North Branch

Safe Routes to School Plan

February 2011

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EXECUTIVE SUMMARY

Planning for pedestrian-friendly communities has become both reactive and proactive. Plans must now identify existing infrastructure and policy barriers and also put in place future measures for pedestrian friendly communities. This "Safe Routes to School" (SRTS) plan contains such reactive and proactive measures in ensuring the safety of school children in the North Branch Area School District.

The goal of a SRTS plan is to instill walking and bicycling habits in school children by putting in place a safe and attractive walking and bicycling environment in and around school areas. The resulting health benefits enjoyed by students as they walk and bike to school makes a SRTS plan like this very convenient in instilling and shaping the right health habits in our school children. The partnership between North Branch Area Public Schools and the City of North Branch, in producing this plan, is aimed at realizing the full benefits of a SRTS plan for the school children and community of North Branch.

Through a consultative process –meetings with partners, parents, teachers and students in these school areas- detailed profiling of these schools were done to identify the existing challenges and opportunities for an effective SRTS planning in and out of the school areas. Although some infrastructure existed at each school location, it was not adequate enough to ensure the safety of school children as they walk or bike to school. The absence of traffic calming measures, especially on busy roads, and the drop-off of students at undesignated zones were also identified as potential hazards for effective SRTS planning in the school areas. These existing situations formed the basis in the formulation of a vision statement, goals, strategies and projects focused on providing education, encouragement, enforcement, engineering, and evaluation (Five E's) solutions for safe walking and biking to school.

CHAPTER 1: INTRODUCTION

National Trends

Thirty years ago 66% of students walked or biked to school. Today, on average, only 13% of students do so and childhood obesity rates are dramatically increasing, according to the Centers for Disease Control. Furthermore, 25% of morning traffic has been attributed to parents driving their children to school (Marin County Congestion Management Agency). This increase school-site congestion has made it increasingly difficult for children who walk or bike to school. At the same time, many of these trips are feasible for students to make by walking or biking.

Parents who are driving their children to school are reacting in part, to decades of auto-oriented land use planning that have neglected pedestrians and bicycles as elements of the transportation system. However, these driving patterns reflect the societal shift in social and economical features that have occurred over the past thirty years and contribute to why there are fewer students walking and biking to school today. Some of those social and economic features included an American lifestyle that generally requires both parents to work outside the home (fewer stay at home mothers, complex work schedules where parents use latch-key programs for their children or drop kids at school), the rise in single parent families, and more consolidated schools (fewer neighborhood schools) with busing programs. These factors have changed the dynamics of traffic around schools. In most cases the distance from a student's home to school has increased. Additionally, as population continues to sprawl in ex-urban areas, school districts are forced to budget more funds for their busing programs. These dynamics, coupled with auto-oriented land use planning that has lacked sidewalk, bicycle, and transit facilities along with the abandoning of street grid patterns in many cities, has made it difficult for students to readily walk or bike to school. In addition, high school students, who have the knowledge to safely walk, bike, or utilize transit to access school, have convenient subsidized parking available to them on-site.

There is a societal challenge in this planning effort, but one worth examining. There has been increased interest across the nation for smart growth and neo-traditional planning (walkable interconnected communities) that includes traffic calming measures to safely encourage people to walk and bike for short trips instead of driving.

Vision Statement

The North Branch Area School District and the City of North Branch are committed to encouraging all students to walk or bike to school by providing safer and more appealing routes, while promoting life long active lifestyle habits.

This plan will examine routes to all of the North Branch Area School Sites and will address the infrastructure and safety concerns associated with each of them.

Goals

1) Provide safer and more appealing routes for children to walk or bike to school.
2) Educate parents, students, and community members about safe biking, walking, driving, and active lifestyle habits.
3) Increase enforcement of local traffic laws and control around schools with local law enforcement and crossing guard programs.
4) Encourage children to walk and bike to school.
5) Evaluate success of education, encouragement, enforcement, and route improvement efforts.

Objectives

1) Identify primary routes students use or could use to walk and bike to school.
2) Provide specific recommendations to improve pedestrian and bicycle safety access to school.
3) Identify costs and potential funding sources for the proposed recommendations.
4) Build public awareness for pedestrian and bicycle laws, focusing on school zone areas.
5) Provide education to students about Minnesota bicycle and pedestrian rules and safety tips along with the health benefits of walking and biking.
6) Provide activities or events that encourage kids to walk or bike to school and develop lifelong active lifestyle habits.
7) Monitor and document outcomes and trends before and after walking and biking improvement activities.

Study Process

In order to address and meet these goals and objectives the following plan has been devised.

1) **Establish Steering Committee**
    - Identify members from City, School, County the public and other agencies.
    - Determine member tasks and responsibilities.
2) **Collect Background Data**
    - School Locations
    - Street Network (Speed Limits, Signage, Pavement Markings, Signals, Lighting, etc.)
    - Sidewalk/Trail Locations (Conditions, Contiguity
    - Crossing Guard Locations
    - Traffic Counts
    - Bicycle/Pedestrian Accident History
    - Minnesota Pedestrian and Bicycle Laws
    - City of North Branch Pedestrian and Bicycle Ordinances
3) **Collect Student/Parent/School Data**
    - Identify actual routes utilized by students.
    - Identify unsafe location.
    - Conduct parent surveys for safety concerns and associated attitudes and behavior.
    - Conduct principal surveys to identify site specific concerns.
4) **Conduct Data Analysis**
    - Display primary routes and existing conditions.
    - Determine access barriers and safety issues.
    - Identify high bike/pedestrian accident areas.

- Photograph problem areas.

5) **Provide Recommendations**
   - Develop recommendations for infrastructure and non-infrastructure improvements.
   - Develop Ordinance's or Policies to encourage bicycling or walking.
   - Develop Cost Estimates.
   - Identify potential funding sources.
6) **Plan Implementation**
   - Adopt plan by North Branch City Council and North Branch Area School District.
   - Host a Walk to School Day as a kick-off event.
   - Conduct a Public Education campaign for walking and bicycling and the benefits of active lifestyles.
   - Plan Encouragement activities such as a Bike Rodeo or Pedal with Police.
   - Conduct Evaluations of activities to monitor success of programs.
7) **Final Product**
   - Production of Safe Routes to School manual identifying designated safe routes to school and future improvements.

CHAPTER 2: PRESENT CONDITIONS & PAST STUDIES

This chapter provides a current conditions inventory of existing policies, plans and legislative controls within the school district and city. Policies and ordinances are listed to demonstrate district and municipal standards for walking and biking as transportation. The chapter also discusses past studies that may affect recommendations cited elsewhere in this plan.

Present Conditions

School Enrollment Boundaries

The North Branch Area Independent School District#138 boundary is located within Chisago and Isanti Counties. There are several cities and townships located within the district including the cities of North Branch, Stacy, Harris, and Almelund along with portions of Oxford, Fish Lake, Lent, Sunrise and North Branch Townships. All of the North Branch Area School Campuses are located within the City of North Branch.

Bicycle & Recreational Facilities

North Branch has been working towards improving the city's bicycling and recreational facilities to help promote active living in the community.

Pedestrian Facilities

Studies show that walkable communities are friendlier and safer places to live. A community survey was conducted in 2006 and walking was identified as one of the most desired recreational activities in North Branch. Sidewalks play a major role in the lives of children in the community. Kids use sidewalks to get to the majority of their destinations; whether it's to school, the park, or just going to a friend's house. The safer and more appealing the facilities are the more likely pedestrians will use them and more importantly stay off of the street. The greater issues are traffic volume, speed and pedestrian crossings.

Sidewalk Construction and Replacement Policy

North Branch's current sidewalk system is comprised of several short interrupted segments scattered throughout the City resulting from sidewalks being constructed in the early days of North Branch and then not being constructed with advent of the automobile. Over the past 10 years the City has made great strides in becoming a Walkable Community. The City has initiated development requirements for the construction of sidewalks or trails on one side of the street for all residential streets, and on both sides of the streets on for all major collector streets. This has greatly reduced the number of gaps in the city's pedestrian network

North Branch City Code 50-21 states that non-residential property owners are responsible for the maintenance and repair of any unsafe sidewalks abutting their property, and the City is responsible for the maintenance and repair of any sidewalk abutting residential properties.

In the past the City utilized funds ($20,000/Annually) from the Liquor Store proceeds to upgrade and maintain the City's residential sidewalk system. However due to recent LGA cuts from the State, the City has been forced to use those funds to cover other operating expenses. Without proper funding for the

maintenance of the existing and future sidewalk network these modes of transportation will become less appealing. The City may need to look at assessing abutting residential properties to ensure the sidewalks can be maintained in a safe and usable condition.

Sidewalk Snow Removal Enforcement

Sidewalks need to be kept free of debris and snow year round to allow for the safe travel of pedestrians. The winter months especially pose challenges for pedestrian mobility as sidewalks become covered with ice and snowpack. Proper maintenance of sidewalks in a timely manner should become a top priority to allow children to safely access school year round.

North Branch City Code 50-25 states that property owner are responsible for keeping sidewalks abutting their property clear of snow within 36 hours after the snow has accumulated, unless the abutting sidewalk has been identified by City Code as the City's responsibility. The sidewalks designated as the City's responsibility are routes that have primarily been identified as Safe Routes to School.

The following is Section 50-25 of the North Branch City Code.

Sec. 50-25. - Snow removal on sidewalks.

(a)No person shall permit an accumulation of more than two inches of snow to build up or remain on any public sidewalk abutting or otherwise serving lots or parcels located in the city except those specified in subsection (d) of this section. The removal of the snow shall be the full width of the sidewalk and shall be completed within 36 hours of the end of the snowfall.

This does not apply to sidewalks that either dead end or do not provide a connection; or that are located in a subdivision in which less than 60 percent of the lots have buildings on them, unless located adjacent to a street that warrants clearing, to be determined by city staff.

(b) Reserved.

(c) For the purposes of this article, person means the owner of record of the lots or parcels or in the event that the premises of any given lot or parcel is under the control of a person other than the owner through a lease or rental agreement, then and in that event the lessee or renter shall be responsible for the snow removal required in this article, unless by written agreement the owner is obligated to remove snow from affected sidewalks. If snow is not removed, the city will hire a company to remove snow and bill to owner or renter.

(d)The city is responsible for removal of snow on the sidewalks specified below:

Street Name	Side of Street	From	To
14th Ave	West	Dead End	Main Street
14th Ave	East	Dead End	Main Street

Main Street	North	12th Avenue	County Road 30
Main Street	North	6th Avenue	Grand Avenue
Main Street	South	Mid-block between 6th &7 th Avenue	2nd Avenue
Main Street	South	Oakview Avenue	County Road 30
Maple Street	North	County Road 30	Grand Avenue
Maple Street	South	County Road 30	Grand Avenue
Oakview Ave	West	Dead End	Main Street
Oakview Ave	East	Dead End	Main Street
Oak St	North	14th	Oakview Ave
Oak St	South	14th	Oakview Ave
Old Main	North	Oakview Avenue	12th Avenue
Pecan St	North	14th	Oakview Ave
Pecan St	South	14th	Oakview Ave
St Croix Trail	North	Flink Avenue	Oakview Avenue
St Croix Trail	South	Falcon Avenue	Oakview Avenue

(e) The city is responsible for snow removal on all city trails. For the purpose of this article a city trail is described as a minimum eight-foot wide path that emphasizes safe travel to city parks, or other destination points, and is generally located within a city right-of-way.

School Zone Speed Limits – Minnesota Law

Ensuring the safety of children on public streets near is schools is the responsibility of parents, school officials and road authorities. Parents must provide the basic training and supervision in order to develop safe behavior and serve as role models. School officials must support and encourage educational safety programs and methods for walking and biking students. Road authorities must provide a safe environment on the street by using proven traffic control methodologies that will minimize crash probability.

Minnesota Law allows each road authority to establish school zone speed limits on roads under their jurisdiction. In order to provide objective, uniform and safe environment for walking and biking students, the state requires a traffic investigation as prescribed by the Commissioner of Transportation prior to establishing a school zone speed limit.

The school zone is legally defined as that section of road which abuts the school grounds, or where there is an established school crossing with advance school signs that define the area. If a reduced school speed limit is warranted:

- It shall not be more than 30 MPH below the established speed limit.
- Is shall not be lower than 15 MPH
- All signs erected must be in conformance to the Minnesota Manual on Uniform Traffic Control Devices. Any speeding violations of a school zone speed limit are subject to a double fine.

While safety is and should be emphasized near schools, a Minnesota study revealed that 88 percent of school age pedestrian crashes occurred more than one block from school. Other states have confirmed similar results. The statistics point out that location is NOT the predominant factor, suggesting that safety education for pedestrians has the greatest potential for improvement since they can use it at all locations.

The majority of school age crashes involved:

- Children dashing from behind parked cars.
- Crashes occurring at mid-block locations.
- K-3rd grade pedestrians understanding traffic control devices.

School age child safety is not a singular issue of speed limits. Real improvements in safety require a comprehensive study of the school trip and each environment must be specifically addressed.

Crossing Guards & Safety Patrols

The safety of school children traveling to and from school is the responsibility of all concerned parents, community members, school officials, law enforcement officials, and students themselves. The North Branch Area School District utilizes crossing guards at several intersections within the City.

Crossing guards are currently posted at intersections that have a particularly high volume of both motorized and student traffic, including Grand Avenue at Maple Street , Lincoln Trail, 381st Street and 378th Street.

Transit Facilities

The City of North Branch is served by the Chisago–Isanti County Heartland Express that provides daily curb-to-curb bus service that is available to all Chisago and Isanti County residents. All buses are handicap accessible and a limited availability of buses that have bike racks on them and children under the age of 7 must be accompanied by an adult or caregiver.

Rail, Truck Routes, and Roadway Classification

The only rail line in North Branch is the St Croix Valley rail corridor along Co Road 30 in North Branch. There are a few major roadways that generate significant traffic counts and the volumes are continuing to increase. Those roadways include Interstate35, State Hwy 95, County Road 30 and County Road 14.

