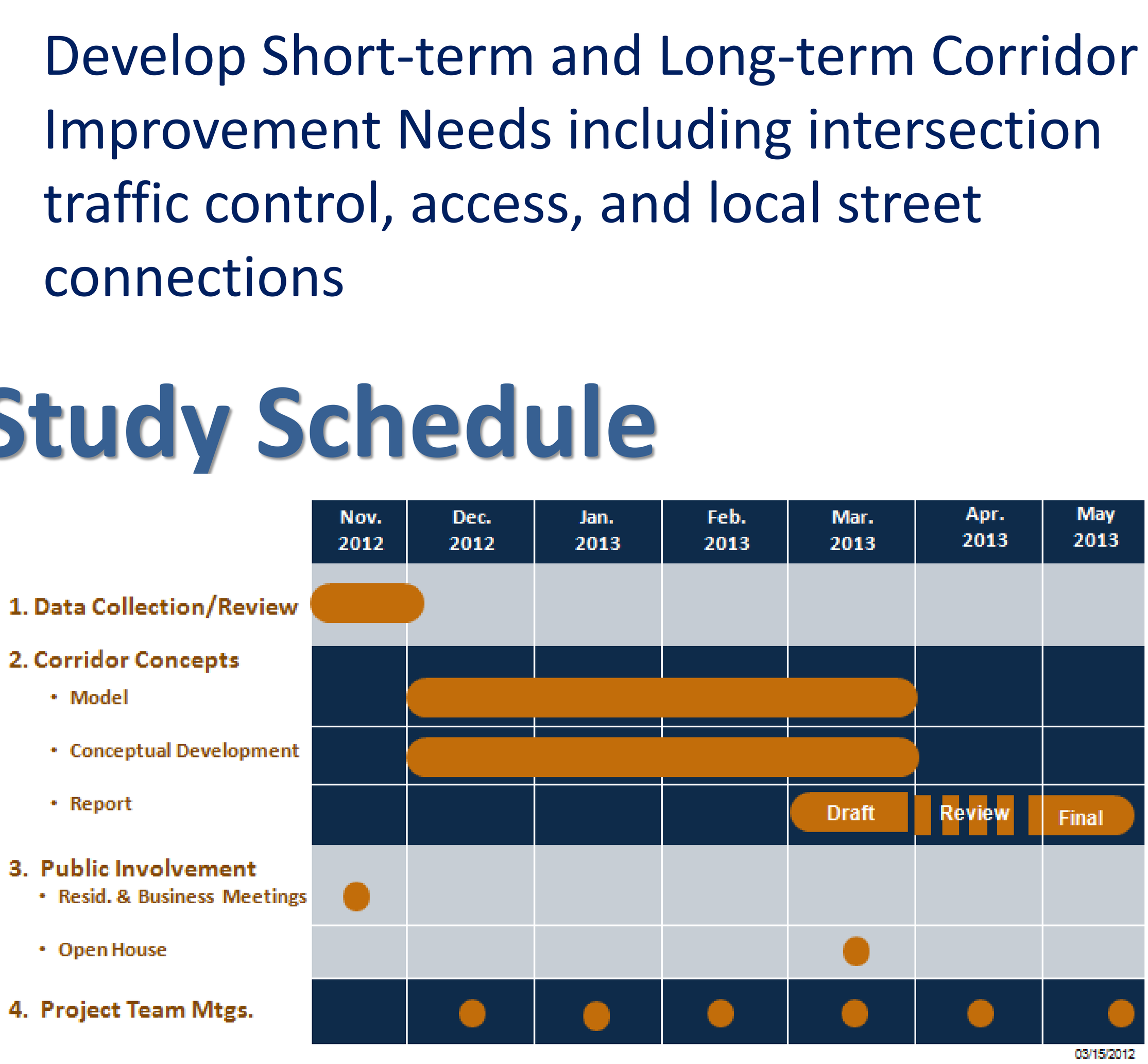
Study Goals and Objectives

- Determine how Hwy. 50 traffic would operate with a roundabout at 185th 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



