



Enterprise Risk Management at MnDOT



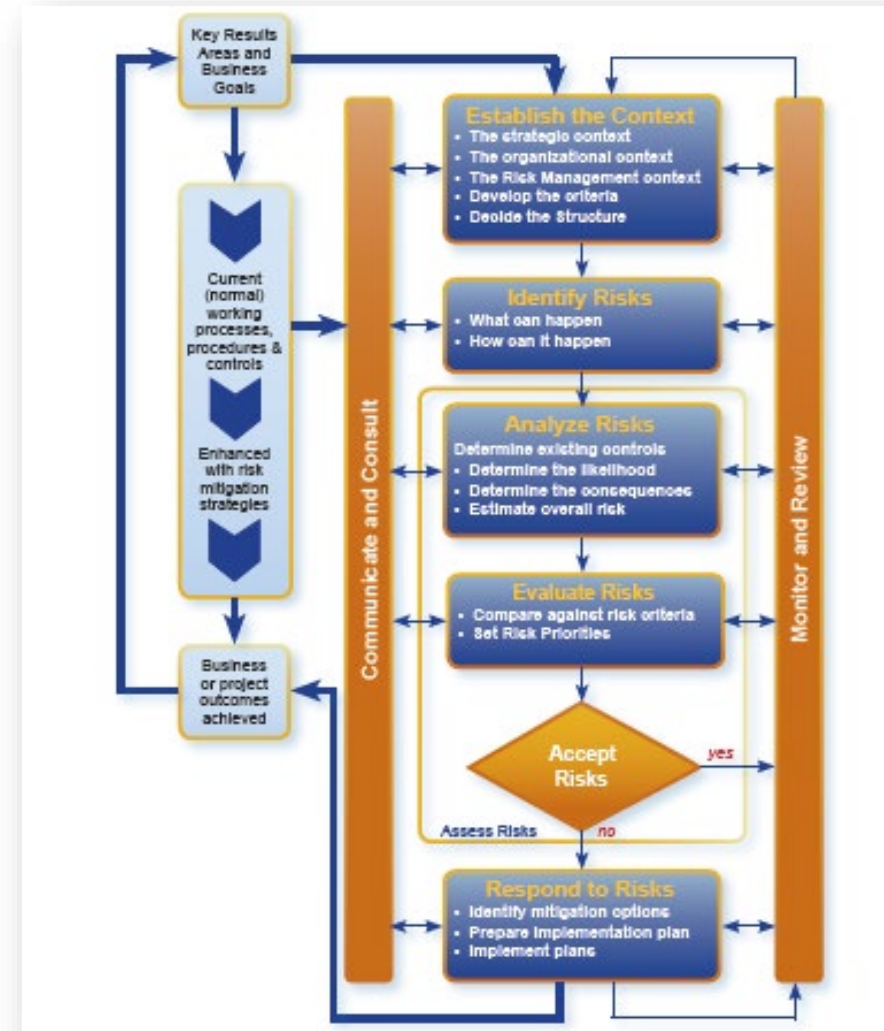
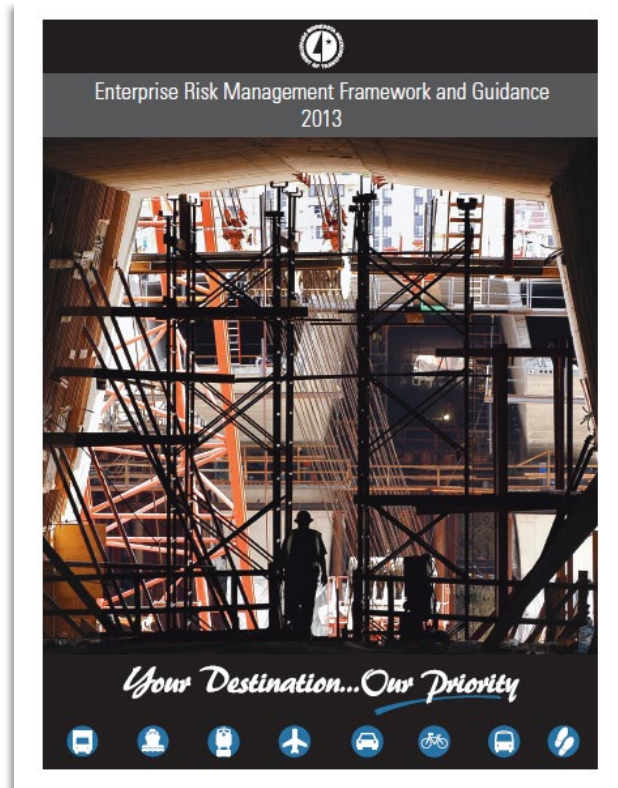
Jake Granholm, Performance and Risk Supervisor
Performance, Risk, and Investment Analysis (PRIA)
Office of Transportation System Management



