



Deer River Safe Routes to School Plan June 2012



Prepared by:
Arrowhead Regional Development Commission
Regional Planning Division

**DEER RIVER
SAFE ROUTES TO SCHOOL PLAN
JUNE 2012**

**PREPARED FOR
DEER RIVER INDEPENDENT SCHOOL DISTRICT**

**PREPARED BY
REGIONAL PLANNING DIVISION
ARROWHEAD REGIONAL DEVELOPMENT COMMISSION**



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EXECUTIVE SUMMARY

The Safe Routes to School (SRTS) program is an international program that promotes walking and biking to school. The first SRTS Program in the United States was started in 1997 in Bronx, New York. In 2005, Congress passed federal legislation to establish a National Safe Routes to School Program. These funds were distributed to each state based on their school enrollment and used by communities and school districts to implement their recommendations through infrastructure and non-infrastructure funds. Projects located within two miles of an elementary or middle school are eligible. The Deer River School District was awarded a Safe Routes to School grant from the Minnesota Department of Transportation (Mn/DOT) to identify and address the unique safety concerns on and around the school and community for students and residents walking and biking.

The SRTS program focuses on teaching children bicycle and pedestrian safety along with healthy lifestyles. The program encourages children to walk and bike to school and also seeks to improve air quality around schools, reduce traffic congestion near schools, increase the physical activity of children, and increase community involvement.

The Deer River Safe Routes to School planning process utilized two existing committees, the Wellness and Safety Committees, to oversee the process. Committee members included representatives from the school district, City, parents and community members. The committees created goals for the Deer River community, and collected information regarding walking and bicycling to and from school. The Committees developed a set of strategies to address safety concerns that were revealed through the planning process.

Existing Conditions

The City of Deer River is located in southwestern Itasca County approximately 15 miles west of Grand Rapids, the county seat along U.S. Highway 2. The Deer River Independent School District encompasses 546.22 square miles within Itasca County and has an enrollment of 892 students. The District is rural with most students living over two miles away and the majority traveling to and from school on the school bus. However the two District schools are located within the City just over half mile apart and students walk between them to access after school activities. The City's sidewalk network is complete through the downtown and in front of the High School on the north side of the City and along 2nd Ave which intersects with Highway 2 at a stoplight. The Elementary School on the south side is in a residential area with sidewalks which lead almost to the School. There are sidewalk gaps on Fourth and Fifth avenues south. These two streets are the main access points to the School.

Recommended Strategies

The Deer River SRTS Committee developed strategies using the five E's of the SRTS Program: Engineering, Educations, Encouragement, Enforcement, and Evaluation.

INTRODUCTION

In the autumn of 2010, the Deer River School District worked with the Arrowhead Regional Development Commission to facilitate their community through a Safe Routes to School (SRTS) planning process for students attending Deer River schools. The planning process resulted in this Deer River Safe Routes to School Plan.

The Deer River School District includes: King Elementary School and Deer River High School. King Elementary School (500 5th Street S.E.) is located near the intersection of 5th Street S.E. and 6th Avenue S.E. on the City's southeast side. Both streets are maintained by the City and are in a residential neighborhood. Pedestrian facilities near the school include sidewalks on the school's property and along 2nd, 3rd and 4th Street with a gap on 4th Ave SE and 5th SE. Deer River High School (101 1st Avenue N.E.) is located at the intersection of 1st Avenue N.E. and 1st Street N.E. (County Highway 81) on the City's east side. Pedestrian facilities include sidewalks along the streets in proximity to the High School.

The City of Deer River is in western Itasca County and is bisected by U.S. Highway 2. The Deer River schools are located within the community of Deer River. The School District covers 546 square miles within the County and a majority of students currently ride the bus to and from school. However with King Elementary School and High School just over a half mile apart, students routinely walk between them and throughout the City to access activities.

Background

Safe Routes to School programs strive to improve the health of kids and the community by making walking and bicycling to school safer, easier and more enjoyable. Programs involve parents, community members, school staff, traffic engineers, city planners, law enforcement officers, community leaders and many others. Planning efforts assess the safety of school travel routes; make changes such as building crosswalks, adding signage or crossing guards; educating students and drivers about safe travel and encouraging walking and biking to school.

Following are several of the large-scale issues that the SRTS Program addresses.



Successful SRTS programs involve parents, community members, school staff, traffic engineers, city planners, police, and community leaders

National Trends

In 1969, approximately half of all U.S. schoolchildren walked or bicycled to or from school and 87 percent of those living within one mile of school walked or bicycled. Today, fewer than 15 percent of children and adolescents use active modes of transportation to access school. Parents report the primary barriers to their children aged 5-18 years walking to or from school as (1) distance to school and (2) traffic-related danger. To address these issues, comprehensive SRTS initiatives focus on behavioral, environmental and policy strategies in an effort to increase the percentage of children who walk and bike to school. The U.S. began researching children walking and bicycling to school in the 1970's which resulted in the 1975 report "School Trip Safety and Urban Play Areas."

Obesity

During the past 20 years, obesity among adults has risen dramatically in the U.S. The National Center for Health Statistics shows that 30 percent of U.S. adults 20 years of age and older (over 60 million people) are obese. This increase has been even more dramatic in young people who are overweight, which has more than tripled since 1980. Among children and teens aged 6-19 years, 16 percent (over 9 million young people) are considered overweight. These increasing rates raise concern because of their implications for Americans' health. Being overweight or obese increases the risk of many diseases and health conditions (hypertension, dyslipidemia, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, and cancers such as endometrial, breast, and colon).

Minnesota's obesity rate is ranked 27th in nation at 23.1 percent.¹ The state's adolescent obesity rate is between 15-22% and 13% for children under the age of five.^{2,3}

Physical Activity

The United States has seen a decrease in the number of children who are physically active and an increase in the number of children



Morning congestion: common around schools nationwide with fewer than 15% of children using an active travel mode to get to school.

¹Trust for American's Health (2006). *F is for Fat: How Obesity Policies are Failing in America*
<http://healthyamericans.org/reports/obesity2006/>

²Healthy Minnesotans: Public Health Improvement Goals for 2004.

