

Dakota County
Safe Routes to School

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Safe Routes to School Comprehensive Plan

Rosemount Middle School

**City of Rosemount
Dakota County, MN**

June 2010

Prepared by:



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and Associates, Inc.

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Project Background

The Statewide Health Improvement Program (SHIP) aims to help Minnesotans live longer, healthier lives by reducing the burden of chronic disease. The Dakota County Public Health Department received SHIP funding to work with community partners to develop and implement programs to improve nutrition, increase physical activity, and reduce tobacco use in schools, workplaces, community settings, and healthcare sites. As part of this effort, comprehensive Safe Routes to School (SRTS) plans have been developed for 10 schools in Dakota County that seek to increase walking and biking to school through the following means:

- **Education** – Teaching children to walk and bike safely.
- **Encouragement** – Developing programs that get children excited about walking or biking to school, such as walk/bike incentive programs or Walk to School Day. May also include methods that help parents and guardians feel comfortable letting their child walk or bike, such as walking school buses or adult crossing guards.
- **Enforcement** – Having law enforcement support, such as speed zone enforcement or increased patrols, along the designated routes to school.
- **Engineering** – Identifying infrastructure barriers to walking and biking, such as sidewalk/trail gaps, hazardous crossings, or the need for secure bicycle parking.
- **Evaluation** – Measuring the effectiveness of the various components of the SRTS project.

The following sections describe the development of a Safe Routes to School Plan for Rosemount Middle School in the City of Rosemount, Dakota County, Minnesota.

Existing Conditions

Rosemount Middle School is part of Independent School District 196 serving the Rosemount, Apple Valley, and Eagan communities in the Twin Cities suburbs. Rosemount Middle School and Rosemount Elementary School are located next to each other on 143rd Street, just west of TH 3 (Robert Trail). Rosemount Middle School opened in 1918 and was most recently expanded and upgraded in 2006. The elementary and middle schools are part of the same campus with Rosemount High School, which is located to the north. The area surrounding the schools is primarily residential.

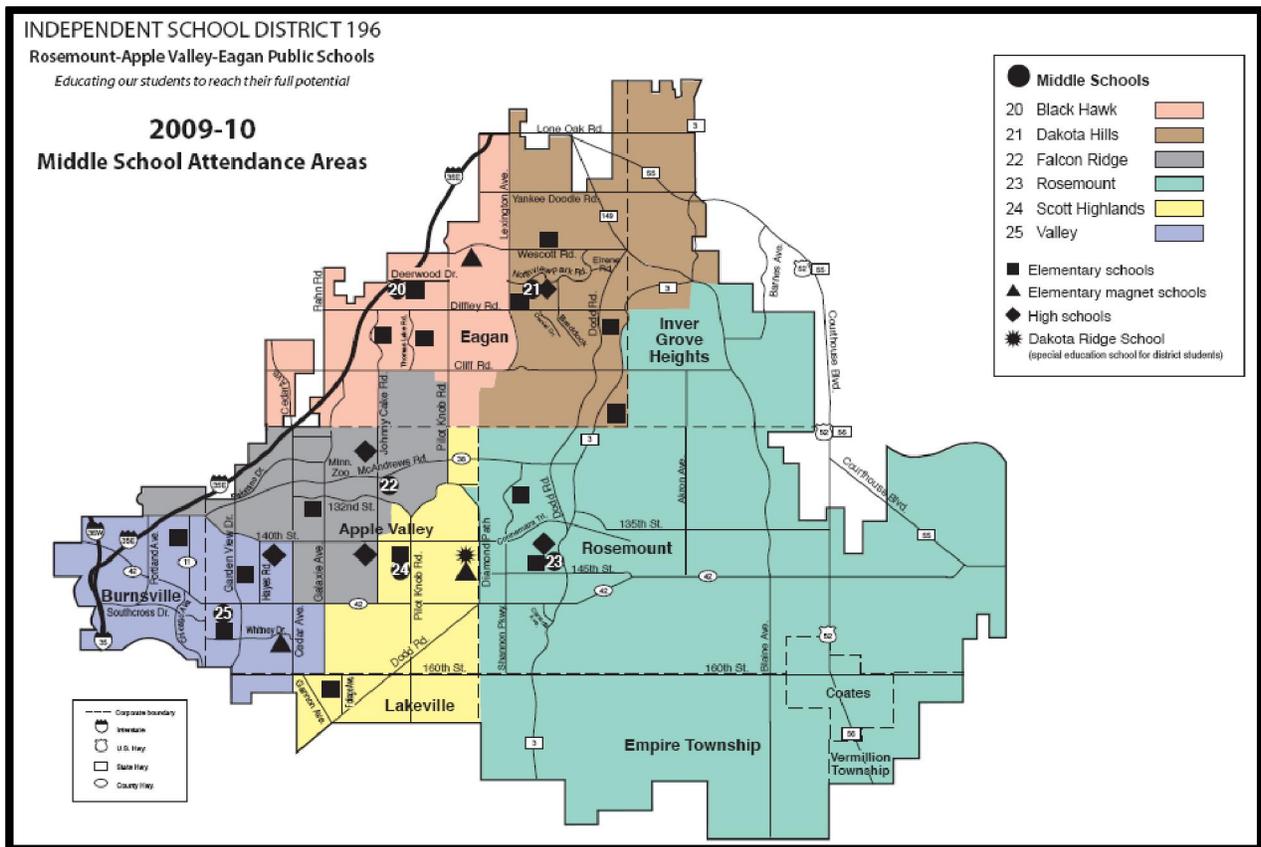
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Student Data

