

Minnesota Statewide Freight System Plan

Performance Measures Working Group

U.S. DOT Measures <i>(Recommended)</i>	MnDOT Measures <i>(Annual Transportation Performance Report 2012 - select sections)</i>	Should this be a freight-related measure? <i>(Y/N)</i>	Should be measured...			Data Availability <i>(Assignment)</i>	Recommended Contact	Comments
			Statewide?	On "Freight Network"?	On Select Corridors or Urban Areas?			
Freight								
Annual Hours of Truck Delay (AHTD)		Y	Y	Y	Y	MnDOT Data Preferred (Inrix?) (email request to heretransport@here.com) FAQs: http://www.ops.fhwa.dot.gov/freight/freight_analysis/performance/vpds/npmrdsfaqs.htm	NPMRDS	use npmrds at national level. Statewide: metro and corridor (chen fu liao based on atri-working through process)
Truck Reliability Index (RI80)		Y	Y	Y	Y	MnDOT Data Preferred (Inrix?) (email request to heretransport@here.com) FAQs: http://www.ops.fhwa.dot.gov/freight/freight_analysis/performance/vpds/npmrdsfaqs.htm	NPMRDS	
	Total domestic shipments to, from or between Minnesota locations (excludes international shipments and "through" shipments) -Value (in billions of 2007 dollars) -Ton miles (in billions)	Y	Y			MnDOT OFCVO/FAF3		
	Freight Mode Share in Minnesota (by value); 2002-2011	Y	Y			MnDOT OFCVO/FAF3		
	Freight Mode Share in Minnesota (by ton miles); 2002-2011	Y	Y			MnDOT OFCVO/FAF3		
	Heavy Commercial Vehicle Miles Traveled (HCVMT) on the Minnesota State Highway System (in billions)	Y	Y			MnDOT TIS/TDA/TFA: http://www.dot.state.mn.us/traffic/data/		
	Heavy Commercial Average Annual Daily Traffic (HCAADT) by Corridor	Y		Y	Y	MnDOT TIS/TDA/TFA: http://www.dot.state.mn.us/traffic/data/data-products.html		
	Annual Rail Shipments in Minnesota (in millions of tons)	Y	Y			STB Waybill Sample (previous year) or AAR State Profile: https://www.aar.org/data-center/railroads-states#state/MN MnDOT Rail Office		
	Annual Container Lifts in Twin Cities intermodal yards (in thousands)	Y	Y			BNSF: Brian Sweeney?		
	Annual Port Shipment Tonnage (in millions of tons)	Y	Y			MnDOT Ports and Waterways Annual Data: http://www.dot.state.mn.us/ofrw/waterways/waterways.html		
						Additional Sources: TTI Urban Mobility Report: http://mobility.tamu.edu/ums/		

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Safety								
Number of Fatalities	Total number of fatalities resulting from crashes involving a motor vehicle	Y	Y	Y		Talk with Brad in safety about ways to parse out truck information as part of these required measures		
Fatality Rate	Traffic fatality rate on all Minnesota roads (per 100 million VMT)	Y	Y	Y		DPS Office of Traffic Safety: https://dps.mn.gov/divisions/ots/Pages/default.aspx		
Number of Serious Injuries	Serious traffic injuries on all Minnesota roads	Y	Y	Y		DPS Office of Traffic Safety: https://dps.mn.gov/divisions/ots/Pages/default.aspx		
Serious Injury Rate		Y	Y	Y		DPS Office of Traffic Safety: https://dps.mn.gov/divisions/ots/Pages/default.aspx (per 100 million VMT)		
	Severe crashes by focus area; 10-year change (2003 - 2012)	N						
	Severe crashes involving motor vehicles and pedestrians	N						
	Severe crashes involving motor vehicles and bicyclists	N						
	Aviation Incidents	N						
	Incidents at railroad / highway crossings	Y				FRA Office of Safety Analysis: http://safetydata.fra.dot.gov/officeofsafety/default.aspx		
	Highway Safety Improvement Program Funding (millions of \$)	N						
	Severe crashes involving trucks	Y	Y	Y		DPS Office of Traffic Safety: https://dps.mn.gov/divisions/ots/Pages/default.aspx		