³Minnesota Department of Health Fact Sheet, August 2004 – *Children and Adolescents- Nutritional Intake of Children and Adolescent.*

who are overweight. Statistics from the Centers for Disease Control (CDC) report nearly half of young people aged 12-21 years in the U.S. are not vigorously active on a regular basis and 14% of young people report no recent physical activity. The fact is that overweight children are more likely to become obese adults at risk for a variety of diseases.

Based on successes in Europe and the drastic decline in the number of U.S. students who are walking and biking to school as their parents once did, the CDC and other groups across the nation have been promoting “Kids Walk-to-School” programs that encourage physical activity as an integral part of a child’s daily routine. It assumes that teaching children the importance and pleasure of walking and bicycling to and from school may help to increase the likelihood that they will engage in other forms of physical activity. In addition to the physical benefits, data shows that physical activity may improve academic performance and alertness in youth.

Traffic Safety

The number one reason parents do not allow their children to walk to school is a fear for their safety. The safety of children as pedestrians is a real concern. Data from the National Highway Traffic Safety Administration shows that one-fourth of child fatalities between the ages of five and nine in 1998 were pedestrians. Children in this age group have not developed the skills and experience to navigate traffic safely and judge speed and distance. Therefore, it is important to teach and practice safe pedestrian skills with our children as well as provide responsible adult supervision as they travel to and from school.

SRTS - European Roots

“Safe Routes to School” terminology was first used in Denmark in the late 1970s as part of their campaign to reduce the number of children involved in crashes while walking and bicycling to school. The concept then spread internationally throughout Europe, Australia, New Zealand, Canada, and then the United States. The first U.S. SRTS program was initiated in 1997 in Bronx, NY. In 1998, Congress funded two pilot SRTS programs through the National Highway Traffic Safety Administration issuing \$50,000 each to Marin County, California and Arlington, Massachusetts. From 1998 onward the grassroots effort has spread. The current federal transportation bill passed in 2005, SAFETEA-LU, authorized funding for six years for the National Safe Routes to School Program. This new program is designed to continue the earlier efforts.

THE SRTS “5-E APPROACH”

The Safe Routes to School planning approach to pedestrian and bicycle safety is effective because it is done comprehensively and covers five key areas, referred to as the “5-E’s”: engineering, education, enforcement, encouragement and evaluation. Following is a summary of each approach as it is incorporated into a SRTS planning process. The Deer River Wellness and Safety committees used this 5-E Approach to categorize the strategies and to make sure that all topics were being covered in the planning process.

Engineering Approach

School Zone Traffic Separation and Traffic Calming

Schools now face the demands of students arriving by bus and an increasing number of parents who choose to drop off their children at the front door. Traffic separation (buses, teachers, parents, bicyclists, pedestrians) around schools addresses the functionality of traffic circulation as well as critical safety measures for students. To address increased traffic around schools, particularly elementary and middle, several communities that have conducted SRTS studies have chosen to implement traffic calming measures to improve safety for pedestrians and bicyclists. Controlling traffic speed around schools, through traffic calming measures, is perhaps one of the most critical things to do, as 89 percent of pedestrian and bicycle crashes result in fatalities when struck at 35 mph or greater.

As defined in *Traffic Calming: State of the Practice* (ITE, 1999), “traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.” The report discusses three main traffic calming distinctions: (1) measures are self enforcing (unlike traffic controls which are regulatory), (2) measures rely on physics and not human psychology to slow traffic (street elements such as trees, lighting, street furniture, and streetscaping complement traffic calming but do not directly slow drivers), and (3) measures modify driver routing options (do not change driver behaviors such as speed, just options). These three elements in combination affect traffic volume and speed, are self-enforcing, and are engineered.

For specific image examples of traffic calming measures or to get a full copy of the above referenced report, visit: <http://www.ite.org/traffic/tcstate.htm#tcsop>.



Median example

Volume Control Measures

The purposes of volume control measures are to discourage or eliminate through traffic.

Examples include:

- Street Closures: Full Street Closures i.e. cul-de-sacs, dead ends; Half
- Street Closures i.e. partial, one-way
- Diverters: Semi-Diverters (i.e. full-lane bulb out); Diagonal Diverters (i.e. full diverters), diagonal road closures
- Median Barriers: Median Diverters; Forced Turn Islands; Island Diverters
- Forced Turn Islands: Forced Turn Channelization, Pork Chops, Right Turn Islands
- Other Volume Control Measures: Various other names and designs

Speed Control Measures

The purpose of speed control measures is to slow traffic. Examples include:

- Vertical Measures
- Speed Humps: Road humps, undulations
- Speed Tables: Trapezoidal humps, speed platforms
- Raised Crosswalks: Raised crossings, sidewalk extensions
- Raised intersections: Raised junctions, intersection humps, plateaus
- Textured Pavements



Raised crosswalk example

Horizontal Measures

The purposes of horizontal measures are to slow traffic at intersections.

- Neighborhood Traffic Circles: Intersection islands
- Roundabouts: Rotaries
- Chicanes: Deviations, serpentines, reversing curves, twists
- Lateral shifts
- Realigned intersections: Modified intersections

Narrowings

The purposes of narrowing measures are to lessen the street crossing distance for pedestrians.

- Neckdowns: Nubs, bulb outs, knuckles, intersection narrowings, corner bulges, safe crosses
- Center Island Narrowings: Midblock medians, median slowpoints, median chokers
- Chokers: Pinch points, midblock narrowings, midblock yield points, constrictions
- Other Speed Control Measures: Various names and designs
- Combined Measures



Curb extension example

Education Approach

Education activities include teaching pedestrian, bicyclist and traffic safety and creating awareness of the benefits and goals of SRTS. While education compliments engineering and enforcement, it is closely linked to encouragement strategies. For example, children may learn pedestrian and bicyclist safety skills and then get a chance to join a mileage club that rewards children for walking or bicycling to school. Encouragement activities also offer "teachable moments" to reinforce pedestrian and bicyclist safety education messages.

