Metropolitan Council, 390 Robert Street North, Saint Paul, Minnesota 55101

NOTICE OF A MEETING of the PLANNING COMMITTEE Thursday, Sept 14th 2017 1:00 PM – Metropolitan Council, Room LLA 390 Robert Street N, Saint Paul, MN

AGENDA

- 1) Call to Order
- 2) Adoption of Agenda
- 3) Approval of the Minutes from the August 2017 Meeting
- 4) Action Items
 - 1. 2017-24 Hennepin County Functional Class Requests #1349 & #1350
- 5) Info Items
 - 1. MnPASS III Study (Brad Larsen) (Handout)
 - 2. TPP Overview Challenges and Opportunities (Michelle Fure)
 - 3. TPP Chapter 1 Performance Based Planning (Cole Hiniker)
 - 4. TPP Chapter 2 Strategies Changes (Cole Hiniker)
 - 5. RBTN Changes (Steve Elmer)
- 6) Other Business
- 7) Adjournment

Full Meeting Packet

TRANSPORTATION ADVISORY BOARD Metropolitan Council 390 N. Robert St., St. Paul, Minnesota 55101-1805

Notes of a Meeting of the TAC-PLANNING COMMITTEE August 10, 2017

MEMBERS PRESENT: Holly Anderson, Innocent Eyoh, Lisa Freese, Anton Jerve, Jean Keely, Elaine Koutsoukos, Dan McCormick, Jason Pieper, Michael Larson, Kevin Roggenbuck, Katie White,

OTHERS PRESENT: Cameron Muhic, Russ Owen, Steve Peterson, Steve Elmer, Heidi Schallberg, Amy Vennewitz, Tony Fischer, Neil Ralston, Ashley Hartle, Taylor Beswick

1. Call to Order

The Meeting was called to order by Kevin Roggenbuck. Lisa Freese arrived minutes after the start.

2. Adoption of the Agenda

Koutsoukos moved, White seconded. Motion passed unanimously.

3. Approval of the Minutes from the July 2017 meetings

White moved, Anderson seconded. Minutes were approved unanimously.

4. Info Items

1. CMSP IV Study (Tony Fischer)

Tony Fischer presented an update on the Congestion Management Safety Plan study. The Congestion Management Safety Plan is an initiative aimed at identifying highway investment solutions that can be quickly implemented at lower costs than traditional projects which address congestion, safety, and travel time concerns. The focus of this of this study is on MnDOT freeways and highways in the metro area.

The study began with assessing 600+ locations with the goal of selecting the costliest 10% of the problem locations. Currently, 80+ solutions are being subjected to a secondary screening and the final selected projects will be sorted into high, medium, and low tiers based on return on investment. Projects selected from the CMSP study will be included in the Metropolitan Council's Transportation Policy Plan Update.

Full length slide show available online:

https://metrocouncil.org/Council-Meetings/Committees/Transportation-Advisory-Board-TAB/TAB-Technical-Advisory-Committee/TAC-Planning-Committee/2017/TAC-Planning-Committee-8-10-17/CMSP-MC-7212017.aspx

2. TPP Update –Bike /Ped (Steve Elmer and Heidi Schallberg)

Steve Elmer and Heidi Schallberg presented the Bicycle and Pedestrian system update in preparation for the Transportation Policy Plan Update. They asked the committee for reactions to high level concepts, clarifying the "story", ideas for changes, and items for future discussion.

Like other system updates for the TPP, they started with "Where are we now?" – current conditions and current policy. They moved into what's changing – updates on studies and known policy direction.

Jason Pieper informed the committee that there are more than three bicycle and pedestrian counters installed currently and the TPP should reflect this.

Anton Jerve recommended the separating focus on bicycle and pedestrian systems. He noted that pedestrian systems seem to lose significance when combined with the bicycle systems in the plan.

Full length slide show available online: https://metrocouncil.org/Council-Meetings/Committees/Transportation-Advisory-Board-TAB/TAB-Technical-Advisory-Committee/TAC-Planning-Committee/2017/TAC-Planning-Committee-8-10-17/Bike-Ped-TAC-Planning_08102017.aspx

3. TPP Update – Aviation (Russ Owen)

Russ Owen presented the Aviation system update in preparation for the Transportation Policy Plan Update. Owen asked the committee for reactions to high level concepts, clarifying the "story", ideas for changes, and items for future discussion.

Like other system updates for the TPP, Owen started with "Where are we now?" – current conditions and current policy. He moved into what's changing – updates on studies and known policy direction.

Dan McCormick asked if there are any military impacts on the plan. He also inquired on plans for Amazon drone delivery and their impacts to the plan. Russ Owen responded there is no change to the Minnesota Nation Guard headquarters at MSP. Additionally, he did not know of any drones flying at MSP from Amazon at this time and is still waiting for the FAA to publish regulations for drones.

Michael Larson asked if there are any potential risks/opportunities as a national airport hub and what are the trends in the airline industry relevant to MSP.

Russ Owen responded by stating since 1996 it has been a primary goal for MSP to be a regional and national airport hub. Additionally, MSP is much tied to Delta Airlines (currently making up 75% of flights). A recommendation was taken to talk more about competitive advantage in the chapter.

Full length slide show available online:

https://metrocouncil.org/Council-Meetings/Committees/Transportation-Advisory-Board-TAB/TAB-Technical-Advisory-Committee/TAC-Planning-Committee/2017/TAC-Planning-Committee-8-10-17/TPP-Aviation-Overview-2017-08-10.aspx

5. Other Business

None

6. Adjournment

White moved, Larson seconded. Motion passed unanimously. Adjourn at 2:16 pm.

Prepared by Taylor Beswick

ACTION TRANSMITTAL – 2017-24

DATE:	9-6-17									
TO:	TAC Planning									
FROM:	MTS Staff									
PREPARED BY:	Rachel Wiken, Planner,651-307-7146									
SUBJECT:	lennepin County A-Minor request #1349 & #1350									
REQUESTED ACTION:	Hennepin County requests approval of Lowry Ave from Other Arterial to A-Minor Augmentor (#1349) and Vernon Ave from Other Arterial to A-Minor Reliever (#1350).									
RECOMMENDED MOTION:	That TAC Planning recommend to TAC the approval of the changes as submitted.									

BACKGROUND AND PURPOSE OF ACTION: #1349 Lowry Avenue between West Broadway Avenue and St. Anthony Boulevard is a regional connection that directly serves the historically disadvantaged business community of North Minneapolis and the growing industrial, commercial and entertainment businesses of Northeast Minneapolis. Upper Harbor Terminal, a planned 50-acre development in North Minneapolis, will be the largest development opportunity along the Mississippi River in Minneapolis and will rely on Lowry Avenue to serve as a critical east/west route through increasingly dense industrial and commercial land uses. Shoreham Yards, an FHWA designated truck-rail facility in Northeast Minneapolis, generates high levels of freight traffic along Lowry Avenue which provides connections over the railroad and the Mississippi River. Additionally, Lowry Avenue serves the growing business community and population within the adjacent Northeast Minneapolis Arts District.

#1350 Vernon Avenue is a critical regional route that directly serves commuter and commercial traffic that also connects two Trunk Highways (TH 62 and TH 100). Additionally, Vernon Avenue currently serves as a reliever for TH 62 and TH 100 that frequently experience significant congestion.

The planned land use of the Grandview District Area provides additional support for the need to reclassify this roadway as an A-Minor Arterial. Hennepin County seeks this functional class change to better warrant roadway function and needed to align with the Grandview District Plan. This will also provide Hennepin County with flexibility to improve the existing 90-year-old structurally-deficient bridge spanning the CP Rail.

STAFF ANALYSIS: Staff agrees with the changes as requested. The traffic volumes, spacing, and trip types reflect the requested functional class.

Both roads have volumes equal or higher than other A-Minor arterials in the area.

Additionally, Met Council Transportation Policy Plan recommends Principal Arterial (PA) roadways to interchange with A-Minor roadways or PAs. Upgrading Vernon Ave from Other Arterial to A-Minor Augmentor would bring two PA interchanges into compliance with policy.

MnDOT staff reviewed the changes and had the following comments: Regarding Lowry Ave (#1349), MnDOT had no major issues. For the segment of Lowry Avenue West of I-94 (or Lyndale), they did not see a documented case as to why this reclassification would need to continue all the way to CSAH 81, at least based on current land use and traffic patterns.

For Vernon Ave (#1350), MnDOT expressed concern that the current configuration of the road does not support the reliever function. MnDOT staff questioned if upgrading the roadway to A-Minor reliever would encourage restriping of the road to remove bike lanes, to return the road to a 4 lane configuration, as it was in the past.

ROUTING

ТО	ACTION REQUESTED	DATE COMPLETED
TAC Planning	Review & Recommend	
Technical Advisory Committee	Approve	

ID Number: 1349 Date of Request: 8-31-17

Roadway Name: Lowry Avenue

Roadway CSAH # 153 Roadway County Rd # N/A Roadway MSA # N/A Request Type: Existing

Functional Classification Information:

Existing Roadway Current Classification:

Other Minor Arterial

Requested Classification:

Planned Roadway

Current Classification: N/A Requested Classification: N/A If other:

A Minor Augmentor If other If other: Planned to existing Contingent Conditions: -----Other / Explain:

Request Information:

Change Start Location: CSAH 81 (West Broadway Avenue) Change End Location: CSAH 88 (New Brighton Boulevard) Length of Requested Change (Miles): 5.00 miles Dependent on other Requested Changes: No

Road name(s) or ID Number(s) of dependent requests: N/A Involves other jurisdictions (Yes) If "yes" please attach letter(s) of support

Purpose of Change: Please explain rationale for requested Change Lowry Avenue between West Broadway Avenue and St. Anthony Boulevard is a critical regional connection that directly serves the historically disadvantaged business community of North Minneapolis and the growing industrial, commercial and entertainment businesses of Northeast Minneapolis. Upper Harbor Terminal, a planned 50-acre development in North Minneapolis, will be the largest development opportunity along the Mississippi River in Minneapolis and will rely on Lowry Avenue to serve as a critical east/west route through increasingly dense industrial and commercial land uses. Shoreham Yards, an FHWA designated truck-rail facility in Northeast Minneapolis, generates high levels of freight traffic along Lowry Avenue which provides connections over the railroad and the Mississippi River. Additionally, Lowry Avenue serves the growing business community and population within the adjacent Northeast Minneapolis Arts District.

Note that Lowry Avenue does not directly connect to CSAH 88 (New Brighton Boulevard). Instead, Lowry Avenue connects with St. Anthony Boulevard, which then extends southeast for approximately 400 feet before intersecting with CSAH 88 (See Attachment 1). This request also includes the short segment of St. Anthony Boulevard to meet the criteria of A-Minor Arterials which requires termination at another A-Minor Arterial.