CHAPTER 3: IDENTIFYING SAFETY ISSUES & ROUTES

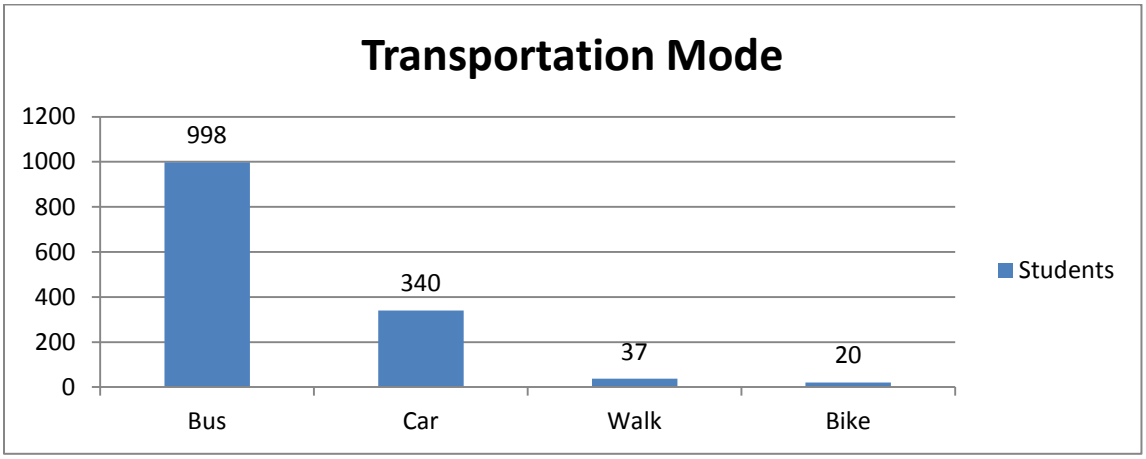
The City of North Branch and North Branch Area School District distributed surveys to be completed by the by students and their parents to help identify existing routes used by students for walking and biking to school and to identify existing or perceived safety issues along those routes. The surveys are located in Appendixes

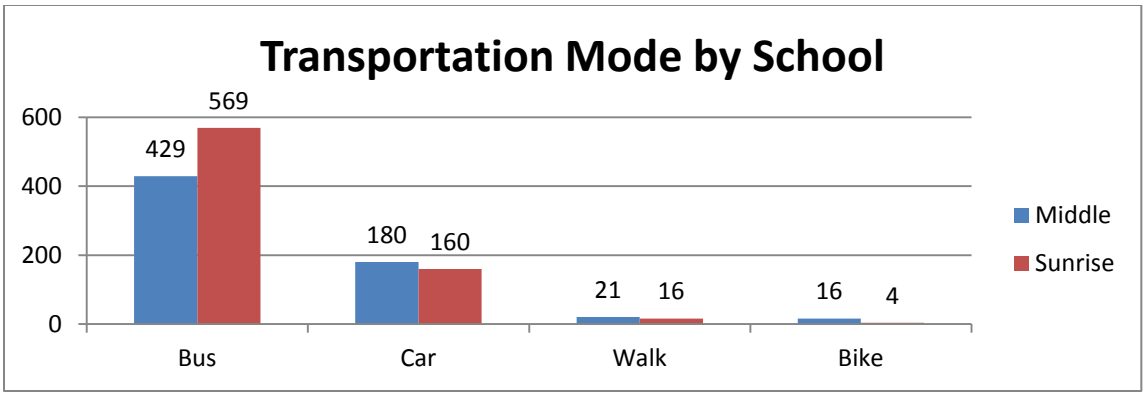
Student Surveys

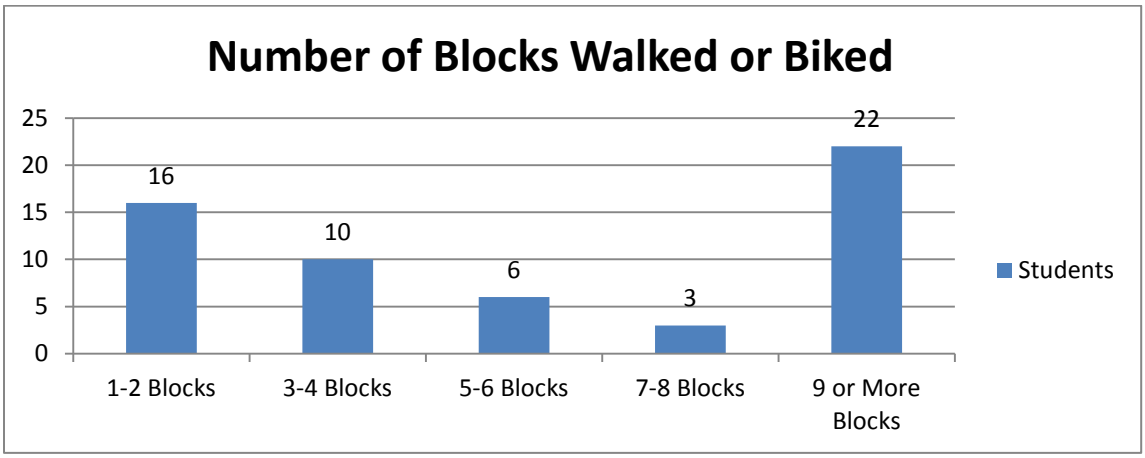
The student surveys were submitted to all students in Grades 2-8 at the Sunrise River and Middle Schools for a week in January 2007. The surveys asked students how they got to and from school and what improvements could be made for safer and more appealing travel. The students who walked or biked to school were asked to map the actual routes taken. The mapped routes are show in the appendix.

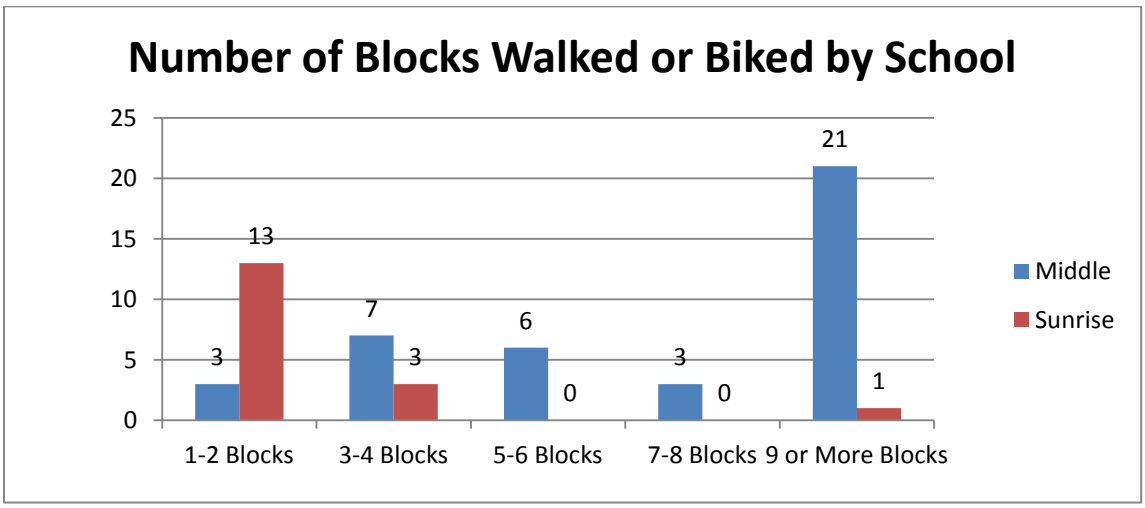
Overall, there were 1,918 surveys distributed to the two schools with 75% or 1,444 surveys returned. The Middle School had a return rate of 85 percent and the Sunrise River School was at 66 percent. Below is a breakdown of the returned surveys.

School	Grades	Responses	Students	Return Rate
Sunrise River	2-5	667	1005	66.37%
Middle	5-8	777	913	85.10%
	Total	**1,444**	**1,918**	75.74%

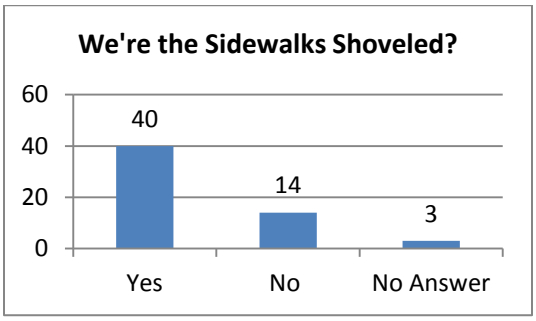


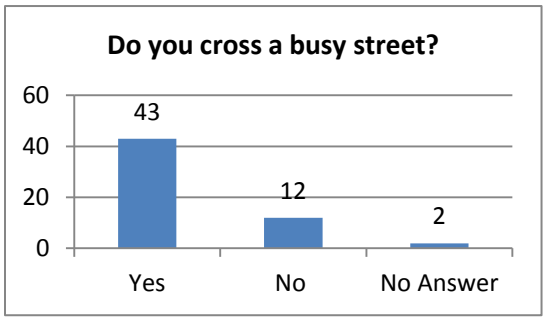

Transportation Mode by School
600
400
200
0
569
429
180
160
21
16
16
4
Bus
Car
Walk
Bike
Middle
Sunrise

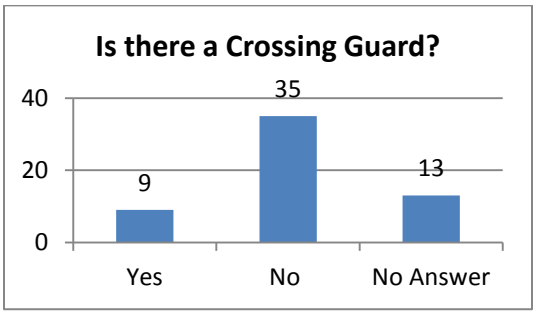

Number of Blocks Walked or Biked
25
20
15
10
5
0
16
10
6
3
22
1-2 Blocks
3-4 Blocks
5-6 Blocks
7-8 Blocks
9 or More Blocks
Students

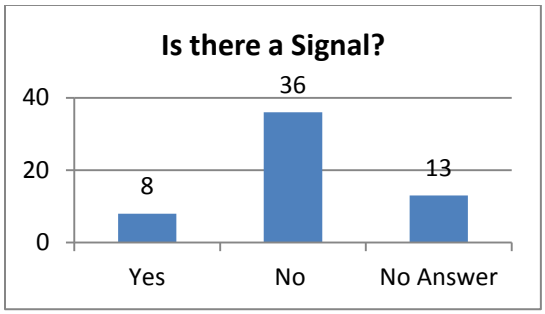

Number of Blocks Walked or Biked by School
25
20
15
10
5
0
3
13
7
3
6
0
3
0
21
1
1-2 Blocks
3-4 Blocks
5-6 Blocks
7-8 Blocks
9 or More Blocks
Middle
Sunrise

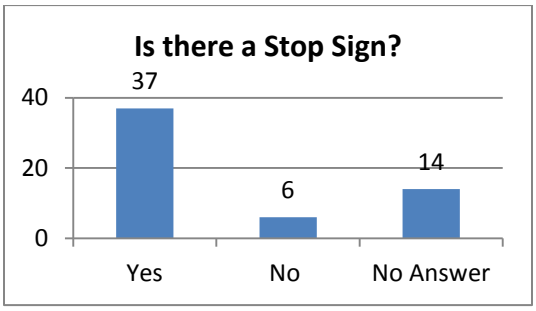
The surveys asked the students that walked or biked to school about their routes to and from school. The following are their responses.

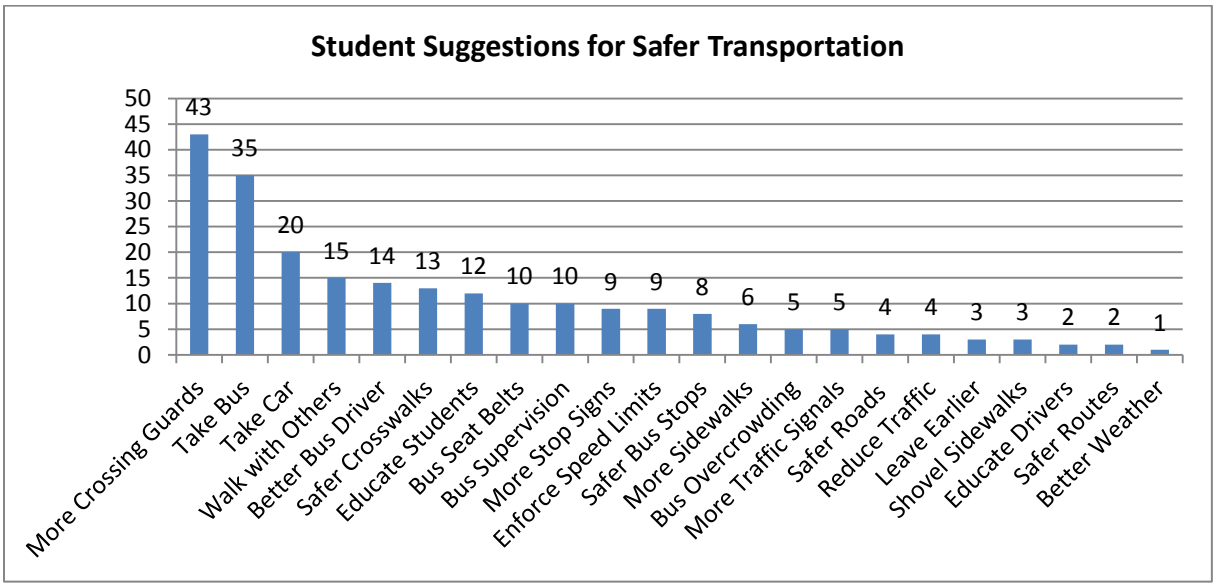






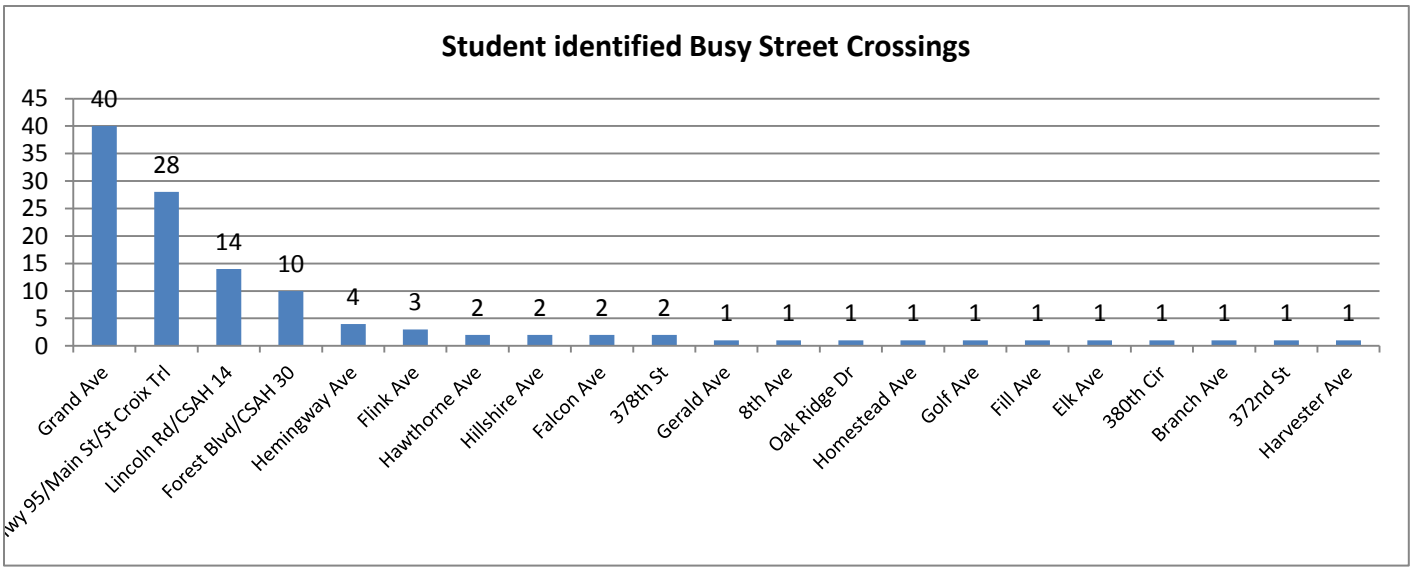






The top responses for safer transportation were:

1) More Crossing Guards
2) Arrive by Bus
3) Arrive by Car
4) Walk with Others (Group, Adults, Police, Supervision)
5) Better Bus Drivers



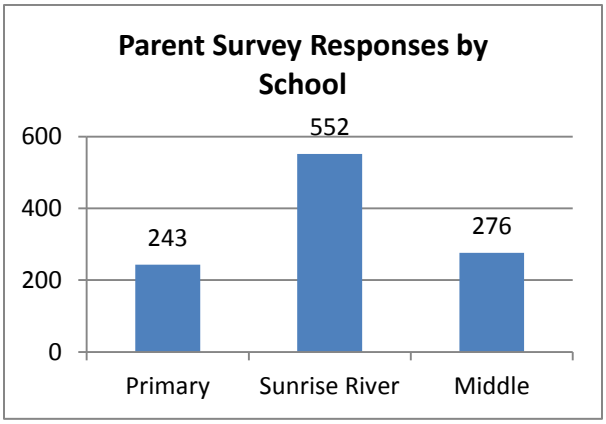
The streets the students identified as being the busiest were:

1) Grand Avenue
2) Hwy 95
3) Co Rd 14/Lincoln Trail
4) Co Rd 30/Forest Blvd
5) Hemingway Avenue

Parent Surveys

Parent surveys were sent home with students in Grades K-8 at the Primary, Sunrise River and Middle Schools January 2007. Parent were asked to fill out the surveys to identify perceived safety issues and barriers that prevent their kids from walking/biking to school and to provide suggestions on what would be required for them to allow their kids to walk/bike to and from school.