MnDOT's ERM Framework and Practice

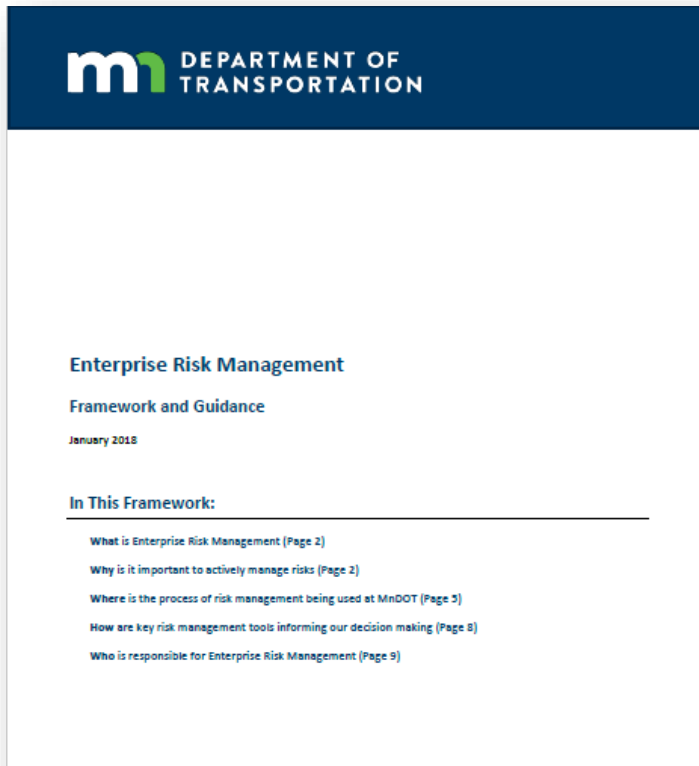
Earlier Iteration of ERM Framework

2013



Updated Risk Management Levels at MnDOT

2018



Tools for Managing Enterprise Risks

- MnDOT's risk register, enterprise risk summaries, Statewide Multimodal Plan = **identify and contextualize the risk categories**
- Leadership committees/councils and management groups = **assess risks and provide further contextualization**
- MnDOT's family of plans (e.g., modal and investment plans) and business plans = **Identify risk responses and risk monitoring framework**



ERM Toolbox Example: Risk Assessments

Scenario-based risk assessments

- Focused on specific topic or policy
- Cross-agency group of about subject matter experts
- Recommended (but not required) for agency-level policy or process decisions
- Recently completed assessments: Email deletion rules, mobile device use policies, expanding electric transmission lines in the Interstate and controlled access right-of-way, Microsoft OneDrive adoption for MnDOT staff

Scenario-based Analysis Steps

Identify scenarios

Articulate opportunities with each scenario

Describe agency risks with each scenario (Rate Risks Pre-response)

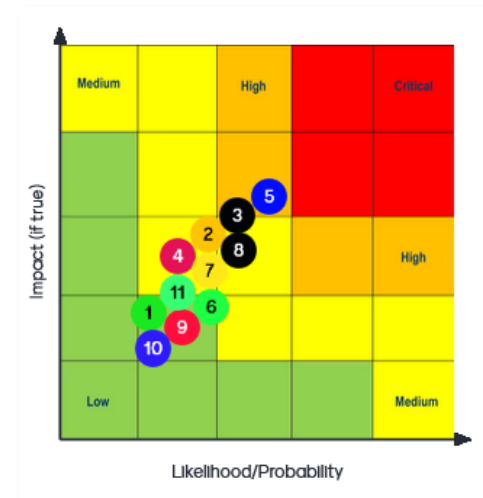
Determine response strategies we could pursue to manage risks (Rate Risks Post-response)

m DEPARTMENT OF TRANSPORTATION
Office of Transportation System Management
Performance, Risk, & Investment Analysis

