

**Request for Qualifications MTP Model Update  
State Project No. H.972584  
F. A. P. No. H972584**

**CONSULTANT SERVICES FOR MODEL UPDATE**

The Acadiana Metropolitan Planning Organization (AMPO) is inviting consultant firms and teams to submit qualification information for services relating to the Travel Demand Model update for the Acadiana Metropolitan Planning Organizations (AMPO) 2055 Metropolitan Transportation Plan (MTP).

In order to meet requirements of the Louisiana Department of Transportation (DOTD) and the AMPO this request will require, principally, the submittal of DOTD standard form for MPOs.

Contract Manager –Sara Gary, Acadiana Metropolitan Planning Organization, Acadiana Planning Commission

Project Manager – Sean Reed, Project Manager, Acadiana Planning Commission

**PROJECT OVERVIEW**

The purpose of the project is to update the Acadiana MPO's MTP to 2055. The consultant advertised portion of this project will be for the update of the Travel Demand Model. New base year of 2025 with a horizon year of 2055.

**PROJECT DESCRIPTION**

The purpose of this project is to provide technical, demographic and engineering services to assist the AMPO in the update of the Travel Demand Model with a new base year of 2025 with a horizon year of 2055. The model is used to perform capacity deficiency analysis, future year demand analysis on multiple scenarios, and evaluation of individual needs in study areas up to the planning horizon. The AMPO seeks experienced modelers to perform specific project tasks, recommend new strategies to improve the model and the modeling process, and provide technical guidance during model update process.

**SCOPE OF SERVICES**

The tasks desired to be performed by the Consultant(s) are outlined in **Exhibit A – Expected Scope of Services**.

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**DATA FURNISHED BY COOPERATING AGENCIES**

The cooperating agencies for this RFQ include the Acadiana Metropolitan Planning Organization and Louisiana Department of Transportation and Development. Each entity generates, collects, maintains and stores both tabular and spatial data. The Consultant selected through this RFQ process should be prepared to provide a listing of data needs at the beginning of this project and be familiar with and utilize geographic information systems (GIS) such as ESRI ArcMap.

**COMPOSITION OF CONSULTANT TEAM AND MINIMUM PERSONNEL REQUIREMENTS**

The composition of the consultant teams responding to this RFQ are desired to be experienced in traffic engineering and in Travel Demand Modeling.

The following requirements must be met by the Consultant(s) at the time of submittal:

1. At least one Principal of the Prime-Consultant must be either an AICP-certified Planner or a Professional Engineer registered in the State of Louisiana.
2. The Prime-Consultant shall employ on full-time basis, or thru use of Sub-Consultant(s):
  - a. One professional engineer registered in the state of Louisiana with at least five years of experience in traffic analysis and certified as a Professional Traffic Operations Engineer.
  - b. A minimum of one professional civil engineer registered in the state of Louisiana with at least three years of experience in roadway design and familiar with all DOTD design guidelines, related manuals, or multimodal street retrofits

**CONTRACT TIME**

The selected Consultant and Acadiana Metropolitan Planning Organization (AMPO), in consultation with its project partners, will mutually agree to a specific contract end date after contract negotiations when the scope of services and project timelines are finalized. This contract end date will be no longer than 12 months from the Notice to Proceed.

**QUALITY CONTROL/QUALITY ASSURANCE**

The AMPO requires the Consultant to develop a Quality Control/Quality Assurance plan; to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. The AMPO, in consultation with partner agencies, shall provide feedback on deliverables before they are completed; the Consultant shall provide requested revisions. However, the AMPO shall provide limited technical assistance to the Consultant.

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## SELECTION PROCESS AND CALENDAR

Below is the schedule for the RFQ qualifications process:

- December 1, 2025: RFQ issued
- January 5, 2026, 4:00 pm CST: RFQ responses due
- January 16, 2026: Evaluation of Qualification and Follow-up interviews scheduled, as needed
- February 11, 2026: Consultant selection announced by AMPO

The AMPO reserves the right to modify this schedule at its discretion. All dates in the RFQ are subject to change and notice of any changes will be provided to all respondents.