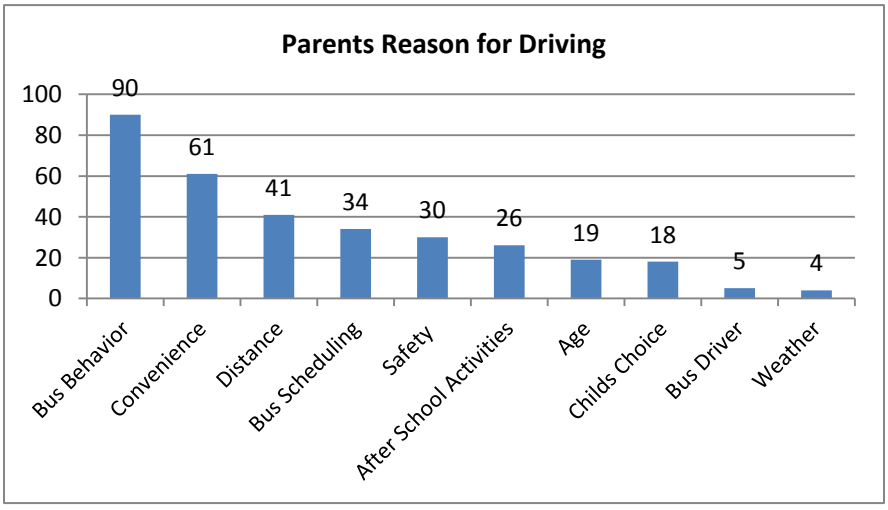
Overall, there were 2,593 surveys sent home to parents with 40% or 1,071 surveys returned. The Primary School had a 36% return, and the Sunrise River School had 55%, while the Middle School had a return rate of 30%.



The surveys also inquired as to why parents chose to drive/carpool their child to and from school.

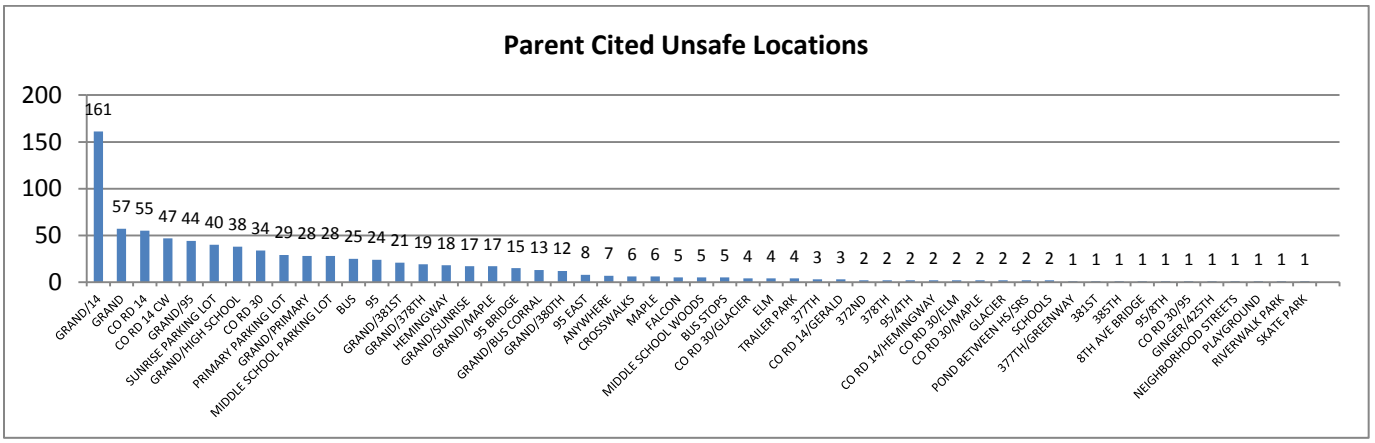
There were 328 comments with the top 5 being:

1) Bus Behavior (Bullying, Profanity, Lack of Supervision, Overcrowded, K-12 on same bus)
2) Convenience (Work/Drive Near School, Spend time with Kids)
3) Distance (Too far to Walk/bike, Bus Ride to long)
4) Bus Scheduling (Arrives at house to early/late)
5) Safety (Traffic, Lack of Sidewalks, Unsafe People)



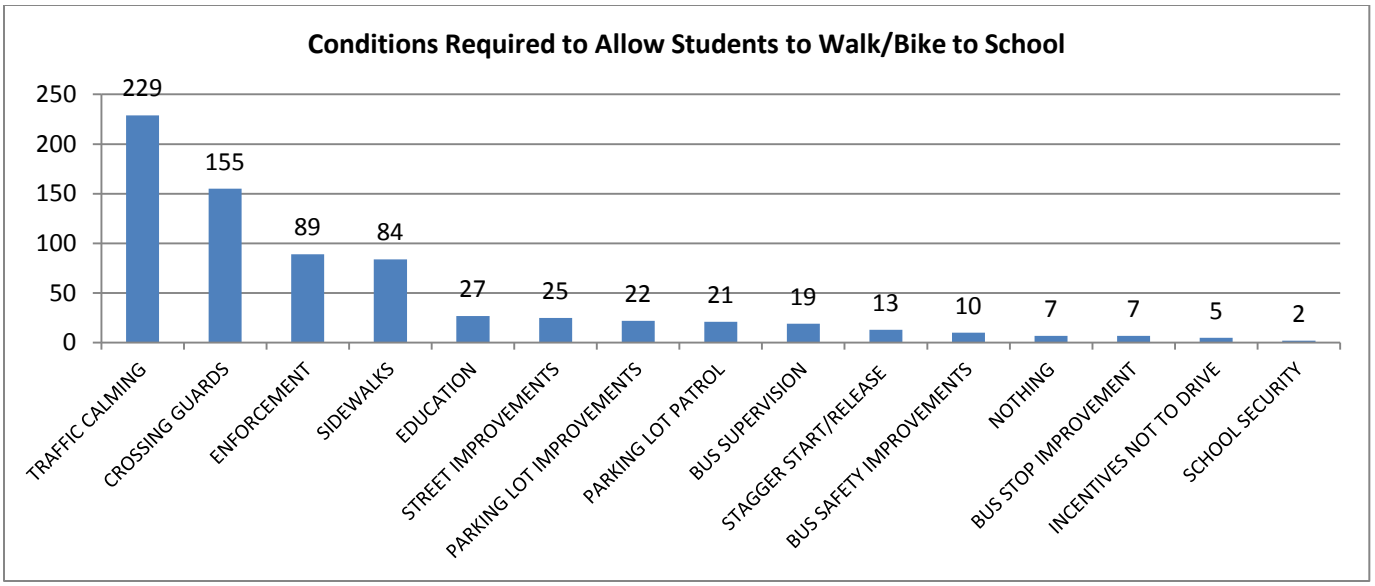
The survey asked to identify the most perceived unsafe locations to and from school. There were 722 responses identifying 53 locations. The top 10 most identified locations were:

1) Grand Ave/Co Rd 14 Intersection
2) Grand Avenue
3) County Road 14
4) County Road 14 Crosswalk
5) Grand Ave/Hwy 95 Intersection
6) Sunrise River School Parking Lot
7) Grand Ave/High School Entrance
8) County Road 30
9) Primary School Parking Lot
10) Grand Ave/Primary School Entrance



Map is shown in the Appendix

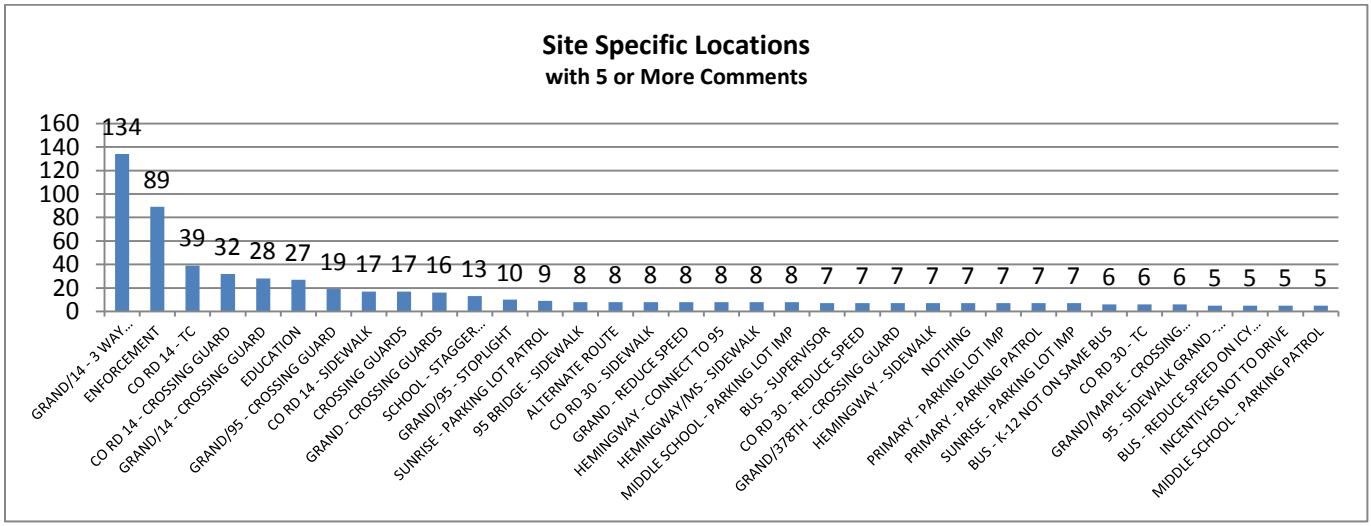
Parent were asked to identify under what conditions would they consider allowing their child walk or bike to school rather than arriving via bus or car. The following chart shows a generalized breakdown of required conditions.



The top 5 conditions required by parents to allow their kids to walk/bike to school were:

1) Traffic Calming Devices (Stop Signs, Improved Crosswalks, Ped Initiated Flashing Lights, Reduced Speed Limits, Flashing Beacons, Driver Feedback Sign)
2) More Crossing Guards
3) Increased Law Enforcement
4) More Sidewalks
5) Education Awareness (Driver & Student)

The top site specific required conditions are depicted below. The entire list of suggestions can be found in the appendix.



The top 10 specific improvements were:

1) Grand Ave & Co Rd 14 Intersection: *3 Way Stop/Stoplight during Peak Traffic Hours*
2) Increased Law Enforcement
3) County Road 14: *Traffic Calming Devices (Improved Crosswalk, Ped Initiated Flashing Beacon*,
4) County Road 14: *Crossing Guards*
5) Grand Ave & County Road 14: *Crossing Guards*
6) Education Awareness
7) Grand Ave & Hwy 95: *Crossing Guards*
8) Crossing Guards
9) Grand Avenue: *Crossing Guards*
10) Staggered School Start/Release Times

School Walkable Area Boundaries

School Walkable Area Boundaries identify the areas that are within 2 miles walking distance from the school entrances. Each of the schools Walkable Area Boundaries are shown in the appendix.

North Branch Busing Policies

The North Branch Area School District has that primary students (grades K-6) can be allowed to walk three-tenths of a mile to the bus stop and secondary students (grades7-12) can be allowed to walk five-tenths of a mile to the bus stop on a public road. Secondary students living less than one mile from school will not be able to utilize bus services to school. Kindergarten children are expected to walk with older students to the nearest bus stop. Each year, bus stop changes will be made to make our stops more efficient. The safest pickup location is chosen for all students within a pickup area. The full busing policy is located in the appendix.

CHAPTER 4: STUDY RECOMMENDATIONS

Communitywide Issues

Communitywide issues in North Branch include the lack of sidewalks on many streets, including Lincoln Trail near the Middle School, and missing segments around the other schools. Many of the sidewalk gaps are due to the presence of local streets with rural cross-sections within the city. Crossing the street can be difficult throughout North Branch due to the proximity of the state and interstate highways and the traffic they produce, even when crosswalks and crossing guards are present. Many parents don't consider walking or biking to be a viable form of transportation based on the gaps or lack of sidewalks, the weather or distance from the schools.

Issue 1.1: Bicycle/pedestrian facilities.

Current city ordinances include a requirement for the installation of sidewalks in new developments. There are currently no requirements to make new infrastructure bicycle friendly. Where sidewalks currently exist in the city, they are sporadic and they may not be striped with a crosswalk at intersections or may not necessarily lead anywhere and end abruptly.

Recommendations

1.1.1 Complete the sidewalk systems on all school properties.
1.1.2 Create a sidewalk installation plan, focusing on the sidewalk networks within a 2 mile radius of schools first. Integrate the sidewalk system with the city's multi-use path system for greater connectivity. When streets with rural cross-sections are reconstructed, include sidewalk facilities where possible.
1.1.3 Continue to install bike storage facilities at each of the school locations.
1.1.4 Propose the city establish a sidewalk and crosswalk reconditioning program that requires annual inspection of crosswalks for analysis of paint condition.
1.1.5 Restripe all crosswalks in the immediate vicinity of a school as ladder style crosswalks to maximize visibility.
1.1.6 Use the Complete Streets model in new facility/infrastructure/neighborhood design: Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a Complete Street.

Issue 1.2: Pedestrian/bicycle education.
There is concern that children do not ride their bicycles correctly and do not obey traffic signs or utilize crosswalk locations. This may be due to parents who may not teach their children to ride or walk on the correct side of the street or who do not discuss the proper use of pedestrian and bicycle facilities at all. There is also little bicycle and pedestrian education occurring within the school district, the burden is placed on the police department via bike rodeos. Many parents and children are also not familiar with bicycle upkeep and maintenance activities. Focus should be on educating parents about the responsibilities of being a pedestrian or cyclist.

Recommendations
Consider working together with North Branch Area High School students, local advocacy groups and recreational equipment retailers to form a free maintenance program to help with basic safety issues and maintenance of students' bicycles.
1.2.1 Include bicycle maintenance programs in school curricula via physical or technology education programming.
1.2.2 Disseminate information via parent emails, backpack flyers, websites, or an instructional DVD illustrating the benefits of active transportation modes.
1.2.3 Add sections to current classroom curricula on the benefits of walking or biking to school.
1.2.4 Contact the Minnesota Department of Transportation, North Branch Police Department, and local advocacy groups about bringing more Bicycle Rodeos, Walkable Communities Workshop, or other education programs to North Branch.
1.2.5 Encourage the creation of an ordinance requiring the use of helmets for children aged fourteen and under. Partner with Allina and/or Fairview Clinics to sponsor helmet giveaways and fitting clinics where possible. Use positive reinforcement techniques to encourage helmet use for cyclists.

Issue 1.3: Motorist/automobile operator education.
The biggest danger posed to most bicyclists and pedestrians is automobiles. While North Branch maintains an efficient system of roadways for motorized vehicles, conflicts emerge when other modes are introduced into the system. When pedestrians cross the street and bicyclists utilize local roadways, they share the transportation network with automobiles. A major concern is the behavior of motorists, especially in school zones or where they encounter crosswalks communitywide. Complaints include motorists who speed or drive dangerously or do not yield right-of-way to pedestrians in crosswalks.

