

SCHEDULE

The CONSULTANT shall begin work upon issuance of a notice to proceed by the MPO Procurement Officer and complete this work no later than the September 2014 MPO Board of Directors meeting. The CONSULTANT shall complete a draft *2040 Long Range Transportation Plan* no later than April 2014 to allow for public review, workshops and presentations to interested parties. A conceptual approval of the final *2040 Long Range Transportation Plan* is required no later than July 2014 so its final adoption in September would be on time.



SCOPE OF SERVICES

2040 Long Range
Transportation Plan
Update

September 20, 2012

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LIST OF ACRONYMS

ATMS	Advanced Traffic Management System
BCCB	Broward County Coordinating Board
CIR	Community Involvement Roundtable
CSWG	Complete Streets Working Group
E+C	Existing plus Committed
EJ	Environmental Justice
ETAT	Environmental Technical Advisory Team
ETDM	Efficient Transportation Decision Making
FFP	Financially Feasible Plan
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FTP	Florida Transportation Plan
FDOT	Florida Department of Transportation
GIS	Geographic Information System
GOMs	Goals, Objectives and Measures of Effectiveness
ITS	Intelligent Transportation System
LCB	Local Coordinating Board
LOS	Level-of-Service
L RTP	Long Range Transportation Plan
MAZ	Micro Area Zone
MPO	Metropolitan Planning Organization
NHS	National Highway System
O&M	Operations & Maintenance
PM	Project Manager
PIP	Public Involvement Plan
RTP	Regional Transportation Plan
SC	Steering Committee
SEFTC	Southeast Florida Transportation Council
SFRPC	South Florida Regional Planning Council
TAD	Traffic Analysis District
TAZ	Traffic Analysis Zone
TCC	Technical Coordinating
TCQSM	Transit Capacity and Quality of Service Manual
TIP	Transportation Improvement Program
TR	Technical Report
TSM&O	Transportation System Management and Operation

GUIDING PRINCIPLES

The CONSULTANT and the Broward Metropolitan Planning Organization (MPO) mutually agree to furnish, each to the other, the respective services, information, and items as described herein for the *2040 Long Range Transportation Plan (LRTP) Update*. This consists of the preparation of an update of the LRTP for the MPO in accordance with the requirements of *Moving Ahead for Progress in the 21st Century*, or *MAP-21* (public law number 112-141)¹ or the current transportation bill; the *Metropolitan Transportation Planning* regulations contained in 23 CFR Part 450 and 49 CFR Part 613; the requirements of section 339.175 of the Florida Statutes; and the provisions and specifications herein. The LRTP will document the assessment of multimodal transportation facility, service and policy needs over the next 25 years. The update process will consider a wide range of social, environmental, energy and economic factors and will consider the overall goals and how transportation investments can meet those goals within financial limits.

This *Scope of Services* specifies the tasks to be accomplished in the LRTP update. The updated LRTP will have 2040 as the horizon year and must be financially feasible and implementable by the appropriate local and state transportation agencies. The LRTP will include long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods. In keeping with the intent and requirements of *MAP-21* or current transportation bill, and the requirements stipulated by the Federal Highway Administration (FHWA)², the Federal Transit Administration (FTA)³, and the Florida Department of Transportation (FDOT)⁴, this plan update will be multimodal in nature. It will include, mass transit, pedestrian facilities, bikeways, waterborne transportation, highways, and freight transportation. The plan will also include an Intelligent Transportation System (ITS)⁵

¹ Legislative initiative by the U.S. Congress reauthorizing and restructuring funding and planning for highway and transit programs. MAP-21 authorizes increased levels of highway and transportation funding beyond SAFETEA-LU. It was signed into law by President Obama on July 6, 2012.

² Division of the U.S. Department of Transportation that administers federal highway programs. www.fhwa.dot.gov

³ Division of the U.S. Department of Transportation that administers federal transit programs. www.fta.dot.gov

⁴ The state agency responsible for designing, building and maintaining Florida's transportation network. The agency helps coordinate the development and improvement of airports, rail facilities and ports. It also can assist in the operational cost of transit systems. www.dot.state.fl.us

⁵ The use of information and communication technologies in vehicles, roadways, signage or other aspects of the transportation system to improve efficiency and safety.

element, consistent with the National ITS Architecture⁶, Southeast Florida Regional ITS Infrastructure and provisions to improve safety and security and protect the environment as required by the *MAP-21* legislation. In addition, the plan will include safety and security elements to meet the Federal requirements indicated in 23 CFR 450.322(h). More importantly, it will continue the new paradigm established in the previous plan update (2035) to provide a balanced transportation system that achieves optimum mobility through improvements in multiple modes with emphasis on mass transit and transit-supportive land uses.

The update will include a Public Involvement Plan (PIP), which shall provide interested parties with opportunities to be involved in the development of the LRTP update. The PIP will define strategies to be used in promoting public participation. The PIP development process will consider innovative funding strategies in producing a financially feasible LRTP and will include visualization techniques to make the plan easier to understand by the public. Plan development shall be consistent with guidelines in Chapter 4 of FDOT's *Metropolitan Planning Organization Program Management Handbook*.

The update will also include the consideration of a Transportation System Management and Operation (TSM&O) planning process to help guide the tasks related to data compilation and needs assessment.⁷ Various TSM&O strategies (which could include transit operations, signal operations, freight logistics, and incident management) shall be considered in the development of the 2040 LRTP.

MPO staff, in cooperation with other planning partner agency staff, will manage the LRTP development project. Reports, plans, maps and other work products resulting from the development of the LRTP will be reviewed by the MPO's Project Manager (PM) or designee(s). The update process will be guided by a Steering Committee (SC) consisting of members of the MPO's advisory committees and other agencies identified by MPO staff.

The development of the LRTP update will require coordination with the neighboring MPOs of Miami-Dade and Palm Beach. Coordination will also be required with the *2040 Regional Transportation Plan* (RTP). This update shall also be developed in consultation with Federal, State, Tribal, and local agencies responsible for: land use management, natural resources, environmental protection, conservation and historic preservation.

⁶ A common framework to guide the development and deployment of ITS infrastructure. The architecture describes the functions, subsystems, and information flows required to create and maintain an integrated system. Architectures exist at the national, state, and regional levels, with state and regional systems conforming with the National ITS Architecture.

⁷ A program to improve user-based performance outcomes and the efficient use of the existing infrastructure. The program consists of various technologies, such as real-time traffic monitoring, speed sensors, dynamic message signs, ramp metering, etc.

PROJECT TASKS

The basic task structure that will be used to develop the *2040 Long Range Transportation Plan* is divided into eleven (11) core categories:

- Task 1 - Public Education and Outreach;
- Task 2 - Performance Assessment;
- Task 3 - Data Compilation and Review;
- Task 4 - Travel Model Support;
- Task 5 - Needs Assessment;
- Task 6 - Efficient Transportation Decision Making;
- Task 7 - Financial Resources;
- Task 8 - Financially Feasible Plan;
- Task 9 - Environmental Justice;
- Task 10 – Regional Transportation Planning Coordination; and
- Task 11 - 2040 Long Range Transportation Plan Adoption.

These tasks will be completed by the CONSULTANT in adherence to both the *Guiding Principles* outlined within this *Scope of Services* and the task descriptions provided within this chapter.

TASK 1 - PUBLIC EDUCATION AND OUTREACH

The PIP outlines the process by which the public will be engaged throughout the development of the LRTP update, from inception until completion. Public outreach promotes two-way education, dialogue and early and continuing participation. The LRTP is the “public’s plan,” so input from the public is a key ingredient in plan development.

The PIP must provide opportunities for public participation and input on applicable tasks in the LRTP update. The CONSULTANT shall undertake outreach efforts to most of the demographics within the MPO boundary, especially the traditionally underserved minority and low-income populations. As part of the PIP, an analysis shall be conducted to investigate both the beneficiaries and those who may be negatively affected by transportation decisions. The efforts shall be in accordance with Federal Environmental Justice (EJ) policies.⁸

⁸ The equitable distribution of costs and benefits associated with any federal investment on all members of the community. An environmental justice analysis seeks to ensure that low-income persons and people of color, in particular, benefit from federal investments and do not experience disproportionate adverse environmental and health impacts.

The public involvement team should utilize the *Transportation Outreach Planner Tool*, www.MPOTransportationOutreachPlanner.org, as a resource to help prepare and implement the Public Involvement Plan. The tool will help to identify EJ populations and typically under-represented groups and ensure they are included in the process as outlined in Executive Order 12898.

