Rothsay

Safe Routes to School Plan

December 2016
SAFE ROUTES TO SCHOOL PLAN

THE ROTHSAy PUBLIC SCHOOL

ROTHSAY PUBLIC SCHOOL DISTRICT #850

DECEMBER 2016, Update FEBRUARY 2017

ROTHSAY, MINNESOTA

Prepared by:
West Central Initiative
1000 Western Avenue
PO Box 318
Fergus Falls, MN 56538-0318
218-739-2239
www.wcif.org

Andrew J. Besold, Principal Author
TABLE OF CONTENTS

Safe Routes to School Plan ............................................................................................................................................... 1
Table of Contents ........................................................................................................................................................ 3
Acknowledgements ..................................................................................................................................................... 5
Executive Summary, Significant Findings and Action Plan ........................................................................................ 7
  Significant Findings .................................................................................................................................................. 8
  Action Plan Recommendations ......................................................................................................................... 11
Chapter 1: Introduction ............................................................................................................................................ 37
  Purpose of the Plan ................................................................................................................................................ 37
Chapter 2: About Safe Routes to School (SRTS) .................................................................................................... 39
  Overview ................................................................................................................................................................. 39
  History ................................................................................................................................................................. 39
  The Decline of Walking and Bicycling .............................................................................................................. 40
  Health Risks ........................................................................................................................................................ 41
  The 5 Es of SRTS Planning ................................................................................................................................. 42
  A 6th E? - Equity .................................................................................................................................................. 46
  National Physical Activity Trends In Children ................................................................................................. 48
  Safe Routes to School Planning Framework .................................................................................................... 49
  MnDOT Walk / Bicycle Zone Concept ............................................................................................................. 50
  Status of State and Federal Support for Safe Routes to School ................................................................. 51
  Minnesota Schools Statewide Enrollment Options And the Impacts on SRTS ............................................ 52
Chapter 3: Vision and Goals .................................................................................................................................... 53
Chapter 4: Community and School Profiles .......................................................................................................... 54
  Community Profile .............................................................................................................................................. 54
  School and District Profile .................................................................................................................................. 57
Chapter 5: Strengths – Barriers – Opportunities Analysis .......................................................................................... 62
West Central Initiative acknowledges the contributions and guidance provided by the Safe Routes to School team members listed below. In addition, we express gratitude for the technical support and resources provided by the Minnesota Department of Transportation.

Safe Routes to School Team Members

Staci Allmaras – Principal, Rothsay Public School

Jordan Barry – Public Works Director, City of Rothsay

Chris Buckingham - Mayor, City of Rothsay

Jane E.W. Butzer, P.E. – Program Coordinator, MnDOT- District 4

Rick Fiedler – Sheriff, Wilkin County

Chuck Grotte - Assistant County Engineer, Otter Tail County

Brandie Hanson – City Clerk / Treasurer, City of Rothsay

Patrick Hollister – Active Living Planner, PartnerSHIP 4 Health

Patrick Jensen – Fire Department Chief, City of Rothsay

Eric Larson – Council Member, City of Rothsay

Robert Larson – Public Works Director, City of Rothsay

Amy Meyer

Steve Neppl – Highway Engineer, Wilkin County

Lori Tillman – Teacher, Rothsay Public School
Minnesota Department of Transportation (MnDOT)

Lisa Austin – Bicycle and Pedestrian Planning Coordinator

Nicole Campbell – Former Safe Routes to School Program Administrator

Dave Cowan – Safe Routes to School Program Administrator

Mary Safgren – Planning Director, MnDOT District 4

West Central Initiative

Wayne Hurley – Planning Director

Greg Wagner – Business and Economic Development Director/ GIS Cartography

Donna Ellsworth – Secretary-Receptionist
The purpose of this Safe Routes to School (SRTS) plan is to guide school and city staff, local and state officials, parents, and educators in their efforts to make it easier, safer and more comfortable for students to walk and bicycle to and from school. It is the product of direct observation, expert analysis of the existing conditions around the school and in the community and input from members of the community. Also included are the Minnesota Department of Transportation (MnDOT) assembled crash and traffic data, and results from standardized parent surveys and student travel tallies. A successful SRTS program will require community involvement if it is to have a meaningful impact on the students attending school. However, as an added bonus, SRTS programs and infrastructure usually prove beneficial to the whole community.

SRTS plans and programming are just a few of the tools being used to combat physical inactivity and increased levels of obesity in the United States. Both are considered public health crises that are greatly impacting the health of Americans. As a result, this contributes to the rising costs of medical care today and much more so in the future, if current trends continue. Walking or biking to and from school is an easy way for children to get the regular physical activity they need to combat these problems and to build healthy habits into adulthood. Physically-active kids have fewer chronic health problems. They also have improved mood and concentration, a stronger self-image and more self-confidence, which are all critical for succeeding in school and in life. SRTS programs can also instill safe travel habits in children at an early age that they can take with them into adulthood.

In the spring of 2014, the Rothsay Public School and City of Rothsay were awarded a SRTS Planning Grant from MnDOT to conduct a SRTS plan for the Rothsay Public School. The SRTS planning process began with a kick-off meeting in August of 2014. It was decided that the actual planning process should be delayed until the following school year when the new school would be open just north of town. The new location is a half a mile north of the old school, just outside of town, and would greatly alter travel patterns. The SRTS team envisions a community that is connected, educated and encouraged to pursue active forms of transportation, as well as one where students can safely walk or bike to and from school. Working together, the Rothsay Public School and City of Rothsay are uniquely suited to implement the identified recommendations for the city and school. The recommendations in this plan address the five “E”s of education, encouragement, enforcement, engineering and evaluation, which is the standard strategy in SRTS planning. Also addressed are possible issues of equity, as some communities and/or members of the community may have been historically underserved, have greater needs and/or have been more negatively affected by transportation planning decisions of the past. After the SRTS planning document is approved by both the City of Rothsay and the Rothsay Public School, the city and/or school may seek funding and resources to implement the identified recommendations.
SIGNIFICANT FINDINGS

OBSERVATIONS AND WALKING AUDIT

- The location of the new Rothsay school is not contiguous with the residential sections of the city of Rothsay. However, all residences within the city limits are still within a one-mile radius of the school with the furthest residence on 3rd Avenue Southeast; a 1.1 mile trip from the school using the roadway network. This distance would require a child to walk 26 minutes or 8 minutes to bike. As such, all students living within the city of Rothsay in grades 6 and up should be able to walk and/or bike to and from school, as should all K-5 grade students living within one-half mile of the school.

- The layout of the new school grounds is effective at separating parent drop-off/pick-up and high school student traffic by placing it on the west side of the school, a safe distance from bicycle and pedestrian traffic approaching from the east side.

- There are no sidewalks on County Highways 52 and 11, or 1st Street NW servicing the new school location.

- There is heavy truck traffic entering and exiting the Rothsay Truck Stop and Café during both the morning arrival and afternoon dismissal of students.

- While most children were seen using the crosswalks and pathway leading to the school at County Highway 52 and 1st Street NW, one or two students did not.

- The assumed speed limit of 55 mph on County Highway 52 would appear to be rather fast for a road with an urban amenity located on it, particularly a school. While a 25 mph school zone limit was installed soon after Observation Day, it is not known if this limit is regularly observed by drivers.

- On County Highway 11, there are no signs warning southbound drivers of the change to a 30-mph limit just south of the County Highway 52 intersection. Because the County Highway 11/52 intersection is busy with truck stop traffic and a downhill run into town from the Interstate overpass, drivers tend to carry a lot of speed through the intersection and into the 30-mph section of County Highway 11 / Center Street.

- The speed limit on County Highway 11 through the Highway 52 intersection is 55 mph. The speed limit doesn't drop to 30 mph until a point about 55 feet south of the intersection.
• Students were observed crossing the intersection of County Highways 11 and 52 to visit the truck stop, particularly after school, and then wandered through the parking lot to points south. A quick visit to the truck stop to talk to the cashier confirmed that students visit nearly every day after school to buy snacks.

• Most of the sidewalk on the west side of Center Street is either missing or in poor condition and there are no sidewalks on the east side of Center, at all. The roadway is very wide (up to 48 feet) with wide shoulders. Such overly-wide roadways are known to induce speeding by even conscientious drivers, as was observed on Observation Day.

• There was a high volume of motor traffic on 1st Avenue NW between County Highway 52 and 3rd Avenue NW in the afternoon, with some borderline speeding / careless driving. Currently, this is the primary and safest route for students walking and biking to school.

• On the afternoon of Observation Day, every car turned left out of the parking lot onto County Highway 52 and headed east towards County Highway 11.

• Most residential streets in Rothsay are no more than 24 feet wide and have no sidewalks. While some may say that narrow streets are substandard and potentially, even dangerous, some of the latest thinking is that narrow streets have a natural traffic calming effect on drivers who feel uncomfortable driving at faster rates of speed, which are often fatal for bicyclists and pedestrians, if a collision were to occur.

TRAFFIC VOLUME AND CRASH DATA ANALYSIS

• There was one crash fatality within the past 10 years which involved a pedestrian. On Monday, May 3, 2010 at 13:39 hours, under dry, clear daylight conditions, a 50-year-old male was struck and killed while mowing the lawn of a property on Center Street near the intersection of Main Avenue. The automobile was driven by a 17-year-old juvenile from Barnesville, Minnesota. The juvenile lost control of the vehicle s/he was driving. The vehicle left the roadway and struck the male victim who died at the scene. “Illegal Speed” was cited as a contributing factor in this fatal crash.
• Traffic on County Highway 11 north of County Highway 52 was measured by MnDOT to be at 3500 AADT. This number drops to 1650 AADT on County Highway 11 south of County Highway 52. This confirms the observations that traffic volume in and out of the truck stop are high. There were no counts made for heavy commercial trucks on this stretch of highway.

PARENT SURVEY AND STUDENT TRAVEL TALLY RESULTS

• According to the student travel tally, a combined total of eight percent of the students walked and biked to school in the morning and 12 percent from school in the afternoon.

• The parent survey for the Rothsay school were distributed to parents of children in grades Kindergarten through 5th. Results showed that just nine percent of these students walked or biked to school in the morning and nine percent walked or biked home in the afternoon. When students reported to live within one-half mile Walk / Bike Zone of the school were counted, those percentages increased to 28 percent in the morning and 43 percent in the afternoon.

• Both the student travel tally and the parent survey mode share results for walking and biking to and from school are below the national average of 15.2 percent in the morning and 18.4 percent in the afternoon.

• The school bus was the most frequently used travel mode to and from school, followed by the family vehicle.

• Distance was the main reason parents did not allow their children to walk or bicycle to and from school.

• Safety factors, such as traffic speed and traffic volume, were chosen more frequently than crime or violence as barriers to children walking or biking to school.
ACTION PLAN RECOMMENDATIONS

EDUCATION

*Goal: Establish at least two educational programs a year within the community to teach and foster good bicycle and pedestrian safety habits.*

1. **Facilitate an annual bicycle rodeo event to teach bicycle skills and safety to students.**

   Bicycle rodeos are bicycle safety training events held over the period of several hours that teach bicycle safety lessons and on-bike skills, usually in a station format. Instructors do bicycle safety checks, helmet fittings, instruction about the rules of the road, on-bike obstacle course, and on-bike skills drills, etc. While geared towards children, many of the lessons can be appropriate for adults, as well. Bicycles rodeos can be held as part of a larger event or on their own, and either during the school day or outside of school. Adult volunteers can administer rodeos, or they may be offered through the local police department. Key partners in implementing a bicycle rodeo event may (should) include teachers, League of American Bicyclists Cycling Instructors, and PartnerSHIP 4 Health.

2. **Educate students about the proper walking and bicycling etiquette through in-school and after-school bicycle and pedestrian safety education.**
   a. **If not existing, establish an after-school club.**
   b. **Utilize the Walk! Bike! Fun! curriculum to help students understand the rules of the road.**
   c. **Identify the need for a bicycle fleet.**

   Observation results indicate that some students did not exhibit proper walking techniques. Students were not utilizing crosswalks and often did not look for traffic when they were crossing the street. Often young bicyclists displayed improper techniques by riding through stop signs and even not looking before entering an intersection.

   The Walk! Bike! Fun! curriculum is an in-classroom and real-world (on foot, on bike) educational resource and can help address improper walking and biking behaviors like that often observed by the SRTS team. Taught by specially-trained school district teachers, this curriculum is intended for children ages five through thirteen. It teaches life-long skills related to traffic rules, potential hazards and bike handling skills that enable students to walk and bike safely and comfortably to and from school, along with other trips around their communities. The curriculum addresses a
variety of walking and bicycling topics and is endorsed by MnDOT. Finally, in order to engage students in the *Walk! Bike! Fun!* curriculum, the Rothsay School District should identify the need for a bicycle fleet, or a nearby fleet they may be able to borrow.

![Figure 1: The Fergus Falls bike fleet is kept inside this towable trailer.](image1)

![Figure 2: Some of the inspirational graphics painted onto the sides of the Fergus Falls bike fleet trailer.](image2)
3. **Develop a school district safety campaign to build awareness of students walking and bicycling to and from school, and to encourage safe driving behavior among parents, high school students and passersby.**

Observations by the SRTS team seem to indicate that driver behavior near the school could be improved. This was particularly true at dismissal time when teenage drivers left in their private automobiles. These concerns may be confirmed by the slight spike shown in the crash history during the 15:00 hour (3:00 PM to 4:00 PM). A school safety campaign should be developed that builds awareness around students walking and bicycling to and from school. An effective safety campaign might utilize multiple forms of media to get the attention of parents, students and passersby. Primary outcomes are improved walking, bicycling and driver safety behaviors, particularly near the school, and youth empowerment.

4. **Design a parent workshop to provide tools, resources and support needed to encourage parents and other community members to begin walking and bicycling for transportation.**

A parent workshop for those living in and around Rothsay can provide the tools, resources and support needed for parents to overcome some of the common barriers noted by parents who do not allow their children to walk or bicycle to and from school. While distance was the most cited barrier by parents, safety of intersections and crossings, and traffic speed were the 2nd and 3rd most-noted barriers. While traffic is a real threat to student safety for those walking to school, it is something that can be mitigated to some degree through education and parental involvement. Topics such as how to be a responsible driver, starting a walking school bus, and launching a safety campaign may impact the amount and speed of traffic near the school route.

5. **Create a family-oriented, educational training program that builds upon the school safety campaign (#3) such as a family biking class and/or family biking guide to teach basic bicycle maintenance, safety checks, etc.**

Educational trainings teach students the skills necessary to walk and bicycle safely while encouraging them to try walking and bicycling on a regular basis. If held in conjunction with the school safety campaign, students and families have the opportunity to practice skills and gain confidence.

For more Education ideas, see Minnesota SRTS Model Policies Tip Sheet (Appendix E) and the Minnesota SRTS Resource Center – Education found at: [http://www.dot.state.mn.us/mnsaferoutes/resources/education](http://www.dot.state.mn.us/mnsaferoutes/resources/education)
ENCOURAGEMENT

Goal: Explore strategies to promote walking and bicycling through the identification of safe routes, organizing events, rewarding participation, and educating adults.

1. Use the proposed walking and biking route maps (Figures 3 & 4) to encourage all students living in Rothsay to walk and bike to school. According to the MnDOT Walk/Bike Zone concept, a distance of one-half mile is an appropriate distance for children in grades K-5 to walk and/or bike to and from school. A distance of up to one mile is considered appropriate for children in grades 6-8. Approximately 45 percent of the residences in Rothsay are with the one-half mile radius and all residences are within the one-mile radius.

All residences within the city limits of Rothsay are within a one-mile radius of the school. The furthest residence on 3rd Ave Southeast is a 1.1 mile trip from the school using the roadway network. This distance would require 26 minutes for a child to walk or 8 minutes to bike. As such, all students living within the city of Rothsay in grades 6 and up should be able to walk and/or bike to and from school, as should all K-5 grade students living within one-half mile of the school.

Note - While a great deal of thought was given in selecting routes that avoided areas with a large volume of high speed traffic, minimized county highway crossings and maximized time spent on residential streets with slow speeds and low traffic volume, the decision to allow a child to walk and/or bike to and from school is that of the child’s parents and/or guardians.

Proposed walking and biking route maps show the suggested optimal routes to school. To go home, students would simply reverse the course they took in the morning. For cyclists, this may require slight alterations due to sidewalk availability.
Rothsay Proposed Walking Routes for Existing Conditions

Figure 3: Rothsay Proposed Walking Routes for Existing Conditions.

* - Distance calculated using Google Maps and by following the optimized street routes as proposed on the map to the school entrance. Estimate child walking time calculated using a conservatively slow speed of 2.5mph. The accepted average adult rate is 3mph (20min. per mile) and the National Centers for Safe Routes to School (SRTS) accepts an average child walking speed of 2.7mph.
Figure 4: Rothsay Proposed Bicycle Routes for Existing Conditions.

* - Distance calculated using Google Maps and by following the optimized street routes as proposed on the map to the school entrance. Estimated time calculated using the National Centers for SRTS accepted average bicycling speed for a child of 8 mph.

Legend

- New Rothsay School
- Existing Sidewalks
- Existing Poor Sidewalks
- Existing Multi-use Paths
- Existing Crosswalks
- Existing Crosswalk with Beacon
- Optimized Biking Routes...
- Distance & Child Bike Time*
- Walk Bike On
- Sidewalk/Facing Traffic
- ½ Mile Walk/Bike Zone
- ¼ Mile Walk/Bike Zone
2. A review of the Rothsay Transportation Policies could not be performed because they were never provided. However, recommendations can still be made as most of districts’ policies are the same since they all originate from the Minnesota School Boards Association model policies. The Wellness Policy (Appendices F) found just one reference that directly promotes and encourages to walking or biking to and from school. While this appears to be fairly standard language, there is always room for improvement. The Rothsay School District may wish to review its policy language to see if it meets current best practices. A sample Wellness policy amendment specific to Minnesota and SRTS was produced by the Public Health Law Center at the William Mitchell College of Law and can be found in Appendix D. An additional policy resource specific to Minnesota is the Minnesota SRTS Model Policies Tip Sheet which can be found in Appendix E. Finally, the SRTS National Partnership, in cooperation with ChangeLab Solutions (a multi-disciplinary, multi-government agency policy partnership,) has developed an on-line SRTS District Policy Workbook found at: http://www.changelabsolutions.org/safe-routes. This resource is a comprehensive SRTS policy guide covering everything from general policies supporting SRTS to more advanced policies like “No Idling Policies” and “School Siting Policies.” Also, look for possible improved policies from the MnDOT SRTS Office and/or the Minnesota Department of Education, in the near future.

The Rothsay School District’s Wellness Policy clearly states that, “Safe bicycling and walking to and from school is promoted and encouraged.” While the 707L Transportation of Public School Students Policy and the 709L Student Transportation Safety Policy were not provided, assumptions can be made as these policies are near identical between districts. The 707L Policy usually sets the ground rules as to who is eligible to be bused to and from school. The 709 Policy is typically an 18-page document dedicated to the finer points of how students will be bused to and from school. Either way, the Rothsay School District may wish to review its policy language so that it is more in line with the current best SRTS practices being promoted in Minnesota. Much could be added to both policies like amendments stating and detailing requirements that would qualify a residence close to the school for hazard busing, while other districts require the teaching of bicycle and pedestrian safety to students.

3. Develop informational messages to be included in the monthly school newsletter or email blast, encouraging students to walk or bike to school and highlighting associated health benefits.
Monthly informational messages can raise awareness about the positive health and academic benefits associated with increased physical activity, such as walking and bicycling. To get information to parents, a short message could be included in the monthly school newsletter.

4. **Explore the development of a remote school bus drop site, possibly at the old school, where students would have the option of walking the remaining distance to school or taking the bus.**

   In a rural school district where students can live 20, 30 or more miles away from the school, it is not practical to have these students walk or bike to school. Others may live close by but are confronted with traffic barriers like highways and/or railroad track. These students can still get the exercise benefits of walking to school if given the option of walking a few blocks to school from a safe remote drop-off site. This would also allow these students to participate in walking and biking to school competitions. (See below)

5. **Explore / develop a competition or challenge to reward students by tracking the number of times they walk or bike to school, including those that take the bus and opt to be dropped off remotely.**

   Competitions or challenges provide students with immediate, positive reinforcement. Beyond a walk and bike to /from school challenge, possible competitions or challenges are endless and could target individuals, classrooms or the entire school.
6. **Look to participate in International Walk and Bike to School Days and the new Minnesota SRTS Winter Walk to School Day to encourage students and their families to try walking or biking to school.**

International Walk and Bike to School Day attracts millions of participants all over the world. The intent is to encourage students and their families to try walking or bicycling to school for one day. In some districts with high busing numbers, events on this day might include a walk around school grounds and throughout the town for all students, or a remote bus drop-off which would allow all students to walk to school from that location. Depending on the response rate, these events could be extended into the future and turn into ongoing designated walking and bicycling days. Winter Walk to School Day started in Canada in 2007 and 2017 marked the first year that the Minnesota SRTS program will be officially participating. Key partners include law enforcement officials, high school students, teachers, parent advocates and PartnerSHIP 4 Health. As a result, youth become empowered and more connected to health and their environment.

7. **Install a bicycle repair station near the bicycle rack, preferably at the proposed new bicycle rack location.**

Outdoor bicycle repair stations (Figure 5) are a great way to encourage bicycling. They provide a way to make sure that bicycles are in good working order before students leave school for the day. A student can make minor repairs that might otherwise leave them stranded, all while teaching students basic mechanics and self-reliance. A typical station is equipped with a repair stand that holds the bike from the saddle, a heavy-duty, all-weather bicycle pump, and basic tools attached to the stand with theft resistant cables that allow a person to make most basic repairs.

![Figure 5: A bicycle repair station with a heavy-duty, all-weather pump, installed in the summer of 2015 at the Fergus Falls Public Library.](image)
The Rothsay school should investigate the need and/or feasibility of walking and/or biking school buses for students within the Rothsay city limits. For a possible route, see Figure 6.