Planning education strategies includes identifying:

- ⇒ Who needs to receive information?
- ⇒ When the education should be delivered.
- ⇒ What information needs to be shared?
- ⇒ How the messages will be conveyed.

Audiences for SRTS education include:

- ⇒ Children
- ⇒ Parents
- ⇒ Drivers
- ⇒ Neighbors



Spring Bike Rodeo

Occasionally education strategies will need to begin quickly. For example, in areas with unsafe routes where children are already walking or bicycling out of necessity, education is needed to reduce the risk of injury to children until other measures can also be put into place. The timing for educational activities can also depend on the issues in the community and how education fits with other parts of the SRTS program.

Encouragement Approach

Encouragement and education combine to increase the number of children who walk and bicycle to school safely. Promotion activities also play an important role moving the overall SRTS program forward because they build interest and enthusiasm, which can maintain support for changes that might require more time and resources, such as constructing a new sidewalk.

Enforcement Approach

The public normally regards enforcement as police officers writing tickets. Actually enforcement, especially for SRTS programs, is best when it includes a network of community members working together to promote safe walking, bicycling and driving. This can be accomplished through safety awareness, education and, where necessary, the use of ticketing for dangerous behaviors. Enforcement includes students, parents, adult school crossing guards, school personnel and neighborhood watch programs all working in conjunction with law enforcement. Working together to enforce rules for safe walking, bicycling and driving makes it safer and easier for everyone to walk and bicycle.



Marin County, California, is a great source for encouragement activity ideas. Visit their website: www.saferoutestoschool.org

Evaluation Technique

Evaluation is important to the SRTS program to make certain the previously described approaches are having the desired affect of more active children, less traffic, cleaner air and fewer injuries because efforts within communities. Evaluating the specific details is difficult due to the complexities of communities. However, a school district can compare the situation in their communities before they began the SRTS efforts, and after. They can also look at their communities and consider other similar communities that have not tried to increase walking and bicycling to school. It is important for SRTS programs to gather data on a routine basis. It can vary from month to month, and from season to season. Data gathered from children (e.g., “raise your hand if you walk to school regularly”) can be incomplete, but does add to the overall understanding of what works. Appendix C contains a list with a basic series of questions that can assist in obtaining data and does not require a complicated evaluation design.⁴

⁴National Highway Traffic Safety Administration (2003). *Safe Routes to School Practice and Promise*. Retrieved July 29, 2007, from <http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/pages/section-3.htm>

DEER RIVER - SRTS PLANNING PROCESS

Minnesota Safe Routes to School Planning

The State of Minnesota Department of Transportation (Mn/DOT) distributes the federal SRTS funds allocated to Minnesota. The State's funding level for Safe Routes to School is approximately eight million dollars during the six year period of SAFETEA-LU (2009). The funds can be used for infrastructure improvements, education, and enforcement to improve the safety of bicycling and walking to and from school. The funding split is 70 percent for infrastructure, 10 percent for education and enforcement, and 20 percent that may be used in either category.

Table 1: Minnesota Safe Routes to School Funding

2005	\$ 830,400.00
2006	\$ 1,211,509.00
2007	\$ 1,644,551.00
2008	\$ 2,011,335.00
2009	\$ 2,545,531.00
Total	\$ 8,243,326.00

The Arrowhead Regional Development Commission (ARDC) Regional Planning Division guides Arrowhead communities in planning long-term transportation improvements. ARDC oversees the Northeast Minnesota Area Transportation Partnership (NE MN ATP) and Enhancement Program and since the passage of SAFETEA-LU administers the SRTS program for the region. ARDC initiated awareness for SRTS planning in 2005 and then guided interested communities through the application process. The Deer River School District expressed interest in completing a Safe Routes to School Plan and was awarded funding in 2009 to complete the process.

Deer River Safe Routes to School Planning

Deer River – Planning Committees

Deer River School District utilized two existing committees, the Wellness and Safety Committees, to provide input throughout the planning process. Members of these two committees included school administration, staff, City representatives and community members. The Committees provided valuable insight on the existing conditions around the schools, student travel routine and recommended strategies.

Deer River Safe Routes to School Goals

As a first step of the planning process, the Wellness and Safety Committees identified goals for the Deer River - SRTS program. Identified were the following goals:

1. Provide infrastructure and associated amenities that increase safety for students walking or biking between the two Deer River schools and throughout the community.
2. Increase community awareness to create a safe environment for biking and walking in Deer River.
3. Provide regular opportunities for walking and biking education for children and adults in Deer River.
4. Periodically evaluate the Deer River SRTS Program to determine progress.

Plan Steps

ARDC worked with the Deer River Independent School District and the City of Deer River to lead the planning process. The School District Wellness Committee met in September 2010 to go over the SRTS work plan. At this meeting the group also discussed many of the issues and barriers that kept students from walking and biking to school. Before the Wellness Committee meeting, ARDC staff observed the afternoon pick-up routine. ARDC and members of the Wellness Committee observed the King Elementary morning drop-off on October 11, 2010.

Part of the Safe Routes to School Planning process was to survey all the parents to gain their perspective on what the obstacles and issues were for walking and biking to school. Classroom tallies were also taken to identify how students travel to school on an average day. The Wellness Committee coordinated the survey distribution.

ARDC set up booths at the October, 2010 and January, 2011 Deer River Health Fair which are widely attended by residents. ARDC worked to promote the Safe Routes to School plan and gather additional input from parents about their students walking and biking to school. The parent survey results were also presented at an October evening public meeting to provide more opportunities for comments and discussion on issues and barriers related to SRTS.

The site observations and survey results were reviewed by the School District Safety Committee in November to determine the main priorities for infrastructure improvements.

ARDC then used the input that was gained through the information gathering process and drafted strategies for the Plan addressing the issues and utilizing the 5 "E" approach. The committee reviewed these strategies and provided their input.