The CONSULTANT shall organize a public involvement team to develop a detailed PIP including strategies to promote proactive public participation in accordance with the MPO's adopted PIP procedures. The PIP will include, but not be limited to, the following activities:

- Introductory video;
- Public workshops;
- Meetings with local civic associations;
- Meetings with traditionally underrepresented populations;
- Surveys;
- Media outreach;
- Educational materials;
- Direct Mailings;
- Interactive project website/social media;
- Publications;
- Evaluation of the public involvement activities; and
- Documentation.

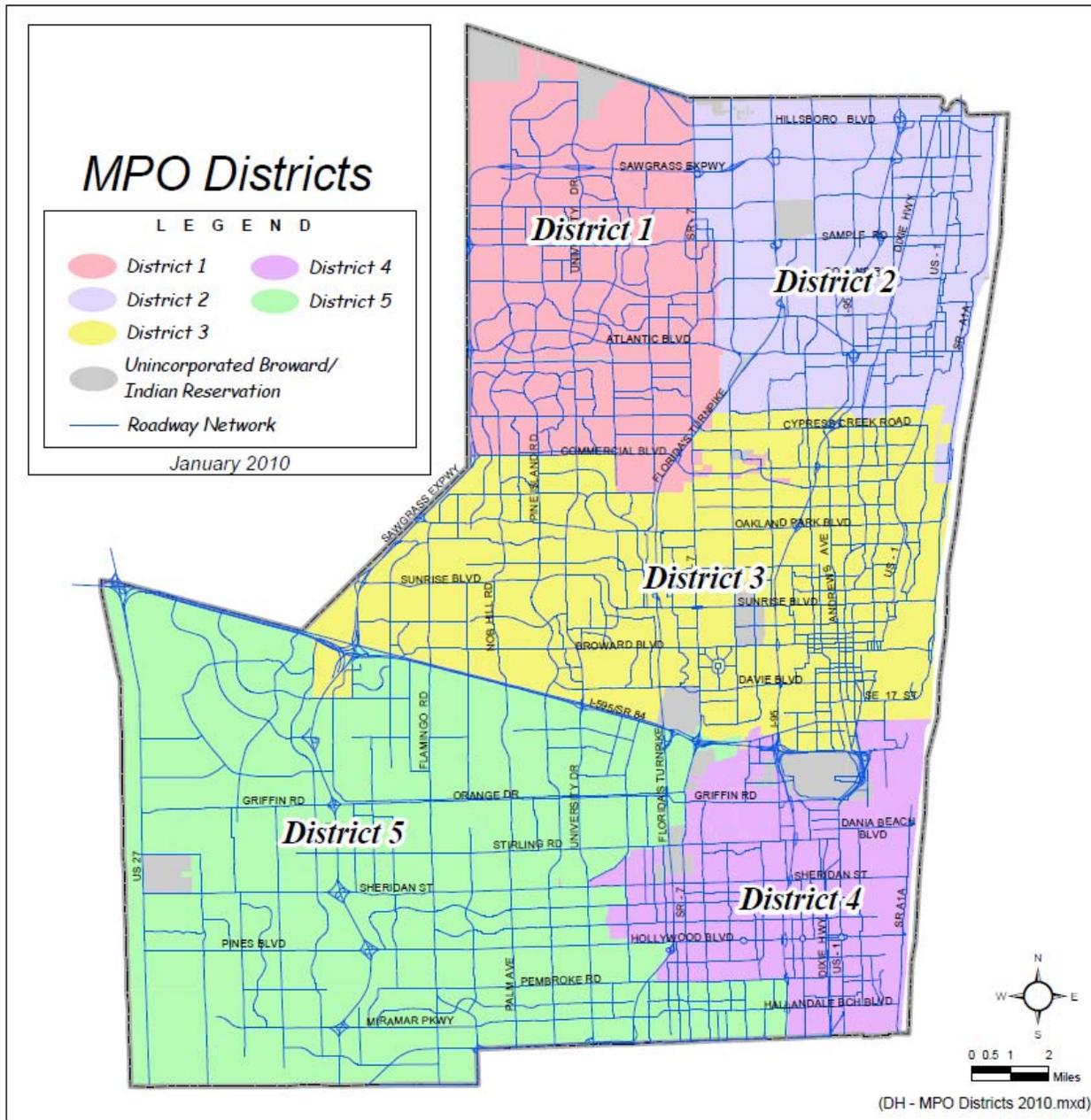
SUBTASK 1.1 - INTRODUCTORY VIDEO

The introductory video will introduce the LRTP update to the public in an easy to understand manner. The CONSULTANT shall use the services of a professional video production agency to develop the introductory video as well as develop a script and a theme that will be reviewed and approved by MPO staff and its advisory committees. The video length would be approximately 60 to 90 seconds.

SUBTASK 1.2 - PUBLIC WORKSHOPS

Ten (10) public workshops will be held throughout the duration of the LRTP update process. Public workshops should be held in each MPO district (**Exhibit 1**) to maximize the outreach at key milestones of the process. MPO staff will provide a final map showing the geographic boundaries of the five (5) districts for inclusion in public outreach documentation.

Exhibit 1 - MPO Planning Districts



The workshops should be conducted during different times of the day so people can select the time that best suits their schedule. The CONSULTANT shall organize workshop locations, coordinate with one of the local governments in each district to host the workshop, advertise workshops in the public and minority newspapers in accordance with the adopted PIP procedures. Further, the CONSULTANT will prepare workshop presentation materials; take minutes; and utilize standard and innovative public outreach techniques to maximize attendance. Workshop participants will identify what is important to them individually when investing in transportation infrastructure and then will develop priorities as a group. Input from the workshops will help in developing the Goals, Objectives and Measures of Effectiveness (GOMs) described in Task 2. The CONSULTANT shall

arrange for interpreters at meetings as needed and requested by attendees. The CONSULTANT shall summarize, document, and analyze the public input and the responses to that input for use in the LRTP development process.

SUBTASK 1.3 - COMMUNITY MEETINGS

The CONSULTANT shall hold ten (10) meetings throughout the duration of the LRTP update process. Meetings should be held at locations that will maximize outreach at key milestones identified by MPO staff. The purpose of these meetings is to reach out to homeowners/civic associations, traditionally underrepresented groups and more importantly the disenfranchised communities to inform them about the LRTP update and solicit input regarding community values and their priorities when investing in transportation improvements. The CONSULTANT shall identify a suitable location or a meeting place and send invitations to the civic associations/groups to attend the meeting. The CONSULTANT shall invite local leaders to serve as meeting host/speakers to attract more attendees. The CONSULTANT shall prepare meeting materials, provide light food and refreshments, take meeting minutes, make presentations and provide handouts to make each event a productive, interactive experience. The CONSULTANT shall arrange for interpreters at meetings as needed and requested by attendees.

In addition, upon request from MPO staff, the CONSULTANT shall, if within the parameters of the approved budget, accompany them to their outreach efforts at community events to help distribute project-related brochures, surveys and literature and provide support on questions regarding the LRTP update process.

SUBTASK 1.4 - SURVEYS

The purpose of this subtask is three-fold: (1) to learn about people's opinions regarding the deficiencies in the current transportation infrastructure, (2) understand people's priorities for improving transportation infrastructure and (3) learn about people's every day journey to work.

The CONSULTANT shall prepare a survey for distribution at the workshops and public meetings, and as an insert to the MPO's newsletter and brochure. It should also be made available on the interactive project website. The survey should be available in English, Spanish, Creole or Portuguese as needed. The survey should be easy to understand and fill out. It should be designed to solicit people's input regarding the current and future transportation infrastructure, community values, and how residents want to deal with the challenges of growth in terms of the different modes of transportation improvements. Each mail-back survey will be self-addressed with free return postage for mailing back to the CONSULTANT.

SUBTASK 1.5 - MEDIA OUTREACH

Media outreach will be on-going throughout the LRTP update. The CONSULTANT shall arrange for news releases in local and minority newspapers, magazines, television stations and radio stations. The CONSULTANT shall inform the media of public meetings and workshops prior to the date of the meetings/workshops. The CONSULTANT shall prepare a media list and make preparations, printing, and distribution of materials. The CONSULTANT shall take advantage of available cost efficient media outlets to reach the public. Strategies may include any or all of the following:

- Schedule interviews with high profile people on public affairs programs;
- Post key meetings on the interactive project website;

- Distribute media advisories;
- Distribute press releases prior to key events;
- Submit photos/press releases of event highlights to community papers;
- Conduct interviews of transportation users or providers and post on project website; and
- Write and distribute public service announcements.

