



SR 9/I-95 Interchange at 45th Street PD&E Study

Palm Beach County, Florida

FPID No.: 436519-1-22-01 | FAP No.: 0951-682-1 | ETDM No.: 14225

Palm Beach County MPO Governing Board

July 20, 2017



Project Study Area



LIMITS:

SR 9/I-95: from S of 45th Street to N of 45th Street
 45th Street: From Village Boulevard to Congress Avenue
 Palm Beach County, Florida

MUNICIPALITIES:

City of West Palm Beach
 Town of Mangonia Park
 City of Riviera Beach

Purpose and Need

Project Purpose:

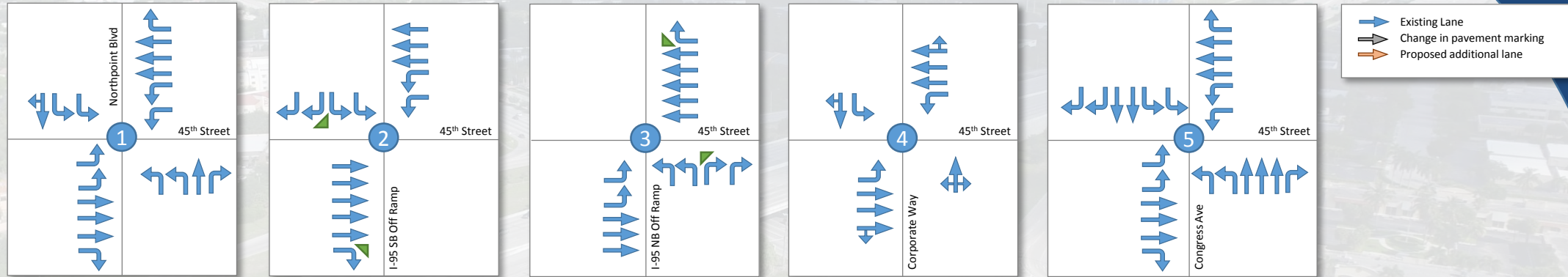
- Identify short-term and long-term needs within the study area;
- Develop design concepts to address traffic spillback onto I-95;
- Improve interchange operations, reduce congestion, and increase safety at the study interchange.

Project Need:

