

EXHIBIT 2

SCOPE OF SERVICES

FOR THE

GAINESVILLE URBANIZED AREA

YEAR 2040 LONG RANGE TRANSPORTATION PLAN UPDATE

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INTRODUCTION

Every five years, the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area updates its long range transportation plan. The purpose of this plan update is to encourage and promote a safe and efficient transportation system to serve future year transportation demands. Results of the long range transportation plan process are intended to serve the overall mobility needs of the area, while also being cost effective and consistent with state and local goals and objectives.

The Gainesville Metropolitan Area is located in the center of Alachua County, Florida and incorporates the City of Gainesville, as well as the surrounding urban and transitioning areas. Census 2010 data indicates that this area is inhabited by approximately 188,000 residents and accounts for approximately 75 percent of the total population of the county.

The Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area manages the transportation network and mobility needs for the Gainesville Metropolitan Area and recognizes the inter-connectivity between network accessibility and land use development patterns. Prior decision making has focused on producing a multi-modal transportation network consisting of roads, transit service, bicycle/pedestrian facilities and a regional airport. These modes of transportation provide a foundation for handling the flow of goods and services to and from the area, as well as establish a system for area residents to access jobs, shopping and recreational facilities.

This document presents the tasks and data requirements to identify and develop a list of transportation projects to meet anticipated future demand needs of the Gainesville Metropolitan Area through the Year 2040. Major components of this update process include consistency with federal and state guidelines as established in the Florida Department of Transportation *Metropolitan Planning Organization Program Management Handbook* and significant attention to public participation, mapping, data development and model validation. These components shall establish a policy foundation for long range transportation decisions affecting the Gainesville Metropolitan Area and are described in more detail in the following list of tasks.

Unless otherwise stated, all tasks discussed in the following pages shall be the responsibility of the CONSULTANT.

FEDERAL AND STATE REQUIREMENTS

Federal and state statutes outline the general requirements for long range transportation plan updates and are incorporated in this Scope of Services. These outlines are broadly defined at the federal and state level by the following:

1. Federal Act - Moving Ahead for Progress in the 21st Century Act;
2. 23 Code of Federal Regulations 450.316 and 450.322;
3. Section 339.175, Florida Statutes; and
4. Florida Department of Transportation *Metropolitan Planning Organization Program Management Handbook*.

TECHNICAL TASKS

This Scope of Services is subdivided into five separate tasks that outline the basic requirements of the long range transportation plan update. Unless otherwise noted, the CONSULTANT is expected to fulfill each of the defined tasks and provide written documentation in the form of technical reports and/or technical memorandums. The CONSULTANT shall provide appropriate project management and coordination sufficient to assure production control and assistance to the Project Manager. The tasks to complete the long range transportation plan update are defined as follows:

- Task 1: Public Involvement - It is imperative that the public involvement aspect of this update conforms to federal and state guidelines and provide ample opportunity for public review and comment.
- Task 2: Data Collection, Mapping and Data Development - Aspects of this task include development of the highway and transit networks, review and update of the traffic analysis zones, development of socioeconomic data and the research of future financial resources.
- Task 3: Data Review and Verification - Task 3 includes a careful review and analysis of socioeconomic data and model input files.
- Task 4: Model Update and Validation - This task involves the validation of each of the components of the travel demand model to federal and state recommended thresholds.
- Task 5: Year 2040 Transportation Needs Plan and Cost Feasible Plan - Elements within this task provide for the development of the Year 2040 Needs Plan and the Year 2040 Cost Feasible Plan.

TECHNICAL REPORTS

For reference purposes, it is important that the entire work effort be well documented. Technical reports detailing methodology and technique are required for each task. Specifically, the following seven technical reports are required.

- Technical Report 1- documents public involvement in the plan development process.
- Technical Report 2- develops required maps, background data and financial resource information.
- Technical Report 3- documents data review and verification.
- Technical Report 4- documents model update and validation.
- Technical Report 5- documents the development of the Year 2040 Needs Plan.
- Technical Report 6- documents the identification, evaluation and selection of the Year 2040 Preliminary and Constrained Needs Plan, all Needs Plan Alternatives and the Year 2040 Needs Plan project ranking.
- Technical Report 7- documents the development of the Year 2040 Cost Feasible Plan.

TASK 1 - PUBLIC INVOLVEMENT

Public participation is a critical component of the long range transportation planning process. Therefore, the CONSULTANT shall proactively implement the long range transportation plan strategies and procedures of the Public Involvement Plan so that the public shall have early and continuing involvement in the plan development process. This public participation process is intended to provide sufficient opportunity for involvement of public officials (including elected officials) and citizens in the development of the long range transportation plan before its approval by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area.

The CONSULTANT shall develop a Public Participation Plan that contains a public involvement schedule and documents public participation activities in accordance with Moving Ahead for Progress in the 21st Century requirements. In the first page or two of the Public Participation Plan, the CONSULTANT shall identify a contact person, as well as general contact information concerning how to get involved.

The CONSULTANT shall be responsible for conducting the following public workshops and public hearings:

- Public workshop #1 early in the plan update process to give a status report on the current long range transportation plan implementation and to discuss the development of the vision statement, goals, objectives and policies;
- Public workshop #2 on the results of testing and evaluating alternative networks one and two discussed in Task 5;
- Year 2040 Needs Plan public hearing;
- Public workshop #3 on the adopted Year 2040 Needs Plan to obtain public input on projects that should be selected for the draft Year 2040 Cost Feasible Plan; and
- Year 2040 Cost Feasible Plan public hearing.

The public participation schedule shall provide for outreach to Federal, State, Tribal wildlife, land management and regulatory agencies. In addition, the public participation schedule shall also provide for outreach to citizens, affected public agencies, agencies responsible for natural resources, environmental protection, conservation and historic preservation, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled and other interested parties with responsible opportunities to be involved in the development of the long range transportation plan.

1.1 PUBLIC PARTICIPATION PLAN PROCESS AND DOCUMENTATION

The CONSULTANT shall implement public participation activities and provide documentation in a technical report and as part of the final report that describes explicit procedures, strategies and outcomes for:

1. Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including but not limited to, a reasonable opportunity to comment on the proposed long range transportation plan;
2. Providing timely notice and reasonable access to information about transportation issues and processes;
3. Employing visualization techniques to describe proposed long range transportation plans for use at public workshops and meetings;
4. Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;
5. Holding public meetings at convenient and Title VI-compliant locations and times;
6. Providing, as needed, planning documentation in Spanish to address Limited-English proficiency strategy of the Public involvement Plan;
7. Demonstrating explicit consideration and response to public input received during the development of the long range transportation plan;
8. Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;
9. Consulting with Federal, State, Tribal, wildlife, land management and regulatory agencies and agencies responsible for natural resources, environmental protection, conservation and historic preservation; and
10. Providing an additional opportunity for public comment, if the final long range transportation plan differs significantly from the version that was made available for public comment by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts.

When significant written and oral comments are received on the draft long range transportation plan (including the financial plan), the CONSULTANT shall prepare a summary, analysis and reports on the disposition of public comments and include this material as part of the adopted Year 2040 Cost Feasible Plan Final Report. Agendas for all public hearings shall be available in Braille or large print upon request, as well as recorded versions of the same. With adequate advance notice, sign language interpretation shall be available for all public meetings. The availability of these media alternatives shall be advertised.

Elements of this work task are integrated throughout the study process and include the following:

1. Development of Vision Statement, Goals, Objectives and Evaluation Criteria;
2. Presentations to the Citizens Advisory Committee, Technical Advisory Committee, Bicycle/Pedestrian Advisory Board and the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area;

3. Public presentations;
4. Preparation of an Executive Summary; and
5. Preparation of a Year 2040 Plan poster similar in design to the Year 2035 Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Livable Community Reinvestment Plan poster.

1.2 PUBLIC INVOLVEMENT STRATEGY IMPLEMENTATION

The CONSULTANT shall implement the Public Involvement Plan strategies for the long range transportation plan update which includes outreach to the elderly, persons with disabilities, minorities and low-income community and other groups traditionally under-represented in the plan update process. Strategies to solicit input from the business, environmental and other communities of local significance, such as focus groups, shall also be implemented.

- 1.2.1 Communication approaches to be used include the use of periodic newsletters and website. This website shall have a standalone address and there will be a direct link from the website of the North Central Florida Planning Council. The purpose of this website is to provide access to materials prepared during the plan update process.
- 1.2.2 The CONSULTANT shall develop a vision statement and a list of goals and objectives that shall govern the development of the long range transportation plan, including long-range and short-range strategies and actions consistent with state and local goals and objectives. The CONSULTANT shall develop a process that ensure the public has adequate opportunity to provide input in developing the vision statement and the goals and objectives for the long range transportation plan.

The CONSULTANT shall develop draft goals and objectives that include a review of the goals and objectives adopted by the City of Gainesville and Alachua County in their Comprehensive Plans. The State Comprehensive Plan and the North Central Florida Strategic Regional Policy Plan shall also be reviewed. Efforts shall be made to ensure that the goals and objectives of this update are consistent with State, regional and local comprehensive plans.

The CONSULTANT shall consider the goals and objectives identified in the Florida Transportation Plan.

The CONSULTANT shall include draft goals concerning safety and security. This information shall be provided to the public during the first public workshop.

