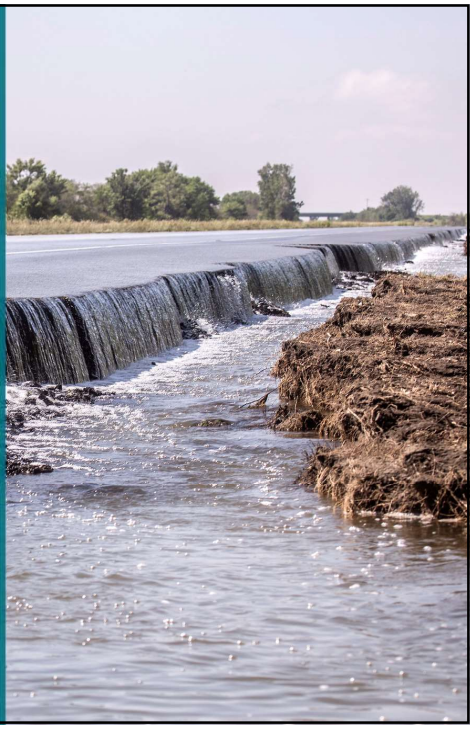
1

Agenda

- What is Resilience?
- What is the Resilience Working Group (RWG)?
- PROTECT
- Resilience Improvement Plan(RIP)?
- Proposed outline of the RIP
- Where are we in the process?



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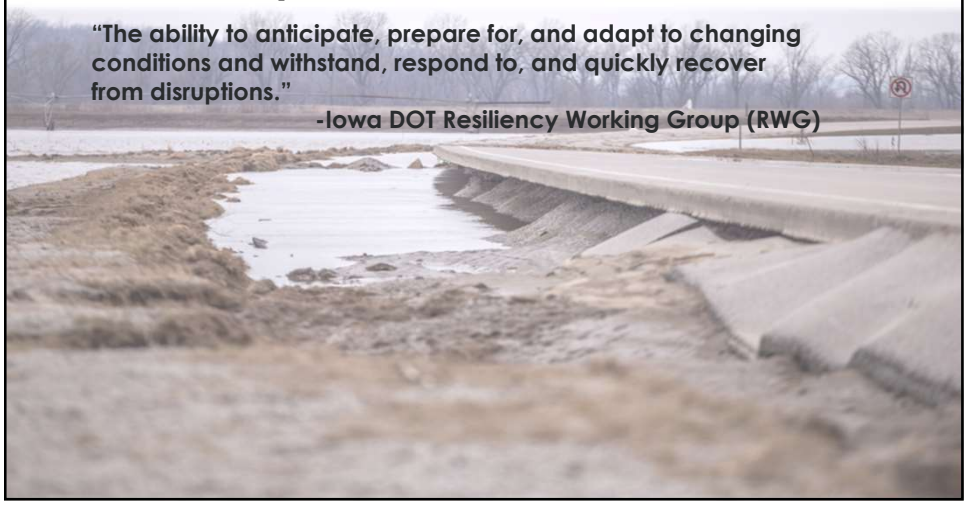
Resiliency Working Group

Defining Resiliency

"The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and quickly recover from disruptions."

-Iowa DOT Resiliency Working Group (RWG)



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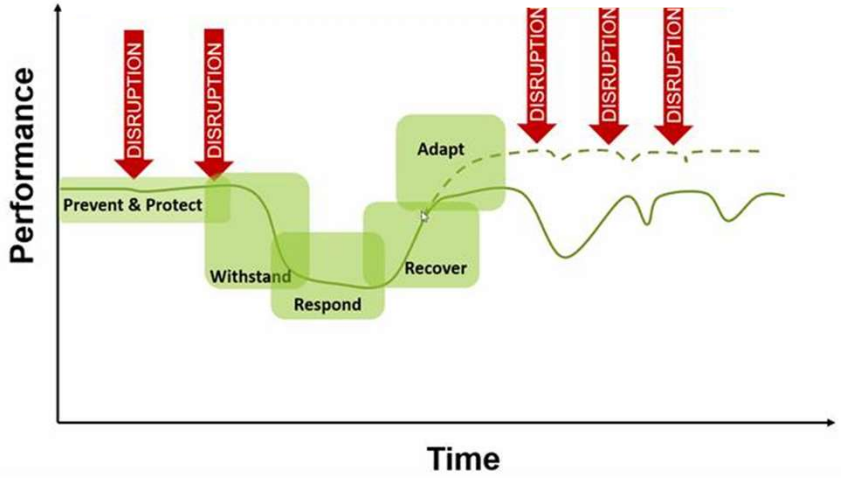
Resiliency Working Group



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Resiliency Working Group (RWG) Visioning Workshop Nov 2021

Strategies Identified

1. Employ a programmatic method for implementing resiliency into the 5-year program
2. Explore vulnerability assessments for various hazards for our transportation system and others.
3. Improve department cybersecurity.
4. Determine alternative routes for emergency closures
5. Incorporate resiliency and climate change into planning and design of roadways, roadsides, and vertical infrastructure.

