



# School Travel

## SAFETY ASSESSMENT



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Kimley»»Horn



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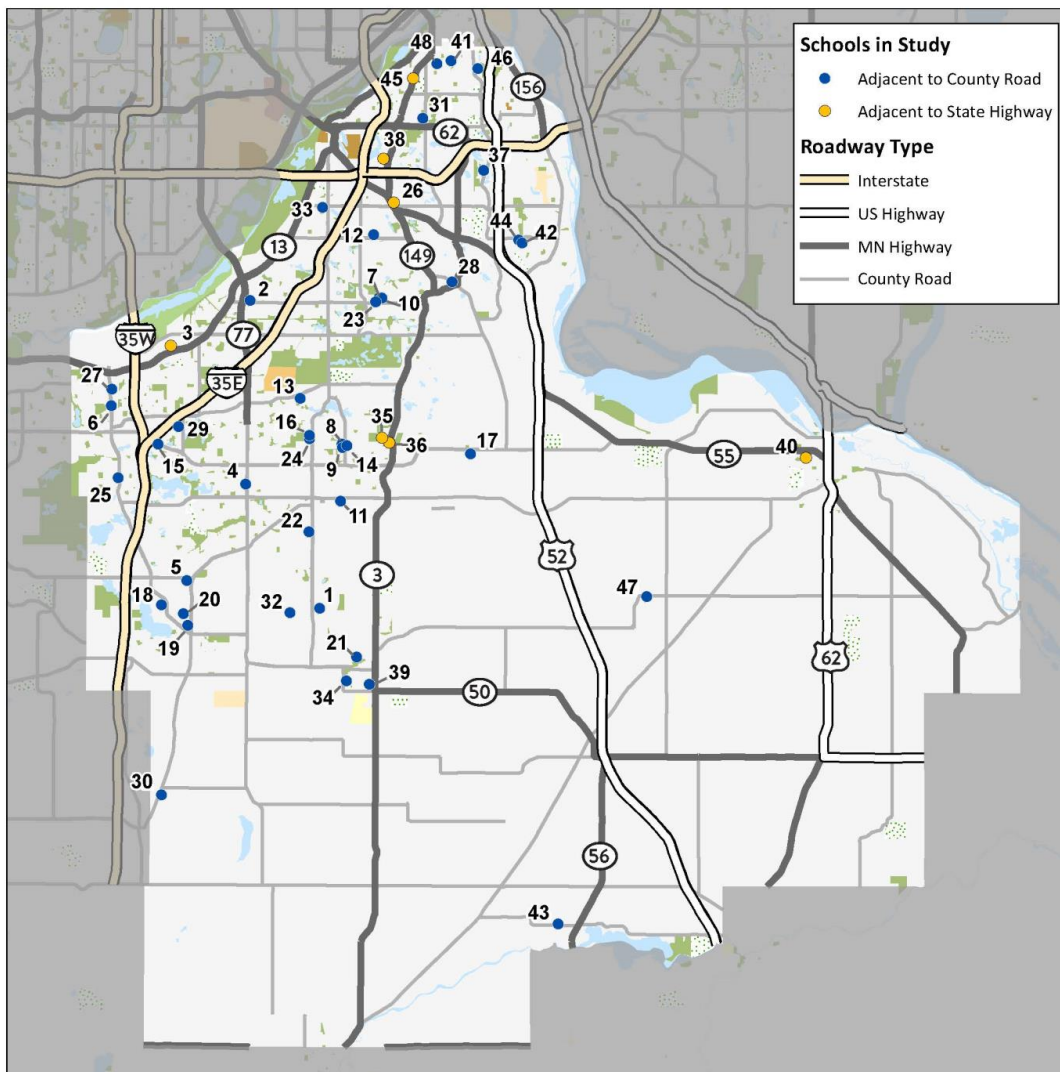


# Executive Summary

## INTRODUCTION

Dakota County and the Minnesota Department of Transportation (MnDOT) have partnered to proactively address safety for students traveling to and from schools next to county and state roads, with a focus on safety for those who walk and bike to school. School zones are a priority for safety because they involve younger pedestrians, bicyclists, and new drivers. Dakota County and MnDOT have worked with several schools in the county to address safety concerns in school zones. However, a consistent and proactive approach is needed to review safety at all the schools on the county and state road network. School properties immediately next to county or state road right-of-way were included in the School Travel Safety Assessment, resulting in a group of 48 schools which are shown in Figure ES-1.

Figure ES-1: Map of Schools Included in Assessment





## PUBLIC AND STAKEHOLDER ENGAGEMENT

Public input was sought at two key points in the assessment process:

- Engagement #1 – Identify walking and biking routes and safety concerns at the 48 schools included in the assessment.
- Engagement #2 – Seek feedback on draft safety improvements identified in the assessment.

Due to the COVID-19 pandemic, all engagement was done virtually through the county website. The project team relied on representatives from the school districts to publicize the engagement opportunities to school staff and families and direct them to the county website to learn about the project and provide feedback. The timeline of the engagement was also extended to provide ample opportunities for the public to provide input.

## SCHOOL AND TRAVEL SAFETY TREATMENTS

Best practices and recommendations for engineering, education, and enforcement treatments have been identified that Dakota County, MnDOT, and its partners can implement consistently throughout the county. The safety of children on public streets near schools is a shared responsibility between drivers, road authorities, school officials, and parents and therefore a combination of treatments is usually needed to improve safety for children walking and biking to school.

The following treatments were researched and considered as part of the School Travel Safety Assessment:

- Sidewalk and trails
- School route plan and Safe Routes to School planning
- School crossings
- School speed zones
- Roadway geometric changes
- Site and circulation improvements
- Education
- Enforcement

The research and best practices were used to identify the conditions when each treatment should be considered and how it should be implemented to be most effective.

## SCHOOL EVALUATIONS AND RECOMMENDED IMPROVEMENTS

All 48 schools included in the assessment were grouped based on their transportation context. The groups were used to evaluate similar transportation conditions together in order to develop consistent recommendations for similar conditions. The following three groups were used for the assessment:

- **High-Speed, 4+ Lane Road:** Schools next to county or state roads with four or more lanes and speed limit of 40 miles per hour (mph) or more.
- **High-Speed, 2-3 Lane Road:** Schools next to county or state roads with two or three lanes and speed limit of 40 mph or more.



- **Low Speed Road:** Schools next to county or state roads with speed limit of 35 mph or less. All schools on roads with lower speed limits were grouped together because there were only two schools on roads with three or four lanes.

The conditions at each school site were used to develop the specific recommendations for the school. The summary of recommended improvements by school evaluation group are summarized in Table ES-1. The summary of recommendations for all 48 school sites is included in Appendix B.

**Table ES-1: Summary of Recommendations by School Evaluation Group**

School Evaluation Group	Number of Schools	Number of Sites with Recommended Treatment								No Treatments Recommended on County/State Road
		Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	
			Major	Minor						
High Speed, 4+ Lanes	27	4	0	4	1	3	1	14	1	8
High Speed, 2-3 Lanes	11	4	2	1	3	2	1	4	1	4
Low Speed	10	4	5	2	4	0	1	3	4	0
<b>TOTAL</b>	<b>48</b>	<b>12</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>21</b>	<b>6</b>	<b>12</b>

The individual school site evaluations are documented in Appendix C. The school district information, school site data, and transportation data that support the recommendations are provided for all 48 school sites. The public input at each school site is also documented and the recommended improvements are described in more detail.

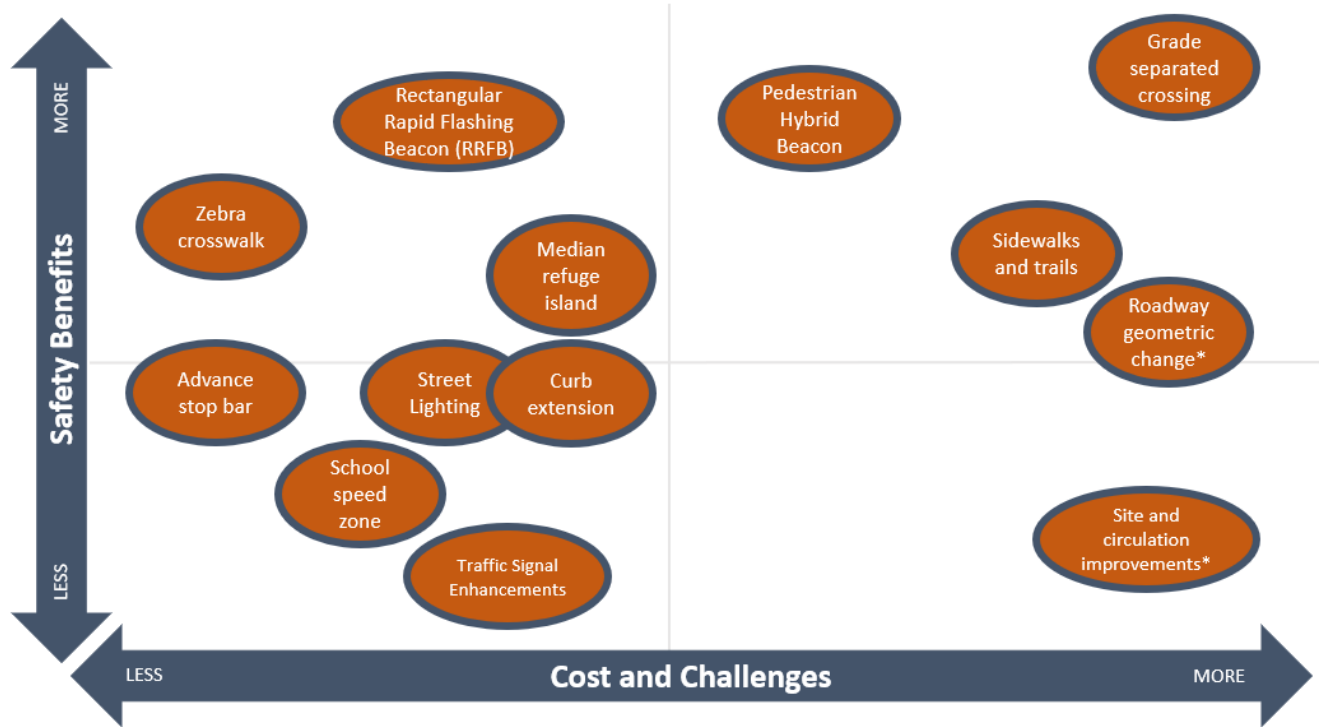
### IMPLEMENTATION AND NEXT STEPS

The recommendations and improvements at each school site are not currently programmed. The next steps for Dakota County and MnDOT will be to identify potential programs and projects that will be used to implement improvements.

The graphic in Figure ES-2 shows the school safety improvements according to a relative scale of safety benefits and costs/challenges. Improvements can be prioritized according to where they fall on this matrix, with the highest benefit/lowest cost improvements shown in the top left quadrant of the matrix. Improvements on the right half of the matrix will require the most time and resources to implement.



Figure ES-2: Improvement Matrix for School Safety Treatments



\*Includes several types of treatments with varying levels of benefits.

Some of the improvements may be implemented in the short term by Dakota County as part of their regular maintenance and operations activities. This can allow improvements to be completed more quickly because they are not tied to a capital project. Implementation through existing programs and budgets is most applicable for lower cost treatments such as crosswalk markings and traffic signal enhancements.

There may also be opportunities to add school safety improvements to existing projects, such as a pavement resurfacing or intersection improvement project near the school. An example of this implementation approach is the through-lane reduction and median refuge completed in 2020 on CR 28 (80<sup>th</sup> Street) near Inver Grove Heights Middle School and Simley High School.

MnDOT will look to incorporate improvements with upcoming projects as well as evaluating standalone capital projects.

Based on the types of treatments considered in this assessment, improvement costs more than \$100,000 or would improvements that would require right-of-way acquisition were assumed as thresholds for Dakota County to plan for a capital project in the five-year capital improvement program (CIP). Improvements that exceed these thresholds will require the most time and funding for implementation, which is why they would likely be completed through a capital project.





## Chapter 1. Introduction

### 1.1 ASSESSMENT PURPOSE

Dakota County and the Minnesota Department of Transportation (MnDOT) have partnered to proactively address safety for students traveling to and from schools next to county and state roads, with a focus on safety for those who walk and bike to school. School zones are a priority for safety because they are commonly used by younger pedestrians, bicyclists, and new drivers. Improving safety for students that walk and bike to school also addresses equity because some students do not have the option to drive a car, be driven to/from school, or take a school bus. Dakota County and MnDOT are committed to improving safety for students traveling to/from school by all transportation modes.

A consistent and proactive approach is needed to review safety at all the schools on the county and state road network. The assessment uses a proactive approach to safety by recommending improvements even where no crashes have occurred. The assessment also follows a consistent approach to identifying treatments for locations with similar conditions across the county. The recommendations developed as part of this assessment include treatments in engineering, education, and enforcement. Finally, the improvements can be prioritized in terms of safety benefit relative to the cost of the treatment and the time needed for implementation, in order to identify improvements that can be implemented quickly and those that will need additional time, planning, or funding for implementation.

### 1.2 ASSESSMENT LOCATIONS

To identify the schools to be included in this assessment, an analysis was completed of all school sites in Dakota County using geographic information systems (GIS) data. There are approximately 65 school sites in Dakota County, all of which are within 1,000 feet of a county or state road. Therefore, to create a feasible number of sites for analysis in this assessment, only schools with the school property immediately next to county or state road right-of-way were included. This resulted in a group of 48 schools, which are shown in Figure 1-1 and listed in Table 1-1. The school sites include both public and private schools, all grade levels from pre-kindergarten through high school, and nine of the ten public school districts in Dakota County. The number of schools in each public school district are summarized in Table 1-2.

As shown in Table 1-1, the schools have been grouped based on the type of county or state road they are next to. This was done so that recommendations could be applied consistently at multiple schools where similar conditions exist. The following three groups were used for the assessment:

- **High-Speed, 4+ Lane Road:** Schools next to county or state roads with four or more lanes and speed limit of 40 miles per hour (mph) or more.
- **High-Speed, 2-3 Lane Road:** Schools next to county or state roads with two or three lanes and speed limit of 40 mph or more.



- **Low Speed Road:** Schools next to county or state roads with speed limit of 35 mph or less. All schools on roads with lower speed limits were grouped together because there were only two schools on roads with three or four lanes.

Figure 1-1: Map of Schools Included in Assessment

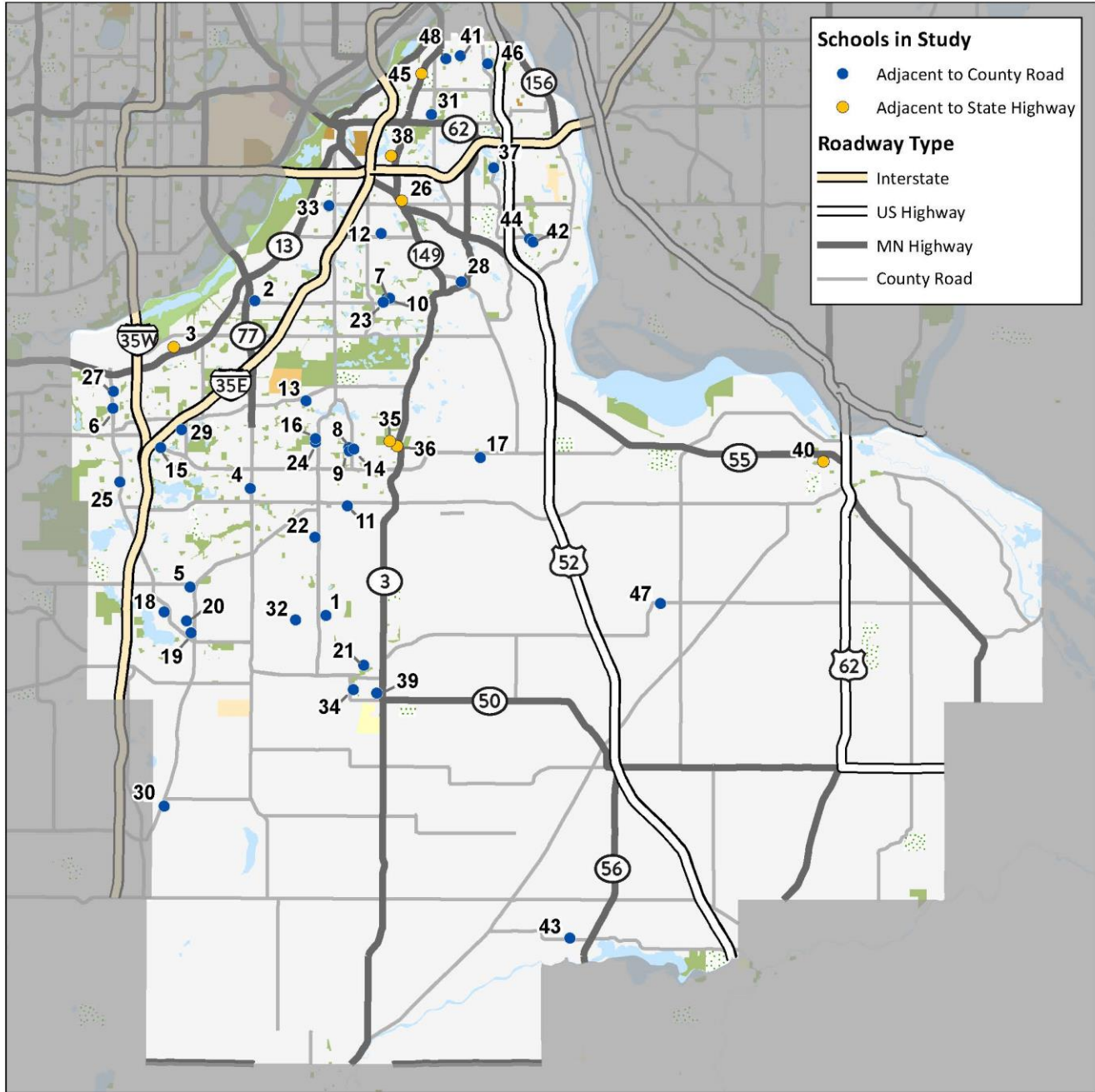




Table 1-1: List of Schools Included in Assessment

Map ID	School Name	School District	City	County or State Road
<b>HIGH SPEED, 4+ LANES</b>				
1	Akin Road Elementary School	Independent School District (ISD) 192 (Farmington)	Farmington	CR 64 (195 <sup>th</sup> Street)
2	Burnsville Alternative High School	ISD 191 (Burnsville-Eagan-Savage)	Eagan	CR 30 (Diffley Road)
3	Burnsville High School	ISD 191 (Burnsville-Eagan-Savage)	Burnsville	TH 13
4	Cedar Park Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 23 (Cedar Avenue)
5	Century Middle School	ISD 194 (Lakeville)	Lakeville	CR 60 (185 <sup>th</sup> Street)
6	Cyprus Classical Academy	Private	Burnsville	CR 5
7	Dakota Hills Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	CR 30 (Diffley Road)
8	Dakota Ridge School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 33 (Diamond Path)
9	Diamond Path Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 33 (Diamond Path)
10	Eagan High School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	CR 30 (Diffley Road)
11	East Lake Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Lakeville	CR 46 (160 <sup>th</sup> Street)
12	Faithful Shepherd	Private	Eagan	CR 28 (Yankee Doodle Road)
13	Falcon Ridge Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 38 (McAndrews Road)
14	First Baptist Church and School	Private	Rosemount	CR 33 (Diamond Path)
15	Good Shepherd Lutheran	Private	Burnsville	CR 42
16	Highland Elementary	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 31 (Pilot Knob Road)
17	Intermediate School District 917 (Adjacent to Dakota County Technical College)	ISD 917	Rosemount	CR 42 (145 <sup>th</sup> Street)



Table 1-1: List of Schools Included in Assessment (continued)

Map ID	School Name	School District	City	County or State Road
<b>HIGH SPEED, 4+ LANES (continued)</b>				
18	Kenwood Trail Middle School	ISD 194 (Lakeville)	Lakeville	CR 50 (Kenwood Trail)
19	Lake Marion Elementary School	ISD 194 (Lakeville)	Lakeville	CR 9 (Dodd Boulevard), CR 50 (Kenwood Trail)
20	Lakeville North High School	ISD 194 (Lakeville)	Lakeville	CR 9 (Dodd Boulevard)
21	Levi P. Dodge Middle School	ISD 192 (Farmington)	Farmington	CR 50 (212 <sup>th</sup> Street)
22	North Trail Elementary School	ISD 192 (Farmington)	Lakeville	CR 31 (Pilot Knob Road)
23	Northview Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	CR 30 (Diffley Road)
24	Scott Highlands Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	CR 31 (Pilot Knob Road)
25	Southview Christian School	Private	Burnsville	CR 5
26	Trinity Lone Oak Lutheran	Private	Eagan	TH 55
27	Vista View Elementary	ISD 191 (Burnsville-Eagan-Savage)	Burnsville	CR 5
<b>HIGH SPEED, 2-3 LANES</b>				
28	Berea Lutheran School	Private	Inver Grove Heights	CR 71 (Rich Valley Boulevard)
29	Echo Park Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Burnsville	CR 11
30	Glory Academy	Private	Lakeville	CR 9 (Dodd Boulevard)
31	Henry Sibley High School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Mendota Heights	CR 63 (Delaware Avenue)
32	Meadowview Elementary School	ISD 192 (Farmington)	Farmington	CR 64 (195 <sup>th</sup> Street)
33	Pilot Knob STEM Magnet Elementary School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Eagan	CR 26 (Lone Oak Road), CR 31 (Pilot Knob Road)
34	Robert Boeckman Middle School	ISD 192 (Farmington)	Farmington	CR 31 (Denmark Avenue)



Table 1-1: List of Schools Included in Assessment (continued)

Map ID	School Name	School District	City	County or State Road
<b>HIGH SPEED, 2-3 LANES (continued)</b>				
35	Rosemount High School	ISD 196 (Rosemount-Apple Valley-Eagan)	Rosemount	TH 3 (Robert Trail)
36	Rosemount Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Rosemount	TH 3 (Robert Trail)
37	Salem Hills Elementary School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	CR 73 (Babcock Trail)
38	Visitation School	Private	Mendota Heights	TH 149 (Dodd Road)
<b>LOW SPEED</b>				
39	Farmington Elementary School	ISD 192 (Farmington)	Farmington	CR 74 (Ash Street)
40	Hastings Middle School	ISD 200 (Hastings)	Hastings	TH 55
41	Heritage STEM Middle School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	West Saint Paul	CR 4 (Butler Avenue)
42	Inver Grove Heights Middle School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	CR 28 (80 <sup>th</sup> Street)
43	Randolph Elementary and High School	ISD 195 (Randolph)	Randolph	CR 88 (292 <sup>nd</sup> Street)
44	Simley High School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	CR 28 (80 <sup>th</sup> Street)
45	Somerset Elementary	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Mendota Heights	TH 149 (Dodd Road)
46	St. Croix Lutheran Academy	Private	West Saint Paul	CR 73 (Oakdale Avenue)
47	St. John the Baptist Catholic School	Private	Vermillion	CR 62 (Main Street)
48	St. Joseph's Catholic School	Private	West Saint Paul	CR 4 (Butler Avenue)



Table 1-2: Summary of Assessment Schools by School District

School District	Number of Schools
ISD 191, Burnsville-Eagan-Savage School District	3
ISD 192, Farmington Area Public Schools	6
ISD 194, Lakeville Area Schools	4
ISD 195, Randolph Public Schools	1
ISD 196, Rosemount-Apple Valley-Eagan Public Schools	13
ISD 197, West St. Paul-Mendota Heights-Eagan Area Schools	4
ISD 199, Inver Grove Heights Schools	3
ISD 200, Hastings Public Schools	1
Intermediate School District 917	1
Private Schools	12
<b>Total</b>	<b>48</b>

### 1.3 ASSESSMENT PROCESS

The process for this assessment involved five main steps as laid out in the following bullets and illustrated in the schedule in Figure 1-2.

- **Identify schools for the assessment:** School sites next to county and state road right-of-way were included in this assessment, as previously described in Section 1.2.
- **Data collection:** Research and best practices for safety treatments at schools were gathered and evaluated, as described in Chapter 3. Transportation and school data were assembled for the 48 schools included in this assessment, which are documented in the individual school evaluations and recommendations in Appendix C.
- **Detailed evaluations:** A smaller group of sample schools was identified and used to conduct more detailed evaluations. The sample schools helped to inform recommended treatments for common conditions that occur at multiple schools. The sample schools and evaluations are described in Chapter 4.
- **Develop recommendations:** The recommended applications of each safety treatment are discussed in Chapter 3. The process for developing recommendations for each school site is described in Chapter 4 and the resulting improvements are detailed in Appendix C.
- **Create implementation plan:** Document the assessment process, the evaluations at each school, the recommended improvements, and benefit/cost information that Dakota County and MnDOT can use to identify potential programs and projects that will be used to implement improvements.



At two key points in the assessment, public input was sought on existing safety concerns and on potential improvements. The engagement strategies and feedback are summarized in Chapter 2.

**Figure 1-2: Assessment Process and Schedule**

Project Schedule	MAY-20	JUN-20	JUL-20	AUG-20	SEP-20	OCT-20	NOV-20	DEC-20	JAN-21
Identify Focus Schools	█								
Virtual Engagement - Round 1		█	█	█					
Data Collection	█	█	█	█					
Detailed School Evaluations			█	█	█				
Develop Recommendations						█	█	█	
Virtual Engagement - Round 2							█	█	
Create Implementation Plan								█	█

## School Travel Safety Assessment Committees

### PROJECT MANAGEMENT TEAM

The Project Management Team (PMT) met eight times during the School Travel Safety Assessment to provide input on the process, school evaluations, recommendations and implementation plan. The PMT included representatives from the following agencies:

- Dakota County Transportation
- MnDOT Metro District and MnDOT Central Office
- City of Lakeville
- City of Eagan

### ADVISORY COMMITTEE

The Advisory Committee included the PMT members as well as additional representatives from Dakota County, MnDOT, and the school districts. The committee met four times as a group during the School Travel Safety Assessment and the project team regularly coordinated one-on-one with the school district representatives during the data collection, engagement, and recommendation stages of the project.



The Advisory Committee included representatives from the following agencies:

- ISD 191 (Burnsville-Eagan-Savage)
- ISD 192 (Farmington)
- ISD 194 (Lakeville)
- ISD 195 (Randolph)
- ISD 196 (Rosemount-Apple Valley-Eagan)
- ISD 197 (West St. Paul-Mendota Heights-Eagan)
- ISD 199 (Inver Grove Heights)
- ISD 200 (Hastings)
- Dakota County Transportation
- Dakota County Public Health
- MnDOT Metro District and MnDOT Central Office
- City of Lakeville
- City of Eagan

## 1.4 HOW TO USE THIS REPORT

The School Travel Safety Assessment focuses on safety near the schools next to county and state roads and recommendations for safety improvements. These recommendations were developed based on research studies of the effectiveness of each treatment, national best practices, stakeholder and public input, and an analysis of the schools included in the assessment. While this assessment focused on 48 schools in Dakota County, the findings and best practices documented in this report can be applied at other schools where similar conditions exist.

As part of the engagement process, the project team also heard about conditions and community concerns on city streets near the schools included in the assessment. These conditions and comments are reflected in this report for future consideration by the cities and schools, but this assessment does not include any recommendations on city streets as they were not the focus of the assessment.

The information in this report is provided to Dakota County and MnDOT to improve safety near schools. The implementation of the recommendations is anticipated to occur over several years. The improvements may be implemented as part of regular operations and maintenance activities, through existing planned projects, or programmed as a new project (see Chapter 5).

Finally, the School Travel Safety Assessment does not set requirements or mandates, does not create standards, and does not establish a legal standard of care. In an effort to help reduce the potential exposure to claims of negligence associated with motor vehicle crashes, three key points should be considered:

- Federal law (23 U.S.C. Section 409) established that information generated as part of the statewide safety planning process is considered privileged and unavailable to the public. The privileged status includes the lists of at-risk locations, and information supporting the development and evaluation of





potential safety projects. The federal law and the privileged status of the safety information was upheld by the U. S. Supreme Court in the case of Pierce County (Washington) v. Guillen.

- Minnesota tort law provides for discretionary immunity for decisions made by agency officials when there is documentation of the decision and evidence of consideration of social, economic, and political issues. To help establish immunity for decisions relative to moving forward with development of recommended safety improvement projects, the County Engineer is encouraged to prepare a memorandum/plan of action for the County Board. This document would identify the projects selected for implementation and those they choose to dismiss and why.
- Minnesota tort law also provides for official immunity for decisions made by agency staff where there is written documentation of the thought process supporting project development and implementation.



## Chapter 2. Public and Stakeholder Engagement

### 2.1 PUBLIC ENGAGEMENT ACTIVITIES

Public input was sought at two key points in the assessment process:

- Engagement #1 – Identify walking and biking routes and safety concerns at the 48 schools included in the assessment.
- Engagement #2 – Seek feedback on draft safety improvements identified in the assessment.

Due to the COVID-19 pandemic, all engagement was done virtually. The project team relied on the members of the Advisory Committee to publicize the engagement opportunities to school staff and families. The engagement activities and feedback received are summarized in the following sections.

#### Virtual Engagement #1

The first virtual engagement was held from June 19 to August 31, 2020, and included the following components:

- Project introduction video
- Interactive map
- Parent/caregiver survey

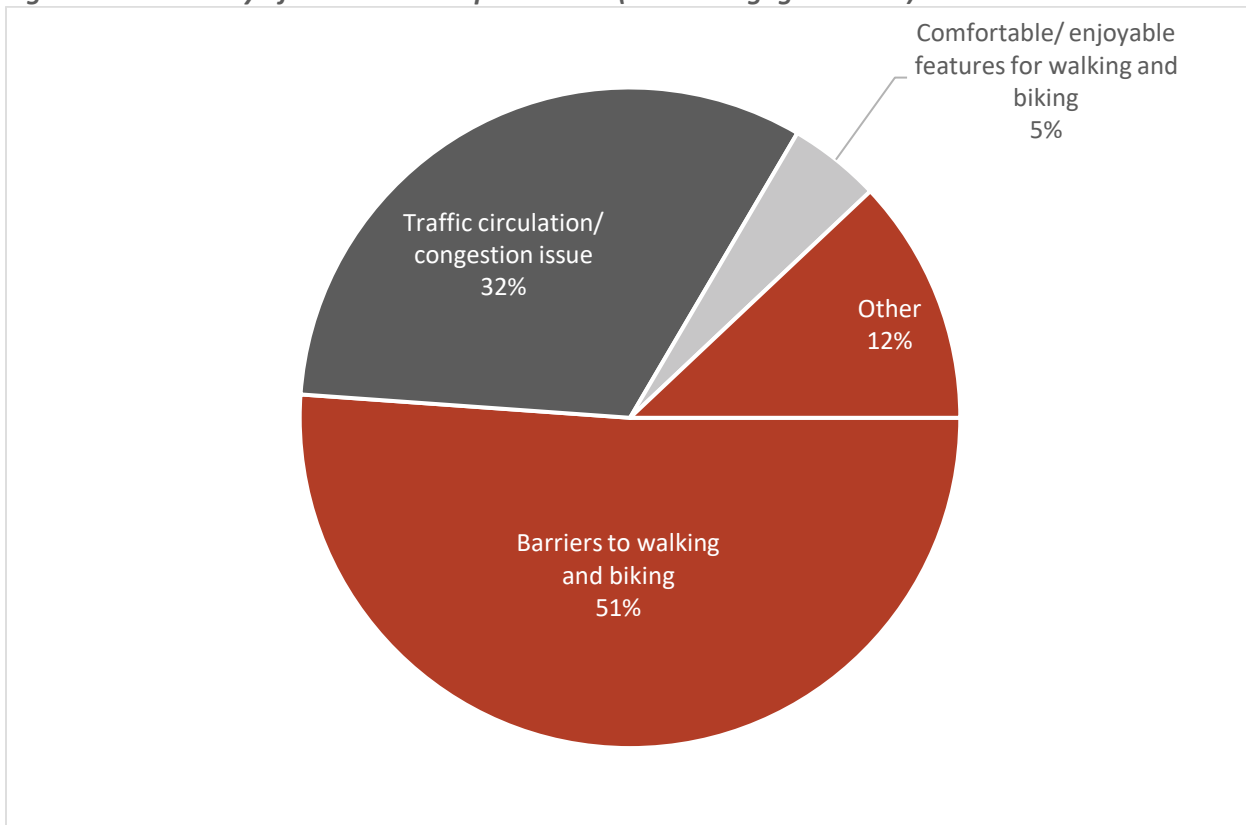
All engagement materials were available on the Dakota County project website in English and Spanish. The engagement was publicized primarily through announcements in regular school communications in order to reach the targeted audiences of school staff and families. Dakota County social media was also used to promote the virtual open house. There were 316 views of the project introduction video.

#### INTERACTIVE MAP

The interactive map provided tools for people to indicate their routes to and from school, locations of enhancements and perceived barriers in their trips, locations of congestion, and other issues. A total of 74 routes were drawn and 133 pins were dropped on the map along with an optional comment box.

The chart in Figure 2-1 summarizes the types of pins and routes that were placed on the map and Figure 2-2 shows an example of how the map was used to gather input. Detailed summaries of map feedback for each school site are provided in the individual school evaluations in Appendix C.

Figure 2-1: Summary of Interactive Map Feedback (Virtual Engagement #1)

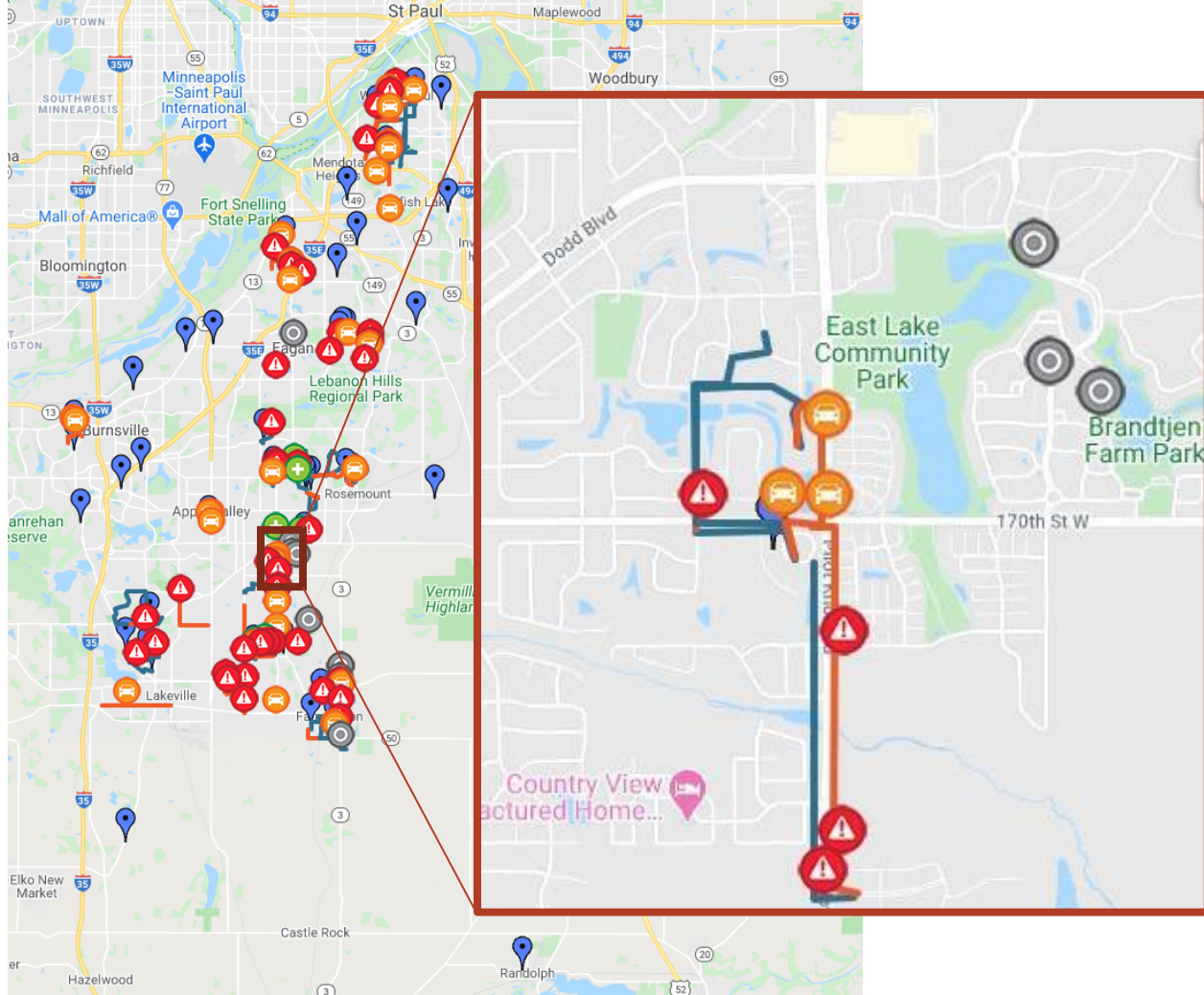









The common themes in the pin and route comments included:

- **Barriers to walking and biking and Routes you wish you could take:** Barriers that were identified included gaps in sidewalk/trail along high speed roadways, intersections without pedestrian crossing features, sidewalk/trail gaps on school grounds, and locations with uncomfortable close proximity between the sidewalk/trail and vehicles.
- **Traffic circulation/congestion:** Concerns that were mentioned included turning movements near schools, areas with limited visibility, and driver behavior such as speeding or distracted driving.
- **Routes you currently take:** Existing sidewalk/trail was identified as the main contributing factor in people’s route choice. Some comments mentioned crossing barriers or deteriorating sidewalk/trail conditions.
- **Other:** Locations where treatments such as speed zones or other traffic calming measures are desired were identified, as well as comments on school bussing areas and other safety concerns or comments.



Figure 2-2: Example of Interactive Map Feedback near North Trail Elementary (Virtual Engagement #1)



- LEGEND:**
-  = School next to county road or state highway
  -  = Comfortable/enjoyable features for walking and biking
  -  = Barriers to walking and biking
  -  = Traffic circulation/congestion issue
  -  = Other
  -  = Walking/biking routes you currently take
  -  = Walking/biking routes you wish you could take

### PARENT/CAREGIVER SURVEY

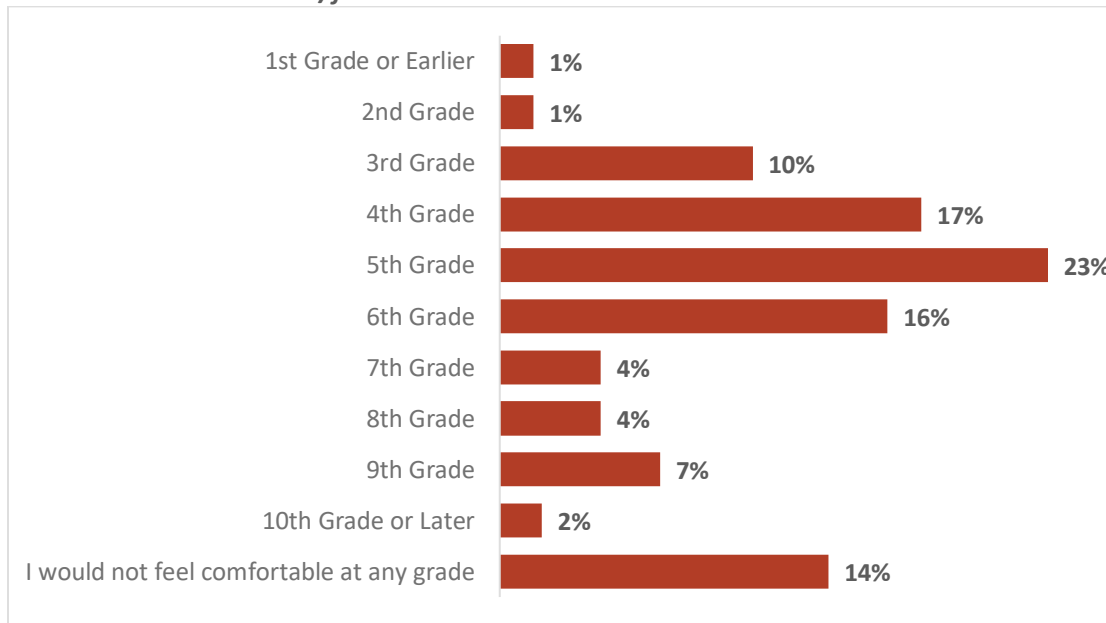
A survey of parents/caregivers was conducted in conjunction with the first virtual engagement to gather behavioral data on biking and walking decisions within Dakota County households. The survey included questions about the number and age of school-aged children, perceptions of walking and biking safety, and their decision-making process in letting their child/children walk or bike to/from school. The survey was modeled



after the standard parent/caregiver survey from the National Center for Safe Routes to School<sup>1</sup> and was provided in both English and Spanish.

There were 304 surveys completed during Virtual Engagement #1. The schools with the most surveys completed were Heritage STEM Middle School and Somerset Elementary, with 64 and 56 responses respectively. Of the parents responding to the survey, 57 percent reported that their child/children have asked for permission to walk or bike to/from school in the last year. The earliest grade level at which respondents said they would allow their student to walk or bike to school without an adult are shown in Figure 2-3. The most significant perceived walking/biking barriers as identified from the survey are shown in Figure 2-4.

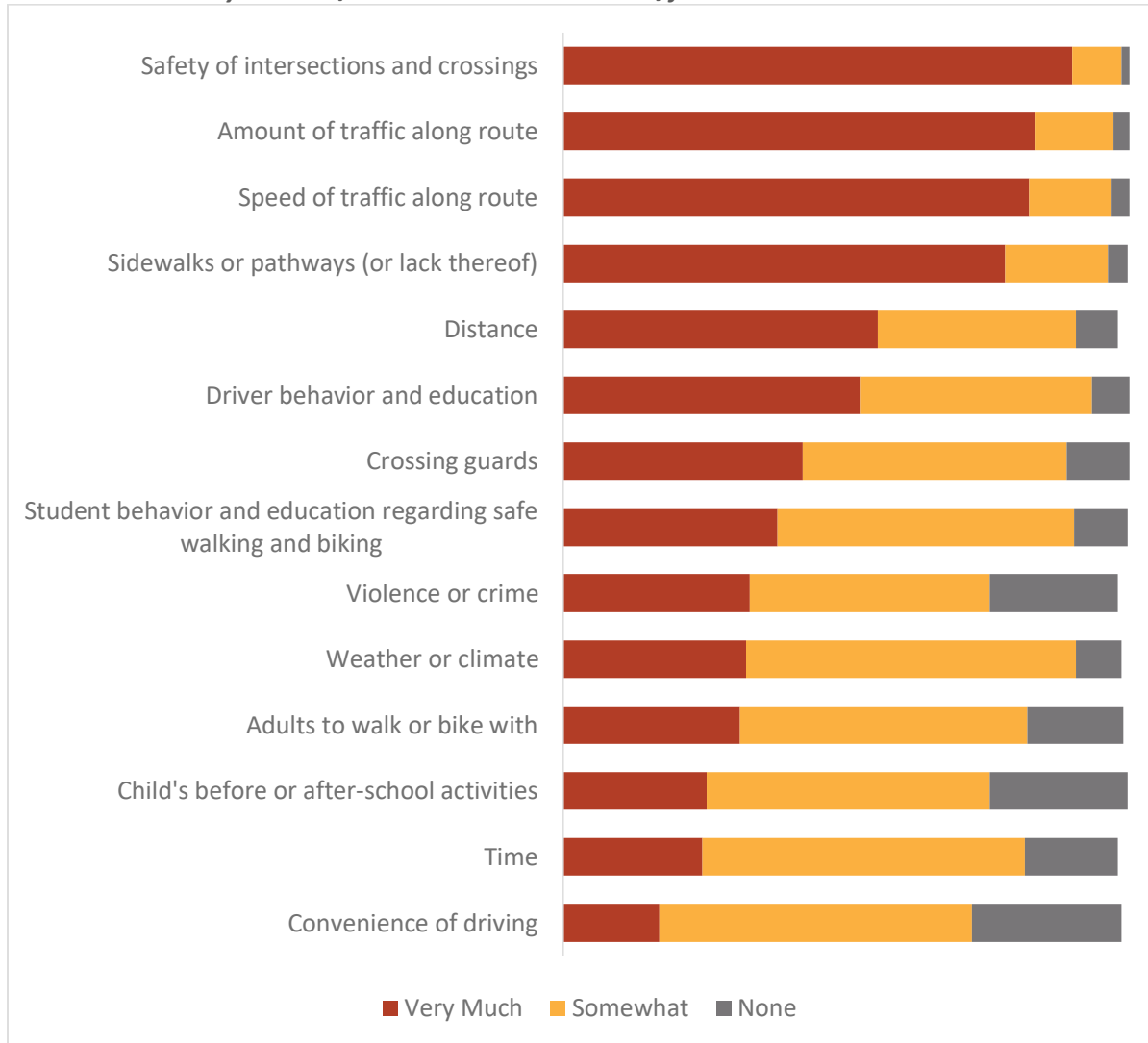
**Figure 2-3: Responses to the Parent Survey Question: What is the earliest grade that you would allow your student to walk or bike to/from school without an adult?**



<sup>1</sup> <http://saferoutesdata.org/>



**Figure 2-4: Responses to the Parent Survey Question: How much do the following issues affect your decision to allow or not allow your child/children to walk or bike to/from school?**



Open-ended survey responses are provided in the individual school evaluations in Appendix C.



## Virtual Engagement #2

The second virtual engagement was held from November 20 to December 31, 2020 and included the following components:

- Project introduction video (from Virtual Engagement #1)
- Interactive map with draft proposed improvements
- Feedback form for open-ended comments

All engagement materials were available on the Dakota County project website in English and Spanish. The engagement was publicized primarily through announcements in regular school communications in order to reach the targeted audiences, which were school staff and families. There were about 680 views of the project website during the second virtual engagement.

### INTERACTIVE MAP

The interactive map included draft improvements at each school site included in the assessment and provided tools for people to agree/disagree with the recommendation and to provide comments on the identified improvements.

There were 70 reactions to or comments on proposed improvements, of which 76 percent were in agreement with the draft improvements.

People that disagreed with the recommendations primarily had concerns with:

- A recommended sidewalk or trail segment and its potential impacts on their property
- Recommended evaluation for potential removal or addition of a school speed zone. There were several comments suggesting a lowered regulatory speed limit.