Recommendations

1.3.1 Disseminate crosswalk information to students, parents, teachers, and neighbors. Hold educational seminars on bicycle and pedestrian safety geared towards drivers of automobiles so they know how to react to these users on the roadway.
1.3.2 Include bicycle and pedestrian education as part of Driver Safety Education programs held at North Branch Area High School and elsewhere within the community.
1.3.3 Invite guest speakers and hold assemblies on safe transportation. Include sections for parents and other drivers about sharing the road with bicyclists and pedestrians.

Issue 1.4: Enforcement of traffic rules and regulations.
Many highways converge in North Branch – Hwy 95, Co Rd 14, Co Rd 30 and Interstate 35. With these major thoroughfares, a surge of traffic is dispersed into or drawn from the surrounding streets. This flow of traffic increases the likelihood of a variety of traffic-related incidents including crashes, speeding, illegal parking, and failure to yield to the right of way. Many of these conditions are compounded during arrival and dismissal times in schools zones where parents are looking for the fastest and easiest way to access and depart the school area.

Recommendations
1.4.1 Work cooperatively with North Branch Police Department to continue to enforce all applicable bicycle and pedestrian right-of-ways. This "sting" effort should focus on high-use crosswalks or other crossings throughout the community.
1.4.2 Work with the North Branch Police Department to report incidents of speeding, parking violations, and crosswalk violations in school zones.
1.4.3 Work with the City of North Branch to better delineate school zones and crossing locations.
1.4.4 Consider developing student-based enforcement groups to remind parents of parking rules and regulations.

Issue 1.5: Enforcement of building, sidewalk, and property maintenance laws.
The walking environment can be greatly enhanced through the enforcement of property maintenance laws. Primary among these are snow removal on all public sidewalks within the city. The ordinance for snow removal in the City of North Branch requires that property owners remove snow within a 48 hour period of the snow event. In addition, code enforcement that leads to abatement of overgrown vegetation, especially at corners, will make a safer environment for pedestrians and motorists alike.

Recommendations
1.5.1 Encourage parents, teachers, and students to report areas where improper sidewalk maintenance impedes walking safety, including lack of snow removal.
1.5.2 Submit regular reports of sidewalk issues, such as uneven surfaces, as well as locations of overgrown brush or other property maintenance standards that impede on the pedestrian right-ofway in the city of North Branch.
1.5.3 Consider doubling the fines for violation in school zone areas for lack of snow removal.

Issue 1.6: Many residents/parents don't see walking or biking as realistic transportation choices and students may not think to ask about walking or biking to school as a result.
Over the past 30 years America has become much more accustomed to utilizing private automobiles for transportation. This is apparent in a community like North Branch, where the majority of the kids that live within a ½ mile of the school do not walk or bike to school. The average time it takes a child to walk one mile is approximately 20 minutes. Part of the issue in educating drivers about pedestrian and bicyclist rights is creating a critical mass of walkers and bikers to increase the expectation these users will be encountered during any trip. If residents don't see people walking or biking frequently, or don't believe people walk or bike as part of a transportation trip, they are less likely to look for them while driving.

Further, parents who do not walk or bike are less likely to suggest walking or biking trips to their children.

Recommendations

1.6.1 Encourage more people to walk or bike as a regular transportation choice. Participate and market the annual International Walk to School Day in October and ask city staff, community groups, employers, and residents to observe Bike to Work Week each May.

1.6.2 Develop school-based incentive programs, such as Mileage Clubs or walk-a-thons that offer rewards when mileage thresholds are reached and to encourage biking and walking as a daily activity. Develop a Walking School Bus program at Sunrise Elementary School

1.6.3 Inform and educate school staff about the SRTS programs via emails, school assemblies, and staff meetings.

1.6.4 Develop a media campaign to get the SRTS message out to parents and the general public. This may include posters, emails, newsletters, or stories in the local newspaper about the programs used to generate enthusiasm among students.

Issue 1.7: The perception of community safety for walking and biking to school is low.

There are a variety of issues affecting the perceived safety of walking or biking to school. The parent surveys conducted reveal many concerns related to traffic. The highest recorded issues affecting all surveyed parents decisions to allow, or not allow, their child to walk or bike to/from school included:

1) Traffic calming devices
2) Crossing guards
3) Increased Law Enforcement
4) More Sidewalks
5) Need for Education/Awareness

Recommendations

1.7.1 Complete the pedestrian network. This includes making sidewalk connections where none exist and ensuring that new developments include pedestrian access to other existing pedestrian facilities.

1.7.2 Enforce speed limits and crosswalk regulations in school zones, and position adult crossing guards at intersections deemed unsafe communitywide.

1.7.3 Restripe all crosswalks adjacent to school properties as ladder crosswalks to increase visibility.

1.7.4 Develop a Walking School Bus program where groups of children walk together. This program is most successful when led by an adult who can ensure safe practices among “passengers”. In many cases these programs may also encourage walking or biking because a parent would not be sending their child out alone, but with a group of other students and an adult.

Issue 1.8: Current conditions for walking and biking throughout the community are not fully known.

There is not a lot of data available within the community to ascertain the current level of bicycle/pedestrian safety. An exhaustive analysis of bikeability or pedestrian friendliness has not been performed and is only available anecdotally.

Recommendations

1.8.1 Consider working with bicycle and pedestrian advocacy groups to increase the working knowledge of biking and walking issues within the community. These groups may also be able to provide key insight and volunteers for implementation strategies.

1.8.2 Submit survey and advocacy results to the National Center for Safe Routes to School so that national databases for survey information can be collected.

Issue 1.9: Motorists drive too fast to make crossing the street safe.
In an effort to increase safety for drivers, many roadways are constructed wider than they need to be to carry the anticipated number of vehicles on the average day. This street widening has resulted in great curb-to-curb distances for pedestrians and bicyclists to negotiate. In addition, many of the streets that carry traffic into town do not have pedestrian or bicycle facilities and as such, motorists speed.

Recommendations
1.9.1 Consider working with North Branch to develop pedestrian islands, or center island medians, to provide a place of refuge for pedestrians crossing the street.
1.9.2 Identify locations for curb extensions, or bulb-outs, to extend the sidewalk curb line out into the street. This narrowing of the street simultaneously slows traffic and decreases the distance for pedestrians crossing the street. Temporary bulb-outs can also be constructed using traffic cones during arrival/dismissal times in school zones.
1.9.3 Support efforts to adopt a citywide "Complete Streets" policy. This policy ensures that all streets are designed and operated to enable safe access for all users (pedestrians, bicyclists, motorists, bus riders).

2. General Site and Neighborhood Issues

Issue 2.1: The neighborhoods surrounding the schools lack consistent sidewalks.
The sidewalk network surrounding the schools is incomplete, with sidewalks missing on the school properties themselves. The parent survey revealed many parents feel walking is unsafe due to a lack of sidewalks. This can be remedied by creating a sidewalk construction plan which addresses the gaps in the existing system first.

Recommendations
2.1.1 Work with the North Branch Public Works Department to schedule sidewalk improvements in the Capital Improvements Plan for key areas in the community that would strengthen the pedestrian network.
2.1.2 Work with the Minnesota Department of Transportation (DOT) to identify cost-sharing programs for development of sidewalks along state highways.
2.1.3 Encourage annual or biennial grant applications to the DOT for Transportation Enhancement (TE) or Bicycle and Pedestrian Facilities Program (BPFP) monies that can be used to enhance the multimodal transportation network.
2.1.4 As roads are scheduled for reconstruction, ensure they are improved upon, where possible, to include facilities for bicycles and pedestrians.

Issue 2.2: Crossing the street is difficult near the school sites. Even where crossing guards and safety patrols monitor activity, the behavior of motorists makes crossing difficult.
The North Branch Areas schools utilize adult crossing guards in the city of North Branch. Even with the use of safety patrols and crossing guards, the erratic behavior of drivers makes crossing the street difficult. Further compounding the issue are the parents who ignore the crossing guards when crossing streets with their children. In addition, the lack of high visibility crosswalks adjacent to school property makes crossing difficult in some places.

Recommendations

2.2.1 Consider installation of speed devices, such as active driver feedback signs, that flash or display a message to the driver, such as current speed or "slow down".
2.2.2 Use traffic cones during arrival and dismissal times to narrow the street width and signal to drivers that school is in session and children will be present, if warranted.
2.2.3 Consider employing additional crossing guards to help students cross safely.
2.2.4 Continue practice of annual training and refresher courses for adult crossing guards prior to each new school year to familiarize crossing guards with any changes that may have occurred on the roadways near the school.
2.2.5 Repaint crosswalks in school zones, especially at safety patrol locations on busy streets, with ladder-style crosswalk markings and epoxy paint to increase the visibility and life-span of these markings.
2.2.6 Prohibit parking within 20 feet of crosswalks; add signage to prevent vehicular stopping or standing in crosswalks.
2.2.7 Consider the use of portable "Pedestrian Warning" signs for use by Adult Crossing Guards in crosswalks during school arrival/dismissal hours.

Issue 2.3: Monitoring the short and long-term effects of the SRTS at the schools, i.e. how will we know if the SRTS program is having an effect?
Throughout the planning process there have been a number of tools used, such as surveys and audits, that illustrate the condition of current facilities and current attitudes. However, it is not fully understood how these tools will be used to create an effective program or to record results of implementation strategies.

Recommendations
2.3.1 Continue to perform the Student Tally and Parent Survey at least annually. The current information collected has established a baseline for comparison to future years. Monitor the results of the surveys to help determine program effectiveness. Forward the survey results to the National Center for Safe Routes to School.
2.3.2 Continue to maintain an active SRTS Task Force to oversee and evaluate the program. It is likely that not all of the programs utilized will meet with expected results. The Task Force should consistently update the SRTS plan and implementation approaches to better serve the needs of parents and students.

Issue 2.4: Cooperation and coordination between the city of North Branch and the School District
The engineering recommendations in this document require significant coordination with the local governmental unit. Ordinance changes, review of new development proposals, and installation of transportation infrastructure are all government functions.

Recommendations
2.4.1 The school district should remain active in city discussions about future growth and transportation planning. Send representatives to the local meetings of the Planning Commission or other committees where capital improvements are discussed.
2.4.2 Meet with local officials or get on the agenda of a regular meeting of the local electorate to discuss this SRTS plan and the courses of action proposed that require significant intergovernmental cooperation.
2.4.3 Advocate for increased bicycle and pedestrian facilities, especially in school zones and immediately surrounding the school site.
2.4.4 Use the SRTS plan as a gauge of walkability/bikability standards communitywide and refer to the plan where appropriate in other city planning efforts.

Issue 2.5: Arrival and dismissal times at North Branch Schools are hazardous for a variety of transportation users.
In many communities arrival/dismissal time is very hectic. There are family vehicles, buses, pedestrians, and bicyclists all using the same transportation network. Though most schools in North Branch have designated areas for automobile pick-up/drop-off, some parents don't observe the suggested rules and

often double and triple load. The location of where parents let children exit or enter their vehicle is also an issue because children become pedestrians in travel lanes or may dart between vehicles. Pedestrians and bicyclists also occupy the same sidewalk areas which can cause conflicts. In addition, many parents are impatient and do not adequately slow down or drive safely within the school zone boundaries. Further, many parents arrive far in advance of dismissal time to wait for their children and most idle their cars while waiting. This causes a significant increase in air pollution directly at the school site.

Recommendations

2.5.1 Continue to develop, review and implement on-site management plans that include designated drop-off/pick-up locations (zones), adult monitors, and student safety patrols for schools that do not currently have such plans. Evaluate existing on-site management plans annually for functionality.

2.5.2 Encourage parents who want to escort their children to the building to park their cars in a parking lot and not in the loading/unloading areas or in the queue for cars waiting to load/unload.

2.5.3 Develop a safe walk/bike zone within a block or two of the schools and actively discourage parents or caregivers from driving into the zone for ten minutes before and after arrival/dismissal times. This zone can be introduced on a monthly basis to ease transition.

2.5.4 Stagger student dismissal times letting walkers and bikers leave first, then school bus riders, then passengers of private vehicles.

2.5.5 Develop a "friendly notes" program to issue "tickets" to vehicles not obeying rules. They may include a "no idling" message, or convey information like "no parking" or "bus lane". Conversely, issue "tickets" to vehicles obeying the rules that can be cashed in by the student for a prize drawing or some other reward.

2.5.6 Institute a district-wide "No Idling" campaign to educate students, parents, and neighbors on the consequences of idling engines.

2.5.7 Involve the parents who repeatedly ignore efforts to improve the operation and safety situation on school grounds. Allow them to assess current conditions and brainstorm solutions.

2.5.8 Instruct children who ride their bikes to school to dismount their bikes and walk them to a bike rack when on school property. Riding on busy sidewalks can cause user conflicts and injuries.

Issue 2.6: Community Safety: many parents won't let their children walk or bike to school because they don't feel it's safe for children to walk or bike alone.

The Parent Survey revealed some of the responding parents were concerned about violence or crime as a factor in transportation choice. Perceptions of safety, real or not, can be a limiting factor in many communities. Safe Routes to School Plans and Programs do NOT advocate for children walking to school alone but rather with an adult or with a group.

Recommendations

2.6.1 Promote the Safe Routes to School map generated as part of the planning process. See the Appendix for Safe Routes to School maps.

2.6.2 Start a Safe Passage or "Eyes on the Street" Program to increase the number of adults keeping watch on student activity surrounding the schools.

2.6.3 Continue to work with interested parents and volunteers to promote the Walking or Biking School Bus and expand the program to all schools. This program provides adult supervision for groups of children who walk or bike to school together. Often, they gather at a set meeting point or "bus stop" in local neighborhoods. This program can also be used in conjunction with satellite parking locations to lessen the amount of traffic around school grounds.

Issue 2.7: More children should be walking or biking to North Branch Schools.

The Student Tally showed that for all schools surveyed, less than 2% of children biked and less than 1% walked.

Recommendations
2.7.1 Develop encouragement programs that make walking and biking to school more fun.
2.7.2 Host a walking or biking parade to the elementary school – to kick off a walking or biking school bus program and increase the visibility of walkers and bikers within the community.
2.7.3 Incorporate walking and biking in regular classroom activities. Ideas include "Walking and Biking across America" exercises that allow students to accumulate miles for walking and biking to school and use them to plot courses to cities across America.
2.7.4 Consider allowing students who depart school by walking or biking to leave before those who get picked up by family vehicle.