Present Conditions

The City of Deer River is located in southwestern Itasca County, approximately 15 miles west of Grand Rapids, the county seat. The City of Deer River has a population of 903 residents. U.S. Highway 2 (Hwy 2) runs through the City dividing it into north and south sections. The four lane highway narrows down to two lanes through town and serves as the City's Main Street. On the north side of Hwy 2 is the majority of the downtown, the high school, the Deer River Hospital, along with a residential area. South of Hwy 2 is the elementary school, ball fields and a park which is surrounded by a residential area and some industry along a BNSF railroad line. The railroad line parallels Hwy 2. The City of Zemple is located along the Deer River southern boundary.

The Deer River Independent School District encompasses 546.22 square miles within Itasca County with an enrollment of 892 students. The District's two schools are King Elementary School (K-6th grade) and Deer River High School (7th-12th grade). The schools are just over half mile apart (.7 mile).

The Average Daily Traffic (ADT) volume on Hwy 2 is 7,900 vehicles east of State Trunk Highway 6 (Division St) and 6,100 west of Highway 6.⁵ U.S. Highway 2 extends across northern Minnesota from Duluth to East Grand Forks. Highway 6 has a ADT volume of 4,000 vehicles and connects Deer River to northern Itasca County communities. County Trunk 81 (First St North) has the third highest ADT with between 610-940 vehicles daily. The section of the street with 940 is in proximity of the High School between First Ave North and Second Ave North. The Hospital and related facilities are located at the terminus of First St North. These two destinations account for the volume of vehicles on the street.



U.S. Highway 2 is Deer River's Main Street

Pedestrian and Bicycle Facilities

Pedestrian Facilities

The City of Deer River has sidewalks throughout the downtown area (See City of Deer River Street Network Map on page 14), along Hwy 2, the west side of First St North and east side of Division St. The residential one-block avenues on the north side of the City have partial sidewalk segments.

⁵Minnesota Department of Transportation (2009). *2009 Traffic Volumes Municipalities of Itasca County, Minnesota*. Retrieved on March 8, 2011 from http://www.dot.state.mn.us/traffic/data/maps/trafficvolume/2009/cities_under_5000/itasca7.pdf.

In front of the High School on First Ave North and Second Ave North there are also sidewalks. The sidewalk continues on the eastside of Second St across Hwy 2 to Third Ave South. The street crossing at Second St and Hwy 2 has a stoplight and painted crosswalk. The existing sidewalk is also found on the south side of Third Ave South, west side of Fourth St South for a block and along the north side of Fourth Ave South for a half a block. Fourth St South from Fifth Ave South to County Road 139 the City of Zemple boundary has sidewalks on both sides of the street.

Bicycle Facilities

On-road bicycle facilities such as dedicated bike lanes are not available. However the street network accommodates bicyclists within the paved road shoulders on the streets with the highest daily average daily traffic (ADT) volume. Bicyclists are permitted ride on sidewalks that do not abut storefronts.⁶ The residential streets with lower ADT can accommodate bicyclists with minimal improvements.



Sidewalk on 1st Ave N near the High School.

In addition to sidewalks, an unpaved half mile section of a designated snowmobile trail between the High School and Hospital is commonly used for walking and biking.

In 2001 the City of Deer River applied for, but was not awarded, Transportation Enhancement funding to construct a paved trail from the White Oak Lake landing in Zemple, through Zemple and Deer River, and north using the previously described section of snowmobile trail to access the public golf course located in Deer River Township. It was planned to create a pedestrian friendly route for the public to use as transportation to recreational and educational facilities.

⁶Minnesota Department of Transportation (2010) *A pocket Guide to Minnesota Bicycle Laws*. Retrieved March 14, 2011 from <http://www.dot.state.mn.us/bike/pdfs/MN-BIKE-LAW-CARD.pdf>



City of Deer River Street Network

-  Sidewalk
-  Schools
-  Parks
-  Crosswalks
-  County Hwys (1-50,000)



