

# I-35W Reconstruction South Minneapolis

I-35W Solutions Alliance January 14, 2016

We all have a stake in  $A \oplus B$ 

















### **Project Goals**

- ▶ Enhanced Transit Service on I-35W
- Improved access to Lake Street Business District
- Improved Accessibility for Pedestrians and Bicycles
- ▶ Upgrade roadway infrastructure on I-35W



















#### **Project Schedule**

- ▶ 30% Plan November 30, 2015
- ▶ 60% Plan July 12, 2016
- ▶ Plan Submittal December 5, 2016
- ▶ Project Letting June 7, 2017
- Construction Start August 2017
- Construction End Fall 2021



















# Traffic Control During Construction

- ▶ The proposed management of traffic has not been set as of this point.
- Studying anticipated diversion of trips based upon scenarios for the management of traffic
- Coordination with local partners to refine alternatives and decide course of action.



















#### Alternatives Considered for I-35W

- Maintain 2 General Purpose Lanes and 1 MnPASS lane in each direction
- Maintain 2 General Purpose Lanes and 1 reversible MnPASS lane
- Directional Closures
  - Southbound closed and Northbound open
  - Northbound open and Southbound closed
- Total Closure



















#### Daily VMT and VHT in DTA Model

Table 2: Daily VMT and VHT in DTA Model

Scenario	Vehicle Hours of Travel (VHT)				
	All	>5 minutes of delay	>10 minutes of delay	>15 minutes of delay	Vehicle Miles of Travel (VMT)
No Construction	1,596,785	n/a	n/a	n/a	51,893,323
2 general purpose lanes in each direction and 1 MnPass lane in each direction	1,783,609	1,755,150	1,738,638	1,727,304	51,986,968
2. 2 general purpose lanes in each direction and one reversible MnPass lane	1,789,972	1,761,387	1,744,242	1,733,074	51,947,354
Northbound only open	1,741,055	1,712,789	1,694,409	1,681,021	52,163129
4. Southbound only open	1,921,961	1,900,619	1,888,974	1,882,404	51,057,059
5. Total Closure	2,075,064	2,049,478	2,031,784	2,017,935	51,393,005



















# Difference in Daily VMT and VHT from the "No Construction" Scenario

Table 3: Difference in Daily VMT and VHT from the "No Construction" Scenario

Scenario		Vehicle Miles of			
	All	>5 minutes of delay	>10 minutes of delay		
2 general purpose lanes in each direction each direction	186,824	158,365	141,853	130,519	93,645
2. 2 general purpose lanes in each direction and one reversible MnPass lane	193,187	164,602	147,457	136,289	54,031
3. Northbound only open	144,270	116,004	97,624	84,236	269,806
Southbound only open	325,176	303,834	292,189	285,619	-836,264
5. Total Closure	478,279	452,693	434,999	421,150	-500,318



















### Average Delay

Table 4 summarizes the average delay per vehicle for all the vehicles in the system as well as only those vehicles that utilize I-35W within the construction zone.

Table 4: 35W Average Delay

Scenario	All Vehicles Average Delay (minutes per vehicle)	I-35W Vehicles Average Delay (minutes per vehicle)
No Construction	1.3	3.5
1. 2 general purpose lanes in each direction and 1 MnPass lane in each direction	3.1	32.8
2. 2 general purpose lanes in each direction and one reversible MnPass lane	3.2	34.4
3. Northbound only open	2.4	26.1
4. Southbound only open	4.9	218.3
Total Closure	6.1	98.0



















### **Daily User Costs**

Table 5 compares the daily user costs for each of the construction scenarios. The calculation of user cost delay was described in earlier memos.

Table 5: Daily User Costs by Scenario

Table 5. Daily Oser Costs by Scenario						
	Daily User Costs					
Scenario	All	>5 minutes of delay	>10 minutes of delay	>15 minutes of delay		
2 general purpose lanes in each direction and 1 MnPass lane in each direction	\$3,227,810	\$2,741,430	\$2,459,240	\$2,265,530		
2. 2 general purpose lanes in each direction and one reversible MnPass lane	\$3,321,792	\$2,833,261	\$2,540,245	\$2,349,379		
Northbound only open	\$2,566,203	\$2,083,124	\$1,769,002	\$1,540,195		
Southbound only open	\$5,245,708	\$4,880,963	\$4,681,945	\$4,569,661		
5. Total Closure	\$7,987,522	\$7,550,246	\$7,247,848	\$7,011,162		