3. Specific School Site Issues

Issue 3.1: North Branch Primary School

Problem Addressed	Recommendation(s)
Congestion in parking lots during arrival/dismissal times can be dangerous	Reinforce and evaluate the on-site traffic management plan on an annual basis and use parent monitors in addition to staff for enforcement; reward parents/kids who are using the plan correctly
Traffic does not yield to pedestrians in crosswalks	Add or upgrade all crosswalks to ladder type style.
General Congestion	Institute walking school bus program(s) for children who live within a ½ mile radius; institute punch card programs for children to encourage walking and biking to school and/or increased physical activity.
Motorist speed in school zones	Install solar powered flashing speed signs

Issue 3.2: Sunrise River Elementary School

Problem Addressed	Recommendation(s)
Congestion in parking lots during arrival/dismissal times can be dangerous	Reinforce and evaluate the on-site traffic management plan on an annual basis and use parent monitors in addition to staff for enforcement; reward parents/kids who are using the plan correctly
Traffic does not yield to pedestrians in crosswalks	Add or upgrade all crosswalks to ladder type style.
General Congestion	Institute walking school bus program(s) for children who live within a ½ mile radius; institute punch card programs for children to encourage walking and biking to school and/or increased physical activity.
Motorist speed in school zones	Install solar powered flashing speed signs

Issue 3.3: North Branch Middle School

Problem Addressed	Recommendation(s)
Congestion in parking lots during arrival/dismissal times can be dangerous	Reinforce and evaluate the on-site traffic management plan on an annual basis and use parent monitors in addition to staff for enforcement; reward parents/kids who are using the plan correctly
Traffic does not yield to	Add or upgrade all crosswalks to ladder type style.

pedestrians in crosswalks	
General Congestion	Institute walking school bus program(s) for children who live within a ½ mile radius; institute punch card programs for children to encourage walking and biking to school and/or increased physical activity.
Motorist speed in school zones	Install solar powered flashing speed signs

Issue 3.4: North Branch High School

Problem Addressed	Recommendation(s)
Congestion in parking lots during arrival/dismissal times can be dangerous	Reinforce and evaluate the on-site traffic management plan on an annual basis and use parent monitors in addition to staff for enforcement; reward parents/kids who are using the plan correctly
Traffic does not yield to pedestrians in crosswalks	Add or upgrade all crosswalks to ladder type style.
Motorist speed in school zones	Install solar powered flashing speed signs

4. Action Plan

The following action plan is based on a 2-3 year forecast of reasonably attainable goals. The strategies within this Action Plan also prioritize important components of the SRTS program because they lay the foundation for activities within each strategy area. Strategy areas include recommendations developed around the 5 E's for Safe Routes to School. The 5 E's are 1) Education; 2) Encouragement; 3) Enforcement; 4) Evaluation; and, 5) Engineering. A successful SRTS program will incorporate components of each of these approaches.

The following table discusses strategies, assigns responsibility for implementation, and recommends a timeframe for completion. A column for potential funding sources has also been included to help allocate resources if grants or other funding is available for implementation. Lastly, the table cites the recommendation number from the previous two sections: 1. Communitywide Issues and 2.) Site and Neighborhood Issues.

Groups assigned to implement this SRTS Plan include the North Branch School District (authority for school site improvements), the city of North Branch (engineering solutions such as sidewalk and sign installation), local police departments, and volunteers from within the community (not specifically identified). See the Action Plan table below.

Action Plan

Action Plan		Project Area School				
Strategy Type	Action	Primary	Sunrise River	Middle	High	Who
Education includes identifying safe routes, teaching students to look both ways at intersections, and how to handle potentially dangerous situations. This strategy is closely tied to Encouragement activities.	Work with local police to host a bike rodeo.	x	x	x		City
	Disseminate information illustrating the benefits of active transportation modes. Consider adding less in classroom curricula.	x	x	x		City; School
	Work with local groups to supply bikes, helmets and programming bicycle safety	x	x	x		City
	Include bicycle and pedestrian lessons as part of local driver education programs			x	x	School
Encouragement combines the results of the other "E's" to improve knowledge, facilities and enforcement to encourage more students to walk or bike safely to school. Most importantly, encouragement activities build interest and enthusiasm. Programs may include "walk to school days" or "mileage clubs" with awards to motivate students.	Develop communitywide encouragement and incentive programs to encourage walking and biking, such as Walk to School Days and media campaigns.	x	x	x	x	School; City
	Develop a walking school bus program.	x	x	x		School
	Encourage coordination with existing neighborhood watch programs to provide assistance with kids walking or biking to school	x	x	x		School; City
	Develop school-based incentive programs such as "mileage clubs"	x	x	x	x	School
	Locate bicycle racks to areas where they can be easily be seen and accessed from sidewalks	x	x	x	x	School; City
	Continue to distribute detailed pick up/drop off materials and traffic regulations to parents the first week of each semester	x	x	x		School
	Work with local media to disseminate info about SRTS successes at schools	x	x	x	x	School; City
	Consider driver feedback signs to inform motorists of their rate of speed within school zones	x	x	x	x	City

Action Plan		**Project Area School**				
Strategy Type	Action	Primary	Sunrise River	Middle	High	Who
Enforcement includes policies that address safety issues such as speeding or illegal turning, but also includes encouraging community members to work together to promote safe walking, bicycling and driving.	Work cooperatively with local police to enforce bicycle and pedestrian rights-of-way. Consider a "sting" effort in high use crosswalks	x	x	x	x	City
	Enforce sidewalk and property maintenance laws to increase safety and capabilities for biking and walking	x	x	x	x	City
	Report instances of inappropriate motorist behavior, illegal parking, and loose animals to police regularly.	x	x	x	x	Citizens; School
Engineering is a broad concept used to describe the design, implementation, operation and maintenance of traffic control devices or physical measures. It is one of the complementary strategies of SRTS because engineering alone cannot produce safe routes to school.	Upgrade every crosswalk within a 1/2 mile radius of school to a ladder type style	x	x	x	x	City
	Identify and sign each school zone and perform regular maintenance on crosswalks within these zones	x	x	x	x	City
	Install sidewalks where gaps exist within 1/2 mile of each school	x	x	x	x	City
	Consider the use of off-site loading/unloading/parking areas for family vehicles to mitigate congestion at the school site	x	x	x	x	City; School
	Local planners should include accommodations for biking and walking in new developments (esp. to the local school site)	x	x	x	x	City
Evaluation includes monitoring outcomes and documenting trends through data collection before and afters SRTS activities. Surveys and auditscan help provide quanitative support for improvements achieved through SRTS programming.	Work with bicycle and pedestrian advocacy groups to increase the working knowledge of biking and walking. Confer periodically to determine SRTS programming impact.	x	x	x	x	City; School
	Conduct a communitywide transportation survey to measure mode choice within the community. Survey should include primary concerns and popular destinations and routes	x	x	x	x	City

APPENDIXES

Student Survey

Student Safety Suggestions by School including map

Parent Survey

Parent-Cited Unsafe Locations including map

School Walkable Areas Maps

School Busing Policies

Safe Routes to School Students Arrival and Departure Tally Sheet

CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY

School Name:

Teacher's First Name:

Teacher's Last Name:

Grade: (PK,K,1,2,3...) 0 2

Monday's Date (Week count was conducted) M M D D Y Y Y Y

Number of Students Enrolled in Class: 1 5

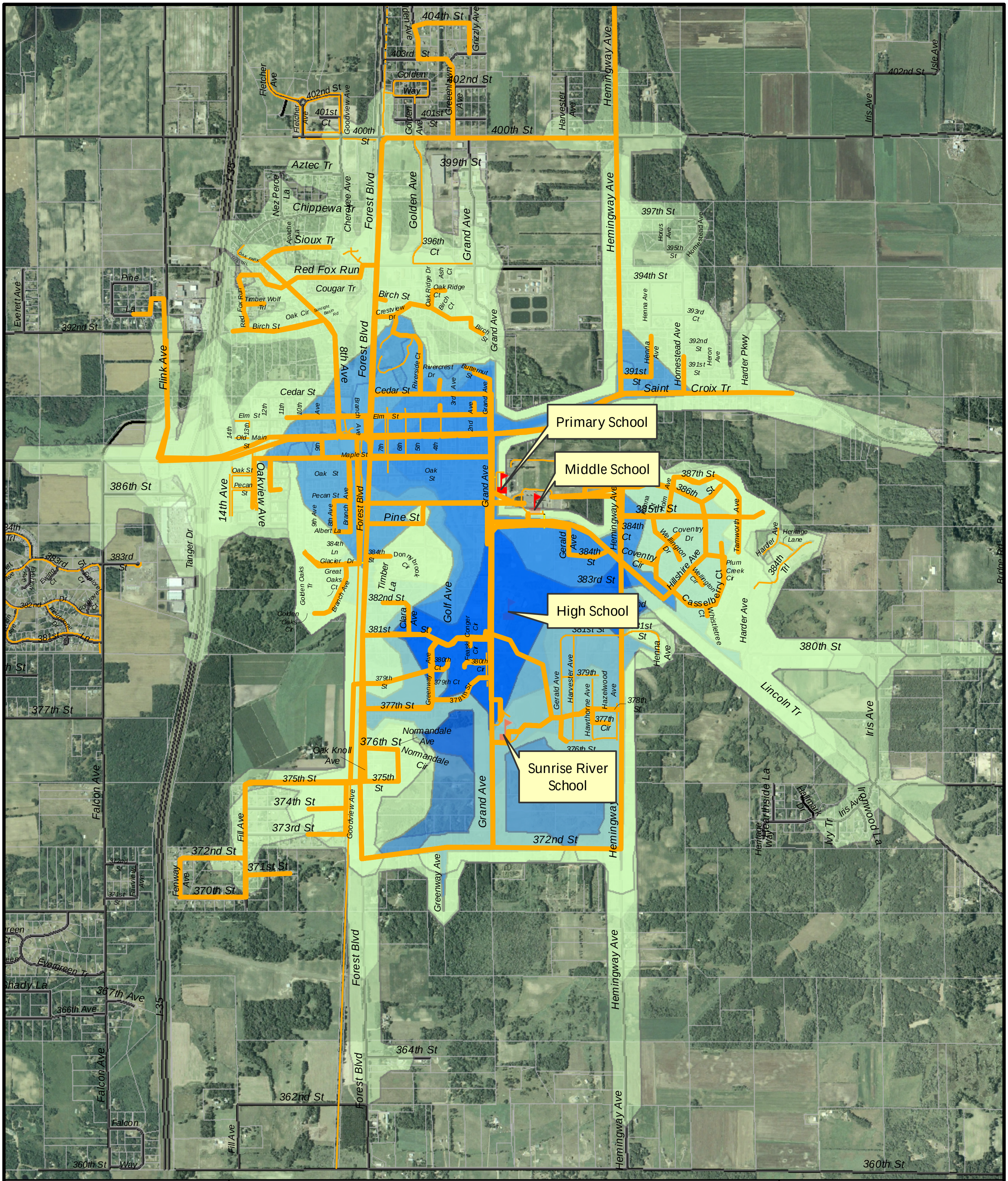
- Please conduct these counts **on two of the following three days Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted)**
- **Please do not conduct these counts on Mondays or Fridays.**
- Before asking your students to raise their hands, please read through all possible 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

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.

Key	**Weather** S= sunny R= rainy O=overcast SN=snow	**Student Tally** Number in class when count made	**Walk** -	**Bike** -	**School Bus** -	**Family Vehicle** Only with Children from your family	**Carpool** Riding with children from other families	**Transit** City bus, subway, etc.	**Other** Skate-board, scooter, etc.
Sample AM	S N	2 0	2	3	8	3		3	1
Sample PM	R	1 9	3	3	8	1	2	2	
Tues. AM									
Tues. PM									
Wed. AM									
Wed. PM									
Thurs. AM									
Thurs. PM									

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



å North Branch Schools

1 Mile Walkable Area

2 Mile Walkable Area

Kids Routes

SRTS Improvements

NORTH BRANCH AREA HIGH SCHOOL

Kids Routes

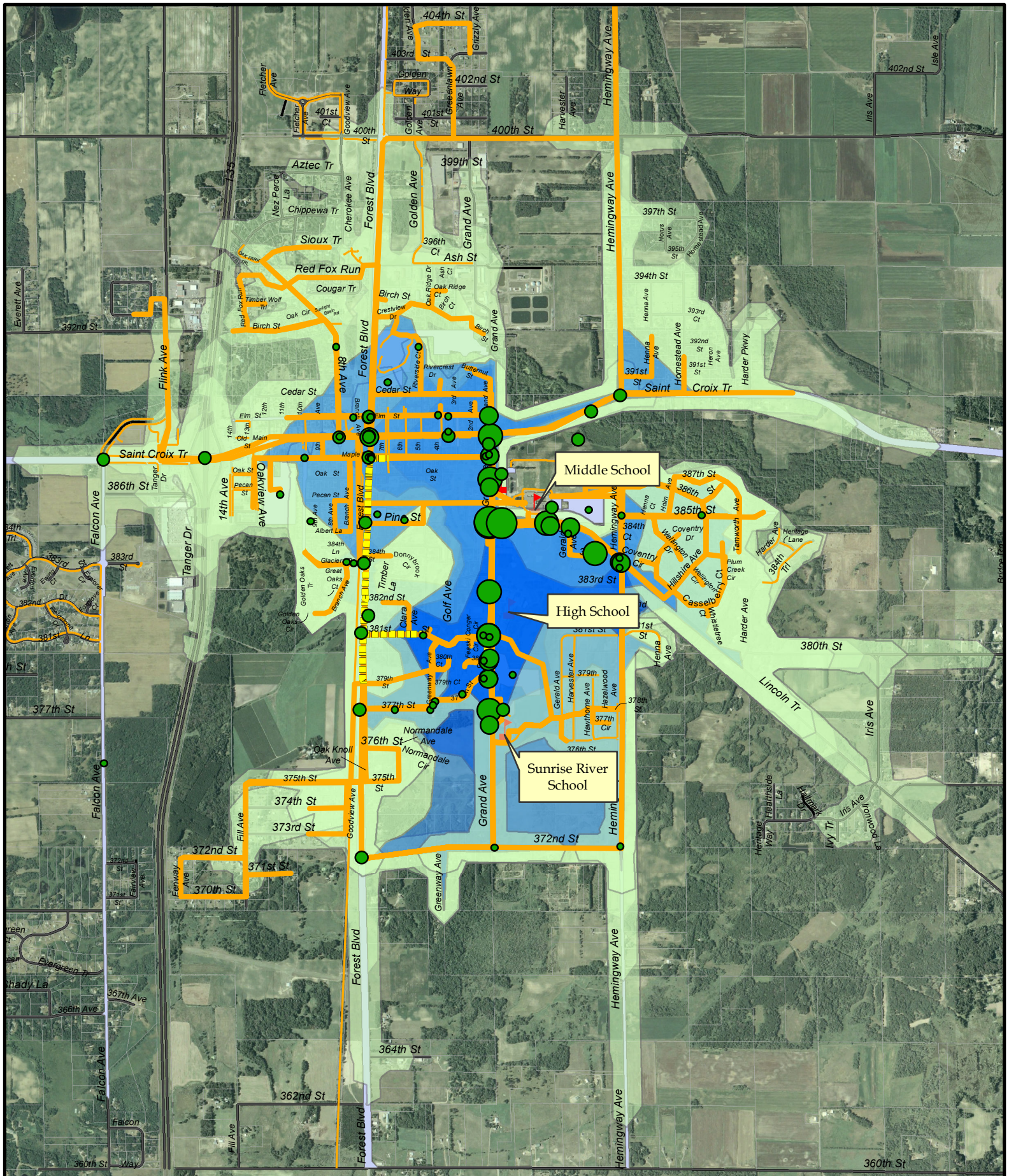
CHISAGO COUNTY, NORTH BRANCH, MN

ISD # 138

Scale: 1":2000'

North Branch Area Public Schools
Independent School District #138

Date: 17-JUL-2008



North Branch Schools
1 Mile Walkable Area
2 Mile Walkable Area
Kids Routes
Unsafe Locations
SRTS Improvements

NORTH BRANCH AREA HIGH SCHOOL

Kids Routes & Unsafe Locations

CHISAGO COUNTY, NORTH BRANCH, MN

ISD # 138

N

Scale: 1":2000'

North Branch Area Public Schools
Independent School District #138

Date: 17-JUL-2008

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 +

School Name:

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

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

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

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

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

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

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	Travel time from school
☐ Less than 5 minutes	☐ Less than 5 minutes
☐ 5 – 10 minutes	☐ 5 – 10 minutes
☐ 11 – 20 minutes	☐ 11 – 20 minutes
☐ More than 20 minutes	☐ More than 20 minutes
☐ Don't know / Not sure	☐ Don't know / Not sure

+ +

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…) ☐☐ grade **(or)** ☐ I would not feel comfortable at any grade

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)

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		
☐ Distance	☐ Yes	☐ No	☐ Not Sure
☐ Convenience of driving	☐ Yes	☐ No	☐ Not Sure
☐ Time	☐ Yes	☐ No	☐ Not Sure
☐ Child's before or after-school activities	☐ Yes	☐ No	☐ Not Sure
☐ Speed of traffic along route	☐ Yes	☐ No	☐ Not Sure
☐ Amount of traffic along route	☐ Yes	☐ No	☐ Not Sure
☐ Adults to walk or bike with	☐ Yes	☐ No	☐ Not Sure
☐ Sidewalks or pathways	☐ Yes	☐ No	☐ Not Sure
☐ Safety of intersections and crossings	☐ Yes	☐ No	☐ Not Sure
☐ Crossing guards	☐ Yes	☐ No	☐ Not Sure
☐ Violence or crime	☐ Yes	☐ No	☐ Not Sure
☐ Weather or climate	☐ Yes	☐ No	☐ Not Sure

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

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

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

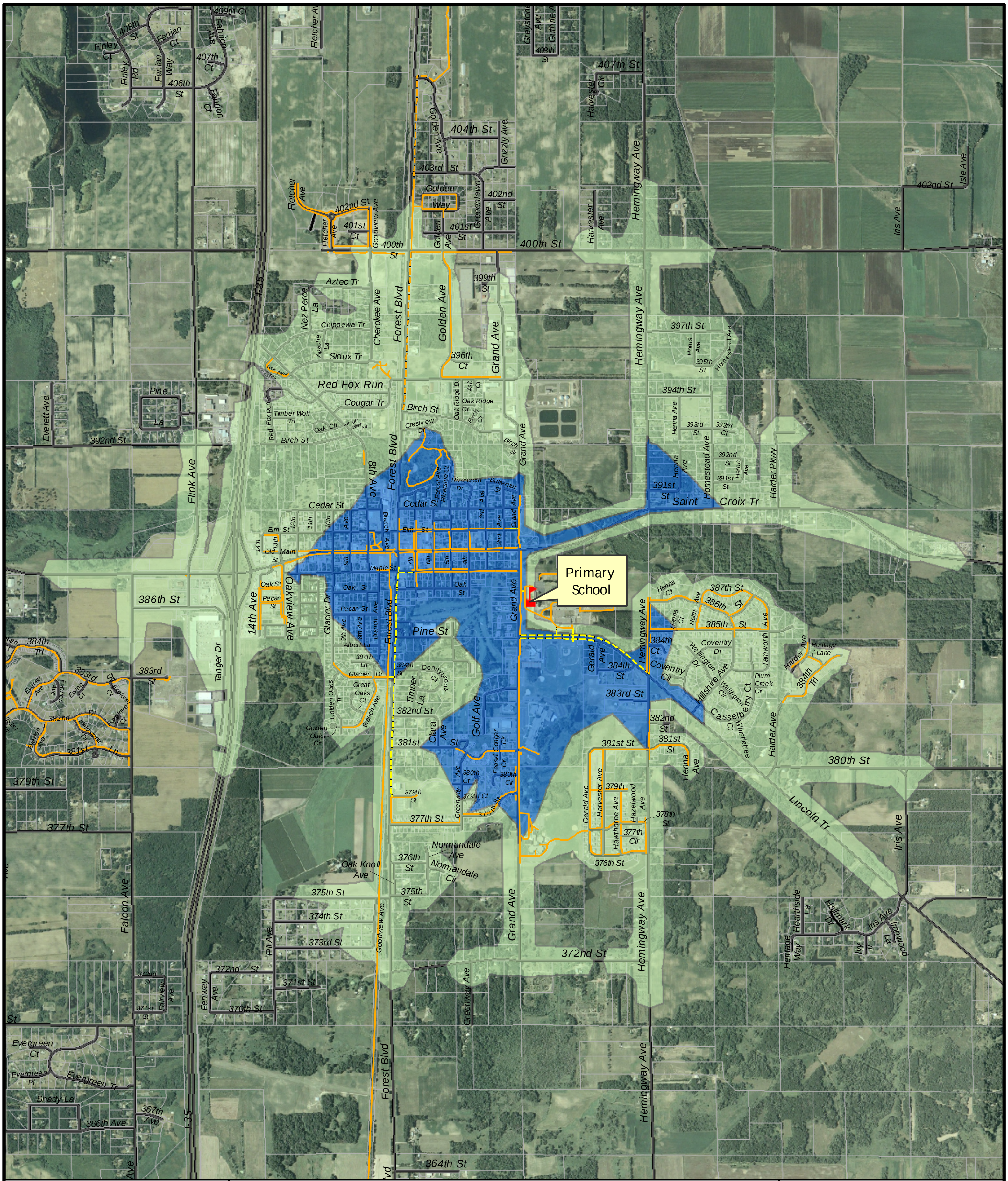
15. What is the highest grade or year of school you completed?

☐ 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.

PARENT SURVEY RESULTS

TO SCHOOL	1071	FROM SCHOOL	1071	UNSAFE LOCATION	830	IMPROVEMENTS	722	DESCRIBE	349	DRIVE OTHER	328	CHANGE 1	848	SCHOOL	1071
BUS	768	BUS	795	GRAND/14	161	GRAND/14 - 3 WAY STOP/STOPLIGHT/Peak Hours/Flashing Light	134	CARS DON'T YIELD FOR KIDS IN CROSSWALK	53	BUS - BEHAVIOR	90	LIVED CLOSER	316	SUNRISE	552
CAR	152	COMBO CAR/BUS	121	GRAND	57	ENFORCEMENT	89	KIDS DON'T USE CROSSWALK	43	CONVENIENCE	44	NEVER	187	MIDDLE	276
COMBO CAR/BUS	120	CAR	98	CO RD 14	53	CO RD 14 - TC	39	KIDS DON'T LOOK BEFORE CROSSING ROAD	41	DISTANCE	41	AGE APPROPRIATE	65	PRIMARY	243
COMBO WALK/BIKE	14	COMBO ALL	24	CO RD 14 CW	47	CO RD 14 - CROSSING GUARD	32	CO RD 14 - KIDS WALKING ON ROAD	25	BUS SCHEDULING	34	WALK WITH GROUP/SUPERVISION	63		
COMBO ALL	8	WALK	13	GRAND/95	44	GRAND/14 - CROSSING GUARD	28	SPEEDING	18	EXTRA-CURRICULAR ACTIVITIES	26	CROSSING GUARDS	61		
WALK	8	BIKE	10	SUNRISE PARKING LOT	40	EDUCATION	27	CO RD 14 - CANT CROSS SAFELY	19	SAFETY	30	SIDEWALKS	46		
BIKE	1	COMBO WALK/BIKE	9	GRAND/HIGH SCHOOL	38	GRAND/95 - CROSSING GUARD	19	DRIVERS DON'T PAY ATTENTION	10	AGE	19	WEATHER	39		
		SKATEBOARD	1	CO RD 30	34	CO RD 14 - SIDEWALK	17	CO RD 14 - SEVERAL KIDS NEARLY HIT	8	CHILDS CHOICE	18	SAFER ROUTES	30		
				PRIMARY PARKING LOT	29	CROSSING GUARDS	17	GRAND/14 - CANT TURN LEFT	8	MISSED BUS	17	INCREASED ENFORCEMENT	25		
				GRAND/PRIMARY	28	GRAND - CROSSING GUARDS	16	TEEN DRIVERS DON'T PAY ATTENTION	6	BUS DRIVER	5	NO BUS SERVICE OFFERED	7		
				MIDDLE SCHOOL PARKING LOT	28	SCHOOL - STAGGER START/RELEASE TIMES	13	BUS - DON'T YIELD AT CROSSWALK	5	WEATHER	4	EMERGENCY ONLY	4		
				BUS	25	GRAND/95 - STOPLIGHT	10	GRAND/14 - KID NEARLY HIT	5			JOB/SCHEDULING CONFLICTS	4		
				95	24	SUNRISE - PARKING LOT PATROL	9	GRAND/14 - SEVERAL KIDS NEARLY HIT	5			UNABLE TO DROP OFF/PICK UP	1		
				GRAND/381ST	21	95 BRIDGE - SIDEWALK	8	TEEN SPEEDING	5						
				GRAND/378TH	19	ALTERNATE ROUTE	8	CO RD 30 - KIDS WALKING ON ROAD	7						
				GRAND - SUNRISE	17	CO RD 30 - SIDEWALK	8	95 - KIDS WALKING ON ROAD	5						
				GRAND/MAPLE	17	GRAND - REDUCE SPEED	8	BUS - BULLYING	4						
				HEMINGWAY	16	HEMINGWAY - CONNECT TO 95	8	BUS - SPEEDING	3						
				95 BRIDGE	15	HEMINGWAY/MS - SIDEWALK	8	SUNRISE - PEOPLE PARKING IN DROP OFF ZONE	3						
				GRAND - BUS CORRAL	13	MIDDLE SCHOOL - PARKING LOT IMP	8	95 - CANT CROSS STREET SAFELY	2						
				GRAND/380TH	12	BUS - SUPERVISOR	7	95 BRIDGE - KIDS WALKING ON ROAD	3						
				95 EAST	8	CO RD 30 - REDUCE SPEED	7	CO RD 14 - KID NEARY HIT	2						
				ANYWHERE	7	GRAND/378TH - CROSSING GUARD	7	CO RD 14 - SPEEDERS	2						
				CROSSWALKS	6	HEMINGWAY - SIDEWALK	7	CO RD 30 - CANT CROSS SAFELY	2						
				MAPLE	6	NOTHING	7	CO RD 30/95 - KID NEARLY HIT	2						
				FALCON	5	PRIMARY - PARKING LOT IMP	7	GRAND - CANT CROSS SAFELY	3						
				MIDDLE SCHOOL WOODS	5	PRIMARY - PARKING PATROL	7	GRAND - KIDS WALKING ON ROAD	3						
				BUS STOPS	4	SUNRISE - PARKING LOT IMP	7	GRAND - USING CENTER LANE AS PASSING LANE	2						
				CO RD 30/GLACIER	4	BUS - K-12 NOT ON SAME BUS	6	GRAND 14 - SEVERAL KIDS NEARLY HIT	2						
				ELM	4	CO RD 30 - TC	6	GRAND/14 - CANT CROSS SAFELY	3						
				TRAILER PARK	4	GRAND/MAPLE - CROSSING GUARD Keep til after school begins	6	HEMINGWAY - KID NEARLY HIT	2						
				377TH	3	95 - SIDEWALK GRAND - HEMINGWAY	5	KID FELL ON STREET	3						
				CO RD 14/GERALD	3	BUS - REDUCE SPEED ON ICY GRAVEL ROADS	5	KID HIT BY SNOWMOBILE	2						
				372ND	2	INCENTIVES NOT TO DRIVE	5	TEEN DRIVERS DON'T YIELD AT CROSSWALK	2						
				378TH	2	MIDDLE SCHOOL - PARKING PATROL	5	95 - 2 KIDS HIT BY CAR	1						
				95/4TH	2	CO RD 30 - CROSSING GUARD	4	95 - KID HIT BY CAR	1						
				CO RD 14/HEMINGWAY	2	ELM - SIDEWALK	4	95 - KID HIT ON BIKE	1						
				CO RD 30/ELM	2	GRAND/MAPLE - CROSSWALK MOVE FURTHER FROM 95	4	95/4TH - 2 KIDS HIT BY CAR	1						
				CO RD 30/MAPLE	2	GRAND/PRIMARY - CROSSING GUARD	4	BUS - BUS STOPS ICY ON GRAVEL ROADS	1						
				GLACIER	2	HEMINGWAY/14 - CW/FL/SL	4	BUS - LEAVES BEFORE KIDS ARE SEATED	3						
				HEMINGWAY/MS	2	372ND - PAVE	3	BUS - NO SIGNALS	1						
				POND BETWEEN HS/SRS	2	95 - SIDEWALK FALCON - I35	3	BUS - NO SUPERVISION	3						
				SCHOOLS	2	BUS - MAKE SURE KIDS GET ON RIGHT BUS	3	BUS - SEXUAL ASSAULT	1						
				377TH/GREENWAY	1	BUS - ONLY 2 KIDS PER SEAT	3	BUS - SPEEDING ON RED FOX RUN	1						
				381ST	1	CO RD 30/MAPLE - CROSSING GUARD	3	CARS DON'T YIELD FOR FLASHING BUS	1						
				385TH	1	FALCON - CROSSING GUARD	3	CARS DON'T YIELD FOR KIDS IN CROSSWALK - HONK	1						
				8TH AVE BRIDGE	1	GERALD/14 - STOPLIGHT	3	CARS GO AROUNG CARS WAITING AT CROSSWALK	1						
				95/8TH	1	GLACIER - STOP SIGN	3	CO RD 14 - SEVERAL KIDS NEARLY HIT IN CROSSWAL	1						
				CO RD 30/95	1	GRAND - SIDEWALK	3	CO RD 30/MAPLE - KID NEARLY HIT	1						
				GINGER/425TH	1	GRAND/381ST - CROSSING GUARD	3	GLACIER - KID NEARLY HIT	1						
				NEIGHBORHOOD STREETS	1	GRAND/HS - CROSSING GUARDS	3	GRAND - BEFORE AND AFTER SCHOOL	1						
				PINE ST BUS STOP	1	HEMINGWAY - PAVE	3	GRAND - KID NEARLY HIT	1						
				PLAYGROUND	1	MIDDLE SCHOOL - THIN WOODS	3	GRAND - NEARLY HIT KID BECAUSE DISTRACTED BY T	2						
				RIVERWALK PARK	1	378TH - SPEED BUMPS	2	GRAND/14 - C ANT TURN LEFT	1						
				SKATE PARK	1	95/4TH - CROSSING GUARD	2	GRAND/14 - CARS TRY TURNING TO BEAT BUS	1						
				STREETLIGHTS	1	BUS - DISCIPLINARY POLICY	2	GRAND/14 - KID HIT IN CROSSWALK	1						
						BUS - SEAT BELTS	2	GRAND/14 - KID HIT ON BIKE	1						
						BUS - STOPS ON TIME	2	GRAND/14 - NO CROSSING GUARD	1						
						CO RD 30/379TH - TC	2	GRAND/95 - NO CROSSING GUARDS	2						
						CO RD 30/ELM - CROSSING GUARD	2	GRAND/MAPLE - CROSSING GUARDS LEAVE BEFORE	1						
						CO RD 30/ELM - CROSSWALK	2	HEMINGWAY - SPEEDING	1						
						CO RD 30/GLACIER - CROSSING GUARD	2	KID HIT BY BUS	1						
						GERALD/384TH - MOVE FENCE ALLOWING KIDS TO NOT WALK ON 14	2	KID ON SCOOTER NEARLY HIT	1						
						GRAND/95 - CW Ped Trigger Flash	2	KIDS TO YOUNG TO BE WALKING	1						
						GRAND/SUNRISE - CROSSING GUARD	2	PRIMARY - PARENT NEARLY HIT IN PARKING LOT	2						
						HS/SRS POND - FENCE	2	SUNRISE - KID HIT IN DROP OFF ZONE	1						
						MAPLE - SIDEWALK	2	TRAFFIC CONGESTION	2						
						SUNRISE RIVER - PEDESTRIAN BRIDGE	2	PRIMARY - LOT OVERCROWDED	1						
						372ND - SIDEWALKS	1	MIDDLE - NO SIDEWALK	1						
						377TH - SPEED BUMPS	1								
						8TH BRIDGE - STRAIGHTEN & WIDEN	1								
						95 - DRIVER FEEDBACK SIGN	1								
						95 - PEDESTRIAN BRIDGE	1								
						95 - REDUCE SPEED	1								
						95/4TH - HAVE KIDS WAIT IN SAFER LOCATION	1								
						95/8TH - STOPLIGHT WITH SENSOR	1								
						BUS - 1 DROPOFF AT A TIME	1								
						BUS - BUSSING PARENT SURVEY	1								
						BUS - MORE THAN 1PICK UP PER YEAR	1								
						BUS - SHOULD STOP AT KINDERGARTNERS DRIVEWAY SO THEY DON'T HAVE TO WA	1								
						CO RD 30/MAPLE - TC	1								
						CROSSWALKS	1								
						FACLON - REDUCE SPEED	1								
						FALCON - SIDEWALK	1								
						FALCON - SLOW CHILDREN SIGN	1								