DAKOTA 50 COUNTY

County Highway 50

Kenwood Trail

Corridor Study

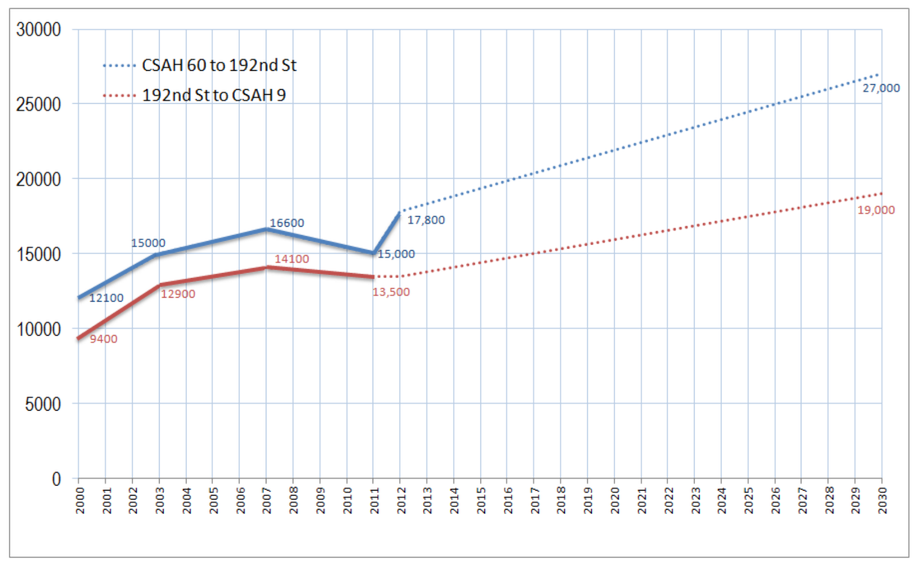
Dakota County transportation we get you there

