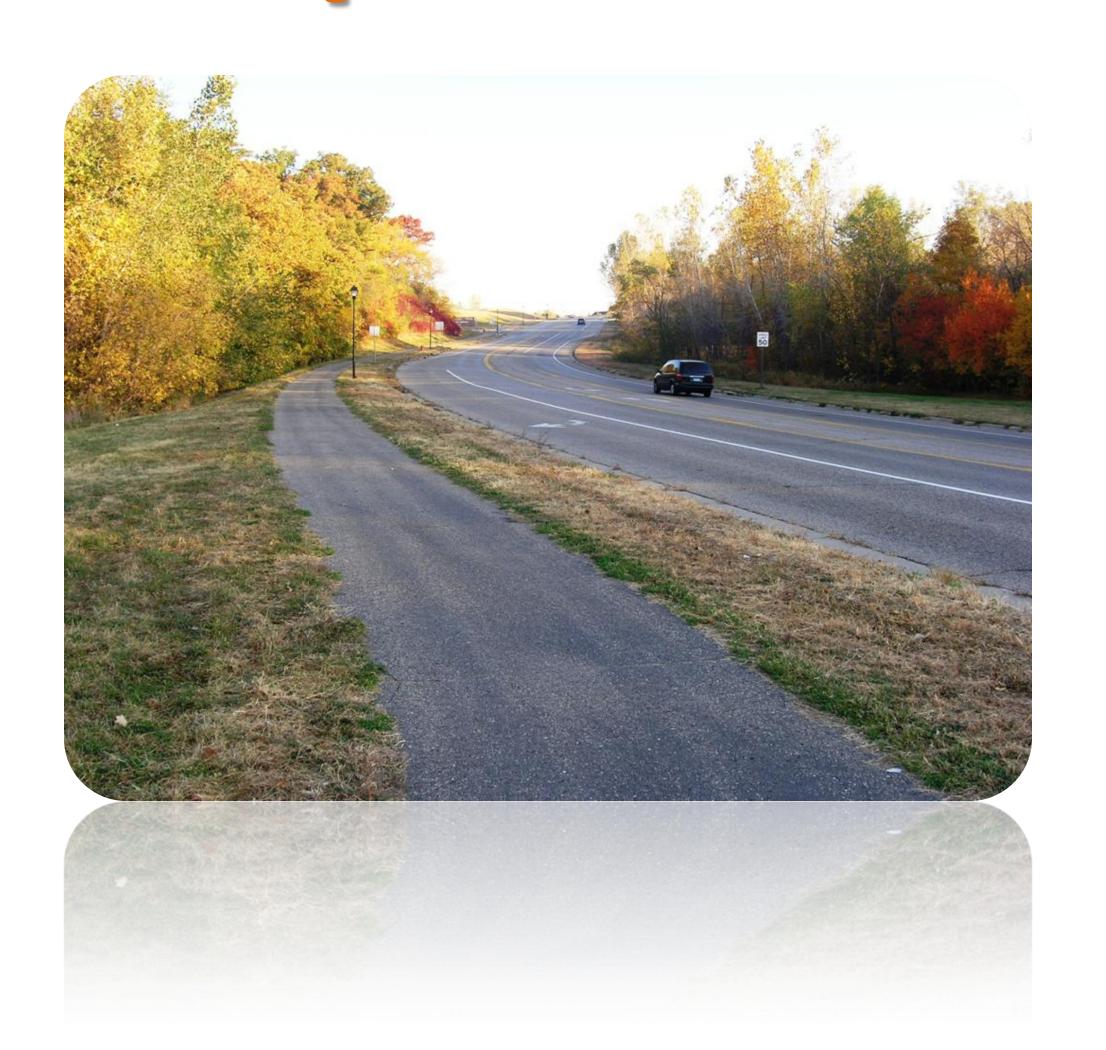
Will the Roundabout Change Operations on Highway 50?



Based on the modeling, the roundabout at Highway 60 has little effect on the current number of gaps and the delays experienced at local roads throughout the corridor.

(See video comparison)

Example Results - Jaguar Avenue

	AM Pe	ak Hour	PM Peak Hour			
	Existing	with Roundabout at CH 60	Existing	with Roundabout at CH 60		
# Vehicles (Volume Demand)	120	120	70	70		
Average Number of Gaps	115	117	75	68		
Number of vehicles that can access Highway 50 with these gaps	320	303	192	135		
Side Street Delay (Level of Service and Average Delay in Seconds)	LOS C (16 sec)	LOS B (14 sec)	LOS C (25 sec)	LOS C (22 sec)		

(See location specific results on individual intersection boards)

SUMMARY

What if there is a signal at 192nd Street?