Comments in agreement with recommended improvements included support for more visible crossings, connections to the existing bicycle and pedestrian network, and greater enforcement of existing school speed zones.

### FEEDBACK FORMS

An additional five comments were received via the feedback form on the project website. These comments addressed a variety of topics including:

- Safety concerns at intersections on city streets or on county/state roads further away from the schools included in the assessment.
- Comments and questions about schools not included in the assessment.
- Concerns with the draft recommendations due to potential impacts to a resident's property.

## 2.2 STAKEHOLDER INTERVIEWS

Interviews were also conducted with other safety professionals that work in Dakota County to gain insight into their perspectives and experiences with student active transportation. Dakota County has both an involved



Toward Zero Deaths (TZD) traffic safety coalition as well as multiple law enforcement agencies that receive federal grant funding for additional traffic law enforcement through the statewide Toward Zero Deaths program. Dakota County public health leaders were also asked to share their experience as they are important partners in school district programs to encourage students to walk and bike to school.

Each interview lasted approximately 30 to 45 minutes. Interview questions were open-ended and built on responses received. Questions included:

- How has your agency/organization been involved with student active transportation (i.e., walking or biking)? This question was followed up with specific questions about efforts or details of programs their organization was involved with.
- From your perspective, what do you see as the primary issues with students walking and/or biking to schools?

While the Dakota County Toward Zero Deaths Coalition works on traffic safety efforts throughout the County and has been involved with school bus stop arm violation campaigns, the coalition has not been involved with promoting student biking and walking.

Law enforcement officials from different police departments described varying levels of involvement with safety efforts aimed at student walkers and bikers. In one community, officers work as frequently as possible enforcing traffic laws in school zones, beginning in the fall and throughout the winter months when morning visibility is lower. They also participate in back-to-school events to promote safety in schools, including biking and walking. In this community, officers work in concert with paid adult crossing guards as no student crossing guards are used. It was noted that driver behavior during student drop-offs is a significant safety concern.

Speaking with a law enforcement representative from another Dakota County community, it was noted that student crossing assistance comes primarily from student crossing guards that are supervised by school staff. In this city, enforcement occurs more often around middle and high school locations, due to complaints of speed and drivers not yielding to people walking. The observation was also made that enforcement overall was hampered because schools in this city lack adequate places for officers to park and observe traffic with a good view of crosswalks, or to be visible in order to deter speeders.

Dakota County public health staff noted that in their work to increase walking and biking, parents expressed the most concern around students crossing streets and using paths that parallel roadways for fear of unsafe driver behaviors. Parents also had safety concerns about underpasses or areas adjacent to public transit bus stops. Many school districts use non-dedicated staff for their active transportation advocacy efforts, which can make consistent effort and messaging a challenge. Finally, it was observed that an equity lens was important because all students do not have access to bicycles.





## Chapter 3. School Travel Safety Treatments

Best practices and recommendations for engineering, education, and enforcement treatments have been identified that Dakota County, MnDOT, and its partners can implement consistently throughout the county. The safety of children on public streets near schools is a shared responsibility between drivers, road authorities, school officials, and parents and a combination of treatments is usually needed to improve safety for children walking and biking to school. This chapter describes:

- Treatments considered and recommended for schools on county and state roads.
- Research and best practices that support the application of these treatments.
- Specific conditions when the treatment is recommended to be used or should be considered.
- Process to evaluate and implement the treatment.

Improving safety necessitates a multi-pronged approach that includes engineering, education, and enforcement. No treatment by itself will address all safety concerns for people walking and biking, so the recommendations take a comprehensive approach to improve all aspects of safety.

The following sections present the treatments that were considered and recommended to improve safety near schools. They are organized with the fundamental elements (school route plan and sidewalk/trails) first, followed by the mostly commonly heard requests from school officials and parents.

### 3.1 SCHOOL ROUTE PLAN AND SAFE ROUTES TO SCHOOL PLANNING

#### Purpose of the Treatment

A school route plan identifies the walking and biking routes to a school along with existing intersection control, school crossing guard locations, and school crossing locations. A school route plan can be developed by any school with a small investment of time.

A Safe Routes to School plan is a more comprehensive process that encompasses all 6 Es of safety (evaluation, education, encouragement, equity, enforcement, and engineering). The planning process engages school and community members to develop an action plan for addressing barriers and encouraging more students to walk and bike to school. A Safe Routes to School plan typically requires several months to develop and necessitates input from many stakeholders.

While they have similar names, a school route plan and a Safe Routes to School plan are used for different purposes and represent different levels of time investment. A school route plan can be developed independent of any larger study, but can also be created as part of a Safe Routes to School planning process.

## Research and Best Practices

A school route plan is a requirement before consideration of other treatments such as school crossing enhancements and evaluation of school speed zones. A school route plan should be developed before any new infrastructure treatments are considered. An example of a school route plan is shown in Figure 3-1 and the plan includes:

- School location
- Walk zone of the school
- Primary walking and biking routes from each area of the walk zone
- Locations of school crossings and crossing guards

School routes and the school route plan are described in more detail in Section 7A.2 of the Minnesota Manual on Uniform Traffic Control Devices<sup>2</sup>.

Safe Routes to School planning is a more in-depth process that addresses education, encouragement, evaluation, equity, enforcement, and engineering. A Safe Routes to School Plan achieves the following objectives:

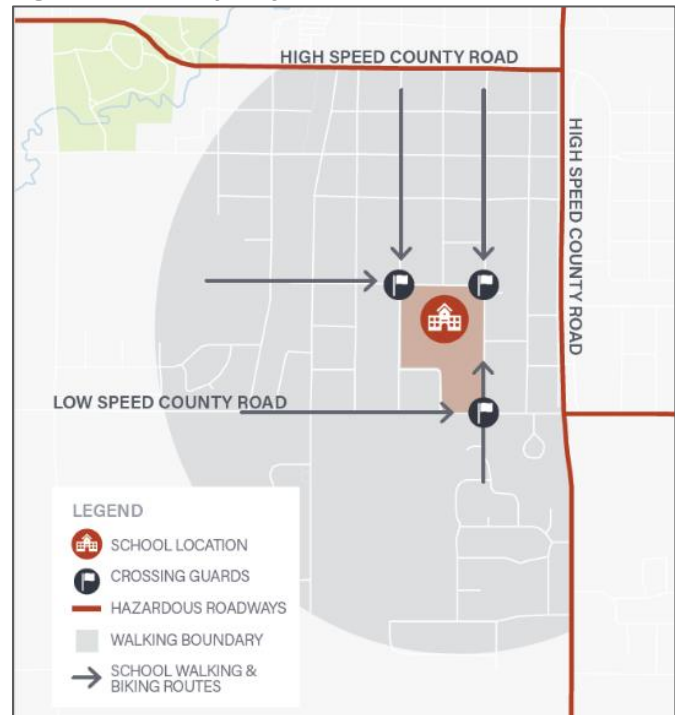
- Creates a vision and goals
- Develops support for walking and bicycling to school
- Evaluates existing walking and bicycling conditions
- Creates an action plan to address barriers and encourage more students to use active travel to school

The development of Safe Routes to School plans at the school or community level is supported through MnDOT grants<sup>3</sup>, and a Safe Routes to School plan is a required element for infrastructure grants<sup>4</sup> to implement walking and biking infrastructure improvements.

## Where the Treatment Should Be Used

A school route plan should be developed to identify walking and biking routes to school before any other treatments are considered such as school crossing improvements or school speed zones. **A school route plan**

Figure 3-1: Example of a School Route Plan



<sup>2</sup> <https://www.dot.state.mn.us/trafficeng/publ/mutcd/mnmutcd2018/mnmutcd-7.pdf>

<sup>3</sup> <http://www.dot.state.mn.us/saferoutes/planning-grants.html>

<sup>4</sup> <http://www.dot.state.mn.us/saferoutes/infrastructure-grants.html>



should be developed by all schools with students walking and biking and requires a small investment of time by the school and school district.

A Safe Routes to School plan can be developed for any community or school, and is recommended for schools that meet either of the following criteria:

- More than ten percent of students live within the walk area.
- School staff or parents/caregivers are actively engaged and want to increase walking and biking activity at the school.

To be successful, Safe Routes to School plans require time investments from all school stakeholders: school staff; parents/caregivers; school district staff; city, county, and state planning and engineering staff; and local law enforcement officers. Therefore, Safe Routes to School plans are recommended at schools or communities where stakeholders are engaged and committed to the planning, encouragement, and implementation process. Having a Safe Routes to School plan in place is also a requirement for schools or communities seeking Safe Routes to School infrastructure funding. It is also recommended that a school route plan be developed as part of the Safe Routes to School planning process and the route plan be included in the Safe Routes to School plan. The research and treatment recommendations in this report should be used when considering infrastructure improvements as part of a Safe Routes to School plan.

### Additional Considerations

School route plans should be reviewed by the school and school district at least every year since the school population changes every year. The review should confirm that the walking/biking routes are still appropriate and confirm crossing guard locations. The school route plan should also be shared with students and families at the start of each school year so they know where they should walk and bike to school (see Section 3.7). When changes in school enrollment or school transportation cause changes to the school route plan, the school or school district should work with Dakota County or MnDOT to reevaluate the treatments along the school routes (see Section 5.4).

MnDOT recommends that Safe Routes to School plans should be updated every three to five years<sup>5</sup> or when major changes are made to transportation conditions, attendance or walk areas of the school, or school transportation policies. The need for or frequency of updates to the plan will depend on whether the conditions at the school have changed.

## 3.2 SIDEWALK AND TRAILS

### Purpose of the Treatment

Sidewalks and trails provide a dedicated space for people to walk and bike that separates them from motor vehicles. They are important elements of a safe and multi-modal transportation system and provide the foundation for non-motorized travel options to and from school. A network of sidewalks and trails that are

<sup>5</sup> <http://www.dot.state.mn.us/mnsaferoutes/resources/plans.html>



maintained for year-round use provide multiple benefits including safety, environmental sustainability, active transportation options, and quality of life.

## Where the Treatment Should Be Used

Sidewalks and trails for children walking and biking to school are needed most along roadways with higher traffic volumes and speeds.

Dakota County practice is to construct shared use trails on each side of the highway within urban and suburban areas.<sup>6</sup> New sidewalk and trail construction near schools should be prioritized where:

- Students are currently walking or biking to school where no sidewalk/trail exists.
- The sidewalk/trail gap exists between a neighborhood and school that are on the same side of the county or state road. The new sidewalk/trail connection would provide a facility for students to walk or bike to the school without having to cross the county or state road.
- The sidewalk/trail gap exists between a neighborhood and a designated school crossing of a county or state road. The sidewalk/trail is needed for students to walk or bike to the location where crossing enhancements are provided, such as school crossing guards, active crossing devices, and other treatments.
- The school walk area includes neighborhoods where students would have the opportunity to walk or bike to school if a sidewalk or trail was provided along the county or state road.
- A sidewalk or trail connection is needed between the school and the local or regional sidewalk and trail network.

*Figure 3-2: Example of Sidewalk/Trail Gap Where There is Demand for Walking to School*



The Dakota County 2040 Transportation Plan identifies and priorities pedestrian and bicycle gaps in the county. Gaps near a school that is part of the assessment are discussed further in Appendix C.

## Additional Considerations

Walking and biking near fast-moving traffic can feel uncomfortable. A buffer between the curb and sidewalk or trail is recommended to provide a comfortable separation from traffic and also provide space for signs, lighting, and snow storage. An eight-foot buffer is recommended to provide adequate clearance from the trail to sign

<sup>6</sup> <https://www.co.dakota.mn.us/Transportation/PlanningPrograms/2040TransportationPlan/Pages/default.aspx>

posts, poles, and other obstructions. A four-foot buffer may be acceptable for lower speed roads and in constrained conditions.

The risk to a pedestrian walking on a sidewalk or trail is very small – from 2016 to 2018, one percent of pedestrian crashes in Minnesota involved a vehicle leaving the roadway. The most common types of pedestrian crashes in Minnesota involve pedestrians crossing the roadway (64 percent) or walking in the roadway (15 percent). Installation of a wall or barrier between traffic lanes and the sidewalk or trail is not recommended because it would not provide significant safety benefits. The types of crashes that the wall or barrier would prevent are very rare and it is not feasible to predict the locations where they could occur.

*Figure 3-3: Example of an Existing Trail Along a County Road*



### 3.3 SCHOOL CROSSINGS

#### Purpose of the Treatment

A school crossing is a designated crossing location that is part of a school route plan where children cross the road traveling to and from school. The number and locations of school crossings need to consider all of the following factors:

- The most direct and convenient routes for children walking and biking to school
- Engineering factors such as sight lines, minimizing the number of lanes being crossed, minimizing conflicts with vehicles, and locations where safety features (infrastructure) can be provided
- The need for school crossing guards for elementary and middle school age students

#### Research and Best Practices

This assessment identified and reviewed relevant research studies and best practices for school crossings. A literature review was conducted for crosswalk marking types, active crossing treatments, and crossings at single lane roundabouts. The following sections detail relevant research reviewed and the findings of those studies.

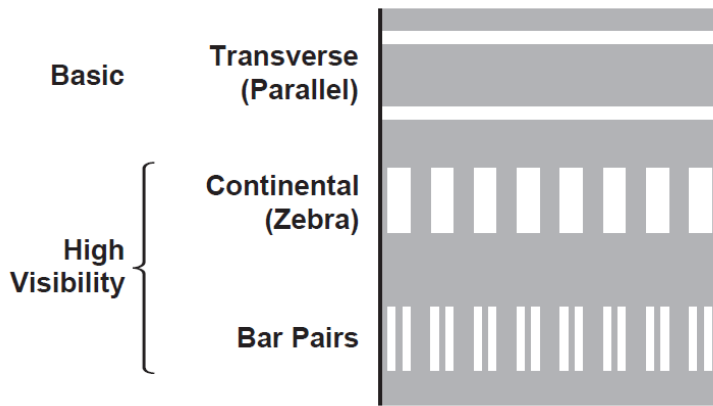
#### CROSSWALK MARKING TYPES

Best practices for crosswalk marking types were evaluated in the Federal Highway Association (FHWA) study, *Crosswalk Marking Field Visibility Study*.<sup>7</sup> The research study evaluated three crosswalk marking patterns, which

<sup>7</sup> <https://www.fhwa.dot.gov/publications/research/safety/pedbike/10068/10068.pdf>

are shown in Figure 3-4: transverse (parallel), continental (zebra), and bar pairs. The research sought to determine the relative visibility of each marking pattern using 78 participants driving an instrumented vehicle on a set course. The research variables included light level (day/night), age group of the participant, gender of the participant, vehicle type (car/SUV), and driving direction of the course.

Figure 3-4: Crosswalk Marking Types



The research concluded that the midblock continental (zebra) crosswalks were detected at twice the distance of the transverse (parallel) crosswalks. In addition, participants rated the continental (zebra) and bar pair crosswalks significantly higher in appearance than the transverse (parallel) crosswalks. The continental (zebra) and bar pair crosswalk types had similar participant ratings in both day and night conditions. The FHWA research study recommended the use of continental (zebra) or bar pair type crosswalks as the default marking type for all uncontrolled crossings. The School Travel Safety Assessment only references continental (zebra) type crosswalks in the recommendations because this is consistent with local practice and design standards in Minnesota.

### ACTIVE CROSSING TREATMENTS

Several research studies were reviewed and considered in identifying best practices and recommendations for active treatments at uncontrolled crossings. The relevant findings of the research are summarized in this section.

A 2018 FHWA study, *Improving Pedestrian Safety at Uncontrolled Crossing Locations*<sup>8</sup>, was prepared as part of the Safe Transportation for Every Pedestrian (STEP) program and is referred to as the STEP Guide. Based on the results of crash analysis, road safety audits, and stakeholder input, the STEP guide provides recommended treatments at uncontrolled crosswalks based on the roadway design, vehicle speeds and vehicle volumes as shown in Figure 3-5. The recommended treatments identify the conditions for which marked crosswalks alone would increase the crash risk and the additional treatments that should be considered.

<sup>8</sup> [https://safety.fhwa.dot.gov/ped\\_bike/step/docs/STEP\\_Guide\\_for\\_Improving\\_Ped\\_Safety\\_at\\_Unsig\\_Loc\\_3-2018\\_07\\_17-508compliant.pdf](https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf)

Figure 3-5: Application of Pedestrian Crash Countermeasures by Roadway Feature

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	① 2	①	①	①	①	①	①	①	①
	4 5 6	5 6 7 9	5 6 ⑦ ⑨	4 5 6	5 6 7 9	5 6 ⑦ ⑨	4 5 6	5 6 7 9	5 6 ⑨
3 lanes with raised median (1 lane in each direction)	① 2 3	① ③	① ③	① 3	① ③	① ③	① ③	① ③	① ③
	4 5	5 7 9	5 ⑦ ⑨	4 5	5 ⑦ ⑨	5 ⑦ ⑨	4 5	5 ⑦ ⑨	5 ⑨
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	① 2 3	① ③	① ③	① 3	① ③	① ③	① ③	① ③	① ③
	4 5 6	5 6 7 9	5 6 ⑨	4 5 6	5 6 ⑦ ⑨	5 6 ⑨	4 5 6	5 6 ⑨	5 6 ⑨
4+ lanes with raised median (2 or more lanes in each direction)	① ③	① ③	① ③	① ③	① ③	① ③	① ③	① ③	① ③
	5 7 8 9	5 7 8 9	5 8 ⑨	5 7 8 9	5 ⑦ 8 ⑨	5 8 ⑨	5 ⑦ 8 ⑨	5 8 ⑨	5 8 ⑨
4+ lanes w/o raised median (2 or more lanes in each direction)	① ③	① ③	① ③	① ③	① ③	① ③	① ③	① ③	① ③
	5 6 7 8 9	5 ⑥ 7 8 9	5 ⑥ 8 ⑨	5 ⑥ 7 8 9	5 ⑥ ⑦ 8 ⑨	5 ⑥ 8 ⑨	5 ⑥ ⑦ 8 ⑨	5 ⑥ 8 ⑨	5 ⑥ 8 ⑨

Given the set of conditions in a cell,

- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.\*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)\*\*
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)\*\*

Source: FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

An additional FHWA study, *Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks*<sup>9</sup>, was reviewed to understand the effectiveness of rectangular rapid flashing beacons (RRFBs) and specifically for multi-lane crossings. There were 22 RRFB sites studied in Florida, Illinois, and Washington, DC and 21 of the sites had three or more lanes. The research showed an increase in driver yielding from 18 percent with static signs to more than 80 percent with RRFB. The data showed that driver yielding remained similarly high even two years after initial installation. The research also showed that drivers increased the distance at which they yielded to the pedestrian, which reduced the potential of a multi-lane threat crash.

<sup>9</sup> <https://www.fhwa.dot.gov/publications/research/safety/pedbike/10043/10043.pdf>



Finally, a University of Minnesota research study was reviewed, *Assessing the Impact of Pedestrian-Activated Crossing Systems*<sup>10</sup>. The University of Minnesota study investigated the effects of pedestrian-activated crossing systems including the RRFB, pedestrian hybrid beacon (PHB)<sup>11</sup> and LED-enhanced pedestrian crossing signs. Observational data was collected via video at 34 sites in Minnesota to identify driver yielding rates and pedestrian delays. Due to a limited number of PHB and LED-enhanced sign locations included in the University of Minnesota study, only the RRFB data was considered when developing recommended treatments for the School Travel Safety Assessment. The driver yield rates for the RRFB locations by the number of lanes are summarized in Table 3-1. RRFBs installed for one- to three-lane crossings had average driver yield rates between 70 and 80 percent. The University of Minnesota research further reinforced the findings from the FHWA study that RRFB are effective on multi-lane crossings.

**Table 3-1: RRFB Driver Yielding Rates by Number of Lanes (Minnesota sites)**

Lanes Crossed	Average Driver Yield Rate (RRFB Activated)
1	72%
2	78%
3	79%
4	61%

## SCHOOL CROSSINGS AT SINGLE LANE ROUNDABOUTS

This assessment identified relevant research studies and best practices for school crossings at single lane roundabouts, and specifically the use of RRFBs. The research in this area was used to inform the school crossing treatments for the CR 30 (Diffley Road) project which was underway at the time the of this assessment, and the findings in this assessment are intended to guide the design of future projects in Dakota County. A literature review was conducted to identify relevant research, including the following studies:

- National Cooperative Highway Research Program (NCHRP). (2016). *Guidelines for the Application of Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities*, Project 3-78b.<sup>12</sup>
- National Cooperative Highway Research Program (NCHRP). (2017). *Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities*. Report 874.<sup>13</sup>

<sup>10</sup> <https://www.dot.state.mn.us/research/reports/2020/202013.pdf>

<sup>11</sup> Some agencies and research studies use the term High intensity Activated cross Walk (HAWK), which refers to the same treatment as the pedestrian hybrid beacon (PHB). This report uses the term PHB throughout, to be consistent with the terminology in the Minnesota Manual on Uniform Traffic Control Devices.

<sup>12</sup> [https://itre.ncsu.edu/wp-content/uploads/sites/2/2017/04/NCHRP-03-78b\\_Final-Report.pdf](https://itre.ncsu.edu/wp-content/uploads/sites/2/2017/04/NCHRP-03-78b_Final-Report.pdf)

<sup>13</sup> <http://nap.edu/24678>



- Oakland County, Michigan. (2011). *Road Commission for Oakland County PHB and RRFB Study*.<sup>14</sup>
- Minnesota Department of Transportation Services. (2012). *Investigation of Pedestrian/Bicyclist Risk in Minnesota Roundabout Crossings*. Final report 2012-28.<sup>15</sup>

The NCHRP research projects included twelve crossing locations at a single-lane roundabout. However, of the 28 study locations with an RRFB, only one was at a single-lane roundabout. The research identified that smaller radii and shorter curves (increased approach degree of curvature) are associated with decreases in vehicle speeds and increased yielding to pedestrians at the crosswalks. However, the research study or subsequent NCHRP Report 874 did not identify conditions or best practices where RRFB should be considered at single-lane roundabouts.

The research study in Oakland, Michigan was focused on PHB and RRFB at multi-lane roundabouts and found that RRFBs significantly increased driver yielding at the crossings. In addition, the Michigan study showed that drivers are less likely to yield to pedestrians at the roundabout exit compared to the roundabout entry.

The Minnesota study focused on two roundabout locations – one single lane roundabout and one multi-lane roundabout. The single lane roundabout evaluated in the Minnesota study, at Minnehaha Parkway/Minnehaha Avenue in Minneapolis, is not representative of a modern roundabout design. The Minnesota study also did not identify design recommendations for pedestrian treatments. Therefore, the Minnesota research study was not considered further relative to the School Travel Safety Assessment.

The Minnesota Department of Transportation and Local Road Research Board (LRRB) recently began a research study<sup>16</sup> to look at pedestrian safety data, best practices for pedestrian features at roundabouts, and features that can be implemented to improve yielding to pedestrians. The LRRB research study is anticipated to be completed in 2022 and therefore was not available to inform the recommendations as part of this assessment.

In summary, the literature review showed that RRFBs are effective treatments to increase driver yielding at roundabouts. However, none of the studies identified best practices or recommendations regarding the use of RRFB at single-lane roundabouts.

During this assessment, one example in Minnesota was identified with a school crossing including an RRFB at a single-lane roundabout. The roundabout location is on TH 97 in Forest Lake, Minnesota and the roundabout construction was completed in fall 2020. It is recommended that MnDOT monitor the safety and operations at this location to evaluate the effectiveness of the RRFB at the school crossings.

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<sup>14</sup> <https://www.rcocweb.org/DocumentCenter/View/99/HAWK-and-RRFB-study-2011-PDF>

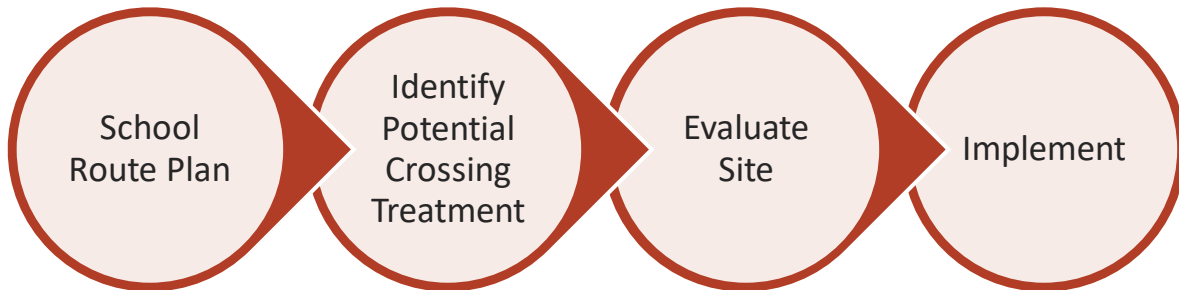
<sup>15</sup> <https://www.dot.state.mn.us/research/TS/2012/2012-28.pdf>

<sup>16</sup> <https://researchprojects.dot.state.mn.us/projectpages/pages/projectDetails>

## Where the Treatment Should Be Used

School crossing treatments should be implemented where the school route plan identifies a crossing on a county or state road. The specific conditions at the crossing are used to determine the appropriate crossing treatment. The process for deciding the appropriate crossing treatment is shown in Figure 3-6, with crossing treatment recommendations based on crossing conditions shown in Table 3-2.

Figure 3-6: Crossing Treatment Decision Making Process



- **Marked crosswalks** should be installed at all designated school crossings that are part of the school route plan.
  - Continental (zebra) style crosswalks are recommended for all designated school crossings because they are most visible to drivers.
  - Dakota County practice is to provide transverse (parallel line) crosswalks at all traffic signals. Continental (zebra) style crosswalks are recommended at traffic signals that are not part of the school route plan but where there is a known destination and student crossings occur periodically (at least once per week).
  - Marked crosswalks alone are insufficient and need to be paired with other treatments to be effective.
- **Active crossing devices** (RRFB or PHB) are recommended based on Table 3-2 below, which is in accordance with FHWA guidance. The conditions at the school crossings on county and state roads evaluated in this assessment indicate that an RRFB would be the appropriate active treatment, but the final determination should be made as part of the design of each location.
- **School crossing guards** should be provided at all uncontrolled school crossings for elementary and middle school students on county and state roads. Elementary and middle school students are not able to sufficiently judge gaps in traffic and adult crossing guards should be provided at uncontrolled crossings, even where there are other crossing enhancements.
  - Where there is not a school crossing guard, elementary school students should only cross a county or state road with an adult unless there is a bridge or tunnel.
  - Where there is not a school crossing guard, middle school students should only cross high-speed or four-lane county or state road with an adult or at controlled crossings.

- High school students should only cross high-speed or four-lane county or state road at controlled crossings. High school students can cross low speed, 2-3 lane county or state roads at an uncontrolled crossing with other crossing enhancements.

**Table 3-2: Crossing Conditions and Recommended Treatment**

	Traffic Volume ≤9,000 vehicles per day			Traffic Volume >9,000 to ≤12,000 vehicles per day			Traffic Volume >12,000 to ≤15,000 vehicles per day			Traffic Volume >15,000 vehicles per day		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes												
3 Lanes												
4+ Lanes Raised Median												
4+ Lanes No Median												

Candidate site for marked crosswalk at school crossing

Possible candidate site for marked crosswalk at school crossing. Risk of pedestrian crashes if crosswalk is installed without other enhancements.

Marked crosswalk is insufficient at school crossing. Substantial enhancements are needed to improve pedestrian crossing safety.

- Curb extensions**, such as those shown in Figure 3-7, should be considered on low speed, two-lane county and state roads to make pedestrians more visible and reduce the crossing distance.
- Median refuge islands** should be considered on multi-lane county and state roads to allow pedestrians to cross one direction of traffic at a time.
- Advance stop bars** should be installed at all mid-block school crossings and at uncontrolled school crossings on county or state roads that have two or more lanes in each direction.



**Figure 3-7: Example of Curb Extension at a School Crossing**

- Traffic signal enhancements** should be installed at all traffic signals on the school route plan and at traffic signals that are not part of the school route plan but where there is a known destination and student crossings occur periodically (at least once per week). Enhancements to the traffic signal should include consideration of the following treatments:
  - Accessible pedestrian push buttons (APS)
  - Pedestrian countdown timers

- Operation of the left-turn movement as protected-only when there is a conflicting pedestrian call at the push button (this applies to left-turn movements with flashing yellow indications)
- Operation of leading pedestrian intervals (LPI) to give pedestrians a head start into the intersection before the green vehicle indication

### SCHOOL CROSSING TREATMENTS AT ROUNDABOUTS

There is no guidance or best practice about the conditions when RRFB should be installed at the crosswalks at a single-lane roundabout; however RRFB at one or more roundabout crosswalks may be beneficial to the visibility of the school crossing and to increase drivers' yielding behavior.

- Smaller radii and shorter curves at the roundabout should be evaluated and to decrease driver speeds at the crosswalks.
- RRFBs may be considered where the school route plan includes crossing the county or state road leg of the single-lane roundabout.
  - RRFBs should be prioritized on the leg of the roundabout where the school crossing is located or where there are increased vehicle/pedestrian conflicts. RRFBs are not needed at all crosswalks of a single-lane roundabout.
- Adult crossing guards are still needed for middle school and elementary students crossing at a roundabout, even if RRFBs are installed. Crossing guards should be trained to use the RRFB push buttons even if they have a stop paddle or school patrol flag.
- Students should be trained to follow the direction of the adult crossing guard, and to wait for the crossing guard to enter the crosswalk and stop traffic, even if the RRFB is flashing.

*Figure 3-8: Example of RRFB at a Single-Lane Roundabout*



*Image Source: Bolton & Menk, Inc.*

### GRADE SEPARATED CROSSINGS

Grade separated crossings (a bridge or tunnel for people to cross over or under the roadway) improve safety by eliminating conflicts between people walking/biking and vehicles. They may be considered where there is crossing demand across a high-speed road and where all of the following conditions exist:

- Other crossing treatments aren't feasible or aren't recommended
- The topography is favorable for the grade separation
- The potential grade separated crossing can be located where it is convenient for the travel routes to school

Opportunities for a grade separated crossing should be evaluated when a new roadway or roadway reconstruction project is planned. Otherwise a capital project would need to be programmed to build the grade separated crossing.

*Figure 3-9: Example of Grade Separated Crossing (Tunnel) of CR 46 (160<sup>th</sup> Street) near East Lake Elementary School*



*Figure 3-10: Example of Grade Separated Crossing (Bridge) of CR 38 (McAndrews Road) near the Minnesota Zoo*



### Additional Treatments

**Through-lane reduction** requires a traffic study to evaluate the road capacity and the existing and future traffic volumes (see Section 3.5). This may be considered on a four-lane road where the future average daily traffic volumes are 15,000-17,500 vehicles per day or less.<sup>17</sup>

**Intersection control** such as a traffic signal or roundabout requires that traffic signal or all-way stop warrants are met, as well as additional criteria that may be established by Dakota County or MnDOT. An engineering study would be required to evaluate the intersection once it is established that the minimum warrants are met.

<sup>17</sup> [https://safety.fhwa.dot.gov/road\\_diets/guidance/info\\_guide/ch3.cfm](https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/ch3.cfm)



**Community crossings** are locations that are not part of the school’s route plan and the crossing demand is generated by the sidewalk/trail network or community destinations rather than the school. These crossing locations on county roads will be evaluated by Dakota County in a separate study because they have different characteristics than school crossings.

### 3.4 SCHOOL SPEED ZONES

#### Purpose of the Treatment

School speed zones are established during the times that children are traveling to and from school because slower traffic speeds reduce vehicles’ stopping time and distance. Crashes that occur at slower speeds also reduce the severity of the crash.

#### Legal Requirements

Minnesota Statutes Section 169.14<sup>18</sup> enables local authorities to establish speed limits in school zones. Detailed evaluation and engineering are required in accordance with *A Guide to Establishing Speed Limits in School Zones*.<sup>19</sup>

A school route plan (see Section 3.1 and Figure 3-1 in this report) is required as a first step and a hazard identification process is needed to address the following nine issues:

1. **Roadway geometry:** Crossing narrower roads at a location with good sight distance.
2. **Traffic volume:** Low volume roads are safer to cross. High volume roads require adult crossing guards.
3. **Pedestrian volume**
4. **Parking:** Parking should be banned in the immediate area of any school crossing
5. **Traffic control devices:** Review to verify existing devices are operating correctly
6. **Sidewalks**
7. **Fencing:** Strategically placed fencing can change walking patterns
8. **Crash history**
9. **Speed zones**

Figure 3-11 Example of School Speed Limit Sign



If measures 1-8 have been addressed and a reduced speed is still required to safely navigate the school zone, then a school speed limit should be considered.

<sup>18</sup> <https://www.revisor.mn.gov/statutes/cite/169.14>

<sup>19</sup> <http://www.dot.state.mn.us/trafficeng/committees/minutes/2012/mayattachment3.pdf>



### Research and Best Practices

A literature review was conducted of relevant research for school speed zones. The primary research study that was used to inform the recommended applications for the School Travel Safety Assessment was a 2009 Texas Transportation Institute (TTI)/FHWA report, *Speeds in School Zones*<sup>20</sup>.

The TTI research study evaluated school speed zones at 24 school sites in Texas, in both urban and rural settings and with a variety of different roadway characteristics and school site characteristics. Driver speeds were continuously measured through the before and through the school speed zone. The research found that the following characteristics are correlated with lower driver speeds in the school speed zone (i.e., greater effectiveness of the school speed zone):

- Presence of a crosswalk within the school speed zone
- Sidewalk (or trail) along the roadway with a school speed zone
- Shorter school speed zone
- Higher number of access points (intersections and driveways)

The chart in Figure 3-12 illustrates why longer school speed zones result in higher driver speeds through the zone. The minimum speed in a school speed zone was found to occur in the first 15 to 30 percent of the school speed zone length, and then driver speeds increase at a rate of approximately 0.9 mph for every 500 ft of school speed zone length.

Figure 3-12: Generalized Ideal and Field Data Speed-Distance Profiles

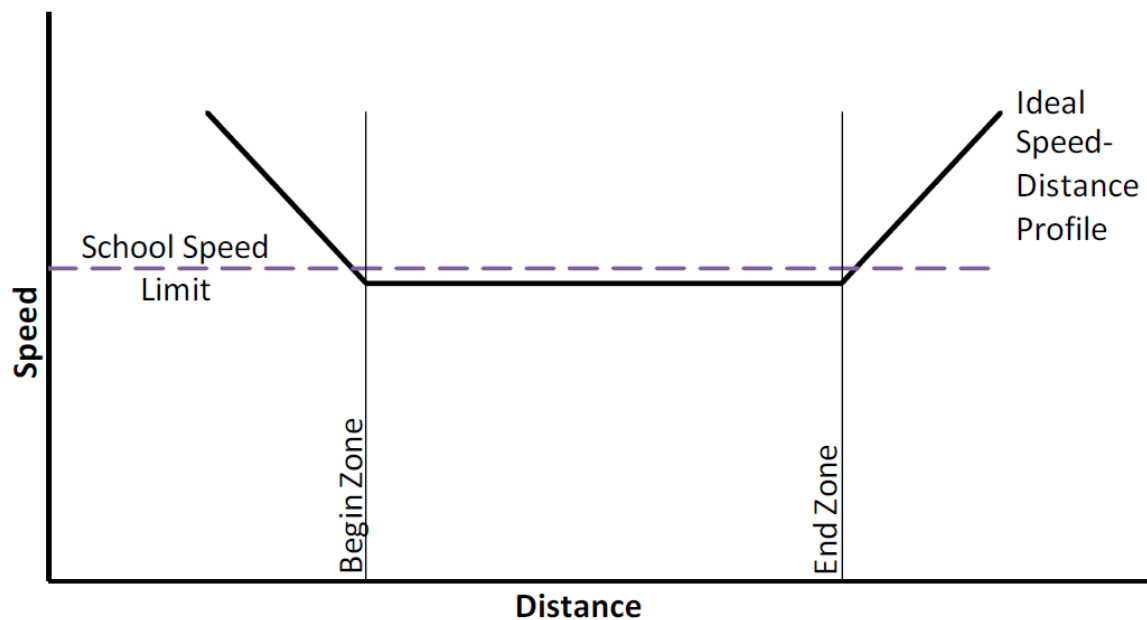


Image Source: *Speeds in School Zones*

<sup>20</sup>. <https://static.tti.tamu.edu/tti.tamu.edu/documents/0-5470-1.pdf>



### RRFBs WITHIN SCHOOL SPEED ZONES

This assessment sought to answer the following questions about the use of RRFBs within school speed zones:

- Are there any driver comprehension issues using multiple treatments that contain beacons or flashers? For example, are the effectiveness of a school speed zone with flashing beacons and an RRFB impacted when they are in proximity to each other?
- Are drivers able to correctly understand and respond to each treatment when there are multiple beacons or flasher treatments in use?

A literature review did not identify any research studies or published best practices regarding the use of RRFBs within school speed zones. With a lack of research to answer the specific questions, an informal survey of locations with similar conditions was conducted. This was done through an email request to approximately 600 traffic engineers at more than 90 Kimley-Horn offices in the United States. More than 20 locations were identified with the combination of school speed zone with beacons and a school crossing with active treatments. Table 3-3 summarizes the 10 locations with RRFBs where additional data was gathered and input was requested from the roadway authority. Quantitative studies were not available from the roadway authorities, but the agencies indicated they believe the treatments are effective and are understood by the public. More detailed information about the 10 locations are provided in Appendix A.

*Table 3-3: Summary of Sample Sites with RRFB within School Speed Zone*

<b>Number of Sites</b>	10
<b>School Types*</b>	7 at Elementary Schools 2 at Middle Schools 3 at High Schools
<b>Average Regulatory Speed Limit (mph)</b>	35.0
<b>Average School Speed Zone Limit (mph)</b>	20.5
<b>Average Distance between Start of School Speed Zone Start and RRFB (feet)</b>	327

*\*Note: Sites may be adjacent to more than one school*

### Where the Treatment Should Be Used

School speed limit signs by themselves do not result in drivers reducing their travel speeds. School speed zones should only be considered where all the following conditions are met:

- School route plan includes a school crossing of a county or state road.
- Regulatory speed limit of 35 mph or higher.
- School transportation by pedestrians, bicycles, and vehicles are focused on the county or state road.
  - In addition to the school crossing on the county or state road, school speed zones are most effective when school driveways and other local street intersections are also located on the same county or state road.





The school speed zone should be focused at the school crossing location and should be as short as possible to maximize its effectiveness. The speed limit within the school speed zone must be established based on an engineering study and the school speed zone should begin at least:

- 200 feet from the school crossing for 20 or 25 mph speed zones
- 300 feet from the school crossing for 30 mph speed zones
- 400 feet from the school crossing for 35 mph speed zones

The school speed zone should follow the guidance in Chapter 7B of the MnMUTCD<sup>21</sup> and the zone is not required to extend to the property boundaries of the school site.

A school speed zone on a county or state road next to a school site, but where there are no school crossings and no school transportation activity, would not be effective in causing drivers to reduce their speeds and therefore school speed zones are not recommended for these conditions.

### Additional Considerations

School speed zones may use a combination of static signs, flashing beacons, and dynamic speed signs to communicate to drivers when the school speed zone is in effect. There is not research or published guidance on where to use each of these treatments, therefore the criteria in Table 3-4 are suggested for use in Dakota County.

<sup>21</sup> <https://www.dot.state.mn.us/trafficeng/publ/mutcd/mnmutcd2015/mnmutcd-7.pdf>

Table 3-4: School Speed Zone

Treatment	Example Application	Conditions Where Treatment May Be Considered
Static Signs		<p>Locations where any of the following conditions exist:</p> <ul style="list-style-type: none"> <li>• County roads with two lanes and regulatory speed limit of 35 mph or less</li> <li>• This type of treatment is also most appropriate where crossings regularly occur outside school arrival and departure times such as during mid-day or in the evening</li> </ul>
Beacons		<p>Locations where any of the following conditions exist:</p> <ul style="list-style-type: none"> <li>• State roads</li> <li>• County roads with three or more lanes</li> <li>• County roads with regulatory speed limit of <math>\geq 40</math> mph</li> </ul>
Dynamic Speed Signs		<p>Dynamic speed signs may be considered as an addition to a school speed zone where any of the following conditions exist and based on engineering judgement.</p> <ul style="list-style-type: none"> <li>• State roads</li> <li>• County roads with regulatory speed limit of <math>\geq 40</math> mph and the change in speed limit is <math>\geq 15</math> mph</li> <li>• Where the school speed zone is longer than 1,000 feet</li> <li>• Where driver compliance with the speed zone is an identified issue and other treatments have not been effective</li> </ul>

Beacons on school speed zones have been shown to be effective and the review of locations with RRFBs within school speed zones did not identify any concerns or issues with the combination of treatments. However, it is acknowledged that at some locations or for some drivers, the combination of school speed zone beacons, RRFBs, and a roundabout may contribute to driver overload. If school speed zone beacons and an RRFB within the school speed zone are implemented at any locations, it is recommended that data be collected to evaluate the effects of having multiple devices with beacons or flashers.



### 3.5 ROADWAY GEOMETRIC CHANGES

#### Purpose of the Treatment

Roadway design has significant effects on safety near schools because it influences traffic speeds, driver behavior, and the width of school crossings.

#### Where the Treatment Should Be Used

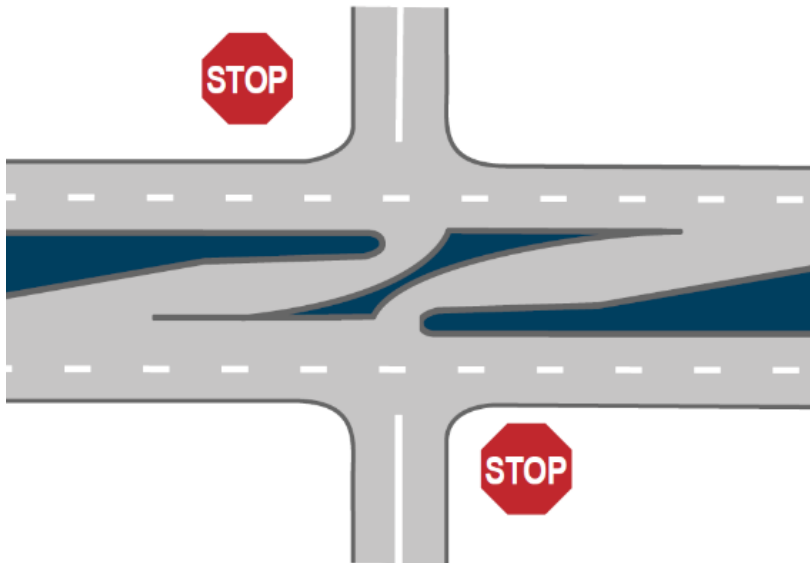
Table 3-5 presents the types of geometric changes that may be considered near schools and the conditions where they should be considered.

*Table 3-5: Roadway Geometric Treatments for Consideration Near Schools*

Condition	Recommended Treatment
County or state road has more traffic lanes than needed for the existing and future vehicle traffic	<p><b>Through lane reduction</b> is an approach to properly size a road to fits its existing and future traffic volumes. Lane reductions can result in better compliance with posted speed limits and provide opportunities for turn lanes.</p> <p>Through lane reduction of four-lane roads to three-lane roads are considered on Dakota County roads based on 2040 volumes of 14,400 vehicles per day, and consultation and agreement with local jurisdictions.</p> <p>Through lane reductions are evaluated for state roads on a project specific basis.</p>
Vehicles turning into the school site are queued on the county or state road	<p>If the county or state road does not have turn lanes and the queued vehicles are waiting for a gap in traffic, left or right <b>turn lanes</b> should be provided on the county or state road.</p> <p>If the queued vehicles are due to congestion on the school site, <b>improvements to the school circulation</b> should be evaluated and implemented first to eliminate queuing from the site onto the county or state road (see Section 3.6).</p>
School traffic causes operations or safety concerns at the intersection with a county or state road	<p>Evaluate intersection for access management and intersection control treatments.</p> <ul style="list-style-type: none"> <li>• A <b>roundabout</b> or <b>traffic signal</b> could be considered for high volume intersections.</li> <li>• Modify access to a <b>reduced conflict intersection</b> at lower volume intersections.<sup>22</sup> This treatment restricts left-turn and through movements from the minor street (shown in Figure 3-13).</li> </ul>
Access control creates demand for u-turn movements	<p>Provide <b>median u-turn</b> location downstream from the school access. The u-turn location is as close as reasonable given the specific conditions such as sight lines and other factors (typically within ¼ mile of the school access).</p>

<sup>22</sup> <http://www.dot.state.mn.us/roadwork/rci/index.html>

Figure 3-13: Diagram of a Reduced Conflict Intersection



The Dakota County 2040 Transportation Plan<sup>23</sup> has identified through lane reduction as a potential treatment on eight roadway segments, and three of these segments are next to or near schools in this assessment (see Appendix C):

- CR 30 (Diffley Road) next to Dakota Hills Middle School, Eagan High School, and Northview Elementary School in Eagan.
- CR 33 (Diamond Path) next to Diamond Path Elementary School, Dakota Ridge School, and First Baptist School.
- CR 26 (Lone Oak Road) east of CR 31 (Pilot Knob Road), which is near Pilot Knob STEM Elementary School in Eagan.

### Additional Considerations

All geometric changes require an **engineering study** to confirm the appropriate treatment for the specific conditions and then to complete the engineering design for implementation. Some of the above improvements may not be feasible or appropriate based on the type of roadway, traffic speeds, or traffic volumes.

<sup>23</sup> <https://www.co.dakota.mn.us/Transportation/PlanningPrograms/2040TransportationPlan/Pages/default.aspx>

### 3.6 SITE AND CIRCULATION IMPROVEMENTS

#### Purpose of the Treatment

School site improvements are used to address on-site congestion or to address conflicts between pedestrians, vehicles, and school buses.

#### Where the Treatment Should Be Used

Site and circulation improvements are **needed** where:

- Vehicle congestion on the school site causes vehicles to back up onto the county or state road.
  - Consider redesign of on-site drop-off/pick-up areas.
  - Consider changes to intersection control, such as stop signs and roundabouts, at intersections within the school site.

Where on-site circulation or congestion results in vehicles backing up on the county or state road, the site issues need to be addressed first. Any additional roadway geometric changes or improvements could be considered on the county or state road only after the site circulation has been improved.

Site and circulation improvements **could be considered** where:

- School bus, vehicle traffic, pedestrian, and bicycle flows cross each other or conflict on the school site, as shown in Figure 3-14.
  - Bus staging and loading areas should be separated from staff and visitor parking and from drop-off/pick-up areas wherever possible.

