhoods and increased property values
5. Improved community services through public servants i.e. first responders, as well as teachers and health care providers' ability to afford homes in the communities they serve.
6. Lowered vacancy rates
7. Connects local developers to local employers, cost effective business strategy
8. Leverages matching funding, public and private, that support employer assisted housing
9. Availability for soft second mortgages which lowers required down payments by providing another loan for the difference between conventional first mortgages and home purchase price
10. Employers guarantee all or part of an employee's mortgage against default which creates more flexible underwriting criteria

Benefits for Employees:

1. Rental or home purchasing assistance
2. Home buyer education and counseling
3. Down payment assistance and increased affordable housing with potential for gap financing to employees
4. Leveraging credit for higher loan amounts and better interest rates
5. Below market rate housing stock
6. Community stability and engagement
7. Reduced crime
8. Reduced commute times
9. Increased sustainability

EAH Financing Tools

To engage in an EAH program, the Harvard University Joint Center for Housing Studies identified four "R"s for employer motivation: employee **recruitment**, employee **retention**, neighborhood **revitalization** and community **relations** (Harvard, Sept 2000). The following is a summary of successful current programs for rental or homeownership. The Employee Assisted Housing (E.A.H.) structure supports employer financing for employee home purchasing or rental assistance: providing opportunities for employees to maintain a stable work/live environment. Local stakeholders can include municipalities, nonprofits, and corporations.

Examples of programs, their objectives, and EAH tools from Harvard University's Joint Center for Housing Studies:

1. Santa Fe Teacher Home Fund: Santa Fe, NM

Objective: To improve teacher recruitment, retention and reduction of 20 percent annual turnover

Tool: Funding for down-payment, closing costs, and low interest purchase loans for teachers through Neighborhood Housing Services of Santa Fe which was part of NeighborWorks (p. 16)

2. Home Ownership Performing Employees (H.O.P.E.) New Jersey

Objective: Employee recruitment and retention to offset limited affordable housing opportunities

Tool: Sales of tax exempt bonds for \$23 million in housing assistance products from New Jersey Mortgage Finance Agency that would allow employees to bundle up-front costs into mortgages (p. 18)

3. Howard University and Fanny Mae LaDroit Park Initiative in Washington, DC

Objective: Revitalization, rehabilitation and new construction

Tool: Howard University's EAH funded down-payment and closing cost assistance to qualified university employees, police officers, fire fighters, teachers, and LaDroit Park residents to spur old home rehabilitation and new construction (p. 20)

4. Emanuel Hospital Neighborhood Home Ownership Program in Portland, OR

Objective: Stakeholder relations improvement

Tool: Down-payment assistance program for hospital employees living within a target area with program and operational grants for two local nonprofits providing home-ownership counseling and neighborhood renovation assistance (p. 22)

5. Select Milwaukee Walk to Work Program in Milwaukee, WI

Objective: Reducing commutes and assisting companies in meeting Clean Air Act requirements

Tool: The nonprofit Select Milwaukee developed and promoted walk-to work program with a small forgivable loan up to \$3,000 for employees who lived within target area. Select Milwaukee staff also provided counseling in home ownership, loan packaging and lender referrals (p. 24).

EAH Case Studies

The [Cleveland Clinic Employer Assisted Housing Program](#) is a project with the City of Cleveland, Cleveland Foundation, Fairfax Renaissance Development Corporation and other smaller businesses. To encourage both employers and employees to move to Cleveland medical district or stay local, this program provides up to \$8,000 in matching funding for first time home buyers and home renovations. It also provides up to \$1,400 towards apartment rental for employees. The prerequisites for the funding are mandatory completion in financial counselling, a 3 percent deposit, proof of homeowner insurance and 60-month occupancy and employment tenure. The program also requires that part-time employees have worked two years and full timers have maintained work of 72 hour pay periods. The home or apartment must be located within the GCL target area and meet all code requirements. Once the employee commits to 5 years of continued work for the Cleveland Clinic Main Campus, down payment for the loan is forgiven. Benefits include up to \$20,000 forgivable loans for employees, and an additional \$10,000 for working families earning less than \$150,000 annually. All loans have a 0% interest rate.

