

Smart Mobility Hubs Plan SCOPE

TO: Mr. Rafael Casals, ICMA-CM, CFM
Town Manager
Town of Cutler Bay
Cutler Bay Town Center
10720 Caribbean Blvd, Suite105
Cutler Bay, FL 33189

FROM: Lisa W. Maack, Project Manager
MARLIN Engineering Inc.
1700 NW 66th Avenue, Suite 106
Plantation, FL 33313

SUBJECT: Smart Mobility Hubs Plan

DATE: September 2, 2018

Dear Mr. Casals,

Marlin Engineering (MARLIN) is pleased to provide the following scope to fulfill the needs of the recently awarded Miami-Dade TPO SMART Mobility grant program. MARLIN will provide the community with a comprehensive system of transit mobility hubs connecting to the South Dade Transitway and Cutler Bay Town Center. While the existing South Dade SMART Plan is focusing on transit and land use within the ¼ - ½ mile buffer of the transitway, this plan will focus on populations and jobs within the entire Town. The plan will improve connectivity, mobility and safety for pedestrians, bicyclists, and transit users by identifying locations for neighborhood, community and commercial level mobility hubs along the Town's roadway network. Once locations have been identified, the appropriate scale of transportation infrastructure and amenities to facilitate usage of the hubs will be recommended through conceptual design and visualizations. The plan will include a sketch planning assessment of the Town's existing circulator and bus system and propose recommendations to improve the Town's overall transit performance and connectivity.

The *Cutler Bay Mobility Hubs Plan* also seeks innovative ways to enhance the Town's recently constructed complete streets projects along Caribbean Boulevard and Old Cutler Road and to build upon recommendations provided in the Town's Transportation, Bicycle/Pedestrian, and



Complete Streets Master Plans, Townwide Traffic Calming Plan and Adopted Land Use Regulations. Finally, the Plan will also take into account best practices provided in the TPO's recently completed First Mile/Last Mile Options for High-Trip Generator Employers Study and Protected Bike Lanes Demonstration Plan.

To achieve these objectives, a detailed scope of services has been developed. The methodology is based on solid planning and engineering analysis of each identified location, the impacts to all the levels of service for all modes, discussion of state of the art methods of providing mobility, and above all, frequent and consistent public involvement at various levels in the community and various times in the project to assure consensus.

I. DESCRIPTION OF SERVICES

Task 1: Background Information / Existing Conditions

MARLIN will review existing plans, for all roadways, bicycle, pedestrian, transit facilities, and land use developments on key transit corridors served by Miami-Dade Transportation and Public Works (MDTPW) and the Town Circulator in an effort to increase ridership and regional connectivity by prioritizing projects that provide the most convenient and comfortable transit service and connectivity. We anticipate that data and information focused on transit hub development will include neighborhood and community locations as origins and commercial and regional transit locations as destination hubs. Some of the destination sites include: the Old Cutler Road commercial area, containing a large 30 +/- acre mixed use site, which is envisioned as a mid-sized commercial center in the future; Cutler Bay's Urban Center District, where Southland Mall is located. This area has been re-zoned by the Town to a higher intensity of land use similar to the Dadeland mixed use district: the Dixie Highway corridor and the South Dade Transitway. Each of these areas are within the Town's long-held land use vision of urban nodes along to accommodate population and commercial growth, instead of spreading it westward in South Dade.

This Task will be performed through 3 Subtasks including:

- a. Review of relevant Multi-modal transportation planning studies including but not limited to:
 1. Growth Management Plan
 2. Town Adopted Transportation Master Plan



3. Town Adopted Bicycle and Pedestrian Master Plan
 4. TPO Completed studies, including the First/Last Mile Pilot with High Trip Generator Employers Study or any other related study in coordination with the TPO Project Manager
- b. Obtain and assess Existing and Future Land Use and Zoning and ROW
 - c. Obtain MDDTPW and Town Circulator Stop and Ridership Data and Files

Task 2: Public Involvement Plan/Meetings

MARLIN will develop a Public Involvement Plan that will be used to solicit input on the vision, goals, objectives and needs for the "Cutler Bay Mobility Hubs Plan". The Town of Cutler Bay firmly believes that it is imperative to understand what the community wants and what it needs. MARLIN will work with the community to determine what is desired and how that can be incorporated into the design. Consensus is built when "wants" and "needs" coincide, and truly effective solutions are developed. Many technical projects have completely collapsed due to lack of consensus, but not in Cutler Bay, which has employed a diligent approach to public involvement since its incorporation. The success is evident in the myriad of capital projects that have been completed to date, all stemming from similar master planning efforts.

