

# A Behind-the-Scenes Look at Traffic Safety Reviews: Why the Solutions Might Be Different from Travelers' Expectations

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## Have You Ever?

- \* ... thought a traffic signal should be installed to improve safety at an intersection?
- \* ... wanted a marked crosswalk & signs to help pedestrians?
- \* ... wanted a speed limit decreased to reduce crashes?

## Highway Safety is Top Priority

### \* Toward Zero Death Initiative

- Education
- Emergency Medical & Trauma Services
- Enforcement
- Engineering
- + Everyone

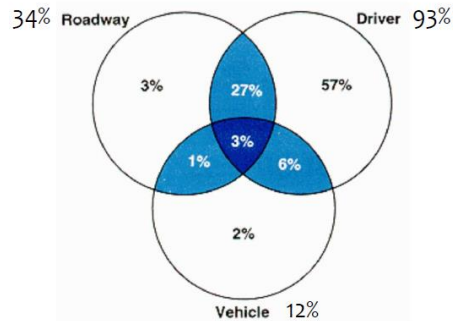


## Presentation Outline

- \* Traffic Safety Facts
  - \* Conveying Information to Public
1. Intersection Traffic Control
  2. Pedestrians
  3. Speeds

## What Causes Crashes?

### Over 90% of Crashes Caused by Driver Error



(National Highway Traffic Safety Administration)

## Top Contributing Factors

### Top contributing factors to crashes in 2015:

- \* Distracted Driving (23%)
  - \* Failure to yield (20%)
  - \* Following too closely (14%)
  - \* Improper lane use (6%)
  - \* Speed (6%)
  - \* Disregard traffic control (5%)
- Note: Chemical Impairment (2%)

Ref: Crash Fact Book, Minnesota crashes involving multiple vehicles

## Proactive Practices

- \* Annual Intersection Crash Listing
- \* Annual Intersection Control Evaluation
- \* County Roadway Safety Plan
- \* Identify issues in a systematic manner.  
Recommend action based on assessment of the specific location to minimize safety risk.

## Reactive Reviews

- \* Individual Assessment Based on Specific Inquiries
- \* ID Specific Issues
- \* Recommendations that Best Address Needs & Minimize Risks

## Intersection Control: Citizen Remarks

- \* How many accidents and potential deaths is this going to take before some sort of traffic control is put in place?
- \* Do you have children? Have you spent time on the roadway? Absolutely ridiculous. Who are the Supervisors that need to be consulted?
- \* In rush hour it's crazy to try to get out of the neighborhood. (That's why I want a signal, but I know that's not going to happen).

## Intersection Control: Citizen Remarks

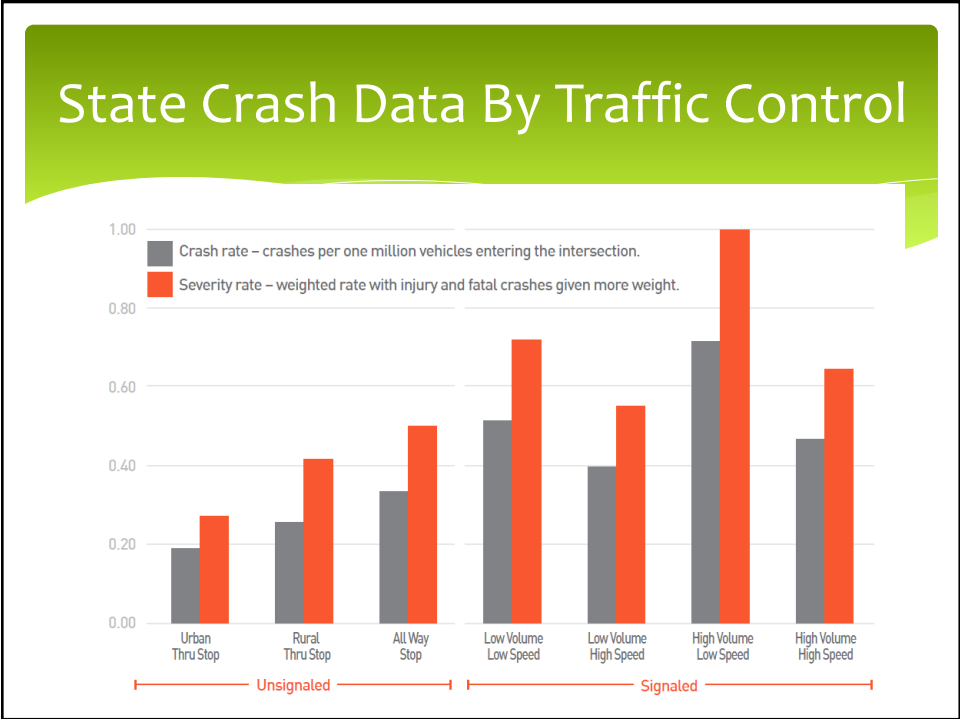
- \* The County should also install a stoplight at [intersection]. There are many accidents there and it would help connect the neighborhoods to the school and commercial businesses.
- \* I'm writing to ask how to raise awareness or ask the County to look into putting a stoplight in at the intersection. It's only a matter of time until someone gets killed.
- \* Someone said the county said it would cause more accidents....what???

## Intersection Control: Citizen Remarks

- \* That intersection is like playing Frogger in real life.
- \* If our neighborhood was to start a petition - what is the process we need to take to get our voices heard- and action taken quickly?
- \* She has to take a much longer route that is controlled with signs and stop lights for safety.

## Traffic Control Tradeoffs

- \* Traffic engineering is risk management
  - All traffic control has crash risk
  - Driver error is a factor in engineering decision making
- \* Consider traffic control trade-offs to minimize risk
  - Assess traffic conditions
  - Traffic control change does not necessarily improve safety



## Traffic Control Tradeoffs

### Side Stop

Used for

- \* Unbalanced approach traffic
- \* Maintain through road mobility
- \* Lowest average crash and severity rates

Drawbacks

- \* Side streets rely on gaps
- \* Side street delay
- \* Crash risk increases with traffic volumes

### All Way Stop

Used for

- \* Moderate traffic volumes
- \* Balanced approach traffic
- \* Lower speeds

Drawbacks

- \* Inefficient and cause delay
- \* Increased crash risk compared to side stop

## Traffic Control Tradeoffs

### Traffic Signal

#### Used for

- \* Consistently high volumes of traffic
- \* Collector or arterial routes



#### Drawbacks

- \* Additional decision making
- \* Increased risk of crashes compared to other traffic control
- \* Can create delay
- \* Rarely improve safety



### Roundabouts

#### Used for

- \* Moderate to high traffic volumes
- \* Improving traffic flow
- \* Significant reduction in crash severity

#### Drawbacks

- \* Higher cost
- \* Increased crash rates
- \* Not suitable for principal arterials

## Pedestrian Crossings: Citizen Remarks

- \* It's astounding there are no pedestrian crosswalks. Adding crossing access should be seriously considered.
- \* Having a crosswalk with signals and markings alerts drivers to watch out. It also gives the child a clear view of where its safe to cross.
- \* This is more of a common sense thing than anything. It wouldn't cost a lot of money to implement.
- \* Do we want to wait until a pedestrian is struck, too (if that hasn't happened yet)?