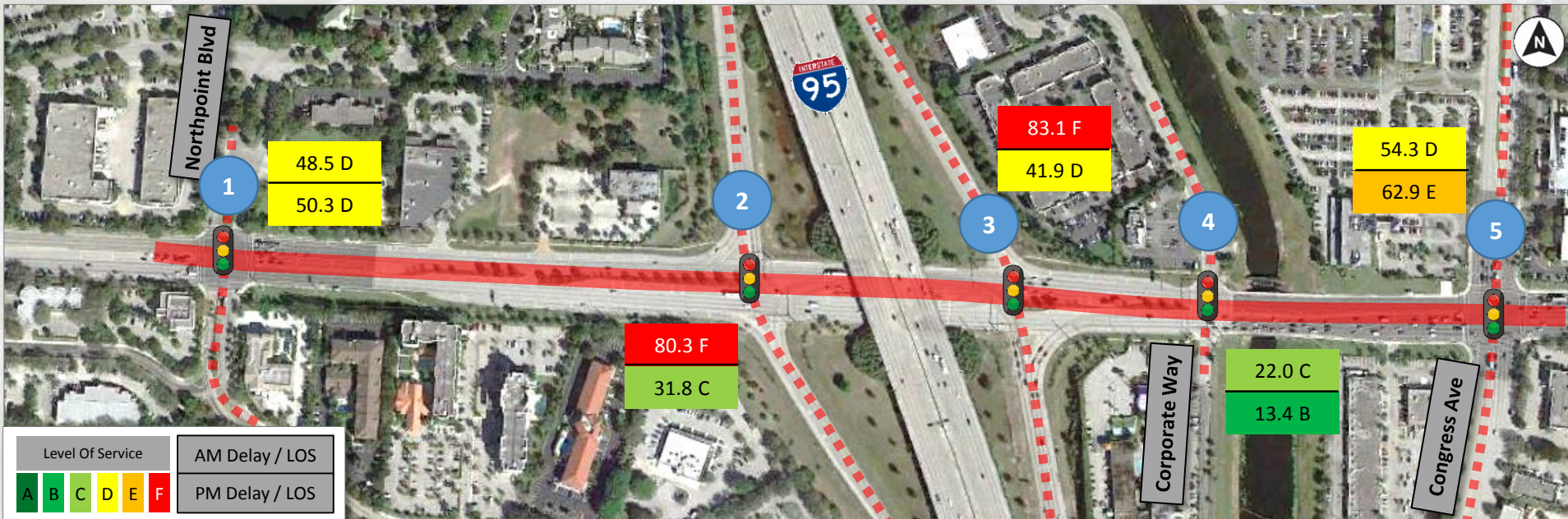
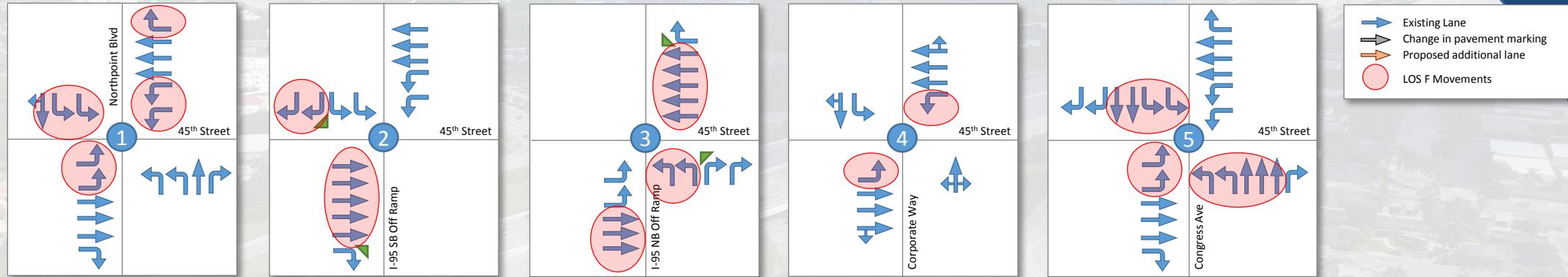
- Alleviate existing and future traffic congestion thereby improving safety at the interchange.



