



**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**Appendix B**

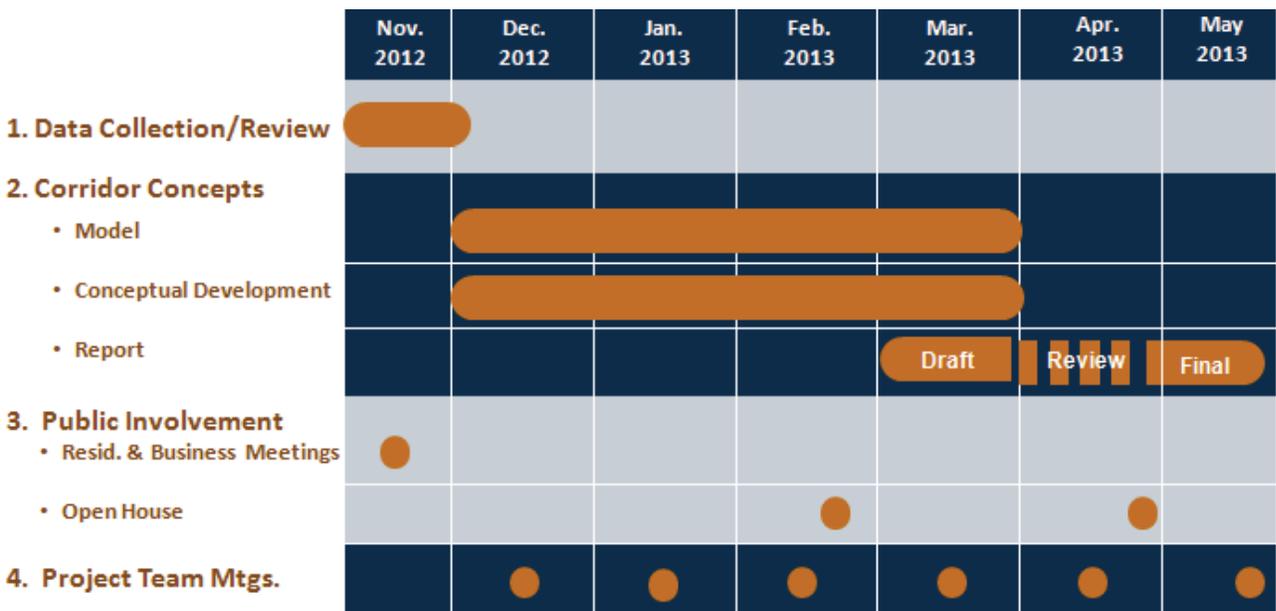
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**Public Involvement Information**

# Study Goals and Objectives

- Determine how Hwy. 50 traffic would operate with a roundabout at 185<sup>th</sup> St., including:
  - If there'd be gaps downstream of roundabout that would allow side street traffic to enter the highway
  - If there'd be delays at the roundabout
- Develop Short-term and Long-term Corridor Improvement Needs including intersection traffic control, access, and local street connections

## Study Schedule



11/14/2012



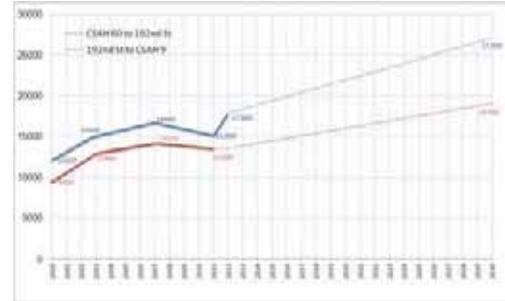
**County Highway 50**  
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# Existing and Future Traffic Operations

## Hwy. 50 Average Daily Traffic Volumes

Location	2011 ADT	2012 ADT	2030 Projection
CSAH 60 to 192 <sup>nd</sup> St	15,000	17,800	27,000
192 <sup>nd</sup> St to CSAH 9	13,500	N/A	19,000



Dakota County Highway Capacity Deficiencies, 2007



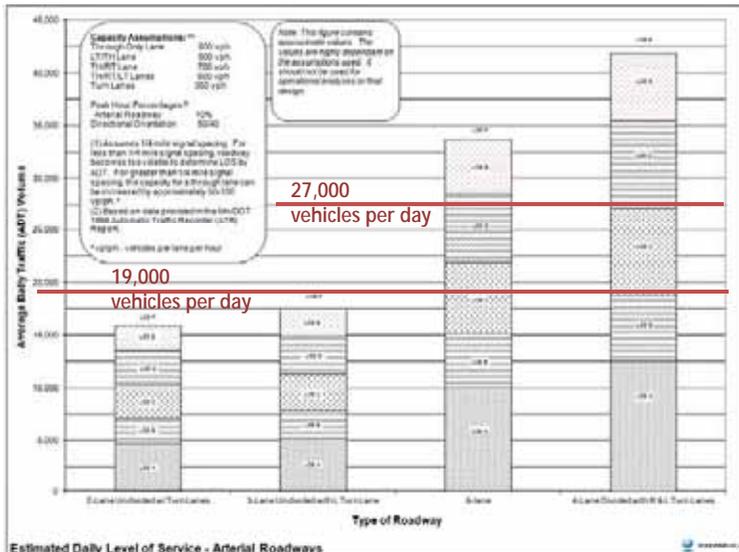
Dakota County 2030 Transportation Plan - Figure 4

Dakota County Highway Capacity Deficiencies, 2030



Dakota County 2030 Transportation Plan - Figure 5

Currently approaching capacity and expected to exceed capacity by 2030.



Need to consider other options along Hwy. 50 to accommodate future traffic volumes.



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# Computer Modeling

## Example of Microscopic Simulation



Microscopic simulation provides:

- Ability to account for individual vehicles entering and exiting the system
- Animation of both existing and future conditions
- Second-by-second reporting allowing for gap analysis at downstream intersections



**County Highway 50**  
Kenwood Trail  
**Corridor Study**



## Please Sign In

Name	Address	Telephone	E-mail Address*
Todd & Roz Wendinger	10045 198 <sup>th</sup> CTW	612-741-2142	rwendinger@charter.net
Nancy Jaasten	9985 199 <sup>th</sup> STW	952-469-4672	nejteach@charter.net
Kathy Shirk	19728 Jagger Ave	952-469-3114	jnkshirk@aol.com
BRETT STUEMPGES	19780 JAVA PATH	612 310 7255	BRETTSTUEMPGES @YAHOO.COM
Doug Anderson	19827 Jersey	952 469 1016	danderson@Martini.com
PATTI McDONALD	20094 KENWOOD TR* 10004 199 <sup>th</sup> ST	(952) 469-3937	tpmcdon7718@aol.com
Pat Steinhagen	19704 Jayma Ave	952-469-4631	Lakehawk56@MSN.com

\*Please provide your e-mail address if you would like to receive regular e-mail updates on the County Highway 50 (Kenwood Trail) Corridor Study.



**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**November 14, 2012 Neighborhood Meeting**  
**4:30-5:30 PM**  
**Lakeville North High School**





## Please Sign In

Name	Address	Telephone	E-mail Address*
Maureen Guio-		952-985-7524	mguion@sasbus.com
Carol Montro		952-469-3191	Carolmontro@aol.com
MIKE COLBERT		952-985-8821	
Ed Nelson		952-232-2047	ed.nelson@isd194.org
DAVID MITCHELL	19624 IRELAND WAY	469-3361	davidrmitchell@tbtmail.com
Roger Gilb	9880 ITERI CT W		gilbo2@nlsn.com
IAN PARANUS	18813 KENWOOD	952-435-0594	reddell75@gmail.com
Susan Mellman	18732 Joplin Ave	952-435-6584	NA
Mark & Amy Eggers	19141 Kenwood Way	952-469-3218	eggers3@frontiernet.net
John Clark	18690 Kenwood trail	952-435-5148	
Tom Hymis	19177 Jewel Path	952-469-2781	
BRANDT HALLBERG	10627-185 <sup>th</sup> ST W.	952-435-9878	-
Dennis Zircal	10639-188 <sup>th</sup> ST.	952-435-2523	

\*Please provide your e-mail address if you would like to receive regular e-mail updates on the County Highway 50 (Kenwood Trail) Corridor Study.



