



**SCOPE OF WORK
FOR
NW 31st Avenue Lane Elimination Study
&
Mobility Plan
City of Lauderdale Lakes**

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PURPOSE

The purpose of the scope of work contains two primary tasks: (1) Lane Elimination Analysis from West Oakland Park Boulevard to Commercial Boulevard on NW 31st Avenue and (2) develop a mobility plan to identify and provide solutions to enhance safety, connectivity and multimodal improvements for NW 31st Avenue. This scope of work will also delineate responsibilities of the MPO and the LEAD CITY (Lauderdale Lakes will represent all of the municipalities along the corridor during the term of the project lifecycle as charged in the Resolutions of Support by the respective municipalities) throughout the life of the project and the necessary requirements to comply with the MPO PTAP Policies as stated below:

- a) The studies should yield executable projects
- b) All projects/plans must have a “transit nexus” (FTA C 7050.1):
 - 1) within or adjacent to public transportation facilities
 - 2) Avenues of access that connect directly to public transportation
 - 3) Connections between public transportation and airports, train stations, and other transportation facilities
- c) BMPO Member Governments may submit applications:
 - 1) Limit of one (1) individual applications
 - 2) Limit of one (1) additional partner applications
- d) The BMPO will conduct the project / plan study on the agency’s behalf.
- e) The applicant must have BMPO Interlocal Agreement for planning services in place by the time the application is submitted.
- f) The applicant may meet with BMPO Staff to discuss planning assistance applications prior to submittal.
- g) All applications will require supporting resolutions from applicants which include commitments to provide:
 - 1) Local match equaling the greater of 10% of the project/plan or \$10,000, (and additional funds should the scope exceed the budgeted cap).
 - 2) Lead staff person responsible for coordination with MPO staff.
 - 3) Documentation of a public participation approach.

The MPO will perform planning services required for the PTAP project.

The LEAD CITY will provide administration services and reviews of all work associated with the plan and perform all public participation activities.

Task A – Lane Elimination Analysis

INTRODUCTION AND OBJECTIVE

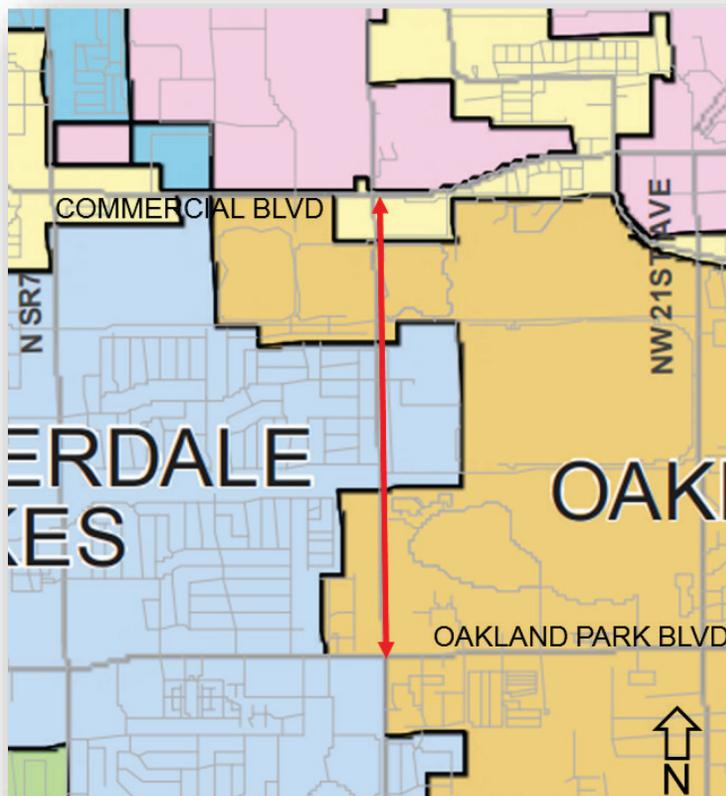
The LEAD CITY provided the following objective in the PTAP application: “To create a plan that identifies transportation and transit improvements on NW 31st Avenue that enhance safety, mobility and connectivity.” The LEAD CITY has identified that part of the focus of the mobility plan for NW 31st Avenue shall include traffic capacity optimization and multimodal accommodations. In order to consider such improvements, a lane elimination is required for a

portion of the corridor due to the limited available right of way. To accomplish this, a lane elimination analysis is required before the MPO proceeds with developing the mobility plan.