- 1.2.3 The CONSULTANT shall incorporate visualization techniques in the public participation process to describe various aspects of the long range transportation plan.
- 1.2.4 The CONSULTANT shall participate in at least eight briefings each that shall be held for the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Citizens Advisory Committee, Technical Advisory Committee and Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, including representatives of the Florida Department of Transportation. The Alachua County Traffic Safety Team, Alachua County Transportation Disadvantaged Coordinating Board and Bicycle/Pedestrian Advisory Board shall be invited and encouraged to attend briefings that are made to the Citizens Advisory Committee.

The CONSULTANT shall be responsible for all handout material, graphics, visual aids and equipment necessary for these presentations. The purpose of these briefings shall be to discuss the progress of the update, key decisions and milestones.

- 1.2.5 The CONSULTANT shall advertise and conduct at least three public workshops during the planning process. The first public workshop shall inform the public of the long range transportation plan update and occur early in the project to outline the study scope, goals and timing. A portion of each meeting shall be devoted to questions and answers and the public shall be asked to identify and provide information about transportation problem areas.

The Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall conduct a minimum of two public hearings, one to solicit public comment on the proposed Year 2040 Needs Plan and one to solicit public comment on the proposed Year 2040 Cost Feasible Plan.

- 1.2.6 The CONSULTANT shall document the entire public involvement effort in Technical Report 1. This document shall include photographs, a review of materials and subjects discussed, recurrent issues or themes and results of the process. The CONSULTANT is responsible for preparing meeting minutes for all public workshops, meetings and hearings, including documenting all public comments. All meeting minutes, emails, comments from the public and related information concerning the draft long range transportation plan and technical reports shall be compiled in Technical Report 1.

TASK 2 - DATA COLLECTION, MAPPING AND DATA DEVELOPMENT

The purpose of this task is to develop the maps, model networks and data files needed to validate and run the transportation model. Data inputs to the model include socioeconomic data in the form of zonal data (ZDATA) files, traffic counts and transit ridership. This task shall also develop existing and projected financial resources to fund needed transportation projects by the Year 2040. Technical Report 2 shall describe the entire map development effort, as well as the development of zonal data (ZDATA) and the research of future financial resources.

2.1 DATA COLLECTION

The CONSULTANT shall collect datasets from the existing model and determine if they contain any usable information. The CONSULTANT shall collect, create, and/or compile datasets necessary to validate and calibrate the Gainesville Urban Area Transportation System travel demand model. The CONSULTANT shall revise screenlines and cutlines as necessary. The CONSULTANT shall collect and utilize all necessary traffic count data. The CONSULTANT shall conduct a roadway inventory to develop a 2010 Highway System Network including facility type, number of travel lanes in each direction, presence of turn lanes, posted speed, functional classification and other information as necessary. This roadway inventory shall incorporate Florida Department of Transportation Roadway Characteristics Inventory system data. The CONSULTANT shall be responsible for the coding, reviewing, editing and debugging of the 2010 Base Year network. The CONSULTANT shall collect necessary transit service data in order to construct transit networks and validate/calibrate the Gainesville Urbanized Area Transportation System model. In addition, the CONSULTANT shall use the bicycle and pedestrian facility inventory maintained by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and collect any additional appropriate bicycle and pedestrian data. This data shall be incorporated in the model as a layer file similar to the transit network.

- 2.1.1 The screenlines and cutlines developed for the last plan update shall be revised as appropriate and used in the validation of the 2010 Base Year Model. The CONSULTANT shall be responsible for the review and modification of the screenlines and cutlines.
- 2.1.2 The CONSULTANT shall be responsible for all traffic count data necessary to validate/calibrate the 2010 Base Year Model. Extensive traffic count data has been collected by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, Florida Department of Transportation, the City of Gainesville, Alachua County and other partner agencies. This data shall be made available to the CONSULTANT. The CONSULTANT shall review the traffic count data/locations for adequacy and shall adjust the counts to average weekday peak season counts. If available, seasonal adjustment factors for local roads shall be used where appropriate.
- 2.1.3 A highway network shall be developed by the CONSULTANT for the 2010 Base Year. This network shall include double digit coding to allow for more accurate facility type representation. The revised model network shall incorporate changes to networks since the last plan update.
- 2.1.4 A Transit Network shall be developed by the CONSULTANT for the 2010 Base Year. The structure of this model system will allow for different modes of transit, such as bus rapid transit, fixed rail, streetcar and trolley.

- 2.1.5 Transit service data necessary to validate/calibrate the travel demand model shall be obtained from the Regional Transit System by the CONSULTANT for all City of Gainesville, Alachua County and University of Florida routes. All appropriate data obtained from special transit studies shall be reviewed and incorporated by the CONSULTANT where suitable.

Transit service data shall include, but not be limited to:

- A. AM Peak Screenline Ridership by route, mode and corridor;
- B. Midday (off-peak) Screenline Ridership by route, mode and corridor;
- C. Average Weekday Ridership by route, mode and corridor; and
- D. Average Weekday Transfer Data for AM Peak and Midday Ridership transferring between modes and between routes of the same mode.

2.2 MAPPING

The CONSULTANT shall be required to provide maps and digital copies of the data collected to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area to facilitate the review and revision of the data prior to its use during model validation and calibration. Maps and data may include the study area boundary, the principal street system, traffic analysis zones, the highway system network maps (link/node plots) and data files, the transit system network maps and data files and other such maps that shall be used as working instruments.

All shapefiles shall be delivered to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area by the CONSULTANT in Florida Standard Urban Transportation Modeling Structure format and in Economic and Social Research Institute ArcView shapefile format (Version 9.0 or later). Network maps shall be in line format with all roadway and/or transit network attributes and shall be used on the City of Gainesville Street Centerline File, unless an alternative road dataset is approved by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area. The data shall be projected using North American Datum of 1983 (NAD83) North Florida State Plane Feet coordinate system unless an alternative projection system is approved by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area.

- 2.2.1 A new Traffic Analysis Zone Map shall be developed. This task shall be prepared by the CONSULTANT and provided to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for review and approval prior to model validation.
- 2.2.2 A Highway System Network Map shall be developed by the CONSULTANT for the 2010 Base Year Network and include double-digit coding for more specific facility and area type designations. The CONSULTANT shall provide draft Highway System Network maps and data to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for review and approval prior to model validation. The Network shall also utilize the true shape display function in Cube Voyager for more accurate graphical representation.

- 2.2.3 A Transit System Network Map shall be developed by the CONSULTANT for the 2010 Base Year. The format of this map shall be consistent with the transit base year network for the last plan update. The CONSULTANT shall provide draft Transit System Network maps and data to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and Regional Transit System for review and approval prior to model validation.
- 2.2.4 For purposes of documenting mode split, a Bicycle Facilities Network Map shall be developed by the CONSULTANT for the 2010 Base Year. The CONSULTANT shall provide draft Bicycle Facilities System Network maps and data to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for review and approval prior to model validation. Any information provided by the CONSULTANT may be used by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for creating an updated bicycle map in an effort separate from this update of the long range transportation plan.
- 2.2.5 For purposes of documenting mode split and identifying gaps in access to transit, a Sidewalk Network Map shall be developed by the CONSULTANT for the 2010 Base Year. The CONSULTANT shall provide draft Sidewalk Network maps and data to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and Regional Transit System for review and approval prior to model validation.
- 2.2.6 For purposes of documenting freight considerations, a Freight Corridor Map shall be developed by the CONSULTANT for the 2010 Base Year. The CONSULTANT shall provide a draft Freight Corridor Map and data to Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for review and approval prior to model validation. The CONSULTANT shall use the Statewide Freight Model for identifying long-haul truck distribution patterns.
- 2.2.7 The development of all maps shall be documented by the CONSULTANT in Technical Report 2.

2.3 DATA DEVELOPMENT

The socioeconomic data developed for the Year 2040 Update shall be prepared by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area staff for both Base Year 2010 and Future Year 2040. Base year 2010 data shall be developed by using information obtained from the 2010 Census, 2008 National Household Travel Survey Florida Add-on program, Info USA employment data, Chamber of Commerce Employment Statistics, State of Florida Agency for Workforce Innovation and Property Appraiser records where necessary.

The scope of services for this plan update shall include testing and evaluating one future land use scenario developed by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area staff. This scenario represents the most realistic forecast of where people shall live and work in Alachua County in the Year 2040 based upon currently adopted comprehensive plans.

Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the CONSULTANT shall also work with the University of Florida to develop specific socioeconomic data related to model production and attraction rates for the University of Florida campus and surrounding areas. Specific information regarding campus trip generation rates, mode splits and auto occupancy rates shall be included in the Year 2040 Update by the CONSULTANT.

The CONSULTANT shall assist Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area in review of this data, perform necessary edit checks and make any corrections as may be required by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area. Additionally, the CONSULTANT shall deliver all zonal data (ZDATA) in Florida Standard Urban Transportation Modeling Structure format and in ArcView shapefile format for the traffic analysis zone and boundary maps.

The CONSULTANT shall obtain data relating to travel demand for airports, intermodal facilities, recreation areas, significant commercial activity centers and freight distribution facilities. The intent is to accumulate sufficient data suitable for analyzing the adequacy of "access" to such facilities. Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the CONSULTANT shall coordinate the development of this list with the City of Gainesville, Alachua County and the Florida Department of Transportation.

The CONSULTANT shall ensure that all data is based upon the latest available estimates and assumptions for population, land use, travel, employment, congestion and economic activity.

