

**Scope of Work
Manchac Greenway
Land Use and Transportation Corridor Analysis
“Stage 0” Feasibility Study
RPC Task No A-1.22MG; FY-22 UPWP**

INTRODUCTION

The regional Planning Commission (RPC), in coordination with St. John the Baptist Parish, is conducting a Land Use and Transportation study of the Manchac Greenway corridor adjacent to US 51 (New Highway 51) and Old US 51.

Project Background

The Manchac Greenway is a 26-mile, on-street recreational bicycling corridor linking St. John the Baptist and Tangipahoa parishes. The majority of the Manchac Greenway is located along Old US 51 in rural St. John and Tangipahoa parishes, with a portion of the Greenway located in urbanized Laplace, primarily along US 51 (New Highway 51). This study will focus on the urban sub-area.

The Manchac Greenway was formally designated by LA DOTD in 2016 with signage installed along the trail. The Greenway is one of several existing and proposed routes comprising the proposed “Louisiana Bootlace Trail” and “Ring Around the Lake” regional bicycle corridors.

Preliminary Project Purpose

The purpose of the study is to gather information on existing land use, infrastructure, and traffic conditions, and to evaluate potential improvements to walking and biking facilities along the project corridor.

Preliminary Project Need

The study will provide information to allow informed decision-making for land use and transportation improvements along the urbanized portion of the Manchac Greenway which would improve pedestrian safety and connectivity on the corridor. The Parish is currently working to utilize RESTORE funds to develop a comprehensive Master Plan for the Manchac Greenway to identify development opportunities for the Greenway as an eco-tourism asset. The Parish has also begun to prioritize the establishment of safe and convenient walking and biking routes connecting neighborhoods and commercial corridors in urbanized portions of the Parish (such as the East LaPlace area and Main Street).

Description of Project Corridor

The project corridor is the portion of the Manchac Greenway located in the urbanized portion of St. John the Baptist Parish. The full corridor is approximately 17.6 miles long and is bounded by South Pass Manchac on the North end and LA 44 on the South end. The I-10/I-55 Interchange divides the rural portion of the corridor to the north and the urban sub-area to the south.

Project Focus - Urban sub-area (4.0 miles) - Frenier Rd to US 44

The urban sub-area consists of the portions of the study area located in urbanized St. John the Baptist Parish. The Urban sub-area is located primarily along US 51 between Frenier Road and US 61/Airline Highway. The corridor also includes small portions of US 61 (0.1mi) and Main St (0.3mi). For the purpose of land use data collection (Task 3A), the study corridor includes the subdivisions adjacent to US 51 between I-10 and US 61.



US 51 and US 61 are classified as Urban Major Arterials, while Main St is classified as an Urban Major Collector. The majority of the route, on US 51, consists of two travel lanes in each direction with a center turn lane. The portion of US 51 north of Bamboo Road has 8–10-foot paved shoulders in each direction, while the portion between Bamboo Rd and US 61 has no paved shoulder.

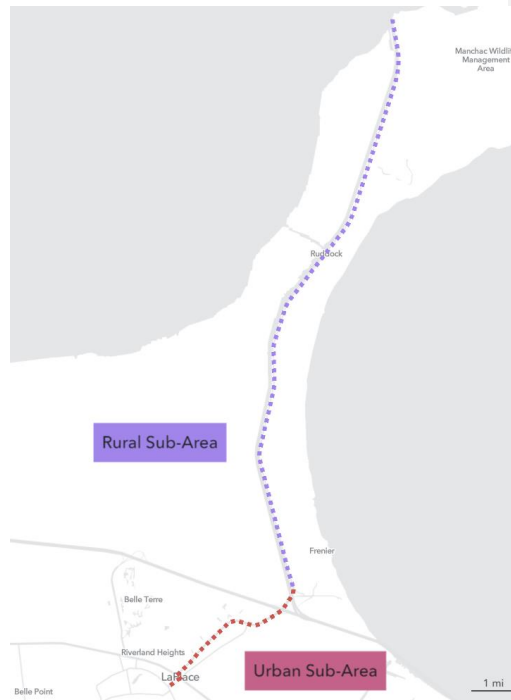
US 51 is both a high-volume arterial and a major commercial/employment corridor on the East Bank of Laplace with a diverse range of existing land uses, including an elementary school, several residential subdivisions, and industrial uses which generate heavy truck traffic. St. John Parish is currently in the process of installing bike lanes and other enhancements to walking and biking facilities along the Main St portion of the urban sub-area corridor.