**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**November 15, 2012 Neighborhood Meeting**  
**4:30-5:30 PM**  
**Lakeville North High School**



# Please Sign In

Name	Address	Telephone	E-mail Address*
Kate Eisenthal	Kenwood Trail Middle School	952 232 3810	kate.eisenthal@isd194.org
Wade Dowland	Kwik Trip La Crosse, WI	608-386-1104	wdowland@kwiktrip.com
Chris Petree	City of Lakeville	952-985-2701	cpetree@lakevillemn.gov
Mark Klapp			
JEFF & JANICE FACKLER (LAKEVILLE)	10323 UPPER 196TH WAY W	952-388-1413	fackjeja87@gmail.com
Bob Erickson	18224 Justice Way Lkvl	612-366-1842	ReErickson@wdshea.com
JAMES BLANCHARD	10299 UPPER 196TH		
Kellie Hennickson	19816 Inter. Place		Khennick2@gmail.com
Staff: Howard Preston			
Rikki Farrington			
Stephanie Eiler			
Brian Sorenson Zach Johnson			

6 PM MEETING

\*Please provide your e-mail address if you would like to receive regular e-mail updates on the County Highway 50 (Kenwood Trail) Corridor Study.



**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**November 14, 2012 Neighborhood Meeting**  
**4:30-5:30 PM**  
**Lakeville North High School**



# Study Goals and Objectives

- Determine how Hwy. 50 traffic would operate with a roundabout at 185<sup>th</sup> St., including the influence on gaps downstream of the roundabout that would allow side street traffic to enter the highway
- Develop Short-term and Long-term Corridor Improvement Needs including intersection traffic control, access, and local street connections

## Study Schedule

	Nov. 2012	Dec. 2012	Jan. 2013	Feb. 2013	Mar. 2013	Apr. 2013	May 2013
<b>1. Data Collection/Review</b>	[Orange bar]						
<b>2. Corridor Concepts</b>							
• Model		[Orange bar]					
• Conceptual Development		[Orange bar]					
• Report					[Draft]	[Review]	[Final]
<b>3. Public Involvement</b>							
• Resid. & Business Meetings	[Orange dot]						
• Open House					[Orange dot]		
<b>4. Project Team Mtgs.</b>		[Orange dot]					

03/15/2012



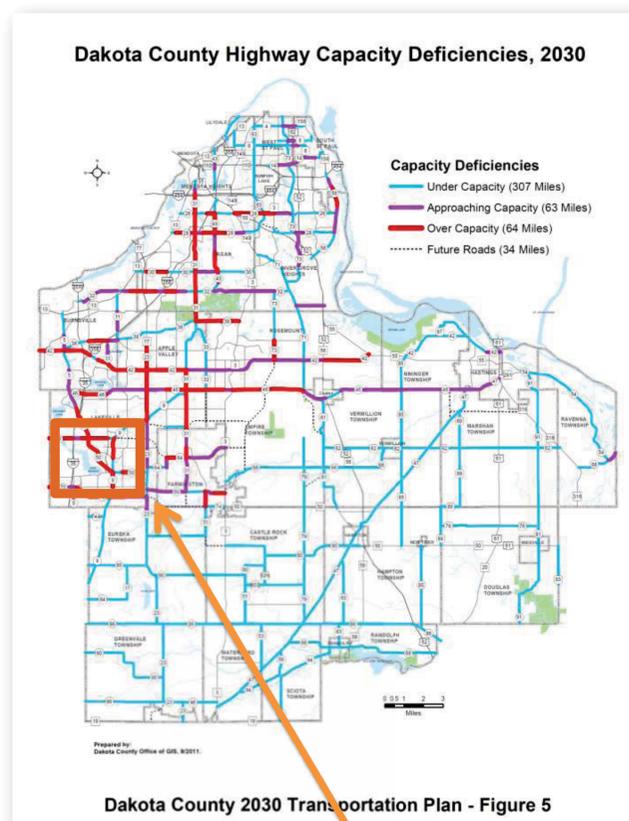
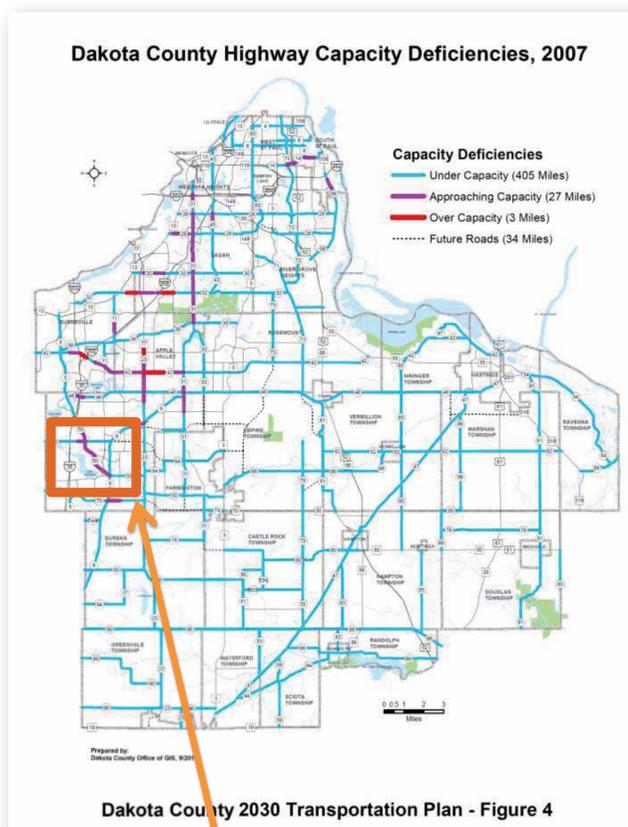
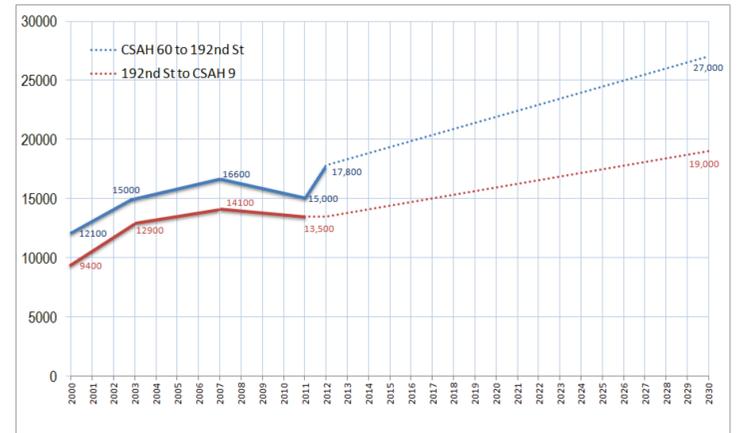
**County Highway 50**  
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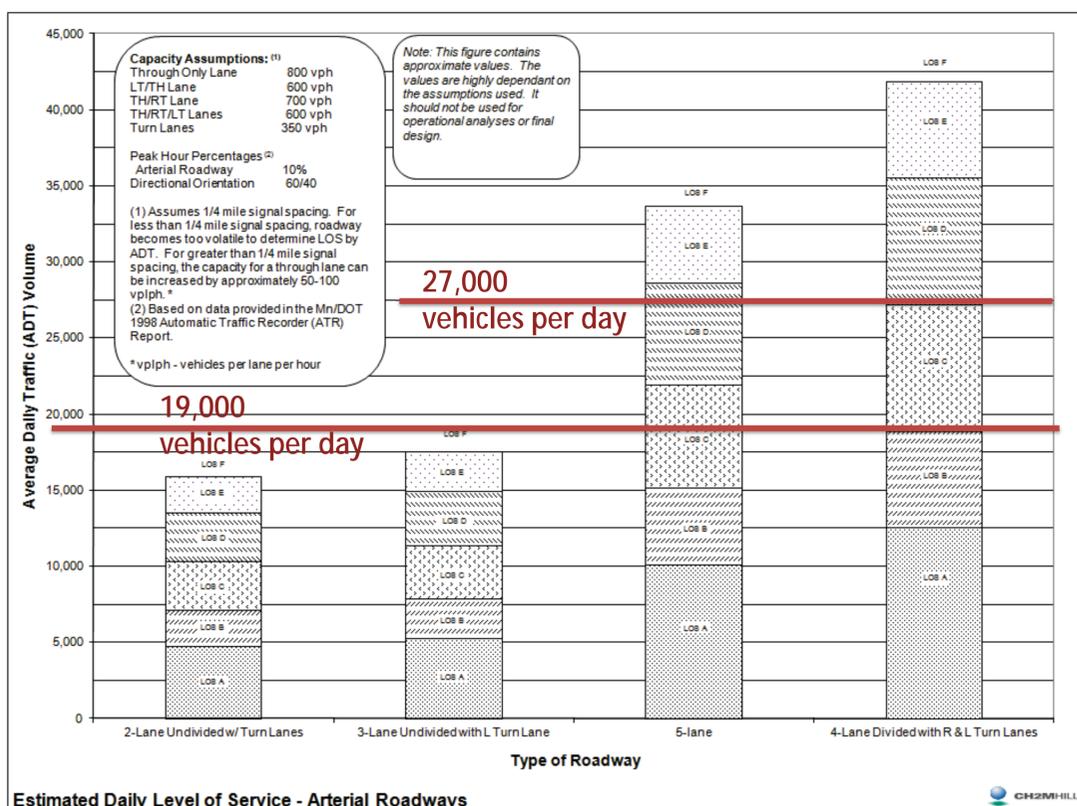
# Existing and Future Traffic Operations