Walking and biking school buses are a group of students walking or biking to and from school with chaperones (usually adult / parent volunteers). These “school buses” are a fun, healthy and an easy opportunity for students to be physically active. A walking or biking school bus can start at muster points, have "bus stops" along the way and/or provide front door pick-up and drop-off of students, which can allay most parents’ fears. They can be done daily or just on certain days of the week, depending on weather conditions. The Rothsay school should investigate the desire for a walking school bus and see if parents or other citizen volunteers are interested in taking turns walking with the students. The hardest part to operating a walking or biking school bus is finding enough dedicated volunteers to act as “drivers.”

For more Encouragement ideas, see Minnesota SRTS Model Policies Tip Sheet (Appendix E) and the Minnesota SRTS Resource Center – Encouragement at:  
http://www.dot.state.mn.us/mnsaferoutes/resources/encouragement.html
Figure 6: A proposed sample "Walking School Bus Routes" for existing conditions. "Biking School Bus Routes" may be best optimized by using other roads. Routes after proposed SRTS improvements would also need to be reevaluated / realigned.
ENFORCEMENT

Goal: Address traffic and safety concerns by identifying and implementing enforcement measures within the school walk and bike zone.

1. Investigate increase the prevalence of traffic law enforcement in strategic locations during student morning arrival and afternoon dismissal.

The SRTS team noted speeding traffic near the truck stop, along the entire length of Center Street and on 2nd Street NW, as well as poor stopping behavior at stop signs. Several comments from the parent surveys also expressed concerns about traffic safety. Increasing the prevalence of law enforcement officers near the school may help to reduce vehicle speeds, improve compliance with speed limits around the school and increase the likelihood of vehicles yielding to pedestrians. This is a short-term, easy-to-implement recommendation that can be low cost.

2. If not done so already, look to employ a trained adult crossing guard at the corner of 2nd Street NW and County Highway 52.

The presence of a trained adult crossing guard can be of invaluable importance to student safety near the school location with all its traffic activity. They can also help with the traffic flow of parents picking up and dropping off students and enforce the no parking restrictions in front of the school which was noted being violated by the SRTS team during Observation Day. Adult crossing guards have the added benefit of acting as a source of encouragement to students and reassurance to parents. This person could be a school employee or adult volunteer.

3. Investigate the reduction of speed limits in strategic locations around the city of Rothsay and areas popular with youth, with an eye toward the safety of students walking and biking to school. Maintain the low-speed nature of Rothsay city streets and sign them accordingly with low-speed limits as per Figures 7 and 8.

High vehicle speeds are an obvious and significant safety hazard to pedestrians and bicyclists. According to the AAA in the U.S., if a pedestrian gets hit by a car traveling at 20 mph, there is approximately a 7% chance of death. The fatality rate climbs to 90% for a pedestrian struck at 60 mph. According to AAA, the greatest rate of fatality risk increase happens between the speeds of 25 and 45 mph, increasing from 12% to 60%. A reduction in vehicle speeds near the school and in places students, as well as other bicyclists and pedestrians, are present is a cheap and proven way to make the roads safer for all users.
4. Investigate lowering the speed limit on County Highway 52 in front of the school from 55 to 30 mph. Use a transitional speed limit of 40 mph from an appropriate distance west on County Highway 52.

5. Investigate installing a transitional speed limit of 40 mph on County Highway 11 through the Interstate 94 interchange, starting at a point just north of the westbound ramps. Move the transition to the 30-mph speed limit to a point north of the County Highway 52 intersection.

6. Investigate converting the current “School Zone” speed limit from 25 mph to 15 mph on County Highway 52, as illustrated in Figures 7, 8, 10 & 11.

7. If not in place already, investigate creating a policy to rescind parking privileges to high school students observed driving in an irresponsible manner while arriving at and leaving the school grounds. If possible, extend such restrictions to any student who is found guilty of a serious traffic citation and/or accrues a certain number of moving violation points.

Being able to drive a private automobile to school and park it on school property is a privilege. Irresponsible driving behaviors by students near the school and around Rothsay should not be tolerated as the consequences can easily be fatal. According to the parent survey, several parents noted poor driving behavior as a deterrent to allowing their children to walk and/or bike to and from school.

8. Identify the most effective form of automated speed feedback sign and investigate the possible installation (permanent or temporary) at strategic locations within Rothsay and in front of the Rothsay school. (See Figures 7 & 8)

As mentioned earlier, the SRTS team noted speeding traffic near the truck stop, along the entire length of Center Street and on 2nd Street NW. Several comments from the parent survey also expressed concerns about traffic safety within the city limits. Speed feedback signs are a fairly uncontroversial and effective means of slowing down traffic and have been used in numerous communities through Greater and west central Minnesota. Using radar to detect a vehicle’s speed, these signs will display the speed of the oncoming vehicle to remind the driver of their speed. If driving more than 5 mph over the limit, the sign will flash the detected speed, sometimes with a flashing strobe light to really catch the driver’s attention. It is recommended that the City of Rothsay, with help of County and MnDOT officials, identify the most effective form of automated speed feedback and possible locations for deployment.
Figure 7: Rothsay Proposed Speed Limits, Speed Feedback Sign Locations and Slow-Speed Neighborhood Zones: Proposal A.

Legend

New Rothsay School..................
Existing Speed Limits.............
(Posted & Assumed)
Warning Speed Limits.............
(Posted with yellow signs)
Proposed Posted Limit...........
Location of sign and/or
direction of speed limit.......... Prop. Speed Feedback Sign..
Prop. Center St. Traffic Calm.
Prop. 15mph School Zone.....
10 mph Neighborhood Zone
15 mph Neighborhood Zone
20 mph Neighborhood Zone

Post regulatory signs to clearly mark speed limits and install appropriate traffic calming features including but not limited to speed humps in slow-speed neighborhood zones to self-enforce the local speed limits.
Figure 8: Rothsay Proposed Speed Limits, Speed Feedback Sign Locations and Slow-Speed Neighborhood Zones: Proposal B.

Post regulatory signs to clearly mark speed limits and install appropriate traffic calming features including but not limited to speed humps in slow-speed neighborhood zones to self-enforce the local speed limits.
For more Enforcement ideas, see Minnesota SRTS Model Policies Tip Sheet (Appendix E) and the Minnesota SRTS Resource Center – Enforcement:

http://www.dot.state.mn.us/mnsaferoutes/resources/enforcement.html

ENGINEERING

Goal: Improve the existing infrastructure within the community to ensure active transportation is encouraged and made safe.

Note – The recommendations below are listed in a general order of priority. For a visual summary of the suggested Engineering proposals, please see Figures 10 through 12.

1. With the following engineering suggestions, ensure that all meet conventional standards including, but not limited to, the latest Public Right-of-Way Accessibility Guidelines (PROWAG) for ADA compliance and the AASHTO Guide for the Development of Bicycle Facilities. With the suggestions in Figures 9 – 11, ensure that all sidewalks, crosswalks, and multi-use pathways near the school follow the suggested widths indicated. The suggested widths were included to advise the best way to handle the extra pedestrian traffic of walking students, near the school and gathering in groups, and those riding bikes. For more information regarding ADA PROWAG guidelines in Minnesota, please see MnDOT's Curb Ramp Guidelines from October 2010.

2. If the agricultural field west of 2nd Street NW between the school and 3rd Avenue NW is planned for immediate residential development, ensure that a logical, safe and direct bicycle and pedestrian-friendly route to the school is constructed. If this is done properly, it would negate the need for the preferred alternative of a ten-foot-wide, asphalt, multi-use pathway built on the eastern edge of this field. (See Figures 9 & 10)

3. Otherwise, investigate the construction of a ten-foot-wide, asphalt, multi-use pathway built on the eastern edge of this field, behind the businesses on the west side of 2nd Street NW but also west of the tree line. If residential construction does not occur in the agricultural field described in #2 above, this primary safe route to school is preferred as it negates the need for a pathway to cross two active driveways. It keeps school children away from the heavy and fast motor vehicle traffic observed on the gravel portion of 2nd Street NW. Relocation of the multi-use path on school grounds would need to occur to make for a more logical, direct route to the east entrance of the Rothsay school. (See Figures 9 & 10)
4. If the location for a pathway, as described in #3, cannot be secured, construct the multi-use pathway on the west side of 2nd Street NW as illustrated in Figure 11.

5. Otherwise, construct sidewalks, crosswalks and multi-use pathways as illustrated in Figure 9. Notably, extend sidewalks north on 1st and 2nd Streets NW to 3rd Avenue NW. Construct a sidewalk on the south side of 3rd Avenue NW from 4th Street NW to Center Street. Construct sidewalks on both sides of Center Street from County Highway 52 to 3rd Avenue South. Suggested improvements are closest to the school and will benefit the maximum number of students walking and biking and should be prioritized.

Note – While it is suggested that pedestrian and bicycle improvements be made on Center Street north of 3rd Avenue NW up to County Highway 52, it is not suggested that students travel by foot and/or bike to and from school in this area. There are alternate and equally-direct routes to and from the school. The traffic volume and observed speeds would indicate that exposure to traffic hazards is high in this location. The proposed improvements in this area are to accommodate student pedestrian and bicycle traffic seen and recorded traveling through this location and to mitigate, as best and as reasonably possible, the hazards motor vehicle traffic poses in this area.

6. Investigate the installation of user-activated crosswalk beacons with proven high yielding / stopping rates like a High-intensity Activated crossWalK (HAWK) beacon or a Rectangular Rapid Flashing Beacon (RRFB) at the locations noted in Figure 10. Priority should be given to the crosswalk (current and/or proposed) on County Highway 52 and at the proposed crosswalk on County Highway 11 at the intersection of County Highway 52.

7. Investigate the installation and construction of traffic calming features on Center Street from County Highway 52 to 3rd Street South which self-enforce the posted 30-mph speed. (See Figure 9) These features include, but are not limited to, a general reduction in the roadway width, the planting of street trees immediately adjacent to the street (often between the street and the sidewalk), the installation of painted bike lanes, and bump-outs with plantings at crosswalk locations. Typically, speed-humps are not employed on county highways which are often designated as emergency routes.

8. Maintain the narrow nature and very slow speed design of all residential city streets. Investigate installing and constructing traffic calming features that self-enforce the
desired motor vehicle speeds. When used on residential streets, the features may include speed-humps and speed tables.

9. Investigate which side of Main Avenue, west of 2nd Street West is preferable for the installation of a sidewalk. Continue that sidewalk over the Otter Tail Valley Railroad with an at-grade crossing that meets the latest PROWAG ADA standards.

10. Where practicable, set sidewalks as far back as possible from the roadway curb to create a buffer between pedestrians and motor vehicle traffic. Such buffers can reduce traffic stress on pedestrians and make walking safer and more enjoyable, while providing a place for street-trees to grow. These buffers are even more important on busier roadways with higher traffic volume, faster vehicle speeds, and/or significant heavy truck traffic.

11. Investigate reducing the width of the streets in the southwest business district to allow for wider sidewalks and tree boulevards where appropriate.

12. Install marked bicycle routes with on-street Sharrow markings (painted white) and appropriate bike route signs from “Section 9B.20 Bicycle Guide Signs” of the 2009 Edition of the MUTCD. (See Figure 12)

Please note that the proposed SRTS improvements will require minor alterations of the suggested walking and biking routes to take maximum benefit of the proposed improvements. See Figures 13 and 14 for how these routes would change with some, if not all, the improvements installed as proposed.

It bears repeating, that while improvements are suggested on Center Street north of 3rd Avenue NW up to County Highway 52, it is NOT suggested that students travel by foot and/or bike to and from school in this area. There are alternate and equally-direct routes to and from the school. The traffic volume and observed speeds would indicate that exposure to traffic hazards is higher on Center Street. The proposed improvements in this area are to accommodate student pedestrian and bicycle traffic seen and recorded traveling through this location. This traffic is likely to persist. Therefore, it is advisable to mitigate, as best and as reasonable as possible, the hazards motor vehicle traffic poses in this area.

For more Engineering ideas, see Minnesota SRTS Model Policies Tip Sheet (Appendix E) and the Minnesota SRTS Resource Center – Engineering:

http://www.dot.state.mn.us/mnsaferoutes/resources/engineering.html
Rothsay Proposed Preferred SRTS Improvements

If developed, ensure street network and/or possible trail provide a logical direct route to either one or both school entrances. This would negate the need for the preferred alternative on the east edge of field.

Investigate best side to route sidewalk and cross railroad tracks.

Install traffic calming features on Center Street that will self-enforce the 30 mph speed limit and not hinder emergency vehicles.

Legend
New Rothsay School
Existing Sidewalks
Existing Poor Sidewalks
Proposed Sidewalks
Existing Multi-use Paths
Proposed Multi-use Paths
Existing Marked Crosswalks
Proposed Marked Crosswalks
Proposed Crosswalks with User Activated Beacons
Proposed ADA PROWAG RR Ped. Crossing Improvements
½ Mile Walk/Bike Zone
¾ Mile Walk/Bike Zone

Figure 9: Rothsay Proposed Preferred SRTS Improvements.
Rothsay School Detail - Suggested SRTS Improvements: Proposal B

Legend

New Rothsay School
Proposed Bicycle Parking
Existing Sidewalks
Existing Multi-Use Path
Existing Crosswalks
Existing Pathway Widths
Existing Speed Limits
Proposed 20mph School Zone
Proposed Removal
Proposed User Activated Crosswalk Beacon

Basemap Aerial Imagery via Google Maps
If developed, ensure street network and/or possible trail provide a logical direct route to either one or both school entrances. This would negate the need for the preferred alternative on the east edge of field.

Investigate best side to route sidewalk and cross railroad tracks.

* - Distance calculated using Google Maps and by following the optimized street routes as proposed on the map to the school entrance. Estimate time calculated using the National Centers for SRTS accepted average bicycling speed for a child of 8 mph.

Figure 12: Rothsay Proposed Marked Bicycle Routes with SRTS Improvements.
Rothsay Proposed Walking Routes with SRTS Improvements

If developed, ensure street network and/or possible trail provide a logical direct route to either one or both school entrances. This would negate the need for the preferred alternative on the east edge of field.

Figure 13: Rothsay Proposed Walking Routes with SRTS Improvements.

* - Distance calculated using Google Maps and by following the optimized street routes as proposed on the map to the school entrance. Estimate child walking time calculated using a conservatively slow speed of 2.5mph. The accepted average adult rate is 3mph (20min. per mile) and the National Centers for SRTS accepts an average child walking speed of 2.7mph.

Legend
- New Rothsay School
- Existing Sidewalks
- Existing Poor Sidewalks
- Proposed Sidewalks
- Existing Multi-use Paths
- Proposed Multi-use Paths
- Existing Marked Crosswalks
- Proposed Marked Crosswalks
- Proposed Crosswalks with User Activated Beacons
- Proposed ADA PROWAG RR Ped. Crossing Improvements
- Optimized Walking Routes
- Distance & Child Walk Time*...
  - 0.8m (20min)
  - ½ Mile Walk/Bike Zone
  - ¾ Mile Walk/Bike Zone

Basemap Aerial Imagery via Google Maps
Figure 14: Rothsay Proposed Optimized Bicycle Routes with SRTS Improvements.
EVALUATION

Goal: Evaluate the effectiveness of programming by tracking baseline data and, in addition, actively work on improvement, based on results.

1. Administer the student travel tallies at least once per year to track the number of students walking and bicycling in comparison to the 2016 baseline results.

In order to track the results of implemented programming, it is recommended that the Rothsay Public School and the Rothsay School District administer the student travel tallies at least annually. The results will indicate the number of students walking and bicycling, which in turn will identify the effectiveness of programs. If possible, try to conduct the student travel tallies more than once per year so it is possible to capture travel data during periods of inclement weather, to see how it affects student travel mode choice. This data will also be useful when applying for non-infrastructure or infrastructure funding.

2. Administer a parent survey questionnaire once every two to three years to track and analyze student travel behaviors and parents’ perceptions.

The parent survey tool tracks and analyzes student travel behaviors and parents’ perceptions of walking and bicycling. This survey should be conducted no more than biannually as attitudes are not likely to change that quickly. If done too frequently, parents may not be as inclined to fill them out. Results can then be compared to the baseline analysis completed in the spring of 2016.

3. Explore establishing baseline health data (possibly already gathered) to evaluate possible health improvements over time, related to SRTS improvements.

In order to track student health improvements over time, it is suggested that the Rothsay School District collect baseline health data. It is likely that the school district is already collecting this data. As SRTS programs and improvements are implemented, the health of students can be tracked on a continual basis. PartnerSHIP 4 Health may be able to help the school district organize this.

For more Evaluation ideas, see Minnesota SRTS Model Policies Tip Sheet (Appendix E) and the Minnesota SRTS Resource Center – Evaluation:
http://www.dot.state.mn.us/mnsaferoutes/resources/evaluation.html
OTHER

Goal: Eliminate conflicts with high school student drivers who have been observed driving inappropriately at afternoon dismissal times.

1. Investigate a later dismissal time for high school students so the high school-aged drivers are not leaving at the same time as the younger elementary school students.

The SRTS team noted poor stopping behavior at stop signs and speeding high school student traffic on 2nd Street NW, during dismissal. It may benefit student safety by having the elementary school students dismissed several minutes before the high school students so the younger students can clear the area around the school before the high school drivers leave. Since the buses must wait for the high school students to dismiss, this also eliminates bus traffic from around the school and nearby streets when elementary school students are walking home.

Goal: Create partnerships with local businesses and organizations to increase support and encouragement of active transportation.

2. Identify opportunities or partners to fund bicycle helmets for educational events like bike rodeos and/or Walk! Bike! Fun! training events.

Goal: Work to ensure all City policies and ordinances are supportive of active transportation.

3. It is highly recommended, if not done already, that the city amends its sidewalk ordinances to expressly forbid the removal of sidewalks within the public right of way. Without such an ordinance it may be difficult for the City of Rothsay to win SRTS or any other grant monies to construct schools if adjoining residents could legally remove them.

4. While the current city ordinances require that sidewalks be maintained and cleared of snow in winter months by the adjacent property owners, there is no time limit given by which the sidewalk must be cleared. It is suggested that the city amend its sidewalk ordinances to require sidewalks be clear of snow and debris within a time period no longer than 24 hours after a weather event.
CHAPTER 1: INTRODUCTION

In April of 2014, the Rothsay Public School and City of Rothsay were awarded a Safe Routes to School (SRTS) Planning Grant from the Minnesota Department of Transportation (MnDOT) to conduct a SRTS plan. This plan is a product of that grant and was developed to encourage students who live within an appropriate distance of the Rothsay Public School to walk and bike to and from school, and to do so safely. In a collaborative effort with the city, the school district, and members of the community, West Central Initiative staff developed this plan, which is focused on developing strategies and identifying the infrastructure needs to help attain these goals.

PURPOSE OF THE PLAN

An SRTS plan is a multi-faceted guide for school officials, city staff, parents and educators to improve the conditions for students walking and biking to and from school. Walking or biking to and from school is an easy way for children to get the regular physical activity they need for good health. Physical inactivity and increased levels of obesity are considered public health crises and, as such, the Minnesota Department of Health has allocated funds and personnel through the Statewide Health Improvement Program (SHIP) to assist with SRTS programs such as Walk to School Day. Physically-active kids have fewer chronic health problems, have improved mood and concentration, a stronger self-image, and increased self-confidence and independence—all of which are critical for succeeding in school and in life. In some communities, SRTS programs have had the added benefit of reducing and, in select cases, eliminating expensive student transportation costs. The recommendations in this plan are intended to improve safety, encourage walking and bicycling, empower students and reduce traffic congestion.

Figure 15: New sidewalks and street lights next to the Barnesville, MN football stadium were installed after the need was identified in an SRTS plan. While the sidewalk and lights were paid for with an SRTS infrastructure grant primarily to benefit students walking to and from school, these amenities are in the public right-of-way and benefit all in the community who wish or need to use them.
during the morning and afternoon school rush. Parents will only allow their children to walk to and from school if the parents are comfortable that it is safe for their children to do so. This plan was commissioned with these goals in mind.

While the primary goal of the plan is to make walking and bicycling to school a safe and desirable transportation choice, the safety improvements proposed have the potential to benefit the community as a whole. Sidewalk, trail and/or intersection improvements possibly built for students as a result of this plan will always be there for any and all who wish to walk or bike for transportation and/or recreation, whether that be a couple going for an evening stroll after dinner or an elderly widow who has no other means but to walk to her local church, convenience store, pharmacy, etc.

This five-to-ten year plan was developed for the City of Rothsay and the Rothsay Public School students and is based specifically on the school’s location, the city’s and the surrounding school district’s geography, pre-existing conditions, school walk and bicycle zones, strengths, barriers, opportunities and student population throughout the district. This SRTS plan uses the standard “5 Es” approach (see Chapter 2) and greatly improves a school’s and community’s chances to be awarded state and federal SRTS infrastructure grant funds.
CHAPTER 2: ABOUT SAFE ROUTES TO SCHOOL (SRTS)

OVERVIEW

Today more than ever, there is a need to provide options that allow all children—including those with disabilities—to walk and bicycle to school safely. Many communities struggle with traffic congestion around schools and motor vehicle emissions polluting the environment. At the same time, children in general engage in less physical activity, which contributes to the prevalence of childhood obesity. At first glance, these problems may seem to be separate issues, but SRTS programs can address all these challenges through a coordinated action plan.

SRTS programs use a variety of education, engineering and enforcement strategies that help make routes safer for children to walk and bicycle to school and encouragement strategies to entice more children to walk and bike. They have grown popular in recent years in response to problems created by a growing reliance on motor vehicles for student transportation, an expanding built environment, as well as the development and availability of federal and state funding for SRTS programs.


HISTORY

The SRTS concept began in the 1970s in Odense, Denmark, rooted in concern for the safety of children walking and bicycling to school.