The proposed limits for the lane elimination, as identified by the LEAD CITY, extend on NW 31st Avenue from W Oakland Park Boulevard to Commercial Boulevard, as depicted in the map below. The limits extend through multiple municipalities including: Lauderdale Lakes, Oakland Park, and Tamarac. A Resolution of Support was acquired from each of the above mentioned municipalities as they are partner governments to be involved in the planning process. The roadway is owned by Broward County and therefore a Resolution of Support was obtained from the Board of County Commissioners for the study to take place.

Prior to the start of the lane elimination analysis, the LEAD CITY shall obtain concurrence with the limits of the lane elimination proposal in writing from the Municipal Managers (Municipal Mayor copied) of the municipalities located along the limits (Oakland Park and Tamarac). Additionally, the LEAD CITY shall notify Broward County and the Municipal Managers (Municipal Mayor copied) of the municipalities included in the study area identified in Task B: Mobility Plan (Fort Lauderdale and Lauderhill).

Proposed Study Area



A.1 PROJECT MANAGEMENT

A.1.1 Project coordination meetings

The MPO will meet with the LEAD CITY as needed throughout the Lane Elimination Analysis. It is anticipated meetings will occur on an as needed basis, during the study period. These meetings

will include progress and miscellaneous review and other coordination activities with the LEAD CITY.

A.1.2 Project status reporting

The MPO will conduct regular progress status meetings with the LEAD CITY to address completion of scope tasks relative to project schedule and budget resources. (May be conducted together with coordination meetings in Section 1.1).

A.1.3 Quality Control

The MPO will establish a procedure for Quality Control and Quality Assurance (QC & QA) covering the completion of all work through this project. The MPO will check, review, and conduct surveillance of work activities by objective and qualified individuals who were not directly responsible for performing the initial work.

A.1.4 Schedule

Within a reasonable time after finalizing of the scope of work, the MPO shall submit a Project activity schedule to the LEAD CITY. The MPO shall allow for a review period of at least two (2) weeks for each draft deliverable submitted for LEAD CITY review in the schedule.

A.1.5 Submittals

The MPO will compile and transmit draft documents identified in this Scope of Work to the LEAD CITY for review.

After LEAD CITY review of the draft submittals, the MPO will address comments, prepare a matrix of comments and responses as applicable, and submit revised documents. The MPO will assist the LEAD CITY in resolving the comments received from other agencies and the public, including preparation of individual responses.

A.1.6 Services to be performed by the LEAD CITY

The LEAD CITY will provide project data currently on file and available, such as:

- List all documents or previous analyses (e.g. bus stop condition reports, etc.);
- Recently completed roadway studies for the study area (e.g. PD&E studies, access management, intersection plans, design files, and capacity improvements);
- Multimodal or small area studies (e.g. freight, intersection, transit, pedestrian, bicycle, land use, signal warrant analysis, etc.);
- Previously conducted transit service plans, transit feasibility studies, etc.;
- All information in the possession of the LEAD CITY pertaining to prior and on-going studies that may affect the project such as existing development plans, transportation reports, prior environmental studies, existing permit information, existing drainage reports and any other documents related to the study corridor;
- All available information in the possession of the LEAD CITY pertaining to utility companies whose facilities may be affected by the proposed plan;
- All future information that is in possession or may become available to the LEAD CITY pertaining to development plans;
- Crash data;
- Available transportation and planning data.

- All land use and development approvals that may impact traffic conditions within the study area (including all municipalities along the corridor and influence area).

A.2 PUBLIC AND STAKEHOLDER INVOLVEMENT

Public outreach will be tailored to the specific needs of the project as determined by the LEAD CITY. Public outreach includes communicating to and receiving information from all interested persons, groups, and government organizations regarding the plan. The MPO will assist in, a limited capacity, public involvement for this plan.

A.2.1 Public Participation Plan

The LEAD CITY will be responsible for developing a Public Participation Plan (PPP) that encourages participation, creates opportunities for citizens to provide input, educates, is interactive and produces a uniform plan image. The LEAD CITY shall include the input of the additional municipalities located in the study area when developing the PPP. Where possible, visualization techniques and other technologies should be used to communicate information and data as needed. It is recommended that the PPP include two or three evaluation measures that can be employed to demonstrate the effectiveness of the public involvement activities over the course of the study.

A.2.1.1 Identify Roles and Responsibilities

The LEAD CITY's PPP will identify the recommended roles and responsibilities for all stakeholder and partner agencies participating in the study.

A.2.2 Public Involvement Activities

The MPO will support, in a limited capacity, public involvement activities required for appropriate outreach and information sharing objectives of this plan, including but not limited to briefings, meetings, workshops and other events.