## Hwy. 50 Average Daily Traffic Volumes

Location	2011 ADT	2012 ADT	2030 Projection
CSAH 60 to 192 <sup>nd</sup> St	15,000	17,800	27,000
192 <sup>nd</sup> St to CSAH 9	13,500	N/A	19,000

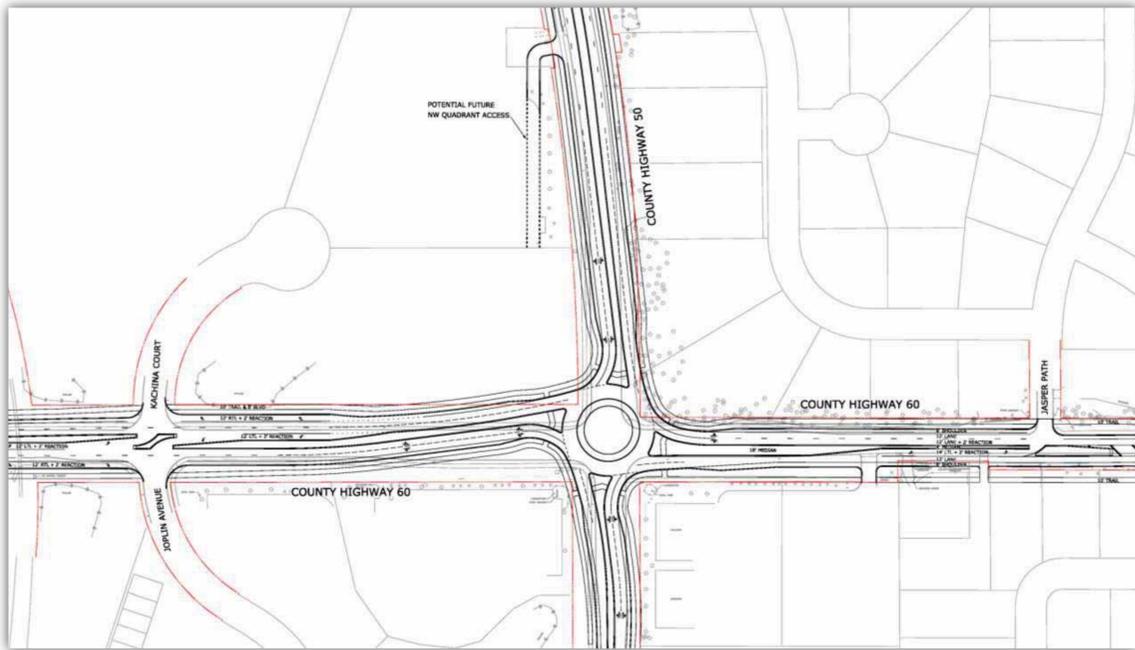


Currently approaching capacity and expected to exceed capacity by 2030.



Need to consider other options along Hwy. 50 to accommodate future traffic volumes.

# Why a Roundabout at Highway 60?



Currently 28,250 vehicles per day use the intersection.

By 2030, over 52,000 vehicles per day will be using the intersection.

The roundabout, opposed to a signalized intersection at Highway 60, is expected to:

- Provide **less delay** at the CH 50/60 intersection than a signal
- Have less severe **crashes**
- Decrease **pedestrian conflicts** with less exposure to traffic and lower vehicle speeds
- **Cost less** than a signalized intersection
- Have less Right of Way impacts to the east and south

Level of Service Comparison		Existing Signal	4-Lane Signal	Multilane Roundabout
AM	Build Year	LOS D	LOS C	LOS A
	Future with Planned Growth*	LOS F	LOS D	LOS C**
PM	Build Year	LOS D	LOC C	LOS A
	Future with Planned Growth*	LOS F	LOS D	LOS B**

\*Population and Employment Projections in Comprehensive Plans

\*\*Roundabout includes planned Free Eastbound Right Turn

Source: CSAH 50/Kenwood Trail and CSAH 60/185<sup>th</sup> Street Intersection Study, July 2011

# What's Been Completed So Far?

- **November**
  - Neighborhood Meetings to discuss the study
- **December**
  - Collected and updated traffic data
- **January**
  - Developed traffic model and alternative corridor scenarios
- **February**
  - Meetings with Business Owners along Highway 50 between Ipava and Icenic
  - City Council Workshop on February 25<sup>th</sup>
- **March**
  - Meeting with Kenwood Trail Middle School officials

# Corridor Crash History

- There were twenty-one crashes on Highway 50 in 2012.
- Based on these crashes the corridor had a crash rate of 1.4 crashes per million vehicle miles. This is below the expected crash rate for similar 3-lane roadways in the metro area that have rates closer to 2.5 crashes per million vehicle miles.
- When five-years of injury and fatal crashes were reviewed (2007-2011), there was one fatal crash and eight injury crashes; most of these crashes were intersection related.
- The fatal crash was a head-on where a vehicle crossed the centerline of Highway 50 between Jaguar Avenue and Ipava Avenue.
- Four out of the eight injury crashes were rear end crashes at intersections; all occurred with southbound vehicles.
- Three of the injury crashes involved vehicles turning left out of 188<sup>th</sup>, 192<sup>nd</sup> and Jaguar Avenue and being hit by a southbound vehicle on Highway 50.

## 2012 CH 50 All Crashes

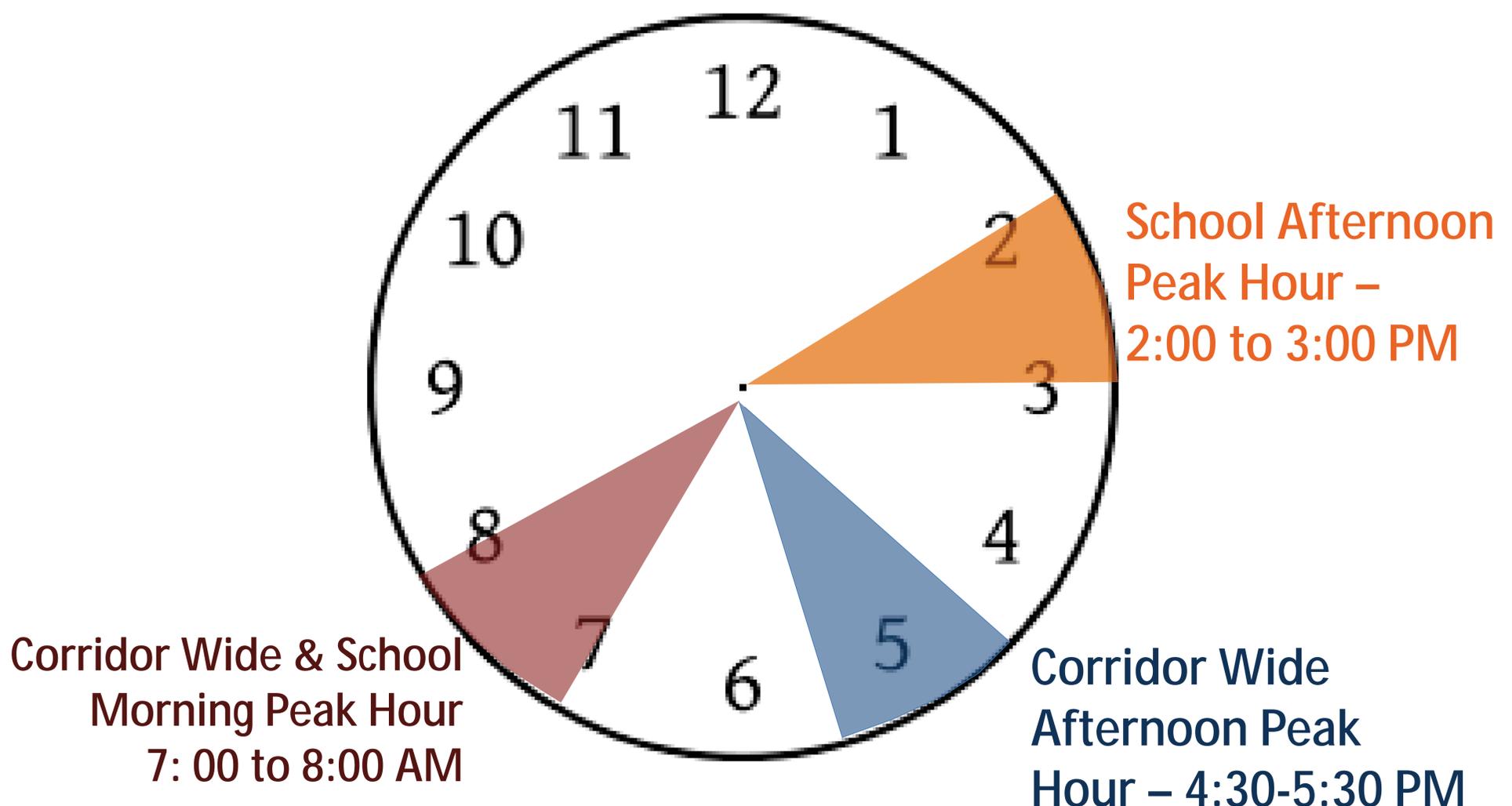
Location	Crashes
CH 60	14 crashes
188 <sup>th</sup> Street	1 crash
192 <sup>nd</sup> Street	None
194 <sup>th</sup> Street	1 crash
Jaguar Ave	2 crashes
Ipava Avenue	3 crashes
Icenic Trail	None
<b>TOTAL</b>	<b>21 crashes</b>

