



HIBBING 

Safe Routes to School

Hibbing Safe Routes to School Plan

ENGINEERING UPDATE



Kimley  Horn

October 2016



HIBBING 

Safe Routes to School



Acknowledgements

This project was made possible through funding from the Minnesota Department of Transportation. Victor Lund, St. Louis County Principal Traffic Engineer, provided direct project management assistance. Mao Yang and Mark Vizecky from the Minnesota Department of Transportation provided state oversight. A special thanks goes out to all of the individuals below who provided their insight, expertise, and time in making this project a success.

Project Team

- ▶ Victor Lund, Principal Traffic Engineer, St. Louis County
- ▶ Jarrett Valdez, Associate Planner, Arrowhead Regional Development Commission
- ▶ Russell Habermann, Associate Planner, Arrowhead Regional Development Commission
- ▶ Brad Johnson, Superintendent, Hibbing Public Schools
- ▶ Jesse Story, City Engineer/Director of Public Works, City of Hibbing
- ▶ Mark Vizecky, Minnesota Department of Transportation State Aid for Local Transportation
- ▶ Mao Yang, Minnesota Department of Transportation State Aid for Local Transportation

School Representatives

- ▶ Robert Bestul, Principal, Lincoln Elementary School
- ▶ BJ Berg, Principal, Washington Elementary and Greenhaven Elementary Schools
- ▶ Gabe Johnson, Principal, Assumption Catholic School
- ▶ Michael Finco, Principal, Hibbing High School
- ▶ Carrie McDonald, Assistant Principal, Hibbing High School
- ▶ Joe Arthurs, Director of Building and Grounds, Hibbing Public Schools
- ▶ Michael Kniffin, Transportation Director, Hibbing Public Schools

Public Health

- ▶ Annie Harala, Regional Coordinator, Northeastern Minnesota Statewide Health Improvement Program (SHIP)
- ▶ Raymond Jobe, Public Health Educator, St. Louis County

Minnesota Department of Transportation

- ▶ Dave Cowan, Safe Routes to School Coordinator, Minnesota Department of Transportation

And to all others who provided comments, questions, and ideas that helped shaped this plan, thank you.

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1 Introduction, Purpose, and Context

This section provides an introduction to the Hibbing Safe Routes to School plan, its purpose, and objectives.

What is Safe Routes to School?

Safe Routes to School (SRTS) is an international effort to make it safer and more comfortable for students to walk and bike to school. SRTS campaigns focus on designing and installing physical walking and biking infrastructure and safety improvements such as sidewalks, signals, signage, and bike facilities. SRTS also works to promote non-infrastructure improvements such as educating parents and students about walking and biking routes to school, encouraging walking and biking among students through contests and incentives, enforcing speed zones and other traffic safety rules, and using tools to evaluate the need for and benefits of walking and biking improvements.

Getting more students to walk and bike to school has numerous community, health, and environmental benefits including reducing the need for busing, decreasing pick-up and drop-off traffic congestion, improving air quality, and incorporating routine physical activity into the daily lives of our young people.

Project Context and Purpose

The Minnesota Department of Transportation (MnDOT) has recently begun scoring applications for SRTS infrastructure grant funding higher if they are backed by a SRTS plan. Even with these plans in place, MnDOT has discovered it is often difficult to determine whether a desired improvement is warranted, would have the desired benefits, is compliant with applicable standards, is feasible to construct, and would not have detrimental effects on the operations and function of the multimodal transportation network.

In talking with its partners, MnDOT selected St. Louis County to help identify a community to serve as a pilot for a new model for safe routes to school planning. St. Louis County identified a willing partner in Hibbing which is a walkable community with a core downtown and which had previously undertaken a SRTS planning process in 2008.

This plan serves as an update to the 2008 Hibbing Safe Routes to School Plan. This update incorporates technical engineering analysis and perspective to inform and support plan recommendations. This plan strives to provide clear justification of the need for improvements so the City of Hibbing and the Hibbing Public Schools can work to fund and implement them.

By incorporating a more rigorous engineering method, this approach to SRTS aims to strengthen infrastructure recommendations and improve MnDOT's ability to allocate state SRTS infrastructure grant funds. In sum, the hope for this new approach is for MnDOT to be able to more confidently allocate SRTS financial resources on projects that are warranted and that will be effective.

Section 3 details the engineering analysis process used to understand existing conditions and form recommendations. Section 4 provides recommendations based on this engineering analysis. Appendix 1 provides best practices and "lessons learned" for future MnDOT and Minnesota communities to incorporate engineering analysis in SRTS plans.

Another critical part of this pilot project was the incorporation of a health impact assessment (HIA) to inform the analysis and recommendations conducted as part of the SRTS plan, described in Section 5. Appendix 2 provides best practices and "lessons learned" for future Minnesota communities to incorporate health impact assessments into their engineering, public works, and capital improvements planning work.

Project Location and Focus Schools

With a population of just over 16,000 people, Hibbing is the second largest city in St. Louis County. The core of the city is predominantly a grid street network of approximately two and a half miles by two miles.

With a relatively dense core and a connected street network, Hibbing is inherently walkable and bikeable, particularly for students traveling to school. This plan strives to build off of that foundation and the work of the 2008 Safe Routes to School Plan. This update focuses on five schools within the City of Hibbing:

- ▶ Greenhaven Elementary School (Pre-K–Grade 2)
- ▶ Washington Elementary School (Pre-K–Grade 2)
- ▶ Lincoln Elementary School (Grades 3–6)
- ▶ Hibbing High School (Grades 7–12)
- ▶ Assumption Catholic School (Grades K–6)

Project Oversight and Guidance

The development of the Hibbing Safe Routes to School Plan and associated appendices was guided by a project team comprised of the following individuals:

- ▶ Russell Habermann, *Arrowhead Regional Development Commission*
- ▶ Brad Johnson, *Hibbing Public Schools*

- ▶ Victor Lund, *St. Louis County*
- ▶ Jesse Story, *City of Hibbing*
- ▶ Jarrett Valdez, *Arrowhead Regional Development Commission*
- ▶ Mark Vizecky, *Minnesota Department of Transportation*
- ▶ Mao Yang, *Minnesota Department of Transportation*

St. Louis County Traffic Engineer Victor Lund served as Project Manager.

How this Report is Organized

This report is organized into the following sections:

SECTION 1: INTRODUCTION, PURPOSE, AND CONTEXT

Section 1 introduces the SRTS plan, describes its intention, and its organization.

SECTION 2: DATA COLLECTION, COORDINATION, AND OUTREACH PROCESS

Section 2 summarizes the data collection and public outreach process conducted to understand existing conditions, assets, challenges, and issues. The results of these engagement activities are included.

SECTION 3: SUMMARY AND ANALYSIS OF EXISTING CONDITIONS:

Section 3 outlines the planning and engineering approach used to review existing conditions in order to identify challenges and deficiencies and to form recommendations. This section details the assets, challenges, deficiencies, and opportunities around each of the five subject schools in Hibbing.

SECTION 4: RECOMMENDATIONS

Section 4 provides the planning and engineering recommendations for improvements to enhance the comfort, connectivity, and accessibility of the walking and biking network serving the five subject schools and the broader Hibbing community.

SECTION 5: HEALTH IMPACT ASSESSMENT

Section 5 summarizes the health impact assessment process conducted in Hibbing and used to inform plan recommendations. Specifically, the section discusses what was done, how it was undertaken, what was learned, and presents recommendations for improving overall school and broader city health outcomes.

SECTION 6: CONCLUSION AND NEXT STEPS

Section 6 concludes the plan and offers some next-action steps.

APPENDIX 1: INCORPORATING ENGINEERING INTO SAFE ROUTES TO SCHOOL PLANS

- ▶ Appendix 1 presents a recommended process for incorporating engineering analysis into SRTS plans.

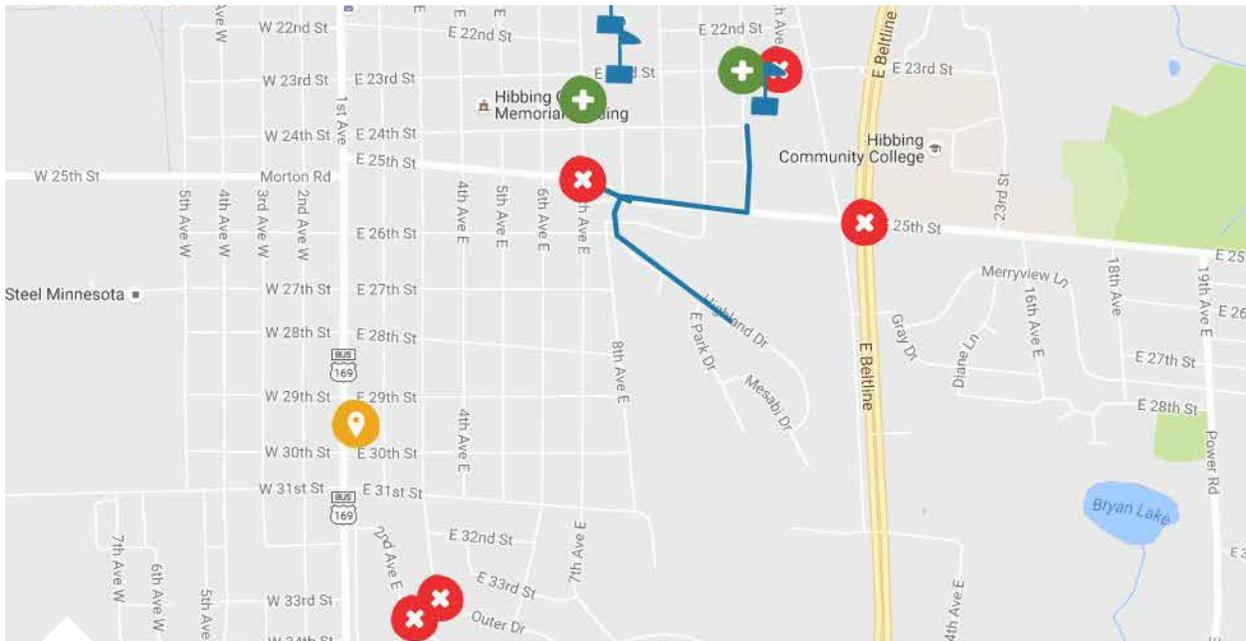
APPENDIX 2: INTEGRATING HEALTH IMPACT ASSESSMENTS INTO TRANSPORTATION PLANNING AND ENGINEERING:

- ▶ Appendix 2 provides best practices and “lessons learned” for Minnesota communities to incorporate health impact assessments into their engineering, public works, and capital improvements planning work.

APPENDIX 3: OPEN-ENDED SURVEY COMMENTS

- ▶ Appendix 3 includes all of the open-ended responses received on surveys conducted in support of this plan.

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2 Data Collection, Coordination, and Outreach Process

This section summarizes the data collection methods, stakeholder engagement, and public outreach process that informed the recommendations in this plan.

Introduction

The recommendations in this plan are rooted in the analysis of information and data collected from school, city, county, and state sources as well as comments and recommendations from the general public. This section summarizes the data collection process and results. The methods in which this data was reviewed and analyzed is described in Section 3. Recommendations for improvement are provided in Section 4.

Project Team

The development of the Hibbing Safe Routes to School Plan and associated appendices was guided by a project team.

The project team and consultant team met as a group at three points throughout the project: a kick-off meeting in April 2016, a progress update meeting in June 2016, and a final Project Team meeting in late August 2016 to review draft materials. Regular updates and communication occurred throughout the process via e-mail.

School Representatives

In April 2016, the consultant team met with representatives from each of the five participating schools to introduce the project and its purpose, and to gain useful information and recommendations about walking and biking challenges and potential solutions. School representatives served as resources throughout the project about particular issues and recommendations.

Public Outreach

Website and Promotion

The project website www.hibbing saferoutestoschool.com was created and maintained throughout the duration of the project.

The project was promoted through outreach to the Hibbing Daily Tribune newspaper in advance of the May 24th, 2016 community workshop. The newspaper article announced the project and its purpose and promoted ways to get involved, including visiting the project website, participating in the WikiMap or survey, and attending the upcoming workshop.

WikiMap

An interactive online WikiMap (www.wikimapping.com) was created and launched in late April 2016, and closed in late June 2016. Participants were asked to respond to the following prompts and could enter their responses in either point or line format:

- ▶ Comfortable/Enjoyable Features in **green**
- ▶ Barriers in **red**
- ▶ Destinations in **yellow**
- ▶ Routes you currently take in **blue**
- ▶ Routes you wish you could take in **purple**

The image below displays the comments received, which indicated walking and biking difficulties on East 37th Street and East 23rd Street, among others.



Parent Opinion Survey

Overview

A survey was administered in May 2016 to inform the Hibbing Safe Routes to School study. The survey was intended to learn how students are currently traveling to school, and to gather parents' opinions on ways to improve the circulation of parent pick-up and drop-off, and methods to make it easier and safer for students to walk and bike to school.

The survey consisted of a total of 16 questions, a full set of which is available in Appendix 3.

Distribution

The survey was distributed through e-mail, accessible from the project website, and a paper flyer was sent home with students. The survey was available between May 1 and June 10, 2016. The survey was promoted through direct calls to principals and city staff in Hibbing, and sent out through existing project team and MnDOT contacts.

A total of 62 people participated in the survey. The next section summarizes the results of the survey but not necessarily in the order that the questions were asked.

Results

All questions were optional and as such, not every respondent answered every question. However, all percentages listed in the General Demographic Questions section are based out of 62 total responses. A percentage for those that did not answer the question is provided when relevant.

General Family Information

The survey asked parents what grade their children were in, what school they went to, what zip code they lived in, and if they were home when their student left and arrived home from school. A summary of the survey findings for family information include:

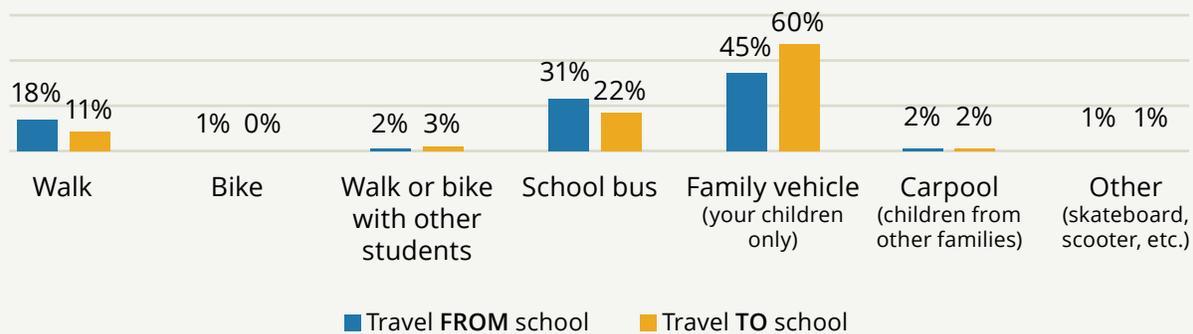
- ▶ Most respondents had 2 children (40%), followed by 3 children (29%), and 1 child (23%).
 - ▶ Majority of respondents had children that attend Hibbing High School (56%)
 - ▶ Almost all respondents live in 55746 zip code (56 out of 62 respondents).
 - ▶ Almost all respondents said on most mornings at least one parent/guardian is present in the house when their student leaves home for school (93%) and 80% said that was also the case when the student arrives home from school.
-

Travel Behavior

The survey also asked parents information about their child's travel mode, length of travel to and from school, and distance to school. A summary of the existing travel behavior includes:

- ▶ Majority of respondents said they take their children to school in a family vehicle both to and from school (60% said to school, 45% said from school). The school bus was the next most frequently used (22% said to school, 31% said from school).
 - ▶ For most respondents, it takes less than 5 minutes to take their children to and from school (41% said to school and 31% said from school).
 - ▶ Answers were fairly evenly split for distance to school: 3% indicated they live less than 1/2 mile; 34% indicated 1/2 mile–1 mile; 16% said 1-2 miles; and 26% said that they lived more than 2 miles away.
-

Q8. What mode of travel does your student(s) take to and from school?



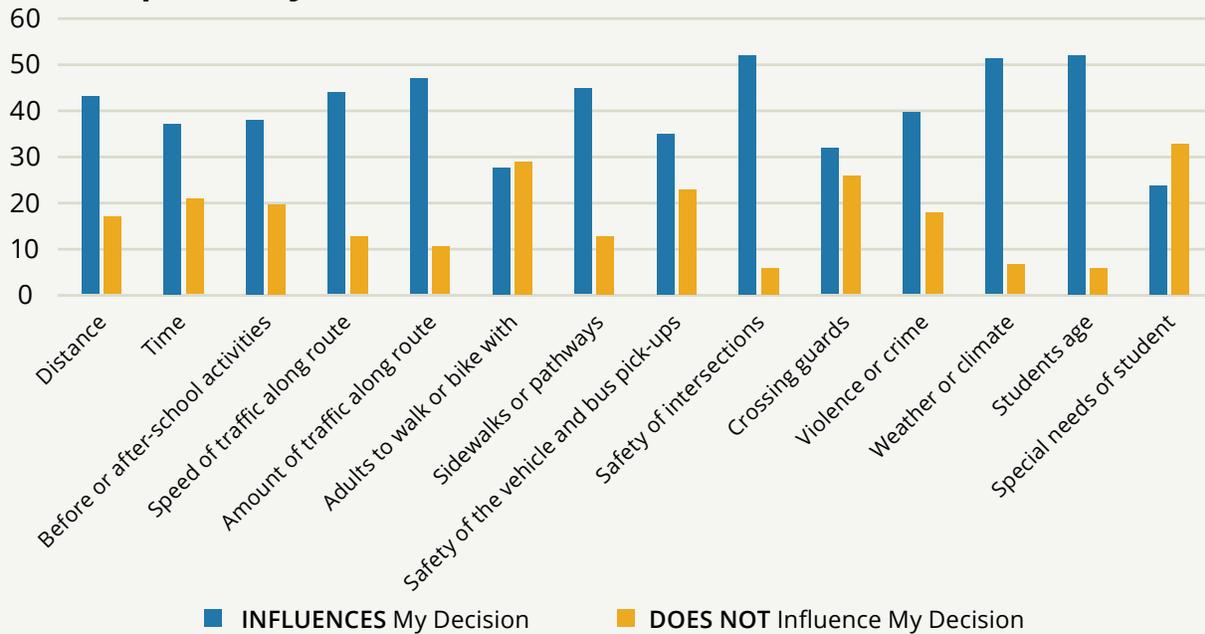
Perception of Travel Option

The next set of survey questions asked parents about their perception of travel for their child between home and school and what factors would influence their decision to permit or not permit their student to walk or bike to school. A summary of these questions include:

- ▶ 61% of parents said their student does not walk or bike to school by her/himself or with classmates; however, they would allow their student to walk or bike starting in 7th grade.
- ▶ About 20% of respondents said their student(s) already walks or bikes to school by her/himself or with classmates. Of these respondents, the majority said they allowed them to walk or bike to school starting in 5th grade.