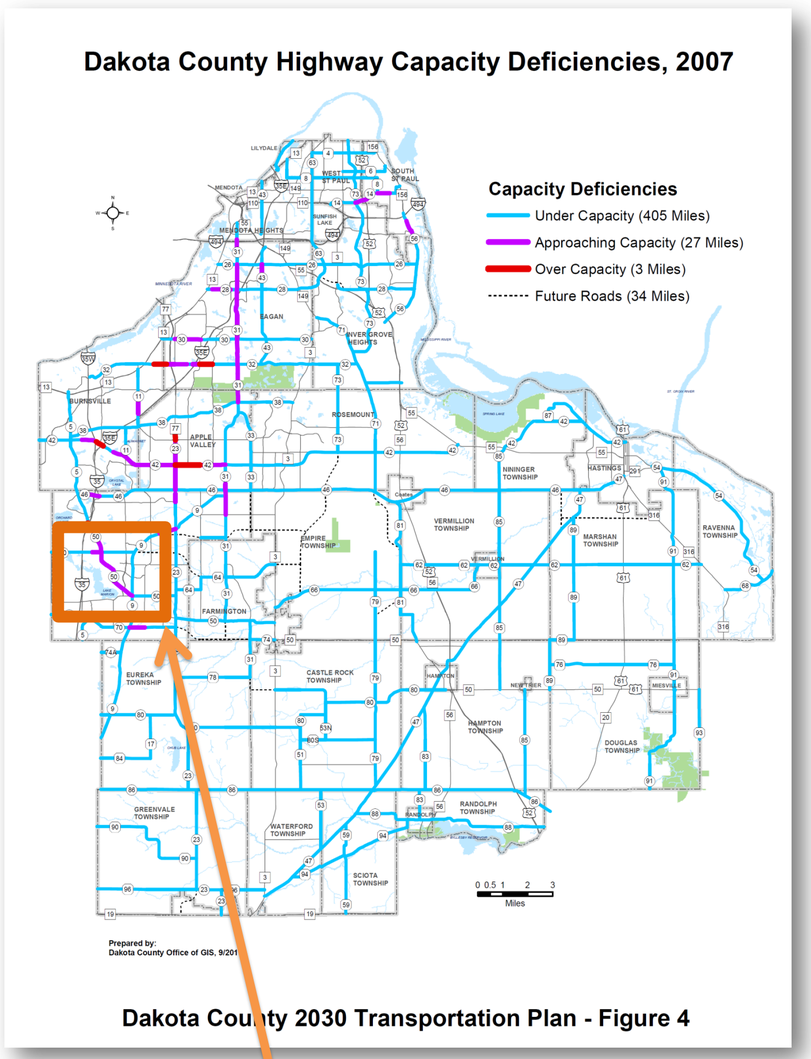
Lakeville

Existing and Future Traffic Operations

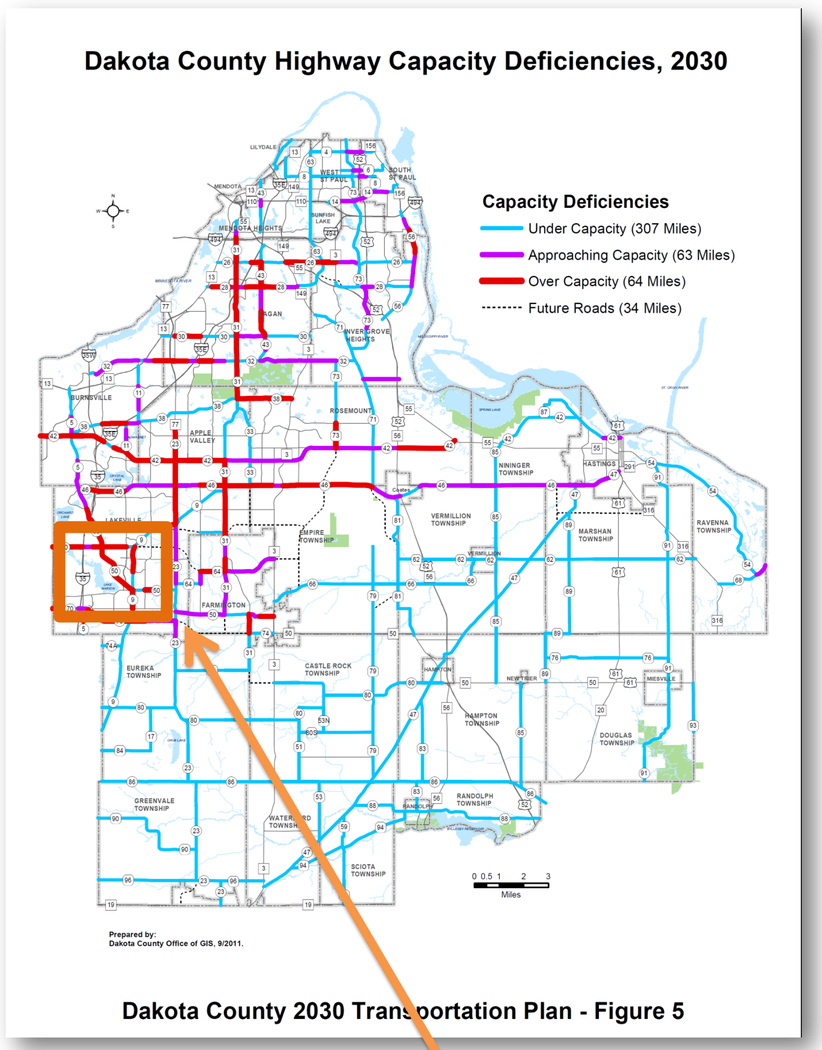
Hwy. 50 Average Daily Traffic Volumes

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