St. Anthony Boulevard is a short (0.1 mile) segment that is currently classified as a Major Collector that provides a vital connection between CSAH 153 and CSAH 88. This connection carries high levels of traffic and connects roadways:

- CSAH 88 and CSAH 153 (Hennepin County)

- CSAH 136 (Ramsey County)

The Federal Highway Administration (FHWA) has identified Lowry Avenue, between 2nd Street North and University Avenue, as an Intermodal Connector on the National Highway System. Presently, there are limited east/west A-Minor Arterials between CSAH 81 (West Broadway Avenue) and I-694 that extend over the Missippi River. East/west trips are served on Lowry Avenue for industrial, commercial, and residential purposes including access to the following Arterials:

- CSAH 81 (West Broadway Avenue)
- I-94 via Washington Avenue North/Dowling Avenue North
- I-35W via Johnson Street Northeast
- TH 65 (Central Avenue)
- TH 47 (University Avenue)

Additionally, St. Anthony Boulevard provides a connection to CSAH 88 (New Brighton Boulevard) and Ramsey CSAH 136 (Silver Lake Road).

Following Section Required for All Principal and Minor Arterial Requests

Criteria: Illustrate how the requested change to a roadway functional classification complies with the following criteria:

Place Connections: Lowry Avenue between West Broadway Avenue and St. Anthony

Boulevard serves as an east/west connection between existing traffic generators, including

the dense concentration of industrial and commercial land uses near the Shoreham Yards

trucking and bulk-distribution site, the Upper Harbor Terminal development, and the

growing business and residential area of the Northeast Minneapolis Arts District (Attachment 2).

<u>Spacing</u>: The nearest A-Minor Arterial roadways to Lowry Avenue between West Broadway Avenue and St. Anthony Boulevard include the following:

North: 42nd Avenue, Webber Parkway, and 44th Avenue on the west side of the Mississippi River (1.5 miles)

St. Anthony Parkway on the east side of the Mississippi River (1.0 miles) South: CSAH 81/ West Broadway Avenue (1.0 miles)

<u>Management:</u> All major intersections along the proposed route are controlled by traffic signals, while all minor intersections are controlled by side street stop conditions. Existing posted speeds are 30 MPH. Vehicle speed data, collected along Lowry Avenue on either side of the Mississippi River, indicated an 85th Percentile Speed greater than 30 MPH throughout the day (Attachment 3). The proposed route is expected to maintain at least a 15 MPH average speed during peak traffic periods. Adjacent Primary Arterials (I-94 and I-35W) experience significant congestion and Lowry Avenue operates as a local reliever (Attachment 4). The existing railroad bridge extends over Lowry Avenue just east of 6th Street NE. Its piers are located within the center of the roadway which not only reduces the travel lane widths, but also presents an obstruction to vehicles. A new bridge structure would improve safety and comfort for all users on Lowry Avenue.

System Connections & Access Spacing: Lowry Avenue serves as the only east/west connection over the the Mississippi River north of West Broadway Avenue in North and Northeast Minneapolis. Additionally, the roadway serves as a connector to Washington Avenue North (CSAH 152), West Broadway Avenue (CSAH 81) and Johnson Street Northeast which all provide access to I-35W and/or I-94. St. Anthony Boulevard provides a connection to CSAH 88 with access to I-35W.

Access spacing along Lowry Avenue is consistent with other A-Minor Arterials within the City of Minneapolis. Intersection spacing ranges from 200' to 400' along the corridor. Hennepin County will continue to work with the City of Minneapolis and the City of St. Anthony to control and consolidate access when the opportunity arises through redevelopment and capital projects.

<u>Trip Making Services:</u> Lowry Avenue serves short and medium trips during peak hours at consistent speeds. It also serves as a multi-modal corridor serving freight, transit, pedestrains, and bicycles. Truck counts, collected along Lowry Avenue on either side of the Mississippi River, indicated approximately 4,000 commercial vehicles utilize Lowry Avenue throughout the day (Attachment 5). Additionally, the planned 50 acre Upper Harbor Terminal development is expected to increase freight traffic. Classifiying the route as an A-Minor arterial better defines the existing and future function of Lowry Avenue.

<u>Mobility vs. Land Access</u>: Lowry Avenue between West Broadway Avenue and St. Anthony Boulevard provide both mobility and land access functions. The roadway provides a balance between access to the expanding industrial and commerical land uses and mobility for east/west traffic over the Mississippi River and I-94.

IF request impacts the A-Minor Arterial Sub-Classification, provide these attributes: (from Table D-4 in TPP, <u>http://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan-(1)/The-Adopted-2040-TPP-(1)/Final-2040-Transportation-Policy-Plan/2040-TPP-Appendix-D-Functional-Class.aspx) Use:</u>

Location: Trip Length: Problem Addressed:

(Optional) Typical Characteristics: Providing the following to support the request

Intersection Treatments: Traffic Signal and Side-Street Stop Control Present AADT: (2013) West: 14,800 | Middle (Bridge): 16,500 | East: 12,800 Estimated Future AADT/Year: (2040) West: 15,500 | Middle (Bridge): 20,300 | East: 14,000 Source of Estimated AADT/Date: Metropolitian Council / June 2017 Email Correspondence Posted Speed: 30 MPH

------ Required for All Requests ------

MAP: Please attach an 8.5 by 11 map of the requested change. Please include all appropriate labels and highlight the roadway in question.

Contact Information:

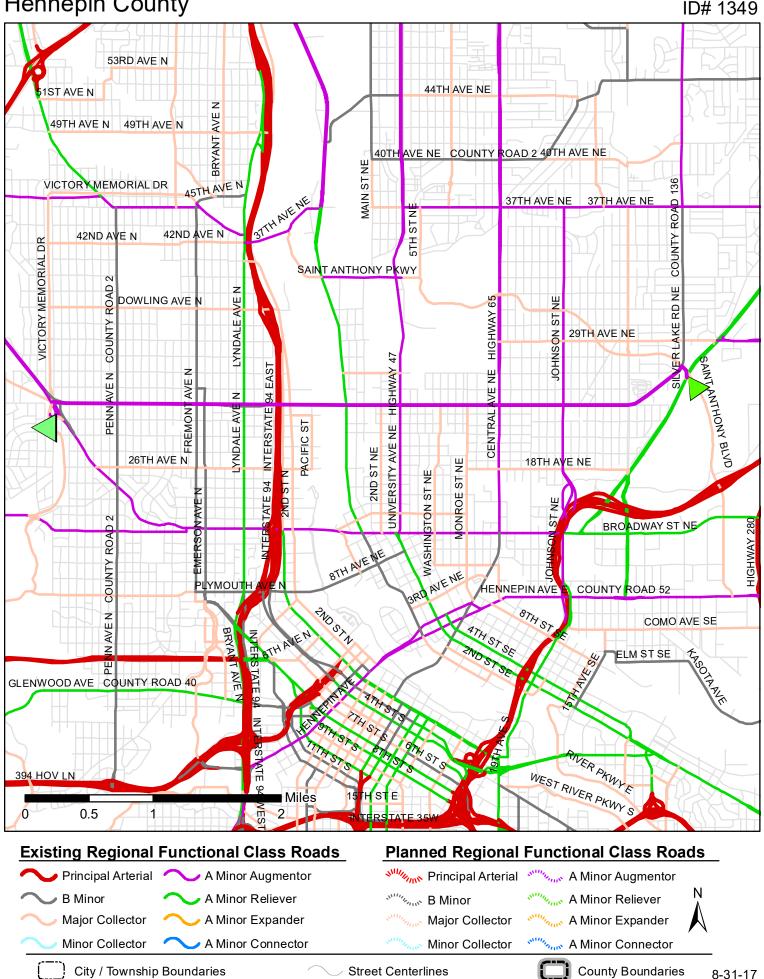
Agency/City/County: Hennepin County
Contact Person: Jason PieperFax: 612-321-3410Phone: 612-596-0241Fax: 612-321-3410Email: Jason.Pieper@hennepin.usFax: 612-321-3410Address: 1600 Prairie Drive
City: MedinaState: MNZip: 55340

	Committe	e Staff ONLY
Staff Recommendation:		
Consent Approval: Technical Correction: Staff Recommendation: MnDOT Consent: YES Potential Issues:	NO 🗌	Comments:

Change Tracking:

TAC Planning Record of Decision: TAC Record of Decision: TAB Record of Decision (PA ONLY): Mn/DOT Notification:	Date: Date: Date: Date:
Geography Recorded:	Date:
Previous Action ID:	Date:

Functional Class Roads Change Requests Hennepin County

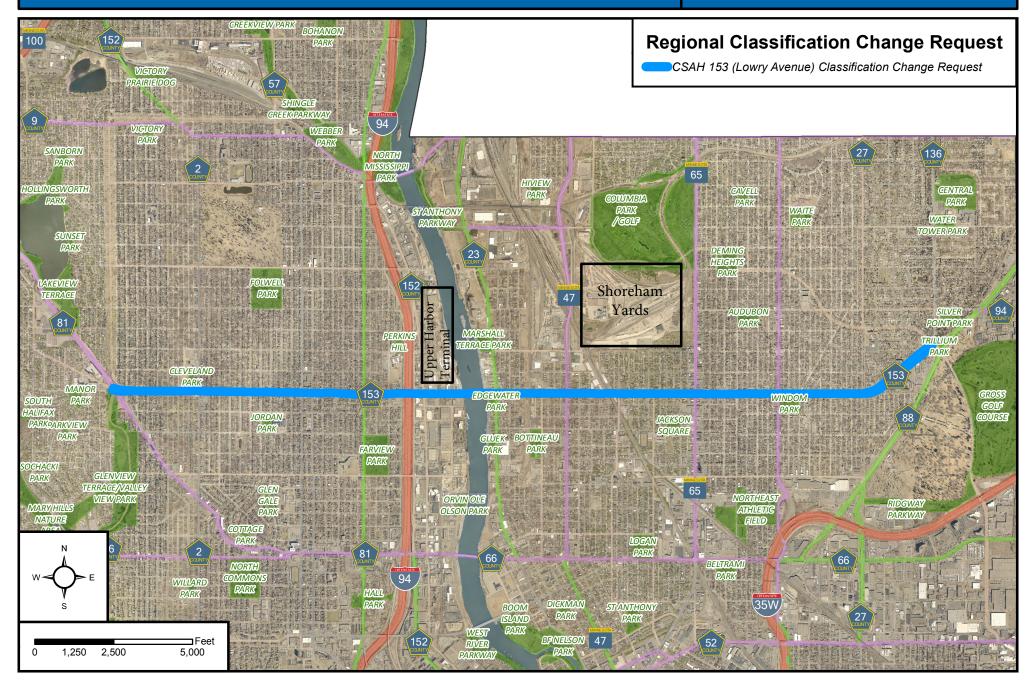


Functional Classification Change Request

Termini Map - CSAH 153 (Lowry Ave) - From CSAH 81 (Broadway Ave) to St. Anthony Blvd

Hennepin

This map has been created for informational purposes only and is not considered a legally recorded map or document. Hennepin County makes no warranty, representation, or guarantee as to the content, accuracy, timeliness, or completeness of any of the information provided herein.