#### Additional Considerations

Site improvements will typically require an engineering study to investigate the causes and appropriate treatment for the specific conditions and then to complete the engineering design for implementation.

*Figure 3-14: Example of Vehicle and School Bus Congestion on a School Site*





### 3.7 EDUCATION

#### Purpose of the Treatment

Teach students safe walking and biking practices and the designated walking and biking routes that are part of the school route plan (see Section 3.1).

#### Where the Treatment Should Be Used

Walking and biking safety education provides students with lifelong skills and is recommended for all students at all schools. Safe Route to School programs provide many tools and resources for education and encouragement to walk and bike to school.<sup>24</sup> Potential activities and programs to promote pedestrian and bicycle safety in schools include:

- School Communication - Communication could come as a paper or electronic newsletter or school social media blast describing safe transportation practices in and around school, especially for walking and biking. Communication can inform parents of designated school crossings, safe crossing practices, and how to dress appropriately for weather. Information could describe where bike parking and other resources are located at each school. Communication can also highlight SRTS news and efforts and advertise upcoming events related to walking and biking.
- Parent workshop - Since parents are usually the ones deciding whether their children walk or bike to school, a workshop designed for them can provide the tools, resources, and support needed to begin walking or biking for transportation. Topics could include starting a walking school bus, carpool matching, launching a safety campaign, how to be a responsible driver, or organizing an event such as Walk and Bike to School Day.
- Walk/Bike Safety Week - A safety week teaches students and families essential safety information all in one week. The information does not need to focus specifically on walking and biking, but at least one lesson should be devoted to transportation safety. Safety Week may be held in coordination with walk and bike to school days in fall and spring to review walking and biking skills, safety, and rules of the road. Information might include how to safely cross streets, how to signal your turns on a bicycle, proper helmet fitting, where to walk/ride when there is no sidewalk or trail, emergency exiting from buses, and safe driving around campus.
- Walk! Bike! Fun! - Walk! Bike! Fun! Pedestrian and Bicycle Safety Curriculum is a two-part curriculum designed specifically for Minnesota's schools. It is structured to meet Minnesota education standards and is an important part of the Safe Routes to School Program in Minnesota. Walk! Bike! Fun! helps children ages five to 13 learn traffic rules and regulations, the potential hazards to traveling, and handling skills needed to bike and walk effectively, appropriately, and safely through their community.
- Walking and Biking Field Trips - A field trip made by foot or by bicycle gives students a supportive environment in which to practice safe walking and bicycling skills. Walk/bike field trips can also

<sup>24</sup> <http://www.dot.state.mn.us/saferoutes/education.html>

showcase the benefits of walking and bicycling for transportation including health and physical activity, pollution reduction, and cost savings. The destination of the field trip may vary, or the field trip could be the ride or walk itself.

The school route plan should also be provided to all students and parents/caregivers so that students know where they should walk, bike, and cross roadways when traveling to and from school. Roadways crossings that are discouraged by the school and district should also be part of the school route plan and should be clearly communicated to students.

### Additional Considerations

Community education creates a better biking and walking environment and may include:

- Minnesota state law requiring yielding to pedestrians in a marked or unmarked crosswalk.
- The role of speed in pedestrian/bicycle safety.
- Safe driving practices around schools.
- How to use new treatments such as roundabouts, pedestrian hybrid beacons, and reduced conflict intersections.

Figure 3-15: Example of Bicycle Education for Children



## 3.8 ENFORCEMENT

### Purpose of the Treatment

Targeted enforcement efforts aimed at improving driver behavior near schools and improving safety for all users.

### Where the Treatment Should Be Used

Enforcement can be effective at addressing the following behaviors if these issues are identified on county and state roads near schools:

- Distracted driving
- Aggressive driving
- Yielding to pedestrians at marked and unmarked crosswalks

Enforcement is also recommended for all school speed zones on county and state roads.



Law enforcement includes a variety of methods to raise awareness and educate drivers about their behaviors and how they relate to safety. The intent of enforcement is to get people to change behaviors that could cause a crash and subsequent injury or fatality. Effective safety-focused enforcement around school includes three components:<sup>25</sup>

- Parent/caregiver and community notification – Parents/caregivers, residents, and school staff make up much of the traffic around schools. An effective enforcement program first notifies these groups about the enforcement efforts through communications such as sending flyers home with students or mailing materials to residents living within a certain distance of the school.
- Public awareness and education – Public awareness and education needs to occur before law enforcement activities. The awareness and education messages should inform people of the problem and why enforcement action is needed. Methods for raising awareness include using local television stations and newspapers to spread the message.
- Officer training – Officer training is critical to an effective law enforcement program. The training should include information on what, when, where and how law enforcement should occur to maximize behavior change.

### Additional Considerations

Local police departments will also have a key role in working with school administrations in providing officers and assistance for education and encouragement programs.

It is recommended that local law enforcement be engaged when designing or re-designing school facilities so that space for officers to observe crosswalks, school speed zones, and other school access points can be considered and incorporated into the design.

<sup>25</sup> [http://guide.saferoutesinfo.org/enforcement/the\\_law\\_enforcement\\_approach.cfm](http://guide.saferoutesinfo.org/enforcement/the_law_enforcement_approach.cfm)





## Chapter 4. School Evaluations and Recommended Improvements

### 4.1 SCHOOL EVALUATION GROUPS

All 48 schools included in the assessment were grouped based on their transportation context. The groups were used to evaluate similar transportation conditions together in order to develop consistent recommendations for similar conditions. The following three groups were used for the assessment:

- **High-Speed, 4+ Lane Road:** Schools next to county or state roads with four or more lanes and speed limit of 40 miles per hour (mph) or more.
- **High-Speed, 2-3 Lane Road:** Schools next to county or state roads with two or three lanes and speed limit of 40 mph or more.
- **Low Speed Road:** Schools next to county or state roads with speed limit of 35 mph or less. All schools on roads with lower speed limits were grouped together because there were only two schools on roads with three or four lanes.

Speed limits of 40 mph or higher are considered high speed relative to pedestrian crossings because of the significantly increased crash severity resulting from vehicle/pedestrian crashes that occur with vehicle speeds of 40 mph or more. Table 1-1 shows the schools included in the assessment, classified in the three evaluation groups.

### 4.2 SAMPLE SCHOOLS

A subset of all the schools in the assessment was selected for more detailed evaluation, with two to three schools selected in each evaluation group. A total of nine sample schools were selected based on the following characteristics:

- Schools next to both county and state roads
- At least one private school
- Schools with all grade levels (elementary, middle, and high school)
- Even distribution of school districts and cities
- Schools with at least two existing school speed zones

Table 4-1 shows the final list of sample schools evaluated. Several of the school sites include other schools in close proximity and were considered as part of the sample school evaluation. These schools are also listed in the table.



Table 4-1: List of Sample Schools

Schools by Category	Sample School	Near Sample School	Adjacent Roadway	School Speed Zone on County or State Road	City	School District
<b>HIGH-SPEED (<math>\geq 40</math> MPH), 4+ LANE ROAD</b>						
Akin Road Elementary School	✓		County		Farmington	ISD 192
Lake Marion Elementary School	✓		County		Lakeville	ISD 194
Scott Highlands Middle School	✓		County		Apple Valley	ISD 196
Highland Elementary School		✓	County		Apple Valley	ISD 196
Vista View Elementary	✓		County		Burnsville	ISD 191
<b>HIGH SPEED (<math>\geq 40</math> MPH), 2 OR 3 LANE ROAD</b>						
Echo Park Elementary School	✓		County	✓	Burnsville	ISD 196
Pilot Knob STEM Magnet Elementary School	✓		County	✓	Eagan	ISD 197
Rosemount High School	✓		State		Rosemount	ISD 196
Rosemount Middle School		✓	State		Rosemount	ISD 196
<b>LOW SPEED (<math>\leq 35</math> MPH) ROAD</b>						
Heritage STEM Middle School	✓		County		West St. Paul	ISD 197
St. Joseph's Catholic School		✓	County		West St. Paul	Private
Somerset Elementary	✓		State	✓	Mendota Heights	ISD 197
<b>TOTAL</b>	<b>9</b>	<b>3</b>		<b>3</b>		



Data on the school district, school site, and transportation infrastructure was collected and evaluated at each of the sample schools. The following data was requested or collected for each sample school:

- School district characteristics:
  - Hazardous roads designated by the school district.
  - School walk zone criteria established by the school district.
- School site characteristics:
  - School attendance zone for each sample school site.
  - School walk area for each sample school site.
  - Number and grade levels of students for each sample school site.
  - Number of students within the designated walk zone for each sample school site.
  - Number of students that regularly walk or bike to each sample school site.
  - Locations of student school patrols and adult crossing guards at each sample school site.
  - Previous Safe Routes to School plans for each sample school site.
- Transportation characteristics:
  - Daily traffic volumes on county and state roads near each sample school site.
  - Daily traffic volumes on city streets, if available, near each sample school site.
  - Posted speed limits on roads near each sample school site.
  - Sidewalk and trail network near each sample school site.
  - Existing pedestrian crossing treatments, including signs, crosswalk markings, and other crossing enhancements near each school site.
  - Location and treatments at existing school speed zones, including signs, beacons, and pavement markings near each sample school site.
  - Location of existing intersection control, including stop signs and traffic signals near each sample school site.

The data gathered for each sample school site is documented in the individual school evaluations in Appendix C.

In addition to the characteristics listed above, one-on-one discussions were also held with school district representatives to identify safety and traffic concerns and qualitative observations at each sample school and issues or concerns gathered from virtual engagement #1 were also noted (see Chapter 2 of this report). Input was also gathered from school principals where needed to confirm the school's activities or operations. On-site observations at the sample schools were not able to be completed during this assessment because all the school districts were operating with full or partial remote learning due to COVID-19.



In consideration of the research findings and best practices documented in Chapter 3 of this report, along with the detailed evaluations of the sample schools, the following generalized findings and conclusions were made.

**High Speed (>40 MPH), 4+ Lane Roads:**

- All school districts identify high speed, 4+ lane roads as hazardous roads. Students that would have to cross these types of roads are provided bus transportation to school.
- Crossing enhancements on high speed, 4+ lane roads would not change the designated hazardous roads and would not change the designated school walk zone.
- School districts would not support designated school crossings on high speed, 4+ lane roads.
- Based on the above considerations, new school crossings were not recommended on any high speed, 4+ lane roads in this assessment.
- Through-lane reductions (see Section 3.5 of this report) could allow for an uncontrolled school crossing on the high-speed road, if the existing/future volumes and an engineering study indicates this is feasible. School crossings on high speed, 2-3 lane roads will need crossing enhancements such as active crossing devices and median refuge island (see Section 3.3).
  - Through-lane reductions are being planned on CR 30 (Diffley Road) near Dakota Hills Middle School, Eagan High School, and Northview Elementary School and on CR 33 (Diamond Path) near Dakota Ridge School, Diamond Path Elementary School, and First Baptist School. No other through-lane reductions were identified or recommended on county or state roads in this evaluation group.
- There are not existing school crossings or adult crossing guards on high speed, four-lane roads.
  - Elementary school students should only cross a county or state road with an adult unless there is a bridge or tunnel.
  - Middle school students should only cross county or state roads with an adult or at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a middle school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
  - High school students should only cross county or state roads at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a high school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
- Because no designated school crossings were identified or recommended in this evaluation group, the criteria for a school speed zone were also not met and therefore no school speed zones were recommended.
- Sidewalk and trail connections are needed for students that could walk or bike to school without crossing the high speed county or state road.
- Sidewalk and trail connections may be needed for students to walk or bike to controlled crossings (for example, an intersection with a traffic signal or PHB) s.



**High Speed ( $\geq 40$  MPH), 2-3 Lane Roads:**

- Not all high speed, 2-3 lane roads are designated as hazardous roads by the school districts.
- School crossings on high speed, 2-3 lane roads may be feasible depending on:
  - Crossing demand or needs
  - Age of students
  - Presence of controlled intersection (traffic signal, all-way stop control, or roundabout)
  - Presence of crossing enhancements at uncontrolled intersections (see Section 3.3):
    - Continental (zebra) crosswalk.
    - Median refuge island where feasible.
    - Active crossing devices (RRFB or PHB).
  - School crossing guards should be provided at all uncontrolled school crossings where elementary and middle school students cross county and state roads because elementary and middle school students are not able to sufficiently judge gaps in traffic.
    - Where there are not school crossing guards, elementary school students should only cross a county or state road with an adult unless there is a bridge or tunnel.
    - Where there are not school crossing guards, middle school students should only cross county or state roads with an adult or at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a middle school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
    - High school students should only cross county or state roads at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a high school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
- A school speed zone should be evaluated for school crossings on high speed, 2-3 lane county and state roads (see Section 3.4).
- Sidewalk and trail connections are needed for students that could walk or bike to school without crossing the county or state road and to connect to designated school crossings of the county or state road.

**Low Speed ( $\leq 35$  MPH) Roads:**

- Schools along low speed county and state roads have the highest opportunities and demand for walking and biking to school.
- School crossings on low speed county and state roads are typically feasible with the following enhancements:
  - Adult crossing guards for elementary students
  - Crossing enhancements at uncontrolled intersections (see Section 3.3)



- Continental (zebra) crosswalk
- Median refuge island or curb extensions where feasible
- Active crossing devices (RRFB) where applicable based on conditions
- Where there is not a school crossing guard, elementary school students should only cross a county or state road with an adult unless there is a bridge or tunnel.
- Where there is not a school crossing guard, middle school students should only cross county or state roads with an adult or at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a middle school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
- High school students should only cross four-lane county or state roads at crossings controlled by stop signs, a traffic signal, or PHB. At existing controlled crossings adjacent to a high school, crossing enhancements should be made to improve safety for students that will cross there even though it is not a designated school crossing.
- High school students can cross 2-3 lane roads at an uncontrolled crossing if there are crossing enhancements.
- A school speed zone should be evaluated for school crossings on 35 mph county and state roads (see section 3.4).
- Sidewalk and trail connections are needed for students that could walk or bike to school without crossing the county or state road and to connect to designated school crossings of the county or state road.

### 4.3 RECOMMENDED IMPROVEMENTS

The findings from the sample school evaluations were used to inform the types of treatments considered at all the school sites in this assessment, but the conditions at each school site were used to develop the specific recommendations for the school. For the 36 school sites that were not part of the sample school evaluation, basic data was collected and used to identify whether additional detailed evaluation was needed. Additional detailed evaluations were done where there was the potential for new or enhanced school crossings or where a school speed zone evaluation was needed. As part of the detailed evaluations of these school sites, individual meetings were also held with school principals and school district representatives to confirm the operations and conditions at the school and validate potential recommendations for improvements.

The summary of recommended improvements by school evaluation group are summarized in Table 4-2. The summary of recommendations for all 48 school sites is included in Appendix B.



Table 4-2: Summary of Recommendations by School Evaluation Group

School Evaluation Group	Number of Schools	Number of Sites with Recommended Treatment								No Treatments Recommended on County/State Road
		Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	
			Major	Minor						
High Speed ( $\geq 40$ mph), 4+ Lanes	27	4	0	4	1	3	1	14	1	8
High Speed ( $\geq 40$ mph), 2-3 Lanes	11	4	2	1	3	2	1	4	1	4
Low Speed ( $\leq 35$ mph)	10	4	5	2	4	0	1	3	4	0
<b>TOTAL</b>	<b>48</b>	<b>12</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>21</b>	<b>6</b>	<b>12</b>

The individual school site evaluations are documented in Appendix C. The school district, school site, and transportation data that support the recommendations are provided for all 48 school sites. The public input at each school site is also documented and the recommended improvements are described in more detail.



## Chapter 5. Implementation and Next Steps

The recommendations and improvements identified in Appendix B at each school site are not currently programmed. The next steps for Dakota County and MnDOT will be to identify potential programs and projects that will be used to implement improvements.

### 5.1 COST ESTIMATES

High level costs estimates were created for each type of improvement to help Dakota County and MnDOT with future planning and programming. The order-of-magnitude estimates for each treatment were based on the cost levels shown in Table 5-1. The costs were developed for each school safety treatment based on previously constructed projects and do not include any right-of-way, utility, or design costs and are shown in Table 5-2.

*Table 5-1: Estimated Cost Levels*

Cost Level	Approximate Cost Range
\$	\$0 to \$10,000
\$\$	\$10,001 to \$50,000
\$\$\$	\$50,001 to \$100,000
\$\$\$\$	>\$100,000





Table 5-2: Safety Treatment Estimated Costs

Treatment	Cost	Notes
Sidewalk and Trails	\$\$ to \$\$\$\$	Depends on length of sidewalk/trail, topography, and drainage needs
Zebra Crosswalks	\$	Per intersection
Street Lighting	\$ intersection \$\$ to \$\$\$\$ roadway segment	
Advance Stop Bar and Signing	\$	
Curb Extensions	\$\$	Depends on drainage and utilities
Median Refuge Island	\$\$	
Rapid Flashing Beacon	\$\$	
Pedestrian Hybrid Beacon	\$\$\$\$	
Traffic Signal Crossing Enhancements	\$\$ to \$\$\$	Per intersection
School Speed Zone	\$\$	Includes evaluation prior to installation
Through-Lane Reduction	\$\$ to \$\$\$\$	Depends on length
Turn Lanes	\$\$ to \$\$\$\$	Depends on existing roadway section and length of turn lane
Reduced Conflict Intersection	\$\$\$\$	
Median U-Turn	\$\$\$\$	Depends on drainage and utilities
Site and Circulation Improvements	\$ to \$\$\$\$	Depends on scope of improvements
Grade Separated Crossing	\$\$\$\$	Includes bridge or tunnel

## 5.2 PRIORITY IMPROVEMENTS

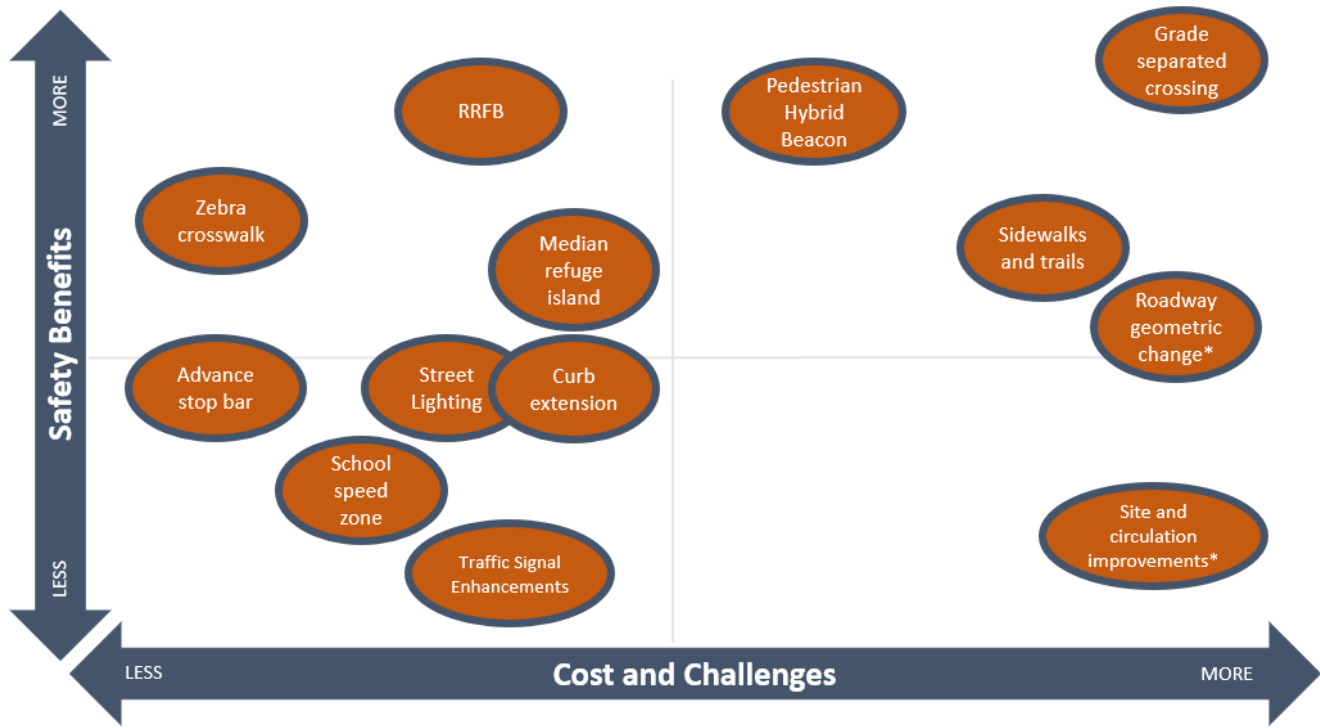
The graphic in Figure 5-1 shows the school safety improvements according to a relative scale of safety benefits and costs/challenges. The relative costs were based on the cost estimates described in section 5.1 of this report. The relative safety benefits were based on available crash modification factors (CMF) or a relative comparison of the benefit for people walking and biking.

Improvements can be prioritized according to where they fall on this matrix, with the highest benefit/lowest cost improvements shown in the top left quadrant of the matrix. These include RRFB, continental (zebra) crosswalk, median refuge island, advance stop bar, and curb extension. The improvements in the top right quadrant of the matrix also have a high level of benefit, but have additional challenges such as utility



coordination, stormwater design, and right-of-way needs. Improvements on the right half of the matrix will require the most time and resources to implement.

Figure 5-1: Benefit-Cost Matrix of School Safety Treatments



\*Includes several types of treatments with varying levels of benefits.

### 5.3 IMPLEMENTATION

The implementation of the recommendations at all school sites is expected to take several years to complete. Dakota County and MnDOT will each be responsible for prioritizing and planning for future implementation. It is anticipated that the implementation of improvements would occur through multiple ways, such as existing operations and maintenance activities, incorporation into existing capital projects, and new capital projects for larger investments.

Improvements that are easy and low-cost may be implemented in the short term as part of regular maintenance and operations activities. This can allow improvements to be completed more quickly because they are not tied to a capital project. Implementation through existing operations and maintenance activities would be most applicable for treatments such as crosswalk markings and traffic signal enhancements.

There may also be opportunities to add school safety improvements to existing projects, such as a pavement resurfacing or intersection improvement project near the school. An example of this implementation approach



is the through-lane reduction and median refuge completed in 2020 on CR 28 (80<sup>th</sup> Street) near Inver Grove Heights Middle School and Simley High School as part of a pavement resurfacing project.

MnDOT will look to incorporate improvements with upcoming projects as well as evaluating standalone capital projects.

Based on the types of treatments considered in this assessment, improvement costs more than \$100,000 or would improvements that would require right-of-way acquisition were assumed as thresholds for Dakota County to plan for a capital project in the five-year capital improvement program (CIP). Improvements that exceed these thresholds will require the most time and funding for implementation, which is why they would likely be completed through a capital project.

## 5.4 FUTURE EVALUATIONS

School attendance and walk zones are updated by school districts periodically and school enrollment changes every year. Similarly, changes will occur to the roadway network over time, such as the sidewalk and trail network, intersection control, traffic speeds, and other elements. When the transportation conditions significantly change, there are school route plan changes, or there is a capital project planned, the following evaluation or re-evaluation process should be followed:

- When there is a significant change in transportation conditions or a capital project is planned, Dakota County or MnDOT will contact the school or school district to initiate the evaluation process.
- When there are changes in the school route plan or walking/biking demand, the school or school district should contact:
  - Dakota County Transportation for needs or concerns on county roads
  - MnDOT Metro District Area Engineer<sup>26</sup> and Safe Routes to School<sup>27</sup> for needs or concerns on state roads
- A meeting should be convened with school, school district, Dakota County and/or MnDOT, city, and other relevant stakeholders to discuss walking and biking demands and any concerns.
- The school should update the school route plan (see Section 3.1).
- Data collection and evaluation will be completed by Dakota County and/or MnDOT.
- Recommendations will be developed by Dakota County and/or MnDOT based on the changed conditions at the school using the guidance and criteria in this report (see Chapter 3) and any new research or best practices.
- Based on the evaluation and recommendations, the school, school district, Dakota County and/or MnDOT, city and other relevant stakeholders should plan for implementation.

The guidance and criteria in this report should also be reviewed periodically and updated as new research and best practices become available or when changes to regulations or standards occur, such as the MnMUTCD.

<sup>26</sup> <https://www.dot.state.mn.us/metro/pdf/programdelivery.pdf>

<sup>27</sup> <http://www.dot.state.mn.us/saferoutes/contacts.html>



## Appendix A: Sites with RRFB within School Speed Zone



**Table A-1: Sites with RRFB within School Speed Zone**

Location		Highlands Ranch, CO
Street Name	Wildcat Reserve Pkwy	 <p><i>Image Source: Google</i></p>
School Name	Ranch View Middle School, Thunder Ridge High School	
Roadway Section	4 Lane Divided	
Regulatory Speed Limit (mph)	45	
School Speed Zone Limit (mph)	25	
Distance between School Speed Zone and RRFB (feet)	345	
Roadway Authority	Douglas County	
Roadway Authority Comments	Not provided	
Location		Memphis, TN
Street Name	N Highland St	 <p><i>Image Source: Google</i></p>
School Name	Treadwell Elementary and Middle School	
Roadway Section	4 Lane Undivided	
Regulatory Speed Limit (mph)	40	
School Speed Zone Limit (mph)	15	
Distance between School Speed Zone and RRFB (feet)	320	
Roadway Authority	City of Memphis	
Roadway Authority Comments	RRFB before/after study was inconclusive	



**Table A-1: Sites with RRFB within School Speed Zone (continued)**

Location		Garland, TX
Street Name	N Plano Rd	 <p><i>Image Source: Google</i></p>
School Name	O. Henry Elementary School	
Roadway Section	6 Lane Divided	
Regulatory Speed Limit (mph)	40	
School Speed Zone Limit (mph)	20	
Distance between School Speed Zone and RRFB (feet)	185	
Roadway Authority	City of Garland	
Roadway Authority Comments	City has 24 locations with an RRFB within a school speed zone. Have not observed any issues with this configuration.	
Location		Austin, TX
Street Name	Shoal Creek Blvd	 <p><i>Image Source: Google</i></p>
School Name	Gullett Elementary School	
Roadway Section	2 Lane Undivided	
Regulatory Speed Limit (mph)	30	
School Speed Zone Limit (mph)	20	
Distance between School Speed Zone and RRFB (feet)	290	
Roadway Authority	City of Austin	
Roadway Authority Comments	Not provided	

**Table A-1: Sites with RRFB within School Speed Zone (continued)**

Location		Southlake, TX
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# School Travel SAFETY ASSESSMENT

Street Name	W Continental Blvd
School Name	Carroll Elementary School
Roadway Section	2 Lane Undivided
Regulatory Speed Limit (mph)	30
School Speed Zone Limit (mph)	20
Distance between School Speed Zone and RRFB (feet)	250
Roadway Authority	City of Southlake
Roadway Authority Comments	Not available



Image Source: Google

**Location Colleyville, TX**

Street Name	Pool Rd
School Name	OC Taylor Elementary School
Roadway Section	2 Lane Undivided
Regulatory Speed Limit (mph)	30
School Speed Zone Limit (mph)	20
Distance between School Speed Zone and RRFB (feet)	N/A (roundabout and RRFBs are not within school speed zone)
Roadway Authority	City of Colleyville
Roadway Authority Comments	City believes RRFBs provide benefit and the school crossing guards like having them. No before/after studies were conducted.



Image Source: Google

Table A-1: Sites with RRFB within School Speed Zone (continued)

Location	Las Vegas, NV
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# School Travel SAFETY ASSESSMENT

Street Name	N Eastern Ave
School Name	Arturo Cambeiro Elementary School
Roadway Section	6 Lane Divided
Regulatory Speed Limit (mph)	35
School Speed Zone Limit (mph)	25
Distance between School Speed Zone and RRFB (feet)	260
Roadway Authority	City of Las Vegas
Roadway Authority Comments	No citizen complaints or concerns. Configuration seems to be working well.



Image Source: Google

<b>Location</b>	<b>Reno, NV</b>
Street Name	Sutro St
School Name	Procter R Hug High School
Roadway Section	4 Lane Divided
Regulatory Speed Limit (mph)	35
School Speed Zone Limit (mph)	15
Distance between School Speed Zone and RRFB (feet)	640
Roadway Authority	City of Reno
Roadway Authority Comments	Not available

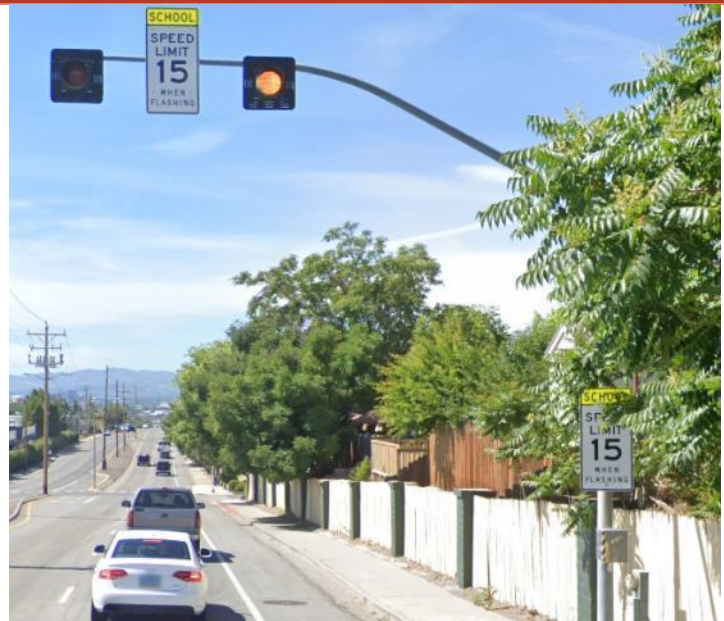




Image Source: Google





**Table A-1: Sites with RRFB within School Speed Zone (continued)**

Location		Minden, NV
Street Name	State Highway 88	 <p><i>Image Source: Google</i></p>
School Name	Douglas High School	
Roadway Section	5 Lane Divided/ Undivided	
Regulatory Speed Limit (mph)	35	
School Speed Zone Limit (mph)	25	
Distance between School Speed Zone and RRFB (feet)	370	
Roadway Authority	Douglas County	
Roadway Authority Comments	Not provided	
Location		Wilmette, IL
Street Name	Wilmette Ave	 <p><i>Image Source: Google</i></p>
School Name	McKenzie Elementary School	
Roadway Section	2 Lane Undivided	
Regulatory Speed Limit (mph)	30	
School Speed Zone Limit (mph)	20	
Distance between School Speed Zone and RRFB (feet)	280	
Roadway Authority	City of Wilmette	
Roadway Authority Comments	Not available	



## Appendix B: Summary of School Recommendations

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
						Major	Minor	✓ School Need									
Akin Road Elementary School	ISD 192 (Farmington)	Farmington	High Speed, 4+ Lanes	CR 64 (195th Street)	5231 195th St W, Farmington, MN 55024							✓			x		<b>Education:</b> School and District instruct students to only cross CR 64 (195th Street) and Akin Road with an adult. <b>School and District Considerations:</b> School and District consider walking and biking safety education.
Berea Lutheran Church & School	Private	Inver Grove Heights	High Speed, 2-3 Lanes	CR 71 (Rich Valley Boulevard)	9308 Rich Valley Blvd, Inver Grove Heights, MN 55077									✓			No specific recommendations were developed at this school based on the limited demand and opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.
Burnsville Alternative High School	ISD 191 (Burnsville)	Eagan	High Speed, 4+ Lanes	CR 30 (Diffley Road)	2140 Diffley Rd, Eagan, MN 55122	●											<b>Sidewalk and Trail Infrastructure:</b> County construct sidewalk to fill gap on the north side of CR 30 (Diffley Road). This is a community need rather than a school need.
Burnsville High School	ISD 191 (Burnsville)	Burnsville	High Speed, 4+ Lanes	TH 13	600 E Hwy 13, Burnsville, MN 55337							✓			x		<b>Education:</b> School and District should instruct students to only cross TH 13 at controlled intersections. <b>School and District Considerations:</b> School and District provide walking and biking safety education.
Cedar Park Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 23 (Cedar Avenue)	7500 Whitney Dr, Apple Valley, MN 55124						✓				x	x	<b>Site and Circulation Improvements:</b> County evaluate left-turn signal timing at CR 23 (Cedar Avenue)/157th Street during school arrival and dismissal for u-turn movements from the school. <b>School and District Considerations:</b> School and District consider site changes to improve pick-up/drop-off if there is a project opportunity or funding becomes available. School and District update the 2010 Safe Routes to School Plan including a walking/biking route plan. School and District provide walking and biking safety education. <b>City Considerations:</b> City consider crossing enhancements at the school crossing at Whitney Drive/Whitney Drive if there is a project opportunity or funding becomes available.
Century Middle School	ISD 194 (Lakeville)	Lakeville	High Speed, 4+ Lanes	CR 60 (185th Street)	18610 Ipava Ave, Lakeville, MN 55044	✓		✓				✓			x	x	<b>Sidewalk and Trail Infrastructure:</b> County construct trail on the north side of CR 60 (185th Street) between Jaeger Path and Ipava Avenue. <b>School Crossings:</b> County implement pedestrian crossing safety improvements at the CR 60 (185th Street)/Ipava Avenue traffic signal. This intersection is not part of the school's route plan but there are periodic student crossings at the intersection. <b>Education:</b> School and District should instruct students to only cross CR 60 (185th Street) with an adult or at a controlled intersection. <b>School and District Considerations:</b> School and District update the 2008 Safe Routes to School Plan including a walking/biking route plan. School and District provide walking and biking safety education. <b>City Considerations:</b> City consider crossing enhancements at the school crossing on Ipava Avenue based on the traffic volume and number of lanes. City consider reevaluation of school speed zone to increase its effectiveness. Reevaluation should consider the limits of the zone and the school speed limit. City consider enhancing the effectiveness of the school speed zones on city streets with periodic enforcement efforts.
Cyprus Academy	Private	Burnsville	High Speed, 4+ Lanes	CR 5	13560 County Rd 5, Burnsville, MN 55337									✓			There is little demand for walking and biking based on the number of students and the enrollment area. Students could still benefit from walking and biking safety education.

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes	
							Major	Minor										
						✓ School Need		● Community Need										
Dakota Hills Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	High Speed, 4+ Lanes	CR 30 (Diffley Road)	4183 Braddock Trail, Eagan, MN 55123				✓				✓					The Diffley Road School Area Improvements Study identified recommendations on CR 30 (Diffley Road) and the school campus. The county, city, and ISD 196 are partnering to implement the improvements recommended in the study. More information about the construction project can be found on the Dakota County website: <a href="https://www.co.dakota.mn.us/Transportation/PlannedConstruction/CR30Braddock/Pages/default.aspx">https://www.co.dakota.mn.us/Transportation/PlannedConstruction/CR30Braddock/Pages/default.aspx</a> . <b>Evaluate School Speed Zone:</b> The existing school speed zone on CR 30 (Diffley Road) should be re-evaluated when the planned school area improvements have been implemented. A school route plan was developed as part of the Diffley Road School Area project. <b>Enforcement:</b> The effectiveness of the school speed zone on CR 30 (Diffley Road) should be enhanced by periodic enforcement efforts.
Dakota Ridge School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 33 (Diamond Path)	4629 144th St W, Apple Valley, MN 55124									✓				No specific recommendations were developed at this school based on the limited demand for students to walk or bike to school.
Diamond Path Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 33 (Diamond Path)	14455 Diamond Path W, Apple Valley, MN 55124			●				✓			x			<b>School Crossings:</b> County change the CR 33 (Diamond Path)/145th Street from a school crossing to a community crossing because the schools and district do not support the location as a school crossing and students are provided bus transportation. County evaluate the community crossing and consider active devices, high visibility (continental) crosswalk and lighting at the CR 33 (Diamond Path)/145th Street crossing based on the number of lanes and the speed limit. <b>Education:</b> School and District should instruct students to only cross CR 33 (Diamond Path) with an adult. <b>School and District Considerations:</b> School and District update the 2010 Safe Routes to School Plan for Diamond Path Elementary, including a walking/biking route plan. School and District provide walking and biking safety education for Diamond Path Elementary and First Baptist School.
Eagan High School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	High Speed, 4+ Lanes	CR 30 (Diffley Road)	4185 Braddock Trail, Eagan, MN 55123				✓				✓					<b>See Dakota Hills Middle School</b>
East Lake Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Lakeville	High Speed, 4+ Lanes	CR 46 (160th Street)	4715 162nd St W, Lakeville, MN 55044					✓		✓			x			<b>Roadway Geometric Changes:</b> County complete the evaluation and design for intersection modifications at CR 46 (160th Street)/Diamond Path intersection. <b>Education:</b> School and District instruct students to only cross CR 46 (160th Street) with an adult or using the tunnel under CR 46 (160th Street). <b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. The school route plan should identify the existing walk area that includes the tunnel crossing of CR 46 (160th Street). School and District provide walking and biking safety education.
Echo Park Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Burnsville	High Speed, 2-3 Lanes	CR 11	14100 Co Rd 11, Burnsville, MN 55337				✓			✓			x	x		<b>Evaluate School Speed Zone:</b> County evaluate the school speed zone on CR 11 for potential modifications including shortening the zone, revising the speed limit, or removing the zone. The speed zone should be considered for removal because students aren't crossing CR 11 and the school transportation activity (pedestrian, bicycle, and vehicle) is focused on Evergreen Drive. The existing on CR 11 is considered to be a community crossing rather than a school crossing. <b>Education:</b> School and District should instruct students to only cross CR 11 with an adult. <b>School and District Considerations:</b> School and District update the 2010 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education. <b>City Considerations:</b> City consider curb extensions at the school crossings on Evergreen Drive.

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
							Major	Minor									
						✓ School Need						● Community Need					
Faithful Shepherd	Private	Eagan	High Speed, 4+ Lanes	CR 28 (Yankee Doodle Road)	3355 Columbia Dr, Eagan, MN 55121									✓			No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.
Falcon Ridge Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 38 (McAndrews Road)	12900 Johnny Cake Ridge Rd, Apple Valley, MN 55124	✓		✓		✓		✓			x		<p><b>Sidewalk and Trail Infrastructure:</b> County construct trail on the north side of CR 38 (McAndrews Road) between Johnny Cake Ridge Road and Everest Trail.</p> <p><b>School Crossings:</b> County implement pedestrian crossing safety improvements at the CR 38 (McAndrews Road)/Johnny Cake Ridge Road traffic signal. This intersection is not part of the school's route plan but there are periodic student crossings at the intersection.</p> <p><b>Roadway Geometric Changes:</b> County construct u-turn on eastbound CR 38 (McAndrews Road) between school driveway and Diamond Path to reduce conflicts and congestion at CR 38 (McAndrews Road)/Diamond Path.</p> <p><b>Education:</b> School and District should instruct students to only cross CR 38 (McAndrews Road) with an adult or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. School and District provide walking and biking safety education.</p>
Farmington Elementary School	ISD 192 (Farmington)	Farmington	Low Speed	CR 74 (Ash Street)	500 Maple St, Farmington, MN 55024			✓				✓			x		<p><b>School Crossings:</b> MnDOT change the signing at the TH 3 (Chippendale Avenue)/Beech Street crossing from school crossing to pedestrian crossing because the crossing is not supported by the school or district and students are discouraged from crossing TH 3. MnDOT should evaluate the crossing and consider active devices at the crossing based on the traffic volume, speed, and number of lanes.</p> <p><b>Education:</b> School and District should instruct students to only cross CR 74 (Ash Street) and TH 3 (Chippendale Avenue) with an adult.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. School and District provide walking and biking safety education.</p>
First Baptist Church and School	Private	Rosemount	High Speed, 4+ Lanes	CR 33 (Diamond Path)	14400 Diamond Path W, Rosemount, MN 55068			●				✓					See Diamond Path Elementary School
Glory Academy	Private	Lakeville	High Speed, 2-3 Lanes	CR 9 (Dodd Boulevard)	25170 Dodd Blvd, Lakeville, MN 55044									✓			No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.
Good Shepherd Lutheran	Private	Burnsville	High Speed, 4+ Lanes	CR 42	151 East County Hwy 42, Burnsville, MN 55306									✓	x		<b>School Considerations:</b> School consider a sidewalk connection between the building and the existing sidewalk on CR 42 if there is a project opportunity or funding becomes available. Even with the limited opportunities for students to walk or bike to school, students could still benefit from walking and biking safety education.
Hastings Middle School	ISD 200 (Hastings)	Hastings	Low Speed	TH 55	1000 11th St W, Hastings, MN 55033						✓	✓			x	x	<p><b>Site and Circulation Improvements:</b> Revise lane assignments on Pine Street at TH 55 to provide a left-turn lane and through/right-turn lane. The City of Hastings would need to initiate and lead this improvement.</p> <p><b>Education:</b> School and District should instruct students to only cross TH 55 with an adult or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District update the 2010 Safe Routes to School Plan, including a walking/biking route plan.</p> <p>School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider high visibility (continental) style crosswalk markings at school crossings on 11th Street and Pine Street if there is a project opportunity or funding becomes available. City consider enhancing the effectiveness of the school speed zones on city streets with periodic enforcement efforts.</p>

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
							Major	Minor									
						✓ School Need		● Community Need									
Henry Sibley High School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Mendota Heights	High Speed, 2-3 Lanes	CR 63 (Delaware Avenue)	1897 Delaware Ave, Mendota Heights, MN 55118	✓	✓		✓				✓		x		<p><b>Sidewalk and Trail Infrastructure:</b> County construct sidewalk or trail on the east side of CR 63 (Delaware Avenue) to connect to a school crossing of CR 63 (Delaware Avenue). County install street lighting for the sidewalk/trail along the east side of CR 63 (Delaware Avenue) if it is part of the school's route plan. School and District construct on-site sidewalk to connect from the school building to CR 63 (Delaware Avenue) and the proposed school crossing of CR 63 (Delaware Avenue).</p> <p><b>School Crossings:</b> School and District develop a walking and biking route plan that supports the need for a school crossing on CR 63 (Delaware Avenue). County construct a school crossing on CR 63 (Delaware Avenue) between Deer Run Trail and Preserve Path. Along with the crossing, the following crossing enhancements should be implemented: high visibility (continental) crosswalk markings, median refuge, street lighting at the crossing, pedestrian activated devices (RRFB recommended).</p> <p><b>Evaluate School Speed Zone:</b> After a school crossing is established on CR 63 (Delaware Avenue), County evaluate CR 63 for implementation of a school speed zone. A school speed zone should be considered based on the recommended school crossing, the school transportation activity (pedestrian, bicycle and vehicle) is focused on CR 63 (Delaware Avenue), and pedestrians/bicyclists that travel along the county road.</p> <p><b>Enforcement:</b> If a school speed zone is established on CR 63 (Delaware Avenue), the effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.</p> <p><b>School and District Considerations:</b> School and District develop a Safe Routes to School Plan. School and District provide walking and biking safety education.</p>
Heritage STEM Middle School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Mendota Heights	Low Speed	CR 4 (Butler Avenue)	121 Butler Ave W, West St Paul, MN 55118	✓	✓		✓				✓		x	x	<p><b>Sidewalk and Trail Infrastructure:</b> County construct sidewalk on CR 4 (Butler Avenue) between CR 63 (Delaware Avenue) and Smith Avenue.</p> <p><b>School Crossings:</b> County install crossing enhancements (advance stop bars, street lighting) at the existing school crossing on CR 4 (Butler Avenue) at Heritage Middle School.</p> <p><b>Evaluate School Speed Zone:</b> School and District provide current school route plan. County conduct a speed study to determine if a school speed zone is needed on CR 4 (Butler Avenue). An evaluation is recommended because of the school crossing, the school transportation activity (pedestrian, bicycle, and vehicle) that is focused on CR 4 (Butler Avenue), and pedestrians/bicyclists that travel along the county road.</p> <p><b>School and District Considerations:</b> School and District consider developing a Safe Routes to School Plan. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City construct sidewalk on Bidwell Street between CR 4 (Butler Avenue) and Thompson Avenue if funding becomes available.</p>
Highland Elementary	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 31 (Pilot Knob Road)	14001 Pilot Knob Rd, Apple Valley, MN 55124							✓			x	x	<p><b>Education:</b> School and District should instruct elementary students to only cross CR 31 (Pilot Knob Road) with an adult.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. School and District develop plan for improved circulation that separates bus traffic from parent, staff, and visitor traffic and reduces vehicle queues onto 140th Street. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider crossing enhancements at the 142nd Street/Euclid Avenue school crossing if there is a project opportunity or funding becomes available. City consider evaluating the school speed zone on 140th Street for potential modifications including shortening the zone, revising the speed limit, or removing the zone. City work with School and District on site circulation and access to address vehicle queues and safety on 140th Street. City consider enhancing the effectiveness of the school speed zone on 142nd Street with periodic enforcement efforts.</p>
Intermediate School District 917	N/A	Apple Valley	High Speed, 4+ Lanes	CR 42 (145th Street)	1500 145th St E, Rosemount MN 55068									✓			No specific recommendations were developed at this school based on the limited demand for students to walk or bike to school. Students could still benefit from walking and biking safety education.