A.2.2.1 Stakeholder Coordination

The LEAD CITY's PPP will also provide necessary documentation to assist in coordination with agencies and other parties to complete the plan. The LEAD CITY will provide notice of all meetings with these agencies and will document the minutes of meetings, document and distribute an action list, and follow up accordingly to ensure the appropriate actions are completed in a timely manner.

Potential stakeholders may include: Broward County Transit, neighborhood associations, business development organizations, non-profits, etc.

The MPO will prepare for and attend presentations to stakeholders as agreed to by both parties.

A.2.2.2 Coordination with other Plans and Projects

The MPO will coordinate plan activities with any ongoing and / or planned city projects that may affect this plan.

A.2.2.3 Project Outreach Materials

The MPO will assist the LEAD CITY in the development of all public involvement materials (in digital format only) required for appropriate outreach and information sharing objectives of this plan, including but not limited to factsheets, advertisements, brochures, handouts, map exhibits, social media and website content. The MPO shall provide drafts of these materials to the LEAD CITY for review and use.

A.2.2.4 Public Meetings

The MPO will provide support necessary for the LEAD CITY to hold various public meetings.

A.3 LANE ELIMINATION REQUIREMENTS

The MPO will coordinate with the LEAD CITY to ensure that the lane elimination analysis follows the requirements and approval process set forth by Broward County (facility owner), more specifically the County Complete Streets Team and the County Commission. This includes the following:

- The creation of a Community Awareness Plan (CAP)
- An analysis of the segment of roadway proposed for lane elimination that extends a minimum of one mile in all directions per one mile segment
- Intergovernmental coordination
- A project-specific municipal “vision” document that addresses the long-range vision of the lane elimination and the surrounding area

See Appendix A for the “Community Awareness Plan” Guidelines provided by the Broward County Complete Streets Team and the “Lane Elimination Considerations – Complete Streets Team” Memo for greater detail regarding the requirements in Task A.3.

A.3.1 Community Awareness Plan (CAP)

This Plan is to be provided by the LEAD CITY. The CAP may be incorporated into the Public Participation Plan (PPP) referenced in Task A.2.1 above. According to the Guidelines provided by the County’s Complete Streets Team, “the objective of the CAP is to notify affected parties, including local governments, property owners, residents, tenants, and the public at large, of the municipality’s proposed lane elimination and associated project components, and the anticipated impact of the project.”

The CAP should include at least two components: public meeting/workshop notifications and public meeting/workshop preparation. See Appendix A for more information.

A.3.2 Lane Elimination Analysis

The County requires “An analysis of the segment of roadway proposed for lane elimination that extends a minimum of one mile in all directions per one mile segment,” hereinafter referred to as the “limits” and the “study area” respectively. The limits of the lane elimination analysis are W Oakland Park Boulevard and Commercial Boulevard. The study area will be determined by a buffer extending out from the segment of roadway proposed for lane elimination that extends a minimum of one mile in all directions per one mile segment.

The MPO will follow the guidelines for lane elimination proposals, located in the BMPO’s *Complete Streets Master Plan*, which state the following:

The lane elimination process “should encompass a review of potential impacts in close proximity to the proposed project including planned projects, street network impacts and planning impacts. This review may cross municipality and county boundaries. Key coordination partners for these efforts include the following:

- Metropolitan Planning Organization (MPO)
- Florida Department of Transportation (FDOT)
- Broward County Traffic Engineering Division (BCTED)
- Broward County Transit (BCT)

- Broward County Schools
- Neighboring Cities
- Local Emergency Services

Within a 2-mile buffer of proposed lane elimination projects, projects that may create street network impacts should be reviewed. These projects may include the following:

- Other Lane Elimination Projects
- MPO/FDOT roadway projects
- Planned developments
- Projects in the current Capital Improvement Plan (CIP)

In closer proximity, within a half-mile buffer, the following should be reviewed:

- Existing, planned or ongoing traffic calming studies
- Planned access management changes
- Bus stops
- Projects in the Transit Development Plan (TDP)
- One-way streets”

The MPO will utilize a professional engineering consultant to conduct the lane elimination analysis.

The lane elimination analysis may include, but not limited to, different models that will be run or scenarios, such as: keeping the same number of lanes at the signalized intersections and removing a lane in between intersections, and removing a lane at the signalized intersections and in between intersections.