Project Adjacent - Rural sub-area (13.6 miles) - South Pass Manchac to Frenier Rd

The rural sub-area consists of the portions of the study corridor located in non-urbanized St. John the Baptist Parish. The Rural sub-area is located entirely along Old US 51 between Frenier Road and the Parish line at South Pass Manchac.

Old US 51 is classified as a Rural Major Collector and consists of one travel lane in each direction with paved (8-10 ft) shoulders on both sides. Prior to the completion of I-55, Old US 51 served as the principal roadway connecting St. John and Tangipahoa parishes. Due to its proximity to I-55, the route has very limited vehicular through-traffic, and primarily serves as a frontage road providing local access to Frenier Village, Manchac and recreational destinations along Lake Pontchartrain and the Manchac Swamp.

Due to its low traffic volumes, wide paved shoulders, and access to recreational destinations, Old US 51 is popular as a recreational bicycle route connecting Laplace to Manchac. It is designated as a recreational “Scenic Byway” by the state of Louisiana.¹



Project Goals

The purpose of this Stage 0 study is to develop recommendations for improving pedestrian and bicycle safety and access to destinations within the urban sub-area. In support of these goals, the consultant will perform a detailed evaluation of existing conditions and planned development along the Manchac Greenway corridor and develop conceptual alternatives based on these findings.

In developing conceptual alternatives, emphasis should be given to addressing the following questions:

- Are there feasible options for improving pedestrian and bicycle facilities within the existing paved right-of-way (e.g., by reallocating the paved shoulder and/or center turn lane of US 51 into pedestrian and bicycle facilities)?
- What are the existing land uses and trip generators along US 51, and how significant is traffic activity on the corridor? Is the center turn lane needed, or could it be reallocated to create (e.g.) bike lanes? What driveway conflicts must be addressed?
- Between Bamboo Rd and US 61, what utilities and other facilities would require relocation to widen US 51 to add pedestrian and bicycle facilities?

¹ <https://byways.louisianatravel.com/byway/southern-swamps-byway>

- Are there feasible options to improve walking and biking connectivity to subdivisions between US 51 and Main St?
- What is the best and safest option for connecting US 51 to planned bike lanes on Main St via US 61?

TASK 1 - PROJECT MANAGEMENT

1A: Project Timeline and Kick-Off

The consultant will prepare a draft project schedule including major milestones (PMC meetings, site visits, draft reviews, final report submission, etc.). The timeline will be submitted at the project kick-off meeting that will include the consultant, all sub-consultants, RPC, St. John, DOTD, Friends of Manchac Greenway, and other parties as deemed appropriate. The kick-off meeting will be organized by the consultant and take place within two (2) weeks of the Notice to Proceed.

Deliverable: Task product will include detailed project schedule with timeline and major milestones.

1B: Project Management Committee

The consultant will assist RPC in establishing and supporting a Project Management Committee (PMC) to guide the technical work effort and to review the consultant's work products. The PMC will consist of the RPC, St. John the Baptist Parish, LADOTD District 62, and other stakeholders, as appropriate. The consultant will provide all necessary agendas, handouts and exhibits in advance of PMC meetings for RPC review and approval and prepare summary minutes of the meetings.

The PMC will meet not more than four times during the study effort. These meetings may be in a virtual setting. Consultant will be responsible for organizing the virtual meetings and will identify the venue (i.e., Zoom, MS Teams, GoToMeeting, etc.) to be used.

In consultation with St. John and RPC, the consultant will arrange meetings with other stakeholders in the area to discuss the project's purpose and need and project-related development opportunities and concerns, as appropriate. The consultant will prepare summary meeting minutes for review and discussion with the PMC.