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RWG and SWG website

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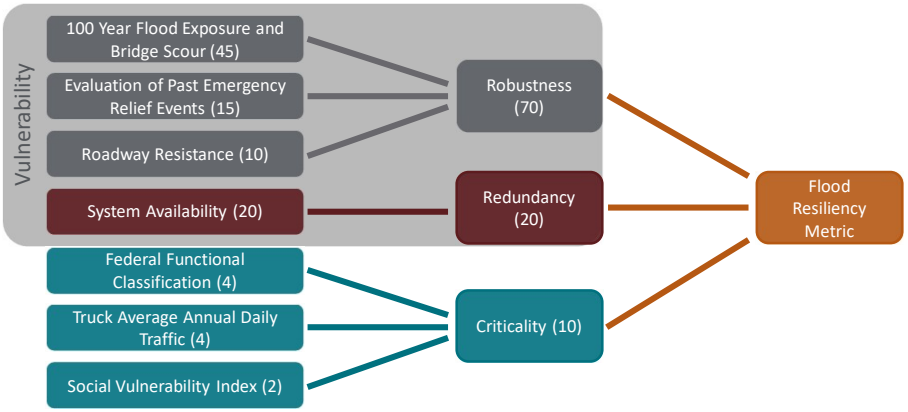
Resiliency Working Group

Iowa statewide flood resiliency analysis



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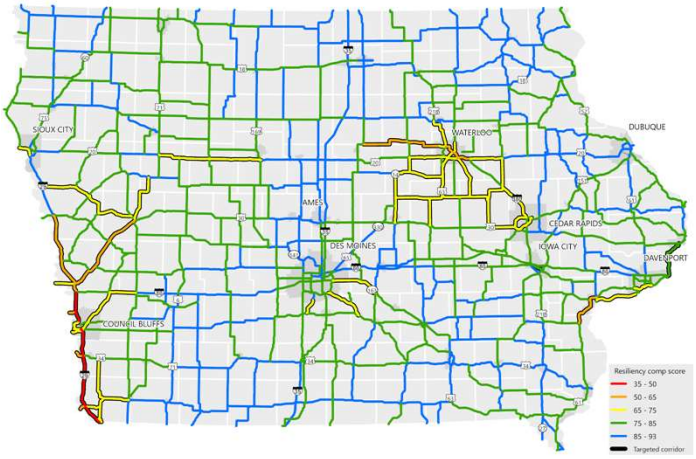
Resiliency Working Group

Iowa statewide flood resiliency analysis



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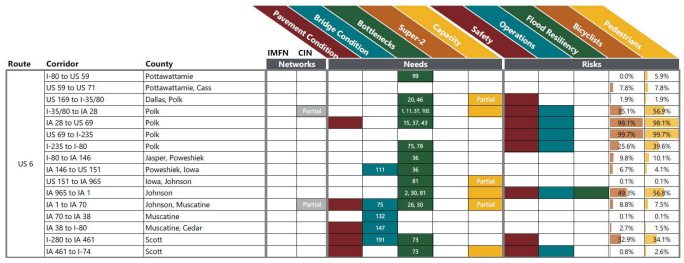
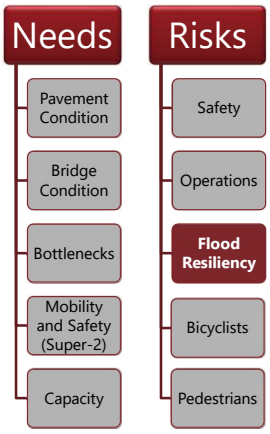
Flood resiliency analysis in State Long-Range Transportation Plan (SLRTP) needs and risks

- Ten-layer analysis across 464 corridors covering entire Primary Highway System
- Targeted locations based on each need/risk analysis; combined in a matrix of all corridors





