

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

Meeting Date:	May 16, 2023	<input checked="" type="checkbox"/>	Consent	<input type="checkbox"/>	Regular
		<input type="checkbox"/>	Workshop	<input type="checkbox"/>	Public Hearing

Department:	Engineering & Public Works
Submitted By:	Engineering & Public Works
Submitted For:	Traffic Division

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to:

- A) **adopt** a Resolution to support the submittal of a Local Initiatives Program (LIP) grant application through the Palm Beach Transportation Planning Agency (TPA) to the Florida Department of Transportation (FDOT) for funding to replace and upgrade seven signalized intersections owned by Palm Beach County (County);

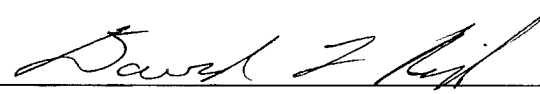
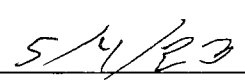
- B) **approve** the 2023 Application for Project Funding for Local Initiatives Construction Projects with the TPA.

SUMMARY: Adopting this Resolution will support the County’s LIP application submittal for improving the safety and operation of seven intersections throughout the County, as listed in Exhibit A to the Resolution. If selected, the proposed Project will be built within the existing County or applicable municipal road right-of-way, and the County will enter into a grant reimbursement agreement with the FDOT. As part of the application process, the TPA requires this Resolution to support the LIP application submittal, and the County’s commitment to design, construct, and operate and maintain the Project after construction. The LIP grant will fund the Project’s construction costs, estimated at \$4,825,749.05. **The County’s local participation funding is estimated to be \$1,987,080.79 of voluntary funding for the Project’s design and construction management.** Funding provided by the LIP for construction will be programmed in 2028. Countywide (YBH)

Background and Justification: The FDOT’s LIP is a cost-reimbursement program where projects are submitted to the TPA for ranking and prioritization. The Project includes replacing the signalized intersections from span wire to mast arm structures, replacing all signal equipment, upgrading the controllers and upgrading certain signal heads with flashing yellow arrow for left and/or right turns. The Project will enhance the safety and operations at the Project locations.

Attachment:

- 1. Resolution with Exhibit A
- 2. 2023 Application for Project Funding for Local Initiatives Construction Projects with Exhibit A

Recommended By:		
	County Engineer	Date

Approved By:		
	Assistant County Administrator	Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2023	2024	2025	2026	2027
Capital Expenditures	-0-	-0-	-0-	-0-	-0-
Operating Costs	-0-	-0-	-0-	-0-	-0-
External Revenues	-0-	-0-	-0-	-0-	-0-
Program Income (County)	-0-	-0-	-0-	-0-	-0-
In-Kind Match (County)	-0-	-0-	-0-	-0-	-0-
NET FISCAL IMPACT	-0-	-0-	-0-	-0-	-0-
# ADDITIONAL FTE POSITIONS (Cumulative)	-0-	-0-	-0-	-0-	-0-

Is Item Included in Current Budget? Yes No

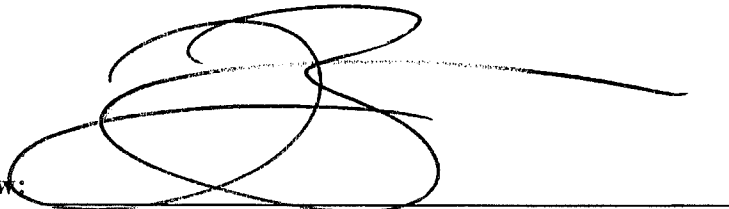
Does this item include the use of federal funds? Yes No

Budget Account No:

Fund Dept Unit Object

Recommended Sources of Funds/Summary of Fiscal Impact:

** This item has no fiscal impact at this time. Funding for construction provided by the Local Initiatives Program (LIP) will be programmed in 2028; If and when the LIP grant is selected and approved for funding by FDOT, it will be brought back to the Board of County Commissioners as an agenda item that includes the complete fiscal impact as well as a budget amendment to recognize the grant revenue and appropriate it to the expense budget.



C. Departmental Fiscal Review:

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. and Control Comments:

Janina... 4/25/23
Lisa M... 4/26/2023
 OFMB *JA 4/20*
MD 4/20 *W/pe*

J. J. ... 5/9/23
 Contract Dev. and Control
MDA 5/9/23

B. Approved as to Form and Legal Sufficiency:

[Signature] *5/9/2023*
 Assistant County Attorney

C. Other Department Review:

 Department Director

This summary is not to be used as a basis for payment.