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<i>Pavement Condition</i>								
Interstate Pavement in Good, Fair and Poor Condition based on the International Roughness Index (IRI)		Y	Y	Y		MnDOT Office of Materials ratings based on IRI measures: http://www.dot.state.mn.us/materials/smoothnesscontacts.html		
Non-Interstate NHS Pavement in Good, Fair and Poor Condition based on the International Roughness Index (IRI)		Y	Y	Y		MnDOT Office of Materials ratings based on IRI measures: http://www.dot.state.mn.us/materials/smoothnesscontacts.html		
Pavement Structural Health Index		Y	Y	Y		MnDOT Office of Materials: Percentage of pavement which meet minimum criteria for pavement faulting, rutting and cracking.		
	Percent of Interstate System with "Poor" ride quality	N						
	Percent of the Non-Interstate NHS with "Poor" ride quality	N						
	Percent of state highway system with "Poor" ride quality	N						
	Percent of state highway system with "Good" ride quality	N						
	MnDOT's annual spending on pavement preservation; FY 2007 - 2016 (\$ millions)	N						
	Customer Satisfaction with Road Maintenance (average on a 1-10 scale)	N						
	Bridge Safety Inspection - Percent completed on time							
<i>Bridge Condition</i>								
Percent of Deck Area on Structurally Deficient Bridges		Y	Y	Y		MnDOT Bridge Office (http://www.dot.state.mn.us/bridge/)		
NHS Bridges in Good, Fair and Poor Condition based on Deck Area	NHS bridges in "Poor" condition as a percent of total NHS bridge deck area	Y	Y	Y		MnDOT Bridge Office (http://www.dot.state.mn.us/bridge/)		
	Percent of NHS deck area on bridges in Fair or Poor condition	N						
	Percent of NHS deck area on bridges in Good or Satisfactory condition	N						
	Percent of non-NHS deck area on bridges in Fair or Poor condition	N						
	MnDOT's annual bridge construction program; FY 2007 - 2016 (in \$ millions)	N						
	Bridge Safety Inspection - Percent completed on time	N						
	High-priority Reactive Bridge Maintenance - Percent completed on time	N						

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System Performance								
Annual Hours of Delay (AHD)		N						
Reliability Index (RI80)		N						
	Percent of metro-area freeway miles below 45 mph in AM or PM peak (<i>Twin Cities Urban Freeway Congestion</i>)	N						
	Percent of system miles performing more than 2 mph below corridor-level speed targets (<i>Interregional Corridor Travel Speed</i>)	N						
	Frequency of achieving bare lanes within targeted number of hours (<i>Snow and</i>	N						
	MnPASS Express Lane Person Throughput, I-35W at Black Dog Road (Northb	N						
	Planned investment in Twin Cities Mobility, 2014-2023	N						
	Customer Satisfaction with Snow & Ice Removal (average rating on 1 - 10 scale)	N						
	Average Clearance Time for Twin Cities Urban Freeway Incidents (minutes, 3-	N						
	Snow and Ice Control Results by Roadway Category, 2012-13	N						
	MnDOT Statewide Snow and Ice Expenditures	N						
	MnDOT Statewide Salt and Sand Use (thousands of tons)	N						
Congestion Mitigation and Air Quality								
Criteria Pollutant Emissions		N						
Annual Hours of Delay (AHD) Reduced		N						
	Total gallons of fuel sold for transportation purposes (in billions)	N						
	Comparison of growth areas and emissions in Minnesota -- percent change si	N						
	Twin Cities Metropolitan Area air quality -- percent of national standard	N						
	Vehicle Miles Traveled in Minnesota, 2003-2012 (in billions)	N						