There are some minor and likely unnoticeable changes in gaps at intersections along the corridor with the installation of a signal at 192nd Street.

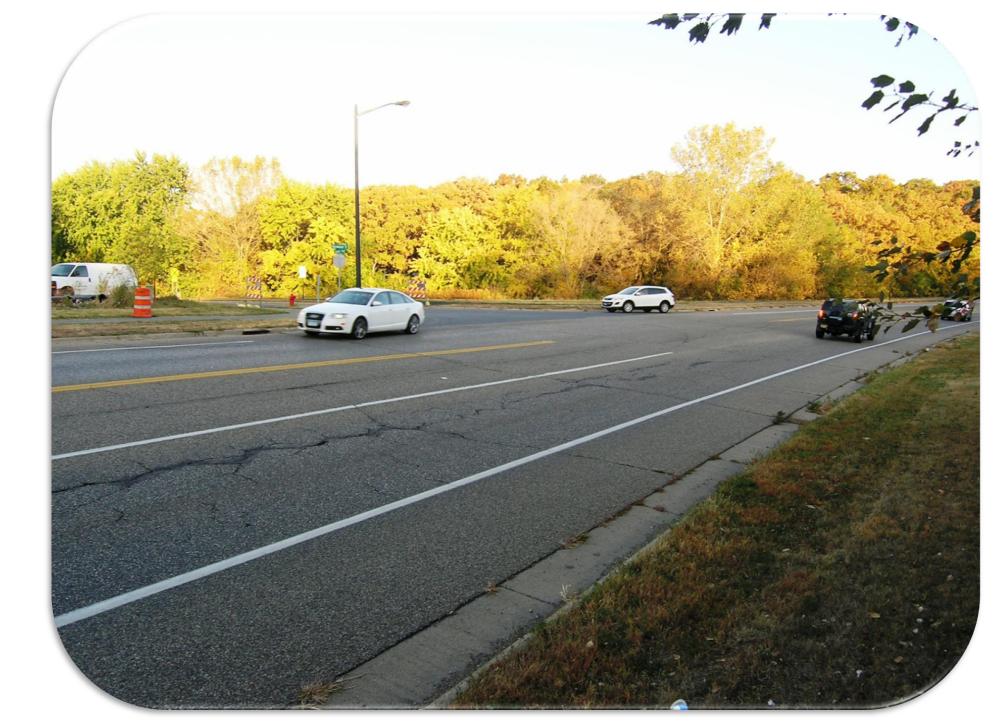
AM Peak Hour					PM Peak Hour			
188 th Street	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd		with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd		
# Vehicles (Volume Demand)	45	45	45	20	20	20		
Average Number of Gaps	83	73	85	59	44	50		
Number of vehicles that can access Highway 50 with these gaps	174	140	199	147	78	99		

	AM Peak Hour			PM Peak Hour		
192 ND Street	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd		with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd
# Vehicles (Volume Demand)	140	140	140	110	110	110
Average Number of Gaps	93	92	Signal	67	59	Signal
Number of vehicles that can access Highway 50 with these gaps	225	199	NA	162	107	NA

	AM Peak Hour			PM Peak Hour			
Jaguar Avenue	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 nd	
# Vehicles (Volume Demand)	120	120	120	70	70	70	
Average Number of Gaps	115	117	116	75	68	77	
Number of vehicles that can access Highway 50 with these gaps	320	303	324	192	135	199	

What will improve gaps along the corridor?

A four-lane roadway will increase the number of gaps at most locations along the corridor.



	AM Peak Hour			PM Peak Hour			
188 th Street	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & 4-Lane	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & 4-Lane	
Average Number of Gaps	83	73	120	59	44	73	
Number of vehicles that can access Highway 50 with these gaps	174	140	270	147	78	136	
	AM Peak Hour			PM Peak Hour			
		AM Peak F	lour		PM Peak H	our	
192 nd Street	Existing	with	with Roundabout at CH 60 & 4-Lane	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & 4-Lane	
192 nd Street Average Number of Gaps	Existing 93	with Roundabout	with Roundabout at CH 60		with Roundabout	with Roundabout at CH 60	

	AM Peak Hour			PM Peak Hour		
Jaguar Avenue	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & 4-Lane	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & 4-Lane
Average Number of Gaps	115	117	146	75	68	92
Number of vehicles that can access Highway 50 with these gaps	320	303	406	192	135	185

SUMMARY

What Can Be Done to Improve the Future Operations of Highway 50?