2.3.1 Zonal Data One (ZDATA1): Population and household data for each model traffic analysis zone shall be obtained from the following sources by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area:

- A. 2010 Base Year population and housing data for each traffic analysis zone shall be obtained from the 2010 U.S. Census and the Census Transportation Planning Package for the following:
 - 1. Population and the number of single-family and multi-family units;
 - 2. Auto availability;
 - 3. Percentage of vacant single-family and multi-family units;
 - 4. Population and number of single-family and multi-family units occupied by non-permanent residents; and
 - 5. According to Florida Standard Urban Transportation Modeling Structure for trip generation, add median family income variable if this data is available.

This information shall be cross referenced with 2010 Property Appraiser parcel records.

- B. Future year population and income forecasts shall be obtained from the University of Florida, Bureau of Economic and Business Research. These forecasts shall be used as control totals for future population and provide a basis for estimating other socioeconomic factors, such as housing and employment.
- C. The number of hotel/motel units shall be obtained from the Florida Department of Business Regulation, Division of Hotels and Restaurants. This data shall be supplemented by a Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area survey of hotel/motels to determine the percentage of occupied units and persons per occupied unit during the peak season.

D. The percentage of vacant single-family and multi-family dwelling units as identified in the Year 2010 Census data shall be used.

2.3.2 Zonal Data Two (ZDATA2): 2010 Base Year employment data shall be developed by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for each traffic analysis zone, classified by type (service, commercial, manufacturing and industrial). This data shall be verified using Property Appraiser records, occupational licenses and Info USA data provided by the Florida Department of Transportation. Employment data shall be cross referenced with the Chamber of Commerce large employers database for consistency (as it relates to size and location) and with Florida Agency for Workforce Innovation information.

A. Parking cost shall be developed for the City and University of Florida campus traffic analysis zones where short-term (average 3 hours) paid parking is available and/or where long-term (average 9 hours) paid parking is offered.

B. 2010 Base Year public school enrollment shall be obtained from the Alachua County School Board. Comparable data shall be obtained from private schools within the study area. Private school enrollment data is available from the Florida Department of Education.

2.3.3 Zonal Data Three (ZDATA3): The CONSULTANT shall develop data for airports, universities, regional shopping malls, military installations, which function as special generators.

2.3.4 Zonal Data Four (ZDATA4) and External-External Trips (EETRIPS) files developed for the last plan update shall be reviewed and updated by the CONSULTANT.

2.4 DESIGNATION OF SCREENLINES

The screenlines and cutlines developed for the last plan update shall be revised as appropriate and used in the validation of the 2010 Base Year Model by the CONSULTANT.

2.5 TRAFFIC COUNT DATA

The CONSULTANT shall be responsible for all traffic count data necessary to validate/calibrate the 2010 Base Year Model. Extensive traffic count data has been collected by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and Florida Department of Transportation and shall be made available to the CONSULTANT. The CONSULTANT shall review the traffic count data/locations for adequacy and shall adjust the counts:

- to average weekday peak season counts; and
- to account for heavy vehicle traffic.

If available, seasonal adjustment factors for local roads developed by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall be used where appropriate.

2.6 HIGHWAY AND TRANSIT NETWORKS

2.6.1 A highway network shall be developed by the CONSULTANT for the 2010 Base Year. This network shall be compatible with the ArcView Geographic Information System format. The structure of this network shall be consistent with, but not limited to, the highway network for the previous update. This network shall also include double digit coding to allow for more accurate

facility type representation and true shape format for graphical representation. The revised model network shall incorporate changes to networks since the last plan update.

2.6.2 A Transit Network shall be developed by the CONSULTANT for the 2010 Base Year. This network shall be compatible with the ArcView Geographic Information System format. The structure of this model system shall be consistent with the transit base year network for the last plan update.

2.7 TRANSIT SERVICE DATA

Transit service data necessary to validate/calibrate the travel demand model shall be obtained from the Regional Transit System by the CONSULTANT for both City and University of Florida campus routes. All appropriate data obtained from special transit studies shall be reviewed and incorporated by the CONSULTANT where suitable.

Transit service data shall include, but not be limited to:

- A. AM Peak Screenline Ridership by route, mode and corridor;
- B. Midday (off-peak) Screenline Ridership by route, mode and corridor;
- C. Average Weekday Ridership by route, mode and corridor; and
- D. Average Weekday Transfer Data for AM Peak and Midday Ridership transferring between modes and between routes of the same mode.

2.8 DATA PROJECTIONS

Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall develop and project the socioeconomic data files Zonal Data One (ZDATA1) and Zonal Data Two (ZDATA2) for the Year 2040. If available, population projections developed by the Bureau of Business and Economic Research shall be used as control totals. The CONSULTANT shall be responsible for developing the Zonal Data Three (ZDATA3), Zonal Data Four (ZDATA4) and External-External Trips (EETRIPS) files for the Year 2040. The Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the North Central Florida Regional Planning Council, the Florida Department of Transportation, the City of Gainesville and Alachua County shall also participate in this effort. In addition, representatives from other municipalities in Alachua County shall also be invited to participate in developing this information.

The methodology used to project transit ridership developed for the Regional Transit System Transit Development Plan, the Regional Transit System Comprehensive Operational Analysis and the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area adopted Year 2035 Plan shall be used to project future transit ridership. This data shall be distributed to existing and projected Regional Transit System routes.

The methodologies used to project bicycle usage, heavy vehicle activity and pedestrian activity shall be developed:

- consistent with multimodal policies in the Alachua County and City of Gainesville comprehensive plans; and

- in coordination with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area.

As appropriate, these factors shall be used to project future highway traffic and transit ridership.

2.9 FINANCIAL RESOURCES

The CONSULTANT shall be responsible for the accumulation and aggregation of information regarding existing and projected funding sources for modifications outlined in the Year 2040 Needs Plan that shall be used in the development of the Year 2040 Cost Feasible Plan. The CONSULTANT shall develop estimates of funds that are anticipated to be available to support Year 2040 Cost Feasible Plan implementation with the Florida Department of Transportation. Cost Feasible Plan dollars shall be reported in year of expenditure dollars.

2.9.1 IDENTIFY AND PROJECT AVAILABLE RESOURCES

The CONSULTANT shall obtain historical financial information relative to the funding of transportation services within the study area from appropriate federal, state and local agencies. Based on this historical information, and the planning data forecast prepared in the development of the zonal data (ZDATA), potential financial resources shall be forecasted for the Year 2040. The CONSULTANT shall report future revenues by funding category. Included in this information shall be financial information from the latest adopted Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Transportation Improvement Program.

2.9.2 IDENTIFY SYSTEM OPERATIONS, MAINTENANCE AND CAPITAL COSTS

The CONSULTANT shall confirm revenues and costs related to system operations and maintenance activities covered in the long range transportation plan. The financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to operate and maintain Federal-aid highways and public transportation.

2.9.3 IDENTIFY NEW PROJECT FUNDING SOURCES

The funding available for new projects is the difference between the funds reasonably expected to be available for transportation modifications minus the funds required to construct committed projects and those funds required to operate and maintain the transportation system. This difference shall be the funding available to develop the Year 2040 Cost Feasible Plan.

2.9.4 IDENTIFY AND PROJECT POTENTIAL FUNDING SOURCES

Alternative funding sources such as bonds, transit fares, tolls, special taxing districts, impact fees and local option gas tax shall also be investigated and shall be included in the final report by the CONSULTANT as potential funding sources for projects not included in the Year 2040 Cost Feasible Plan. All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

Should any of these alternatives sources be recommended to fund projects in the Year 2040 Cost Feasible Plan, strategies to ensure the availability and commitment of these sources shall be included as part of the recommendation. These strategies must include a plan of action

describing the steps necessary to enact the sources. The analysis shall discuss past successes or failures to secure similar funding sources.

If the long range transportation plan assumes a new revenue source as part of the Year 2040 Cost Feasible Plan, the following information shall be included in the text: the source shall be clearly explained; why it is considered to be reasonably available; when it will be available; what actions would need to be taken for the revenue to be available; and what would happen with projects if the revenue source was not available. If, for example, the most recent action of a governing body, or a referendum of the public, defeated a similar revenue source, then the new revenue source may not be included in the Year 2040 Cost Feasible Plan unless the CONSULTANT can justify the revenue source and explain the difference between the action that failed and the action being proposed. This applies to all revenue sources in the long range transportation plan (i.e. federal, state, local, private, etc.).

2.9.5 TRANSPORTATION SYSTEM OPERATIONS AND MAINTENANCE

The financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways, as defined by 23 United States Code 101(a)(5), and public transportation, as defined by Title 49 United States Code Chapter 53. The system level costs for operations and maintenance shall be included in the main summary plan document, in addition to the technical report, as a short narrative for both the state and local systems. This material shall also discuss how this information was developed.

2.9.6 YEAR OF EXPENDITURE DOLLARS

The CONSULTANT shall use an inflation rate for revenue and cost estimates to reflect year of expenditure dollars based on reasonable financial principles and information.

2.10 TECHNICAL REPORT 2

The CONSULTANT shall document in Technical Report 2 the entire data development process detailed in Tasks 2.1 through 2.9. As noted earlier, documentation of all tasks, including the development of all maps, data and financial resources, shall be in the form of Technical Memoranda. These memoranda shall be delivered to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task by the CONSULTANT. The technical memoranda shall clearly define all of the facility attributes and their purpose in the model.