The SRTS concept spread internationally, with programs developing in other parts of Europe, Australia, New Zealand, Canada and the United States. The Bronx, a borough of New York City, started the first SRTS program in the United States in 1997. In the same year, the State of Florida implemented a pilot program. In August of 2000, the U.S. Congress funded two SRTS pilot projects through the National Highway Traffic Safety Administration. Within a year of the launch of the pilot projects, many other grassroots SRTS efforts began throughout the United States.

Success with the pilot projects generated interest in a federally funded national program. In 2003, advocates convened meetings with experts in pedestrian and bicycle issues to talk about SRTS issues.

---

and ideas for developing a national program. Momentum for a national SRTS program in the United States continued to build as several states developed their own programs.

Congress created the Federal-Aid Safe Routes to School Program in 2005 through comprehensive transportation legislation, ultimately resulting in nearly $1 billion in funding. Subsequent transportation legislation, Moving Ahead for Progress in the 21st Century (MAP-21) passed in 2012 making Safe Routes to School (SRTS) activities eligible to compete for funding alongside other programs, including the Transportation Enhancements program and Recreational Trails program, as part of a new program called Transportation Alternatives.


---

**THE DECLINE OF WALKING AND BICYCLING**

Not long ago, children routinely moved around their neighborhoods by foot or by bicycle, and that was often how they traveled to and from school. That is no longer the case. Whether looking at the total proportion of children walking and bicycling to school, the proportion of children who live within a mile of school or the proportion of children living within one mile of school who walk or bike, the decline is apparent.

- In 1969, 48 percent of children 5 to 14 years of age usually walked or bicycled to school.
- In 2009, 13 percent of children 5 to 14 years of age usually walked or bicycled to school.
- In 1969, 41 percent of children in grades K–8 lived within one mile of school.
  - 89 percent of these children usually walked or bicycled to school.
- In 2009, 31 percent of children in grades K–8 lived within one mile of school;
  - 35 percent of these children usually walked or bicycled to school.

The circumstances that have led to a decline in walking and bicycling to school did not happen overnight and have created a self-perpetuating cycle. As motor vehicle traffic increases, parents become more convinced that it is unsafe for their children to walk or bicycle to school. They begin driving them to school, thereby adding even more traffic to the road and sustaining the cycle. Understanding the many reasons why so many children do not walk or bicycle to school is the first step in interrupting the cycle. Many factors contribute to the reduction in children walking and bicycling to school. The U.S. Centers for Disease Control and Prevention (CDC) conducted a nationwide survey of parents to find out the most

---

common barriers that prevented them from allowing their children to walk to school. Parents of children aged 5 to 18 years cited one or more of the following six barrier reasons:

<table>
<thead>
<tr>
<th>Barrier Reason</th>
<th>Percentage of parents identifying with the barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to school:</td>
<td>61.5</td>
</tr>
<tr>
<td>Traffic-related danger:</td>
<td>30.4</td>
</tr>
<tr>
<td>Weather:</td>
<td>18.6</td>
</tr>
<tr>
<td>Crime danger:</td>
<td>11.7</td>
</tr>
<tr>
<td>Opposing school policy:</td>
<td>6.0</td>
</tr>
<tr>
<td>Other reasons (not identified):</td>
<td>15.0</td>
</tr>
</tbody>
</table>

While this CDC report is from 2005, a report from the National Center for Safe Routes to School in 2010 found that these barriers remain the same.


**HEALTH RISKS**

The U.S. Department of Health and Human Services recommends that children do 60 minutes (1 hour) or more of physical activity each day and that the bulk of this physical activity comes through aerobic exercise, such as walking and bicycling. For children and adolescents, regular physical activity helps build and maintain healthy bones and muscles, reduces the risk of developing obesity and chronic diseases, reduces feelings of depression and anxiety and promotes psychological well-being.

Despite these benefits, many children are not getting adequate physical activity. In the 2014 United States Report Card on Physical Activity for Children and Youth, the National Physical Activity Plan Alliance reports that only 24.8 percent of youth ages 12-15 years obtain 60 minutes of moderate to vigorous physical activity every day. A 2014 CDC study reports that during the school day, only 4 percent of elementary schools and 8 percent of middle/junior high schools provide daily physical education classes, and in 2012 only 58.9% of all school districts required that elementary schools provide students with regularly scheduled physical activity. Unfortunately, less active children are more likely to be overweight, according to the American Academy of Pediatrics.
When it comes to children’s health, the costs of inadequate physical activity and poor eating habits are alarming. Inadequate physical activity and poor eating habits are major contributors to the increased rates of childhood obesity and overweight in the United States. Obese children are at least twice as likely to become obese adults. According to both a 2003 report by the American Academy of Pediatrics and a 2015 CDC, this puts obese children at greater risk for premature death and chronic diseases than their healthy-weight counterparts.


THE 5 E'S OF SRTS PLANNING

Safe Routes to School (SRTS) programs are intended to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. The recommendations outlined in this plan are based on the “5 Es” of the National SRTS program, which include Education, Encouragement, Enforcement, Engineering, and Evaluation. An integrated approach, each one of the “5 Es” is intended to complement one another. Below is a detailed description of the “5 Es”.

EDUCATION

Programs focused on education can have long-lasting effects on students that continue into adulthood. Education programs that teach students safety skills for walking and bicycling also form the basis of good driving skills they may need in the future. Programs should also target parents and other drivers to inform them how to drive more safely around pedestrians and bicyclists. A few examples of possible education strategies are bicycle rodeos that teach safe bicycling skills, classroom lessons focused on traffic safety, take-home flyers informing parents of the rules and regulations regarding student pick-up and drop-off at the school, the Minnesota Walk! Bike! Fun! program, and thoughtfully-placed billboards with safety messages targeting drivers.

---

Figure 16: Bike MN instructors demonstrate how to do on-bike skill drills to teachers in a parking lot at the Rothsay, MN school.
ENCOURAGEMENT

Encouragement strategies are focused on getting students to try walking and bicycling to school and in turn, to celebrate and reward students for their efforts. These strategies can be low-cost, easy to implement and fun for students. Examples of encouragement activities include walking school buses and organizing events such as “Walk to School Day” (in October) and “Bike to School Day” (in May) to encourage students to try walking and biking to school.

ENFORCEMENT

The primary goals of enforcement strategies are to help reduce unsafe behaviors by drivers, pedestrians and bicyclists; and to increase awareness of laws protecting children who are walking and bicycling. Enforcement strategies include students, parents and school personnel working in conjunction with law enforcement officers. Examples of enforcement activities include the installation of digital speed feedback signs, adult or student safety patrol, crossing guards and educational “stings” that inform motorists of the dangers of seemingly minor traffic infractions without issuing tickets.

ENGINEERING

Engineering involves the planning and implementation of physical improvements to the built environment that make it safer and more attractive for students to walk and bicycle to and from school. For example, providing a designated space for pedestrians, such as sidewalks, has been proven to reduce pedestrian crash risks. Up to an 88 percent reduction in ‘walking along the roadway’ pedestrian crashes has been seen with
the installation of sidewalks on both sides of the road. However, engineering projects are most successful when used in conjunction with education, encouragement and enforcement strategies. Partnering with engineers and planners is crucial to the successful implementation of projects. Examples of engineering strategies include adding bicycle racks, installing fully-accessible crosswalks, sidewalks and multi-use trails, traffic calming, bicycle lanes, signs and signals, as well as other infrastructure.

Figure 18: This crosswalk is equipped with a pedestrian (push button) activated, solar-powered Rectangular Rapid Flashing Beacon (RRFB). It is located in Frazee, MN and crosses County Road 12 near the north entrance into town. It is a prime example of an engineering SRTS solution. It was installed as part of a new trail that allows students to get to school in a more direct and safer manner. Once a pedestrian presses the button located on the sign posts, super-bright yellow LED lights flash in an eye-catching “wiggle” pattern under both signs and in both directions. Otherwise, the LED lights remain turned off as seen in this photo. Driver compliance rates for crosswalks with RRFBs are significantly higher than at crosswalks without them, and can be relatively inexpensive to install.

---

EVALUATION

In order to measure the progress of the program activities over time, consistent evaluation is necessary. Evaluation techniques include a combination of quantitative and qualitative information. Schools are very strongly encouraged to continue conducting the National Centers for SRTS parent surveys (every two to three years) and student travel tallies (once or twice a year) which were already done as part of this plan to provide baseline data. You can find the National Centers for SRTS survey forms in the Appendix C of this report. Other examples of evaluation strategies include, but are not limited to, school walking audits and observations of student travel behaviors arriving at and leaving school.

A 6TH EQUITY

Recently, the principle of Equity has begun to be added to the standard “5 Es” of SRTS planning. According to the MnDOT SRTS webpage:

*Equity is a needs-based approach to allocating resources that aims to achieve fairness in the distribution of benefits and costs. In transportation planning, discussion of equity acknowledges that some communities and populations may require additional resources in order to have the same opportunities as other communities.*

*Equity is often confused with equality, when in fact they have different meanings. Equality assumes that all needs are the same. The result is that every community gets the exact same resources without regard to individual differences. Equality works only in circumstances where everyone starts from the same place and needs the same things. Equity allows resources to be provided on the basis of need. Communities disproportionally impacted by safety, health or transportation access inequities*
are provided appropriate resources to address their individual needs. Therefore, resource allocation may differ between communities.⁶

---

Figure 20: This is a common diagram used to illustrate the concept of Equity versus Equality.

Equality is demonstrated on the left, where six boxes (units of aid) are given equally to three people despite their differences in height (need). The two boxes are more than enough for the tall person to reach the fruit high in the tree (goal). Two boxes, however, are just enough for the person of medium height but still not enough for the short person (the one with the most need) to reach the high hanging fruit. When resources are distributed equally, some people may be given more assistance than they need, while others are still not given enough.

Equity is demonstrated on the right where the same six boxes (units of aid) are distributed to three people based on their differences in height (need). The tall person is given just one box as that is all (the aid) that person needs. The person of medium height is again given two boxes as that remains the amount of boxes (aid) this person needs to reach the high hanging fruit (goal). Finally, the short person is given three boxes (units of aid) as this is the additional level of assistance that person needed to be able to reach the fruit in the tree (goal).

Source: Modified version of an image obtained from the Maine Office of Health Equity website.

The introduction of equity to the SRTS planning formula is an effort to better focus limited SRTS resources to communities and groups that have been often underserved, have greater needs and/or have been more negatively affected by transportation planning decisions of the past and the transportation infrastructure now found in their local community.

---

NATIONAL PHYSICAL ACTIVITY TRENDS IN CHILDREN

Today, children today are not attaining the recommended amounts of physical activity, contributing to the increasing rates of obesity and a variety of chronic diseases. Lack of physical activity along with poor nutrition is the second leading cause of preventable death, according to the Minnesota Department of Health (MDH). Physical activity not only prevents chronic diseases but also improves mood and helps with weight control. There is also increasing evidence that physical activity improves academic performance, attentiveness and concentration in the classroom.

There are many ways to promote physical activity among youth, and improving walking and biking to and from school is one of them. SRTS programs can increase students’ daily amount of physical activity and have the potential to decrease the prevalence of students becoming overweight or obese. It is recommended that children get sixty minutes of physical activity a day. Nationally, only 50 percent of high school students participate in any kind of physical activity that increases their heart rate for a total of 60 minutes on five or more days a week. A 15-minute walking or biking route to and from school can help students meet much of their recommended 60 minutes of physical activity per day. Walking and bicycling to and from school at a young age also has the potential to instill habits of an active lifestyle that children can take with them into adulthood.

---


SAFE ROUTES TO SCHOOL PLANNING FRAMEWORK

SRTS TEAM

Successful SRTS programs recognize each community as being unique and emphasize the importance of including a diverse range of community representation on the team. The Rothay SRTS team included representation from the Rothsay Public Schools, the City of Rothsay, the Rothsay Police and Fire Departments, Wilkin and Otter Tail Counties, Minnesota Department of Transportation – District 4, and PartnerSHIP 4 Health. The team members were directly involved in the planning process, with many having the knowledge and skills needed to implement the plan recommendations. After delivering the plan, West Central Initiative (WCI) will continue to provide ongoing technical assistance to aid in plan implementation.

SRTS PLANNING PROCESS

The SRTS planning process got its start in 2014 when Principal Staci Allmaras contacted WCI about performing an SRTS plan for the Rothsay school. However, the school was to be moving out of its old location in the center of town to a new building just beyond the northeast corner of the town. It was felt that to get the most out of the SRTS planning process, it would be best-served to do the majority of the work after the new school was built and occupied in September of 2015. With the assistance and expert staff at WCI, the SRTS team came together to review the school and community profiles, provide input on the barriers, outline the vision and goals, assist in data collection, and develop and review the recommendations. As part of the planning and outreach process, the community was invited and encouraged to provide feedback on the community’s strengths, barriers and opportunities; a kind of SWOT Analysis tailored to planning.

In addition to gathering community input, the team conducted an assessment of the community’s current conditions and policies in order to identify opportunities to advance walking and bicycling to school or programs that support active transportation. The team conducted observations to understand how many students walk and bike to and from school, what routes are the most traveled, their behaviors as pedestrians and bicyclists and the interactions between pedestrians and motorists. In addition, the team conducted a separate walk-audit of the entire community to survey its geography and infrastructure. During the walk-audit, the team recorded sidewalk conditions, child-friendly opportunities to cross streets, along with vehicle speeds, and potential trail and sidewalk connections.

Furthermore, the team helped administer the National Centers for Safe Routes to School (National Centers) student travel tally survey and a separate parent survey. The student travel tally form is used to count the
The parent survey collects information from parents of K-8th graders about how their children travel to and from school, their attitudes towards active transportation, and finally, barriers that prevent their children from participating in active transportation modes of travel. The results were then entered into the National Centers’ database. These assessment tools illustrate the range of current barriers and opportunities, which is the foundation of the identified recommendations. These surveys are to be done yearly with continuing WCI assistance so that possible trends in student travel behavior and parent perceptions can be identified and recorded with the National Centers for Safe Routes to School database. Understanding the possible changes in student travel trends will give the school, school district and WCI staff the information they need to be able to determine if the goal of getting more children to walk and bike to and from school is being met.

All of this information was then reviewed by the SRTS team and analyzed by the staff at WCI to provide a list of recommendations to improve walking and biking to and from school structured around the active transportation planning principles of the “5 Es.”

**MNDOT WALK / BICYCLE ZONE CONCEPT**

Children are more likely to walk or bicycle to school if they live within the school “walk/bicycle zone.” MnDOT defines this as “the area within the school’s enrollment boundary from which students can realistically walk or bike to school.” MnDOT guidelines generally assume distances of up to 0.5 mile for children in grades PreK-5, 1 mile for grades 6-8, and 1.5 miles for grades 9-12 are within the walk/bicycle zone.13

While not stated in any MnDOT documents, the walk/bicycle zone distances are likely based on the following accepted standards. The average adult can walk a distance of 0.5 mile in 10 to 12 minutes. For a child in grades PreK-5, the same distance would likely require twice as much time (20 to 24 minutes) which is a reasonable amount of time to travel to school. For students in grades 6-8, 1 mile can likely be walked within 20 to 30 minutes, similar to an adult. However, children in these grades have the maturity to bicycle that distance if there are no significant traffic hazard barriers. At the relaxed speeds of 8 to 10 mph (the bicycle equivalent to a modest walking pace), 1 mile can be bicycled in 6 to 8 minutes. For high school students in grades 9-12, a distance of 1.5 miles could be walked in 30 to 40 minutes. However, these students can bike that distance in 9 to 11 minutes and have the maturity to navigate even more complex traffic situations.

---

STATUS OF STATE AND FEDERAL SUPPORT FOR SAFE ROUTES TO SCHOOL

An SRTS plan is not required to receive Minnesota state and/or federal SRTS infrastructure grants but is highly recommended. A school and/or community with an SRTS plan will be much better able to compete for limited funding and resources to implement the identified recommendations. Please be aware, with anticipated future changes in federal and state transportation laws, the following funding sources below are likely to change. Please contact WCI or MnDOT for updated funding information at any point in the future.

FEDERAL

In previous federal transportation laws, the SRTS program was a separately-funded category, independent of the Transportation Enhancements program (TE - bikeways, trails, sidewalks, streetscapes reconstruction, etc.) and Scenic Byways program. In 2012, Congress passed a federal transportation bill entitled Moving Ahead for Progress in the 21st Century (MAP-21). This law combined the SRTS, TE and Scenic Byways programs into one funding source called Transportation Alternatives Program (TAP). TAP is funded from the Highway Account of the Highway Trust Fund at an amount equal to 2% of the total amount of federal-aid highways each fiscal year. Each state was charged with developing their own program for soliciting projects to be funded by the TAP funds allocated to them. MAP-21 states also have the option of redirecting 50% of TAP to other transportation projects.

Late in 2015, Congress passed a five-year transportation spending bill called the Fixing America’s Surface Transportation Act (FAST Act), which was then signed into law by the President on December 4th. It is the first law enacted in over 10 years that provides long-term funding certainty for surface transportation. Overall, the FAST Act largely maintains current program structures and funding for SRTS. The only difference is that the Transportation Alternative Program, (TAP) which provides SRTS infrastructure funding, has been renamed Transportation Alternatives (TA). The FAST Act does include two modest funding increases (4% over the life of the Act) for TA/SRTS programs. WCI can assist communities and school districts that apply for federal TA and SRTS infrastructure funds.

STATE

In 2014, the Minnesota Legislature allocated $1 million from the general fund of that fiscal year’s budget to the SRTS program as proclaimed by Minnesota Statute 174.40. MnDOT was tasked with administering the program and allocating the funding to communities. Under the 2014 state program, requested funds could be used only for construction costs, which must be clearly identified in the SRTS budget proposal. Applications could have been submitted for projects with a total cost as low as $50,000, which made them useful for spot improvements. Regardless, it was still recommended that the minimum project cost at least $100,000 to make efficient use of the funds with a limited amount of administrative time at the local level. It is uncertain if this program will receive funding again in the future.

MINNESOTA SCHOOLS STATEWIDE ENROLLMENT OPTIONS AND THE IMPACTS ON SRTS

Minnesota law allows parents, whose children are Minnesota residents, the choice to enroll their children in a regular public school district other than the one in which they reside. While not required to provide transportation, school districts will often send buses into the immediate neighboring districts with the practical and alluring promise of front-door pickups. To compete, local school districts have then felt compelled to offer equivalent transportation services, even for students living within immediate proximity of the local school. This has had the unintended consequence of undermining many SRTS efforts. In communities in where WCI has completed SRTS plans, the SRTS team had observed students being picked up by the local district bus only to be transported to the school a block away, a distance walked in no more than a minute. However, some school districts have eliminated busing within the walk/bike zone for students without hazardous traffic barriers after SRTS plans written at WCI made the policy recommendations to do just that.

CHAPTER 3: VISION AND GOALS

The SRTS team created a unique vision for Rothsay and the Rothsay Public School. This vision is what the team imagines their community will look like in five to ten years after the successful and complete implementation of the Rothsay SRTS plan. In order to make the vision a reality, the team set goals to attain and barriers to overcome in pursuit of opportunities to increase walking and bicycling to and from school. The goals outlined below are that of the SRTS team. These goals are attainable through the Action Plan Recommendations section which can be found in the beginning of this document. Those recommendations were not developed to address these goals as an itemized list.

VISION

Many people remember a time when walking and bicycling to school, parks, and local businesses was the norm. Today, conversely, many trips are made by private vehicles translating into long-term health and traffic consequences. Rothsay, home of the Tigers and the world’s largest “Booming” Prairie Chicken, is motivated to reverse the decline in walking and bicycling among its children.

GOALS

1. Increase academic achievement through the proven benefits of daily exercise of walking and biking.
2. Lower our community’s carbon footprint.
3. Increase physical activity.
4. Reduce the potential for auto accidents.

NOTE: The recommendations in this plan address all 4 goals identified by the Rothsay SRTS team.
COMMUNITY PROFILE

The city of Rothsay straddles both Wilkin and Otter Tail Counties. Center Street, running north to south through the center of town marks the border. It sits on the western fringes of the lakes region of west central Minnesota, just east of the highly-fertile agricultural lands of the Red River Valley. Rothsay is 186 miles northwest of the state capitol in Saint Paul and is just south of Interstate 94 at Exit 38. While the ancestral lands of the Dakota Sioux and the Ojibwa, or Anishinaabe, the area that would become Rothsay was first settled in 1869; soon after the Great Northern Railway between St. Cloud and Fargo, North Dakota came to the area. Rothsay, named after Rothesay Scotland, was founded a short time later. Originally a rural agrarian community, agriculture still plays a large role in Rothsay’s economy with a fairly sizable, rail-serviced grain elevator just off the town center. Today, Rothsay also serves as a bedroom community for Fergus Falls, 17 miles to the southeast and Fargo, 38 miles northwest. Agriculture still makes up a majority of the land use around the city with some lakes and the occasional vacation home to the east. Rothsay sits within the Prairie Biome but is just a few miles west of the Eastern Deciduous Forest Biome. With the tracks abandoned south of Fergus Falls and converted into a trail, The Great Northern Railway through Rothsay is now the Class III Otter Tail Valley Railroad, with limited freight service traversing the southwest edge of Rothsay. Interstate 94 was constructed in the early 1960s and routed around the city to the northeast. As first noted, Rothsay is also unique in that it sits within two counties with Wilkin on the west side of town and Otter Tail on the east.