## Pedestrian Crossings

- \* In 2016:
  - \* 5,987 pedestrians killed in traffic crashes
  - \* 9-percent increase
  - \* This is the highest number of pedestrians killed in one year since 1990.

Source: National Highway Traffic Safety Administration – Aug. 2016 Traffic Safety Facts


## Pedestrian Crossings

- \* Pedestrian signs & markings alone have been found to be ineffective.
- \* Speeds < 45 mph
  - \* Install marked crosswalk
  - \* Enhanced signs
  - \* Geometric improvements
- \* Speeds  $\geq$  45 mph
  - \* Do NOT install marked crosswalk
  - \* Additional crossing enhancements should be considered

Source: MnDOT Pedestrian crossing facilitation tech memo (Jan. 7, 2015)



## Speed Limits: Citizen Remarks



- \* People are going OVER 50 coming over the hill and there's lil ol me turning right hoping that they see my turn signal on.
- \* People treat it like a freeway.
- \* Cars drive quite fast down our road, faster than the 40 MPH speed limit, making it really frightening for us.
- \* The traffic speed on the roadway should be reduced. There are many very terrible accidents.
- \* With all due respect. Can we at least try to reduce speed limit?? Reducing speed could reduce severity of impact when crashes occur. People are easily driving almost 60 miles per hour.

## County Highway Speed Limits



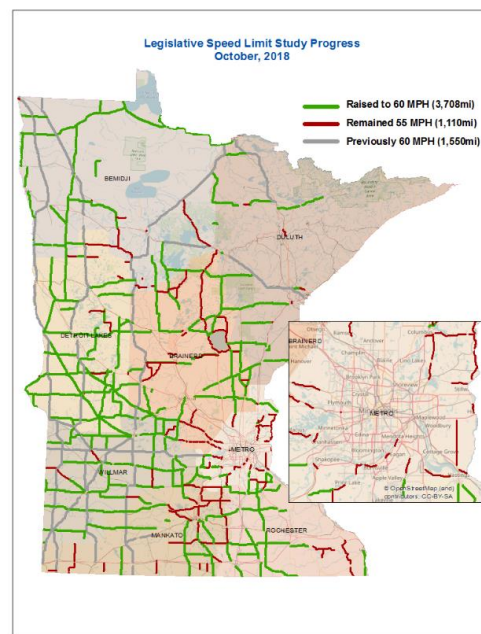
- \* 55 MPH Only Statutory Speed for County Roadways
- \* Other Regulatory Speeds Set by MnDOT
- \* Changes Require Speed Study & Authorization
- \* Incorrect Speed Limit Can Lead to Greater Differential in Speed and a Less Safe Situation

## 55 to 60 MPH Legislative Study

- \* 2014 Law directed at MnDOT
- \* 2 lane / 2 way Trunk Highway Roads
- \* Over 6,000 miles of roadway
- \* Determine safe and reasonable speed
- \* 5 years to complete
- \* Final report due 1/15/2019

## Status

- \* All studies complete
- \* Over 75% raised to 60 MPH
- \* Limited evaluation to be included in final report



## Travel Speeds vs Speed Limits

- \* Question: Did increasing the speed limits increase the travel speeds?
- \* Evaluation approach: Sample speeds on locations where speed limit increased from 55 to 60 mph.
- \* What do you think happened?

# Approach

- \* 42 individual location randomly selected
- \* Examined Speed Data
  - \* Sampled at 55 mph posted speed limit
  - \* Resampled at 60 mph posted speed limit
- \* Samples from every district



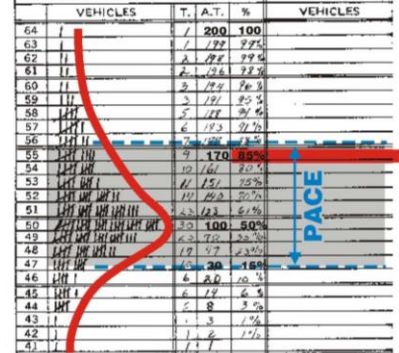
# Traditional measures

- \* 85%tile Speed
- \* 10 MPH pace

FIELD SPEED SURVEY SHEET

Road No. **EXAMPLE** Zone **55** M.P.H.  
 Ref. Pt. \_\_\_\_\_ Time \_\_\_\_\_ A.M.-P.M.  
 County \_\_\_\_\_ Weather \_\_\_\_\_  
 Date \_\_\_\_\_ Machine \_\_\_\_\_  
 Day \_\_\_\_\_ Observer \_\_\_\_\_

PASSENGER CARS, PICKUPS, VANS				
Bound	VEHICLES			VEHICLES
	T.	A.T.	%	
64	1	200	100	
63	1	177	87%	
62	1	178	89%	
61	1	126	72%	
60	1	124	70%	
59	1	121	65%	
58	1	122	66%	
57	1	123	67%	
56	1	124	68%	
55	1	170	85%	
54	1	161	80%	
53	1	151	75%	
52	1	143	71%	
51	1	123	66%	
50	1	100	50%	
49	1	72	36%	
48	1	57	28%	
47	1	30	15%	
46	1	6	3%	
45	1	2	1%	
44	1	2	1%	
43	1	3	1%	
42	1	2	1%	
41	1	1	0%	



## Preliminary findings

- \* In general speeds have increased
- \* 85<sup>th</sup>tile speed increased
- \* Upper End of 10 MPH pace increased
- \* Lower End of 10 MPH pace increased



## 85<sup>th</sup> Percentile Findings

- \* Speeds increased – statistically significant finding
- \* Magnitude of speed increase was only 1.4 MPH
  - \* 63+ mph before
  - \* 65 mph after
- \* While results are significant the magnitude of the increase is not substantial