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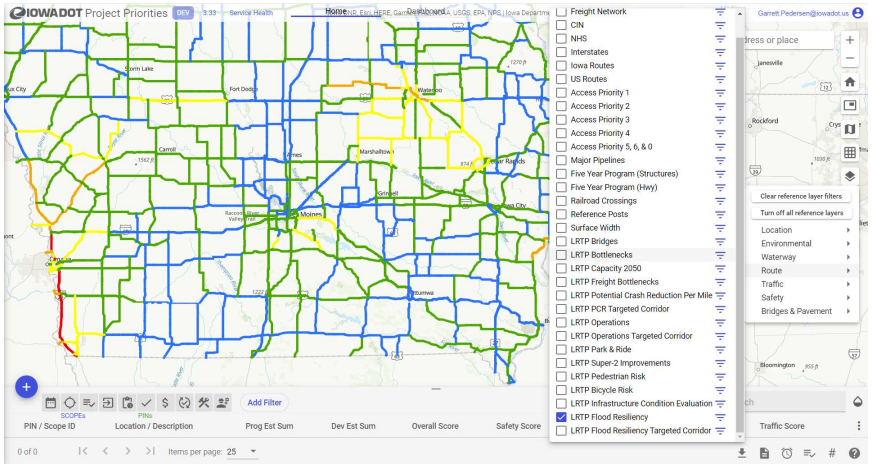
SLRTP needs and risks in project scoping/prioritization



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PROTECT

What is the PROTECT Program?

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Promoting Resilient Operations for Transformative, Cost-saving Transportation (PROTECT) Program

- Purpose
  - "…to help make surface transportation more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, community resilience evacuation routes, and at-risk coastal infrastructure."
- Funding Features
  - Formula Funds
    - What will Iowa receive?
  - Competitive
    - A Notice of Funding Opportunity (NOFO) has recently been published for the competitive side.

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

N4510.87

FY 2023 FEDERAL-AID HIGHWAY PROGRAM APPORTIONMENTS UNDER THE BIPARTISAN INFRASTRUCTURE LAW
(before post-apportionment set-asides; before penalties; before sequestration)

State	National Highway Performance Program	Surface Transportation Block Grant Program	Highway Safety Improvement Program [1]	Railway-Highway Crossings Program	Congestion Mitigation & Air Quality Improvement	Metropolitan Planning	National Highway Freight Program	Carbon Reduction Program	PROTECT Formula Program	Apportioned Total
Iowa	373,097,590	181,506,935	36,516,068	5,790,534	12,553,242	2,669,034	17,384,864	16,184,368	18,402,787	664,105,422

Iowa's Apportionment

Over the course of the 5-year authorization of the Infrastructure Investment and Jobs Act (IIJA), Iowa will receive an estimated $93,891,020 in funding through the PROTECT program.

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PROTECT

- Eligible Activities
  - Planning activities
    - Developing a Resilience Improvement Plan.
    - Resilience planning, predesign, design, or the development of data tools to simulate transportation disruption scenarios, including vulnerability assessments.
    - Technical capacity building.
  - Resilience Improvements
    - Resurfacing, restoration, rehabilitation, reconstruction, replacement, improvement or realignment of surface transportation facility.
    - Natural infrastructure.
    - Installation of mitigation measures.
    - Strengthening systems to remove rainwater.

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PROTECT

- Eligible Activities
  - Community Resilience and Evacuation Routes
    - Projects that ensure the ability of the evacuation route to provide safe passage during an evacuation and reduce the risk of damage to evacuation routes.
    - Expansion of capacity of evacuation routes to swiftly and safely support evacuations.
    - Construction of new or redundant evacuation routes.
    - Acquisition of evacuation route or traffic incident management equipment or signage.
  - At-Risk Coastal Infrastructure
    - Strengthening, stabilizing, hardening, elevating, relocating, or otherwise enhancing the resilience of highway and non-rail infrastructure…"
    - Not likely to be used in Iowa.

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PROTECT

- Eligible Facilities
  - A State may only use its PROTECT Formula Program funds for eligible activities and eligible costs associated with-
    - Highway projects.
    - Public transportation facilities or services.
    - Port facilities, including facilities that connect ports with other modes of transportation, improve the efficiency of evacuations and disaster relief, or aid transportation.

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Resilience Improvement Plan (RIP)

What is a RIP?

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Resilience Improvement Plan (RIP)

- What is a RIP?
  - Its new!
  - A RIP is a plan developed by a State DOT to address surface transportation system resilience to current and future weather events and natural disasters.
  - It is an integral part of the transportation planning process.
  - A RIP should be informed by asset management plans, evaluations of repeatedly damaged facilities and state freight plans.
  - Must be consistent with State and local hazard mitigation plans.
  - May help identify vulnerabilities, develop proposed resilience solution, and schedule and prioritize resilience improvements to meet the needs of travelers.

