




# Route to 2050

## Mast-Arm Conversion Projects

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## Infrastructure Hardening Program




Infrastructure Hardening projects to mitigate weather extremes effects on the identified MTP roadway susceptibility network.



Number of Projects:  
**50**

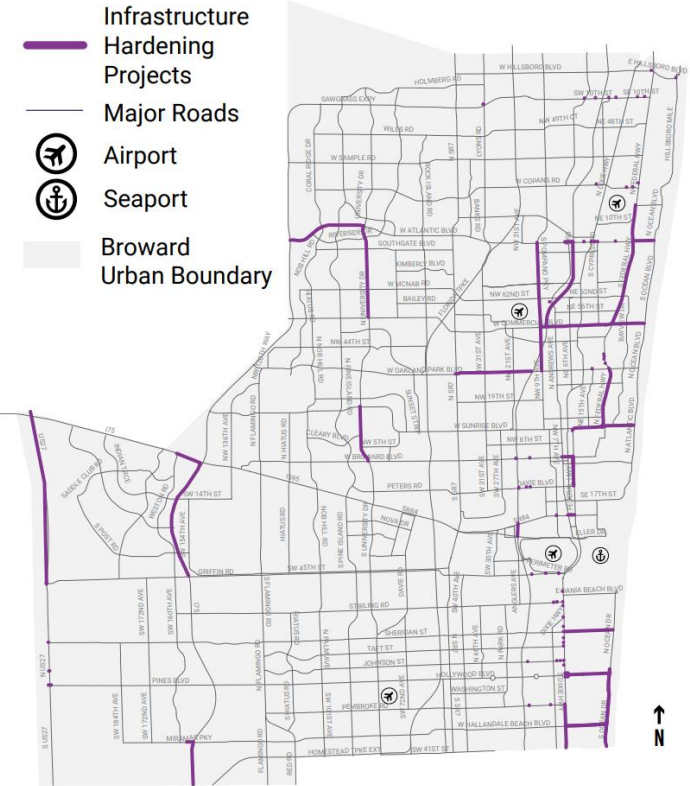
Types of Projects:  
Infrastructure Hardening  
Corridor Studies  
Mast-arm conversion

Total Funding: **\$44 Million**

This program includes funding for both Infrastructure Hardening corridor feasibility studies and mast-arm conversion projects.

Program: 

Emphasis Areas:  



# Mast-Arm Conversion Projects



How were mast-arm conversion projects identified and programmed in the 2050 MTP?





# Step 1- Identification of Intersections

The MPO conducted a needs assessment by completing a GIS analysis to identify all span wire signalized intersections within Broward County.



# Step 2- Establishing Focus Areas

Using the SEFTC Regional Network, the MPO filtered out intersections not located on the Regional Network. This allowed us to focus investments on the Broward's most vital roadways.



# Step 3- Partner Coordination

Through various coordination meetings, the MPO worked with Broward County to align mast-arm investment strategies. Broward County performed a similar analysis and prioritized mast-arm conversions primarily for County/County and County/Local roadways. Given this, the MPO focused its efforts on intersections along State-owned roadways to complement the County's initiatives.



# Step 4- Project Prioritization

- To prioritize projects, the MPO developed an Infrastructure Hardening Network Assessment. This assessment helped identify roadways with the greatest need for mitigation and adaptation investments. Each roadway segment was assigned a score based on the following factors:
- Susceptibility: Comprised of three variables:
  - Sensitivity: The facility's capacity to manage variations from extreme weather events.
  - Exposure: The extent to which a facility is subjected to adverse conditions from the following stressors:
    - Coastal Inundation
    - Current and Future Flooding (Precipitation and Storm Surge)
    - Extreme Heat
    - Future Groundwater Elevation
  - Adaptive Capacity: The ability of the transportation network to accommodate the loss of a facility, considering both the number of travelers affected and available detour lengths.
- Demographics: Recognizing the challenges faced by socially vulnerable populations during mobility disruptions and recovery efforts, the MPO incorporated its Transportation Demographic Areas into the assessment to ensure equitable prioritization.



# Step 5- Cost Feasible Plan

Based on revenue availability (following the guidance of the FDOT 2050 Revenue Forecast Handbook), prioritized projects were assigned to a future timeband in the 2050 MTP for implementation, with the project cost inflated to be consistent with that timeband.

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## For More Information

Visit: [RouteTo2050.org](http://RouteTo2050.org)  
Thank you!

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