Existing Year Conditions - Lane Configuration, Delay and LOS



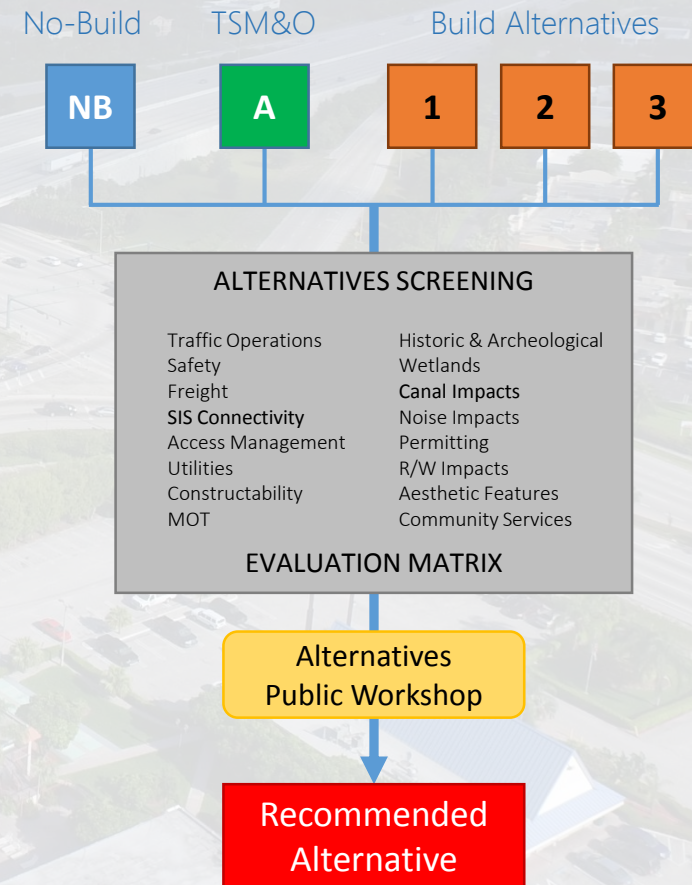
No-Build 2040 Year Conditions - Lane Configuration, Delay and LOS