## EVALUATION CRITERIA

Consultants submitting responses to the RFQ will be weighted and evaluated in terms of relevant experience related to the following:

1. Demonstration of relevant qualifications, specifically detailing certain capabilities that will address the subject areas delineated in Exhibit A (this evaluation criterion will include consideration of qualifications by proposed subconsultant(s)). - **25 POINTS**
2. Demonstration of relevant experience, specifically detailing projects of similar type, scale, scope, and complexity executed for clients of existing plans. - **30 POINTS**
3. Demonstration of how respondent has innovated with the change in data collection practices as related to the field of Travel Demand Modeling. - **20 POINTS**

Professional services are procured in accordance with AMPO and the Acadiana Planning Commission (APC) Consultant Selection Process as approved by the Louisiana DOTD and the Federal Highway Administration (FHWA). A copy of the selection process document is available upon request.

Selection of the most highly qualified respondent(s) will be made based on demonstrated competence and qualifications as scored using a point system by the Evaluation Committee.

The AMPO reserves the right to reject all proposals, to waive any formalities outlined in the RFQ and in the selection process and generally to make the award that, in its judgement, will best meet the objectives stated in this RFQ. The AMPO also reserves the right to request additional information and/or proposal clarifications from any Consultant submittals to assist in its evaluation process.

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The Project Evaluation Team will be responsible for performing the above described review and will present a short list of at least three rated Consultants to the Transportation Policy Committee. The Transportation Policy Committee will make the final selection.

Expenses incurred by Consultants in replying to the RFQ or being chosen to participate in consultant interviews at a site in Lafayette, Louisiana are at the Consultants' own expense and risk.

All dates in the RFQ are subject to change, and notice of any changes will be provided to all respondents.

### **RFQ CONTENT REQUIREMENTS**

The following components will be required for all Consultant respondents to this RFQ. Additional information may be submitted as Appendices, at the Consultant's discretion. Please refer to Section 14.0 of this RFQ for additional submittal and format requirements.

- a. Cover Page, including at a minimum:
  - RFQ Title
  - Name and point-of-contact information for the prime consultant
  - Date of submission
- b. Table of Contents
  - All material items comprising the RFQ responses should be clearly identified by referencing the Table of Contents, and easily located using page numbers and/or tabs.
- c. Project Staffing and Management Plan
  - Statement of availability of all key principals and staff.
  - A detailed timeline of the project outlined in the RFQ.
  - Include specific descriptions of expectations regarding the client activities and contributions, if any.
- d. Project Plan
  - In a brief narrative statement of project understanding, limited to two pages in length, the consultant should describe their general approach on the work referenced in Exhibit A. The narrative statement should also include descriptions of any recommended changes or refinements to the scope of work to successfully complete the project.
- e. Sample Work Product

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- The proposer should provide at least one similar scope and scale to the one described in this RFQ, if available. If submitted, this should be in digital format.

## **CONTRACT REQUIREMENTS**

The selected Consultant(s) will be required to execute the contract within thirty (30) days after receipt of the contract.

## **INSURANCE**

During the term of this contract, the Consultant(s) will be required to meet insurance requirements established by AMPO. This coverage shall include professional liability, workmen's compensation, general liability and commercial automobile liability for project-related work.

The attached certificate of insurance correlates directly with the insurance requirements of the contract. AMPO requires, therefore, that this certificate be used for approval of contract. This certificate of insurance shall be furnished to AMPO within ten (10) days of notice of award.

The Consultant shall not commence work under this contract until he has obtained all insurance required by this paragraph, and until such insurance has been approved by the Owner, nor shall the Engineer allow any sub-consultant to commence work on his subcontract until the insurance required has been obtained and submitted. Proper certificates evidencing such insurance shall be furnished to the Owner prior to commencement of work. All certificates of insurance must contain provisions indicating that no cancellation of change in limits of such insurance shall be affected for any cause without thirty (30) calendar days written notice being first given to the Owner.

The insurance company providing coverage shall be acceptable to AMPO.