RESOLUTION NO. R2023-_____

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, SUPPORTING THE SUBMITTAL OF AN APPLICATION TO THE PALM BEACH TRANSPORTATION PLANNING AGENCY FOR THE FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL INITIATIVES PROGRAM FOR FUNDING THE REPLACEMENT AND UPGRADE OF SEVEN SIGNALIZED INTERSECTIONS; COMMITTING TO FUND THE LOCAL SHARE OF PROJECT DELIVERY AND THE ASSOCIATED ONGOING OPERATION AND MAINTENANCE EXPENSES; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Palm Beach County (County) is eligible to apply for funding in an amount not to exceed \$5 million from the Florida Department of Transportation (FDOT) Local Initiatives Program (LIP) through the Palm Beach Transportation Planning Agency (TPA); and

WHEREAS, the County plans to make improvements to seven (7) signalized intersections owned by the County that have reached their end of life, as listed in **Exhibit A** (Project); and

WHEREAS, the Project includes replacing the signalized intersections from a span wire intersection to mast arm structures, replacing all signal equipment, upgrading the controllers and upgrading certain signal heads with flashing yellow arrow for left and/or right turns; and

WHEREAS, the Project will improve safety and operations at the Project locations; and

WHEREAS, the Project will improve the intersections' resiliency against storms; and

WHEREAS, the Project will primarily be constructed within the County or applicable municipal road right-of-way; and

WHEREAS, construction of the Project is estimated to cost \$4,825,749.05; and

WHEREAS, FDOT will reimburse the County only for eligible construction costs associated with the Project in an amount not to exceed \$5,000,000; and

WHEREAS, the County will further fund the costs of design and construction management, estimated at \$1,987,080.79; and

WHEREAS, after construction of the Project, the County agrees to operate and maintain the Project contingent upon an annual appropriation by the Board of County Commissioners.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, that:

1. The foregoing recitals are true, accurate and correct and are incorporated herein.
2. The Board of County Commissioners hereby supports the submittal of the application to the TPA for the LIP funding of the Project.
3. If the Project is selected for funding by the TPA, the County agrees to design and construct the Project and agrees to operate and maintain the Project after construction, contingent upon an annual appropriation by the Board of County Commissioners.
4. This Resolution shall take effect upon adoption.

The foregoing Resolution was offered by Commissioner _____ who moved for its adoption. The motion was seconded by Commissioner _____ and upon being put to a vote, the vote was as follows:

- Commissioner Gregg K. Weiss, Mayor -
- Commissioner Maria Sachs, Vice Mayor -
- Commissioner Maria G. Marino -
- Commissioner Michael A. Barnett -
- Commissioner Marci Woodward -
- Commissioner Sara Baxter -
- Commissioner Mack Bernard -

The Mayor thereupon declared the Resolution duly passed and adopted this _____ day of _____, 2023.

PALM BEACH COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA BY AND THROUGH ITS BOARD OF COUNTY COMMISSIONERS

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

JOSEPH ABRUZZO, CLERK OF THE CIRCUIT COURT AND COMPTROLLER

BY: /s/Yelizaveta B. Herman
Yelizaveta B. Herman
Assistant County Attorney

BY: _____
Deputy Clerk

APPROVED AS TO TERMS AND CONDITIONS

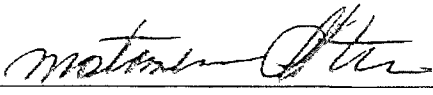
BY: 
Motasem Al-Turk
Traffic Division, Director

Exhibit A

Signalized Intersection Locations

	Intersection ID	East/West Road	North/South Road
1.	29060	Belvedere Road	Skees Road
2.	29070	Belvedere Road	Jog Road
3.	37800	Melaleuca Lane	Congress Avenue
4.	38110	Melaleuca Lane	Kirk Road
5.	41645	Hypoluxo Road	S. Jog Road
6.	43800	Gateway Boulevard	Jog Road
7.	50260	Flavor Pict Road	Military Trail



2023 APPLICATION FORM Project Funding for Local Initiatives (LI) Construction Projects

Project Title Flashing Yellow Left & Right Turn Arrow Upgrade
Applicant Palm Beach County Engineering & Public Works - Traffic Division

WHAT DO YOU WANT TO BUILD?

Briefly provide a general description of the project and what it will accomplish.

For the twenty-nine traffic signals we are proposing to add flashing yellow arrows for left turns and where applicable, right turns. We will be upgrading each controller cabinet, adding LED luminaries for street lighting where applicable and upgrading 11 intersections to include back plates to improve visibility. Through these improvements, we will be improving safety and travel time reliability for pedestrians and motorists.

