

Location Map - Project D1-1 Duluth, St Louis County



Overall Weighted Score: 8.84

Figure 1: Mobility and Reliability Summary

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		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

 $^{^{\}rm I}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

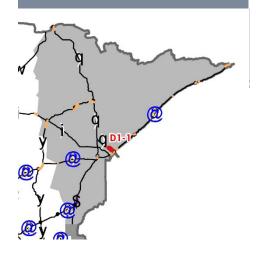
Figure 2: Evaluation Criteria Scores



Location Description:

Divided four lane highway with many accesses. There is one access on a curve. Only the intersections with MN 194 and CSAH 48 have stop signs. There are large shoulders which are utilized as turn lanes to each access.

District Input: None







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-2 Hibbing, St Louis County



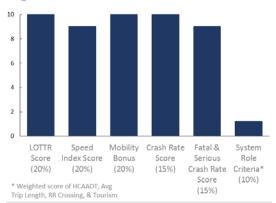
Overall Weighted Score: 8.77

Figure 1: Mobility and Reliability Summary

		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Divided four-lane highway with wide shoulders and many accesses.

District Input: 2018 signal timing project and will add signal back plates. Crash history. Potential additional future opportunity for signal modifications







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-3 Cloquet, Carlton County



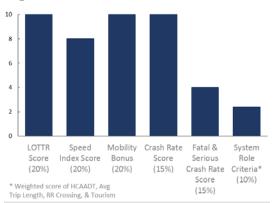
Overall Weighted Score: 7.94

Figure 1: Mobility and Reliability Summary

_	_	· ·	-
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	OK
Weekday	10a-4p	Unreliable	OK
Weekday	4p-8p	Unreliable	OK
Weekend	6a-8p	Unreliable	OK

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores

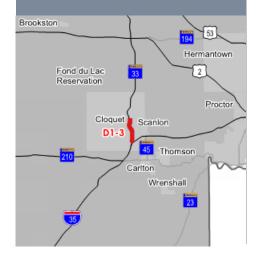


Location Description:

Divided four lane highway with many accesses, accesses on curves, and signalized intersections.

Shoulders are medium when in between access turnoffs

District Input: None







² Segment considered slow if Speed Index is less than 0.9



US 169 From US 23 to CSAH 17

Location Map - Project D1-4 Grand Rapids, Itasca County



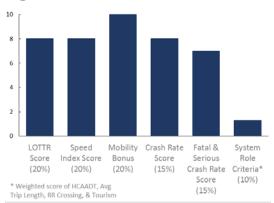
Overall Weighted Score: 7.58

Figure 1: Mobility and Reliability Summary

_	_		
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Reliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Reliable	Slow
Weekend	6a-8p	Reliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Four-lane highway with wide shoulders and many accesses on curves.

District Input: Recently reconstructed (new signals, dual left turn lanes). Need additional study for signal timing, potential roundabouts, reduced conflicts, and access management.

Potential Follow-Up:
Additional study needed







² Segment considered slow if Speed Index is less than 0.9

I-35 From MN 61 to MN 61

Location Map - Project D1-5 Duluth, St Louis County



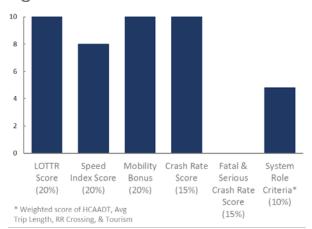
Overall Weighted Score: 7.58

Figure 1: Mobility and Reliability Summary

_	_		-
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Reliable	Slow
Weekend	6a-8p	Reliable	Slow

 $^{^{\}rm I}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores

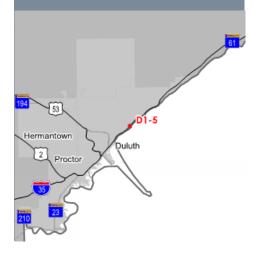


Location Description:

East leg access of signalized intersection of a freeway (end/start of) and an urban highway.

District Input: Issue is actually on I-35/MN 61 from 26th to 40th Avenue. Traffic signal at I-35/26th Avenue queues to I-35. MN 61 reliably slow from 26th to 40th

Potential Follow-Up: Additional Study Needed







² Segment considered slow if Speed Index is less than 0.9

MN 61 From Grand Marais to Grand Marais

Location Map - Project D1-8 Grand Marais, Cook County



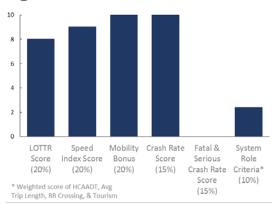
Overall Weighted Score: 7.14

Figure 1: Mobility and Reliability Summary

_	_		-
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores

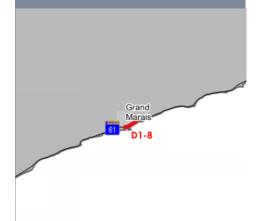


Location Description:

Two lane highway with residential access every block.