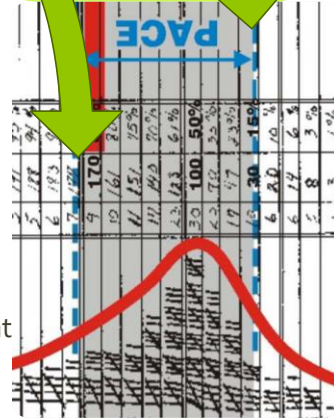
Go on and write me up for 125. Post my face, wanted dead or alive. Take my license, all that jive. I can't drive 55

*Sammy Hagar*



## 10 mph Pace Findings

- \* Lower Pace increased 2.3 MPH
- \* Upper Pace increased 2.1 MPH
- \* Percentage of drivers within Pace
  - \* Increased, not statistically significant
  - \* Higher % in pace = less crashes



## Summary

- \* Yes, speeds increased - but not by much
- \* Results are similar to previous speed increase projects done in Minnesota (HEAT, HEAT 2)
- \* Crash analysis efforts will begin in earnest
  - \* Previous efforts indicated no change in crashes but a shift higher in overall severity – result TBD
- \* Study based increases preferred over broad based statutory speed limit changes

## Behind the Scenes Look at Traffic Safety

- \* Intersection Traffic Control
- \* Pedestrians
- \* Speed
  
- \* Approach to Addressing Complex Elements of Traffic Safety Require Communication & Interaction with the Public to Move Forward with the Right (SAFE) Approach

## Public Engagement

- \* Traffic Boards
  
- \* Neighborhood Meeting
  
- \* Social Media



## Public Engagement

- \* Traffic Boards
  - \* Developed with Communications
  - \* Taken to all Open Houses
  - \* Traffic Rep to Communicate Messages



### Intersection traffic control

**All-way stops are used for**

- > Moderate traffic volumes.
- > Balanced traffic.
- > Speed limits of 40 mph or less.

**Drawbacks**

- > Inefficient and cause delay.
- > Multiple lanes can increase crash risk
- > Increased crash risk when disregarded.
- > Constant stopping/acceleration is noisy.

**Traffic signals are used for**

- > Consistently high volume of traffic.
- > Collector or arterial corridor intersections.

**Drawbacks**

- > Introduces additional decision making.
- > Increased crash risk when disregarded.
- > Increased risk of fatal or serious injury crashes.
- > Creates delay, particularly for higher volume movements.

**Roundabouts are used for**

- > Moderate to high traffic volumes.
- > Improving traffic flow.

**Drawbacks**

- > May have higher construction cost and right-of-way needs.
- > Potential for more property damage crashes.
- > Not suitable for six-lane or principal arterial roadways.





## Public Engagement

- \* Traffic Boards
  - \* Developed with Communications
  - \* Taken to all Open Houses
  - \* Traffic Rep to Communicate Messages



### Traffic signals

**Traffic signals are effective because they**

- > Manage high volumes of traffic conflicts.
- > Provide crossing opportunities.
- > Can improve intersection efficiency.
- > Can reduce right-angle crashes.

**New signals are added with caution because**

- > Crashes often increase, especially rear-end crashes.
- > Crashes at signals are typically more severe.
- > They typically result in higher delays throughout the day.

**The decision to install signals is based on**

- > Traffic volumes.
- > Vehicle delays.
- > Crash history.
- > Anticipated crash rate.

**In Dakota County**

- > Approximately 10% of intersections are signalized.
- > 47% of fatal and serious injury crashes occur at signalized intersections.






Intersection Type	Crash Rate (Signalized)	Crash Rate (Unsignalized)
Other Intersect	~0.25	~0.15
Local Intersect	~0.35	~0.25
All Way Stop	~0.45	~0.35
Low Volume Lane-Change	~0.55	~0.45
Low Volume High-Speed	~0.65	~0.55
High Volume Lane-Change	~0.75	~0.65
High Volume High-Speed	~0.85	~0.75

## Public Engagement

- \* Traffic Boards
  - \* Developed with Communications
  - \* Taken to all Open Houses
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>

### Speed limits

**Speed limits are important because they**

- > Make roads safer by reducing variability in vehicle speeds.
- > Help unfamiliar drivers know the appropriate speed.
- > Help law enforcement curb dangerous behavior.

**Speed limits are established through Minnesota Statute 169.14. The statute**

- > Defines speeds for certain roadway types.
- > Establishes a process for the State to determine speeds.

**Speed studies examine**

- > Actual speeds of vehicles using the roadway.
- > Roadway type, condition and length.
- > Location of intersections and driveways.
- > Traffic volume and crash history.
- > Sight distance limitations caused by curves or hills.

After a speed study is conducted, a speed limit is set by the State. Posted limits reflect speeds for ideal road and weather conditions.

**Speed limit facts**

- > Lowering the posted speed limit will not slow traffic.
- > Most people drive what is comfortable and safe to them regardless of posted speeds.
- > Lowering a posted speed limit does not reduce crashes.
- > Improperly set speed limits decrease safety.

# Public Engagement

- \* Neighborhood Meetings
  - \* Presentations
  - \* Display Boards
  - \* One-on-one Discussions

## Cliff Road Neighborhood Meeting

November 8, 2017

Dakota County and City of Eagan

## Public Engagement Neighborhood Meeting

### Key Elements toward a successful outcome:

- \* Establish Meeting Purpose
- \* Develop Trust with Community
- \* Discuss what we've heard / looked at
- \* Provide "big picture frame work"
- \* Considerations
- \* Next Steps

## Public Engagement Neighborhood Meeting

### Meeting Objectives:

- \* Discuss Safety Concerns
- \* Highway Safety in Dakota County
- \* Share Traffic Engineering Principals
- \* **Recognize Traffic Engineering Tradeoffs**
- \* How Cliff & Dodd Fits
- \* Next Steps

## Public Engagement Neighborhood Meeting

### Concerns We've Heard from you:

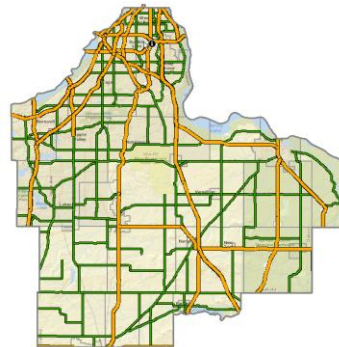
- \* Excessive speeds
- \* So many accidents
- \* Add Traffic Control (Roundabout or Signal)
- \* Difficulty Crossing Cliff Road
- \* Turning off Cliff – Cars go around me
- \* Additional Lanes on Cliff will make it harder to cross
- \* 2016 Fatal Crash

*Please share any additional concerns.*

[\(link\)](#)