If at any time, any of the insurance policies required to be furnished by the Consultant under the terms of this Article shall lapse, expire, or fail to comply with the requirements of

this Article, the Consultant shall procure and obtain such new insurance policies as may be required to comply with the requirements of this Article. Upon obtaining a new insurance policy, the Consultant shall submit a new certificate of insurance to the Owner for approval. Upon failure of the Consultant to furnish, deliver and maintain such insurance as required by this Article, the contract, at the election of the Owner, may be declared suspended, discontinued or terminated. Failure of the Consultant to maintain any required insurance shall not relieve the Consultant from any liability under the contract.

The Consultant shall affect and maintain until completion and acceptance of the work, insurance as follows:

**PROFESSIONAL LIABILITY COVERAGE - \$1,000,000/per claim/aggregate**

- I. Standard Worker's Compensation Insurance - Coverage for all Worker's Compensation claims as permitted under Louisiana State Law together with Employer's Liability Coverage of \$500,000 minimum, per occurrence.
- II. Commercial General Liability Insurance – Coverage under this policy must be provided on an “occurrence” basis, and not on a “claims made” basis. AMPO, ITS OFFICIALS, EMPLOYEES AND VOLUNTEERS MUST BE NAMED AS AN ADDITIONAL INSURED ON THE POLICY. All commercial general liability insurance shall include coverage for the following:
 

A. Premises Operations	\$1,000,000		
B. Independent Engineers	\$1,000,000		
C. Products – Completed Operations	\$1,000,000		
D. Contractual Liability	\$1,000,000		
E. Broad Form Property Damage	\$1,000,000		
- III. Business Auto Policy
 

	BODILY INJURY	BODILY INJURY	PROPERTY DAMAGE
	<u>per person</u>	<u>per accident</u>	<u>per accident</u>
A. Any Auto	\$100,000	\$100,000	\$100,000
B. Owned Autos	\$100,000	\$100,000	\$100,000
C. Non-Owned Autos	\$100,000	\$100,000	\$100,000
D. Hired	\$100,000	\$100,000	\$100,000

If coverage A – Any Auto is carried, Coverages B, C, & D will not be required. If the Engineer does not own an automobile (vehicle) and an automobile (vehicle) is utilized in the execution of the contract, then hired and non-owned coverage is required.
- IV. Umbrella Liability  
 In lieu of providing insurance at the limits required in Sections I, II and III of this Article, Consultant may fulfill the requirements of this Article by securing umbrella liability insurance coverage provided that the combined total of the primary and umbrella coverages satisfies the minimum required insurance limits set forth in Sections I, II, and II hereinabove.
- V. AMPO as an Additional Insured  
 The Acadiana Metropolitan Planning Organization/Acadiana Planning Commission, its officials, employees and volunteers must be named on all liability policies (except for Workmen's Compensation and Professional Liability policies) described above as additional insureds.

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VI. Waiver of Subrogation

Consultant must obtain a Waiver of Subrogation from all insurance carriers providing coverage under Section I in this Article for any claims which could be asserted against AMPO/APC, its employees, agents, representatives, officers, directors, elected and appointed officials, and volunteers.

VII. Waiver of Insurance Requirements

Notwithstanding anything to the contrary contained herein, AMPO reserves the right at all times, in its discretion, to alter, amend, and/or waive insurance requirements set forth in this Section where the insurance carried and/or to be provided by the Engineer is deemed reasonable, sufficient and adequate to protect the interests of AMPO, provided that AMPO take no steps to impose more stringent and onerous insurance requirements on the Engineer than those contained herein.

VIII. Certificate of Insurance

A copy of the certificate of insurance shall be furnished to the AMPO within ten (10) days of the notice of award.

## AUDIT

Both pre-award and post-project audits, as well as interim audits, may be required. For audit purposes, the selected Consultant will maintain accounting records for a minimum of five years after final contract payment.

## MISCELLANEOUS PROVISIONS

The Consultant(s) should be aware of the following provisions under which the RFQ will be evaluated and processed along with the resulting deliverables when the project is completed.

