2020 Transportation System Performance Evaluation



Planning Work and the TPP





- Compare performance to targets Identify trends and issues

Planning Studies

- Truck Corridors Study
- PA Intersection Conversion Study
- **Bike Barriers Study**
- Other Studies

Transportation System **Performance Evaluation**



Transportation Policy Plan Update

- Incorporate study results
- Analyze performance, adjust strategies and measures
- New fiscal analysis
- Adjust regional investments
- Forecast outcomes





Overview

- Comprehensive review of the regional transportation system performance
 - Demographics **Bicycle and Pedestrian**
 - Highway Transit
 - Freight – Aviation
- Plan
- Thrive MSP 2040 outcomes

Prepared to inform the 2020 update of the Transportation Policy

Incorporates performance measures relevant to 2040 TPP goals and



Legislative Requirement

- Before each TPP update, the TSPE is required to:
 - transport goods and people
 - Evaluate trends and impacts
 - Assess success in meeting regional transportation benchmarks
 - Compare transit system performance to peer regions

Evaluate transportation system's ability to effectively and efficiently



Demographics: Pop & Household





Demographics: Jobs





Travel Mode Use





Vehicle Miles Traveled (VMT)





VMT per Person



Source: Texas Transportation Institute



Highway System Peer Regions

- Seattle
- Portland
- Denver
- St. Louis
- Milwaukee

- Dallas
- Cincinnati
- Cleveland
- Pittsburgh
- Baltimore



Travel and Density





Highways: Congestion







Highways: Annual Delay per Auto Commuter





Highways: Pavement Condition (MnDOT PAs)







Highways: Pavement Conditions (MnDOT non-PAs)







Highways: Bridges





Highways: Bridges





Transit System Ridership



- Local and Express bus ridership down
- Transitway ridership up
- Metro Mobility ridership up



Transit Service By Route Type







Transit Performance by Route Type

2018 Ridership by Route Type



	Route Type	Pass. Per In Service H		
	Core Local Bus	35.5		
	Supporting Local Bus	18.6		
	Suburban Local Bus	16.3		
	Commuter & Express Bus	29.1		
	Regular Route Bus Total	30.6		
	Light Rail	212.2		
ommuter Rail, 0.8% ABRT, 1.7% Highway BRT, 0.3% OA DAR, 2.6%	Commuter Rail	246.7		
	Arterial BRT	42.9		
	Highway BRT	21.1		
	ADA Dial-A-Ride	1.7		
	Gen Dial-A-Ride	2.6		
	Vanpool	3.7		
-	Regional Total	24.2		



Transit System Peer Ridership



- Transit ridership in the region reflects national trends of ridership decline
- Regional ridership decline at slower
 rate than peer
 average



Transit System Peer Subsidy per Passenger (Adjusted for inflation, 2018\$)



- Subsidy per
 passenger has grown
 both in the region and
 amongst peers
- Increased with substantial service expansion for Green Line
- Also affected by bus ridership decreases and Met Mo increases



Transit System Peer Trips per Capita



- Twin Cities trips per capita slightly above, near average
- Still significantly lower than regions with more substantial investments





Freight Transportation Freight Mode Shares by Weight & Value

100%	 	
10078	7.3%	0.1%
90%	 -	
80%	 25.0%	
70%		
60%		
50%		
40%		
30%	 67.7%	
20%	 -	
10%		
0%	 TONNAGE	
	TONNAOL	
	■ Trucl	k ∎Rail





Freight Transportation Metropolitan Freight System

- Regional Highway System
 - Major truck distribution centers
- Rail system
 - 4 Class I national railroads
 - 3 Class III regional railroads
 - Intermodal rail facilities
 - General cargo rail yards
- Mississippi River Waterway
 System
 - River barge terminals
- MSP Airport



Freight Transportation

Daily Truck Volumes

Heavy Commercial Vehicle







Freight Transportation Cost of Freight Congestion



CINCINNATI OH-KY-IN





Freight Transportation Regional Truck Freight Corridors

Regional Corridors

- Consist of prioritized highway segments grouped into three tiers
- Based on weighted criteria applied in Regional Truck Highway Corridors Study:
 - Average daily truck volumes
 - Truck % of total traffic
 - Proximity to freight clusters
 - Proximity to regional freight terminals
- Used in Regional Solicitation & MN Highway Freight Program
- Future TSPEs may include projects developed on these corridors



Bicycling & Walking Regional Mode Share

Trip Mode	Minneapolis & St. Paul Only	Outside Core Cities	Region
Bicycle	2.1%	0.6%	0.9%
Walk	13.9%	6.1%	7.7%
Transit	7.8%	1.8%	3.1%
Drive	74.4%	89.7%	86.5%





Bicycling & Walking Mode Participation Rate

Definition:

Percent of the population making at least one trip by a specific mode on a given day.

Trip Mode	2016	2020		
Bicycling	2.9%	2.9%		
Walking	12.2%	23.4%		



Bicycling & Walking

Regional Bicycle Transportation Network (RBTN)

- Consists of a series of designated alignments & planned corridors
- Grouped into two priority tiers based on factors applied in original study:
 - Population density
 - Bicycle travel demand
 - Connectivity to regional destinations
 - Connectivity to regional transit system
 - Social equity
- Used in Regional Solicitation to distribute federal transportation dollars
- Future TSPEs may include projects developed on the network



Bicycling & Walking Regional Bicycle Transportation Network

Implementation Status Measure: percent of total network miles with existing bicycle facilities.

RBTN Category	On Street	Off- Street	Undefined	Total	% of Planned	% of Total
Existing Bikeways (Alignments)	199	649	0	848		56.2%
Planned Bikeways						
RBTN Alignments	28	140	61	229	34.7%	
RBTN Corridors	0	0	431	431	65.3%	
Total Planned	28	140	492	660	100.0%	43.8%
Total RBTN Centerline	227	789	492	1508		100.0%



Aviation

Total annual aircraft operations						
Airport	2014	2015	2016	2017	2018	Percent Change (2014-2018)
Minneapolis – St. Paul (MSP)	412,586	404,612	413,279	416,213	407,476	-1.5%
Airlake (LVN)	35,662	42,341	36,818	31,346	33,178	-7%
Anoka County – Blaine (ANE)	79,589	89,708	80,845	76,721	68,157	-14%
Crystal (MIC)	44,229	39,569	36,967	42,308	41,117	-7%
Flying Cloud (FCM)	94,244	87,493	84,038	79,511	73,634	-22%
Lake Elmo (21D)	34,374	32,845	27,275	33,220	25,727	-25%
St. Paul Downtown (STP)	88,995	56,676	54,548	69,277	64,539	-27%
South St. Paul (SGS)	61,999	62,000	62,640	63,600	64,800	+5%
Total	851,248	815,244	796,410	827,556	782,912	-12%