The public participation plan for this effort will be extensive and will include a menu of activities and meetings. It will involve several levels of involvement including meetings with industry professionals, individual meetings in the community, and meetings in large groups.

This Task will be performed through 5 Subtasks including:

- a. Project Management Teleconferences (6, 30 Minutes)
- b. Kickoff Meeting and Ongoing Coordination with TPO, MD DTPW, FDOT
- c. Town Commission Meetings (2)
- d. Community Public Involvement Meetings (2)
- e. The Town of Cutler Bay shall identify stakeholders and participants which are key to the planning process for the Town. A Study Advisory Committee (SAC) will be established consisting of, but not limited to representatives from the Florida Department of Transportation District Six (FDOT-6), DTWP, and other key project stakeholders within the Study limits. The SAC will provide valuable feedback and will review materials on all project deliverables and approval/endorsement of the final results and recommendations



for this study. A total of three (3) SAC meetings are anticipated as part of this scope of services. The intent of the SAC is to provide essential technical and policy guidance on the project related issues.

Task 3: Data Collection

The data collection task will focus on where existing riders are beginning and ending their trips through data and interviews. Data on boardings and alightings from MDTPW and the Town Circulator. Stops with the highest activity and those with the most transfer activity will be reviewed for surveys/interviews with passengers and assessed for pedestrian/bicycle access. Miovision cameras will also be utilized to determine which direction pedestrians and bicyclists are traveling to access the transit stops. Surveys will be distributed to on-site transit users that will ask questions regarding what amenities will be most useful to them to improve their commute. Future nodes for potential hubs will be identified by reviewing approved development, consultation with Town staff and analysis of the Future Land Use Map.

The Task will also include a planning assessment of the Town's existing circulator system. Technicians will perform an on-board speed and delay study to understand running speeds during peak-hours of service. All data collected will assist in developing recommendations on how to improve the transit system's overall performance.

This Task will be performed through the following Subtasks:

- a. Interview Miami-Dade County Circulator Drivers/Operator
- b. Ride Town Circulator Routes and Use Speedtracker for Speed/Delay and Rider Survey
- c. Interview Metrobus Riders at transfer points and at Cutler Bay Transitway Stations
- d. Analysis of MIOVision results
- e. GIS Analysis of existing and future stop use and route demographics
- f. Development of alternative system routes and schedules
- g. Sketch Planning Stop/Hub Utilization Assessment
- h. Capital, O&M Cost Analysis (3 Schedules)

Task 4: Conceptual Design

Using the data collected in the previous tasks, including right-of-ways and any existing survey



data, as well as examples of the specification of significant pedestrian, bicycle and transit amenities, a conceptual design will be developed for 3 levels of Mobility Hub – neighborhood/small scale, community/medium to large scale and commercial area. This will consist of graphics to show how each Mobility Hub will look depending on scale of infrastructure. Additionally, graphic examples and renderings of the concepts, and potential landscape and hardscape will be provided. Conceptual quantities and costs will be developed as an evaluation tool. Any permitting requirements will also be identified for each corridor so that the eventual designer is aware of the permitting requirements for the implementation of each project.

This Task will be performed through 5 Subtasks including:

- a. Hub Siting Analysis up to 12 locations
- b. Development of Neighborhood/small scale, Community/medium to large scale and Commercial area Hub Templates
- c. Review of Right of Way, Adjacent Land Use and Ped/Bike Access
- d. Assessment of permitting requirements
- e. Cost Estimates 12 locations

Task 5: Recommendations/Final Report

Once the individual Mobility Hubs have reached the conceptual design phase, each will be evaluated and prioritized. A review of available funds will be undertaken; this will include a study of local, state and federal sources, as well as funds from private sources or impact fees. An ultimate funding level will be identified based on traditional funding levels and percentages, which will then be allocated over the corridors. The highest ranked projects that fit within the available funding limit will represent the financially feasible list of projects. This will be portrayed in textual, tabular and GIS map form. All other projects will be listed in the master plan for future development. A final document will be prepared.