0 0.05 0.1 0.2 Miles

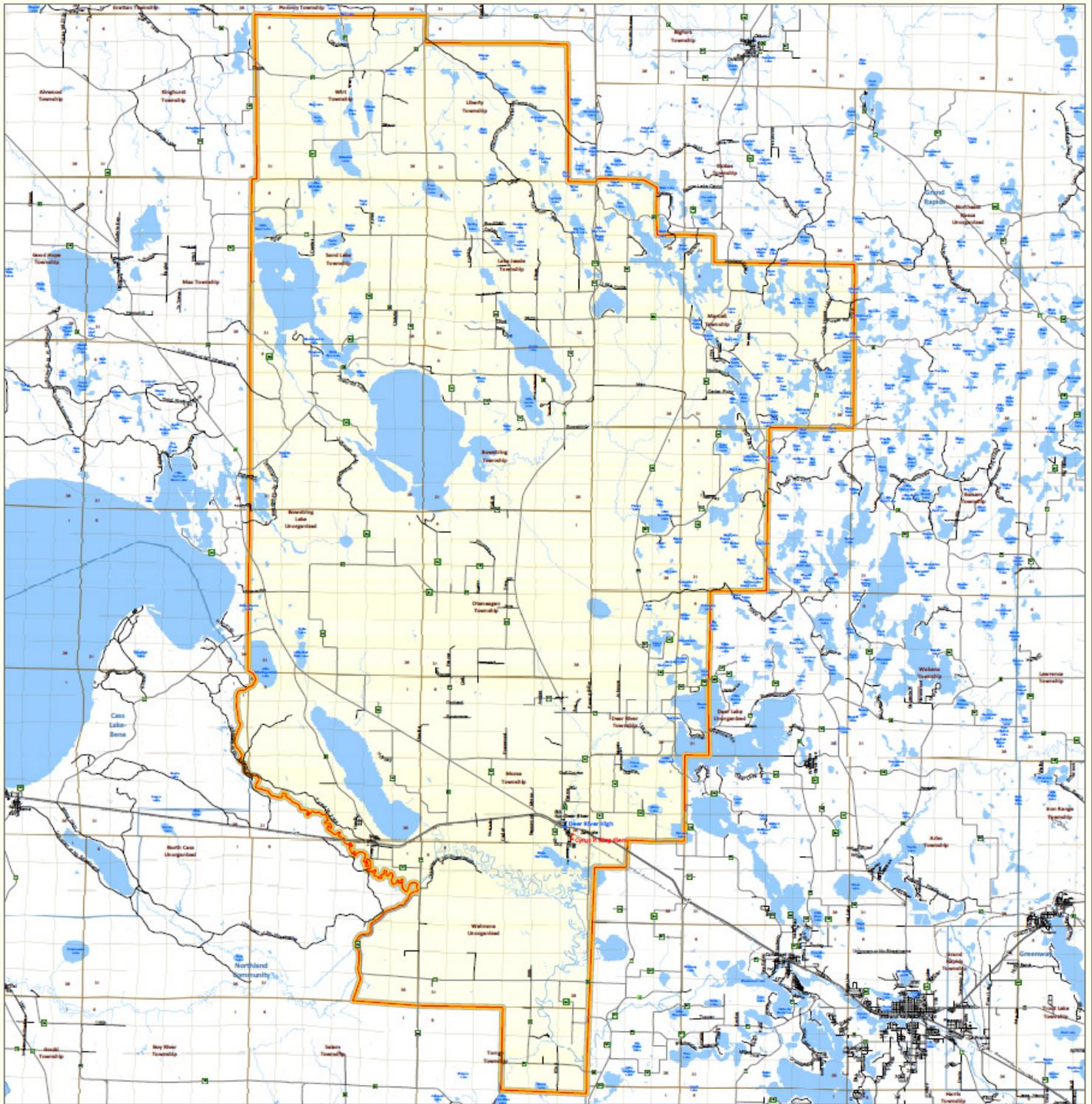
Zemple

Public School District Attendance Areas and Educational Facility Locations

SY2010-2011

Deer River School District
 ISD 317

Map 1 of 1



Public Educational Facilities or Programs

- Red square: Elementary school
- Blue square: Middle/Junior high school
- Green square: High/Secondary school
- Purple square: School District Office
- Black square: Non-Public school
- Green triangle: Public Charter school
- Red circle: Other School Program (examples)
 - Area Learning Center (ALC)
 - Area Learning Program (ALP)
 - Targeted Services
 - College/University
 - Correctional
 - Secondary Education

Public School Attendance Areas

- Yellow box: Elementary School Attendance Area (ESM)
- Light blue box: Middle School Attendance Area (MDD)
- Medium blue box: High School Attendance Area (HIGH)

Public School Districts

- Orange outline: School District
- Black outline: Adjacent School District
- Black outline: MDD - 2008 MAP 2 (if applicable)

Other Features

- Red line: Interstate Highway
- Blue line: U.S. Highway
- Green line: State Highway
- Black line: County Highway
- Black line: Roadfront
- Black line: Railroad
- Blue circle: Lake/Pond
- Blue circle: Water Control
- Black line: Public Land Survey Township Range
- Black line: Public Land Survey Section

Data Sources:

- Minnesota Department of Education, IT Division, 2010
- Minnesota Department of Transportation, 2009
- Minnesota Geographic Information Office
- U.S. Bureau of the Census, Minnesota Legislative GIS Office (provided to include attendance area with boundary from 2008 Map 2)
- Minnesota Department of Natural Resources

Special Note:
 The public school district boundaries appearing on this map do not necessarily represent the legal boundaries of the district. It is a generalization of boundaries based on the data provided by the Minnesota Department of Education and the Minnesota Department of Transportation for Census 2000. Since 2000, district boundaries have been modified by the Department of Education based on completed County Period Revisions. Please contact your county auditor or assessor to obtain an accurate legal description of the boundary.

Liability Statement:
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1 : 70,570



DEER RIVER - IDENTIFIED BARRIERS AND SAFETY CONCERNS

A main goal of a Safe Routes to School plan is to help a community assess what real or perceived barriers exist for students to safely walk and bike to school. In addition to doing an inventory of physical barriers, such as a lack of pedestrian infrastructure (sidewalks/trails), identifying and assessing safety concerns and perceptions of community members is a critical component of building solutions and seeking opportunities for improvement.

In identifying safety concerns and perceptions for students attending Deer River Schools, information was gathered from parents, students, District staff and administration, law enforcement, community members, and public health representatives. The process used to identify specific issues and concerns included two main elements: School site observations and gathering public input through distribution of a student and parent survey.

Following is an overview of the process and results of each method used to identify safety concerns as well as real or perceived barriers for walking and biking to school in the Deer River community.

Deer River - Public Input

Gathering feedback from the Deer River community was a key strategy used to identify safety concerns and barriers. During the Deer River SRTS planning process, the public was invited to learn about the SRTS program and provide their input on existing barriers to walking and biking to school at a community public meeting. ARDC also attended two Deer River Health Fairs to provide information on SRTS. Comments received during the community meeting included; concern over traffic speed and amount around the school during peak student travel times and having a safe place for younger students to bicycle. At the Health Fairs, the public provided input on unsafe intersections and learned about the SRTS planning process.

Deer River - Survey Results

One of the main activities of this planning process was to administer surveys to students and the parents/guardians of students in the two Deer River schools. The purpose of these surveys was to obtain a baseline of information to identify and measure student travel behaviors and parental attitudes. The results also helped the SRTS planning committee identify strategies to increase the safety of children walking and biking to school. This section shows the results of selected survey responses. A copy of the student and parent surveys used for this analysis can be found in Appendix A. Copies of the survey reports can be found in Appendix B.

Classroom Tallies and Parent Surveys

The student and parent survey tools were developed by the National Center for Safe Routes to School. Students participated in classroom tallies, which asked them how they traveled to and from school for two consecutive days. Parents/guardians filled out a 16-question survey distributed to students in all first through eighth grade classrooms. Surveys were sent home with students. The parent surveys asked for information regarding current travel mode behavior and safety perceptions.

Parent Survey Results

Parent surveys were distributed in October 2010 to all 288 King School parents/guardians and had a 14 percent return rate. At the High School parents of seventh through eighth grade students received surveys.