The latest Florida Department of Transportation Revenue Forecast Handbook shall be used to develop an appendix that reflects the use of federal and state funding for non-capacity projects. This appendix shall be made part of Technical Report 2. Similar information shall be provided to document local and/or privately funded projects.

TASK 3 - DATA REVIEW AND VERIFICATION

The purpose of this task is to review the model inputs and outputs to ensure that the data sets are adequate for planning purposes. The CONSULTANT shall document completion of each task in a technical memorandum. All Technical Memoranda shall be delivered to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task by the CONSULTANT.

3.1 REVIEW ZONAL DATA (ZDATA) INPUTS

The CONSULTANT shall review the zonal data (ZDATA) to verify that it is in the standardized model format, is accurate, logical and properly coded. This review shall include the use of Land Use Check (LUCHECK), or similar software programs, as well as random manual checks. All errors and or deviations shall be corrected and documented by the CONSULTANT. Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall be notified by the CONSULTANT of all errors/corrections/changes through a technical memorandum.

- 3.1.1 The traffic analysis zone structure shall be analyzed by the CONSULTANT based on the number of productions and attractions generated. The necessary changes shall be made by the CONSULTANT to ensure a homogeneous traffic analysis zone structure in which zones are compatible as to the number of trips generated. The socioeconomic data shall also be checked for statistical validity and ratio comparisons.
- 3.1.2 The CONSULTANT shall incorporate special generators identified in Task 2 and ensure compatibility with all other socioeconomic data.
- 3.1.3 The CONSULTANT shall make all necessary changes related to the adjustments made to traffic analysis zone boundaries, including all the zonal data (ZDATA) files and all the Network Files. This requirement shall be clearly documented. Maps shall be provided, where necessary, (such as with traffic analysis zone splits) along with changes in data. Also, the process of delineating traffic analysis zones splits shall also be documented. All activities under this task shall be coordinated with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the Florida Department of Transportation, the City of Gainesville and Alachua County.

3.2 REVIEW 2010 HIGHWAY AND TRANSIT NETWORK

The CONSULTANT shall review the Highway Network for coding errors in facility types, area types, number of lanes and coordinates.

- 3.2.1 The review of the Highway Network shall also include the review of all directions and turn prohibitors.
- 3.2.2 The CONSULTANT shall review the network to determine whether links should be added or deleted to obtain a better assignment and a better reflection of the actual travel pattern.
- 3.2.3 The CONSULTANT shall review the coding of Interstate facilities to ensure that directional links, ramp systems and interchanges are correctly coded.
- 3.2.4 Double digit coding shall be used for area and facility type identification on all links.

3.2.5 All necessary corrections shall be made by the CONSULTANT and fully documented and mapped.

3.2.6 All input files and other related transit files shall be reviewed and updated as needed.

3.2.7 The CONSULTANT shall maintain and update bicycle facility coding.

3.3 REVIEW 2010 TRAFFIC COUNT AND 2010 TRANSIT RIDERSHIP DATA

The CONSULTANT shall review all traffic counts for accuracy and consistency. All traffic counts shall represent peak season weekday traffic and shall be reviewed and approved by the Florida Department of Transportation, Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the City of Gainesville and Alachua County prior to model input.

3.3.1 The CONSULTANT shall review the location and number of counts available to ensure that screenlines, cutlines and cordon lines are fully represented. The CONSULTANT shall also review the number of counts available within each cell matrix for each facility type and area type for the purpose of validation/calibration.

3.3.2 The CONSULTANT shall be responsible for the review of all transit service data and any other input variables needed for the transit and access modes. This effort shall include a review and use of data developed for the Regional Transit System Transit Development Plan.

3.4 REVIEW TRIP GENERATION RATE

The CONSULTANT shall review trip rates contained in input files for the study area for multi-family and single-family dwelling units in the cell matrixes used in the Gainesville Urbanized Area Transportation System Model. Modifications to the standard trip generation shall be based on 2008 National Household Travel Survey Florida Add-on Program for Alachua County. Variable attraction rates shall be used to add flexibility to the model. All Tranplan-Fortran Trip Generation modules shall be converted into a Cube Voyager platform.

The CONSULTANT shall review the trip rate concerning the total number of productions and attractions in the area. All zonal data (ZDATA) files shall be double checked if the output of the generation step falls beyond the acceptable range of 10,000 trips per traffic analysis zone.

3.5 REVIEW TRIP LENGTH DISTRIBUTION

The CONSULTANT shall review, and if necessary update, the Friction Factor files used in the last plan update and review the trip length distribution curves for each trip purpose.

3.6 REVIEW AUTO OCCUPANCY RATES

The CONSULTANT shall compare the Gainesville Urbanized Area Transportation System model automobile occupancy rates to results of the 2010 Census and the Census Transportation Planning Package and revise where necessary.

3.7 REVIEW TRANSIT PARAMETERS

The CONSULTANT shall review and, if necessary, revise the Florida Standard Urban Transportation Modeling Structure system files to ensure that all modes, local bus, express bus and walk modes,

currently used in the study area are accommodated. The CONSULTANT shall review and update the parameters used in the input files based on information obtained from the household travel behavior survey and on data used in other urbanized areas of similar size within Florida. The CONSULTANT shall coordinate this task with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, Regional Transit System and the Florida Department of Transportation.

3.8 TECHNICAL REPORT 3

The CONSULTANT shall prepare a Technical Memorandum for each of the tasks under Task 3. All Technical Memoranda are to be delivered to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task by the CONSULTANT. Once the review as outlined under Task 3 has been completed, the CONSULTANT shall document completion of Task 3 in Technical Report 3. This Technical Report may consist of an assemblage of the required Technical Memoranda.

TASK 4 - MODEL UPDATE AND VALIDATION

The purpose of this task is to update, validate and calibrate the 2010 Base Year Model with 2010 traffic counts and transit ridership figures. The CONSULTANT shall use the Gainesville Urbanized Area model developed by the Florida Department of Transportation and shall follow the process outlined below for the validation/updating and calibration purposes.

The end product of this task shall be a validated travel demand model capable of forecasting and evaluating future travel demand for alternative highway and transit networks using Cube Voyager as the primary Florida Standard Urban Transportation Modeling Structure engine. The entire validation process shall be documented in Technical Report 4 and shall include a summation of each of the related technical memoranda.

The CONSULTANT shall document the completion of each task in a Technical Memorandum. All Technical Memoranda shall be delivered to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task by the CONSULTANT. Documentation shall include flow charts, a step-by-step procedural guide for the complete model set and identification of all parameters specific to the Gainesville Urbanized Area Transportation System travel model. Details shall be provided describing key decisions and conclusions from each step of the process, including trip generation, trip distribution, mode-split and traffic assignment to completion.

The acceptable or tolerable range/limits for the various parameters generated in the model validation procedures that follow shall be those established by the Florida Department of Transportation and Federal Highway Administration. These parameters are documented in the Florida Department of Transportation publication entitled *Florida Standard Urban Transportation Modeling Structure - Cube Framework Phase I Default Model Parameters*, dated September 27, 2007. The model calibration and validation process shall follow the procedures in the report entitled *Florida Standard Urban Transportation Modeling Structure - Cube Framework Phase II Model Calibration and Validation Standards Final Report*, dated October 2, 2008.

The CONSULTANT shall provide all associated files in a format compatible with Cube Voyager as the primary Florida Standard Urban Transportation Modeling Structure engine. All Tranplan modules shall be converted to a Cube Voyager environment. The CONSULTANT shall ensure that the final model has been converted to a fully operational Cube Voyager platform.

4.1 VALIDATE EXTERNAL TRIPS

The CONSULTANT shall review and, if necessary, update the Zonal Data Four (ZDATA4) and External-External Trips (EETRIPS) files developed for the last plan update.

4.1.1 The CONSULTANT shall perform a Base Year assignment using Year 2010 Zonal Data Four (ZDATA4) and External-External Trips (EETRIPS) files. Results of this model run shall be reviewed by the CONSULTANT to compare the volume/count ratio on the cordon line capturing the links connecting the external stations to actual counts.

4.1.2 The CONSULTANT shall compare the projected 2040 volumes at the external stations with the growth rates of the adjacent counties, as well as the historic growth rate at the count stations. Adjustments to the Zonal Data Four (ZDATA4) and External-External Trips (EETRIPS) files shall be made as necessary.

4.2 VALIDATE THE TRIP GENERATION MODEL

The CONSULTANT shall review and, if necessary, update the input files developed for the last plan update. All revisions shall be documented in the accompanying Technical Memorandum.

- 4.2.1 Based on the results of the distribution and assignment process, the CONSULTANT shall identify the special generators. The output of the Trip Generation Model shall be analyzed at the traffic analysis zone level.

At the traffic analysis zone level, the CONSULTANT shall review the total number of productions and attractions generated by the Year 2040 Model using the methodology described in the Florida Department of Transportation publication entitled *Florida Standard Urban Transportation Modeling Structure - Cube Framework Standard Trip Generation and Distribution Models, Draft Technical Memorandum No.1 Trip Generation Review and Recommendations*, dated March 2009 to ensure a proper zone size and trip range per zone.

- 4.2.2 At the County level, the CONSULTANT shall conduct an analysis to ensure a direct correlation between land use and the relative number of productions and attractions. The total number of unadjusted attractions relative to the total number of adjusted attractions/productions shall be compared with the Institute of Transportation Engineers ratios and other national ratios, as well as the percentage of total trips, by purpose, of the total number of trips produced.