- a. Recommendations: Prioritization
- b. Potential Funding
- c. Powerpoint presentations for Commission Meetings



d. Final Report

Deliverables will include:

- a. Public Forum notes
- b. Town Circulator service review
- c. Conceptual designs for Mobility Hubs (3)
- d. Final Plan with recommendations ranked based on criteria

II. SCHEDULE

MARLIN shall begin work upon issuance of the work order. The attached schedule contains the 12-month schedule for the project.

III. BUDGET

The attached staff hour fee proposal contains the budget for the work effort. For the services performed, the Town will pay MEI the lump sum fee of **\$69,327.00**. The hourly billing rates are consistent with the unit rates shown in the Executed Agreement for this contract. This Work Order is a Lump Sum Work Order, and shall be billed monthly as a percentage of completion.

IV. ACCEPTANCE

The return of an executed copy of this proposal would constitute our Notice to Proceed.

Sincerely,

MARLIN ENGINEERING, INC.

Lisa W. Maack, AICP
Project Manager

ACCEPTED BY: _____ **DATE:** _____

ENTITY: _____

TITLE: _____



Town of Cutler Bay SMART Network Plan

MARLIN ENGINEERING, INC.

| Tasks/Subtasks | Project Manager | | Senior Designer | | Planner | | Engineering Technician/GIS | | CADD Designer | | Clerical | | Staff-Hours by Activity | Raw Cost by Activity |
|--|-----------------|--------------------|-----------------|--------------------|-------------|--------------------|----------------------------|-------------------|---------------|-------------------|-------------|--------------------|-------------------------|----------------------|
| | Staff Hours | Hourly Rate | Staff Hours | Hourly Rate | Staff Hours | Hourly Rate | Staff Hours | Hourly Rate | Staff Hours | Hourly Rate | Staff Hours | Hourly Rate | | |
| | | \$175.00 | | \$159.00 | | \$130.00 | | \$90.00 | | \$100.00 | | \$50.00 | | |
| Task 1. Background Information/Existing Conditions | | | | | | | | | | | | | | |
| a. Review relevant Multi-modal transportation planning studies | 2 | \$350.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 10.00 | \$1,390.00 |
| b. Obtain and assess Existing and Future Land Use and Zoning and ROW | 2 | \$350.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 10.00 | \$1,390.00 |
| c. Obtain MDDTPW and Town Circulator Stop and Ridership Data and Files | 2 | \$350.00 | 0 | \$0.00 | 6 | \$780.00 | 8 | \$720.00 | 0 | \$0.00 | 0 | \$0.00 | 16.00 | \$1,850.00 |
| Subtotal Task 1 | | | | | | | | | | | | | | \$4,630.00 |
| Task 2. Public Involvement and Coordination | | | | | | | | | | | | | | |
| a. Project Management Teleconferences (6, 30 Minutes) | 3 | \$525.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 3.00 | \$525.00 |
| b. Coordination with TPO, MD DTPW | 4 | \$700.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 12.00 | \$1,740.00 |
| c. City Commission Meetings (2) | 4 | \$700.00 | 0 | \$0.00 | 4 | \$520.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 8.00 | \$1,220.00 |
| d. Community Meetings (2) | 8 | \$1,400.00 | 0 | \$0.00 | 8 | \$1,040.00 | 12 | \$1,080.00 | 0 | \$0.00 | 4 | \$200.00 | 32.00 | \$3,720.00 |
| e. Study Advisory Committee | 8 | \$1,400.00 | 0 | \$0.00 | 8 | \$1,040.00 | 12 | \$1,080.00 | 0 | \$0.00 | 4 | \$200.00 | 32.00 | \$3,720.00 |
| Subtotal Task 2 | | | | | | | | | | | | | | \$10,925.00 |
| Task 3. Data Collection and Transit Hub Assessment | | | | | | | | | | | | | | |