In the 2009-2010 school year, there are approximately 1,175 students in grades 6 through 8 at Rosemount Middle School. The school day runs from 8 am to 3 pm, but many students participate in before- and after-school activities that start as early as 7 am and continue as late as 5 pm. The middle school boundary map for District 196 shows that the attendance area for Rosemount Middle School includes Inver Grove Heights to the north and the Empire Township to the south. The elementary schools that feed Rosemount Middle School are Diamond Path Elementary–School of International Studies (part), Red Pine Elementary School (part), Shannon Park Elementary School, and Rosemount Elementary School.



Source: www.district196.org

Rosemount Middle School has the largest attendance area of any of the middle schools in District 196, but the designated walk area for the school is approximately 1 mile. In addition, the school district designates hazardous roadways beyond which students are bused even if they are within the 1-mile

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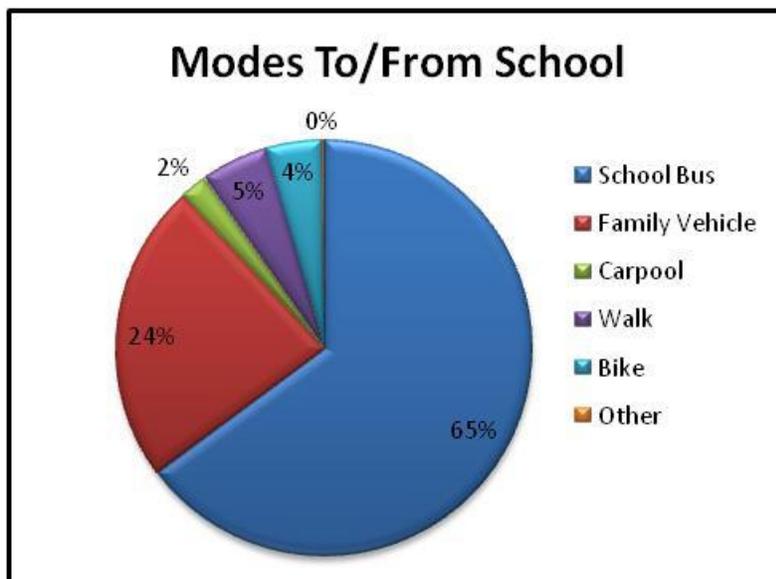
walk area. At Rosemount Middle School, TH 3 (Robert Trail) and County Road 42 (150th Street) are designated as hazardous roadways. This means that students living across TH 3 (Robert Trail) from the middle school are provided bus transportation, however, there are very few homes immediately east of TH 3 (Robert Trail). The walk area for Rosemount Middle School is shown on the map on page 13.

Safe Routes to School Activities

Currently, there isn't a targeted Safe Routes to School program at the school, but there are an estimated 100 students that regularly walk or bike to school.

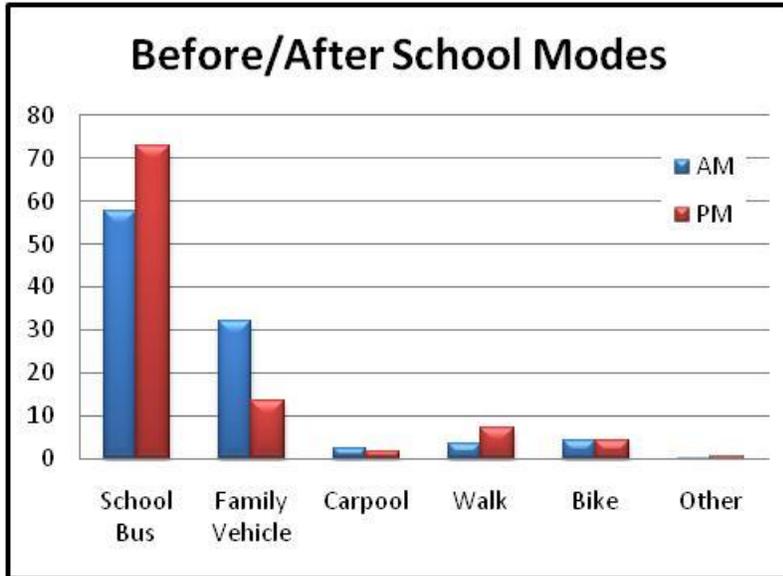
In 2009, the City of Rosemount was awarded a \$35,000 federal Safe Routes to School grant to implement encouragement, education and evaluation activities at Rosemount Elementary, Rosemount Middle, and Shannon Park Elementary. The City is currently working to determine how to best use the grant funding.

In-classroom tallies of students' arrival and departure modes were conducted at Rosemount Middle School in April 2010. As shown in the chart below, an average of 5 percent of students currently walk to school and an average of 4 percent of students currently bike to school. However, the most predominant mode to and from school is by school bus. The tallies also showed that almost double the number of students walked home from school in the afternoon, compared to the morning, and significantly more students ride the bus in the afternoon.

