

Baton Rouge Capital Area Transit System (CATS)

Premium Service Transit Feasibility Study

Florida Boulevard

Scope of Services – August 30, 2022

The Baton Rouge Capital Area Transit System (CATS) received a Route Renovation grant to support development of a premium service along Florida Boulevard. Identified as a priority corridor for BRT in its Comprehensive Operational Analysis, CATS looks to explore options to improve transit service including BRT, enhanced local bus or express bus modes. As part of the COA, CATS has completed BRT design standards which will be incorporated into this phase of study should the mode be determined as BRT. This phase of work will also include a transit hub evaluation at the former Cortana Mall and as the eastern terminus for this service. The study will also evaluate whether Florida Boulevard east of Cortana Mall should be included in the improved service route or left as a separate operation.

1 PROJECT MANAGEMENT

Task 5 outlines the Project Management activities HNTB will provide for the Project.

1.1 General Management

HNTB will perform the following general management activities for the Project:

- HNTB will monitor the scope, schedule and budget for the Project. This will include developing and maintaining a Project schedule that aligns with the Project.
- HNTB will conduct HNTB internal monthly Project review meetings.
- HNTB will prepare and submit monthly invoices to CATS and provide a progress report with each invoice on the 5th day of the month following the end of the preceding month.

1.2 Client Coordination Meetings

HNTB will be responsible for organizing and attending up to twenty-six (26) bi-weekly coordination meetings with CATS. These meetings will be used to report on project management functions, obtain feedback on deliverables and coordinate the various aspects of the project. HNTB will prepare meeting summary notes for each meeting.

1.3 Advisory Committee Engagement

CATS will convene a group of staff and other stakeholder agencies to be determined to provide guidance and review various technical aspects of the project. HNTB will attend and provide meeting agendas and notes and action log for up to three (3) Advisory Committee Meetings.

1.4 FTA Coordination Meetings

HNTB, in coordination with CATS, will be responsible for participating in coordination calls with FTA for the Project. The purpose of this coordination is to ensure Project activities and deliverables meet FTA guidelines.

1.5 Quality Management Plan

HNTB will develop a Quality Management Plan that describes Quality Assurance (QA) and Quality Control (QC) activities for the Project. The plan will focus on project deliverables and identify QA/QC task managers for the major components of the Project, along with anticipated milestones for quality reviews. The plan will describe the levels of review for each major task component and incorporate HNTB QA/QC activities.

Task 4 Deliverables:

- Monthly invoices
- Meeting minutes for CATS coordination and advisory committee
- Document management system
- Quality Management Plan document

2 PREMIUM TRANSIT CORRIDOR FEASIBILITY STUDY

This task will evaluate the corridor connecting Florida Boulevard to CBD for the appropriate level of transit investment and feasibility of BRT, enhanced local bus, express service, or a combination thereof. This task will include project definition, route, termini, station locations, and guideway treatments. It will also include ridership projections, traffic analysis, service planning, capital cost estimates, and operating and maintenance (O&M) cost estimates.

2.1 Project Definition

HNTB will define the Florida Boulevard to Central Business District premium service project based on the following components.

2.1.1 Existing Studies, Existing Conditions and Purpose and Need

HNTB will review and summarize relevant prior and ongoing planning studies related to BRT and premium service, the Florida Boulevard to the Central District corridor, and regional transit planning efforts. This includes, but is not limited to the following:

- CATS Comprehensive Operational Analysis, 2022
- Transit Development Plan, 2021
- MoveBR Florida Boulevard Corridor Enhancement
- The North Baton Rouge Mobility Reinvestment Program (Infra Grant)

HNTB will provide an existing conditions summary of route service, connections, ridership and transfer activity on the existing routes in the Florida Boulevard Corridor. HNTB will prepare a Purpose and Need statement based on its review of previous studies and existing transit service, and what the project team with CATS and the public agree to be the Purpose and Need for a new transit investment along Florida Boulevard. This will serve as the guiding mission statement and standard for any of the project components recommended in the Project Definition. The Purpose and Need Statement will be shared during public engagement and modified based on stakeholder and public feedback as needed, and will serve as the official Purpose and Need Statement for a future environmental review phase.