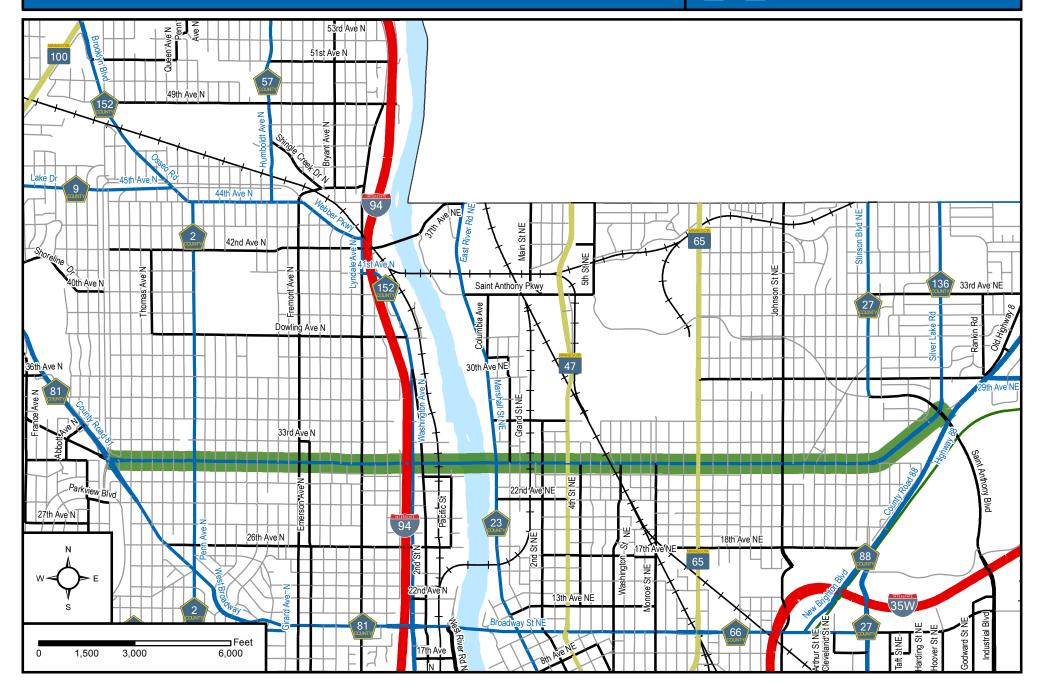


Functional Classification Change Request

Attachment 01 - CSAH 153 (Lowry Ave) - From CSAH 81 (Broadway Ave) to St. Anthony Blvd

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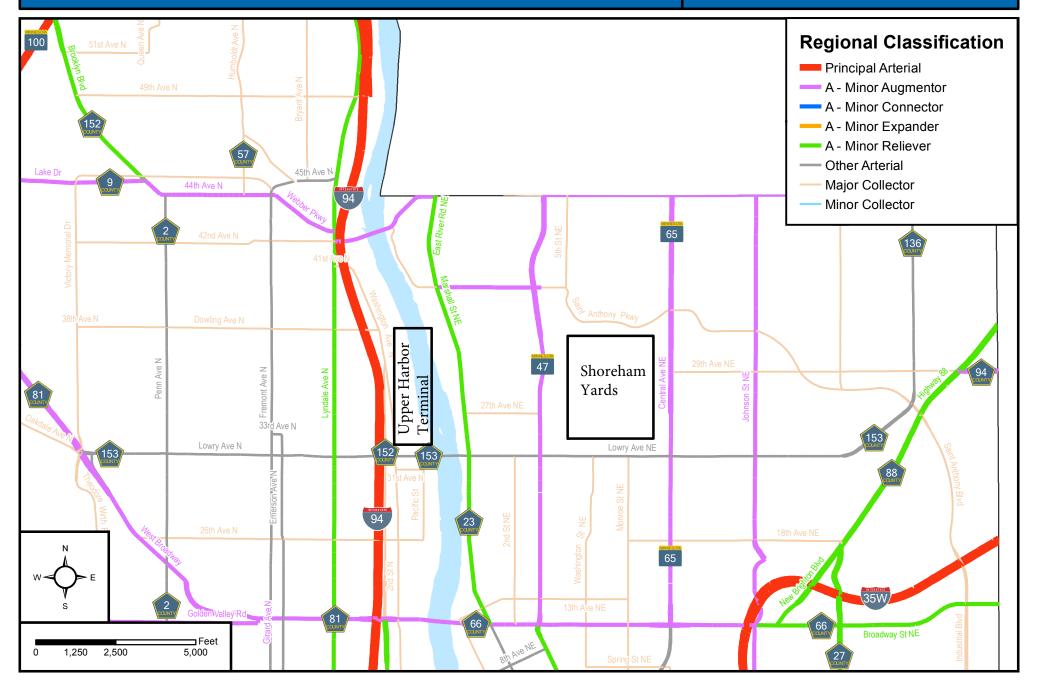


Functional Classification Change Request

CSAH 153 (Lowry Ave) - From CSAH 81 (Broadway Avenue) to St. Anthony Blvd

Hennepin

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48 HR. SPEED DATA CSAH 153 E. OF 6TH. ST. N.E. STUDY # 4340

Site: 03 Monday, 3/6/2017 10:00 AM -Wednesday, 3/8/2017 10:00 AM

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mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	75.5	0.5	0.5	4.5	13.5	40.0	11.5	4.0	0.5	0.5	0.0	0.0	0.0	0.0
1:00 AM	44.5	0.0	0.0	0.5	9.0	26.5	7.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	39.5	0.0	0.0	0.5	10.5	19.5	6.5	1.5	1.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	32.5	0.5	0.0	1.0	8.0	14.0	7.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	47.0	0.0	0.0	1.0	8.0	23.0	12.5	1.5	1.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	120.5	0.0	0.0	0.5	13.5	48.0	50.0	8.0	0.5	0.0	0.0	0.0	0.0	0.0
6:00 AM	250.5	0.0	0.5	4.0	21.5	116.0	89.0	17.5	1.5	0.5	0.0	0.0	0.0	0.0
7:00 AM	580.0	9.0	6.5	20.0	104.5	277.5	136.0	22.5	3.5	0.5	0.0	0.0	0.0	0.0
8:00 AM	586.5	2.5	4.0	22.0	109.5	276.0	143.5	25.5	3.5	0.0	0.0	0.0	0.0	0.0
9:00 AM	386.5	3.5	3.0	10.5	50.0	175.0	128.5	14.5	1.5	0.0	0.0	0.0	0.0	0.0
10:00 AM	347.0	1.5	1.5	8.5	67.5	161.0	90.5	15.0	1.0	0.5	0.0	0.0	0.0	0.0
11:00 AM	393.0	1.0	1.0	5.0	54.0	207.5	111.5	13.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	404.0	2.5	2.5	5.5	65.0	203.5	113.0	10.0	1.5	0.5	0.0	0.0	0.0	0.0
1:00 PM	447.5	1.5	2.5	3.0	92.0	242.5	96.5	9.5	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	527.0	3.0	3.5	13.0	99.5	265.5	129.5	12.5	0.5	0.0	0.0	0.0	0.0	0.0
3:00 PM	578.0	4.5	3.0	19.5	124.0	275.0	133.0	17.0	1.5	0.5	0.0	0.0	0.0	0.0
4:00 PM	665.5	7.0	6.0	30.5	151.0	294.5	152.0	24.0	0.5	0.0	0.0	0.0	0.0	0.0
5:00 PM	686.5	7.5	2.5	32.5	167.0	329.5	135.0	11.0	1.0	0.0	0.5	0.0	0.0	0.0
6:00 PM	485.5	3.0	4.5	20.0	140.0	244.5	67.0	5.0	1.5	0.0	0.0	0.0	0.0	0.0
7:00 PM	336.0	0.0	1.0	2.5	70.0	193.5	63.0	4.5	1.0	0.5	0.0	0.0	0.0	0.0
8:00 PM	281.0	0.0	0.0	8.0	56.0	157.5	49.0	9.5	1.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	207.0	0.0	0.0	2.5	44.5	115.0	41.5	3.0	0.5	0.0	0.0	0.0	0.0	0.0
10:00 PM	152.5	0.0	0.0	3.0	31.0	85.0	32.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
11:00 PM	112.5	0.0	0.0	2.5	20.0	63.0	22.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0
Daily Average	7786.0	47.5	42.5	220.5	1529.5	3853.0	1827.5	237.5	24.0	3.5	0.5	0.0	0.0	0.0
	Average (Mean)	32.6 mp	oh M	inimum 5.0	mph	Maximum 5	7.2 mph		Pace Ra	nge 27.8 - 3	7.8 mph 12	465 vehicles (8	30.0 %)	
	Percentile Speeds		10%	<u>15%</u>	<u>50%</u>	85%	<u>90%</u>							
	(mph)		27.6	28.7	32.7	36.6	37.7							
	Speeds Exceeded		<u>25 mph</u>	35	mph	<u>45 mp</u>	bh	<u>55 mph</u>	6	5 mph	<u>75 n</u>	nph		
			% (14951)		6 (4186)	0.4 % (0.0 % (1)		0 % (0)	0.0 %			
						Study (arand Totals							
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	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
E.B.	15572	95	85	441	3059	7706	3655	475	48	7	1	0	0	0
		0.6 %	0.5 %	2.8 %	19.6 %	49.5 %	23.5 %	3.1 %	0.3 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %

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HENNEPIN COUNTY TRANSPORTATION PLANNING DIVISION

48 HR. SPEED DATA CSAH 153 E OF 6TH. ST. N.E. STUDY # 4340 Site: 03 Monday, 3/6/2017 10:00 AM -Wednesday, 3/8/2017 10:00 AM