Deliverable: Task products will include meeting agendas, handouts, summary minutes and support graphics. A report of the meeting activities and outcome, with a copy of the sign-in list, will be made available to attendees within 10 days of the kick-off meeting.

TASK 2 – EXISTING/ONGOING DATA & PLANS

Prior to initiating Task 3, the consultant will inventory existing data and existing or ongoing studies for the corridor. The PMC will assist the consultant in compiling available data addressing land use and zoning, transportation, utilities, area demographics and environmental conditions within the study area.

The consultant will review previous plans and studies for the corridor, including but not limited to: the St. John the Baptist Comprehensive Plan, previous studies of the Manchac Greenway corridor, and planned walking and biking improvements within St John the Baptist Parish.

The consultant shall also coordinate LADOTD on a safety being conducted concurrently on Airline Hwy (US 61) within the study area (H.014305).

As a component of the existing conditions report, the consultant will prepare a standalone memo summarizing data reviewed during Task 2, to be used as a basis for subsequent tasks.

Deliverable: *Task Report summarizing previous plans and studies for the corridor, incorporating an inventory of existing data available for the project area.*

TASK 3 - SITE INVESTIGATION AND LAND USE DATA COLLECTION

3A: Land Use

Working with the St. John Parish Planning Department, the consultant shall prepare land use and facilities inventory for the urban sub-area in an appropriate geospatial/machine-readable spreadsheet format, with accompanying maps/graphics showing existing and planned development in the study area adjacent to the corridor. Land use information will be recorded using LBCS classifications at the parcel level and reviewed by the PMC for accuracy. The land use information will be used for trip generation purposes and as input into a traffic analysis.

The consultant will use the latest edition of the ITE Trip Generation manual to discern specific volumes from land uses. The traffic analysis will be performed based in part on this land use information to estimate projected traffic volumes for the alternative(s) and conceptual designs for the urban sub-area. It will also be used to inform conceptual design of alternatives in subsequent tasks.

Deliverable: *Maps and geospatial data documenting detailed land uses information for the project area. The consultant will coordinate with RPC's GIS Coordinator to ensure compliance with RPC standards and industry best practices related to GIS products and printed mapping.*

3B: Infrastructure & Utilities

The consultant shall conduct field work to identify existing infrastructure conditions and utilities within and adjacent to the Manchac Greenway right-of-way. The consultant shall document pavement conditions and shall inventory existing utilities and facilities within the US 51 right-of-way between I-10 and US 61, including gas, water, electric, sewer, drainage, elevation, lighting, striping, signage, and signals.

Information shall be documented in an appropriate geospatial/machine-readable spreadsheet format with accompanying maps/graphics showing infrastructure and utilities on the corridor.

Deliverable: *Maps and geospatial data documenting pavement conditions infrastructure and utilities information. The consultant will coordinate with RPC's GIS Coordinator to ensure compliance with RPC standards and industry best practices related to GIS products and printed mapping.*

TASK 4 - TRAFFIC DATA COLLECTION

Prior to initiating Task 4, the consultant shall prepare a memo describing the count methodology and validation process to be employed for automated 24-hour counts, walking and biking counts, TMCs, and driveway counts. This methodology must be approved by [the Project Management Committee](#) before commencing counts.

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4A. Motorized Traffic

7-day, 24-hour traffic volume counts will be conducted for the project corridor. These counts will contain hourly subtotals and include vehicle classification amounts. Counts must be completed during a 7-day period that does not include a holiday or special event not typically seen at the site. Per DOTD traffic data collection policy, consultant will review the 24 hour counts and recommend a peak AM, Mid-day, and PM peak period to RPC PM. The RPC project manager will review and recommend approval or otherwise comment on changes required.

It is anticipated that counts will be required at the following locations:

- Main St, two sites (south of US 61; between US 61 and US 51)
- US 61, two sites (east of Main St; west of US 51)
- US 51, four sites (between US 61 and Main; between Main and Woodland; south of I-10 approaches; north of I-10 approaches)
- Old Hwy 51, two sites (north of Frenier Rd, south of Sunset Park)
- Summerlin Dr at US 51
- Bamboo Rd at US 51
- Palmetto Dr at US 51
- All interstate approaches to US-51.