District Input: 2019 project will add turn lanes.

Potential Follow-Up: Input for Planned Project







² Segment considered slow if Speed Index is less than 0.9

I-35 from Downtown Duluth to Downtown Duluth

Location Map - Project D1-9 Duluth, St Louis County



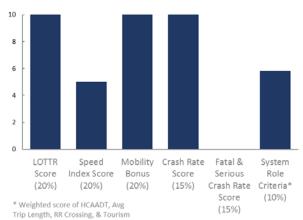
Overall Weighted Score: 7.08

Figure 1: Mobility and Reliability Summary

		Travel Time	Speed
		Reliability ¹	Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

 $^{^{\}rm 1}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Divided four lane freeway with no accesses.

District Input: Complex issues. Not likely a low-cost solution.

Potential Follow-Up: Additional Study Needed







² Segment considered slow if Speed Index is less than 0.9



MN 61 From Two Harbors to Two Harbors

Location Map - Project D1-10 Two Harbors, Lake County



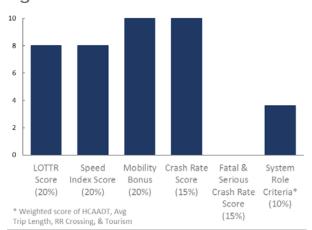
Overall Weighted Score: 7.06

Figure 1: Mobility and Reliability Summary

		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

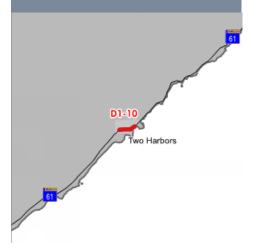
Figure 2: Evaluation Criteria Scores



Location Description:

Iwo lane highway through city. Has a center turn lane and no shoulder. Many accesses including signalized accesses and accesses on turns.

District Input: Upcoming project to interconnect signals and add turn lanes. A comprehensive long-term solution is still needed.







² Segment considered slow if Speed Index is less than 0.9



US 2 From US 169 to US 169

Location Map - Project D1-11 Grand Rapids, Itasca County



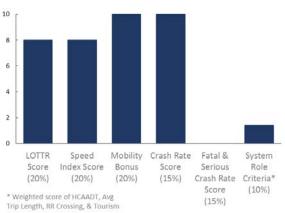
Overall Weighted Score: 6.84

Figure 1: Mobility and Reliability Summary

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		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores

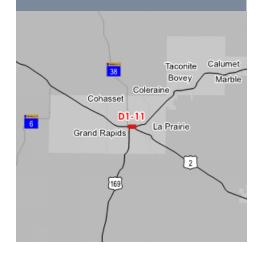


Location Description:

Four lane urban roadway with center turn lane. Train crossing within one block south of west TH 169 signalized intersection. East TH 169 intersection also signalized.

District Input: None

Potential Follow-Up: Additional study needed







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-12 McGregor, Aitkin County



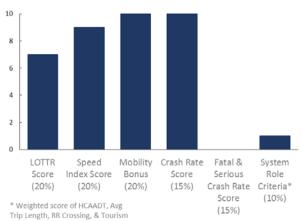
Overall Weighted Score: 6.8

Figure 1: Mobility and Reliability Summary

_	_		
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Reliable	Slow

 $^{^{\}rm 1}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

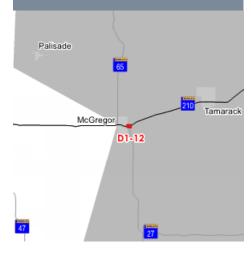
Figure 2: Evaluation Criteria Scores



Location Description:

Signalized intersection on a two-lane highway with right turn lanes instead of shoulders.

District Input: Problem is located at all-way stop.







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-13 Virginia, St Louis County



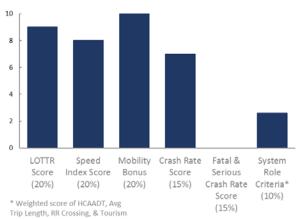
Overall Weighted Score: 6.71

Figure 1: Mobility and Reliability Summary

_	_			
		Travel Time Reliability ¹	Speed Index ²	
Weekday	6a-10a	Unreliable	Slow	
Weekday	10a-4p	Unreliable	Slow	
Weekday	4p-8p	Unreliable	Slow	
Weekend	6a-8p	Reliable	Slow	

 $^{^{\}rm I}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

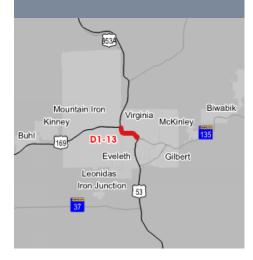
Figure 2: Evaluation Criteria Scores



Location Description:

Divided four lane highway. Two signalized accesses on the west curve. Wide shoulders.

District Input: Review data next year to see if recent improvements addressed issues.







