



System Study – Phase 3

Met Council Transportation Committee

October 9, 2017



MnPASS Express Lanes

MnPASS = MN's system of priced managed priced managed lanes

(a/k/a High Occupancy Toll Lanes)

- MnPASS lanes currently in operation:
 - I-394 since 2005
 - I-35W since 2009
 - I-35E since 2015



 MnPASS is a key strategy for improving the efficiency of the region's highway and transit systems by providing a reliable, congestion-free option to commuters during peak-travel times

What are the Benefits of MnPASS?

MnPASS Lanes

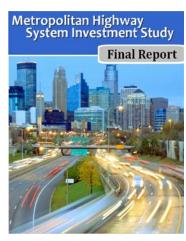
- Improve the movement of people during congestion (i.e. increase person throughput)
 - A single MnPASS lane can carry twice as many people as a single regular lane during peak congestion
- Improve travel time reliability
 - Transit buses and commuters can plan for and rely on a 50-55 mph trip in a MnPASS lane
- Improve bus transit and carpooling
 - Express bus ridership on I-35W increased 55% within three years after opening of MnPASS lanes
 - Nearly 90% of the people using the MnPASS lanes are either riding on buses or in carpools

Past MnPASS System Studies

• Phase 1 study completed in 2005

- Phase 2 study completed in 2010
 - In coordination with the Met Council's Metropolitan Highway System Investment Study
 - Results adopted into the 2030 TPP and updated in the 2040 TPP



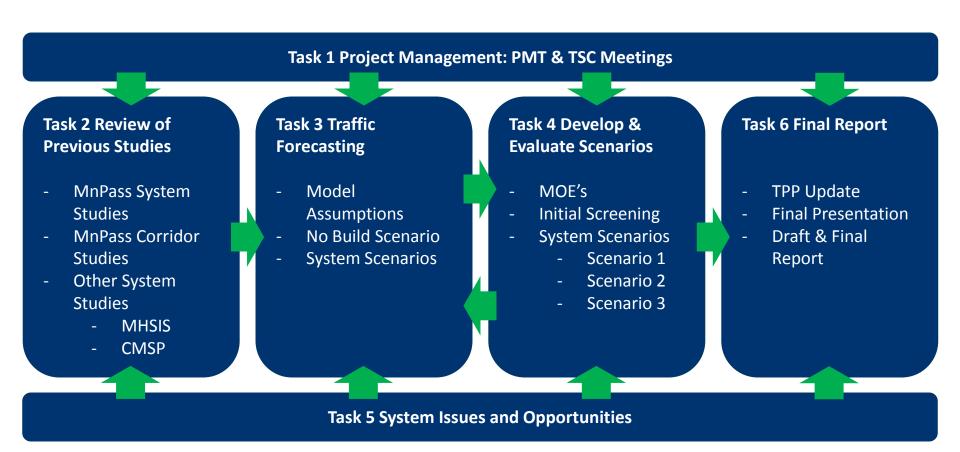


MnPASS System Study Phase 3 - Goals

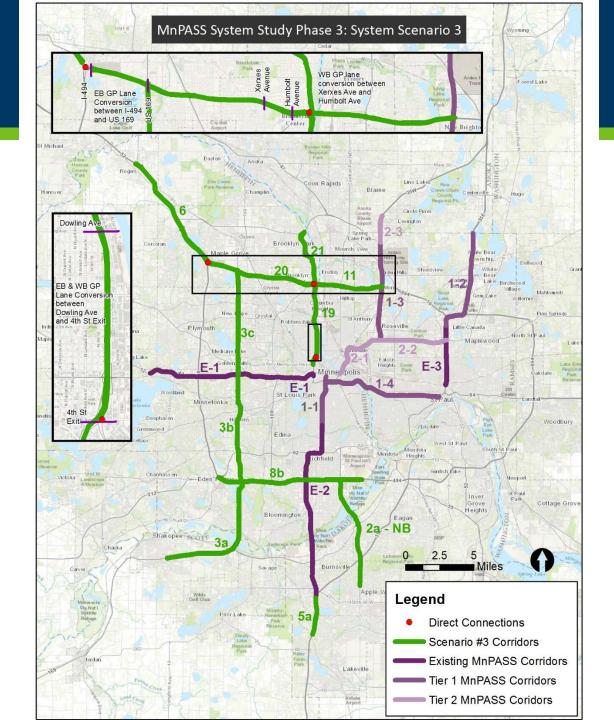
Phase 3 study goals:

- Update the MnPASS system vision for inclusion in the 2017/18 TPP Update
- Evaluate key MnPASS issues, opportunities, and risks from both a regional needs perspective and a national state-of-the-practice perspective

MnPASS System Study Phase 3 - Process



Technical Steering Committee (TSC) consisted of representatives from MnDOT, Met Council, transit providers, metro counties and FHWA