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
							Major	Minor									
						✓ School Need		● Community Need									
Inver Grove Heights Middle School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	Low Speed	CR 28 (80th Street)	8167 Cahill Ave. E. Inver Grove Heights, MN 55076		✓		✓				✓		x	x	<p><b>School Crossings:</b> CR 28 (80th Street)/Boyd Avenue: County evaluate street lighting at the crossing to determine if replacement of lighting units are needed. There are 4 street lights at the intersection (2 on utility pole and 2 street slight poles), however the schools report that the crossing has insufficient lighting. County conduct observations at the school crossing on CR 28 (80th Street) at Boyd Avenue with the new 3-lane roadway configuration, median refuge, and any school speed zone adjustments before considering further treatments such as an RRFB.</p> <p><b>Evaluate School Speed Zone:</b> School and District provide current school route plan. County evaluate the school speed zone on CR 28 (80th Street) for potential modifications including shortening the zone and revising the speed limit. The existing signing should be updated to indicate the speed limit is in effect when beacons are flashing and the flashing beacons should be replaced and updated.</p> <p><b>Enforcement:</b> The effectiveness of the school speed zone on CR 28 (80th Street) should be enhanced by periodic enforcement efforts.</p> <p><b>School and District Considerations:</b> School and District are currently in the process of developing a Safe Routes to School Plan for Inver Grove Heights Middle School and Simley High School. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider crossing enhancements at the school crossing on Cahill Avenue at 81st Street based on the traffic volume, traffic speed, and number of lanes. City consider evaluation of Cahill Avenue for a 4-lane to 3-lane conversion if there is a project opportunity or funding becomes available (long term recommendation).</p>
Kenwood Trail Middle School	ISD 194 (Lakeville)	Lakeville	High Speed, 4+ Lanes	CR 50 (Kenwood Trail)	19455 Kenwood Trail, Lakeville, MN 55044							✓			x		<p><b>Education:</b> School and District should instruct students to only cross CR 50 (Kenwood Trail) with an adult or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District consider sidewalk connections from the school site to the County trail network if there is a project opportunity or funding becomes available. School and District update the 2009 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education.</p>
Lake Marion Elementary School	ISD 194 (Lakeville)	Lakeville	High Speed, 4+ Lanes	CR 9 (Dodd Boulevard), CR 50 (Kenwood Trail)	19875 Dodd Blvd, Lakeville, MN 55044							✓			x		<p><b>Education:</b> School and District should instruct students to only cross CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail) with an adult.</p> <p><b>School and District Considerations:</b> School and District consider sidewalk connections from the school site to the County trail network if there is a project opportunity or funding becomes available. School and District update the 2009 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education.</p>
Lakeville North High School	ISD 194 (Lakeville)	Lakeville	High Speed, 4+ Lanes	CR 9 (Dodd Boulevard)	19600 Ipava Ave, Lakeville, MN 55044					✓		✓			x		<p><b>Roadway Geometric Changes:</b> County consider u-turn on southbound CR 9 (Dodd Boulevard) between 194th Street/195th Street and Itea Avenue for school traffic that must turn right from 195th Street.</p> <p><b>Education:</b> School and District should instruct students to only cross CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail) at controlled intersections.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan for Lakeville North School. School and District provide walking and biking safety education.</p>
Levi P. Dodge Middle School	ISD 192 (Farmington)	Farmington	High Speed, 4+ Lanes	CR 50 (212th Street)	4200 208th St W, Farmington, MN 55024									✓	x	x	<p><b>School and District Considerations:</b> School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider updating the school speed zone on 208th Street based on the research showing that shorter school speed zones are more effective.</p>

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
						✓ School Need	○ Community Need	Major									
Meadowview Elementary School	ISD 192 (Farmington)	Farmington	High Speed, 2-3 Lanes	CR 64 (195th Street)	6100 195th St W, Farmington, MN 55024	✓		✓							x		<p><b>Sidewalk and Trail Infrastructure:</b> County install street lighting for the trail along both sides of CR 64 (195th Street) because it is part of the school's route plan; County evaluate existing light levels in the tunnel under CR 64 (195th Street).</p> <p><b>School Crossings:</b> School and District develop school route plan that support the need for crosswalk markings along CR 64 (195th Street). County install high visibility (continental crosswalks) parallel to CR 64 (195th Street) at Exceptional Trail, Everest Path, and Eureka Avenue.</p> <p><b>School and District Considerations:</b> District consider the 2018 SRTS plan if there is a project opportunity or funding becomes available. School and District provide walking and biking safety education.</p>
North Trail Elementary School	ISD 192 (Farmington)	Lakeville	High Speed, 4+ Lanes	CR 31 (Pilot Knob Road)	5580 170th St W, Farmington, MN 55024	✓						✓			x	x	<p><b>Sidewalk and Trail Infrastructure:</b> County install street lighting for the trail along the west side of CR 31 (Pilot Knob Road) from 173rd Street to 170th Street because it is part of the school's route plan.</p> <p><b>Education:</b> School and District should instruct students to only cross CR 31 (Pilot Knob Road) with an adult.</p> <p><b>School and District Considerations:</b> School and District consider the 2018 SRTS plan if there is a project opportunity or funding becomes available. School and District develop a school route plan to support the need for a school crossing on 170th Street at Enfield Way. If a crossing is installed on 170th Street, School and District should provide an adult crossing guard. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider an enhanced school crossing on 170th Street. City consider reevaluation of the school speed zone if the school crossing is installed.</p>
Northview Elementary School	ISD 196 (Rosemount-Apple Valley-Eagan)	Eagan	High Speed, 4+ Lanes	CR 30 (Diffley Road)	965 Diffley Rd, Eagan, MN 55123				✓				✓				See Dakota Hills Middle School
Pilot Knob STEM Magnet Elementary School	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Eagan	High Speed, 2-3 Lanes	CR 26 (Lone Oak Road)	1436 Lone Oak Rd, Eagan, MN 55121	✓	✓		✓	✓		✓			x		<p><b>Sidewalk and Trail Infrastructure:</b> County construct sidewalk and install street lighting on the north side of CR 26 (Lone Oak Road) between Vince Trail and CR 31 (Pilot Knob Road) so that students can cross CR 26 (Lone Oak Road) to school (short-term recommendation). County construct sidewalk or trail along both sides of CR 26 (Lone Oak Road) between TH 13 and CR 31 (Pilot Knob Road) (long-term recommendation).</p> <p><b>School Crossings:</b> School and District develop a school route plan that supports the need for a crossing on CR 26 (Lone Oak Road). County implement pedestrian crossing safety improvements at the CR 26 (Lone Oak Road)/CR 31 (Pilot Knob Road) traffic signal. This intersection is expected to be part of the school's route plan when the sidewalk is constructed on the north side of CR 26 (Lone Oak Road) between Vince Trail and CR 31 (Pilot Knob Road). County evaluate a midblock school crossing on CR 26 (Lone Oak Road), between Vince Trail and Woodlark Lane. This is a long-term recommendation that is dependent on the following improvements also being implemented: 1) Sidewalk or trail constructed on the north side of CR 26 (Lone Oak Road) between Vince Trail and Lone Oak Lane. 2) Through lane reduction implemented on CR 26 (Lone Oak Road) east of CR 31 (Pilot Knob Road), which would reduce the number of lanes and eliminate the lane transition on CR 26 (Lone Oak Road) west of CR 31 (Pilot Knob Road).</p> <p><b>Evaluate School Speed Zone:</b> County evaluate the school speed zone on CR 26 (Lone Oak Road) for potential modifications including shortening the zone, revising the speed limit, or removing the zone. If the speed zone is determined to be retained, the appropriate speed limit should be revised as recommended and the existing signing should be updated to include flashing beacons.</p> <p><b>Roadway Geometric Improvements:</b> County consider the segment of CR 26 (Lone Oak Road) west of CR 31 (Pilot Knob Road) when evaluating the through lane reduction between CR 31 (Pilot Knob Road) and I-35E. This is a long-term recommendation.</p> <p><b>Education:</b> School and District instruct students to only cross CR 26 (Lone Oak Road) with an adult or at the school crossing at CR 31 (Pilot Knob Road) with an adult crossing guard.</p> <p><b>School and District Considerations:</b> School and District update the 2011 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education.</p>



Appendix B: Summary of School Recommendations

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School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
						Major	Minor	✓ School Need									
Randolph Elementary and High School	ISD 195 (Randolph)	Randolph	Low Speed	CR 88 (292nd Street)	29110 Davisson Ave, Randolph, MN 55065	✓									x		<p><b>Sidewalk and Trail Infrastructure:</b> County construct sidewalk and trail to fill gaps along CR 88 (292nd Street) as opportunities arise: North side of CR 88 (292nd Street) from Davisson Avenue to Curtis Lane, South side of CR 88 (292nd Street) from Danel Avenue to Cooper Avenue, Both sides of CR 88 (292nd Street) at the railroad crossing.</p> <p><b>School and District Considerations:</b> School and District provide walking and biking safety education.</p>
Robert Boeckman Middle School	ISD 192 (Farmington)	Farmington	High Speed, 2-3 Lanes	CR 31 (Denmark Avenue)	800 Denmark Ave, Farmington, MN 55024									✓	x	x	<p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> Sidewalk and trail connections on city streets are addressed in the city's existing plans, including the 2040 Comprehensive Plan and the Farmington Bicycle and Pedestrian Plan.</p>
Rosemount High School	ISD 196 (Rosemount-Apple Valley-Eagan)	Rosemount	High Speed, 2-3 Lanes	TH 3 (Robert Trail)	3135 142nd St W, Rosemount, MN 55068					✓	✓	✓			x		<p><b>Roadway Geometric Changes:</b> MnDOT construct roundabout at TH 3 (Robert Trail)/142nd Street to slow vehicle speeds and address intersection safety concerns.</p> <p><b>Site Circulation Improvements:</b> School and District modify intersection control or use a traffic control agent at the 142nd Street/school parking lot during school arrival to address the existing queues onto TH 3 (Robert Trail).</p> <p><b>Education:</b> School and District should instruct students to only cross TH 3 (Robert Trail) using the tunnel under TH 3 (Robert Trail) or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District update the 2010 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education.</p>
Rosemount Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Rosemount	High Speed, 2-3 Lanes	TH 3 (Robert Trail)	3135 143rd St W, Rosemount, MN 55068							✓			x		<p><b>Education:</b> School and District should instruct students to only cross TH 3 (Robert Trail) using the tunnel under TH 3 (Robert Trail), with an adult, or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District update the 2010 Safe Routes to School Plan, including a walking/biking route plan. School and District provide walking and biking safety education.</p>
Salem Hills Elementary School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	High Speed, 2-3 Lanes	CR 73 (Babcock Trail)	5899 Babcock Trail, Inver Grove Heights, MN 55077	✓									x		<p><b>Sidewalk and Trail Infrastructure:</b> County and city construct sidewalk/trail on CR 73 (Babcock Trail) if there is a project opportunity or funding becomes available (long term recommendation). In conjunction with adding sidewalk or trail on CR 73 (Babcock Trail), School and District consider a school route plan and consider sidewalk connections to the county road.</p> <p><b>School and District Considerations:</b> School and District provide walking and biking safety education.</p>
Scott Highlands Middle School	ISD 196 (Rosemount-Apple Valley-Eagan)	Apple Valley	High Speed, 4+ Lanes	CR 31 (Pilot Knob Road)	6602, 14011 Pilot Knob Rd, Apple Valley, MN 55124			✓				✓			x	x	<p><b>School Crossings:</b> County implement pedestrian crossing safety improvements at the CR 31 (Pilot Knob Road)/142nd Street traffic signal. This intersection is not part of the school's route plan but there are periodic student crossings at the intersection. This intersection is recommended for improvements based on the lower number of vehicle crashes and the greater likelihood of crossings by middle school students.</p> <p><b>Education:</b> School and District should instruct students to only cross CR 31 (Pilot Knob Road) with an adult or at a controlled intersection.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider crossing enhancements at the 142nd Street/Euclid Avenue school crossing if there is a project opportunity or funding becomes available.</p>

Appendix B: Summary of School Recommendations

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School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
							Major	Minor									
						✓ School Need	● Community Need										
Simley High School	ISD 199 (Inver Grove Heights)	Inver Grove Heights	Low Speed	CR 28 (80th Street)	2920 80th St E, Inver Grove Heights, MN 55076		✓		✓				✓		x		<p><b>School Crossings:</b> CR 28 (80th Street)/Boyd Avenue: County evaluate street lighting at the crossing to determine if replacement of lighting units are needed. There are 4 street lights at the intersection (2 on utility pole and 2 street slight poles), however the schools report that the crossing has insufficient lighting. County conduct observations at the school crossing on CR 28 (80th Street) at Boyd Avenue with the new 3-lane roadway configuration, median refuge, and any school speed zone adjustments before considering further treatments such as an RRFB.</p> <p><b>Evaluate School Speed Zone:</b> School and District provide current school route plan. County evaluate the school speed zone on CR 28 (80th Street) for potential modifications including shortening the zone and revising the speed limit. The existing signing should be updated to indicate the speed limit is in effect when beacons are flashing and the flashing beacons should be replaced and updated.</p> <p><b>Enforcement:</b> The effectiveness of the school speed zone on CR 28 (80th Street) should be enhanced by periodic enforcement efforts.</p> <p><b>School and District Considerations:</b> School and District are currently in the process of developing a Safe Routes to School Plan. School and District provide walking and biking safety education.</p>
Somerset Elementary	ISD 197 (West St. Paul-Mendota Heights-Eagan)	Mendota Heights	Low Speed	TH 149 (Dodd Road)	1355 Dodd Rd, Mendota Heights, MN 55118	✓		✓	✓				✓		x	x	<p><b>Sidewalk and Trail Infrastructure:</b> MnDOT construct sidewalk on TH 149 (Dodd Road) as opportunities arise (long-term recommendation).</p> <p><b>School Crossings:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. School consider a school crossing guard at the school driveway. One crossing guard should focus on the TH 149 (Dodd Road)/Emerson Avenue intersection and the other crossing guard should focus on the vehicle and crossing activity at the driveway.</p> <p><b>Evaluate School Speed Zone:</b> City and District work with MnDOT to implement flashers on the school speed zone. Research indicates that the speed zone is likely to be more effective with this enhancement.</p> <p><b>Enforcement:</b> Effectiveness of the school speed zone on TH 149 (Dodd Road) should be enhanced by periodic enforcement efforts.</p> <p><b>School District Considerations:</b> School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider sidewalk on Emerson Avenue between TH 149 (Dodd Road) and CR 63 (Delaware Avenue) if there is a project opportunity or funding becomes available.</p>
Southview Christian School	Private	Burnsville	High Speed, 4+ Lanes	CR 5	15304 Co Rd 5, Burnsville, MN 55306									✓			No specific recommendations were developed at this school based on the limited demand and opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.
St. Croix Lutheran Academy	Private	West St. Paul	Low Speed	CR 73 (Oakdale Avenue)	1200 Oakdale Ave, West St Paul, MN 55118	●	✓					✓			x		<p><b>Sidewalk and Trail Infrastructure:</b> County and city construct trail on the east side of CR 73 (Oakdale Avenue) between CR 4 (Butler Avenue) and CR 8 (Wentworth Avenue). The trail along CR 73 (Oakdale Avenue) is a community need rather than a school need.</p> <p><b>School Crossings:</b> School develop a walking and biking route plan, including crossing activity outside of the school day. County construct a school crossing at CR 73 (Oakdale Avenue)/Moreland Avenue. The following improvements should be implemented as part of the crossing: high visibility (continental) crosswalk markings, curb extensions. There is an existing street light at the intersection and the illumination levels should be confirmed as part of the design of the school crossing.</p> <p><b>Education:</b> School instruct students to only cross TH 3 (Robert Street) at a controlled intersection.</p> <p><b>School Considerations:</b> School provide walking and biking safety education.</p>

Appendix B: Summary of School Recommendations

Treatments or improvements that are specific to and necessary for safety on the county or state road are listed under the headings that were described in Chapter 3 of the report: Sidewalk and Trails; School Crossings; School Speed Zones; Roadway Geometric Changes; Site and Circulation Improvements; Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are listed under School and District Considerations and City Considerations.

School	School District	City	School Evaluation Group	County or State Road	Address	Sidewalk and Trail Infrastructure	School Crossings		Evaluate School Speed Zone	Roadway Geometric Changes	Site and Circulation Improvements	Education	Enforcement	No County/State Road Recommendation	School and District Considerations	City Considerations	Notes
							Major	Minor									
						✓ School Need		● Community Need									
St. John the Baptist Catholic School	Private	Vermillion	Low Speed	CR 62 (Main Street)	111 Main St W, Vermillion, MN 55085		✓		✓				✓		x		<p><b>School Crossings:</b> School develop school route plan for walking and biking, including crossing activity during the school day. County implement crossing enhancements at the school crossing on CR 62 (Main Street) at St. John the Baptist Catholic School: install advance stop bars, construct curb extensions or median refuge to shorten the crossing and make pedestrians more visible. here is an existing street light near the crossing and the illumination levels should be confirmed as part of the design of the curb extensions or median refuge.</p> <p><b>Evaluate School Speed Zone:</b> County evaluate the school speed zone on CR 62 (Main Street) for potential modifications including shortening the zone and revising the speed limit.</p> <p><b>Enforcement:</b> The effectiveness of the school speed zone on CR 62 (Main Street) should be enhanced by periodic enforcement efforts.</p> <p><b>School Considerations:</b> School provide walking and biking safety education.</p>
St. Joseph's Catholic School	Private	West St. Paul	Low Speed	CR 4 (Butler Avenue)	1138 Seminole Ave, West St Paul, MN 55118		✓		✓				✓		x		<p><b>School Crossings:</b> School develop a walking and biking route plan for St. Joseph's Catholic School that supports crossings of CR 4 (Butler Avenue) being focused at Seminole Avenue. County remove school crossing at CR 4 (Butler Avenue)/Ohio Street and focus crossings at CR 4 (Butler Avenue)/Seminole Avenue. County construct curb extensions at CR 4 (Butler Avenue)/Seminole Avenue to shorten the crossing and make pedestrians more visible. There is an existing street light at the intersection and the illumination levels should be confirmed as part of the design of the curb extensions. St. Joseph's provide adult crossing guards at the CR 4 (Butler Avenue)/Seminole Avenue intersection based on the age of the students.</p> <p><b>Evaluate School Speed Zone:</b> County conduct a speed study to determine if a school speed zone is needed on CR 4 (Butler Avenue). An evaluation is recommended because of the school crossing, the school transportation activity (pedestrian, bicycle, and vehicle) that is focused on CR 4 (Butler Avenue), and pedestrians/bicyclists that travel along the county road.</p> <p><b>School Considerations:</b> School and District provide walking and biking safety education.</p>
Trinity Lone Oak Lutheran	Private	Eagan	High Speed, 4+ Lanes	TH 55	2950 Dodd Rd, Eagan, MN 55121									✓			No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.
Visitation School	Private	Mendota Heights	High Speed, 2-3 Lanes	TH 149 (Dodd Road)	2455 Visitation Dr, Mendota Heights, MN 55120									✓		x	<p><b>City Considerations:</b> City consider a request to MnDOT to update the left-turn indications at the traffic signal at TH 149 (Dodd Rd)/Mendota Heights Rd to reduce delays during school drop-off and pick-up.</p>
Vista View Elementary	ISD 191 (Burnsville)	Burnsville	High Speed, 4+ Lanes	CR 5	13109 Co Rd 5, Burnsville, MN 55337							✓			x	x	<p><b>Education:</b> School and District instruct students to only cross CR 5 with an adult.</p> <p><b>School and District Considerations:</b> School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. School and District provide walking and biking safety education.</p> <p><b>City Considerations:</b> City consider sidewalk construction on 131st Street and Irving Avenue near the school if there is a project opportunity or funding becomes available.</p>



## Appendix C: Individual School Evaluations and Recommendations



## INTRODUCTION

This appendix documents the school, school district, and transportation data and conditions at each of the school sites included in the assessment. In addition, the site-specific input received from the public engagement is summarized. The assembled data and public input are used to support the recommendations and improvements at each school site.

Treatments or improvements that are specific to and necessary for safety on the county or state road are described under the headings that were described in Chapter 3 of the report:

- Sidewalk and Trails
- School Crossings
- School Speed Zones
- Roadway Geometric Changes
- Site and Circulation Improvements
- Education
- Enforcement

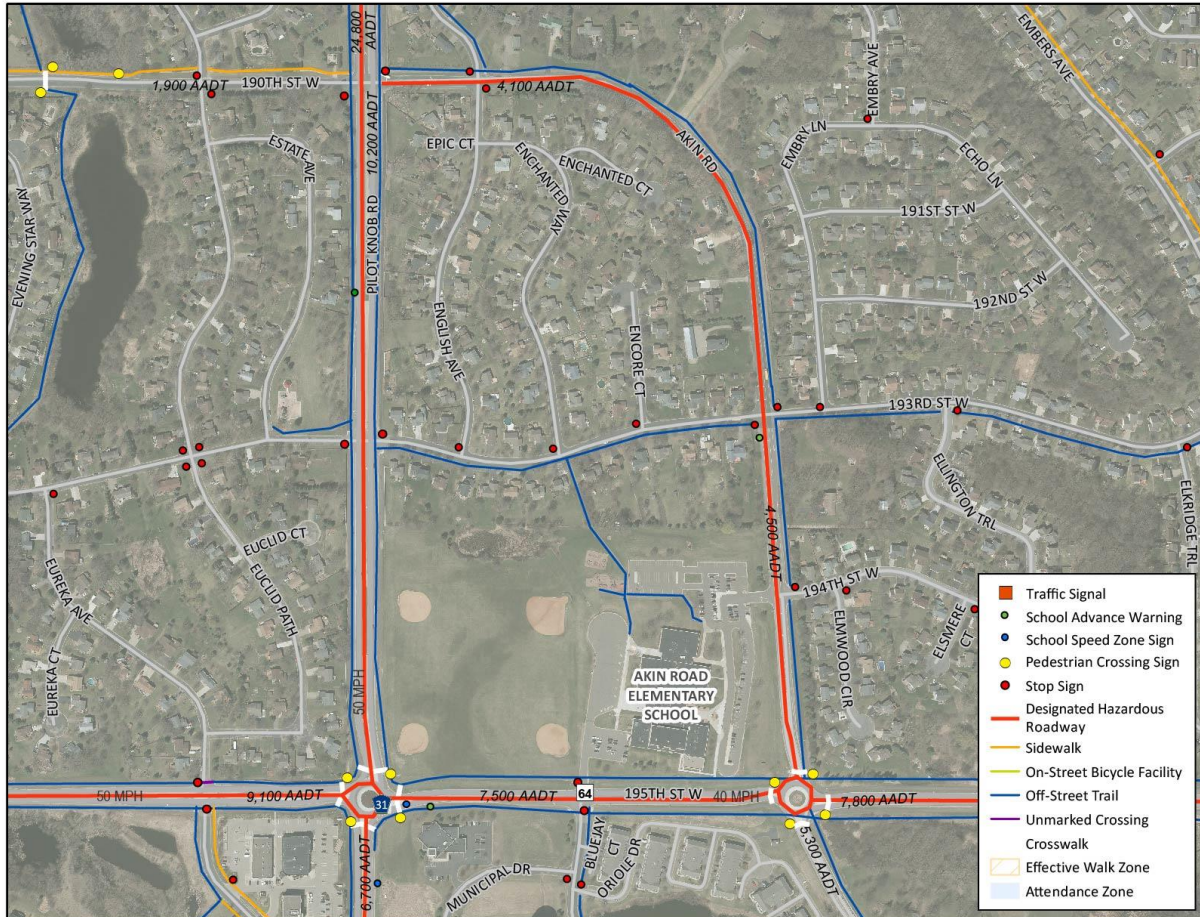
Treatments or improvements that are not directly related to the county or state road, but that were identified during the evaluation process, are described under the following headings:

- School and District Considerations – Improvements related to the school site or school programs that are not specific to the county or state road.
- City Considerations – Improvements related to city streets.



## AKIN ROAD ELEMENTARY SCHOOL

Farmington Public Schools, ISD 192  
County or State Road: CR 64 (195<sup>th</sup> Street)  
Farmington, MN



Note: This map includes additional data and details because this school site was evaluated as a sample school.

### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 560 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 64 (195<sup>th</sup> St); the school access is on Akin Road.
- The school attendance area is north of CR 64 (195<sup>th</sup> Street) and east of CR 31 (Pilot Knob Road).
- Hazardous roadways around the school, as identified by ISD 192, are: Akin Road, CR 64 (195<sup>th</sup> Street), and CR 31 (Pilot Knob Road).
- About 3 percent of students live in the walk zone and an estimated 25 students walk or bike to school.
- Roundabouts were constructed on CR 64 (195<sup>th</sup> Street) in 2015.



## School Travel SAFETY ASSESSMENT

- There are no existing school crossings at Akin Road Elementary School, but a school crossing on Akin Road at 194<sup>th</sup> Street has been discussed in the past.
- The Dakota County 2040 Transportation Plan identified two pedestrian and bicycle gaps on CR 31 (Pilot Knob Road):
  - Medium priority gap between 197<sup>th</sup> Street and McKendry Path. The existing section has no sidewalk or trail.
  - Low priority gaps between CR 64 (195<sup>th</sup> Street) and 197<sup>th</sup> Street and between McKendry Path and CR 50. The existing section has trail on the west side of the road.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- Barrier to walking and biking: *Difficult to cross CR 64 (195<sup>th</sup> Street) at Embers Avenue*
- Traffic circulation/congestion issue: *Difficult to make a left-turn from 190<sup>th</sup> Street to CR 31 (Pilot Knob Road)*

##### *Parent/Caregiver Survey*

6 survey responses were received for Akin Road Elementary School. No comments were provided.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

### Recommendations

- **Education:**
  - School and District instruct students to only cross CR 64 (195<sup>th</sup> Street) and Akin Road with an adult because there are not crossing guards.
- **School and District Considerations:**
  - School and District consider walking and biking safety education.

A school crossing is not recommended on CR 64 (195<sup>th</sup> Street) because it is the south boundary of the school's attendance area and it is not part of the school's route plan.

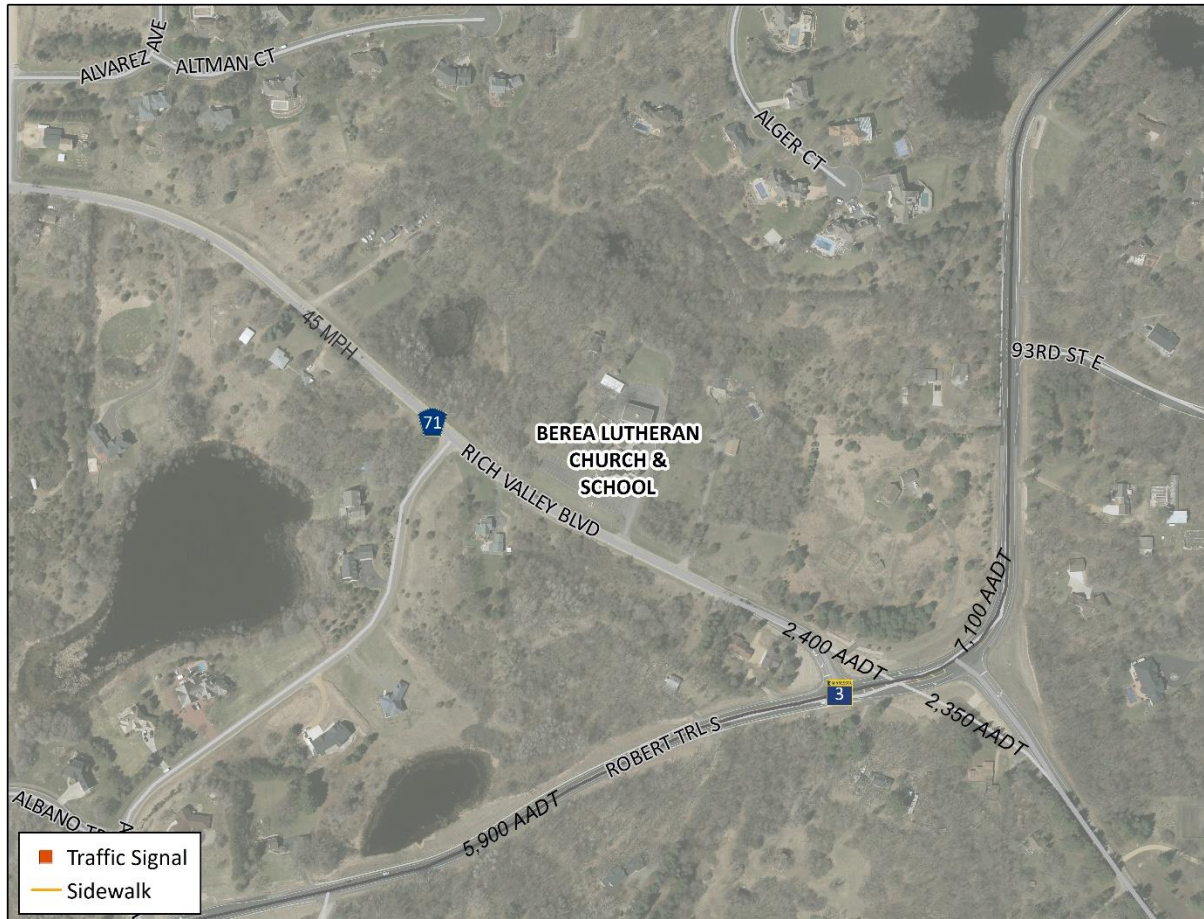


## BEREA LUTHERAN SCHOOL

Private School

County or State Road: CR 71 (Rich Valley Boulevard)

Inver Grove Heights, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: Private school with approximately 25 to 35 students in kindergarten through 8<sup>th</sup> grade.
- The school site and access are on CR 71 (Rich Valley Boulevard).
- There are no existing school crossings.
- There is low demand and limited opportunities for walking or biking to school.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 5 between TH 13 and CR 42. The existing section has sidewalk on both sides of the road.





## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

One survey response was received for Berea Lutheran School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

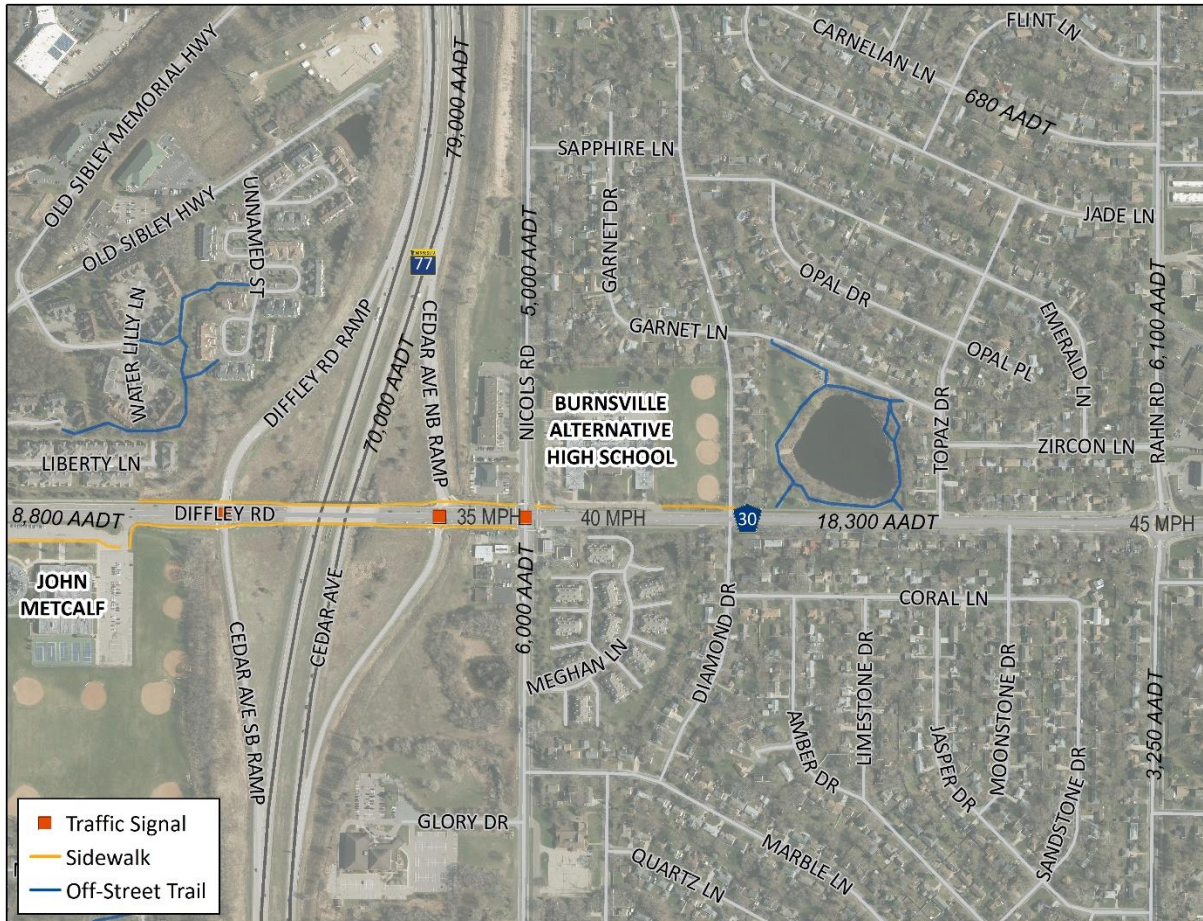
## Recommendations

No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.



### BURNSVILLE ALTERNATIVE HIGH SCHOOL

Burnsville-Eagan-Savage Public Schools, ISD 191  
County or State Road: CR 30 (Diffley Road)  
Eagan, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 100-150 students in grades 10 through 12. Students enrollment is not limited to ISD 191.
- The school is next to CR 30 (Diffley Road), and the school accesses are on CR 30 (Diffley Road) and Nichols Road.
- There are no existing school crossings.
- There is low demand and limited opportunities for walking or biking to school because the attendance area includes all of Dakota County.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 30 (Diffley Road) between TH 77 and Diamond Drive. The existing section has sidewalk or no facilities.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Burnsville Alternative High School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

The opportunities for walking and biking to this school are limited given that the enrollment includes students throughout ISD 191 as well as Dakota County.

- **Sidewalk and Trail Infrastructure:**
  - County construct sidewalk to fill gap on the north side of CR 30 (Diffley Road). This is a community need rather than a school need. Pedestrians on CR 30 (Diffley Road) currently must walk on school property and cross the school parking lot. This may also necessitate changes to the site circulation and access due to the spacing between CR 30 (Diffley Road) and the school's access drive.

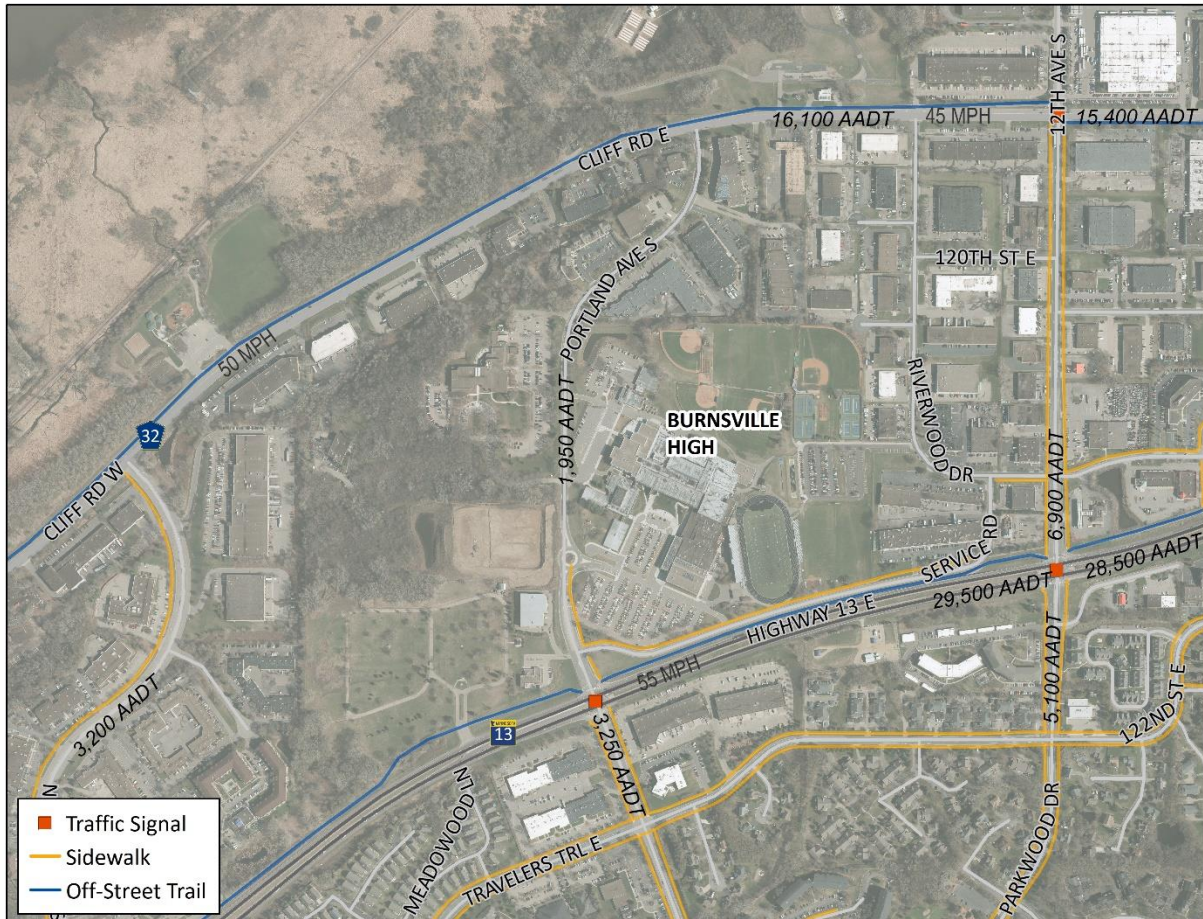


## BURNSVILLE HIGH SCHOOL

Burnsville-Eagan-Savage Public Schools, ISD 191

County or State Road: TH 13

Burnsville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 2,500 students in grades 9 through 12.
- The school site is next to TH 13, and the school access is on Portland Avenue.
- Hazardous roadways around the school, as identified by ISD 191, are: TH 13 and CR 32 (Cliff Road).
- There are no existing school crossings.
- There is low demand for walking or biking to school due to the designated hazardous roadways.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Burnsville High School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

#### *Feedback Form*

A comment was received with safety concerns about crossings at the Portland Avenue/Burnsville Parkway intersection, which is an intersection of two city streets.

## Recommendations

Demand for walking and biking to this school is limited and the most appropriate crossing of TH 13 is at the existing traffic signal at Portland Avenue.

- **Education:**
  - School and District should instruct students to only cross TH 13 at controlled intersections because it is a high-speed road.
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking.
  - School and District provide walking and biking safety education.

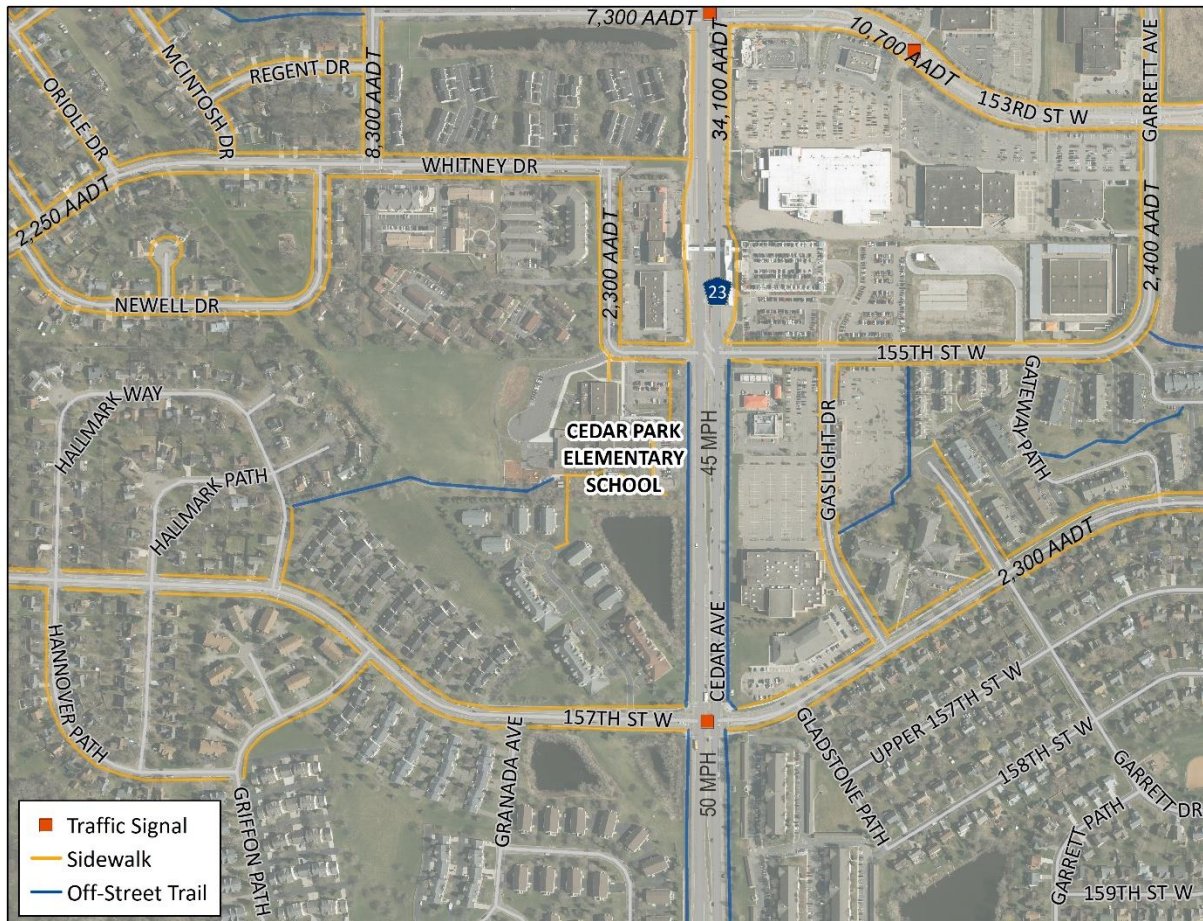


## CEDAR PARK ELEMENTARY STEM SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196

County or State Road: CR 23 (Cedar Avenue)

Apple Valley, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 700 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 23 (Cedar Avenue), and the school access is on Whitney Drive.
- Hazardous roadways around the school, as identified by ISD 196, are: CR 23 (Cedar Avenue), CR 42 (150<sup>th</sup> Street) and CR 46 (160<sup>th</sup> Street).
- About 25 percent of students live in the walk zone.
  - Demand for walking and biking is primarily from the neighborhoods west of the school.
- A Safe Routes to School plan was completed in 2010.
- There is an existing school crossing at Whitney Drive/Whitney Drive.



## School Travel SAFETY ASSESSMENT

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- Whitney Drive
  - Traffic circulation/congestion issue: *Vehicles back up from the school parking lot onto Whitney Drive*
  - Traffic circulation/congestion issue: *Vehicles back up on Whitney Drive waiting to turn onto CR 23 (Cedar Avenue)*
- CR 23 (Cedar Avenue)/157<sup>th</sup> Street
  - Traffic circulation/congestion issue: *Vehicles from the school u-turn at this traffic signal and the southbound left-turn phase is not long enough during school arrival and dismissal times*

##### *Parent/Caregiver Survey*

One survey response was received for Cedar Park Elementary. No comments were provided.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

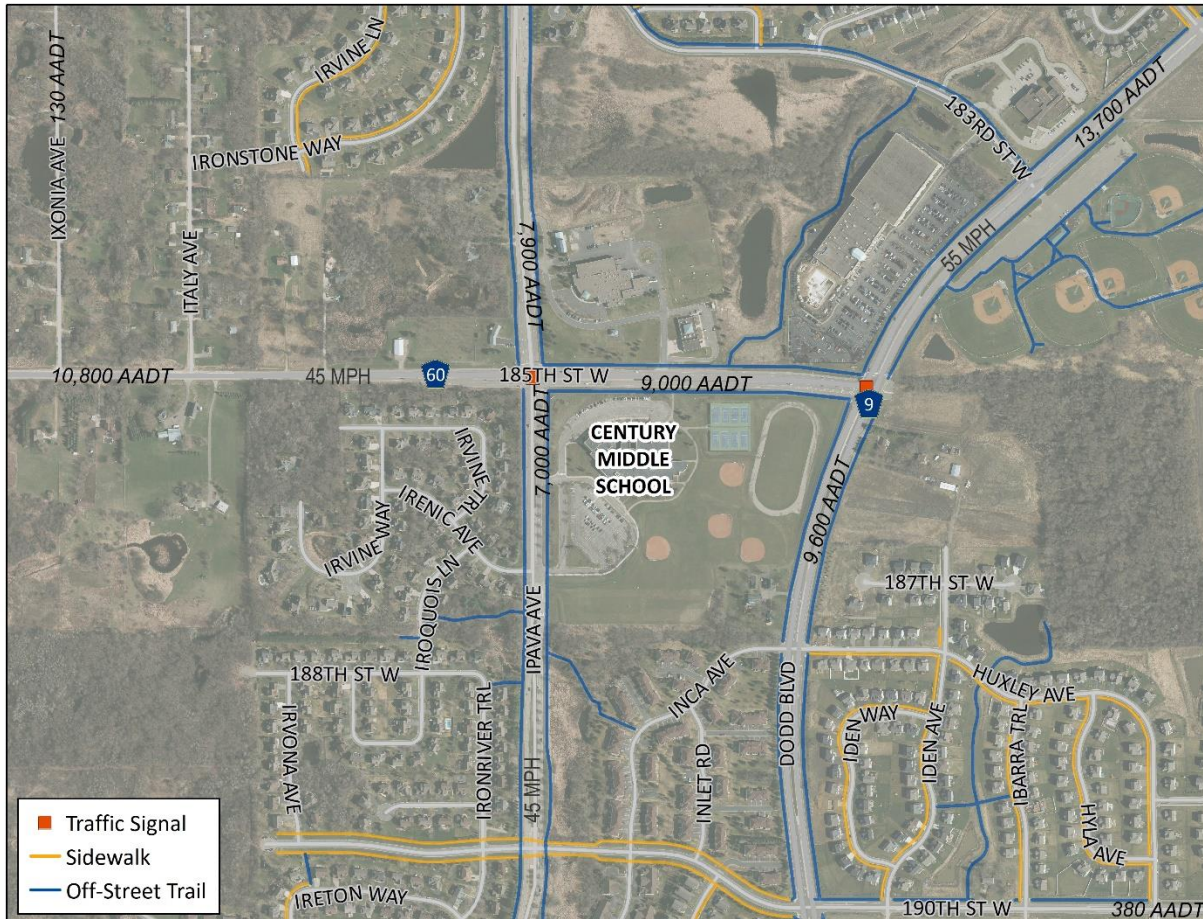
### Recommendations

- **Site and Circulation Improvements:**
  - County evaluate left-turn signal timing at CR 23 (Cedar Avenue)/157<sup>th</sup> Street during school arrival and dismissal for u-turn movements from the school.
- **School and District Considerations:**
  - School and District consider site changes to improve drop-off/pick-up if there is a project opportunity or funding becomes available.
  - School and District update the 2010 Safe Routes to School Plan including a walking/biking route plan.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider crossing enhancements such as curb extensions and high visibility (continental) crosswalks at the school crossing at Whitney Drive/Whitney Drive if there is a project opportunity or funding becomes available.