- ▶ Majority of respondents (75%) said their student's school neither encourages nor discourages their student from walking and biking to/from school.
- ▶ 57% of respondents said their student has asked for their permission to walk or bike to/from school in the past year.
- ▶ The Q. 13 chart on the following page shows the varied responses parents provided for what factors influence their decision to permit or not permit their student to walk or bike to school. More factors influenced than did not influence their decision.

Q13. What factors influence your decision to permit or not permit you student(s) to walk or bike to school?



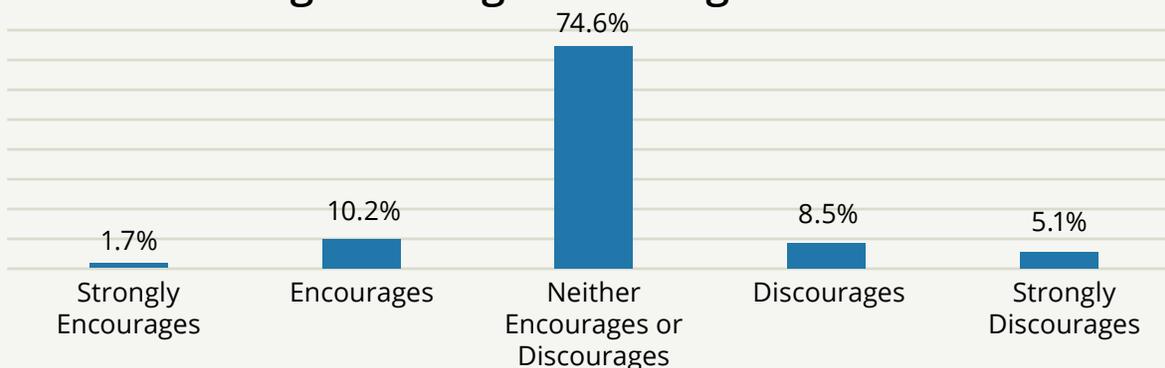
Other factors include:

- ▶ There are only patrols on certain intersections, and students come from all directions, not just one corner
- ▶ Parent available to walk with younger kids
- ▶ Maturity, knowledge of crossing, and responsibility
- ▶ Other drivers (some of whom are parents of fellow students) still not following traffic

laws, even in school zones; distracted driving; not completely stopping (of at all) at stop signs; stopping or parking in the middle of the lane; or no parking zones to drop off or pick up.

- ▶ This is a hard question to answer as we open enroll and choose to drive rather than take the bus from Keewatin
- ▶ Whether or not pathways are specifically for walkers and bikers (not shared with vehicles)

Q15. How much does your student's school encourage or discourage walking and biking to/from school?



Open Ended Feedback

The survey concluded by asking respondents to share any other comments they had about walking and biking to school in Hibbing, as

well as comments they had about pick-up and drop-off operations. A summary of the comments received are included in the table below. A full set of comments received, along with all of the comments received through public engagement, is included in Appendix 4.

Summary of Comment	Number of Times Comment Was Received
Need for an enhanced crosswalk mid-block between HHS and Assumption.	7
Drivers and bus drivers are not stopping for crosswalks with pedestrians in them, even if they are marked.	5
I am reluctant to allow my student to walk to school due to fear of abduction.	4
Concern over parents parking and walking students to the door from the parent drop off area causing backups at Lincoln and Greenhaven.	4
General improvement is needed.	2
Concern over snow plows clearing street while school kids are crossing.	2
Concern over safety with high speeds and inattentive drivers.	2
School bus travel times are inconveniently long, driving provides more time for students in the morning.	2
Use adult crossing guards or adult supervision.	2
I would consider allowing my students to ride the bus but don't like the pick-up/drop-off location.	2
Parent drop-off has too many parents and feels uncontrolled and unsafe.	2
School buses should be allowed to drop off at grandparents or other designated locations then the house or daycare.	2
There should be stop control on north/south streets at 22nd Street between 10th Ave and 12th Ave.	2
Statement about the benefits.	1
Snow plows cover sidewalks after being cleared.	1
Sidewalks aren't being cleared before school so students are walking through the snow.	1
Compliance with school bus stop arm.	1
Increase law enforcement around school zones.	1
Do not add more stop signs. Use more school crossing guards to control traffic.	1
Need clarification on rules for biking to school (students told they were not allowed to walk or bike to school if they lived east of the Beltline).	1
Place the Lincoln School bike rack in a more visible place like on the east side of the school outside the office windows.	1
It's not the culture of the city, and schools don't encourage walking with programs that bus students to locations instead of walking.	1
Students need to drive if they have gear bags, school projects or other large objects to bring.	1

Student Travel Tally

With the help of Principal Bestul, teachers in 25 classrooms at Lincoln Elementary conducted a two-day student travel tally the week of May 16 to find out what mode students were taking to travel to school and home. The Student Travel Tally included a total of 25 classrooms and nearly 700 students.

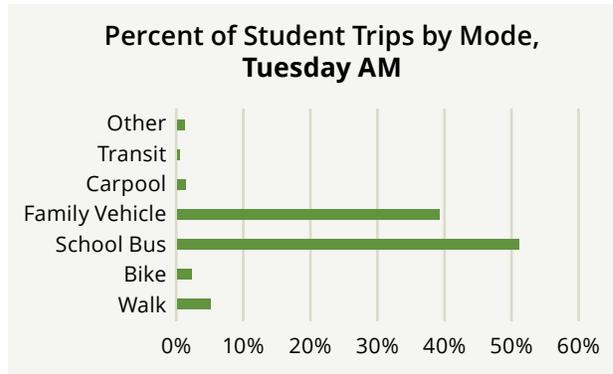
Results

Image of a completed Student Travel Tally form

The Student Travel Tally was conducted on a Tuesday morning and Wednesday evening. A summary of the results are listed to the left and shown in the charts.

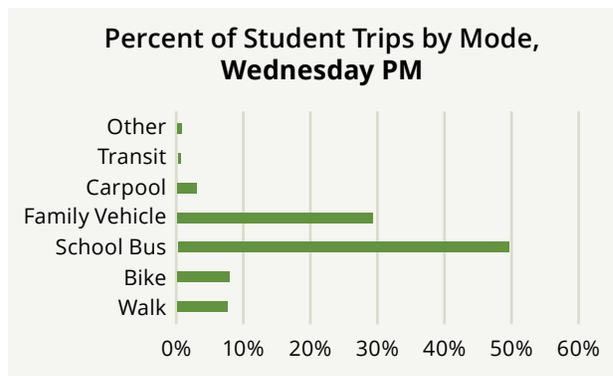
Tuesday AM

- ▶ 682 student trips tallied
- ▶ 25 classrooms
- ▶ 90% of trips were made via family vehicle or school bus on Tuesday AM
- ▶ 7% of trips were made via biking or walking on Tuesday AM



Wednesday PM

- ▶ 692 student trips tallied
- ▶ 25 classrooms
- ▶ 80% of trips were made via family vehicle or school bus on Wednesday PM
- ▶ 16% of trips were made via biking or walking on Wednesday PM



Community Workshop

A community workshop was held on May 24 at Lincoln Elementary School in Hibbing. Five participants attended the meeting which included a presentation and a discussion of assets and challenges during a map exercise.

The majority of the workshop was spent in a dialogue between school transportation and buildings officials, the St. Louis County Traffic Engineer Victor Lund, and parents of students at Hibbing Public Schools. The conversation focused on the challenges of traveling along East 23rd Street, as well as the crossings of East 23rd Street and East 25th Street and U.S. Highway 169 from the east.

Also discussed was the coverage of sidewalks in the immediate vicinity of the schools, including the presence of gaps.

Site Visits

Two site visits were conducted as critical components of the data collection effort: April 13, 2016 and May 24, 2016. During the April site visit, the consultant team joined St. Louis County Traffic Engineer Victor Lund to observe school arrival and dismissal, as well as walk around the grounds of each school. The May site visit included additional observation of school ground and the adjacent intersections and observation of dismissal at Lincoln Elementary School.

During the observations, consultants discussed conditions with school principals and staff including personnel observing parking lot and intersection operations.

Information gathered during site visits was critical to informing an understanding of existing conditions and the recommendations presented in Sections 3 and 4 of this plan, respectively.

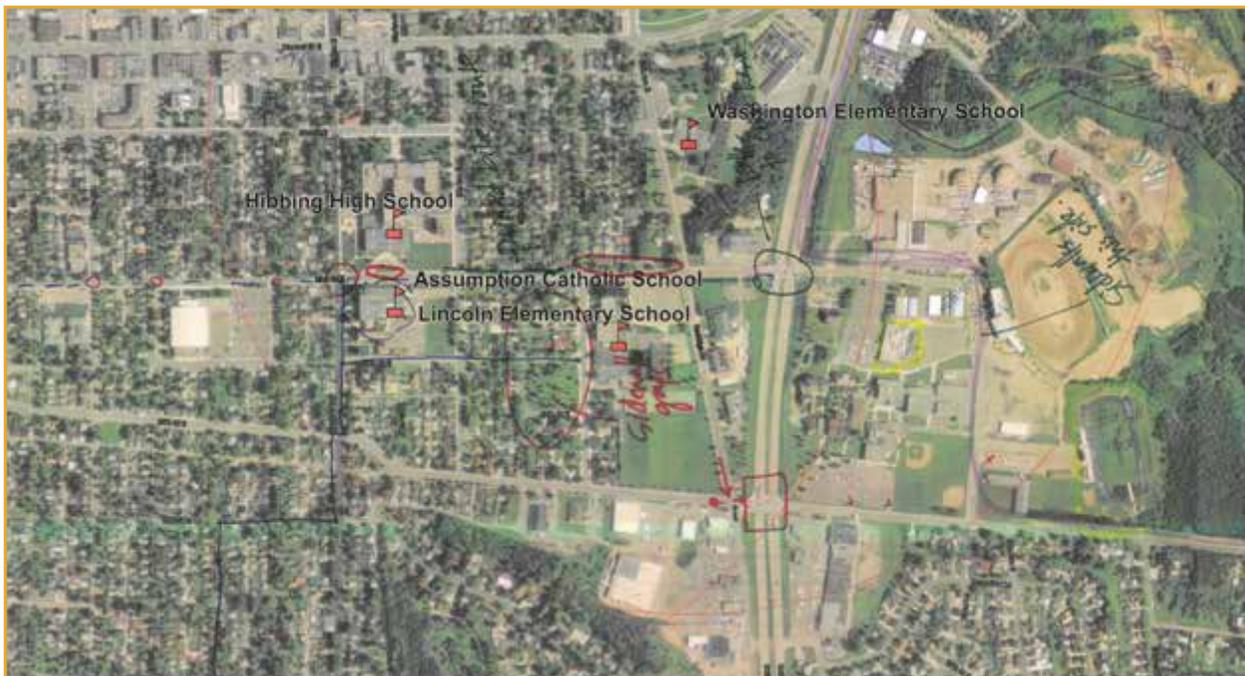


Image of comments received at the Community Workshop.

Engagement Summary

Engagement with school officials, parents, and the general public offered conclusions that formed the basis of recommendations presented later in this plan. As is common at many schools, most students are driven to and from school in a personal vehicle or ride the bus. There is concern about driver behavior and compliance with speed and stop regulations around each of the schools. The need for a crossing at East 23rd Street between Hibbing High School and Assumption Catholic was mentioned as a specific need.

Those engaged indicated pick-up and drop-off processes and routes around the school sites are chaotic and unsafe in many cases. Over 50% of parents indicated that their students have asked permission to walk or bike school. In addition to age and weather, the presence of sidewalks and bikeways and the safety of intersections, particularly along East 23rd Street, were mentioned as heavily influencing whether a student would be permitted to walk or bike to school.

Other Data Collected

Numerous other pieces of data were collected and analyzed, including:

- ▶ Crash data from the Minnesota Department of Transportation
- ▶ Traffic volumes
- ▶ Intersection turning movement counts taken by camera recording
- ▶ Crosswalks, signs, signals, sidewalk locations
- ▶ School bus service routes and stops
- ▶ School sidewalk improvement program
- ▶ City, county, and state capital improvements

Collected data was reviewed and analyzed, and provides the basis for the recommendations of this plan. A more detailed summary and analysis of this data is included in Sections 3 of this plan.

Conclusion

The breadth of public engagement done and data collected to inform the development of this plan was determined by the unique characteristics of the city and school, the scope of this project, and the types of data readily available.

Early on in any SRTS process, there should be a deliberate discussion focusing on what types of data are available and what is most appropriate to inform the analysis and recommendations that lead to the desired project outcome. A range of specific data that may be used to incorporate engineering analysis into SRTS work is discussed in Appendix 2.

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3 Summary and Analysis of Existing Conditions

This section summarizes the results of the planning and engineering analysis of existing conditions performed in Hibbing.

Transportation Context

Road Network

Hibbing is crisscrossed by U.S. Highway 169 and Minnesota State Highways 37 and 73. Howard Street on the city's northern end serves as Hibbing's main street with a core district of retail and commercial destinations. The core of the city is predominantly a grid street network of approximately two and a half miles by two miles. The city boundary extends well beyond the core city to encompass a sparsely populated area that includes Hibbing Taconite to the north and predominantly forested land to the south.

U.S. Highway 169 runs north-south through the eastern portion of Hibbing, serving as a major commercial corridor and separating the primary part of the city with more sparsely populated residential and industrial development to the east. BNSF and Canadian National Railroads cross through the city to serve the industry.

Business U.S. 169 or 1st Avenue is the primary collector providing north-south access through the center of Hibbing's core residential and commercial area, and parallels U.S. Highway 169. 1st Avenue north of 25th Street had a 2011 AADT of 9,100. Howard Street, 23rd Street, 25th Street, and 37th Street, serve as primary east-west collector streets. Low volume local residential streets serve the vast majority of the rest of the city's core area. Table 3.1 below provides traffic volume information for relevant Hibbing streets.

Table 3.1: Traffic Volumes

Street	2011 AADT Volume
1st Avenue (north of 25th Street)	up to 9,100
Howard Street	up to 7,100
23rd Street	up to 2,500
25th Street	up to 4,900
37th Street	up to 5,600

Source: Minnesota Department of Transportation

Demographics

With a population of 16,361 people according to the 2010 U.S. Census, Hibbing is the second largest city in St. Louis County and a hub for recreation, commerce, education, medicine, employment, and services in northeast Minnesota. Nearly 96% of Hibbing residents are white, while just over 85% of state residents are white. The median age of Hibbing residents is 42.5 years, older than the state's median age of 37.4 years. Nearly 21% of state residents are of school age (ages 5-19), compared to 18% of Hibbing residents. The majority (54%) of housing units in Hibbing were built in or prior to 1970.

According to U.S. Census, 2010-2014 American Fact Finder data, nearly 45% of occupied households in Hibbing have one personal vehicle or less, with nearly 11% having no available personal vehicle, a higher percentage than the state as a whole. 37% of occupied housing units in Minnesota have one personal

vehicle or less, with just over 7% without access to a personal vehicle. The city has a poverty level of nearly 21%, compared to nearly 12% for the state of Minnesota as a whole.

Transit

The city operates Hibbing Area Transit which picks up at regular times at four locations around the city. Pick-up from other locations on defined routes can be reserved via phone. A Heartland Express dial-a-ride is also available for pick-up at any location in the city.

Walking and Biking

The core of the city has a grid street network with short blocks, alleys, and significant sidewalk coverage along low speed and low volume residential streets. Marked crosswalks are frequent at intersection and some mid-block pedestrian crossings.

In 2010, Hibbing residents involved in the Hibbing Active Living Group worked with the city to secure Statewide Health Improvement Program (SHIP) funding. The funding was used to install bike route signs and limited share-the-road pavement markings. One of these routes is East 23rd Street adjacent to Hibbing High School, Assumption Catholic School, and Lincoln Elementary School.

At this time, no dedicated local off-street shared-use paths exist in the city; however, the paved regional Mesabi Trail traverses the northeast section of Hibbing, connecting all the way to Grand Rapids to the west and Virginia to the east.

Figure 3.1 displays the focus schools for this SRTS plan, as well as relevant transportation context. Priority intersections identified through the stakeholder engagement process are also displayed. These intersections are the subject of the analysis in Section 3.