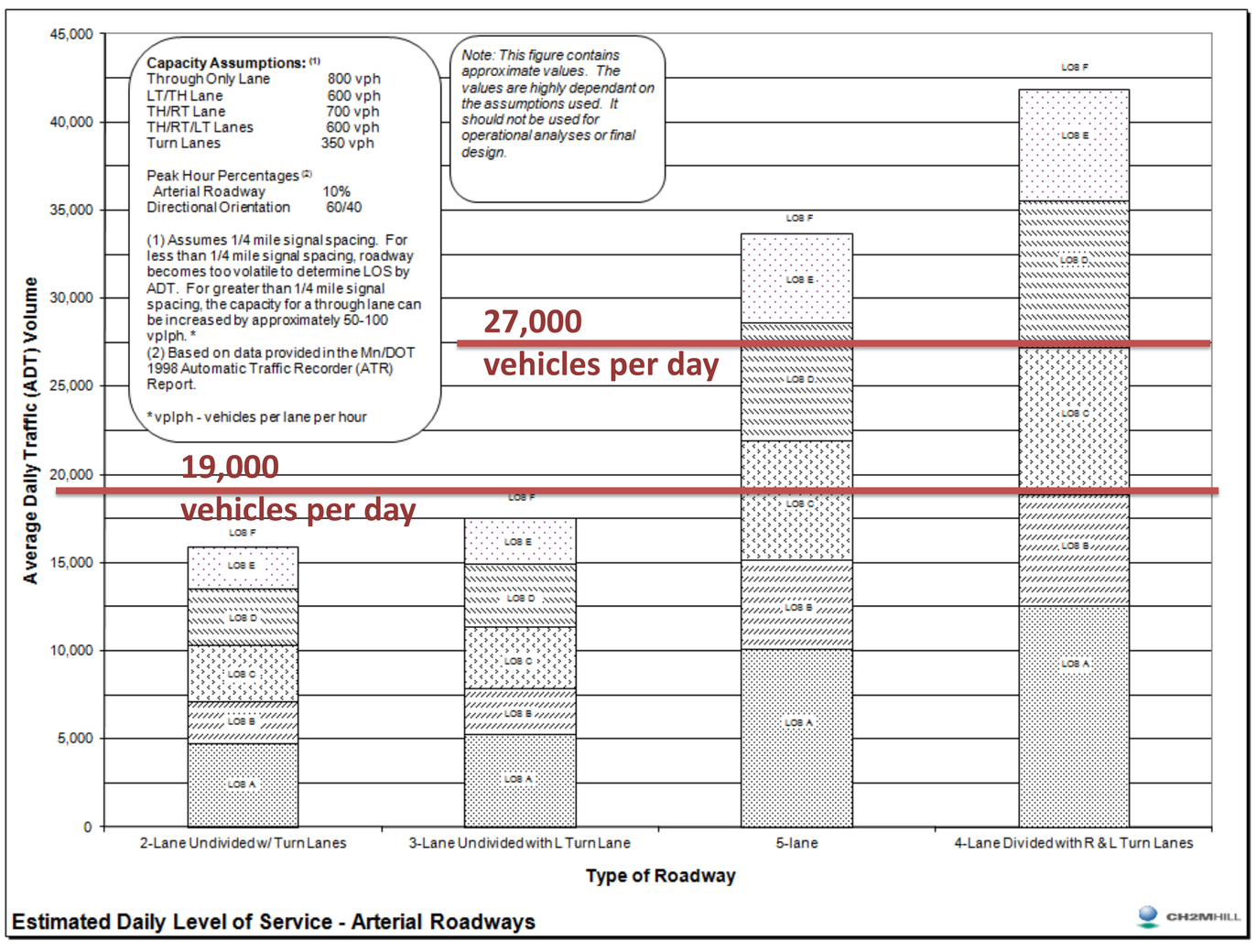


Dakota County 2030 Transportation Plan - Figure 4



Dakota County 2030 Transportation Plan - Figure 5

Currently approaching capacity and expected to exceed capacity by 2030.

