

# Planning for Sea Level Rise on Cape Cod



Cape Cod is almost completely surrounded by water

# We are vulnerable, yet resilient

**re•sil•ient** [ri-zil-yuhnt] adj.

1. Able to bounce back after change or adversity.
2. Capable of preparing for, responding to, and recovering from difficult conditions.

Syn.: **TOUGH**

See also: New York City [ ... and Cape Cod ]

source: planyc: a stronger, more resilient new york

# We are a proactive community



towns actively  
involved  
in hazard  
planning.

# We are a proactive community



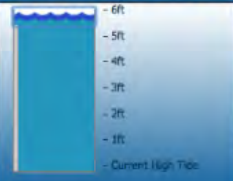
CAPE COD  
COMMISSION



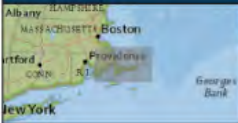
Massachusetts  
Maritime  
Academy



# Cape Cod Sea Level Rise



- Low-lying Areas
  - Critical Facility
  - Disconnected roads
- At 6ft of Sea Level Rise:
- 21,260 acres (9%) of land is submerged.
  - 130 Critical Facilities are impacted.
  - 11,724 Acres of Priority Habitat is lost.
  - Sales of \$1.07 billion and 6,222 jobs are lost in 795 businesses.
  - 174.1 Miles of roadway are submerged and 708.6 miles are disconnected from the network.
- SLOSH Hurricane Categories
- Category 1
  - Category 2
  - Category 3
  - Category 4
- FEMA FIRN Floodzones
- Special Flood Hazard Areas
  - Coastal High Hazard Areas
- [More information](#)





hazard planning  
+  
transportation

# Hazard Planning

## RISK ASSESSMENT

**1** identify hazards



**2** profile hazards



**3** inventory assets




**4** estimate losses





relevant  
hazards

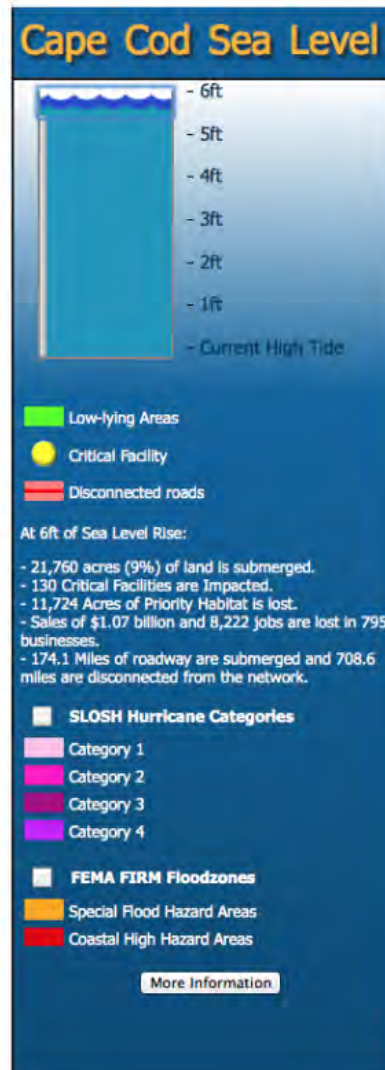


- wind
- extreme temperature
- thunderstorms
- tornadoes
- drought
- wildfires
- hurricane/tropical storms
- nor'easters
- severe winter weather
- coastal erosion/shoreline change
- flooding
- sea level rise