The following is a summary of written comments listed by parents/guardians on the SRTS survey expressing main areas of concern:

Sidewalk Gaps around King School:

- ⇒ 2nd St SE
- ⇒ 5th Ave SE
- ⇒ 5th St SE
- ⇒ 4th Ave SE
- ⇒ 4th St SE
- ⇒ Next to King Parent drop-off

Unsafe Intersections:

- ⇒ 4th St SE/4th Ave SE
- ⇒ 1st St NE/1st Ave NE
- ⇒ 2nd St NE/1st St NE

Other Concerns

- ⇒ Traffic Speed i.e. fast student drivers
- ⇒ In front of High School
- ⇒ Lack of bike facilities
- ⇒ Poor lighting



Top: 4th Ave SE sidewalk gap

Middle: 5th Ave SE from King school entrance

Bottom: King School Drop-off

Current Travel Routine To and From School

King Elementary School

Parents of kindergarten and third grade students had the highest response rate out of the 43 surveys returned. 30 percent lived under two miles to school while the majority (70 percent) of respondents indicated that they lived over 2 miles away. Two percent reported their student typically walked to school, while the majority (72 percent) responded that their student rode the school bus and 26 were driven in a private vehicle. No students were reported to ride their bikes to school routinely.

Traveling from school, parent survey respondents reported that no students typically walked or biked home. 76 percent took the bus while 21 percent were picked up by private vehicles.

The low percentage of students who typically walk or bicycle to or from school reflects the large number of households who live over two miles away. In addition, the low percentage relates to the young age of students attending King School and the need for adult supervision while walking or biking to school.

Deer River High School

59 surveys were returned by parents of seventh and eighth grade students. 22 percent indicated they lived less than two miles from school while 78 percent lived over two miles from school. 10 percent reported typically walking to school while 59 percent rode the bus and 31 percent were driven. No respondents indicated they typically rode a bike.

Traveling from school respondents reported that typically 12 percent walked, 67 percent rode the bus and 21 percent were picked up from school. No respondents indicated they routinely rode a bicycle.

Classroom Tally Results

Teachers administered a classroom tally to 338 kindergarten through eighth grade students during the week of October 18, 2010. Students were asked to report on how they traveled to school for two consecutive days midweek, including any differences between mode of travel for arrival to school and departure from school.

Students answered the questions: “How did you arrive at school today?” and “How do you plan to leave for home after school?” The majority of students indicated that they traveled to and from school by school bus and private vehicles, with more students taking the bus home from school, 75 percent at King School and 60 percent at the High

School. This high percentage rate reflects several factors, including the long distance that many students live from school (70 and 75 percent live more than 2 miles from King Elementary and the High School respectively) (Figure 1.2). Four percent of students reported that they walked to school. In the afternoon the percentage of students decreased to 2 percent for after school travel at King School but increased at the High School to ten percent. No students reported riding a bike to or from school at the High School during the week of the classroom tally. At the King School one percent indicated that they rode a bike to school, yet five percent reported they would likely ride home from King School. This may indicate students misunderstood the question and planned to ride their bikes after school.

Issues Affecting Walking and Bicycling in the Deer River Community

Top issues reported by parents/guardians that affect decisions as to whether they would allow their child to walk or bike to school included the following: travel distance, weather, traffic volume and speed, sidewalks and crossing safety.

Despite parents' concerns for students biking and walking to school, a majority of respondents also reported that they believe that walking and biking to/from school is very healthy for their child (46 percent).

Additional comments provided by the parent survey respondents indicated concerns in four main areas: 1) Vehicle traffic, 2) Distance from school 3) Adult supervision needed for King School students 4) Crime.

The Deer River School District's rural characteristics are seen in the high percentage of respondents who indicated that distance and weather were barriers for walking and bicycling to school. These barriers can not be addressed by the community, however SRTS efforts can benefit students who live over two miles from school by improving the school site and increased community-wide awareness for walking and bicycling.

Vehicle traffic amount and speed were the main concerns for King Elementary School respondents followed by intersection safety.

This survey sample of parents of K-8 students who attend the Deer River School District reflects that SRTS may be well received and utilized if safety concerns and issues are aggressively addressed by the Deer River community.

DEER RIVER - SRTS STRATEGIES

The Deer River SRTS Plan is meant to guide the Deer River community in implementing their Safe Routes to School Program. The barriers to walking and bicycling to school that were identified in Section 4 illustrate the need for a set of comprehensive strategies to reach their SRTS goals. The recommendations are grouped by goal and encompass the “5 -E” approach areas and vary by implementation effort level.

Goals and Strategies

Goal 1 strategy recommendations encompass engineering recommendations which are intended to improve the safety of the school site and the community with both short and long-term recommendations. Goal Two strategy recommendations address ways to raise awareness throughout the community and includes both education and enforcement approach activities. Goal Three strategy recommendations are focused on education and encouragement for students and parents and target training on walking/bicycling skills and safe parent drop and bus loading zones conduct. Finally, Goal Four addresses evaluating the Deer River SRTS Plan recommendation implementation through observation and routine parent survey to note changes in travel behavior and awareness for safe routes to school.

Goal 1: Provide infrastructure and associated amenities that increase safety for students walking or biking between the two Deer River schools and throughout the community.

The City of Deer River is 1.1 square miles in total area, a size that allows walking or biking to be a practical option for students traveling between the two schools and throughout the community. Currently a number of students walk between the schools to attend after school activities. The street network north of Highway 2 (Hwy 2) has sidewalks along streets adjacent to the High School and throughout the neighboring business district. South of Hwy 2 there are gaps in the sidewalk system on the streets which approach the King Elementary School.

Strategy 1.1: Complete the sidewalk network between the Deer River High School and King Elementary School on Fourth Ave South between Fourth St South and the School, along Fifth Ave South between Forth St South and the School.

Students walking or biking to King School need sidewalk facilities on these two streets to more safely access school and complete the sidewalk network between the schools.

Strategy 1.2: Construct a sidewalk along the King School parent drop-off driveway and parking lot from the school to 5th St South.

Students walking or biking to school need designated sidewalk facilities to access the school and sport fields.

Strategy 1.3: Consider developing a paved trail between the High School and hospital to link the north and south side of the community.