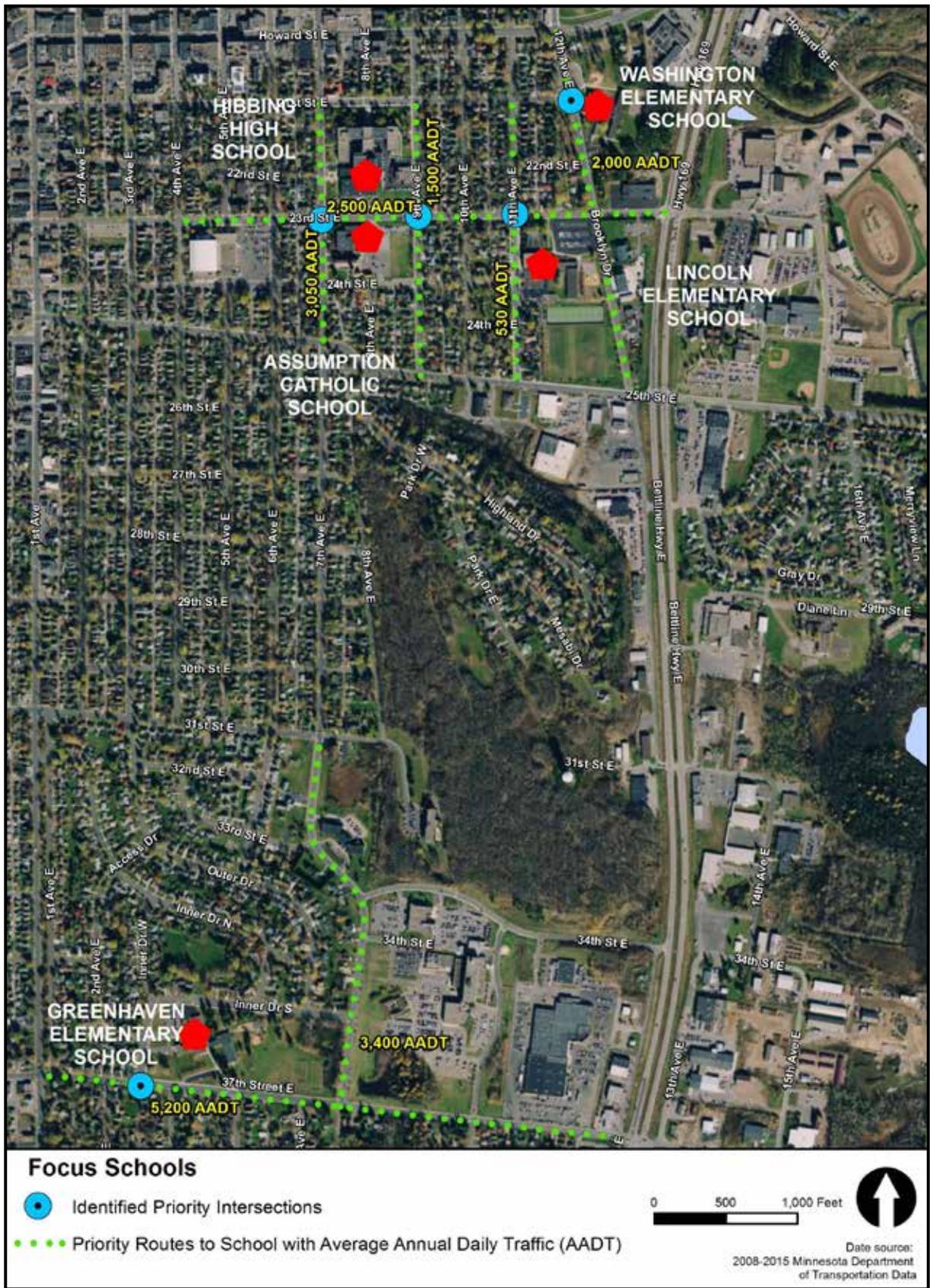


Figure 3.1: Location of Four Focus Schools in Hibbing.

School Basics

Enrollment

Hibbing Independent School District (ISD) 701 is located in western St. Louis County and stretches from Cedar Valley Township in the south to Morcom Township in the north, and from the Cities of Nashwauk and Keewatin in the west to Cherry and Lavell Townships in the east. The school district area encompasses roughly 340 square miles and currently enrolls 2,359 students as of April 2016. According to school transportation officials, the majority of students live within the core of Hibbing, or within four miles of the center of the city. Attempts at acquiring specific student residence information from the school district, in order to determine specifically where students travel from to get to school, were unsuccessful.

The school district expressed that they were unable to provide location specific enrollment data in aggregate for students across all schools. Such information would assist in prioritizing walking and biking improvements, defining existing likely routes to school, and helping plan for and forecast new walking, biking, and bus routes. Figure 3.2 depicts ISD 701.

Assumption Catholic School is an independent private Catholic school that serves 112 students in Grades K–6 operating in Hibbing since 1923. The school is located south of and across the street from Hibbing High School, between East 23rd Street and East 24th Street, and between 7th Avenue East and 9th Avenue East. Most of Assumption School’s students live in the core part of Hibbing, but the school enrolls students from the entire Hibbing area.

Transportation to School

BUSING

The school district provides critically important bus transportation to high school and elementary school students in Hibbing,

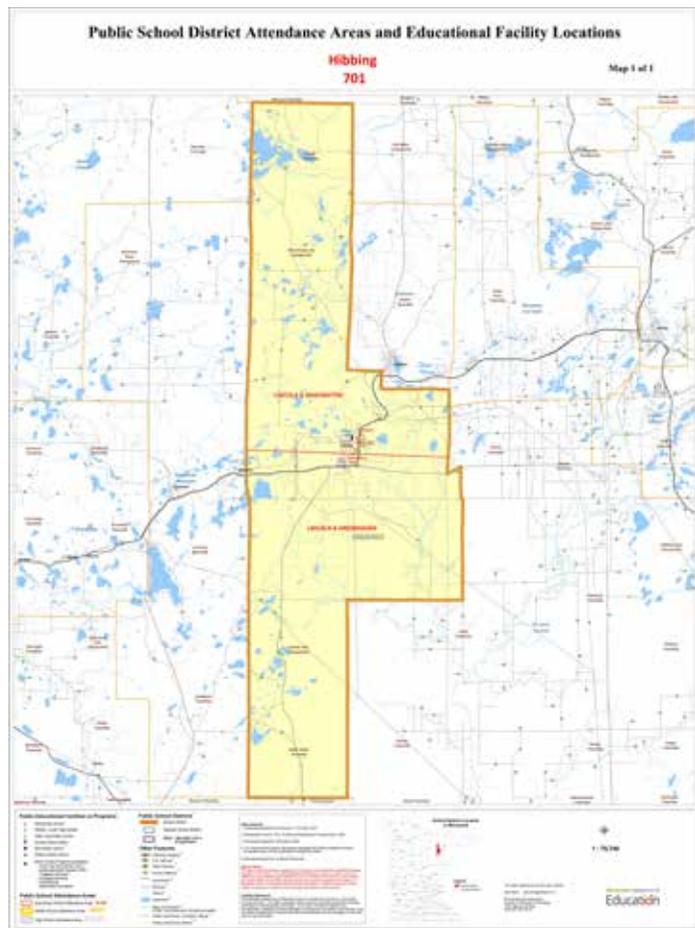


Figure 3.2: Independent School District (ISD) 701.

the city’s two private schools (as long as the student lives within the boundary of ISD 70), as well as the surrounding communities of Keewatin, Nashwauk, Buhl, and Cherry. Twenty-three fixed-route bus routes provide service at roughly 140 stops (approximately 1/3 are elementary school-only) within the core of Hibbing. Buses pick up both elementary and high school students at some stops, while other stops see only elementary school pick-ups. Students are dropped off at these same pre-defined stops.

Busing is not provided for high school students in the yellow hatched Hibbing High School Walk Area. Busing is provided for Lincoln Elementary School students in the Lincoln Elementary School Walk Area as desired. Hibbing School District provides busing to students from Assumption School as well, provided students live within the district’s boundary. Overall,

approximately 1,225–1,250 students in the school district regularly ride the bus. This is compared to approximately 2,500 students who are eligible to ride the bus. Figure 3.3 depicts the bus stops and walk areas within the core of Hibbing.

PERSONAL VEHICLES

Although it did not involve a representative sample, the parent survey conducted indicated that 60% of parents responding drive their student to school. Each of the five subject schools have dedicated parent drop-off/pick-up areas and specific procedures. In the case of the high school, there is an assigned student parking area to the west of the school in the Hibbing City Memorial Building Arena parking lot at East 23rd Street and 6th Avenue East.

WALKING AND BIKING

More study of the schools' enrollment data needs to be done to understand the percentage of students living within walking or biking distance from the schools. However, results from the parent survey indicate nearly 40% of respondents live within 1 mile of school, although only 11% indicate that their student regular walks to school. The four district schools, as well as Assumption Catholic School, exist within the core of Hibbing. Short blocks, sidewalks, and a compact grid street network make the city inherently conducive to walking and biking. Typical walking speed for a child is about 2.5 miles per hour, and typical bicycling speed is about 8 miles per hour. The core of Hibbing is approximately 1-mile wide (a 24-minute walk or 7 ½ minute bike ride). With strategic improvements, particularly at identified priority intersections, the city and school district have the potential to see far higher rates of walking and biking.



Figure 3.3: Bus Stops and Walk Areas Within Hibbing. Source: Hibbing Public Schools.

Overall School Mode Choice and Travel Patterns

School officials indicate that enrollment among those in K-6 grade has increased in recent times in the Hibbing School District. Many students are driven to and from school by parents or guardians, although no clear trends appear to be taking place favoring one mode (walk, bike, bus, personal vehicle) over another. According to a National Center for Safe Routes to School report entitled *How Children Get to School: School Travel Patterns from 1969 to 2009*, the percentage of students driven to and from school amongst all students between 1995 and 2009 increased, while walking and bus use decreased.

WASHINGTON AND GREENHAVEN ELEMENTARY SCHOOLS

The handbook of these schools reads: "All students at the Greenhaven and Washington schools will ride a bus unless the parent has provided a ride to and from school. There will be no safety patrols." Moreover, regarding bicycles: "Students at the primary level are not allowed to ride bicycles to school. Bicycle instruction is given in the spring for third grade students." Students are expected to ride the bus to school unless they can be transported by a parent.



Student crossing guard outside of Lincoln Elementary School.

LINCOLN ELEMENTARY SCHOOL

Lincoln Elementary School students are permitted to walk and bike to school. Bicycle instruction is given each spring for third grade students. A bicycle rodeo was conducted in May 2016 in the main parking lot by PTO staff and representatives from Walmart for 2015-2016 third grade students.

SAFETY PATROLS

Sixth grade student safety patrols from Lincoln Elementary School are present during arrival and dismissal at the intersection of East 23rd Street and 11th Avenue East year-round unless the weather is colder than -10 degrees Fahrenheit or it is storming. An adult school staff person provides supervision to the safety patrols during arrival and dismissal. Students are required to walk their bicycles through patrolled intersections.

Five student patrols, in addition to Assumption Catholic School Principal Gabe Johnson, are present each day from 2:15 – 2:30 pm at the intersection East 23rd Street and 7th Avenue North between Assumption Catholic School and Hibbing High School.



A student crosses the street walking to Hibbing High School.

Relevant Plans, Policies, and Programs

2008 City of Hibbing Safe Routes to School Plan

A previous Safe Routes to School plan for the Hibbing Public Schools was completed in 2008 by the Arrowhead Regional Development

Commission (ARDC). Below is a summary of plan recommendations and whether the recommendations have been addressed since the plan was completed. Table 3.2 summarizes the 2008 Plan recommendations made since plan completion.

Table 3.2: Hibbing SRTS 2008 Recommendations by School

Hibbing SRTS 2008 Recommendations		
Greenhaven Elementary School		
LOCATION	IMPROVEMENT	COMPLETED
South Inner Drive	Close gap in sidewalk	✓
	Addition of striped parking lane	
South Inner Drive at West Inner Drive	Flashing school zone signage	✓
	Narrow turning radius	
3rd Avenue	Close gap in sidewalk	
4th Avenue	Close gap in sidewalk	
Surrounding Intersections (General)	Enhanced Crosswalk	✓
Washington Elementary School		
LOCATION	IMPROVEMENT	COMPLETED
East 21st Street at Brooklyn Drive	Enhanced Crosswalk	✓
North Parking Lot	Close gap in sidewalk	
	Signing and striping changes	✓
Lincoln Elementary School		
LOCATION	IMPROVEMENT	COMPLETED
Drop-off Areas	Switch parent and bus drop off zones	✓
11th Avenue	Enhanced Crosswalk	✓
East 21st Street	Enhanced Crosswalk	✓
Hibbing High School		
LOCATION	IMPROVEMENT	COMPLETED
East 21st Street at 7th Avenue East	Enhanced Crosswalk	✓
East 22nd Street at 7th Avenue East	Enhanced Crosswalk	✓
East 23rd Street at 6th Avenue East	Enhanced Crosswalk	✓
East 21st Street at 8th Avenue East	Enhanced Crosswalk	✓
	In-street pedestrian crossing signs	
East 23rd Street	Remote parent pick-up/drop-off	
7th Avenue	Designate bus loading/unloading zone	✓
9th Avenue	Designate bus loading/unloading zone	

GREENHAVEN ELEMENTARY SCHOOL

Plan recommendations for Greenhaven Elementary School focused on improving pedestrian access to the school site. This included proposed sidewalks west of the school on South Inner Drive and south of the school connecting to East 37th Street; enhanced crosswalks at most intersections; flashing school zone signage; and narrowing the turning radius at the intersection of South Inner Drive and West Inner Drive. The plan also recommended striping a parking lane on South Inner Drive west and north of the school to slow traffic and designate on-street parking.

Notable improvements made since the completion of this plan include the flashing school zone sign at South Inner Drive and East 37th Street, as well as a sidewalk connection between East 37th Street to the west school entrance along South Inner Drive.

WASHINGTON ELEMENTARY SCHOOL

Plan recommendations for Washington Elementary School included enhanced crosswalks at East 21st Street across Brooklyn Drive to the school and a re-designed north parent pick-up/drop-off parking lot including signage, striping, and a new sidewalk to encourage parents to pick-up and drop-off their students in the northeast portion of the parking lot.

High visibility “zebra” crosswalks are present East 21st Street crossing both 12th Avenue East and Brooklyn Drive (on the south side of East 21st Street), although they are beginning to wear. New pedestrian ramps with truncated domes are also present in these locations as well. The pick-up/drop-off parking lot is now configured as the plan recommended, although capacity issues in the lot necessitate parents parking on Brooklyn Drive.

LINCOLN ELEMENTARY SCHOOL

Plan recommendations for Lincoln Elementary school included switching the locations of bus and parent pick-up/drop-off and enhancing the crosswalks at the intersection of 11th Avenue East and East 21st Street, which sees high amounts of pedestrian and bicycle traffic.

Zebra crosswalks are currently present at 11th Avenue East and East 21st Street, although they are worn and difficult to see. The bus loading/unloading area is now on the east side of Lincoln Elementary School, and the parent pick-up/drop-off location is now on the west side of the school in the main parking lot.

HIBBING HIGH SCHOOL

Plan recommendations for Hibbing High School included enhanced visibility crosswalks at East 21st Street and 7th Avenue East, East 22nd Street and 7th Avenue East, and East 23rd Street and 6th Avenue East. Additional recommendations included pedestrian crossing signs in the street and an enhanced crosswalk at the mid-block crossing at East 21st Street and 8th Avenue East; clearing designating the bus loading/unloading zone on 7th and 9th Avenues by re-striping the curb and replacing signs; and encouraging remote parent pick-up/drop-off on East 23rd Street near the student parking lot.

High visibility zebra crosswalks have been added in many locations, but they are worn and faded. No in-street pedestrian crossing signs are present, and parent pick-up/drop-off is not taking place on East 23rd Street by the student parking lot.

School District Re-Pavement Program

The Hibbing School District, in strong partnership with the City of Hibbing, has an annual sidewalk replacement program for strategic replacement of sidewalks connecting to its schools. Table 3.3 below depicts the current 10-year improvement plan, including approximate year district expenditures for strategic sidewalk replacement around the schools. In each fiscal year, the City of Hibbing provided matching funds to support improvement efforts.

Table 3.3: School District Re-Pavement Program Expenditures

Fiscal Year	Improvement	Approximate Cost Paid by ISD 701
2017	East Lincoln Parking Lot area, West Washington Parking Lot area	\$20,000
2016	South Lincoln Football Practice Field walks	\$16,000
2015	Greenhaven 37th Street walk near school site	\$15,000
2014	Greenhaven School West sidewalks near the receiving entrance	\$14,000
2013	Lincoln Bus Loading site sidewalks	\$18,000
2012	Greenhaven School North sidewalks near parking lot and playground	\$21,000
2011	Hibbing High School 9th Ave sidewalks	\$13,000
2010	Hibbing High School Front Entrance public sidewalks	\$19,000
2009	Hibbing High School 7th Ave sidewalks	\$26,000
2008	Lincoln North sidewalk on 23rd street	\$11,000

Infrastructure Maintenance

City residents handle the clearing of snow in front of private residences within the city, including on those sidewalks close to the focus schools. The city handles street snow plowing and maintenance, while the school district clears snow and ice from sidewalks adjacent to schools. In a recent survey of school parents, respondents indicated that city maintenance crews are often present plowing streets near Hibbing schools during school arrival times, causing potential conflicts with arriving students. To the extent possible, streets and sidewalks near schools should be prioritized near schools so that snow and ice are cleared before peak travel times.

City of Hibbing Comprehensive Plan

The City of Hibbing, in an effort to plan a safe and efficient transportation system, developed the 2003 Comprehensive Transportation Plan with five goals. While these goals address all modes of transportation used in Hibbing, Goal 2, to provide safe facilities for pedestrians, bicyclist and other non-motorized traffic, especially near schools, stores, and trails has direct impact on safe routes to schools.

The plan calls for a study of the 25th Street pedestrian crossing of Highway 169, east of Lincoln Elementary School, Washington Elementary, Hibbing High School, and Assumption Catholic School. This intersection was cited as a safety concern through the outreach done in support of this project. MnDOT recently installed new pedestrian-activated push buttons at cross streets of U.S. Highway 169 within the core of Hibbing, such as at East 21st and East 23rd Streets. Additionally, the development of a five-year plan for sidewalk maintenance plan provides opportunities for the school district to coordinate with the city to maintain quality pedestrian facilities adjacent to the schools.

City of Hibbing Ordinances

Review of City of Hibbing ordinances discovered multiple ordinances which relate to transportation to schools in the area. A list of the relevant ordinances and a brief summary of each is listed below.

- ▶ Section 7.12 School Patrols: Upon recommendation from the Superintendent of the School District, or the Principal of each school, persons from and among the students attending the schools can be appointed as school patrol officers. This school patrol officers have the same powers as any police officer to regulate traffic in the vicinity of the school they are associated with.
- ▶ Section 8.04 Bicycles:
 - ▶ Subd. 4.A: Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable.
 - ▶ Subd. 4.B: Persons riding on roadways shall ride single file except on paths or parts set aside for exclusive use of bicycles.
 - ▶ Subd. 5: When riding a bicycle on the sidewalk, the pedestrian has right-of-way. Prior to passing or overtaking, an audible signal must be given by the person riding the bicycle.

Capital Improvements Plans

CITY OF HIBBING

The City of Hibbing uses two systems for completing capital improvement projects. For pavement rehabilitation, a five-year capital improvement plan (CIP) is maintained which sets forth the next five-years of city street paving projects, not including pedestrian ramps, bike route construction or sidewalk construction. Construction or repair of sidewalks is completed based on petitions received from citizens. The city requires a 50 percent contribution of project costs from citizens petitioning for the repair or construction of the sidewalk, while the city pays the remaining 50 percent.

The existing five-year CIP includes two roadway maintenance projects adjacent to Hibbing Schools. The paving of 24th Street from 8th Avenue East to 11th Avenue East is adjacent to Assumption Catholic School and Lincoln Elementary School. The 9th Ave repaving from 23rd Street to 25th Street is adjacent to Hibbing High School and Assumption Catholic School.

ST. LOUIS COUNTY

St. Louis County maintains a five-year capital improvement project for roads, bridges, and buildings within the St. Louis County right-of-way. Review of the current CIP shows no funds being allocated for project affecting the road network within the City of Hibbing.