## CENTURY MIDDLE SCHOOL

Lakeville Public Schools, ISD 194  
County or State Road: CR 60 (185<sup>th</sup> Street)  
Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 950 students in grades 6 through 8.
- The school site is next to CR 60 (185<sup>th</sup> Street) and CR 9 (Dodd Boulevard), and the school access is on Ipava Avenue.
- Hazardous roadways around the school, as identified by ISD 194, are: CR 60 (185<sup>th</sup> Street) and CR 9 (Dodd Boulevard).
- There are an estimated 10 students that regularly walk or bike to school
- A Safe Routes to School plan was completed in 2008
- There is an existing school crossing on Ipava Avenue south of Century Middle School.
- There is an existing 25 mph school speed zone on Ipava Avenue.





- The CR 60 (185<sup>th</sup> Street)/Ipava Avenue intersection ranked #33 for crashes at county road intersections for 2017-2019.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 60 (185<sup>th</sup> Street) between Jasmine Way and Ipava Avenue. The existing section has no sidewalk or trail.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- Ipava Avenue
  - Barrier to walking and biking: *Difficult to cross Ipava Avenue at CR 60 (185<sup>th</sup> Street) or at school crossing (2 comments)*
- CR 60 (185<sup>th</sup> Street)
  - Walking/biking route you wish you could take: *No sidewalk on CR 60 (185<sup>th</sup> Street) between Ipava Avenue and Jaeger Path (3 comments)*

#### *Parent/Caregiver Survey*

Seven survey responses were received for Century Middle School. The following summarizes the open-ended comments provided on the survey:

- *Concerns about vehicle speeds and drivers not yielding to pedestrians at the CR 60 (185<sup>th</sup> Street)/Ipava Avenue traffic signal*
- *Requests for enhanced treatments at the school crossing on Ipava Avenue south of the school*
- *Lack of sidewalk or trail west of the school along CR 60 (185<sup>th</sup> Street W)*
- *Difficult to make a left turn onto Ipava Avenue out of the Spring Hill Neighborhood in the morning peak period*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- Sidewalk/trail along CR 60 (185<sup>th</sup> Street)
  - One comment agreed with this recommendation
- Pedestrian crossing enhancements at CR 60 (185<sup>th</sup> Street)/Ipava Avenue
  - One comment agreed with this recommendation
- Update the 2008 Safe Routes to School Plan
  - One comment agreed with this recommendation
- Crossing enhancements at the Ipava Avenue crossing south of the school (city improvement)
  - One comment agreed with this improvement



- Instructing students to only cross CR 60 (185<sup>th</sup> Street) at the traffic signal at Ipava Avenue.
  - One comment disagreed with the recommendation
  - The draft recommendation has been revised to clarify that it is referring only to crossings of CR 60 (185<sup>th</sup> Street). There is an existing school crossing of Ipava Avenue south of CR 60 (185<sup>th</sup> Street) and the recommendation was not intended to discourage use of that crossing.

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County construct trail on the north side of CR 60 (185<sup>th</sup> Street) between Jaeger Path and Ipava Avenue.
- **School Crossings:**
  - County implement pedestrian crossing safety improvements at the CR 60 (185<sup>th</sup> Street)/Ipava Avenue traffic signal. This intersection is not part of the school's route plan but there are periodic student crossings at the intersection.
    - Install high visibility (continental) crosswalks
    - Install accessible pedestrian signals and pedestrian countdown timers
    - Update left-turn indications to flashing yellow arrow (FYA)
    - Operate left-turn phasing as protected only when pedestrian push buttons are activated
- **Education:**
  - School and District should instruct students to only cross CR 60 (185<sup>th</sup> Street) with an adult or at a controlled intersection because there are not crossing guards on CR 60 (185<sup>th</sup> Street). Midblock and uncontrolled crossings of CR 60 (185<sup>th</sup> Street) between Ipava Avenue and CR 9 (Dodd Boulevard) should be discouraged because it is a high-speed road.
- **School and District Considerations:**
  - School and District update the 2008 Safe Routes to School Plan including a walking/biking route plan.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider crossing enhancements such as advance stop bars and active devices at the school crossing on Ipava Avenue based on the traffic volume and number of lanes.
  - City consider reevaluation of school speed zone to increase its effectiveness. Reevaluation should consider the limits of the zone and the school speed limit.



*Existing school crossing on Ipava Avenue*

- City consider enhancing the effectiveness of the school speed zone on Ipava Avenue with periodic enforcement efforts.

A school speed zone evaluation is not recommended on CR 60 (185<sup>th</sup> Street) because the crossings at CR 60 (185<sup>th</sup> Street)/Ipava Avenue are not part of the school's route plan. The crossing improvements are recommended at the intersection because students periodically cross, but the crossing activity is not sufficient to result in an effective school speed zone. In addition, the other criteria for consideration of a school speed zone are not met on CR 60 (185<sup>th</sup> Street) because most of the school transportation activity (pedestrian, bicycle, and vehicle) is focused on Ipava Avenue.

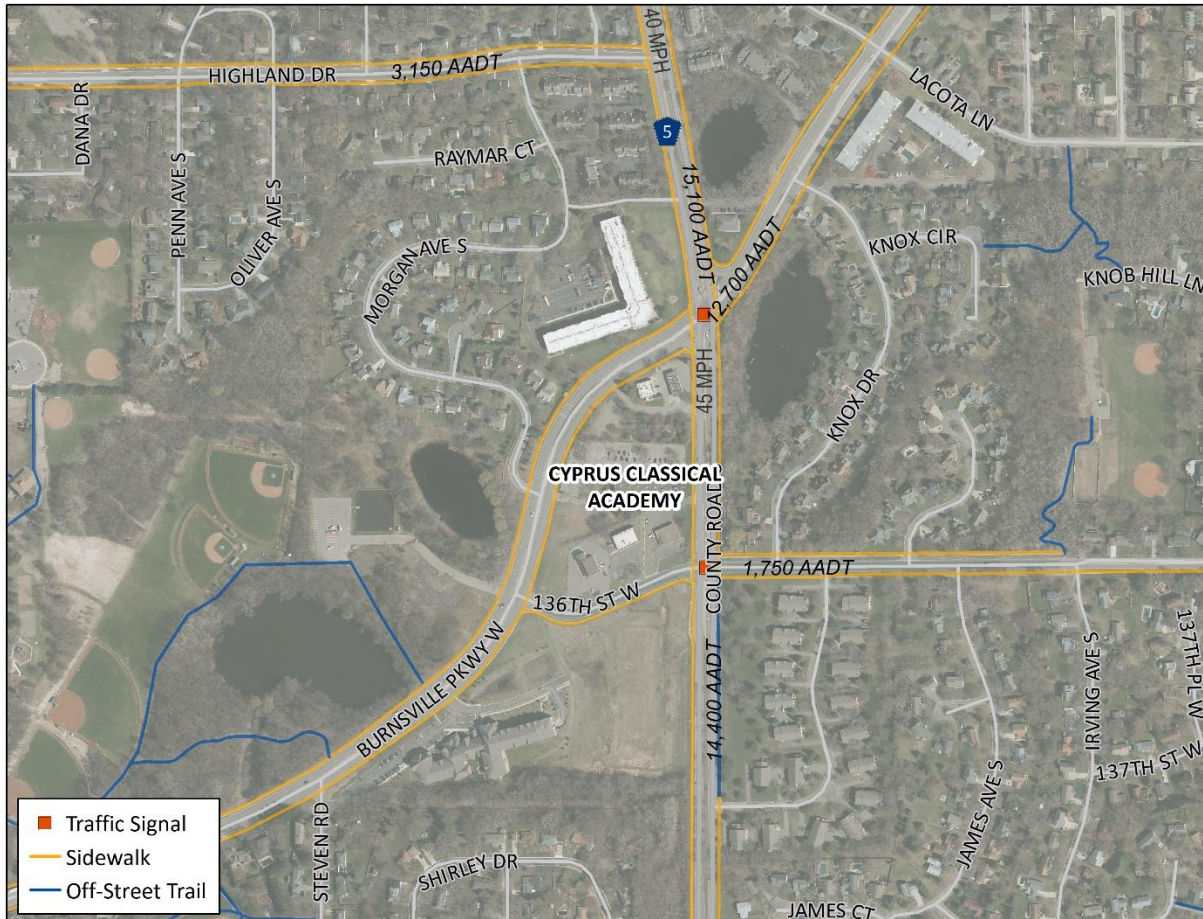


## CYPRUS ACADEMY

Private School

County or State Road: CR 5

Burnsville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: Private school with approximately 50 students, pre-kindergarten through age 13.
- The school site is next to CR 5, and the school accesses are on CR 5 and Burnsville Parkway.
- There are no existing school crossings.
- There is low demand for walking or biking to school.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 5 between TH 13 and CR 42. The existing section has sidewalk on both sides of the road.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Cyprus Academy.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

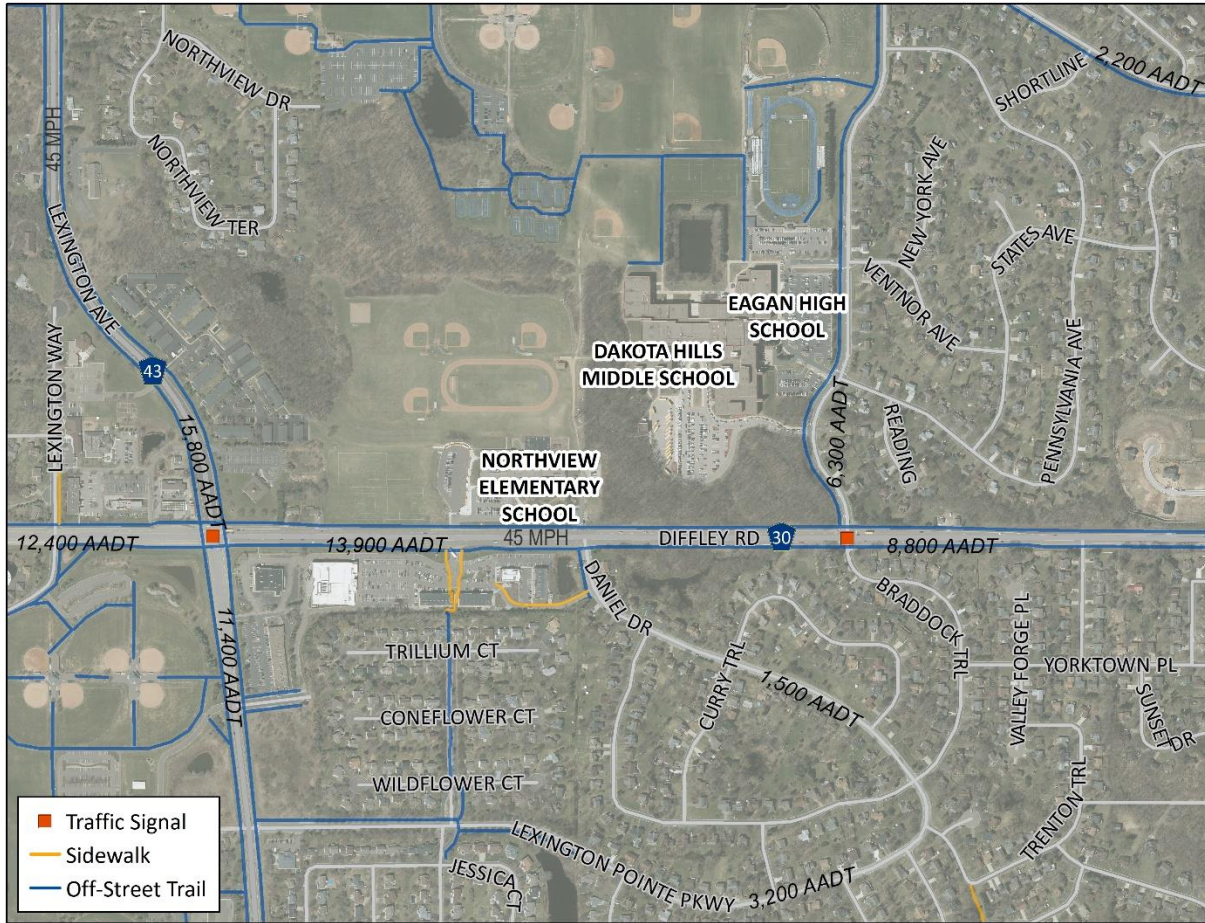
There is little demand for walking and biking based on the number of students and the enrollment area. Students could still benefit from walking and biking safety education.



# School Travel SAFETY ASSESSMENT

## DAKOTA HILLS MIDDLE SCHOOL, EAGAN HIGH SCHOOL, NORTHVIEW ELEMENTARY SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: CR 30 (Diffley Road)  
Eagan, MN



Note: These school sites were included in the High Speed, 4+ Lanes evaluation group based on the conditions that existed in 2020.

### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Student enrollment and grades
  - Northview Elementary: About 450 students in pre-kindergarten through 5<sup>th</sup> grade.
  - Dakota Hills Middle: About 1,250 students in grades 6 through 8.
  - Eagan High: About 1,950 students in grades 9 through 12.
- The school sites are next to CR 30 (Diffley Road), and the school accesses are on CR 30 (Diffley Road) and Braddock Trail



## School Travel SAFETY ASSESSMENT

- Hazardous roadways around the schools, as identified by ISD 196, are: CR 30 (Diffley Road), Lexington Avenue, Dodd Road, and Wescott Road.
- About 10 percent of students live in the walk zone for all three schools.
- Safe Routes to School plans are currently being developed.
- There is an existing school speed zone on CR 30 (Diffley Road).
- The Diffley Road School Area Improvements Study was recently completed to address safety and mobility concerns along CR 30 (Diffley Road). The proposed treatments include a through lane reduction, school crossings, and school speed zone. The study report and recommendations can be found on the Dakota County website:  
<https://www.co.dakota.mn.us/Transportation/PlannedConstruction/CR30Braddock/Pages/diffley-road-study.aspx>
- CR 30 (Diffley Road) between CR 43 (Lexington Avenue) and Braddock Trail is identified in the Dakota County 2040 Transportation Plan as a potential roadway segment for through lane reduction based on the existing and future traffic volumes.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 30 (Diffley Road)/Daniel Drive
  - Barriers to walking and biking: *Pedestrians and bicyclists are still crossing at the intersection after no crossing signs were installed. Concern with drivers yielding to pedestrians at the future roundabout.*
- CR 30 (Diffley Road)/Braddock Trail
  - Traffic circulation/congestion issue: *Signal timing causes back-ups on CR 30 (Diffley Road)*

##### *Parent/Caregiver Survey*

Four survey responses were received for this school campus. The following summarizes the open-ended comments provided on the survey:

- *Controlled intersections near the school should be the priority over maintaining traffic speeds or serving vehicle traffic. Driver education and behavior are important to address but are secondary.*

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



## Recommendations

The Diffley Road School Area Improvements Study identified recommendations on CR 30 (Diffley Road) and the school campus. The county, city, and ISD 196 are partnering to implement the improvements recommended in the study. More information about the construction project can be found on the Dakota County website:

<https://www.co.dakota.mn.us/Transportation/PlannedConstruction/CR30Braddock/Pages/default.aspx>

- **Evaluate School Speed Zone:**
  - The existing school speed zone on CR 30 (Diffley Road) should be re-evaluated when the other roadway improvements have been implemented. A school route plan was developed as part of the Diffley Road School Area project.
- **Enforcement:**
  - The effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.





### DAKOTA RIDGE SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196 (Dakota Ridge and Diamond Path)  
County or State Road: CR 33 (Diamond Path)  
Apple Valley, MN



See Diamond Path Elementary School



School Travel SAFETY ASSESSMENT

**DIAMOND PATH ELEMENTARY SCHOOL, DAKOTA RIDGE SCHOOL, AND FIRST BAPTIST SCHOOL**

Rosemount-Apple Valley-Eagan Public Schools, ISD 196 (Diamond Path Elementary and Dakota Ridge) Private School (First Baptist)  
 County or State Road: CR 33 (Diamond Path)  
 Apple Valley and Rosemount, MN



*Note: These school sites were included in the High Speed, 4+ Lanes evaluation group based on the conditions as they existed in 2020 and the number of lanes on CR 33 (Diamond Path) for the majority of the roadway segment next to the three sites.*

**Background Information**

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Student enrollment and grades
  - Dakota Ridge School: ISD 196 school with about 100 special education students in kindergarten through 12<sup>th</sup> grade.
  - Diamond Path Elementary: ISD 196 school with about 760 students in kindergarten through 5<sup>th</sup> grade.

## School Travel SAFETY ASSESSMENT

- First Baptist School: Private school with about 200 students in pre-kindergarten through 12<sup>th</sup> grade.
- The school sites are next to CR 33 (Diamond Path). The Dakota Ridge and Diamond Path Elementary accesses are on 144<sup>th</sup> Street. The First Baptist School access is on CR 33 (Diamond Path).
- Hazardous roadways around the schools, as identified by ISD 196, are: CR 33 (Diamond Path), 140<sup>th</sup> Street, and CR 42 (150<sup>th</sup> Street).
- About 19 percent of Diamond Path Elementary students live in the walk zone.
- A Safe Routes to School plan was completed for Diamond Path Elementary in 2010.
- There are existing school crossings on CR 33 (Diamond Path) at 145<sup>th</sup> Street and on 144<sup>th</sup> Street between Drake Path and the school district driveway. The schools do not provide crossing guards at the intersections.
- Dakota County recently completed the County Road 33 Roundabout Feasibility Study for the CR 33 (Diamond Path)/140<sup>th</sup> Street intersection. A roundabout is recommended at the CR 33 (Diamond Path)/140<sup>th</sup> Street intersection and a through lane reduction on CR 33 (Diamond Path) is planned between 140<sup>th</sup> Street and 145<sup>th</sup> Street. The study report and recommendations can be found on the Dakota County website: <https://www.co.dakota.mn.us/Transportation/TransportationStudies/Current/Pages/cr-33-roundabout-feasibility-study.aspx>
- CR 33 (Diamond Path) between 140<sup>th</sup> Street and 145<sup>th</sup> Street is identified in the Dakota County 2040 Transportation Plan as a potential roadway segment for through lane reduction based on the existing and future traffic volumes.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 33 (Diamond Path)/145<sup>th</sup> Street
  - Walking/biking routes you wish you could take: *Crossing CR 33 (Diamond Path) is difficult because there are no crossing guards or stop signs*
- Trail through Tintah Park
  - Comfortable/enjoyable features for walking and biking: *Bike path through the park with restroom*
- 140<sup>th</sup> Street W/Drommond Trail
  - Barriers to walking and biking: *Bike path connection across 140<sup>th</sup> Street is challenging (2 comments)*

##### *Parent/Caregiver Survey*

Two survey responses were received for this school campus. The following summarizes the open-ended comments provided on the survey:



## School Travel SAFETY ASSESSMENT

- *Don't feel comfortable letting children cross at CR 33 (Diamond Path)/140<sup>th</sup> Street because there is not a traffic signal or other features.*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020:

- One comment agreed with the recommendation for the crossing at CR 33 (Diamond Path)/145<sup>th</sup> Street

### EMAIL COMMENTS

In addition to the input tools discussed in the previous sections, several comments and requests were also sent to County staff outside of the two virtual engagements. The emails regarding the crossing at CR 33 (Diamond Path)/145<sup>th</sup> Street are summarized in the following bullets.

- Three resident requests concerned with visibility of the crossing at CR 33 (Diamond Path)/145<sup>th</sup> Street and speed of traffic on CR 33 (Diamond Path). Residents requested enhanced markings and additional treatments at the crossing.
- Employee at Dakota Valley Learning Center concerned with safety on CR 33 (Diamond Path) and the multiple school and district sites along and near CR 33 (Diamond Path)

## Recommendations

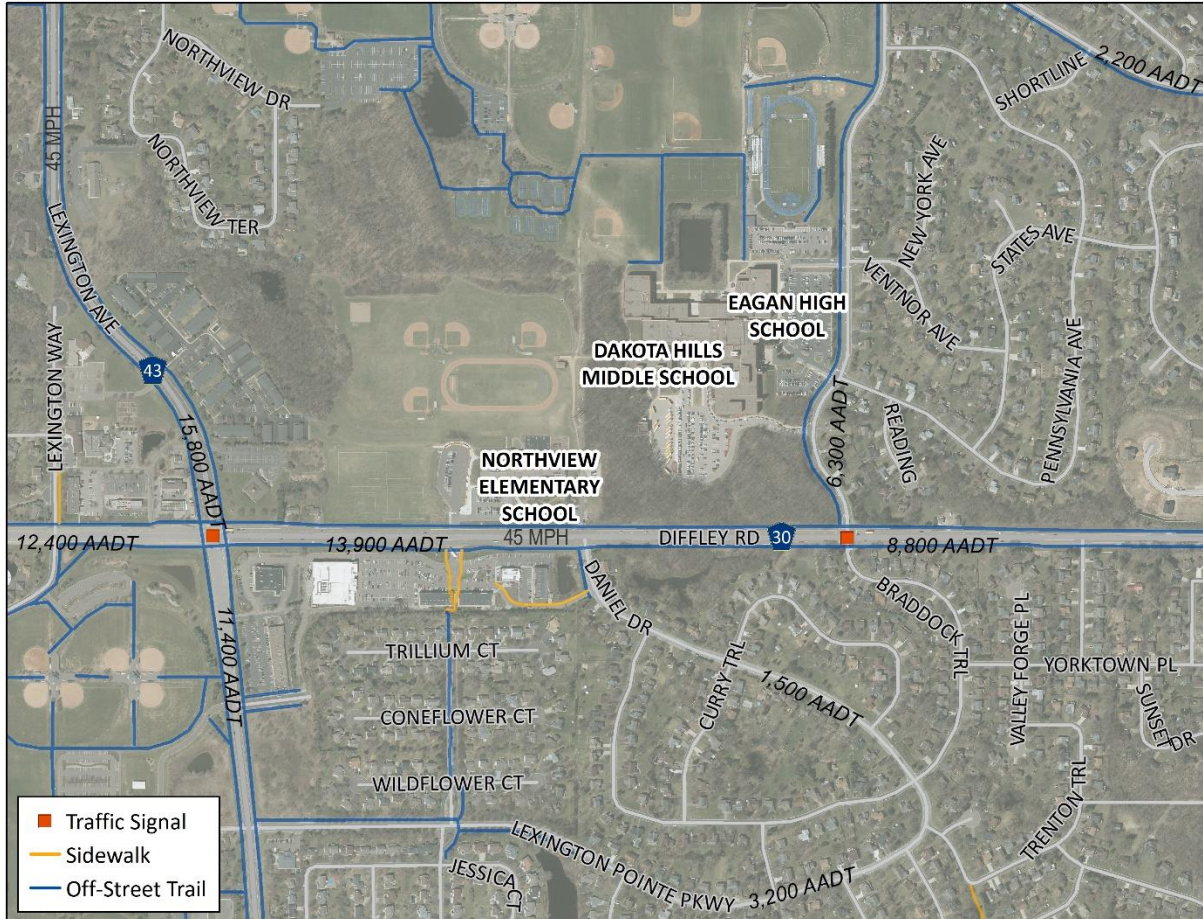
- **School Crossings:**
  - County evaluate the CR 33 (Diamond Path)/145<sup>th</sup> Street as a community crossing instead of a school crossing because the schools and district do not support consider the location as a school crossing.
    - County consider active devices, high visibility (continental) crosswalk and lighting at the crossing based on the number of lanes and the speed limit.
- **Education:**
  - School and District should instruct students to only cross CR 33 (Diamond Path) with an adult because there is not a crossing guard on CR 33 (Diamond Path).
- **School and District Considerations:**
  - School and District update the 2010 Safe Routes to School Plan for Diamond Path Elementary, including a walking/biking route plan.
  - School and District provide walking and biking safety education for Diamond Path Elementary and First Baptist School.



# School Travel SAFETY ASSESSMENT

## EAGAN HIGH SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: CR 30 (Diffley Road)  
Eagan, MN

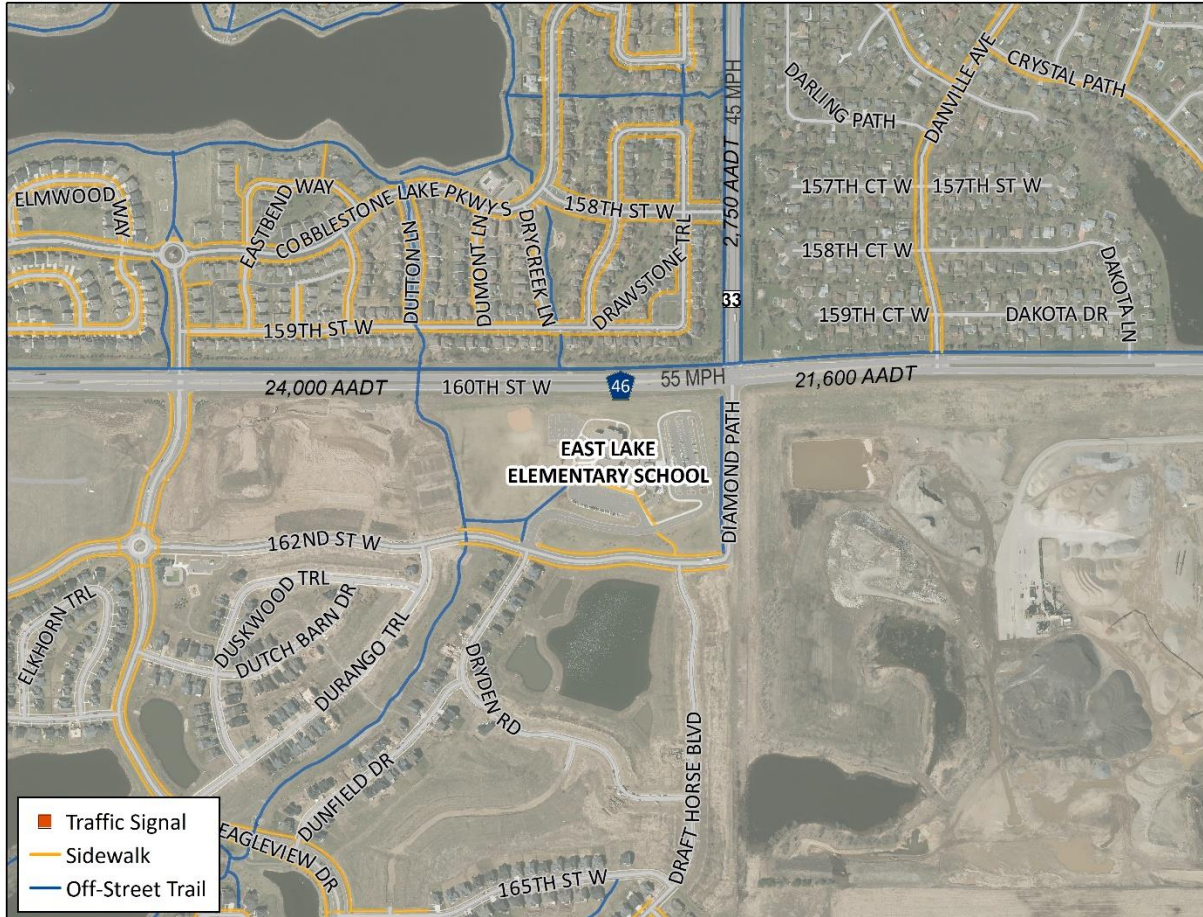


See Dakota Hills Middle School



## EAST LAKE ELEMENTARY SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: CR 46 (160<sup>th</sup> Street)  
Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 700 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 46 (160<sup>th</sup> Street), and the school access is on 162<sup>nd</sup> Street.
- About 40 percent of students live in the walk zone.
- There are no existing school crossings.
- There is an existing pedestrian/bicycle tunnel under CR 46 (160<sup>th</sup> Street) just north of the school.
- The CR 46 (160<sup>th</sup> Street)/Diamond Path intersection is not ranked for crashes at county road intersections for 2017-2019, which means the intersection had less than 5 crashes in the current year or less than 10 crashes in the past 3 years.
- Dakota County is programming an access modification project at the CR 46 (160<sup>th</sup> Street)/CR 33 (Diamond Path) intersection in the county's Capital Improvement Program (CIP).



- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 46 (160<sup>th</sup> Street) between CR 33 (Diamond Path) and TH 3 (Chippendale Avenue). The existing section has a trail on the north side of the road only.



Existing tunnel under CR 46 (160<sup>th</sup> Street) at East Lake Elementary

## Public Input

### VIRTUAL ENGAGEMENT #1

#### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 46 (160<sup>th</sup> Street)/Diamond Path
  - Barriers to walking and biking: *Difficult to cross intersection as a pedestrian or vehicle (2 comments)*
  - Traffic circulation/congestion issue:
    - *Concern with speeds and truck traffic on CR 46 (160<sup>th</sup> Street) (3 comments)*
    - *Concern with traffic on local streets due to side street delays at CR 46 (160<sup>th</sup> Street) Diamond Path*

#### Parent/Caregiver Survey

Eight survey responses were received for East Lake Elementary. The following summarizes the open-ended comments provided on the survey:

- *Concern with safety for school traffic at the CR 46 (160<sup>th</sup> Street)/Diamond Path intersection (5 comments)*



## VIRTUAL ENGAGEMENT #2

### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **Roadway Geometric Changes:**
  - County complete the evaluation and design for intersection access modifications at CR 46 (160<sup>th</sup> Street)/Diamond Path intersection.
- **Education:**
  - School and District should instruct students to only cross CR 46 (160<sup>th</sup> Street) with an adult or using the tunnel under CR 46 (160<sup>th</sup> Street) because there are not crossing guards on CR 46 (160<sup>th</sup> Street).
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan. The school route plan should identify the existing walk area that includes the tunnel crossing of CR 46 (160<sup>th</sup> Street).
  - School and District provide walking and biking safety education.

A school speed zone is not recommended on CR 46 (160<sup>th</sup> Street) because it would not be effective due to no school crossings on CR 46 (160<sup>th</sup> Street) and the school transportation activity (pedestrian, bicycle, and vehicle) being focused on local streets. A traffic signal is not recommended at the CR 46 (160<sup>th</sup> Street)/Diamond Path intersection because the intersection does not meet traffic signal warrants and would have safety and operations impacts on CR 46 (160<sup>th</sup> Street).



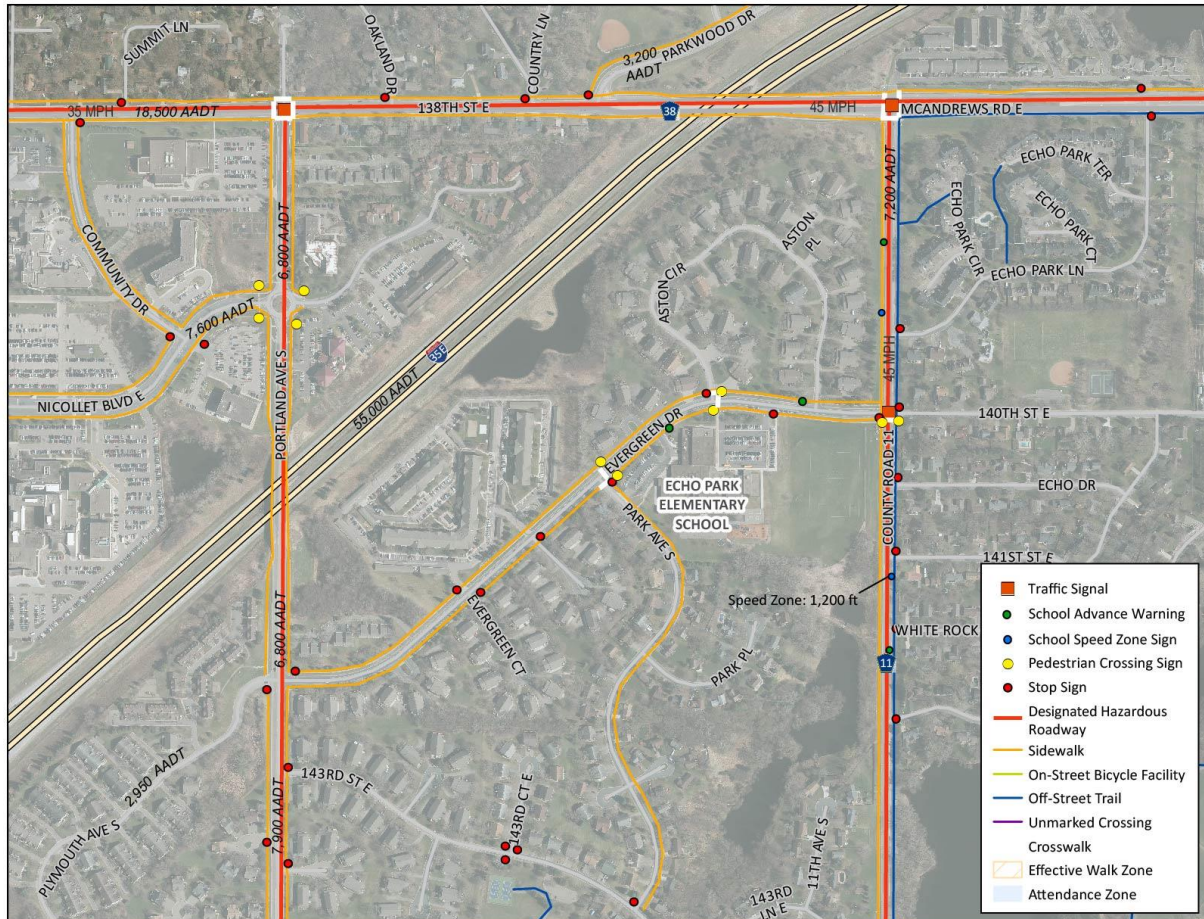


## ECHO PARK ELEMENTARY SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196

County or State Road: CR 11

Burnsville, MN



Note: This map includes additional data and details because this school site was evaluated as a sample school.

### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 730 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 11, and the school access is on Evergreen Drive.
- Hazardous roadways around the school, as identified by ISD 196, are: CR 11, 138<sup>th</sup> Street, Portland Avenue, and CR 42.
- About 20 percent of students live in the walk zone.
- A Safe Routes to School plan was completed in 2010.
- There is an existing pedestrian crossing with a pedestrian hybrid beacon on CR 11 at 140<sup>th</sup> Street/Evergreen Drive. This crossing is considered to be a community crossing rather than a



school crossing based on the users of the crossing. The school does not provide a crossing guard at the crossing.

- There are existing school crossings with school patrols on Evergreen Drive at Park Avenue and Aston Circle.
- There is an existing school speed zone on CR 11.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 11 between CR 38 (McAndrews Road) and CR 42. The existing section has trail on the east side of the road and sidewalk on the west side of the road.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

Two survey responses were received for Echo Park Elementary School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

#### *Feedback Form*

A comment was received with safety concerns about crossings at the Portland Avenue/Evergreen Drive/Plymouth Avenue intersection, which is an intersection of two city streets.

## Recommendations

- **Evaluate School Speed Zone:**
  - County evaluate the school speed zone on CR 11 for potential modifications including shortening the zone, revising the speed limit, or removing the zone. The speed zone should be considered for removal because students aren't crossing CR 11 and the school transportation activity (pedestrian, bicycle, and vehicle) is focused on Evergreen Drive. The existing crossing on CR 11 is considered to be a community crossing rather than a school crossing.
- **Education:**
  - School and District should instruct students to only cross CR 11 with an adult because there are not crossing guards on CR 11.



- **School and District Considerations:**
  - School and District update the 2010 Safe Routes to School Plan for Echo Park Elementary, including a walking/biking route plan.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider curb extensions at the school crossings on Evergreen Drive to shorten the crossings and make pedestrians more visible if there is a project opportunity or funding becomes available.

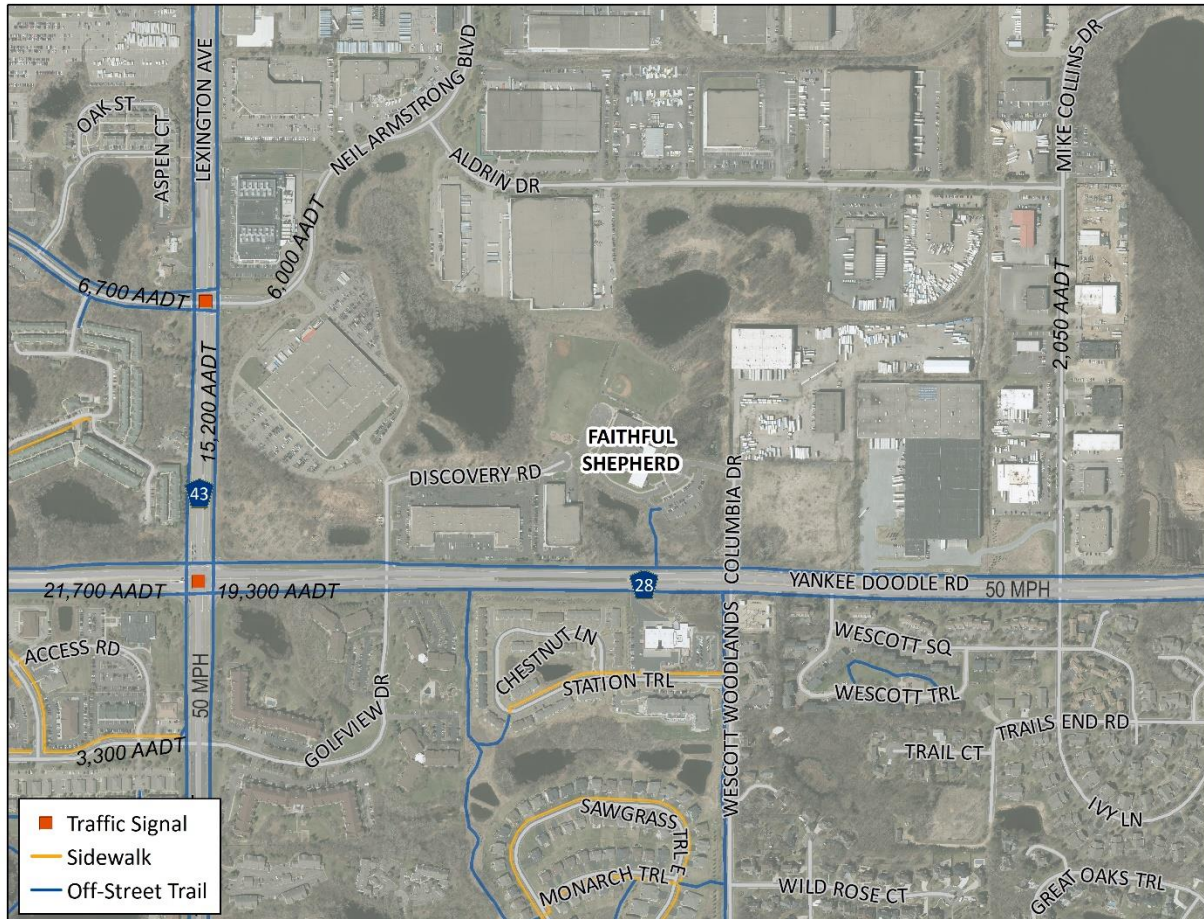


## FAITHFUL SHEPHERD SCHOOL

Private School

County or State Road: CR 28 (Yankee Doodle Road)

Burnsville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: Private school with about 400 students in kindergarten through 8<sup>th</sup> grade.
- The school site is next to CR 28 (Yankee Doodle Road), and the school accesses are on Columbia Drive and Discovery Road.
- There are no existing school crossings.
- There is limited demand for walking or biking to school due to the large attendance area.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

One survey response was received for Faithful Shepherd School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

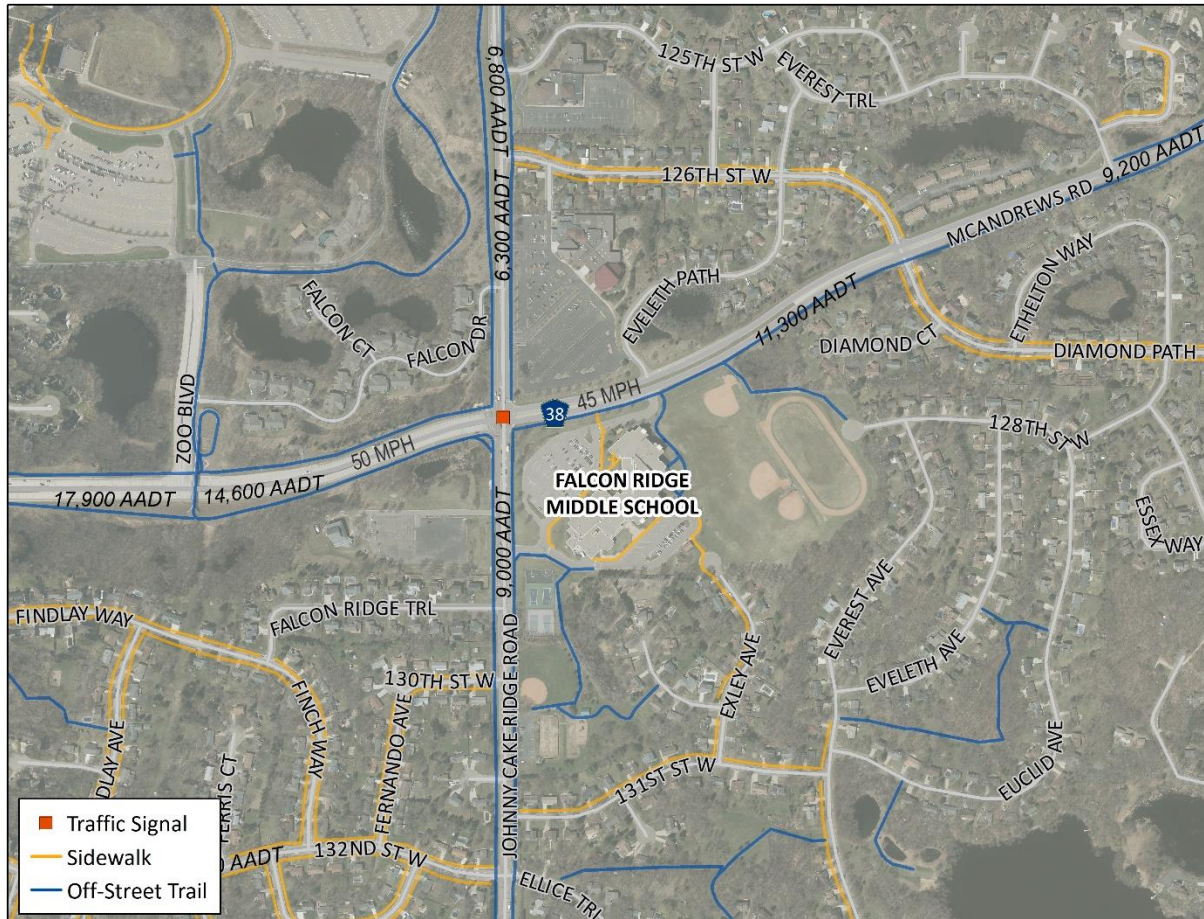
## Recommendations

No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.



## FALCON RIDGE MIDDLE SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: CR 38 (McAndrews Road)  
Apple Valley, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 1,050 students in grades 6 through 8.
- The school site is next to CR 38 (McAndrews Road), and the school accesses are on CR 38 (McAndrews Road) and Johnny Cake Ridge Road.
- Hazardous roadways around the school, as identified by ISD 196, are: CR 38 (McAndrews Road) and Johnny Cake Ridge Road.
- There are an estimated 50 or fewer students that walk or bike to school.
- The CR 38 (McAndrews Road)/Johnny Cake Ridge Road intersection ranked #235 for crashes at county road intersections for 2017-2019. The CR 38 (McAndrews Road)/Diamond Path intersection was not ranked, which means that it had less than 5 crashes in the current year or less than 10 crashes in the past 3 years.



- Dakota County is planning a project in 2021 or 2022 to construct a u-turn for traffic on eastbound CR 38 (McAndrews Road) between the school driveway and Diamond Path.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 38 (McAndrews Road) between Johnny Cake Ridge Road and Everest Trail. The existing section has trail on the south side of the road only.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 38 (McAndrews Road)/Diamond Path
  - Traffic circulation/congestion issue: *Intersection is congested, especially during peak periods and school arrival/dismissal (3 comments)*

#### *Parent/Caregiver Survey*

Five survey responses were received for Falcon Ridge Middle School. The following summarizes the open-ended comments provided on the survey:

- *CR 38 (McAndrews Road)/Diamond Path is challenging for pedestrians and bicyclists to cross Diamond Path.*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020:

- One comment agreed with the recommendation to instruct students to only cross CR 38 (McAndrews Road) at the traffic signal at Johnny Cake Ridge Road

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County construct trail on the north side of CR 38 (McAndrews Road) between Johnny Cake Ridge Road and Everest Trail.
- **School Crossings:**
  - County implement pedestrian crossing safety improvements at the CR 38 (McAndrews Road)/Johnny Cake Ridge Road traffic signal. This intersection is not part of the school's route plan but there are periodic student crossings at the intersection.
    - Install high visibility (continental) crosswalks
    - Install accessible pedestrian signals and pedestrian countdown timers
    - Operate left-turn phasing as protected only when pedestrian push buttons are activated



- **Roadway Geometric Changes:**
  - County construct a u-turn on eastbound CR 38 (McAndrews Road) between school driveway and Diamond Path to reduce conflicts and congestion at the CR 38 (McAndrews Road)/Diamond Path intersection that are caused by school traffic.
- **Education:**
  - School and District should instruct students to only cross CR 38 (McAndrews Road) with an adult or at a controlled intersection because there are not crossing guards on CR 38 (McAndrews Road).
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan.
  - School and District provide walking and biking safety education.