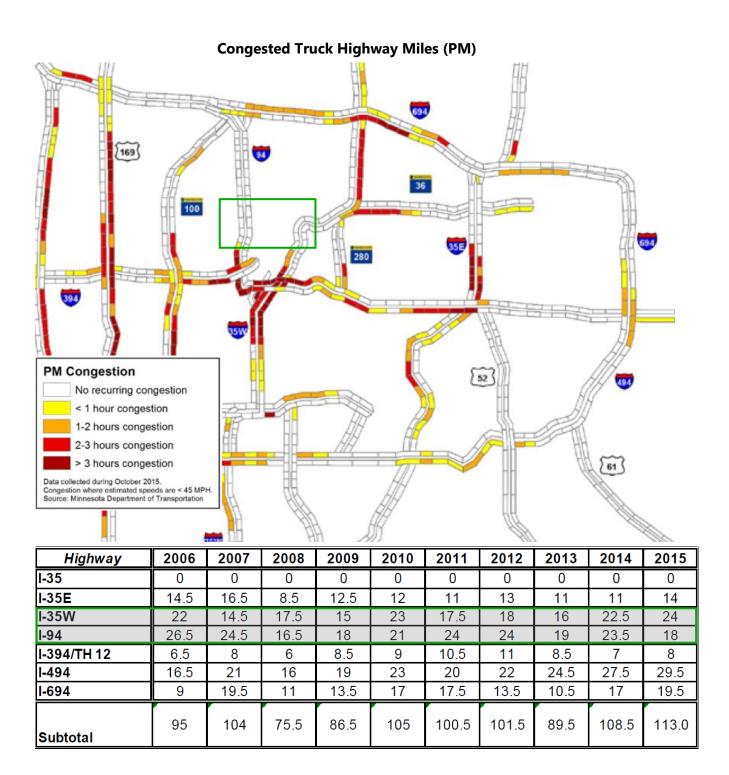
51	001 // 4540													
						Speed G	Grand Total	S						
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mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	63.5	0.0	0.5	1.0	16.5	29.5	13.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	33.0	0.0	0.0	0.5	7.0	17.0	7.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0
2:00 AM	41.5	0.0	0.0	0.5	9.5	20.0	9.5	1.5	0.0	0.0	0.5	0.0	0.0	0.0
3:00 AM	25.0	0.0	0.0	0.0	7.5	12.0	4.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
4:00 AM	45.0	0.0	0.0	1.0	3.5	25.5	10.5	4.0	0.5	0.0	0.0	0.0	0.0	0.0
5:00 AM	136.0	0.0	0.5	3.0	15.0	63.0	44.5	9.5	0.5	0.0	0.0	0.0	0.0	0.0
6:00 AM	324.5	0.0	2.0	6.5	34.5	138.5	118.0	20.0	4.0	1.0	0.0	0.0	0.0	0.0
7:00 AM	643.5	0.5	1.0	7.5	60.0	271.5	241.0	56.0	6.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	554.0	0.5	2.0	7.5	60.0	264.0	186.0	29.5	3.5	1.0	0.0	0.0	0.0	0.0
9:00 AM	396.5	1.0	4.5	6.5	48.0	190.0	120.0	24.0	2.5	0.0	0.0	0.0	0.0	0.0
10:00 AM	353.0	1.5	1.5	9.0	52.0	185.5	87.5	14.5	1.5	0.0	0.0	0.0	0.0	0.0
11:00 AM	380.0	0.5	3.0	14.5	44.0	175.5	121.0	20.0	1.5	0.0	0.0	0.0	0.0	0.0
12:00 PM	441.0	1.5	0.5	7.0	47.0	231.5	127.5	24.5	1.5	0.0	0.0	0.0	0.0	0.0
1:00 PM	481.5	2.0	4.0	8.5	61.5	246.0	134.0	22.5	2.5	0.5	0.0	0.0	0.0	0.0
2:00 PM	538.5	0.5	2.5	8.0	59.0	242.5	186.0	34.5	4.5	0.5	0.5	0.0	0.0	0.0
3:00 PM	683.5	2.5	1.0	15.0	86.0	338.5	201.5	36.0	3.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	783.5	2.0	1.5	7.5	96.5	393.0	246.0	35.5	1.5	0.0	0.0	0.0	0.0	0.0
5:00 PM	780.5	4.5	1.5	17.5	134.0	407.5	195.5	19.0	0.5	0.0	0.5	0.0	0.0	0.0
6:00 PM	531.5	0.0	1.5	11.0	129.5	283.5	96.0	9.0	1.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	369.0	0.0	0.5	9.5	84.0	197.0	70.0	7.0	1.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	312.5	0.5	0.5	2.0	69.5	173.5	59.0	7.0	0.5	0.0	0.0	0.0	0.0	0.0
9:00 PM	229.0	0.0	0.5	1.5	53.5	122.0	40.0	10.0	0.5	0.5	0.5	0.0	0.0	0.0
10:00 PM	144.5	0.0	1.0	4.0	27.0	79.5	27.5	5.0	0.5	0.0	0.0	0.0	0.0	0.0
11:00 PM	99.5	0.0	0.5	2.5	21.5	47.5	19.0	4.0	2.5	0.5	1.5	0.0	0.0	0.0
Daily Average	8390.0	17.5	30.5	151.5	1226.5	4154.0	2365.0	397.0	40.0	4.5	3.5	0.0	0.0	0.0
	Average (Mean)	33.5 m	nph Mi	nimum 5.2	mph	Maximum 59	9.8 mph		Pace Ra	nge 28.5 - 38	8.5 mph 136	625 vehicles (8	31.2 %)	
	Percentile Speeds		<u>10%</u>	<u>15%</u>	<u>50%</u>	85%	<u>90%</u>							
	(mph)		28.7	29.7	33.5	37.4	38.4							
	Speeds Exceeded		<u>25 mph</u>	35	5 mph	<u>45 m</u>	bh	<u>55 mph</u>	e	5 mph	<u>75 m</u>	nph		
			97.6 % (16381) 33.5 % (5620)		0.6 %	(96)	0.0 % (7)							
						Study (Grand Totals							
		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
W.B.	16780	35	61	303	2453	8308	4730	794	80	9	7	0	0	0
		0.2 %	0.4 %	1.8 %	14.6 %	49.5 %	28.2 %	4.7 %	0.5 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %

1



Highway	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
I-35	0	1	1	1	0	2	0	0	0	0
I-35E	12.5	13	9	9.5	13.5	14.5	14.5	16	11	13
I-35W	27	22	17	24	28	25	23	24	24	28
I-94	26	24.5	23	25.5	28.5	24.5	29	26	23	25
I-394/TH 12	6.5	6	8.5	7.5	8.5	9.5	10.5	7.5	8.5	7.5
I-494	13	16.5	24.5	17.5	14.5	19.5	20	19.5	20	24
I-694	10.5	12.5	9	10.5	12	11	13	14	15.5	19
Subtotal	95.5	95.5	92	95.5	105	106	110	107	102	116.5





48 HR. CLASSIFICATION DATA CSAH 153 E. OF 6TH. ST. N.E. STUDY # 4338 Site: 03 Monday, 3/6/2017 10:00 AM -Wednesday, 3/8/2017 10:00 AM

Classification Grand Totals

	Hourly Averages														
							E.B.								
Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
12:00 AM	75.5	0.0	57.5	15.0	0.0	2.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	44.5	0.0	38.0	4.0	0.0	1.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	39.5	0.0	34.0	4.0	0.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	32.5	0.0	23.5	7.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	47.0	0.0	33.0	11.0	0.0	1.0	1.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
5:00 AM	120.5	0.0	85.0	27.0	1.0	4.0	3.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	250.5	0.0	170.5	55.0	11.0	10.5	1.0	0.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0
7:00 AM	580.0	0.0	404.5	124.5	20.5	22.0	2.0	0.0	4.0	1.5	0.5	0.5	0.0	0.0	0.0
8:00 AM	586.5	0.0	404.5	133.0	18.5	24.5	2.5	0.0	2.0	1.5	0.0	0.0	0.0	0.0	0.0
9:00 AM	386.5	0.0	268.0	82.0	7.5	22.5	1.0	0.0	3.0	2.5	0.0	0.0	0.0	0.0	0.0
10:00 AM	347.0	0.0	238.5	74.0	11.5	14.5	2.0	0.0	3.5	2.5	0.0	0.0	0.5	0.0	0.0
11:00 AM	393.0	0.0	277.5	83.5	7.0	14.0	2.0	0.0	3.5	4.0	1.0	0.5	0.0	0.0	0.0
12:00 PM	404.0	0.0	284.0	92.5	3.5	14.5	2.0	0.0	2.0	5.0	0.0	0.0	0.0	0.0	0.5
1:00 PM	447.5	0.0	306.0	111.0	7.5	17.0	1.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	527.0	0.0	357.5	113.0	16.0	24.5	6.0	0.5	3.0	4.5	0.0	2.0	0.0	0.0	0.0
3:00 PM	578.0	0.0	410.5	118.5	11.5	23.5	2.0	0.0	7.5	3.5	0.0	0.5	0.0	0.5	0.0
4:00 PM	665.5	0.5	488.0	133.5	17.0	11.0	1.5	0.5	7.0	3.5	0.0	2.5	0.5	0.0	0.0
5:00 PM	686.5	0.0	529.5	110.0	14.0	13.5	1.0	0.0	11.0	3.0	0.0	4.5	0.0	0.0	0.0
6:00 PM	485.5	0.0	390.5	75.0	7.0	8.5	0.0	1.0	2.0	0.5	0.0	1.0	0.0	0.0	0.0
7:00 PM	336.0	0.0	280.5	47.5	0.0	6.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	281.0	0.0	226.0	50.0	0.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	207.0	0.0	170.0	32.5	0.0	4.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	152.5	0.0	129.5	22.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	112.5	0.0	90.5	19.5	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	7786.0	0.5	5697.0	1545.5	154.5	247.5	31.5	2.0	54.5	37.5	1.5	12.0	1.0	0.5	0.5
						-									

Study Grand Totals 2 Axle 6 Motor Cars & 2 Axle 3 Axle 4 Axle <5 Axle 5 Axle >6 Axle <6 Axle 6 Axle >6 Axle Total Buses Tailgating Bikes Trailers Tire Double Double Double Multi Multi Multi Long Single Single E.B. 15572 1 11394 3091 309 495 63 109 75 3 24 2 1 4 1 3.2 % 0.4 % 0.7 % 0.5 % 0.0 % 0.0 % 0.0 % 73.2 % 19.8 % 2.0 % 0.0 % 0.0 % 0.2 % 0.0 %

EASTBOUND ONLY - SUM OF THE DAILY AVERAGE OF CLASSES 4 THROUGH 13 = 2,101 WESTBOUND ONLY - SUM OF THE DAILY AVERAGE OF CLASSES 4 THROUGH 13 = 2,090