2.1.2 Preliminary Station Locations

HNTB will identify proposed station locations based on the BRT standards, existing transit ridership in the corridor, existing corridor conditions, potential future development, constraints, and stakeholder and public input. Draft preliminary station locations will be presented to CATS and key stakeholders before developing refined preliminary station locations that will be used to further define the project and used for the project ridership forecasts.

HNTB will work with CATS to confirm the potential east and west terminus locations for the Florida Boulevard to the CBD route. HNTB will evaluate ridership demand and key destinations, operational feasibility, and land availability to inform terminus layout. HNTB will also determine whether one or two service routes should accommodate the stretch of Florida Boulevard between the CBD and Cortana Mall and the CBD and east of the former Cortana mall.

The west terminus is assumed to be located in the Baton Rouge CBD. The concepts will inform transit-oriented development opportunities. The station locations will consider adjacent land use, transit operations, facility access, and neighborhood connectivity.

2.1.3 Preliminary Guideway/TSP Concept

HNTB will evaluate guideway improvements in the corridor including but not limited to queue jumps, dedicated transit lanes, business access and transit (BAT) lanes, and other special priority guideway treatments. It is assumed that the transit service will operate in mixed traffic like the Plank – Nicholson BRT, but this assumption will be evaluated. The ultimate guideway concept will align with CATS' existing BRT standards.

HNTB will also evaluate the potential benefits of transit signal priority (TSP) and develop a draft high-level implementation strategy for TSP in the corridor to improve the reliability of BRT service. This work will be based on the TSP design now underway for Plank – Nicholson.

2.1.4 Preliminary Ridership Projections

HNTB will run the STOPS model and analyze three (3) ridership options based on different operating scenarios, routes or stop locations. The Consultant will utilize the following data inputs to set up the STOPS model, including:

- STOPS model developed for Plank Nicholson BRT
- Pre-COVID and current average weekday ridership by stop for the CATS, and LSU Transit system, if available. 2019 average weekday ridership will be used if not alternative years will be discussed with CATS.

The above data will be formatted and input into STOPS to create the base model. As part of the initial model set up the CRPC population and employment data will be interpolated to the year 2018 to create the current year scenario.

HNTB will document the ridership estimating process and summary ridership in the Project Definition report.

2.1.5 Mode Evaluation

HNTB will consider the mode options of BRT, enhanced local bus and express service for the application that is most appropriate based on the goals of CATS, the projected ridership and estimated capital costs. The final recommendation may be a mix of these service categories for segments along Florida

Boulevard. In the case that any corridor segments are defined as BRT, the design of the service should meet the existing design standards CATS has established for their BRT service. Enhanced local bus service will be evaluated as increased service frequency and span and minimal to no station improvements, while express service will be an evaluation of service frequency and span for select stations. All modes will consider guideway treatments.

2.1.6 Preliminary Traffic Operations Analysis

HNTB will identify possible locations for implementing priority right-of-way transit treatments such as exclusive transit lanes or BRT pull out lanes (queue jumps, etc.) at stations and for assessing roadway system impacts of capacity reductions primarily resulting from right-of-way treatments. This assessment will be qualitative in nature and will not include the development of a detailed traffic model. The conclusions will be documented in the Project Definition Report.

2.3.4.1 Transit Signal Priority Conceptual Analysis:

Identify intersections where traffic signal priority and/or coordination would be effective for BRT operations and could be installed.

2.3.4.2 Conceptual Parking Analysis:

HNTB will identify potential parking impacts along the route.

2.3.4.3. Intersection LOS:

Individual intersections level-of-service operations will be assessed for existing year, opening year and 2040 traffic volumes with and without BRT at up to ten (10) intersections utilizing HCS software.

