



Building a Resilient Cape Cod through Hazard Planning

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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

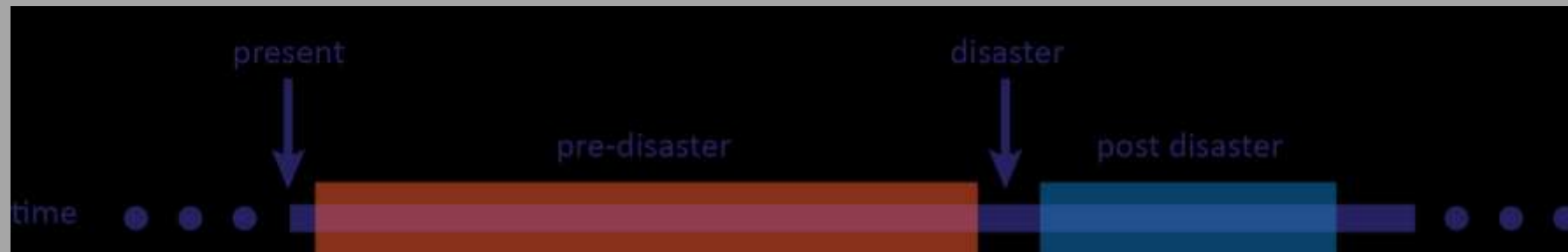
What does it mean to be resilient?



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Hazard Planning



Public
Engagement



Data



Action +
Accountability

Hazard Planning



Public
Engagement

- During the planning process
- Once a draft plan is developed
- Prior to project implementation

Hazard Planning



Data

- “Relevant Hazards”
- Historical storm events
- Probability, frequency and impact of storms (past and future)
- Vulnerability and Risk