- 4.2.3 The statistical information provided as part of the Trip Generation Model output, such as total permanent population, total number of employees, number of dwelling units and truck generation by class, shall be checked against Census information and local data. In addition, all ratios, such as number of persons per dwelling unit, shall be checked against national ratios. Any major deviations from the above mentioned totals and/or ratios shall be traced back to the Zonal Data One (ZDATA1) and/or Zonal Data Two (ZDATA2) file(s) and researched, corrected and/or documented in the Technical Memorandum.

4.3 VALIDATE THE TRANSIT PATH BUILDING MODEL

The CONSULTANT shall review all of the traffic analysis zones reported in the output file as not having access to transit. These traffic analysis zones shall be double checked against the transit ridership information obtained by the CONSULTANT.

- 4.3.1 All transfer fares, transfer points, maximum and minimum limits on all parameters, such as waiting time, transfer time, walking distances, allowed mode transfers, park-and-ride connections and walk network connections, shall also be checked.

- 4.3.2 The CONSULTANT shall correct all errors in the morning and Midday Routecards and input files. All identified errors shall be corrected and documented in a Technical Memorandum. Further corrections may be necessary after the transit and highway assignments have been run.

4.4 VALIDATE THE TRIP DISTRIBUTION MODEL

The CONSULTANT shall validate the trip distribution model consistent with threshold parameters established by the Florida Department of Transportation in the report entitled *Florida Standard Urban Transportation Modeling Structure Cube Framework Phase 1* and consider suggestions from the report entitled *Florida Standard Urban Transportation Modeling Structure - Cube Framework Standard Trip Generation and Distribution Models, Draft Technical Memorandum No.2 Trip Distribution Review and Recommendations*, dated June 2009. This process shall be documented in a Technical Memorandum and identify major revisions to model input files necessary to meet the identified minimum thresholds.

- 4.4.1 The CONSULTANT shall review and document the percentage of intrazonal trips and ensure that no trip purpose exceeds the five percent threshold. If there are purposes that exceed this threshold, the CONSULTANT shall analyze the trip distribution patterns at the traffic analysis zone level.
- 4.4.2 The CONSULTANT shall summarize the output of the Distribution Model at the County level in order to identify the origin-destination pairs. This summary shall be checked for consistency with the land use in each traffic analysis zone.
- 4.4.3 The CONSULTANT shall review the assigned volumes on the links adjacent to special generators and check them against existing counts. Based on the magnitude of difference, the assignment shall be iteratively adjusted by adding or subtracting trips from the special generator in the Zonal Data Three (ZDATA3) file. The accepted method to code the Zonal Data Three (ZDATA3) file is described in the report entitled *Florida Standard Urban Transportation Modeling Structure - Cube Framework Standard Trip Generation and Distribution Models, Draft Technical Memorandum No.1 Trip Generation Review and Recommendations*, dated March 2009.
- 4.4.4 Once the Zonal Data Three (ZDATA3) file is adjusted, the CONSULTANT shall check the volume/count ratio on all screenlines, cut lines and cordon lines. In addition, the volume/count ratios within all matrices shall be checked for all facility and area types using the standard procedures and ratios and ranges prescribed by the Florida Department of Transportation and the Federal Highway Administration.

The CONSULTANT shall then make all necessary adjustments to all network and/or data files to obtain a proper distribution as outlined in the Florida Standard Urban Transportation Modeling Structure documentation. All adjustments made to obtain a proper distribution shall be documented in the Technical Memorandum.

4.5 VALIDATE THE MODE CHOICE MODEL

- 4.5.1 The CONSULTANT shall validate a mode choice model that shall be capable of accurately dividing the generated trips among the different modes. This process shall accommodate the existing modes that include local bus, express bus, bus rapid transit and any additional modes that might need to be tested for the future networks.

4.5.2 The CONSULTANT shall review the auto occupancy factors, as well as the mode choice coefficients, making the necessary corrections to obtain a proper mode choice model using the standard procedures prescribed by the Florida Department of Transportation and the Federal Highway Administration. The process to obtain the mode choice coefficients, as well as a comparison with the variables used in the last plan update, shall be documented in a Technical Memorandum.

4.5.3 The CONSULTANT shall use the data from the household travel behavior survey conducted in Year 2008 by the Florida Department of Transportation to obtain coefficients related to the attractiveness of additional future transit modes. The information obtained in the survey regarding sample size, adjustment factors and the methodology used to obtain mode choice information shall also be documented in the Technical Memorandum.

4.6 VALIDATE THE TRANSIT ASSIGNMENT MODEL

4.6.1 The CONSULTANT shall be responsible for analyzing all transit-related data and making the necessary corrections to all the data files in order to obtain a proper transit assignment as provided for in the report entitled *New Florida Standard Urban Transportation Modeling Transit Modeling Framework*, updated March 26, 2010. Data developed for the Regional Transit System Transit Development Plan shall be used where appropriate.

4.6.2 The CONSULTANT shall summarize the number of trips assigned to the transit network and compare the results to the ridership data for the AM and Midday networks. The CONSULTANT shall review the total trips assigned, the total trips assigned by mode, the total trips assigned by corridor, the total number of transfers and the total number of transfers by mode. In addition, transit operating characteristics, such as average speed by mode, number of vehicles, total fare collected and other level of service information as provided in the output of the Transit Assignment Model, shall be reviewed and summarized.

4.6.3 The CONSULTANT shall document the procedures used in adjusting the Transit Assignment Model and all results in a Technical Memorandum.

4.7 VALIDATE THE HIGHWAY ASSIGNMENT MODEL

4.7.1 The CONSULTANT shall validate the highway assignment model using the current standard Florida Standard Urban Transportation Modeling Structure procedure. The CONSULTANT shall be responsible for all necessary corrections that need to be made to the data and network files in order to obtain a proper highway assignment as prescribed in Florida Department of Transportation and Federal Highway Administration documentation.

4.7.2 The CONSULTANT shall check the highway assignment against the actual ground counts throughout the highway network and check the accuracy of the highway assignment against the volume/count ratios grouped by facility type, area type, vehicle miles traveled, vehicle hours traveled and heavy vehicle factors.

The CONSULTANT shall refer to the existing documentation for allowable percentage of deviation of assignment versus count and compare to model results. If necessary, corrections to the appropriate files shall be made to obtain a proper assignment, consistent with the parameters defined by the Florida Department of Transportation and the Federal Highway Administration.

4.7.3 The CONSULTANT shall ensure accurate assignment of transit trips. The methodology used to achieve accurate assignment of transit trips shall first be reviewed and approved by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the Florida Department of Transportation and documented in a Technical Memorandum.

4.7.4 The CONSULTANT shall run color coded plots listing the volume/count ratios by link so that it can be reviewed for errors. The plots shall be color coded in four groups, as follows: less than 0.50, 0.51 to 0.85, 0.86 to 1.0 and over 1.0. If discrepancies are found in a particular area, and/or along certain corridors, the network shall be checked for errors, such as loadings of centroid connectors, possible errors in the Turn Prohibitor file and zonal data (ZDATA) file errors. The CONSULTANT shall make all necessary corrections to obtain a proper assignment.

4.8 FINAL MODEL VALIDATION

4.8.1 The CONSULTANT shall perform a highway only run using the base year network and the socioeconomic dataset for Year 2040.

4.8.2 The CONSULTANT shall summarize the trip generation and distribution outputs and compare them with the Base Year 2010 socioeconomic data. The results of the assignment for Year 2040 runs shall also be summarized using the evaluation program included as part of Florida Standard Urban Transportation Modeling Structure. Screenline projections, Base Year counts and historic growth rates shall also be compared.

4.8.3 The CONSULTANT shall review the model output data with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the Florida Department of Transportation pointing out any inconsistencies or errors in the socioeconomic data. The results of this analysis shall be documented in a Technical Memorandum.

4.8.4 The CONSULTANT shall also perform a transit only validation of the model (highway and transit).

4.9 GAINESVILLE URBANIZED AREA TRANSPORTATION MODEL TRANSIT PROCEDURE TECHNICAL MEMORANDUM

The CONSULTANT shall develop a technical memorandum for the Gainesville Urbanized Area Transportation System model transit procedure. The main purpose of this documentation is to describe any non-standard Florida Standard Urban Transportation Modeling Structure procedures used in the Gainesville Urbanized Area Transportation System model transit procedure. The CONSULTANT shall also provide descriptions on some standard Florida Standard Urban Transportation Modeling Structure executable files, input files and output files as necessary. The CONSULTANT shall incorporate the new Public Transit procedures noted in the documents entitled *Florida Standard Urban Transportation Modeling Structure Transit Modeling Framework*, updated March 26, 2010.

4.9.1 The consultant shall prepare a Technical Memorandum to describe the Gainesville Urbanized Area Transportation System transit model. This Memorandum shall include flow charts of Gainesville Urbanized Area Transportation System transit model, descriptions of all special executable files and descriptions of all special input and output files.

4.9.2 All executable files (includes both standard Florida Standard Urban Transportation Modeling Structure executables and non-standard Florida Standard Urban Transportation Modeling

Structure executables) shall be included in the flow charts and all input and output files shall also be included in the flow charts.