## 2007-2011 Fatal and Injury Crash Summary

Location	Crashes	Crash Types
188 <sup>th</sup> Street	2 crashes	Left turn out, rear end
192 <sup>nd</sup> Street	1 crash	Left turn out
Jaguar Ave	1 crash	Left turn out with bicycle
Ipava Avenue	3 crashes	Two rear end, 1 Right angle
Icenic Trail	1 crashes	Rear End
Non-Intersection	1 crash	Fatal head-on crash

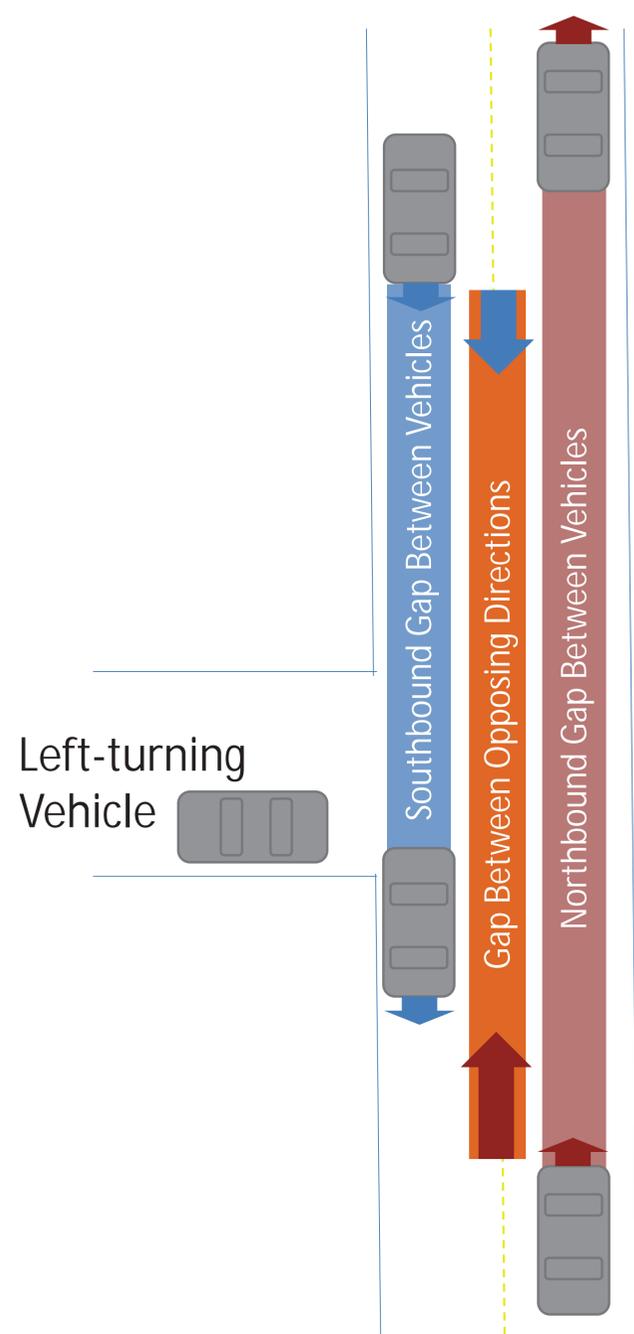
# What Time of Day Was Analyzed?

- The peak hours for the corridor are 7-8 AM and 4:30-5:30 PM based on actual counts collected in early December, 2012.
- The AM peak hour for the corridor includes the peak traffic leaving Kenwood Trail Middle School in the morning. The school's afternoon peak occurs when County 50 traffic is not at it's peak in the afternoon.



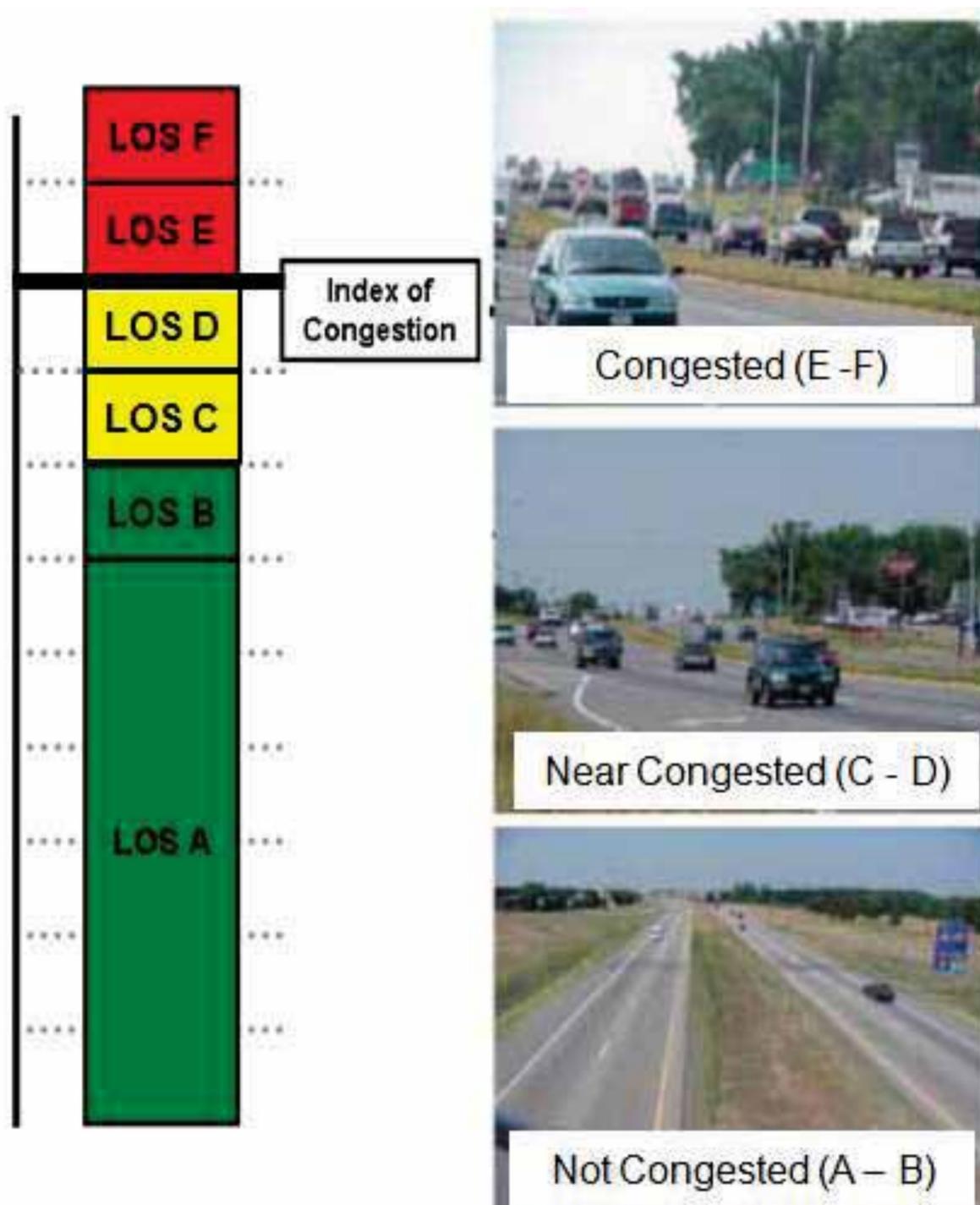
# How Are Gaps Assessed?

- A gap is the amount of time available for a vehicle on a side street to make a left turn onto Highway 50 based on gaps in traffic in both directions that overlap.
- An Acceptable Gap is any gap 8 seconds or more.
- The length of a gap also defines how many vehicles can make a left onto County 50. For example, a 12 second gap allows for 2 vehicles to turn left onto Highway 50.
- The number of vehicles reported that can access Highway 50 is conservative since the minimum acceptable gap works for left-turning vehicles. Vehicles turning right only need a gap in one direction.