SUBTASK 1.6 - EDUCATIONAL AND OUTREACH MATERIALS

The CONSULTANT shall coordinate with the MPO's Public Information Officer to develop materials to help inform the public of the MPO's LRTP update process. These materials will be branded with the MPO's logo, website, phone number and other information appropriate to the materials developed.

In addition, the CONSULTANT shall arrange for three (3) high-level policy briefings for the MPO Board of Directors and other local officials identified by MPO staff. The goal of these briefings will be to inform elected officials about changes in legislation (such as *MAP-21*) or changes in policies that may provide flexibility or limitations on funding. The CONSULTANT will document these changes and new funding opportunities to help inform the ongoing dialog that will be working to identify the optimal mix of funding alternatives to advance the LRTP objectives.

SUBTASK 1.7 - DIRECT MAILING

The CONSULTANT shall update the comprehensive mailing list developed by MPO staff to include missing civic and homeowner associations in new and redeveloped areas. The CONSULTANT shall insure that the mailing list includes county and municipal elected officials and transportation agencies. Throughout the process, attendees at meetings and workshops will be encouraged to provide their addresses to add to the mailing list, which shall be maintained by the CONSULTANT throughout the LRTP update. Where people identify a preference of e-mail distribution of information will be utilized in place of regular mail to save project resources. The CONSULTANT shall use the comprehensive mailing list to mail surveys (free return postage), project brochures, and/or invitations to public meetings/workshops.

The CONSULTANT will prepare a quarterly news article for inclusion in the MPO's newsletter. The news article will document progress, solicit input and present "findings to date" to help keep the public and elected officials informed as the LRTP is updated. MPO staff will be responsible for distributing the quarterly newsletter.

SUBTASK 1.8 - INTERACTIVE PROJECT WEBSITE/SOCIAL MEDIA

The CONSULTANT shall develop, host, and maintain an interactive website that will be in use during the entire LRTP update process. The website will allow citizens to interact with the CONSULTANT and MPO staff as well as be able to access current data, fill out surveys and provide input. The CONSULTANT shall ensure that public informational materials are available and transferable to the MPO for inclusion on the MPO website after the completion of the LRTP update.

The interactive project website will include an interactive mapping element tool that describes planned projects as they move through the LRTP evaluation process. Each project on the map will include metadata describing the project's location/limits, a purpose and need statement,

sponsoring agency, basic project costs, additional project costs due to mitigation strategies and which phase(s) of the LRTP the project will be advanced in.

The CONSULTANT will use the MPO's website designer and/or format to achieve a consistent look and feel to the MPO's website and to facilitate transfer of the project website and media upon completion of the LRTP update.

SUBTASK 1.9 - PUBLICATIONS

The CONSULTANT shall create a project theme or brand concept/logo for the LRTP update to be used throughout the public involvement and documentation. The CONSULTANT shall develop three (3) brochures; one at the beginning of the LRTP update, one in the middle and one close to the end, after the Financially Feasible Plan (FFP) is completed. The CONSULTANT will provide translation and interpretation services for the brochures as needed.

The CONSULTANT shall produce summary brochures and/or fact sheets MPO staff can use during and after the LRTP has been adopted for use in outreach events in English, Spanish, Creole or Portuguese as warranted.

Based on the previously described activities (subtasks 1.1 thru 1.9), the CONSULTANT shall develop a vision for the LRTP, which will determine what communities think about the existing deficiencies in the transportation system and document their priorities for investing in the transportation infrastructure to correct these deficiencies at present and in the future. The CONSULTANT shall coordinate the vision with other similar activities such as the Century Commission for a Sustainable Florida, 1000 Friends of Florida's Florida 2060, and the South Florida Regional Planning Council's (SFRPC) *Seven 50* planning exercise.

The PIP will provide for a three (3) month public comment period before the adoption of the final LRTP by the MPO Board of Directors on or before September 2014. When significant written and oral comments are received on the draft LRTP as a result of the public involvement activities, the CONSULTANT shall prepare a summary, analysis and report on the disposition of comments which will be a part of the final LRTP. **Exhibit 2** presents the anticipated meetings, workshops and public hearings required for the LRTP update.

SUBTASK 1.10 - EVALUATION OF THE PUBLIC INVOLVEMENT PROCESS

The CONSULTANT will conduct a public involvement evaluation for the following purposes:

- To obtain strategic feedback with the potential to improve and increase the effectiveness of comprehensive public participation processes in the future; and
- To evaluate how effectively the public has been educated, informed, and encouraged to actively participate in the transportation planning process, with particular emphasis on the early identification and involvement of potentially impacted individuals, communities, and stakeholders.

The CONSULTANT shall be responsible to develop, track, and analyze the following:

- Public Workshops/Meetings
 - Advice should be sought from MPO Board of Directors as to the timing and locations of meetings and workshops;
 - Develop a brief questionnaire to be administered at the public workshops/meetings for attendees to evaluate the value and effectiveness of the activities and delivery methods;
 - Develop questions or other methods to evaluate whether or not typically under-represented groups participated (i.e. requesting zip codes); and
 - Analyze the extent to which input and comments received are pertinent and substantive, showing understanding of the project as a result of the information provided.

- Project Website (use a widely recognized website analytics software program to report website activity)
 - Track hits, visits, and page views;
 - Track returning visitors versus new visitors;
 - Track length of visit to the homepage and to each specific webpage;
 - Track referring sites (search engines, MPO website, etc.);
 - Track search engine results and document efforts to improve search engine optimization;
 - Create an optional online opportunity for public comment on the project;
 - Include the Google translator feature, and track the extent to which it is used, if possible;
 - Include an option for users to alter the text size on the website, and track the extent to which it is used, if possible; and
 - Provide a “lessons learned” report to document related outreach efforts, results, and future recommendations to enhance the overall effectiveness of public participation.

Exhibit 2 - Workshops, Meetings and Public Hearings Schedule

Topic/Meeting*	MPO	TCC	CIR	BCCB	SC	CSWG	PM	Workshop	Local
Kickoff	1	1	1	1	1	1	1	0	0
PIP	1	1	1	0	1	0	1	<u>5</u>	5
GOMs	1	1	1	1	1	1	1	0	0
Data Compilation	1	1	1	0	1	0	2	0	0
Model Support	1	1	1	0	1	0	2	0	0
Project Options	1	1	1	1	1	0	2	0	0
Needs Assessment	2	2	2	0	2	1	2	0	0
Draft Plan	1	1	1	0	1	1	2	<u>5</u>	5
Final Plan	1	1	1	1	1	1	1	0	0
Plan Adoption	<u>1</u>	<u>1</u>	<u>1</u>	0	0	0	1	0	0
Totals	11	11	11	4	10	5	15	10	10

*Underlined numbers imply an advertised Public workshop or hearing

Meeting dates and times:

- MPO Board of Directors meets the 2nd Thursday of the month;
- Technical Coordinating Committee (TCC) meets the 4th Monday of the month;
- Community Involvement Roundtable (CIR) meets the 4th Tuesday of the month;
- Broward County Coordinating Board (BCCB) meets the 3rd Monday of every other month;
- SC meets as directed by the PM;
- Complete Streets Working Group (CSWG); and
- As directed by PM.

Note: The above table does *not* include meetings with other agencies to compile data and/or other information pertinent to the LRTP update.

SUBTASK 1.10 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 1 (TR1) titled *Public Involvement Plan* to document the proposed visioning, public input and public participation activities. TR1 shall include the proposed meetings schedule; meeting minutes; statistical analysis of public input; map of mailing list coverage; outreach plan to minorities and traditionally underrepresented groups; proposed design for promotional brochures; input to the MPO newsletter; project website design; and other activities proposed by the CONSULTANT to make the PIP a productive and successful process. This documentation should be part of the appendix of the final *2040 LRTP Update*.

TASK 2 - PERFORMANCE ASSESSMENT

The Goals, Objectives, and Measures (GOMs) will direct and evaluate the development of the future transportation system within the MPO's planning area. This task is built on the public education and outreach efforts described in Task 1, *Public Education and Outreach*, and the input from the public, elected officials, transportation officials and implementing agencies.