## County Highway System

- \* 424 Miles of Road
  - \* Rural, Urban, and Suburban
  - \* Trail Facilities
  - \* Just under 1500 Intersections
- \* Intersection Traffic Control
  - \* Side Street stop - 1300
  - \* All Way Stop - 36
  - \* Traffic Signal - 135
  - \* Roundabout - 7
- \* Cliff Road (County Hwy 32)  
Minor Arterial & Cross County Connection  
From I 35 W to future connection at TH 52



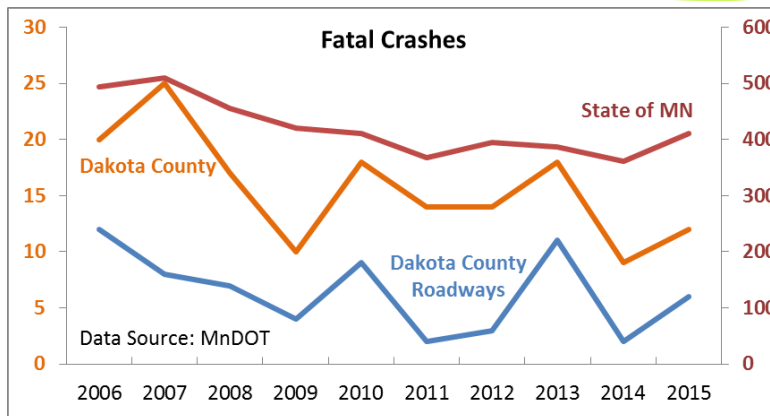
# Highway Safety is our Top Priority

- \* Transportation Plan Overarching Principal
- \* County Highway Safety Plan
- \* Toward Zero Death Initiative (4 “E” approach)
  - \* Education
  - \* Emergency Medical & Trauma Services
  - \* Enforcement
  - \* Engineering
  - + Everyone
- \* County Board Strategic Measure



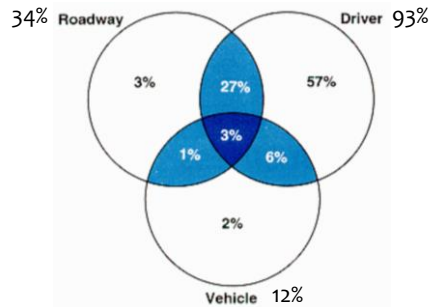
## County Strategic Measure

Review with the County Board Each Year



## What Causes Crashes

OVER 90% of Crashes are Caused by Driver Error



(National Highway Traffic Safety Administration)

## Top Contributing Factors

Top contributing factors to crashes in 2015:

- \* Distracted Driving (23%)
  - \* Failure to yield (20%)
  - \* Following too closely (14%)
  - \* Improper lane use (6%)
  - \* Speed (6%)
  - \* Disregard traffic control (5%)
- Note: Chemical Impairment (2%)

Ref: Crash Fact Book, Minnesota crashes involving multiple vehicles

## Traffic Engineering

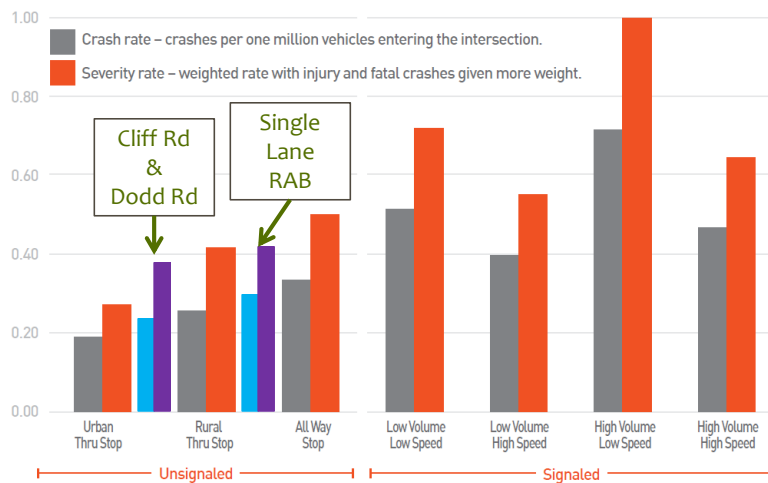
### Traffic Engineering is Risk Management

- \* All Traffic Control has crash risk
- \* Driver error – Factor in Engineering Decision Making

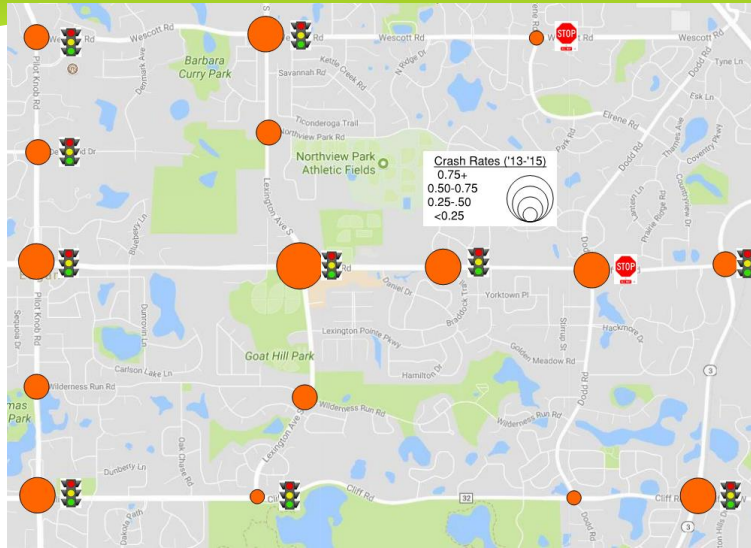
### Consider traffic control tradeoffs to minimize risk

- \* Assess traffic conditions
- \* Traffic Control Change does not necessarily improve safety