WHO OWNS THE RIGHT-OF-WAY?

Check whether the applicant and/or another agency owns the right-of-way where the project will be built. Resolution of support from facility owner clearly indicating that the project may be constructed as proposed is a required attachment (see submittal checklist).

- Applicant Other Entities _____
Requires resolution letter from owner allowing project to be built.

See attached right of way documents for more information.

WHO IS DOING WHAT?

Check the applicable boxes. All projects on state highways must be administered and constructed by FDOT. For projects on local roadways (county or city), the applicant may administer the project or ask FDOT to administer the project on their behalf. Locally administered projects require a Local Agency Program (LAP) agreement to administer Federal Aid projects in accordance with FDOT's Local Agency Program Manual (topic no. 525 010 300).

	<u>Administered by:</u>	<u>Funded by:</u>
Design (PE)	<input checked="" type="checkbox"/> Applicant or consultant ⁽¹⁾⁽²⁾ <input type="checkbox"/> FDOT (requires prior approval)	<input checked="" type="checkbox"/> Applicant (required if locally administered) <input type="checkbox"/> TPA (if FDOT administered)
Construction (CST)	<input checked="" type="checkbox"/> Applicant or consultant ⁽¹⁾ <input type="checkbox"/> FDOT (requires prior approval) <input type="checkbox"/> Other: _____	<input type="checkbox"/> Applicant <input checked="" type="checkbox"/> TPA
Const Eng & Inspect (CEI)	<input checked="" type="checkbox"/> Applicant or consultant ⁽¹⁾⁽²⁾ <input type="checkbox"/> FDOT (requires prior approval)	<input checked="" type="checkbox"/> Applicant (if locally administered project) <input type="checkbox"/> TPA (if FDOT administered project)

(1) FDOT pre-qualified consultants must be used on all design and CEI work for critical projects (a project is considered critical when it is on the State Highway System (SHS), features a major structure, and/or has a budget greater than \$10 million)
 (2) Design consultant and CEI consultant shall not be the same.

APPLICANT CONTACT INFORMATION

Contact Person Melissa Ackert, P.E.
Title Assistant Director, Traffic Division
Email mackert@pbcgov.org
Phone Number 561 684-4030
Address 2300 N. Jog Rd., 3rd Floor, West Palm Beach, FL 33411

PROJECT LOCATION

Road Name See attached list and map (7 locations)
Road Number US, SR, CR, etc.

Project Limit Begin See attached list
Project Limit End

QUALIFYING ACTIVITIES FOR FUNDING

Check the box that represents the majority of the work the proposed project will address. *Eligible activities must be consistent with details described under 23 U.S.C. 133(b).*

- Complete Street projects - Including Lane Narrowing, Lane Elimination, Bicycle Facilities, Pedestrian Facilities, Transit Infrastructure, Intelligent Transportation Systems (ITS), Median Modifications, Signing and lighting, Turn Lanes, Traffic Signals, Striping and Marking.
- Transit capital - purchase of vehicles, shelters, park-and-ride facilities. Can also pay up to 50% of a 3-year turn-key contract for new transit service (e.g. trolley service)
- Non-motorized infrastructure - Separated, Buffered and/or designated bike lanes, Sidewalks, Shared-use paths, Street lighting
- Freight efficiency - Airport or seaport off-site capacity improvements, Railway capacity improvements, Truck movement improvements.
- Other eligible activities not specified above

PROJECT TYPICAL SECTION INFORMATION

Complete the following information for existing & proposed features, dimensions, & right of way lines. The typical section information provides an understanding of the spacing requirement differences between the existing facilities and the proposed facilities.

	EXISTING	PROPOSED
RIGHT-OF-WAY WIDTH Project must fit within current ROW, acquisition is not permitted	See Attached	See Attached
PEDESTRIAN OR MULTIUSE FACILITIES		
Length (miles) for one direction. Do not count both sides of roadway.	NA	NA
Width on North or West side (feet)*		
Width on South or East side (feet)*		
BICYCLE FACILITIES		
Bike Lane Length (feet) for one direction. Do not count both sides of roadway.	NA	NA
Width on North or West side (feet)* (not Including Buffer Width)		
Buffer Width on North or West side (feet)*		
Width on South or East side (feet)* (not Including Buffer Width)		
Buffer Width on South or East side (feet)*		
Proposed improvements requires:		
Pavement widening <input type="checkbox"/> Sharrows <input type="checkbox"/> Restriping <input type="checkbox"/>		
MOTORIZED VEHICLE FACILITIES		
Number of Through Travel Lanes	NA	NA
Typical Through Lane Width (feet)		
Total Width* (No. Travel Lanes x Lane Width)		
Posted Speed Limit		
Design Speed (if known)		
MEDIAN/SWALE/CURB		
Median/Center Turning Lane Width (feet)*	NA	NA
Swale Width (feet)*		
Curb Width (feet)*		
*TOTAL WIDTH OF ALL COMPONENTS (Add all rows with red for total width) Must fit within existing right-of-way.	0	0