4.9.3 For each of the nonstandard Florida Standard Urban Transportation Modeling Structure executable files, the CONSULTANT shall describe the function of the file, the purpose it serves in the process and required input and output files. All variables and parameters and their data format shall be described.

4.10 TECHNICAL REPORT 4

The CONSULTANT is responsible for documenting all activities related to the completion of Task 4 in Technical Report 4. The CONSULTANT shall prepare and deliver a Technical Memorandum for each task to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task.

TASK 5 - YEAR 2040 TRANSPORTATION NEEDS PLAN AND COST FEASIBLE PLAN

The purpose of this task is to develop a long range transportation plan that identifies facilities (including major roadways, transit, multimodal and intermodal facilities, nonmotorized transportation facilities and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions. In addition, the long range transportation plan shall preserve the existing transportation infrastructure, enhance economic competitiveness, improve travel choices to ensure mobility and integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions.

The long range transportation plan shall include the projected transportation demand in the planning area, the existing and proposed transportation facilities that function as an integrated system, operational and management strategies, consideration of the results of the latest available *Mobility Plan, Gainesville Metropolitan Area, Congestion Management Process* (Congestion Management Plan), strategies to preserve the existing and projected future transportation infrastructure, pedestrian and bicycle facilities, transportation and transit enhancement activities and regionally significant projects.

A regionally significant project is defined as a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area transportation network. At a minimum, this includes all principal arterial highways, all fixed guideway transit facilities and other transit facilities that offer a significant alternative to regional highway travel.

The first step in this process shall be the development of the existing plus committed (E+C) network and project list. Projects included in this list shall be developed from the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Transportation Improvement Program and the annual budgets of Alachua County and the City of Gainesville.

The second step in this process shall be development of a Year 2040 Needs Plan that identifies highway and transit system modifications in response to model projected demands. In addition, this step shall include identification of needed:

- bicycle facility modifications based on implementation of the Alachua Countywide Bicycle Master Plan;
- pedestrian facility modifications based on the Alachua County and City of Gainesville comprehensive plans; and
- intelligent transportation system modifications based on City of Gainesville Traffic Operations recommendations.

A Year 2040 Cost Feasible Plan shall also be developed by ranking projects and eliminating those for which financial resources cannot be identified. This plan shall build upon the Needs Plan to select a list of projects that can be funded with available revenue sources.

Both the Year 2040 Needs Plan and the Year 2040 Cost Feasible Plan shall include narrative descriptions of the major and more significant projects in the Plan. Any preliminary engineering studies and National Environmental Policy Act phases shall also be included in the long range transportation plan.

Technical Reports 5 and 6 shall document the development of the Year 2040 Needs Plan, while Technical Report 7 shall document the development of the Year 2040 Cost Feasible Plan. A Technical Memorandum shall document completion of each task and shall be submitted to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area within 30 days of completion of the task.

5.1 NETWORK CODING, EDITING AND DEBUGGING

The CONSULTANT shall be responsible for the coding, review, editing and debugging of all networks leading to an adopted Year 2040 Cost Feasible Plan. These networks shall include the Year 2019 Existing Plus Committed Network and the Year 2040 Needs Plans and the Year 2040 Cost Feasible Plan.

5.2 DEVELOPMENT OF THE EXISTING PLUS COMMITTED NETWORK

5.2.1 The Existing Plus Committed Network shall be developed by the CONSULTANT by coding all projects committed for construction to the Base Year Networks.

5.2.2 The CONSULTANT shall also review the Regional Transit System Transit Development Plan for transit related ridership and operational information.

5.2.3 Only projects for which federal, state, local or private funding for construction, or for the acquisition of right-of-way (and assumed to be completed and open to traffic in 2019), shall be identified and included in the Existing Plus Committed Network.

5.2.4 The CONSULTANT shall make an "all or nothing" assignment to the Existing Plus Committed Network and include a Year 2040 Trip Table to determine the deficiencies on the highway and transit networks that shall occur by the Year 2040.

5.3 DEVELOPMENT OF THE YEAR 2040 NEEDS PLAN

5.3.1 The CONSULTANT shall use the following information to develop the Year 2040 Needs Plan:

- A. the adopted Cost Feasible Plan identified in the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area adopted Year 2035 Livable Community Reinvestment Plan;
- B. the Mobility Plan- Gainesville Metropolitan Area Congestion Management Process (to identify problem areas to be addressed); and
- C. the adopted Regional Transit System Transit Development Plan.

5.3.2 The CONSULTANT shall further develop the Year 2040 Needs Plan by testing multi-modal alternatives to satisfy person and freight travel demand deficiencies.

5.3.3 A maximum of three alternative solutions to transportation deficiencies shall be developed as discussed in Sections 5.3.7 through 5.3.10. These alternative needs plans shall consider the Vision Statement and the Goals and Objectives of this Update.

- 5.3.4 The identification, evaluation and selection of the Year 2040 Needs Plan shall be documented in Technical Report 5.
- 5.3.5 A Preliminary Needs Plan shall be developed by running 2040 zonal data (ZDATA) with the 2019 Existing Plus Committed Network and identifying facilities with a volume/capacity ratio of 0.9 or greater. The CONSULTANT and Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall review the facilities identified during this task. At the option of Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the CONSULTANT shall use National Cooperative Highway Research Program- 255 to smooth and adjust the travel demand outputs for identified facilities as necessary.
- 5.3.6 A Constrained Needs Plan shall be developed by identifying facilities in the Preliminary Needs Plan which cannot be modified for any of the following reasons:
- A. The impact widening of the road would have on the community;
 - B. The geography or development of the area causes a project to be too difficult or expensive;
 - C. The road is already as wide as allowed by state or local policies;
 - D. The potential impact to a designated historic district; or
 - E. The potential impact on environmentally sensitive lands.

Constrained facilities shall be eliminated from the Needs Plan prior to the development of subsequent alternatives.

- 5.3.7 One alternative network shall be created that includes a mix of highway and transit solutions, but shall primarily consider transit related modifications. This network alternative shall include some highway modifications, but shall consist primarily of a future bus rapid transit and streetcar system, new and/or extended regular and express bus routes, bus ways and other transit related modifications.
- 5.3.8 A second alternative network shall be created that includes a mix of highway and transit solutions, but shall primarily consider highway related modifications that expand the grid network of roads. This network alternative shall include transit modifications, but shall consist primarily of new roads or projects that add capacity to existing roads. This alternative shall also include the projects in the currently adopted Year 2035 Livable Community Reinvestment Cost Feasible Plan.
- 5.3.9 The CONSULTANT shall facilitate a public workshop on the two alternative solutions in order to gather broad-based input on proposed alternative modifications that may be used to develop the third alternative and also included in the Year 2040 Needs Plan.
- 5.3.10 A third alternative network shall be created that includes a combination of effective approaches identified in the previous two tasks. This alternative shall also consider innovative demand management techniques, such as congestion pricing, high occupancy vehicle lanes, park-and-ride facilities and ridesharing programs.

- 5.3.11 In all three alternative networks discussed in the preceding sections, the CONSULTANT shall address non-motorized activity in the model using the pedestrian environment variable procedures discussed on pages 14 and 15 of Technical Report 4 from the adopted Gainesville Urbanized Area Year 2025 Long-Range Transportation Plan Update. This information shall be validated using bicycle and pedestrian counts taken by Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the University of Florida.
- 5.3.12 The CONSULTANT shall incorporate performance measures/metrics for system-wide operation, as well as more localized measures/metrics into the long range transportation plan. These measures shall assess the effectiveness of the long range transportation plan in increasing system performance. The CONSULTANT will obtain approval from the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area of all performance measures that will be used in the long range transportation plan.
- 5.3.13 The CONSULTANT shall employ context sensitive solutions for appropriate transportation corridors by using a collaborative approach that involves all stakeholders to identify needed transportation projects that preserve and enhance scenic, aesthetic, historic, community and environmental resources, while improving or maintaining safety, mobility and infrastructure conditions.
- 5.3.14 The CONSULTANT shall identify projects to include in the Needs Plan that enhance intermodal connections between alternative modes of travel, such as automobile, bus rapid transit, streetcar, bicycle and pedestrian.
- 5.3.15 The CONSULTANT shall coordinate the development of the Needs Plan process, including selection of the final Year 2040 Needs Plan, with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area. The criteria by which the alternative needs plans shall be evaluated shall include:
- A. Those listed in the Urban Transportation Planning Model Update-Phase II, Task D, Develop Standard System Evaluation Model, and Task J, Transit Evaluation, as amended and other appropriate technical publications;
 - B. Requirements of Moving Ahead for Progress in the 21st Century Act and appropriate rules issued by Federal Highway Administration and Federal Transit Administration; and
 - C. The Vision Statement and the Goals and Objectives established for this Study and documented in Technical Report 1.
- 5.3.16 Analysis of the Needs Plan shall include sufficient information to understand the composition of the identified need. The CONSULTANT shall include an estimate of unfunded needs plan costs in base year dollars in the adopted long range transportation plan. Estimated needs shall be reported by mode.