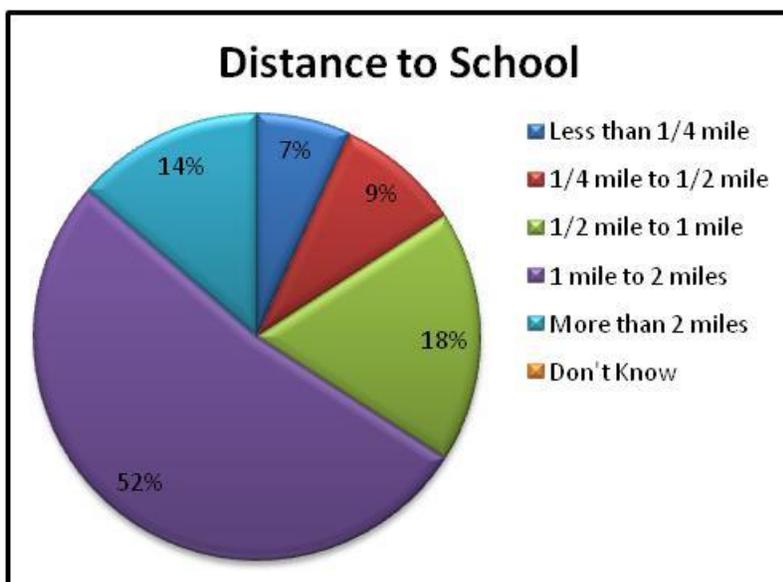


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A parent survey of concerns and attitudes related to walking and biking was conducted at Rosemount Elementary and Middle Schools in April 2010, with 44 responses. Most respondents live between 1 and 2 miles of the schools, and the amount of traffic and intersection safety were the top factors that influenced the decision to walk or bike. The survey also showed that approximately 20 percent of the respondents live east of TH 3 (Robert Trail) and another 35 percent live south of CSAH 42 (150th Street). The charts on the following pages show some of the other key results from the survey.

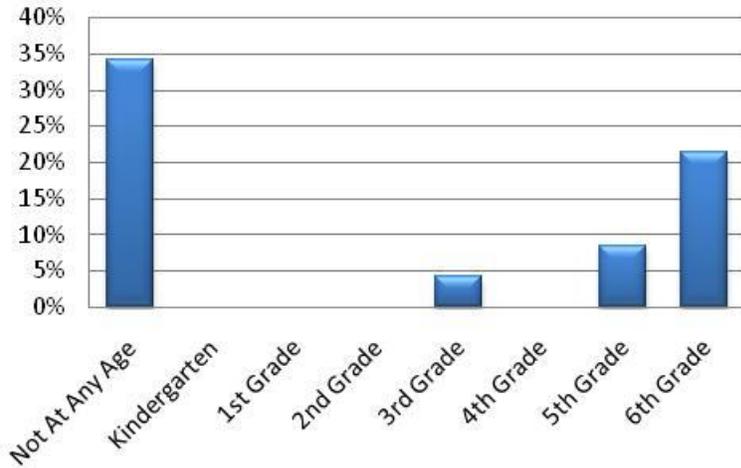


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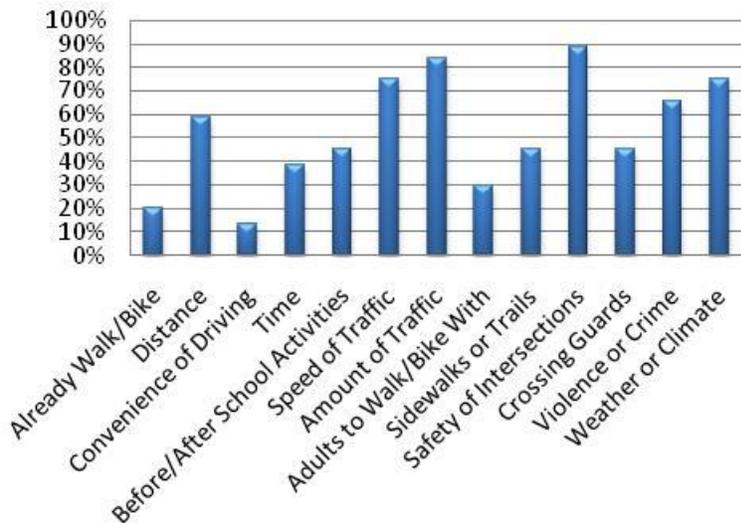
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Age Students Can Walk/Bike to School Without An Adult



Factors Affecting Decision to Walk/Bike



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Infrastructure

The primary access to the Rosemount Elementary and Rosemount Middle Schools site is on 143rd Street via TH 3 (Robert Trail). A turn lane on southbound TH 3 (Robert Trail) at 143rd Street is proposed to be added in 2010. The parking lot between the elementary and middle schools is shared by both schools and used for staff as well as parents and visitors. The elementary and middle schools have different hours, so there are not conflicts between the two.

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Rosemount Elementary School (left) and Rosemount Middle School (center) share a parking lot for staff and parent parking, as well as bus loading/unloading.