DRAFT - Risk Assessment for MN First Policy

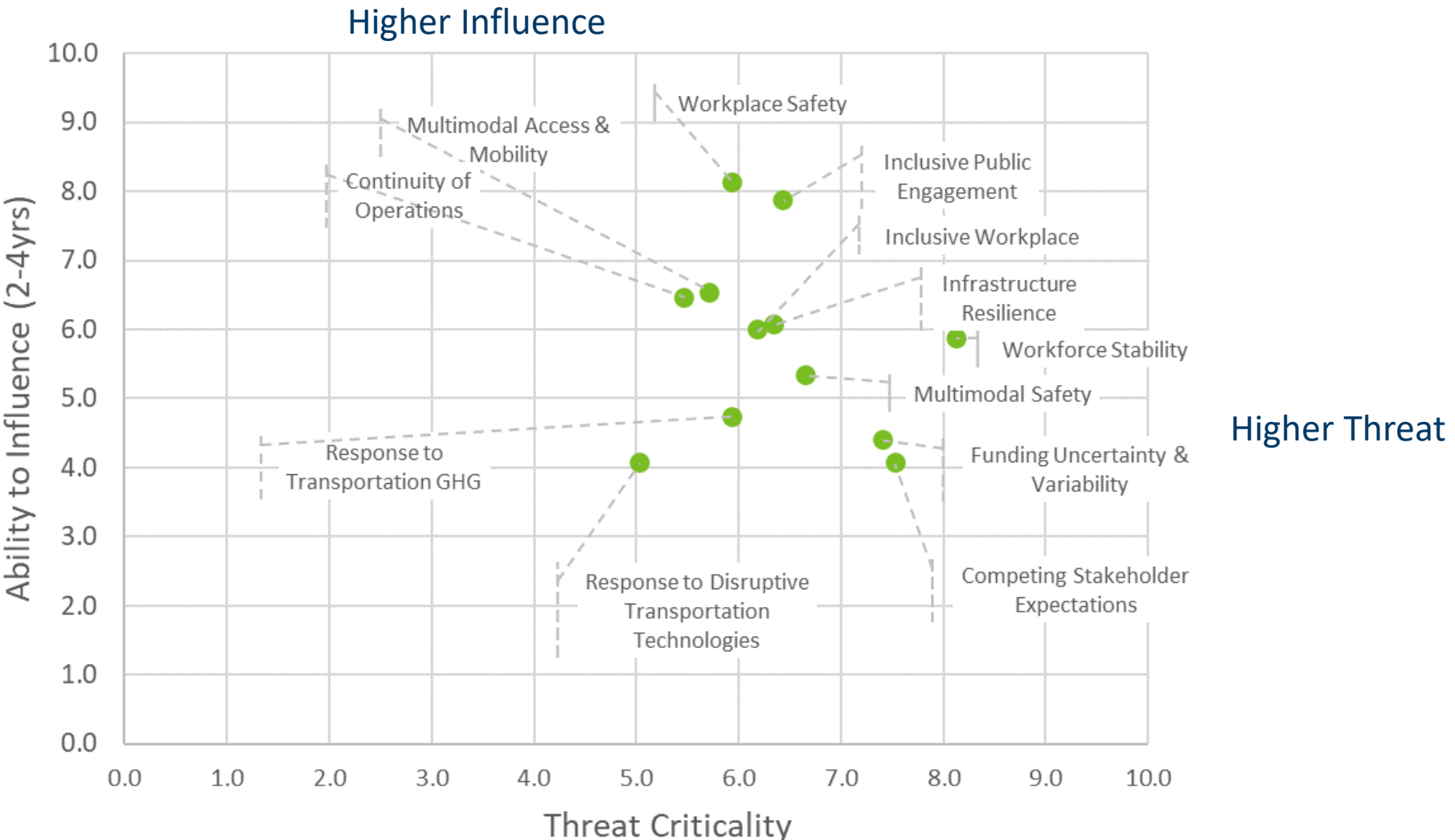
Contact: University of Minnesota staff are requesting that MnDOT consider a Minnesota First Policy/Practice where Minnesota (defined as UMN, UMD, and MnSCU) professors would be given preference over other universities for MnDOT research projects. Historically, MnDOT did have a practice of providing preference for Minnesota Universities (UMN/UMD and MnSCU). Professors from these universities reviewed the research need statements prepared by MnDOT and decided which ones they wanted to prepare a response. The remaining need statements were then opened up to other Master Agreement universities for competitive bidding. In 2008, MnDOT changed its approach to the current practice which provides for open competition from all Master Agreement universities.

