### **REGIONAL PLANNING COMMISSION**

South Range Road
Operations Study
Tangipahoa Parish
Stage 0 Feasibility Study
(Task T-1.23RR; FY 23 UPWP)

# **INTRODUCTION**

The Regional Planning Commission (RPC), in coordination with Tangipahoa Parish, is conducting a feasibility study for improving operations along a portion of South Range Road in Tangipahoa Parish, LA.

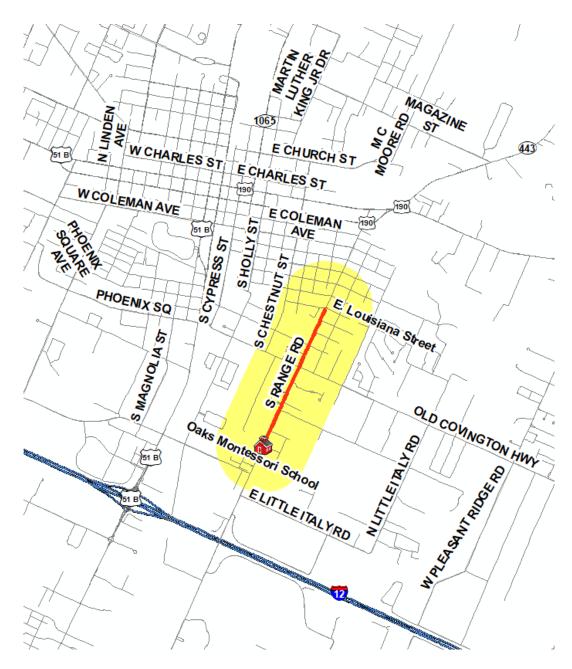
The project will consist of stakeholder outreach, transportation planning, infrastructure assessments, and cost estimates to develop a conceptual plan that has the support of the public, stakeholders, and agencies with interests along the corridor. Data collected during the study will include, but not be limited to:

- Update of nearby Land Uses
- Public Infrastructure Utilities and Servitudes, including drainage infrastructure.
- Roadway Average Daily Traffic and vehicle classification counts,
- Turning Movement Counts
- Roadway crashes of all types

S. Range Road is a two lane, locally owned major collector roadway, with a 25 MPH posted speed limit. Existing land uses at this location are mostly single family residential, multi-family residential and institutional.

## **STUDY AREA:**

The geographic parameters of the study area are along S. Range Road roughly between driveway of Oaks Montessori School to the south to approximately E. Louisiana Street to the north, a distance of approximately 4,000 feet, and includes the intersection of Old Covington Highway roughly midway through the corridor.



# **PURPOSE AND NEED:**

The purpose of this study is to conduct a corridor analysis along this portion of Range Road in the Hammond area of Tangipahoa Parish. This study will examine the specific operating conditions of the intersection of Old Covington Highway and Range Road, land uses and operations of nearby trip generating land uses, and to identify conceptual, feasible improvements at and adjacent to the intersection that would enhance operations for all roadway users.

The need for the study was derived by concerns of the Parish and the City of Hammond related to evolving traffic patterns that have increased congestion along the corridor and specifically at the intersection of Old Covington Highway and Range Rd. Localized congestion resulting from post-COVID operating characteristics of adjacent land uses have been observed by Parish and City field personnel.

### **GOAL:**

Pursuant to performance measures outlined in RPC's Metropolitan Transportation Plan (2023-2052) for the S. Tangipahoa Urbanized area, the overarching goal is to reduce transportation related fatalities and serious injuries for all users by supporting comprehensive, multimodal, data-driven, and proactive transportation planning processes that integrate safety into surface transportation decision-making. In this regard, the intersection of Old Covington Highway and Range Road has been identified by Tangipahoa Parish and the City of Hammond as an intersection that warrants follow up analysis.

The goal of this effort is to develop concepts for intersection improvements that would enhance operational efficiency and manage access where possible while accounting for future development and growth in the corridor.

#### **TASK 1: PROJECT MANAGEMENT TEAM**

The Consultant will assist the RPC in establishing and supporting the Project Management Team (PMT) to oversee the work in progress, review inventory findings, and assist in the development of recommended operational improvements for motor vehicles and school buses, as well as for non-motorized modes and related improvements for inclusion in the conceptual design plan.

The PMT will include representatives from the Regional Planning Commission (RPC), Tangipahoa Engineering Department, City of Hammond, LA DOTD District 62, and other organizations as deemed appropriate. The Consultant will provide all necessary agendas, handouts and exhibits in advance of the PMT's meetings for RPC review and approval and prepare summary minutes of the meetings. The PMT will meet four times during the course of the study effort: at the kick-off meeting, to review data inventory findings, to discuss alternative concepts, and to review project costs and phasing recommendations.

The Consultant will assist the RPC by attending meetings with elected officials and other local leaders and organizations in the area to discuss the project's purpose and need and project-related opportunities and concerns as necessary. The Consultant will receive approval from RPC prior to initiating these contacts and prepare summary meeting minutes for review and discussion with the PMT. It is anticipated that project findings may reveal the need for further engineering analysis through LADOTD and/or RPC prior to consideration for advancement into project implementation.

**Task 1 Deliverable:** Development of PMT and requisite meeting agendas, summary meeting minutes of same in technical memorandum format.

# **TASK 2: PROJECT TIMELINE & KICK-OFF MEETING**

The Consultant will prepare a draft project schedule in Gantt chart format including major milestones (including, at a minimum: project initiation and conclusion dates, tasks and subtasks as per this scope, technical meetings, site visits, draft submittal and final submittal dates). The timeline will be submitted at a project kick-off meeting that will include: the consultant team, the Project Management Committee, and other stakeholders as needed. The project kick-off meeting will take place within two (2) weeks of the Notice to Proceed.