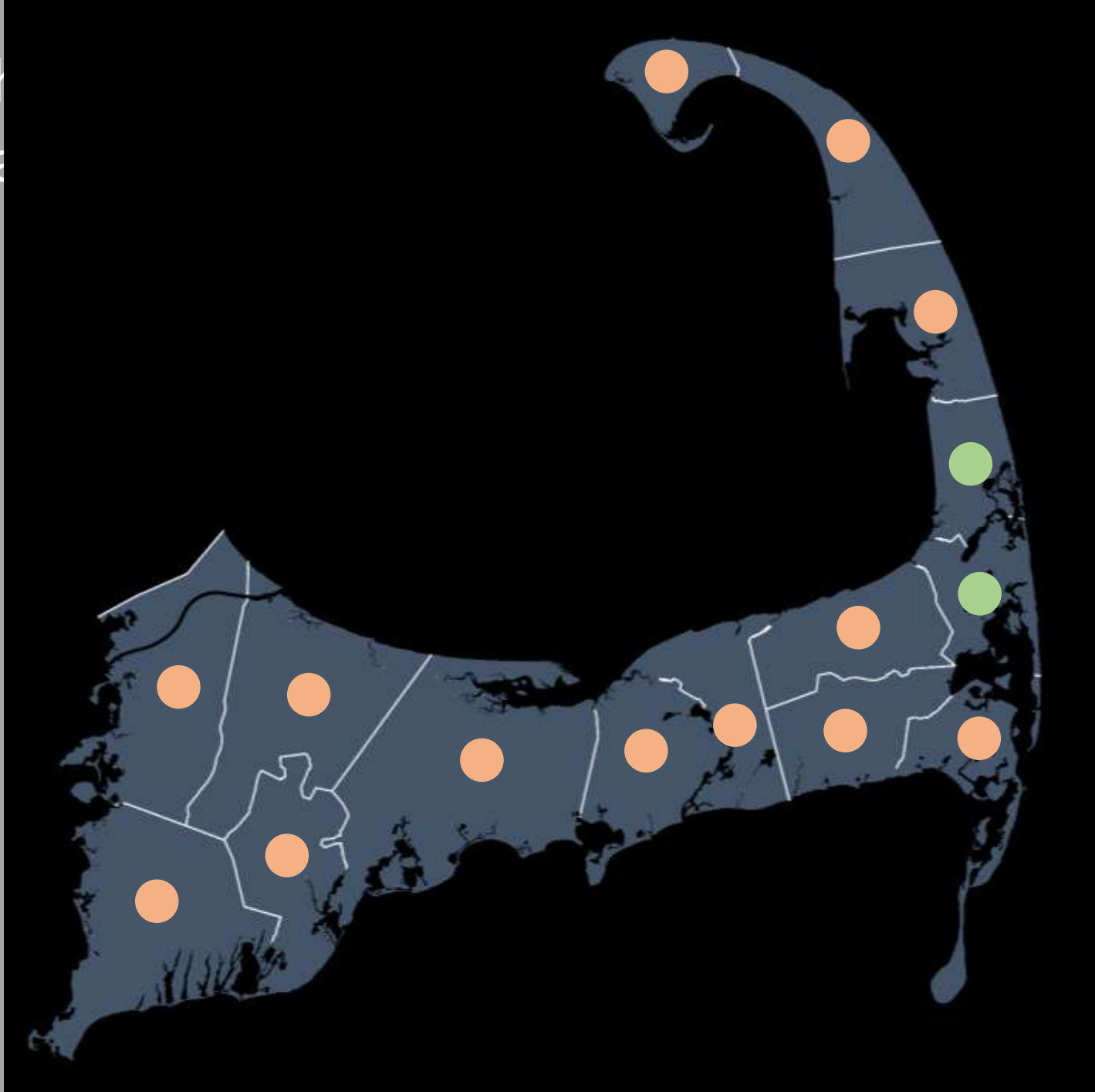
Hazard Planning



Action +
Accountability

- Accountability for past actions
- Develop new actions for the next 5 years

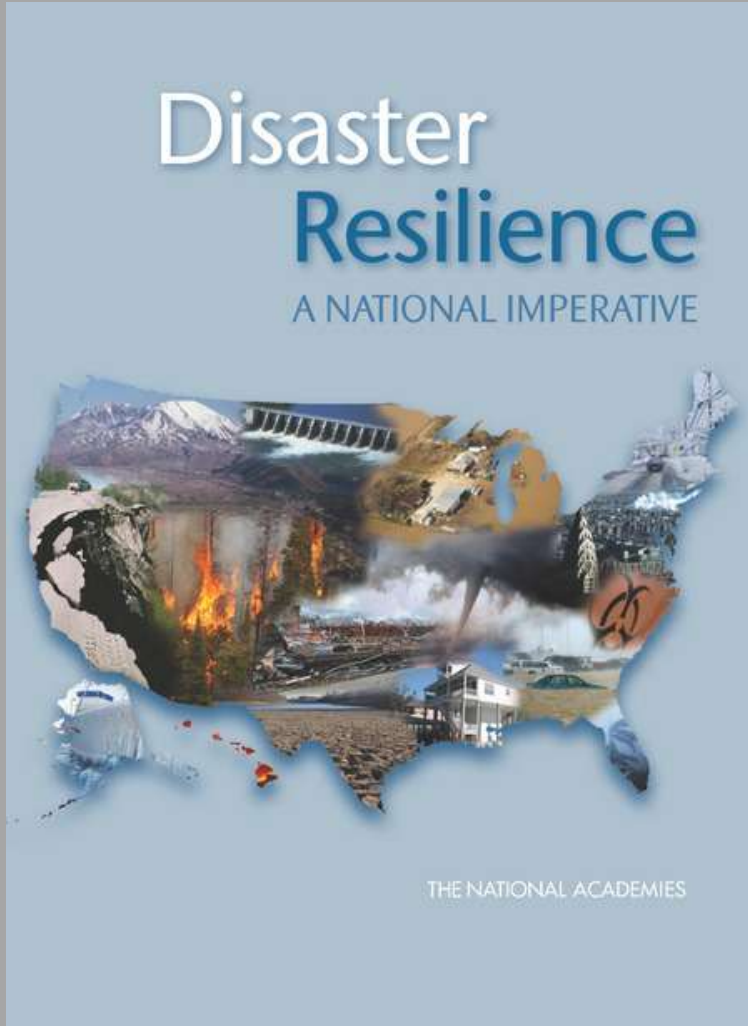
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● Plan is approved and/or in progress