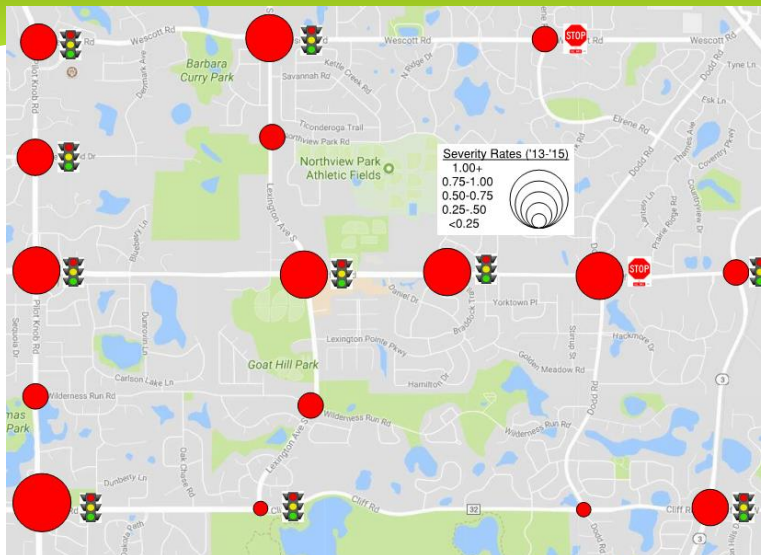
## Crash Data By Traffic Control



## Crash Rates – Area Intersections



## Severity Rates – Area Intersections





## Traffic Engineering Parameters

### Minnesota Statutes 169.06

#### Subd. 1 – Uniform System

- \* Devices conform to State specifications
- \* Provides criteria for various traffic control, including volume thresholds for
  - \* All way stops
  - \* Traffic signals



#### Signal Justification Report

- \* Requires State approval
- \* Due to impacts on safety and traffic, focus on need throughout the day (8 hours), not peak hour alone

## Traffic Engineering Review

### Engineering Study Process

- \* Field Review –What We Saw
- \* Crash/Safety Review
  - \* Typically 3 or more years of data to establish trends
- \* Delay/Traffic Volume Review
  - \* Evaluate various traffic control based on standard criteria
  - \* Typically look at 8 hour needs
- \* Comparison System Wide

## Cliff and Dodd Considerations

### **Side Stop:**

- \* Most times of the day – Dodd Road has minimal delay
- \* Some queuing and delay during parts of the peak hour
- \* Requires Dodd Road to wait for gap in traffic

### **All-way stop:**

- \* Traffic only met 3 of 8 hours
- \* Traffic volumes not balanced – Dodd much lower than Cliff
- \* Concern about increased crash and crash severity risk
- \* Concern about increased delays for Cliff Road
- \* Reduces delay for Dodd Road during peak times of the day

## Cliff and Dodd Options

### **Traffic Signal:**

- \* Traffic only met 3 of 8 hours
- \* Increased crash and severity risk
- \* Increased delay
- \* Assigned time to cross roadway

### **Roundabout:**

- \* Significantly higher traffic on Cliff Road
- \* Impacts main road all day
- \* Improves mobility and potentially safety for side road traffic
- \* Cliff Road long term needs
- \* Enhanced treatment for bikes & pedestrians
- \* Intersection focused solution

## Cliff and Dodd Options

### **Right Turn Lane on Cliff Road at Dodd Road:**

- \* Address issue of passing turning vehicles
- \* Doesn't address side street crashes or delay

### **Four-lane Divided Roadway on Cliff Road (Lexington to TH 3):**

- \* Provides capacity and additional gaps
- \* Minimize side street delay and need for traffic control
- \* Associated turn lanes sort and store traffic
- \* Addresses Long-term traffic needs along Cliff Road
- \* Cost and impacts

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## Public Engagement Neighborhood Meeting

Layout Next steps  
And  
*How we will continue to  
communicate*

## Dodd & Icenic/Heritage Meeting

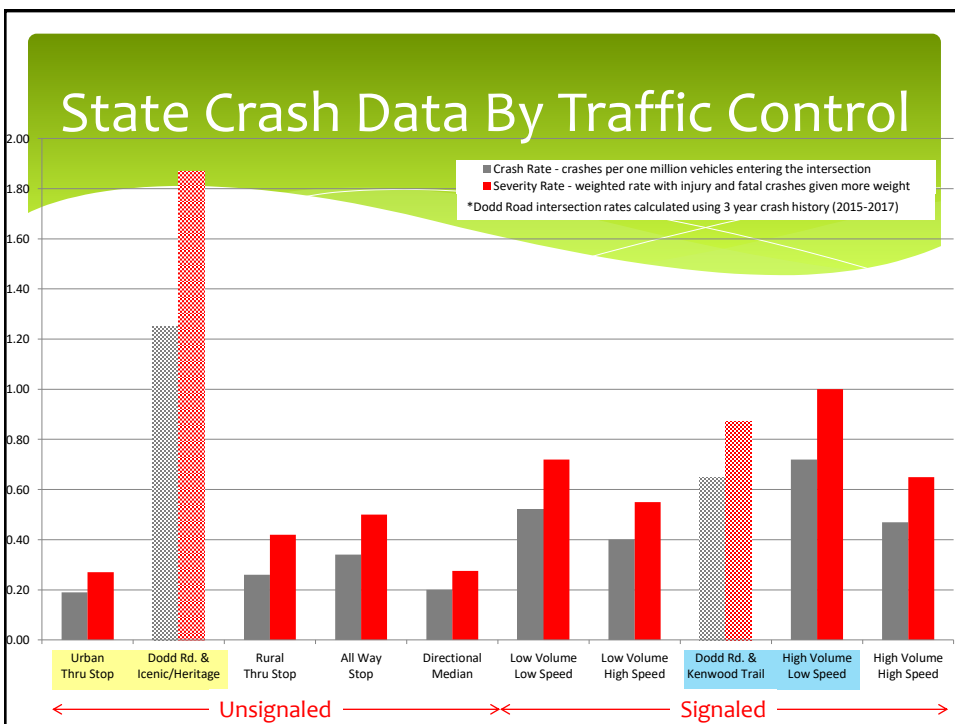
July 18, 2018

Dakota County and City of Lakeville



## Reason for Meeting

- \* Safety concerns at Dodd & Icenic / Heritage
- \* Discuss issues, considerations and potential solutions
- \* County / City collaboration