System Scenario 3 Evaluation Summary Table

Corridor	Change in Average Person Throughput	Total Person Hours Saved	Percent Travel Time Savings	Cost (M)	Cost Variability
2a -NB	3,118	747	3.2%	\$50	Medium
3 a	7,985	1,765	5.8%	\$130	Low
3b	15,492	768	3.8%	\$200	High
3 c	7,788	760	4.2%	\$180	Medium
5 a	3,490	795	8.9%	\$40	Medium
6	3,846	1,106	3.7%	\$80	Low
8b	18,786	4,121	9.8%	\$220	High
11	2,361	936	3.9%	\$120	Medium
19	16,552	-119	-1.2%	\$110	Med / High
20	3,044	1,487	4.9%	\$110	Med / High
21	36,925	1,186	39.7%	\$140	Medium

System Scenario 3 Corridor Evaluation Ranking

Rank	Corridor	Change in Average Person Throughput	Cost (M)	Change in Average Person Throughput per \$M
1	21	36,925 ¹	\$140 ¹	264 ¹
2	19	16,552	\$110	151
3	5a	3,490	\$40	87
4	8b	18,786	\$220	85
5	3b	15,492	\$200	78
6	2a -NB	3,118	\$50	62
7	3 a	7,985	\$130	61
8	6	3,846	\$80	48
9	3 c	7,788	\$180	43
10	20	3,044	\$110	28
11	11	2,361	\$120	20

9

Results Summary

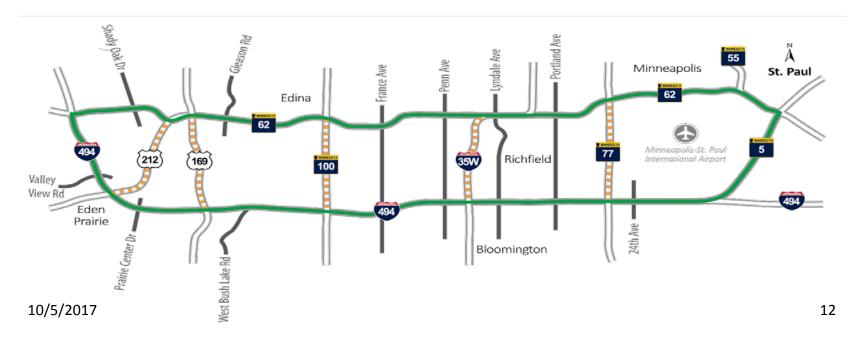
- Scenario 3 has similar benefits to previous scenarios, but a lower cost per mile and total cost
- Corridor 21¹ and corridor 8b are very strong
- Corridor 19 has a large increase in throughput, but fewer hours saved
- Corridor 5a has moderate benefits, but very low cost
- Corridors 2a-NB, 3a, 3b also score moderately

Schedule/Next Steps

- Draft final report available later in October
- Council staff drafting TPP update are currently considering:
 - MnPASS corridor tiering
 - Increased revenue scenario

I-494/Hwy. 62 Congestion Relief Study

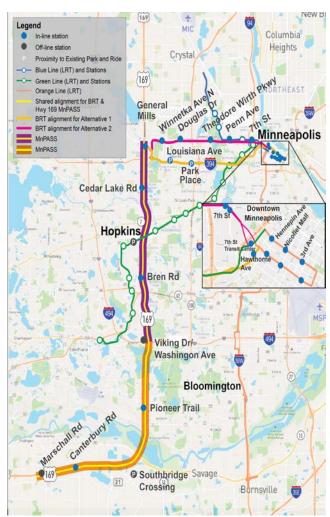
- Study evaluated MnPASS lane options and spot mobility improvements on I-494 and Hwy. 62 between the MSP Airport and Eden Prairie.
- Study is nearing completion and a recommended implementation plan of improvements has been developed that includes adding MnPASS lanes on I-494 between W. Bush Lake Rd. and Hwy. 5, as well as implementing several spot mobility improvements on Hwy. 62 and I-494





Hwy. 169 Mobility Study

- Study focused primarily on evaluating highway BRT alternatives, MnPASS options and spot mobility improvements on Hwy. 169 between Shakopee and Golden Valley
- Collaborative effort between MnDOT, Met Council and Scott County
- Study completion anticipated Nov./Dec. 2017 the key evaluation findings to date include:
 - Two good BRT alternatives:
 - Marschall Rd. to downtown Mpls. via Hwy. 169 and I-394
 - Marschall Rd. to downtown Mpls. via Hwy. 169 and Hwy. 55
 - Adding MnPASS lanes on Hwy. 169 between Marschall Rd. and Hwy. 55 would provide significant mobility benefits and there are a range of design options at specific locations
 - Several viable spot mobility improvements



Questions/Comments

Contact:

Brad Larsen, MnDOT 651-234-7024 brad.larsen@state.mn.us