4B. Walking and Bicycling Activity

Automated bicycle and pedestrian counts shall be collected using a DOTD-evaluated methodology described in LTRC 16-4SA (“Pedestrian and Bicyclists Count - Developing a Statewide Multimodal Count Program,” specifically Appendix D “Pedestrian and Bicycle Count Data: A Guide for Louisiana” - <https://www.ltrc.lsu.edu/pdf/2019/Appendix%20D.pdf>). Counts should be collected during the same period as motorized traffic counts.

4C. Turn Movement Counts (TMCs)

The consultant will undertake weekday and weekend turning movement counts at approximately six (6) locations using the peak periods identified in Task 3C. Consultant shall document vehicle, truck, bicyclist, and pedestrian usage at each intersection for each for a three (3) hour period adjacent to the discerned peak hour (1 hour before, 1 hour after). It is anticipated that turn movement counts will be required at the following sites:

- US 61 (Airline Highway) at Main St.
- US 61 (Airline Highway) at US 51 (New Hwy 51)
- US 51 (New Hwy 51) at Main St.
- US 51 Woodlands Dr.
- Two additional locations to be determined.

4D. Driveway Counts

The consultant will collect peak 15 minute driveway counts on 12 non-residential parcels adjacent to the urban portion of the study corridor. These driveways will be identified as primary generators of vehicular movement by the PMC.

***Deliverable:** Task Report describing the collection methods and findings from Task 4. Consultant will prepare documentation of the above information to be used in subsequent tasks and prepare a standalone report that will be used as input for those same. RPC project manager will review this and results from Task 4. Upon approval, consultant will be authorized to begin subsequent tasks.*

All Task 4 traffic data products, including automated daily counts and manual Turn Movement Counts, shall be provided to the RPC in an appropriate machine-readable geospatial format to be determined in coordination with the RPC's GIS Coordinator.

TASK 5 - EXISTING CONDITIONS REPORT

The consultant shall prepare a standalone existing conditions report documenting land uses and traffic conditions on the corridor using the results of Tasks 2 through 4.

5A - Land Use Analysis

The consultant shall prepare a detailed summary of existing and future land uses within the study corridor, including recent development along the study corridor and projected impacts of adjacent land uses on traffic volumes.

***Deliverable:** Task Report describing existing and future land use conditions for the urban- and rural sub-areas.*

5B - Motorized Travel Analysis

Utilizing the traffic data from Task 4, the consultant will evaluate motorized travel conditions on the study corridor, with an emphasis on conditions within the urban sub-area. This analysis shall include, but not be limited to, an evaluation of motorized travel generated by existing land uses within the study area by trip volume, trip type, and vehicle class. The consultant shall prepare maps reflecting traffic flows using data in Task 4, including turn movement and driveway counts.

The consultant shall conduct an operational analysis for key intersections and driveways within the urban-sub area, including a Highway Capacity Manual (HCM) level of service (LOS) analysis for the A.M. and P.M. peak periods at intersections selected for turning movement counts in subtask 4C.

***Deliverable:** Task Report summarizing travel conditions for motorized users of the corridor.*

5C - Non-Motorized Travel Analysis

Latent Walking and Biking Demand - The consultant will employ a methodology that will show a quantitative measure of the potential demand for bicycling and walking along the study corridor if the adequate safety measures were employed. (i.e., protected lanes, lower speed, etc.), and will allow a relative comparison of latent demand among all facilities. Prior to initiating Task 5C, the consultant shall prepare a memo describing the methodology to be employed in estimating bicycling latent demand, consistent with best practices described in FHWA's "Guidebook on Methods to Estimate

Non-Motorized Travel” (https://safety.fhwa.dot.gov/ped_bike/docs/guidebook1.pdf) or comparable guidance. This methodology must be approved by the Project Manager before deployment.