# Sea Level Rise Viewer allows hazard planning teams to see connections



*Moving Massachusetts Forward.*  
**massDOT**



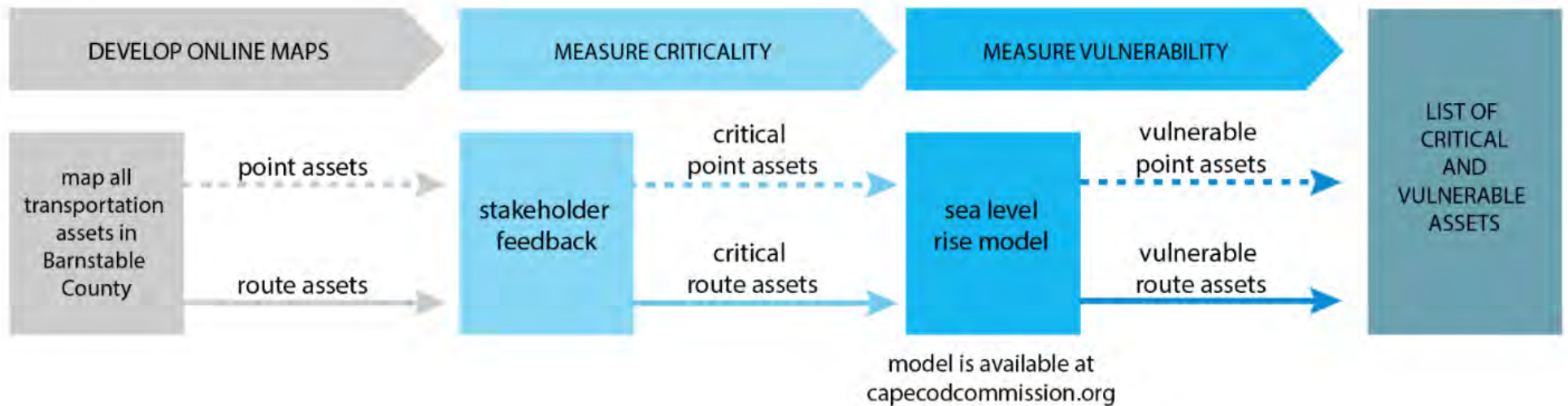
Massachusetts Department of Transportation



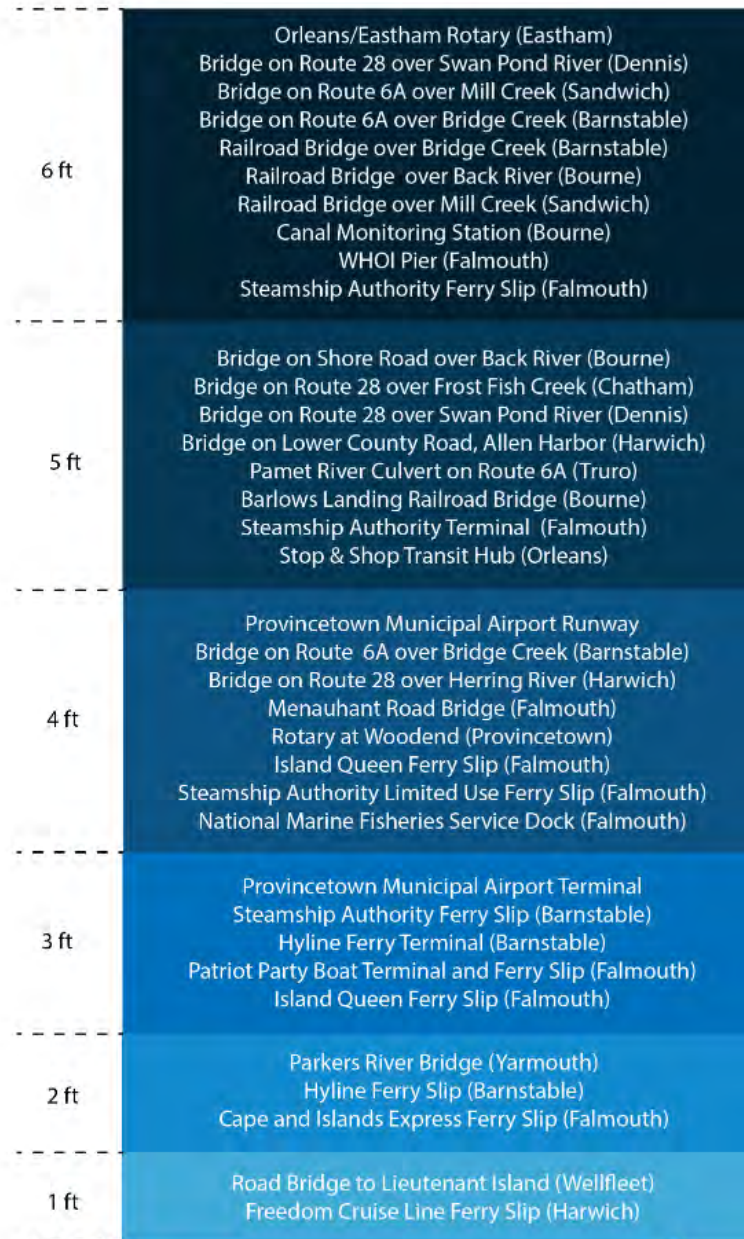
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project data used to draft portions of the Regional Transportation Plan and  
facilitate discussions with stakeholders and town officials