å	North Branch Area High School
(blue)	1 Mile Walkable Area
(light green)	2 Mile Walkable Area
(orange line)	Existing Trails / Sidewalks
(yellow dashed)	SRTS Improvements

NORTH BRANCH AREA PRIMARY SCHOOL

Walkable Area

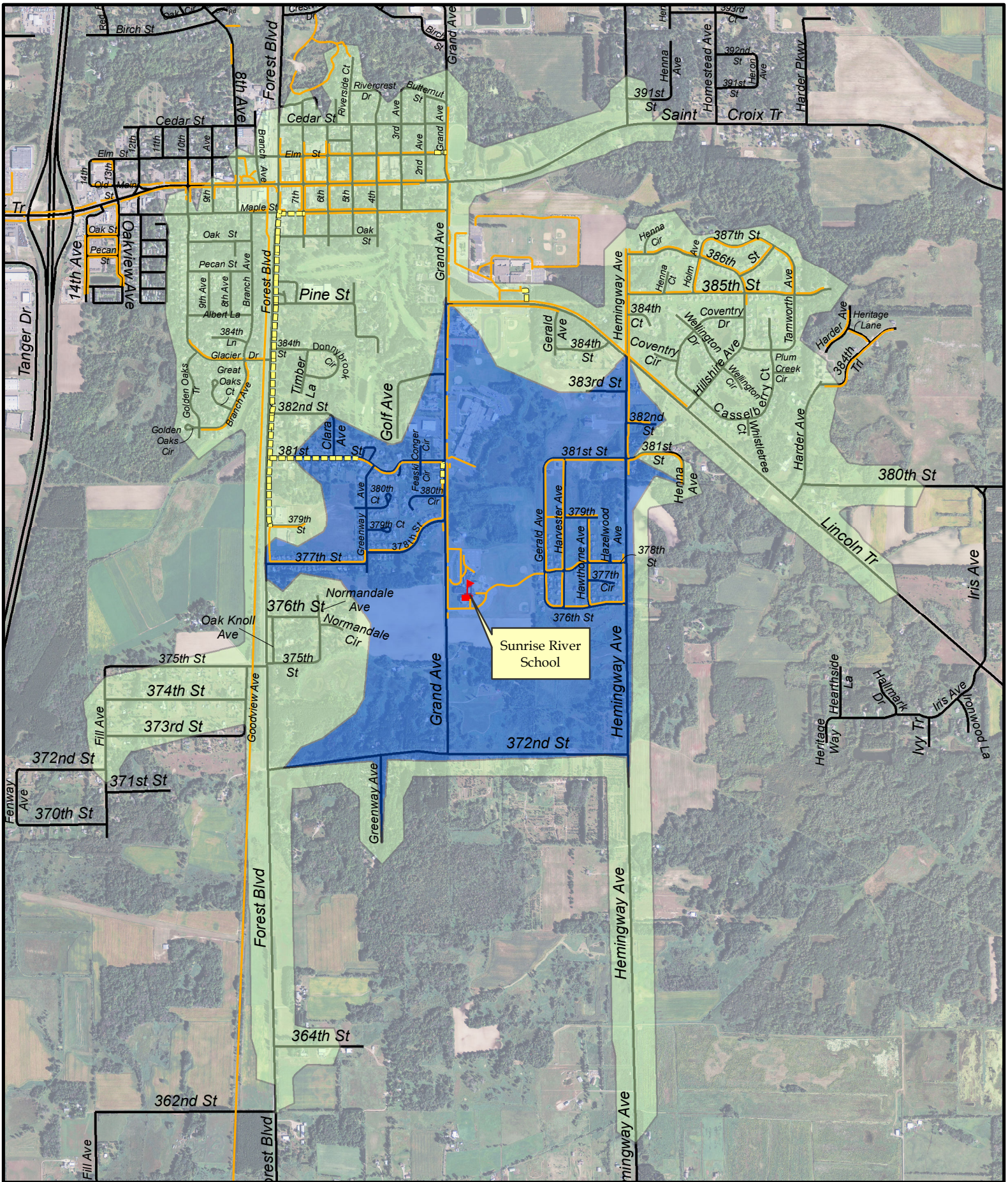
CHISAGO COUNTY, NORTH BRANCH, MN

ISD # 138

Scale: 1":1800'

North Branch Area Public Schools

Date: 17-JUL-2008



Sunrise River School
1 Mile Walkable Area
2 Mile Walkable Area
Existing Trails/Sidewalks
SRTS Improvements

SUNRISE RIVER SCHOOL

Walkable Area

CHISAGO COUNTY, NORTH BRANCH, MN

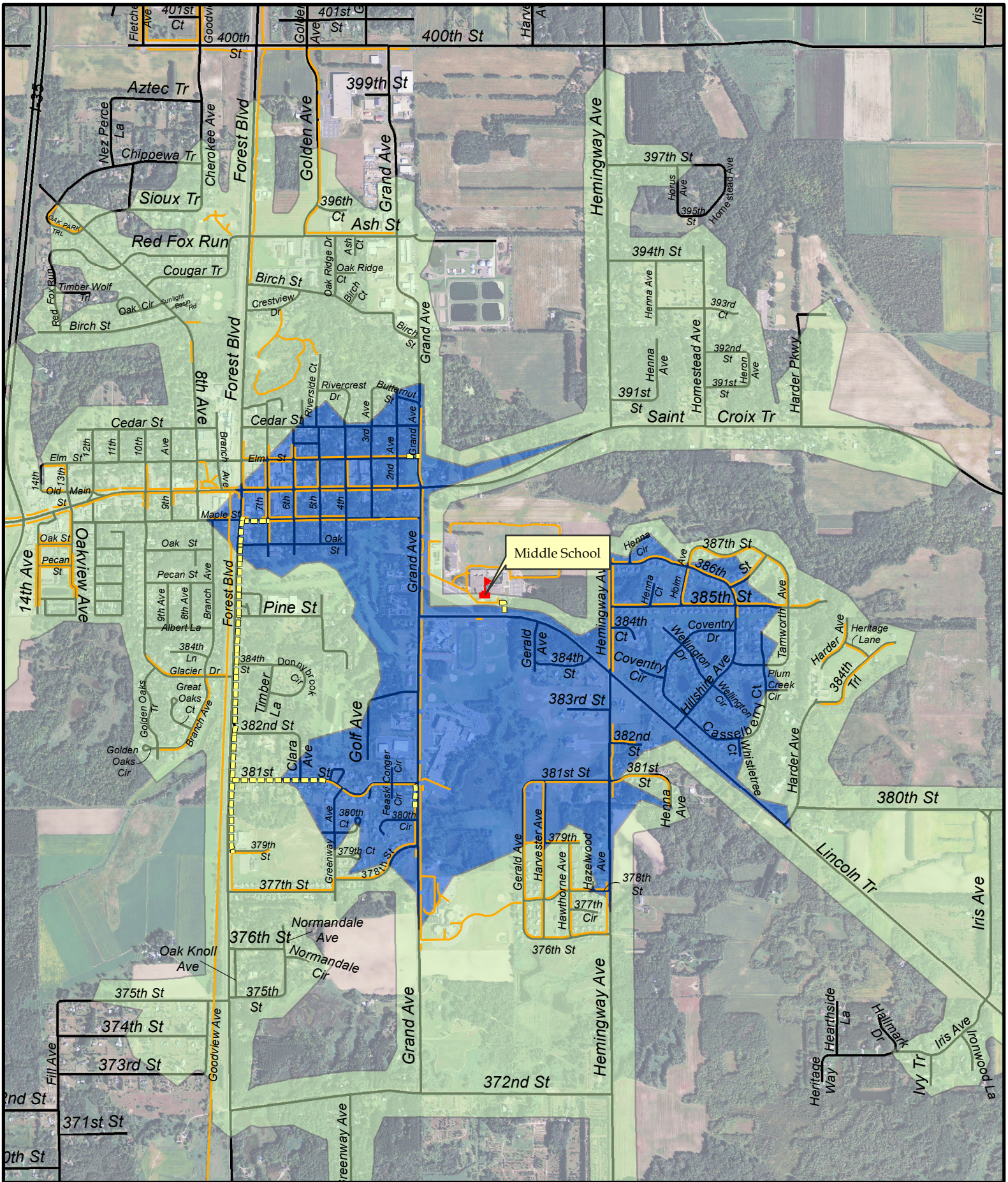
ISD # 138

N

Scale: 1":1800'

North Branch Area Public Schools
Independent School District #138

Date: 15-JUN-2011



North Branch Area Middle School

1 Mile Walkable Area

2 Mile Walkable Area

Existing Trails/Sidewalks

SRTS Improvements

NORTH BRANCH AREA MIDDLE SCHOOL

Walkable Area

CHISAGO COUNTY, NORTH BRANCH, MN

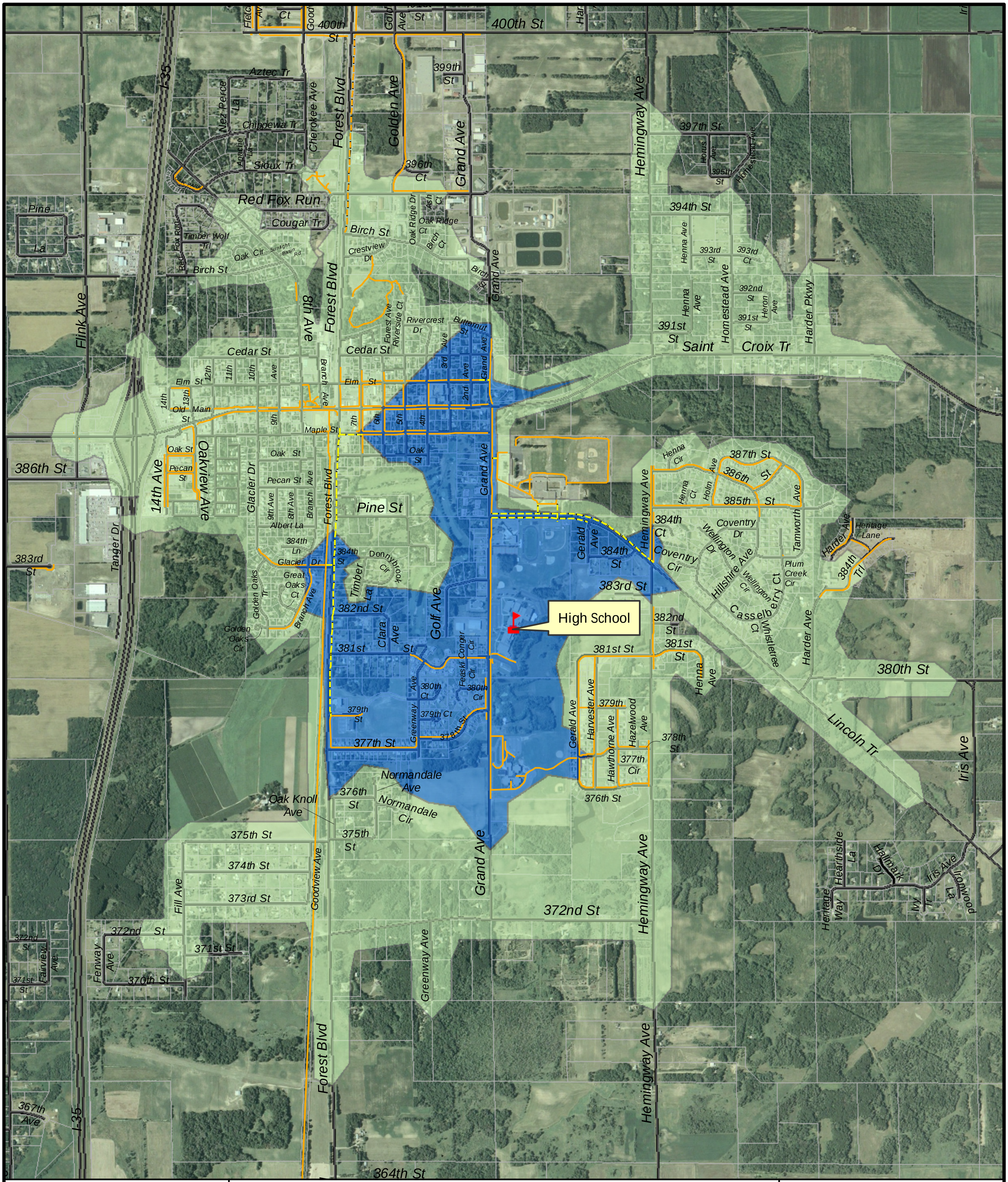
ISD # 138

N

Scale: 1":2000'

North Branch Area Public Schools Independent School District #138

Date: 21-JUL-2008



North Branch Area High School

1 Mile Walkable Area

2 Mile Walkable Area

Existing Trails/Sidewalks

SRTS Improvements

NORTH BRANCH AREA HIGH SCHOOL

Walkable Area

CHISAGO COUNTY, NORTH BRANCH, MN

ISD # 138

North Branch Area Public Schools Independent School District #138

Scale: 1":2000'

Date: 17-JUL-2008

Elementary (Kindergarten-6th Grade)

1st Offense - Warning.
2nd Offense - Three school day suspension from riding the bus.
3rd Offense - Five school day suspension from riding the bus.
4th Offense - Ten day suspension from riding the bus. Further offenses-individually considered. Students may be suspended for longer periods of time, including the remainder of the school year.
NOTE: *When a student goes 60 calendar days without a report, the student's consequences may start over at the first offense.*

Secondary (7th-12th Grade)

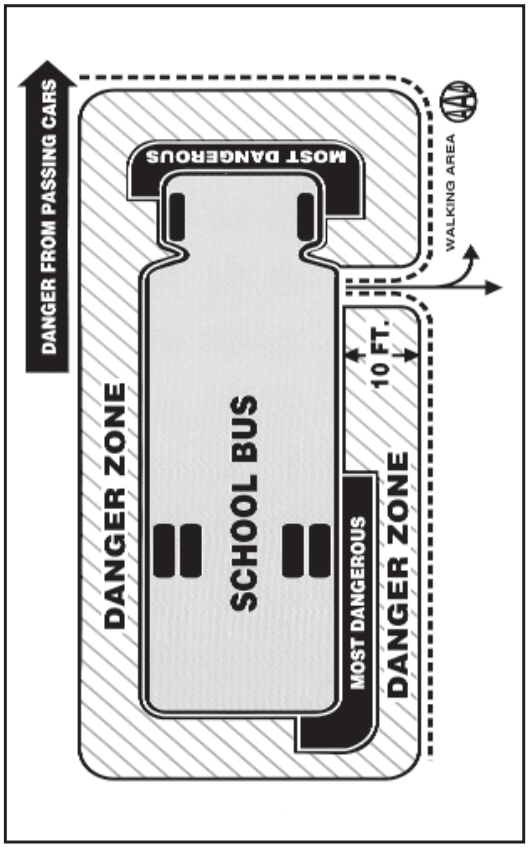
1st Offense - Warning.
2nd Offense - Five school day suspension from riding the bus.
3rd Offense - Ten school day suspension from riding the bus.
4th Offense - Twenty day suspension from riding the bus.
5th Offense - Suspended from riding the bus for the remainder of the year.