DAILY TOTAL OF HEAVY COMMERCIAL VEHICLES =



48 HR. CLASSIFICATION DATA CSAH 153 E. OF 6TH. ST. N.E. STUDY # 4338

0.0 %

75.1 %

18.6 %

1.6 %

3.0 %

Site: 03 Monday, 3/6/2017 10:00 AM -Wednesday, 3/8/2017 10:00 AM

	Hourly Averages														
							W.B.								
Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
12:00 AM	63.5	0.0	52.5	10.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	33.0	0.0	27.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	41.5	0.0	30.5	7.5	0.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	25.0	0.0	17.0	5.0	0.0	0.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	45.0	0.0	34.5	9.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	136.0	0.0	100.5	31.5	0.5	1.5	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	324.5	0.0	227.5	61.0	17.5	10.0	1.0	0.5	2.0	5.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	643.5	0.0	497.0	97.0	13.5	24.0	3.0	0.0	5.5	2.0	0.5	1.0	0.0	0.0	0.0
8:00 AM	554.0	0.5	416.5	93.0	11.0	21.0	2.5	0.0	3.5	5.0	0.0	1.0	0.0	0.0	0.0
9:00 AM	396.5	0.0	280.0	84.5	5.0	17.0	3.0	0.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	353.0	0.0	235.0	79.5	6.5	21.5	0.5	0.0	5.0	4.0	1.0	0.0	0.0	0.0	0.0
11:00 AM	380.0	0.0	260.0	86.5	9.5	13.5	3.5	0.0	2.0	5.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	441.0	0.0	322.5	89.5	5.0	13.0	2.0	0.0	3.5	4.5	0.5	0.5	0.0	0.0	0.0
1:00 PM	481.5	0.0	351.5	99.5	7.5	14.5	2.0	0.0	2.0	3.5	0.0	1.0	0.0	0.0	0.0
2:00 PM	538.5	0.0	365.0	133.5	12.0	21.0	2.0	0.0	3.0	1.5	0.0	0.5	0.0	0.0	0.0
3:00 PM	683.5	0.0	500.0	127.5	18.5	23.5	2.5	0.0	8.5	2.5	0.0	0.5	0.0	0.0	0.0
4:00 PM	783.5	1.5	584.5	153.0	11.5	20.5	1.5	0.0	7.0	2.0	0.5	1.5	0.0	0.0	0.0
5:00 PM	780.5	0.0	611.5	131.0	15.0	14.0	1.0	0.0	5.0	0.5	0.5	2.0	0.0	0.0	0.0
6:00 PM	531.5	0.0	430.0	87.0	2.0	11.0	0.5	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0
7:00 PM	369.0	0.0	300.5	57.5	0.0	9.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	312.5	0.0	258.0	48.5	0.5	4.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	229.0	0.0	192.0	32.5	0.0	4.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	144.5	0.0	123.0	19.5	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	99.5	0.0	83.0	14.5	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	8390.0	2.0	6300.0	1564.0	136.0	250.0	29.0	1.5	55.5	40.5	3.0	8.5	0.0	0.0	0.0
						Stu	idy Grand T	otals							
	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
W.B.	16780	4	12600	3128	272	500	58	3	111	81	6	17	0	0	0

0.3 %

0.0 %

0.7 %

0.5 %

0.0 %

0.1 %

0.0 %

0.0 %

1

0.0 %

48 HR. CLASSIFICATION DATA CSAH 153 E. OF 6TH. ST. N. STUDY # 4339 Site: 03 Monday, 3/6/2017 11:00 AM -Wednesday, 3/8/2017 11:00 AM

Classification Grand Totals

Hourly Averages															
							E.B.								
Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
12:00 AM	65.0	1.5	42.5	8.5	1.5	10.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	42.5	1.0	28.0	5.0	0.5	7.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	36.0	0.0	22.0	4.5	0.0	8.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	37.5	1.5	21.5	4.0	1.0	8.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	53.5	1.5	28.5	4.5	1.0	10.5	6.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	148.5	4.5	94.0	18.0	3.5	20.5	6.5	0.0	1.0	0.0	0.0	0.0	0.0	0.5	0.0
6:00 AM	289.0	13.0	159.5	30.5	15.5	58.5	6.0	0.0	4.5	1.5	0.0	0.0	0.0	0.0	0.0
7:00 AM	551.0	14.0	320.0	58.0	41.5	82.0	12.0	1.0	15.5	3.5	1.5	0.0	0.0	2.0	0.0
8:00 AM	557.0	24.0	297.5	59.5	42.0	106.5	11.5	0.5	11.0	0.0	2.5	1.5	0.0	0.5	0.0
9:00 AM	357.5	8.0	222.0	55.5	13.0	51.5	4.5	0.5	2.0	0.0	0.0	0.0	0.0	0.5	0.0
10:00 AM	295.5	4.5	168.5	49.0	17.0	44.0	4.5	1.0	5.5	1.5	0.0	0.0	0.0	0.0	0.0
11:00 AM	329.5	2.5	210.5	68.0	15.0	24.5	1.5	0.0	6.0	0.5	0.0	1.0	0.0	0.0	0.0
12:00 PM	336.0	1.0	248.5	58.0	7.5	15.0	1.5	0.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0
1:00 PM	367.5	3.0	248.5	69.5	7.0	31.5	3.5	0.0	3.5	0.5	0.0	0.5	0.0	0.0	0.0
2:00 PM	443.5	2.0	286.5	82.0	17.0	40.0	3.5	0.0	10.5	0.5	0.0	1.5	0.0	0.0	0.0
3:00 PM	468.0	2.5	311.5	92.5	13.5	38.5	4.0	0.0	5.0	0.0	0.5	0.0	0.0	0.0	0.0
4:00 PM	573.0	6.5	386.0	95.5	24.5	48.0	3.0	0.0	7.5	1.5	0.0	0.5	0.0	0.0	0.0
5:00 PM	554.5	10.5	375.5	75.0	25.5	56.5	4.0	0.0	6.5	0.0	0.0	1.0	0.0	0.0	0.0
6:00 PM	396.0	7.5	260.5	41.0	14.5	63.0	2.5	0.0	4.0	1.5	1.0	0.5	0.0	0.0	0.0
7:00 PM	276.0	6.5	183.0	34.0	11.0	35.5	1.5	0.0	2.5	1.0	0.5	0.5	0.0	0.0	0.0
8:00 PM	262.0	5.0	184.0	26.5	5.0	37.0	1.0	0.0	1.5	0.5	1.0	0.0	0.0	0.5	0.0
9:00 PM	175.0	2.5	121.5	23.5	1.5	22.5	3.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
10:00 PM	143.0	2.5	96.0	16.5	1.0	25.5	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	106.0	3.0	73.0	11.5	0.0	17.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	6863.0	128.5	4389.0	990.5	279.5	862.0	86.0	3.0	93.0	13.5	7.0	7.0	0.0	4.0	0.0
						Stu	dy Grand T	otals							

	Study Statia Totals														
	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
E.B.	13726	257	8778	1981	559	1724	172	6	186	27	14	14	0	8	0
		1.9 %	64.0 %	14.4 %	4.1 %	12.6 %	1.3 %	0.0 %	1.4 %	0.2 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %

EASTBOUND ONLY - SUM OF THE DAILY AVERAGE OF CLASSES 4 THROUGH 13 = 2,347 WESTBOUND ONLY - SUM OF THE DAILY AVERAGE OF CLASSES 4 THROUGH 13 = 1,869 DAILY TOTAL OF HEAVY COMMERCIAL VEHICLES = 4,216

48 HR CLASSIFICATION DATA CSAH 153 E. OF 6TH. ST. N. STUDY # 4339 Site: 03 Monday, 3/6/2017 11:00 AM -Wednesday, 3/8/2017 11:00 AM

Classification Grand Totals

Hourly Averages															
							W.B.								
Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
12:00 AM	77.5	0.0	61.5	14.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	46.0	0.0	36.5	9.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	52.5	0.0	44.5	7.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	36.5	0.0	25.5	8.5	0.0	1.0	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	37.0	0.0	28.5	6.0	0.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	73.0	0.0	49.0	17.0	1.0	4.0	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
6:00 AM	224.0	0.0	156.0	51.0	9.5	4.0	0.5	0.0	1.5	1.0	0.0	0.5	0.0	0.0	0.0
7:00 AM	424.5	0.5	314.5	73.5	7.0	18.5	1.0	0.0	8.5	1.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	415.0	2.5	285.0	88.5	8.5	21.0	1.5	0.0	7.5	0.5	0.0	0.0	0.0	0.0	0.0
9:00 AM	324.5	1.0	221.5	69.5	8.5	18.0	2.5	0.0	2.5	0.5	0.0	0.5	0.0	0.0	0.0
10:00 AM	263.5	0.0	179.0	66.5	4.0	10.0	1.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	338.5	0.5	238.0	72.0	8.5	13.5	0.5	0.0	3.5	1.0	0.0	1.0	0.0	0.0	0.0
12:00 PM	397.5	0.0	289.0	86.5	3.5	12.0	1.0	0.0	3.0	0.5	0.0	2.0	0.0	0.0	0.0
1:00 PM	385.0	1.0	281.5	80.5	5.5	12.0	1.0	0.0	2.0	0.5	0.0	1.0	0.0	0.0	0.0
2:00 PM	510.5	1.0	349.0	128.0	12.0	15.5	0.0	0.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0
3:00 PM	570.5	2.0	412.5	116.0	9.0	20.0	0.0	0.5	9.5	0.0	0.0	0.5	0.5	0.0	0.0
4:00 PM	673.0	2.5	494.0	130.5	18.5	14.5	0.0	0.0	11.0	0.0	0.0	2.0	0.0	0.0	0.0
5:00 PM	664.5	1.5	520.0	107.0	15.5	9.5	0.0	0.0	9.0	0.0	0.0	1.5	0.0	0.5	0.0
6:00 PM	535.5	2.5	401.5	93.0	14.5	15.0	0.0	0.0	7.0	1.0	0.0	1.0	0.0	0.0	0.0
7:00 PM	317.0	0.0	255.5	49.0	2.0	7.5	0.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	314.5	0.5	248.5	59.0	1.5	1.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	233.5	1.0	193.0	33.5	0.5	5.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	191.5	0.0	163.0	25.5	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	128.0	0.0	104.0	20.0	0.5	3.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	7233.5	16.5	5351.0	1411.0	131.5	210.5	13.0	0.5	81.5	7.0	0.0	10.0	0.5	0.5	0.0
Study Grand Totals															
	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
W.B.	14467	33	10702	2822	263	421	26	1	163	14	0	20	1	1	0
		0.2 %	74.0 %	19.5 %	1.8 %	2.9 %	0.2 %	0.0 %	1.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %

1

RESOLUTION

By Reich

Authorizing a functional classification change for Lowry Ave between W Broadway Ave and St. Anthony Blvd.