Figure 21: The location of Rothsay in Minnesota relative to major landmarks.
According to the 2010 U.S. Census, the city of Rothsay has a population of 493 people, 211 households and 140 families all living within a 0.88 square mile. Even though Rothsay is a small rural town, it has a population density of 560 residents per square mile. The median age in the city was 37.1 years. 25.8 percent of the residents were under the age of 18. The racial makeup of the city was 98.8 percent White, zero percent African American, 0.8 percent Native American, 0.4 percent Asian and zero percent from two or more races. Hispanic or Latino of any race was 0.2 percent of the population. 16 As of 2015, the top five industries in Otter Tail County by the number of persons employed are, in order, “Education and Health Services”, “Trade, Transportation and Utilities”, “Manufacturing”, “Leisure and Hospitality”, and “Professional and Business Services.” In Wilkin County, the top five are “Health Care and Social Assistance,” “Educational Services,” “Wholesale Trade,” “Retail Trade” and “Public Administration.” 17

And not be outdone by many of its neighboring towns in the region claiming the have the “Worlds Biggest” this or that, Rothsay is home to the World’s Largest “Booming” Prairie Chicken. Located immediately east of the new school grounds is a 9,000 pound, 13-foot creature that was designed and built by Art Fosse as Rothsay’s contribution to America’s 1976 Bicentennial. Located just off the Interstate and flanked by a shaded picnic table, the statue is a popular destination for those on the “Roadside America” trail. The prairie around Rothsay still supports nesting broods of prairie chickens, and the monument honors Rothsay’s designation as the Prairie Chicken Capital of Minnesota.

Figure 22: The 13-foot statue of the World’s Largest “Booming” Prairie Chicken is located next to the school and is a popular stop for passing travelers.

---


Figure 23: Rothsay city limits and the new Rothsay school location.
SCHOOL AND DISTRICT PROFILE

The new Rothsay Public School and the Rothsay Public School District #850 are co-located at 2040 County Road 52 Rothsay, MN. The new school opened in September 2015. It is located next to Interstate 94 at Exit 38 and is approximately 1,000 feet across an agricultural field from the closest residences on 3rd Avenue NW. While not directly contiguous with the residential development in the small city, the school is no more than 4,300 bee-line feet or 1.1 road miles from the furthest residence in town. (See Chapter 6, Figure 26) The Rothsay Public School serves students grades Pre-Kindergarten through 12th. On the first day of school in September 2016, the school had an enrollment of 352 students. The breakdown of students per grade is shown in Table 1. 46 percent of students are eligible for free and reduced cost meals.

Table 1: Number of Students per Grade (First day - School Year 2016-2016)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreK</td>
<td>54</td>
</tr>
<tr>
<td>K</td>
<td>24</td>
</tr>
<tr>
<td>1st</td>
<td>25</td>
</tr>
<tr>
<td>2nd</td>
<td>25</td>
</tr>
<tr>
<td>3rd</td>
<td>26</td>
</tr>
<tr>
<td>4th</td>
<td>35</td>
</tr>
<tr>
<td>5th</td>
<td>31</td>
</tr>
<tr>
<td>6th</td>
<td>23</td>
</tr>
<tr>
<td>7th</td>
<td>19</td>
</tr>
<tr>
<td>8th</td>
<td>14</td>
</tr>
<tr>
<td>9th</td>
<td>15</td>
</tr>
<tr>
<td>10th</td>
<td>21</td>
</tr>
<tr>
<td>11th</td>
<td>20</td>
</tr>
<tr>
<td>12th</td>
<td>20</td>
</tr>
</tbody>
</table>
The Rothsay School District itself is large, encompassing 174 square miles; with approximately 35 percent of the district in northeastern Otter Tail County and the remaining 65 percent in northwestern Wilkin County. The school sits just slightly east-northeast of the center of the district with the western and southwestern edges of the district furthest from the school at approximately 12 bee-line miles from the new Rothsay school location. Interstate 94 runs immediately adjacent to the school and bisects the district. Roughly one quarter of the district is east of the Interstate with the remaining three quarters to the west. (Figure 25)

**ROTHSAY PUBLIC SCHOOL DISTRICT MISSION STATEMENT**

*To educate our students to become responsible citizens and lifelong learners.*

Source – Staci Allmaras, Principal, Rothsay Public Schools


The Rothsay school has been a Reward School an impressive five years in a row and is a leader in school performance. This designation means the Rothsay school is in the top 15% of all schools in the state according to the MMR rating (Multiple Measurement Rating) from the Minnesota Department of Education.

**ROTHSAY SCHOOL DISTRICT STUDENT TRANSPORTATION POLICIES**

The “707L Transportation of Public School Students” and policy “709L Student Transportation Safety Policy” were requested for review but were never provided. However, recommendations can still be made as most of districts’ policies are nearly identical since they all originate from the Minnesota School Boards Association model policies. The 707L Policy usually sets the ground rules as to who is eligible to be bused. The 709 Policy is an 18-page document mostly dedicated to the finer points of how students will be bused to and from school. Almost all “recognizes that transportation by school bus is a privilege and not a right for an eligible student.” However, some districts have added policy amendments stating the detailed requirements that would qualify a residence close to the school for hazard busing. Other districts require the teaching of bicycle and pedestrian safety to students in their transportation policies.
Figure 25: The Rothsay School District, Rothsay city limits, Rothsay school location and concentric radii from the school location.
ROTHSAY PUBLIC SCHOOL DISTRICT WELLNESS POLICY

The Rothsay “533 Wellness” policy was originally adopted in 2006 and then last revised in 2013. “The purpose of this policy is to assure a school environment that promotes and protects students’ health, well-being, and ability to learn by supporting healthy eating and physical activity. The policy promotes and encourages students to adopt lifelong healthy behaviors that can promote and protect students’ health and wellbeing as well as reduce the risk of chronic disease.”

In the section about daily physical activity opportunities before and after school, the Wellness policy says, “Safe bicycling and walking to and from school is promoted and encouraged.” This simple and concise statement is so often lacking in schools who want to improve walking and biking to and from their schools and is a powerful first step. While a great start, no specific details are given on how exactly to do this.

The complete Rothsay “533 Wellness” policy can be found in Appendix F.

ROTHSAY CITY SIDEWALK ORDINANCE / REGULATIONS

The City of Rothsay Ordinance 3.05 – “Boulevards, Streets, and Sidewalks” was provided for review.

- Section 4. – Maintenance states, “Property owners shall maintain that portion of the boulevard and sidewalk which lies between the curb line and the lot line. Said boulevard and sidewalk are to be kept free of debris and weeds; the grass shall be kept mowed during the spring, summer, and fall months; the sidewalks shall be kept shoveled during the winter months so as to allow pedestrian passage.”
- Section 5. – Construction of Sidewalks, Curbs and Gutter, and Driveways states in part, “No person shall construct, reconstruct, lay, make or repair any public sidewalk, curb and gutter, or driveway in any dedicated public street in the City of Rothsay without first having obtained, from the City Council, a permit for said work.”
- Section 12. – Prohibited Acts, Paragraph C says in part that, “No person shall ... Place upon or suffer to be placed upon the sidewalk, any goods, wares, or merchandise which he/she may be receiving of delivery without leaving a passageway clear upon said sidewalk of not less than six (6) feet for the use of foot passengers; and or person receiving or delivering such goods shall suffer them to remain on the sidewalk for longer than twenty-four (24) hours.”

While these ordinances do require that adjacent property owners maintain and keep the sidewalk clear, there is no clear statement in this ordinance prohibiting the removal of sidewalks. And while delivered goods cannot be left in the public right-of-way for an extended period of time, there is no time limit given for the removal of snow after the end of a weather event.
RECOMMENDATIONS

Policy recommendations to improve SRTS can be found in the beginning of this document in the subchapter titled "Action Plan Recommendations" in the "Encouragement" and "Other" sections, with further policy recommendations found in Appendices D and E.
CHAPTER 5: STRENGTHS – BARRIERS – OPPORTUNITIES ANALYSIS

A strengths, barriers and opportunities analysis of existing policies and programs related to walking and bicycling to school was also performed. This is similar to a SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) but tailored for use in SRTS planning. The comments in the following tables are not edited and are not listed in any priority order. Recommendations to improve SRTS found in the sub-chapter titled “Action Plan Recommendations” at the beginning of this document have taken into consideration Rothsay’s unique strengths, barriers and opportunities.

STRENGTHS

The City of Rothsay and the Rothsay Public School have many strengths to work with, similar to many other communities in west central Minnesota. Identifying and understanding those strengths are keys with regard to any SRTS plan. The strengths listed in detail (see Table 2) below were gathered by the Rothsay SRTS team.

Table 2: Community and School District Strengths

<table>
<thead>
<tr>
<th>Community Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The new school grounds are well designed to separate motor vehicle traffic from</td>
</tr>
<tr>
<td>student pedestrian and bicycling traffic.</td>
</tr>
<tr>
<td>2 While on the edge of town, the entire City of Rothsay is within one mile of the</td>
</tr>
<tr>
<td>new school location with approximately 45 percent of residences within a half mile.</td>
</tr>
<tr>
<td>3 SRTS has a champion in Rothsay with Principal Staci Allmaras.</td>
</tr>
<tr>
<td>4 Several Rothsay teachers are trained in Walk! Bike! Fun! curriculum.</td>
</tr>
<tr>
<td>5 Almost all residential streets within Rothsay are 24 feet or narrower which</td>
</tr>
<tr>
<td>creates a traffic calming effect ideal for shared use where pedestrians, bicyclists</td>
</tr>
<tr>
<td>and motorists all share space in the streets.</td>
</tr>
<tr>
<td>6 Support from the school and community (example is raising money to help pay for</td>
</tr>
<tr>
<td>children’s school supplies).</td>
</tr>
<tr>
<td>7 Population is increasing.</td>
</tr>
<tr>
<td>8 Fitness center is available at the school.</td>
</tr>
</tbody>
</table>
Fresh produce is used whenever possible within the school.

Lions club is a big supporter helping to donate money, work, labor and time.

Other stakeholders/supporters – Tri-county foundation, Sanford Health, Perham Health, Otter Tail Power and Lake Region Electric.

In all new construction projects, ADA compliant curb cuts are being installed.

DARE officer: Elliot Stoll.

Bike racks available/present on school grounds and pool is nearby.

BARRIERS

To successfully develop and implement SRTS activities and programs, it was important for the SRTS team to identify and understand the existing barriers within the community that are preventing children from walking and bicycling to school. These barriers, listed in detail in Table 3 below, are an accumulation of information received from the SRTS team.

Table 3: Community and School District Barriers

<table>
<thead>
<tr>
<th>Community Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>
OPPORTUNITIES

The SRTS team identified opportunities to improve walking and bicycling to school that are not currently being acted upon. The list of opportunities in Table 4 is not exhaustive but is an accumulation of ideas and action steps to help achieve the overall vision.

Table 4: Community and School District Opportunities

<table>
<thead>
<tr>
<th>Community Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Population is increasing and the housing stock will need to be increased to accommodate the population.</td>
</tr>
<tr>
<td>2. If a pathway can be built along North Broadway Ave under U.S. Highway 10 then there is an opportunity for students living north of the highway to walk and/or bike to and from school.</td>
</tr>
<tr>
<td>3. Encourage employees to walk or bike to work.</td>
</tr>
<tr>
<td>4. Encouragement opportunity – If trails, parks sidewalks etc. are built then the students using them will come.</td>
</tr>
<tr>
<td>5. Encouragement – Continue to support smart walking/biking behaviors of children (Involves local law enforcement and other businesses).</td>
</tr>
<tr>
<td>6. Six Bicycle Boats – could be used for different events.</td>
</tr>
<tr>
<td>7. Getting people to use the built environment and walk/bike to school.</td>
</tr>
</tbody>
</table>
The SRTS team conducted school observations, a community walking audit and a neighborhood assessment. This was done to identify the existing conditions at the Rothsay school, as well as those within the city, and residences immediately adjacent to city limits. Traffic volume and crash data were also retrieved from MnDOT's databases for the roads in and around Rothsay. And while the SRTS team is a core group of individuals who are very familiar with Rothsay, its schools, SRTS and active transportation planning, broader community input is always helpful to create a comprehensive list of existing conditions and concerns. To aid with additional community input, a table was set up at the Rothsay Parent Orientation Open House which occurred on the evening of Wednesday, August 31, 2016. (See Chapter 7) Having information on existing conditions is critical in making strategic decisions that support wise and fiscally-sound future SRTS programming and activities.

**ROTHSAY WALK / BICYCLE ZONES**

As discussed in Chapter 2, MnDOT guidelines generally assume that students can realistically walk and / or bike to and from school up to distances of 0.5 mile in grades PreK-5, 1 mile for grades 6-8, and 1.5 miles for grades 9-12. The one-half and three-quarter mile “Walk / Bicycle Zones” are shown in Figure 26, and are measured and represented using bee-line radii from the south center of the school. Roughly 45 percent of the residences within the city of Rothsay fell within the half-mile walk / bike zone (Grades PreK-5), and all residences fell within the one-mile, grades 6-8, zone. Using the street network and measured with Google Maps’ walking directions, the furthest residence on 3rd Avenue Southeast is a distance of just over one mile.

**WALK AUDIT**

A walk-audit of the community used for this report was conducted in September of 2015, and again in September 2016. This was done to gather data related to major streets, intersections and sidewalk conditions impeding or facilitating pedestrian and bicyclist safety. Factors that were documented included sidewalk width and condition, possible ADA PROWAG (Public Right-of-Way Accessibility Guidelines) violations, traffic volume, terrain, threatening features (dogs, perception of criminal activity, highways and busy intersections), trash, speed limits and general safety. The audit provided an opportunity for the team to identify where the community is walkable and where there is need for improvement. The results of the sidewalk survey can be found in Figures 26 and 29, and are also discussed throughout the narrative of this section of the report. The street and intersection observations from the walk-audit are described in the report narrative with major streets and intersections listed in Table 5 at the end of this subchapter.
Figure 26: City of Rothsay existing sidewalk, crosswalk and pathway inventory with select observations.
School Location

The new Rothsay school is located at 2040 County Road 52, directly south of Interstate 94 and southwest of Exit 38. (See Figure 26) It is separated from the residential portion of the city by County Road 52 and an active agricultural field leaving it about 1070 beeline feet away from the closest residence. While not in the center of Rothsay as was the old school, or in a location contiguous with residential sections of Rothsay, approximately 45 percent of city residences are still within a half-mile of the front entrance of the school and all city residences are within 1 mile. Using Google Maps as a measurement tool, the furthest residence on 3rd Avenue Southeast is 1.1 miles, a 26-minute walk or an 8-minute bike ride for a child to get to school. As such, all students living in the city of Rothsay in grades 6 and up should be able to walk and/or bike to and from school. Outside of town, there are several farmsteads within a mile of the school and maybe 2 more within a mile and a half. However, Interstate 94 has created an impenetrable walking and biking barrier to all destinations north and east. The high traffic speed on County Road 52 would make it difficult to recommend walking and biking to and from school for even high school students living within one and a half miles.

School Grounds

It is regularly noted among SRTS experts that the area closest to schools can be the most dangerous part of the journey for children who walk and bike to school. This is due to the multitude of traffic modes converging on and delivering people to the school. Exacerbating this, the design of the school grounds is often primarily focused on the circulation of motor vehicle traffic flow with an emphasis on front door pick-up. This is at the expense of the safety of those arriving on bike or foot. The design of the Rothsay school grounds was well thought-out and does a very good job of isolating most motor vehicle traffic away from student bicycle and pedestrian traffic. The parking lot for teachers and high school students, along with the parent drop-off and pick-up, is on the western side of the school which is isolated from students walking and biking to school on the eastern side of school grounds. (See Figure 29)
The only traffic that walking and biking students need to contend with on school grounds is the five professionally-driven school buses and one or two vans. By design, the walking, biking and bused students enter the school by a second entrance. With the construction of the new school, a multi-use path was constructed with a crosswalk traversing County 52 at 1st Avenue Northwest. At some time after the September 2015 walk audit and observation day, a solar-powered, yellow beacon light was installed to bring attention to the crosswalk when students are most likely to be crossing. This beacon was likely relocated from a crosswalk near the old school. However, the path does not connect to a sidewalk, and because 1st Street Northwest is not paved, it is often dusty or muddy during much of the year. There are also no sidewalks on County 52 serving the school.

There is one modified “coat hanger” style bicycle rack serving the school located on the southeast corner of school grounds where the multi-use path transitions from asphalt to concrete. (See Figure 29) This design does not comply with the bicycle parking standards established by the Association of Pedestrian and Bicycle Professional (APBP) because it is claimed that the top bar on the rack limits the types of bikes it can accommodate. However, the author of this report refutes that claim having used this style of rack for 20 years with little issue. If anything, this style of rack is a high-security solution that exceeds the needs of children who were observed just parking their bikes next to the rack without locking them to the rack. In its current location, the rack still does not comply with APBP guidelines for rack placement as it is further than 50 feet from the east entrance which is used by walkers and bikers.
Figure 29: A close-up of the new Rothsay school grounds, and the existing conditions in its immediate surroundings.
**Rothsay Truck Stop & Café**

Located immediately adjacent to the interstate and a mere 500 feet east of the Rothsay School, the Rothsay Truck Stop & Café is a long-standing and extremely popular stop for travelers on the Interstate seeking food, fuel and a place to rest. (See Figure 26) Open 24 hours a day, the truck stop welcomes truckers with warm meals, as well as warm showers. Its large parking lot on the north side of the property provides ample parking space for truckers to rest for the night. As such, traffic in and out of the truck stop is heavy and continuous with a good portion of the traffic comprising of heavy commercial trucks. With all the amenities of a convenience store, it is also popular with the local children seeking a pop, candy bar or sandwich. Because it is only a few hundred feet from the school, it is an attractive destination for students before, but most notably after, school, as was documented during Observation Day.

![Figure 30: The front entrance area of the Rothsay Truck Stop & Café.](image-url)
Otter Tail Valley Railroad

The sparsely used rail line that runs through the southwestern corner of Rothsay was once the main line of the mighty Great Northern Railroad. (See Figure 26) Today, on that same track, the Class III Otter Tail Valley Railroad runs 64 miles from Moorhead, Minnesota, northwest of town and terminates in Fergus Falls only 17 miles to the southeast. From Fergus Falls, there are two short branches; one that serves the Hoot Lake power plant in Fergus Falls and another that services the large CHS grain elevator located a few miles west in French. South of Fergus Falls to St. Joseph, the former Great Northern Railroad line has been converted into the Central Lakes and Lake Wobegon Multi-Use Non-Motorized Trails. Primarily, this railroad hauls inbound coal to the power plant and outboard grain and ethanol from a plant a mile or so north of Fergus Falls. The Hoot Lake Power Plant, scheduled to close permanently in 2021, is the largest customer of the Otter Tail Valley Railroad. The power plant will be replaced with wind power and a natural gas generating station at another location. Therefore, the future of the Otter Tail Valley Railroad remains uncertain. If anything, without gaining new customers, traffic on the railroad through Rothsay is sure to decrease after 2021.
**Sidewalks and Crosswalks**

Within Rothsay’s business district, the sidewalk network is relatively contiguous and in good-to-fair condition. However, outside of this core area, sidewalks are much less common and many of those are in poor condition. Most of the sidewalk on the west side of Center Street is either missing or in poor condition and there are no sidewalks on the east side on Center at all. County 52, in front of the school, has no sidewalks and 1st Street NW north of the old Rothsay school location also does not have any usable sidewalks all the way north to the new school location. The only remaining visible crosswalk is that crossing County 52 from 1st Street NW which was installed with the construction of the school. As mentioned previously, at a time after the September 2016 walk audit and Observation Day, a solar-powered, yellow beacon light was installed to bring attention to the crosswalk when students are most likely to be crossing. This beacon was likely relocated from a crosswalk near the old school. Two other solar crosswalk beacons remain on Center Street at 1st Avenue NW and 1st Avenue SW/SE but are not ideally situated for students walking to the new school location. See Figures 26 and 29 for details.

**Figure 32**: Sidewalks along the west side of Center Street at 2nd Avenue NW are in poor condition, narrow and located in the ditch. Clearly, the people walking on Center have judged the sidewalk to be an undesirable option by choosing to walk on the roadway shoulder instead.

**Street, Lane, and (if present) Shoulder Widths**

Street design and lane width can provide subtle clues to drivers as to the safe operating speed on a particular stretch of roadway. Recent thinking today is that bigger is not always safer and that wide road and lane widths can encourage drivers to speed, even unintentionally. They also require pedestrians to spend more time in the roadways when crossing, extending the time that they are exposed to potentially hazardous motor traffic. Wide streets and lanes, however, can provide the space needed within the right-of-way to retrofit bike lanes, sidewalks, wider sidewalks, tree boulevards, etc.
Center Street (County 11), the main street through town, varies from 44 to 48 feet wide with two 12-foot travel lanes and shoulders that vary from 8 to 12 feet wide. County 52 in front of the school is 22 feet from fog line to fog line with 3+ feet of soft shoulder. This makes the travel lanes of County 52 just 11 feet wide. On the south side of town, County 26 (3rd Street SW) and County 24 (3rd Street SE) vary in width from 24 feet with two 12-foot travel lanes to 48+ feet wide with wide shoulders in front of the Rothsay school bus garage.

The business district of Rothsay is located in the southwest corner of the city. All of the streets are very wide, ranging in width from 50 to 55 feet. 1st Avenue SW near the Rothsay Farmers Co-Op grain elevator is an exceptional 80 feet wide. On these streets, automobile parking is maximized with nose-in parking at a steep angle to the curb. But parking demand seen in aerial photography and in field observations does not seem to justify this dense form of on-street parking.

Elsewhere, all residential streets in Rothsay are no more than 24 feet wide, including the newest developments on Main Avenue West and 4th Street SE, and have no sidewalks. Some streets are even narrower at only 20 feet. There is one exception and that is the block around the old school where the streets were made slightly wider, likely to accommodate the parking needs of teachers and high school students. It should be noted that some would say these narrow streets are substandard and dangerous as they could possibly make it difficult for large emergency vehicles to traverse the street in crowded emergency conditions. But this opinion is now falling out of favor. Narrow residential streets, like those seen in Rothsay, have a natural traffic calming effect on drivers who feel uncomfortable driving at greater speeds that often prove fatal for bicyclists and pedestrians if a collision were to occur. (More details in the following subchapter.)
**Speed and Speed Limits**

High vehicle speed has been known to be a significant safety hazard to pedestrians and bicyclists. According to the AAA in the U.S., if a pedestrian gets hit by a car traveling at 20 mph, there is approximately a 7% chance of death. The fatality rate climbs to 90% for a pedestrian struck at 60 mph. According to AAA, the greatest rate of fatality risk increase happens between the speeds of 25 and 45 mph, increasing from 12% to 60%. Other studies report the 45-mph pedestrian fatality rate can be as high as 85%. High-speed traffic also creates noise and induces stress on pedestrians, making even wide, well-designed sidewalks unappealing places to walk.

