SR A1A Long Term Improvements Feasibility Study South of S. 28th Street to South of Osprey Drive

FLAGLER COUNTY FPID: 440557-1-22-01



FDEP Coastal Management Program Presentation

 M_{2} 16 2017

Damage from Hurricane Matthew



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Damage from Hurricane Matthew



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Damage from Hurricane Matthew





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Let's find a long term solution!

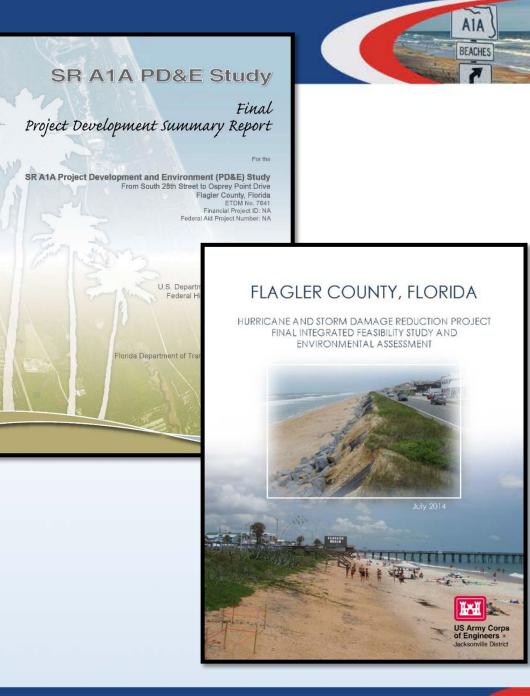
Recent Studies

• FDOT PD&E Study (2011)

- Interim improvements
 - Revetment using coquina rock
 - Revetment using granite rock
- Long term improvement
 - Retaining wall with sand covering
 - Adding natural vegetation

• USACOE (2014)

- Recommended option
 - Rebuilding the dune
 - Beach re-nourishment every 11 years
 - 50-year life cycle cost of \$42 million
- May not protect SR A1A from major storm damage



Agency Coordination

- Weekly Environmental Advisory Group
 - Florida Department of Transportation
 - Federal Highway Administration
 - Florida Department of Environmental Protection
 - US Fish and Wildlife Service
 - Florida Fish and Wildlife Conservation Commission
 - National Marine Fisheries Service
 - US Army Corps of Engineers
- Coordination with Local Stakeholders
 - Flagler County
 - City of Flagler Beach
 - Town of Beverly Beach

















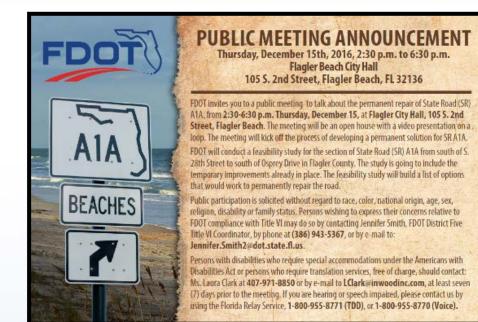
Challenges and Constraints

- A1A is completely within CCCL in this segment of Flagler Beach
- Homes and businesses immediately adjacent to A1A on west side
- Sea Turtle Nesting Habitat
- A1A is a Scenic Highway and evacuation route