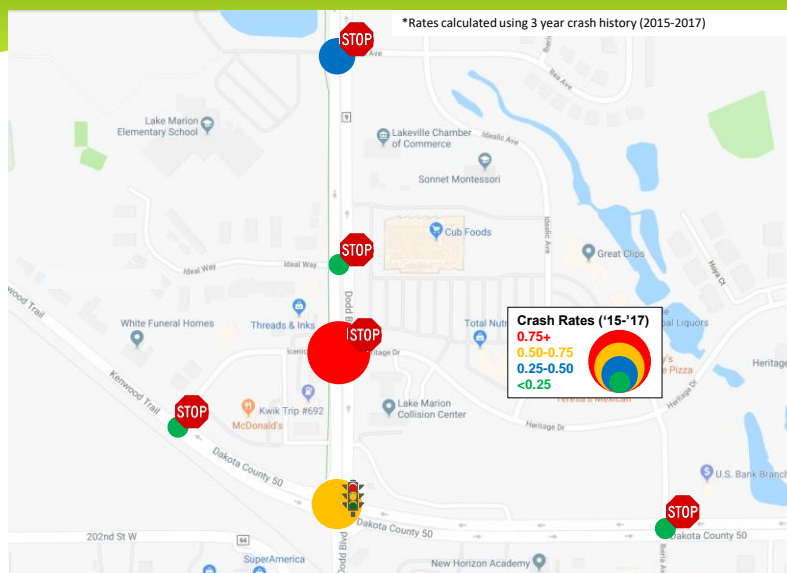


# Traffic Engineering Review Dodd & Icenic/Heritage

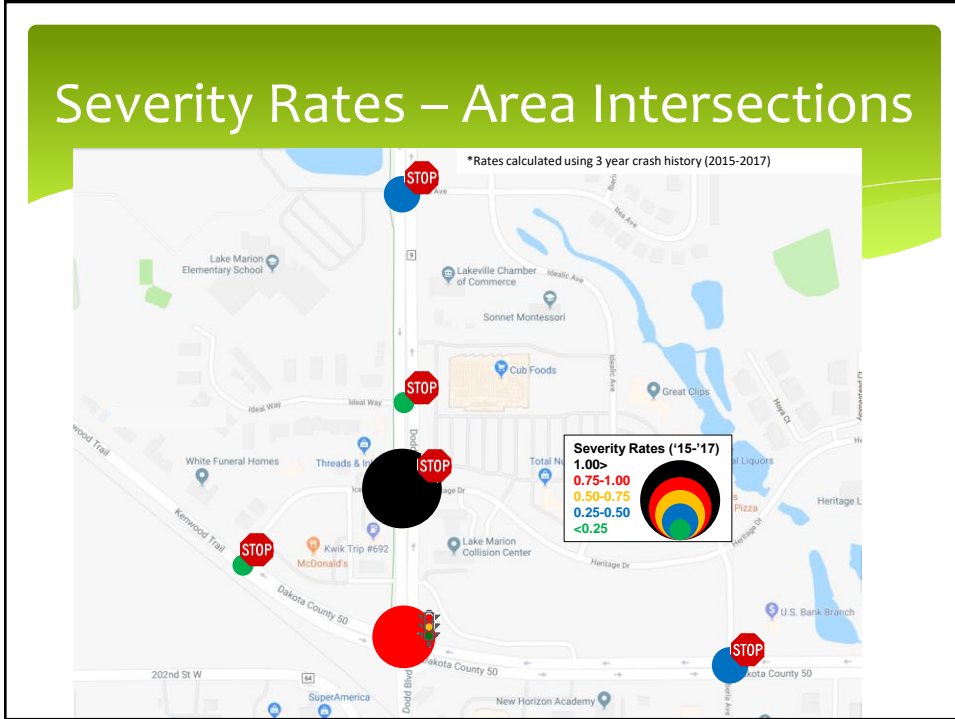
## Engineering Study Process

- \* Field Review
- \* Crash/Safety Review
  - Typically 3+ years of data to establish trends
- \* Traffic Volume Review
  - Evaluate various traffic control based on standard criteria
  - Typically look at 8 hour needs
- \* System-wide Traffic Control Comparison

## Crash Rates – Area Intersections

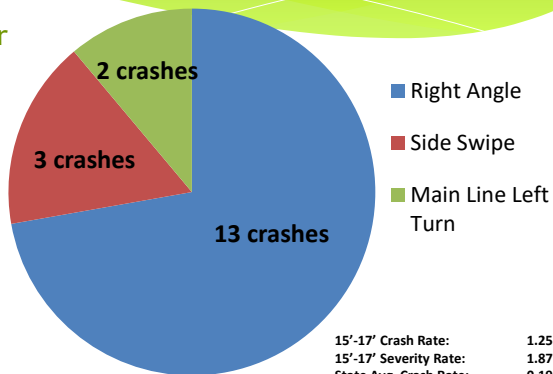


# Severity Rates – Area Intersections



## Dodd & Icenic/Heritage 2015-2018 Crash Data

- \* Crash rate 6 times higher than the state average
- \* Ranks 8 out of 262 on Dakota County's Intersection Crash List
- \* Addressing right angle crashes will improve intersection safety

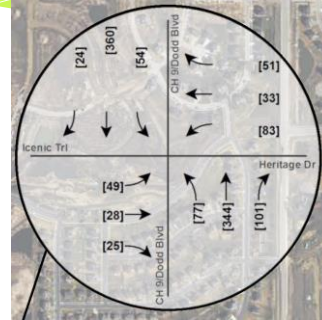


15'-17' Crash Rate:	1.25
15'-17' Severity Rate:	1.87
State Avg. Crash Rate:	0.19
State Avg. Severity Rate:	0.27

**Safety issue at this intersection needs to be addressed.**

## Dodd & Icenic /Heritage Traffic Volume Review

- \* During the afternoon peak hour, over 1200 vehicles travel through this intersection.
- \* Crossing or turn movements (both approaches) account for or approximately 8 % of the entering volume.



*As traffic increases, it will become more challenging to find gaps in traffic to cross or turn onto the roadway.*

## Dodd & Icenic/Heritage Traffic Signal Considerations

- \* Volumes on Icenic/Heritage are not at a level where a signal is justified
- \* Maintains all movements to businesses at intersection
- \* Close proximity (550 ft) to Dodd/Kenwood signal would increase the risk of crashes at Icenic/Heritage and at Kenwood signal



*A signal at Dodd & Icenic/Heritage is not appropriate considering the close proximity of the Kenwood intersection and distribution of traffic.*



## Dodd & Icenic/Heritage Roundabout Considerations

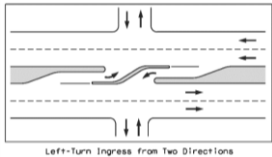


- \* Traffic volumes are not balanced
- \* Maintains all movements to businesses at intersection
- \* Potential for interaction with existing signal (peak hour back-ups)
- \* Reduces severe crashes / increases property damage crashes
- \* Greater property impacts/costs and overall construction costs

*A roundabout at Dodd & Icenic/Heritage is not appropriate considering traffic on Dodd and the Icenic/Heritage approaches.*