MINNESOTA DEPARTMENT OF TRANSPORTATION

The State Transportation Improvement Plan (STIP), the State of Minnesota's five-year capital improvement plan, last updated for 2016-2019, provides statewide budget and fiscal planning for transportation and infrastructure projects. The City of Hibbing has been included in the STIP for multiple projects over the next five years. In fiscal year 2016 (FY2016), the STIP calls for the purchase of two buses for the City of Hibbing (#TRRS-0022-16). Additionally, the plan calls for the construction of a roundabout at the junction of TH 37 and US 169 (FY17, #088070048).

Existing Conditions Infrastructure Analysis

Introduction

This section includes a description of existing infrastructure conditions around the subject schools in Hibbing: what is present, its location, its assets, and its deficiencies. Summary and analysis of existing conditions is presented in two district sub-sections. First a summary of the planning analysis was done, which focuses on network connectivity. Second, an engineering analysis is presented, focusing on a quantifiable and standards-based assessment of the operations, efficiency, safety, and compliance of the existing infrastructure and local transportation network.

A standards-based and technical engineering analysis was incorporated into this SRTS plan to determine its usefulness in adding more rigorous justification to plan recommendations. In order to distinguish between the two sets of analysis, they are presented in two distinct sub-sections here. Please see Appendix 1 for general insight and best practices for incorporating engineering into Safe Routes to School plans.

Greenhaven Elementary School

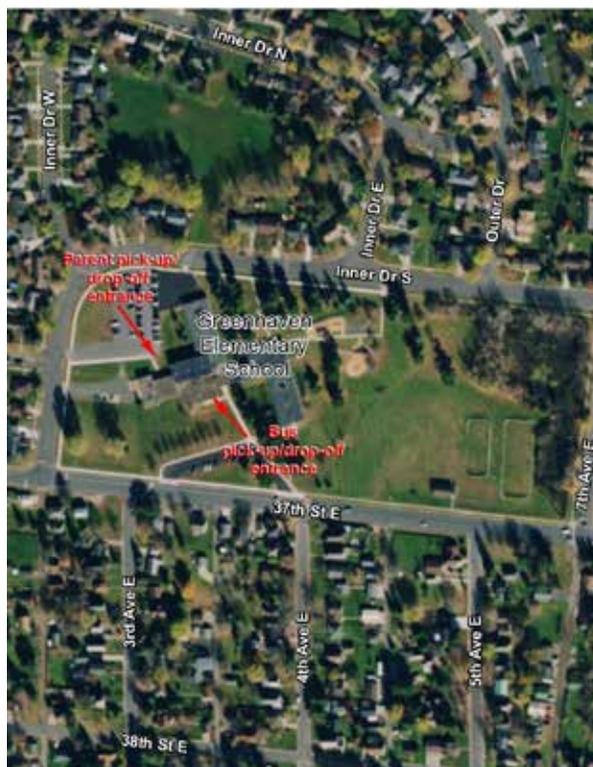
TRAVEL TO AND FROM SCHOOL

Five vehicle ingress/egress locations exist for Greenhaven Elementary on East 37th Street and South Inner Drive serving the south parking lot and bus pick-up/drop-off area, and the west parking lots.

WALKING AND BIKING

The sidewalk network is incomplete in some locations around the school. No students were observed walking or biking from school during a recent observation of school dismissal.

Figure 3.4 presents a sidewalk inventory in the area around Greenhaven Elementary and **Figure 3.5** displays identified priority intersections and observed walking routes to school.



Greenhaven Elementary School

BUSING

Drop-off begins at 7:30 AM and classes begin at 8:00 am. Pick-up begins at 2:20 and the building is locked at 3:00 pm. School policy requires that all students travel to and from school by bus, unless a parent has provided a ride to and from school. No school safety patrols are provided.

The bus pick-up and drop-off area is in the parking lot south of the school. Buses enter the one-way pick-up/drop-off area through the eastern driveway entrance, and exit through the western exit back on to East 37th Avenue. Buses line up sequentially in the pick-up/drop-off area based on their particular route. During a recent observation of dismissal, parked buses were observed queuing along East 37th Avenue and 3rd Avenue East, waiting to enter the pick-up/drop-off area in the correct order.

Students riding the bus enter and exit from the southern school door. A limited number of buses pick up and drop off students on the north side of the school along South Inner Drive with special transportation needs. During

a recent site observation, these buses were obstructing a marked crosswalk across South Inner Drive. In general, bus pick-up and drop-off at Greenhaven Elementary School is orderly and efficient.

PARENT PICK-UP/DROP-OFF

Parents pick-up and drop-off students in the parking lot northwest of the school building, pulling in to the one-way parking lot from the entrance west of the school building, and exiting to the north. Students exit the building from the cafeteria area. Parents are told by written instruction and signage not to park along the sidewalk immediately adjacent to the school exit, as this area is for immediate pick-up and drop-off only. No school officials were present outside in the lot itself monitoring pick-up at the time of observation.



The entrance to the student pick-up and drop-off parking lot off South Inner Drive is congested from parents parking vehicles on both sides during a recent observation of school dismissal, including adjacent to a marked no parking area. Some vehicles were also observed parking along South Inner Drive. At the time of observation, nearly all spaces in the parking lot were full.



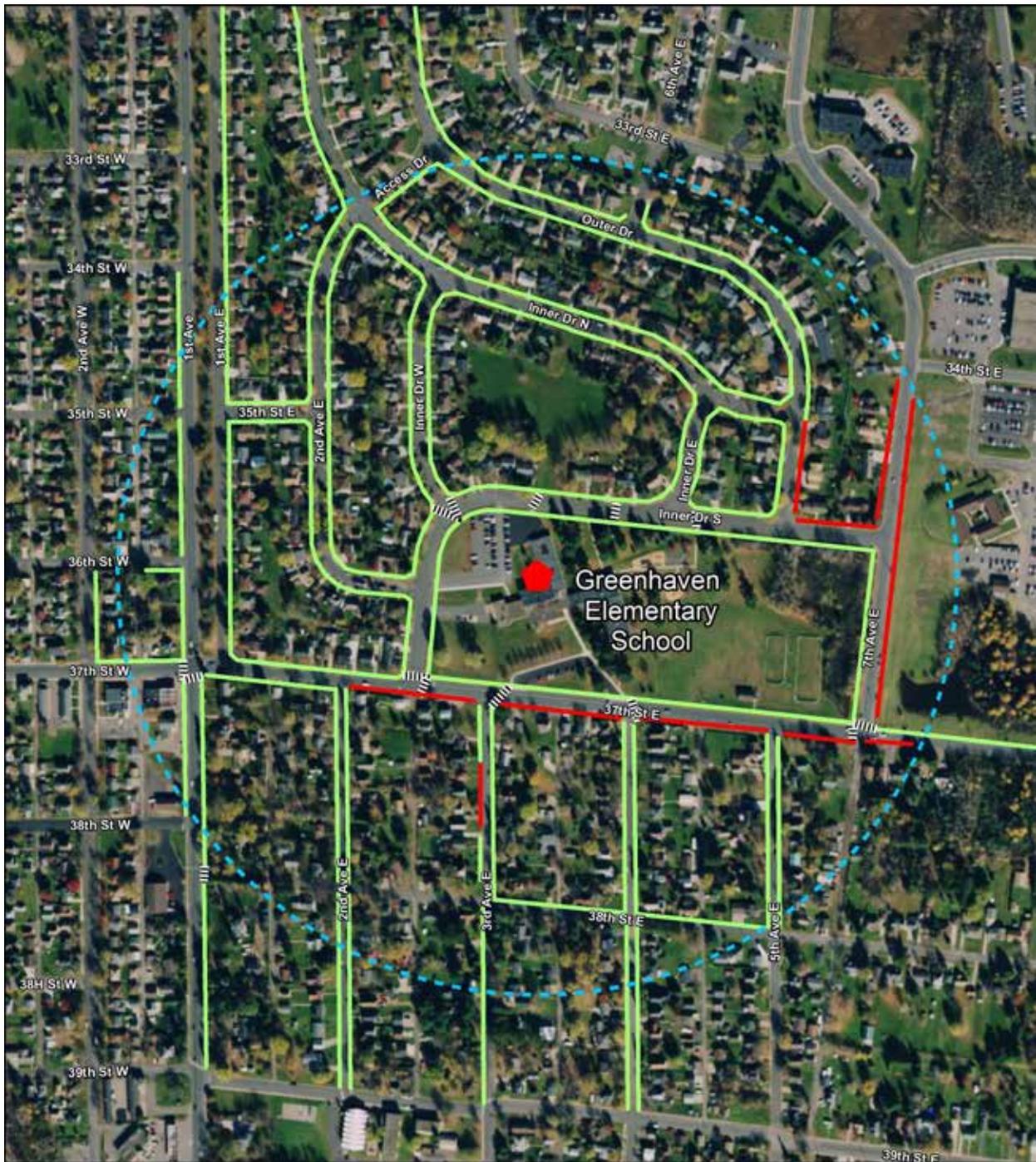
Pathways provide good circulation around the Greenhaven Elementary School campus, connecting to adjacent sidewalks.

Parents are supposed to park in designated parking spaces before going inside to get their children. Issues observed during observation of pick-up and drop-off operations include:

- ▶ During a recent observation of dismissal, parents were observed parking in the lot, well before dismissal, on both sides of the one-way entrance driveway from South Inner Drive and leaving their vehicles to pick-up students. This led to students and parents walking through these parked vehicles to access their own vehicles.
- ▶ Vehicles were observed parked on South Inner Drive and exiting their vehicles to pick-up children.
- ▶ Nearly all of the spaces in the lot were full, indicating that the lot and circulation space are not sufficient for peak dismissal pick-up demand.

In a recent survey of school parents, several respondents indicated the need for better enforcement of parking and pick-up and drop-off rules to provide a safer and better organized lot.

A more detailed description of the pick-up and drop-off area at Greenhaven Elementary School, including recommendations for improving the function and efficiency of operations, is included in Section 4.



Sidewalks and Crosswalks Near Greenhaven Elementary School

-  School
-  1/4 Mile Buffer
-  Crosswalks
-  Sidewalk Locations
-  Gaps in the Sidewalk Network

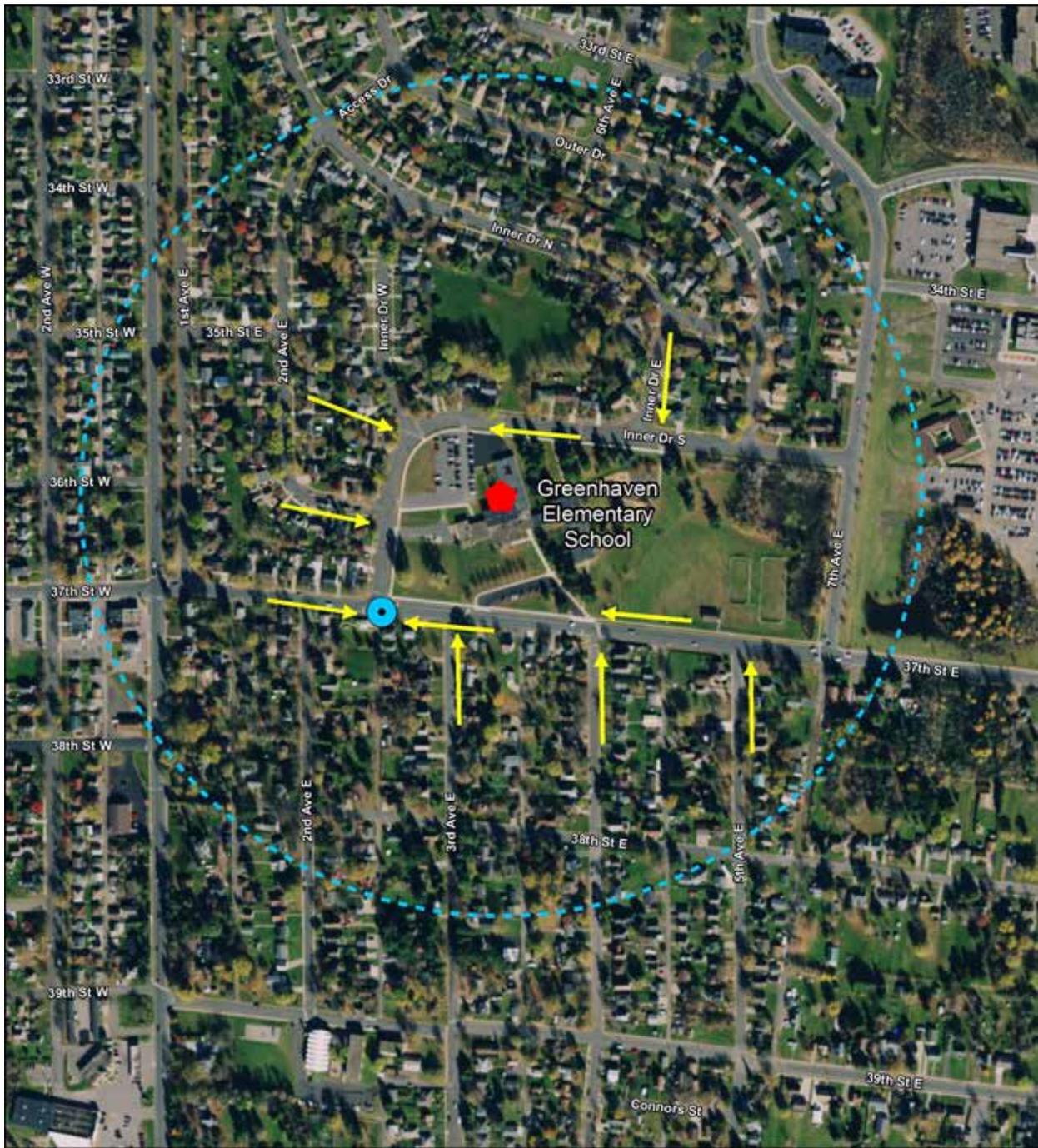


0 250 500 Feet

Note: Existing crosswalks are shown adjacent to the school on primary routes to school.

3.4. Sidewalks and Crosswalks Around Greenhaven Elementary School

3. SUMMARY AND ANALYSIS OF EXISTING CONDITIONS



Priority Intersections and Locations Near Greenhaven Elementary School

-  Identified Priority Intersections
-  School
-  1/4 Mile Buffer
-  Primary Walking Routes to School



Note: Existing crosswalks are shown adjacent to the school on primary routes to school.

3.5. Identified Priority Intersections and Routes to School Around Greenhaven Elementary

Washington Elementary School, Lincoln Elementary School, Hibbing High School, and Assumption Catholic School

TRAVEL TO AND FROM SCHOOL

The section below summarizes observations and findings related to how students get to and from Washington Elementary, Lincoln Elementary, Hibbing High, and Assumption Catholic Schools.

Washington Elementary School

Five vehicle ingress/egress locations exist for Washington Elementary on Brooklyn Drive serving the south and north parking lots, as well as the bus pick-up/drop-off area.



Washington Elementary School



Sidewalks on East 21st Street leading up to Washington Elementary School are incomplete in some locations.

WALKING AND BIKING

The sidewalk network is incomplete in some locations around the schools. No students were observed walking and biking to school during a recent site observation.

Figure 3.6 presents a sidewalk inventory in the area around Washington Elementary and **Figure 3.7** displays identified priority intersections and observed walking routes to school.

BUSING

Drop-off begins at 7:30 AM and classes begin at 8:00 am. Parent Pick-up begins at 2:20 and the building is locked at 3:00 pm. School policy requires that all students travel to and from school by bus, unless a parent has provided a ride to and from school.

Buses pick-up and drop-off students in the one-way driveway area to the west of the school, entering in from the south and exiting to the north to and from 12th Avenue/Brooklyn Drive. Students riding the bus enter and exit the school from the west doors. Bus pick-up during dismissal was observed to be orderly and efficient.

PARENT PICK-UP/DROP-OFF

Parent pick-up and drop-off occurs in the lot immediately to the north of the school building. Parents are encouraged to pull in the one-way driveway from the southern entrance off of Brooklyn Drive and park their cars to drop-off and pick-up students. Vehicles must then exit from the northern egress driveway back on to Brooklyn Drive. Parking is prohibited inside and along the side of the parking driveway entrance adjacent to the school.

Parking space within the lot is limited. During an observation of dismissal, the lot was filled to capacity and vehicles were observed parked along the east (northbound) and west (southbound) sides of Brooklyn Drive in front of the school. Numerous students were observed crossing Brooklyn Drive to access vehicles parked on the west side of the street.

A more detailed description of the pick-up and drop-off area at Washington Elementary School, including recommendations for improving the function and efficiency of operations, is included in Section 4.



The north parking lot at Washington Elementary School near Brooklyn Drive and East 21st Street becomes congested during arrival and dismissal. Parents can be observed parking on the west side of Brooklyn Drive opposite the school and crossing the road at unmarked locations to return to their vehicles.

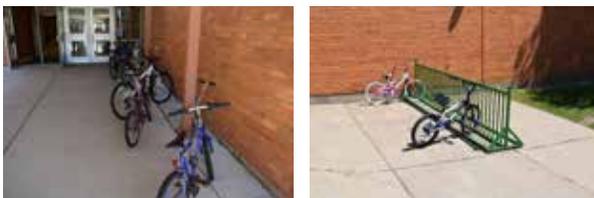
Lincoln Elementary School



Lincoln Elementary School

WALKING AND BIKING

Bicycle racks are provided outside of the main office doors. Crossing guards are provided at cross walks to assist with students walking to school. Rollerblades, scooters, and skateboards are strongly discouraged by school policy, as the school indicates there is not enough room to properly secure them from loss or theft. During a recent observation of school dismissal, a significant number of students were observed walking and biking from the northwest corner of the school through the intersection of 23rd Street and 11th Avenue.



A single uncovered bike rack is present on the west side of Lincoln Elementary. Most of bikes are parked under the awning near the west entrance.



Students walk north along 11th Avenue East (above) and East 23rd (below) with the assistance of student crossing guards.

About 2/3 of the approximately 100 students observed walking and biking through this intersection traveled west on 23rd Street, while about 1/3 traveled north on 11th Avenue.

Figure 3.6 presents a sidewalk inventory in the area around Lincoln Elementary and **Figure 3.7** displays identified priority intersections and observed walking routes to school.

BUSING

Buses pick-up and drop-off students along 11th Avenue to the west side of the school building. Operations were observed to be orderly during a recent observation of school dismissal.