The half mile trail would connect the key destinations in the City and formalize a trail currently used by the public. Combined with Strategies 1.1 and 1.2 the trail would enhance the existing sidewalk network and link the north and south sides of the City, the schools and hospital with a complete and designated system for students and community members to walk and bike.

Strategy 1.4: Use a combination of updated school zone signage and traffic calming measures in the School zones.

See diagram in Appendix D from the Minnesota Manual on Uniform Traffic Control Devices. It shows recommended signing for school area traffic control. The diagram displays several sign groupings that include up to four signs on each side of a roadway in which a school was located. Traffic calming measures could include speed tables or speed humps.

Strategy 1.5: Locate bicycle racks near the entrances of both schools in highly visible, accessible and convenient areas.

For increased visibility and access keep bike racks clear of obstacles add more as usage increases.

Strategy 1.6: Maintain crosswalks and street shoulder striping to assure good visibility for all street users.

Communicate with the City and County to ensure crosswalks and street shoulders are repainted when needed.

Strategy 1.7: Establish parent drop-off area in front of High School along the eastside of curb of Second St North.

Encourage student drop-off along the Second St N curb.





Goal 2: Increase community awareness to create a safer environment for biking and walking in Deer River.

During the public outreach and survey efforts, traffic speed and traffic amount, especially around King School, were main safety concerns. The young age of the King School students and lack of sidewalks makes this an important safety issue to address. Recommended strategies for Goal Two focus on community enforcement which includes policies that address safety issues such as speeding or illegal turning, but also includes getting community members to work together to educate safe walking, bicycling, and driving skills. Enforcement with education is critical in establishing a community that is perceived as safe for those bicycling and walking.

Currently, there is limited safety education for young people for biking and walking. Limited education for drivers about observing pedestrian and bicyclist rights is also an issue. In addition to the education about safe travel, increased education about the health benefits of active living may encourage it. There is concern that all road users, pedestrians, bicyclists and motorists are unclear as to how to safely share the street. There is a lack of education on how pedestrians and bicyclists should correctly use streets without sidewalks safely. Bicycle education for adults and older students is not available.

Strategy 2.1: Develop a public awareness campaign to increase parent and public awareness about the SRTS Plan and pedestrian safety.

This may include posters, emails, newsletters, or stories in the local newspaper and the distribution of materials at the start of the school year to provide elementary student parents/guardians with information on safety practices. This could be included with a flyer on parent and bus drop zone procedures to ensure the safety of students as they arrive at school.

Strategy 2.2: Work with the Deer River Police Department to create a safer environment for students walking and bicycling in the community.

Work with the Deer River Police Department to host bicycle education activities. This may include inviting a bicycle and pedestrian safety expert to train interested community members (or officers) about the importance of bicycle and pedestrian safety. These community members can then assist with parent and student education and can look to promote education efforts within Deer River. Some resources and ideas for education can be found at the MN Share the Road Website (www.sharetheroadmn.org/index.html) and other pedestrian information websites including www.dot.state.mn.us/peds.

Strategy 2.3: Adults and Police monitor heavily used streets and intersections during morning and afternoon school travel times.

Work with Deer River Police and the Wellness and Safety committees to provide saturation enforcement at these times. This will help to keep automotive speeds at the posted speed limits and increase driver attentiveness. This will also encourage pedestrians and bicyclists to abide by safety rules as well. A major obstacle today in encouraging more students to bike and walk to school is the perception that it is too dangerous for students to travel to school. Consistent community enforcement will help to increase safety for the students.

Goal 3: Provide regular opportunities for walking and biking safety education for children and adults in Deer River.

Education and encouragement activities typically combine the results of the other “E’s” to improve knowledge, facilities, and enforcement to encourage students to walk or ride safely to school. Most importantly, encouragement activities build interest and enthusiasm throughout the community. Programs may include “Walk to School Days” or mileage clubs and contests with awards to motivate students.

Encouragement will be a powerful tool to get students walking and biking to school in Deer River. Because the distances to school for a majority of student’s homes is two miles or greater, it will be important to continue encouragement of a healthy walking and biking lifestyle.

Strategy 3.1: Hold a kick-off event such as the “International Walk to School Day” in the fall annually and distribute SRTS information.

Participating in the Walk to School Day can be a great way to introduce this new activity into student’s routines. Prizes, breakfast, contests, recognition, and other incentives can be given to those who walk to school on this day. A celebration like this can also serve as encouragement to get the community and parents knowledgeable of the event. The more people are aware of the efforts the more successful they will be. International Walk to School Day is the first Wednesday in October: <http://www.walktoschool-usa.org/>

Strategy 3.2: Develop an ongoing Safe Routes to School Incentive Program.

This would be an ongoing incentive program that may be led by a School District committee that would continue to encourage students to walk or bike to school. This could involve things like offering prizes for the student that walks the most times to school or a student who bikes the most miles. Individual classrooms could each have their own activities. Ongoing incentives can be successful in encouraging students to begin and continue to walk and bike.

Strategy 3.3: Support the distribution of bicycles and helmets to students who need them.

Deer River should look for opportunities to provide bikes and helmets to students who need them. Partnerships with the area bicycle shops or organizations could help to fix bikes.

Strategy 3.4: Continue to hold a bike rodeo to teach bike education, fix bikes, and meet other bike riders.

Bike rodeos are helpful in encouraging bike riding. Having a bike expert on hand can help to tighten chains, adjust seats and handlebars, attach reflectors, fit bicycle helmets, and teach safe bike tips. Education could include teaching appropriate hand signals, how to safely cross the street, and other safe bike riding tips. It's helpful to meet other bike riders that will encourage riding to school.

3.5: Integrate age-appropriate pedestrian safety information during classroom or after school activities.

Throughout the year teach pedestrian safety skills to students in each grade.

Curriculum Guide Directory:

http://www.saferoutespartnership.org/media/file/Curr_Guide_2011_lo.pdf

Goal 4: Periodically evaluate the Deer River SRTS Program to determine progress.