At a minimum, the analysis will include the following:

1. Existing Conditions
 - a. The consultant will use existing data available, as acceptable to Broward County Traffic Engineering Division, for the lane elimination and use an acceptable growth factor to 2021 due to the existing reduction in traffic due to the pandemic.
2. Future Traffic Volumes
 - a. The consultant will use the SERPM traffic volumes used in the adopted 2045 Metropolitan Transportation Plan to evaluate future conditions.
3. Lane Reduction Evaluation
4. Conclusions and Recommendations

A.3.3 Intergovernmental Coordination

The LEAD CITY will be responsible for notifying, in writing, any municipality located within the study area of the proposed lane elimination. The LEAD CITY will be responsible for providing documentation of such notifications to the County. The LEAD CITY will be responsible for collecting letters of “no objection” from any municipality where the analysis identifies a roadway link that would be impacted with an increase in projected trips as per the study (even if below the three percent threshold). The letter of no objection would be required (at a minimum) to be from the municipal manager with the municipal mayor copied. The LEAD CITY will be responsible for submitting these letters of no objection to the County.

A.3.4 Long-Range Vision

The LEAD CITY will be responsible for providing the long-range vision document to Broward County. The document should address the long-range vision of the lane elimination and the surrounding area.

A.4 RECOMMENDATION

The lane elimination analysis will include a recommendation on the proposed lane reduction within the study area. The MPO and the LEAD CITY recognize that the County considers impacts that exceed the established “de minimis threshold” of three percent or greater to be “adverse.” At their discretion, the LEAD CITY shall present the lane elimination analysis to the Broward County Complete Streets Team and the Broward County Commission. If the lane elimination proposal is approved by the County Commission, the MPO will proceed with Task B with the assumption to repurpose a lane of the segment of NW 31st Avenue as determined by the County Commission. If the lane elimination is not approved by the County Commission, Task B will move forward with the existing number of lanes on NW 41st Avenue and not include a lane being repurposed for the Mobility Plan.

Task B – Mobility Plan

INTRODUCTION AND OBJECTIVE

The LEAD CITY provided the following objective in the PTAP application:

To create a plan that identifies transportation and transit improvements on NW 31st Avenue that enhance safety, mobility and connectivity. The LEAD CITY has identified that the NW 31st Avenue corridor lacks pedestrian safety features such as continuous sidewalks, pedestrian crossings and lighting. The LEAD CITY also has identified a need for intersection regulation, and crossing signal and marking improvements. Bus shelters and bus routes are recognized by the LEAD CITY as deficient. Additionally, noise from traffic and absence of roadway lighting are documented problems on this corridor.

The proposed project limits extend on NW 31st Avenue from Broward Boulevard to W McNab Rd, as depicted in the map provided by the LEAD CITY below. The project scope extends through multiple municipalities including Lauderdale Lakes, Fort Lauderdale, Oakland Park, Tamarac, Lauderhill and unincorporated Broward County. A Resolution of Support is required from each of the above mentioned municipalities as they are partner governments to be involved in the planning process. The roadway is owned by Broward County and therefore the LEAD CITY acquired a Resolution of Support from the Board of County Commissioners for the study to take place.

Proposed Project Limits



PROJECT REQUIREMENTS AND PROVISIONS FOR WORK

The MPO will conduct the appropriate planning level analyses related to the plan, as outlined in Broward MPO’s [Transportation Planning Guidebook](#) (January 2018), and directed by the Plan objective.

The MPO will maximize the use of existing information available from state, regional, local agencies, private sources, and its own files.

B.1 PROJECT MANAGEMENT

B.1.1 Project coordination meetings

The MPO will meet with the LEAD CITY as needed throughout the life of the Project. It is anticipated meetings will occur every two (2) weeks (as needed basis), for approximately 24 meetings during the study period. These meetings will include progress and miscellaneous review and other coordination activities with the LEAD CITY.

B.1.2 Project status reporting

The MPO will conduct regular (at least monthly) progress status meetings with the LEAD CITY to address completion of scope tasks relative to project schedule and budget resources. (May be conducted together with coordination meetings in Section 1.1).

B.1.3 Quality Control

The MPO will establish a procedure for Quality Control and Quality Assurance (QC & QA) covering the completion of all work through this project. The MPO will check, review, and conduct surveillance of work activities by objective and qualified individuals who were not directly responsible for performing the initial work.

B.1.4 Schedule

Within a reasonable time after finalizing of the scope of work, the MPO shall submit a detailed Project activity schedule to the LEAD CITY. The schedule must indicate all required submittals, critical path activities, and key project milestones. The MPO shall allow for a review period of at least two (2) weeks for each draft deliverable submitted for LEAD CITY review in the schedule.

B.1.5 Submittals

The MPO will compile and transmit draft documents identified in this Scope of Work to the LEAD CITY for review.