The roadways surrounding the school generally have a good system of sidewalks and trails, but don't necessarily have good connections within the school district complex. The primary pedestrian routes to and from the middle school are on 145th Street, TH 3 (Robert Trail), and Cameo Avenue. While 145th Street and Cameo Avenue have sidewalk on one or both sides of the street, 143rd Street, Upper 143rd Street, and portions of 144th street do not have sidewalk on either side of the street and there is no sidewalk on the north or west sides of the school. In addition, there are not direct sidewalk or trail connections from the middle school to the high school site or the neighborhoods northwest of the high school.

School speed zones were recently established by the Rosemount City Council on 145th Street, Cameo Avenue, and Canada Avenue. The zone lowers the speed limit from 30 miles mph to 20 mph when children are present.

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Looking towards Rosemount High School from the sidewalk in front of Rosemount Middle School. There is not a direct connection from the middle school to the high school, so students take the shortest route through the field.

Bike parking at Rosemount Middle School is in a very visible location to the side of one of the main entrances to the school. Currently, the number of bike racks is adequate to accommodate the number of students that bike to school.



Bike racks at Rosemount Middle School.

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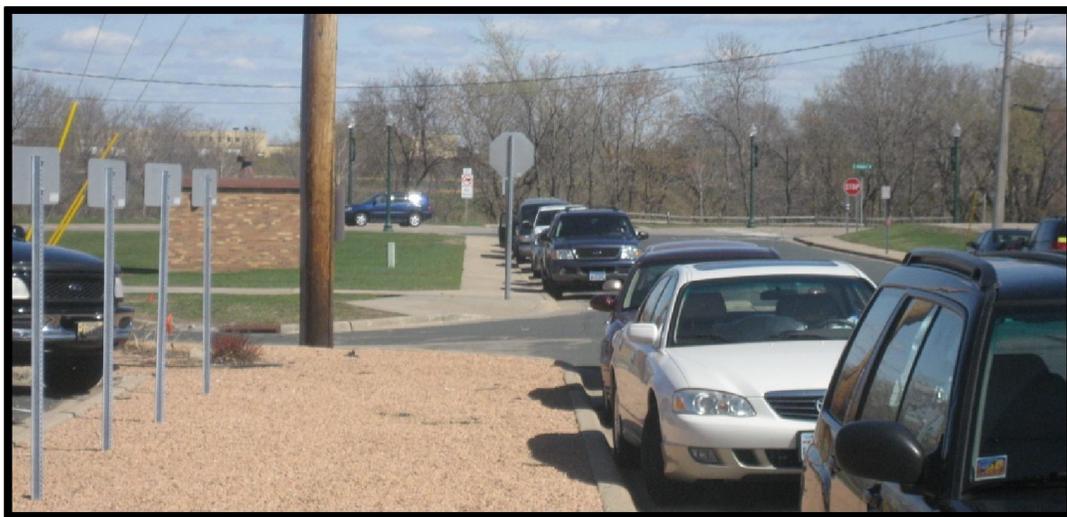


A review of the crash history for the past five years (2004-2008) showed that there have been 2 crashes at the 143rd Street/Cameo Avenue intersection and 1 crash on the elementary/middle school site, but no other crashes on Upper 143rd Street, 143rd Street, or 144th Street, except at Chili Avenue. However, there have been 2 pedestrian crashes at the TH 3 (Robert Trail)/County Road 42 (150th Street) intersection, 4 bike crashes at the Chippendale Avenue/County Road 42 (150th Street) intersection, and 2 bike crashes at the Shannon Parkway/County Road 42 (150th Street) intersection. Most of the crashes occurred in the summer before 8 am or after 5 pm.

Site Evaluation

A site evaluation was completed at Rosemount Middle School on April 8, 2010 that included walking around the site and observing the dismissal process on a typical day. At the middle school, all buses enter and exit the site using on 143rd Street. With over 1,000 students at the middle school, the number of buses is greater than can be accommodated along the curb space on the site. As a result, the buses queue and load in two rows in the parking lot, meaning no other traffic can enter or exit while all the buses are there.

Parents are asked to wait to pick up students until after 3:10 pm, when the buses have left the site, but many were observed on 143rd Street, Cameo Avenue, and even in the school parking lot when school was dismissed.



Queue of parent vehicles on 143rd Street waiting for the middle school dismissal.

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Buses load in two rows in order to fit all buses in the available parking lots (top photo). Students and parents were observed walking between buses through the parking lots.

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View of the school crossing at 143rd Street/Cameo Avenue. Many students walk on Cameo Avenue to and from school or go the library at Cameo Avenue/144th Street after school. Compliance with the all-way stop control at this intersection was identified as a concern.

Existing Issues and Challenges

In addition to the data collection and site evaluation completed as part of this project, a Safe Routes Working Group was established for Rosemount Elementary and Middle Schools that included both school principals, the City of Rosemount, and a parent representative. The role of this group was to identify and discuss barriers to walking and biking to school as well as potential ways to overcome the barriers.

The existing challenges to walking and biking to Rosemount Middle School are summarized in the following bullets, as well as the map following this section:

- Volume of bus and parent traffic on the site, especially before school.
- Congestion in the parking lot and adjacent street.
- High school students on the middle school site – vehicle speeds and driving behavior.
- Existing parking lots are too small to accommodate the number of buses needed.
- Vehicles queue on Cameo Avenue to 145th Street and block crosswalks.
- Conflicts between pedestrians/bikes and high school traffic at the Chili Avenue/Chippendale Avenue/145th Street intersection.