1. **Rights of Negotiation** – The AMPO reserves the right to waive any irregularities in submittals, and to negotiate with any party.
2. **Cancellation of RFQ** – The AMPO reserves the right to cancel the RFQ at any time. All costs incurred by the Consultant(s) in preparing and responding to this solicitation are the sole responsibility of the Consultant(s) and shall not be reimbursed by the AMPO.
3. **Further Process** – The AMPO reserves the right to interview only those Consultant(s) it determines shall provide the most advantageous services and to negotiate with one or more consultants to contract terms acceptable to the AMPO.
4. **Nondiscrimination** – The AMPO notifies all possible consultants that no person shall be excluded from participation in, denied any benefits of, or otherwise discriminated against with the award and performance of any contract on basis of race, religious creed, color, national origin, ancestry, physical disability, sex, age, ethnicity, or on any other basis prohibited by law.

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5. **Distribution of Proposals** – All documentation, information or data provided by the Consultant as part of its submission (whether in writing and/or digital format) shall become the property of the AMPO. The AMPO is subject to Louisiana Public Records Law.
  6. **Public Disclosure** – The AMPO may publish the names of all submitting consultants on its Website. Proposals will be distributed to members of the AMPO's evaluation team. The AMPO reserves the right, at its sole discretion, to use without limitation, any information and data submitted in response to the RFQ or derived from further investigation of any submittal.
  7. **Notice Conflicts of Interest** – The Consultant(s) shall identify any group, individual or organization that they may have worked for, or currently work for, that has had ownership, lease, development, related or similar interest in the AMPO and shall disclose such potential conflicts of interest to the AMPO. The AMPO reserves the right to reject any proposal or consultant(s) who it feels has a conflict of interest.
  8. **News Release** – Consultant(s) shall make no news/press release pertaining to this RFQ or anything contained or referenced herein without prior written approval from the AMPO.
  9. **Applicable Law** – The RFQ and any contract or agreements resulting herein are subject to applicable federal, state and local laws, rules, regulations and executive orders.
  10. **Acknowledgement** – The Consultant shall acknowledge that the work completed as part of the project is a collaborative effort with the AMPO in future statements.
  11. **Participation By Disadvantaged Business Enterprises in Acadiana Metropolitan Planning Organization (MPO) Programs** – It is the policy of the Acadiana Metropolitan Planning Organization (MPO) that disadvantaged businesses, as defined by 49 Code of Federal Regulations, Part 26, shall have an opportunity to participate in the performance of MPO contracts in a nondiscriminatory environment.

The contractor or subcontractor shall not discriminate based on race, color, national origin, income, gender, age, and disability in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT/FTA assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the MPO deems appropriate.

## RFQ SUBMITTAL REQUIREMENTS

To be considered, interested consultant(s) should submit three (3) bound, color copies of the RFQ response, each to include the DOTD standard submittal form for MPOs, plus one (1) copy of a completed RFQ response on USB digital media. All submittals must be in accordance with the requirements of this advertisement.



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Font, type-size, and margins are not specified, but responses should be easily and comfortably readable.

Although there is no overall maximum page count stated in this RFQ, to promote greater use of recycled and environmentally preferable products and minimize waste, the AMPO encourages all responses submitted in hard copy be prepared simply and economically (except where digital copies are called out in this RFQ). The use of special bindings or unnecessary colored displays, and/or the inclusion of promotional materials are neither required nor desired. Double-sided printing on recycled paper and/or the use of reusable products is preferred.

Any sub-consultants anticipated to be used, in performance of the RFQ and resultant contract, must also submit a DOTD standard submittal form for MPOs, which is completely filled out and contains all information pertinent to the work to be performed.

Any Consultant failing to submit any of the information required on the forms, or providing inaccurate information on the forms, will be considered non-responsive.

The RFQ and required DOTD standard submittal form for MPOs will be submitted prior to 4:00 p.m. CST on January 5, 2026, by email or mail, addressed to:

Acadiana Planning Commission  
Web: <http://www.planacadiana.org/>  
E-Mail: [sreed@planacadiana.org](mailto:sreed@planacadiana.org)  
Phone: 337-735-7398  
Fax: 337-806-9379  
101 Jefferson Street, Suite 201, Lafayette, La. 70501  
P. O. Box 3705, Lafayette, La. 70502

## **SPECIAL INSTRUCTIONS**

Consultant(s) shall restrict all contact and questions regarding this RFQ and selection process to the individual named herein.