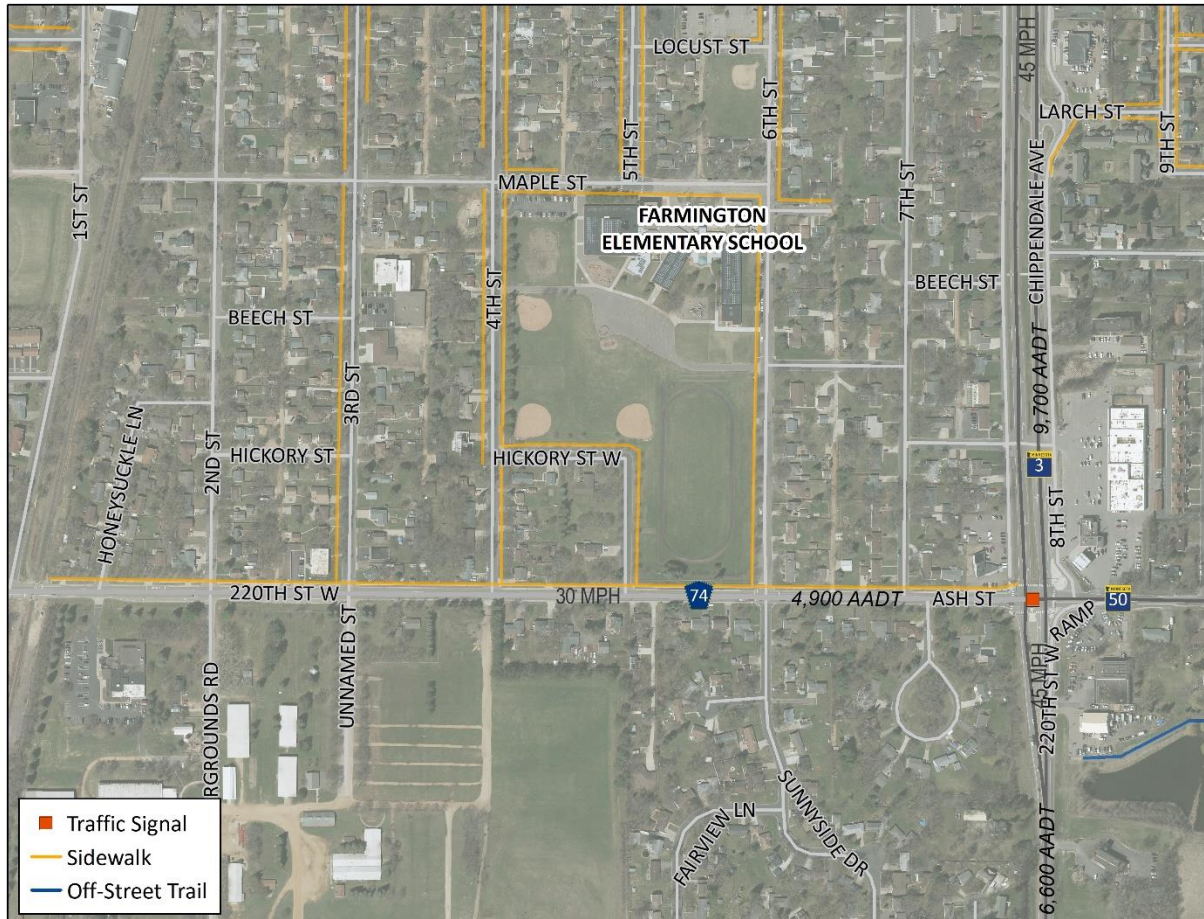
A school speed zone evaluation is not recommended on CR 38 (McAndrews Road) because the crossings at CR 38 (McAndrews Road)/Johnny Cake Ridge Road are not part of the school's route plan. The crossing improvements are recommended at the intersection because students periodically cross, but the crossing activity is not sufficient to result in an effective school speed zone.





## FARMINGTON ELEMENTARY SCHOOL

Farmington Public Schools, ISD 192  
County or State Road: CR 74 (Ash Street)  
Farmington, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: about 600 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 74 (Ash St), and the school accesses are on 4<sup>th</sup> Street, 6<sup>th</sup> Street, and Maple Street.
- Hazardous roadways around the school, as identified by ISD 192, are: CR 50 (Elm Street), TH 3 (Chippendale Avenue), and the Union Pacific Railroad.
- About 14 percent of Farmington Elementary students live in the walk zone.
- There are existing school crossings at CR 74 (Ash Street)/6<sup>th</sup> Street/Sunnyside Drive, TH 3 (Chippendale Avenue) at Beech Street, on 6<sup>th</sup> Street at Maple Street, and on Maple Street at 4<sup>th</sup> Street and 5<sup>th</sup> Street.



- The school crossings on Maple Street have student school patrols. The school no longer posts school patrols at the CR 74 (Ash Street)/6<sup>th</sup> Street/Sunnyside Drive intersection due to no crossing demand. The school discourages crossings of TH 3 (Chippendale Ave).
- There are existing school speed zones on Maple Street and 6<sup>th</sup> Street.
- The Dakota County 2040 Transportation Plan identified two pedestrian and bicycle gaps on CR 74 (Ash Street/220<sup>th</sup> Street):
  - Low priority gap between the railroad and TH 3 (Chippendale Ave). The existing section has sidewalk on the north side of the road only.
  - Medium priority gap between CR 31 (Denmark Avenue) and the railroad. The existing section has no sidewalk or trail.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 74 (Ash Street)/6<sup>th</sup> Street/Sunnyside Drive
  - Barriers to walking and biking: *Intersection no longer has school patrol (3 comments)*
- CR 74 (Ash Street) at Union Pacific Railroad
  - Walking/biking route you with you could take: *No sidewalk or bike path*
- TH 3 (Chippendale Avenue) at Beech Street
  - Barriers to walking and biking: *Crossing of TH 3 (Chippendale Avenue) only has a crosswalk and signs. Concerns with driver behavior, lack of yielding to pedestrians, and multiple threat conflicts with vehicles (2 comments)*

#### Parent/Caregiver Survey

Seven survey responses were received for Farmington Elementary School. The following summarizes the open-ended comments provided on the survey:

- *Concern with lack of crossings on TH 3 (Chippendale Avenue)*

### VIRTUAL ENGAGEMENT #2

#### Interactive Map

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **School Crossings:**
  - MnDOT change the signing at the TH 3 (Chippendale Avenue)/Beech Street crossing from school crossing to pedestrian crossing because the crossing is not supported by the school or district.



- MnDOT consider active devices at the crossing based on the traffic volume, speed, and number of lanes.
- **Education:**
  - School and District should instruct students to only cross CR 74 (Ash Street) and TH 3 (Chippendale Avenue) with an adult because there are not crossing guards on CR 74 (Ash Street) or on TH 3 (Chippendale Avenue).
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan.
  - School and District provide walking and biking safety education.



### FIRST BAPTIST SCHOOL

Private School

County or State Road: CR 33 (Diamond Path)

Rosemount, MN



See Diamond Path Elementary School

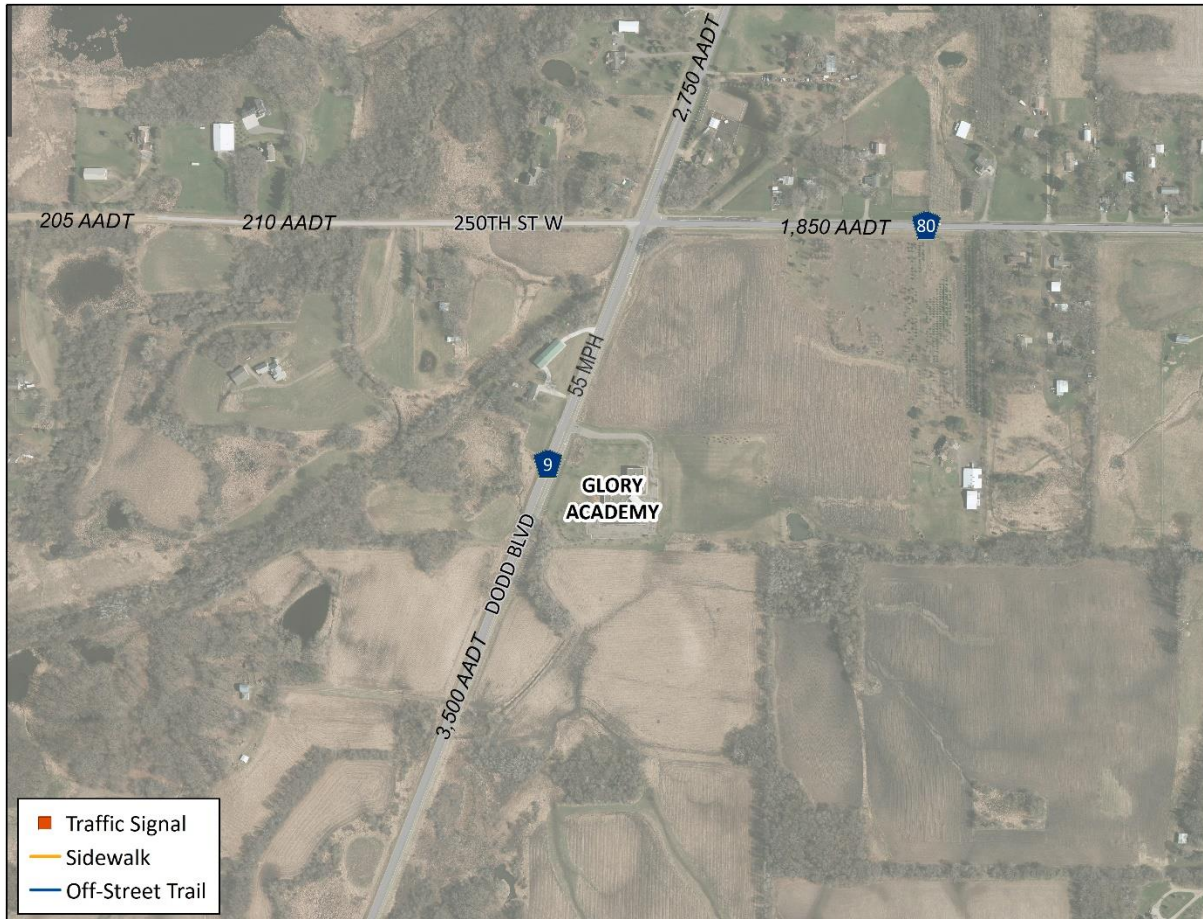


## GLORY ACADEMY

Private School

County or State Road: CR 9 (Dodd Boulevard)

Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: Private school with approximately 35 students in pre-kindergarten through 12<sup>th</sup> grade.
- The school site and access are on CR 9 (Dodd Boulevard).
- There are no existing school crossings.
- There is low demand and limited opportunities for walking or biking to school.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Glory Academy.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

No specific recommendations were developed at this school based on the limited opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.

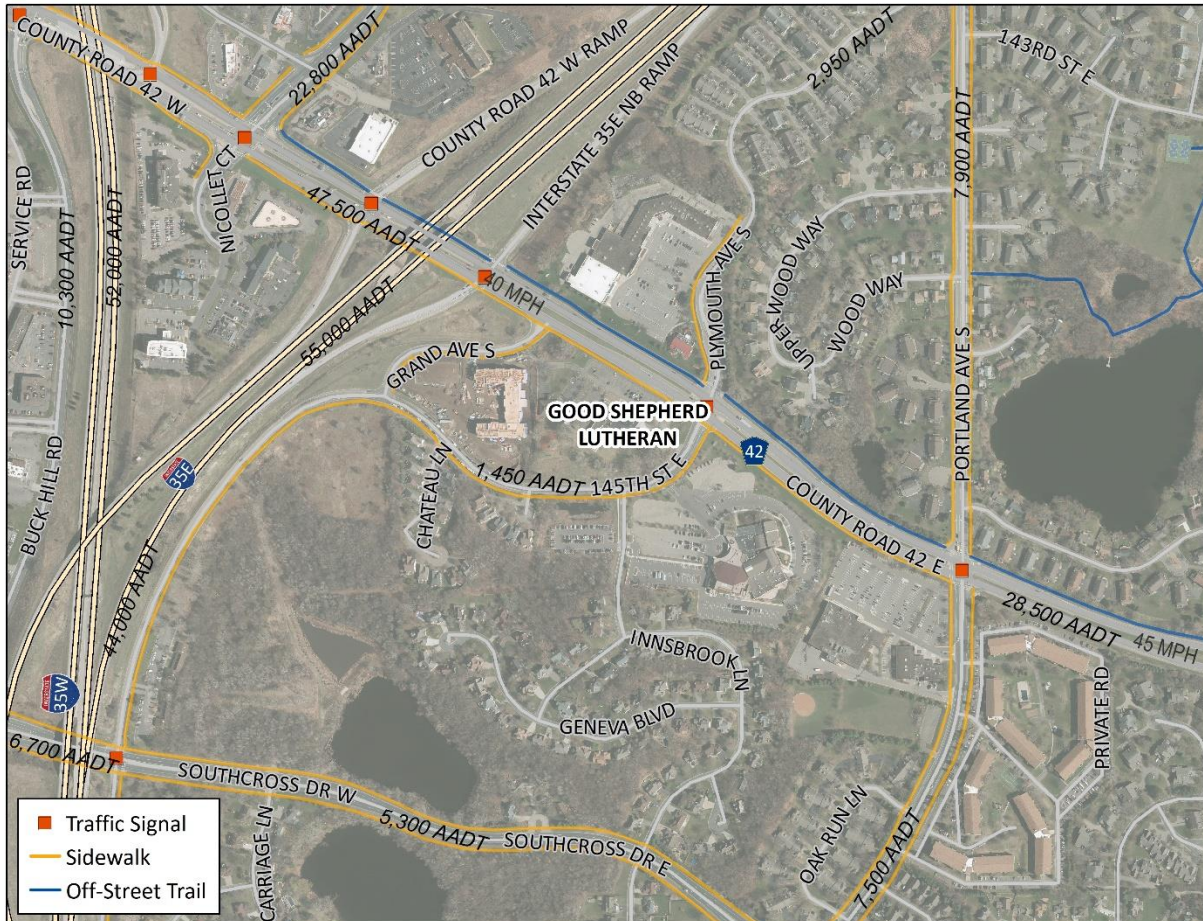


## GOOD SHEPHERD LUTHERAN SCHOOL

Private School

County or State Road: CR 42

Burnsville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: Private school with approximately 135 students in pre-kindergarten through 8<sup>th</sup> grade.
- The school site is next to CR 42, and the school access is on Plymouth Avenue.
- There are no existing school crossings.
- There is low demand for walking or biking to school.
- The City of Burnsville has a street reconstruction project planned on 145th St and Grand Ave in 2024.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 42 between I-35E and CR 11 (Lac Lavon Drive). The existing section has trail on the north side of the road, and sidewalk or no facility on the south side of the road.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Good Shepherd Lutheran School.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **School and District Considerations:**
  - School consider a sidewalk connection between the building and the existing sidewalk on CR 42 if there is a project opportunity or funding becomes available.
  - Even with the limited opportunities for students to walk or bike to school, students could still benefit from walking and biking safety education.





## HASTINGS MIDDLE SCHOOL

Hastings School District, ISD 200

County or State Road: TH 55

Hastings, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: about 1,350 students in grades 5 through 8.
- The school site is next to TH 55 (McAndrews Road), and the school accesses are on the TH 55 frontage road and on 11<sup>th</sup> Street.
- There is an existing school crossing at 11<sup>th</sup> Street/Pine Street.
- There are existing school crossing guards at the traffic signal at TH 55/Pine Street.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

One survey response was received for Hastings Middle School. The following summarizes the open-ended comments provided on the survey:

- *Concern with children that must cross a county road to access their school bus stop*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **Site and Circulation Improvements:**
  - During the study, the City of Hastings identified improved lane assignments on Pine Street at TH 55 to improve the alignment of the through movements. The lane realignment would also reduce back pressure on permissive northbound left-turn movements that can occur during school arrival and dismissal times. This improvement would require lane restriping and detection revisions at the traffic signal. MnDOT is supportive of these changes, but the improvement would need to be initiated and led by the City of Hastings.
- **Education:**
  - School and District should instruct students to only cross TH 55 with an adult or at a controlled intersection because there are not crossing guards on TH 55.
- **School and District Considerations:**
  - School and District update the 2010 Safe Routes to School Plan for Hastings Middle School, including a walking/biking route plan.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider high visibility (continental) style crosswalk markings at school crossings on 11<sup>th</sup> Street and Pine Street if there is a project opportunity or funding becomes available.
  - City consider enhancing the effectiveness of the school speed zones on city streets with periodic enforcement efforts.



## HENRY SIBLEY HIGH SCHOOL

West St. Paul-Mendota Heights-Eagan Area Schools, ISD 197  
County or State Road: CR 63 (Delaware Avenue)  
Mendota Heights, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 1,450 students in grades 9 through 12.
- The school site is next to CR 63 (Delaware Avenue), and the school accesses are on CR 63 (Delaware Avenue) and on Warrior Drive.
- Students walk to school from the neighborhoods on all sides of the school. Students cross CR 63 (Delaware Avenue) from the neighborhoods east of the school, from the transit stops on the east side of CR 63 (Delaware Avenue), and the apartments along Mendota Heights Road.
  - Students that live south of TH 62 are currently provided bus transportation to school.
- There are no existing school crossings.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 63 (Delaware Avenue) between CR 8 (Wentworth Avenue) and TH 62. The existing



section has trail on the west side of the road between Marie Avenue TH 62. There is no existing sidewalk or trail on the east side of the road.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 63 (Delaware Avenue) at Preserve Path and Deer Run Trail
  - Barriers to walking and biking: *Crossing CR 63 (Delaware Avenue) is challenging and there is not a crosswalk or other crossing facilities (8 comments)*
- CR 63 (Delaware Avenue)/School driveway (exit)
  - Barriers to walking and biking: *Sidewalks on the school site do not extend to the trail along CR 63 (Delaware Avenue) and students walk in the driveways (2 comments)*
- CR 63 (Delaware Avenue) from south of TH 62 to High School
  - Walking/biking route you wish you could take: *Many students use CR 63 (Delaware Avenue) to walk and bike to school, and concerns with traffic volumes and speeds*

#### *Parent/Caregiver Survey*

19 survey responses were received for Henry Sibley High School. The following summarizes the open-ended comments provided on the survey:

- *Concern with lack of crossing guards for busy streets*
- *Safety concerns with students walking on the east side of CR 63 (Delaware Avenue)*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- Sidewalk and Trail on the east side of CR 63 (Delaware Avenue) and on the school site to connect to CR 63 (Delaware Avenue)
  - Four comments agreed with the recommendation
    - One comment suggested extending the sidewalk/trail south along CR 63 (Delaware Avenue) to Mendota Road
    - One comment suggested there should be trail extended further north and south along CR 63 (Delaware Avenue)
    - One comment suggested extending the on-site sidewalk/trail west to Warrior Drive
    - One comment suggested there should be separate facilities for pedestrians and bicycle on the school site
  - Four comments disagreed with the recommendation



- Two comments cited concerns with cost and impacts to residents' property
- School crossing on CR 63 (Delaware Avenue) between Deer Run Trail and Preserve Path
  - Four comments agreed with the recommendation
    - Two comments suggested that a crossing also be added at Mendota Road
  - Four comments suggested that crossings be provided at both Deer Run Trail and Preserve Path
  - Two comments disagreed with the recommendation
- Evaluation of school speed zone on CR 63 (Delaware Avenue)
  - One comment agreed with the recommendation
  - Two comments disagreed with the recommendation

#### Feedback Form

Two comments were received from property owners with concerns about the recommendations for trail/sidewalk on the east side of CR 63 (Delaware Avenue) and potential impacts to their property and landscaping. One of the comments was a duplicate of a comment received on the interactive map.

### Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County construct sidewalk on the east side of CR 63 (Delaware Avenue) to connect to the crossing.
  - County install street lighting for the sidewalk/trail along the east side of CR 63 (Delaware Avenue) if it is part of the school's route plan.
  - School and District construct on-site sidewalk to connect from the school building to CR 63 (Delaware Avenue) and the proposed school crossing of CR 63 (Delaware Avenue).
- **School Crossings:**
  - School and District develop a walking and biking route plan that supports the need for a school crossing on CR 63 (Delaware Avenue).
  - County construct a school crossing on CR 63 (Delaware Avenue) between Deer Run Trail and Preserve Path. The preferred location is near the school driveway exit, but the final location should be finalized based on more detailed evaluation including sight lines, traffic circulation, and traffic queues. Along with the crossing, the following crossing enhancements should be considered:
    - High visibility (continental) crosswalk markings.
    - Median refuge to shorten the crossing, allow pedestrians to cross one traffic lane at a time, and eliminate the potential for vehicles to pass at the crossing.
    - Street lighting at the crossing.
    - Pedestrian activated devices. An RRFB is recommended as the appropriate treatment based on the 3-lane roadway, 40 mph speed limit, and average traffic volumes of 6,000 vehicles per day.
- **Evaluate School Speed Zone:**
  - After a school crossing is established on CR 63 (Delaware Avenue), County evaluate CR 63 (Delaware Ave) for a school speed zone.
    - A school speed zone is recommended for consideration based on the recommended school crossing, the school transportation activity (pedestrian,



bicycle, and vehicle) that is focused on CR 63 (Delaware Avenue), and pedestrians/bicyclists that travel along the county road.

- **Enforcement:**
  - If a school speed zone is established, the effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.
- **School and District Considerations:**
  - School and District consider developing a Safe Routes to School Plan.
  - School and District provide walking and biking safety education.

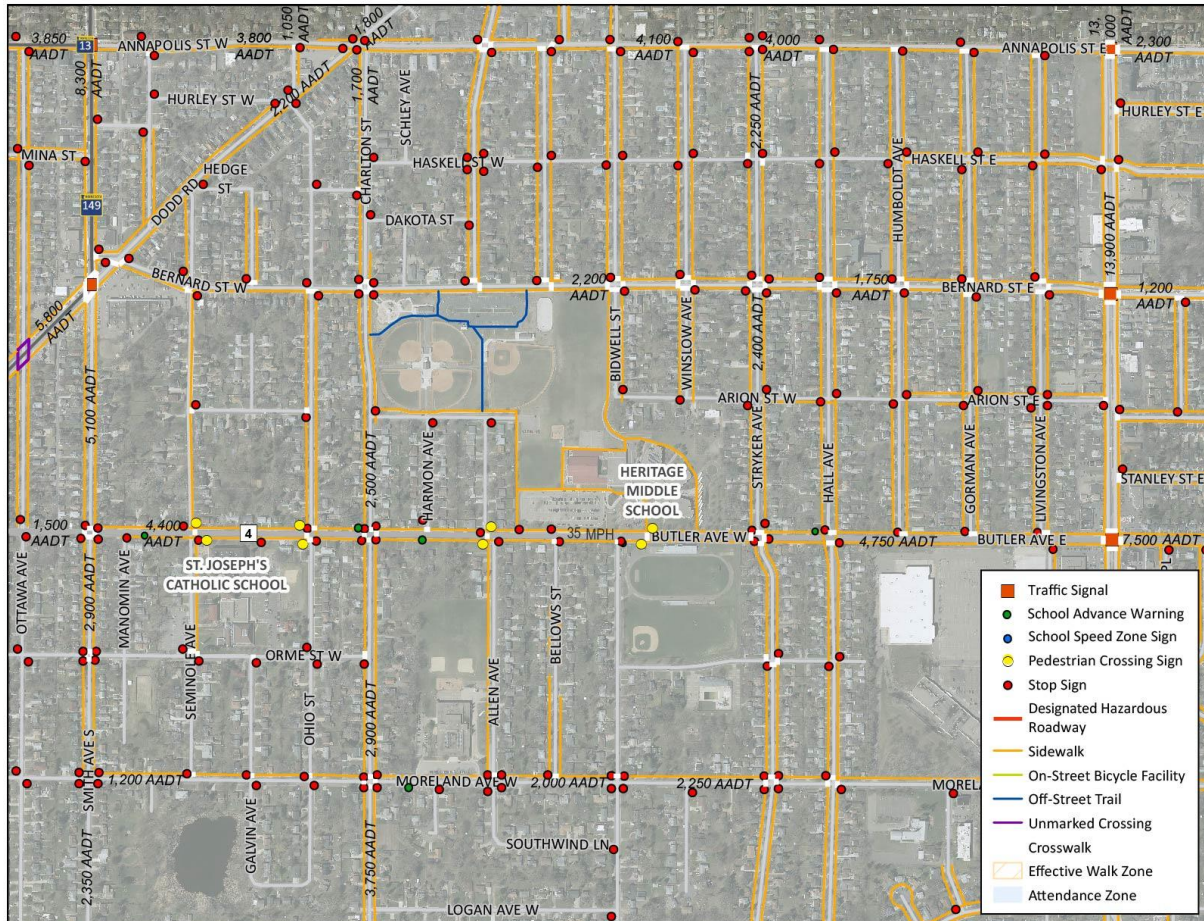


## HERITAGE MIDDLE SCHOOL

West St. Paul-Mendota Heights-Eagan Area Schools, ISD 197

County or State Road: CR 4 (Butler Avenue)

West Saint Paul, MN



Note: This map includes additional data and details because these school sites were evaluated as sample schools.

### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: about 800 students in grades 5 through 8.
- The school sites are next to CR 4 (Butler Avenue) and the school accesses are on CR 4 (Butler Avenue).
- The school walk zone is 1 mile for grades 5-8.
- There is an existing school crossing on CR 4 (Butler Avenue) at:
  - Heritage Middle School (between Bidwell Street and Stryker Avenue) with school crossing guard
- Heritage Middle School has significant walking and biking activity based on the its location in a residential neighborhood.



- In 2016 Dakota County constructed curb extensions and installed a mid-block school crossing on CR 4 (Butler Avenue) at the school entrance, across from Charles Matson Field. This crossing was installed to improve safety and moved the crossing away from the intersections that have more traffic and congestion before and after school.
- The City of West St. Paul has received grant funding to construct sidewalk on Bidwell Street between CR 4 (Butler Avenue) and Thompson Avenue. The sidewalk would likely be a 2024 construction project.
- The Dakota County 2040 Transportation Plan identified two pedestrian and bicycle gaps on CR 4 (Butler Avenue):
  - A medium priority gap between Smith Avenue and TH 3 (Robert Trail). The existing section has sidewalk on both sides of the road.
  - A high priority gap between CR 63 (Delaware Avenue) and Smith Avenue. The existing section has no sidewalk or trail.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 4 (Butler Avenue)/Heritage School Crossing
  - Walking/biking routes you wish you currently take: *Desire for enhancements at school crossing (2 comments) and desire for enhancements to improve safety of crossings when crossing guards aren't present (1 comment)*
- CR 4 (Butler Avenue)
  - Traffic circulation/congestion issue: *Congestion during school arrival and dismissal*
  - Walking/biking routes you wish you could take: *No sidewalk on CR 4 (Butler Avenue) between Smith Avenue and CR 63 (Delaware Avenue)*
- Bidwell Street
  - Walking/biking routes you currently take: *Desire for sidewalk on Bidwell Street to connect to Heritage Middle School*
- Charlton Street
  - Walking/biking routes you currently take: *Desire for wider sidewalks to accommodate biking*
- TH 149 (Dodd Road)
  - Walking/biking routes you wish you could take: *Desire for sidewalk/trail along TH 149 (Dodd Road) (3 comments)*





## Parent/Caregiver Survey

64 survey responses were received for Heritage Middle School – the most of any school in the study. The following summarizes the open-ended comments provided on the survey:

- Sidewalk or trail desired on TH 149 (Dodd Road)
- Sidewalk or trail desired on CR 63 (Delaware Avenue)
- Crossings of Dodd Road are a concern

## VIRTUAL ENGAGEMENT #2

### Interactive Map

The following feedback was provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- School Crossings
  - Advanced stop bars and street lighting at the school crossing on CR 4 (Butler Avenue) at Heritage Middle School
    - One comment agreed with the recommendation
  - One comment asked for school crossings on CR 63 (Delaware Avenue) which is within the walk area
  - Two comments asked for sidewalk on CR 63 (Delaware Avenue)
- Evaluation of school speed zone on CR 4 (Butler Avenue)
  - Two comments agreed with the recommendation
- Enforcement if a school speed zone is implemented on CR 4 (Butler Avenue)
  - Two comments agreed with the recommendation
- Development of a school route plan or Safe Routes to School Plan for both schools
  - Two comments agreed with the recommendation
- Sidewalk on Bidwell Street (city improvement)
  - Three comments agreed with the improvement

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County construct sidewalk on CR 4 (Butler Avenue) between CR 63 (Delaware Avenue) and Smith Avenue. This street segment is within the walk zone for both St. Joseph's and Heritage STEM Middle School and there is no existing sidewalk or trail.
- **School Crossings:**
  - County install crossing enhancements at the existing school crossing on CR 4 (Butler Avenue) at Heritage Middle School
    - Advance stop bars (based on the mid-block crossing)
    - Street lighting



*Existing school crossing on CR 4 (Butler Avenue) at Heritage Middle School*

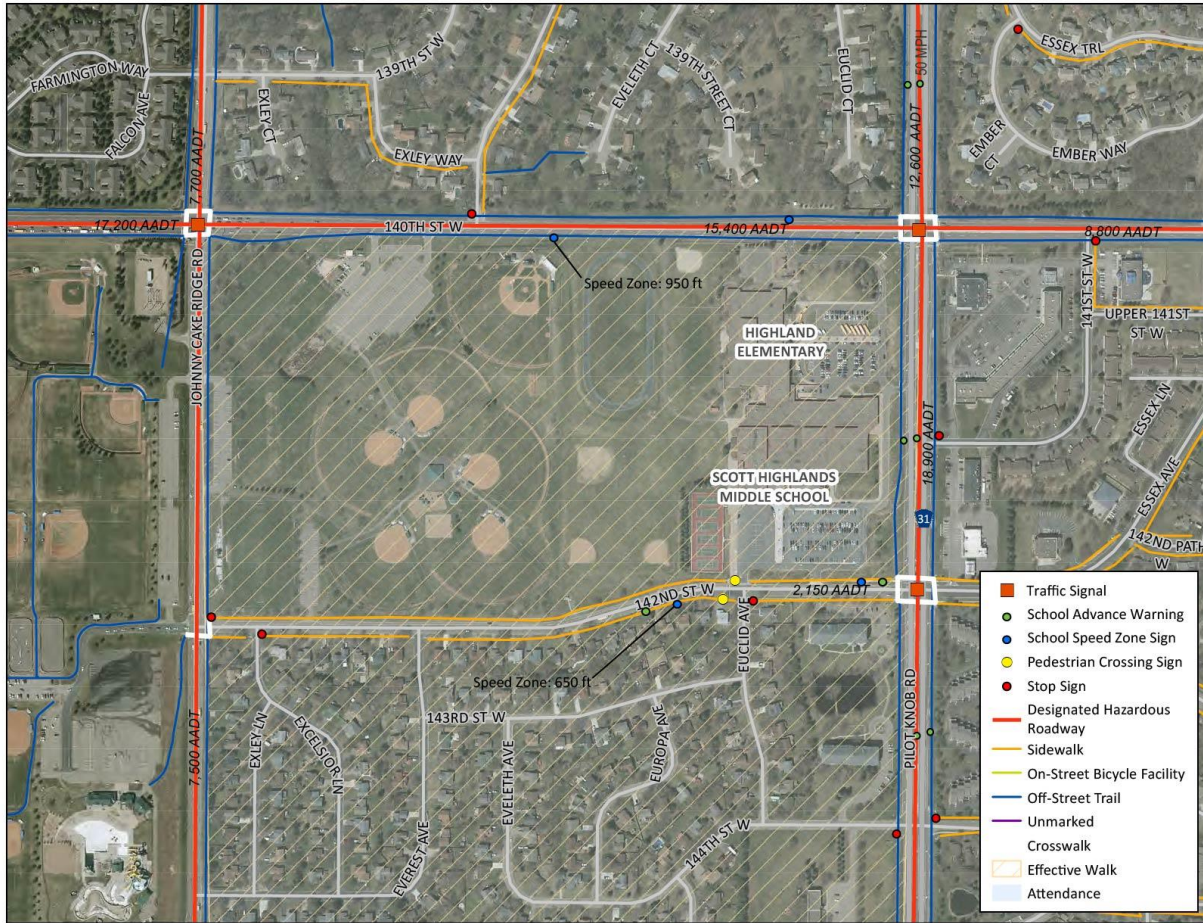
- **Evaluate School Speed Zone:**
  - School and District provide current school route plan.
  - County conduct a speed study to determine if a school speed zone is needed on CR 4 (Butler Avenue). An evaluation is recommended because of the school crossings, the school transportation activity (pedestrian, bicycle, and vehicle) that is focused on CR 4 (Butler Avenue), and pedestrians/bicyclists that travel along the county road.
- **Enforcement:**
  - If a school speed zone is established, the effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.
- **City Considerations:**
  - City construct sidewalk on Bidwell Street between CR 4 (Butler Avenue) and Thompson Avenue if funding becomes available.
- **School and District Considerations:**
  - School and District develop a Safe Routes to School Plan. A Safe Routes to School Plan is recommended for this school based on the number of students currently walking and biking to school and the opportunities for walking and biking based on the school location within a residential neighborhood.
  - School and District provide walking and biking safety education.



School Travel SAFETY ASSESSMENT

## HIGHLAND ELEMENTARY SCHOOL AND SCOTT HIGHLANDS MIDDLE SCHOOL

Rosemount – Apple Valley – Eagan Public Schools, ISD 196  
 County or State Road: CR 31 (Pilot Knob Road)  
 Apple Valley, MN



Note: This map includes additional data and details because these school sites were evaluated as sample schools.

### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Student enrollment and grades
  - Highland Elementary School: About 710 students in kindergarten through 5<sup>th</sup> grade
  - Scott Highlands Middle School: About 1,150 students in grades 6 through 8.
- The school site is next to CR 31 (Pilot Knob Road), and the school accesses are on CR 31 (Pilot Knob Road), 140<sup>th</sup> Street, and 142<sup>nd</sup> Street.
- Hazardous roadways around the schools, as identified by ISD 196, are: CR 31 (Pilot Knob Road), 140<sup>th</sup> Street, CR 42 (150<sup>th</sup> Street), and Johnny Cake Ridge Road.



- About 8 percent of Highland Elementary students live in the school walk zone and about 3 percent of Scott Highlands Middle School students live in the school walk zone.
- There is an existing school crossing on 142<sup>nd</sup> Street at Euclid Avenue.
- There are existing school speed zones on 140<sup>th</sup> Street and 142<sup>nd</sup> Street.
- The CR 31 (Pilot Knob Road)/140<sup>th</sup> Street intersection ranked #83 for crashes at county road intersections for 2017-2019. The CR 31 (Pilot Knob Road)/142<sup>nd</sup> Street intersection ranked #246 for crashes at county road intersections for 2017-2019.
- The City of Apple Valley is planning for a reconstruction of Johnny Cake Ridge Road from 140<sup>th</sup> Street to 147<sup>th</sup> Street.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 31 (Pilot Knob Road)
  - Barriers to walking and biking: *Concern with high vehicle volumes at the 140<sup>th</sup> Street intersection and distracted drivers (2 comments)*
  - Barriers to walking and biking: *Concerns with speeds on CR 31 (Pilot Knob Road)*
- 142<sup>nd</sup> Street/Euclid Avenue
  - Traffic circulation/congestion issue:
    - *Concern with visibility of existing school crossing and drivers not yielding to pedestrians (2 comments)*
    - *Concern that school speed zone is not followed*

#### *Parent/Caregiver Survey*

11 survey responses were received for this school campus. The following summarizes the open-ended comments provided on the survey:

- *Desire for sidewalks and traffic calming on neighborhood streets*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



## Recommendations

- **School Crossings:**
  - County implement pedestrian crossing safety improvements at the CR 31 (Pilot Knob Road)/142<sup>nd</sup> Street intersection. This intersection is not part of the schools' route plans but there are periodic student crossings at the intersection. This intersection is recommended for improvements based on the lower number of vehicle crashes compared to CR 31 (Pilot Knob Road)/140<sup>th</sup> Street and the greater likelihood of crossings at this location by middle school students.
    - Install high visibility (continental) crosswalks
    - Operate left-turn phasing as protected only when pedestrian push buttons are activated
- **Education:**
  - School and District should instruct elementary students to only cross CR 31 (Pilot Knob Road) with an adult. Education for middle school students should instruct them to only cross CR 31 (Pilot Knob Road) with an adult or at a controlled intersection.
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking.
  - School and District develop plan for improved circulation that separates bus traffic from parent, staff, and visitor traffic and reduces vehicle queues onto 140<sup>th</sup> Street.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider crossing enhancements at the 142<sup>nd</sup> Street/Euclid Avenue school crossing if there is a project opportunity or funding becomes available:
    - High visibility (continental) crosswalks
    - Curb extensions to shorten the crossing and make pedestrians more visible
  - City consider evaluating the school speed zone on 140<sup>th</sup> Street for potential modifications including shortening the zone, revising the speed limit, or removing the zone. The speed zone is recommended for evaluation based on no school crossings of 140<sup>th</sup> Street and the function of the school driveway on 140<sup>th</sup> Street, which make the school speed zone less likely to be effective.
  - City work with School and District on site circulation and access to address vehicle queues and safety on 140<sup>th</sup> Street.
  - City consider enhancing the effectiveness of the school speed zone on 142<sup>nd</sup> Street with periodic enforcement efforts.

A school speed zone evaluation is not recommended on CR 31 (Pilot Knob Road) because the crossings at CR 31 (Pilot Knob Road)/142<sup>nd</sup> Street are not part of the school's route plan. The crossing improvements are recommended at the intersection because students periodically cross, but the crossing activity is not sufficient to result in an effective school speed zone. In addition, the other criteria for consideration of a school speed zone are not met on CR 31 (Pilot Knob Road) because most of the school transportation activity (pedestrian, bicycle, and vehicle) is focused on 140<sup>th</sup> Street and 142<sup>nd</sup> Street.

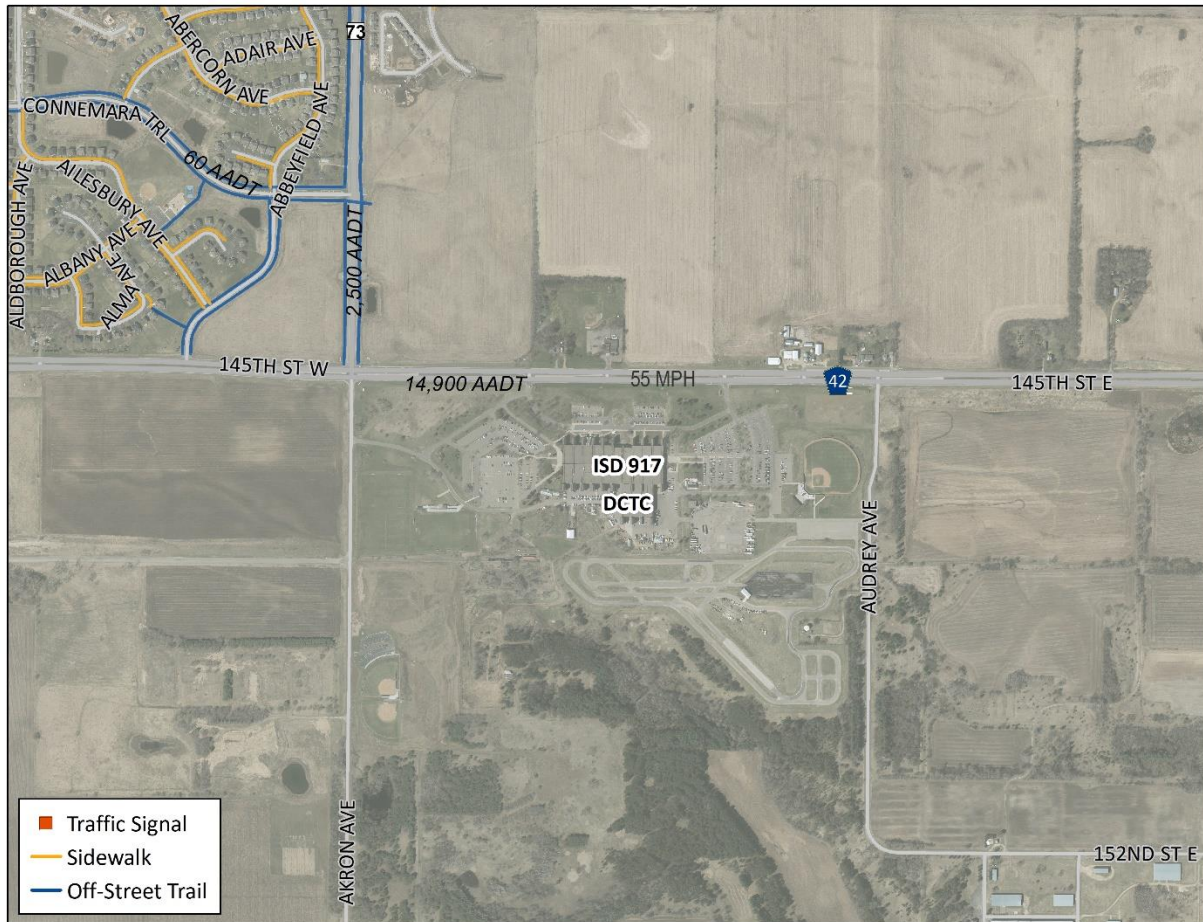


# School Travel SAFETY ASSESSMENT

## INTERMEDIATE SCHOOL DISTRICT 917

County or State Road: CR 42 (145<sup>th</sup> Street)

Rosemount, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- ISD 917 offers special education, alternative learning, and career and technical education for nine member school districts. This site is incorporated into the Dakota County Technical College (DCTC) campus.
- The school is next to CR 42 (145<sup>th</sup> Street), and the school accesses are on CR 42 (145<sup>th</sup> Street), Audrey Avenue, and Akron Avenue.
- There are no existing school crossings.
- All students are bussed or driven to school and there is no walking or bicycling demand to the school.
- Dakota County is constructing a new traffic signal at the CR 42 (145<sup>th</sup> Street)/CR 73/Akron Avenue intersection and making access modifications at the DCTC driveways in 2021.



## School Travel SAFETY ASSESSMENT

- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 42 (145<sup>th</sup> Street) between Auburn Avenue and DCTC. The existing section has no sidewalk or trail.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

##### *Parent/Caregiver Survey*

No survey responses were received for the ISD 917 site at DCTC.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

### Recommendations

No specific recommendations were developed at this school based on the limited demand for students to walk or bike to school. Students could still benefit from walking and biking safety education.



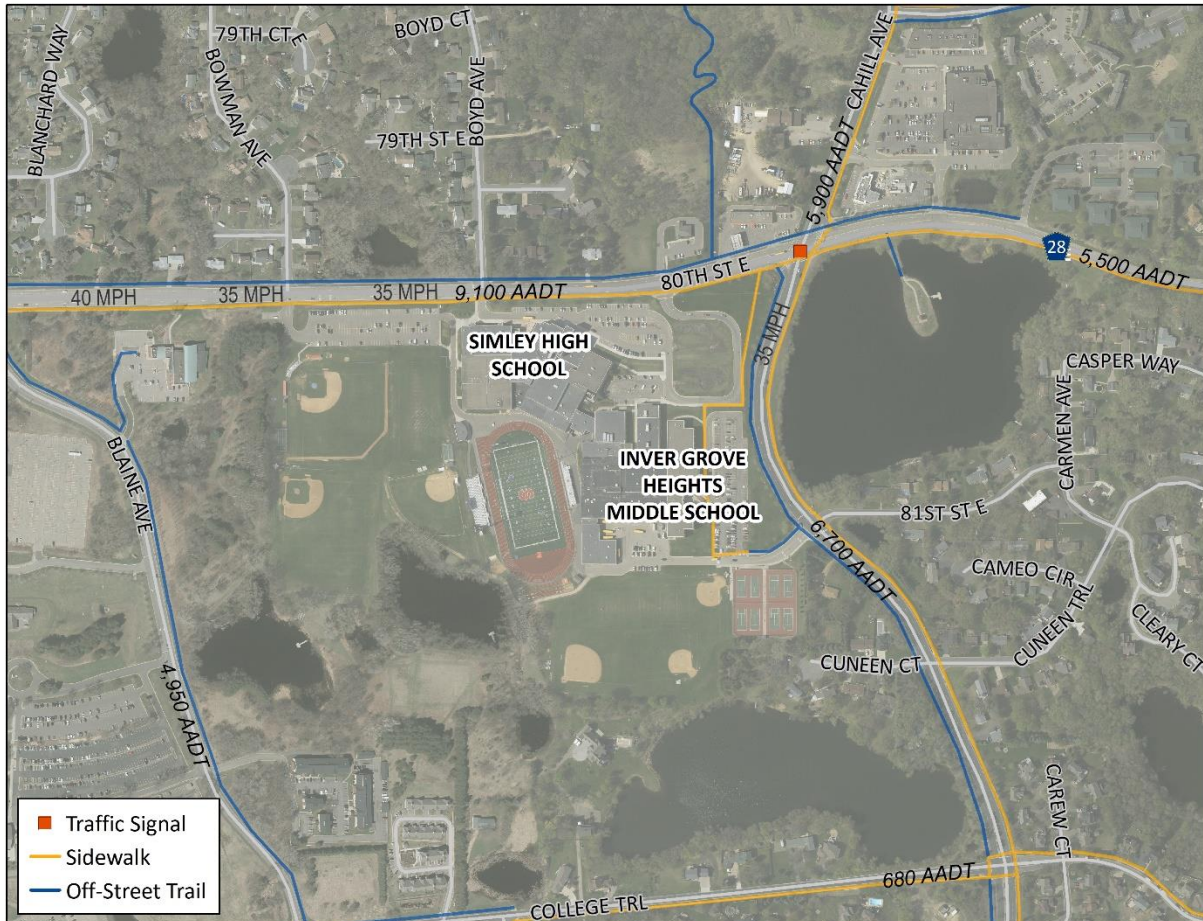
# School Travel SAFETY ASSESSMENT

## INVER GROVE HEIGHTS MIDDLE SCHOOL AND SIMLEY HIGH SCHOOL

Inver Grove Heights Public Schools, ISD 199

County or State Road: CR 28 (80<sup>th</sup> Street)

Inver Grove Heights, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Student enrollment and grades
  - Inver Grove Heights Middle School: About 800 students in grades 6 through 8.
  - Simley High School: About 1,100 students in grades 9 through 12.
- The school site is next to CR 28 (80<sup>th</sup> Street). The high school access is on CR 28 (80<sup>th</sup> Street) and the middle school access is on Cahill Avenue.
- The hazardous roadway near the schools, as identified by ISD 199, is TH 52.
- Safe Routes to School plans are currently being developed for each school.
- There are existing school crossings with crossing guards at CR 28 (80<sup>th</sup> Street)/Boyd Avenue and at Cahill Avenue/81<sup>st</sup> Street.
- There is an existing school speed zone on CR 28 (80<sup>th</sup> Street).





- The CR 28 (80<sup>th</sup> Street)/Cahill Avenue intersection ranked #90 for crashes at county road intersections for 2017-2019.
- A Dakota County resurfacing project in 2020 converted CR 28 (80<sup>th</sup> Street) from 4 lanes to 3 lanes and added a median at the CR 28 (80<sup>th</sup> Street)/Boyd Avenue school crossing.