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Resilience Improvement Plan (RIP)

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Resilience Improvement Plan (RIP)

- What is required in a RIP
  - A RIP is voluntary, but the benefit to states is to receive an authorized reduction in the non-federal share of the cost of a project.
    - 7 percentage points if the state has developed a RIP and prioritized the project in the RIP.
    - 3 percentage points if a State RIP is incorporated int eh the Metropolitan transportation plan or the statewide long-range transportation plan.

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Proposed Outline

What will be covered in the RIP?

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Proposed Outline

Chapter 1: Introduction and Background

- What is Resiliency
- Iowa DOT's Resiliency Efforts
- Why Resiliency Matters
- What is a RIP
- How the RIP was developed
- Appendix: How this plan relates to others.

Chapter 2: Iowa's Climate and Weather

- The difference between weather and climate
- Iowa's climate over time and previous natural disasters
- Preparing for future weather patterns

Chapter 3: Iowa's Hazard

- Natural hazards summary
- Other hazards summary
- Hazard assessment
- Implications to Iowa's transportation system

Chapter 4: Strategies and Implementation

- Implementation of this plan
- Iowa's resiliency toolbox
- Strategies
- Targeted corridors and segments
- Project selection/programing processes

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Resiliency Working Group

Proposed Outline

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Timeline

Where are we in the process?

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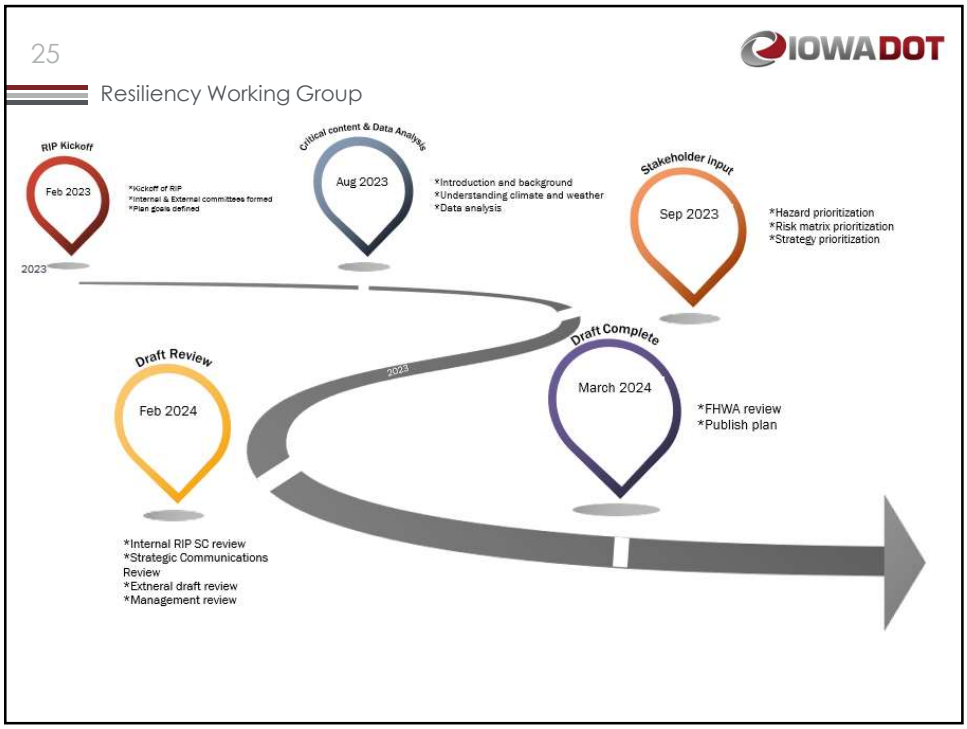
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IOWADOT
Resiliency Working Group
RIP Kickoff
Feb 2023
*Kickoff of RIP
*Internal & External committees formed
*Plan goals defined
2023
Critical content & Data Analysis
Aug 2023
*Introduction and background
*Understanding climate and weather
*Data analysis
Stakeholder input
Sep 2023
*Hazard prioritization
*Risk matrix prioritization
*Strategy prioritization
2023
Draft Review
Feb 2024
*Internal RIP SC review
*Strategic Communications Review
*Extneral draft review
*Management review
Draft Complete
March 2024
*FHWA review
*Publish plan

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THANK YOU FOR YOUR TIME AND ATTENTION
Samuel Sturtz
Transportation Planner

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