



Exercise 2: Addressing Risks to the Resilience of a Highway Network

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Climate Risk: A New Normal



Risk and Resiliency



- Risk management supports preparing for and responding to external risks including:
 - Storms
 - Seismic events
 - Changing climate



Risk Applications



- Scenario planning for events
- Conducting climate change risk analysis
- Identifying critical, at-risk assets
- Developing flexible mobilization and response plans



Risk and the Three R's



- Robustness – Can our transportation network withstand events?
- Resiliency – Are we prepared to bounce back quickly after an events?
- Redundancy – Do we have parallel facilities and alternatives to sustain connectivity and service?
- What ‘No Regrets’ strategies can we adopt?

Addressing Resiliency



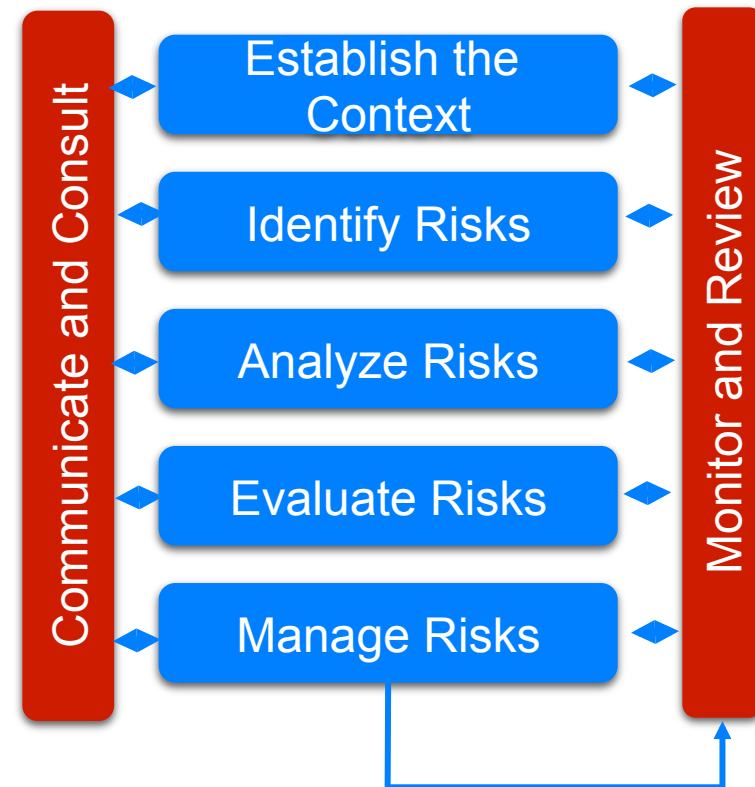
John Milton

*The WSDOT
Experience*

Exercise



- Chose from among the scenarios
- Identify risks caused by the scenarios
- Use the risk matrix to map the likelihood and impact
- Brainstorm risk responses



Risk Matrix



Risk Matrix with Impact and Likelihood Definitions			Likelihood				
			Rare	Unlikely	Likely	Very Likely	Almost Certain
			Less than once every 10 years	Once in more than 3 but less than 10 years	Once between 1-3 years	Once a year	Several times a year
Impact	Catastrophic	Potential for multiple deaths & injuries, substantial public & private cost.	Medium	Medium	High	Very High	Very High
	Major	Potential for multiple injuries, substantial public or private cost and/or foils agency objectives.	Low	Medium	Medium	High	Very High
	Moderate	Potential for injury, property damage, increased agency cost and/or impedes agency objectives.	Low	Medium	Medium	Medium	High
	Minor	Potential for moderate agency cost and impact to agency objectives.	Low	Low	Low	Medium	Medium
	Insignificant	Potential impact but manageable with normal agency practices.	Low	Low	Low	Low	Medium

Report Out