After LEAD CITY review of the draft submittals, the MPO will address comments, prepare a matrix of comments and responses as applicable, and submit revised documents. The MPO will assist the LEAD CITY in resolving the comments received from other agencies and the public, including preparation of individual responses.

B.1.6 Services to be performed by the LEAD CITY

The LEAD CITY will provide project data currently on file and available, such as:

- List all documents or previous analyses (e.g. bus stop condition reports, etc.);
- Recently completed roadway studies for the study area (e.g. PD&E studies, access management, intersection plans, design files, and capacity improvements);
- Multimodal or small area studies (e.g. freight, intersection, transit, pedestrian, bicycle, land use, signal warrant analysis, etc.);
- Previously conducted transit service plans, transit feasibility studies, etc.;
- All information in the possession of the LEAD CITY pertaining to prior and on-going studies that may affect the project such as existing development plans, transportation reports, prior environmental studies, existing permit information, existing drainage reports and any other documents related to the study corridor;
- All available information in the possession of the LEAD CITY pertaining to utility companies whose facilities may be affected by the proposed plan;
- All future information that is in possession or may become available to the LEAD CITY pertaining to development plans;
- Crash data;
- Available transportation and planning data.

B.2 PUBLIC AND STAKEHOLDER INVOLVEMENT

Public outreach will be tailored to the specific needs of the project as determined by the LEAD CITY. Public outreach includes communicating to and receiving information from all interested persons, groups, and government organizations regarding the plan. The MPO will assist in, a limited capacity, public involvement for this plan.

B.2.1 Public Participation Plan

The LEAD CITY will be responsible for developing a Public Participation Plan (PPP) that encourages participation, creates opportunities for citizens to provide input, educates, is interactive and produces a uniform plan image. The LEAD CITY shall include the input of the additional municipalities located in the study area when developing the PPP. Where possible, visualization techniques and other technologies should be used to communicate information and data as needed. It is recommended that the PPP include two or three evaluation measures that can be employed to demonstrate the effectiveness of the public involvement activities over the course of the study.

B.2.1.1 Identify Roles and Responsibilities

The LEAD CITY's PPP will identify the recommended roles and responsibilities for all stakeholder and partner agencies participating in the study.

B.2.2 Public Involvement Activities

The MPO will support, in a limited capacity, public involvement activities required for appropriate outreach and information sharing objectives of this plan, including but not limited to briefings, meetings, workshops and other events.

B.2.2.1 Stakeholder Coordination

The LEAD CITY's PPP will also provide necessary documentation to assist in coordination with agencies and other parties to complete the plan. The LEAD CITY will provide notice of all meetings with these agencies and will document the minutes of meetings, document and distribute an action list, and follow up accordingly to ensure the appropriate actions are completed in a timely manner.

Potential stakeholders may include: Broward County Transit, neighborhood associations, business development organizations, non-profits, etc.

The MPO will prepare for and attend presentations to stakeholders as agreed to by both parties.

B.2.2.2 Coordination with other Plans and Projects

The MPO will coordinate plan activities with any ongoing and / or planned city projects that may affect this plan.

B.2.2.3 Project Outreach Materials

The MPO will assist the LEAD CITY in the development of all public involvement materials (in digital format only) required for appropriate outreach and information sharing objectives of this plan, including but not limited to factsheets, advertisements, brochures, handouts, map exhibits, social media and website content. The MPO shall provide drafts of these materials to the LEAD CITY for review and use.

B.2.2.4 Public Meetings

The MPO will provide support necessary for the LEAD CITY to hold various public meetings.

B.3 PROJECT DESCRIPTION, PURPOSE AND NEED

B.3.1 General Problem Description (Draft Purpose and Need Statement)

Based on available data, the MPO shall develop a concise definition of the corridor problems that will be refined throughout the course of the plan as needed. Consideration will be given to previous studies (corridor studies, regional and strategic plans and other documents to obtain a historical context).

The MPO will include general identification of the markets served including any special populations such as environmental justice populations or special generators; existing and anticipated travel conditions and congestion levels; land use development plans and economic development initiatives; and sensitive social and natural environmental resources. The outcome of this effort will be a description of the problems that need to be addressed in the study area and will lay the foundation for potential solutions or improvements later in the study.

The MPO will evaluate the current Purpose and Need Statement prepared by the LEAD CITY and revise as necessary to ensure that it adequately reflects the problems and needs identified in the plan. The current Project Purpose and Need Statement provided by the LEAD CITY consist of:

- Create a corridor plan with the goal of improving multimodal access and ADA transit accessibility on NW 31st Avenue between the proposed project limits (Broward Boulevard to W McNab Rd.) Corridor description, including demographic, development, and transportation trends;
- Corridor transportation improvement needs – problems identified;
- Goals and objectives, that are specifically and measurably attached to each of the identified problems; and
- Planning context, that is, the planning and Project development process.