SUBTASK 2.1 - GOALS, OBJECTIVES AND MEASURES REVIEW

The CONSULTANT shall examine and evaluate the GOMs included in the current 2035 LRTP, then refine and/or revise them as necessary to develop GOMs for the LRTP update in accordance with input from the public involvement process. GOMs should further the vision set forth by the MPO Board of Directors to “provide a balanced transportation system that achieves optimum mobility through improvements in various modes of transport with emphasis on mass transit and transit-supportive land uses”. In addition, the GOMs must incorporate the MAP-21 factors and the guidelines in FDOT’s latest *Metropolitan Planning Organization Program Management Handbook*. The GOMs shall be used as the basis for policies, programs and investments identified in the LRTP.

The CONSULTANT shall review local plans for applicable performance metrics and considerations. The review shall include professional literature, research reports, local governments’ comprehensive plans, FDOT policies contained in the *Florida Transportation Plan (FTP)*, and other sources, which may have concepts applicable to the LRTP development. The review of the GOMs must consider the performance measures and standards set forth in the various MAP-21 transportation management programs. Performance standards for non-highway and highway modes must be developed if not available in local comprehensive plans or ordinances. The consultant shall investigate the applicability of the latest FDOT’s Quality/ Level of Service Handbook and the Transit Capacity and Level of Service Manual, or other publications in developing these standards. The CONSULTANT shall be responsible for obtaining and compiling, for the PM’s review, ideas from the public outreach, MPO Board of Directors, the TCC, the CIR, the CSWG, the Local Coordinating Board (LCB), the Broward TSM&O Task Team and other interested parties regarding the GOMs and performance standards. The CONSULTANT shall keep records of information-gathering efforts in an easily presented and understood manner.

The CONSULTANT shall review the GOMs of neighboring MPOs such as Palm Beach and Miami-Dade and the Regional Transportation Plan (RTP) in order to identify any potential conflicts and to ensure regional consistency between the three MPOs. MPO staff will assist in acquiring available documents from the neighboring MPOs.

SUBTASK 2.2 - EVALUATION CRITERIA

The CONSULTANT shall develop evaluation criteria based on the GOMs, community values and requirements outlined in MAP-21. The criteria will be used to evaluate and prioritize the proposed transportation improvement projects recommended in the Needs Assessment and FFP. Criteria will be both objective and subjective as appropriate. Examples of objective criteria include cost, Level-of-Service (LOS)⁹ and similar numeric assessments based on current or forecast conditions. Subjective criteria include quality-of-life measures, perceived value, consistency with the goals and objectives of partner agency plans, etc.

⁹ A description of the state of a transportation facility rated on a scale of “A” to “F.” For a highway, an “A” rating means traffic is flowing freely and “E” and “F” means it is very congested. Other LOS highway measurements include density, speed and maximum service flow.

MAP-21 established national performance goals for federal highway programs that the LRTP should demonstrate:

- *Safety* - To achieve a significant reduction in traffic fatalities and serious injuries on public roads;
- *Infrastructure Condition* - To maintain the highway infrastructure asset system in a state of good repair;
- *Congestion Reduction* - To achieve a significant reduction in congestion on the National Highway System (NHS);
- *System Reliability* - To improve the efficiency of the surface transportation system;
- *Freight Movement and Economic Vitality* - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
- *Environmental Sustainability* - To enhance the performance of the transportation system while protecting and enhancing the natural environment; and
- *Reduced Project Delivery Delays* - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

MPO staff must be able to report to FHWA and FTA on progress in achieving these targets and the evaluation criteria selected for the LRTP must help to satisfy that requirement.

SUBTASK 2.3 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 2 (TR2) titled *Goals, Objectives and Measures of Effectiveness* to document public input from the workshops and meetings regarding the evaluation criteria to be used to update the LRTP.

TASK 3 - DATA COMPILATION AND REVIEW

This task covers the development of data needed to run the regional travel demand model¹⁰, which is used mainly to develop the highway and transit networks. Other data include but are not limited to planning for bikeway, pedestrian, waterborne transportation, ITS and freight.

¹⁰ A mathematical representation of human travel behavior that is designed to forecast travel so that problems can be defined and solutions can be tested.

SUBTASK 3.1 - HIGHWAY AND MASS TRANSIT DATA

The socioeconomic data is used in the regional travel model to forecast auto and transit trips and is divided into the following sections:

- Household size (1,2,3,4+);
- Household income;
- Number of employed household members (0,1,2,3+);
- Households by presence of children (0,1+);
- Group quarter status;
- Households by type of housing unit;
- Age of population in households;
- Gender of population in households;
- Race/Ethnicity of population in households; and
- Worker occupation of population in households.

MPO staff will prepare a draft socioeconomic data forecast for 2010 (base-year) and 2040 (horizon-year) within the MPO planning area. The CONSULTANT shall check this data for accuracy, consistency and suggest corrections or modifications as necessary. The CONSULTANT will use interpolation to develop two interim year zonal data sets for the Years 2020 and 2030. The CONSULTANT shall utilize Geographic Information System (GIS) applications¹¹ to prepare maps and graphs showing socioeconomic variables by Traffic Analysis Zones (TAZ)¹² and Micro Area Zones (MAZ) for 2010 and 2040. The GIS maps should be based on density per square mile to avoid bias due to the difference in TAZ areas.

SUBTASK 3.2 – PEDESTRIAN, BICYCLE AND GREENWAYS DATA

The pedestrian, bikeways and greenway data will be used to inventory the existing pedestrian facilities and bikeways networks within the MPO planning area. MPO staff in cooperation with the Bicycle/Pedestrian Coordinator and FDOT will transmit to the CONSULTANT the available sidewalk and bikeway data. The CONSULTANT will be responsible for ensuring that this information is both accurate and up to date and for suggesting corrections or modifications as necessary. The CONSULTANT shall use GIS to produce the existing pedestrian, greenways and bikeway facilities maps. The CONSULTANT shall identify on these maps major traffic generators for pedestrian and bicycle trips such as schools, beaches, major employers and others.

SUBTASK 3.3 - WATERBORNE TRANSPORTATION NETWORK DATA

The waterborne transportation data is used to inventory the existing waterborne transportation network which could be used to provide successful and efficient waterborne transportation service. The CONSULTANT will identify existing and potentially navigable waterways within the MPO planning area. The CONSULTANT will also be responsible for ensuring that this information is both accurate and up to date and for suggesting corrections or modifications as necessary. The

¹¹ Computer software and technology that allows information to be analyzed and displayed spatially on a map.

¹² An area used to study the effects of traffic and transit on an area that can be from one to 10 square miles in area.

CONSULTANT shall use GIS to produce the maps showing the waterways, known operational constraints such as manatee protection zones and speed controls.

SUBTASK 3.4 - FREIGHT TRANSPORTATION NETWORK DATA

The 2010 and 2040 highway network will be used to identify projects that would provide for the safe and efficient movement of freight and goods. MPO Staff will transmit to the CONSULTANT the freight and goods movement data available to the MPO such as the *Urban Freight/Intermodal Mobility Study* and from other outreach initiatives to the freight industry. The CONSULTANT will be responsible for ensuring that this information is both accurate and up to date and for suggesting corrections or modifications as necessary. The CONSULTANT shall coordinate the above mentioned activities with the Southeast Florida Transportation Council (SEFTC) and the Regional Freight Study CONSULTANT for consistency and to avoid duplication of efforts.

SUBTASK 3.5 – TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS DATA

The CONSULTANT shall assemble and summarize local, regional, state and national Transportation System Management and Operations (TSM&O) initiatives, projects and studies, including, but not limited to: FHWA’s Connected Vehicles Initiative, IBM’s Smarter Planet initiative, FDOT TSM&O research and the Southeast Florida Regional ITS Architecture.

SUBTASK 3.6 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 3 (TR3) titled *Data Compilation and Review*. TR3 will provide detailed information on how the data was developed and quality checked for accuracy and consistency. The CONSULTANT shall be responsible for the contents and the accuracy of the maps and the GIS data should be maintained in the State Plane Coordinate System (NAD83).

TASK 4 - TRAVEL MODEL SUPPORT

This task includes the review of the model structure, the transportation networks and the travel flows to ensure the forecasts used to build the LRTP are reasonable. The CONSULTANT shall review and suggest, if necessary, model specification adjustments and highway and transit network coding updates to reflect 2010, 2015 2020, 2030 and the 2040 conditions in order to produce accurate and dependable travel forecast projections. The CONSULTANT shall coordinate with SEFTC and FDOT to ensure the regional transportation network reflects the FFP. Updating (coding) the network is the responsibility of the RTP’s CONSULTANT. The CONSULTANT shall coordinate with neighboring MPOs and the RTP’s CONSULTANT to ensure consistency and avoid duplication of efforts.