Scenario Summary	Brief Risk Description	Risk Type	Pre-Response Risk Rating	Risk Response(s) and/or Mitigation (with MnDOT's value of dollars)	Post-Response Risk Rating
Scenario 1: Adopt a UMN First Policy/Practice Summary: UMN/UMD professors select which projects to propose on before other universities. Projects remaining after the UMN/UMD professors make their selections are released for competitive bidding by all universities on MnDOT's Master Contract. Opportunities: • Transportation Expertise: Investing our transportation research funds in the UMN will ensure there is local expertise about Minnesota's transportation issues/solutions (ITS) • Future Workforce: Education of the future workforce (ITS) • Partnership/Collaboration - Potential for deeper partnership/collaboration with professors throughout the process (MnDOT) • Local Investment - MN dollars stay in MN (MnDOT) • Streamline Process - Efficiencies with less administrative time for MnDOT (MnDOT)	1. Fiduciary Responsibility: Removing open competition for all ideas from the process may not provide the best value for the taxpayer	Internal	High	Communicate with stakeholders the ROI of MN research dollars staying in Minnesota and the opportunity cost when research dollars go elsewhere	Medium
	2. Agency Needs: Research may become UMN-focused versus agency needs focused	Internal	Medium	Proactive communication with MN universities to ensure they understand MnDOT needs and relationship building internal MnDOT champion & support by affected MnDOT office	Medium
	3. National Expertise: MnDOT may miss out on national expertise on specialized research topics	Internal	High	Receive Request for Qualifications from MnFirst P12	High
	4. Accountability: Providing a preference may raise questions in terms of transparency to MnDOT's research process and those who are involved.	Internal	Medium	MnDOT is open and document the process that provides for MN First	Medium
	5. Research Relationships: Could harm relationships with research institutions outside of Minnesota (SU, Auburn, etc.)	External	Medium	Encourage MN universities to partner with outside universities to broaden expertise and diversity of thought	Medium
	6. Research Methods: Quality of research may be harmed by a limited diversity of methods	Internal	High	Accept this risk (more qualification)	High
Scenario 2: Retain current process - Status Quo Summary: Research projects are competitively bid and open to all universities included in the Master Agreement. Opportunities: • Fiduciary Responsibility: Providing open competition from Master Contract universities may provide the best value for the taxpayer • Agency Needs: A competitive process helps to ensure that agency research needs are met. • National Expertise: Providing opportunities for non-Minnesota Universities to compete ensures that MnDOT does not miss out on national expertise on specialized research topics and different methodologies.	1. Transportation Expertise: Investing our transportation research funds outside of Minnesota may affect development of local transportation expertise.	External	Medium	Cultivate strong communication channels with local universities so that they know MnDOT priorities and needs for developing effective research proposals	Low
	2. Future Workforce: Investing our transportation research funds outside of Minnesota may mean less hometown talent.	External	High	MnDOT to invest in ways to opportunity in the transportation workforce in Minnesota (e.g. CTEC, Pharis, Great Engineer Program, Training, summer internships).	High
	3. Local Investment: Minnesota taxpayer dollars may not be staying in Minnesota.	External	High	Cultivate strong communication channels with local universities so that they know MnDOT priorities and needs for developing effective research proposals	Medium



