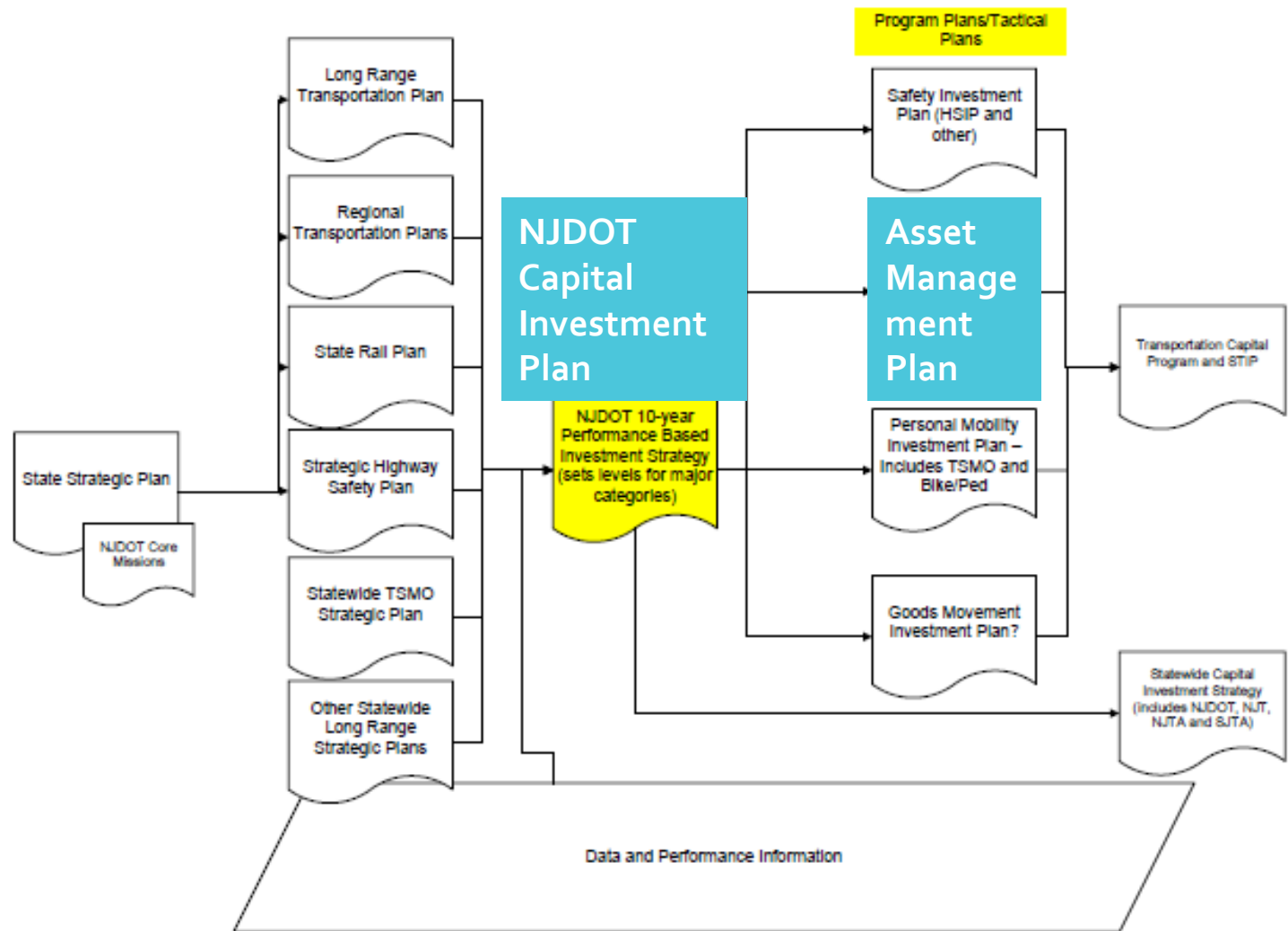


# New Jersey DOT

**Dave Kuhn**

Peer Exchange - Integrating Risk Management in Transportation Asset Management Programs