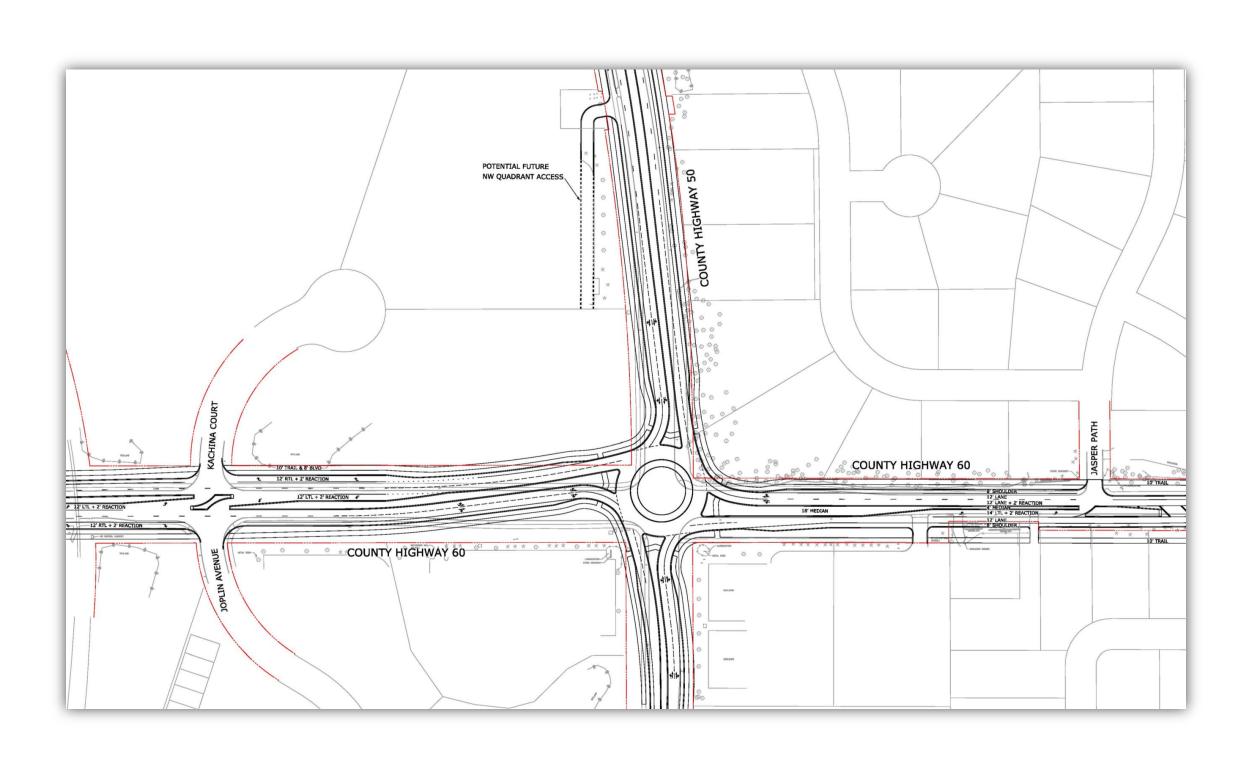
- A four-lane roadway with existing traffic provides more gaps at most locations along the corridor.
- A four-lane divided roadway will better accommodate future volumes of up to 27,000 vehicles a day on the Highway 50 corridor.
- New roadway connections should be implemented to provide access to controlled intersections, especially for Jaguar Avenue.
- A long-term access plan should be adopted for the corridor that minimizes the risk of safety issues while providing for efficient traffic operations.



SUMMARY

What's Next?

Construction of the roundabout at Highway 60 will begin in 2014.





A follow-up Gap Analysis
Study will be performed after
construction of the
roundabout to verify the
results of the modeling.

DAKOTA

Dakota County and City of Lakeville to plan and schedule the reconstruction of Highway 50 to a four-lane roadway including the necessary access changes and roadway connections.

The earliest possible schedule for reconstruction, contingent on City Council and County Board approval for inclusion in their Capital

Improvement Programs, is:

2014 – Design

2015 – Right of Way

2016 – Construction