Whereas, Lowry Ave between W Broadway Ave and St. Anthony Blvd serves as an east/west connection between existing traffic generators, including Shoreham Yards, the Upper Harbor Terminal development, and the growing business and residential area of the Northeast Minneapolis Arts District; and

Whereas, Lowry Ave serves as a multi-modal corridor for pedestrians, bicycles, transit, freight, and vehicles; and

Whereas, Lowry Ave includes one of four east/west bridges over the Mississippi River connecting North and Northeast Minneapolis; and

Whereas, Lowry Ave meets the technical criteria for an A-Minor Arterial including daily vehicle traffic, corridor spacing, and system connections; and

Whereas, changing the corridor designation from a B-Minor Arterial to an A-Minor Arterial allows for federal funding to be pursued for corridor improvements; and

Whereas, surrounding land use is being redeveloped at higher densities requiring more efficient and modern transportation infrastructure; and

Whereas, the Federal Highway Administration (FHWA) has identified Lowry Ave, between 2nd St N and University Ave, as an Intermodal Connector on the National Highway System;

Now, Therefore, Be It Resolved by The City Council of The City of Minneapolis:

That the City of Minneapolis support a request from Hennepin County to the Metropolitan Council to allow a functional classification change for Lowry Ave between W Broadway Ave and St. Anthony Blvd, changing the status of the roadway from a B-Minor Arterial to a A-Minor Arterial.

CITY OF ST. ANTHONY VILLAGE STATE OF MINNESOTA

RESOLUTION 17-057

A RESOLUTION SUPPORTING HENNEPIN COUNTY'S EFFORTS SEEKING APPROVAL FOR A FUNCTIONAL CLASS UPGRADE OF KENZIE TERRACE AND ST. ANTHONY BOULEVARD

- **WHEREAS,** the existing Kenzie Terrace roadway has been identified as in need of future capital improvements by Hennepin County staff; and
- WHEREAS, the roadway segment lacks adequate bicycle and pedestrian accommodations and the City of St. Anthony is experiencing redevelopment adjacent to these roadways; and
- WHEREAS, Hennepin County is seeking a functional class upgrade from Metropolitan Council to A-Minor Arterial status to provide eligibility for Regional Solicitation funding; and
- WHEREAS, this functional classification upgrade would not affect these roadways in terms of operation or access; and
- WHEREAS, at this time, Hennepin County has not allocated any capital funding towards improvements along Kenzie Terrace within its Board Approved 2017-2021 Transportation CIP; and
- **WHEREAS**, Hennepin County will work directly with City of St. Anthony staff in developing preferred concepts once funding has been allocated in the county's capital budget.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of St. Anthony Village that:

 The City supports Hennepin County's efforts in seeking approval for a functional class upgrade of Kenzie Terrace and St. Anthony Boulevard from Metropolitan Council to provide eligibility for Regional Solicitation funding.

Adopted this 22nd day of August, 2017.

ATTEST:

Nicole Miller, City Clerk

Reviewed for administration:

Jerome O. Faust, Mayor

Mark Casey, City Manager

Roadway Name: Vernon Avenue

Roadway CSAH # 158 Roadway County Rd # N/A Roadway MSA # N/A Request Type: Existing

Functional Classification Information:

Existing Roadway

Planned Roadway

Current Classification: N/A Requested Classification: N/A If other:

Request Information:

Change Start Location: TH 62 Change End Location: TH 100 Length of Requested Change (Miles): 2.60 miles Dependent on other Requested Changes: No Road name(s) or ID Number(s) of dependent requests: N/A Involves other jurisdictions (Yes) If "yes" please attach letter(s) of support

Purpose of Change: Please explain rationale for requested Change Vernon Avenue is a critical regional route that directly serves commuter and commercial traffic that also connects two Trunk Highways (TH 62 and TH 100) as illustrated in Attachment 1. Additionally, Vernon Avenue currently serves as a reliever for TH 62 and TH 100 that frequently experience significant congestion as illustrated in MnDOT's Congestion Report Map (Attachment 2).

Vernon Avenue is currently classified as a B-Minor Arterial (Attachment 3). Presently, there are no east/west Primary or A-Minor Arterials in the immediate area. East/west trips are served on Vernon Avenue for commercial and residential purposes including access to the following major roadways:

- TH 62 (Principal Arterial)
- TH 100 (Principal Arterial)
- Tracy Avenue (Major Collector)
- Blake Road (Major Collector)
- Interlachen Boulevard (Major Collector)

The planned land use of the Grandview District Area provides additional support for the need to reclassify this roadway as an A-Minor Arterial. Hennepin County seeks this functional class change to better warrant roadway function and needed to align with the Grandview District Plan. This will also provide Hennepin County with flexibility to improve the existing 90 year old structurally-deficient bridge spanning the CP Rail. The

bridge is currently load-posted, has a Sufficiency Rating of 24.2 and has substandard bridge railings and guard rail (Attachment 4).

Following Section Required for All Principal and Minor Arterial Requests

Criteria: Illustrate how the requested change to a roadway functional classification complies with the following criteria:

<u>Place Connections</u>: Vernon Avenue serves as a critical east/west connection between two Trunk Highways, commercial traffic generators such as Jerry's Foods and Walgreens, and residential areas for the growing southwest metro.

<u>Spacing</u>: The nearest east/west Arterial roadways to Vernon Avenue include the following: North: A-Minor Reliever - CSAH 3 (Excelsior Boulevard) (1.75 miles)

South: Principal Arterial - TH 62 (1.0 miles)

<u>Management:</u> All major intersections along the proposed route are controlled by traffic signals, while all the minor intersections are controlled by side street stop conditions. Existing posted speeds range from 30 and 40 MPH. The proposed route is expected to maintain at least a 30 MPH average speed during peak traffic periods to provide consistent travel times along the corridor.

System Connections & Access Spacing: Vernon Avenue serves as the only continous east/west connection between TH 62 and TH 100 which provide access to TH 169, I-394 and I-494. Additionally, the roadway connects to Gleason Road, Blake Road, Olinger Road, Tracy Avenue, and Interlachen Boulevard, which all serve local residential neighborhoods. Access spacing along Vernon Avenue is consistent with other A-Minor Arterials throughout Hennepin County. Intersection spacing ranges from 300' to 500' along the corridor, with additional driveways for surface parking lots provided at some of the intersections. Hennepin County will continue to work with the City of Edina to modify access along Vernon Avenue when the opportunity arises through redevelopment and capital projects.

<u>Trip Making Services:</u> Vernon Avenue serves short and medium trips during peak periods at consistent speeds. It also functions as a multi-modal corridor with on-street bike lanes that connect to Bredesen Park and Garden Park. Classifiying the route as an A-Minor arterial better defines the current and future function of Vernon Avenue.

<u>Mobility vs. Land Access:</u> The west segment of Vernon Avenue (between TH 62 and 53rd Street) generally serves a mobility function that provides a relatively high level of service with limited access points that are mainly controlled by traffic signals. The east segment of Vernon Avenue (between 53rd Street and TH 100) provides more access, connecting residents to commerical areas. Replacing the structurally-deficient bridge spanning the CP Rail will also allow for improved sidewalk facilities and the implementation of a bicycle facility where there is not currently one.

IF request impacts the A-Minor Arterial Sub-Classification, provide these attributes: (from Table D-4 in TPP, <u>http://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan-(1)/The-Adopted-2040-TPP-(1)/Final-2040-Transportation-Policy-Plan/2040-TPP-Appendix-D-Functional-Class.aspx)</u>

Use:

Location: Trip Length: Problem Addressed:

(Optional) Typical Characteristics: Providing the following to support the request

Intersection Treatments: Major Intersections: Traffic Signal Control Minor Intersections: Minor Street Stop Control Present AADT: (2016) West: 10,400 | Middle: 13,200 | East: 20,400 Estimated Future AADT/Year: (2040) West: 11,500 | Middle: 15,500 | East: 22,600 Source of Estimated AADT/Date: Metropolitan Council / June 2017 Email Correspondence Posted Speed: Between 30 MPH and 40 MPH

------ Required for All Requests -----

MAP: Please attach an 8.5 by 11 map of the requested change. Please include all appropriate labels and highlight the roadway in question.

Contact Information:

Agency/City/County: Hennepin County

Contact Person: Jason Pieper						
Phone: 612-596-0241		Fax: 612-321-3410				
Email: Jason.Pieper@hennepin.u	IS					
Address: 1600 Prairie Drive						
City: Medina State	: MN	Zip: 55340				
Staff Recommendation: Consent Approval: Technical Correction: Staff Recommendation: MnDOT Consent: YES Potential Issues:	Committe	ee Staff ONLY				

Change Tracking:

TAC Planning Record of Decision:	Date:
TAC Record of Decision:	Date:
TAB Record of Decision (PA ONLY):	Date:
Mn/DOT Notification:	Date:

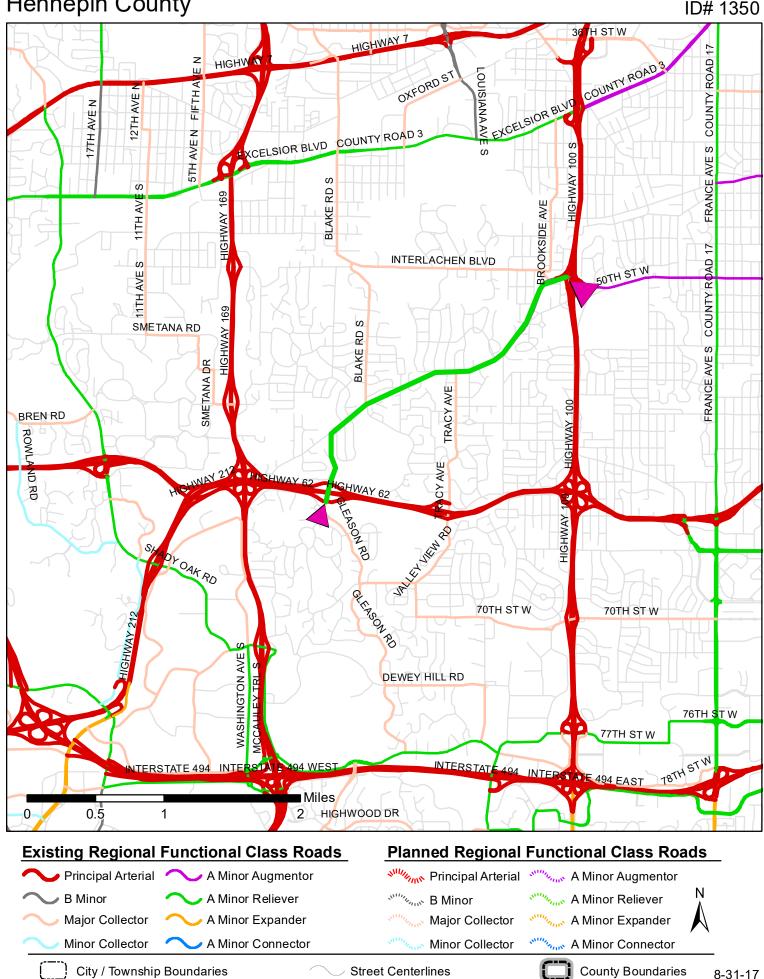
Geography Recorded: ------

Previous Action ID:

