Resilience Pilots

FHWA has partnered with State Departments of Transportation (DOTs), Metropolitan Planning Organizations (MPOs) and others to develop and deploy resilience solutions to current and future extreme weather events, reducing future maintenance costs over the full life-cycle of transportation assets.

The map below shows the locations of these pilots along with locations of similar geographically focused studies that FHWA sponsored. You may click on the icons for more information about each study and links to study reports.

View as list

2018 - 2020/2024 Pilot Program: Resilience and Durability to Extreme Weather

FHWA is partnering on eleven projects to address one or more of three areas related to deploying resilience solutions:

1. Integrating resilience and durability into agency practices;
2. Using available tools and resources to assess the vulnerability and risk of transportation projects or systems; and
3. Deploying a resilience solution and monitoring performance.

- Resilience and Durability Pilot Project Descriptions and other information

2017-2019 Pilot Program: Asset Management, Extreme Weather, and Proxy Indicators

Six pilot teams have partnered with FHWA to integrate resilience considerations into their asset management processes. FHWA also plans to develop a guidebook to help other States address resilience considerations in in asset management processes.

- Asset Management, Extreme Weather, and Proxy Indicators Pilot Program (2017-2019)

2016-2017 Pilot Program: Nature-based Resilience for Coastal Highways

Five pilot teams partnered with FHWA to assess the potential for natural and nature-based features, such as wetlands, beaches, dunes, and reefs, to protect specific locations along coastal roads and bridges from storm surge, sea level rise, and erosion.

- Nature-based Resilience Pilot Reports and other information

2013-2015 Pilot Program: Vulnerability Assessments and Adaptation Options

Nineteen pilot teams partnered with FHWA to assess transportation vulnerability and evaluate options for improving resilience as part of the 2013-2015 program. The pilots used FHWA's Climate Change & Extreme Weather Vulnerability Assessment Framework (December 2012) and other resources for their analyses. A final report for the 2013-2015 pilot program details outcomes, lessons learned, and recommendations from the pilots. FHWA will use the experiences and lessons learned to develop an updated and expanded framework.

- 2013-2015 Climate Resilience Pilot Reports, Case Studies, and other information.

2010-2011 Pilot Program: Vulnerability Assessments

Five pilot teams piloted a Conceptual Model to use in conducting vulnerability and risk assessments of infrastructure to the projected impacts of global climate change. Based on the feedback and lessons learned through the pilots, FHWA revised and expanded the model into the Climate Change & Extreme Weather Vulnerability Assessment Framework (December 2012).

- 2010-2011 Climate Change Vulnerability Assessment Pilot Reports, Case Studies, and other Information.