- 5.3.17 The Needs Plan shall include only transportation projects that are necessary to meet identified future transportation demand and advances the goals, objectives and policies of the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the region and the state. Cost shall be given significant consideration when choosing among various alternatives (mode or alignment) to meet an identified need. Compelling policy or practical reasons for selecting alternatives that exceed the identified transportation need may include increasing the availability of premium transit options, overwhelming environmental benefit or the need to use compatible technology to expand an existing transportation asset.
- 5.3.18 The CONSULTANT will produce Purpose and Need statements and GIS shape files for major transportation or regionally significant projects (including specific transit/Bus Rapid Transit alignment projects identified in the Needs Plan. The CONSULTANT is responsible for coordinating this effort with the Project Manager and the Florida Department of Transportation to ensure the projects are entered into the Efficient Transportation Decision Making Process (ETDM) data base system.
- 5.3.19 Presentation materials, including graphics and support documentation for the Year 2040 Needs Plan Alternatives, shall be prepared by the CONSULTANT and presented to the Citizens Advisory Committee and the Technical Advisory Committee.
- 5.3.20 A proposed Year 2040 Needs Plan shall be developed by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for presentation at a public hearing.
- 5.3.21 The CONSULTANT shall present the proposed Year 2040 Needs Plan at the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area public hearing and include a discussion of the process by which the plan was developed.

The CONSULTANT shall prepare presentation materials that shall include graphics, visual aids and handout materials. The CONSULTANT shall be responsible for preparing a transcript of the public hearing.

- 5.3.22 The CONSULTANT shall be responsible for meeting all of the Efficient Transportation Decision Making requirements identified in Sections 4.5.3 and 4.5.4 of the *Metropolitan Planning Organization Program Management Handbook*.

5.4 RANKING OF PROJECTS AND PROGRAMS IN THE YEAR 2040 NEEDS PLAN

- 5.4.1 The CONSULTANT shall develop a methodology to rank projects and programs in the Year 2040 Needs Plan and shall coordinate the ranking process with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the Florida Department of Transportation. All projects and programs included in the adopted Year 2040 Needs Plan shall be ranked based on the following criteria:

- A. Output from the Congestion Management System;
- B. Existing level of service;
- C. Safety rankings that consider historic crash data, ability to manage traffic as an incoming emergency evacuation route from coastal counties and compatibility to non-motorized travel;

- D. Consistency with the long range transportation plan vision statement and the goals and objectives established through the public involvement process;
- E. Forecast travel demand for the Year 2040;
- F. Cost estimates and the scheduled availability of funding;
- G. Assessment of the distribution of social, cultural and environmental benefits and adverse impacts of proposed long range transportation plan projects on various socioeconomic groups; and
- H. Economic development opportunities.

5.4.2 The CONSULTANT shall prepare and distribute a list of the project rankings to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for review and approval. This list shall include project rank, as well as the ranking factors, for each proposed project. Any modifications made by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall be incorporated into the Adopted Year 2040 Needs Plan.

5.4.3 The CONSULTANT shall facilitate a public workshop on the adopted Year 2040 Needs Plan in order to gather broad-based input on proposed Needs Plan modifications for the development of the Year 2040 Cost Feasible Plan.

5.5 TECHNICAL REPORT 6

The identification, evaluation and selection of the Year 2040 Preliminary and Constrained Needs Plan, all Needs Plan Alternatives and the Year 2040 Needs Plan ranking shall be documented in Technical Report 6.

5.6 DEVELOPMENT OF THE YEAR 2040 COST FEASIBLE PLAN

Upon the approval of the Year 2040 Needs Plan by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the proposed Year 2040 Cost Feasible Plan shall be developed based on the financial resources identified in Task 2.9 and the cost analysis undertaken in Task 5.4. The CONSULTANT shall use evaluation criteria established earlier as a basis for ranking projects to be considered in the Cost Feasible Plan.

The CONSULTANT shall include an estimate of the cost of all projects and all phases, regardless of mode, in year of expenditure dollars. The CONSULTANT shall use Florida Department of Transportation adopted estimates of inflation to adjust costs from present day costs to year of expenditure costs. The CONSULTANT shall also clearly state in the proposed Year 2040 Cost Feasible Plan the costs of operating and maintaining the existing and future transportation system.

Based upon this process, the CONSULTANT shall develop three Alternative Cost Feasible Plan Scenarios that shall establish the basis for identifying a final Year 2040 Cost Feasible Plan. These scenarios shall be based on prior input received from the public and shall represent three unique proposals to address transportation system needs through the Year 2040. According to Federal Highway Administration and Florida Department of Transportation guidelines, the Year 2040 Cost Feasible Plan must be the final plan adopted by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area. The development of the Year 2040 Cost Feasible Plan shall be documented in Technical Report 7.

The CONSULTANT shall use the following information to develop the Year 2040 Cost Feasible Plan:

- 5.6.1 The CONSULTANT shall evaluate the effectiveness of the proposed Year 2040 Cost Feasible Plan by comparing it with the Year 2040 Needs Plan using the evaluation criteria established and documented in Technical Report 6. This evaluation shall include an impact analysis and identification of transportation programs/projects included in the Year 2040 Needs Plan, for which there is no funding and eliminated in the Year 2040 Cost Feasible Plan.
- 5.6.2 The CONSULTANT shall identify those projects which would allow the proposed Year 2040 Cost Feasible Plan to accomplish the vision statement and the goals and objectives identified in Technical Report 6, but cannot be included because of their costs.
- 5.6.3 The CONSULTANT shall review the alternative funding sources identified in Technical Report 2 as a possible funding source(s) and make appropriate recommendations. Should any of these alternative sources be recommended to fund projects in the Cost Feasible Plan, strategies to ensure availability of these funds shall be included in the Year 2040 Cost Feasible Plan. These strategies shall include a plan of action describing the steps necessary to enact the proposed revenue sources and a discussion of past successes or failures to secure similar funding sources, as appropriate.
- 5.6.4 The CONSULTANT shall collect adequate safety data in order to develop a Safety Element as part of the proposed Year 2040 Cost Feasible Plan. As required in 23 Code of Federal Regulations 450.322, the Safety Element shall incorporate or summarize the priorities, goals, countermeasures or projects contained in the Strategic Highway Safety Plan required under 23 United States Code 148, as well as (as appropriate) and safeguard the personal security of all motorized and non-motorized users. The Safety Element shall also incorporate emergency relief and disaster preparedness plans and strategies and policies that support homeland security and established incident management plans (if there is one with local authorities).

- 5.6.5 As required by Moving Ahead for Progress in the 21st Century Act, the CONSULTANT shall consider the following planning factors in developing the Year 2040 Cost Feasible Plan:
- A. support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
 - B. increase the safety of the transportation system for motorized and nonmotorized users;
 - C. increase the security of the transportation system for motorized and nonmotorized users;
 - D. increase the accessibility and mobility of people and for freight;
 - E. protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
 - F. enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - G. promote efficient system management and operation; and
 - H. emphasize the preservation of the existing transportation system.
- 5.6.6 The CONSULTANT shall develop strategies for the proposed Year 2040 Cost Feasible Plan that adequately address operations and management for both the transit and highway network. This shall include the development of performance measures for transportation systems operations and management, with the focus on mobility and safety.
- 5.6.7 The CONSULTANT shall ensure that the proposed Year 2040 Cost Feasible Plan includes both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe efficient movement of people and goods in addressing current and future transportation demand.
- 5.6.8 The CONSULTANT shall also ensure that the proposed Year 2040 Cost Feasible Plan includes the following as required by Moving Ahead for Progress in the 21st Century Act, 23 Code of Federal Regulations 450.322 and Florida Statutes 339.175:
- 1. The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;
 - 2. Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions, including Strategic Intermodal System and Transportation Regional Incentive Program facilities, over the period of the transportation plan;
 - 3. Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;

4. Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs. The long range transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area transportation system;
 5. All proposed modifications shall be described in sufficient detail to develop cost estimates;
 6. A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the proposed Year 2040 Cost Feasible Plan;
 7. Pedestrian walkway and bicycle transportation facilities;
 8. Consideration of strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse emissions; and
 9. Comparison of the proposed Year 2040 Cost Feasible Plan to the State conservation plans and maps or inventories of natural resources.
- 5.6.9 The CONSULTANT shall include in the long range transportation plan performance measures and targets and a system performance report and shall integrate other performance based plans, if any, in the long range transportation plan either directly or by reference. This material shall describe the performance measures and targets used in assessing system performance and progress in achieving the performance targets.
- 5.6.10 The CONSULTANT shall develop a matrix that shows the consistency between each Cost Feasible Plan project and the Vision Statement, Goals, Objectives and Policies.
- 5.6.11 The adopted Cost Feasible Plan shall use Fiscal Year 2013/2014 as the base fiscal year and Fiscal Year 2039/2040 as the horizon fiscal year. The CONSULTANT shall show all the projects and project funding for the entire time period covered by the Cost Feasible Plan, from the base year to the horizon year.
- 5.6.12 Cost Feasible Plan cost estimates shall be provided for the operations and maintenance activities for the entire timeframe of the long range transportation plan. System level estimates for operations and maintenance costs shall be shown for each of the five-year cost bands. System level is interpreted to mean the system within the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area planning area boundary.

Local agencies shall provide cost estimates for locally-maintained facilities covered in the Cost Feasible Plan. The Florida Department of Transportation shall provide cost estimates for the state-maintained facilities covered in the Cost Feasible Plan. System level estimates at the Florida Department of Transportation District level are acceptable for the state-maintained facilities.

The Cost Feasible Plan shall also identify the general source of funding for the operations and maintenance activities. Since operations and maintenance costs and related revenues are not available to balance the fiscal constraint of capital investment projects, a clear separation of costs for operations and maintenance activities from other grouped and/or regionally significant projects shall be shown in order to demonstrate fiscal constraint.