SUBTASK 4.1 - MODEL REVIEW AND ANALYSIS

The CONSULTANT shall review the model validation results to identify the strength and weakness of the travel model, identify links where the model tends to over report and under report trips and determine how the model output should be adjusted to develop the needs assessment and FFP.

It is likely that the version of the SERPM model used for the regional modeling will incorporate activity-based travel forecasting methods. These methods offer the potential for new project evaluation methodologies; however, these methodologies have not yet been fully tested in the

context of transportation improvement policies. The CONSULTANT will perform sensitivity tests to verify both the capacity and reasonableness of this additional functionality. The CONSULTANT will communicate findings to the RTP's CONSULTANT to address any identified issues or concerns that would prevent successful application of the travel model.

SUBTASK 4.2 - EXISTING + COMMITTED NETWORK REVIEW

This task is primarily directed at compiling Existing + Committed (E+C) transit and highway networks for the Year 2015 condition, which is the end year in the latest available Transportation Improvement Program (TIP)¹³. Transportation projects in the TIP are considered committed. The CONSULTANT shall review the accuracy of the E+C network and suggest corrections or modifications as necessary to the RTP CONSULTANT, who is responsible for the coding of the E+C network. It is the responsibility of the CONSULTANT to coordinate modeling efforts with the RTP CONSULTANT.

SUBTASK 4.3 - FORECASTED TRIP PATTERNS REVIEW

It is the responsibility of the RTP CONSULTANT to identify and assess directional demand flows at multiple levels including:

- Counties;
- TADs ; and
- Corridors.

The CONSULTANT shall review these flows to ensure consistency and suggest corrections or modifications as necessary to the RTP CONSULTANT.

SUBTASK 4.4 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 4 (TR4) titled *Travel Model Support* detailing guidelines required for those cases where model modifications should be performed or where alternative methods have been incorporated by the RTP CONSULTANT to improve model results.

TASK 5 - NEEDS ASSESSMENT

The purpose of this task is to analyze the deficiencies of the E+C transportation facilities in coping with transportation demands in 2040. The 2040 socioeconomic data, in addition to potential bicycle, pedestrian greenways and waterborne activities, will be used to develop the travel demand estimates. The Needs Assessment is an attempt to identify the transportation infrastructure needed to accommodate future travel demand and to address safety issues without regard to economic, local, or political considerations. In this task, the CONSULTANT should review mobility hubs and high performance transit corridors identified in the current 2035 LRTP. It will also consider measures to reduce greenhouse gas emissions and the potential climate change impacts of the transportation system.

¹³ A program of intermodal projects to be implemented over several years that grows out of the planning process and designed to improve transportation in a community. A TIP is required as a condition for a locality to receive federal transit and highway grants.

SUBTASK 5.1 - IDENTIFY DEFICIENCIES IN THE EXISTING + COMMITTED NETWORK

The CONSULTANT shall analyze a highway and transit assignment to the regional E+C Network with the 2040 socioeconomic data to determine the deficiencies on the highway and transit networks that will occur by the Year 2040. This will represent the “do nothing alternative” since the E+C network includes committed improvements in the latest TIP but not beyond that. The CONSULTANT shall use the output from the regional model, the most current Broward Roadway Capacity and Level of Service Report, the most current Highway Capacity Manual, and other software necessary to perform this task. Capacity shortfalls will be identified using the GOMs and performance measures developed in Task 2, *Goals, Objectives and Measures of Effectiveness*. The MPO and its advisory committees, with guidance from the SC (as needed), will define the congestion levels at which a facility becomes “deficient”. The adopted year 2035 cost feasible plan will be used as a starting point to develop a year 2040 needs assessment project list. Particular attention should be given to the potential inaccuracy of the validated model in simulating actual link traffic and transit ridership by route. The CONSULTANT shall develop adjustment factors to correct model forecast anomalies where applicable to improve projection results. These factors should be based on the validated model for base year 2010 and the same year traffic count and transit ridership by route information.

Capacity shortfalls for some of the above items such as the need for bikeways, pedestrian facilities, greenways and others cannot be directly evaluated using the regional travel demand model. However, the CONSULTANT may use other appropriate methods such as the pedestrian and bikeway facilities development guide books, the proposed greenway plan, the Bicycle Suitability Map, sidewalk inventory, input from the CSWG, Transit Capacity and Quality of Service Manual (TCQSM), ITS screening, and others to evaluate transportation needs that cannot be modeled. The CONSULTANT shall develop and examine future travel desire-lines using the regional model and an aggregate of the zonal structure to assess the needs for future transportation facilities.

SUBTASK 5.2 - EVALUATE MULTIMODAL DEFICIENCIES AND SOLUTIONS

The needs assessment must include multi-modal solutions such as:

- New bus routes;
- Improvements to existing transit corridors;
- New or improved exclusive right-of-way transit service (i.e. light rail¹⁴, BRT¹⁵);
- ITS strategies and applications;
- Pedestrian walkways;
- Greenways and bikeway facilities;
- Transportation disadvantaged services;
- High occupancy vehicle treatments;

¹⁴ Fixed rail vehicles that are electrically powered by overhead wires, also known as catenary wires. Light rail transit systems make more frequent stops and travel more slowly than heavy rail or high-speed rail service that is designed to serve more riders and make less frequent stops.

¹⁵ A flexible system of rubber-tired rapid transit vehicles that integrates stations, running ways, and ITS to improve the speed, reliability, and identity of bus transportation.

- Intermodal linkage and access needs;
- Freight related transportation improvements; and
- Arterial intersection improvements.

SUBTASK 5.3 - MASS TRANSIT AND HIGHWAY NEEDS ASSESSMENT

The CONSULTANT shall develop up to four (4) alternative plans to address the capacity shortfalls identified by the regional model in the preliminary needs assessment. The CONSULTANT shall use the results of the analysis of the alternative plans to develop the final 2040 Needs Assessment for highway and mass transit. The Needs Assessment may incorporate the best components of the alternatives or use an alternative with elements taken from other alternatives. The final Needs Assessment will be based primarily on its capacity to promote the goals and objectives identified through public input and interagency staff recommendations. The CONSULTANT shall also address congestion and mobility issues within specific corridors, which may require a separate detailed analysis. Examples of these studies include but are not limited to Strategic Intermodal System (SIS) corridor, Airport/Seaport People Mover, Central Broward East West Transit Study, South Florida East Coast Corridor Study and the Wave Fort Lauderdale Street Car project. The CONSULTANT shall coordinate the LRTP update effort with the agencies managing those studies. Some of these studies have been completed or are underway. The CONSULTANT shall obtain a copy of each study from the appropriate agency and incorporate the study finding in the Needs Assessment process.

All proposed plan alternatives shall be described in sufficient detail to allow implementing agencies to advance projects to the next logical phase of project development. The recommended transportation improvements in each alternative plan shall be consistent with the goals and objectives developed in Task 2 and the input from the public, elected officials and other planning partners. The CONSULTANT shall coordinate this task with the neighboring MPOs and FDOT. The CONSULTANT in coordination with RTP's CONSULTANT, shall use the regional model to test highway and transit alternatives. The CONSULTANT is responsible for providing data required for the coding of transportation networks alternatives in Broward County to the RTP's CONSULTANT. The coding of the transportation networks alternatives is the responsibility of the RTP CONSULTANT.

SUBTASK 5.4 - LAND USE ALTERNATIVE

A key part of the 2040 LRTP update is to provide linkage between land use and transportation infrastructures. In this subtask, the CONSULTANT shall test a "what if" scenario of the relation between the allocation of transportation resources and the growth of population and employment. The consultant shall examine and explore urban design guidelines, development strategies and financial incentives to reinforce the linkage between land use and transportation planning. The proposed strategies should address the efficiency of the transportation system and opportunities for improving transit use, reducing auto trips and trip length and encouraging non-motorized travel.

This task shall include the review of existing and planned transit supportive land uses by municipalities within the MPO boundary. The development of the socioeconomic data for this alternative shall be the responsibility of the CONSULTANT in close consultation with MPO Staff.

The CONSULTANT shall use the socioeconomic data developed under this alternative to test the proposed transportation improvements and demonstrate the relation of transportation investments, efficient land use and socioeconomic growth.

SUBTASK 5.5 - TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS APPLICATIONS

In coordination with Task 5.3, *Mass Transit and Highway Needs Assessment*, and the findings from Task 3, *Data Review and Compilation*, the CONSULTANT shall identify areas in the transportation system where TSM&O strategies would be applicable and beneficial.