Intersection	Traffic Control	Mainline AADT	Side Road AADT	Entering Volume	Volume Distribution (%)
Dodd (CSAH 9) & Highview Ave	Roundabout (2&1)	13,700	4,500/4,750	18,325	75/25
202 <sup>nd</sup> St (CSAH 50) & Holyoke Ave	Future Roundabout (2&1)	12,800/7,000	7,900/5,800	16,750	59/41
Dodd (CSAH 9) & 185 <sup>th</sup> St (CSAH 60)	Recent Signal	9,600/13,700	9,000	16,150	72/28
Dodd (CSAH 9) & Flagstaff Ave	Future Single-lane Roundabout	11,900/8,000	6,700/5,900	16,250	61/39
Dodd (CSAH 9) & Icenic/Heritage	Side stop	12,000	1,200	13,500	90/10
Dodd (CSAH 9) & 194 <sup>th</sup> St	Side Stop	9,600	2,100	11,700	82/18

## Dodd & Icenic/Heritage Directional Access

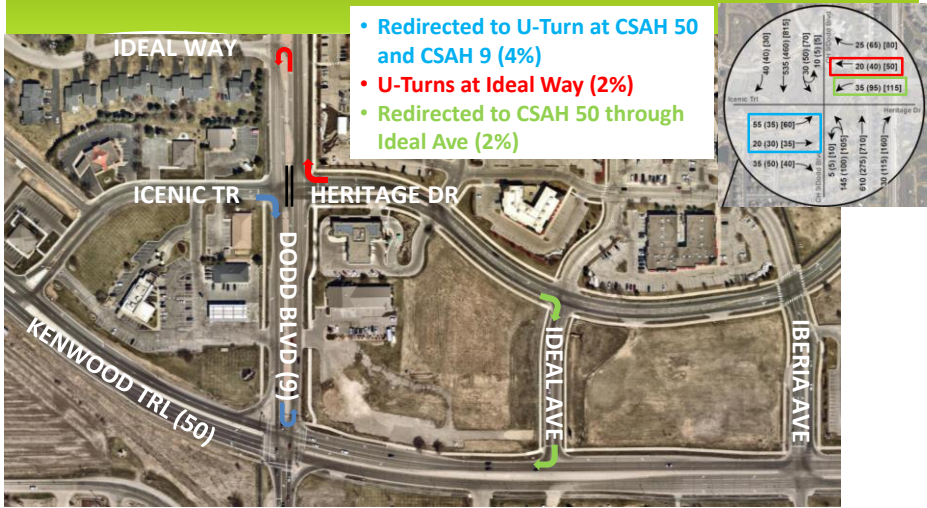


Left-Turn Ingress from Two Directions

- \* No change to entering traffic
- \* Existing patterns for business traffic changes
- \* Directional Access Intersection will address safety issues with left turn and crossing traffic from the side road
- \* Typical approach throughout county
- \* Diverted trips safely accommodated at nearby intersections

*Directional median is reasonable approach to addressing safety while maintaining access and mobility (businesses & highway)*

## Redistribution of Turning Movements



- Redirection to U-Turn at CSAH 50 and CSAH 9 (4%)
- U-Turns at Ideal Way (2%)
- Redirection to CSAH 50 through Ideal Ave (2%)

*Area intersections can safely accommodate rerouted traffic.*

## Next Steps

- \* County and City to discuss meeting feedback and next steps to address safety issue
- \* Potential submittal for safety funding
- \* Include project in Dakota County's 2019-2023 Capital Improvement Program (Construction 2020)

## Public Engagement

**Dakota County Government**  
September 27 at 4:10 PM

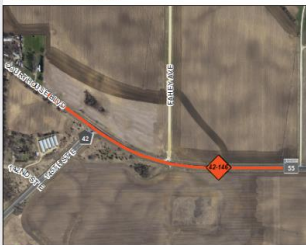
Dakota County drivers, we've got some positive news: we're making improvements to Highway 55 to make it both safer and more efficient. We're adding a left turn lane from Highway 55 onto Fahey Avenue and another one onto County Road 42. We're also grading the ditches to divert and infiltrate storm water runoff, in an effort to improve water quality.

We thank you for your patience as we make these improvements. Highway 55 westbound is closed for construction, starting at Fahey Avenue. There is a posted detour running from CSAH 85/Goodwin Ave. S to CSAH 46. However, some drivers experienced significant delays on this route this morning. We expect there will be some delays while this detour is in place, but we're currently looking at additional options to help improve the traffic flow during the morning commute.

We thank you again for your patience and ask that drivers explore alternative routes or departure times, when possible.

We expect this project to be complete by early November. For more information, [https://www.co.dakota.mn.us/\\_CR42](https://www.co.dakota.mn.us/_CR42).

Highw.../Pages/default.aspx



8 Comments 15 Shares

**Dakota County Government**  
October 5 at 2:37 PM

**Don't do it.**

Passing another driver from a designated turn lane is not only dangerous—it's illegal too. And it needlessly puts pedestrians and drivers turning onto side roads at risk.

That's why we're teaming up with our City of Lakeville, Minnesota – Government friends to place signs and traffic barrels on County Road 70 at Grenada Ave. the week of October 8th. We're hoping they help remind drivers not to try passing other vehicles while in a designated turn lane. Lakeville Police will also have extra enforcement out—and they'll be looking for drivers who are slow to get the message.



# Public Engagement

**Project Coordinator Physical Development, Dakota County Governmen...**

**OPEN HOUSE: Akron Avenue Improvement Project (County Road 73)**

Wednesday October 17th, 2018 4:30-6:30PM Rosemount Community Center 13885 South Robert Trail Rosemount, MN 55068 Why come to the Open House? - Learn about project information, current issues, and a preliminary corridor layout - Participate in determining the scope of improvements - Discuss any concerns [See more...](#)



**Project Coordinator Physical Development, Dakota County Governmen...**

**Highway 55 Construction Update**

Dakota County drivers, we've got some positive news: we're making improvements to Highway 55 to make it both safer and more efficient. We're adding a left turn lane from Highway 55 onto Fahey Avenue and another one onto County Road 42. We're also grading the ditches to divert and infiltrate storm water runoff, in an effort to [See more...](#)



County Road 42 at Highway 55, Rosemount | Dakota County  
CO.DAKOTA.MN.US



County Road 73, Rosemount | Dakota County  
CO.DAKOTA.MN.US

27 Sep · Subscribers of Dakota County Government in 14 neighborhoods

[Reply](#) 1 - 716 Impressions

0d ago · Subscribers of Dakota County Government in 3 areas

[Reply](#) 2 - 3645 Impressions

**Mona S., Meadows Of Bloomfield** · 5d ago

Is bacardi Ave going to be paved? It's a good road to connect Rosemount and Eagan.