| a. Interview Town Circulator Drivers/Operator | 4 | \$700.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 12.00 | \$1,740.00 |
| b. Ride Town Circulator Routes and Use Speedtracker for Speed/Delay and Rider Survey | 2 | \$350.00 | 0 | \$0.00 | 4 | \$520.00 | 16 | \$1,440.00 | 0 | \$0.00 | 0 | \$0.00 | 22.00 | \$2,310.00 |
| c. Interview Metrobus Riders at transfer points and at Cutler Bay Transitway Stations | 2 | \$350.00 | 0 | \$0.00 | 8 | \$1,040.00 | 16 | \$1,440.00 | 0 | \$0.00 | 0 | \$0.00 | 26.00 | \$2,830.00 |
| d. Analysis of MIOVision results | 1 | \$175.00 | 0 | \$0.00 | 2 | \$260.00 | 2 | \$180.00 | 0 | \$0.00 | 0 | \$0.00 | 5.00 | \$615.00 |
| e. GIS Analysis of ridership and route demographics | 4 | \$700.00 | 0 | \$0.00 | 4 | \$520.00 | 16 | \$1,440.00 | 0 | \$0.00 | 0 | \$0.00 | 24.00 | \$2,660.00 |
| f. Development of alternative system routes and schedules | 2 | \$350.00 | 0 | \$0.00 | 8 | \$1,040.00 | 4 | \$360.00 | 0 | \$0.00 | 0 | \$0.00 | 14.00 | \$1,750.00 |
| g. Sketch Planning Stop/Hub Utilization Assessment | 4 | \$700.00 | 0 | \$0.00 | 16 | \$2,080.00 | 8 | \$720.00 | 0 | \$0.00 | 0 | \$0.00 | 28.00 | \$3,500.00 |
| h. Capital, O&M Cost Analysis (3 Schedules) | 4 | \$700.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 12.00 | \$1,740.00 |
| Subtotal Task 3 | | | | | | | | | | | | | | \$17,145.00 |
| Task 4. Mobility Hub siting and Conceptual Design | | | | | | | | | | | | | | |
| a. Hub Siting Analysis up to 12 locations | 4 | \$700.00 | 8 | \$1,272.00 | 8 | \$1,040.00 | 8 | \$720.00 | 0 | \$0.00 | 0 | \$0.00 | 28.00 | \$3,732.00 |
| b. Development of Neighborhood, Community and Central Hub Templates | 2 | \$350.00 | 20 | \$3,180.00 | 4 | \$520.00 | 0 | \$0.00 | 24 | \$2,400.00 | 0 | \$0.00 | 50.00 | \$6,450.00 |
| c. Review of Right of Way, Adjacent Land Use and Ped/Bike Access | 2 | \$350.00 | 16 | \$2,544.00 | 16 | \$2,080.00 | 0 | \$0.00 | 24 | \$2,400.00 | 0 | \$0.00 | 58.00 | \$7,374.00 |
| d. Assessment of permitting requirements | 2 | \$350.00 | 8 | \$1,272.00 | 0 | \$0.00 | 0 | \$0.00 | 8 | \$800.00 | 0 | \$0.00 | 18.00 | \$2,422.00 |
| e. Cost Estimates 12 locations | 4 | \$700.00 | 16 | \$2,544.00 | 0 | \$0.00 | 0 | \$0.00 | 16 | \$1,600.00 | 0 | \$0.00 | 36.00 | \$4,844.00 |
| Subtotal Task 4 | | | | | | | | | | | | | | \$19,978.00 |
| Task 5. Documentation | | | | | | | | | | | | | | |
| a. Recommendations: Prioritization | 2 | \$350.00 | 0 | \$0.00 | 8 | \$1,040.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 10.00 | \$1,390.00 |
| b. Potential Funding | 4 | \$700.00 | 0 | \$0.00 | 16 | \$2,080.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 20.00 | \$2,780.00 |
| c. Powerpoint presentations for Commission Meetings | 4 | \$700.00 | 0 | \$0.00 | 16 | \$2,080.00 | 0 | \$0.00 | 0 | \$0.00 | 8 | \$400.00 | 28.00 | \$3,180.00 |
| d. Final Report | 4 | \$700.00 | 0 | \$0.00 | 16 | \$2,080.00 | 16 | \$1,440.00 | 16 | \$1,600.00 | 16 | \$800.00 | 68.00 | \$6,620.00 |
| Subtotal Task 5 | | | | | | | | | | | | | | \$13,970.00 |
| Total: Hours and Labor Costs | 78 | \$13,650.00 | 68 | \$10,812.00 | 170 | \$22,100.00 | 110 | \$9,900.00 | 88 | \$8,800.00 | 32 | \$ 1,600.00 | 546.00 | \$66,648.00 |
| Subtotal Expense: MIOVison Camera Pedestrian , Bicycle Transfer Activity 3 Locations x \$893.00 | | | | | | | | | | | | | | \$2,679.00 |
| Total Cost | | | | | | | | | | | | | | \$69,327.00 |