Alternatives Evaluated

Shown at Public Meeting on December 15, 2016

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Project Limits

COUNTY

VOLUSIA



S. 28th Street

Atlantic Ocean

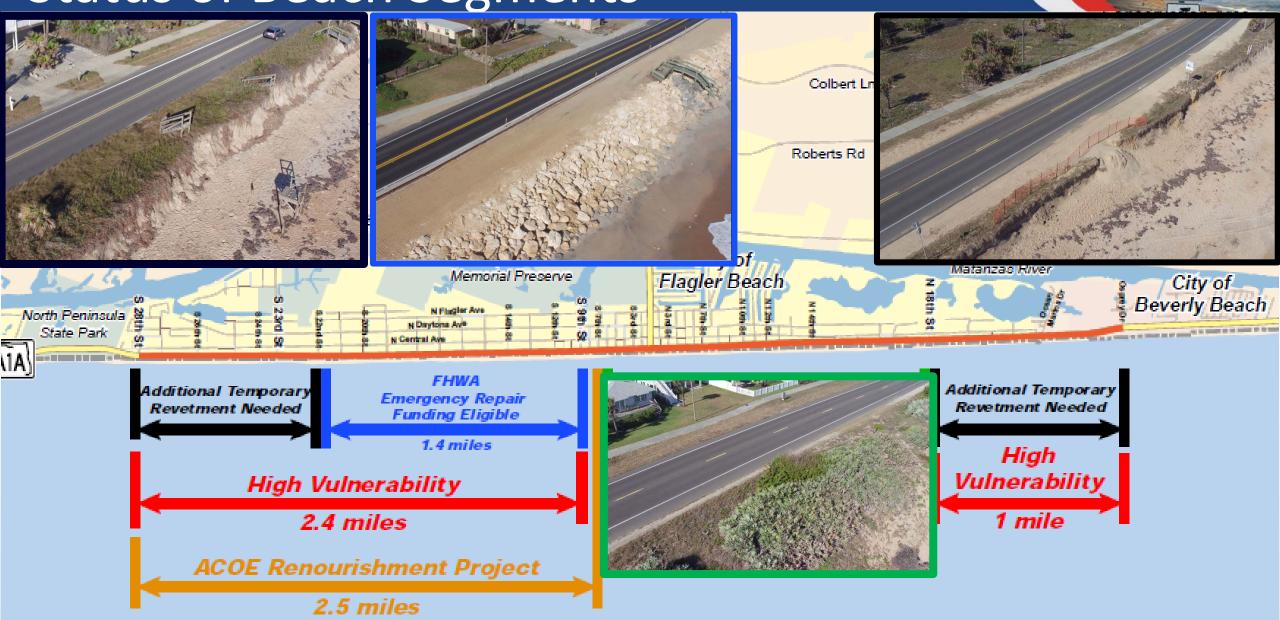
Osprey Drive

Initial Alternatives Evaluated

- 1. Reconstruction of SR A1A back to its original location
- 2. Construct buried retaining wall and reconstruct to pre-storm location of A1A
- **3.** Reconstruct A1A within ROW shifting to west and construct buried retaining wall
- 4. Relocate A1A to Central Avenue
- Construct One-Way Pairs with A1A and Central Avenue and construct buried retaining wall
- 6. Construct One-Way Pairs with Central and Daytona Avenues