Consultant(s) and their agents are strictly prohibited from lobbying members of representatives from the following: Louisiana Department of Transportation and Development, Acadiana Metropolitan Planning Organization/Acadiana Planning Commission, employees/staff of partner agencies, and any other person(s) involved in the selection process. Failure to comply with this clause shall be grounds for rejection of their respective RFQ submittal as non-responsive.

## **REVISIONS TO THE RFQ**

The AMPO reserves that right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by the AMPO

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to award a contract. The AMPO reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in AMPO's best interest. All materials submitted in response to this announcement become the property of the AMPO, and selection or rejection of a submittal does not affect this right. The AMPO also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.

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**EXHIBIT A**

**EXPECTED SCOPE OF SERVICES**

**Metropolitan Transportation Plan update 2055**  
**Travel Demand Model update**

**Project Overview:**

The overall project is to update AMPO's MTP to 2055. Every 5 years MPO's greater than 200K in population must revise their MTP's. Many tasks take place during the update of an MTP including, but not limited to update of all plans, updating travel demand model and public meetings.

**Project Scope:**

Services to be rendered for this project shall consist of assisting the AMPO in updating the Travel Demand Model, which is a very specific part of the greater MTP update.

Work on the project will include tasks performed by MPO Staff as well as work performed by the consultant. See MPO task sheet.

**Consultant Team Tasks:**

The Consultant shall be responsible for the following model update tasks:

**Task 3.0 Update Street and Highway Networks to 2025 Base Year**

This task is to update the database and travel demand model network that will assist in analyzing future transportation networks, identification of anticipated transportation system deficiencies, and provide support for project prioritization.

- **3.1 Review Existing Models Base Year Network**  
The existing base year model network will be reviewed by the CONSULTANT for use in this MTP and model update. The CONSULTANT will utilize the existing model data files for zonal data, trip tables, network descriptions and traffic assignments from the Acadiana MPO. The data will be downloaded from existing computer files to transferable media by the respective agencies for use by the CONSULTANT. This information will be reviewed to determine additional planning data needs.
- **3.2 Update Street and Highway Network to 2025 Base Year**  
The existing base year network will be reviewed along with current aerial photographs to update the network attributes to a new 2025 base year highway network. The CONSULTANT

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will develop and update these attributes. The attributes will include, but not necessarily be limited to, number of lanes, presence of left turn lanes at major intersections, posted speeds, functional classification, one-way or two-way operation, directional capacity for peak hour and 24-hour time periods. The CONSULTANT will identify coding schemes for each attribute.

Detailed coding of descriptive fields for number of lanes and functional classification will allow reporting of network characteristics (i.e. vehicle miles traveled, vehicle hours traveled, v/c ratios, etc.) by categories identical to the LADOTD functional classification system.

The highway network will include all roadways in the Study Area classified as collectors and above. In certain sections of the Study Area, based on zone and network density, other significant roadways will be added for continuity purposes. Future networks will be developed by the COMSULTANT modifying and building upon the base year network.

#### **Task 4.0 Traffic Counts**

- Identify Traffic Count Locations

Existing traffic counts made in the study area will be provided by LADOTD, Lafayette Traffic & Transportation Dept., APC and the other involved government agencies. Base year (2025) traffic counts will be needed for screenlines, cutlines and other locations. The Acadiana MPO will work with the CONSULTANT to identify the existing locations that counts are needed. All counts shall be compliant with DOTD standards.

While the screenline/cutline comparisons for calibrating the regional model will be in terms of a 24-hour time period, the counts should be directional and in 15 minute or 1-hour intervals for use in Time of Day analyses.

- 4.2 Perform Traffic Counts

The Acadiana MPO working with the CONSULTANT will determine the number and location of traffic counts to be made, the LADOTD and the CONSULTANT will coordinate the collection of traffic counts. Where current traffic counts are not available on network links, prior year daily counts could be factored using adjustment factors provided by LADOTD and possibly Lafayette Consolidated Government from permanent counting stations.

- 4.3 Verification and Checks

The CONSULTANT will verify the 2025 network attributes for plausibility and conduct field checks as necessary to ensure the accuracy of the network description.

- 4.4 Code Traffic Counts to Travel Demand Model

The CONSULTANT will code the traffic count data to the Travel Demand Model.