- 5.6.13 For total project costs, all phases of a project shall be described in sufficient detail to estimate and provide an estimated total project cost and explain how the project is expected to be implemented. Any project which will go beyond the horizon year of the long range transportation plan shall include an explanation of the project elements beyond the horizon year and what phases/work will be performed beyond the horizon year of the plan. The costs of work and phases beyond the horizon year of the plan shall be estimated using year of expenditure methodologies and the estimated completion date may be described as a band (i.e. construction expected 2040-2050, \$40 million). If there is more than one phase remaining to be funded, these may be shown as a combined line item for the project (i.e. right-of-way/construction expected 2040-2050, \$50 million). This paragraph does not apply to routine system preservation or maintenance activities. Total project costs shall be shown for capacity expansion projects and for regionally significant projects.
- 5.6.14 The CONSULTANT shall ensure that the projects in the proposed Year 2040 Cost Feasible Plan are listed in five-year band increments (based upon year of need). Estimates shall be summarized for the following five-year periods- 2014-2015, 2016-2020, 2021-2025, 2026-2030 and 2031-2040.
- 5.6.15 Revenues to support the costs associated with the work/phase shall be demonstrated. For a project to be included in the Cost Feasible Plan, an estimate of the cost and source of funding for each phase of the project being funded (including the Project Development and Environment phase) must be included.

The phases to be shown in the Cost Feasible Plan include preliminary engineering, right-of-way and construction (project development and environment and design phases may be combined into preliminary engineering). Boxed funds can be used as appropriate to finance projects. However, the individual projects using the box shall be listed, or at a minimum, shall be described in bulk in the Cost Feasible Plan (i.e. project development and environment for projects in Years 2016-2020).

- 5.6.16 Federal and state participation on projects in the Cost Feasible Plan can be shown as a combined source for Cost Feasible Plan projects. Projects within the first ten years of the Cost Feasible Plan shall be notated or flagged to identify which projects are planned to be implemented with federal funds. Beyond the first ten-year period, specific federal funding notation is not required. Project funding, however, must be clearly labeled as a combined Federal/State source in the Cost Feasible Plan.
- 5.6.17 For highway projects, the Cost Feasible Plan shall describe the types of potential environmental mitigation activities and opportunities which are developed in consultation with federal and state wildlife, land management and regulatory agencies. This description shall occur at more of a system-wide level to identify areas where mitigation may be undertaken and what kinds of mitigation strategies, policies and/or programs may be used.

This description in the Cost Feasible Plan shall identify broader environmental mitigation needs and opportunities of which individual transportation projects might later take advantage. The use of Efficient Transportation Decision Making alone is not environmental mitigation. The Efficient Transportation Decision Making effort is considered to be project screening and not a system-wide review. Documentation of the consultation with the relevant agencies shall be provided by the CONSULTANT.

For transit capital projects in the Cost Feasible Plan, transit environmental benefits like reduction in single occupancy vehicle trips and vehicle miles traveled, reduction in greenhouse gases, pedestrian and bicycle linkages, transit oriented/compact development (which is more walkable) shall be stated within the broad parameters in the Cost Feasible Plan. Preliminary engineering, final design, right-of-way, utility relocation and construction for transit capital projects shall be listed in the Cost Feasible Plan.

- 5.6.18 For regionally significant projects in the Cost Feasible Plan, the CONSULTANT shall include a purpose and need statement for the project. This purpose and need statement shall identify the rationale as to why the project warranted inclusion in the Cost Feasible Plan.
- 5.6.19 The CONSULTANT shall ensure that the Cost Feasible Plan document is prepared in a manner that balances length, clarity and graphics to create a succinct, specific and attractive document that relays a distinct vision and plan in a user-friendly way.
- 5.6.20 The CONSULTANT shall prepare procedures which document how modifications to the long range transportation plan are addressed after adoption. The procedures shall specifically explain what qualifies as a modification as opposed to an amendment. These procedures shall be included as part of the long range transportation plan.

5.7 TECHNICAL REPORT 7

The development of the Year 2040 Cost Feasible Plan shall be documented in Technical Report 7. Changes to the Cost Feasible Plan made in response to public comment, committee recommendation(s) or Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area action shall also be documented in this Technical Report.

5.8 APPROVAL OF THE YEAR 2040 COST FEASIBLE PLAN

The culmination of the long range transportation plan process is the adoption of a fiscally constrained long range transportation plan. This plan is a list of bicycle, highway, pedestrian and transit projects consisting of those modifications deemed most needed to address deficiencies in the transportation system, while also being financially feasible.

- 5.8.1 As soon as the proposed Year 2040 Cost Feasible Plan is developed and reviewed by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Citizens Advisory Committee, Technical Advisory Committee and Bicycle/Pedestrian Advisory Board, the CONSULTANT shall present the proposed Year 2040 Cost Feasible Plan to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area at a public hearing.

- 5.8.2 The CONSULTANT shall ensure that the financial plan demonstrates how the adopted transportation plan can be implemented.
- 5.8.3 The CONSULTANT shall include an estimate of unfunded costs in base year dollars in the adopted long range transportation plan.
- 5.8.4 The CONSULTANT shall present the proposed Year 2040 Cost Feasible Plan at the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area public hearing and include a discussion of the process by which the plan was developed. The CONSULTANT shall prepare presentation materials that include graphics, visual aids and handout materials. The CONSULTANT shall be responsible for preparing a transcript of the public hearing.
- 5.8.5 The Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall adopt the final Year 2040 Cost Feasible Plan with such additional modifications as deemed appropriate. The adopted Year 2040 Cost Feasible Plan shall be included in all supporting analyses, including all Geographic Information System files.
- 5.8.6 The Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area shall send copies of the adopted Year 2040 Cost Feasible Plan to the Governor, the Florida Department of Transportation, the Federal Highway Administration and the Federal Transit Administration.

5.9 PROJECT TIME LINE

The CONSULTANT shall develop a detailed project time line that identifies the development of each task and the delivery of work products. Additionally, the time line shall include identifiers that represent the approximate date of public presentations and public workshops. The CONSULTANT shall meet monthly with the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Project Manager to present work completed, confirm action items for the next work period and provide the Project Manager with a revised detailed project time line if changes are necessary.

In conjunction with its quarterly meeting with the Project Manager, the CONSULTANT shall provide a written monthly status report on the progress of each task being undertaken.

REQUIRED DOCUMENTS

The CONSULTANT shall ensure that all final documents are posted online, available for distribution and available through the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area office no later than 90 days after adoption by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area.

The CONSULTANT shall provide to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area one clean, single-sided, full color paper original and Adobe Portable Data File and Microsoft Word electronic versions of materials to be presented:

- at meetings of the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the Citizens Advisory Committee, Technical Advisory Committee and the Bicycle/Pedestrian Advisory Board;
- at public hearings on the Year 4040 Needs Plan and Year 2040 Cost Feasible Plan;
- at public workshops; and
- on the Year 2040 Long Range Transportation Plan website.

A copy of all Powerpoint presentations shall be provided to the Project Manager and posted on the Year 2040 Long Range Transportation Plan website. The Year 2040 Long Range Transportation Plan website shall include an accommodation to collect public comments.

TECHNICAL REPORTS AND MEMORANDUMS

As outlined in preceding sections, technical documentation is required for all tasks. These include Technical Reports for each task and Technical Memoranda for each subtask. The CONSULTANT shall provide one clean, single-sided, full color draft of the Technical Memorandums for review by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area and the Citizens Advisory Committee, Technical Advisory Committee and the Bicycle/Pedestrian Advisory Board. Subsequent to this review, the CONSULTANT shall include all review comments and provide to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area one clean, single-sided, loose-leaf, full color paper original and Adobe Portable Data File (PDF) and Microsoft Word electronic versions of each final Technical Memorandum.

Copies of all final documents and maps shall be provided to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area on compact disks in editable text/graphic software format and Adobe Portable Data File (PDF) format.

The Adopted Year 2040 Cost Feasible Plan shall be published or otherwise made readily available by the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the internet.

FINAL REPORT

The long range transportation plan shall be presented as a standalone document and provided in a three-ring binder. The CONSULTANT shall provide the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area 15 color printed copies, a copy of the final report on Compact Disc-ROM/DVD media, as well as produce one clean, single-sided, loose-leaf, full color final report.

SUMMARY REPORT

A summary report of 20 or fewer pages shall accompany the final report. This summary report shall document the major steps and final results of the long range transportation plan process and shall include the following sections:

- A. Introduction;
- B. Growth Forecasts;
- C. Vision Statement and the Goals and Objectives;
- D. Study Process;
- E. Year 2040 Cost Feasible Project Ranking; and
- F. Year 2040 Cost Feasible Project Map.

The CONSULTANT shall provide the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area 30 copies of the summary report as well as one clean, single-sided, loose-leaf, full color summary.

SUMMARY POSTER

The final long range transportation plan report shall also include a folded, full color poster of the adopted Year 2040 Cost Feasible Plan. Summary information in the poster shall include the vision statement, graphic representations of the Year 2040 Cost Feasible Plan and a table representation of the Project Priority Ranking list. Other information may include the goals and objectives of the plan. The CONSULTANT shall provide to the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area 200 copies of the summary poster upon final approval of the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area.

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