Starting in front of the Rothsay school, County 52 is currently the default unmarked rural highway speed limit of 55 mph, with a school zone limit of 25 mph “when children are present.” County 11 north of the intersection with County 52 is also the default 55-mph limit. South of County 52, County 11 / Center Street is marked at the default Minnesota standard 30 mph for urban areas to a point approximately 300 feet south of the intersection of County 26 and 24. County 24 is reduced to 30 mph at the point where the first urban residential property in the city of Rothsay abuts the highway, approximately 450 feet east of 4th Street SE. County 26 reduces to 30 from 55 mph approximately 600 feet west of 3rd Street SW. While most of the city streets default to the 30-mph limit for streets in urban districts, several are marked with limits less than 30 mph using black on yellow warning signs, while others are marked using black on white regulatory signs. All current marked and assumed speed limits in and around Rothsay are documented in Figure 34 with areas of notable concern listed in Table 5.

---

Rothsay Existing Marked and Assumed Speed Limits

Figure 34: Rothsay Existing Marked and Assumed Speed Limits.
### Notables and Concerns

<table>
<thead>
<tr>
<th>Street or Intersection</th>
<th>Posted/Assumed Speed Limit</th>
<th>Conditions Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>County 52</td>
<td>55</td>
<td>55mph would appear to be a rather fast speed limit for a road with an urban amenity like a school. Not known whether the 25mph school zone limit is regularly observed by passing drivers.</td>
</tr>
<tr>
<td>County 11 heading south into Rothsay from north of I 94 and County 52</td>
<td>55</td>
<td>There are no signs on southbound County 11 warning drivers of the change to a 30mph limit until the first 30mph speed limit sign south of County 52. With a busy intersection at County 52, the truck stop and a downhill run into town, drivers carry a lot of speed through the intersection and into the 30mph section of County 11 / Center Street. This is a location where students are commonly observed crossing County 11.</td>
</tr>
<tr>
<td>County 11 / Center Street</td>
<td>30</td>
<td>Wide roadway (up to 48 feet) with wide shoulders. Such overly-wide roadways are known to induce speeding by even conscientious drivers, which is what was seen on Observation Day. Most of the sidewalk on the west side of Center Street is either missing or in poor condition and there are no sidewalks on the east side on Center at all.</td>
</tr>
<tr>
<td>Southwest Rothsay Business District</td>
<td>30</td>
<td>Streets are exceptionally-wide which induces speeding and makes street crossings for pedestrian longer than need be. They also take away what could be an inviting wide sidewalk area for businesses.</td>
</tr>
</tbody>
</table>
OBSERVATION RESULTS

To gain a better understanding of the current conditions at the Rothsay school and on roads in Rothsay leading to the school, the SRTS team conducted field observations of students’ travel behaviors, patterns and mode choices during morning arrival and afternoon departure on Tuesday, September 29, 2015. Team members were strategically positioned around the school and in the city of Rothsay. They counted the number of pedestrians and bicyclists accessing school grounds and which routes the students took. They also observed whether students were using good techniques when crossing the street and how motorists behaved in relation to pedestrians and bicyclists on the streets and on school grounds. The detail of observations will depend on the level and concentration of activity at that location and may vary at times at a single location. It should be noted that the 25-mph school zone and beacons at the Old 52 crosswalk were not yet in place the day the observations were made.

Morning Observations

- Weather: Local observation at Rothsay, MN:
  7:45 AM – 42 °F. Clear. Sunny – Light to calm winds.

Observations began at 7:45 AM with school starting at 8:30 AM.

Position 1: County 52 and 1st Street NW – Andrew Besold

- Pedestrians: Six.
- Cyclists: Three.

- 7:50 - Older male student approached school on County 52 from County 11. Used path once on school grounds.
- 7:53 - Two young male students approach school by bike on County 52 from County 11. Used path and bike rack. No helmets.
- 7:57 - Two young female students approached via 1st Street NW and used school path.
- 8:00 - Driver incorrectly pulls into bus drop-off area.
- 8:01 - Young male student on bike approaches via 1st Street NW. Used path, bike rack but no helmet.
- 8:02 - Young male student ran via 1st Street NW. Used path.
- 8:03 - Very young male student walked via 1st Street NW. Used path.
- 8:08 - Mid-aged male student walked via 1st Street NW. Walked up bus driveway.
- 8:11 - First school bus arrived via 1st Street NW.
• 8:12 – Second school bus arrived via 1st Street NW.
• 8:12 + 10 seconds – Third school bus arrived via County 11 and County 52.
• 8:14 – First bus left. 20 seconds later, second bus left.
• 8:16 – Fourth bus arrived via County 11 and County 52.
• 8:16 + 20 seconds – Fifth bus arrived via County 11 and County 52.
• 8:18 – Blue Suburban (school vehicle) dropped off several students in bus area. Fourth bus left.
• 8:19 – Fifth bus left. 30 seconds later, Blue Suburban left.

Other Observations:
• Sun glare from the east on County 52 is bad in front of school near County 11 intersection.
• No “School Zone” speed limit signs on County 52 approaching or in front of school.
• Most driver behavior seems rather tame and well-behaved on County 52 in front of the school. One grain truck at around 8:05 heading north of County 52 accelerated a little fast.

Position 2: Front of Parking Lot Entrance – Staci Allmaras
• Pedestrians: Zero.
• Cyclists: Zero.
• Total Parent Drop-Off: 32.
• Total Student Drivers: 23.

• 7:45 – Five Parent Drop-Offs.
• 7:55 – Three Parent Drop-Offs.
• 8:00 – Four Parent Drop-Offs.
• 8:05 – Six Parent Drop-Offs.
• 8:10 – Five Parent Drop-Offs.
• 8:15 – Four Parent Drop-Offs.
• 8:20 – One Parent Drop-Off.
• 8:25 – Three Parent Drop-Offs.

Other Observations:
• No walkers approached the school on this side.
• Sprinklers came on and wetted sidewalk.
Position 3: Corner of 3rd Avenue and 1st Street NW – Observer not noted

- Pedestrians: Five.
- Cyclists: Three.

- 16 cars drove past this location.
- Two drivers were going fast.

Position 4: Bus Drop-Off Entrance Door – Lori Tillman

- Pedestrians: Six.
- Cyclists: Three.

- All walkers entered on corner and used crosswalks except one.
- All walkers stayed on path around bus drop-off area.
- James normally does flag patrol at County 52 crosswalk.
- One teacher dropped off in bus area.
- One driver made a U-turn with car in bus area.

Position 5: Corner of Center Street and Main Avenue East – Patrick Hollister

- Pedestrians: One.
- Cyclists: Zero.

- Only pedestrian seen walking on east side of Center Street across from 1st Avenue NW.
- Mom drove son to school from home on Main Avenue West.

Position 6: Center Street across from 2nd Avenue NW – Wayne Hurley

- Pedestrians: Four.
- Cyclists: Four.

- Speeds on County 11 (Center Street) seem very high.
- Drivers did yield for pedestrians crossing County 11 at County 52.
- At 1st Street and 2nd Avenue NW, two students got into cars to be driven.
- A large number of trucks going in and out of the Rothsay Truck Stop and Café.
Figure 35: Rothsay Morning Observation – September 28th 2015
Afternoon Observations

- Weather: Local observation at Rothsay, MN:

Observations began at 3:10 PM and ended at 3:45 PM with the school dismissing at 3:15 PM.

Position 1: Old 52 and 1st Street NW – Andrew Besold

- Pedestrians: Two.
- Cyclists: Three.

- 3:21 – Young male students, one on bike and one on foot, crossed with guard and continued down 1st Street NW.
- 3:24 – Older male student walked on north side of County 52 and crossed County 11. Used path on school grounds.
- 3:26 – All five buses left together.
- 3:27 – 10 younger students still playing on playground.
- 3:39 – Two male students left on bikes. Used path and crossed with guard onto 1st Street NW.
- 3:30 – Guard left. Typically does so after buses leave but will stay later to assist any students headed guard’s way to cross County 52.
- 3:41 – At least three younger students are still playing on playground.

Position 2: Front of Parking Lot Entrance – Staci Allmaras

- Pedestrians: Zero.
- Cyclists: Zero.
- Total Parent Pick-Ups: 10.

- Every car turned left out of parking lot onto County 52 eastbound.
- Two drivers ran stop sign exiting parking lot (with Principal Allmaras standing right there!)
- Sidewalks around parking lot are not used as designed and everyone cuts across lot to their cars.

Position 3: Corner of 3rd Avenue and 1 Street NW – Not occupied in afternoon.
Position 4: Bus Drop-Off Entrance Door – Lori Tillman

- Pedestrians: Two.
- Cyclists: Three.

- One walker did not use sidewalk.

Position 5: Corner of Center Street and Main Avenue East – Not occupied in afternoon.

Position 6: Center Street across from 2nd Avenue NW – Wayne Hurley

- Pedestrians: Two.
- Cyclists: Three.

- Students were noted visiting truck stop and walking through parking lots on their way home.
- Speeds on County 11 (Center Street) high as in the morning.
- High volume of traffic on 1st Street NW with some borderline speeding / careless driving.
- Poor stop sign discipline. Many drivers stopped late and/or rolled through.
- High volume of truck traffic on County 11 at truck stop.
Figure 36: Rothsay Afternoon Observations – September 28th 2015.
TRAFFIC VOLUME DATA

While speed limits/traffic speed, street form (street width, number of lanes, lane width, presence of street trees, etc.) and the presence of sidewalks can have a great deal of impact on the safety of a street for pedestrians and bicyclists, traffic volume is also a very important factor. As expected, streets with heavy traffic are often more dangerous for bicyclists and pedestrians due to increased exposure to potential conflicts. Traffic volume is also the ultimate factor with regard to the stress experienced due to passing motor traffic while walking or biking. (No traffic, no stress!) The Level of Traffic Stress (LTS) is a relatively new term in the active transportation field, which intends to replace or supplement the often-criticized Level of Service (LOS) measure of facilitation for bicycles and pedestrians. High traffic stress environments can dissuade people from walking and biking despite the presence of facilities that have a high LOS. This report, however, does not attempt to measure LTS but provides traffic volume to help understand current conditions and justify and prioritize future investments.

A common measure of traffic volume is “Annual Average Daily Traffic,” abbreviated AADT. According to MnDOT, AADT “is the theoretical estimate of the total number of vehicles using a specific segment of roadway (in both directions) on any given day of the year. This estimate represents the total number of cars per year divided by 365 and is developed using factors to adjust for the season, day of the week, and vehicle type.” “Heavy Commercial Annual Average Daily Traffic” (HCAADT) is a subset of AADT of heavy commercial truck traffic, only. MnDOT defines “Heavy Commercial Traffic” as “traffic from all trucks with at least 2 axles and 6 tires.” It is important to have a measure of HCAADT when available because heavy commercial vehicles are more cumbersome to operate. The increased mass of these vehicles is likely to cause more serious injuries and/or fatalities when involved in any type of crash. Heavy commercial traffic also has a greater impact on LTS per vehicle observed.

Even though Rothsay is a small rural agrarian town, Interstate 94 traverses the area just north of town and immediately north of the school grounds. Interstate 94 has high traffic speeds (70 mph posted speed limit), high traffic volume and a high number of trucks and commercial vehicles. However, being limited access in nature, the traffic on Interstate 94 would have little to no impact upon walking and biking in Rothsay save for a complete highway closure and detour onto local street. Figures 37 and 38 are maps of the AADT and HCAADT from data collected by MnDOT of the more significant roads in the immediate vicinity of the city of Rothsay. Table 6 is a breakdown of both AADT and HCAADT (where available) within an approximate 0.6 mile radius of the Rothsay city center. MnDOT traffic volume data comes from the MnDOT Basemap and was accessed on January 25th 2017. (Available at: [http://mndotgis.dot.state.mn.us/basemap/](http://mndotgis.dot.state.mn.us/basemap/))
Figure 37: Annual Average Daily Traffic (AADT) for more significant roads in and around Rothsay.
Figure 38: Heavy Commercial Annual Average Daily Traffic (HCAADT) for more significant roads in and around Rothsay.
Table 6: Annual Average Daily Traffic (AADT) for state system highways in and around Rothsay and Heavy Commercial Annual Average Daily Traffic (HCAADT) on select highways.

<table>
<thead>
<tr>
<th>Highway Name and Location</th>
<th>Annual Average Daily Traffic (AADT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 94 Westbound</td>
<td>14,800</td>
</tr>
<tr>
<td>Interstate 94 Eastbound</td>
<td>14,600</td>
</tr>
<tr>
<td>County 52 in front of new Rothsay School</td>
<td>280</td>
</tr>
<tr>
<td>County 11 north of Interstate 94</td>
<td>375</td>
</tr>
<tr>
<td>County 11 / Center St south of Interstate 94 and north of County 52</td>
<td>3,500</td>
</tr>
<tr>
<td>County 11 / Center St south of County 52 and north of 1st Ave North</td>
<td>1,650</td>
</tr>
<tr>
<td>County 11 / Center St south of 1st Ave North and north of Main Ave</td>
<td>1,600</td>
</tr>
<tr>
<td>County 11 / Center St south of Main Ave and north of County 26 and County 24</td>
<td>1,150</td>
</tr>
<tr>
<td>County 26 (west of Center St)</td>
<td>495</td>
</tr>
<tr>
<td>County 24 (east of Center St)</td>
<td>350</td>
</tr>
<tr>
<td>County 88 (Old Highway 52) south of 3rd Ave South</td>
<td>445</td>
</tr>
<tr>
<td>County 21 south of 3rd Ave South</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highway Name and Location</th>
<th>Heavy Commercial AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 94 Westbound</td>
<td>2,250</td>
</tr>
<tr>
<td>Interstate 94 Eastbound</td>
<td>2,200</td>
</tr>
</tbody>
</table>
CRASH DATA

Crash data with the greatest proximal significance to walking and biking to the Rothsay school was gathered using the online Minnesota Crash Mapping Analysis Tool (MCMAT). (http://www.dot.state.mn.us/stateaid/crashmapping.html) MCMAT is MnDOT’s crash database that includes all crashes involving a motor vehicle where a crash report was filed. It includes only crash reports from the past ten years. However, a crash involving a solo cyclist, the most common type of bicycle crash, would not be recorded even if emergency services responded, as long as the crash did not involve a motor vehicle. The MCMAT data for Rothsay was accessed January 24th 2017. As of that date, the dataset included crash reports from January 1st 2006 through December 31st 2015, all of which were included in this analysis. According to the MCMAT homepage accessed on the date above, there has been a delay in updating the database with crash data from 2016. Typically, the lag time between crash occurrence and data entry into the MCMAT database can last approximately 2-3 months with the data updated four times per year (approximately quarterly.)

The staff at WCI felt that collecting crash data within a 0.6 mile radius from the intersection of Center Street and 1st Avenue North roughly 2,120 feet south southeast of the school building would provide the most utility. This is the approximate center of Rothsay, as well as relatively proximal to the school. From this center point, a 0.6 mile radius includes all urbanized lands within Rothsay and all residences that are within the one mile Rothsay school walk / bike zone. The circle formed by 0.6 mile radius from the above-mentioned center point returns 34 crash reports from the MCMAT dataset. Of these collisions, 21 were on Interstate 94, as can be seen on the map. (See Figure 39) Since crashes on the limited access interstate highway would have little to no impact on the safety of students walking and biking to school, they were excluded from the analysis. The remaining 13 crashes in the study area were all within the urban areas of Rothsay.

Of these 13 crashes, there was one fatality which did involve a pedestrian. Based upon information provided by the MCMAT-generated crash detail report and a newspaper article in the May 5th 2010 edition of the Fergus Falls Daily Journal, on Monday, May 3, 2010 at 13:39 hours, under dry, clear daylight conditions, a 50-year-old male named Ronald Lee Snell was struck and killed while on private property by a Saturn automobile driven by a 17-year-old juvenile from Barnesville, Minnesota. Mr. Snell had been mowing the lawn of a property on Center Street near the intersection of Main Avenue when the juvenile lost control of the vehicle s/he was driving. The vehicle left the roadway and struck Mr. Snell who died at the scene. “Illegal Speed” was cited as a contributing factor in this fatal crash.
Figure 39: Map of the 34 crash sites within a 0.6-mile radius axis indicated on the map. Mapped crash sites are shown as red dots; crashes involving pedestrians and/or bicyclists, turquoise blue, and excluded interstate crashes as white dots. Map automatically generated online by MCMAT and then edited.
Besides this one fatal crash, no others in the study area involved a pedestrian or a bicyclist. The severity of the other 12 crashes included four with possible injuries and eight with property damage. (See Figure 40) Of the “Crash Types,” four of those crashes involved a collision with another motor vehicle in transport, one with a parked motor vehicle, one with a pedestrian, (fatal, detailed above) one with railroad crossing device, one with a utility pole, two with a tree/shrub, one with bank, ditch or curb, one with other fixed object and one classified as collision “other”. (See Figure 41) On average, there was just one crash in the selected area (excluding the interstate) per year. There does not appear to be a trend of an increase or decrease in crashes in the study area from 2006 to 2015, despite a peak of three in 2009. (See Figure 42) Most crashes happened during daylight conditions (see Figure 43) with a spike of three crashes during the 15:00 hour. (See Figure 44) This could correspond to student driver behavior upon dismissal. However, only one of the crashes at this time involved a juvenile driver (17 years-old.) That said, the juvenile driver in that case was said to have failed to yield right-of-way and was operating at an illegal speed. Finally, there was no noticeable pattern to the crashes depending on the month of the year. There was, however, a spike in crashes in both May and September, the two months out of the year that students are most likely to walk and/or bike to and from school. (see Figure 45) Despite any and all attempts to find a pattern in the crash data, with a sample size of only 13, there is no way to make any claims regarding patterns in the data with any statistical certainty.

Figure 40: Rothsay Crash Severity - Severity Class and number of crashes in each class.
Graph automatically generated online by MCMAT.
Figure 41: Rothsay Crash Type – Crash type and number of each crash type. Graph automatically generated online by MCMAT.

Figure 42: Rothsay crash rate per year. Note the absence of crashes in 2013 and 2014. Graph automatically generated online by MCMAT.
**Rothsay Crashes per Ambient Light Conditions**

Figure 43: Rothsay crashes per hour of the day (24 hour time). Graph automatically generated online by MCMAT.

**Rothsay Crashes per Hour of the Day (24 hour time)**

Figure 44: Rothsay crashes per hour of the day (24 hour time). Graph automatically generated online by MCMAT.
Figure 45: Rothsay crashes per month of the year. Note the missing months.
Graph automatically generated online by MCMAT.
CHAPTER 7: COMMUNITY SRTS OPEN HOUSE EVENT

On Wednesday, August 31, 2016 from 4:00-7:00 pm, the Rothsay school held a community open house to welcome everyone to the new school year. Due to a poor attendance record at previous SRTS Open House events in other communities, it was decided by the team that it may be more fruitful to go to the people instead of trying to get the people to come to them. As such, it was decided to present the project and get community feedback at the school’s Open House. Members of the community were able to meet some of the SRTS team, learn how SRTS works, and help envision what a more walkable, bikeable community could look like. Available to the community members at the open house were the results from the strengths, barriers and opportunities analysis seen in the previous chapter.

Comments from members of the community are as follows and not edited. They are not listed in any priority order.

<table>
<thead>
<tr>
<th></th>
<th>Wednesday August 31, 2016 Community SRTS Open House Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concerns about traffic safety on 3rd Ave Northwest.</td>
</tr>
<tr>
<td>2</td>
<td>Concerns about the safety of the railroad crossing.</td>
</tr>
<tr>
<td>3</td>
<td>Concerns about the volume of traffic on Center Street.</td>
</tr>
</tbody>
</table>
Figure 46: A reproduction of the map with "Post-It Note" comments from the August 31st 2016 Rothsay school Open House.
In addition to the public comments above, during the SRTS study period, a letter to the editor of the Rothsay Regional Report was published and related concerns about the safety of children walking and biking to and from the Rothsay school. The author, Deb Sherette, is a resident on 3rd Avenue NW (the Dump Road.) For many years, she has observed the traffic and the students who attend the Rothsay school. Her letter, in its entirety, is as follows:

Rothsay Regional Report – Week of May 23rd 2016

TO THE EDITOR:

Open letter to the Rothsay School District.

I have written to the school board with my concerns, and received no response. I do not have children in school so I am not part of the school system or its committees.

I do live on the “dump road” in Rothsay, which is directly south of the Rothsay School building.

I believe the new school was in the works for the past five years, perhaps longer. With the voting, the construction and now the first complete year of school and still there is no signage for crossing the county highway 'Old 52' or Highway 88.

I am not sure why this was not addressed, however, being outside a lot in the fall and spring of the year working in the gardens in our yard, I have seen countless close calls of children getting hit/hurt by vehicles that have no idea there is a school right down the road!

There must be some sort of school flashing signage on the road in front of the truck stop area. A lot of semi traffic is in and out all day long, and for whatever reason, children are walking on that highway instead of crossing the highway and walking on the gravel road by the newly relocated fire hall. I would hope that kids are instructed to stay away from the highway... however, I have seen a couple of times where a semi has to literally slam on its brakes because a child will dart out of the ditch to cross the street.

I know there are finally signs on the old highway 52 in front of the school that do list a reduced speed limit now when children are present...there are no flashing lighted signs that I have seen yet.