Date:

Date:

Functional Class Roads Change Requests Hennepin County

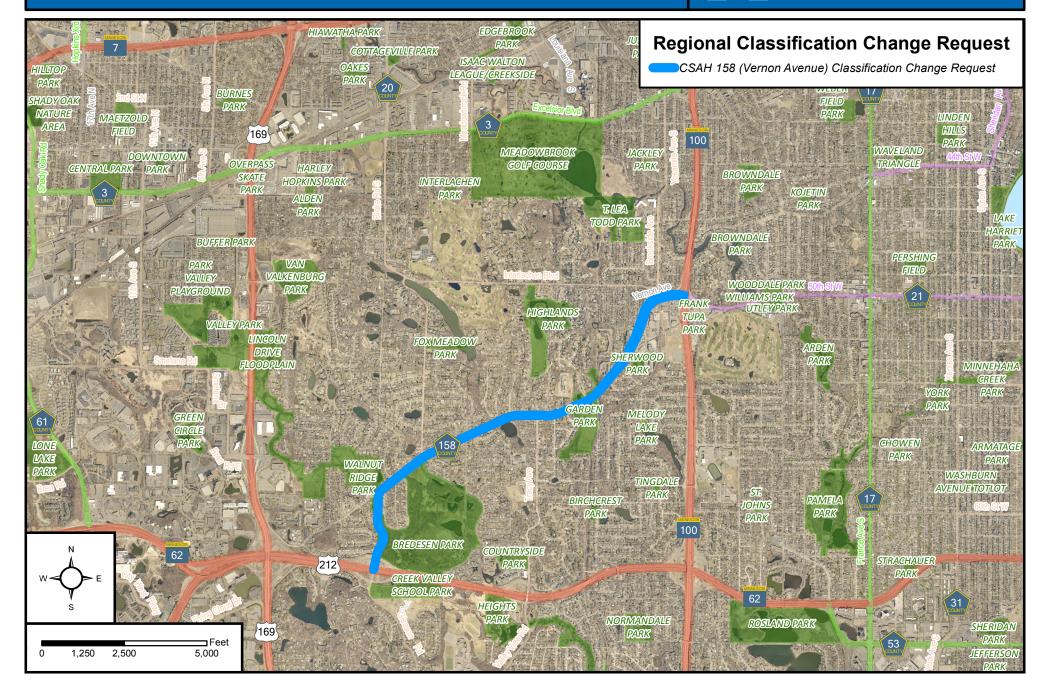


Functional Classification Change Request

Termini Map - CSAH 158 (Vernon Ave) - From TH 62 to TH 100

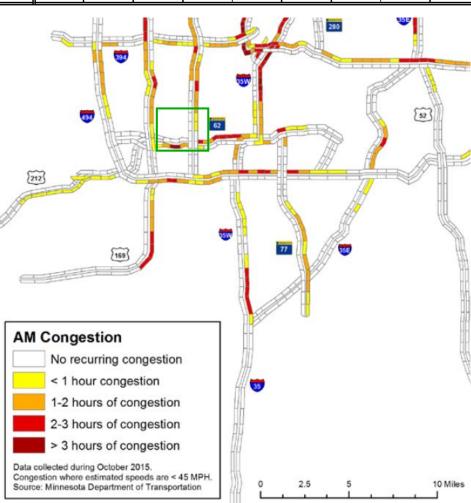


This map has been created for informational purposes only and is not considered a legally recorded map or document. Hennepin County makes no warranty, representation, or guarantee as to the content, accuracy, timeliness, or completeness of any of the information provided herein.



Congested Trunk Highway Miles (AM) 1, 2										
Highway	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TH 5	0	0	0	0	0	0	0	0	0	0.5
TH 10	4.5	4	4.5	2.5	5	4	2.5	2.5	3.5	5
TH 36	7.5	1.5	7	6	7.5	7.5	6.5	6	7.5	7.5
TH 52	2	2.5	2	2	2	2.5	2	2	2	2
US 61	-	-	0	0	0	0	0	0	0	0
TH 62	6.5	10	10	9.5	10.5	9	8.5	8.5	7	7.5
TH 65	0.5	1	0	0	1	1	0.5	0.5	1	1
TH 100	5	9	10.5	10	10.5	7	10.5	8.5	9.5	12.5
US 169	6.5	14	16.5	15	17	16.5	20	16.5	18.5	21
US 212	0	0	5	5.5	5.5	5	5.5	4.5	5	6.5
TH 280	0	3.5	0	0	0	0	0	0.5	0	0
TH 610	0	0	0	0	0	0	0	0.5	0	0
TH 77	6	6	6	4.5	6	5.5	5.5	6	6	6
Subtotal	38.5	51.5	61.5	55	65	58	61.5	56	60	69.5

Congested Truck Highway Miles (AM)

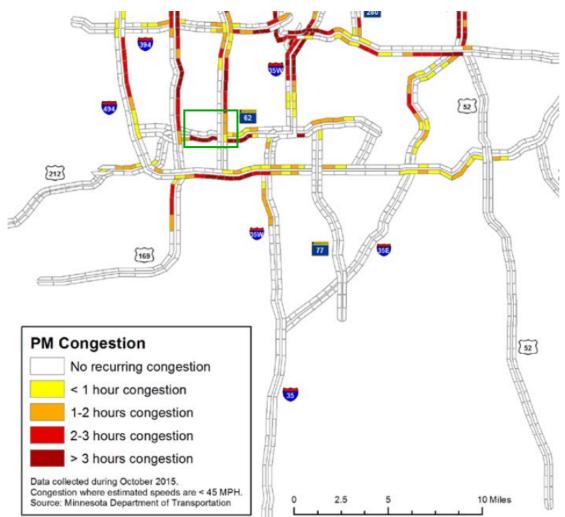


Hennepin County Transportation Project Delivery



Congested Trunk Highway Miles (PM) 1, 2										
Highway	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TH 5	0	0	0	0	0	0	0	0	0	0
TH 10	1	3	1.5	1.5	3.5	4	4	3	3.5	3
TH 36	4.5	4.5	3	3.5	6.5	6.5	4.5	4	2.5	4.5
TH 52	1	1	1	1	0	0	0	0	0	0
US 61	-	-	0	0	0	0	0	0	0	0
TH 62	8	10.5	8.5	9.5	10.5	9.5	10	10	9	9.5
TH 65	1.5	1.5	1	1.5	1.5	1.5	1.5	0.5	0.5	0.5
TH 100	4	12.5	7.5	11	11.5	12.5	11	10.5	11	11.5
US 169	15	16	9.5	10	14.5	17	18	17.5	18.5	20.5
US 212	0	0	1	0	0	0.5	0.5	2	3	3
TH 280	0	3	0	0.5	0.5	0	0	0	2	1.5
TH 610	0	0	0.5	0	0	0	0	0	0	0
TH 77	3	2	0	0	2	2.5	2.5	2	0.5	0.5
Subtotal	38	54	33.5	38.5	50.5	54	52	50	51	55

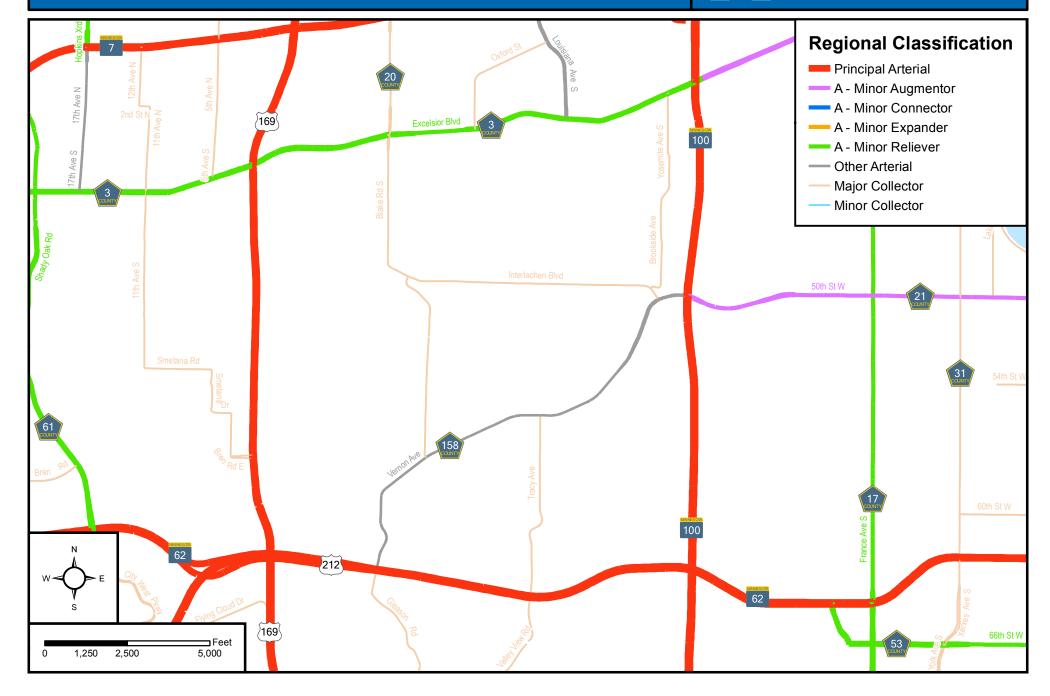
Congested	Truck	Highway	Miles	(PM)
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Functional Classification Change Request

Attachment 01 - CSAH 158 (Vernon Ave) - From TH 62 to TH 100

Hennepin This map has been created for informational purposes only and is not considered a legally recorded map or document. Hennepin County makes no warranty, representation, or guarantee as to the content, accuracy, timeliness, or completeness of any of the information provided herein.





RESOLUTION NO. 2017-79 SUPPORTING HENNEPIN COUNTY'S EFFORTS SEEKING APPROVAL FOR A FUNCTIONAL CLASS UPGRADE OF COUNTY ROAD 158 TO PROVIDE ELIGIBILITY FOR REGIONAL SOLICITATION FUNDING IN 2018

WHEREAS, the existing County Road 158 Bridge over Canadian Pacific Rail is structurally deficient, including weight restrictions, and has reached the end of its useful life. Additionally, the segment of County Road 158 between West 53rd Avenue and Trunk Highway 100 has been identified as a future capital need by Hennepin County staff; and

WHEREAS, the roadway segment lacks adequate bicycle and pedestrian accommodations and the City of Edina has shown interest in modifying the surrounding land use (through the recent Grandview District Transportation Study) which will impact the use of County Road 158; and

WHEREAS, Hennepin County is seeking a functional class upgrade for County Road 158 from Trunk Highway 62 to Trunk Highway 100 from Metropolitan Council from a status of B-Minor Arterial status to A-Minor Arterial status to provide eligibility for Regional Solicitation funding in 2018; and

WHEREAS, this functional classification upgrade would not affect County Road 158 in terms of operation or access; and

WHEREAS, at this time, Hennepin County has not allocated any capital funding towards improvements along County Road 158 within its Board Approved 2017-2021 Transportation CIP; and

WHEREAS, Hennepin County will work directly with City of Edina staff in developing preferred concepts once funding has been allocated in the county's capital budget.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Edina, Minnesota that the City supports Hennepin County's efforts in seeking approval for a functional class upgrade of County Road 158 from the Metropolitan Council to provide eligibility for Regional Solicitation funding in 2018.