# What does Level of Service mean?

- A traditional operational performance measure for roadways is the level of service (LOS).
- A letter, A through F, is assigned to a roadway or intersection based on performance, with A being the best (no congestion) and F being the worst (unacceptable congestion)



# What if we just lower the speed limit?

- Studies have shown that merely changing the speed limit sign is not successful in changing driver behavior and does not result in significant change in vehicle speeds.

- As shown in table to the right, various locations in Minnesota attempted to change operating speeds along a corridor by changing the speed limit signs but each had no impact.

Speed Zoning Studies					
Study Location	Before	After	Sign Change +/- MPH	85% Before After	Change MPH
T.H. 65			-10	34 34	0
T.H. 65			-10	44 45	+1
Anoka CSAH 1			-5	48 50	+2
Anoka CSAH 24			+15	49 50	+1
Anoka CSAH 51			+5	45 46	+1
Hennepin CSAH 4			-10	52 51	-1
Noble Ave			+5	37 40	+3
62nd Ave N			-5	37 37	0
Miss. St			+5	39 40	+1

Source: Mn/DOT UnPublished

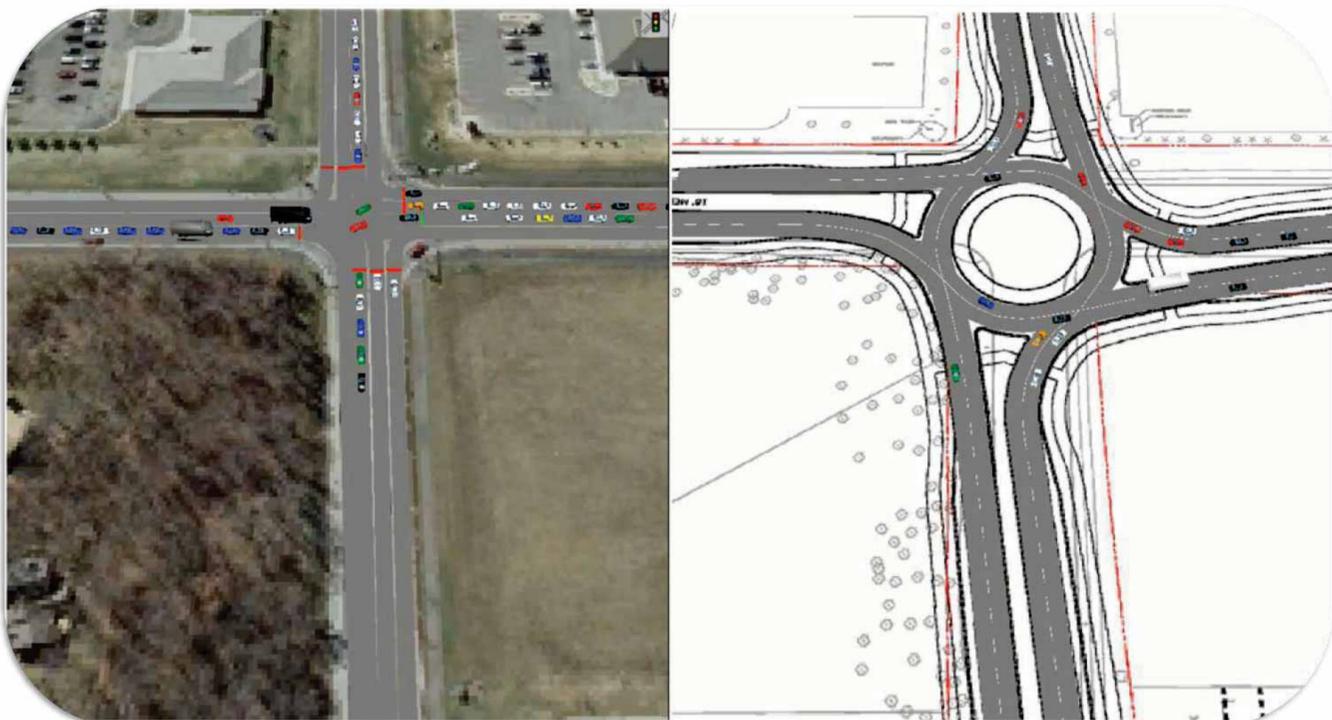
# What affects the gaps along the corridor?

The number and length of gaps on the roadway can be affected by the following:

- **Volume** – the more vehicles, the less gaps available. This changes along a corridor because traffic is random in speed and constantly turning on to and off of the corridor.
- **Lanes** – the more lanes (includes through lanes and turn lanes), the more gaps available.
- **Traffic control device and type** – signals and roundabouts can create gaps, however, the further from the traffic control device, the less effect it has. All-way stops can have a metering effect.
- **Driver behavior** – variability in speed can change the number and duration of gaps.

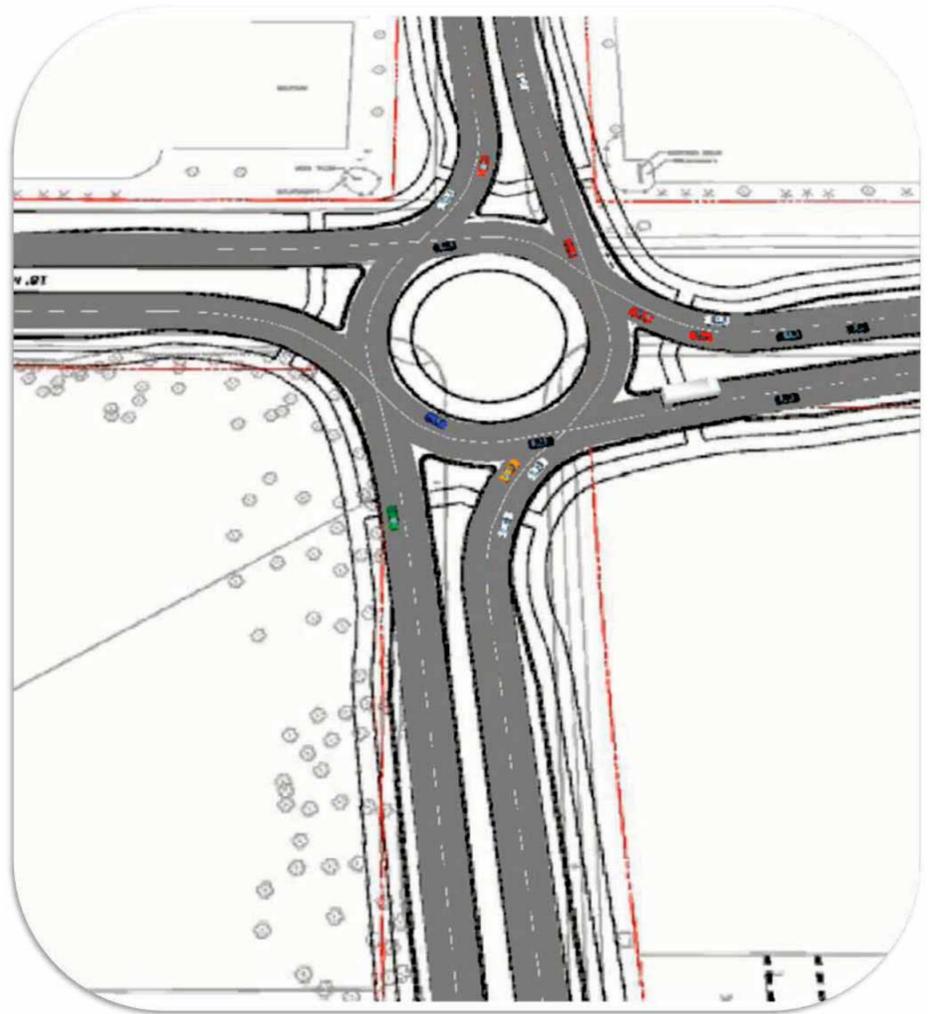
# How does the Model Work?

- The model simulates operations on the roadway by accounting for each individual vehicle.
- Each vehicle is unique and has various driver-behavior characteristics such as how aggressive the driver is, how fast they drive, or how closely the driver will follow the next vehicle.
- Individual vehicles also have unique vehicle characteristics. For example, the model accounts for slower acceleration and deceleration of larger vehicles.
- A model “run” estimates traffic conditions for an hour and records the results of both individual vehicles and the system as a whole.
- The model was run 10 times for each scenario and the average of the results are what is reported.