2.3.4.3 Transit Improvements:

HNTB will estimate transit running time savings resulting from premium service operations with recommended roadway and traffic signal improvements.

2.1.7 Preliminary Operating Plan

HNTB will evaluate and develop a conceptual operating plan. The operating plan will incorporate the determined route alignment(s), station locations and right-of-way treatment assumptions to develop estimated running time and define a service plan (headways, span, etc.). HNTB will develop, in coordination with CATS, operating cost estimates based on the operating plan and unit cost assumptions using the operating cost model developed in the COA.

As part of the operating plan, HNTB will evaluate potential changes to existing bus services using the COA as a basis.

2.1.8 Project Definition Report

HNTB will develop a Project Definition Report to summarize the work completed in Task 1 and document the proposed project alignment (and any options), station locations, guideway concept(s), TSP concept, operating plan, traffic operations assessment, ridership projections, environmental screening, and implementation schedule.

The Project Definition Report will be consistent with the conceptual design developed in Task 1. The report will also document public engagement efforts and conclusions from Task 4.

2.2 Conceptual Financial Planning and Revenues

2.2.1 Capital Cost Estimates

HNTB will prepare a conceptual capital cost estimate for the route based on expenses from the Plank – Nicholson BRT project and HNTB’s experience with similar projects.

2.2.2 Revenue Estimates

HNTB will prepare an order-of-magnitude revenue projection based on the ridership estimates prepared.

2.2.3 Capital Cost Funding Sources

HNTB will identify and review funding sources for BRT capital costs including local, state and federal financing options and potential private sources.

2.2.4 Operations Funding Sources

HNTB will identify and review potential annual operating cost sources that could be used for the BRT route. HNTB will research how comparable BRT projects are funded in other cities and consider funding scenarios specific to this Project. HNTB will utilize the financial projections prepared for the COA.

2.2.5 Conceptual Financial Planning and Revenues Summary Report

The consultant will prepare a conceptual financial plan. HNTB will prepare a summary report that documents conceptual BRT revenue, capital cost funding sources and operations funding sources.

2.3 Corridor Environmental Scan

2.3.1 Preliminary Evaluation

HNTB will review readily available data on sensitive environmental resources within the project corridor and provide a summary report of potential environmental concerns. All environmental review and analysis activities will be conducted via desktop data collection, GIS analysis, and windshield surveys in the project corridor. Anticipated review topics and resources that could be evaluated:

- Transportation Facilities and Traffic & Parking
- Consistency with Local and State Plans (STIPs)
- Land Use/future land uses
- Environmental Justice populations
- Water Resources and Water Quality
- Wetlands and Waters of the United States
- Floodplains and Flood Management
- Biological Resources/T&E Species
- Cultural and Historic Resources/Section 106 of NHPA
- Hazardous and Regulated Materials.
- Section 4(f)/6(f) Parks and Recreation Resources
- Utilities

2.4 Final Documentation

A final document will assemble all interim reports produced in Task 2 into one, seamless report document.

Task 2 Deliverables:

- Station Locations, Right-of-Way Treatments and Service Plan
- Project Definition Report
- Conceptual Financial Planning and Revenues Summary Report
- Purpose and Need Statement
- Final Documentation

3 CORTANA TRANSFER HUB EVALUATION AND NEPA DOCUMENTATION

CATS operates from a transit hub near the former Cortana shopping mall with seven routes converging on the hub. The site is at the northeast quadrant of the US 61/190 and Florida Boulevard interchange. Buses operate along the ring road of the former mall and load at the curb on the northeast corner of the mall area. Passenger shelters are located at the stop areas, but passenger amenities are otherwise very limited. The transit hub is one of the key points on the CATS system, facilitating transfers for hundreds of daily passengers.

Although the mall no longer exists, there is a Walmart Supercenter near the site which generates significant traffic. Amazon is locating a major regional distribution center at the site with significant employment.

3.1 Current Terminal Operations, Existing Facilities, and Future Conditions and Needs

3.1.1 Current Terminal Operations

HNTB will document current operations at the passenger terminal as needed to assess the current facilities. CATS does not currently employ timed transfers at the facility; buses arrive and depart throughout the service day according to individual route schedules.