PARENT PICK-UP/DROP-OFF

Doors open at 7:30 am and school operates between 8:05 am and 2:20 pm. The school doors are locked at 3:00 pm. Pick-up and drop-off occurs in the primary school parking lot east of the school building. Parents are advised to either park in the lot and walk into the school to meet their student or pull all the way into the lot toward the Brooklyn Drive exit instead of queueing along the curb closest to the school.

Vehicles pull into the one-way lot from 23rd Street and exit off Brooklyn Drive. During an observation of school dismissal, vehicles were observed parking along the curb closest to the school, which is marked as a no parking zone. This causes congestion at the parking lot entrance.



Vehicles park near the entrance to the Lincoln Elementary School parking lot off of East 23rd Street. At the time of this photo, there was room at the front of the line for vehicles to pull forward, and there were available spaces in the parking lot.

entrance, and backing up of traffic on to 23rd Street, which was observed at the time of the conducted site audit.

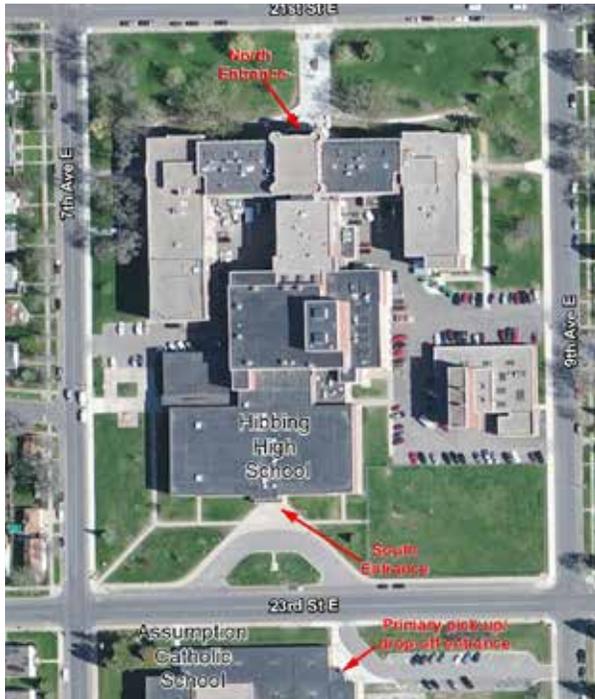
According to discussions with school officials who supervise parking lot operations during arrival and dismissal, parents often park near the entrance to the parking lot along the curb and wait in their vehicles for their students.

Other issues either observed or discussed to be occurring during pick-up and drop-off operations include:

- ▶ Double stacking of cars and stopping in the middle of the driving lane were reported in parent comments, which suggested traffic enforcement to correct the issue
- ▶ Vehicles parking along Brooklyn Drive east of the school to pick-up and drop-off students.
- ▶ Some comments indicated that there is a conflict in the parking lot between cars doing pick-up/drop-off and staff trying to cross from parked cars to the school.

A more detailed description of the pick-up and drop-off area at Lincoln Elementary School, including recommendations for improving the function and efficiency of operations, is included in Section 4.

Hibbing High School and Assumption Catholic School



Hibbing High School, Assumption Catholic School

WALKING AND BIKING

Students walk and bike to the high school from different locations throughout the surrounding area. During a recent observation, students were observed walking from the north along 7th Avenue and 9th Avenue North toward the high school. A significant number of students walk from the Memorial Building parking lot, across the intersection of East 23rd Street and 7th Avenue North, to the high school. High school students are required to park in the Memorial Building lot. Numerous students cross East 23rd Street mid-block between 7th Avenue North and 9th Avenue north between Assumption Catholic School and Hibbing High School. This location is unmarked and is adjacent to the entrance to the Assumption Catholic School parking lot and the Hibbing High School bus drop-off area. Bicycle racks are provided outside of the main office doors. On a recent site observation, there was only one bicycle in the bicycle rack.



A few bicycles are parked in a bicycle rack at Hibbing High School.



Students cross the intersection of East 23rd Street and 7th Avenue North from the Memorial Building parking lot.



A student crosses East 21st Street after being dropped off opposite of Hibbing High School.

Figure 3.6 presents a sidewalk inventory in the area around these schools and **Figure 3.7** displays identified priority intersections and observed walking routes.

BUSING

Buses use 7th Avenue North, 9th Avenue North (for handicap-accessible buses), the “anchor” bus turn-around on the south side of Hibbing High School (as needed), and the south side of East 23rd Street in front of Assumption Catholic School to conduct pick-up and drop-off operations.

STUDENTS DRIVING THEMSELVES

Students driving themselves and parking in the Hibbing City Memorial Building parking lot, located southwest of the school off of East 23rd Street, are then accessing the school building by crossing through the intersection of East 23rd Street and 7th Avenue East. This intersection sees heavy traffic volumes and congestion during arrival and dismissal times, and is a focus of this plan.

PARENT PICK-UP/DROP-OFF

Doors open at 7:00 am and school operates between 8:00 am and 2:40 pm. The school doors are locked at 3:00 pm. Parents pick-up and drop-off high school students in the one-way driveway south of the school as well as along the curb on all sides of the school



Students get off buses on 9th Avenue North.



Congestion at the intersection of East 23rd Street and 7th Avenue North.

building. For the high school, parents are instructed to conduct pick-up and drop off on East 21st Street in front of the high school. During a recent observation, parents were observed dropping off students along 7th Avenue North and 9th Avenue North, often away from the curb where curb space was not available to park. Some vehicles were observed dropping students off on the opposite side of the road as the high school.

At Assumption Catholic School, parents are advised to park in the lot to the north of the school if they are coming in to the building to greet their student. Significant congestion is present at the intersection to this parking lot with parents pulling in, vehicles using the high school “anchor” driveway, through traffic, and students attempting to cross the street in this location.

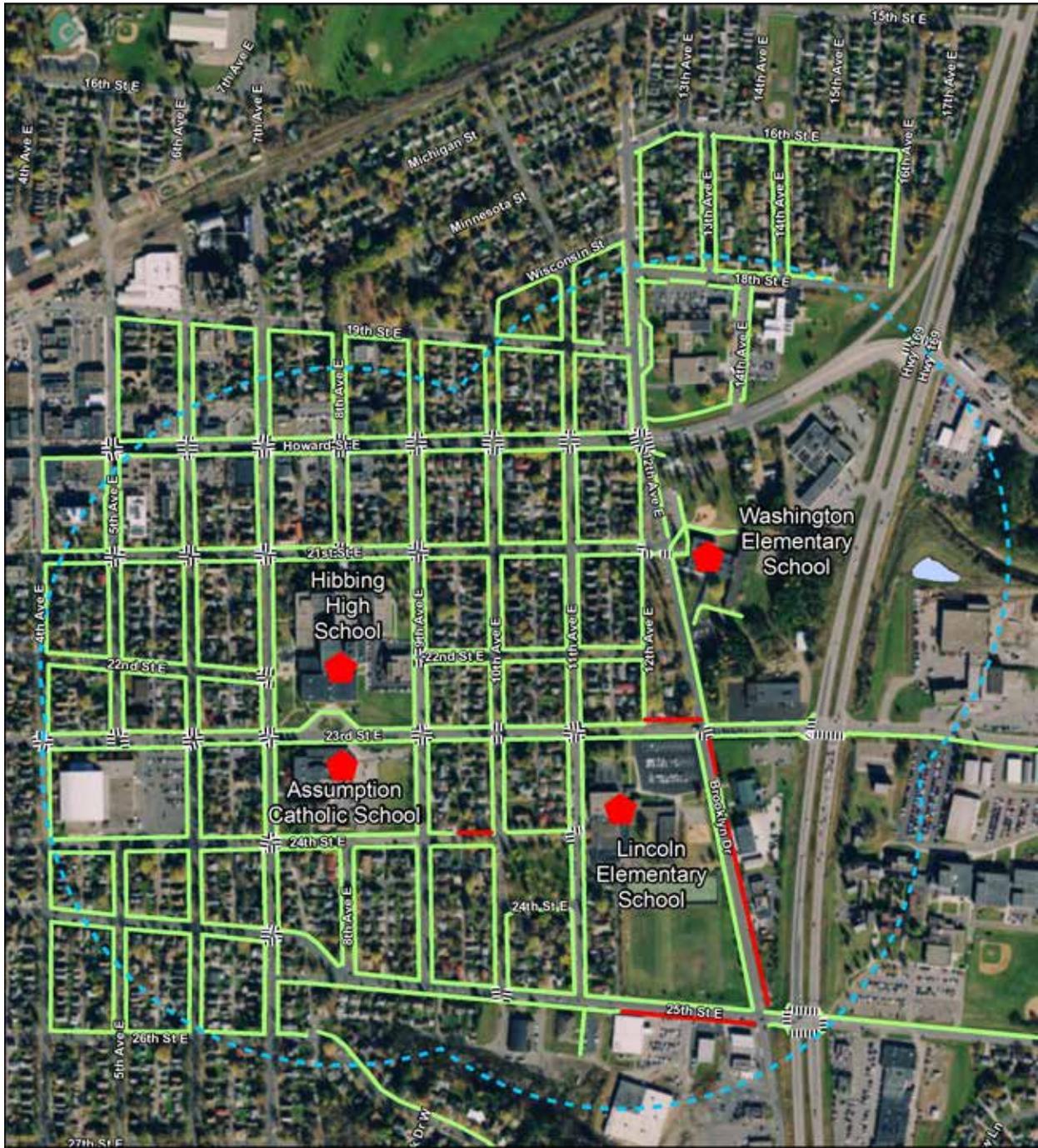
A more detailed description of the pick-up and drop-off area at Hibbing High School and Assumption Catholic School, including recommendations for improving the function and efficiency of operations, is included in Section 4.



Vehicles park along East 21st Street outside of the north entrance of Hibbing High School, making curbside drop-off here difficult.



Students are dropped off in the anchor along East 23rd Street.



**Sidewalks and Crosswalks
Near Lincoln, Washington, Assumption, and Hibbing High School**

-  School
-  1/4 Mile Buffer
-  Crosswalks
-  Sidewalk Locations
-  Gaps in the Sidewalk Network

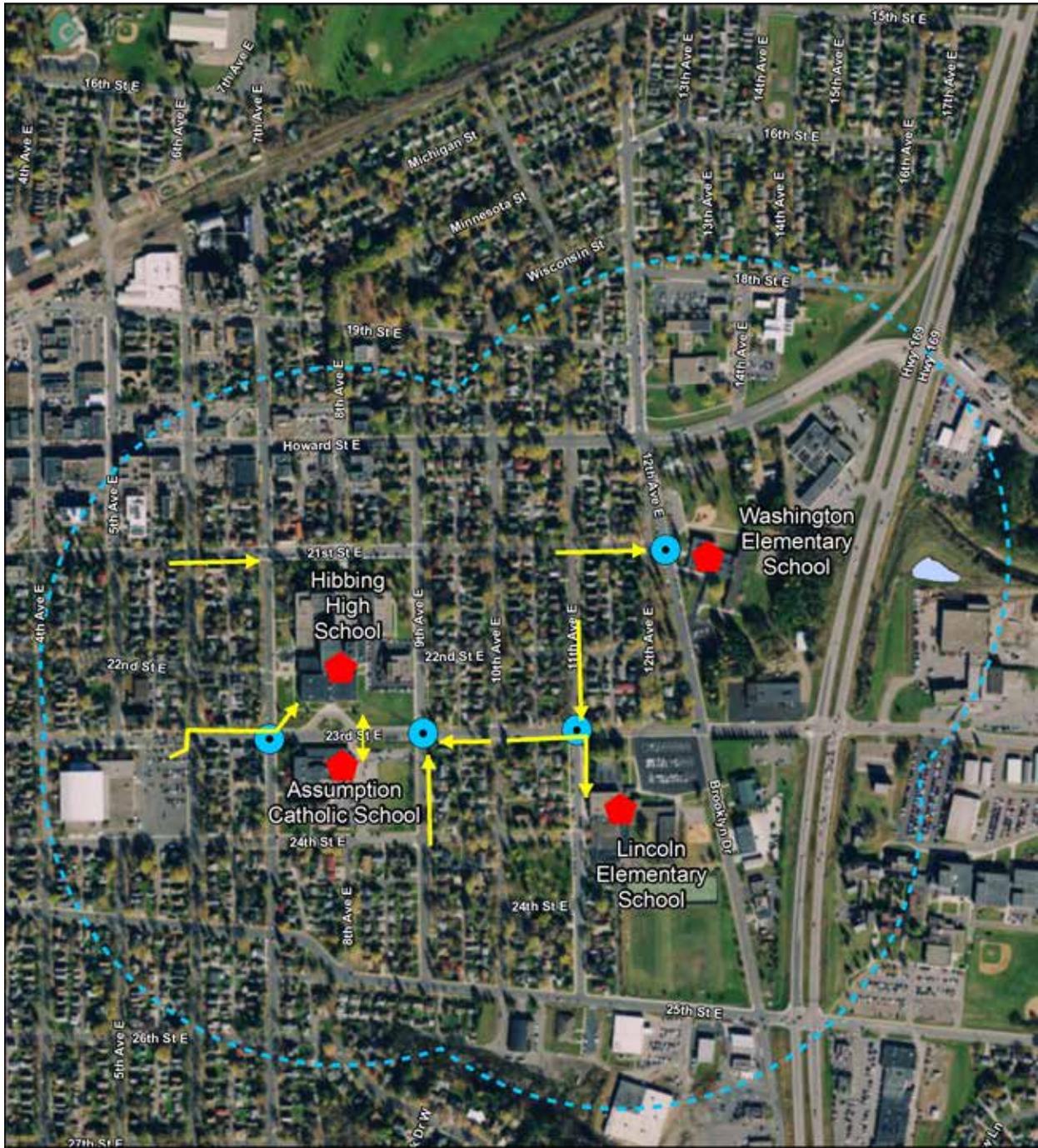


0 350 700 Feet



Note: Existing crosswalks are shown adjacent to the school on primary routes to school.

Figure 3.6: Sidewalks and Crosswalks Around Washington Elementary, Lincoln Elementary, Assumption Catholic School, and Hibbing High School



**Priority Intersections and Locations
Near Lincoln, Washington, Assumption, and Hibbing High School**

-  Identified Priority Intersections
-  School
-  1/4 Mile Buffer
-  Primary Walking Routes to School



0 350 700 Feet



Note: Existing crosswalks are shown adjacent to the school on primary routes to school.

Figure 3.7: Identified Priority Intersections and Routes to School Around Washington Elementary, Lincoln Elementary, Assumption Catholic School, and Hibbing High School

Incorporating Engineering Analysis in Safe Routes to School

Introduction

This plan integrates engineering analysis into the evaluation of physical infrastructure in Hibbing to provide rigor to the assessment of existing conditions and greater justification and assurance to the operations, function, and benefits of proposed improvements.

This section summarizes the engineering analysis, including the process and findings, conducted in Hibbing.

Existing Conditions Engineering Analysis in Hibbing

PROCESS

This engineering analysis conducted provided a set of baseline conditions around the five focus schools of this Safe Routes to School Plan. The review of existing conditions focused on the following frameworks:

- ▶ Around the school
- ▶ Along the route
- ▶ Crossing the street
- ▶ Traffic speeds and compliance

The process conducted was informed by numerous standards of practice, including those of the Federal Highway Administration, National Association of City Transportation Officials, Institute of Transportation Engineers, United States Access Board, Manual on Uniform Traffic Control Devices. The fundamentals included *Pedestrian Crossings: Uncontrolled Locations*, from the Minnesota Local Technical Assistance Program, Minnesota Department of Transportation, and the University of Minnesota Center for Transportation Studies.

The process conducted for Hibbing was customized to the city's context and needs, as well as to the type and availability of data.

Guidance on incorporating engineering analysis into Safe Routes to School plans in general is available in Appendix 1. The process and results summarized below inform the recommendations included in the next section.

Specifically, engineering analysis of existing conditions included the following steps:

1. Field review of the multi-modal transportation network, including:

- ▶ Intersection control and lane configurations at major adjacent intersections
- ▶ Posted speed of major adjacent roadways
- ▶ Presence of sidewalks, trails, on-street bike paths, curb ramps
- ▶ Intersection sight distance and visibility for motor vehicles and pedestrians
- ▶ Turning movements, lane widths, presence of congestion
- ▶ Locations of crossing guards during drop-off and pick-up times

2. Data analysis, including:

- ▶ Use of Miovision cameras to collect vehicle, pedestrian, and bicycle turning movement data during the peak periods of school drop-off and pick-up at priority intersections
- ▶ Collection and analysis of traffic volume data of adjacent roadways
- ▶ Review and analyze historical crash data for the previous ten-year period along major adjacent roadways and intersections

3. Intersection capacity and geometry analysis, including:

- ▶ Analysis of priority adjacent intersections using Synchro or HCS software, including reporting of movement delay and level of service (LOS)
- ▶ Reviewing lane width, available pavement width, and turning radii
- ▶ Reviewing warrants for increased/decreased intersection control (all-way stop, signal, etc.)

4. Sign inventory and pavement marking review, including:

- ▶ Documenting existing signage along the major adjacent roadways and intersections
- ▶ Documenting existing pavement markings, including crosswalks, along the major adjacent roadways and intersections
- ▶ Reviewing compliance per MN-MUTCD standards

5. Review of school circulation and drop-off/pick-up operations, including:

- ▶ Reviewing entry and exit points for school parking lots
- ▶ Observing drop-off and pick-up operations and noting any deficiencies in vehicle storage, vehicle dwell times, and vehicle queuing at turning locations

1. Field Review of the Multi-Modal Network

Field observations were performed to get an understanding of the existing roadway, pedestrian, and bicycle networks that serve the schools.