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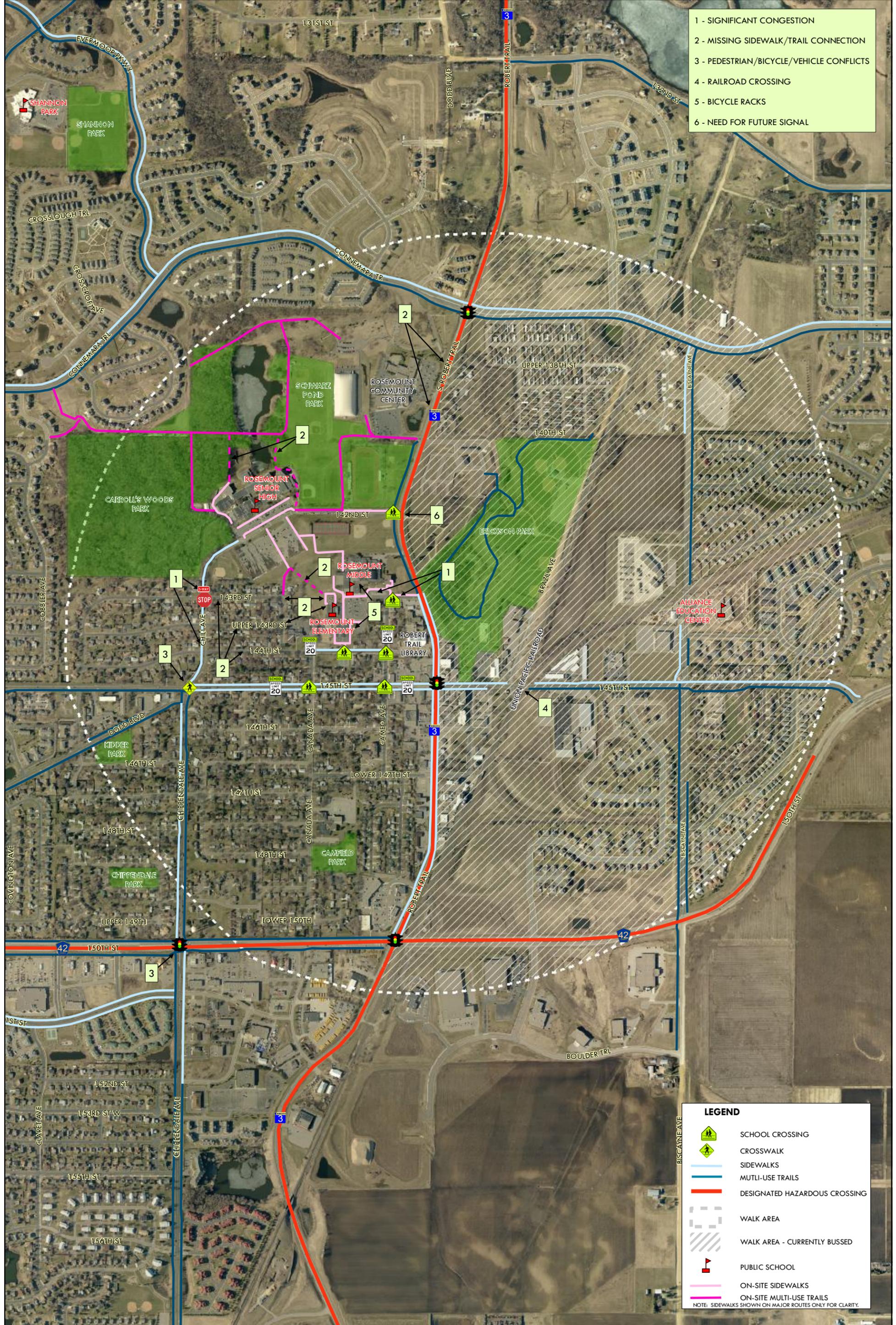
- Students that live south of County Road 42 (150th Street) bike even though County Road 42 (150th Street) is a hazardous crossing.
- Crossing the railroad tracks, even though they are gated, is perceived as being more dangerous than crossing TH 3 (Robert Trail).
- Biking along TH 3 (Robert Trail) is a safety concern.
- No sidewalk or trail connection between the elementary/middle schools and 143rd Street or Upper 143rd Street.
- No sidewalk on 143rd Street, Upper 143rd Street, or portions of 144th Street. Students that live west of the school walk in the street.
- Conflict between buses loading at the curb and students biking on the sidewalk – need clear zone on the sidewalk.



Potential conflicts existing between students biking/walking on the site and bus doors and mirrors that extend over the sidewalk.

- District budgets may increase walk radius in the future – opportunity for more walking and biking, but could also mean even more parents driving.

- 1 - SIGNIFICANT CONGESTION
- 2 - MISSING SIDEWALK/TRAIL CONNECTION
- 3 - PEDESTRIAN/BICYCLE/VEHICLE CONFLICTS
- 4 - RAILROAD CROSSING
- 5 - BICYCLE RACKS
- 6 - NEED FOR FUTURE SIGNAL



LEGEND

- SCHOOL CROSSING
- CROSSWALK
- SIDEWALKS
- MULTI-USE TRAILS
- DESIGNATED HAZARDOUS CROSSING
- WALK AREA
- WALK AREA - CURRENTLY BUSSED
- PUBLIC SCHOOL
- ON-SITE SIDEWALKS
- ON-SITE MULTI-USE TRAILS

NOTE: SIDEWALKS SHOWN ON MAJOR ROUTES ONLY FOR CLARITY.