As child safety is paramount, I am really shocked that this was not addressed during the year and a half of construction.

Perhaps parents can be crossing guards, as the bike path from the school dumps out right on old Highway 52 with no crosswalk signs at all.
The gravel road between the school and Third Avenue NW (the dump road) sees a huge increase in traffic, as does the dump road. I have asked that a four-way stop be placed at the corner of First Street NW and Third Avenue NW to help slow traffic down.

With the new bank being built on the corner, and the fire hall to be relocated to this area, the traffic pattern has increased in this area of town. This is the area of town where the children are walking, riding bike and riding four-wheelers back and forth to school.

I would hope that the “safe route to school” initiative would have included the proper signage for safe crossing areas for children coming and going to school, yet so far…after a couple years of planning and construction and now an entire school year…nothing has been done.

We must act before we lose a child to a senseless accident. We cannot prevent 100% of things that happen, however, we can try to do everything to help prevent as many accidents as possible!!

A concerned citizen of Rothsay.

Deb Sherette
CHAPTER 8: STANDARDIZED SRTS SURVEY ANALYSIS

A take-home, self-report parent survey was conducted in spring 2016 and the teacher-administered in-class student travel tally completed in October of 2016. These surveys and survey documents have been designed by the National Centers for Safe Routes to School (National Centers.) (http://www.saferoutesinfo.org/) These surveys and survey forms are the national standard for reporting SRTS data in the United States and help the National Centers keep track of walking and biking rates. As per the National Centers’ guidelines, both of these surveys are administered to gather data from students in grades K-8. However, since many school districts in rural Minnesota have only a K-12 schools, some schools may have administered these surveys to students all the way up to grade 12. Rothsay decided to administer the surveys to students in all grades. When this happens, it is WCI policy to enter the data as the individual surveys have a place to indicate what grade the student is in and it would be very easy to deselect data from students grade 9-12, if so desired. The results analyzed are from the Rothsay school, grades PreK through 12.

The parent survey questionnaire is a two-page form that was taken home by students for parents to complete asking about their child’s school travel behaviors and the parents’ perceptions regarding whether walking and biking to school is appropriate and fitting for their child. Besides English, the parent survey is available from the National Centers in Spanish, Arabic, Armenian, Mandarin Chinese, Haitian Creole, Hmong, Korean, Russian, Somali, Ukrainian and Vietnamese. The parent survey (English and Spanish only) can also be done by parents directly online if school administrators and SRTS believe that this will provide a greater survey return rate. This also has the potential to increase survey response accuracy and saves administrative data entry time.

The student travel tally is administered by teachers and conducted over three days (Tuesday, Wednesday and Thursday) in one single school week throughout the entire school. Teachers record weather conditions in the morning and afternoon on each particular day. Then, the teachers ask about students’ travel modes to school that each day and how they plan on going home.

Once the paper forms were completed and collected for both surveys, the data is entered on-line into the National Centers’ database by staff at WCI, (This is done to maintain data entry continuity and as a service to the school.) After the survey data is entered, those with access to the National Centers’ database can produce automated individual reports from each school for both the parent survey and the student travel tally. These reports provide a breakdown of the basic statistics that first establish a baseline that progress can be measured against in the future. These reports are also the origin of most of the graphs and charts in this chapter and all those in Appendix A and B. The 2016 surveys will be used to establish baseline data for the Rothsay school. Moving forward, the parent survey will be done once every two to three years. The
teacher-administered student travel tally will be done at least once, but preferably twice per school year; fall and spring. Follow-up surveying, with help from WCI, will be done so that local, state and national officials can, over time, monitor trends in the travel habits of students traveling to and from school.

**KEY FINDINGS – PARENT SURVEY**

The more significant highlights gleaned from the spring 2016 parent survey for students in grades Prekindergarten (PreK) through 5 are below. It is not known why this survey wasn’t done for all students up to grade 8. These results provide valuable information about parental attitudes and opinions relevant to SRTS at the Rothsay school and create a benchmark baseline by which future analysis can be compared against.

Of the children whose parents participated in the survey, three percent walked and three percent biked to school (six percent combined) while six percent walked and three percent biked from school (nine percent combined.) When compared to the 2013 national SRTS combined walk and bike mode share numbers of 17.4 percent in the morning and 20.2 percent in the afternoon, the percentages of students walking and bicycling to and from the Rothsay school are below average.¹⁹

WCI staff investigated the travel habits of students who lived within a distance that the MnDOT SRTS office considers walkable and / or bikeable. Since only the travel habits of students grades PreK through 5th were included in the survey results, a distance of one-half mile was the appropriate “Walk / Bike Zone” to analyze. Of the students who lived within one-half mile of the school, 28 percent of the students walked and/or biked to school and 43 percent walked and/or biked from school. This is somewhat in keeping with the Walk/Bike Zone concept as defined and promoted by MnDOT. Clearly, there is room to increase walking and biking numbers. One-half mile is a 10-minute walk for an adult, 15 minutes for a child and no more than a 7-minute bike ride for a child.

Other results included:

- The school bus was the most frequently used mode of travel to and from school, followed by the family vehicle.
- Distance was the main reason parents do not allow their children to walk or bicycle to/from school.

• Safety factors, such as amount of traffic and speed of traffic, were cited more frequently by parents as barriers preventing their children from walking or biking to school, more so than crime or violence.
• A vast majority of parents (74 percent) believe that the Rothsay school neither supports nor actively encourages children to walk and bike to and from school.
• A vast majority of parents (74 percent) believe that walking and biking to and from school is, in some degree, healthy for their child. 35 percent believe it to be healthy and 39 percent very healthy. No one believed it to be unhealthy.

PARENT SURVEY – SELECT QUESTIONS

For the complete parent survey results, see Appendix A.

The Rothsay school serves grades PreK-12. In the spring 2016, there were 290 students enrolled. Of that, 100 parent surveys were distributed to the parents of students in grades PreK through 5th. Of that 100, 34 surveys were returned, met the criteria to be entered in the National Centers’ database, and are included in this report.

*Question – Is the child who brought home this survey male or female?*

Approximately 50 percent of questionnaires were completed for male and 50 percent for female students.

Sex of children for parents that provided information

![Pie chart showing 50% male and 50% female students](image)

*Figure 47: Breakdown of male/female student representation in the parent survey.*
**Question – What is the grade of the child who brought home this survey?**

Third grade, followed by Kindergarten and fourth grade had the highest number of responses, (See Table 7)

The percentages listed in the right column are **not** the percent of survey returns versus the total number of students in each grade. It is simply the percentage of surveys returned from that grade as part of the total 34 returned from the entire school. This is also what “percent” represents in all following survey questions.

---

**Table 7: Grade levels of children represented in the Rothsay school parent survey. (Spring 2016)**

<table>
<thead>
<tr>
<th>Grade in School</th>
<th>Responses per grade</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreK</td>
<td></td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Kindergarten</td>
<td></td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>9</td>
<td>26%</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>4</td>
<td>12%</td>
</tr>
</tbody>
</table>

No response: 0
Percentages may not total 100% due to rounding.
Question – On most days, how does your child arrive and leave for school?

A comparison of a child’s typical travel mode of arrival at and departure from school, as reported by parents, is shown in Figure 48 and Table 8. The survey is structured so that parents can give an answer for both how their child arrives at and then leaves from school. Based on the parent responses, the school bus was the most common mode of travel both to and from school representing 59 percent and 53 percent of all trips, respectively. The second most frequently chosen mode for travel to and from school was the family vehicle at 35 percent and 38 percent, followed by walking at three and six percent. Students riding a bike represented just three percent of the travel mode share in both the morning and afternoon.

There is a slight change in travel modes chosen for school departure as compared to arrival. There is a switch from the school bus to the family vehicle and walking in the afternoon by two students; at least according to this survey. This is contrary to what has been seen in other schools in the west central region of Minnesota where there is often a switch from the family vehicle in the morning to the school bus and walking. It is still the belief of the author that this mode shift from the family vehicle happens, in most communities and schools, because it is easy for parents to drive children to school as they are headed to work. In the afternoon, parents are at work when students are dismissed and can take their time getting home. Bike mode share for students does not vary between mornings and afternoons. Students will need to ride their bikes home if they wish to ride to school the next day. Still, this shift away from the school bus in the afternoon is small and not likely statistically-significant.
Typical mode of arrival at and departure from school

Figure 48: Typical mode of arrival at and departure from school (Spring 2016)

Table 8: Typical mode of arrival at and departure from school (Spring 2016)

<table>
<thead>
<tr>
<th>Time of Trip</th>
<th>Number of Trips</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>34</td>
<td>3%</td>
<td>3%</td>
<td>53%</td>
<td>35%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Afternoon</td>
<td>34</td>
<td>6%</td>
<td>3%</td>
<td>53%</td>
<td>38%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

No Response Morning: 0
No Response Afternoon: 1
Percentages may not total 100% due to rounding.
Question – How far does your child live from school?

Parents were asked to give the distance from their home to the school. This question is asked in a way so that parents likely estimate that distance. These results are shown in Table 9. This is recorded because what parents estimate will have an effect on their mode choice for their child. Often parents will overestimate that distance and drive their child to school when walking and/or biking is a viable, safe and timely alternative.

Table 9: Parent estimate of distance from the child’s home to school (Spring 2016)

<table>
<thead>
<tr>
<th>Distance between home and school</th>
<th>Number of children</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>21%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>16</td>
<td>47%</td>
</tr>
</tbody>
</table>

Don’t know or No response: 0
Percentages may not total 100% due to rounding.
Cross-reference – Distance, by arrival and departure modes

These estimated distances are then cross-referenced with actual arrival and departure mode choice. (Tables 10 and 11)

Table 10: Parent estimate of the distance from child’s home to school and mode choice to school (Spring 2016)

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>0%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>16</td>
<td>0%</td>
<td>0%</td>
<td>81%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Don't know or No response: 0  
Percentages may not total 100% due to rounding.

Table 11: Parent estimate of the distance from child’s home to school and mode choice from school (Spring 2016)

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>40%</td>
<td>20%</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>71%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>14</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Don't know or No response: 2  
Percentages may not total 100% due to rounding.
**Mode analysis within the Walk / Bike Zone, arrival and departure modes**

According to the MnDOT Walk / Bike Zone concept, one-half mile is considered an appropriate distance for students in grades PreK through 5th to walk and/or bike to and from school. For grades 6-8, one mile is considered an appropriate distance and for grades 9-12, it is one and one-half miles. Even though the Rothsay school has students from PreK through 12th Grade, it is not understood why the only surveys returned are from grades PreK through 5th. As such, for this analysis, only those living within the perceived half-mile will be considered to live within the appropriate Walk/Bike Zone for their grade.

Further WCI staff analysis of the parent survey data shows that 28 percent of the children who live within one-half mile of the school, walk and/or bike to school in the morning. (Table 12) This increases to 43 percent in the afternoon. (Table 13) However, these percentages are represented by just two and three students respectively and likely do not represent a true overall percentage of students who regularly walk and/or bike to and from the Rothsay school from within a one-half mile distance. For most students living within one-half mile of the school, the high use of the school bus and family vehicle to travel to and from school is likely due to habit and convenience posed by both modes, rather than the perceived and/or real dangers posed by automobile traffic on the streets of Rothsay.

**Table 12: School arrival modes for K-5 students (raw numbers and percent) living within one-half mile of the Rothsay school.**

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than ¼ mile</td>
<td>5</td>
<td>1 (20%)</td>
<td>1 (20%)</td>
<td>2 (40%)</td>
<td>1 (20%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>¼ mile up to ½ mile</td>
<td>2</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (50%)</td>
<td>1 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total within ½ mile</td>
<td>7</td>
<td>1 (14%)</td>
<td>1 (14%)</td>
<td>3 (43%)</td>
<td>2 (29%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

**Total Walk / Bike within ½ mile**

| Total Motorized Modes within ½ mile | 2 (28%) | 5 (72%) |

Percentages may not total 100% due to rounding.
Table 13: School departure modes for K-5 students (raw numbers and percent) living within one-half mile of the Rothsay school.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than ¼ mile</td>
<td>5</td>
<td>2 (40%)</td>
<td>1 (20%)</td>
<td>2 (40%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>¼ mile up to ½ mile</td>
<td>2</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (50%)</td>
<td>1 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total within ½ mile</td>
<td>7</td>
<td>2 (29%)</td>
<td>1 (14%)</td>
<td>3 (43%)</td>
<td>1 (14%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total Walk / Bike within ½ mile</td>
<td>3 (43%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Motorized Modes within ½ mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 (57%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentages may not total 100% due to rounding and/or reporting error.
Question – What of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school?

Parents were asked to identify issues affecting their decision to allow, or not allow, their child to walk or bike to and from school. Parents were given a list of options to choose from, with the ability to select as many reasons they felt applied. The results from this question were then split by whether parents did allow their child to walk or bike to and from school, or did not.

For this question, 21 parents said their “Child does not walk/bike to school.” Only one parent said their “Child walks/bikes to school,” and 12 parents did not answer.

Figure 49 illustrates the issues affecting the decisions of the 21 parents that do not allow their child to walk or bike both to and from school. For those parents, the top four issues affecting their decision are “distance” (76 percent), “safety of intersections and crossings” and “speed of traffic along route” (tied at 57 percent,) and “sidewalks or pathways” (43 percent). The four least frequently-cited issues are “weather or climate,” “adults to bike/walk with,” “violence or crime,” “child’s participation in after-school programs” (all tied at 14 percent,) “convenience of driving” (10 percent) and a lack of “crossing guards” (5 percent).

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school
Figure 50 illustrates the results for the one parent who allows their child/ren to walk or bicycle to and from school. The three issues affecting this parent’s decision are “safety of intersections and crossings,” “weather or climate,” and “crossing guards.”

Note: Because of the low response rate from parents that do allow their children to walk and bike to school (one), the results from this question are likely not statistically-significant and likely cannot be compared to the general population of parents that do allow their children to walk and bike to school.

Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school.

![Bar Chart](chart.png)

Figure 50: Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school. (Spring 2016)
STUDENT TRAVEL TALLY – SELECT QUESTIONS / KEY FINDINGS

For complete student travel tally results, see Appendix B.

The student travel tally survey is used to quantify students’ travel both to and from school by travel mode. The tally form is administered in school, by teachers. The count is administered school-wide in one single school week. Doing the tally on all three mid-week days (Tuesday, Wednesday and Thursday) is greatly preferred but two of three midweek days is acceptable. Monday and Friday are avoided as possible weekend plans and/or holidays are more likely to affect students’ regular travel behaviors on those two days. Students are asked by a show of hands how they arrived at school that day and then how they plan to leave for home after school. This survey also records weather conditions morning and afternoon separately on each particular day, as inclement weather can have an obvious effect on children walking or biking to and from school.

ROTHSAY SCHOOL – ELEMENTARY STUDENTS

The student travel tally was conducted in the fall of 2016 and includes results only for elementary school grades K through 5th at the Rothsay school. It is not understood why only these students were counted and not at least up to 8th grade.

Question – How did you arrive at school today? How do you plan to leave for home after school?

Travel mode results from the student travel tally generally match up with the travel mode results from the parent survey. According to the tally as seen in Figure 51, the combined rate of walking and biking to school in the morning was two percent (zero percent walking, two percent biking). This combined rate of walking and biking stays exactly the same in the afternoon. As for motorized modes, 60 percent of students rode the school bus in the morning and 68 percent in the afternoon while 36 percent of students arrived in the family vehicle in the morning and 29 percent in the afternoon. Finally, two percent carpooled in the morning and one percent in the afternoon. This mode shift towards the school bus in the afternoon is consistent with patterns seen at other schools. The higher use of a family vehicle in the morning is in all likelihood due to the convenience of dropping off students while parents are headed to work.
DISCUSSION / COMPARISON

Results from both the parent surveys and student travel tallies are fairly comparable and, for the most part, did not contradict one another. The one small exception was that the switch from the family vehicle to the school bus in the afternoon was not seen in the parent survey. In fact, just the opposite was seen which is somewhat unusual. Walking and biking mode shares were higher in the parent survey, as well. Still, sample sizes in both surveys were smaller than optimal and more consistent results may have been possible if more people were surveyed. All things considered however, the similarities of the results between both data collection instruments reinforce the credibility and reliability of the final results.

While the results from the parent surveys and student travel tallies provide valuable baseline data, several limitations exist. The parent survey was self-reported information, which may self-select and bias the results to a socially-desirable response. Furthermore, the three-day time frame for student travel tally, taken only during one school week out of the entire year, limits the likelihood of collecting data in all weather conditions. Additional analysis, particularly a second student travel tally at a different time of the year, would be helpful to better understand student travel behaviors including the influences of weather.
For a comprehensive set of recommendations, please see the “Action Plan” in the “Executive Summary, Significant Findings and Action Plan” at the beginning of this document.
CHAPTER 10: CONCLUSION

This Safe Routes to School (SRTS) plan is intended to guide the Rothsay School District, the Rothsay School and the City of Rothsay toward their collective goal of making it safer, more convenient and more fun for students to walk and bicycle to and from school. Where it is already safe, encourage students to walk and bicycle to school. Where it is less than ideally safe, improve the existing conditions to make it as safe as practically possible with an eye towards walking and bicycling comfort. When children get exercise on their way to and from school they:

- Arrive more alert and able to focus,
- Get a large portion of their recommended daily physical activity,
- Are more likely to be a healthy weight,
- Demonstrate improved test scores,
- Are less likely to suffer from anxiety, and
- Build healthy habits and practices they can bring with them into adulthood.

The SRTS recommendations in the Action Plan at the beginning of this document address the “5 Es” and recognize the “6th E” of Equity. They were created to improve safety, reduce traffic congestion, encourage students to consider walking or bicycling, and instill an active lifestyle. The recommendations in this plan were formed based on expert analysis of the existing conditions around the school and in the community, direct observation, input from members of the community, MnDOT assembled crash and traffic data, and results from standardized parent surveys and student travel tallies. SRTS plans are the most successful when programs involve the entire community and when they are integrated into current and future policies. If at any time, the Rothsay School District, the Rothsay School and the City of Rothsay have any questions of how to best enact the recommendations in this report, whether that be funding sources or best policies and practices, etc., they are encouraged to contact the staff at West Central Initiative and/or PartnerSHIP 4 Health.
### APPENDIX A: PARENT SURVEY RESULTS

Parent Survey Report: One School in One Data Collection Period

<table>
<thead>
<tr>
<th><strong>School Name:</strong></th>
<th>Rothsay Public School</th>
<th><strong>Set ID:</strong></th>
<th>14719</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Group:</strong></td>
<td>Rothsay Public Schools</td>
<td><strong>Month and Year Collected:</strong></td>
<td>April 2016</td>
</tr>
<tr>
<td><strong>School Enrollment:</strong></td>
<td>200</td>
<td><strong>Date Report Generated:</strong></td>
<td>01/26/2017</td>
</tr>
<tr>
<td><strong>% Range of Students Involved in SRTS:</strong></td>
<td>0-25%</td>
<td><strong>Tags:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Questionnaires Distributed:</strong></td>
<td>100</td>
<td><strong>Number of Questionnaires Analyzed for Report:</strong></td>
<td>34</td>
</tr>
</tbody>
</table>

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Centers for Safe Routes to School.
Sex of children for parents that provided information

![Pie chart showing 50% male and 50% female]
Grade levels of children represented in survey

No response: 0
Percentages may not total 100% due to rounding
Parent estimate of distance from child's home to school

Parent Survey Aggregate Summary

<table>
<thead>
<tr>
<th>Distance between home and school</th>
<th>Number of children</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>21%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>16</td>
<td>47%</td>
</tr>
</tbody>
</table>

Don't know or No response: 0
Percentages may not total 100% due to rounding.
Typical mode of arrival at and departure from school

![Chart showing typical mode of arrival and departure from school]

<table>
<thead>
<tr>
<th>Time of Trip</th>
<th>Number of Trips</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>34</td>
<td>3%</td>
<td>3%</td>
<td>59%</td>
<td>35%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Afternoon</td>
<td>34</td>
<td>6%</td>
<td>3%</td>
<td>53%</td>
<td>38%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

No Response Morning: 0
No Response Afternoon: 2
Percentages may not total 100% due to rounding.
Typical mode of school arrival and departure by distance child lives from school
Typical mode of school arrival and departure by distance child lives from school

School Arrival

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>0%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>16</td>
<td>0%</td>
<td>0%</td>
<td>81%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Don't know or No response: 0
Percentages may not total 100% due to rounding.

School Departure

<table>
<thead>
<tr>
<th>Distance</th>
<th>Number within Distance</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1/4 mile</td>
<td>5</td>
<td>40%</td>
<td>20%</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/4 mile up to 1/2 mile</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1/2 mile up to 1 mile</td>
<td>7</td>
<td>0%</td>
<td>0%</td>
<td>71%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1 mile up to 2 miles</td>
<td>4</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>More than 2 miles</td>
<td>14</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Don't know or No response: 2
Percentages may not total 100% due to rounding.
Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

Percentages may not total 100% due to rounding.