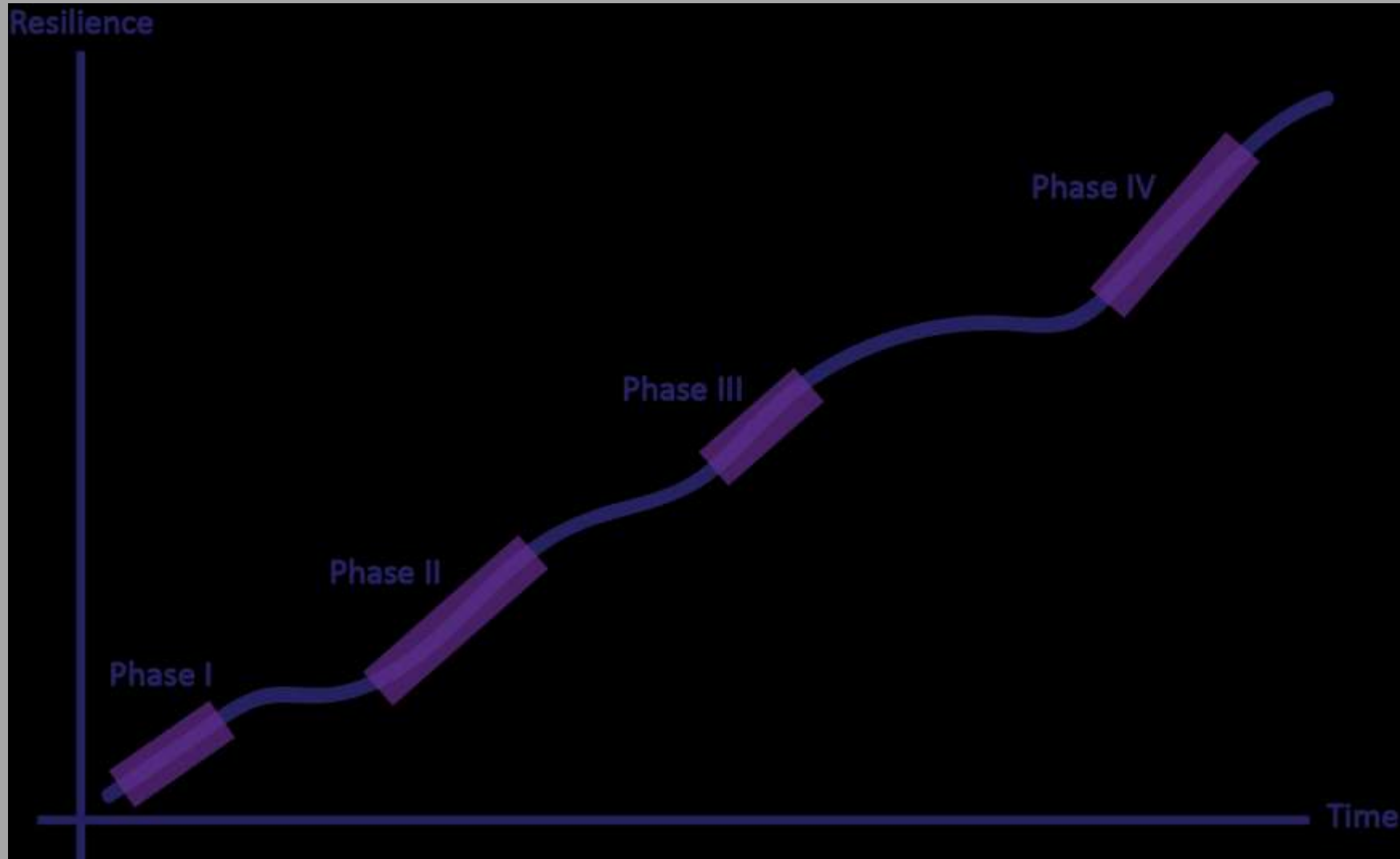
● Planning process will kick-off soon

Ways to Build Resilient Communities



- Engage in a long term process, carried out in small steps
- Share the responsibility
- Stay committed to planning

Resilience is a long term process, carried out in small steps



Resilience is a shared responsibility



Resilience requires a commitment to planning.