Vandalism/Bus Damage - Students damaging school buses will be responsible for the damages. Failure to pay such damages (or make arrangements to pay) within two weeks may result in the loss of bus privileges until damages are paid. The school district may also pursue other available options.

Criminal Conduct - In cases involving criminal conduct (for example, assault, weapons, possession, or vandalism), the Superintendent, local law enforcement officials, and the Department of Public Safety will be informed.

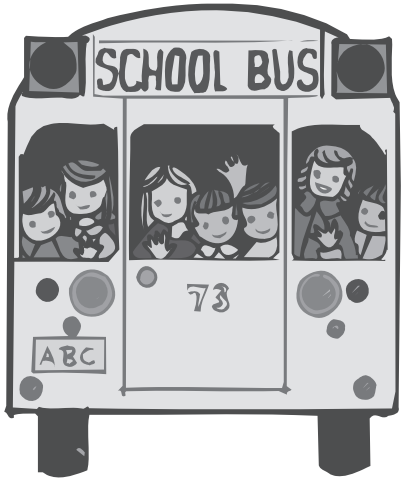
Other Discipline - Based on the severity of a student's conduct more serious consequences may be imposed at any time, depending on the nature of the offense. Consequences such as suspension or expulsion from school may also result from school bus/bus stop misconduct.

Stay Out of the School Bus Danger Zone!



2009-2010

BUS SAFETY INFORMATION AND RULES



North Branch Area Public Schools

TRANSPORTATION DEPARTMENT

Phone (651) 674-1030

Riding is a Privilege, Not a Right

District #138 is concerned with the safety of your child. One of the areas we are especially concerned with is safety on the school bus. Bus drivers, schools, parents, and the students themselves each have responsibilities in ensuring the District #138 buses remain a safe method of transportation.

Transportation Policy

No bus passes will be issued to students - Buses are at capacity.

Only one pick-up location and one drop-off location will be permitted for each student. They may be different locations. One of these locations may change once during the school year.

Students new to the district or those requesting a change in pick-up or drop-off location will be assigned a bus within five school days - parents will have to transport students during that time. School-age childcare is available until 6 p.m. for a fee if parent transportation is not available.

Bus Stop Determination and Walking Distance

Our district procedure has been that primary students (grades K-6) can be allowed to walk three-tenths of a mile to the bus stop and secondary students (grades 7-12) can be allowed to walk five-tenths of a mile to the bus stop on a public road. Secondary students living less than one mile from school will not be able to utilize bus services to school. Kindergarten children are expected to walk with older students to the nearest bus stop. Each year, bus stop changes will be made to make our stops more efficient. We choose the safest pickup location for all students within a pickup area.

Driver Responsibility and Authority

Drivers assigned to transport students on District #138 buses are licensed and certified by the State of Minnesota as "school bus drivers." In addition, drivers have undergone training in safety, first aid, and emergency procedures.

Drivers are authorized to give directions and enforce rules and standards which will promote safety and security for all passengers.

School and Teacher Responsibility

The first week of school is designated as school bus safety week. To ensure the safety of your child, all students in grades Kindergarten - 12th grade will be provided with school bus safety training. Students who wish to remain bus riders must pass a school bus safety test. They must know and understand the following:

1. Transportation by school bus is a privilege, not a right.
2. District policies for student conduct and school bus safety.
3. Appropriate conduct while on the bus.
4. The danger zones surrounding a school bus.
5. Procedures for safely boarding and leaving a school bus.
6. Procedures for safe vehicle lane crossing.
7. School bus emergency and vehicle lane crossing.

The School district may deny transportation to those students who fail to demonstrate their knowledge of school bus safety rules.

Student Responsibility

Students are responsible for maintaining bus safety by following both school bus and bus stop safety rules. Every student who rides the school bus should know and practice the rules of school bus safety.

NOTICE - *Students will be given a copy of school bus and bus stop rules during school bus safety training. Rules are to be posted on each bus and both rules and consequences will be periodically reviewed with students by the driver.*

Rules at the Bus Stop

1. Get to the stop 5 minutes before your scheduled pick up time. The school bus will not wait for late students.
2. Respect the rights of others while waiting at your bus stop.
3. Keep your arms and belongings to yourself.
4. Use appropriate language.
5. Stay away from the street, road, or highway when waiting for the bus.
6. After getting off the bus, move at least 10 feet away from the bus.
7. If you must cross the street, always cross in front of the bus where the driver can see you. Wait for the driver to signal you before crossing the street.
8. No fighting, harassment, intimidation, or horseplay.
9. No balloons or use of alcohol, tobacco, or drugs.
10. Do not damage the school bus.

Rules on the Bus

1. The driver is in charge; listen and follow directions.
2. Sit in the seat facing forward; no profanity allowed.
3. The driver may assign seats; riding the bus is a privilege, not a right.
4. No eating, drinking or use of tobacco, drugs, or alcohol.
5. Talk quietly. No fighting, bullying, teasing, or horseplay.
6. No balloons, pets, weapons, look-a-likes or dangerous objects.
7. Keep hands, arms, legs, and belongings to yourself.
8. Keep the bus clean. Do not damage the bus.
9. Do not throw objects of any kind.
10. Bus windows halfway down. No body parts outside the window.
11. Stay out of the "DANGER ZONE" outside the bus.

Parent Responsibility

For our bus safety policy to be most effective, we need your help! Parents should:

1. Become familiar with district rules and policies regarding bus safety.
2. Help your students understand safety rules and encourage them to follow them.
3. Recognize your responsibility for how your student behaves.
4. Support safe riding and reasonable discipline.
5. When needed, help students in boarding the bus or in crossing streets.
6. Respect the rights of others.
7. Let us know about any bus safety concerns you may have.
8. Watch bus stops.
9. Support all efforts to improve bus safety.

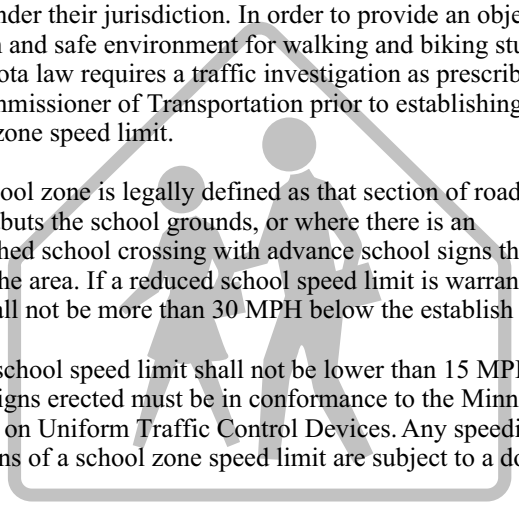
Consequences

Consequences for school bus/bus stop misconduct will apply to all regular and late routes. Decisions regarding a student's ability to ride the bus in connection with co-curricular and extra-curricular events (for example, field trips and competitions) will be at the discretion of the building principal or the principal's designee. Parents or guardians will be notified of any suspension of bus privileges. Bus drivers are encouraged to use a variety of discipline tools available prior to a referral.

School Zone Speed Limits

SCHOOL ZONE SPEED LIMITS
Ensuring the safety of children on public streets near schools is the responsibility of parents, school officials and road authorities. Parents must provide basic training and supervision in order to develop safe behavior and serve as role models. School officials must support and encourage educational safety programs and methods for walking or biking students. Road authorities must provide a safe environment on the street by using proven traffic control methodologies that will minimize the crash probability.

THE LAW
Each road authority may establish school zone speed limits on roads under their jurisdiction. In order to provide an objective, uniform and safe environment for walking and biking students, Minnesota law requires a traffic investigation as prescribed by the Commissioner of Transportation prior to establishing a school zone speed limit.



The school zone is legally defined as that section of road which abuts the school grounds, or where there is an established school crossing with advance school signs that define the area. If a reduced school speed limit is warranted:
- It shall not be more than 30 MPH below the establish speed limit
- The school speed limit shall not be lower than 15 MPH
- All signs erected must be in conformance to the Minnesota Manual on Uniform Traffic Control Devices. Any speeding violations of a school zone speed limit are subject to a double fine.

SCHOOL AGE PEDESTRIAN CRASHES
While safety is emphasized near schools, pedestrian crash experience requires a broader look. A Minnesota study revealed that 88 percent of school age pedestrian crashes occurred more than one block from school. Similar studies in Idaho showed only 13 percent of school age pedestrian crashes occurred in a school zone but 31 percent occurred on the trip to school. Other states have confirmed similar results. The statistics point out that location is NOT the predominant factor, suggesting that safety education for pedestrians has the greatest potential for improvement since they can use it at all locations.

Further insights can be gathered from analysis of circumstances contributing to school age crashes.
- Most crashes occurred when the child dashed from behind parked cars
- Many crashes occur at mid-block locations
- Kindergarten through third grade pedestrians had considerable difficulty understanding traffic control devices.

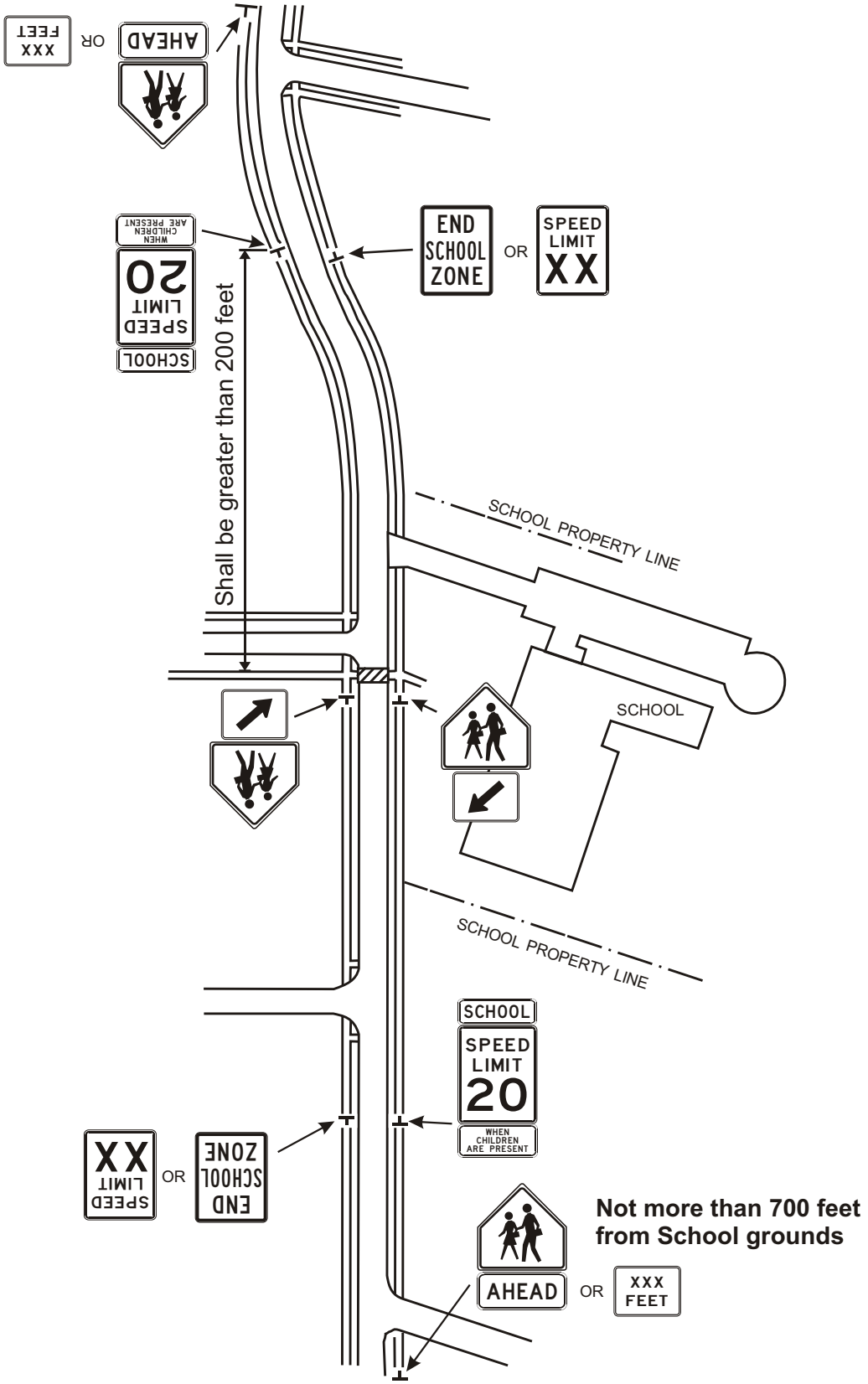
In realization of these facts it is apparent that school age child safety is not a singular issue of speed limits. Real improvements in safety require a comprehensive study of the school trip and each environment must be specifically addressed.

THE TRAFFIC INVESTIGATION
Mn/DOT developed the booklet "A Guide to Establishing Speed Limits in School Zones" that is a comprehensive safety outlook and is the prescribed method as required by MS 169.14. Three distinct components are addressed-
The School Route Plan
Hazard Identification
Education.

The main objective of the **School Route Plan** is to establish walking routes that minimize the number of streets crossed and to maximize the safety of approved crossings used by children on the entire trip to school.
Hazard Identification addresses nine issues using the school route plan and evaluates each street for what is present as well as what can be changed to enhance the safety of the planned routes.

A quick summary:
1) Roadway geometry**-** crossing narrower roads in straight sections with good sight distance increases the safety to pedestrians.
2) Traffic volume**-** low volume roads are safer to cross. High volume roads will require adult crossing guards for maximum safety.
3) Pedestrian volumes- number of pedestrians can determine signal timing or necessitate additional traffic control.
4) Parking- parking should be banned in the immediate area of any school crossing.
5) Traffic Control Devices- these should be reviewed to verify they are operating correctly and signs are not hidden by vegetation.
6) Sidewalks - children walking in the street is dangerous. Continuous sidewalks that do not intermittently disappear and force children into the road are the best.
7) Fencing-strategically placed fencing can change walking patterns and prevent dangerous mid-block crossing. At playgrounds, it prevents errant kick-balls from rolling into the street and causing children to chase them from between parked cars.
8) Crash History - crash investigation can reveal locations where remedial measures may not be working and pedestrians should be routed away from these areas.
9) Speed zones- if all other measures have been addressed and a reduced speed is still required to safely navigate the school zone, then a school zone speed limit should be considered. Trained engineering personnel should design speed limits based on the limiting criteria and arbitrary blanket values should be avoided.

As noted before, **education** is the most important. All the best efforts of engineering and planning will be lost if the pedestrian is unaware of the safe routes and safe practices. Children are rarely involved in crashes while crossing properly. Education is not the singular responsibility of one group or person, it requires a partnership and commitment from all.



Minnesota Manual on Uniform Traffic Control Devices
Signing for School Area Traffic Control

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http://www.dot.state.mn.us/speed