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Recommendations

At the same time the Safe Routes Comprehensive Plan was being completed for Rosemount Middle School, the City of Rosemount was also in the process of developing a Pedestrian and Bicycle Master Plan for the city. The following sections discuss the findings and recommendations of the Master Plan, as well as the specific short- and long-term Safe Routes recommendations for the middle school.

Rosemount Pedestrian and Bicycle Master Plan

The planning included a walking/biking needs assessment, stakeholder meetings, and a public open house. A pedestrian-bicycle questionnaire was completed by 41 community members as part of the needs assessment, with the following key findings:

- Downtown Rosemount was identified as the number one destination for convenient walking/biking access in the city (95 percent of respondents), followed by Rosemount Middle and High School (80 percent), Shannon Park Elementary School and the Rosemount Community Center (each 72 percent), and Rosemount Elementary School (69 percent).
- Vehicle traffic volumes and speeds were the biggest deterrents to walking and biking (44 percent of respondents), followed by a lack of on-street bike lanes (42 percent).
- Intersection and street crossings were identified as the most significant improvement that could be made for both biking and walking conditions in the city (54 percent and 44 percent of respondents, respectively).

As of the time that this plan was completed, a draft Pedestrian and Bicycle Master Plan had been developed and was under review. The draft plan identifies the downtown area and Rosemount elementary/middle/high school campus as a focal point for pedestrian and bicycle activity because it provides convenient and safe routes to and through Rosemount's central core of schools, neighborhoods, and businesses. Recognizing the importance of this area, the draft plan includes a number of recommendations that are near the school campus or would directly benefit students walking or biking to school:

- Create Trail and Bikeway Connections in the School and Park Campus
 - Build trail on east side of Chili Avenue from 145th Street to Rosemount High School
 - Create pedestrian-bike plaza in front of Rosemount High School and divert traffic to the parking lot drives

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- Connect existing trails in Schwarz Pond Park and school campus
- Improve pedestrian and bike access to the Community Center
- Build Underpasses at TH 3 and CSAH 42
 - Build TH 3 underpass and rest area (between Connemara Trail and 142nd Street)
 - Engage Dakota County in a discussion about acquiring land for a grade separated crossing on CSAH 42
- Install Wayfinding Signage in a Pilot Area in the Downtown and School Zone
- Create Trail Heads and Rest Areas
 - Create trail heads with bike parking, benches and water at Central Park and Schwarz Pond Park
 - Create rest areas with bike parking and benches and water on the Rosemount Elementary/Middle/High School campus and on Shannon Parkway north of 133rd Court W near Shannon Park Elementary

Rosemount Middle School Safe Routes Recommendations

The following recommendations have been developed specifically for Rosemount Middle School to address the identified challenges to walking and biking. The short-term recommendations are actions that could be implemented prior to or during the 2010-2011 school year, while the long-term recommendations may require policy changes, additional discussion and coordination, or significant funding sources. In addition to the recommendations, the group that should take the lead in implementing the recommendations has also been identified. Many of the Safe Routes recommendations on the middle school site are also interrelated to the Rosemount Pedestrian and Bicycle Master Plan and close coordination with the City of Rosemount will be necessary as both plans move forward into implementation.

Short-Term Recommendations

The short-term recommendations in this section primarily consist of low-cost improvements that can be implemented in six months, although some are depending on funding availability. The recommendations are generally prioritized in terms of actions that are easiest or most necessary to complete first. The infrastructure improvements are also summarized on the map included on page 20.

1. Establish a permanent Safe Routes committee at Rosemount Elementary and Middle Schools to provide on-going support and organization for Safe Routes activities, including regular Walk to School days. Plan yearly activities for International Walk to

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School Month in October and National Bike Month in May. Implementation lead – Rosemount Elementary/Middle Schools.

2. Provide incentives to students for walking and biking, such as water bottles, gift cards, or getting out of class early. Implementation lead – Rosemount Middle School.
3. Consider a remote pick-up/drop-off location on 144th Street to keep parent vehicles away from the site and reduce the number of conflicts during arrival and dismissal. Implementation lead – Rosemount Middle School.
4. Create information for parents and students that communicates the benefits of walking or biking to school, as well as teaching them how to walk and bike safely. Implementation lead – Rosemount Middle School, with assistance from Dakota County Public Health.
5. Increase the visibility of school crossings using mobile in-street crossing signs at the crosswalks. Implementation lead – Rosemount Middle School.¹



Example of an in-street sign at a school crossing.

¹ Rosemount Middle School has already taken steps to implement this recommendation by applying for a \$1,000 Safe Routes mini-grant from Dakota County to mail safety information to parents and purchase mobile in-street school crossing signs for crosswalks.

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6. Consolidate all crossings of Chili Avenue between the high school and 145th Street to one location. If a crossing north of 145th Street is needed, the location should have a crosswalk and be signed as a school crossing. Implementation lead – City of Rosemount with assistance from Rosemount Elementary and Rosemount Middle Schools.
7. Improve delineation between buses and bikes on the sidewalk around the parking lot using enhanced striping, mobile signs, or flexible tubular delineators. Implementation lead – Rosemount Middle/Elementary Schools.