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-14 Duluth, St Louis County



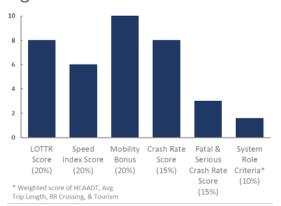
Overall Weighted Score: 6.61

Figure 1: Mobility and Reliability Summary

_	_			
		Travel Time Reliability ¹	Speed Index ²	
Weekday	6a-10a	Reliable	OK	
Weekday	10a-4p	Unreliable	Slow	
Weekday	4p-8p	Reliable	Slow	
Weekend	6a-8p	Reliable	Slow	

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Divided four lane highway with wide shoulders. Severa accesses on turns and signalized accesses.

District Input: 2024 reconstruction planned.

Potential Follow-Up: Input for planned project







² Segment considered slow if Speed Index is less than 0.9





Location Map - Project D1-15 Duluth, St Louis County



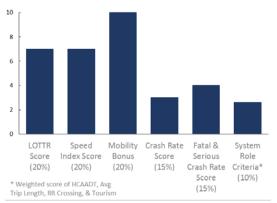
Overall Weighted Score: 6.11

Figure 1: Mobility and Reliability Summary

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		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Reliable	Slow
Weekend	6a-8p	Reliable	Slow

 $^{^{\}rm 1}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Four lane divided highway with many accesses and wide shoulders

District Input: Review data next year to see if recent improvements addressed issues.







² Segment considered slow if Speed Index is less than 0.9



US 169 From US 53 to CSAH 102

Location Map - Project D1-18 Virginia, St Louis County



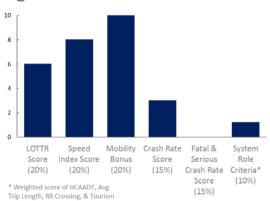
Overall Weighted Score: 5.37

Figure 1: Mobility and Reliability Summary

		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Unreliable	Slow
Weekday	10a-4p	Unreliable	Slow
Weekday	4p-8p	Unreliable	Slow
Weekend	6a-8p	Unreliable	Slow

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Divided four-lane highway with two signalized intersections and one unsignalized intersection. The entry ramps to US 53 are signalized, but the entry ramps to CSAH 102 are not. There are large shoulders.

District Input: None.







² Segment considered slow if Speed Index is less than 0.9



Location Map - Project D1-20 Duluth, St Louis County



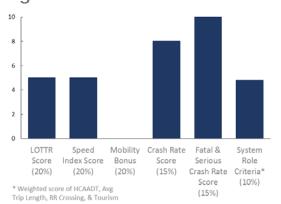
Overall Weighted Score: 5.18

Figure 1: Mobility and Reliability Summary

		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Reliable	OK
Weekday	10a-4p	Reliable	OK
Weekday	4p-8p	Reliable	OK
Weekend	6a-8p	Reliable	OK

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Two lane highway with many residential accesses and a wide shoulder.

District Input: None







² Segment considered slow if Speed Index is less than 0.9



US 169 From CSAH 67 to CSAH 67

Location Map - Project D1-21 Grand Rapids, Itasca County



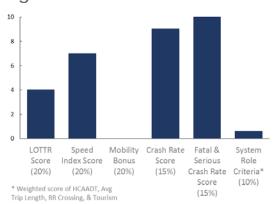
Overall Weighted Score: 5.11

Figure 1: Mobility and Reliability Summary

	_	_	
		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Reliable	OK
Weekday	10a-4p	Reliable	OK
Weekday	4p-8p	Reliable	OK
Weekend	6a-8p	Reliable	OK

¹ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

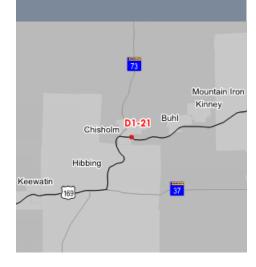
Figure 2: Evaluation Criteria Scores



Location Description:

Intersection of two two-lane highways. US 169 has designated left and right turn lanes. CSAH 67 has a stop sign control

District Input: None







² Segment considered slow if Speed Index is less than 0.9





Location Map - Project D1-22 Duluth, St Louis County



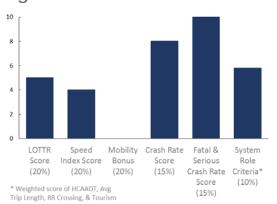
Overall Weighted Score: 5.08

Figure 1: Mobility and Reliability Summary

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		Travel Time Reliability ¹	Speed Index ²
Weekday	6a-10a	Reliable	OK
Weekday	10a-4p	Reliable	OK
Weekday	4p-8p	Reliable	OK
Weekend	6a-8p	Reliable	OK

 $^{^{\}rm 1}$ Segment considered unreliable if Level of Travel Time Reliability index is greater than 1.5

Figure 2: Evaluation Criteria Scores



Location Description:

Signalized intersection of two four lane divided highways. Three legs use one lane as a left turn lane. Accesses begin within one block of three legs of the intersection.

District Input: None







² Segment considered slow if Speed Index is less than 0.9