The focus of the plan will include:

- Conduct field observations to review existing transportation/transit conditions.
- Understand the project area, assess project needs, and identify physical and environmental constraints.
- Evaluate and find alternate transit route, bus shelter locations, pedestrian crossings, sidewalk continuity, safety features, and mobility.
- Analyze and develop safety recommendations and countermeasures.
- Collect data describing existing conditions and characteristics of the project including roadway geometrics, signalization and other operational features, access features, and right of way requirements. **(Task A)**
- Collect and analyze data applicable to modes and sub-modes of transportation, including pedestrians, bicyclists, public transit users (including transit vehicles and riders), paratransit users (carpools, vanpools, taxis, shuttles, jitneys, school buses, coach buses), and freight (including loading/unloading and parking, emergency response vehicles, service vehicles, and freight handler vehicles).
- Conduct traffic analysis with future demand forecasting and also for No-Build analysis. **(Task A)**
- Intersections Evaluation for safety enhancement and improvements (include project safety needs associated with the existing and future traffic conditions).
- Evaluate and identify solutions address driveway access management on the west side of NW 31st Avenue between NW 39th Street and NW 44th Street to minimize the severity and frequency of crashes.

- Evaluate and identify traffic safety solutions and vehicle movement efficiencies the area between Cypress Creek Rd and W McNab Rd to minimize the severity and frequency of crashes.
- Assessing potential safety measures for the SW corner of NW 31st Avenue and NW 44th Street to address vehicles crashing into the Summer Lake Community wall.
- Traffic capacity optimization, multimodal accommodations (**Task A**), roadway lighting needs evaluation.
- Identify and assess potential Project impacts on physical barriers, traffic pattern changes, and loss of connectivity to community features and facilities.
- Identify and assess potential project impacts on nearby schools, churches, parks, emergency facilities, social services, daycare facilities, retirement centers, community centers, and retail locations.
- Identify and assess potential project impacts on minority, disabled persons, low-income populations, and/or special populations within the Project area.

B.3.1.1 Study Area

The MPO will develop a detailed definition and description of the study area to be used throughout the plan. This will address the geographic extent, including logical termini, and the width of the area each side of the corridor.

B.3.2 Goals and Objectives

The MPO will develop a detailed list of plan goals and objectives to address identified problems and support the planning process.

The MPO will continue to consider the goals and objectives and may make minor refinements to them through the course of the plan based on the evaluation of existing conditions as well as input from the LEAD CITY's public and partner outreach, with any adjustments to be reviewed and approved by the LEAD CITY.

B.3.3 Evaluation Framework and Measures

The MPO shall develop measures that can be used to assess how well each proposed solution or improvement address the corridor needs. Example categories of measures may include:

- Effectiveness – the extent to which improvements address and solve the stated transportation problems in the corridor.
- Impacts – the extent to which the improvements impact nearby natural resources, neighborhoods, the adjacent transportation network and facilities, land use, businesses, etc.
- Equity – the fair distribution of costs and benefits across different population groups.
- Mobility Improvement – the extent that mobility for all users is improved.
- Congestion relief – the extent that congestion is relieved.
- Environmental benefits, including reduction in vehicle miles travelled and subsequent improvement to the environment.
- Transit-supportive land use, including economic development and transportation / housing costs.

- Mobility efficiencies, including reduction in recurrent congestion and hours of peak hour excessive delay.
- Safety – the extent to which improvements address known safety issues and crash hot spots on the corridor.

Other evaluation measures may be added based on community and stakeholder outreach. This will ensure that locally-defined measures reflecting the values and vision of affected communities and stakeholders.

B.4 EXISTING AND FUTURE CONDITIONS ASSESSMENT

The MPO will collect data and information to analyze existing transportation conditions and verify transportation deficiencies as they relate to the needs and objectives of this Plan.

B.4.1 Data Collection and Management

The MPO will obtain and assemble data describing existing conditions and characteristics of the study area, and conduct field observations to review existing field conditions to understand the project area, assess needs, and identify constraints.

The MPO will create a data storage and management system to allow for efficient data use and sharing with the LEAD CITY. The MPO will furnish appropriate data summaries and necessary exhibits for use in the plan, such as a project location and other maps, and concept renderings.

B.4.1.1 Prior Studies and Best Practices Review

The MPO will obtain, assemble and review previous completed (or concurrent) planning studies and other studies related to this plan and appropriately incorporate their review results in the analysis of the plan. The results or decisions from the previous studies may be adopted or incorporated by reference, as appropriate.