Example of a flexible post delineator.

8. Start a weekly or monthly Walk to School Day with incentives for students that walk and bike, such as water bottles, gift cards, or getting out of class early. Implementation lead – Rosemount Middle School.
9. Hold regular (e.g., quarterly) coordination meetings with the City of Rosemount, District 196, Rosemount Elementary School, and Rosemount High School regarding walking and biking activities, funding opportunities, and planning for infrastructure improvements. Implementation lead – City of Rosemount, Rosemount Elementary, Middle, and High Schools, and District 196.

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Long-Term Recommendations

The long-term recommendations included in this section primarily consist of higher cost improvements or actions that would require a significant policy change, either of which would be expected to take longer than six months to occur. These recommendations are generally prioritized in order of importance, however funding availability may mean that the highest priority recommendations are not the first to be implemented. The infrastructure recommendations are also summarized on the map included on page 20.

1. Pursue recognition for Rosemount as a Bicycle Friendly Community through the League of American Bicyclists. Implementation lead – City of Rosemount, with support from Dakota County and District 196.
2. Enact a Safe Routes to School policy to guide future walking/biking programs and projects. Implementation lead – District 196, City of Rosemount, and Dakota County.
3. Designate a Safe Routes coordinator at the district level and each of the individual elementary and middle schools in the district. The district-level coordinator would share information and coordinate Safe Routes activities and best practices among all the District 196 schools. Implementation lead – District 196.
4. Develop a Safe Routes website for Rosemount Middle School that provides walking/biking route information as well as other information, such as the volunteer schedule for adult crossing guards. Implementation lead – Rosemount Middle.
5. Install additional bike racks when the capacity of the existing racks is reached. Implementation lead – Rosemount Middle.
6. Construct sidewalk or trail to connect the elementary/middle schools to 143rd Street or Upper 143rd Street. The connection should be the same location as the designated crossing on Chili Avenue. Implementation lead – District 196.
7. Construct sidewalk on 143rd Street or Upper 143rd Street between the Elementary/Middle Schools and Chili Avenue. The connection should be the same location as the designated crossing on Chili Avenue. Implementation lead – City of Rosemount.

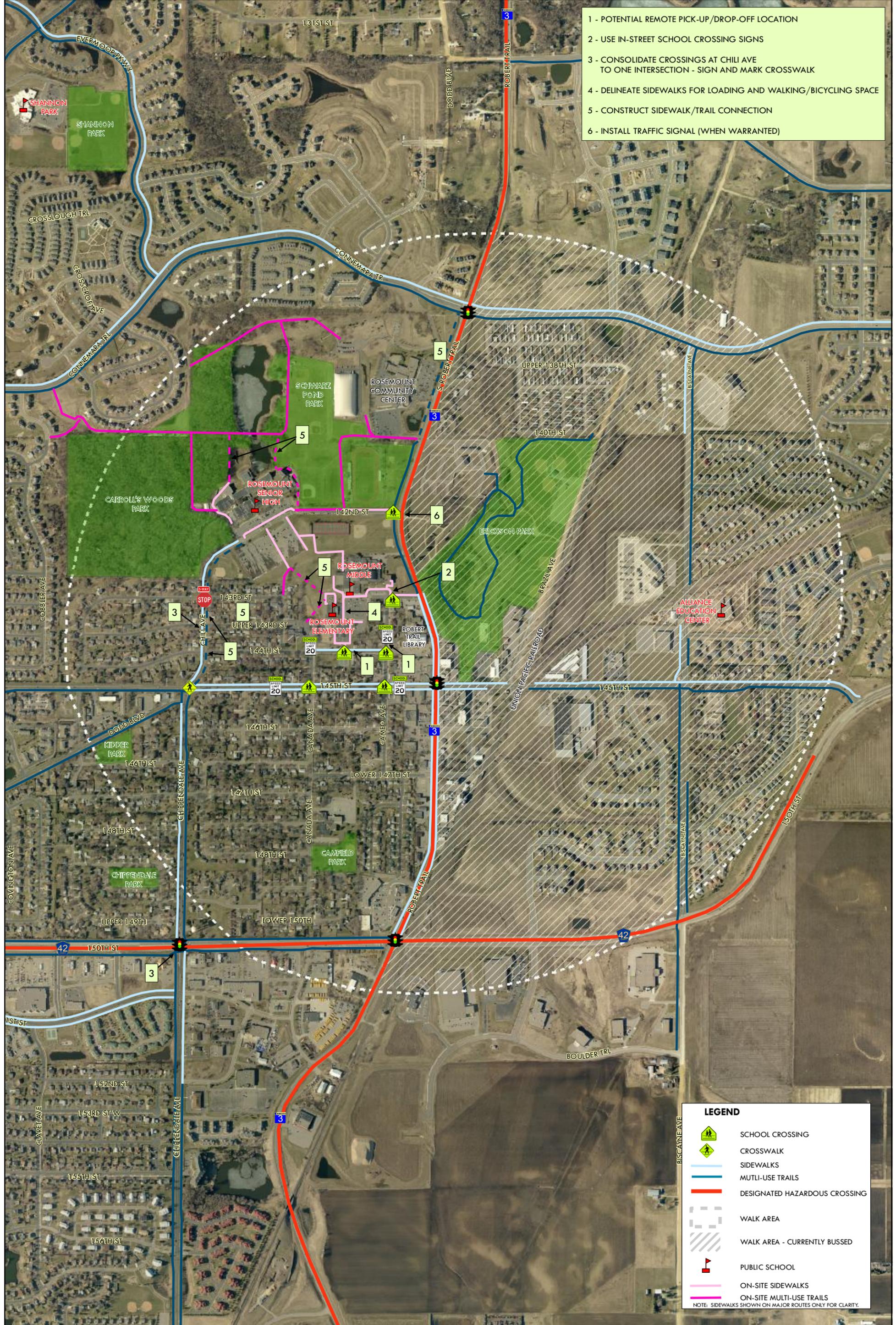
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8. Construct paved multi-use paths to connect the existing trails in Schwarz Pond Park to the high school/middle school/elementary school campus. Implementation lead – District 196.
9. Construct approximately 1,500 feet of trail on the west side of TH 3 (Robert Trail) between existing trail endpoints at Connemara Trail and 140th Circle. Implementation lead – City of Rosemount.
10. Construct trail on the east side of Chili Avenue between 145th Street and Rosemount High School. Implementation lead – City of Rosemount.
11. Install pedestrian/bicycle wayfinding signing through the school district campus to provide better connectivity to the rest of the community and sidewalk/trail network. Implementation lead – City of Rosemount.
12. Continue to monitor the need for a traffic signal at the TH 3 (Robert Trail)/142nd Street intersection. Implementation lead –City of Rosemount.
13. Continue to monitor safety and capacity on Chili Avenue and at the Chili Avenue/Chippendale Avenue/145th Street intersection. Implementation lead – City of Rosemount.
14. Consider adding walking and bicycling curriculum to physical education classes and a bicycle repair shop as an after school club. Implementation lead – Rosemount Middle School/District 196.
15. Establish a Rosemount Middle School Bicycle club in partnership and coordination with the Rosemount Cycling Club – Rosemount Middle School.