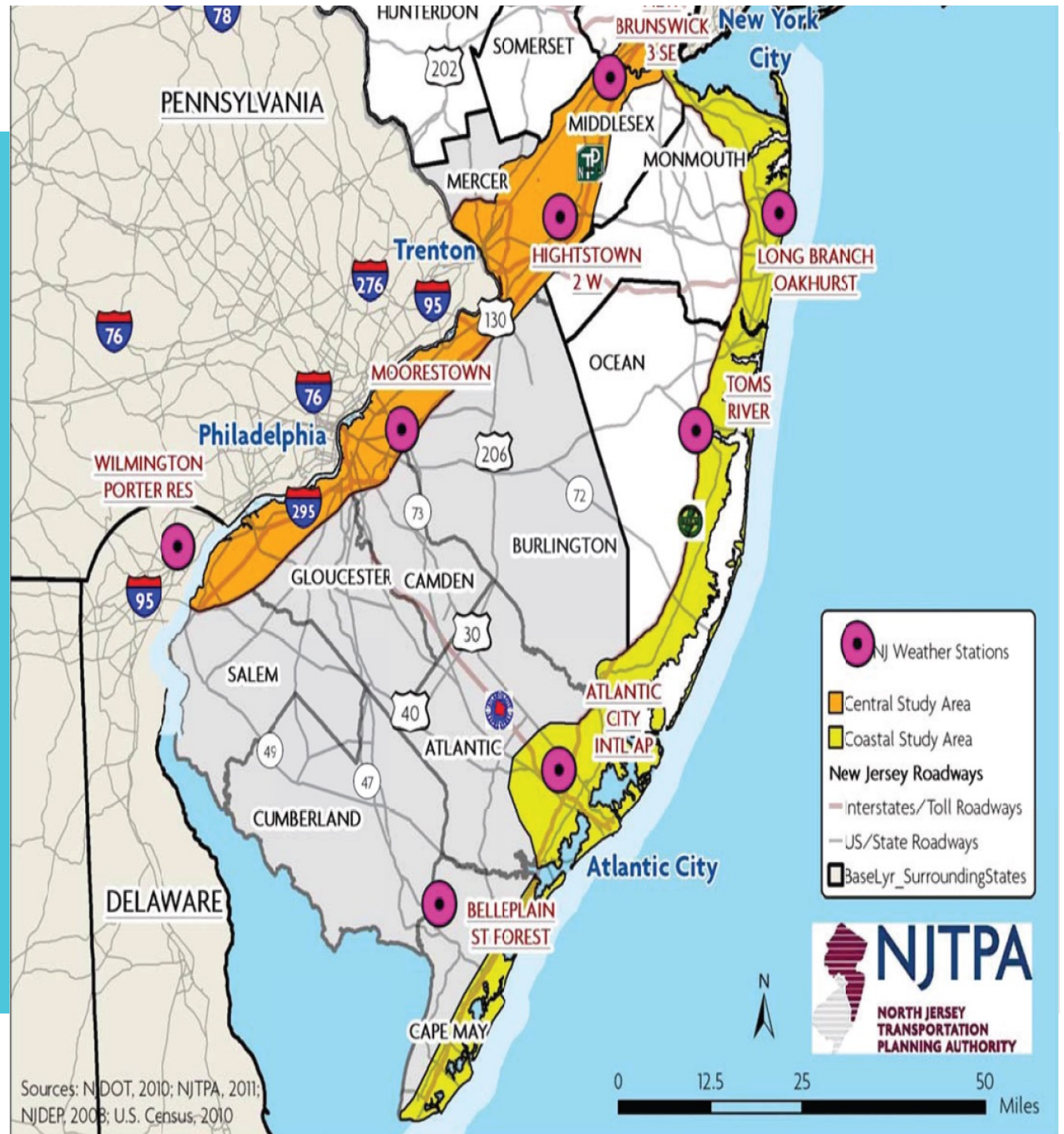
# NJDOT Plan Relationships



## NJDOT Capital Investment Strategy Elements

- Funding Context
- Define Core Mission Investment Areas
- Outline Strategic Objectives
- Outline some high-level performance history/trends
- Outline risks and trade-off considerations
- Establish targeted capital investment levels for Infrastructure, Safety, Mobility and Operations.
- May also provide policy direction to inform Asset Management Plans and other Program Plan.

