

Countywide Vulnerability Assessment

IMPACT OF SEA LEVEL RISE & STORM SURGE ON
CRITICAL INFRASTRUCTURE



Countywide Vulnerability Assessment

- \$300k RESTORE Act grant to assess the vulnerability of our critical infrastructure to sea level rise & storm surge
- Project Partners: Tampa Bay Regional Planning Council, Forward Pinellas, and Pinellas Municipalities
- Four phases of project; up to a 3-year study



SE FL Regional Climate Change Compact: Asset Analysis

Physical features:

- Ports and airports
- Hospitals
- Schools
- Water & wastewater treatment plants
- Power plants
- Marine facilities
- Landfills
- Railroads
- Evacuation routes
- Emergency shelters

Types of outputs generated for each sea level rise scenario:

- Total acres impacted
- Taxable value of property
- Impact on assets
- Miles of road by FDOT category
- Critical habitat by category (mangroves, wetlands, etc.)
- FLU categories by acre



Hillsborough County MPO Vulnerability Assessment and Adaptation Pilot Project

Project Goals:

- Identify transportation assets vulnerable to sea level rise and storm surge
- Develop adaptation strategies for a subset of the vulnerable assets
- Econometric modeling using REMI to assess cost/benefit of the strategies
- Incorporate results into LRTP



**Plan
Hillsborough**

Vulnerability Assessment: Phase 1

Project Kickoff:

- Confirm project goals and objectives with partners – begin stakeholder outreach process
- Identify/establish working groups and planning teams



Credit: Planning.org

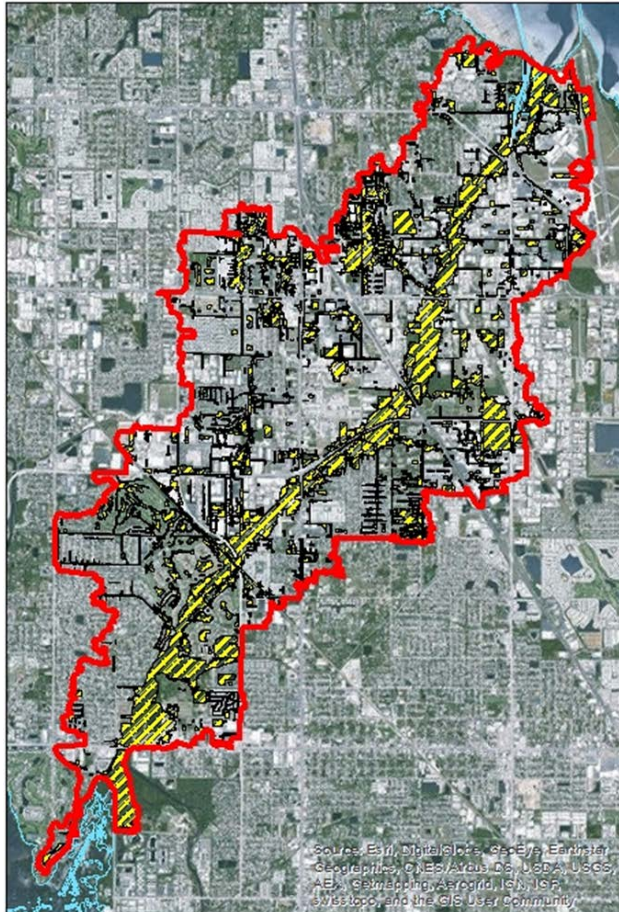
Vulnerability Assessment: Phase 2

Obtain & Format Data:

- Sea level rise and storm surge
- Transportation assets, stormwater infrastructure and utilities (water, wastewater, natural gas & electricity)
- Update GIS Decision Support Tool



Vulnerability Assessment: Phase 3



Data Analysis:

- Utilize GIS decision support tool to identify vulnerable critical infrastructure
- Conduct scenario planning/vulnerability assessments on identified critical assets
- Conduct economic analyses

Vulnerability Assessment: Phase 4

Strategy Development & Final Report:

- Development of adaptation strategies
- Consider relationships & opportunities presented via interplay between the natural and built environment
- Draft final report, including summary of findings and policy recommendations



Questions?

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