<table>
<thead>
<tr>
<th>Asked Permission?</th>
<th>Number of Children</th>
<th>Less than 1/4 mile</th>
<th>1/4 mile up to 1/2 mile</th>
<th>1/2 mile up to 1 mile</th>
<th>1 mile up to 2 miles</th>
<th>More than 2 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10</td>
<td>60%</td>
<td>50%</td>
<td>50%</td>
<td>75%</td>
<td>0%</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>40%</td>
<td>50%</td>
<td>50%</td>
<td>25%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Don't know or No response: 1
Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school

![Chart showing issues affecting decisions not to walk or bike](image1)

Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

![Chart showing issues affecting decisions to walk or bike](image2)
Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

<table>
<thead>
<tr>
<th>Issue</th>
<th>Child does not walk/bike to school</th>
<th>Child walks/bikes to school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>76%</td>
<td>0%</td>
</tr>
<tr>
<td>Safety of Intersections and Crossings</td>
<td>57%</td>
<td>100%</td>
</tr>
<tr>
<td>Speed of Traffic Along Route</td>
<td>57%</td>
<td>0%</td>
</tr>
<tr>
<td>Sidewalks or Pathways</td>
<td>43%</td>
<td>0%</td>
</tr>
<tr>
<td>Amount of Traffic Along Route</td>
<td>38%</td>
<td>0%</td>
</tr>
<tr>
<td>Time</td>
<td>18%</td>
<td>0%</td>
</tr>
<tr>
<td>Weather or climate</td>
<td>14%</td>
<td>100%</td>
</tr>
<tr>
<td>Adults to Bike/Walk With</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Violence or Crime</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Child's Participation in After School Programs</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Convenience of Driving</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Crossing Guards</td>
<td>5%</td>
<td>100%</td>
</tr>
</tbody>
</table>

No response: 12

Note:
--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.
--Each column may sum to > 100% because respondent could select more than issue.
--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns; (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school by percent

Parents' opinions about how much fun walking and biking to/from school is for their child by percent
Parents' opinions about how healthy walking and biking to/from school is for their child by percent

![Pie chart showing healthy walking and biking]

Comments Section

<table>
<thead>
<tr>
<th>Survey ID</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1434515</td>
<td>I am just unhappy on how slow the progress is for getting lights, signage and speed limit dropped at the new school site.</td>
</tr>
<tr>
<td>1434537</td>
<td>Why does my education have any impact on my child walking or biking to and from school?</td>
</tr>
<tr>
<td>1434530</td>
<td>The traffic coming off interstate and truck stop, plus proximity to those is a major concern.</td>
</tr>
<tr>
<td>1434535</td>
<td>I [Parent] work at the school.</td>
</tr>
<tr>
<td>1434517</td>
<td>We live in the County, one mile from town.</td>
</tr>
<tr>
<td>1434540</td>
<td>Both parents live in country, so no walking or biking to or from school.</td>
</tr>
</tbody>
</table>
Student Travel Tally Report: One School in One Data Collection Period

**School Name:** Rothsay Elementary School

**School Group:** West Central Minnesota / MnDOT D4

**School Enrollment:** 150

**% of Students reached by SRTS activities:** Don’t Know

**Number of Classrooms Included in Report:** 5

**Set ID:** 23180

**Month and Year Collected:** October 2016

**Date Report Generated:** 06/16/2017

**Tags:** SRTS Planning Team

This report contains information from your school's classrooms about students' trip to and from school. The data used in this report were collected using the in-class Student Travel Tally questionnaire from the National Centers for Safe Routes to School.
Morning and Afternoon Travel Mode Comparison

Percentages may not total 100% due to rounding.

<table>
<thead>
<tr>
<th></th>
<th>Number of Trips</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>253</td>
<td>0.4%</td>
<td>2%</td>
<td>60%</td>
<td>36%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Afternoon</td>
<td>287</td>
<td>0%</td>
<td>2%</td>
<td>68%</td>
<td>29%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Morning and Afternoon Travel Mode Comparison by Day

Morning and Afternoon Travel Mode Comparison

Percentages may not total 100% due to rounding.

<table>
<thead>
<tr>
<th></th>
<th>Number of Trips</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday AM</td>
<td>87</td>
<td>1%</td>
<td>2%</td>
<td>53%</td>
<td>41%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Tuesday PM</td>
<td>98</td>
<td>0%</td>
<td>2%</td>
<td>70%</td>
<td>27%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wednesday AM</td>
<td>81</td>
<td>0%</td>
<td>1%</td>
<td>59%</td>
<td>37%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wednesday PM</td>
<td>94</td>
<td>0%</td>
<td>1%</td>
<td>72%</td>
<td>24%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Thursday AM</td>
<td>85</td>
<td>0%</td>
<td>2%</td>
<td>68%</td>
<td>28%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Thursday PM</td>
<td>95</td>
<td>0%</td>
<td>2%</td>
<td>62%</td>
<td>35%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Travel Mode by Weather Conditions

Percentages may not total 100% due to rounding.

<table>
<thead>
<tr>
<th>Weather Condition</th>
<th>Number of Trips</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunny</td>
<td>288</td>
<td>0%</td>
<td>2%</td>
<td>65%</td>
<td>32%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Rainy</td>
<td>75</td>
<td>1%</td>
<td>3%</td>
<td>47%</td>
<td>47%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overcast</td>
<td>86</td>
<td>0%</td>
<td>0%</td>
<td>79%</td>
<td>20%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Snow</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
# Parent Survey: English – Page 1

## Parent Survey About Walking and Biking to School

Dear Parent or Caregiver,

Your child’s school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school your children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today’s date.

After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child’s name will be associated with any results.

Thank you for participating in this survey!

**+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +**

<table>
<thead>
<tr>
<th>School Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

1. What is the grade of the child who brought home this survey?  
   - Grade (PK, K, 1, 2, 3, ...)  

2. Is the child who brought home this survey male or female?  
   - Male  
   - Female

3. How many children do you have in Kindergarten through 8th grade?  

4. What is the street intersection nearest your home? (Provide the names of two intersecting streets)

   and

5. How far does your child live from school?  
   - Less than ¼ mile  
   - ¼ mile up to ½ mile  
   - ½ mile up to 1 mile  
   - 1 mile up to 2 miles  
   - More than 2 miles  
   - Don’t know

6. On most days, how does your child arrive and leave for school? (Select one choice per column, mark box with X)

   **Arrive at school**
   - Walk  
   - Bike  
   - School Bus  
   - Family vehicle (only children in your family)  
   - Carpool (Children from other families)  
   - Transit (city bus, subway, etc.)  
   - Other (skateboard, scooter, inline skates, etc.)

   **Leave from school**
   - Walk  
   - Bike  
   - School Bus  
   - Family vehicle (only children in your family)  
   - Carpool (Children from other families)  
   - Transit (city bus, subway, etc.)  
   - Other (skateboard, scooter, inline skates, etc.)

7. How long does it normally take your child to get to/from school? (Select one choice per column, mark box with X)

   **Travel time to school**
   - Less than 5 minutes  
   - 5 - 10 minutes  
   - 11 - 20 minutes  
   - More than 20 minutes  
   - Don’t know / Not sure  

   **Travel time from school**
   - Less than 5 minutes  
   - 5 - 10 minutes  
   - 11 - 20 minutes  
   - More than 20 minutes  
   - Don’t know / Not sure
## Parent Survey: English – Page 2

8. Has your child asked you for permission to walk or bike to/from school in the last year?  [ ] Yes  [ ] No

9. At what grade would you allow your child to walk or bike to/from school without an adult?  (Select a grade between PK, K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)  [ ] grade (or)  [ ] I would not feel comfortable at any grade

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Place a clear ’X’ inside box. If you make a mistake, fill the entire box, and then mark the correct box

10. What of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school? (Select ALL that apply)

- [ ] Distance
- [ ] Convenience of driving
- [ ] Time
- [ ] Child’s before or after-school activities
- [ ] Speed of traffic along route
- [ ] Amount of traffic along route
- [ ] Adults to walk or bike with
- [ ] Sidewalks or pathways
- [ ] Safety of intersections and crossings
- [ ] Crossing guards
- [ ] Violence or crime
- [ ] Weather or climate

11. Would you probably let your child walk or bike to/from school if this problem were changed or improved? (Select one choice per line, mark box with X)

- [ ] My child already walks or bikes to/from school

12. In your opinion, how much does your child’s school encourage or discourage walking and biking to/from school?

- [ ] Strongly Encourages
- [ ] Encourages
- [ ] Neither
- [ ] Discourages
- [ ] Strongly Discourages

13. How much fun is walking or biking to/from school for your child?

- [ ] Very Fun
- [ ] Fun
- [ ] Neutral
- [ ] Boring
- [ ] Very Boring

14. How healthy is walking or biking to/from school for your child?

- [ ] Very Healthy
- [ ] Healthy
- [ ] Neutral
- [ ] Unhealthy
- [ ] Very Unhealthy

15. What is the highest grade or year of school you completed?

- [ ] Grades 1 through 8 (Elementary)
- [ ] Grades 9 through 11 (Some high school)
- [ ] Grade 12 or GED (High school graduate)
- [ ] College 1 to 3 years (Some college or technical school)
- [ ] College 4 years or more (College graduate)
- [ ] Prefer not to answer

16. Please provide any additional comments below.

---

A high-quality original printable version of this document can be found at:

Encuesta sobre ir caminando o andando en bicicleta a la escuela
- PARA PADRES -

Estimado Padre o Encargado,
La escuela donde su hijo/hija asiste desea saber sus opiniones sobre niños caminando y andando en bicicleta a la escuela. Esta encuesta tomará entre 5 y 10 minutos para completar. Le pedimos a las familias que completen sólo una encuesta por escuela a la que asisten sus niños. Si recibe más de un formulario de la misma escuela, por favor complete sólo una encuesta, la del niño que cumpla años en la fecha más próxima al día de hoy.

Después de completar esta encuesta, devuélvala a la escuela a través de su hijo o entéguesela a la maestra. Sus respuestas se mantendrán confidencial y no se asociará su nombre ni el de su hijo a ningún resultado.

¡Gracias por participar en esta encuesta!

+ LETRA MAYÚSCULA SOLAMENTE USE TINTA AZUL O NEGRA +

Nombre de la Escuela:

1. ¿En qué grado esta el niño que trajo esta encuesta al hogar? ☐ Grado (PK, K, 1, 2, 3...)

2. ¿El niño que trajo a casa la encuesta es niño o niña?
   ☐ Niño ☐ Niña

3. ¿Cuántos niños tiene usted entre Kindergarten y el 8vo grado?

4. ¿Cuál es la intersección más cerca de su casa? (el cruce de las dos calles)

+ ¿Cómo llenar este formulario?: Escriba en letras MAYÚSCULAS. Marque las cajas con "X" +

5. ¿A qué distancia vive su niño de la escuela?
   ☐ Menos de 1/4 milla ☐ medio milla hasta 1 milla ☐ Más de 2 millas
   ☐ Entre 1 y 1/2 milla ☐ Entre 1 y 2 millas ☐ No lo sé

6. La mayoría de los días, ¿cómo va su niño a la escuela y cómo regresa a la casa después de la escuela?
   Llega a la escuela ☐ Caminando ☐ Bicicleta ☐ Autobús escolar
   ☐ Vehículo de la familia (solo con niños de la familia) ☐ Compartiendo el viaje en auto con niños de otras familias
   ☐ Tránsito (autobús de la ciudad, subterráneo, etc.) ☐ Otro (patineta, monopatín, patines, etc.)
   Regresa a casa ☐ Caminando ☐ Bicicleta ☐ Autobús escolar
   ☐ Vehículo de la familia (solo con niños de la familia) ☐ Compartiendo el viaje en auto con niños de otras familias
   ☐ Tránsito (autobús de la ciudad, subterráneo, etc.) ☐ Otro (patineta, monopatín, patines, etc.)

+ ¿Cómo llenar este formulario?: Escriba en letras MAYÚSCULAS. Marque las cajas con "X" +

7. ¿Cuánto tiempo le toma a su niño para ir y regresar de la escuela? (una respuesta por columna con una "X" en la caja)
   Tiempo del recorrido a la escuela
   ☐ Menos de 5 minutos ☐ 5 a 10 minutos ☐ 11 a 20 minutos
   ☐ Más de 20 minutos ☐ No lo sé / No estoy seguro/a
   Tiempo del recorrido para llegar a casa
   ☐ Menos de 5 minutos ☐ 5 a 10 minutos ☐ 11 a 20 minutos
   ☐ Más de 20 minutos ☐ No lo sé / No estoy seguro/a

+ +
8. ¿En el último año, le ha pedido permiso su hijo para caminar o andar en bicicleta hacia o desde la escuela?
☐ Sí  ☐ No

9. ¿En qué grado permitiría que su hijo camine o ande en bicicleta solo a/o de la escuela?
(seleccione un grado entre PK, K, 1, 2, 3, 4, 5)
☐ grado
☐ No me sentiría cómodo/a en ningún grado

¿Cómo llenar este formulario?: Escribe en letras MAYÚSCULAS. Marque las cajas con "X"

10. ¿Cuáles de las siguientes situaciones afectaron su decisión de permitir, o no permitir, que su niño camine o ande en bicicleta hacia o desde la escuela? (marque todas las que correspondan)
☐ Distancia
☐ Conveniencia de manejar
☐ Tiempo
☐ Actividades antes o después de la escuela
☐ Velocidad del tránsito en la ruta
☐ Cantidad de tránsito en la ruta
☐ Adultos que acompañen a su niño
☐ Aceras o caminos
☐ Seguridad de las intersecciones y cruces
☐ Guardias de cruce peatonal
☐ Violencia o crimen
☐ Tiempo o clima

11. ¿Probablemente dejaría que su hijo caminara o usara la bicicleta para ir a / regresar de la escuela si este problema cambiara o mejorara?
(elija una respuesta por línea)
☐ Mi hijo(a) ya viaja a/pie o en bicicleta a/desde la escuela
☐ Sí  ☐ No  ☐ No estoy seguro/a

12. En su opinión, ¿cuánto apoya provee la escuela de su hijo a caminar y usar la bicicleta para ir o regresar de la escuela?
☐ Anima Fuertemente  ☐ Anima  ☐ Ni uno ni otro  ☐ Desalienta  ☐ Desalienta Fuertemente

13. ¿Qué tan DIVERTIDO es caminar o andar en bicicleta hacia o desde la escuela para su niño?
☐ Muy Divertido  ☐ Divertido  ☐ Neutral  ☐ Aburrido  ☐ Muy Aburrido

14. ¿Qué tan SANO es caminar o andar en bicicleta hacia o desde la escuela para su niño?
☐ Muy Sano  ☐ Sano  ☐ Neutral  ☐ Malsano  ☐ Muy Malsano

¿Cómo llenar este formulario?: Escribe en letras MAYÚSCULAS. Marque las cajas con "X"

15. ¿Cuál es el grado o el año más alto de educación que usted terminó?
☐ Grados 1 a 8 (Escuela primaria)
☐ Grados 9 a 11 (alguna High School/secundaria)
☐ Grado 12 o GED (graduado High School/secundaria)
☐ Universidad 1 a 3 años (alguna universidad o escuela técnica)
☐ Universidad 4 años o más (graduado de la universidad)
☐ Prefiero no contestar

16. Por favor proporcione comentarios adicionales:

A high-quality original printable version of this document can be found at: http://www.saferoutesinfo.org/sites/default/files/resources/Parent_Survey_Spanish.pdf
### Safe Routes to School Students Arrival and Departure Tally Sheet

**STUDENT TRAVEL TALLY**

- **School Name:**
- **Teacher’s First Name:**
- **Teacher’s Last Name:**
- **Grade:** (PK, K, 1, 2, 3,...)
- **Monday’s Date:** (Week count was conducted)
- **Number of Students Enrolled in Class:**

*Please conduct these counts on two of the following three days Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted)*

*Please do not conduct these counts on Mondays or Fridays.*

*Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each student may only answer once.*

*Ask your students as a group the question “How did you arrive at school today?”*  

*Then, reread each answer choice and record the number of students that raised their hands for each. Place just one character or number in each box.*

*Follow the same procedure for the question “How do you plan to leave for home after school?”*  

*You can conduct the counts once per day but during the count please ask students both the school arrival and departure questions.*

*Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).*

#### Step 1.
Fill in the weather conditions and number of students in each class

<table>
<thead>
<tr>
<th>Weather</th>
<th>Student Tally</th>
<th>Walk</th>
<th>Bike</th>
<th>School Bus</th>
<th>Family Vehicle</th>
<th>Carpool</th>
<th>Transit</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SN</strong></td>
<td>B 2 0</td>
<td>2 3 8</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>SN</strong></td>
<td>R 1 9</td>
<td>3 3 8</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tues. AM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tues. PM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wed. AM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wed. PM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thurs. AM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thurs. PM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 2.**

**AM – “How did you arrive at school today?”** Record the number of hands for each answer.  

**PM – “How do you plan to leave for home after school?”** Record the number of hands for each answer.

Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.

A high-quality original printable version of this document can be found at:

**Promoting Health in Minnesota Schools:**

**SAFE ROUTES TO SCHOOL**

As society becomes more aware of and concerned with children’s health issues, communities are turning to their schools to provide an environment that promotes both healthy eating and physical activity. School policies supporting healthy eating and physical activity are an important component of school efforts to promote the health and well-being of school children. Good nutrition and physical activity help “contribute to improved academic performance, attendance rates, behavior, and lifelong health and well-being.” Policies supporting Safe Routes to School can encourage children to be more physically active by encouraging active transportation to and from school through biking and walking.

**What is Safe Routes to School?**

Safe Routes to School (SRTS) is a movement focused on increasing the number of children who walk or bike to school. Safe Routes to School initiatives can include both policies and programs that support safe, efficient, and enjoyable opportunities for children to walk or bike to and from school.

Local policies supporting SRTS may include:

- School wellness policies.
- Speed zone limits around schools.
- Local land use planning and zoning requirements that address school siting, crosswalks, and street design.
- Active School Day policies.
- Safe Routes to School plan.

A school’s SRTS programs may include:

- Walking and/or biking maps.
- Consolidated bus pick-up points.
- Remote pick-up and drop-off locations.
- Bike and pedestrian curriculum.
- Walking school bus.
- Safe Routes to School Day.
- Designated team of stakeholders.
- Bicycle parking.
- Hand tallies to assess usage of various modes of student transportation.
- Hazard or zero-mile busing to transport children past areas unsafe for walking or biking.
Safe Routes to School policies and programs are often designed to remove barriers that may prevent children from walking or biking to and from school, including:

- A lack of safe infrastructure (such as sidewalks, cross-walks, or crossing guards) and other safety issues.
- A lack of programs that promote walking and biking through education and encouragement programs aimed at children, parents, and the community.
- A lack of cooperation between local stakeholders (school districts, cities, counties, or townships).
- A general fear of “liability” for injuries or other unwanted incidents.

Why is Safe Routes to School important?

Safe Routes to School can play a critical role in reversing the nationwide trend of childhood inactivity. In addition, SRTS efforts can help relieve traffic congestion around school zones, improve air quality, reduce accidents, and help improve a community’s quality of life. Safe Routes to School initiatives benefit local neighborhoods by supporting the health and well-being of children, parents, neighbors, plants, animals, and the environment.

Do any federal or Minnesota laws require a Safe Routes to School initiative?

No. However, while neither federal nor Minnesota law require SRTS, both provide support for SRTS initiatives. Federal support for SRTS initiatives includes funding for state departments of transportation to develop SRTS programs. Financial assistance is then awarded to schools by a state department of transportation through a competitive grant program.

A separate Minnesota SRTS program was created to provide additional “assistance in capital investments for safe and appealing non-motorized transportation to and from a school.” Financial assistance from Minnesota’s SRTS Program is intended to supplement or replace aid for infrastructure projects funded through the federal program. This program is in development; it first received funding from the Minnesota bonding bill that was passed in May 2013. The Minnesota Department of Health also supports SRTS by providing funding through its Statewide Health Improvement Program (SHIP) Active Living Strategy. In the first three years of SHIP, 215 schools that serve 143,000 students created SRTS programs.

Does the Minnesota School Boards Association (MSBA) Model Wellness Policy address Safe Routes to School?

No, not specifically.

Could existing MSBA policies be used to support the creation and management of Safe Routes to School?

Yes. The MSBA has several model policies that could be used to support the creation and management of a Safe Routes to School program, such as:

- 707 (Transportation of Public School Students)
- 708 (Transportation of Nonpublic School Students)
- 709 (Student Transportation Safety Policy & Notification Forms)
- 710 (Extracurricular Transportation)
How can Minnesota schools incorporate Safe Routes to School into a school wellness policy?

The following language can be incorporated into a school board policy that follows the MSBA’s model. This language can also be individually tailored to fit into a school board policy that does not follow the MSBA model policy.

Addition to the MSBA School Wellness Policy

533._ SAFE ROUTES TO SCHOOL POLICY

I. PURPOSE

The purpose of this policy is to provide the criteria that students, parents/guardians, and employees need to follow when biking, walking, or using other forms of active transportation to and from school. Biking, walking, and other forms of active transportation promote student and adult well-being by integrating more physical activity into a daily routine and provide active living skills and healthy habits that will last a lifetime.

In supporting active transportation to and from school:

- The district supports biking and walking as transportation as long as students and employees can do so safely.
- Students, parents/guardians, and employees have a responsibility to follow the laws and rules for safe walking, biking, and driving to ensure the safety of all road users - pedestrians, bikers, and motorists.
- The school district assumes no liability for injury or damage resulting from individuals biking or walking to school.

II. GUIDELINES

A. General

1. The school district will facilitate all schools developing a Safe Routes to School (SRTS) plan that incorporates action items from all “5 E’s” (evaluation, engineering, education, encouragement, and enforcement).1

2. The school district will integrate SRTS strategies into district-wide and individual school wellness policies.

3. The school district will assess and, to the extent possible, make any necessary improvements to make it safer and easier for students to walk and bike to and from school. When appropriate, the district will work together with local public works, public safety, and/or police departments in those efforts. The school district will explore the availability of federal and state funds to finance such improvements.

4. The school district will form a school-community planning team that includes students, parent-teacher organizations, local public health representatives, school administrators, law enforcement representatives, city and/or county transportation engineers, city and/or county planners, city and/or county elected officials, fire/EMS representatives, neighborhood association representatives, and parents or other community volunteers.

5. The school district will encourage health and wellness councils at the school district and school level to advance SRTS goals and support successful, ongoing implementation.

6. The school district will encourage walking and biking to and from school based on age-appropriate standards for students living within certain distances of the school.

7. The school district will provide parents with information on the health benefits of walking and biking to and from school.
8. The school district will work with the appropriate local government authorities to ensure that sidewalks and/or bike paths exist to provide connectivity among neighborhoods and to allow safe access to recreation centers, libraries, and other after-school destinations.

