I-95 Interchange Projects
Palm Beach County

Presentation to Palm Beach Metropolitan Planning Organization

April 2017
Presentation Outline

I. Strategic Intermodal System (SIS) Program
II. Origin of I-95 Interchange Projects
III. I-95 Interchange Project Information & Palm Beach MPO 2040 Long Range Transportation Plan Amendment Requests
Strategic Intermodal System (SIS)

- Established by the Florida Legislature in 2003 (F.S. 339.61)
- State Funding Program Administered by FDOT Central Office
- Focuses state resources on transportation facilities most critical to statewide travel, including:
  - Interstates
  - Interchanges
  - Airports
  - Seaports
  - Spaceports
  - Rail
  - Highways of Interregional Significance
  - “Last Mile” Connectors

SIS Planning Documents:
- First 5 Year Plan – projects funded in 5 Year work program
- Second 5 Year Plan – planned project funding years 6-10
- SIS Cost Feasible Plan – planned project funding years 11-25
- SIS Multi Modal Unfunded Needs Plan

http://www.fdot.gov/planning/systems/programs/mspi/plans/
Strategic Intermodal System (SIS) Program Funding

- SIS program State Managed Funds comprised of state and federal fund sources and managed by FDOT Central Office.

- Qualifying capacity projects on designated SIS facilities (highway, airport, seaport, rail, transit) may be eligible for SIS program funding; minimum matching fund requirements apply for non-highway projects.

- Qualifying “quick fix” minor operational highway improvements on SIS and NHS Connectors such as a turn lane, ITS device, or safety hot spot improvement may be eligible for “quick fix” SIS program funding.

- FDOT District SIS Coordinators and modal partners may submit eligible projects to FDOT Central Office each year for consideration of new or advanced SIS funding for years 1-10.

- Eligible SIS projects compete statewide for available State Managed SIS program funds each year; approved projects are included in approved ten year SIS 1st five year and 2nd five year funding plans (FY 2018 – FY 2027).

- SIS program funds help all stakeholders advance existing projects each year, and/or fund significant new capacity or minor operational projects.
Origin of I-95 Interchange Improvement Projects

Identification of existing issues come from many sources
• Congestion or safety studies
• Planning studies such as I-95 Interchange Master Plan
• PD&E Studies
• County, Cities, MPO, and the public

Identification of future needs based on growth and demand
• 27% population growth: 1.32 million to 1.68 million from 2010 to 2040 in Palm Beach County
• 44% employment growth: 571,000 to 820,000 employees from 2010 to 2040 in Palm Beach County
• 10% annual visitor growth: 6.3 million visitors to Palm Beach County in 2014 to 6.9 million visitors in 2015
Origin of I-95 Interchange Improvement Projects

SR 9 (I-95) Interchange Master Plan, Palm Beach County, 2013-2015

- Evaluated 17 interchanges from Linton Boulevard to Northlake Boulevard
- Analyzed interchanges to determine existing & future deficiencies; identified capacity, operational & safety needs
- Completed 17 Interchange Concept Development Reports with recommended improvements
- Coordinated with County and MPO
- Feb 2014 & Dec 2014 - FDOT presented findings to MPO Advisory Committees and MPO Board
- FDOT District Four pursued SIS program funding for I-95 interchange projects
I-95 Interchange Projects
LRTP Amendments

Four I-95 interchange project Long Range Transportation Plan (LRTP) Amendments requested

1) I-95 at Glades Road Interchange FM #412420-4
   - Amend LRTP to move from Desires Plan (partially funded) to Cost Feasible Plan (fully funded)

2) I-95 at Woolbright Road Interchange FM #437279-1
   - Amend LRTP to move from Desires Plan (not funded) to Cost Feasible Plan (fully funded)

3) I-95 at Northlake Boulevard Interchange FM #435803-1
   - Amend LRTP to move from Desires Plan (partially funded) to Cost Feasible Plan (fully funded)

4) I-95 at 45th Street Interchange FM #436519-1
   - Amend LRTP to move from Desires Plan (not funded) to Cost Feasible Plan (fully funded)
I-95 at Woolbright Road Interchange
Project FM #437279-1