RIGHT-OF-WAY OWNERSHIP DOCUMENTATION

Describe the project's existing right-of-way ownerships. This description shall identify when the right-of-way was acquired and how ownership is documented (i.e. plats, deeds, prescriptions, certified surveys, easements). If right-of-way is an easement, please describe the easement language. Right-of-way ownership verification documents are a required attachment (see submittal checklist on page 9).

All projects are located within County road right-of-way. See attached documentation.

PROJECT SCOPE OF WORK

Describe how the proposed improvements will affect the following:

ADA items (crosswalks, sidewalks, ramps, etc.)

All proposed crosswalks, sidewalks, ramps, etc. comply with ADA standards YES NO

All sidewalk and curb ramps impacted from construction will be rebuilt and enhanced to meet ADA standards.

Access Management revisions (median modifications, impacts to driveways, etc.) YES NO

Pedestrian and/or Roadway Lighting

Pedestrian lighting proposed YES NO Roadway lighting proposed YES NO

Roadway lighting and pedestrian level lighting will be upgraded to standards as required. Street lights will be upgraded to LED.

Landscape (with Local Funds)

Median landscape proposed YES NO Other landscape proposed YES NO
Irrigation items proposed YES NO

Signalization

Pedestrian signals proposed YES NO Existing signalization to be replaced YES NO
New traffic signalization proposed YES NO

7 intersections will be rebuilt and upgraded. The scope of this includes: upgrading 4 span wire intersections to mast arm intersections and at 3 locations upgrading to steel strain poles and rewiring, adding flashing yellow arrow for left turns and rights, replace traffic signal heads, replace internally illuminated street name and sign panels, upgrade pedestrian features to meet ADA standards.

Transit Improvements

Queue jump possible YES NO Transit provider concurrence provided YES NO
Upgrade existing bus bay area YES NO

School Zone Modifications

Existing flashing school zone signal on state road YES NO
High emphasis cross walk at unsignalized crossing YES NO

Utility Modifications

Sub-surface relocation is required YES NO

Utility coordination is required YES NO

Drainage and/or other Permits

Existing closed drainage system to remain YES NO

Existing open drainage system to remain YES NO

Railroad Crossing Modifications

Rail crossing within limits YES NO

Replace railroad signal equipment and gates YES NO

Bridge Modifications

Proposed pedestrian bridge YES NO

Bridge replacement YES NO

Proposed bridge widening YES NO

Other Scope Items

See attached scope for each location.

Summarize any special characteristics of the project.

When FVA for left-turns are used, safety and operational benefits can be realized. From a safety standpoint, the FVA indication for the permissive portion of the left-turn movement is more intuitive to motorists as opposed to a solid green circular indication. It provides a direct message emphasizing the need to yield to opposing traffic and pedestrians prior to proceeding. The FVA also provides a period of time in the setup to minimize vehicle/pedestrian conflicts through omission of the permissive (FVA) portion of the left-turn movement when a pedestrian crosses the signalized crosswalk in conflict. The expanded setup flexibility also allows for varying the operation mode of the left-turn movement (permissive only, protected-permissive and protected) as necessary to address any safety concerns pertaining to certain periods of the day. As for operational and capacity benefits, these opportunities are created for the left-turn movement to advance as the FVA provides a separate signal head for it, thereby removing the constraint of sharing signal indications with the adjacent through lane. As noted earlier, the design also provides flexibility to vary the left-turn operation mode by time of day to maximize efficiency. Additionally, the FVA setup allows for leading operation for protected-permissive left-turns, which helps improve signal synchronization along a corridor, a feature that cannot be utilized with the traditional 5-section signal head for a protected-permissive left-turn movement due to safety concerns associated with potential yellow trap.