- 1 - POTENTIAL REMOTE PICK-UP/DROP-OFF LOCATION
- 2 - USE IN-STREET SCHOOL CROSSING SIGNS
- 3 - CONSOLIDATE CROSSINGS AT CHILI AVE TO ONE INTERSECTION - SIGN AND MARK CROSSWALK
- 4 - DELINEATE SIDEWALKS FOR LOADING AND WALKING/BICYCLING SPACE
- 5 - CONSTRUCT SIDEWALK/TRAIL CONNECTION
- 6 - INSTALL TRAFFIC SIGNAL (WHEN WARRANTED)



LEGEND

- SCHOOL CROSSING
- CROSSWALK
- SIDEWALKS
- MULTI-USE TRAILS
- DESIGNATED HAZARDOUS CROSSING
- WALK AREA
- WALK AREA - CURRENTLY BUSSED
- PUBLIC SCHOOL
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Funding and Implementation

Funding for the various recommended projects may come from a variety of sources depending on the type of project and who is implementing it. Some potential funding opportunities that currently exist and may be used to fund these recommendations include, but are not limited to:

- Statewide Health Improvement Program funds, which are available through several programs administered by Dakota County Public Health:
 - Safe Routes to School mini-grants
 - Active Living grants, which are available to cities in Dakota County, but may be used to fund improvements on school sites
 - Assistance with preparation of infrastructure grant applications. Cities in Dakota County can submit infrastructure projects and the County's consultant will assist in identifying potential funding sources and preparing applications.
- Blue Cross Blue Shield of Minnesota
- Federal Transportation Enhancement (TE) funds through the Metropolitan Council (next cycle will be in 2011 for funds to be used in 2015-2016)
- Federal Safe Routes to School funds through the Minnesota Department of Transportation ²

Other sources of funding, as identified in the City of Rosemount's Pedestrian and Bicycle Master Plan include:

- Partnerships
Partnerships with public and private organizations to provide assistance with design, outreach and maintenance. Potential partnership organizations, in addition to the City of Rosemount and Rosemount High School that participated in the development of this plan, may include Dakota County, Dakota County Active Living Partnership, Rosemount Cycling Club, and area businesses.

² The federal Safe Routes to School program was funded via SAFETEA-LU legislation through fiscal year 2009. Future funding will be dependent on passage of the Federal Surface Transportation Reauthorization Bill, which is currently being discussed in the United States Congress.

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- Donations
Private donations from individuals or area corporations or donations of labor from recreation clubs or use agreements or trail easements from landowners. Programs such as “adopt-a-trail” by an organization, business, or individual provide have successfully been used in many communities to help with maintenance tasks and raise awareness.
- Grants
Grants are often available to governmental agencies (city and county), but may also be available directly to Rosemount High School and District 196. As priority projects are identified, the City of Rosemount, Rosemount High School, District 196, and Dakota County will need to closely coordinate their efforts to maximize potential grant funding opportunities. For a full listing of potential grant sources, refer to the City of Rosemount Pedestrian and Bicycle Master Plan.

No one of the E’s of Safe Routes to School will by itself increase walking and biking, which emphasizes the need for cooperation among school, city, county and other agencies to implement change.