Alternatives Analysis

- **No-Build**
- **Transportation System Management & Operations (TSM&O)**
 - Short Term
 - Open to Traffic in 3-5 Years
 - No Right-of-Way Impacts
 - Lower Cost
- **Build Alternatives**
 - Long Term
 - Open to Traffic in 8-10 Years
 - Ultimate Improvements

Alternatives Evaluation Process



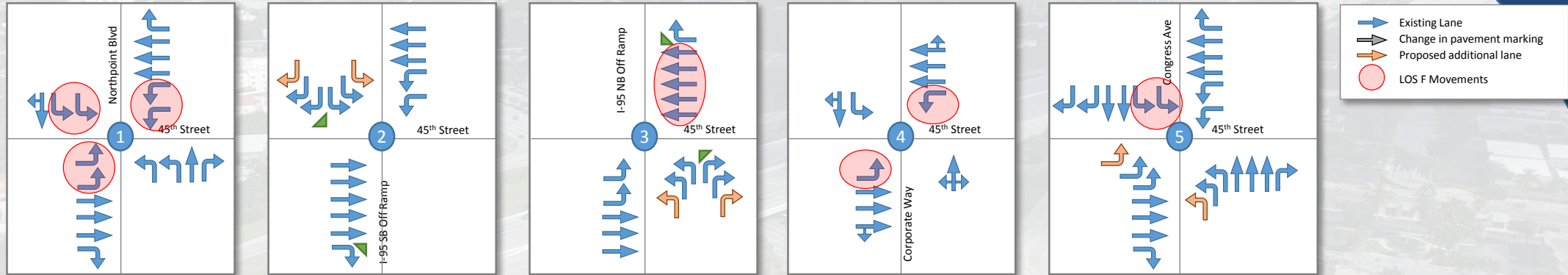
Alternatives Analysis | TSM&O



- Add additional right and left turn lane at the ramp intersections
- Add directional signage on NB off-ramp to North Congress Avenue
- Add one EB and one NB left turn lane at Congress Avenue
- Provide travel information system
- Develop signal system strategies



TSM&O 2040 Year Conditions - Lane Configuration, Delay and LOS



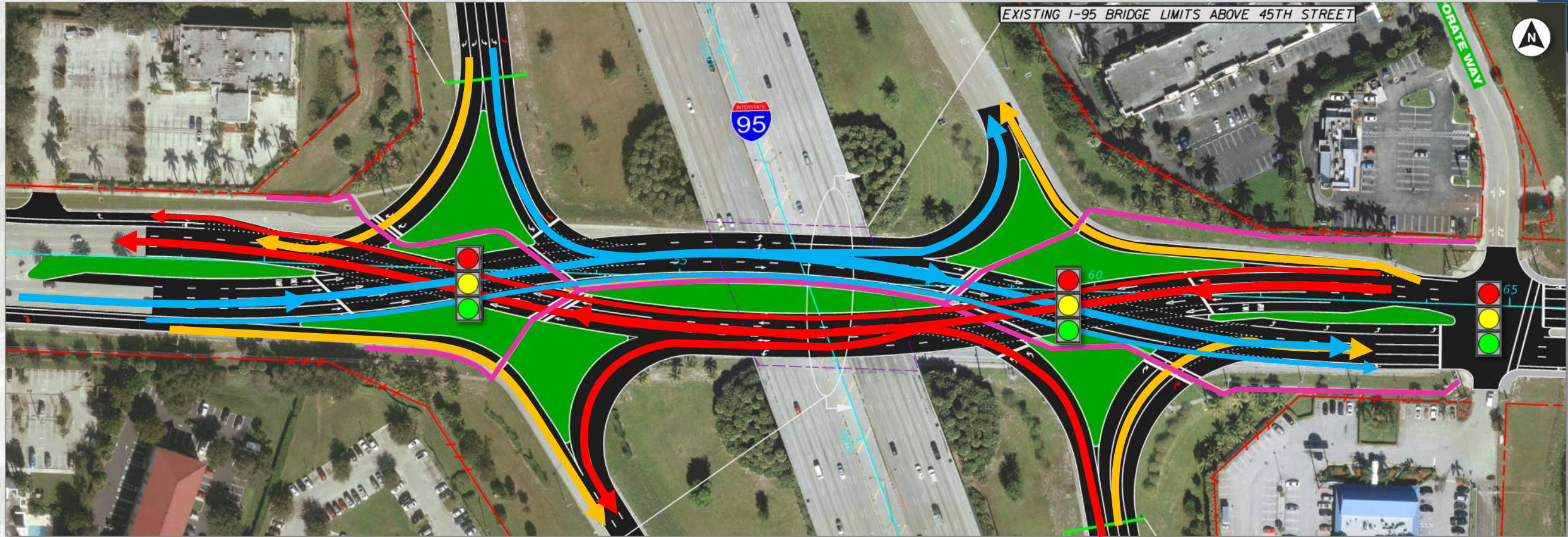
Alternatives Analysis | Alternative 1 – 45th Street Widening



