FHWA Update

Sustainable Transportation: Energy, Infrastructure and Climate Solutions (STEICS) steering committee

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Gloria Shepherd Associate Administrator Office of Planning, Environment & Realty Federal Highway Administration

Climate Change Adaptation at FHWA



 Goal: Systematic consideration of climate change vulnerability and risk in transportation decision making, at system and project level



 Approach: Develop and share information on tools and methodologies that state DOTs and MPOs can use to assess risk and prioritize actions



Vulnerability Assessment Framework



Define Project Scope

- Objectives
- Relevant Assets
- Climate Variables

Assess Vulnerability

- Asset data, criticality, sensitivity
- Climate Inputs
- Vulnerabilities, risk
- Integrate VulnerabilityInto Decision Making

CLIMATE CHANGE ADAPTATION FRAMEWORK

1. DEFINE THE SCOPE

IDENTIFY KEY CLIMATE VARIABLES

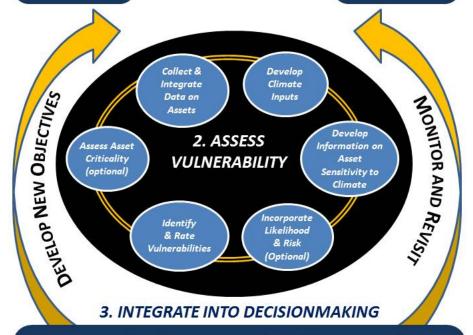
- What are the climate impacts of concern?
- Identify sensitive assets & thresholds for impacts

ARTICULATE OBJECTIVES

- What actions might be motivated by the assessment?
- Who is your target audience?What products are needed?
- What level of detail is required?

SELECT & CHARACTERIZE RELEVANT ASSETS

- Consider Asset Type
- Existing vs. planned assets
- Consider Data availability
 Further Delineate



- Incorporate into Asset Management
- Integrate into Emergency & Risk
 Management
- Contribute to Long Range
 Transportation Plan
- Assist in Project Prioritization

- Identify Opportunities for Improving Operations or Designs
- Build Public Support for Adaptation
 Investment
- EDUCATE & ENGAGE STAFF & DECISIONMAKERS

Pilot Program Vulnerability Assessments and Adaptation Options



FHWA is soliciting descriptions of proposed pilot projects from transportation agencies in two areas:

- assessments of transportation vulnerability to climate change and extreme weather events
- options for improving resiliency of transportation facilities or systems to climate changes and/or extreme weather events.

Pilot Program, cont.



Timeline

- November 2012: Call for Pilots Released
- January 22, 2013: Proposed project descriptions due to FHWA Division Offices
- February 19, 2012: FHWA HQ announces selected pilot projects

Gulf Coast 2 Project – Detailed Study at Metropolitan Scale





Primary Phase 2 Tasks

- Task 1: Identify critical transportation assets in Mobile (complete)
- Task 2: Identify climate impacts, assess infrastructure sensitivity (complete)
- Task 3: Assess vulnerability of critical assets (2012-2013)
- Task 4: Develop risk management tools for transportation agencies to conduct similar analyses (2012-2013)
- Available from the FHWA website



FHWA Funding for Adaptation Work



- FHWA released a memo on using Federal-aid and Federal Lands funding for adaptation activities to address
 - Extreme weather events, climate change impacts
- Three sections: Memo, Qs & As, Funding categoryspecific information
- Clarifies eligibility for various activities
 - Planning (e.g., vulnerability assessments)
 - Design (e.g., designing to handle potential impacts)
 - Construction, etc.
- Memo available at: http://www.fhwa.dot.gov/federalaid/120924.cfm



INVEST Version 1.0 Launched



- Version 1.0 launched October 10, 2012
 Link to the recorded event @ www.sustainablehighways.org
- Version 1.0 includes many improvements made as result of feedback and pilots
- Project is now entering deployment phase
- Request for deployment sites released soon





Thank you

www.fhwa.dot.gov/hep/climate_change