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**Task 5.0 Update Demographic base year Data (2025) and forecast to year 2055**

This task will involve developing a new 2025 base year demographic data set for use in the model.

- Task 5.1 Development of Base Year (2025) Demographic Data

Demographic data for the transportation models will be obtained and/or estimated for the base year (2025) by the CONSULTANT. Data from the 2020 Census will be the starting point for population. The CONSULTANT will purchase employment data. Other planning data for base year will be obtained with the assistance of LADOTD, which will be provided to the CONSULTANT in electronic format.

- Task 5.2 Demographic Model Input

Planning variables will be developed for each traffic zone, and will include the following typical input data:

- 1) Population
- 2) Retail employment
- 3) Total employment
- 4) Occupied dwelling units
- 5) Total dwelling units
- 6) School attendance

Data will also be updated for “special generators” (i.e., Airport, Hospitals, Universities, etc.) as defined by the Acadiana MPO in working with the CONSULTANT.

- Task 5.3 Verification of Base Year Demographic Data

The CONSULTANT will review the demographic data for accuracy and reasonableness and will conduct field checks of any questionable zones to ensure the reliability of the data variables.

**Task 6.0 Update Scenario Manager and Coding Scheme**

This task will involve updating the Scenario manager for the Acadiana MPO Model.

- Task 6.1 Update Scenario Manager for new projects

The CONSULTANT will take new projects from the vision process and code into the existing Scenario Manager

- Task 6.2 Update Scenario Manager for new version of TransCad

The CONSULTANT will take the existing Code for the Scenario Manager and convert into a usable format for TransCad 8.0 or 10.

- Task 6.3 Update Scenario Manager with all existing new linework

The CONSULTANT will take the new E+C network and code into the Scenario Manager.

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**Task 7.0 Include Doubly Constrained Trip Distribution to Travel Demand Model**

This task will include a feedback loop with congested conditions for zonal to zonal trips in the Trip Distribution step. The CONSULTANT will be performing this work.

- Task 7.1 Probe data with zonal distributions  
Procure probe data and compare trip distribution patterns to existing Acadiana MPO Travel Demand Model patterns. Calibrate and change based off of the differences.
- Task 7.2 Validate Model Components  
Look and calibrate Trip Distribution by trip length

**Task 8.0 Recalibrate and Revalidate Model with Updated Network, data and ADT Using Current Trip Rates and Equations**

Once the Travel Demand Forecasting Model is updated, it will be calibrated so that the link traffic volume estimates produced by the model fall within reasonable variances of the actual ground counts.

- Task 8.1 Develop Base Year (2025) Assignment  
The trip assignment model is the last model in the process and loads the trips onto the network based upon the shortest path between zones and how congested that route becomes. In a capacity restraint assignment, as a particular link's traffic approaches the link's capacity, any additional traffic is diverted to another link, the second shortest path, third shortest, etc. The trip tables developed in the trip distribution process will be summed together and, based on auto occupancy factors, be used to create total and hourly vehicle trip matrices. These matrices will be loaded/assigned to the 2025 network.
- Task 8.2 Validate Model Components  
Each model component (Generation, Distribution and Assignment) will be validated against known data sources. These sources will include the National Cooperative Highway Research Report 365 (NCHRP365), the Nationwide Personal Transportation Study (NPTS), The Institute of Transportation Engineers (ITE) Trip Generation Rates, and the Census Transportation Planning Package (CTPP).
- Task 8.3 Calibrate Models  
A model calibration process will be used to adjust model parameters such that the 2025 network traffic volumes can be accurately simulated by the forecasting model. The assignment results (link traffic volumes) of the base year model runs will be compared to actual base year traffic counts at screenlines, cutlines, cordon line crossings, and other locations as required to determine model calibration adjustments. If the total crossing assigned volume is not within  $\pm 10\%$  of the ground counts, then reasonable adjustments will be made to model factors and/or parameters until the desired precision is achieved. Special attention will be paid to Principal Arterial links in order to reach closer tolerances on those higher volume facilities. An iterative process of model adjustments and traffic assignments will be used in order to attain acceptable estimates of existing traffic volume assignments. Developing the degree of

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correlation between actual field traffic counts versus computer modeled traffic volumes will require adjustments in trip generation and trip distribution parameters in this iterative model calibration process. The results of this task will be the calibrated traffic forecasting model for use in making future year traffic forecasts.