Through discussion with city, county, and school staff, as well as engagement with parents and the school community, several critical roadways and intersections were chosen as necessitating further analysis. These roadways and intersections experience a heavy mix of vehicle, pedestrian, and bicycle traffic and are often uncomfortable for those walking and biking. These roadways include East 23rd Street, Brooklyn Drive, and East 37th Avenue. Along these roadways, the following critical intersections were identified needing further analysis:

- ▶ East 23rd Street & 7th Avenue East (High School/Assumption Catholic School)
- ▶ East 23rd Street & 9th Avenue East (High School/Assumption Catholic School)
- ▶ East 23rd Street & 11th Avenue East (Lincoln Elementary School)

- ▶ Brooklyn Drive & East 21st Street (Washington Elementary School)
- ▶ East 37th Avenue & Inner Drive (Greenhaven Elementary School)

The following provides a general description of the critical roadways:

- ▶ **East 23rd Street** – This roadway provides access to Hibbing High School, Assumption Catholic School, and Lincoln Elementary School. East 23rd Street is a two-way, two-lane undivided roadway that runs in an east-west direction through the northern part of the city. The posted speed along East 23rd Street is generally 30 mph. Near the public schools, school speed zones are posted at 15 mph while children are present. At 11th Avenue East, the intersection is two-way stop controlled (NB/SB), whereas the intersections with 9th Avenue East and 11th Avenue East are all-way stop controlled. On street parking is permitted between Business 169 and 7th Avenue East, as well as between 9th Avenue East and 11th Avenue East.
- ▶ **Brooklyn Drive** – This roadway provides access to Washington Elementary school. Brooklyn Drive is a two-way, two-lane undivided roadway that runs in a north-south direction in the northern part of the city. There are four-way stop controlled intersections at East 23rd Street and East 21st Street, and a traffic signal at East Howard Street (Business 169). The posted speed along East 23rd Street is generally 30 mph. Near the public schools, school speed zones are posted at 15 mph while children are present.
- ▶ **East 37th Street** – This roadway provides access to Greenhaven Elementary School. East 37th Street is a two-way two-lane undivided roadway the runs in an east-west direction. South Inner Drive is a two-lane two-way undivided roadway that runs in a north-south direction between East 37th Street and West Inner Drive, and an east-west direction between West Inner Drive and 7th Avenue East. The posted school speed limit is 15 mph while children are present. There are all-way stop-controlled

intersections along East 37th Street at South Inner Drive, 4th Avenue East, and 7th Avenue East.

Building on the observational inventory of the presence of sidewalks described earlier in this section, the routes, orientation, and

function of the sidewalk network adjacent to the focus schools were evaluated as a critical component to this plan's engineering analysis of infrastructure. A results from this analysis is provided in table 3.4 below.

Table 3.4: Sidewalk Analysis Summary

Issue	Location/Details
Missing ADA-accessible curb ramps obstructing crossing	<ul style="list-style-type: none"> ▶ West Inner Drive North of Greenhaven Elementary ▶ East 37th Street south of Greenhaven Elementary ▶ These locations are missing curb ramps, obstructing access from the street to the sidewalk.
Improper curb ramp orientation and features	<ul style="list-style-type: none"> ▶ The intersections of East 37th Street and West Inner Drive, as well as East 37th Street and 7th Avenue East near Greenhaven Elementary have diagonal curb ramps without proper truncated domes. Directional curb ramps provide more direct and perpendicular access for pedestrians across intersections.
Narrow sidewalks less than the standard recommended 6' width	<ul style="list-style-type: none"> ▶ 3rd Avenue East, 4th Avenue East, and 5th Avenue East south of Greenhaven Elementary
Gaps in sidewalk connectivity	<ul style="list-style-type: none"> ▶ North of East 23rd Street west of Brooklyn Drive connecting to west near Washington Elementary ▶ West side of Brooklyn Drive between Howard Street and East 23rd Street (west side) and between East 23rd Street and East 25th Street (east side) near Lincoln and Washington Elementary Schools ▶ East 37th Street (south side) south of Greenhaven Elementary School
Inadequate buffer zone	<ul style="list-style-type: none"> ▶ Sidewalks on the south side of East 23rd Street connecting Lincoln Elementary to Assumption Catholic School to the west lack the standard minimum 2 foot buffer between the sidewalk and roadway recommended by FHWA's sidewalk design guidelines. This buffer zone provides space for plantings, and winter snow storage, as well as provides some refuge for pedestrians from motor vehicles. This is especially critical for locations of high pedestrian and vehicle conflict, such as the entries to Lincoln Elementary and Assumption Catholic School.



Several concerns are evident in this image of the crossing of East 37th Street at 3rd Avenue East, immediately south of Greenhaven Elementary School. The oblique nature of the crossing increases the crossing distance for pedestrians, and proper ADA-accessible curb ramps are not present. Additionally, no sidewalk is present on either East 37th Street or 3rd Avenue east to connect pedestrians once they cross. Additionally, queuing buses seen in the background of the image obstruct visibility for pedestrians crossing in this location.



Several crosswalks around Greenhaven Elementary School, like this one crossing South Inner Drive, are not the recommended high-visibility marking and do not have proper curb cuts with ADA-accessible pedestrian ramps to access adjoining sidewalks.



Crossing guards near Lincoln Elementary.

2. Pavement Marking Review and Sign Inventory

AROUND GREENHAVEN ELEMENTARY

Pavement Markings

Standard two-bar crosswalks connect to the surrounding neighborhood to the north, west, and south at:

- ▶ South Inner Drive and East 37th Street southwest of the school
- ▶ South Inner Drive and West Inner Drive west of the school
- ▶ Along South Inner Drive north of the school
- ▶ East 37th Street and 7th Avenue East southeast of the school

Zebra crosswalks exist at East 37th Street and 7th Avenue East southeast of the school and crossing East 37th Street south of the school. These crosswalks are not optimal in type, placement, and configuration. Issues with these crosswalks include:

- ▶ Not the recommended high-visibility continental type
- ▶ Too numerous and placed seemingly at random, and are in need of consolidation to simplify pedestrian movements and increase motor vehicle understanding and compliance
- ▶ Placed at non-90 degree oblique angles, which increases the distance that pedestrians have to walk to cross the street
- ▶ Run into the curb face without curb cuts or ADA-accessible truncated dome curb ramps

Observation and results from a recent survey of school parents indicate poor yielding compliance from drivers at crosswalks surrounding Greenhaven Elementary School.

Signs and Signals

Several pentagon school signs (MN-MUTCD S1-1) and school crossing sign assemblies (MN-MUTCD S1-1 and W16-7P) designate marked crosswalks in the school area along East 37th Street and South Inner Drive. Additionally, Speed Limit 15 (MN-MUTCD R2-1) signs with school plaques (MN-MUTCD S4-3P) are present as well. Like crosswalks, the type and location of signs in the immediate vicinity of Greenhaven Elementary is inconsistent and excessive.

Intersections within the immediate vicinity of the school are stop controlled on all approaches. The intersection of 1st Avenue and East 37th Street within ¼ mile from Greenhaven Elementary is controlled by a traffic signal. Of particular concern is the intersection of East 37th Street and South Inner Drive southwest of the school. Wide vehicle travel lanes on East 37th Street exist, and vehicles do not always obey speed controls or properly stop for the stop sign in this location.

Figures 3.9 and 3.10 display existing pavement markings and signage around Greenhaven Elementary School.



Inconsistent pavement markings near Greenhaven Elementary School

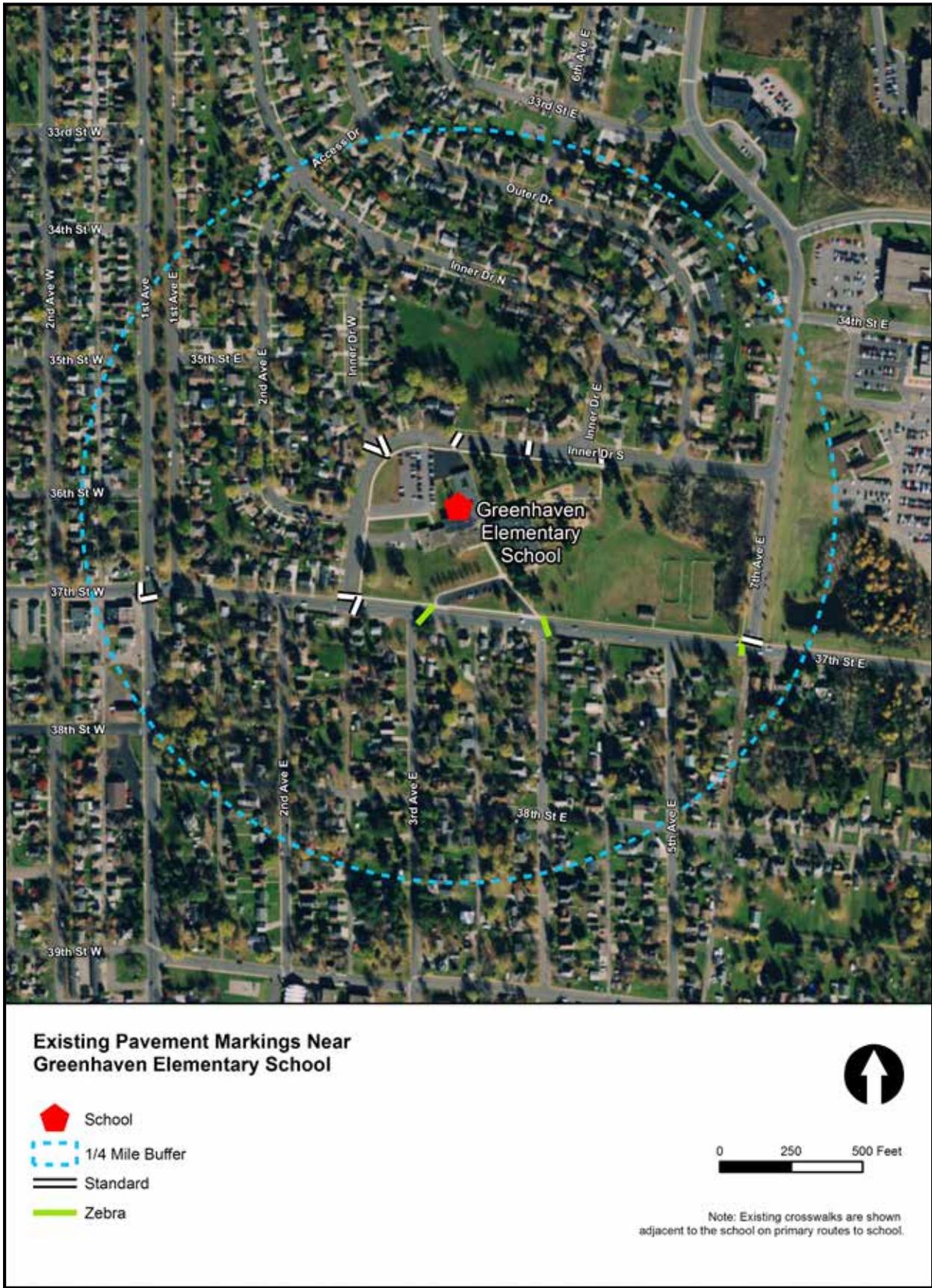


Figure 3.9: Existing Pavement Markings Near Greenhaven Elementary School.

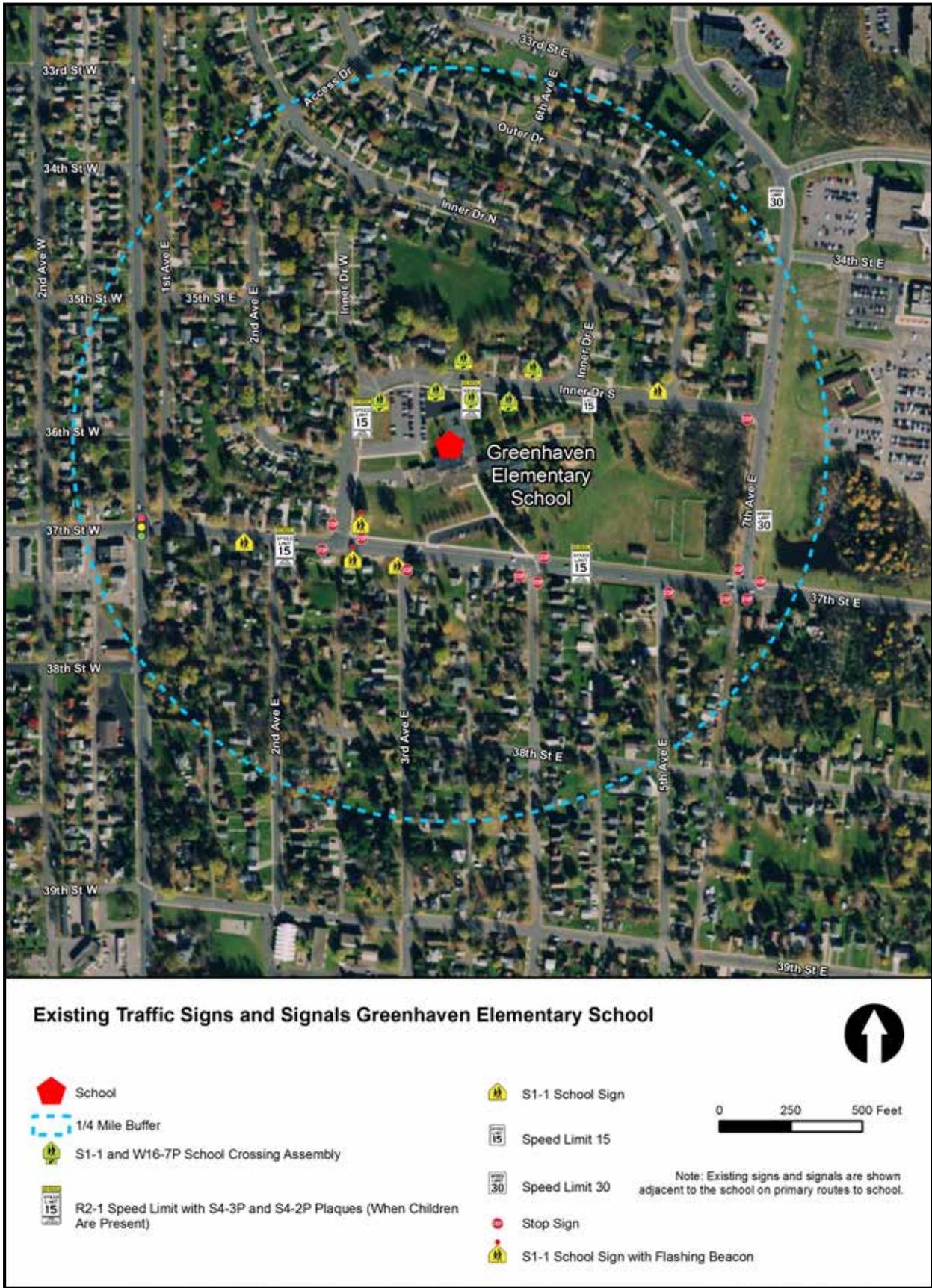


Figure 3.10: Existing Signage Around Greenhaven Elementary School

NEAR HIBBING HIGH SCHOOL, ASSUMPTION CATHOLIC SCHOOL, AND LINCOLN ELEMENTARY SCHOOL

Pavement Markings

Marked crosswalks exist at all intersections immediately adjacent to Hibbing High School and Assumption Catholic School. South of Assumption Catholic School, crosswalks are not present.

Marked crosswalks near Lincoln Elementary School exist at the intersection of E 24th St and 11th Ave on the north and west legs, at intersections along 23rd St, and at the intersection of 25th St and 10th Ave on the east and west legs.

These crosswalks are not optimal in type or configuration. Issues with these crosswalks include:

- ▶ Not the recommended high-visibility continental type
- ▶ ADA-compliant curb ramps and truncated domes are not present

At the critical intersections, there is currently crosswalk striping provided; however, the majority of the crossings appear to be worn and weathered. Also, the type of pavement markings used is inconsistent between the multiple roadways and intersections.



Curbs ramps provided at East 23rd St & 9th Ave. (above) and East 23rd St & 7th Ave. (below).



Worn markings at East 23rd Street & 11th Ave. (above) and East 23rd Street & 9th Ave. (below).

Signs and Signals

All-way stop controls exist at all of the corner intersections surrounding Hibbing High School and Assumption Catholic School.

The surrounding intersections around Lincoln Elementary School are all-way stop controlled, with driveway to the school being uncontrolled. The intersection of East 23rd and 25th Streets with the Beltline are the only signalized intersections in the area. Figure 3.11 displays pavement markings and signage around these schools.

Figures 3.11 and 3.12 display existing pavement markings and signage around Washington Elementary, Lincoln Elementary, Assumption Catholic School, and Hibbing High School.

NEAR WASHINGTON ELEMENTARY SCHOOL

Pavement Markings

Marked pedestrian cross-walks exist on all four legs of every Howard Street intersection near Washington Elementary School. Crosswalk connections leading to the school are missing on the following legs of these intersections: the north leg of 21st Street/Brooklyn Drive, all legs of 22nd Street/Brooklyn Drive, north and west legs of 23rd Street/Brooklyn Drive.

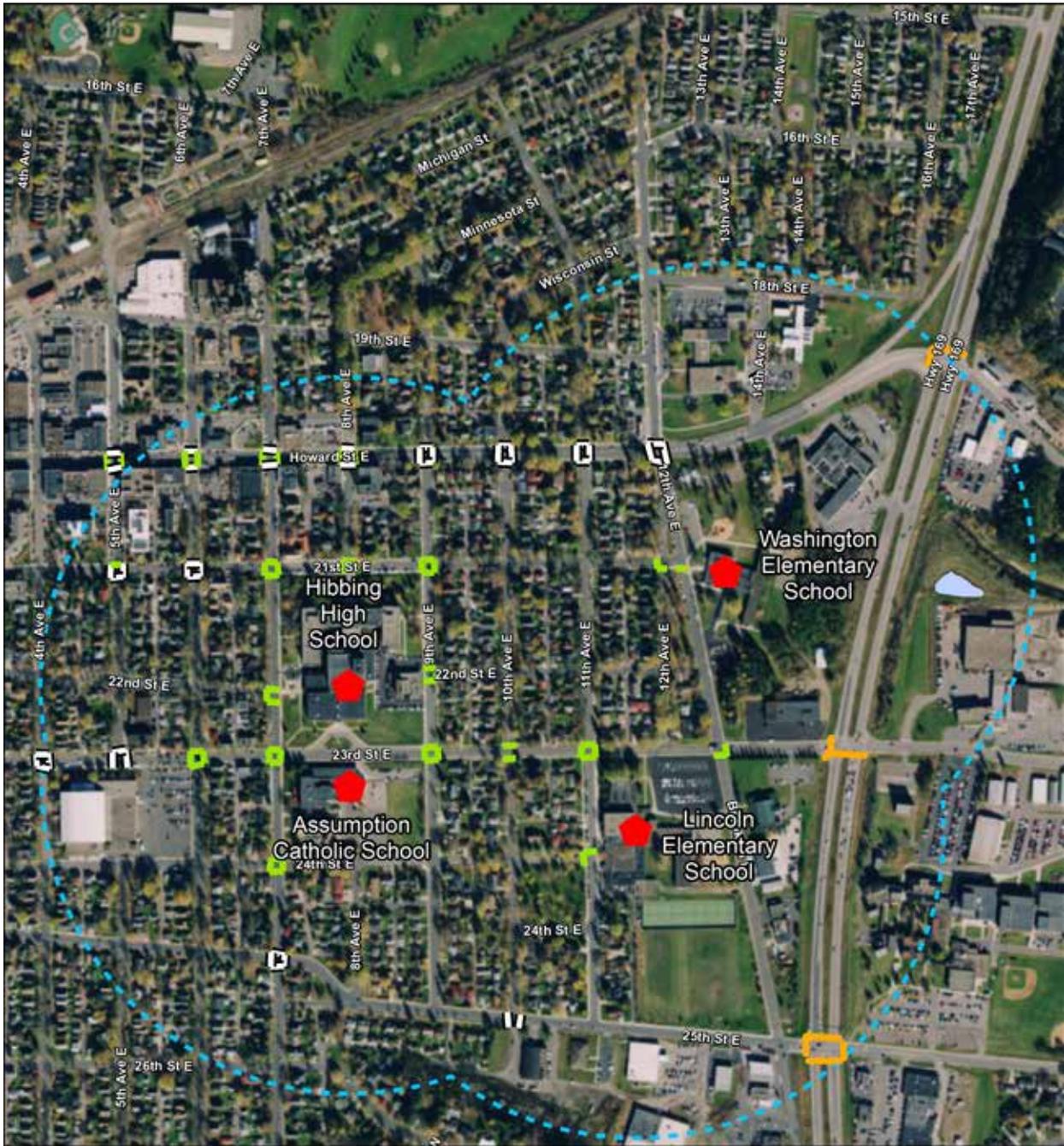
Signs and Signals

The intersection of East 21st Street and Brooklyn Drive is all-way stop controlled. Signals are present at Howard Street and 12th Avenue East and East 23rd Street and U.S. Highway 169 adjacent to the school campus. All intersections surrounding Washington Elementary School are stop controlled with the exception of the signalized intersection of 23rd Street and the Beltline. School zone signs are located on Brooklyn Drive near the intersections of Brooklyn Drive/21st Street and Brooklyn Drive/23rd Street.