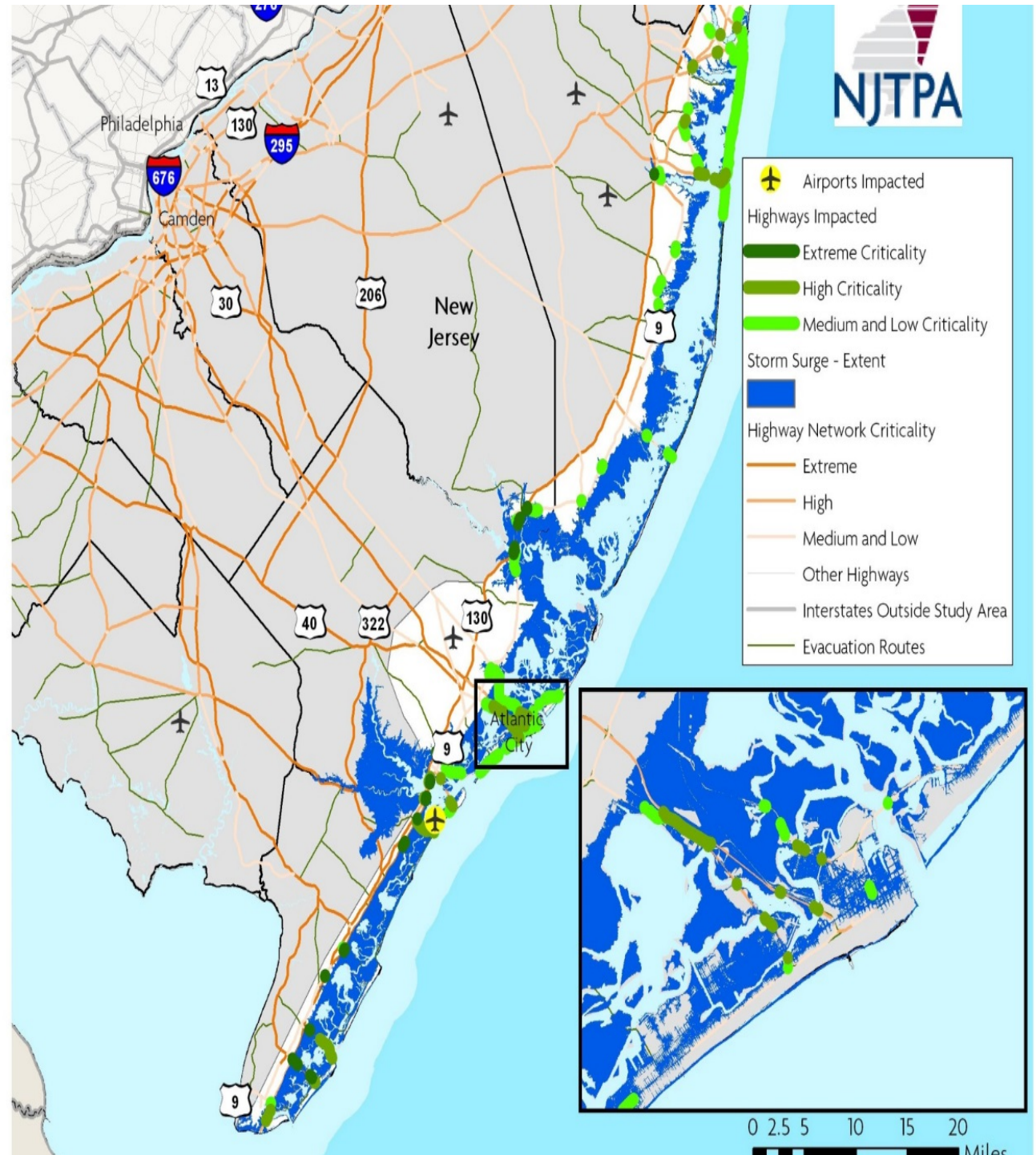
# Climate Change Vulnerability and Risk Assessment Model