Existing school crossing and school speed zone on CR 28 (80<sup>th</sup> Street) at Boyd Avenue

- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 28 (80<sup>th</sup> Street) between TH 52 and CR 56 (Concord Boulevard). The existing section has trail or no facility on the north side of the road and sidewalk on the south side of the road.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- Cahill Avenue/81<sup>st</sup> Street
  - Barriers to walking and biking: *Challenging to cross Cahill Avenue (3 comments)*

#### Parent/Caregiver Survey

Two survey responses were received for Inver Grove Heights Middle School. No survey responses were received for Simley High School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### Interactive Map

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



## Recommendations

- **School Crossings:**
  - CR 28 (80<sup>th</sup> Street)/Boyd Avenue
    - County evaluate street lighting at the crossing to determine if lighting unit replacements are needed. There are 4 street lights at the intersection (2 on utility pole and 2 street light poles), however the schools report that the crossing has insufficient lighting.
    - County conduct observations at the school crossing on CR 28 (80<sup>th</sup> Street) at Boyd Avenue with the new 3-lane configuration, median refuge, and any school speed zone adjustments prior to considering further treatments such as an RRFB.
- **Evaluate School Speed Zone:**
  - School and District provide current school route plan.
  - County evaluate the school speed zone on CR 28 (80<sup>th</sup> Street) for potential modifications including shortening the zone and revising the speed limit. The existing signing should be updated to indicate the speed limit is in effect when beacons are flashing, and the flashing beacons should be replaced and updated.
- **Enforcement:**
  - The effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.
- **School and District Considerations:**
  - School and District are currently in the process of developing a Safe Routes to School Plan for Inver Grove Heights Middle School and Simley High School.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider crossing enhancements such as advance stop bars and active devices at the school crossing on Cahill Avenue at 81<sup>st</sup> Street based on the traffic volume, traffic speed, and number of lanes.
  - City consider evaluation of Cahill Avenue for a 4-lane to 3-lane conversion if there is a project opportunity or funding becomes available (*long-term recommendation*). The existing daily traffic volume of 6,600 vehicles per day indicate that a 3-lane section may be feasible but additional analysis is needed.



## KENWOOD TRAIL MIDDLE SCHOOL

Lakeville Public School District, ISD 194  
County or State Road: CR 50 (Kenwood Trail)  
Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 825 students in grades 6 through 8.
- The school site and access are on CR 50 (Kenwood Trail).
- The hazardous roadway near the school, as identified by ISD 194, is CR 50 (Kenwood Trail).
- A Safe Routes to School plan was completed in 2009.
- There are no existing school crossings.
- The approved Access and Traffic Control Plan resulting from the CR 50 Corridor Study identified the following potential future access changes:
  - CR 50 (Kenwood Trail)/Middle School North Access – If/when traffic conditions dictate, a traffic signal would be considered.



- CR 50 (Kenwood Trail)/Middle School South Access – If/when safety or operational issues occur, restricting left turns onto CR 50 (Kenwood Trail) should be considered.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 50 (Kenwood Trail)
  - Walking/biking routes you currently take: *Like the trails along CR 50 (Kenwood Trail) but vehicle speeds are too fast (2 comments)*
  - Traffic circulation/congestion issue: *Difficult to make left turn from middle school onto CR 50 (Kenwood Trail)*

#### *Parent/Caregiver Survey*

No survey responses were received for Kenwood Middle School.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **Education:**
  - School and District should instruct students to only cross CR 50 (Kenwood Trail) with an adult or at a controlled intersection because there are not crossing guards on CR 50 (Kenwood Trail).
- **School and District Considerations:**
  - School and District consider sidewalk connection from the school site to the County trail network if there is a project opportunity or funding becomes available.
  - School and District update the 2009 Safe Routes to School Plan for Kenwood Trails Middle School, including a walking/biking route plan.
  - School and District provide walking and biking safety education.

A school speed zone is not recommended on CR 50 (Kenwood Trail) because it would not be effective based on no school crossings on CR 50 (Kenwood Trail) and the school's location set back from the county road.

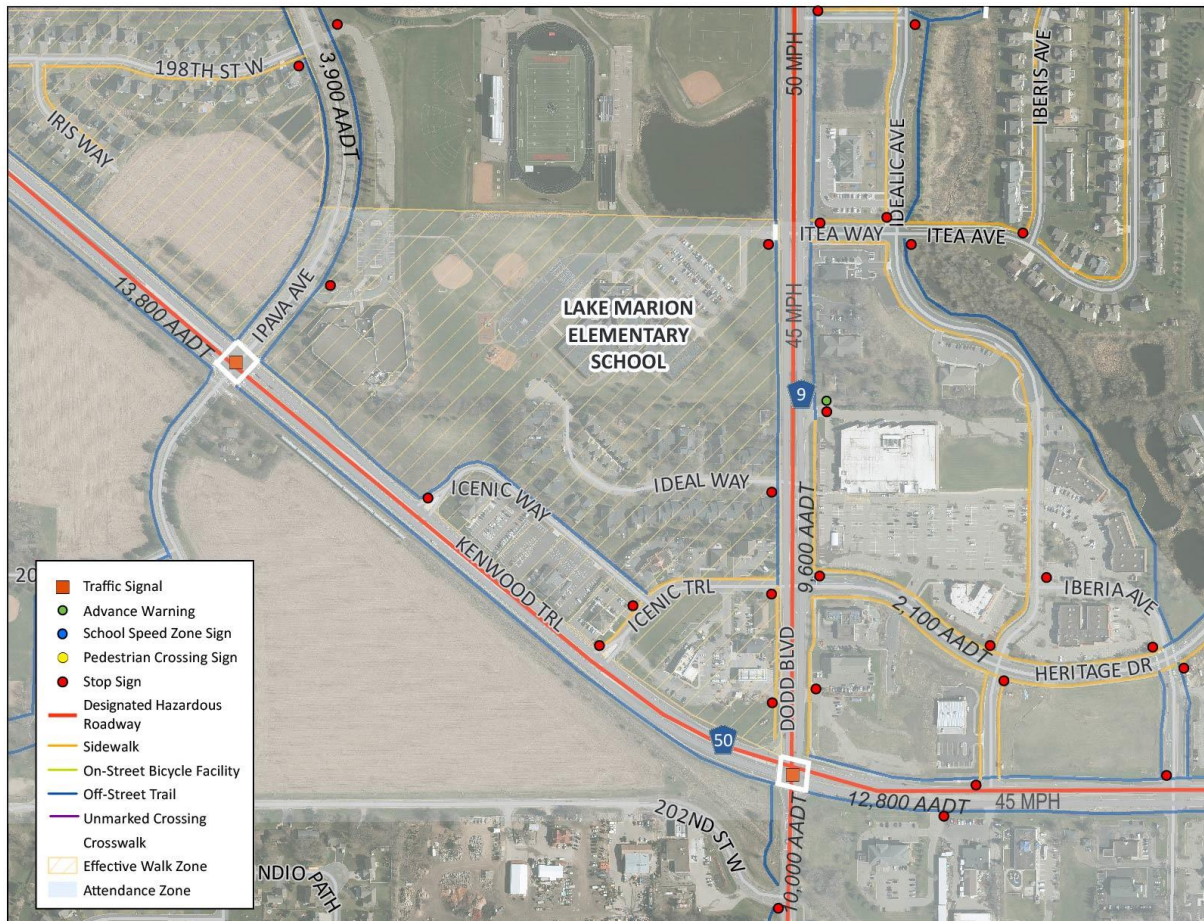


## LAKE MARION ELEMENTARY SCHOOL

Lakeville Public School District, ISD 194

County or State Road: CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail)

Lakeville, MN



*Note: This map includes additional data and details because this school site was evaluated as a sample school.*

### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 720 students in kindergarten through 5<sup>th</sup> grade.
- The school site and access are on CR 9 (Dodd Boulevard).
- Hazardous roadways near the school, as identified by ISD 194, are CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail).
- An estimated 5 or fewer students regularly walk or bike to school.
- A Safe Routes to School plan was completed in 2009.
- There are no existing school crossings.



*Revised school driveway at CR 9 (Dodd Boulevard) with exiting traffic restricted to right turns only*

- An ISD 194 project to improve site circulation was completed in 2020, including restricting the site exit at CR 9 (Dodd Boulevard) to right turns only.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 50 (Kenwood Trail)
  - Walking/biking routes you currently take: *Like the trails along CR 50 (Kenwood Trail) but vehicle speeds are too fast (2 comments)*

#### *Parent/Caregiver Survey*

Three survey responses were received for Lake Marion Elementary School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



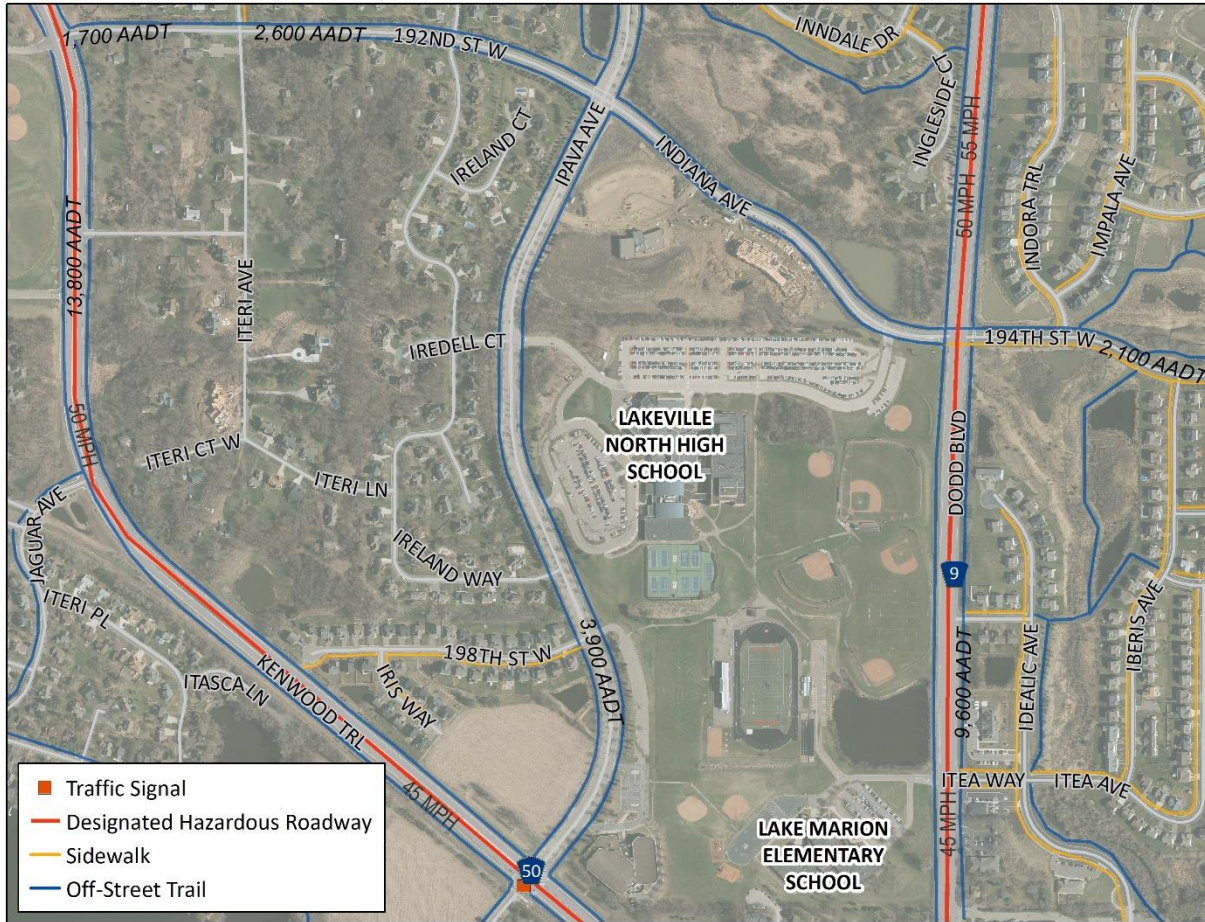
## Recommendations

- **Education:**
  - School and District should instruct students to only cross CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail) with an adult because there are not crossing guards on CR 9 (Dodd Boulevard) or CR 50 (Kenwood Trail).
- **School and District Considerations:**
  - School and District consider sidewalk connections from the school site to the County trail network if there is a project opportunity or funding becomes available.
  - School and District update the 2009 Safe Routes to School Plan for Lake Marion Elementary, including a walking/biking route plan.
  - School and District provide walking and biking safety education.



## LAKEVILLE NORTH HIGH SCHOOL

Lakeville Public School District, ISD 194  
County or State Road: CR 9 (Dodd Boulevard)  
Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 1,890 students in grades 9 through 12.
- The school site is next to CR 9 (Dodd Boulevard), and the school accesses are on Indiana Avenue and Ipava Avenue.
- Hazardous roadways around the school, as identified by ISD 194, are CR 9 (Dodd Boulevard) and CR 50 (Kenwood Trail).
- There are no existing school crossings.
- The CR 9 (Dodd Boulevard)/194<sup>th</sup> Street/Indiana Avenue intersection ranked #20 for crashes at county road intersections for 2017-2019.
- Dakota County reconstructed the CR 9 (Dodd Boulevard)/194<sup>th</sup> Street/Indiana Avenue intersection in 2020 to restrict through and left-turn movements from 194<sup>th</sup> Street/195<sup>th</sup> Street.





Revised intersection at CR 9 (Dodd Boulevard)/194<sup>th</sup> Street/195<sup>th</sup> Street

- ISD 194 modified the site circulation in 2020 by closing the student parking lot access closest to 195<sup>th</sup> Street.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 9 (Dodd Boulevard)/Indiana Avenue/194<sup>th</sup> Street
  - Barrier to walking and biking: *Difficult to cross and no crossing is provided at the intersection (3 comments)*

#### Parent/Caregiver Survey

Five survey responses were received for Lakeville North High School. The following summarizes the open-ended comments provided on the survey:

- *Sidewalk desired on CR 60 (185<sup>th</sup> Street)*

### VIRTUAL ENGAGEMENT #2

#### Interactive Map

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- School crossing on CR 9 (Dodd Boulevard)
  - One comment agreed with the recommended actions if the need for a school crossing on CR 9 (Dodd Boulevard) is identified in the future



- Development of a school route plan or Safe Routes to School plan
  - One comment agreed with the recommendation

## Recommendations

- **Roadway Geometric Changes:**
  - County evaluate u-turn on southbound CR 9 (Dodd Boulevard) between 194<sup>th</sup> Street/Indiana Avenue and Itea Avenue for school traffic that must turn right from 195<sup>th</sup> Street.
- **Education:**
  - School and District should instruct students to only cross CR 9 (Dodd Boulevard) at controlled intersections because it is a high-speed road.
- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan for Lakeville North School.
  - School and District provide walking and biking safety education.

A school crossing of CR 9 (Dodd Boulevard) is not recommended at this time because students are bussed across CR 9 (Dodd Boulevard) and the school/district do not support a crossing.



## LEVI P. DODGE MIDDLE SCHOOL

Farmington Public Schools, ISD 192  
County or State Road: CR 50 (212<sup>th</sup> Street)  
Farmington, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 830 students in grades 6 through 8.
- The school site is next to CR 50 (212<sup>th</sup> Street), and the school accesses are on 208<sup>th</sup> Street.
- About 1 percent of students live in the school walk zone.
- There is an existing school crossing on 208<sup>th</sup> Street at the school driveway/Dallas Avenue.
- There is an existing school speed zone on 208<sup>th</sup> Street.
- There is limited demand for walking or biking to school.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- Trail south of school to Vermillion River and under railroad tracks
  - *Barrier to walking and biking: Trail is in poor condition*

#### *Parent/Caregiver Survey*

16 survey responses were received for Levi P. Dodge Middle School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **School and District Considerations:**
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider updating the school speed zone on 208<sup>th</sup> Street based on research showing that shorter school speed zones are more effective.



## MEADOWVIEW ELEMENTARY SCHOOL

Farmington Public Schools, ISD 192  
County or State Road: CR 64 (195<sup>th</sup> Street)  
Farmington, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 700 students in kindergarten through 5<sup>th</sup> grade.
- The school site and access are on CR 64 (195<sup>th</sup> Street).
- Hazardous roadways around the school, as identified by ISD 192, are: 190<sup>th</sup> Street, CR 31 (Pilot Knob Road), and Flagstaff Avenue.
- About 27 percent of students live in the school walk zone.
- A Safe Routes to School plan was completed in 2018.
- There are no existing school crossings.
- CR 64 (195<sup>th</sup> Street) was constructed as three-lane section in 2015, including an existing pedestrian/bicycle tunnel under CR 64 (195<sup>th</sup> Street) just north of the school.
- The City of Farmington prioritizes winter maintenance of trails that connect to schools.



## School Travel SAFETY ASSESSMENT

- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 64 (Flagstaff Avenue) between CR 64 (195<sup>th</sup> Street) and CR 64 (200<sup>th</sup> Street). The existing section has no sidewalk or trail.



Existing tunnel under CR 64 (195<sup>th</sup> Street) to Meadowview Elementary

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 64 (195<sup>th</sup> Street)
  - Comfortable/enjoyable features for walking and biking: *Tunnel to cross the road to school*
  - Barriers to walking and biking:
    - *Trail is unplowed during the winter (4 comments)*
    - *Desire for lighting along the trail and in the tunnel*
    - *There are no crosswalks along CR 64 (195<sup>th</sup> Street) at Everest Path or Eureka Avenue, concerns with visibility of pedestrians to turning vehicles (4 comments)*
  - Traffic circulation/congestion issue: *Difficult to turn left from school driveway to CR 64 (195<sup>th</sup> Street) (4 comments)*
  - Other:
    - *Desire for school speed zone (8 comments)*
    - *Desire for bus transportation to their neighborhood (2 comments)*
- 193<sup>rd</sup> Street
  - Barriers to walking and biking: *There is no sidewalk or trail on 193<sup>rd</sup> Street*
- Exceptional Trail
  - Barriers to walking and biking: *There is no sidewalk or trail on Exceptional Trail*
- Flagstaff Avenue
  - Barriers to walking and biking: *Desire for trail along Flagstaff Avenue*



### Parent/Caregiver Survey

26 survey responses were received for Meadowview Elementary School. The following summarizes the open-ended comments provided on the survey:

- *Desire for students to be bussed to school even if they are within the walking distance*
- *Desire for a school speed zone on CR 64 (195<sup>th</sup> Street)*

### VIRTUAL ENGAGEMENT #2

#### Interactive Map

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - CR 64 (195<sup>th</sup> Street)
    - County install street lighting for the trail along both sides of CR 64 (195<sup>th</sup> Street) because it is part of the school's route plan.
    - County evaluate existing light levels in the tunnel under CR 64 (195<sup>th</sup> Street).
- **School Crossings:**
  - School and District develop school route plan that support the need for crosswalk markings along CR 64 (195<sup>th</sup>).
  - County install high visibility (continental crosswalks) parallel to CR 64 (195<sup>th</sup> Street) at Exceptional Trail, Everest Path, and Eureka Avenue.



*Existing foot-worm path from the trail on CR 64 (195<sup>th</sup> Street) to Meadowview Elementary*



- **School and District Considerations:**

- School and District consider implementation of the 2018 Safe Routes to School Plan if there is a project opportunity or funding becomes available.
- School and District provide walking and biking safety education.

A school speed zone is not recommended on CR 64 (195th Street) because it would not be effective based on no school crossings of CR 64 (195th Street) and the school's location and visibility from the county road. The city does already prioritize winter maintenance for trails that connect to schools.



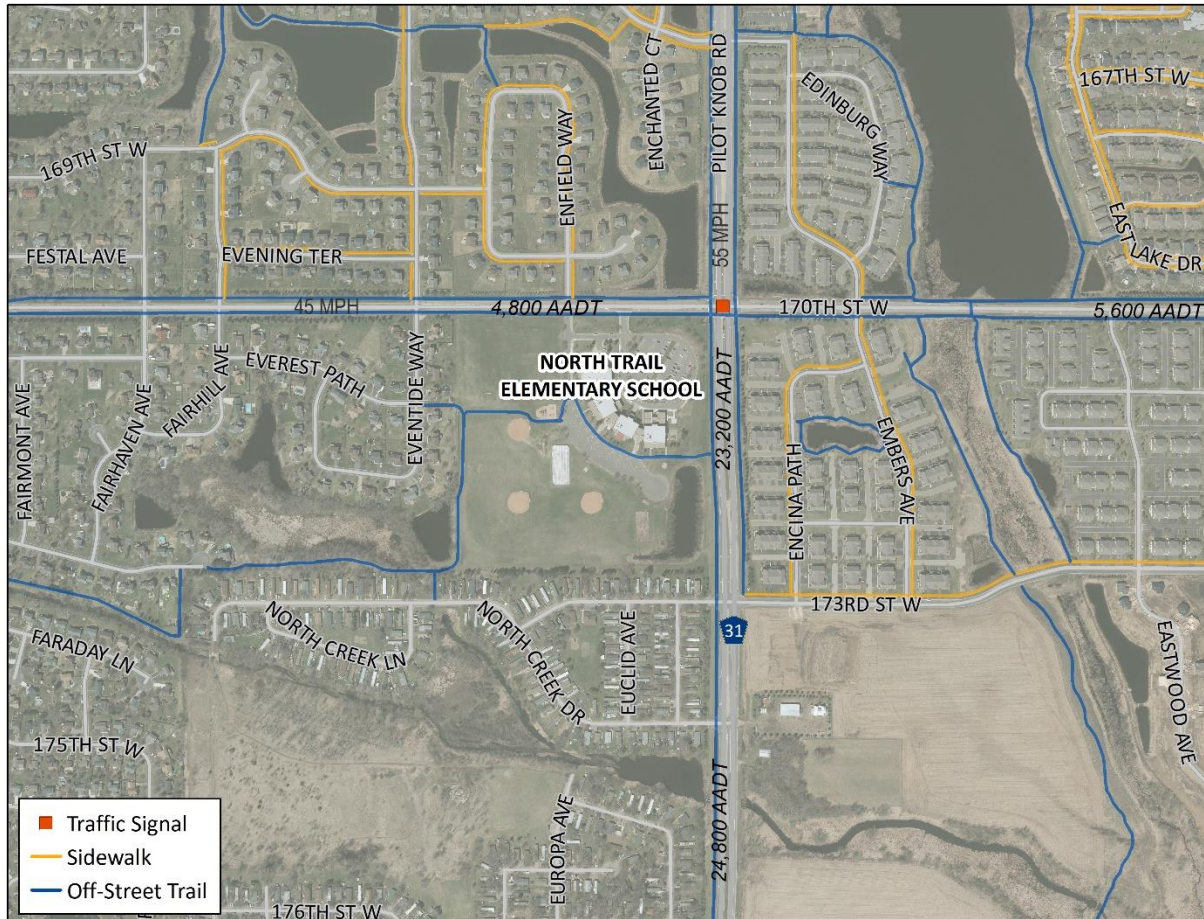


## NORTH TRAIL ELEMENTARY SCHOOL

Farmington Public Schools, ISD 192

County or State Road: CR 31 (Pilot Knob Road)

Lakeville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 600 students in kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 31 (Pilot Knob Road), and the school access is on 170<sup>th</sup> Street.
- Hazardous roadways around the school, as identified by ISD 192, are: 170<sup>th</sup> Street, CR 31 (Pilot Knob Road), and Flagstaff Avenue.
- South attendance area is near North Creek.
- About 17 percent of students live in the school walk zone.
- Safe Routes to School plan was completed in 2018.
- No existing school crossings.
- Existing school speed zone on 170<sup>th</sup> Street.



- The CR 31 (Pilot Knob Road)/170<sup>th</sup> Street intersection ranked #76 for crashes at county road intersections for 2017-2019.
- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 31 (Pilot Knob Road) between 173<sup>rd</sup> Street and 179<sup>th</sup> Street. The existing section has trail on the west side of the road only.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- 170<sup>th</sup> Street
  - Barriers to walking and biking: *No crosswalks and desire for all-way stop (2 comments)*
  - Traffic circulation/congestion issue: *Traffic congestion during school arrival, especially left turns into the school parking lot*
- CR 31 (Pilot Knob Road)
  - Barriers to walking and biking:
    - *Desire for NO TURN ON RED at 170<sup>th</sup> Street traffic signal*
    - *Desire for sidewalk on the east side of CR 31 (Pilot Knob Road) south of 173<sup>rd</sup> Street (3 comments)*
    - *Desire for reduced speed on CR 31 (2 comments)*
  - Traffic circulation/congestion issue: *Difficult to turn left from Tullamore development onto CR 31 (Pilot Knob Road)*
- Trail infrastructure
  - Walking/biking routes you currently take: *Trails south of the school are used to walk and bike to school*

#### *Parent/Caregiver Survey*

23 survey responses were received for North Trail Elementary School. The following summarizes the open-ended comments provided on the survey:

- *Desire for pedestrian crossing improvements at CR 31 (Pilot Knob Road)/170<sup>th</sup> Street*
- *Desire for reduced traffic speeds*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



## Recommendations

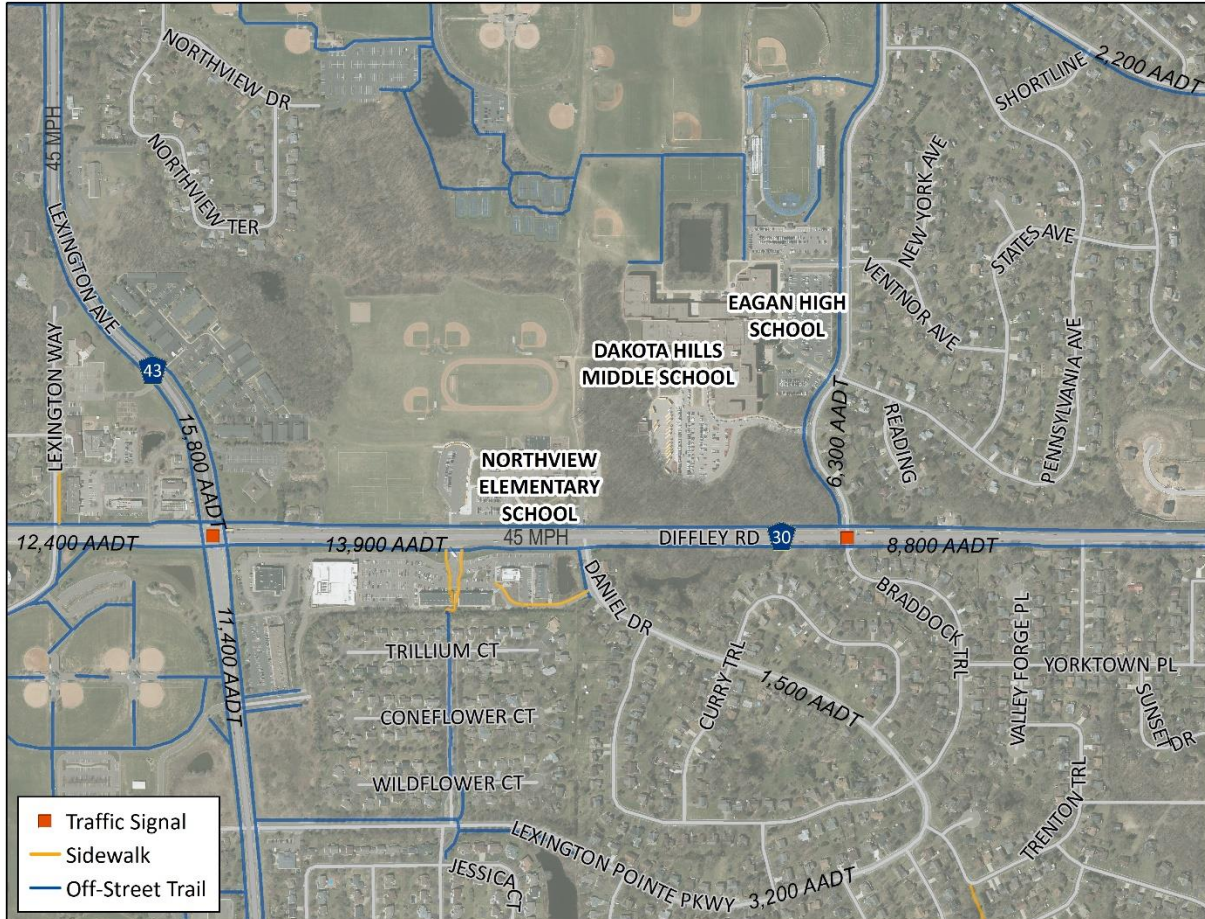
- **Sidewalk and Trail Infrastructure:**
  - County install street lighting for the trail on the west side of CR 31 (Pilot Knob Road) from 173<sup>rd</sup> Street to 170<sup>th</sup> Street because it is part of the school's route plan.
- **Education:**
  - School and District should instruct students to only cross CR 31 (Pilot Knob Road) with an adult because there are not crossing guards on CR 31 (Pilot Knob Road).
- **School and District Considerations:**
  - School and District consider implementation of the 2018 Safe Routes to School Plan if there is a project opportunity or funding becomes available
  - School and District develop a school route plan to support the demand or need for a school crossing on 170<sup>th</sup> Street at Enfield Way. Based on discussions with the school principal and school district, a number of students that live on the north side of 170<sup>th</sup> Street are open enrolled at North Trail Elementary.
  - If a crossing is installed on 170<sup>th</sup> Street, School and District should provide an adult crossing guard based on the age of the students.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - Based on the school route plan, City consider a school crossing on 170<sup>th</sup> Street at Enfield Way with crossing enhancements such as high visibility (continental) crosswalk, street lighting, and geometric treatments (median refuge or curb extensions).
  - City consider reevaluation of the school speed zone, if the school crossing is installed, to confirm the limits of the zone and the speed limit in the zone.

A school speed zone is not recommended on CR 31 (Pilot Knob Road) because it would not be effective based on the school transportation activity (pedestrian, bicycle, and vehicle) being focused on 170<sup>th</sup> Street.



### NORTHVIEW ELEMENTARY SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: CR 30 (Diffley Road)  
Eagan, MN



See Dakota Hills Middle School

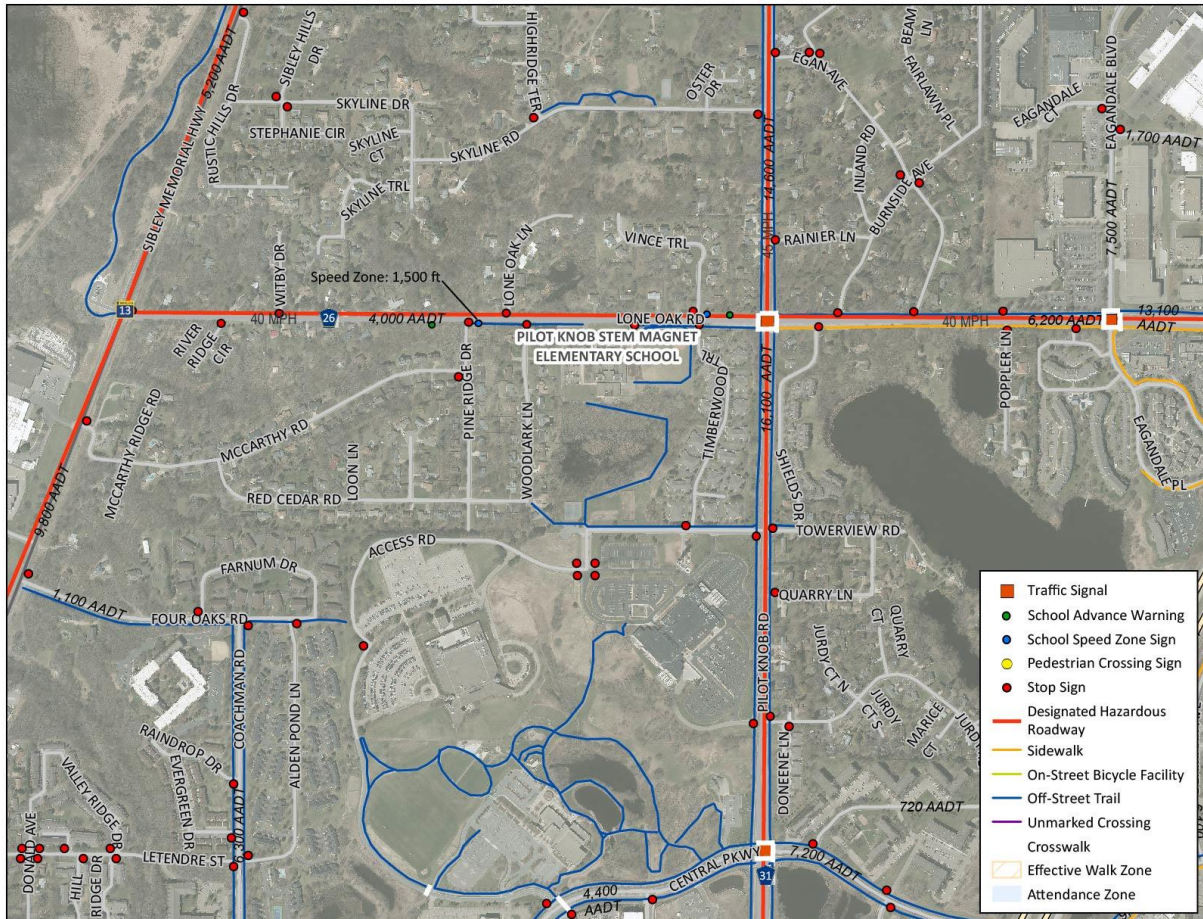


### PILOT KNOB STEM MAGNET ELEMENTARY SCHOOL

West St. Paul-Mendota Heights-Eagan Area Schools, ISD 197

County or State Road: CR 26 (Lone Oak Road)

Eagan, MN



Note: This map includes additional data and details because this school site was evaluated as a sample school.

### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 400 students in kindergarten through 4<sup>th</sup> grade.
- The school site and access are on CR 26 (Lone Oak Road).
- Hazardous roadways around the school, as identified by ISD 197, are CR 26 (Lone Oak Road) and CR 31 (Pilot Knob Road).
- A Safe Routes to School plan was completed in 2011.
- There are no existing school crossings.
- There is an existing school speed zone on CR 26 (Lone Oak Road).
- The CR 31 (Pilot Knob Road)/CR 26 (Lone Oak Road) intersection ranked #151 for crashes at county road intersections for 2017-2019.



- CR 26 (Lone Oak Road) is planned for a multimodal corridor study in 2024.
- CR 26 (Lone Oak Road) between CR 31 (Pilot Knob Road) and I-35E is identified in the Dakota County 2040 Transportation Plan as a potential roadway segment for through lane reduction based on the existing and future traffic volumes. This would also influence the number of lanes on CR 26 (Lone Oak Road) west of CR 31 (Pilot Knob Road) in front of the school.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 26 (Lone Oak Road)
  - Barriers to walking and biking: *High vehicle speeds on CR 26 (Lone Oak Road) (2 comments)*
  - Walking/biking route you wish you could take: *Desire for crossing of CR 26 (Lone Oak Road)*
- Trail Connection
  - Walking/biking route you wish you could take: *Desire for trail connection from Four Oaks Road to Towerview Road*

#### *Parent/Caregiver Survey*

9 survey responses were received for Pilot Knob Elementary School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- Sidewalk/trail on CR 26 (Lone Oak Road)
  - One comment agreed with the recommendation
- School crossing enhancements at the CR 26 (Lone Oak Road)/CR 31 (Pilot Knob Road) traffic signal
  - One comment suggested a school crossing on CR 26 (Lone Oak Road) at the school
  - One comment agreed with the recommendation and noted there are 22 elementary students that currently live on Vince Trail
- Evaluation of the school speed zone on CR 26 (Lone Oak Road)
  - Three comments noted that speeding is an issue
  - One comment disagreed with potentially removing the school speed zone
- Instructing students to only cross CR 26 (Lone Oak Road) at the traffic signal at CR 31 (Pilot Knob Road)



## School Travel SAFETY ASSESSMENT

- Two comments disagreed with the recommendation

### Recommendations

- **Sidewalk and Trail Infrastructure:**

- County construct sidewalk and install street lighting on the north side of CR 26 (Lone Oak Road) between Vince Trail and CR 31 (Pilot Knob Road) so that students can cross CR 26 (Lone Oak Road) to school.
  - This is a short-term recommendation that is lower cost and does not have right-of-way or drainage impacts. It provides students a facility to walk to the CR 26 (Lone Oak Road)/CR 31 (Pilot Knob Road) intersection and cross at the traffic signal.
- County construct sidewalk or trail along both sides of CR 26 (Lone Oak Road) between TH 13 and CR 31 (Pilot Knob Road).
  - This is a long-term recommendation that would provide a more direct route to the school, especially for students that live on the north side of CR 26 (Lone Oak Road). However, additional investments would be needed to implement the segment of sidewalk/trail on the north side of CR 26 (Lone Oak Road) west of Vince Trail due to the existing topography and drainage.

- **School Crossings:**

- School and District develop a school route plan that supports the need for a crossing on CR 26 (Lone Oak Road).
- County implement improvements at the CR 26 (Lone Oak Road)/CR 31 (Pilot Knob Road) traffic signal. This intersection is expected to be part of the school's route plan when the sidewalk is constructed on the north side of CR 26 (Lone Oak Road) between Vince Trail and CR 31 (Pilot Knob Road). This is a short-term recommendation that can be made to improve the safety of crossing CR 26 (Lone Oak Road) until other treatments can be implemented.
  - Install high visibility (continental) crosswalks
  - Install accessible pedestrian signals
  - Update left-turn indications to flashing yellow arrow (FYA) and operate left-turn phasing as protected only when pedestrian push buttons are activated
- County evaluate a midblock school crossing on CR 26 (Lone Oak Road), between Vince Trail and Woodlark Lane. This would provide a more direct route to the school, a crossing with fewer conflicts than at CR 31 (Pilot Knob Road), and additional students that live on the north side of CR 26 (Lone Oak Road) would have the opportunity to walk or bike to school.
  - This is a long-term recommendation that is dependent on the following improvements also being implemented:
    - Sidewalk or trail constructed on the north side of CR 26 (Lone Oak Road) between Vince Trail and Lone Oak Lane.
    - Through lane reduction implemented on CR 26 (Lone Oak Road) east of CR 31 (Pilot Knob Road), which would reduce the number of lanes and eliminate the lane transition on CR 26 (Lone Oak Road) west of CR 31 (Pilot Knob Road).



- In addition to the improvements noted above, a midblock school crossing would necessitate high visibility (continental/zebra) crosswalks, active devices (RRFB), street lighting, a school crossing guard, and a median refuge.
- **Evaluate School Speed Zone:**
  - County evaluate the school speed zone on CR 26 (Lone Oak Road) for potential modifications including shortening the zone, revising the speed limit, or removing the zone. This is a short-term recommendation.
    - Research indicates that the speed zone is likely to be less effective in the current conditions because there are no school crossings on CR 26 (Lone Oak Road). The speed zone could be considered for removal based on no school crossing of CR 26 (Lone Oak Road); however, the school transportation activity (vehicle) is focused on CR 26 (Lone Oak Road).
    - If the speed zone is determined to be retained, the appropriate speed limit should be revised as recommended and the existing signing should be updated to include flashing beacons.
    - If a midblock school crossing is implemented on CR 26 (Lone Oak Road) as a long-term improvement, the school speed zone should be re-evaluated. The combination of the reduced cross section, sidewalk and trail along the roadway, and a school crossing would be expected to improve driver compliance with a school speed zone.
- **Roadway Geometric Changes:**
  - County consider the segment of CR 26 (Lone Oak Road) west of CR 31 (Pilot Knob Road) when evaluating the through lane reduction between CR 31 (Pilot Knob Road) and I-35E. This is a long-term recommendation.
    - If the number of through lanes is reduced east of CR 31 (Pilot Knob Road), then the number of lanes could also be reduced west of CR 31 (Pilot Knob Road) and the lane transition between Vince Trail and CR 31 (Pilot Knob Road) could be eliminated.
    - This is a necessary improvement to consider a midblock school crossing on CR 26 (Lone Oak Road).
- **Education:**
  - School and District should instruct students to only cross CR 26 (Lone Oak Road) with an adult or at the school crossing at CR 31 (Pilot Knob Road) with an adult crossing guard.
- **School and District Considerations:**
  - School and District update the 2011 Safe Routes to School Plan for Pilot Knob STEM Magnet Elementary School.
  - School and District provide walking and biking safety education.





## RANDOLPH ELEMENTARY AND HIGH SCHOOL

Randolph Public Schools, ISD 195

County or State Road: CR 88 (292<sup>nd</sup> Street)

Randolph, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: about 660 students in kindergarten through 12<sup>th</sup> grade.
- The school site is next to CR 88 (292<sup>nd</sup> Street), and the school accesses are on Davisson Avenue and Dawson Avenue.
- There is an existing school crossing on CR 88 (292<sup>nd</sup> Street E) at Davisson Avenue. The crossing is used by students during the school day to access the athletic fields and the students cross with an adult.
- The Dakota County 2040 Transportation Plan identified a low priority pedestrian and bicycle gap on CR 88 (292<sup>nd</sup> Street) between Cooper Avenue and TH 56 (Randolph Boulevard). The existing section has sidewalk for short segments.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Randolph Elementary and High School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County construct sidewalk and trail to fill gaps along CR 88 (292<sup>nd</sup> Street) as opportunities arise (*long-term recommendation*):
    - North side of CR 88 (292<sup>nd</sup> Street) from Davisson Avenue to Curtis Lane
    - South side of CR 88 (292<sup>nd</sup> Street) from Danel Avenue to Cooper Avenue
    - Both sides of CR 88 (292<sup>nd</sup> Street) at the railroad crossing
- **School and District Considerations:**
  - School and District provide walking and biking safety education.



## ROBERT BOECKMAN MIDDLE SCHOOL

Farmington Public Schools, ISD 192

County or State Road: CR 31 (Denmark Avenue)

Farmington, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 950 students in grades 6 through 8.
- The school site is next to CR 31 (Denmark Avenue), and the school accesses are on CR 31 (Denmark Avenue) and on Spruce Street.
- About 5 percent of students live in the school walk zone.
- There are no existing school crossings.
- There is limited demand for walking or biking to school along or across the county road due to the low density of homes west of CR 31 (Denmark Avenue).
- The Dakota County 2040 Transportation Plan identified two pedestrian and bicycle gaps:
  - Medium priority gap on CR 31 (Denmark Avenue) between CR 50 and CR 74 (220<sup>th</sup> Street). The existing section has no sidewalk or trail.



## School Travel SAFETY ASSESSMENT

- Medium priority gap on CR 74 (220<sup>th</sup> Street) between CR 31 (Denmark Avenue) and the railroad. The existing section has no sidewalk or trail.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 31 (Denmark Avenue)
  - Walking/biking route you wish you could take: *Desire for sidewalk or trail on CR 31 (Denmark Avenue)*
- 1<sup>st</sup> Street
  - Walking/biking route you currently take: *Bike to school on CR 74 (Ash Street) to 1<sup>st</sup> Street*
- Spruce Street
  - Walking/biking route you currently take: *Use Division Street to Spruce Street*

##### *Parent/Caregiver Survey*

21 survey responses were received for Robert Boeckman School. The following summarizes the open-ended comments provided on the survey:

- *Support trails to and from schools for exercise*
- *Families within walk zone pay for bus transportation due to distance and vehicle traffic*

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

### Recommendations

- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking.
  - School and District provide walking and biking safety education.



- **City Considerations:**
  - Sidewalk and trail connections on city streets are addressed in the city's existing plans, including the 2040 Comprehensive Plan and the Farmington Bicycle and Pedestrian Plan.



*Existing sidewalk gap on Spruce Street at the Union Pacific Railroad*



## ROSEMOUNT HIGH SCHOOL AND ROSEMOUNT MIDDLE SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196

County or State Road: TH 3 (Robert Trail)

Rosemount, MN



Note: This map includes additional data and details because these school sites were evaluated as sample schools.

### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Student enrollment and grades
  - Elementary School: About 700 students in kindergarten and 5<sup>th</sup> grade
  - Middle School: About 1,300 students in grades 6 through 8
  - High School: About 2,300 students in grades 9 through 12
- The school sites are next to TH 3 (Robert Trail), and the school accesses are on TH 3 (Robert Trail), 143<sup>rd</sup> Street, and 144<sup>th</sup> Street. Although Rosemount Elementary School is not next to TH 3 (Robert Trail), it is included in the analysis because it is part of the same school campus with Rosemount High School and Rosemount Middle School.



## School Travel SAFETY ASSESSMENT

- Hazardous roadways around the schools, as identified by ISD 196, are: TH 3 (Robert Trail), CR 42 (150<sup>th</sup> Street), Shannon Parkway (north of 145<sup>th</sup> Street), and 145<sup>th</sup> Street (west of Shannon Parkway)
- About 12 percent of students live in the school walk zone.
- Safe Routes to School plans were completed in 2010.
- Existing school crossings are located at 144<sup>th</sup> Street/Cameo Avenue, 144<sup>th</sup> Street at Rosemount Elementary School, 144<sup>th</sup> Street/Canada Avenue, 144<sup>th</sup> Street/Chili Avenue, 145<sup>th</sup> Street/Cameo Avenue, 145<sup>th</sup> Street/Canada Avenue, and 145<sup>th</sup> Street/Chili Avenue/Chippendale Avenue. The school crossings have student school patrols.
- There is an existing tunnel to cross TH 3 (Robert Trail) north of the high school.
- There are existing school speed zones on 145<sup>th</sup> Street, 144<sup>th</sup> Street, and Cameo Avenue.
- Circulation on the high school site was reconstructed in 2018.
- MnDOT is planning a safety project in 2025 to construct a roundabout at TH 3 (Robert Trail)/142<sup>nd</sup> Street.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### Interactive Map

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- TH 3 (Robert Trail)/142<sup>nd</sup> Street
  - Traffic circulation/congestion issue: *Concern with safety at the intersection*
  - Walking/biking route you currently take: *Use Connemara Trail to TH 3 (Robert Trail). Concern with TH 3 (Robert Trail)/142<sup>nd</sup> Street intersection.*
- Trail Connections
  - Walking/biking routes you wish you could take: *Desire to complete paved trail network from Connemara Trail to the elementary, middle, and high schools*

##### Parent/Caregiver Survey

12 survey responses were received for this school campus. The following summarizes the open-ended comments provided on the survey:

- *Concern with traffic safety at the TH 3 (Robert Trail)/142<sup>nd</sup> Street intersection*
- *Desire for more parents to teach their students about safe walking and biking and to practice walking with them*

#### VIRTUAL ENGAGEMENT #2

##### Interactive Map

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.