Alternatives Analysis | Alternative 2 – Diverging Diamond Interchange

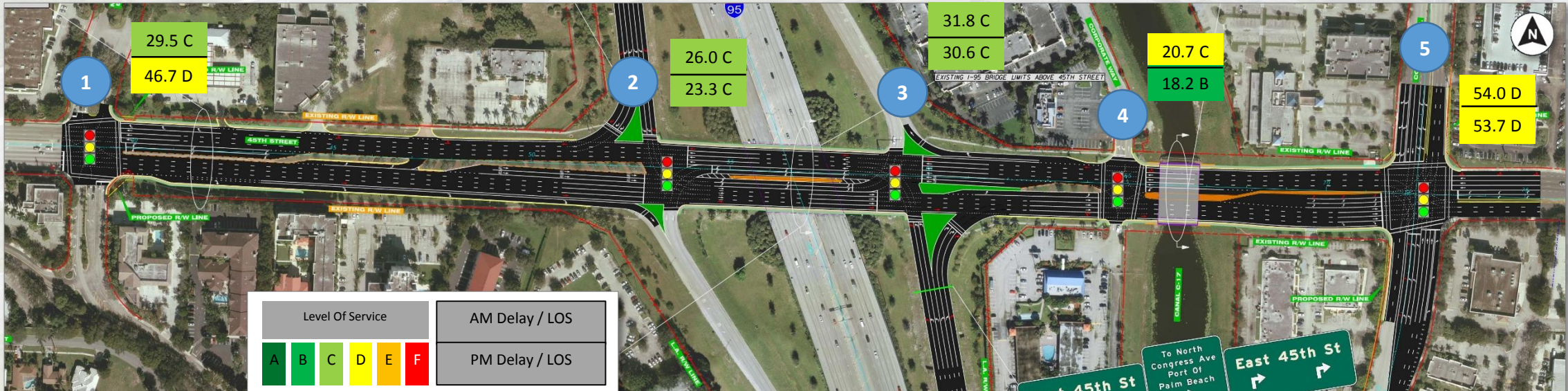
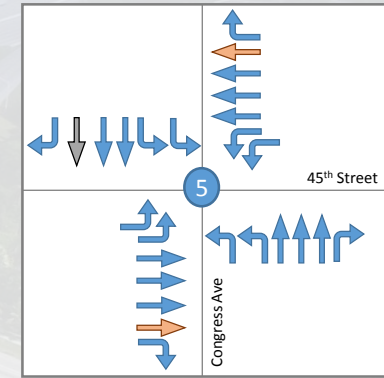
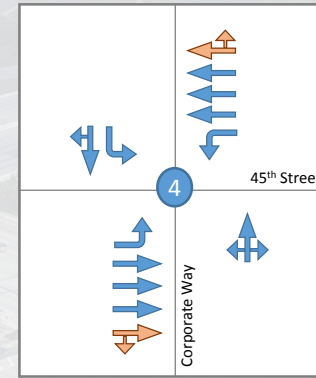
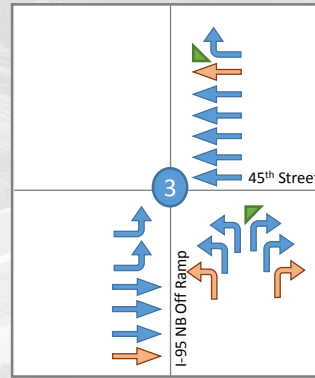
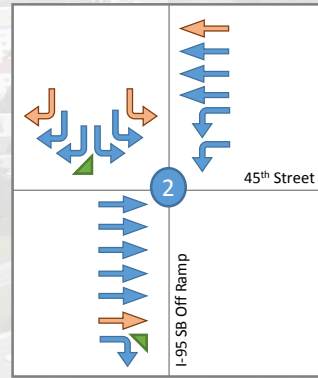
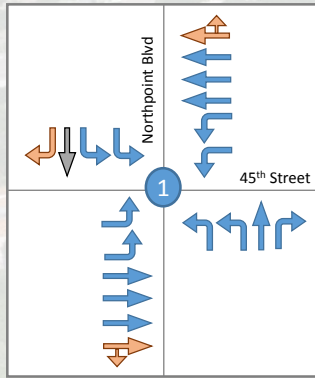