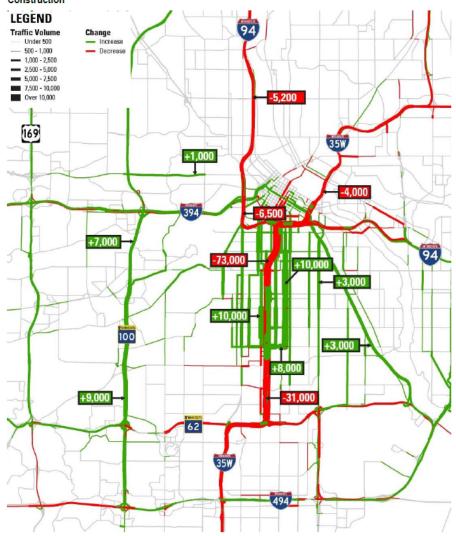






#### 6 Lane Alternative Daily Diversion

Figure 3: 2 General Purpose Lanes, 1 MnPass Lane in each direction, Daily difference from "No Construction"















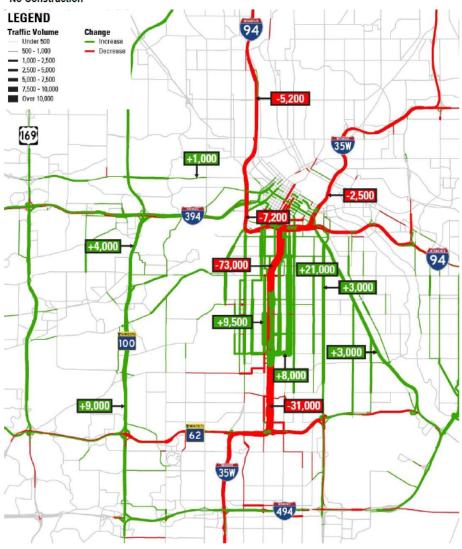






#### 5 Lane Alternative Daily Diversion

Figure 6: 2 General Purpose Lanes, 1 Reversible MnPass Lane in each direction, Daily difference from "No Construction"





















#### Northbound Open Daily Diversion

Figure 9: Northbound only open, Daily difference from "No Construction" LEGEND **Traffic Volume** Change Under 500 Increase **—** 500 - 1,000 - Decrease 1,000 - 2,500 2,500 - 5,000 5,000 - 7,500 7,500 - 10,000 Over 10,000 +2,800 +4,700 -99,000 +4,000 +12,000 494













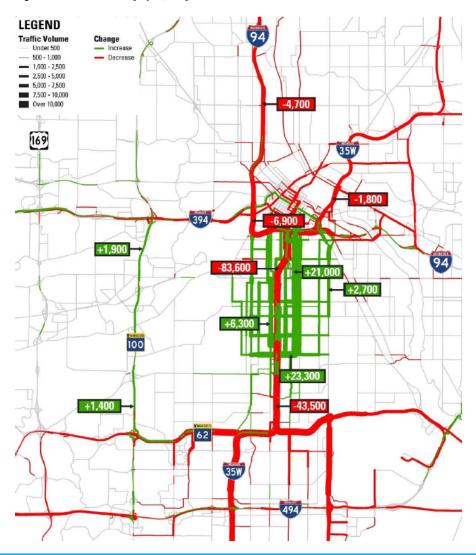






#### Southbound Open Daily Diversion

Figure 12: Southbound only open, Daily difference from "No Construction"















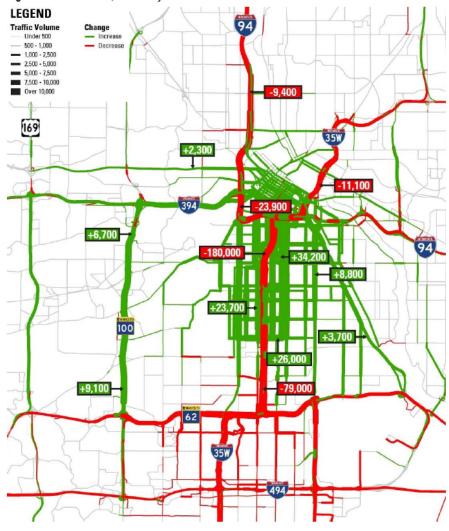






## **Total Closure Daily Diversion**

Figure 15: Total Closure, Total Daily Difference from "No Construction"





















#### Other Considerations

- Look for Opportunities to Manage Diversion
- Look for Opportunities to Reduce Construction Duration
- Local Access to and from I-35W inside of Construction Zone
- Minimize impacts to local streets during construction
- Alternative techniques to manage demand during construction



















#### **Future Work**

- Coordinate with staff from partner agencies
- Begin outreach/engagement efforts with businesses, residents, emergency services, schools, transit, and etc.
- Begin outreach with communities outside of project area that will be affected by project.

