## Recommendations

- **Roadway Geometric Changes:**
  - MnDOT construct roundabout at TH 3 (Robert Trail)/142<sup>nd</sup> Street to slow vehicle speeds and address intersection safety concerns.
- **Site and Circulation Improvements:**
  - School and District modify intersection control or use a traffic control agent at the 142<sup>nd</sup> Street/school parking lot during school arrival to address the existing queues onto TH 3 (Robert Trail).
- **Education:**
  - School and District should instruct students to only cross TH 3 (Robert Trail) using the tunnel under TH 3 (Robert Trail), with an adult, or at a controlled intersection because there are not crossing guards on TH 3 (Robert Trail) and it is a high-speed road.
- **School and District Considerations:**
  - School and District update the 2010 Safe Routes to School Plan for Rosemount High School, Rosemount Middle School, and Rosemount Elementary School.
  - School and District provide walking and biking safety education.





### ROSEMOUNT MIDDLE SCHOOL

Rosemount-Apple Valley-Eagan Public Schools, ISD 196  
County or State Road: TH 3 (Robert Trail)  
Rosemount, MN

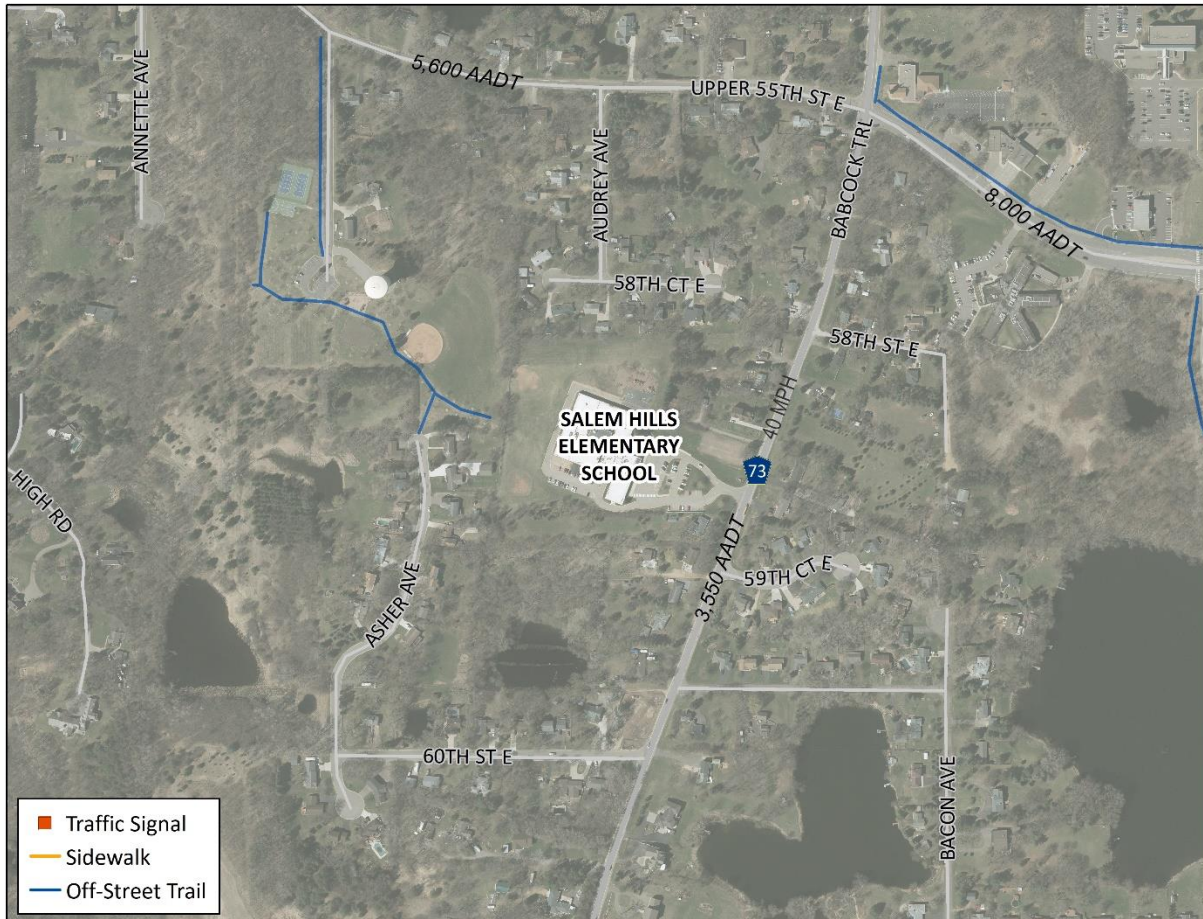


See Rosemount High School



## SALEM HILLS ELEMENTARY SCHOOL

Inver Grove Heights Public Schools, ISD 199  
County or State Road: CR 73 (Babcock Trail)  
Inver Grove Heights, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: about 280 students in kindergarten through 5<sup>th</sup> grade.
- The school site and access are on CR 73 (Babcock Trail).
- About 1 percent of students live in the school walk zone.
- There are no existing school crossings.
- There is limited demand for walking or biking to school.
- Dakota County and the City of Inver Grove Heights completed a trail feasibility study for CR 73 (Babcock Trail) in 2017. The study noted issues with school traffic queuing onto CR 73 (Babcock Trail). A Safe Routes to School Plan was also recommended to identify pedestrian access routes and address vehicle circulation issues.



## School Travel SAFETY ASSESSMENT

- The Dakota County 2040 Transportation Plan identified a low priority pedestrian and bicycle gap on CR 73 (Babcock Trail) between Upper 55<sup>th</sup> Street and 70<sup>th</sup> Street. The existing section has no sidewalk or trail.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

##### *Parent/Caregiver Survey*

2 survey responses were received for Salem Hills Elementary School. No comments were provided.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

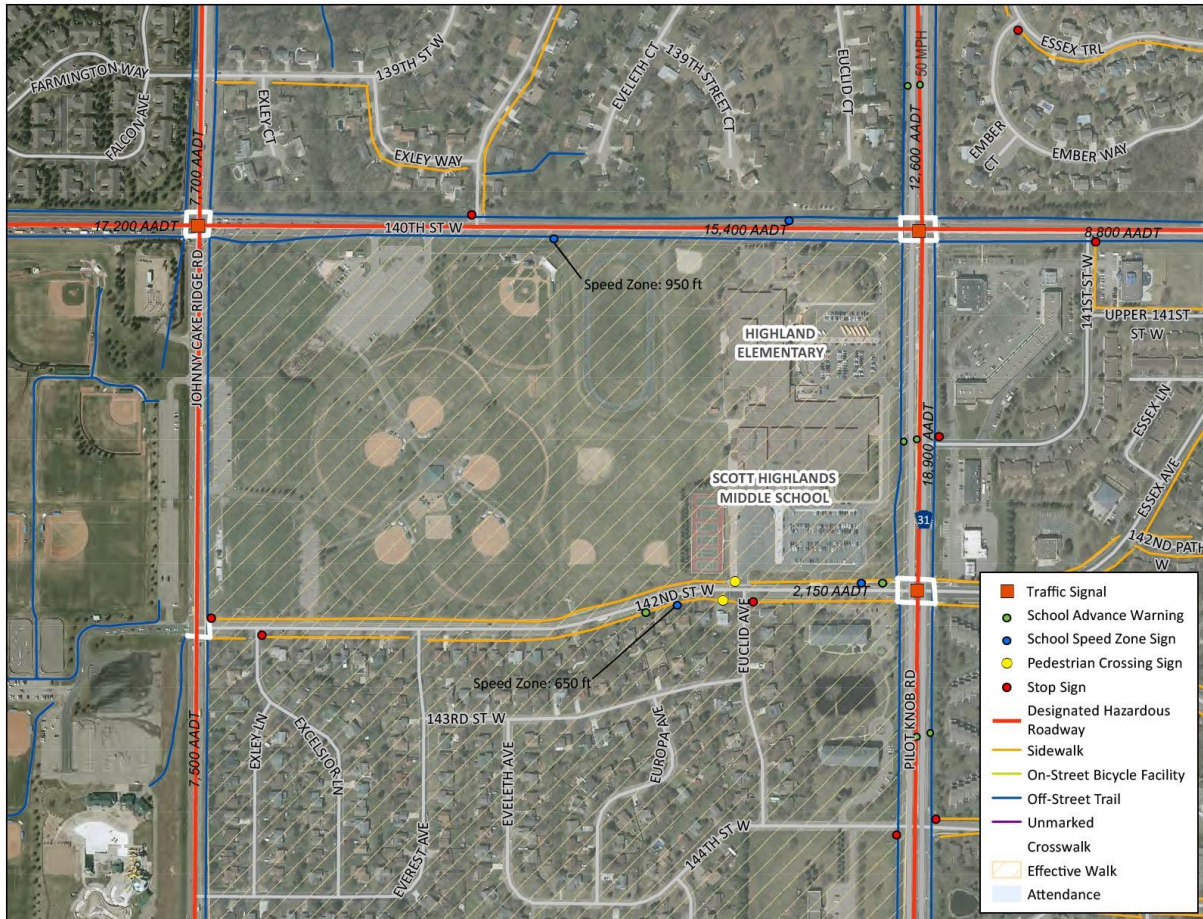
### Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County and city construct sidewalk/trail on CR 73 (Babcock Trail) if there is a project opportunity or funding becomes available (*long-term recommendation*).
  - In conjunction with adding sidewalk or trail on CR 73 (Babcock Trail), School and District develop a school route plan and construct on-site sidewalk to connect from the school building to CR 73 (Babcock Trail).
- **School and District Considerations:**
  - School and District provide walking and biking safety education.



### SCOTT HIGHLANDS MIDDLE SCHOOL

Rosemount – Apple Valley – Eagan Public Schools, ISD 196  
County or State Road: CR 31 (Pilot Knob Road)  
Apple Valley, MN



See Highland Elementary School



### SIMLEY HIGH SCHOOL

Inver Grove Heights Public Schools, ISD 199

County or State Road: CR 28 (80<sup>th</sup> Street)

Inver Grove Heights, MN



See Inver Grove Heights Middle School

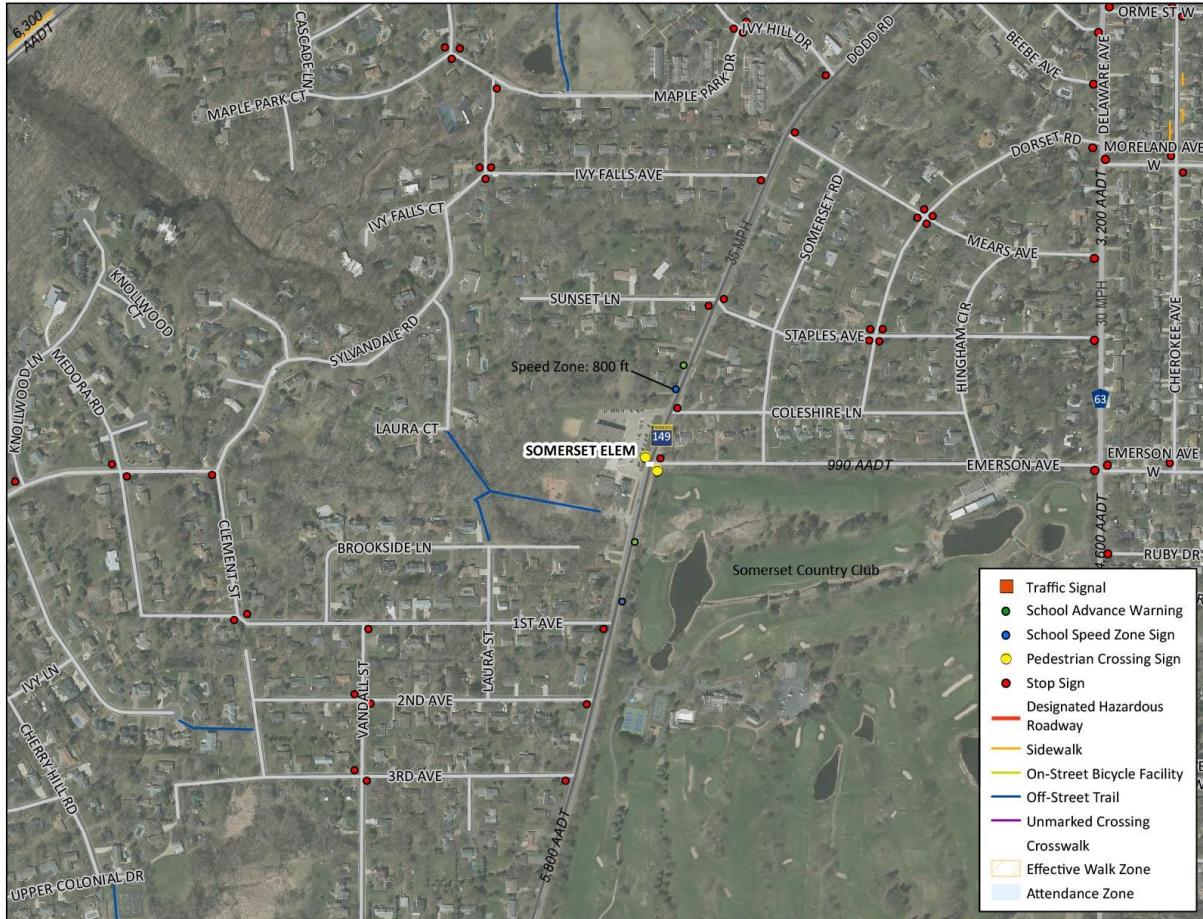


## SOMERSET ELEMENTARY

West St. Paul-Mendota Heights-Eagan Area Schools, ISD 197

County or State Road: TH 149 (Dodd Road)

Mendota Heights, MN



Note: This map includes additional data and details because this school site was evaluated as a sample school.

### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: about 410 students in kindergarten through 4<sup>th</sup> grade.
- The school site and accesses are on TH 149 (Dodd Road).
- There is an existing school crossing on TH 149 (Dodd Road) at Emerson Avenue.
- There is an existing school speed zone on TH 149 (Dodd Road).
- The school recently implemented changes to the site circulation. Vehicles can both enter and exit at the driveway closest to TH 149 (Dodd Road)/Emerson Avenue, and vehicles are restricted to making a right turn when exiting.
- There are limited opportunities to walk or bike to school due to limited sidewalk and trail infrastructure.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- TH 149 (Dodd Road)
  - Walking/biking routes you wish you could take: *Desire for sidewalk or trail along TH 149 (Dodd Road) (4 comments)*
  - Barriers to walking and biking: *Concerned with safety at TH 149 (Dodd Road)/Emerson Avenue*
- Emerson Avenue
  - Walking/biking routes you wish you could take: *Desire for sidewalk on Emerson Avenue*
  - Barriers to walking and biking: *Concerns with crossings at TH 149 (Dodd Road) and CR 63 (Delaware Avenue)*

#### *Parent/Caregiver Survey*

56 survey responses were received for Somerset Elementary School. The following summarizes the open-ended comments provided on the survey:

- *Safety concerns at the TH 149 (Dodd Road)/Emerson Avenue intersection (2 comments)*
- *Desire for sidewalk or trail on TH 149 (Dodd Road) (6 comments)*
- *Desire for sidewalk or trail on CR 63 (Delaware Avenue) (2 comments)*
- *Desire for sidewalk connection on north side of school site*

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following comments were provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- Sidewalk/trail on TH 149 (Dodd Road)
  - Three comments agreed with the recommendation
- Additional school crossing guard at the school crossing on TH 149 (Dodd Road) at Emerson Avenue
  - Two comments agreed with the recommendation
- Adding flashers to the school speed zone on TH 149 (Dodd Road)
  - Two comments agreed with the recommendation
  - One comment asked for the speed limit on TH 149 (Dodd Road) to be permanently lowered
- Enforcement of the school speed zone on TH 149 (Dodd Road)
  - Two comments agreed with the recommendation
- Development of a school route plan and walking/biking education
  - Two comments agreed with the recommendation

- Sidewalk/trail on Emerson Avenue (city improvement)
  - Five comments agreed with this improvement
  - Three comments suggested a school crossing at CR 63 (Delaware Avenue)/Emerson Avenue

## Recommendations

- **Sidewalk and Trail Infrastructure:**
  - MnDOT construct sidewalk on TH 149 (Dodd Road) as opportunities arise (*long-term recommendation*).
- **School Crossings:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan.
  - School consider a school crossing guard at the school driveway. One crossing guard should focus on the TH 149 (Dodd Road)/Emerson Avenue intersection and the other crossing guard should focus on the vehicle and crossing activity at the driveway.



*Existing school speed zone sign on TH 149 (Dodd Road)*

- **Evaluate School Speed Zone:**
  - City and District work with MnDOT to implement flashers and dynamic speed signs on the school speed zone.
- **Enforcement:**
  - Effectiveness of the school speed zones should be enhanced by periodic enforcement efforts.
- **School and District Considerations:**
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider sidewalk on Emerson Avenue between TH 149 (Dodd Road) and CR 63 (Delaware Avenue) if there is a project opportunity or funding becomes available.



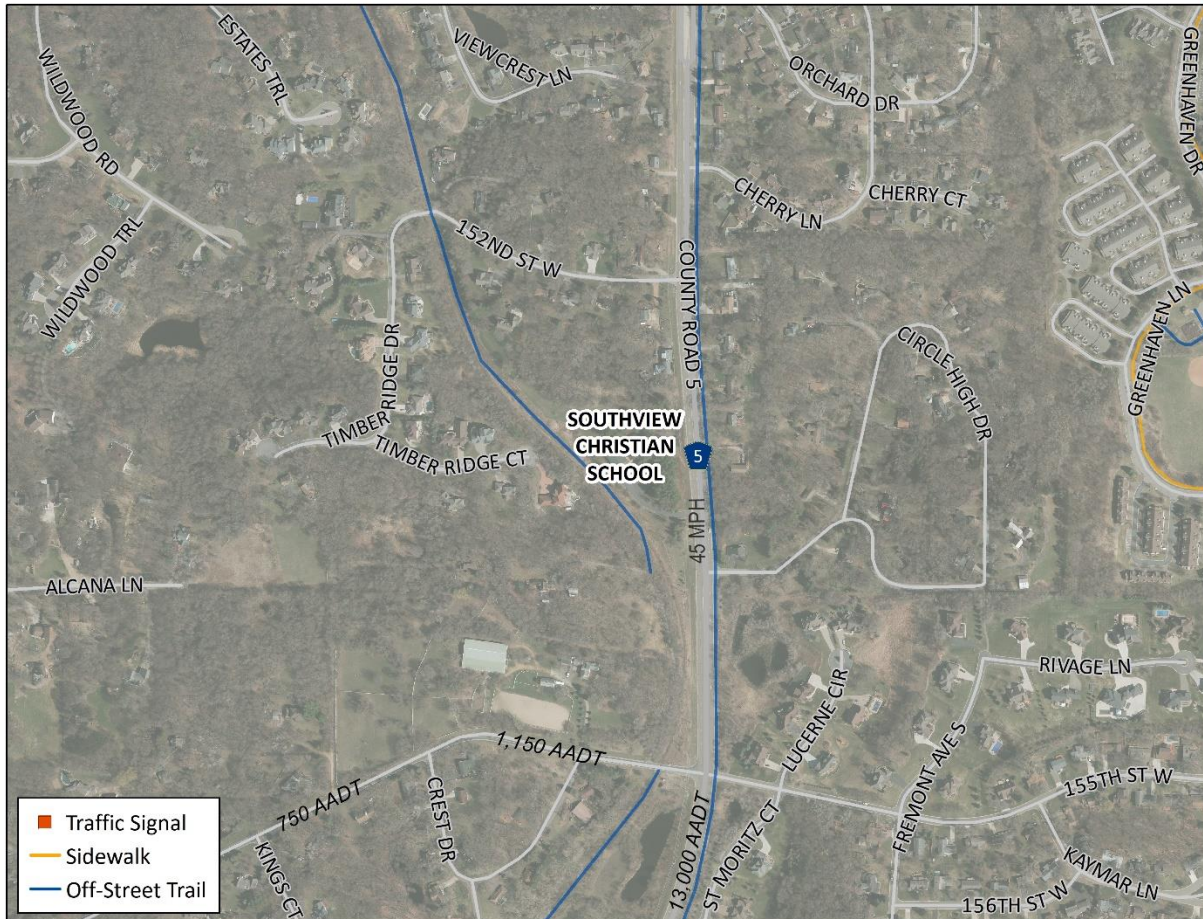


## SOUTHVIEW CHRISTIAN SCHOOL

Private School

County or State Road: CR 5

Burnsville, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: Private school with about 65 students in pre-kindergarten through 10<sup>th</sup> grade.
- The school site and access are on CR 5.
- There are no existing school crossings.
- There is low demand and opportunities for walking or biking to school.
- The Dakota County 2040 Transportation Plan identified a low priority pedestrian and bicycle gap on CR 5 between 150<sup>th</sup> Street and Klamath Trail/170<sup>th</sup> Street. The existing section has sidewalk/trail on the east side of the road only.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Southview Christian School.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

No specific recommendations were developed at this school based on the limited demand and opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.

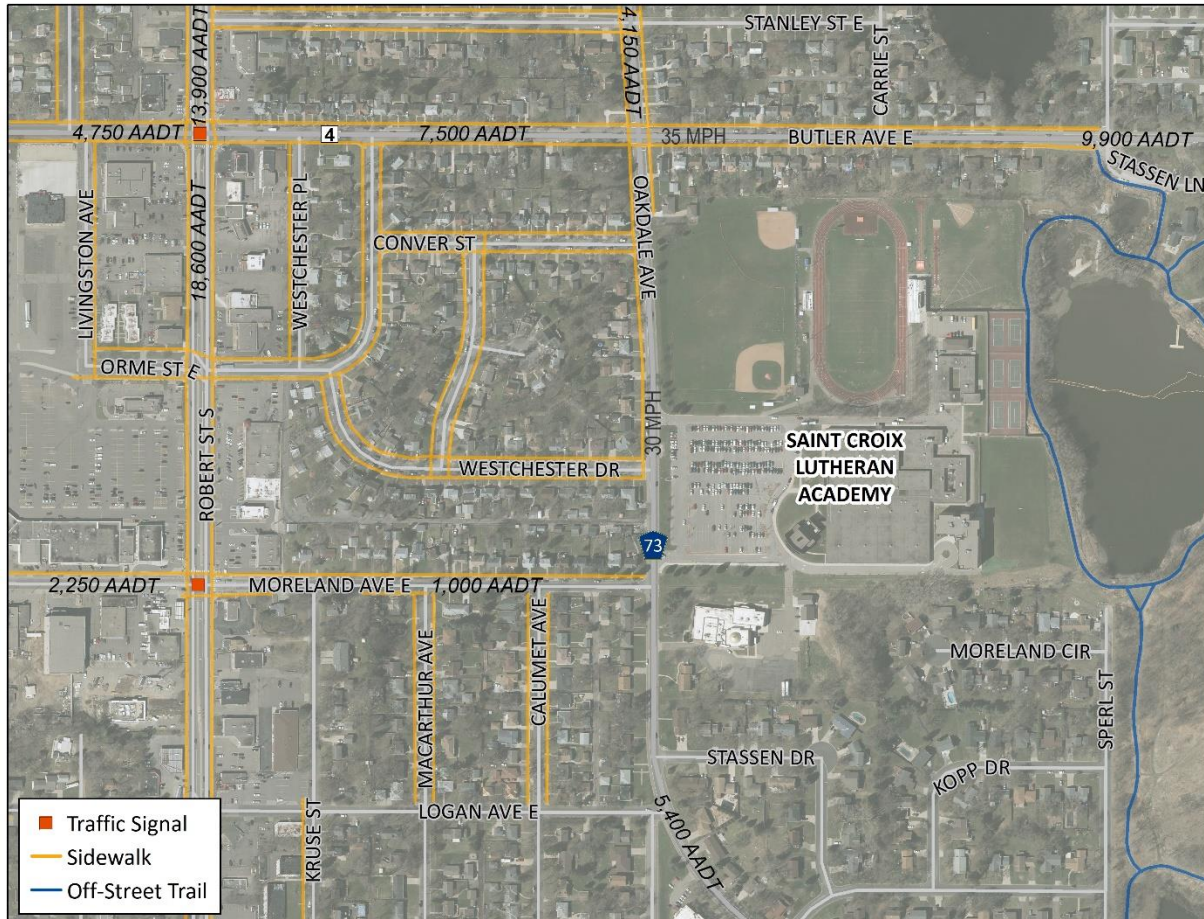


## ST. CROIX LUTHERAN ACADEMY

Private School

County or State Road: CR 73 (Oakdale Avenue)

West Saint Paul, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: Private school with about 480 students in grades 6 through 12.
- The school site and access are on CR 73 (Oakdale Avenue).
- About 150 students live on campus in dormitories and often walk to the commercial area on TH 3 (Robert Street). Student crossings on CR 73 (Oakdale Avenue) typically occur outside of school arrival and dismissal periods.
- There are no existing school crossings.
- The City of West St. Paul has received grant funding to construct trail on CR 73 (Oakdale Avenue) between CR 4 (Butler Avenue) and CR 8 (Wentworth Avenue). The trail would likely be a 2024 construction project.



## School Travel SAFETY ASSESSMENT

- The Dakota County 2040 Transportation Plan identified a high priority pedestrian and bicycle gap on CR 73 (Oakland Avenue) between CR 4 (Butler Avenue) and CR 6 (Thompson Avenue). The existing section has sidewalk on one side of the street or no facilities.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

##### *Parent/Caregiver Survey*

No survey responses were received for St. Croix Lutheran Academy.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

### Recommendations

- **Sidewalk and Trail Infrastructure:**
  - County and city construct trail on the east side of CR 73 (Oakdale Avenue) between CR 4 (Butler Avenue) and CR 8 (Wentworth Avenue). The trail along CR 73 (Oakdale Avenue) is a community need rather than a school need.
- **School Crossings:**
  - School develop a walking and biking route plan, including crossing activity outside the school day.
  - County construct a school crossing at CR 73 (Oakdale Avenue)/Moreland Avenue. The following crossing enhancements should be implemented:
    - High visibility (continental) crosswalk markings
    - Curb extensions to shorten the crossing and make pedestrians more visible
    - There is an existing street light at the intersection and the illumination levels should be confirmed as part of the design of the school crossing
- **Education:**
  - School should instruct students to only cross TH 3 (Robert Street) at a controlled intersection because it is a four-lane road.
- **School Considerations:**
  - School provide walking and biking safety education.



# School Travel SAFETY ASSESSMENT

## ST. JOHN THE BAPTIST CATHOLIC SCHOOL

Private School

County or State Road: CR 62 (Main Street)

Vermillion, MN



### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: Private school with about 100 students in pre-kindergarten through 6<sup>th</sup> grade.
- The school site and access are on CR 62 (Main Street).
- There is an existing school crossing on CR 62 (Main Street) in front of the school with an adult crossing guard. The crossing is used before/after school and sometimes during the school day.
- There is an existing school speed zone on CR 62 (Main Street) in front of the school.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for St. John the Baptist Catholic School.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

- **School Crossings:**
  - School develop school route plan for walking and biking, including crossing activities during the school day.
  - County implement crossing enhancements at the school crossing on CR 62 (Main Street) at St. John the Baptist Catholic School:
    - Install advance stop bars (based on the mid-block crossing)
    - Construct curb extensions or a median refuge to shorten the crossing and make pedestrians more visible
    - There is an existing street light near the crossing and the illumination levels should be confirmed as part of the design of the curb extensions or median refuge
- **Evaluate School Speed Zone:**
  - County evaluate the school speed zone on CR 62 (Main Street) for potential modifications including shortening the zone and revising the speed limit.
- **Enforcement:**
  - The effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.
- **School Considerations:**
  - School provide walking and biking safety education.

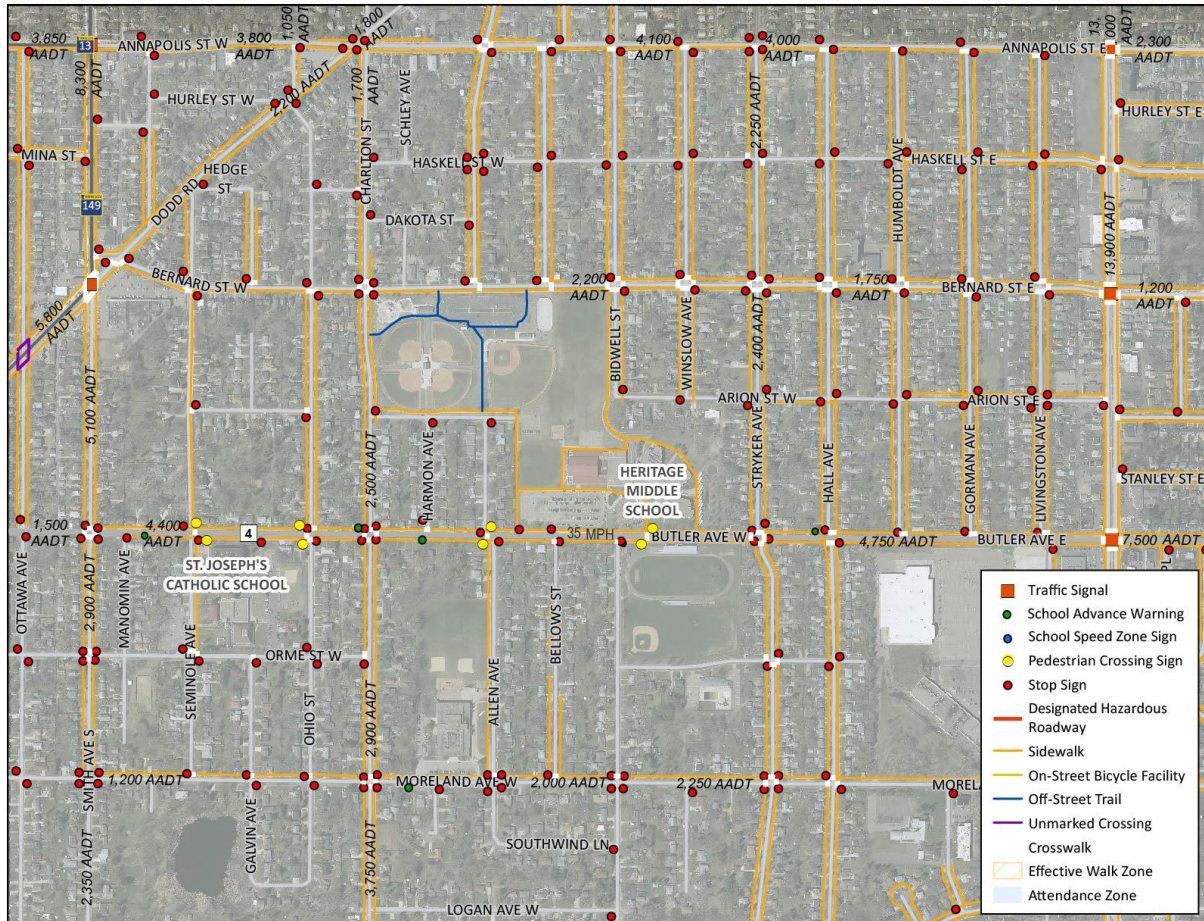


### ST. JOSEPH'S CATHOLIC SCHOOL

Private School

County or State Road: CR 4 (Butler Avenue)

West Saint Paul, MN



Note: This map includes additional data and details because these school sites were evaluated as sample schools.

### Background Information

- School Travel Safety Assessment Group: Low Speed
- Enrollment: Private school with about 335 students in kindergarten through 8<sup>th</sup> grade.
- The school site is next to CR 4 (Butler Avenue) and the school access is on CR 4 (Butler Avenue).
- The school walk zones, as established by ISD 197, are ¾ mile for grades K-4 and 1 mile for grades 5-8. The school district establishes the walk zone because ISD 197 provides transportation for students at St. Joseph's.
- There are existing school crossings on CR 4 (Butler Avenue) at:
  - Ohio Street
  - Seminole Avenue



- St. Joseph's has about six families that walk and bike to school.
- The City of West St. Paul has received grant funding to construct sidewalk on Bidwell Street between CR 4 (Butler Avenue) and Thompson Avenue. The sidewalk would likely be a 2024 construction project.
- The Dakota County 2040 Transportation Plan identified two pedestrian and bicycle gaps on CR 4 (Butler Avenue):
  - A medium priority gap between Smith Avenue and TH 3 (Robert Trail). The existing section has sidewalk on both sides of the road.
  - A high priority gap between CR 63 (Delaware Avenue) and Smith Avenue. The existing section has no sidewalk or trail.

## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 4 (Butler Avenue)
  - Traffic circulation/congestion issue: *Congestion during school arrival and dismissal*
  - Walking/biking routes you wish you could take: *No sidewalk on CR 4 (Butler Avenue) between Smith Avenue and CR 63 (Delaware Avenue)*
- Charlton Street
  - Walking/biking routes you currently take: *Desire for wider sidewalks to accommodate biking*
- TH 149 (Dodd Road)
  - Walking/biking routes you wish you could take: *Desire for sidewalk/trail along TH 149 (Dodd Road) (3 comments)*

#### *Parent/Caregiver Survey*

Three survey responses were received for St. Joseph's Catholic School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

The following feedback was provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- School Crossings
  - One comment asked for school crossings on CR 63 (Delaware Avenue) which is within the walk area
  - Two comments asked for sidewalk on CR 63 (Delaware Avenue)
- Evaluation of school speed zone on CR 4 (Butler Avenue)
  - Two comments agreed with the recommendation





## School Travel SAFETY ASSESSMENT

- Enforcement if a school speed zone is implemented on CR 4 (Butler Avenue)
  - Two comments agreed with the recommendation
- Development of a school route plan or Safe Routes to School Plan
  - Two comments agreed with the recommendation
- Walking and biking education
  - One comment requested walking and biking education for St. Joseph's students
- Sidewalk on Bidwell Street (city improvement)
  - Three comments agreed with the improvement

### Recommendations

- **School Crossings:**
  - CR 4 (Butler Avenue)/Seminole Avenue
    - St. Joseph's School develop a walking and biking route plan that supports crossings of CR 4 (Butler Avenue) being focused at Seminole Avenue.
    - St. Joseph's provide adult crossing guards at the intersection based on the age of the students.
    - County construct curb extensions at the school crossing to shorten the crossing and make pedestrians more visible.
    - There is an existing street light at the intersection and the illumination levels should be confirmed as part of the design of the curb extensions
  - County remove school crossing at CR 4 (Butler Avenue)/Ohio Street and focus crossings for St. Joseph's at Seminole Avenue.



*Existing school crossing on CR 4 (Butler Avenue) at Seminole Avenue*



- **Evaluate School Speed Zone:**
  - County conduct a speed study to determine if a school speed zone is needed on CR 4 (Butler Avenue). An evaluation is recommended because of the school crossing, the school transportation activity (pedestrian, bicycle, and vehicle) that is focused on CR 4 (Butler Avenue), and pedestrians/bicyclists that travel along the county road.
- **Enforcement:**
  - If a school speed zone is established, the effectiveness of the school speed zone should be enhanced by periodic enforcement efforts.
- **School Considerations:**
  - School provide walking and biking safety education.



## TRINITY LONE OAK LUTHERAN

Private School

County or State Road: TH 55

Eagan, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: Private school with about 150 students in pre-kindergarten through 8<sup>th</sup> grade.
- The school site and access are on TH 55.
- There are no existing school crossings.
- There is low demand and opportunities for walking or biking to school.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

No survey responses were received for Trinity Lone Oak Lutheran School.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

No specific recommendations were developed at this school based on the limited demand and opportunities for students to walk or bike to school. Students could still benefit from walking and biking safety education.

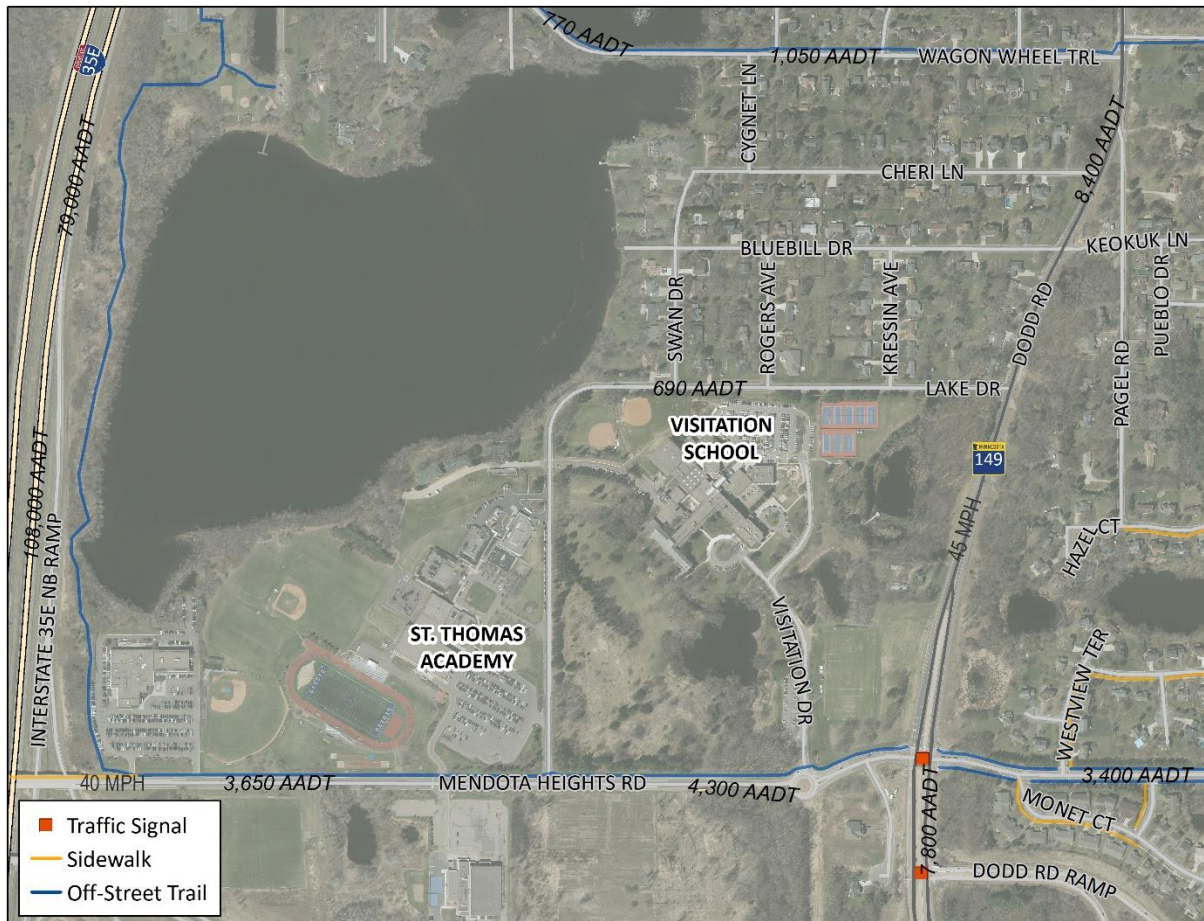


## VISITATION SCHOOL

Private School

County or State Road: TH 149 (Dodd Road)

Mendota Heights, MN



### Background Information

- School Travel Safety Assessment Group: High Speed, 2-3 Lanes
- Enrollment: Private school with about 500 students in pre-kindergarten through 12<sup>th</sup> grade.
- The school site is next to TH 149 (Dodd Road), and the school access is on Mendota Heights Road.
- There are no existing school crossings.
- There is an existing school speed zone on Mendota Heights Road at Saint Thomas Academy.
- The campus is fenced along TH 149 (Dodd Road), Lake Drive, and Mendota Heights Road.
- There is limited demand for walking or biking to school due to the large attendance area.



## Public Input

### VIRTUAL ENGAGEMENT #1

#### *Interactive Map*

No feedback was provided on the interactive map as part of the first virtual engagement in summer 2020.

#### *Parent/Caregiver Survey*

One survey response was received for Visitation School. No comments were provided.

### VIRTUAL ENGAGEMENT #2

#### *Interactive Map*

No feedback was provided on the interactive map as part of the second virtual engagement in winter 2020.

## Recommendations

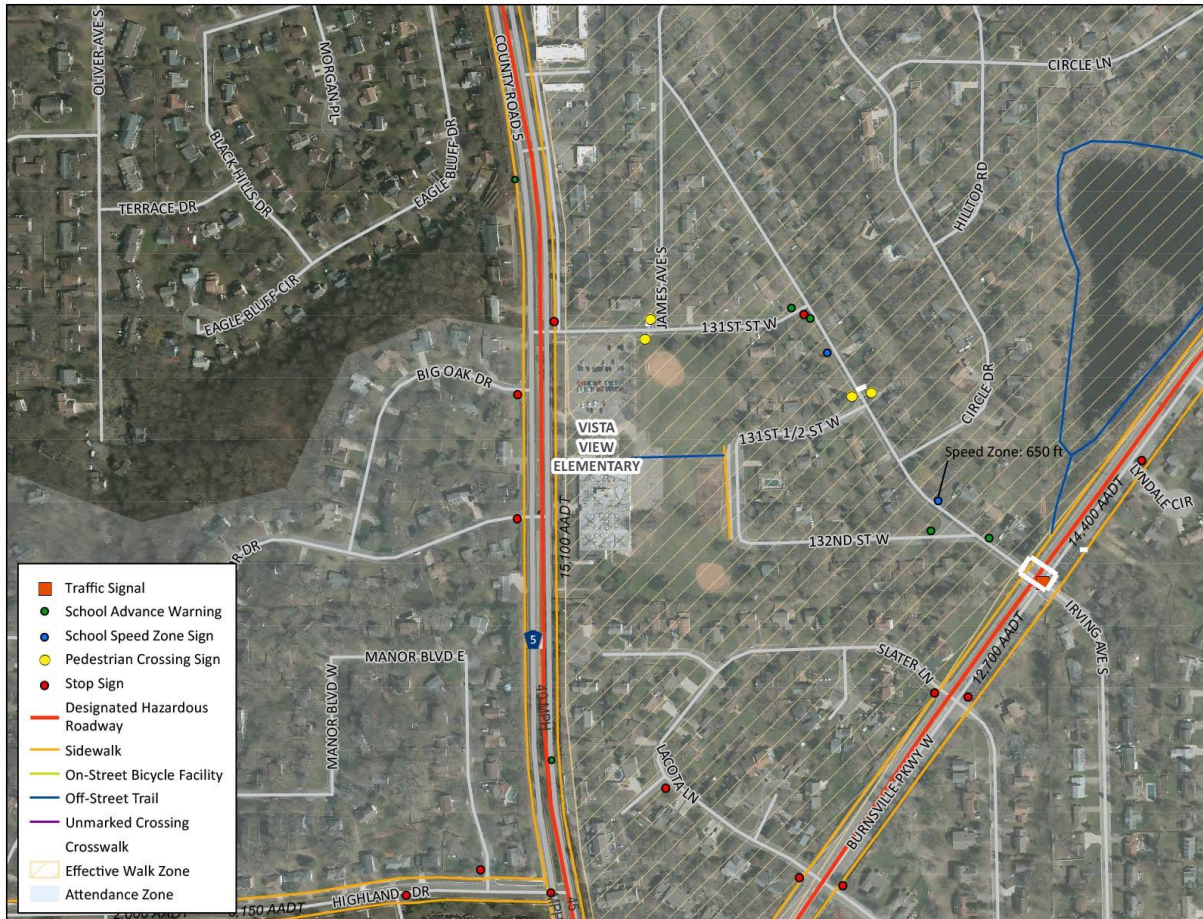
The opportunities for walking and biking to this school are limited based on the enrollment that includes students throughout the Twin Cities area.

- **City Considerations:**
  - City consider a request to MnDOT to update the left-turn indications at the traffic signal at TH 149 (Dodd Rd)/Mendota Heights Rd to include flashing yellow arrow (FYA) left-turn indications. The FYA left-turn operation could reduce delays and queuing during school drop-off and pick-up.



### VISTA VIEW ELEMENTARY

Burnsville-Eagan-Savage Public Schools, ISD 191  
County or State Road: CR 5  
Burnsville, MN



Note: This map includes additional data and details because this school site was evaluated as a sample school.

### Background Information

- School Travel Safety Assessment Group: High Speed, 4+ Lanes
- Enrollment: about 360 students in pre-kindergarten through 5<sup>th</sup> grade.
- The school site is next to CR 5, and the school accesses are on CR 5 and 131<sup>st</sup> Street.
- There are existing school crossings at 131<sup>st</sup> Street/James Avenue and Irving Avenue/131 ½ Street.
- There is an existing school speed zone on Irving Avenue.



## School Travel SAFETY ASSESSMENT

- The Dakota County 2040 Transportation Plan identified a medium priority pedestrian and bicycle gap on CR 5 between TH 13 and CR 42. The existing section has sidewalk on both sides of the road.

### Public Input

#### VIRTUAL ENGAGEMENT #1

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the first virtual engagement in summer 2020. The pin type and any comments provided are summarized.

- CR 5/131<sup>st</sup> Street
  - Traffic circulation/congestion issue: *Safety concerns turning from CR 5 to 131<sup>st</sup> Street*
- CR 5/Manor Drive
  - Walking/biking route you wish you could take: *Desire for school speed zone on CR 5 and pedestrian hybrid beacon at CR 5/Manor Drive*
- 131<sup>st</sup> Street
  - Walking/biking route you wish you could take: *Desire for sidewalk on 131<sup>st</sup> Street*

##### *Parent/Caregiver Survey*

Two survey responses were received for Vista View Elementary School. No comments were provided.

#### VIRTUAL ENGAGEMENT #2

##### *Interactive Map*

The following feedback was provided on the interactive map as part of the second virtual engagement in winter 2020. The draft recommendation and the comments provided are summarized.

- Development of a school route plan or Safe Routes to School Plan and providing walking/biking education
  - Two comments agreed with the recommendation
- Sidewalk on 131<sup>st</sup> Street and Irving Avenue (city improvements)
  - Two comments agreed with this improvement

##### *Feedback Form*

A comment was received with safety concerns about the need for sidewalks and street lighting on the streets near Vista View Elementary.

### Recommendations

- **Education:**
  - School and District should instruct students to only cross CR 5 with an adult because there are not crossing guards on CR 5.





- **School and District Considerations:**
  - School and District develop a school route plan for walking and biking or a Safe Routes to School Plan.
  - School and District provide walking and biking safety education.
- **City Considerations:**
  - City consider sidewalk construction on 131<sup>st</sup> Street and Irving Avenue near the school if there is a project opportunity or funding becomes available.