Alternatives Analysis | Alternative 2 – Diverging Diamond Interchange



Alternative 1 – 2040 Year Conditions

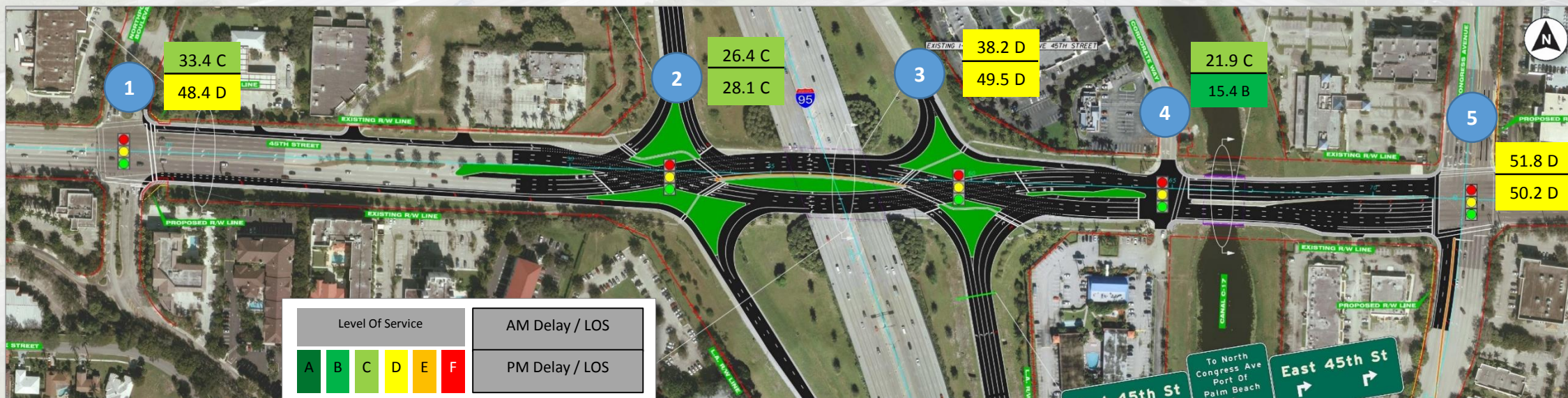
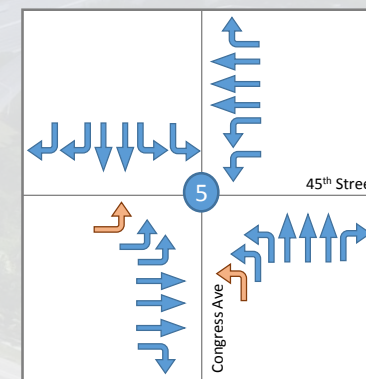
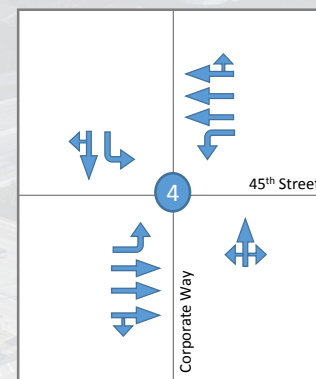
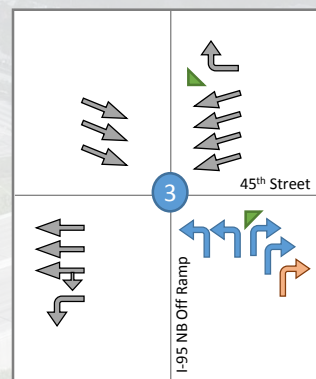
Lane Configuration, Delay and LOS