The CONSULTANT shall recommend the type of ITS application(s) appropriate for each situation and the operational and maintenance resource needs while working with the Broward County Traffic Engineering Division, FDOT Traffic Operations and other agencies to ensure compliance with the adopted ITS architecture and standards.

SUBTASK 5.6 - FREIGHT AND GOODS MOVEMENT NEEDS

The LRTP will provide for an integrated transportation system to enhance the efficiency of freight movement on the surface transportation network. The CONSULTANT shall address freight and goods movement concerns through inclusion of a variety of surface transportation projects focused on improving truck-mediated goods movement throughout the County.

Fort Lauderdale-Hollywood International Airport and Port Everglades are recognized as two important facilities serving as regional economic engines. The CONSULTANT shall identify other major freight and goods generator facilities, evaluate truck traffic between these facilities and the rest of the county. The CONSULTANT shall recommend appropriate transportation improvement projects, which would improve freight and goods movements over the life of the Plan and include these projects in the Needs Assessment. The CONSULTANT shall review available reports and on-going freight studies such as “Urban Freight/ Intermodal Mobility Study”, the US 27 Multimodal Planning & Conceptual Engineering Study along with input from stakeholders and others to develop this task. The SEFTC will be acquiring a CONSULTANT to conduct a Regional Freight Study. The CONSULTANT shall coordinate with the 2040 Regional Freight Study CONSULTANT and shall ensure that no duplication of efforts is taking place.

SUBTASK 5.7 - PEDESTRIAN, BICYCLE AND GREENWAYS NEEDS

As population increases, the construction of bicycle, pedestrian and greenway facilities as an alternative to automobile travel becomes increasingly important. To meet the transportation needs of those individuals who walk and/or bike for mobility, the MPO is focusing on meeting those needs within the LRTP.

The CONSULTANT shall review the available Bicycle Facilities Plan, the Bicycle Suitability Map, sidewalk inventory, greenway plan and meet with the Bicycle and Pedestrian Advisory Committee and local governments to develop the Bicycle, Pedestrian and Greenway Needs Assessment. The CONSULTANT, in cooperation with MPO staff, shall estimate an appropriate LOS for the existing bikeways and sidewalks. The needs plan should focus on improving and enhancing LOS for areas especially around schools, beaches, major traffic generators, transit stops/stations and other locations identified by the CONSULTANT. The CONSULTANT shall examine existing roadway conditions as they relate to bicycle and pedestrian travel, and propose facility improvements to enhance mobility and safety of pedestrian and bikers. The CONSULTANT shall examine the proposed

Greenway Plan and recommend additional extensions to this plan to meet Year 2040 travel demand.

The CONSULTANT shall identify steps and activities to encourage the usage of bicycle and pedestrian modes of transportation. Activities may include the distribution of safety pamphlets, the introduction of a traffic safety program in Broward public elementary schools, and the provision of materials to the different Police Departments and Sheriff Offices.

SUBTASK 5.8 - WATERBORNE TRANSPORTATION NEEDS

The consultant shall assess the feasibility of utilizing the existing network of coastal canals and waterways to accommodate some of the commuter, recreational and other trip purposes. This task will identify the appropriate waterways and supporting facilities that would provide for the efficient and safe mobility of people.

The CONSULTANT shall evaluate and identify the connectivity between the feasible waterway network and the activity centers and identify potential service routes.

SUBTASK 5.9 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 5 (TR 5) titled *Needs Assessment* documenting the process by which the transportation needs for the year 2040 plan were identified including highway, transit, ITS, freight movement, and other modes. The CONSULTANT shall identify the cost associated with implementing the Needs Assessment, including capital, construction, rights-of-way and operating and maintenance costs and uncertainty where applicable. The CONSULTANT shall develop evaluation criteria consistent with Tasks 1 and 2 to rank projects by mode recommended in the Needs Assessment

TASK 6 - EFFICIENT TRANSPORTATION DECISION MAKING

Efficient Transportation Decision Making (ETDM) creates linkages between land use, transportation and environmental resources through early interactive involvement of permitting and planning agencies. This involvement is expected to save resources and improve decision making by resolving project impact at an early stage. The CONSULTANT shall develop the information needed for review and comment by the Environmental Technical Advisory Team (ETAT). This information will be created for capacity related projects in the Needs Assessment in accordance with FDOT's guidelines for ETDM. The CONSULTANT shall develop the Purpose and Need Statement and a sociocultural profile for each project for inclusion in the ETDM planning screen.

SUBTASK 6.1 - PLANNING SCREEN

The CONSULTANT shall electronically submit the created list of candidate projects and supporting information to the ETAT. The ETAT will conduct preliminary assessments of the impact of candidate projects on the environment using standardized formats and criteria. The CONSULTANT shall review comments from the ETAT and provide a recommended course of action to address these comments.

SUBTASK 6.2 - ENVIRONMENTAL MITIGATION STRATEGIES

The environmental provisions of MAP-21 require that the LRTP describe the types of potential environmental mitigation activities, and potential location for these activities, to restore and

maintain environmental functions that could be affected by the transportation improvements included in the LRTP. It also provides new definitions of what can be classified as a “Categorical Exclusion” or CE.

The CONSULTANT shall identify strategies to mitigate the potential impact of the new transportation infrastructure recommended in the needs assessment on wetlands, cultural (historical/archeological) resources, water resource, threatened and endangered species habitat and other environmentally sensitive subjects. Costs for these for the environmental mitigation strategies should be considered in the overall projects costs.

SUBTASK 6.3 - DOCUMENTATION

The CONSULTANT shall develop Technical Report Number 6 (TR6) titled *Efficient Transportation Decision Making* documenting the requirements and results of applying ETDM on the 2040 Needs Assessment and any environmental mitigation measures

TASK 7 - FINANCIAL RESOURCES

The CONSULTANT shall develop a Financial Resources deliverable describing revenue projections and assumptions supporting these projections. This analysis is crucial to the accuracy of the financially feasible plan development. The financial feasibility report shall include at minimum the following:

- Public and private sources reasonably expected to be made available; and
- Innovative financing techniques to fund existing project costs as well as the capital and Operations and Maintenance (O&M)¹⁶ costs of proposed projects (i.e., techniques may include new starts, tolls, taxing districts, new funding sources, local option tax, private funding and congestion value pricing).

This task will be led by the CONSULTANT. However, the CONSULTANT shall use any data available from the MPO, FDOT and other agencies involved in planning and funding of transportation projects. The task will assess the financial resources that may be available for funding transportation improvements during the LRTP planning period. The work will consist of the identification and evaluation of existing and prospective transportation improvement funding sources, assessment of funding levels available during each of the interim years of the LRTP planning period, and assembly of broad schedules of financial capacity between the present and 2040 to help guide the development of the LRTP. The CONSULTANT shall identify funding eligibility for each source used in the plan. For example, regional funds can be spent on regional facilities, and Florida Intrastate Highway System (FIHS)/Strategic Intermodal System (SIS) funds cannot be spent on local roads. The CONSULTANT shall investigate the use of “flex” funding as allowed to shift from funding highway projects to other modes such as mass transit and/or from capital to O&M.

Based on the above information, the CONSULTANT shall forecast potential financial resources for interim and horizon years 2020, 2030 and 2040 to build modes of transportation improvements as documented in Task 5, *Needs Assessment*. The CONSULTANT shall show how the cost of

¹⁶ Funds paid for salaries, wages, materials, supplies, fuel and equipment used to maintain property, roads, bridges facilities, equipment and buildings. Also would cover funds needed to operate vehicles, rent equipment and facilities and settle claims.

transportation improvement projects in the LRTP including capital; operations and maintenance are met using available revenues. This will demonstrate that the FFP for new construction can be reasonably expected to be completed in the LRTP timeframe. The CONSULTANT shall incorporate a sub-section in the Financial Resources Task to discuss new potential revenue sources that may be available for the implementation of improvements identified in the Needs Assessment, which are not included in the Financially Feasible Plan. The CONSULTANT shall estimate the amount of revenues expected to be generated from these sources.

SUBTASK 7.1 - DOCUMENTATION

The CONSULTANT shall document the financial resources task in Technical Report Number 7 (TR7) titled *Financial Resources*. The report shall include detailed analysis of types of available and potential funding sources earmarked for transportation improvement during the LRTP planning period, i.e., FY 2020 through 2040 (transportation improvements between 2014 and 2019 are already committed in the TIP).