After ten years:

- More than 300 families have participated successfully
- More than \$4 million has been invested into project area housing stock

The [Live Midtown Program](#) in Detroit, Michigan consists of alliances with the Detroit Medical Center, Henry Ford Health System and Wayne State University. It is structured similarly to the Cleveland program where the companies encourage new home ownership through \$20,000 awards toward purchase, or \$2,500 allowance for new renters with \$1,000 for the second year. Existing renters are eligible for \$1,000 allowance and existing home owners get a \$5,000- \$10,000 grant. Like Cleveland, completion in financial counselling and site occupancy are also conditions for participation in the program.

Impacts so far show:

- 51 percent of employers are Detroit residents.
- There has been a 55 percent decline in crime in the Midtown area.
- Since 2014 over 100 businesses have been launched
- Census data shows a 13 percent increase in population back to Midtown.
- There are 126 affordable housing partnerships and over \$32 million has been invested in historic preservation.
- Over \$6 million has been invested in the associated infrastructure

The [Live Near Your Work \(LNYW\)](#) project in Baltimore, Maryland has grown to include over 100 business, nonprofit and community stakeholders. Leading companies are invested in the program including Johns

Hopkins Health Center, Medical Systems and University (Maryland Department of Housing and Community Development, 2000). In the case of Baltimore, the City will offer up to a \$2,500 direct match to the employer contribution which can be used toward down-payment and closing costs. Borrowers must obtain a fixed-rate mortgage from a federally insured lender. Prohibited financing includes: Adjustable Rate Mortgages, no-document loans, cash sales, or seller financing. No co-signers (persons not residing in the property) are permitted. The mortgage amount cannot exceed the prevailing FHA limit of \$517,500 for single family properties. The homeowner must earn their Homeownership Counseling Certificate before signing a sales contract. They also must invest a minimum of \$1,000 for earnest money deposit and the property must be their primary residence.

A survey of Maryland's [Live-Near-Your-Work](#) program revealed useful information regarding the program's impact in terms of the state's objectives to enable home ownership and reduce car journeys to work. Additional benefits include:

- 80 percent of households were first-time homebuyers;
- 39 percent would not have bought their home without the assistance;
- 40 percent of homebuyers in the program stopped driving to work;
- 95 percent found the program easy to use.

Founded and supported by the Mayo Clinic and the Rochester Area Foundation in 1999, the [First Homes and the Greater Minnesota Housing Fund](#) program has leveraged over \$120 million in donations for assisting new homeowners and establishing community land trust properties to develop permanently affordable housing. First Homes reaches seven collar counties with homes in twelve different towns. By establishing the Community Land Trust (CLT), First Home provides the new homeowner lower costs. They do not have to pay Private Mortgage Insurance either. The CLT leases the land to the homeowner. This provides stability and a sense of community. Many of the typical features of homeownership include: bank mortgage, accumulated equity, property taxes, ability to make improvements and alterations and the benefit of federal tax deductions for mortgage interest and property taxes. By shifting the cost of the land to the Trust, the new homeowner's costs are dramatically lower, becoming more affordable. First Homes also provides \$10,000 in GAP funding for the down payment. Similar to Cleveland, Detroit and Baltimore, First Homes' programmatic features include 0% interest deferred loans, forgiven 20 percent each year for five years. Employees must take financial counseling, remain employed with the company, and reside at the property for a full five years. Employees must also front \$2,500 towards their down payment and closing costs.

Impacts from the [First Homes Program](#) include:

- 420 new single family homes built
- 225 new below-market rental units built
- Over 48 properties belong to the CLT

EAH Planning through Project Development & Program Creation

Paths to Employer Involvement in Affordable Housing

- ✓ Assess Housing Needs of Employees & the Community
- ✓ Evaluate & Choose Options for Employer Involvement



Source: Greater Minnesota Housing Fund 2002

Building on Success

10 Lessons Learned

- 1 An employer-assisted housing investment can be cost effective for a business
- 2 Employer involvement stems from either:
 - strong civic responsibility
 - urgent need for employees
 - community stabilization concerns
- 3 Working relationship and common vision needed before commitment is made
- 4 Employer pools attract smaller employers with limited resources
- 5 Employers need to be able to choose their method of involvement based on their resources and the company's skills and objectives
- 6 Businesses need to understand the issue of affordable housing in simple terms
- 7 Employers are often attracted by ability to leverage other private and public funds
- 8 Local leadership or catalyst needed to obtain employer commitment
 - city with a vision
 - developer with a specific plan
 - advocating around known needs
- 9 Employers do not want 'red tape' when establishing a program or making a contribution or investment
- 10 Employers need someone with experience to put projects together and administer programs



Source: Greater Minnesota Housing Fund 2002

HNTB