9. The school district assumes no responsibility to ensure that students are trained in pedestrian or bike safety. Parents and guardians are expected to teach students the traffic safety laws and school district rules outlined in this policy.

B. Biking

1. The school district supports students, parents/guardians, and employees using biking as transportation as long as the bikers live within a comfortable biking distance for their level of skill, follow traffic safety laws, and use appropriate safety equipment, including a properly fitted helmet.

2. Children in 3rd grade and below are unlikely to have the developmental and judgment skills for unsupervised biking. These children should be accompanied by an adult when biking to or from school.

3. While on school grounds with a bike, students must comply with traffic safety laws and the following rules:
   a. Bikers must exercise caution around motor vehicles and pedestrian students. Bikers must walk bikes on school sidewalks when others are present.
   b. Bikes must be parked in the racks provided.
   c. Students are encouraged to bring and use bike locks.
   d. Helmets must be stored in a locker or backpack, or locked to a bike.
   e. Students must respect the personal property of others and not interfere with other bikes. This includes stealing bikes or equipment, unlocking quick releases, touching helmets locked to bikes, or any other action that would damage property.

C. Walking

1. The school district supports students, parents/guardians, and employees walking to and from school, as long as the individuals live within a comfortable walking distance.

2. The school district recommends that students in 3rd grade and below walk with adult supervision.

3. Walkers must obey traffic safety laws and always use their common sense and good judgment.
   a. If available, students, parents/guardians, and employees should use cross walks where painted.
   b. Before crossing, look left, right, and left again to make sure the road is clear. Continue looking while you cross and listen for traffic.
   c. Walkers should not cross the street from between parked cars.

What other ways can schools support Safe Routes to School initiatives?

In Minnesota, the superintendent is responsible for implementing and enforcing school board policy. Superintendents issue protocols, procedures, and guidelines to help implement the school board’s policies. The following language can be incorporated into existing guidelines. However, as school boards and superintendents may adopt more specific or general guidelines based on their needs and goals, policy language can be interchangeable with the guidelines listed below.
Safe Routes to School Guidelines

- Students, faculty, and staff are encouraged and supported to safely walk or bike to and from school as often as possible.17
- Elementary schools will provide crossing guards near the school.18
- Schools will work with the community, including school board members, parents, and local public works, community planning, and public safety agencies, to create ways for students to walk, bike, rollerblade, or skateboard safely to and from school.19
- All schools will provide biking and walking safety education to students, parents, and faculty.20
- Basic biking and walking safety will be taught when bus safety is taught.
- The school district will participate in national activity campaigns, like Kids Walk to School, Screen-Free Week, Bike to School Day, and International Walk to School Day.
- All schools will provide bike racks on the school campus.21 Bikes must be locked to school-provided racks when left unattended.22
- The school district will develop a walking school bus and remote drop-off program at the elementary level.
- All schools will provide maps showing safe routes for students to walk and bike to and from school.23
- Elementary school students living less than ___ mile(s) away from the closest school in their district, and middle and high school students living less than ___ mile(s) from the closest school in their district, will be encouraged to walk or bike to and from school.24
- Transportation or an adult escort will be provided to students whose route to school has been surveyed and determined not to be reasonably safe for walking or biking.25
- All persons on school grounds riding a bike, other pedal-powered vehicle, scooter, or any other device associated with a significant risk of causing a head injury will wear a safety helmet that meets the standards of the federal Consumer Product Safety Commission.26
- Health education and physical education curricula will include topics of pedestrian and biker safety and traffic rules at appropriate grade levels.27
- Schools will conduct hand tallies to measure the number of students biking, walking, and arriving in motor vehicle transit for assessment purposes.

Are there any other resources that may be helpful in implementing Safe Routes to School?

Yes. Several resources are available that can assist with implementing an SRTS program. These include:

- Public Health Law Center
Appendix D: Public Health Law Center, SRTS Policy Amendments

- Minnesota Department of Transportation, Safe Routes to School Program, http://www.dot.state.mn.us/saferoutes/
- National Center for Safe Routes to School

---

Endnotes

5 What is Safe Routes to School?, SAFE ROUTES TO SCHOOL NAT'L. PARTNERSHIP, http://www.saferoutespartnership.org/about/history/what-is-safe-routes-to-school (last visited Apr. 29, 2013). See also David Basset.
et al., Estimated Energy Expenditures for School-Based Policies and Active Living, 44 AM. J. PREV. MED., 108, 112 (2013) (reviewing scientific literature to conclude that walking or biking to school has “the potential to meaningfully increase children’s physical activity”).


9 Safe Routes to School Program: Safe Routes to School Funding and Special Requirements, MINN. DEP’T OF TRANS. (last modified 2012), http://www.dot.state.mn.us/safeforpublic/funding.html.


14 LEAGUE OF MINNESOTA CITIES, HANDBOOK FOR MINNESOTA CITIES 17-14 (2012), available at http://www.lmcr.org/media/document/1/chapter17.pdf (“The Minnesota School Boards Association (MSBA) supports, promotes and enhances the work of public school boards. MSBA is a private nonprofit organization that provides technical assistance; cost-saving programs; and advocacy, training, research, and referral services for all of Minnesota’s public [school members]. Membership in MSBA is voluntary.”).


21 Id. at 20.

22 Fit, Healthy, and Ready to Learn, supra note 17, at 39.

23 Id.

24 Id.

25 Id.

26 Id.

27 Id.
APPENDIX E: MINNESOTA SRTS MODEL POLICIES TIP SHEET

**TIPSHEET**

**MODEL POLICIES**

**WHY WRITE POLICIES?** - Written policies help SRTS programs evolve into more permanent change. Policies may also lead to more support for programs and more funding opportunities. Strong policies build the foundations for sustainable SRTS programs to exist throughout the future.

**INSTRUCTIONS** - See the model policies below and customize them for your school, school district, agency, municipality, or department.

---

**EDUCATION**

**BEGINNER**

**Safety Education**

Our school requires a comprehensive education curriculum with a focus on traffic safety education and active transportation skills. The curriculum shall include:

- Implementing the Minnesota Walk! Bike! Fun! Pedestrian and Bicycle Curriculum for all students age 5-13
- Conducting pedestrian safety workshops for all students in grades K-2nd
- Hosting bicycle skills and safety workshops for all students in 5th grade
- Holding ‘How to use public transit’ classes in 6th grade
- Promoting safe-driving skills to 10th graders, with an emphasis on avoiding injuries to pedestrian and bicyclists

---

**INTERMEDIATE**

**Safety Education**

In addition to the policy above, our school shall host a traffic safety education and active transportation skills workshop with the Bicycle Alliance of Minnesota at the beginning of each school year to train and educate teachers and school personnel on using the Minnesota Walk! Bike! Fun! Pedestrian and Bicycle Curriculum.

---

**LOCAL EDUCATION SUCCESS:** The Arrowhead Regional Development Commission (ARDC) implemented the Helmet Hero program in 2007. 3rd grade students throughout northeast Minnesota receive 30-45 minutes of in-class instruction on bicycle safety, as well as receive a helmet at no charge. Rewards are then given to students seen using their helmets.

---

**MN SRTS MODEL POLICIES | PHONE: 651-366-4180 | www.mnsaferooutestoschool.org**

---
EVALUATION

Beginner

Establishing a School Team

Our school shall establish a Safe Routes to School Task Force to develop and implement strategies grounded in the “Five E’s” that address Safe Routes to School planning, funding, and policies. Specifically, the Task Force shall:
- Evaluate current SRTS policies to determine 1) whether they are being fully implemented, 2) how to improve implementation, and 3) what is needed to improve the policies’ success
- Ensure that Safe Routes to School resources are distributed equitably in the school
- Identify and pursue funding opportunities.

In the first year of its formation, the Task Force shall meet every two months. Thereafter, it shall meet quarterly.

Data Collection

The Task Force shall coordinate annual SRTS data collection. This collection process may include:
- SRTS Student Travel Mode Tallies
- SRTS Parent Surveys on Transportation Preferences and Concerns
- Walk Audits and Maps of Active Transportation Routes
- Plotting student addresses with assistance from local GIS departments
ENCOURAGEMENT

BEGINNER  INTERMEDIATE  ADVANCED

Minimize Driving
Because automobile collisions are a leading cause of death among school-aged children, we support efforts to increase traffic safety by minimizing driving to and from school. Decreasing the number of automobile trips, whether by engaging active transportation, taking public transportation, or carpooling, will reduce automobile congestion and create a safer environment for active transportation.

Safe Routes to School Events
We shall promote at least two active transportation events per school year. Events will promote active, healthy lifestyles for the community and may include Walk to School Days, Bike to School Days, and School Walk-a-Thons.

Walking School Bus and Bike Trains
Our school will establish and promote regular Walking School Bus or Bicycle Train programs. Such programs shall occur on a regular basis, at least once per week.

Arrival and Dismissal
Our school recognizes that promoting student safety is especially critical during arrival and dismissal times due to 1) increased automobile and bus traffic volume, and 2) the potential for conflicts between different modes of transportation. Accordingly, our school will separate active transportation from the other forms of transportation, to the extent possible. To achieve this end, one or more of the following strategies must be adopted:

- Remote drop-off locations
- Car-free zones
- Carpool lanes for drop-offs and pick-ups
- Early dismissal for active transporters

Busing
Our school acknowledges that busing may play a significant role in supporting student learning and meeting educational and equity objectives. However, we also support integrating active transportation into our existing busing policies. Options may include:

- Voluntary or mandatory remote drop-offs for buses
- Safe Routes to Bus Stops programs
- Training for bus drivers on how to drive safely on routes frequented by users of active transportation (e.g., biking, walking)

LOCAL ENCOURAGEMENT SUCCESS: Minneapolis Public Schools are encouraged to implement Bus Stop & Walk programs. With Bus Stop & Walk, school buses unload away from the school campus and walk along a designated route to school together to complete their trip. Learn about Loring Community School’s Bus Stop & Walk program here.
## ENFORCEMENT

### Law Enforcement Partnership

On an annual basis, our school provide our SRTS Plan and policies to our local public safety and police departments. Our school shall partner with these agencies to ensure that they 1) understand the details of this policy, 2) provide rigorous traffic safety enforcement in the vicinity of schools, and 3) understand the rights and responsibilities of those engaging in active transportation.

### Crossing Guards

Our school, in partnership with the administrator of the crossing guard program, shall work together to implement an effective process for hiring, funding, training, locating, supervising, and properly equipping crossing guards. If the number of crossing guards at our school is insufficient, we shall, in partnership with the crossing guard agency, seek additional funding or resources to increase the number of crossing guards.

### No Idling

Our school acknowledges that motor vehicles idling on or near campus increase air pollution, negatively affecting the health of everyone in the vicinity of the school. Accordingly, our school prohibits all motor vehicles from idling on campus. “No Idling” signs shall be posted on campus to alert drivers of this policy. In extreme weather, bus drivers will be allowed to wait in a temperature-controlled room until students are dismissed.

---

**LOCAL ENFORCEMENT SUCCESS:** The Minneapolis City Council adopted an Anti-Idling Vehicle Ordinance for the city in June 2008. The ordinance is enforced with educational warning tickets and flyers disseminated to families through the local schools. The local Metro Transit agency stated that the new ordinance will save the public transit buses nearly 66,000 gallons of gasoline each year.

**LOCAL ENFORCEMENT SUCCESS:** In 2008, The Duluth-Superior Metropolitan Interstate Council (MIC) worked with the Duluth Police Department to conduct a training session for Duluth school staff on how to properly issue parking tickets to motor vehicles parked illegally in bus zones.
### ENGINEERING

<table>
<thead>
<tr>
<th>BEGINNER</th>
<th>INTERMEDIATE</th>
<th>ADVANCED</th>
</tr>
</thead>
</table>

#### Assessing Routes

Our school will perform an annual walk audit to 1) assess traffic and safety conditions in the vicinity of the school, 2) identify safety conditions needing mitigation, and, based on those assessments, 3) begin to identify recommended active transportation routes to school. Findings will be shared with the appropriate entities to mitigate concerns and hazards. Maps will be produced that 1) identify the hazards or travel conditions needing mitigation, and 2) show recommended routes from surrounding neighborhoods.

#### Bike Parking

Our school shall provide sufficient storage facilities for bicycles, scooters, skateboards, or similar devices to encourage active transportation. The quantity of storage facilities will increase in proportion to demand, and we will seek input from active transportation advocates to ensure that the quality and quantity of facilities is satisfactory.

To ensure convenience and protection from theft or vandalism, storage facilities shall be located in visible areas, near school entrances, and when deemed appropriate, in locked facilities. All storage facilities shall provide protection from the elements. Our school will also provide repair tools such as air pumps and other common tools to help students repair minor equipment failures.

#### School Travel Plans

Our school will adopt a School Travel Plan that addresses all modes of active transportation and related safety, access, and parking issues. The plans shall also include goals, strategies, and objectives for increasing active transportation among students and staff, including those with disabilities. At a minimum, the School Travel Plan shall contain a map identifying the school, streets surrounding the school, existing traffic controls, established pedestrian and bicycle routes, pedestrian crossings, school and municipal bus routes and bus stops, with the goal of minimizing risk of injury and maximizing safety and convenience for active transportation.

School travel plans shall be updated regularly with input from various stakeholders and should seek opportunities to incorporate the Travel Plan into local municipalities’ comprehensive plans.

---

**LOCAL ENGINEERING SUCCESS:** In 2009, the Arrowhead Regional Development Commission (ARDC) worked with the Fond du Lac Reservation and the Ojibwe School to develop a SRTS Travel Plan. In 2010, the Fond du Lac Reservation incorporated the Travel Plan into their comprehensive plan, and secured funding for a multi-use path in 2013. According to Jason Holliday, the Director of Planning at ARDC, the SRTS planning process was an important factor in being awarded the Transportation Enhancement (TE) funds to implement the trail project.

**LOCAL ENGINEERING SUCCESS:** In 2012, the City of Brooklyn Center received a grant to create a SRTS Plan. The Plan established prioritized routes and engineering recommendations. The City of Brooklyn Center incorporated some of the upgrades and improvements into plans for reconstruction projects. The City’s Public Works Director and City Engineer, Steve Lillegaard, has since successfully used the Plan to receive Transportation Alternatives Program (TAP) funding from the Metropolitan Council.

---

Resources:
- [safe-routes](http://www.saferoutespartnership.org/sites/default/files/pdf/Safe-Routes-of-America.pdf)
- [Local Policy Guide](http://www.portlandoregon.gov/transportation/article/37369)
- [Find State Contacts](http://saferoutesinfo.org/program-tools/find-state-contacts/minnesota)
- [Fond du Lac SRTS - Minnesota Active Living](http://www.saferoutespartnership.org/sites/default/files/pdf/Fond-du-Lac-SRTS-Minnesota-Active-Living.pdf)


---

A text readable version of this document can be found at:
I. PURPOSE

The purpose of this policy is to assure a school environment that enhances student attendance and academic performance by supporting healthy eating and physical activity. The policy promotes and encourages students to adopt lifelong healthy behaviors that can promote and protect students’ health and wellbeing as well as reduce the risk of chronic disease.

II. Nutrition Education and Wellness Promotion is:

A. Recognized as an essential component of the education process and formation of lifelong healthy behaviors.

B. Provided as part of a standards-based, comprehensive program designed to provide students and families with knowledge and skills that facilitate healthy behaviors, and encouragement to promote and protect their health and ability to learn.

C. Integrated into every classroom and physical education (PE).

D. Supported by teachers, staff, and food service personnel through participation in worksite wellness opportunities, and role modeling of healthy behaviors.

E. Linked with school food environment, any school related programs/services.

F. Communicated and promoted with consistent messaging throughout the district, as well as to parents and the community via posters, website, newsletters, or other means. Offered in the cafeteria and classrooms with coordination between nutrition trained school foodservice staff and teachers.

G. Consistent with and reinforces the objectives of the educational and nutritional health goals of the school, thus promoting physical activity (PA) and healthy food/beverages.
III. USDA School Meal Program

School Meals are:

A. The main source of nutrition during the school day.

B. Affordable, nutritious, appealing, and served in a safe, clean, and enjoyable setting

C. Served in an environment that encourages healthy eating and food habits.

D. In compliance with or exceeding the most updated safety standards, current Dietary Guidelines for Americans (DGAs), and USDA regulations.

E. Provides continuing professional development for food service director and employees.

F. Is encouraged to offer nutrient-rich fresh fruit and/or vegetables, whole grains, and other minimally processed foods daily.

G. Provides access to clean, free drinking water for students during the school day.

H. Provides student access to hand washing or hand sanitizing prior to meals and snacks.

I. Operates the USDA Breakfast Program in all schools, encourages breakfast participation, and informs families of the program availability and the link between a healthy breakfast and ability to learn.

J. Provides students with adequate time to eat meals (goal is: 20 minutes for lunch and 10 minutes for breakfast).

K. Schedules lunch between 10:45 am-1 pm, and after recess when possible to increase student nutrient intake and reduce food waste.

L. Discourages tutoring, club meetings, or activities during mealtimes unless lunch may be eaten during such activities.

M. Work towards using no food/beverages as a reward unless healthy choices are allowed by student’s Individualized Education Plan (IEP) by school year two of adoption date; does not withhold food/beverages as a punishment.

N. Discourages sharing of food/beverages due to concerns about allergies and diet restrictions.
O. Obtains student feedback about menu items through taste testing, surveys, or other means when available.

P. Encourages lunches from home meet guidelines for Nutritious Lunches from Home.

IV. Competitive Foods and Other Foods:

Competitive Foods are those food and beverages sold/served during the school day outside of reimbursable school meals. The district will work towards using the current DGAs and/or IOM standards to establish Competitive Foods Nutrition Standards (CFNS). CFNS are based on the intent that school meals be the main source of nutrition for students during the school day. Competitive Foods shall help rather than hinder health and learning, and when possible be within age appropriate serving sizes.

A. Food and beverages sold through vending, school stores, and a la carte shall work towards following the above referenced standards.

B. Fundraisers: Nonfood fundraising is recommended and shall follow district procedure for all fundraisers. Food items will not be sold after year five of adoption date.

C. Student Snacks: Families are encouraged to send healthy snacks that enhance their student’s learning and health: (150-200 Calorie Snacks list will be available as a resource).

D. Pop is not allowed in school during the school day.

E. School Day Classroom Celebrations, including birthdays, focus on healthy alternatives. Parents are encouraged to refer to Healthy Celebrations list on the website and provided by teachers.

F. Concessions:
   • Encouraged to include healthy food/beverage options (Ap5).
   • Encouraged to offer the following in appropriate portion sizes: low-fat or fat-free milk, fruits, vegetables, and at least one healthy entrée option.

G. Anytime food is served at a school function, encourage having healthy food options available.
V. Physical Education and Physical Activity

A. Physical Education (PE) is:

1. Standards-based, using national or state-developed standards, such as the National Association for Sport and Physical Education Guidelines, and incorporates adequate PE/PA specific space and equipment that conforms to all applicable safety standards.

2. Recognized as an essential component of the educational process and forming lifelong healthy behavior and lifestyle.

3. Offered daily 125 minutes/week for elementary grades K-6, 250 minutes/week per one semester in grades 7-10, and there is a PE elective available for grade 11. It is in compliance with specialized IEP or 504 Plans for students with disabilities, special healthcare needs, and in alternative educational settings. Elementary schools do not substitute recess for PE.

4. Composed of at least 50% of the time spent in moderate to vigorous PA.

5. Provides an opportunity to learn, practice, and be assessed on content, developmentally appropriate motor skills, social skills, responsible behavior, physical fitness, and PA benefits.

6. Taught by certified PE staff trained to educate, and promote enjoyable, lifelong PA among students.

7. Consistent with student-teacher ratios of other academic subjects through enrollment caps.

8. Working towards not withholding PE or PA as punishment. PA or recess shall not be withheld or used as punishment.

9. To be participated in by all students; students may be temporarily excused from PE but will not receive waivers. Adapted PE is identified through an IEP.

B. Integration of Physical Activity Throughout the School Day

1. Elementary school students have at least a 20 minute supervised recess break daily, preferably outdoors and before lunch; moderate to vigorous PA is facilitated verbally and via adequate equipment and outdoor/indoor space.
2. Working towards encouraging integrating Physical Activity into the Classroom Settings—In order that students are active the recommended amount of at least 60 minutes of PA per day:

   a. Classroom health education reinforces knowledge and self-management skills to maintain a physically active lifestyle and reduce sedentary activities, such as watching TV and video games.

   b. PA is integrated into classroom lessons and celebrations, and school events.

   c. Short PA breaks are offered between lessons and classes, as appropriate.

C. Daily Physical Activity Opportunities Before and After School

1. Daily PA programs such as before-school/after-school supervised active play time, and activity clubs or intramurals, are offered and promoted.

2. Schools shall make outdoor and indoor PA facilities available for community use when not being used for school activities. School safety policies apply at all times.

3. Safe bicycling and walking to and from school is promoted and encouraged.

VI. Implementation and Monitoring of LWP

A. The district engages students, parents, PE and other teachers, food service professional, school health professionals, school board, school administrators, and the public in developing, implementing, annual monitoring, periodic review, and revising of this policy through its wellness committee that meets regularly.

B. The Superintendent or designee shall execute administrative procedures to follow this policy.

C. Monitoring will be repeated annually to help review policy compliance, assess progress, and determine areas in need of improvement and/or revision.

D. District Food Service (DFS) staff will ensure compliance in food service areas, and report to the food service director, building principal or superintendent’s designee.

E. The DFS director will provide updates to the superintendent identifying the nutrition guidelines and procedures for selection of all foods made available on campus, as well as the most recent USDA School Meal Initiative (SMI) review findings and updates.
F. An annual update will be provided to the school board and wellness committee, and communicated to school staff, parents, and the public through school website, newsletter, and/or other means as designated by the superintendent.

G. This policy is supported by resources in the form of appendices which will be monitored as needed. The appendices are support materials that can be accessed by parents, staff, students and community members.