- Task 8.4 Technical Memorandum No.1

A technical report will be prepared which summarizes the results of Tasks 3 - 8.

### **Task 9.0 Develop Travel Forecasts and Identify Deficiencies**

Following completion of calibration of the model to base year conditions, future travel will be projected for the Existing Plus Committed (E+C) network for the year 2055. The process of trip generation, distribution, and assignment will be accomplished by using the input planning variables forecasted for the years 2025, 2035, and 2045 and 2055

- Task 9.1 Develop Existing Plus Committed Network

The first step in identification of roadway needs is the assignment of future (year 2055) traffic volumes to the Existing Plus Committed (E+C) network. The CONSULTANT will compile information on the location and physical characteristics of committed roadway improvements for the study area in coordination with LADOTD, Acadiana MPO, and the local governmental agencies, from which information on committed improvements will be obtained. The E+C network will be coded for input to the forecast model. The E+C network will include existing classified roadways and those committed by LADOTD, Acadiana MPO, and local agencies for implementation.

- Task 9.2 Assign 2050 and 2055 Traffic to E+C Network

The year 2050 and 2055 vehicle trips will be assigned to the E+C network. This assignment will be analyzed to determine future traffic demands and the adequacy, or capacity, of the existing plus committed roadway network to accommodate these projected traffic demands. Future travel demands will be compared to the capacity of the roadway network to identify sections or locations, which are projected to operate at unacceptable levels of service.

- Task 9.3 Assign 2025 and 2035 Traffic to E+C Network

An assignment of each of the intermediate years (2025 and 2035) vehicle trips will be made on the E+C network. These interim assignments will help identify the probable order and magnitude of deficiencies that can be expected in light of forecast development.

### **Task 10.0 Test Existing Plan Projects and Develop Alternative Projects**

Roadway network alternatives for addressing identified long-range (year 2055) needs will be developed and evaluated in this task. This process of alternatives development will result from a team effort involving the Acadiana MPO, CONSULTANT.

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- Task 10.1 Test Existing Plan Projects

The CONSULTANT will code all projects remaining in the existing MTP into the 2055 planning horizon year. These projects will be tested to see how well they address the deficiencies identified in Task 8.

- Task 10.2 Formulate Alternative Networks

Based on assignment results from above, new roadways and facilities will be considered as well as improvements and/or changes to the existing network and land use. Indicators which will help choose needed network additions/improvements include regional Vehicle Miles Traveled (VMT), VMT by functional classification, screenline changes, reasonableness of changes in travel patterns, and average speed or speed by functional classification. This task, along with coordination with LA DOTD, Acadiana MPO general staff and the CONSULTANT, will help determine which proposed roadway alternatives yield the best return on investment and provide a basis for the Metropolitan Transportation Plan. The CONSULTANT will produce scenarios for evaluation using the Scenario Manager so as ensure that the set of selected projects is the most efficient. Each alternative will be executed independently and compared to the 2055 E+C forecast. The results will reveal which combination of strategies best address the identified deficiencies. The details of which improvements or changes are to be included in each network will be identified in concert with the Acadiana MPO.

- Task 10.3 Assign Future Traffic (2055) to Alternative Networks

Future year 2055 traffic assignments will be made for the alternative networks for use in the evaluation of their operational performance and to determine their ability to satisfy projected deficiencies.

- Task 10.4 Alternative Network Evaluation

The CONSULTANT will evaluate the alternative network traffic assignments for review with the Acadiana MPO. A matrix type evaluation process will be used to compare alternatives. This matrix will relate alternatives, and individual elements of alternatives, to evaluation criteria established in Task 1.0. Based on this analysis, a preferred roadway network alternative will be recommended, reviewed with LADOTD, Acadiana MPO, and the local agencies and finalized as the Recommended Long-Range Transportation Needs Analysis for the year 2055. This Needs Analysis will take into consideration the Metropolitan Planning Requirements described in IJJA.