This task includes, but is not limited to, the following:

Existing Local Planning Document review

The MPO will review previously adopted transportation and land use plans which overlap or are adjacent to the project study area. These plans may include corridor studies, comprehensive plans, policy guides, urban design studies and other documents. These include local and state design guides and regulations as well. The LEAD CITY will provide all relevant planning documents in electronic format which should be reviewed as part of this effort.

National Best Practices Review

National complete streets and transit access policies will also be reviewed by the MPO. These include best practices from National Association of LEAD CITY Transportation Officials (NACTO), American Association of State Highway and Transportation Officials (AASHTO), and other comparable cities who have successfully implemented similar projects.

B.4.1.2 Data Collection: Land Use, Traffic and Multimodal

The MPO will obtain and assemble available data and information from the LEAD CITY (except where noted) to assess conditions, utilizing GIS data to the maximum extent possible. Data will include, but not limited to, the following:

- Land use characteristics: GIS files, aerial maps, local planning documents
- Roadway characteristics: ROW, curb lines, sidewalks

- Economic and demographic data: Population, jobs, local growth patterns
- Existing traffic counts: AADT, peak hour traffic, bicycle and pedestrian counts (if available)
- Traffic safety and crash data. Crashes throughout the corridor, including auto, pedestrian, bicycle which involve property damage and personal injuries. (Signal Four Analytics provided by MPO)
- Planned future development and roadway projects in the study area
- Information on projects included in the FDOT Work Program, TIP, MTP, and TDP that have a potential impact on transportation conditions in the study area (provided by MPO)
- Bus stop condition reports
- Recently completed roadway studies for the study area including PD&E studies, access management, intersection plans, design files, and capacity improvements;
- Multimodal or small area studies including freight, intersection, transit, pedestrian, bicycle, land use and signal priority;
- Previously conducted transit vision plans, transit feasibility studies, comprehensive operations analyses, transit development plans, etc.;
- All information in the possession of the LEAD CITY pertaining to prior and on-going studies that may affect the project such as existing construction plans, transportation reports, prior environmental studies, existing permit information, existing drainage and geotechnical reports and any other documents related to the study corridor;
- All available information in the possession of the LEAD CITY pertaining to utility companies whose facilities may be affected by the proposed plan;
- All future information that is in possession or may become available to the LEAD CITY pertaining to development plans, so that the MPO may take advantage of additional areas that can be utilized as part of the existing right of way;

B.4.2 Field Review and Additional Data Collection

The MPO will conduct a field review and collect all data reflecting existing corridor conditions relating to mobility, complete streets and safety, and determine the adequacy of data assembled to carry out the multimodal analysis of existing conditions for this Plan. If there are data gaps, the MPO will identify these, and work with the LEAD CITY to collect additional data for the study area.

These data will be used by the MPO to determine existing conditions of the study area and identify opportunities, deficiencies, and safety issues. The MPO will map all data that are able to be mapped in a geodatabase (ArcGIS) and overlaid on top of base aerial maps for spatial analyses. Land use data will be used to determine transit, automobile and pedestrian, bicycle trip generators and how these generators impact future safety and design recommendations. Other travel data (e.g. traffic counts) will be used to evaluate characteristics, demand and available capacity. Traffic crash data will also be mapped by the MPO to determine the location of safety issues on the corridor.

B.4.3 Existing Conditions Analysis

The MPO will conduct a comprehensive multimodal analysis of existing transportation conditions for the study area based on all data collected in prior tasks.

The analysis will report on the quality of existing multimodal travel conditions in the study including corridor transit services and traffic conditions and, drawing on the outcomes of related studies where possible. Preliminary data analysis shall address: safety, mobility, accessibility, multimodal accommodation, transit stop conditions, and key geographic travel markets.

B.4.4 Identification of Needs, Deficiencies, & Opportunities

Using the results of the conditions analyses in previous tasks, findings from prior and related studies, and input from plan partners and the public, the MPO will identify mobility needs within the study area.

An assessment of needs, deficiencies, and opportunities of the corridor will be conducted by the MPO based on the data collected in previous tasks. These may include:

- ADA non-compliance – Identification of locations of non-ADA compliant curb ramps, intersections where curb ramps are missing, assessment of ADA conditions at existing and proposed transit stops.
- Sidewalks – Identification of sidewalk gaps, sidewalks that may be too narrow, and other opportunities for pedestrian access and safety improvements.
- Bicycle facilities – Identification of bicycle safety issues and opportunities, including assessment of bicycle lanes, racks / amenities, and high bicycle crash locations.
- Transit access – Assessment of transit stop locations, transit stop amenities, and opportunities to improve transit access.
- Safety – Identification of known safety issues and crash hot spots on the corridor.
- Mobility Efficiencies – Identification of peak hour excessive delay and recurrent congestion.