MnDOT Agency Risk Register

Risk Register: SLT High Threat + High Influence



MnDOT Enterprise Risk Register

Enterprise Risk	MnDOT Strategic Objective/Goal
Inclusive Workplace	Workforce Excellence
Funding	System Stewardship
Succession Planning	Workforce Excellence
Multimodal Access & Mobility	Critical Connections / Healthy Communities
Workplace Safety	Operational Excellence
Inclusive Public Engagement	ODM & Customer Trust
Infrastructure Resilience	Healthy Communities / System Stewardship
Response to Transportation GHG	Healthy Communities
Multimodal Safety	Transportation Safety
Continuity of Operations	Operational Excellence
Response to Disruptive Transportation Technologies	Operational Excellence
Competing Stakeholder Expectations	System Stewardship/ ODM & Customer Trust

Maturing the Risk Register

Since adoption of the risk register categories:

1. Evaluating how each of our enterprise risks has shifted in significance for MnDOT over the last 2 years.
2. Any risks that we can remove from this communication and decision support tool?
3. What should be added?

ERM ENTERPRISE RISK MANAGEMENT
Risk Summaries

Enterprise Risks
Enterprise Risks, Connection to Strategy + Current Mitigation

Enterprise Risk Management Defined
The formal and systematic effort to control uncertainty and variability on an organization's strategic objectives by managing risks at all levels of the organization.