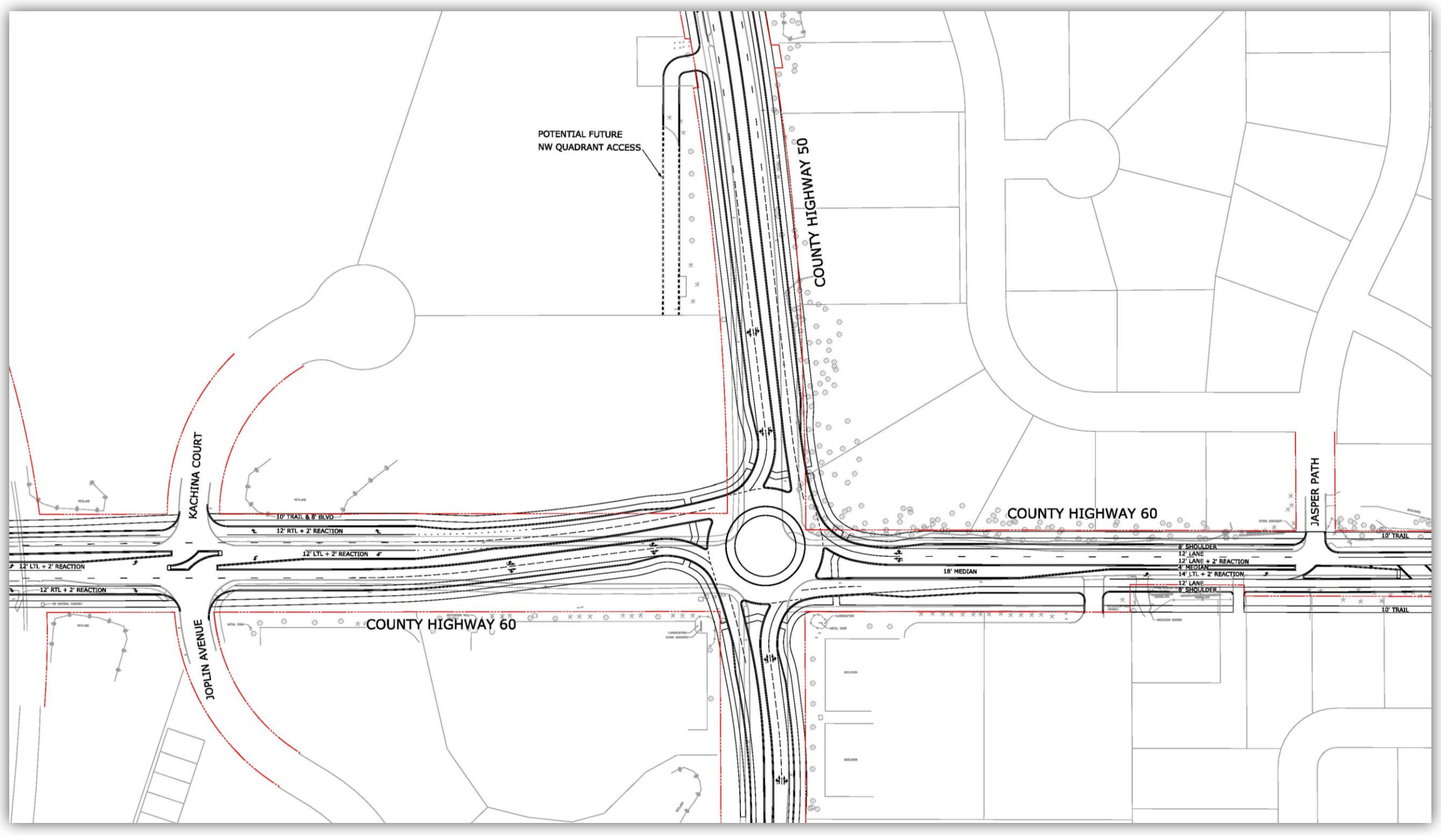


Estimated Daily Level of Service - Arterial Roadways

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

BACKGROUND

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 60/185th 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 25th
- **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.

2012 CH 50 All Crashes

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

- 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 188th, 192nd and Jaguar Avenue and being hit by a southbound vehicle on Highway 50.

2007-2011 Fatal and Injury Crash Summary

Location	Crashes	Crash Types
188th Street	2 crashes	Left turn out, rear end
192nd 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