# What was Modeled?

The following scenarios were modeled using the VISSIM software:



- **Existing Conditions** – this scenario used the existing roadway and current traffic volume. The results were compared with actual video of the corridor to calibrate the model.
- **Existing with an Improved Signal at CH 60** – existing roadway but additional capacity at the signal at Highway 60 and current traffic volumes
- **Existing with Roundabout at CH 60** – existing roadway but with a roundabout at Highway 60 and current traffic volumes
- **Existing with Roundabout at CH 60 & Signal at 192<sup>nd</sup> Street** – this scenario used existing roadway with a roundabout at Highway 60 and a signal at 192<sup>nd</sup> Street and current traffic volumes
- **Existing with Four-Lane & Roundabout at CH 60**– current traffic volumes are used in this scenario with a four-lane divided roadway. This scenario does not include any changes in access except the roundabout at Highway 60.
- **Future** – the future scenario included a four-lane roadway, the roundabout at Highway 60, signals at Jordan Trail/190<sup>th</sup> Street, 192<sup>nd</sup> Street, Ipava Avenue and Dodd Road and other access changes with future traffic volumes.

# What type of access changes are being considered for the future?

## Legend

Potential Traffic Control

 Traffic Signal *(contingent on justification)*

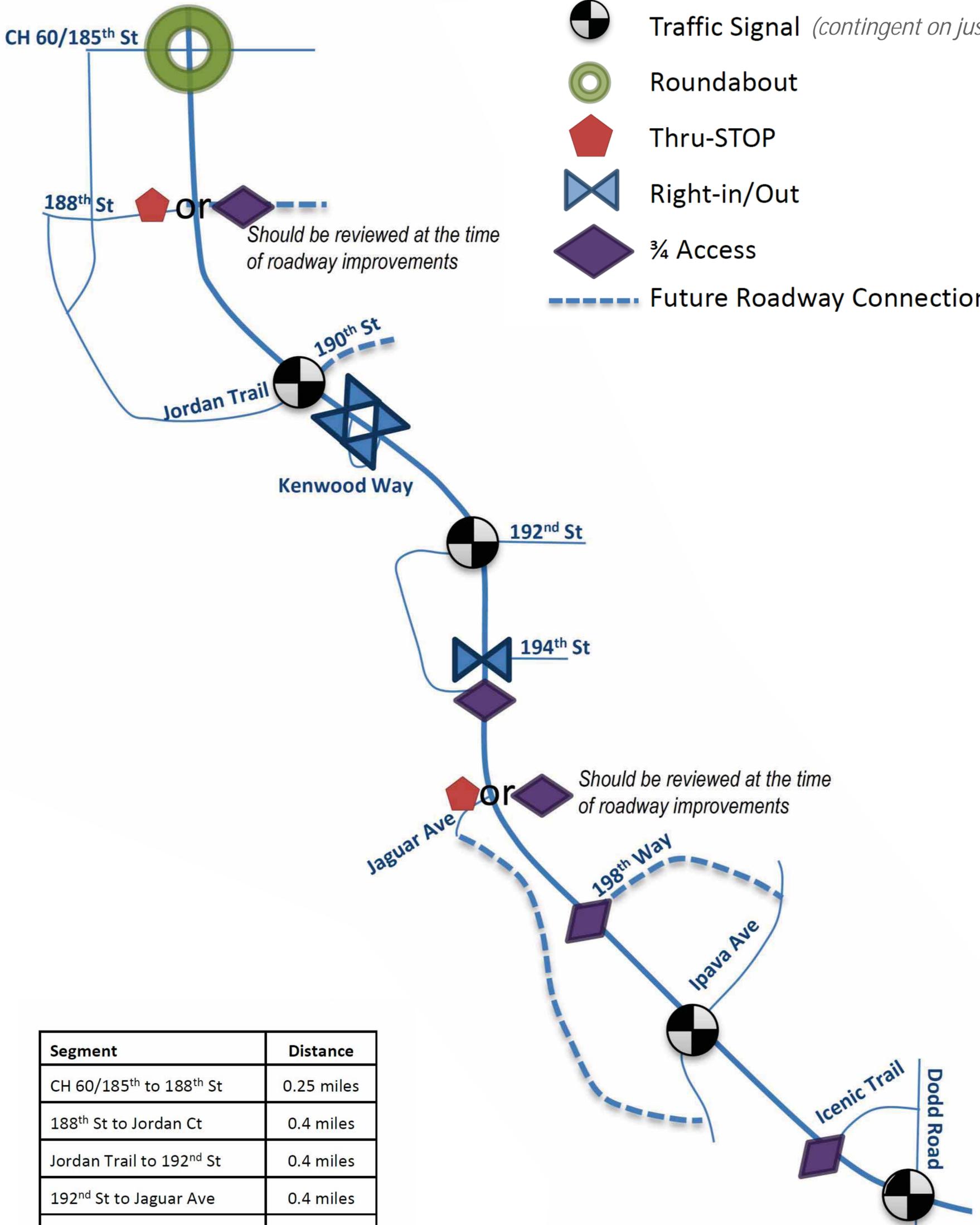
 Roundabout

 Thru-STOP

 Right-in/Out

 3/4 Access

 Future Roadway Connections



Segment	Distance
CH 60/185 <sup>th</sup> to 188 <sup>th</sup> St	0.25 miles
188 <sup>th</sup> St to Jordan Ct	0.4 miles
Jordan Trail to 192 <sup>nd</sup> St	0.4 miles
192 <sup>nd</sup> St to Jaguar Ave	0.4 miles
Jaguar Ave to Ipava Ave	0.5 miles
Ipava Ave to Dodd Rd/CR 9	0.5 miles

# Results of Modeling

## 188<sup>th</sup> Street

AM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future (3/4 Access)
# Vehicles <i>(Volume Demand)</i>	45	45	45	45	45	55
Average Number of Gaps	83	86	73	85	120	53
Number of vehicles that can access Highway 50 with these gaps	174	181	140	199	270	102
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS C (16 sec)	LOS C (15 sec)	LOS C (16 sec)	LOS C (17 sec)	LOS B (12 sec)	LOS B (10 sec)

PM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future (3/4 Access)
# Vehicles <i>(Volume Demand)</i>	20	20	20	20	20	25
Average Number of Gaps	59	70	44	50	73	36
Number of vehicles that can access Highway 50 with these gaps	147	161	78	99	136	63
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS D (29 sec)	LOS B (13 sec)	LOS C (22 sec)	LOS C (24 sec)	LOS C (16 sec)	LOS B (10 sec)



# Results of Modeling

## 192<sup>nd</sup> Street

AM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future
# Vehicles <i>(Volume Demand)</i>	140	140	140	140	140	300
Average Number of Gaps	93	98	92	Signal	98	Signal
Number of vehicles that can access Highway 50 with these gaps	225	242	199	NA	215	NA
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS D (28 sec)	LOS C (24 sec)	LOS D (31 sec)	LOS C (28 sec)	LOS C (18 sec)	LOS B (14 sec)

PM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future
# Vehicles <i>(Volume Demand)</i>	110	110	110	110	110	215
Average Number of Gaps	67	71	59	Signal	62	Signal
Number of vehicles that can access Highway 50 with these gaps	162	173	107	NA	114	NA
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS D (29 sec)	LOS C (24 sec)	LOS D (28 sec)	LOS C (28 sec)	LOS C (22 sec)	LOS B (10 sec)



Why are the delays in the AM peak hour so different between 192<sup>nd</sup> and Jaguar when they have similar volumes? 192<sup>nd</sup> Street is a 4-leg intersection while Jaguar Ave is a T-intersection. So when turning (especially when turning left) at 192<sup>nd</sup> Street from one of the side streets, the vehicles may have to not only wait for an appropriate gap, but yield to an opposing vehicle turning left or going straight. For example, there are 90 southbound vehicles turning left at 192<sup>nd</sup> Street in the peak hour, and vehicles turning left from the school driveway have to yield to these vehicles.