- A chance to “look back”
- Opportunity to engage with the public
- Builds public and private partnerships
- Opportunity to develop a “path forward”



Provincetown Case Study

Richard J. Waldo, P.E.
Provincetown DPW



An aerial photograph of Provincetown, Massachusetts. The town is situated on a narrow peninsula, with a large harbor area to its east. The harbor water is a deep blue-green color. The town itself is a dense cluster of buildings, with a few larger structures visible. The surrounding waters are a lighter blue-green color. The text "Provincetown is vulnerable." is overlaid on the right side of the image.

Provincetown is
vulnerable.



Provincetown is becoming more resilient.

- Coastline
- Infrastructure
- Critical Facilities

Coastline



Coastal Community
Resilience Grant

Shoreline Data
+ Outreach

Coastline



Coastal Community
Resilience Grant

Shoreline Data
+ Outreach

Infrastructure and Critical Facilities

MASSACHUSETTS OFFICE OF
COASTAL ZONE MANAGEMENT

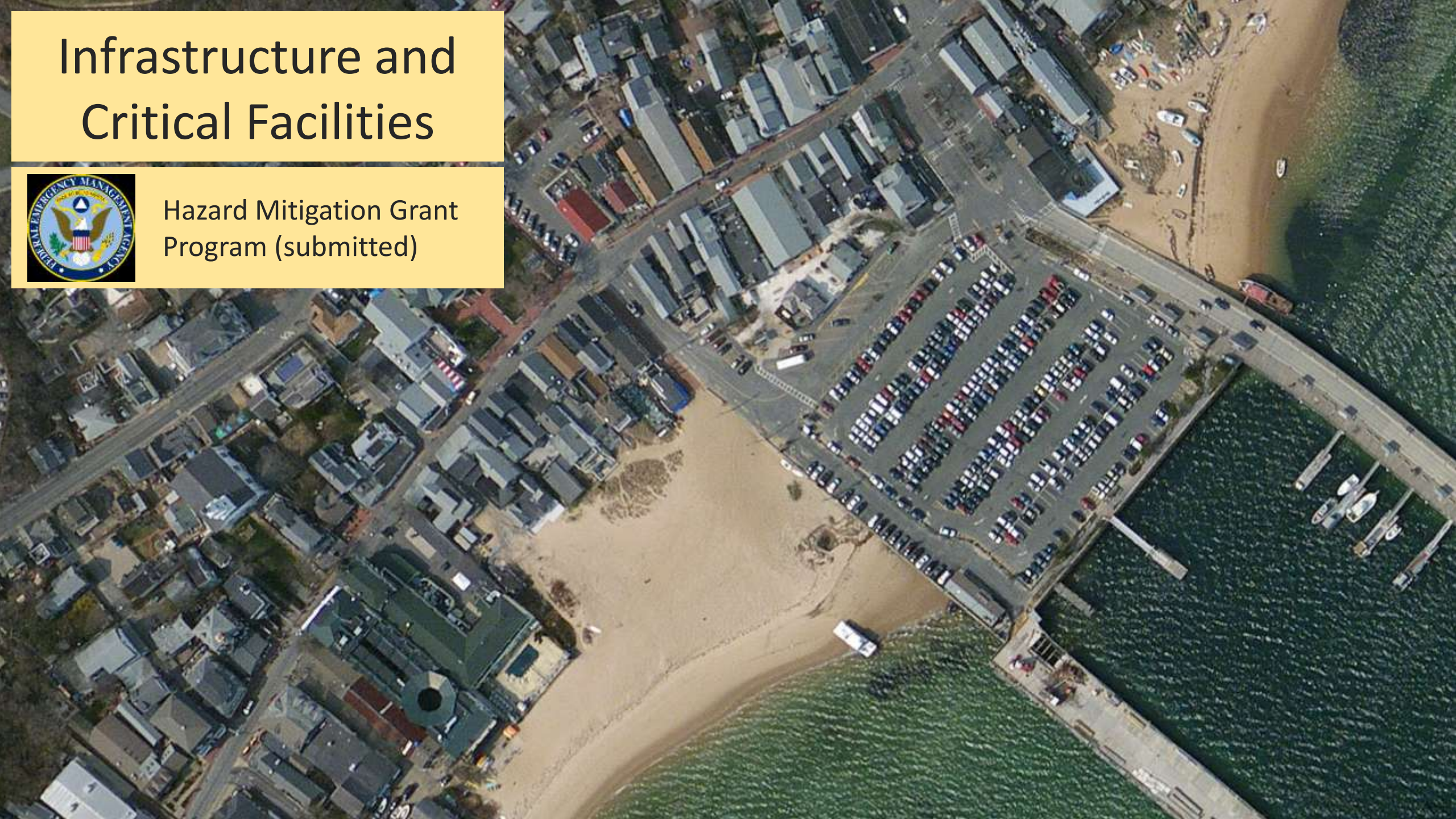
Coastal Community
Resilience Grant