**Task 2 Deliverable:** Project Schedule in GANTT chart format, including major milestones and identification of PMT decision points.

## TASK 3: SITE INVESTIGATION AND DATA COLLECTION

3A: DATA COLLECTION

3A1. Demographic Profile

To review community equity, access and general impacts in the study area, an Area of Interest (AOI) will be established by the RPC. The RPC will provide the consultant with geographic, demographic, and employment data, including measures identifying socio-economically distressed neighborhoods. The consultant shall describe how these data are to be used in the development of alternatives promulgated herein.

# 3A2. Fatal and Serious Injury Crash Data Review

The RPC will provide the consultant with a five-year history of fatal and serious injury crashes, and crashes of all severities for non-motorized users, by location within the project area. This includes all non-motorized crashes along the Old Covington Highway and S. Range Road corridors. The consultant will also review all relevant safety reports including the *Tangipahoa Parish Local Road Safety Plan*, the *LADOTD Roadway Departure Implementation Plan*, and the *Louisiana Pedestrian Crash Study*. The consultant shall prepare a memo summarizing findings from the review of the crash data and segments identified within the above-mentioned plans and describe how the data and identified segments will inform subsequent tasks. The consultant shall prepare maps and tables summarizing crash data for inclusion in PMT presentations and the final report.

# **3B: SITE INVESTIGATION**

A comprehensive site investigation and data collection effort will be made at the study area intersection to allow an accurate assessment of the traffic and physical characteristics of the site. The Consultant will work with the PMT to establish baseline volumes for all modes for the study corridor.

The consultant will compile other immediately adjacent land use, transportation, and safety data for the corridor. This will include updated (new) traffic counts for all modes; changes in immediately adjacent land uses; posted/actual speeds; crash data (to be provided by RPC); and forecast growth rates on Old Covington Highway and Range Road for traffic (to be provided by RPC).

# 3C: Roadway Volumes and Vehicle Classification

The consultant will undertake four directional ADT/ vehicle classification counts along the roadway, one on either side of Range Rd and either side of Old Covington Highway. Counts will be undertaken during three consecutive, non-holiday weekdays. Consultant will use the data collected to discern the weekday AM and PM peak periods. Consultant will prepare a memo for RPC review that documents the count locations, data collected, vehicle classifications and the peak AM and PM hour turning movement volumes. RPC will review and direct the consultant to either proceed or revise the memo and resubmit.

## 3D: Turning Movement Counts:

Based on the daily counts described above, the Consultant will undertake AM, Mid-day, PM peak hour turning movement counts at all approaches to the intersection. Consultant will determine existing Levels of Service for the intersection using HCM criteria. Data will be collected and presented consistent with LADOTD's TEPR Tier 1 process. RPC will provide growth rates for the study area derived from the SELATRAM model for use in developing forecast volumes for this effort.

# 3E: Driveway Counts/ Queueing:

Consultant will document driveway queueing at school locations during AM and PM pick up hours at Woodland Park Elementary School and at Oaks Montessori School to document length of queues and corresponding impact, if any, to operations of the S. Range Road, and/or Old Covington Highway.

**Task 3 Deliverable:** Technical memorandum detailing and documenting existing and forecast traffic conditions for the S. Range Road corridor that will be based upon current, observed traffic data and counts, as well as known or readily foreseeable land use changes that would impact trip generation, traffic volumes and patterns.

#### TASK 4 – PLANNING AND CONCEPT DESIGN DEVELOPMENT

Based on data collection from Task 3, the consultant will provide feasible options that improve/ enhance operational efficiency and safety for all modes at the intersection where opportunities exist to do so. This will include but not be limited to examining the feasibility of implementing various access management techniques at select locations; turn lanes, roundabouts, and traffic signal if potentially warranted. Consideration shall be given to pedestrian access and accommodation for bicyclists at the intersection with corresponding conceptual layouts for alternatives promulgated.

Draft overall design concept may incorporate elements such as new or upgraded sidewalks/ paths, signage, striping, lighting, pedestrian crossings where warranted or where pedestrian oriented developments are planned, and other measures to enhance the safety and connectivity of the corridor, consistent with LADOTD design standards (EDSM II.2.1.14). The Consultant will coordinate with the PMT on the development and evaluation of these improvement measures, identifying project priorities which are feasible and appropriate for implementation.

**Task 4 Deliverable:** Submittal of concept options for improvements in the intersection, including concept level cost estimates (opinions of probable cost).

### **TASK 5 - SUBMIT DRAFT REPORT**

The RPC will distribute the draft report with proposed design concepts (ten copies) to the PMT membership and call for a final review meeting, if necessary. An electronic version of the draft plan should also be provided in Microsoft Word format. The draft plan will include unit cost estimates and quantities

with an opinion of probable costs for proposed improvements, (i.e. new or upgraded sidewalks, signage, striping, lighting, pedestrian crossings, transit facilities, improved bus facilities and other measures.) The plan will review transportation plans provided by other PMT participants to identify future phased improvements that may require additional study and/or follow-on analysis.

**Task 5 Deliverable:** Distribution of draft report to PMT members, coordination through RPC project manager.

### TASK 6 – SUBMIT FINAL STAGE "0" STUDY

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 PMT 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.

**Task 6 Deliverable:** Ten printed copies of the report and five 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 Parish and the City of Hammond 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:** \$55,000

**Timeline:** 10 months