HNTB will:

- Review plans and other documentation provided by CATS. CATS has developed a very preliminary concept for a transfer facility at this location.
- Document spaces, areas, capacities.
- Conduct staff interviews to confirm usage of spaces.
- Conduct an on-site observation of facilities to complete the inventory.
- Prepare site graphics - Graphics will be overlaid on a current aerial image.

3.1.2 Existing Facilities

HNTB will conduct an evaluation of existing facilities, which will include staff interviews, on site observations and a review of operating data.

Staff interviews will include a discussion of the functionality and future needs. The interviews will include:

- Director of Planning
- Service Planner and Scheduler
- Director of Transportation
- Others representing Amazon and other interested parties.

This evaluation will capture existing capacity and functionality using standards and guidelines for transit passenger facilities as well as HNTB experience with the North Transit Center and the 2222 Florida Boulevard central passenger terminal.

3.1.3 Future Conditions and Needs

HNTB will use the conclusions and results of the COA and other plans to determine the future conditions (operations and ridership) that will be assumed for the transfer hub evaluation. The intent is to develop a functional program for the facility as a basis for the conceptual design of the future transit center.

HNTB will prepare a program for the future facility including the number of bus routes, exterior waiting areas, and other amenities such as sheltered waiting areas and electronic signs. CATS will be evaluating the potential for a premium transit service along Florida Boulevard concurrent with the transit hub evaluation.

HNTB will prepare a technical memorandum documenting Task 3.1 items including graphics at a conceptual level depicting the design and an operating plan with supporting text.

3.2 Site Options

3.2.1 Identify Options

HNTB will evaluate future facility needs based on results of the previous task. The evaluation will consider site requirements, functional space requirements, including bus loading areas, employee parking, etc.

HNTB will identify options for addressing the needs identified in previous tasks. CATS has preliminarily identified a location for the transfer facility and there are multiple potential sites available. HNTB will identify up to three options for the facility for further evaluation. HNTB will identify potential sites for relocation based on capacity, proximity to current and future markets, conformance with plans for the Amazon facility and access for passengers and buses. Working with CATS staff HNTB will develop a process and criteria for evaluation of the site options. It is assumed that the process will be straightforward and will rely on input from a team of CATS staff knowledgeable about facility needs.

Site graphics will be developed at a conceptual level but have sufficient detail to serve as a basis for the evaluation, conceptual cost estimates, overall site size, etc.

HNTB will also prepare a summary of pros and cons to facilitate the evaluation of the site options.

3.2.2 Capital Costs

Order of magnitude capital costs will be developed for the site options.

3.2.3 Evaluation Workshop

HNTB will convene a workshop of CATS and HNTB staff to finalize the evaluation of site options. The workshop will be virtual using video conferencing tools. The workshop objectives will include:

- Decide upon one option as the preferred approach for further refinement.
- Identify revisions and additions required for the preferred approach.

The information developed in Task 2.4 will be summarized in a technical memorandum with graphics for review by CATS staff.

3.3 Refinement of the Preferred Approach

HNTB will revise and update the site design by incorporating input from the evaluation workshop and adding detail required to support refined capital cost estimates. Capital cost estimates will include estimated land acquisition cost, construction and development, design and other soft costs, and appropriate contingency. The site drawings will remain conceptual and will include:

- Existing and new structures and functional spaces
- Delineated bus loading areas
- Auto parking areas
- Site circulation patterns
- Site access/egress points
- Other defining site features

All graphics will be drawn on a current aerial image and will include shapes for buildings. The site documentation will not include any oblique renderings or 3-D images.

HNTB will update capital cost estimates. Cost estimates will include “soft costs” such as design, permitting, environmental, etc. Capital costs will be presented in both constant and current dollars.

HNTB will prepare a technical memorandum documenting the conclusions of Task 2.5 with site graphics.