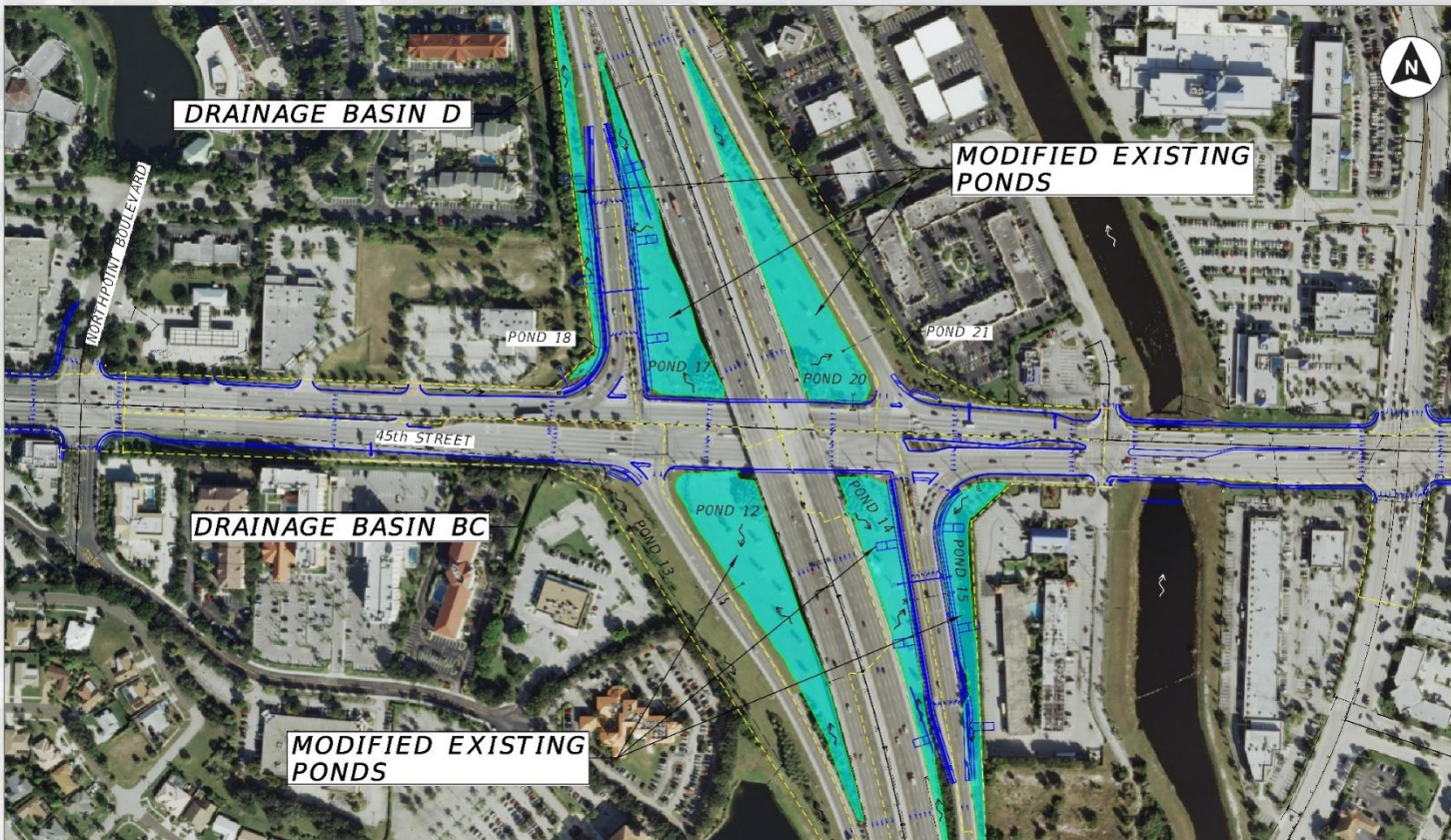
Alternative 2 – 2040 Year Conditions

Lane Configuration, Delay and LOS

Existing Lane
 Change in pavement marking
 Proposed additional lane



Drainage Analysis



- Drainage requirements are being met within existing R/W through use of dry detention ponds and swales that ultimately discharge to the C-17 Canal.
- Minor modifications to the existing collection system will be required.
- No need for additional offsite ponds are anticipated.

Environmental Analysis

Wetlands/Benthic Resources

- No jurisdictional wetlands
- Sparse tape grass in C-17 Canal south of 45th Street

Special Designations

- No special designation or Outstanding Florida Waters

Wildlife and Habitat

- Project area does not generally provide wildlife habitat

Contamination

- Alternative 1:
 - 2 High Risk Sites
 - 7 Medium Risk Sites
- Alternative 2:
 - 1 High Risk Sites
 - 6 Medium Risk Sites

Others Environmental Considerations

- There are **no** anticipated noise impacts as part of the recommended improvements
- There are **no** anticipated impacts to any Historical or Archeological Sites
- There are **no** relocation potentials as part of the recommended improvements



Preliminary Right-of-Way Impacts

COMPONENT	TSM&O	ALTERNATIVE 1	ALTERNATIVE 2
Commercial	0	4	4
Residential	0	0	0
Vacant Land	0	0	0
TOTAL PROPERTIES IMPACTED	0	4	4