- **Project Study Area:** I-95 from south of Woolbright Rd to north of Woolbright Rd, and Woolbright Rd from Congress Dr/SW 8th St to Seacrest Blvd

- **Origin**
  - SR 9 (I-95) Interchange Master Plan, Palm Beach County, 2013-2015

- **Purpose and Need for Project**
  - 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 interchange
I-95 at Woolbright Road Interchange
Project FM #437279-1

- **Issues identified in Master Plan:**
  - Crash countermeasures recommended to address high number of crashes at I-95 ramps
  - Add turn lanes and increase storage lengths to keep vehicles from backing up through interchange and ramps
I-95 at Woolbright Road Interchange Project FM #437279-1

- **Interim Improvements**
  1. Prior to 2012/2013 - Palm Beach County project extended the eastbound and westbound left-turn lanes on Woolbright over I-95 and added “Ramp Only” lanes for more storage
  2. FDOT interim construction project FM #231932-2-52-01 funded in FY 2014-2015 provides dual left-turn lanes onto I-95 on east and west approaches, widens northbound on-ramp, widens southbound on-ramp, constructs free-flow right turn lane from southbound off-ramp

- **Design Concept from Master Plan to be evaluated as Build Alternative in PD&E Study**
  - Extend left-turn lane vehicle storage on Woolbright Road for eastbound and westbound left-turn lanes onto I-95 on-ramps
  - Add free-flow right turn lane on Woolbright Rd onto I-95 northbound on-ramp, and widen northbound on-ramp
  - Add right and left turn lanes to Woolbright at Congress Dr/SW 8th St intersection and Woolbright Rd at Seacrest Blvd intersection
  - Arterial dynamic message signs recommended on Woolbright Road leading up to I-95, evaluate adaptive signal control and active traffic management strategies and queue loop detectors on off-ramps
  - Evaluate adding bicycle lanes along Woolbright Road through interchange
I-95 at Woolbright Road Interchange
Project FM #437279-1

- Design Concept from Master Plan to be evaluated as Build Alternative in PD&E Study
I-95 at Woolbright Road Interchange
Project FM #437279-1

- Potential Impacts
  - ROW anticipated to be needed along Woolbright Road to accommodate:
    - Eastbound Bike Lane west of I-95
    - Eastbound left-turn lane at Corporate Drive/SW 8th Street
    - Eastbound left- and right-turn lanes at Seacrest Boulevard
    - Westbound right-turn lane at Seacrest Boulevard
  - ROW anticipated to be needed along Seacrest Boulevard to accommodate:
    - Northbound right-turn lane at Woolbright Road
    - Southbound right-turn lane at Woolbright Road
- Environmental
  - Socio-cultural features includes two city parks, two schools, one cemetery, one place of worship, large percentage of minority households within study area
  - Hazardous material sites in area
  - Natural Resources: Wetlands (LWDD E-4 Canal), Threatened and Endangered species (scrub jay and wood stork)
  - Noise analysis
- Drainage
Potential Benefits

- Turn lanes and storage provided to add capacity, improve operations, reduce delay at signalized intersections to ensure vehicles do not spill back into I-95 interchange area and impact ramps.
- Reduce overall intersection delay by up to 92.0 seconds per vehicle in AM peak hour and 88.0 seconds per vehicle at Woolbright and Seacrest Blvd intersection.
- Improve safety, reduce rear-end crashes.
- Potential bike lane improvement through interchange.
- Potential to add new CCTV cameras and arterial dynamic message signs, better manage traffic.
- Benefit / Cost ratio for all improvements = 7.0.
- Net Present Value (NPV) approx. $18.4 million.
I-95 at Woolbright Road Interchange Project FM #437279-1

- **PD&E Study Schedule**
  - Information regarding initial concept presented to Palm Beach MPO advisory committees and MPO Board in 2014
  - PD&E Study Public Kickoff meeting 2019
  - Public Alternatives Meeting 2020
  - Public Hearing by 2021
  - Presentation to MPO Advisory Committees and Board between 2019 and 2021

- **SIS Funding**
  - 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 FY 2023–FY 2027

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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 Woolbright Rd Interchange project as a fully funded project in the Cost Feasible Plan (CFP)
Thank you

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