Evaluation is instrumental in maintaining a good environment for walking and biking in Deer River. Evaluation includes observing traffic during peak travel times, surveying parents and students to identify progress and new issues that arise. The information gathered can help in developing new programs that encourage walking and biking, address new issues and continue to promote planning for walking and biking.

Strategy 4.1: Assign an existing committee to oversee the implementation of the SRTS Plan.

The assigned committee should be made up of School administration, staff, City staff, law enforcement, parents, and others. This committee will be the driving force behind Safe Routes to School efforts in Deer River. This committee would help to organize various events and efforts to ensure that the strategies and goals of the Safe Routes to School Plan are carried out.

Strategy 4.2: Annually review progress for implementation of the Safe Routes to School Plan.

The Safe Routes to School (or assigned existing) Committee should do a thorough annual review of the Plan Strategies and identify changes, additional efforts, and successes that should be continued.

SRTS IMPLEMENTATION SCHEDULE

Implementation of the Deer River Safe Routes to School Plan is important. Identifying tasks for a variety of entities and organizations is very important in the success of the plan and reaching the ultimate goals of getting more students to walk and bike to school safely. The following is an implementation matrix that identifies the parties that will likely be responsible for each strategy listed in the plan.



APPENDICES

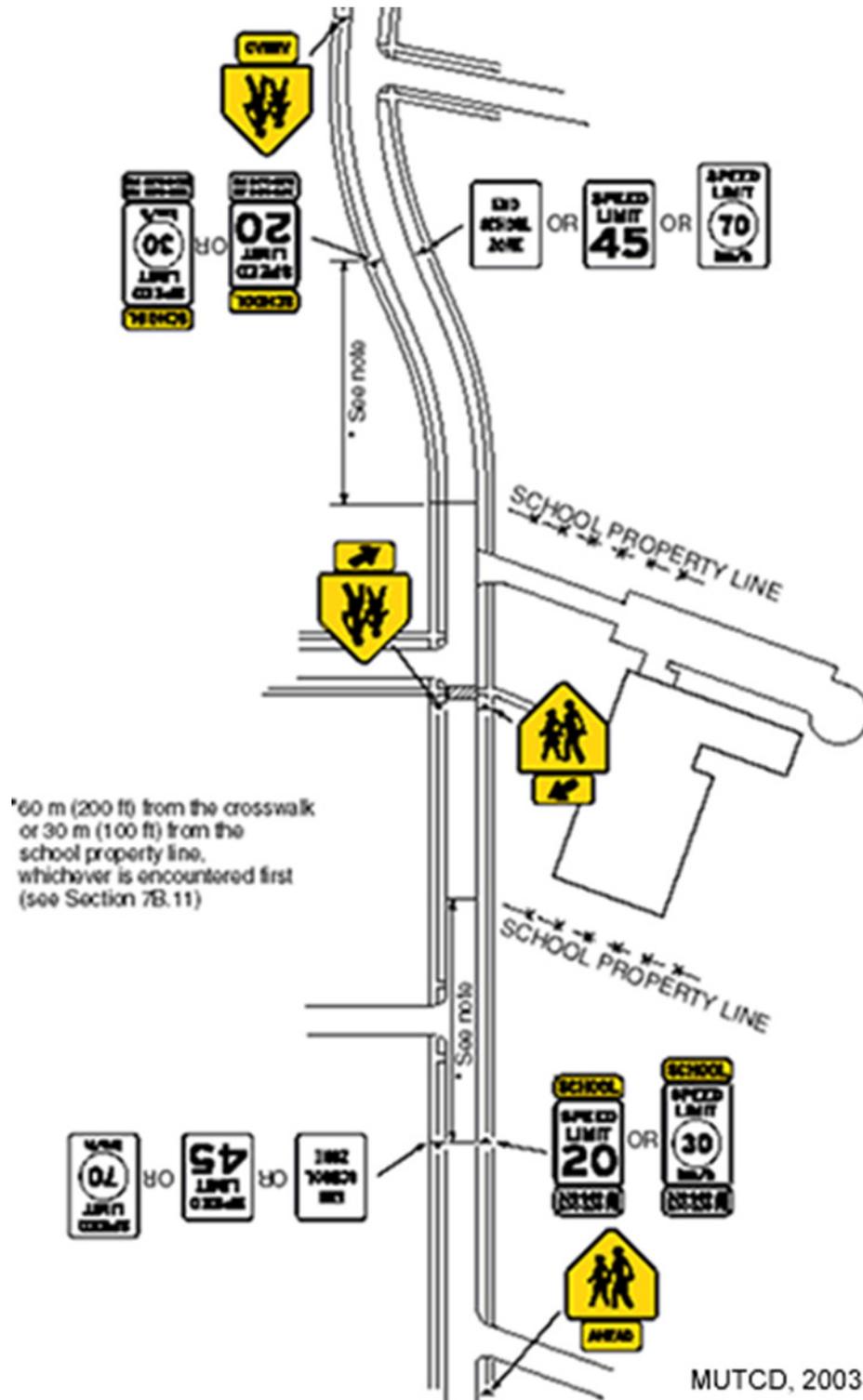


Appendix A
Student and Parent Surveys

Appendix B
Survey Report

Appendix C
Minnesota Manual on Uniform Traffic Control Devices
School Zone

Figure 1: Diagram from the MUTCD, showing typical placement of School advance warning signs, School Speed Limit signs, School Crossing signs and End School Zone signs.





DEER RIVER
SAFE ROUTES TO SCHOOL PLAN
JUNE 2012

Prepared for
Deer River Independent School District

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Regional Planning Division
Arrowhead Regional Development Commission

ARDC's Mission

“To serve the people of the Arrowhead Regional by providing local units of government and citizens groups a means to work cooperatively in identifying needs, solving problems, and fostering local leadership.

If you have questions regarding ARDC or
the Deer River Safe Routes to School Plan
please contact:

Ellen Pillsbury
Regional Planning Division
Arrowhead Regional Development Commission
221 West First St.
Duluth, MN 55802
Phone 218-722-5545
Fax: 218-529-7554
Website: www.ardc.org
Email: epillsbury@ardc.org