# Critical Transportation Assets and Their Vulnerability to Sea Level Rise



## Transportation Point Assets Vulnerable to 1-6 feet of sea level rise



# # of vulnerable transportation point assets identified in each town



- Upper Cape Towns
- Mid-Cape Towns
- Lower Cape Towns
- Outer Cape Towns

# Vulnerable Roadways

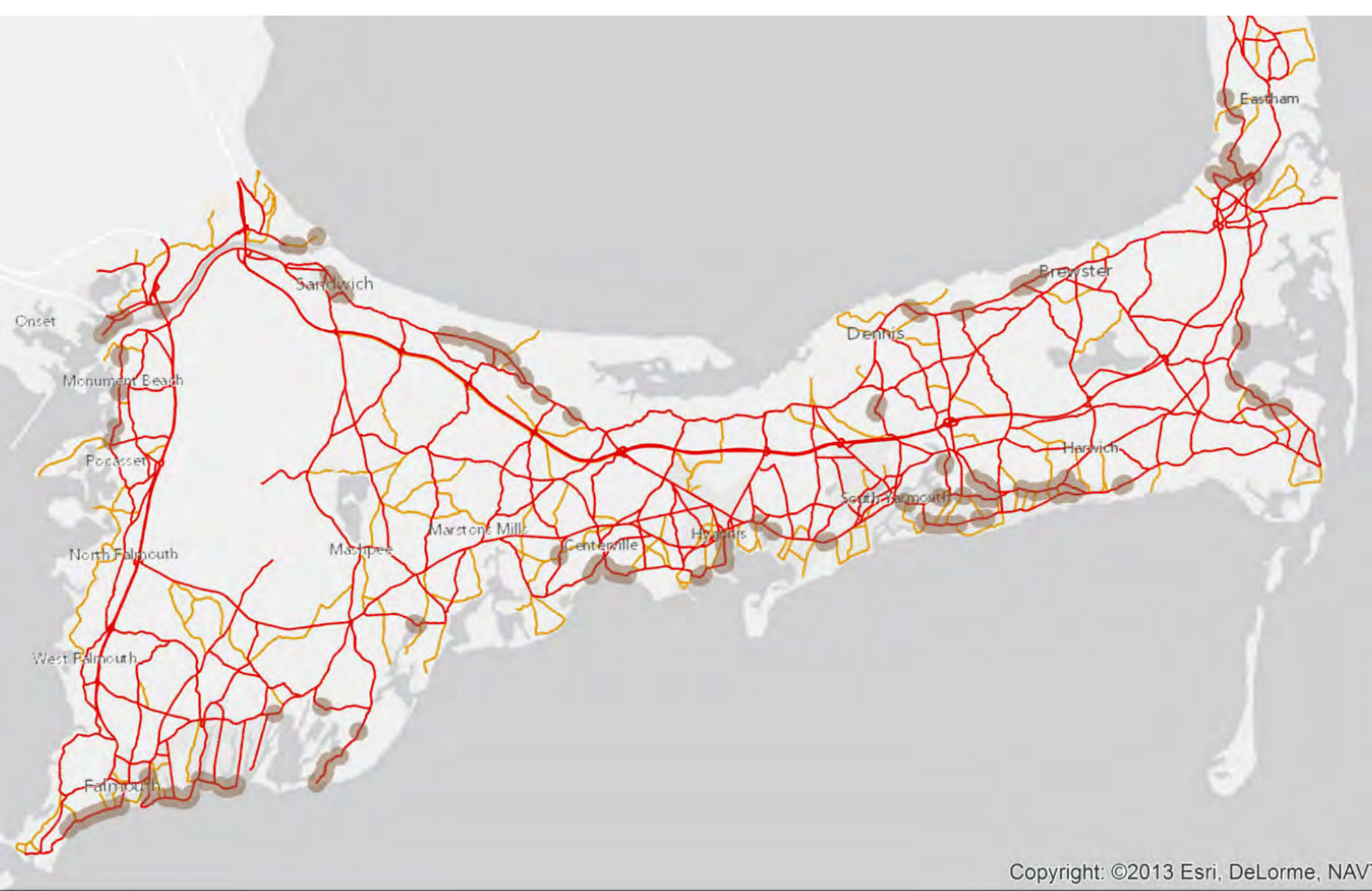
at 3 feet of sea level rise



at 6 feet of sea level rise







## CCC Sea Level Rise Viewer is used to:

- 1 make connections between hazards
- 2 determine infrastructure vulnerability



Cally Harper, PhD  
[cally.harper@capecodcommission.org](mailto:cally.harper@capecodcommission.org) (508) 362-3828