When FVA for right-turns are used, safety concerns associated with vehicle/pedestrian conflicts can be reduced. A typical signal operation provides for a "Walk" indication to be displayed concurrently with the adjacent vehicular circular green indication and requires right-turning motorists to yield to the pedestrians that are legally in the crosswalk. Motorists being to yield to pedestrians is a very common concern in this scenario. The FVA provides a separate signal head for right-turns and replaces the circular green indication with a FVA, a more intuitive display that better reinforces the message that motorists need to yield to conflicting pedestrians. The FVA can also be utilized when pedestrians activate the signalized crosswalk. Operational benefits can also be achieved as the FVA signal head separates the display for the right-turn movement from the adjacent through movement, allowing for expanded configurations that provide motorists more opportunities to advance when there are no conflicts with other intersection movements.

Identify any upcoming projects or projects currently underway adjacent to the proposed project.

Other specific project information that should be considered.

These intersections were identified to be rebuilt because of the age and the reliability they have demonstrated during major storms. These intersections are susceptible to going in flash because of the fragile and deteriorated cabling. The current equipment and structures are not consistent with the modern systems and signal components newer intersections being built.

PUBLIC INVOLVEMENT AND SUPPORT

Describe the public outreach and support for the project (i.e. petitions, written endorsements, resolutions, etc.). Attach documentation.

The 7 project locations are not adjacent to single family home access; therefore, public outreach was not performed.

Projects impacting single family residential lots will require additional documentation of public support. Additional documentation must indicate that all property owners directly affected by the improvement were notified, that at least 25 percent of the property owners showed support for the project, and that no more than 10 percent of the property owners showed lack of support.

PROJECT MAINTENANCE

Document ownership and maintenance responsibilities for the project when complete. Applicant's Resolution of Support and commitment to fund operations and maintenance of the project is a required attachment. See submittal checklist on page 9).

The attached resolution in support of the project will be presented at the May 2, 2023 Palm Beach County Board of County Commissioners meeting. It includes a provision by the County to fund design, construction management, operation, and maintenance of the project.

The Lake Worth Drainage District has provided a 1-24-2023 letter to issue a permit for traffic signalization structures. (Location A #29060 and Location C #37800).

Palm Beach County Property Real Estate & Management has provided 2-13-2023 memorandums confirming Palm Beach County fee simple ownership and will process a Declaration of Easements for three project locations. (Location B #29070, Location C #37800, and Location F #43800).

COST ESTIMATE

The total construction amount of Local Initiatives Program funds requested per projects (infrastructure) must be in excess of \$250,000 with a maximum project amount of \$5,000,000.

Local Initiatives Program funds will be used to fund Construction, Construction Engineering and Inspection Activities (CEI) and FDOT in-house support activities. The applicant may also request that Local Initiative Program funds be used for project Design, Environmental Services, and Post Design Services.

Local Funds (LF) will be used for all non-participating items, contingency activities, and any costs in excess of the awarded funding (LI) allocation.

- (a) Provide detailed project cost estimate using one of the following forms. Estimate shall be broken down to eligible and non-eligible project costs. **Estimates are to be prepared and signed by a Professional Engineer from the Local Agency's Engineering office.**
- a. On-System (on State Highway System) Cost Estimate Sheet
 - b. Off-System (not on State Highway System) Cost Estimate Sheet

Use the following links to access the basis of estimates manual as well as historical information for the project area.

[Basis of Estimates Manual](#)
[Historical Cost Information](#)

CERTIFICATION OF PROJECT SPONSOR

I hereby certify that the proposed project herein described is supported by Palm Beach County Engineering
(*municipal, county, state or federal agency, or tribal council*) and that said entity will:

- 1) provide any funding required in addition to the grant amount;
- 2) enter into a LAP and maintenance agreement with the Florida Department of Transportation;
- 3) have complied with the Federal Uniform Relocation Assistance and Acquisition Policies Act for any Right of Way actions intended for this project previously performed within the project limits;
- 4) will comply with NEPA process prior to construction, which may involve coordination with the State Historic and Preservation Office (SHPO); and
- 5) support other actions necessary to fully implement the proposed project.

I further certify that the estimated costs included herein are reasonable, and that increases in these costs could cause significant increase to the local agency required participation. I understand failure to follow through on the project once programmed in the Florida Department of Transportation’s Work Program is not allowed.

Signature

Fatmeh Jafar, P.E., Ph.D.

Name (*please type or print*)

Manager, Traffic Signal & Street Light Design - Traffic Division

Title

2/16/2023

Date

FOR FDOT USE ONLY		
Application Complete	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Project Eligible	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Implementation Feasible	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Include in Work Program	<input type="checkbox"/> Yes	<input type="checkbox"/> No