# Results of Modeling

## Jaguar Avenue

AM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future (3/4 Access)*
# Vehicles <i>(Volume Demand)</i>	120	120	120	120	120	75
Average Number of Gaps	115	116	117	116	146	114
Number of vehicles that can access Highway 50 with these gaps	320	311	303	324	406	334
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS C (16 sec)	LOS B (15 sec)	LOS B (14 sec)	LOS C (16 sec)	LOS B (11 sec)	LOS A (7 sec)

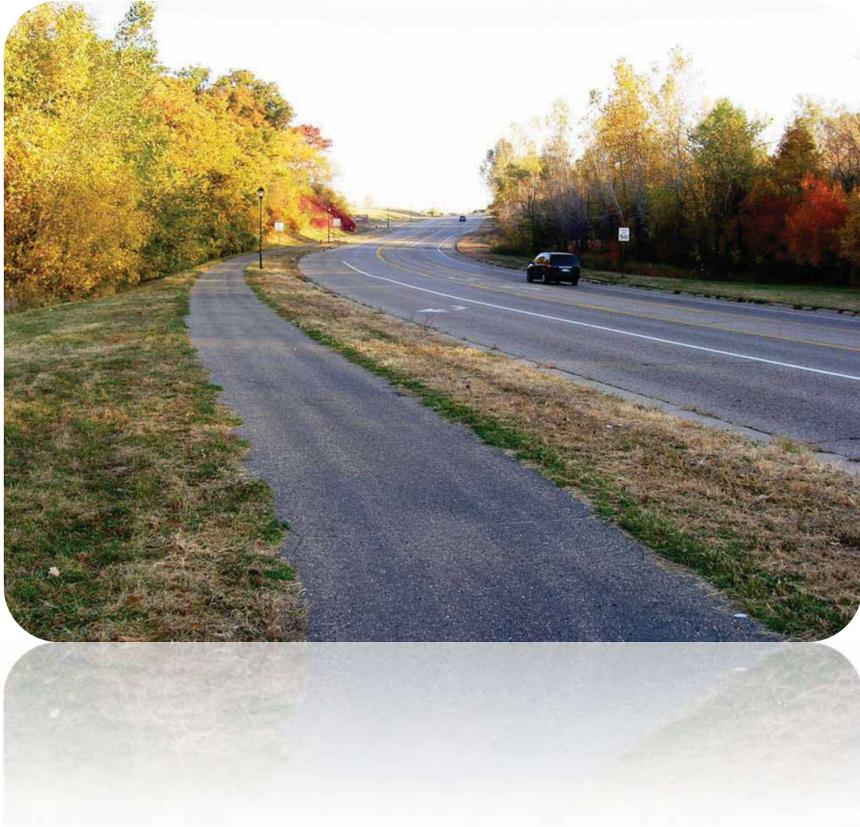
PM Peak	Existing	With Improved Signal at CH 60	With Roundabout at CH 60	With Roundabout at 60 & Signal at 192 <sup>nd</sup> Street	4-Lane Roadway & Roundabout at CH 60	Future (3/4 Access)*
# Vehicles <i>(Volume Demand)</i>	70	70	70	70	70	50
Average Number of Gaps	75	71	68	77	92	89
Number of vehicles that can access Highway 50 with these gaps	192	177	135	199	185	254
Side Street Delay <i>(Level of Service and Average Delay in Seconds)</i>	LOS C (25 sec)	LOS C (25 sec)	LOS C (22 sec)	LOS C (22 sec)	LOS B (14 sec)	LOS A (9 sec)

\*Future Scenario assumes local street connection to Ipava.



Why are the delays at Jaguar generally the same with and without a signal at 192<sup>nd</sup> when the gapping data shows differences? There are two measures associated with gaps. First, how many are there. Second, how many vehicles can be served. While the number of gaps changes as well as the number of vehicles that can be served, the vehicles that can be served is well above the demand volume. In the videos it illustrates that there is a difference in delay for some vehicles. However, some vehicles wait less, others have to wait more. So by the time these differences are averaged over 10 model runs, the intersections operate about the same for the two scenarios.

# 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 Peak 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)*

# What if there is a signal at 192<sup>nd</sup> Street?

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

	AM Peak Hour			PM Peak Hour		
<b>188<sup>th</sup> Street</b>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>
# Vehicles <i>(Volume Demand)</i>	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		
<b>192<sup>ND</sup> Street</b>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>
# Vehicles <i>(Volume Demand)</i>	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		
<b>Jaguar Avenue</b>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>	Existing	with Roundabout at CH 60	with Roundabout at CH 60 & Signal at 192 <sup>nd</sup>
# Vehicles <i>(Volume Demand)</i>	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.



188 <sup>th</sup> Street	AM Peak Hour			PM Peak Hour		
	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

192 <sup>nd</sup> Street	AM Peak Hour			PM Peak Hour		
	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	93	92	96	67	59	63
Number of vehicles that can access Highway 50 with these gaps	225	199	214	162	107	116

Jaguar Avenue	AM Peak Hour			PM Peak Hour		
	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

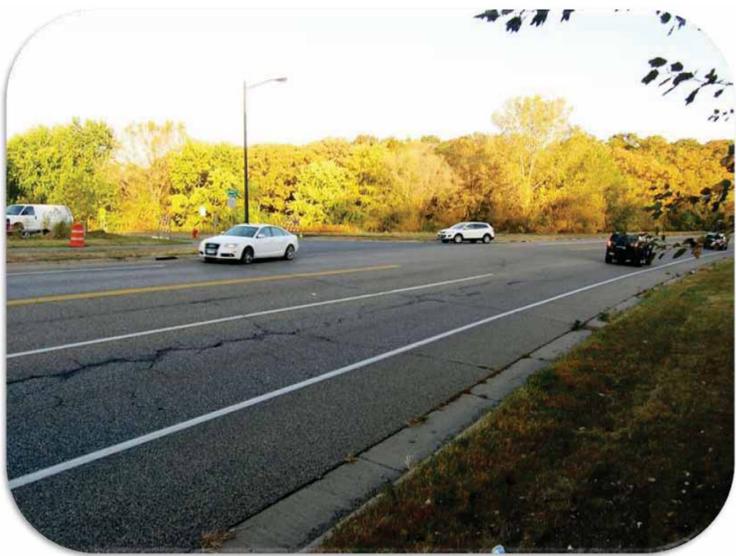
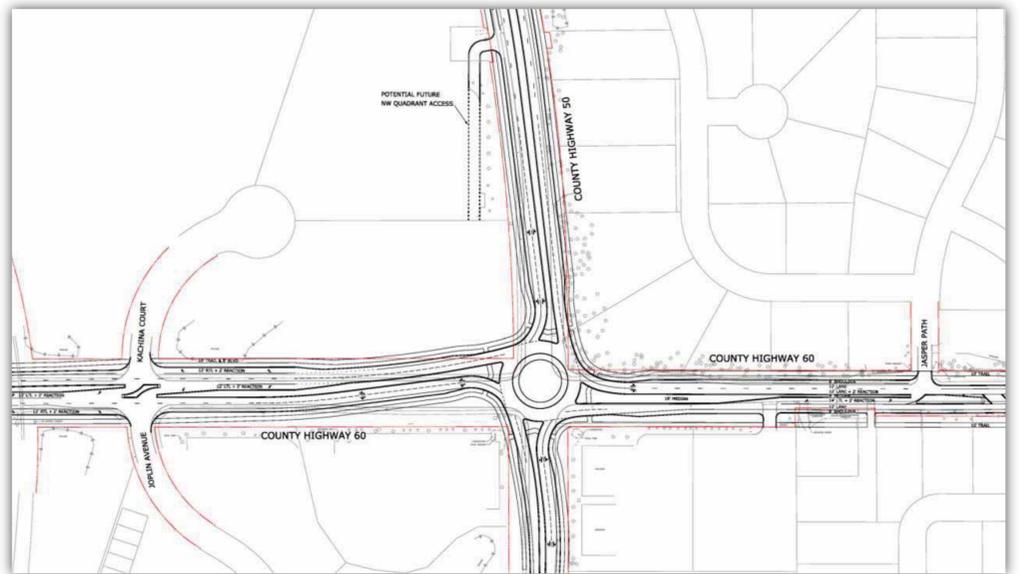
# What Can Be Done to Improve the Future Operations of Highway 50?

- 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.



# 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 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





## County Highway 50 Kenwood Trail Corridor Study

Highway 50 Corridor Study  
Open House  
March 21, 2013

## Agenda

- Project Background
- Corridor Modeling Considerations
- Corridor Modeling Results
- Next Steps



## Study Objectives

- Determine how Hwy. 50 traffic would operate with a roundabout at 185<sup>th</sup> St., including if there'd be gaps downstream of the roundabout that would allow side street traffic to enter the highway
- Develop Short-term and Long-term Corridor Improvement Needs including intersection traffic control, access, and local street connections



## What's Happened So Far?

- **November**
  - Neighborhood Meetings to discuss the study
- **December**
  - Collected and updated traffic data
- **January**
  - Developed traffic model and alternative corridor scenarios
- **February**
  - Meetings with Business Owners along Highway 50 between Ipava and Icenic
  - City Council Workshop on February 25<sup>th</sup>
- **March**
  - Meeting with Kenwood Trail Middle School officials



## Corridor Background

- Current traffic volumes, between 13,000 and 18,000 vehicles per day, are approaching the capacity of the three-lane roadway. If the roadway remains in its current configuration, there will be high levels of congestion in 2030 with volumes between 19,000 and 27,000 vehicle per day.
- The corridor does not experience a higher than expected crash rate and has no unusual crash characteristics when compared to similar three-lane roadways in the metro area.

## Corridor Background

- Traffic turning movement counts were collected in December. Based on these counts the highest volume of traffic on the corridor is between 7 - 8 AM and 4:30 - 5:30 PM.
- The Kenwood Trail Middle School's AM drop-off volume coincides with the corridor's AM peak. The school's afternoon pick-up peak volume is between 2 - 3 PM.