Figures 3.11 and 3.12 display existing pavement markings and signage around Washington Elementary, Lincoln Elementary, Assumption Catholic School, and Hibbing High School.



The Minnesota Manual on Uniform Traffic Control Devices was used as the standard in evaluating signs and signals in Hibbing.



**Existing Pavement Markings Near
Near Lincoln, Washington, Assumption, and Hibbing High School**

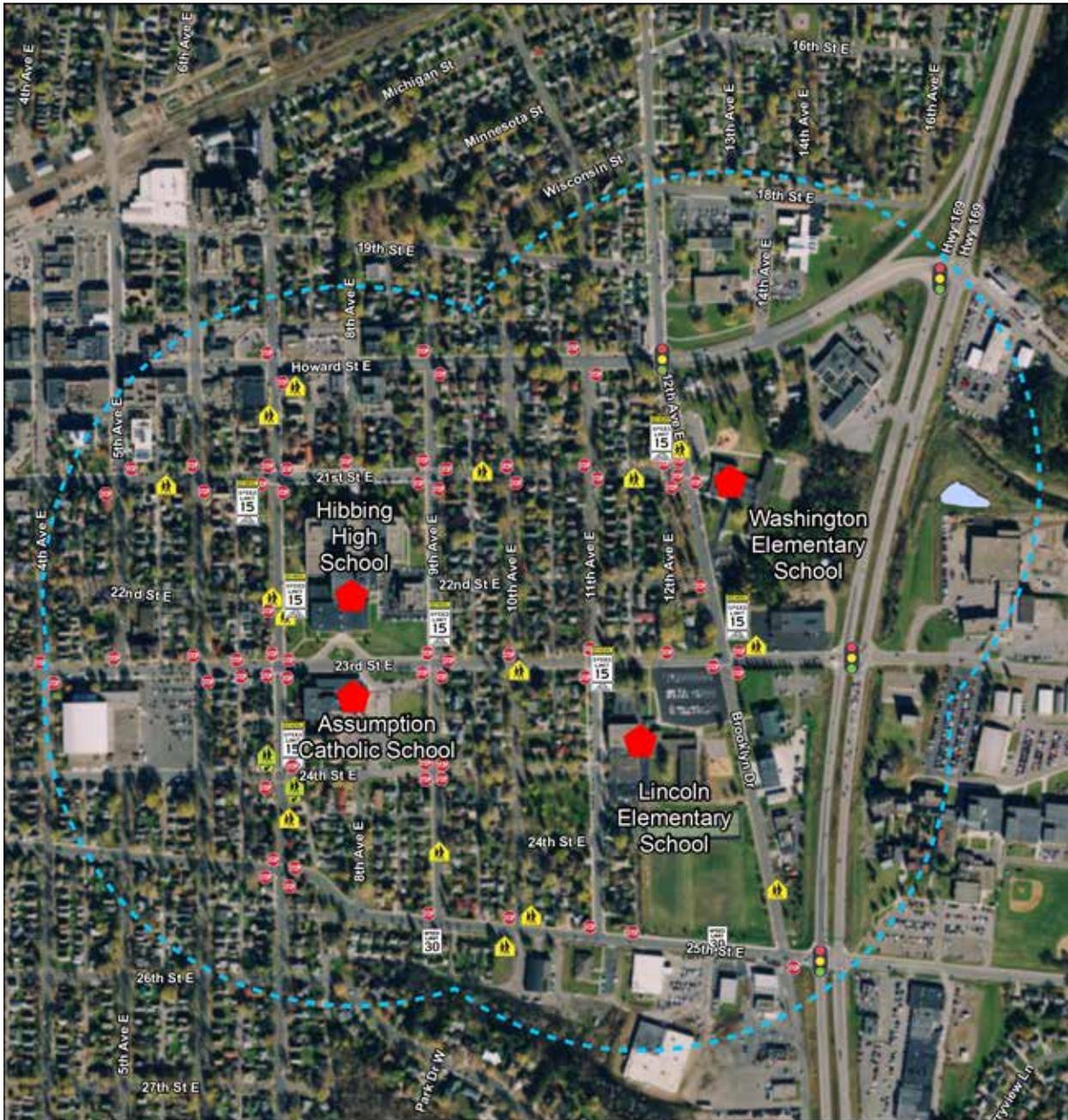
-  School
-  1/4 Mile Buffer
-  Continental
-  Standard
-  Zebra



0 350 700 Feet

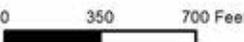
Note: Existing crosswalks are shown adjacent to the school on primary routes to school.

Figure 3.11: Existing Pavement Markings Near Washington Elementary School, Lincoln Elementary School, Hibbing High School, and Assumption Catholic School



**Existing Traffic Signs and Signals
Near Lincoln, Washington, Assumption, and Hibbing High School**

-  School
 -  1/4 Mile Buffer
 -  S1-1 and W16-7P School Crossing Assembly
 -  R2-1 Speed Limit with S4-3P and S4-2P Plaques (When Children Are Present)
 -  S1-1 School Sign
 -  Speed Limit 15
 -  Speed Limit 30
 -  Stop Sign
- 



Note: Existing signs and signals are shown adjacent to the school on primary routes to school.

3.12: Existing Signage Near Washington Elementary, Lincoln Elementary, Assumption Catholic School, and Hibbing High School

3. Traffic Data Analysis

TURNING MOVEMENT

Volume count data was collected at the critical intersections adjacent to the schools. At these intersections, peak period (student drop-off and pick-up) traffic counts were collected, including movements of pedestrians, bicycles, and motor vehicles.

Table 3.5 provides a summary of vehicles, pedestrians, and bicyclist counts at the study intersections.

Figures 3.13–3.16 on the following pages depict the peak hour turning movement counts at the five study intersections.

Table 3.5: Existing Traffic Volumes at Study Intersections

Intersection	Analysis Period	Hourly Vehicle Volume	Hourly Pedestrian Volume	Hourly Bicycle Volume
East 23rd St at East 7th Ave	Drop-Off (AM)	493	163	6
	Pick-Up (PM)	571	232	4
East 23rd Street at East 9th Avenue	Drop-Off (AM)	471	33	3
	Pick-Up (PM)	377	57	9
East 23rd Street at East 11th Avenue	Drop-Off (AM)	385	60	7
	Pick-Up (PM)	288	99	13
Brooklyn Drive at East 21st Street	Drop-Off (AM)	355	54	0
	Pick-Up (PM)	232	47	0
East 37th Street at Inner Drive	Drop-Off (AM)	363	1	0
	Pick-Up (PM)	468	2	0

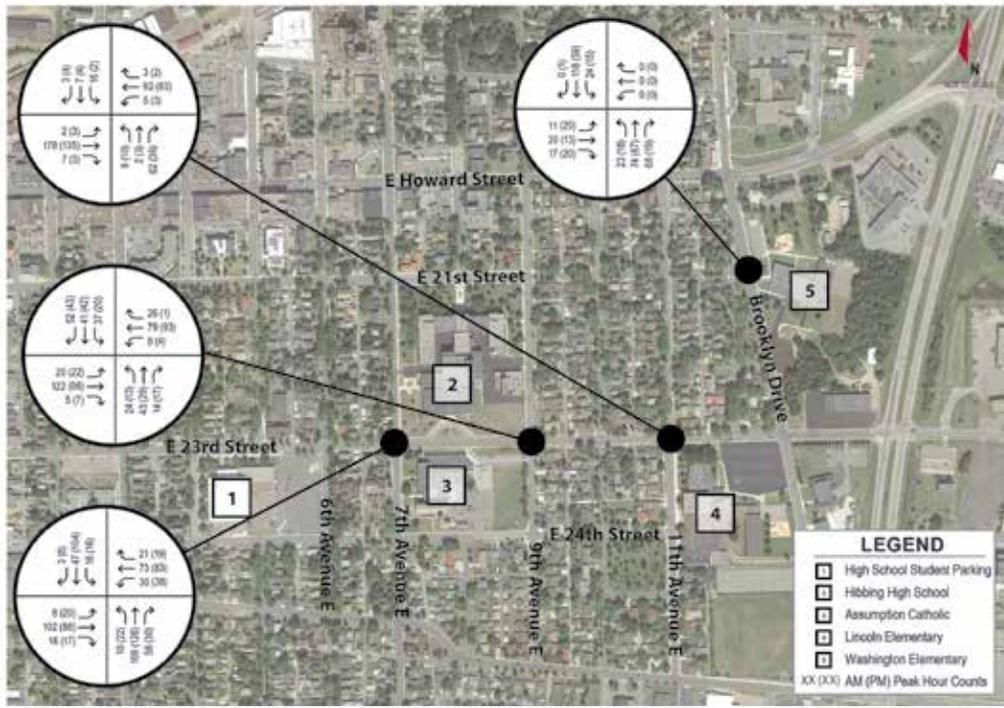


Figure 3.13: Peak Hour Turning Movement Counts from the Study Intersections Near Washington Elementary School, Lincoln Elementary School, Hibbing High School, and Assumption Catholic School.

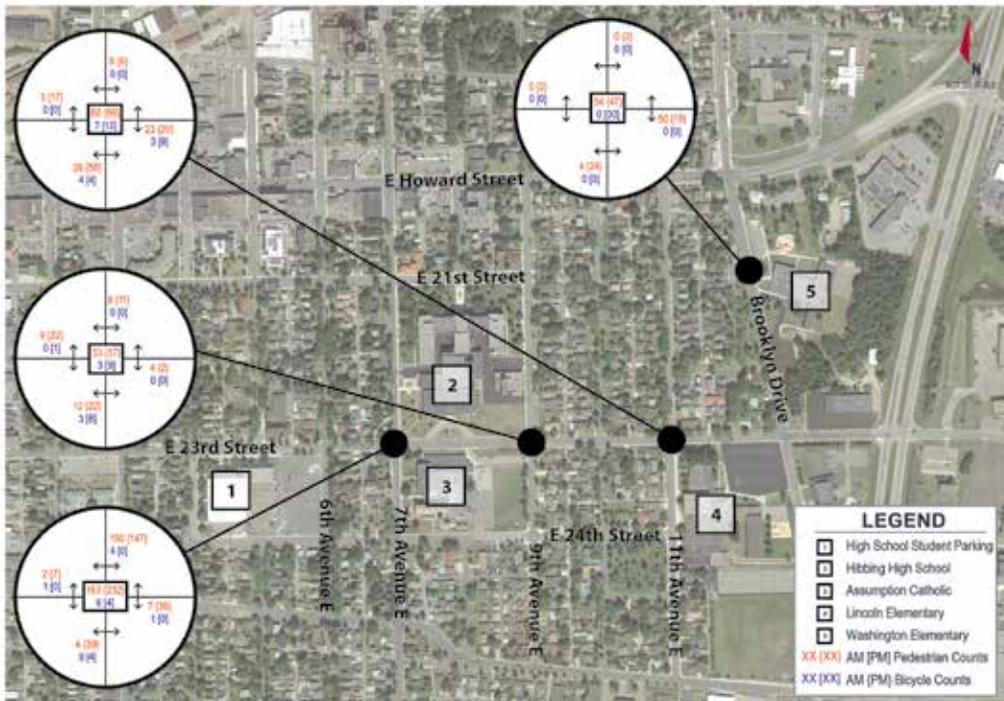


Figure 3.14: Peak Hour Pedestrian and Bicycle Turning Movement Counts from Priority Intersections Near Washington Elementary School, Lincoln Elementary School, Assumption Catholic School, and Hibbing High School.



Figure 3.15: Peak Hour Turning Movement Counts from Priority Intersections Near Greenhaven Elementary School.



Figure 3.16: Peak Hour Pedestrian and Bicycle Turning Movement Counts from Priority Intersections Near Greenhaven Elementary School.

CRASH ANALYSIS

Around Greenhaven Elementary School

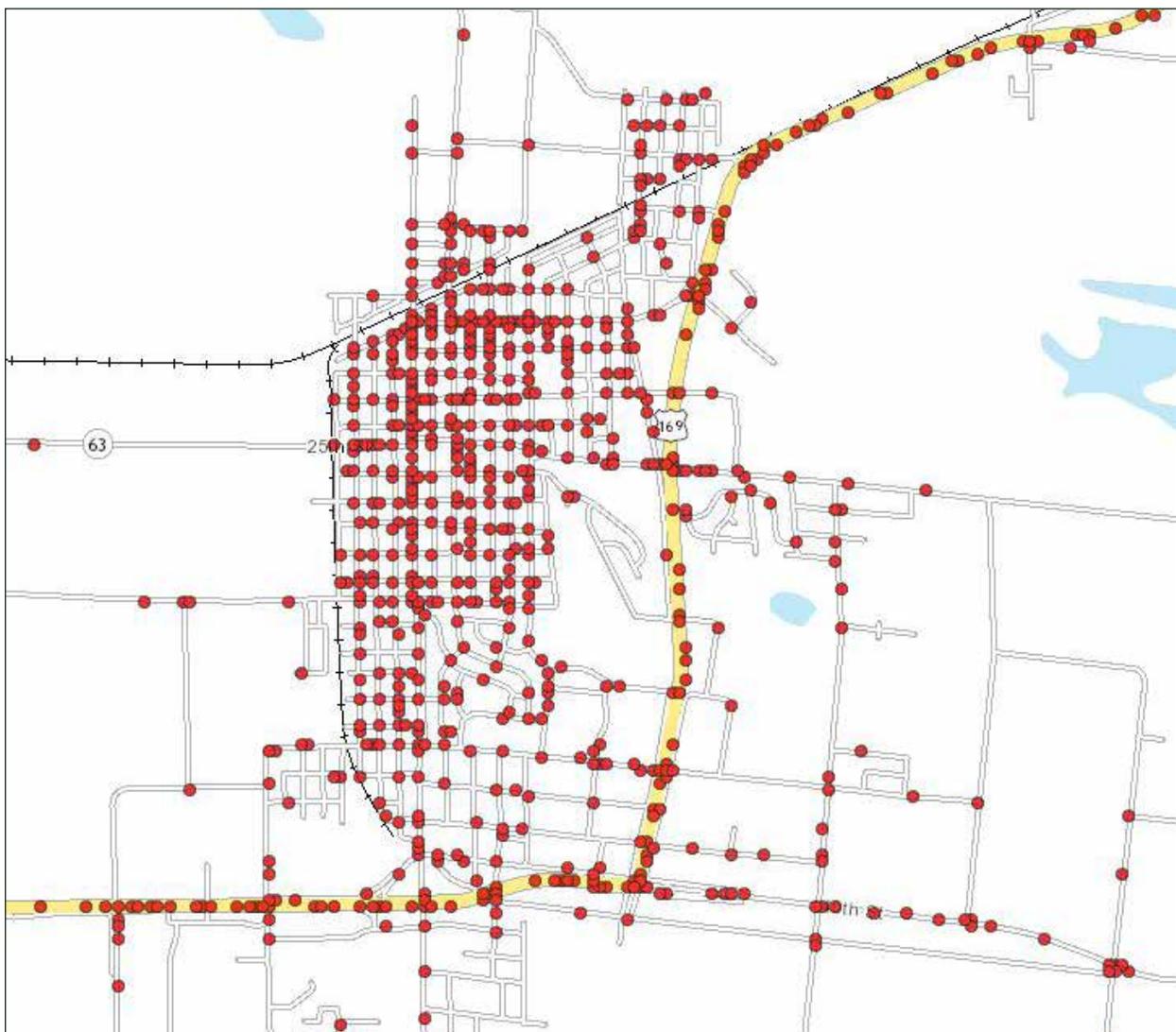
There were 72 reported crashes within the last ten years in the quarter-mile surrounding Greenhaven Elementary, according to MnDOT crash data. One involved a pedestrian, occurring on 7th Avenue East, northeast of the school. Numerous crashes occurred near 1st Avenue East and East 37th Street south of the school.

Figure 3.17 displays the location of these crashes.