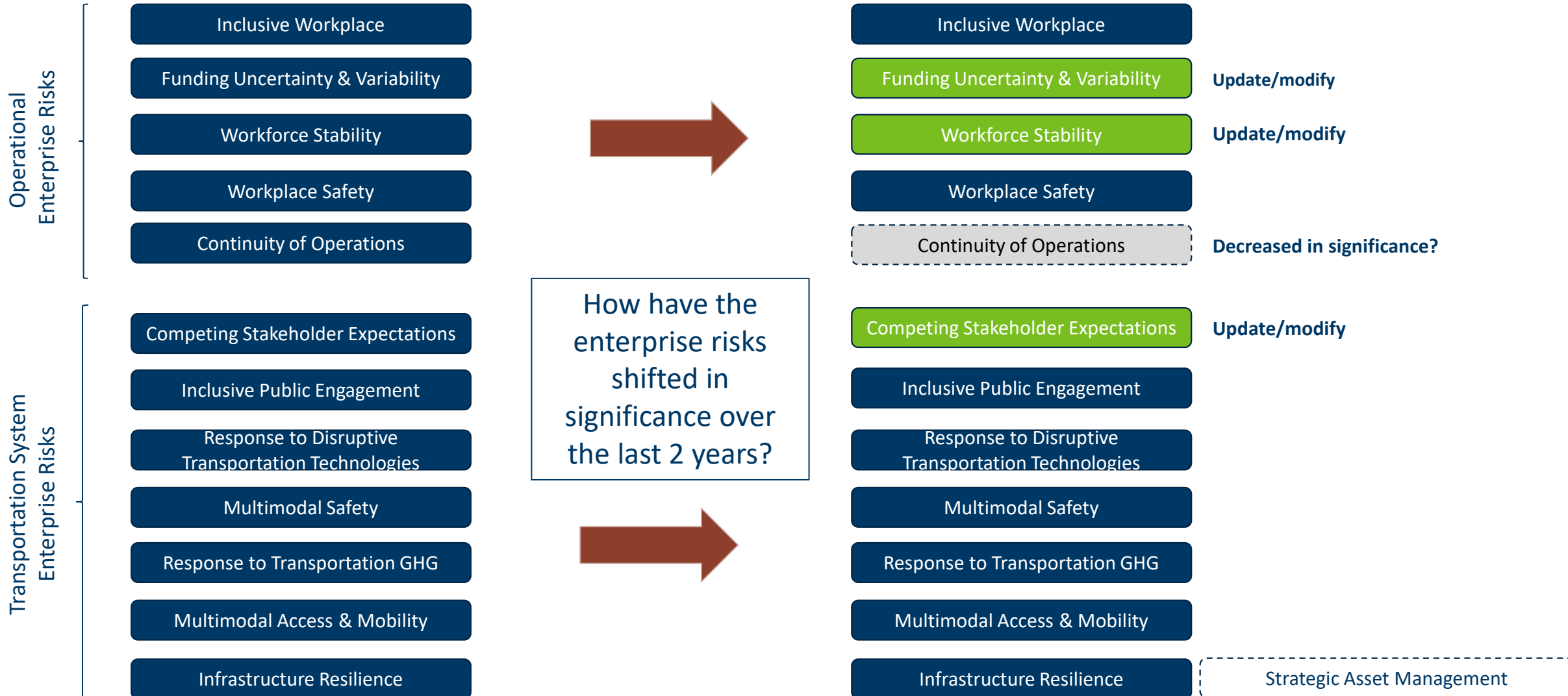
MnDOT's Strategic Objectives & Goals

<ul style="list-style-type: none"> • Open Decision Making • Transportation Safety • Critical Connections • System Stewardship • Healthy Communities 	<ul style="list-style-type: none"> • Customer Trust • Operational Excellence • Workforce Excellence
--	--

Enterprise Risks	Current
Inclusive Workplace <i>Opportunity:</i> A modern and inclusive workplace that accurately represents the demographic populations in Minnesota enhances MnDOT's ability to serve its mission <i>Threat:</i> Offices and units function poorly in a non-inclusive workplace undermining MnDOT's ability to serve its mission	Workforce Excellence
Funding <i>Opportunity:</i> Adequate funding allows MnDOT to address multimodal network gaps <i>Threat:</i> Funding uncertainty creates reactive maintenance on existing infrastructure and an inability to meet system performance targets	System Stewardship
Succession Planning <i>Opportunity:</i> Preparation for employee turnover with effective knowledge transfer and assessment of needed skills allows MnDOT continuity and improvements in quality service delivery <i>Threat:</i> Staff skills do not reflect present and future needs and useful institutional knowledge goes uncaptured resulting in service degradation	Workforce Excellence
Multimodal Access & Mobility <i>Opportunity:</i> A focus on multimodal access & mobility allows MnDOT to provide the efficient and affordable movement of people and goods throughout Minnesota <i>Threat:</i> Modal options/choices are fragmented across the system creating a fractured network for Minnesotans	Critical Connections / Healthy Communities
Workplace Safety <i>Opportunity:</i> Sustained commitment to improve workplace safety and health will foster a safety culture that results in less risk of injury/illness to our employees <i>Threat:</i> Avoidable loss of human life or serious injury/illness to employees	Operational Excellence
Inclusive Public Engagement <i>Opportunity:</i> Inclusive and representative engagement in MnDOT's decision making process improves the public's confidence in decisions made <i>Threat:</i> Decision making at all levels is seen as illegitimate by the public	Customer Trust
Infrastructure Resilience <i>Opportunity:</i> A focus on infrastructure resilience prepares MnDOT to better respond and adapt to impacts from climate change and extreme weather <i>Threat:</i> Climate change and extreme weather, especially flooding, increases travel disruptions, infrastructure failure, and vulnerabilities during construction	Healthy Communities / System Stewardship
Response to Transportation GHG	Healthy Communities

5/3/2022

How have enterprise risks shifted?



ERM Steering Committee

Cross-functional Risk Managers

ERM Steering Committee Charge

From 2019 committee charter:

- Active management of agency risks with leadership and staff
- Develop and organize FHWA and State of MN enterprise risk management processes for MnDOT
- Alignment of risk-based decision making across the organization

ERM Steering Committee
Risk Areas
Enterprise/Planning Risk Management
Operations/Project Risk Management
Strategic Plan + Business Plans
Counsel/Policy Development
Sustainability + Resilience
Audit/Internal Controls/Safeguarding
Capital Risk Management
Finance
Emergency Management
State Aid
Information Technology
Human Resources/Labor Relations

Maturing the ERM Steering Committee

Scope updates in development:

- Assist senior leaders, agency management groups, divisions, districts, and offices in using and maintaining an enterprise risk management framework to effectively identify, assess, and respond to cross-functional risks.
- Assess whether existing risk responses align with established enterprise risks strategies and are effective in responding to risks.
- Routinely review MnDOT's enterprise risk management framework and risk register to assure they align with risk management best practices and MnDOT's strategic objectives.
- Support strategies by risk managers to effectively respond to risks.



Thank You!

Jake Granholm

jacob.granholm@state.mn.us