3.4 Transit Hub Environmental Scan

HNTB will review readily available data on sensitive environmental resources within the project corridor and provide a summary report of potential environmental concerns. All environmental review and analysis activities will be conducted via desktop data collection, GIS analysis, and windshield surveys in the project corridor. Anticipated review topics and resources that could be evaluated:

- Transportation Facilities and Traffic & Parking
- Consistency with Local and State Plans (STIPs)
- Land Use/future land uses
- Environmental Justice populations
- Water Resources and Water Quality

- Wetlands and Waters of the United States
- Floodplains and Flood Management
- Biological Resources/T&E Species
- Cultural and Historic Resources/Section 106 of NHPA
- Hazardous and Regulated Materials.
- Section 4(f)/6(f) Parks and Recreation Resources
- Utilities

Findings will be summarized in a technical memorandum.

3.5 Final Documentation

A final document will assemble all interim reports produced in Task 3 into one, seamless report document.

Task 3 Deliverables

- Current Conditions, Existing Facilities, and Future Conditions and Needs Technical Memorandum
- Site Options and Preferred Option Technical Memorandum
- Preferred Option Refinement Technical Memorandum
- Transit Hub Environmental Scan Technical Memorandum
- Final Documentation

4 PUBLIC ENGAGEMENT

Task 4 outlines the Public Engagement activities HNTB will provide for the Project.

4.1 Project Communications

HNTB will work with CATS to develop and alter previous content that can be used to display information on CATS’s website. Website content will focus on deliverables associated with this scope of services and would include Project overview, schedule, electronic copies of deliverables and public meeting information. The development of information not specific to this scope of services will be the responsibility of CATS.

4.2 Public Information Handouts

HNTB will prepare up to three (3) handouts summarizing Project information. The handouts will be used at stakeholder meetings and posted on CATS’s website to inform the public and stakeholders about the Project. The handouts will typically be double sided 8.5 x 11 sheets for printing or for Web viewing.

4.3 Stakeholder/Neighborhood Meetings

HNTB will schedule, organize and attend up to two (2) stakeholder/neighborhood meetings in coordination with CATS. The purpose of these meetings is to keep stakeholders informed about the progress of the Project and to seek feedback at key milestones. HNTB will work with CATS to identify stakeholder meeting candidates such as property owners, local businesses, elected officials, advocacy

groups and civic organizations. HNTB will be responsible for developing meeting presentations and preparing meeting summary notes.

4.4 Public Information Meeting

HNTB will conduct one (1) public information meeting for the Project. HNTB will conduct the meeting to present details regarding the recommendations for transit service along the Florida Boulevard to CBD corridor.

4.4.1 Meeting Logistics and Staffing

HNTB will identify and schedule the meeting venue and provide staffing for each public meeting.

4.4.2 Update and Maintain Master Contact List

HNTB will create a project outreach database for project outreach communications and updates.

4.4.3 Meeting Notices

HNTB will prepare meeting notices including an electronic meeting flyer and a press release for the meeting. HNTB will distribute the electronic meeting flier to the master contact list. HNTB will assist with the development of a press release and CATS will distribute the press release to media sources.

4.4.4 Meeting Materials

HNTB will prepare and bring the following display and presentation materials for the public meeting:

- PowerPoint presentation
- Mounted display boards (8 to 12)
- Meeting handout describing purpose of meeting, meeting agenda and how to submit feedback
- Comment forms and sign-in sheets

4.4.5 Meeting Summary Report

HNTB will prepare a meeting summary report that documents the distribution of meeting notices, the materials and information presented at the meeting, meeting attendance and public input.

4.4.6 Provide Project Materials for CLIENT Website

HNTB will provide project materials to be uploaded by CATS onto the existing CLIENT web page.

Task 3 Deliverables:

- Master project contact list
- Electronic communications to master contact list
- Project-related content for CATS's website
- Public information handouts
- Meeting summary notes for up to four (4) stakeholder meetings
- Public information meeting material
- Public meeting summary report