Land Use and Traffic Conditions Analysis  
Greater Mandeville Area  
(RPC Task MC-1.16; FY 16 UPWP)

Project Description
In accordance with MAP-21’s emphasis on improving transportation mobility and reducing congestion at major bottleneck locations, the Regional Planning Commission is conducting a land use and traffic conditions analysis of the Greater Mandeville Area. The project limits extend from Lake Pontchartrain to Interstate 12 and between Bayou Castine and the Tchefuncte River. The project is being carried out in coordination with the City of Mandeville, St. Tammany Parish, and LADOTD District 62 office. The study will focus on traffic data collection and analysis to alleviate traffic congestion at both existing and proposed land use development nodes within the study area. Tasks to be performed by the technical consultant include:

**TASK 1: PROJECT MANAGEMENT COMMITTEE**
The consultant will assist RPC in establishing and supporting a Project Management Committee to guide the technical work effort and to review the consultant’s work products. The PMC will consist of the RPC, St. Tammany Parish, City of Mandeville, and 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 three (3) times during the course of the study effort. In addition, the consultant will assist RPC in the conduct of meetings (maximum of three) with other stakeholder organizations in the area to discuss the project’s purpose and need and project-related concerns. The RPC will initiate these contacts and the consultant will prepare summary meeting minutes for review and discussion with the PMC.

**TASK 2: PROJECT TIMELINE & KICK-OFF MEETING**
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, City of Mandeville, St. Tammany Parish and LADOTD District 62. The kick-off meeting will be organized by RPC and take place within two (2) weeks of the Notice to Proceed.

**TASK 3: REVIEW OF EXISTING CONDITION**

**A. DEMOGRAPHIC AND ECONOMIC PROFILE**
The technical consultant will prepare a summary description of existing demographic and economic conditions within the study area using available U.S. Department of Commerce census and economic data, identifying changes in population and economic growth by census tract or other appropriate analysis unit, i.e., traffic zones or neighborhoods. Generalized Land use information also will be collected by the consultant from the parish and municipality to identify any major changes in
existing land use as well as new or proposed residential and commercial development sites. A maximum of three development sites will be selected by the PMC for land use and traffic and circulation analysis, including potential bicycle and pedestrian access. Task product will consist of a summary socio-economic profile and a generalized geospatial database of land use in the study area, describing population and economic shifts and emerging residential and commercial growth centers.

B. TRAFFIC DATA COLLECTION
The consultant will work with the PMC to establish 2015 base traffic volumes for the study area. The consultant shall collect three day twenty-four (24) hour machine traffic counts and peak period turning movement counts for selected routes and intersections in the study area. The traffic network will be established by the RPC in consultation with the PMC and based on the region's fed-aid system. The manual turning movement counts and machine counts shall include FHWA Vehicle Classifications 1-14. Hours for the manual turning movement counts shall be determined from the data collected in the tube counts. Counts shall be taken in accordance with standard procedures (peak hour counts shall be taken Tuesday through Thursday, all counts shall be taken when schools are in session, no counts shall be taken during holiday weeks, etc.). The consultant shall anticipate that 24 hour counts (bi-directional) will be required at 45 study locations and am/pm turning movement counts at 35 intersections many of which are signalized.

Working with the PMC, the consultant will utilize the collected field data as well as supplemental data provided by RPC (i.e., recent traffic counts and speed data) to populate the study network and to establish an existing conditions benchmark for future comparisons.

TASK 4: DESIGN YEAR TRAFFIC
Design Year (2040) traffic will be forecasted considering year 2015 traffic volumes carried forward to the design year using appropriate rates of growth, RPC’s Regional Travel Demand Model, and land use scenarios developed in consultation with the PMC.

TASK 5: LEVEL OF SERVICE ANALYSIS
Level of Service Analysis will be performed at signalized intersections for the existing condition and for the design year under the no-build year 2040 condition. In addition, traffic generation associated with the land use build-out of the three sub-area development sites will be reviewed and analyzed for traffic impact on local and major streets in the immediate area.

TASK 6: CONCEPTUAL DEVELOPMENT AND EVALUATION
Working with the PMC, the consultant will review and develop supporting recommendations for the three targeted land use development sites, identifying bicycle and pedestrian improvements, minor geometric improvements, crosswalks, striping and signage, and other transportation systems management (TSM) measures to enhance access and safety in the development areas. Some improvements may need to be addressed as separate follow-on Feasibility Study efforts in accordance with state procedures and warrant analysis requirements.
**TASK 7: PROGRAM OF PROJECTS**
Based on the level of service analysis of major streets and intersections, recommendations will be developed recommending short and long-term priorities for further study, refinement, and implementation. The consultant will provide the PMC with a prioritized list of both short and long-term improvements by location, describing the transportation deficiency, type of proposed improvement(s), and estimated costs.

RPC will work with St. Tammany Parish and the City of Mandeville and LADOTD District 62 to advance these Transportation System Management improvements towards project level design and implementation using various funding sources including STP<200K attributable funds and Transportation Alternatives Program (TAP), among others.

**TASK 8: DRAFT REVIEW**
A draft of the report (ten copies) with supporting documentation will be submitted to RPC for distribution to the PMC for review by, at the latest, 75% of project completion. The report will include generalized land use information, existing traffic conditions mapping, and forecasted traffic volumes and results of the level of services analysis for the study intersections. The report will address land use and traffic associated with the three development sites, including transportation access alternatives and the potential for low-cost TSM types of improvements.

**TASK 9: FINAL DELIVERABLES**
Following review and approval of the draft submission, the consultant will provide RPC with ten (10) bound copies of the Land Use and Traffic Conditions Report, documenting the information and analysis described above. Ten printed copies of the report and 10 disks in electronic format (pdf including all traffic data, maps and visualizations) will be submitted by the consultant to the RPC for distribution and further consideration.

**TIMELINE:** Ten Months

**BUDGET:** $150,000