### **Task 11.0 Develop Staged Improvement Plan**

The recommended transportation plan elements will be selected from the Needs Analysis and listed in priority order for the following time intervals: 2025-2035 (Stage I), 2036-2045 (Stage II), 2046-2055 (Stage III).



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- Task 11.1 Development of Implementation Costs

Order-of-magnitude estimates of implementation costs will be developed for each improvement identified in the Needs Analysis. These cost estimates (in 2025 constant dollars) will be prepared for all logical route segments or projects. Typical implementation costs by type of improvement will be those previously developed by LADOTD, Acadiana MPO, and local governmental agencies and furnished to the Acadiana MPO by the respective agencies. Implementation costs will be in terms of “total project cost” as defined in the Metropolitan Transportation Regulations including anticipated construction cost to which industry standard multipliers (agreed on by Acadiana MPO) will be applied for items such as preliminary engineering, construction engineering, indirect costs, contingencies and rights-of-way.

These constant dollars will then be converted to ‘Year-of-Expenditure’ project cost to conform to the IIJA requirements. Constant year dollars will be inflated using an annual compound inflation factor agreed upon by the Acadiana MPO.

- Task 11.2 Financial Assessment

The CONSULTANT will prepare an assessment of the estimated funding availability, which can reasonably be expected to be available from all sources during the plan period. The calculations of available revenue will include a rate-of-growth (ROG) factor as agreed upon by the Acadiana MPO. The Needs Analysis and financial assessment will then be used to prepare a realistic staging program based on anticipated funding levels.

- Task 11.3 Staged Improvement Plan

If the projected funding levels exceed the cost of the Needs Analysis the improvements will be prioritized and allocated to the following time intervals: Stage 1(2025-2035), Stage II (2036-2045), Stage III (2046-2055). However, if the cost of the Needs Analysis exceeds the projected funding, the improvements will be prioritized and allocated to the three stages until the cost of the Staged Improvement Program is not greater than the funding expected to be available.

- Task 11.3.1 Stage 1(2025-2035)

The Stage I (2025-2035) roadway needs shall be those previously identified by LADOTD and local agencies. These improvements shall consist primarily of committee improvements and Transportation System Management (TSM) actions including traffic operational improvements, ride sharing, High Occupancy Vehicle (HOV) lanes and other traffic management concepts.

- Task 11.3.2 Stages II & III

An evaluation of the Years 2036 & 2045 traffic assignments on the E+C Network will be used to designate the remaining improvements in the Needs Analysis to the appropriate Stage. This designation will be made based on the order and magnitude of forecast deficiencies. Working meetings will be held to reach consensus on the recommended staging. The final staged transportation plan will be the product of LADOTD, Acadiana MPO general staff and local agency input.

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- Task 11.3.3 Identification of Unmet Needs  
Projects described in the Needs Analysis that will not be implemented, due to funding constraints, if any, will be listed as Unmet Needs.
  - Task 11.4 Operations and Maintenance  
An analysis of operations and management requirements related to the existing and proposed transportation system will be performed in accordance with the Metropolitan Transportation Regulations through agency consultation with local and state agencies. Attention will be given to operational strategies that have the potential to optimize the performance of the existing system or proposed improvements.
  - Task 11.5 Plan Network Assignment  
A financially constrained network comprised of the E+C Network and all improvements in the three Stages, less Unmet Needs, if any, will be prepared. Using TransCAD the Year 2055 traffic will be assigned to the Plan Network and evaluated using the performance criteria described in Task 1.0. Any remaining deficiencies will be identified.

The product of Task 11.0 will be the Recommended Acadiana MPO Urbanized Area Staged Improvements that will be included in the MTP and presented to the Acadiana MPO for adoption.

#### **Task 16.3 Coordination**

Coordination will continue throughout the duration of the study. It will ensure communication and coordination among Acadiana MPO, CONSULTANT and others who will be involved with study activities. It will ensure that all assignments are clearly defined and delivered on time and consistent with client expectations. Additionally, the CONSULTANT will provide to AMPO monthly progress reports discussing on-going activities including issues to be resolved, schedule changes and any unusual occurrences.

#### **Task 16.4 Consultant Technical Assistance**

The Consultant will provide general Technical Assistance as needed throughout all tasks of model development.