Status of Beach Segments

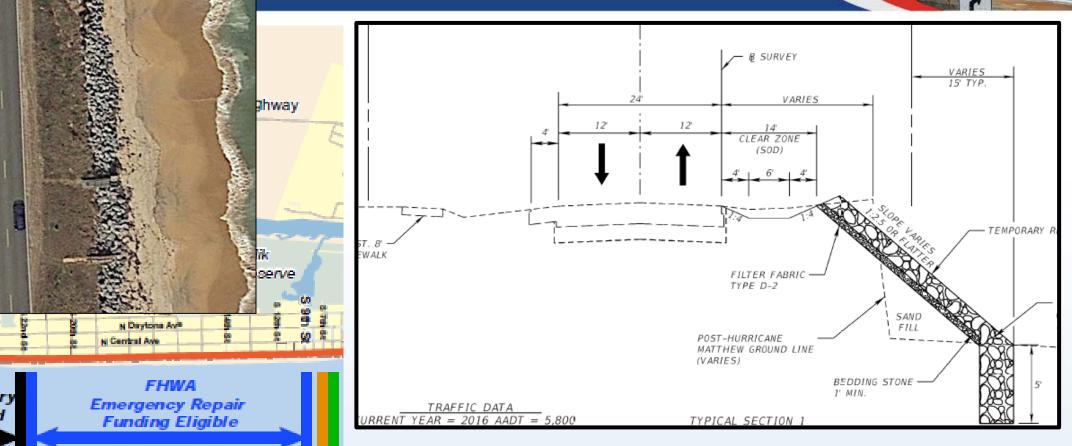


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Recommended Hybrid Option

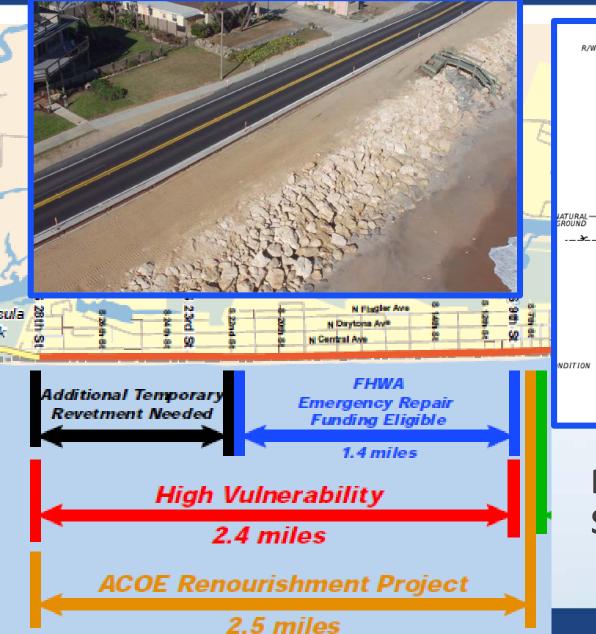
South Segment of Recommended Option

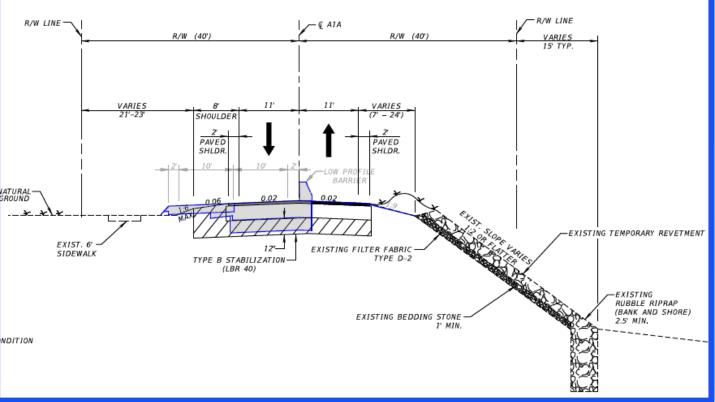


Add Revetment from S. 28th Street to S. 23rd Street

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South Segment of Recommended Option





Reconstruct Road from S. 22nd Street to S. 9th Street

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Middle Segment of Recommended Option



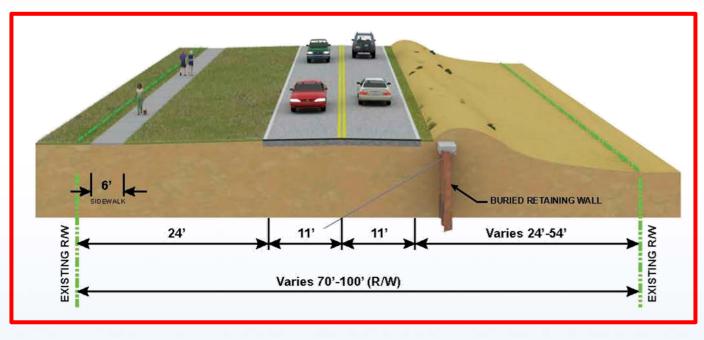
- No Construction Activities
- Annual funding for maintenance activities related to dune stability to protect A1A



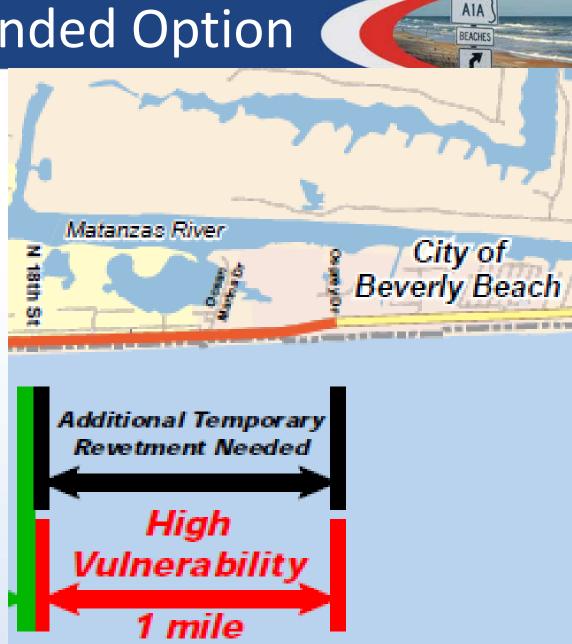
Low Vulnerability



North Segment of Recommended Option



- Construct Buried Retaining Wall and Dune from N. 18th Street to 500' South of Osprey Drive
- Annual funding for maintenance activities related to dune stability to protect A1A



Next Steps



- Final Design scheduled to begin June 2017
 - Continue coordination with agencies
 - Update Biological Opinion
 - Prepare reevaluation
- Construction Letting scheduled for October 2018



Questions?

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