Disruptions to the transportation system due to extreme weather events have become a very real concern, threatening Wisconsin’s transportation infrastructure. Recent flood events in Northern and Western Wisconsin have demonstrated the devastating impact such weather can have and the tremendous financial consequences these events impose.
What is Resiliency?

- Resilience can be defined as the ability of a system to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions. As a concept, resiliency is rooted in ecological systems thinking, but has also been utilized in the field of disaster response and emergency management. Recently, the concept has been connected to asset management and risk management frameworks, where risk management helps systems prepare and plan for adverse events, and resilience management goes further by integrating the temporal capacity of a system to absorb and recover from adverse events, and then adapt.

WisDOT has focused on the reactive side of resiliency. The "withstand, respond to, and recover rapidly from disruptions".
How do we respond

- WisDOT has made great strides in ETO (Emergency Transportation Operations)
  - incident scenario matrix
  - “Chain of Command” for any incident
  - Work with other agencies
  - Many other items

Funding

- We created an overview of Emergency Highway Aid Programs in Wisconsin
- In the next portion of my presentation:
  - overview document
  - Summary of the three main categories
Disruptions to the transportation system due to increased extreme weather events have become a very real concern, threatening Wisconsin’s transportation infrastructure. Recent flood events in Northern and Western Wisconsin have demonstrated the devastating impact such weather can have and the tremendous financial consequences these events impose.

### Damage to any publicly owned or private non-profit facility.
This includes damage to parks, schools, buildings, utilities, and roads/structures NOT on the Federal-aid system (minor collectors and below). PA also covers debris removal and emergency protective measures on ALL roads regardless of functional classification. This includes traffic control, detour signing, police/fire protection, pumping and sandbagging.

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**Overview of Emergency Highway Aid Programs in Wisconsin**

<table>
<thead>
<tr>
<th>Category</th>
<th>Emergency Relief (ER)</th>
<th>Public Assistance (PA)</th>
<th>Disaster/Damage Aid (DRA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong></td>
<td>Federal Highway Administration (FHWA)</td>
<td>Federal Emergency Management Agency (FEMA)</td>
<td>Department of Transportation (DOT)</td>
</tr>
<tr>
<td><strong>B.</strong></td>
<td>State Highway Administration</td>
<td>Wisconsin Department of Transportation</td>
<td>Wisconsin and WisDOT</td>
</tr>
<tr>
<td><strong>C.</strong></td>
<td>Local Government</td>
<td>County and Municipalities</td>
<td>County and Municipalities</td>
</tr>
</tbody>
</table>

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**Public Assistance (PA) - FEMA**

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**Jeff Gust**
Wisconsin Department of Transportation
Roadway or roadway structure damage on ALL Federal-aid highways (major collectors and above) resulting from a catastrophic failure or natural disaster. Besides physical damage, ER also includes debris removal and emergency protective measures such as traffic control and detour signing.

Damage caused by a disaster event to any highway that is NOT on the State Trunk Highway System.
Need more information on funding programs?


What about the proactive side of resiliency. The “anticipate, prepare for, and adapt to changing conditions.”

Some of the things we are doing include:

- Located and mapped low chord and low point locations along all interstate highways, also mapping floodplain locations.
- Completed flood studies of the Portage area.
- Completed flood studies of the Rock and Crawfish river basins.
- Updating our rainfall data in the WisDOT FDM (Facilities Development Manual).
Questions??

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