Preliminary Cost Estimate

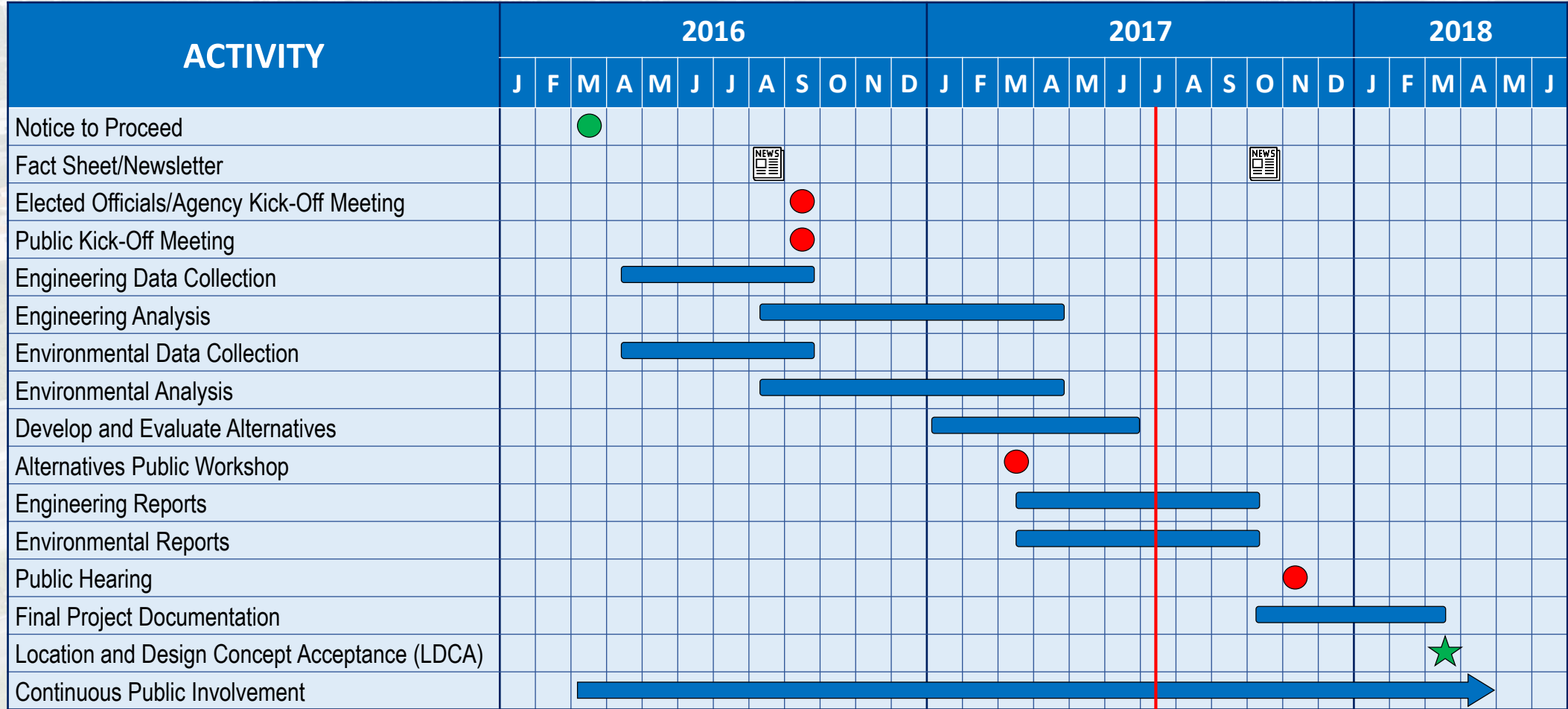
COMPONENT	TSM&O	ALTERNATIVE 1	ALTERNATIVE 2
Roadway Construction	\$3,880,000	\$8,983,400	\$8,619,700
Engineering/Design (10% Construction)	\$388,000	\$898,340	\$861,970
CEI (15% Construction)	\$582,000	\$1,347,510	\$1,292,955
Right-of-Way Acquisition	\$0	\$2,261,400	\$2,261,400
TOTAL COST	\$4,850,000	\$13,490,650	\$13,036,025

Public Involvement

- Agency & Public Kick-Off Meetings — September 13, 2016
- Elected Officials/Agencies Briefings
 - Palm Beach County Engineering
 - Palm Beach County MPO
 - City of West Palm Beach
 - Town of Mangonia Park
 - City of Riviera Beach
- Alternatives Public Workshop — March 28, 2017
- Other Meetings
 - Coordination with City of West Palm Beach & Town of Mangonia Park
 - 45th Street Corridor Summit — Multiagency Discussion
- Public Hearing — November 2, 2017



Summary Schedule



TODAY

Long Range Transportation Plan (LRTP) Amendment

➤ I-95 at 45th Street Interchange Project FM #436519-1

- FDOT District Four requested and received approval for statewide SIS funds for all phases
- Draft Tentative Work Program FY 2018 – FY 2022 and SIS 2nd Five

Phase	PD&E	Design	ROW	Const
Fiscal Year(s)	2016-2017	2021	2022-2023	2026
Funding ⁽¹⁾	\$1,792,126	\$6,000,000	\$19,516,258	\$80,432,086

Note: (1) Shown in Year of Expenditure (YOE) dollars

- **Requesting an amendment to Palm Beach MPO's adopted 2040 LRTP to incorporate the I-95 at 45th Street Interchange project as a fully funded project in the Cost Feasible Plan (CFP)**



THANK YOU

For more information, please call, email or write to:

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