**Project Coordinator Physical Development** · 4d ago

Hi Mona, paving of Bacardi Avenue is not a part of this proposed project. Bacardi Avenue is a City Road. Questions and comments regarding projects on City roads should be directed towards the Rosemount City Engineer. Thank you for your question!

# Public Engagement

**\* Traffic Tidbit Video Series**

- \* **#1: Intersection Traffic Control**
  - <https://www.co.dakota.mn.us/Transportation/RoadSafety/IntersectionSafety/Pages/default.aspx>
  - <https://www.youtube.com/watch?v=zdQ9oUuAaQ>
- \* **Other Topics**
  - \* Roundabouts, Signal Timing & Coordination, Access Control, Flashing Yellow Arrows, Etc.

## Public Engagement

### \* Traffic Tidbit Video Series

\* #2: Sarah the Signal \_

Send us feedback!

<https://tinyurl.com/DCtraffic123>

## Dodd Boulevard & 194<sup>th</sup> Street Neighborhood Meeting

April 5, 2018

Meeting Purpose:  
Kenwood Trail Construction Impacts  
&  
Long Term Intersection Options



## Dodd Boulevard & 194<sup>th</sup> Street Traffic Control Review (No Construction)

### CONCERNS WE'VE HEARD

- Difficulty crossing or turning onto Dodd Boulevard from the side road
- Need for pedestrian crossing accommodations
- Speed
- Extra concern due to proximity of the high school & young drivers

## Dodd Boulevard & 194<sup>th</sup> Street Traffic Control Review (No Construction)

### STUDY WORK

- Collected & evaluated traffic volumes, including with anticipated development near intersection
- Assessed traffic control & compared to other intersections
- Field observation during school start, dismissal & non-school times
- Assessed long-term traffic control needs consistent with reviews throughout the county system.

## Dodd Boulevard & 194<sup>th</sup> Street Traffic Control Review (No Construction)

### TRAFFIC VOLUME COMPARISON

Intersection	Traffic Control	Mainline Average Daily Traffic	Side Road Average Daily Traffic	Total Entering Volume	Volume Distribution
Dodd Blvd. & 194 <sup>th</sup> St	Side Street Stop	9,600	2,100	11,700	82/18
CSAH 50 & Holyoke Ave	Future Roundabout (2vt)	12,800/7,000	7,900/5,800	16,750	59/41
CSAH 9 & Highview Ave	Roundabout (2vt)	13,700	4,500/4,750	18,325	75/25
CSAH 9 & CSAH 60 (185 <sup>th</sup> St)	Recent Signal	9,600/13,700	9,000	16,150	72/28
CSAH 9 & Flagstaff Ave	Future Single-lane Roundabout	11,900/8,000	6,700/5,900	16,250	61/39

*Volumes at Dodd Boulevard & 194<sup>th</sup> Street are low when compared to other Lakeville intersections with signals and roundabouts.*

## Dodd Boulevard & 194<sup>th</sup> Street Traffic Control Review (No Construction)

### PEDESTRIAN ISSUES

- Signing and striping alone do not increase pedestrian safety along high speed roadways
- Multiple threat crashes are a major concern at four-lane roadways
- Crosswalk markings not recommended
- Separated crossing (tunnel) was reviewed with the Dodd Boulevard project and determined not feasible
- Consideration to move crossing along Dodd Boulevard away from the intersection
- School district busses students east of Dodd due to hazardous crossing.

## Dodd Boulevard & 194<sup>th</sup> Street Traffic Control Review (No Construction)

### SUMMARY

- Motorists can experience longer delays during the peak hours (20-30 seconds+ on average)
- Volumes throughout the day are not at the levels where signalization would typically be considered
- Future residential development not at levels to justify traffic control change
- City and County will continue to work with LNHS to address before-school rush
- The intersection will be reviewed yearly to monitor changes in conditions

## Amana Trail (Co. Highway 28)

### Neighborhood Meeting

March 19, 2018

Dakota County and Inver Grove  
Heights

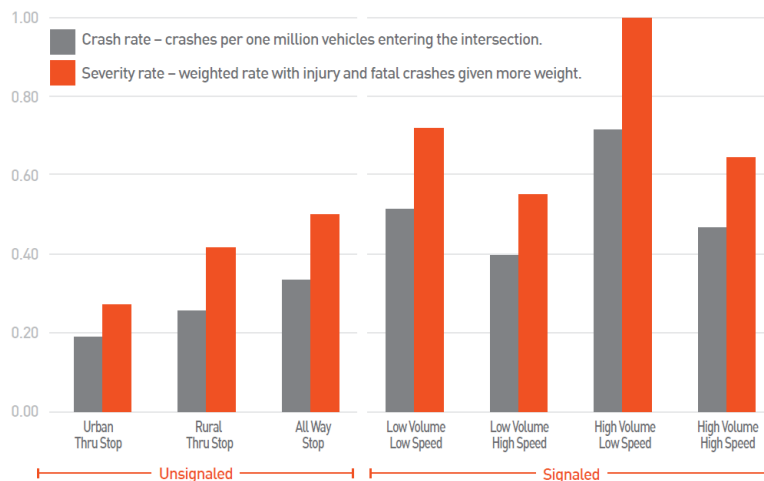




## Amana Trail Corridor Review

- \* Posted Speed – Determined by MnDOT. Dakota County has requested MnDOT provide a speed authorization. Final determination expected this summer.
- \* Pedestrian Crossings – Plan for new crossing locations to improve safety by reducing conflicts and providing a refuge for pedestrians.
- \* Traffic Control at Amana and Addisen – Ensure that traffic control has the lowest risk for crashes.

## Crash Data By Traffic Control



## Amana and Addison Path Traffic Control Considerations

Consider traffic control tradeoffs to minimize risk:

- All Traffic Control has crash risk based on driver error
- Assess existing and future traffic conditions to determine best approach

### **Side Stop:**

- \* Addisen Path stops, Amana does not
- \* Works best throughout the day based on current (2,300 veh) and expected (9,400 veh) traffic conditions.
- \* Adequate gaps are available for traffic on Addisen trail to cross or turn onto Amana Trail now and with full development south of Amana Trail.

## Amana and Addison Path Traffic Control Considerations

Consider traffic control tradeoffs to minimize risk:

- All Traffic Control has crash risk based on driver error
- Assess existing and future traffic conditions to determine best approach

### **All-way stop:**

- \* Traffic meets no criteria for all-way stop (now or with future development)
- \* Traffic volumes are not balanced – 80% of the traffic is on Amana Trail
- \* Increased crash and crash severity risk
- \* Rolling/disregard stops – review showed 10% of vehicles disregarded or did not come to a complete stop.