TASK 8 - FINANCIALLY FEASIBLE PLAN

The CONSULTANT shall prepare the Financially Feasible Plan (FFP) using the results from previous tasks. The FFP shall include mass transit, pedestrian facilities, greenways, bikeways, highways, waterborne transportation, ITS, freight transportation as identified in the needs assessment, that are financially feasible and reasonably accepted by the public and elected officials. The CONSULTANT shall ensure that the final plan continues to be multimodal in nature and the recommended projects are consistent with the LRTP's vision, goals and objectives.

SUBTASK 8.1 - INTEGRATE PUBLIC COMMENTS

Public involvement is essential during the LRTP development, especially in the beginning and at the end. The FFP shall be finalized after sufficient policy review and public involvement. The CONSULTANT shall seek input from the MPO Board of Directors, its advisory committees, FDOT staff and other interested parties as part of the fulfillment of this task and as specified in Task 1, *Public Education and Outreach*. The CONSULTANT shall coordinate, schedule, and attend meetings, make presentation, take meeting minutes and keep records of information gathering efforts in such a way that is easily understood by the public and staff. MPO staff will be available to assist the CONSULTANT as specified in the PIP or as determined by the PM.

Preparation of the FFP must include documentation describing the efforts made to solicit public input and how it was used to help craft the LRTP. The CONSULTANT shall identify how the proposed Financially Feasible Plan for the transportation system meets the performance standards included in the vision, goals and objectives. When significant written and oral comments are received on the draft *2040 Long Range Transportation Plan* as a result of the PIP, the CONSULTANT shall prepare a summary, analysis, and report on the disposition of comments which will be made a part of the final *2040 Long Range Transportation Plan*.

SUBTASK 8.2 - FINANCIALLY FEASIBLE PLAN DEVELOPMENT

As per Federal and State guidelines, the FFP must be implementable by the appropriate local and state agencies. The financial feasibility will be based on the reasonably estimated future revenues expected to be available from both private and public sources to carry out the plan in a timely

manner, i.e., between years 2015 and 2040. The period between 2014 (plan adoption year) and 2019 is covered in the five-year TIP and will be reflected in the FFP as committed improvements. In developing the FFP, the CONSULTANT shall demonstrate the consistency of proposed transportation investments with the projected sources of revenue identified in the Financial Resources. Using the Financial Resources Report and the cost data generated in Task 5, *Needs Assessment*, the CONSULTANT shall meet the requirements for a financial analysis as specified in FDOT's Metropolitan Planning Organization Program Management Handbook.

SUBTASK 8.3 - COMPARATIVE ANALYSIS

The CONSULTANT shall perform a comparative analysis between the Needs Assessment and the FFP and identify projects that will not make the FFP due to revenue shortfalls. The CONSULTANT shall identify and evaluate the impacts on levels of service for modes of transportation and land use, of not being able to finance projects in the Needs Assessment.

SUBTASK 8.4 - LIVABILITY PLANNING AND CONGESTION MANAGEMENT

The intent of livability planning and congestion management is to improve quality of life through the efficiency and effectiveness of the transportation system. As per Federal guidelines, the LRTP should address livability planning and congestion management through corridor-specific strategies. The CONSULTANT shall identify appropriate livability planning and congestion management strategies to improve the movement of people and goods. Such strategies shall be included in the FFP.

SUBTASK 8.5 - CONSISTENCY WITH LOCAL PLANS

The CONSULTANT shall explain how the FFP is consistent with the transportation element and future land use element of local government's plans. The CONSULTANT shall prepare a list identifying inconsistencies, if any, between the FFP and other plans.

SUBTASK 8.6 - PREPARE INTERIM YEAR PLANS

Using the 2040 FFP, available funding sources and socioeconomic data for interim Years, 2020 and 2030 the CONSULTANT shall develop interim year plans including project cost estimates for capital, maintenance and operations including amounts expended by FDOT and local partners on current transportation facilities.

SUBTASK 8.7 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 8 (TR8) titled *Financially Feasible Plan*, documenting the entire process of developing a FFP including the Interim Year Plans

TASK 9 - ENVIRONMENTAL JUSTICE

The principles of environmental justice, as outlined by the FHWA, are intended to ensure that the process of transportation planning is consistent with the provisions of Title VI of the Civil Rights Act. These provisions should be incorporated into the 2040 LRTP update, and adhered to throughout the public involvement task of this project.

In close coordination with MPO staff, the CONSULTANT shall identify geographic areas where traditionally underrepresented populations are located. The CONSULTANT shall assess the level of transportation investment in these areas using GIS. The CONSULTANT shall demonstrate that the

proposed 2040 Financially Feasible Plan will not have a disproportionate adverse impact on low income/minority communities and how it responds to concerns identified during the public outreach process.

SUBTASK 9.1 - DOCUMENTATION

The CONSULTANT shall develop Technical Report Number 9 (TR9) titled *Environmental Justice* documenting how the new plan satisfies the principles and requirements of Environmental Justice.

TASK 10 - REGIONAL TRANSPORTATION PLANNING COORDINATION

The Miami-Dade, Broward, and Palm Beach MPO's have grown together and are now considered one urbanized area by the Census. To address the regional transportation concerns in the urbanized area, the South East Florida Transportation Council (SEFTC) was formed. SEFTC planning partners are currently coordinating planning processes. SEFTC has developed a Regional Transportation Technical Advisory Committee (RTTAC) tasked with assessing the following types of regional facilities:

- Interstates and Expressways;
- Major and Minor Regional Arterials;
- Extensions to Principal Arterials Connecting Regional Facilities;
- Future Extensions of Current Regional Facilities;
- Regional Transit Systems; and
- Regional Freight Networks.

SUBTASK 10.1 - REGIONAL TRANSPORTATION PLAN

The CONSULTANT will coordinate and assist in the preparation of the *2040 Regional Transportation Plan* (RTP). The RTP will be developed by a different CONSULTANT in cooperation Palm Beach, Broward and Miami-Dade MPOs. This task would entail meeting with SEFTC members, MPO staffs and the RTP CONSULTANT to support:

- Development and implementation of a *2040 Regional Transportation Plan* (RTP) for the tri-county region;
- Development and implementation of a regional prioritization process, yielding a single list of prioritized regionally significant projects for the tri-county region;
- Development and implementation of a regional public involvement process to build public understanding and awareness of the region and regional transportation issues and opportunities;
- Continuation of regional-level air quality planning efforts;
- Generation of regional land use strategies with the South Florida Regional Planning Council and Treasure Coast Regional Planning Council; and,
- Utilization of performance measures to assess the effectiveness of enhanced regional coordination efforts.

SUBTASK 10.2 - TRANSIT SYSTEM PLAN

To more effectively deliver premium transit services on a regional basis, a *Transit System Plan (Public Engagement Campaign Implementing Broward's Transportation Plans and Projects)* will be developed by a different CONSULTANT. The *Transit System Plan* will offer potential solutions within the region which provides additional transportation choices and the development of a shared transit vision so that the limited financial resources can be expended in an efficient manner. The CONSULTANT shall coordinate with *Transit System Plan* CONSULTANT to ensure consistency with the *2040 Long Range Transportation Plan*.

SUBTASK 10.3 - DOCUMENTATION

The CONSULTANT shall develop Technical Report Number 10 (TR10) titled *Regional Transportation Planning Coordination* summarizing the RTP and Transit Systems Plan coordination efforts and outlining how the regional corridors in the three MPO regions were evaluated and improved to meet future travel demand.

TASK 11 - 2040 LONG RANGE TRANSPORTATION PLAN ADOPTION

The CONSULTANT shall perform work necessary to obtain final adoption of the *2040 Long Range Transportation Plan* by the MPO Board of Directors no later than September 2014. A conceptual approval is required by July 2014 so the final approval can proceed on time. The CONSULTANT shall prepare necessary presentation material and handouts including slide presentation to explain how the plan was developed in accordance with the vision, GOMs community values and available funding sources. This work includes the development of the final plan update report including the contents of Technical Reports 1 through 10.

SUBTASK 11.1 - DOCUMENTATION

The CONSULTANT shall prepare Technical Report Number 11 (TR11) titled *2040 Long Range Transportation Plan Adoption*. This report shall include detailed analysis of previous tasks and Technical Memorandums 1 through 10, maps, figures, and revisions. TR11 will be circulated to the review bodies as outlined in Table 1.