Walking and Bicycling Stress Measure - The consultant will employ a methodology for each facility that will show a qualitative measure of the existing walking and bicycling conditions on individual components of the study corridor as well as an estimated improvement in quality of facilities with conceptual improvements (task 5). Prior to initiating Task 5C, the consultant shall prepare a memo describing the methodology to be employed in estimating bicycle and walking stress/quality on the bridges, consistent with best practices, such as NACTO’s “Urban Streets Design Guide” and San Francisco’s “Pedestrian Environmental Quality Index” (PEQI). This methodology must be approved by the Project Manager before deployment.

Deliverable: Task Report summarizing non-motorized travel conditions within the corridor.

5D: Utility Information

The consultant will research and report on utilities within or crossing the existing right of way. Potential conflicts will be identified and costs/methods for resolving conflicts will be developed. Cost estimates for same will be provided.

Deliverable: Utility information provided in graphic form and included as part of the deliverable from Task 5. Consultant will document outreach efforts and will include electronic files, maps, or other data from utility providers in the corridor in an appendix to the report.

5E: Environmental Documentation

Consultant will research and report on all known environmental constraints or issues that could potentially impact project feasibility or implementation of the project.

Deliverable: Task product will be summarized environmental information provided in graphic form and included as part of the deliverable from Task 5. Consultant will document outreach efforts and will include electronic files, maps, or other data from consulted agencies and databases in the corridor in an appendix to the report.

TASK 6 - CONCEPTUAL PLAN DEVELOPMENT

Based on the findings from Tasks 2-4, consultant will review, summarize, and make recommendations in a report form, following RPC report protocols that improve/enhance operational efficiency and safety for all modes where opportunities exist to do so both in the field and in policy. The Consultant will review and recommend FHWA proven safety countermeasures where feasible. The Consultant will also review and make recommendations consistent with the newest available AASHTO Guidance on Bicycle Facility Design. The evaluation will include but not be limited to examining the feasibility of implementing a multi-use path along part or all of the aforementioned corridor, extending and improving existing sidewalks, and improving/ enhancing existing pedestrian signals and pedestrian crossings along and across the corridor.

Draft concepts will be developed for each alternative deemed feasible by the PMC. These concepts may incorporate elements such as new or upgraded sidewalks/ paths, signage, striping, lighting, augmented pedestrian crossings, wayfinding, ADA improvements, and other measures to enhance the safety and connectivity of the corridor, consistent with LADOTD design standards (EDSM II.2.1.14).

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The Consultant will coordinate with the PMC on the development and evaluation of these improvement measures, identifying project priorities which are feasible and appropriate for implementation. For each of these alternatives, the consultant will, to the extent possible at this stage of project development, establish preliminary cost estimates associated with engineering design, environmental actions, right-of-way acquisition, utility relocation, and contingencies.

TASK 7 - DRAFT AND FINAL REPORT

Consultant shall finalize alternatives and prepare/submit the Stage 0 Feasibility Study, documenting the information and analysis described above. All studied alternative(s) **deemed feasible by the PMC** will be described in the Stage 0 Report.

The MPO will engage with the local public agency (LPA) following the completion of the Stage 0 report to determine a recommended alternative, should the LPA decide to advance the project. The consultant will prepare MPO Stage 0 checklists (ref. LA DOTD Program Development and Project Delivery System Manual, Chapter 4: Stage 0 Standard Operating Procedure, Checklist for MPO Stage 0-Preliminary Scope and Budget Worksheet, and Stage 0 Environmental Checklist) for the recommended alternative.

Deliverable: *Ten printed copies of the report and 5 PDF and an editable Microsoft Word version, as well as digital versions of all maps and visualizations, saved on three USB drives.*

*Deliverables will be submitted by the Consultant to the RPC for distribution. All analysis work products and electronic files (including SYNCHRO files) will be submitted to the RPC. All data collected as part of this effort will be provided to the RPC in formats designated by RPC staff. Submittals accomplished in CAD and/or *.shp file format will be consistent w/ RPC standards.*

The Consultant will prepare overall visualizations and “meeting-ready” graphics of the proposed improvements to be used in outreach efforts conducted by the City at its discretion to help the community understand the design intent by using before and after graphics in plan-view for the corridor and key destinations. The Consultant will be responsible for the development of estimated quantities and costs for proposed improvements.

Budget: \$95,000

Timeline: 8 months