Adopted this 15th day of August, 2017.

Attest: Debra A. Mangert, City C

1angen, City Clerk

James B. Hovland, Mayor

STATE OF MINNESOTA) COUNTY OF HENNEPIN) SS CITY OF EDINA)

CERTIFICATE OF CITY CLERK

I, the undersigned duly appointed and acting City Clerk for the City of Edina do hereby certify that the attached and foregoing Resolution was duly adopted by the Edina City Council at its Regular Meeting of August 15, 2017, and as recorded in the Minutes of said Regular Meeting.

WITNESS my hand and seal of said City this 1/10 day of August elia Manz City Clerk

ENGINEERING DEPARTMENT 7450 Metro Boulevard • Edina, Minnesota 55439 www.EdinaMN.gov • 952-826-0371 • Fax 952-826-0392



MnPASS System Study – Phase 3

TAC Planning Committee

September 2017

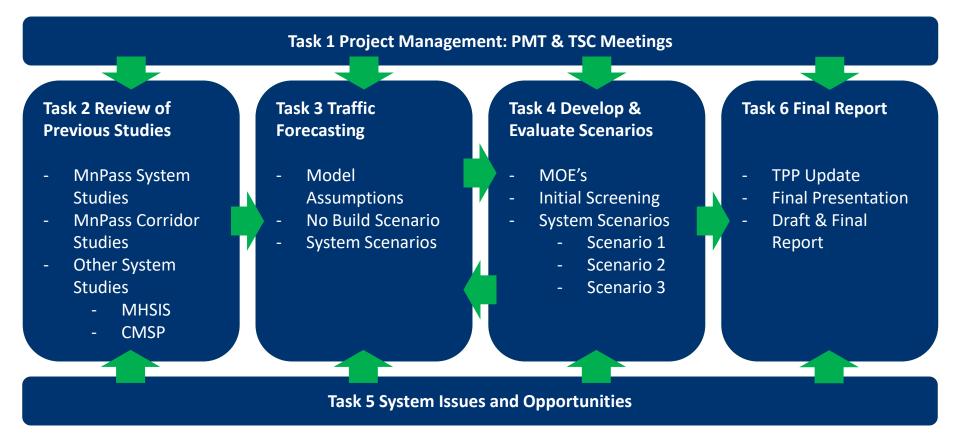


www.dot.state.mn.us/metro/projects/mnpass-study/

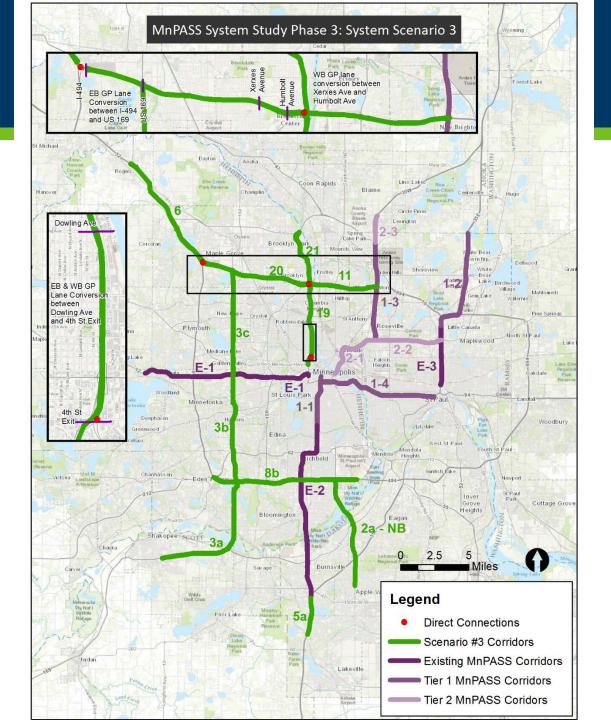
 Update the MnPASS system vision for inclusion in the 2017/18 TPP Update

 Evaluate key MnPASS issues, opportunities, and risks from both a regional needs perspective and a national state-of-the-practice perspective

MnPASS System Study 3 Process



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



9/8/2017

4

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
3a	7,985	1,765	5.8%	\$130	Low
3b	15,492	768	3.8%	\$200	High
Зс	7,788	760	4.2%	\$180	Medium
5a	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

www.dot.state.mn.us/metro/projects/mnpass-study/

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	3a	7,985	\$130	61
8	6	3,846	\$80	48
9	3c	7,788	\$180	43
10	20	3,044	\$110	28
11	11	2,361	\$120	20

1 – Corridor dependent on freeway conversion

Results Summary

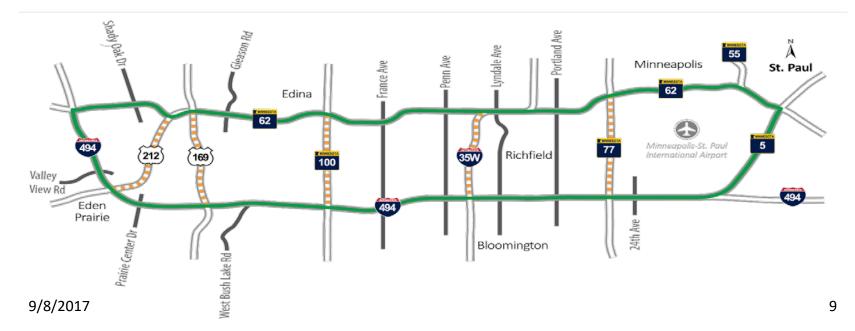
- Scenario 3 has similar benefits to previous scenarios, but a lower cost per mile and total cost
- Corridor 21¹ and corridor 8b are very strong
- Corridor 19 has a large increase in throughput, but fewer hours saved
- Corridor 5a has moderate benefits, but very low cost
- Corridors 2a-NB, 3a, 3b also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

Schedule/Next Steps

- Draft final report available in October
- Council staff drafting TPP update are 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

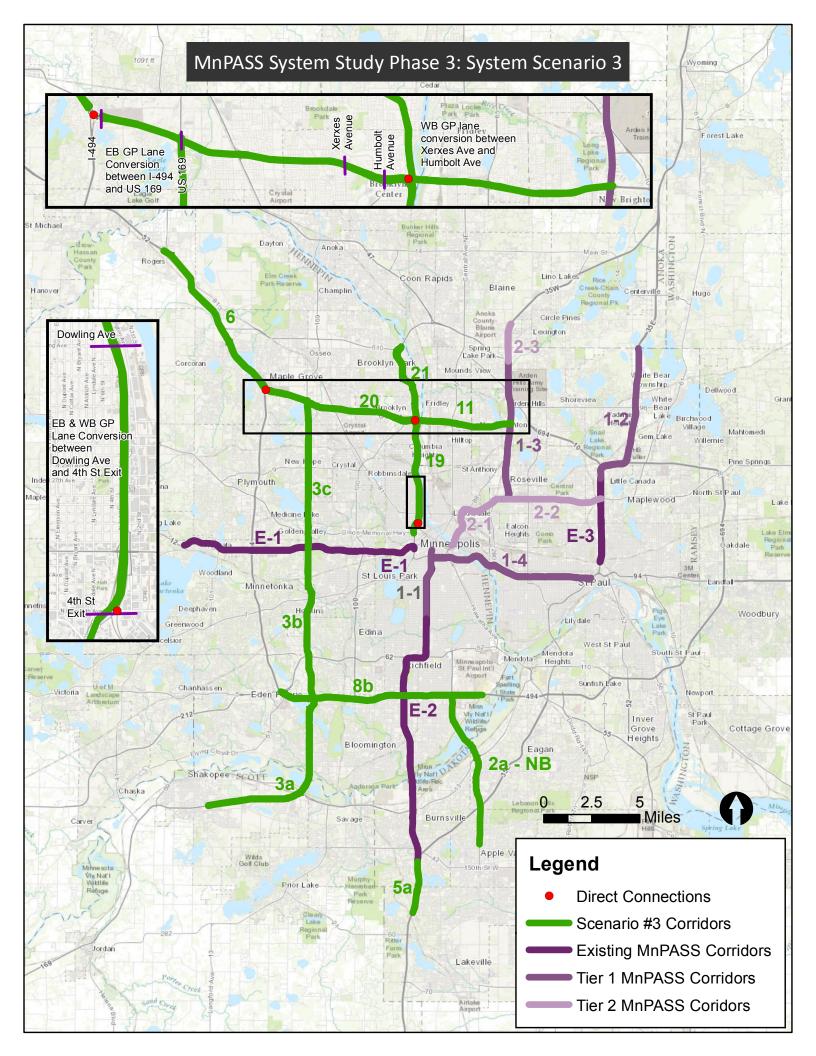
- Study focused primarily on evaluating highway BRT alternatives, MnPASS options and spot mobility improvements on Hwy. 169 between Shakopee and Golden Valley
- Collaborative effort between MnDOT, Met Council and Scott County
- Study completion anticipated Nov./Dec. 2017 the key evaluation findings to 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





Thrive MSP POLICY PLAN

Overview Discussion – Challenges & Opportunities

TAC Planning Sept. 14, 2017

Overview Content - Generally

- Introduction and background about the plan, the Council
- Summary of transportation in the region (TBI data, trends in development)
- Summary of existing transportation system
- Regional Transportation Challenges and Opportunities
- Goals, Objectives and Strategies
- Investing in Transportation
- Performance Outcomes Engagement Summary
- Mandated information, other administrative content

TRANSPORTATION POLICY PLAN

Challenges and Opportunities

- Our highway system is complete, but it is aging and requires reconstruction
 - Most revenue will go to maintaining what we have; we can engage community better
- Technology will continue to influence travel in the region
 - Automated vehicles, other technology
- We need many solutions, working together, to address the region's congestion
- Travel patterns are changing
 - Generational, land-use based
- Transportation affects equity, environmental justice, and the economy

TRANSPORTATION POLICY PLAN

Key Questions

- Is there anything missing?
- Are there particular themes that should be reflected in this section?

TRANSPORTATION POLICY PLAN