The CONSULTANT shall prepare Technical Report Number 12 (TR12) titled *2040 Long Range Transportation Plan Executive Summary*. The Executive Summary shall be of high quality paper and print and shall briefly outline the tasks included above and describe the transportation improvements. A summary of costs and revenues shall be presented in a table format and explained in the text. The Executive Summary shall include maps and other graphics to assist the reader in understanding the LRTP.

REPORTING

Reporting activities for this contract will include a series of monthly progress reports documenting the work performed during the reporting period. Monthly progress reports shall be prepared by the CONSULTANT to document the progress in the previous month, problems encountered and activities planned for the next month. The CONSULTANT shall provide a monthly progress report regardless the status of progress, whether or not a progress payment is requested. The progress report will include an updated project schedule as necessary.

Invoices will be based upon the CONSULTANT estimate of the percent of work completed and direct expenses as incurred. Both the percent of work completed and directed expenses will be categorized by task. An original invoice plus one copy is due to the Project Manager (PM) within fifteen (15) days of the end of the month. Invoices shall designate the nature of the services performed so that a payment could be made for that portion of the work completed. The final invoice is due to the Project Manager no later than sixty (60) days after the *2040 Long Range Transportation Plan* adoption by the MPO Board of Directors and the completion of required reports and final documents.

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DOCUMENTATION

The MPO retains all rights and ownership to the data, reports, presentations, maps, video and figures delivered by the CONSULTANT in order to complete the tasks documented in this *Scope of Services*. All reports shall be of high quality and reproducible and maps shall be provided in a GIS platform compatible with the MPO's computer software and hardware.

PROJECT SCHEDULE

The CONSULTANT shall submit a project schedule to the MPO at the project kick-off meeting. The CONSULTANT shall prepare and submit project schedule updates along with each monthly progress report or whenever changes occur to the initial project schedule.

TECHNICAL REPORTS

The CONSULTANT shall prepare the following Technical Reports (TR):

- TR 1 (Task 1) *Public Involvement Plan*
- TR 2 (Task 2) *Goals, Objectives and Measures of Effectiveness*
- TR 3 (Task 3) *Data Compilation and Review*
- TR 4 (Task 4) *Travel Model Support*
- TR 5 (Task 5) *Needs Assessment*
- TR 6 (Task 6) *Efficient Transportation Decision Making*
- TR 7 (Task 7) *Financial Resources*
- TR 8 (Task 8) *Financially Feasible Plan*
- TR 9 (Task 9) *Environmental Justice*
- TR 10 (Task 10) *Regional Transportation Plan Coordination*
- TR 11 (Task 11) *2040 Long Range Transportation Plan*
- TR 12 (Task 11) *2040 Long Range Transportation Plan Executive Summary*

RESPONSIBILITIES

MPO staff shall:

- Conduct a technical review and/or assist in coordinating the review of all data, reports, presentations, maps, video and figures by appropriate planning partners; and
- Deliver comments to the CONSULTANT within 15 working days from the date that the preliminary data, reports, presentations, maps, video and figures are received from the CONSULTANT.

The CONSULTANT shall:

- Review and check all data, reports, presentations, maps, video and figures for accuracy, quality and consistency, prior to review by MPO staff and other relevant planning partners;
- Deliver one electronic copy of preliminary materials for distribution to the MPO Board of Directors, the Technical Coordination Committee (TCC), the Community Involvement Roundtable (CIR), the Broward County Coordination Board (BCCB), the Steering Committee (SC) and the Complete Streets Working Group (CSWG) for review and comment;
- Revise preliminary data, reports, presentations, maps, video and figures to address comments provided within 15 working days of the date that the comments are delivered to the CONSULTANT;
- Request from the RTP CONSULTANT and deliver the FSUTMS users' files for the 2040 horizon year and the 2020 and 2030 interim years in a digital format compatible with the MPO's computer hardware and software;
- Deliver one electronic copy, on a CD-R, and 60 printed copies of the *2040 Long Range Transportation Plan Executive Summary*; and
- Deliver 20 electronic copies, each written on a separate CD-R, and 60 printed copies of the *2040 Long Range Transportation Plan*.

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MEETINGS

All MPO Board of Directors, Technical Coordination Committee (TCC), Community Involvement Roundtable (CIR), Steering Committee (SC) and Complete Streets Working Group (CSWG) meetings will be held at the offices of the MPO at 100 West Cypress Creek Road, Suite 850, Fort Lauderdale, FL 33309, unless otherwise noted at the time of meeting announcement. Workshops and meetings with civic associations and local groups will be located throughout the MPO's planning area in accordance with **Exhibit 1**.

MONTHLY MEETINGS

The CONSULTANT shall be available to meet with the Project Manger at least twice a month to discuss the contents of the monthly progress reports, to discuss the schedule of future activities and to ensure the project schedule is maintained.

TECHNICAL PRESENTATIONS

The CONSULTANT shall make the necessary arrangements to present to the MPO Board of Directors, TCC, CIR, BCCB, SC and the CSWG as required in **Exhibit 1**.

MEETINGS WITH LOCAL GROUPS

The CONSULTANT shall hold ten (10) meetings with the appropriate local groups, civic associations, and local governments as necessary to solicit input regarding vision and community values during the LRTP update. Five meetings will be held in the beginning of the update process and five at the end after completing the draft *2040 Long Range Transportation Plan*. MPO staff must be advised in advance of these meetings to ensure that enough time is given for their participation, if desired. Meetings with local groups shall be arranged by the CONSULTANT.

STEERING COMMITTEE

The LRTP will be guided by a SC that will provide technical advice and coordination throughout the plan update process. The SC will be created by MPO staff and will include members from the TCC and the CIR. The SC will meet bimonthly or as needed to review data, reports, presentations, maps, video and figures.

WORKSHOPS

The CONSULTANT shall prepare ten (10) workshops during the course of LRTP update. Five (5) workshops will be held in the beginning of the project with the public and elected officials to solicit input regarding visioning, potential controversial transportation improvements, establishing the evaluation criteria and the Goal, Objectives and Measures (GOMs). The other five workshops will be held after completing the draft *2040 Long Range Transportation Plan*. The CONSULTANT shall prepare the necessary material, exhibits, presentation, advertising, and handouts for the workshops. The CONSULTANT shall arrange to take minutes and record verbal and documented comments from the public, staff and elected officials. The CONSULTANT shall include a copy of these records in the Appendix of the appropriate Technical Reports (TR) and the final *2040 Long Range Transportation Plan*.

RESPONSIBILITIES

MPO staff will:

- Appoint a Project Manager (PM);
- Provide the CONSULTANT with available data and documentation maintained by the MPO;
- Assist the CONSULTANT in obtaining data and documentation maintained by the MPO's planning partners;
- Assist the CONSULTANT in coordinating the various meetings and workshops; and
- Provide timely review of all data, reports, presentations, maps, video and figures as delivered by the CONSULTANT.

The CONSULTANT will:

- Prepare and maintain a project schedule to complete the *2040 LRTP Update*;
- Prepare project schedule status updates along with monthly progress reports; and
- Perform necessary work to complete the tasks documented in this *Scope of Services*.

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REFERENCES

MAP-21 (public law 109-59) <http://www.gpo.gov/fdsys/pkg/PLAW-109publ59/pdf/PLAW-109publ59.pdf>

23 CFR Part 450, Federal Highway Administration - Planning Assistance and Standards
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=7f5985b5d2fe301f3fd5a6f537e6bfb8&rqn=div5&view=text&node=23:1.0.1.5.11&idno=23>

49 CFR Part 613, Federal Transit Administration - Planning Assistance and Standards
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rqn=div5&view=text&node=49:7.1.2.1.7&idno=49>

MPO Program Management Handbook, Chapter 4
<http://www.dot.state.fl.us/planning/policy/metrosupport/mpohandbook/ch4.pdf>

42 USC 2000d et. seq. (Title VI of the Civil Rights Act of 1964, as amended)
<http://www.fhwa.dot.gov/civilrights/programs/tvi.htm>

Environmental Justice http://www.fhwa.dot.gov/environment/environmental_justice/

The Florida Transportation Plan <http://www.dot.state.fl.us/planning/FTP/>

Florida Strategic Highway Safety Plan
<http://www.dot.state.fl.us/safety/SHSP/StrategicHwySafetyPlan.shtm>

Efficient Transportation Decision Making (ETDM) Planning and Programming Manual, March 2006
<http://www.dot.state.fl.us/emo/pubs/etdm/etdmmanual.shtm>

Sociocultural Effects Evaluations Handbook for the ETDM Process, November, 2005
<http://www.dot.state.fl.us/emo/pubs/sce/sce.htm>