Time Period	Count
Kenwood Middle School AM Drop-off (7:00 AM - 8:00 AM)	11
Corridor WIDE Afternoon Peak (4:30 - 5:30 PM)	10
Kenwood Middle School Afternoon Pick-up (2:00 - 3:00 PM)	9
Other	8
Other	7
Other	6
Other	5
Other	4
Other	3
Other	2
Other	1

## How Does the Model Work?

- The model simulates operations on the roadway by accounting for each individual vehicle.
- Each vehicle is unique and has various driver-behavior characteristics such as how aggressive the driver is, how fast they drive, or how closely the driver will follow the next vehicle.
- Individual vehicles also have unique vehicle characteristics. For example, the model accounts for slower acceleration and deceleration of larger vehicles.
- A model "run" estimates traffic conditions for an hour and records the results of both individual vehicles and the system as a whole.
- The model was run 10 times for each scenario and the average of the results are what is reported.



## What Scenarios were Modeled?

- Existing Conditions
- Existing with Roundabout at CH 60
- Existing with Roundabout at CH 60 & Signal at 192<sup>nd</sup> Street
- Existing with Roundabout at CH 60 & 4-lane Roadway
- Existing with Improved Signal at CH 60 & 4-lane Roadway
- Future with Access Changes and new roadway connections

# Please Sign In

Name	Address	Telephone	E-mail Address*
Lynn Tharaldson	20028 Kenwood Trail	952-469-2444	lyndertva@yahoo.com
Maureen Thielen	10254-199th St. West	952-469-1625	
Howard + Mary Schneider	19634 Jersey Ave	952-469-4760	hamptonmeadow@msn.com
Angela + Jeff Vanden Busch	19371 Jersey Ave	952-985-0661	angelavb1@yahoo.com
Robert + Colleen Powell	11774 205th St W	952-469-2789	
Robert + Becky Kopying	8593-202nd St W	612-636-0969	
Eugene Brunette	10375-196 Way West	952-469-4165	
Mike + Jan Judge	19629 Jewett Ave.	952-469-2037	
Bill + Jennifer	10060-199th St W	952-469-1314	
Kathy Shirk	19708 Jaguar Ave	952-469-3111	jinkshirk@aol.com
Oprie Fackler	10323 Upper 196th Way W	952-388-1413	
JEFFREY FACKLER	10323 UPPER 196TH WAY W	952-388-1413	
Kate Eisenthal	Kenwood Trail Middle School	952 232 3810	Kate.eisenthal@isd194.org

\*Please provide your e-mail address if you would like to receive regular e-mail updates on the County Highway 50 (Kenwood Trail) Corridor Study.



**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**March 21, 2012**  
**4:30-7:30 PM**  
**Kenwood Trail Middle School**



# Please Sign In

Name	Address	Telephone	E-mail Address*
JAMES BLANCHARD	10279 UPPER 196TH		
Martha Endema	1988 Jersey Ave.		
Mr. & Mrs. Patrick Musto	19852 Iteri Place		
MARIL SHOQUIST	10262 199TH ST W		
Joanne & John Pahl	19705 Jersey Ave. Lakeville		
Don Wurdit	19733 Jersey Av		
JAN Graft	10245 Upper 196TH WAY W		
Shari Bluhm	10152 Upper 196th Way W		
Amy Eggers	19141 Kenwood Way		
Mark Ziemann	10056 198TH CT W		
Diane Crang	19710 Jersey Ave		
Juli Clemons	19850 Ithaca Circle		
Roger Gilb	9880 I Ter. Ct W		

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**County Highway 50**  
Kenwood Trail  
**Corridor Study**

**March 21, 2012**  
**4:30-7:30 PM**  
**Kenwood Trail Middle School**





# County Highway 50

Kenwood Trail

## Corridor Study

### COMMENTS

We need your input to guide decisions about the future of Highway 50. Please write comments below and/or on reverse side of page.

Leave in the "Comments" box on the table or, if you prefer, you may mail or e-mail your comments to:

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Dakota County Western Service Center  
14955 Galaxie Avenue  
Apple Valley, MN 55124  
[Brian.Sorenson@co.dakota.mn.us](mailto:Brian.Sorenson@co.dakota.mn.us)

Clearly designate 2 approach lanes (Rt & Lt)  
for Jaguar Approach to Highway 50.

**Name** \_\_\_\_\_

**Address** \_\_\_\_\_

**Telephone** \_\_\_\_\_

**E-mail** \_\_\_\_\_



# County Highway 50

Kenwood Trail

## Corridor Study

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2nd outlet for Jaguar

Better Timing from Dodd right to turn left for Jaguar

Name

M. Erickson

Address

19833 Jersey

Telephone

952-469-2317

E-mail



# County Highway 50

Kenwood Trail

## Corridor Study

Need 4 Lanes

If your study is not correct you will be putting entire neighborhoods @ risk!



# County Highway 50

Kenwood Trail  
Corridor Study

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★ Roundabout sounds useful  
and I look forward to it.  
I understand why no light yet at 192nd,  
but I still wish there could be  
one. I live off Jaguar Ave,  
and turning left is often  
hard much of the day and  
even Saturdays.

Name Diara Long  
Address ~~XXXXXXXXXX~~  
Telephone 612 280-1110  
E-mail \_\_\_\_\_



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Very concerned about fatalities on highway 50 @ Jaguar once this roundabout is made

Will need 4 lanes ASAP

OR

some kind of other access from Jaguar to enter highway 50

ASAP!!

not 2016 -

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

E-mail \_\_\_\_\_



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If you please stop lights at Hwy 50, Those cars stopped at a red light in the middle of the steep Hill may have a difficult time getting started on Icy Days to get up the hill.

I think a better spot for the lights is 194<sup>th</sup> Hwy 50 - A lot more traffic is turning, trying to enter Hwy 50 etc.

\* Plus The Kenwood M.S. has A Lot of Traffic Between 5:30 pm + 8pm for Activities during School Year + in Summer for Athletic games + practices

Name

J. Druff

Address

Lakewood MN

Telephone

E-mail



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until 2016 (when we could get 4 lanes)  
could we please lower speed limit on  
50. with hills & curves it is hard to  
get out of Jaquar & in front of  
Kenwood street

Name Shari Bluhm  
Address 10152 Upper 196th way W  
Telephone \_\_\_\_\_  
E-mail sblu290@aol.com



# County Highway 50

Kenwood Trail

## Corridor Study

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As a 10 year resident of the neighborhood at Jaguar + Cty Rd 50, our 1<sup>st</sup> choice is a traffic signal at Jaguar + (not 192<sup>nd</sup>). Our second choice is a 3 way stop at Jaguar. With the speed of

Name Maureen Thieleh  
 Address 10254 - 199<sup>th</sup> St. W., Little  
 Telephone (952) 469-1625  
 E-mail \_\_\_\_\_

the cars going south on 50 + the curve to the road for cars going north on 50 →



# County Highway 50

Kenwood Trail

## Corridor Study

This is a very, very dangerous intersection for the 200 families that only have this one exit out of the neighborhood.

(The Kenwood Trail M.S. traffic is only busy for 15 minutes in the morning + 15 minutes in the afternoon, for 175 days/yr)  
↳ Why put <sup>new</sup> traffic signals 192<sup>nd</sup> + NOT JAGUAR?)

Jaguars



# County Highway 50 Kenwood Trail Corridor Study

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Apple Valley, MN 55124  
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A failure to consider the problem of JAGUAR Avenue.

1) The entire neighborhood exits & enters by Jag + Kenwood Trail

2 Blind corner to right - dangerous speeds - 3 not 3 crashes

3 Roundabout increases blind "busy" from right (3A) 4WAY ROAD means more difficult access!

4. a road out that follows tracks or close by would work

Seems Jaguar has been forgotten

Name Mary Schneider  
Address 19634 Jersey Ave  
Telephone 952-469-4760  
E-mail hamptonmeadowfarm@msn.com



# County Highway 50 Kenwood Trail Corridor Study

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*Will need 4 lanes ASAP*

*OR*

*some kind of other access from Jaguar to enter highway 50*

*ASAP!!*

*not 2016 -*

Name

Address

Telephone

E-mail



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Kenwood Trail

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Name Jeff Duff

Address Lakewood MN

Telephone \_\_\_\_\_

E-mail \_\_\_\_\_



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Kenwood Trail

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until 2016 (when we could get 4 lanes)

could we please lower speed limit on

50. with hills & curves it is hard to

get out of Jaycar & in front of

Kenwood street

Name Shari Blum

Address 10152 Upper 196th way

Telephone \_\_\_\_\_

E-mail sbk290@aol.com



# County Highway 50

Kenwood Trail  
Corridor Study

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Name Maureen Thirlen  
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*Shawna*



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