## Results:

### Coastal Study Area

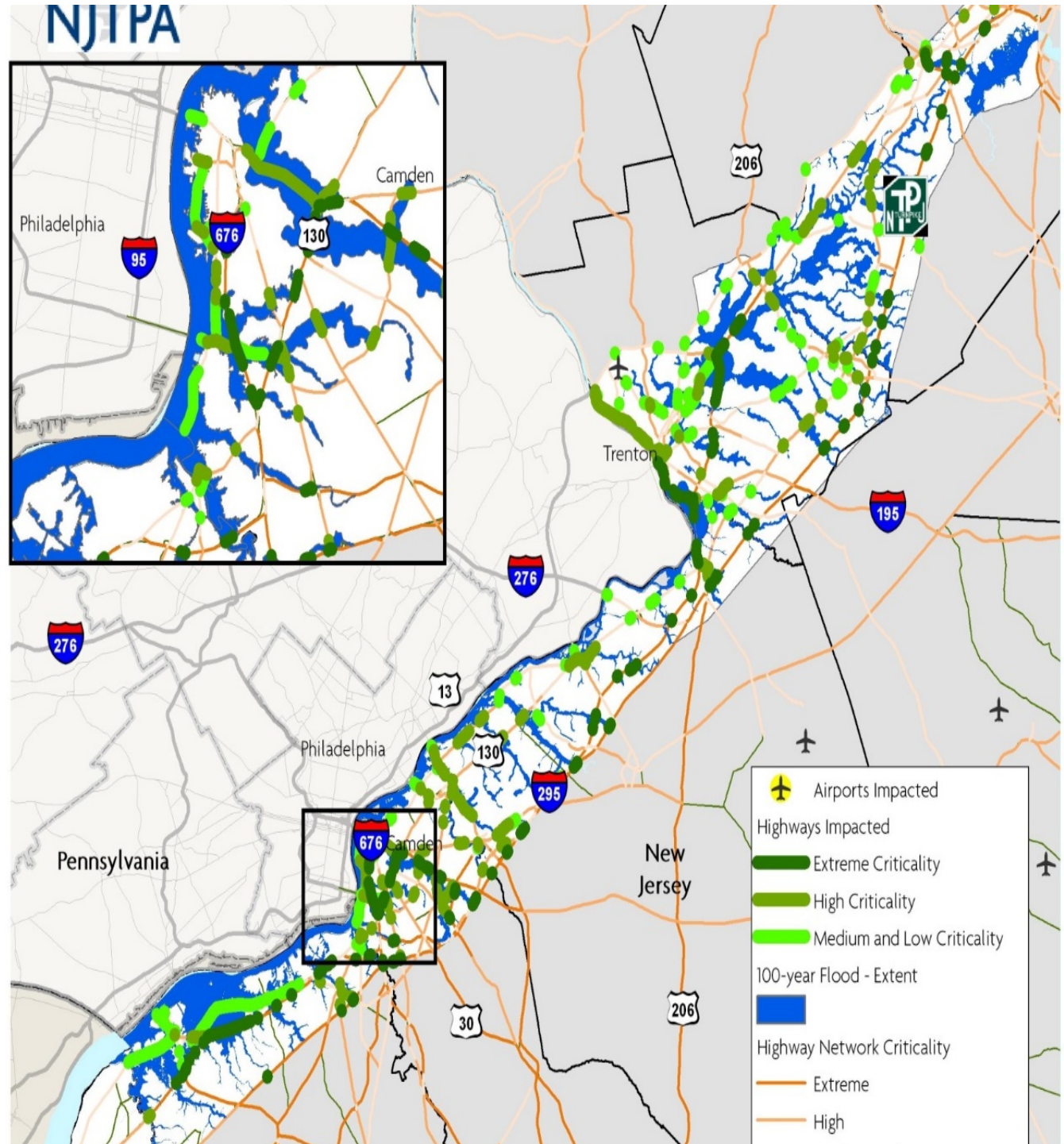
- Year 2100, Medium Scenario Results
- 1 Meter Sea Level Rise with Storm Surge
- 48.5 miles of roadway potentially impacted
- 2.9 miles of NJ Transit Lines impacted.
- 31 total rail miles impacted.



## Results:

### Central Study Area

- Year 2100, Medium Scenario
- 1 Meter Sea Level Rise with Storm Surge
- 81 miles of roadway potentially impacted
- Major Routes Impacted: I-295, I-676 and US 130
- 138 rail miles, 11.7 miles Amtrak.



## NJDOT High Level Investment Plan and Extreme Weather Considerations

- Establish clear strategic objectives and time horizons across Core Mission areas.
- Consideration of extreme weather may rise as an enterprise-level risk.

## NJDOT TAMP and Extreme Weather Considerations

- Assess the risk of extreme weather to program goals
- What is NJDOT's policy for extreme weather in relation to Asset Management?
- Options
  1. Address adaptation/resiliency measures as critical locations rise on management systems for rehabilitation/reconstruction?
  2. Establish critical corridors/connections that are prioritized for adaptation measures as part of the AM Program?
  3. Accept all risk and do nothing?



# Weigh the Risk

## **Performance of Critical Corridors/Connections**

Ensure all assets on a critical commerce route are in good condition with weather adaptation measures implemented.



## **Performance of a class of assets**

Bridges at 90%.