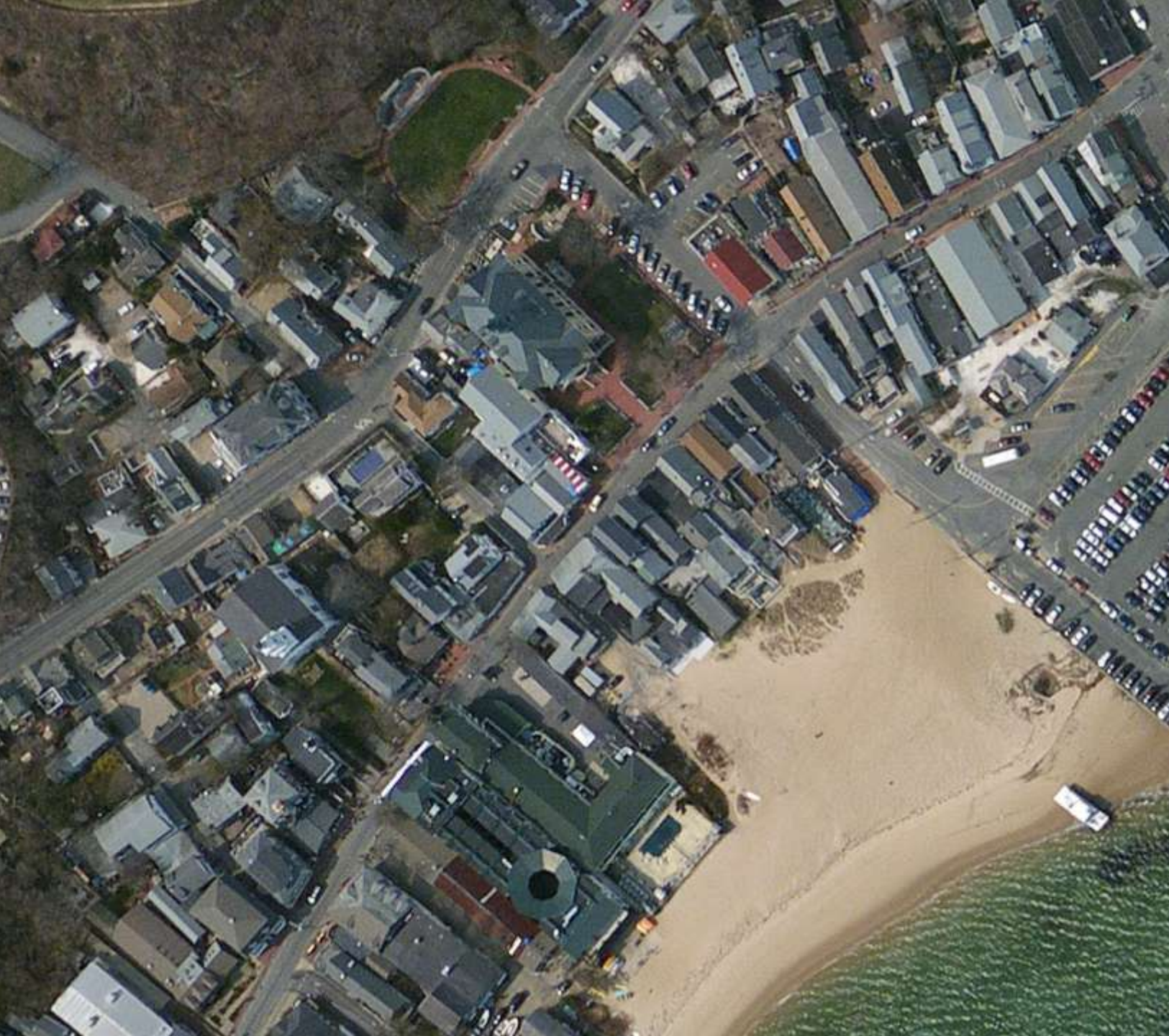
Vulnerability
+ Risk

Infrastructure and Critical Facilities



Hazard Mitigation Grant
Program (submitted)





PROVINCETOWN

2015 Hazard Mitigation Plan



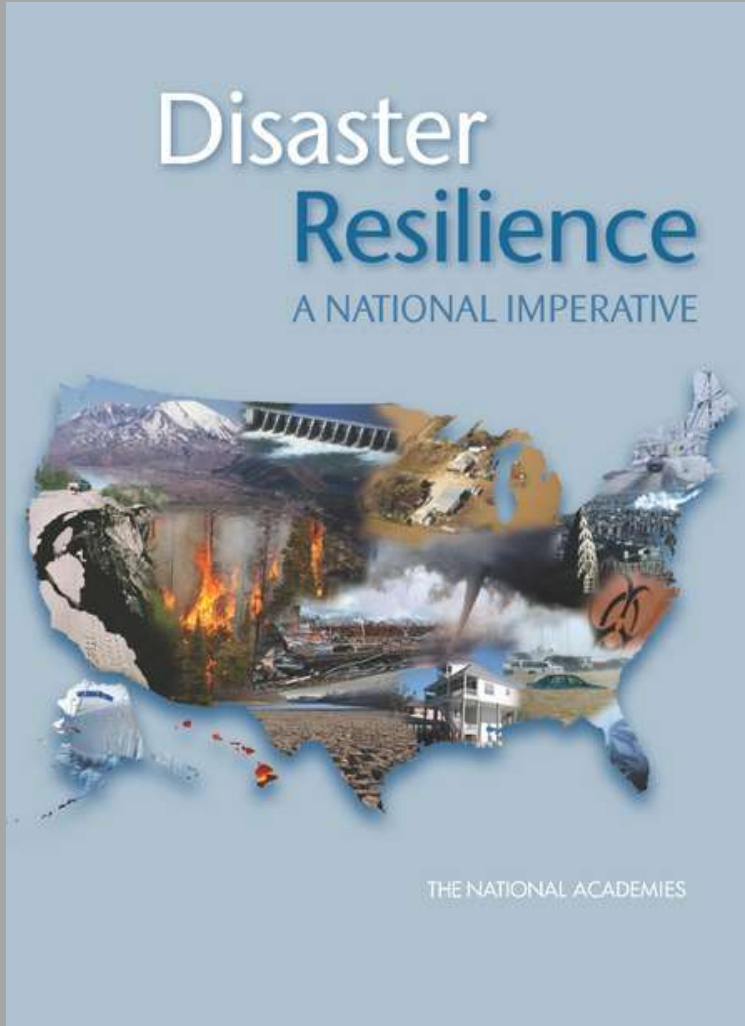
2011 Hazard Plan



2015 Hazard Plan



Provincetown: Building a Resilient Community



National Academy of Science, 2012 Report



Engage in a long term process,
carried out in small steps



Share the responsibility



Stay committed to planning

Take Away Message



Join the Hazard
Planning Process



Take Action