An analysis of these problems will assist in developing potential solutions and improvements recommended in Task 5.

B.4.5 Refined Problem Definition

The MPO will work with the LEAD CITY and Plan partners to develop a refined problem definition statement that draws from the analysis of the conditions analyses and mobility improvement needs. This refined problem definition will form the basis of the Plan recommended improvements to be developed in the following tasks.

B.5 RECOMMENDATIONS

The MPO will assemble all results of the study area recommendations and will assist the LEAD CITY to make a recommendation for a collection of proposed improvements that best addresses the plan's goals and objectives. Since the plan aims to be realistic with a clear path for implementation, corridor recommendations may be technically feasible but unrealistic given community preferences or financial constraints. Therefore, the MPO will work with the LEAD CITY and stakeholders to judiciously select preferred recommendations. The MPO will address input received from the public as well as project partners and participating agencies, and will identify trade-offs considered in arriving at the preferred solution.

The MPO will develop recommendations in written policy and design statements as well as maps and concept-level renderings (including plan view and cross sections) of some proposed improvements. Potential solutions and improvements are outlined in the following tasks.

B.5.1 Potential Solutions and Improvements – ADA

The MPO will develop potential Americans with Disabilities Act (ADA) solutions and improvements for the study area based on evaluation and public and partner input. These potential solutions may include:

- Curb ramp upgrades
- Sidewalk access / clearance improvements
- Other ADA design issues

B.5.2 Potential Solutions and Improvements – Transit

The MPO will develop potential Transit solutions and improvements for the study area based on evaluation and public and partner input. These potential solutions may include:

- Transit stop location recommendations
- Transit stop amenity recommendations
- Signage additions
- Other transit access recommendations

B.5.3 Potential Solutions and Improvements – Bicycle & Pedestrian

The MPO will develop potential Bicycle and Pedestrian solutions and improvements for the study area based on evaluation and public and partner input. These potential solutions may include:

- Completion of missing sidewalk gaps
- Crosswalk recommendations
- Bicycle facility recommendations
- Traffic signal recommendations which improve bicycle and pedestrian safety

B.5.4 Potential Solutions and Improvements – Safety

The MPO will develop potential Safety solutions and improvements to address high crash and killed and severely injured (KSI) locations within the study area based on evaluation and public and partner input. These potential solutions may include:

- Roadway geometry changes (planning / conceptual level)
- Signal timing changes
- The addition of traffic control devices
- Other traffic safety recommendations

B.5.5 Potential Solutions and Improvements – Other

The MPO will develop other solutions and improvements such as landscaping, lighting, streetscape, amenities, etc. within the study area based on evaluation and public and partner input. Other solutions and improvements will also address the needs identified in the General Problem Description (Task 3.1).

B.5.6 Potential Solutions and Improvements – Planning Level Cost Estimates

The MPO will develop planning level cost estimates for all potential solutions and improvements using best available data sources such as historical costs from similar projects, FDOT estimates, FTA estimates, and other sources.

B.5.7 Screening of Potential Solutions and Improvements

By considering Plan goals and objectives, the MPO in consultation with the LEAD CITY will develop a matrix-based methodology to conduct a quantitative and qualitative screening analysis of the potential solutions and improvements, addressing impacts, performance and planning level cost estimates. The analysis will identify and document alternatives to be eliminated from inclusion in the final plan, to be agreed to by the LEAD CITY.

B.6 PLAN**B.6.1 Draft Plan**

The MPO will develop a draft plan which includes all the elements and processes noted in previous tasks. The draft plan will be distributed to the LEAD CITY and members of the public for review and comment. The MPO will allocate time in the schedule for internal and external review by LEAD CITY, stakeholders, and public, as necessary.

B.6.2 Final Plan

Following the LEAD CITY's review of the draft plan, the MPO will prepare the final plan addressing all comments and revisions received from Task 6.1. The final plan document will be delivered in digital format to the LEAD CITY. The MPO will develop a final report document in a format and level of detail suitable for public dissemination. The Plan will consolidate and summarize the study process including goals, objectives, purpose, public involvement, evaluation methods and results, maps, concept computer renderings and recommendations. In addition, the final Plan will outline and address "next steps" for stakeholders towards the implementation of the recommendations. An abridged (executive) summary (1-2 pages) of the study and recommendations shall be provided.