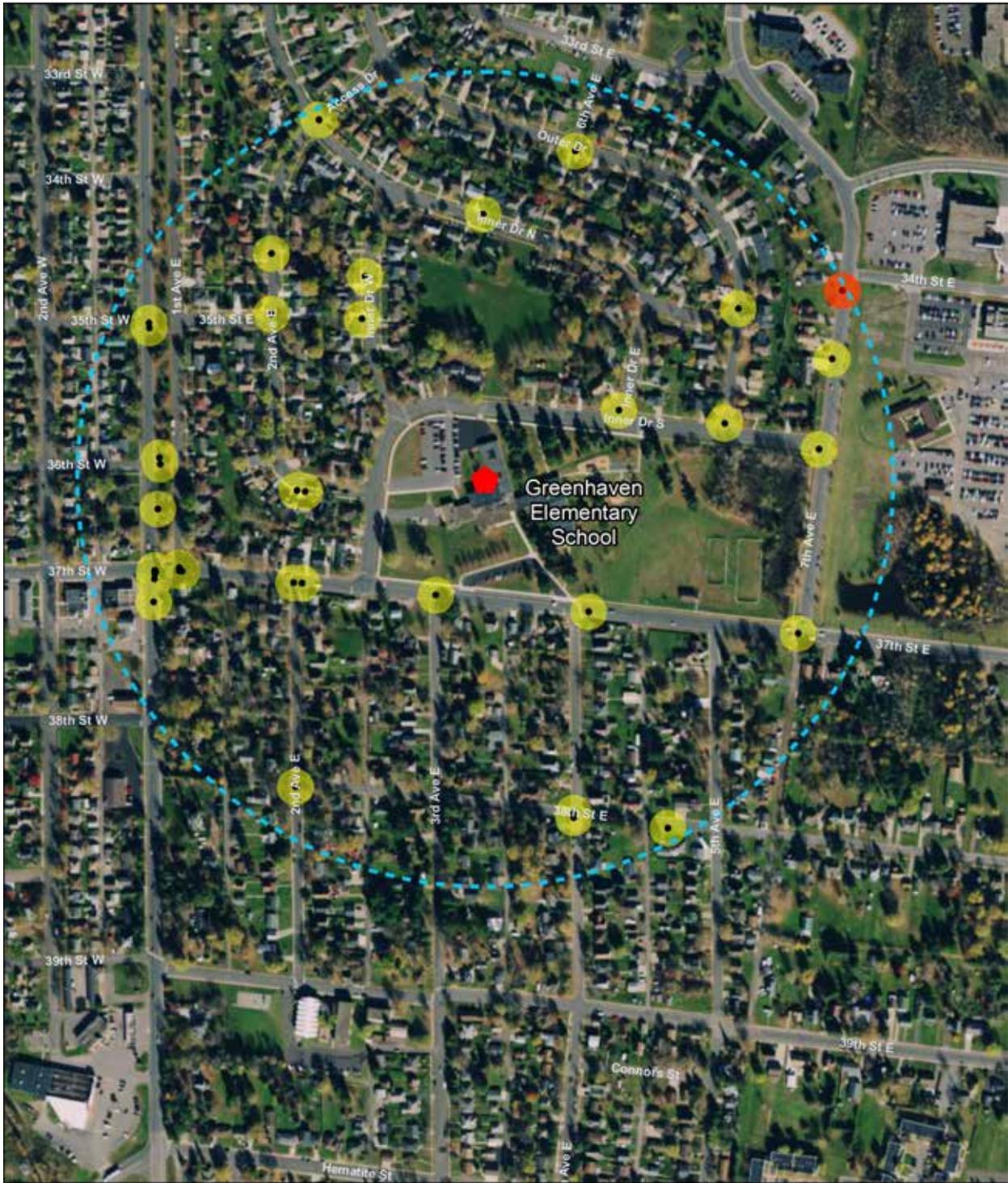
Around Lincoln Elementary, Washington Elementary, Hibbing High School, and Assumption Catholic School

A total of 423 crashes occurred within a quarter-mile radius of these four schools, including 2 pedestrian crashes. 102 of these crashes occurred near the intersection of East 25th Street and U.S. Highway 169. Numerous collisions also have occurred along East 23rd Street and 9th Avenue North, in particular.

Figure 3.18 displays the location of these crashes.



Minnesota Crash Mapping Analysis Tool (MnCMAT) data from the past 10 years was evaluated for the City of Hibbing. This image displays the aggregate data set collected from MnCMAT. A density display of crashes in the immediate vicinity of the focus schools is displayed in Figures 3.17 and 3.18.



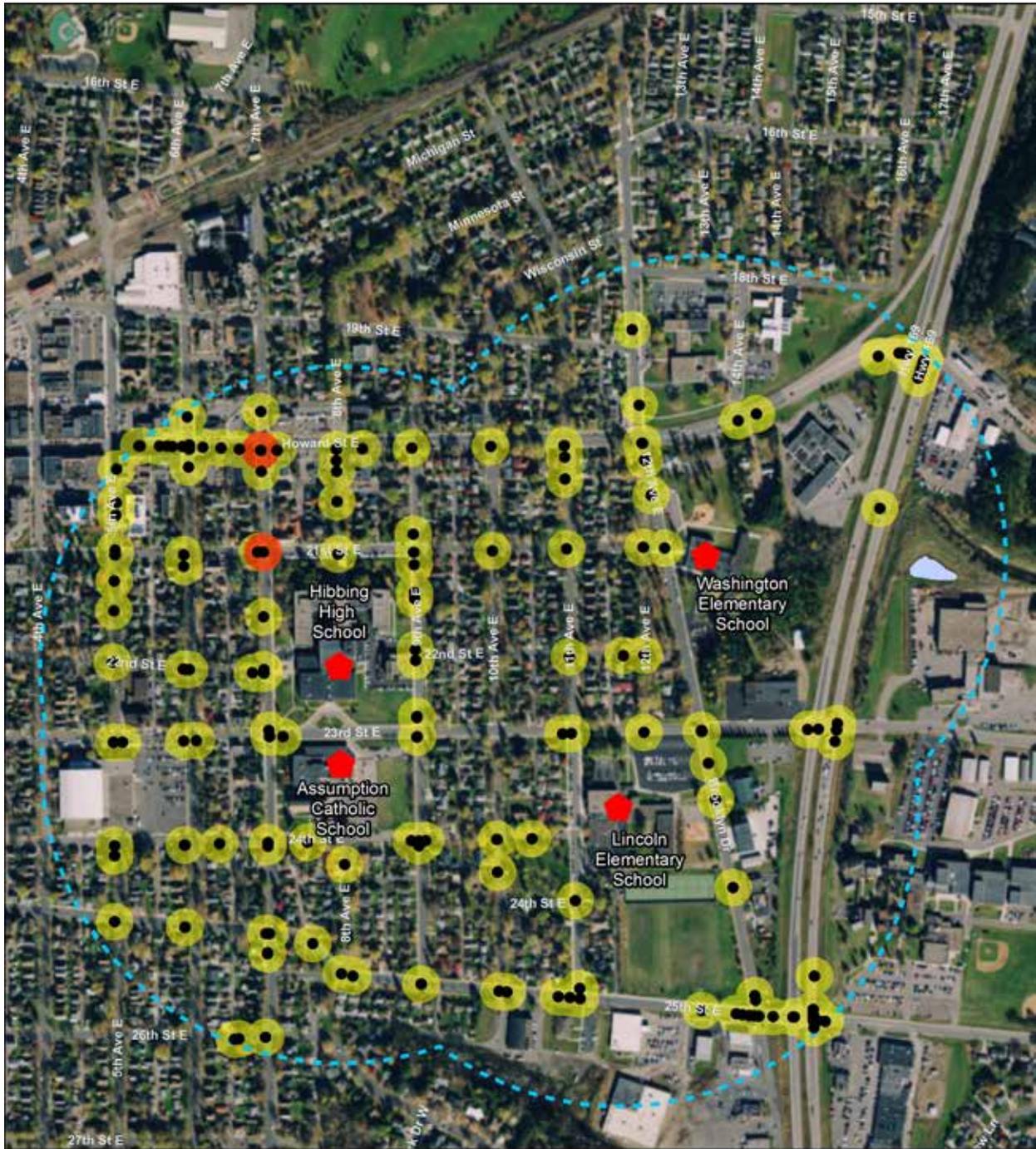
Crashes Near Greenhaven Elementary School

2005-2015 Minnesota Department of Transportation Data

- School
- Crashes Involving a Pedestrian or Bicyclist
- 1/4 Mile Buffer
- Crashes Near Greenhaven Elementary



Figure: 3.17: Crashes Near Greenhaven Elementary School.



Crashes Near Lincoln, Washington, Assumption, and Hibbing High School

2005-2015 Minnesota Department of Transportation Data

-  School
-  Crashes Involving a Pedestrian or Bicyclist
-  1/4 Mile Buffer
-  All Crashes Within 1/4 Mile



0 350 700 Feet

Figure 3.18: Crashes Near Washington Elementary, Lincoln Elementary School, Assumption Catholic School, and Hibbing High School.

INTERSECTION ANALYSIS

An intersection capacity analysis was performed at the study intersections during the school drop-off and pick-up times. The purpose of the capacity analysis is to identify any significant vehicle delay (measured in seconds) that could potentially lead to drivers making unsafe decisions in crossing the intersections. Table 3.6 provides a summary of the capacity analysis. The vehicle capacity analysis was performed using the latest version of Synchro.



Synchro software was used to evaluate capacity at priority intersections.

Table 3.6: Existing Intersection Analysis

Intersection	Drop-Off Time Period		Pick-Up Time Period	
	Delay (Sec/Veh)	LOS	Delay (Sec/Veh)	LOS
East 23rd Street & 7th Avenue East	10.9	B	12.3	B
East 23rd Street & 9th Avenue East	10.4	B	9.2	A
East 23rd Street & 11th Avenue East	9.6	A	8.6	A
Brooklyn Drive & East 21st Street	9.1	A	8.1	A
East 37th Street & Inner Drive	9.2	A	10.7	B

Engineering assessment indicates that the intersections are all operating at an acceptable level of service. However, concerns have been raised pertaining to the safety of pedestrians crossing some of the study intersections. While no real evidence of safety issues exists (i.e. specific crash data), the perception of decreased safety impacts the desirability to walk and bike to school.

Recommendations are provided in the following section to address concerns over safety and poor motor vehicle compliance, improvements that work to improve the overall level of service for all modes of transportation, not just vehicular traffic.

Since all of the critical intersections are currently all-way stop-controlled intersections, the need to update the intersection control to traffic signals was analyzed. Based on the existing traffic volumes, none of the critical intersections are anticipated to meet volume thresholds to warrant the installation of a traffic signal based on the Minnesota Manual on Uniform Traffic Control Devices.

REVIEW OF INTERSECTION OPERATIONS DURING SCHOOL DROP-OFF/PICK-UP

Overall, congestion along the adjacent roadway network and intersections was within an acceptable range during school drop-off/pick-up operations. The three all-way stop controlled intersections along East 23rd Street near the high school and Lincoln Elementary School appeared to be operating fine with no significant vehicle queueing or delay. Even when the crossing guards were directing students through the intersections, there was not observed to be significant vehicle queueing. The stop-controlled intersection in front of Washington Elementary School operates with minimal queueing and vehicle delay.

One area of congestion observed was during school drop-off at Lincoln Elementary. On a couple instances, vehicles backed up into East 23rd Street and vehicles were required to queue in the westbound left-turn lane and the eastbound through lane. This causes overall congestion on East 23rd Street.



Queueing during student drop-off at Lincoln Elementary.

Conclusion

Planning and engineering analysis of existing infrastructure surrounding the focus schools yields several key points that formed the basis of this plan's recommendations:

- ▶ Gaps in connectivity are present and often major impediments to safe travel to school, particularly for pedestrians
- ▶ Crosswalk placement, orientation, and connections to existing sidewalks do not meet best practice standards in many locations
- ▶ School zone signage is inconsistent and non-compliant
- ▶ Analysis of available data using industry standard means and best practices indicates that intersections are functioning well from a capacity and level of service standpoint and based on an analysis of crash data. Stakeholder engagement and site observation, however, indicate that parents, school staff, and students perceive routes and intersections (particularly identified priority intersections) to be unsafe and uncomfortable.

Despite real data that says otherwise, perception of poor safety and comfort is critically important to affecting rates of walking and biking, even more important that results of real data analysis. Sidewalks, crossings, and other facilities in school zones need to **FEEL** safe to young children and the parents of young children for them to be used.

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A mid-block crosswalk featuring a median pedestrian refuge island is recommended crossing East 23rd Street between Assumption Catholic School and Hibbing High School.

4 Recommendations

This section presents infrastructure, policy, and program recommendations for improving walking and bicycling conditions in the City of Hibbing.

Introduction

This section includes recommendations to make it easier and more comfortable to walk and bike to school in Hibbing, and safer for students, parents, and others of all transportation modes to navigate school pick-up and drop-off areas. The recommendations of this section are informed by the analysis of existing conditions, public outreach, and other information gained and insight learned described in previous sections.

Recommendations presented in this section are based on the planning and engineering analysis summarized in Section 3, which was conducted to give substantiation and justification to the suggested improvements.

Some recommendations in this section are presented in single project sheet format. These recommendations pertain to a specific location or defined project scope, and should be implemented as a single improvement or set of improvements. Project sheets enable review and dissemination to stakeholders and a clear foundation for further study and eventual implementation.

The recommendations in Section 4 are categorized as follows:

CITYWIDE RECOMMENDATIONS

- ▶ General operations and network recommendations

- ▶ Specific project sheets
 - ▶ Infrastructure

 - ▶ Non-infrastructure

SCHOOL-FOCUSED RECOMMENDATIONS

- ▶ General operations recommendations

- ▶ Specific project sheets
 - ▶ Infrastructure

 - ▶ Non-infrastructure

Where implementation of recommendations will be led by the City of Hibbing or Hibbing School District, communication, coordination, and collaboration between the two will be necessary for successful project scoping, funding, and implementation. The city should also work close with the Minnesota Department of Transportation State Aid when doing work on Minnesota State Aid for Local Transportation-designated roads such as East 23rd Street.

Resources

Several resources are available for more information about unit capital and maintenance costs of different types of pedestrian and bicycle infrastructure improvements. These resources should be used as estimates only:

- ▶ Wichita, Kansas Planning Level Cost Estimator (Appendix C), <http://www.wichita.gov/Government/Departments/Planning/Pages/Bicycle.aspx>

- ▶ UNC Highway Safety Research Center, Costs for Pedestrian and Bicyclists Infrastructure Improvements, http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf

Citywide Recommendations

General Operations and Network Recommendations

The recommendations in this section are aimed at improving the connectivity and safety of the overall City of Hibbing pedestrian and bicycle network.



Create a Citywide Bicycle Boulevard Network

Recommendations:

- ▶ Consider a network of bicycle boulevards or “neighborhood slow streets” throughout the City of Hibbing to offer connectivity for bicyclists to city destinations, including schools. See Figure 4.1 at right.
- ▶ Routes to consider include 6th Avenue East, 4th Avenue West, and West 24th Street.
- ▶ Critically evaluate where bicycle boulevards cross primary streets to ensure safe crossings.
- ▶ Map and promote the network of bicycle boulevards to residents, including students.
- ▶ More information about bicycle boulevards can be found here: <http://nacto.org/publication/urban-bikewaydesignguide/bicycle-boulevards/>



Bicycle boulevards are low speed and low volume (typically < 30 mph) residential streets that are designated as priority routes for bicyclists. Improvements such as signage, pavement markings, and speed and traffic calming measures, such small center traffic islands, are often added to enhance comfort for bicyclists. Source: The Orchestrator

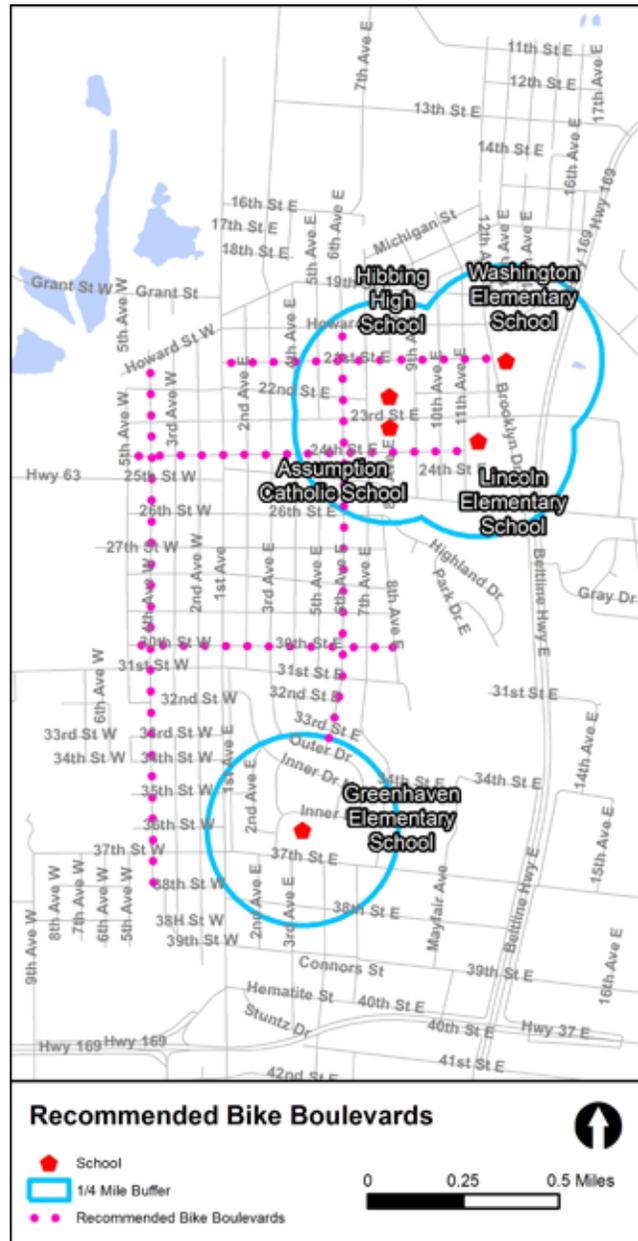


Figure 4.1: Recommended Bike Boulevard Network

Complete the Gaps in the Network: Greenhaven Elementary School

Recommendations:

- A.** Construct a 6' wide sidewalk on the south side of East 37th Street from 1st Avenue East to U.S. Highway 169.
- B.** Install sidewalks on 3rd, 4th, and 5th Avenues East and connect them with East 37th Street using proper ADA-accessible curb ramps and truncated dome tactile warning surfaces.
- C.** Establish a 5' wide marked bicycle lane with a 2' side painted buffer on the south side of East 37th Street. Use vertical bollards or a more permanent raised concrete curb to separate bicyclists from motor vehicle traffic.
- D.** A more interim low-cost option instead of A and C above would be to establish a combined 7' wide in-street pedestrian and bicycle lane separated from motor vehicle traffic by a buffer and raised plastic bollards. This option is less desirable since pedestrians will be walking in the street itself.



A combined in-street pedestrian and bicycle lane, such as this one in Minneapolis, could be an option to establish pedestrian and bicycle connections where off-road space is limited. Vertical plastic bollards and a buffer area separate pedestrians and bicyclists from motor vehicles in this location.

See Figure 4.2 below.

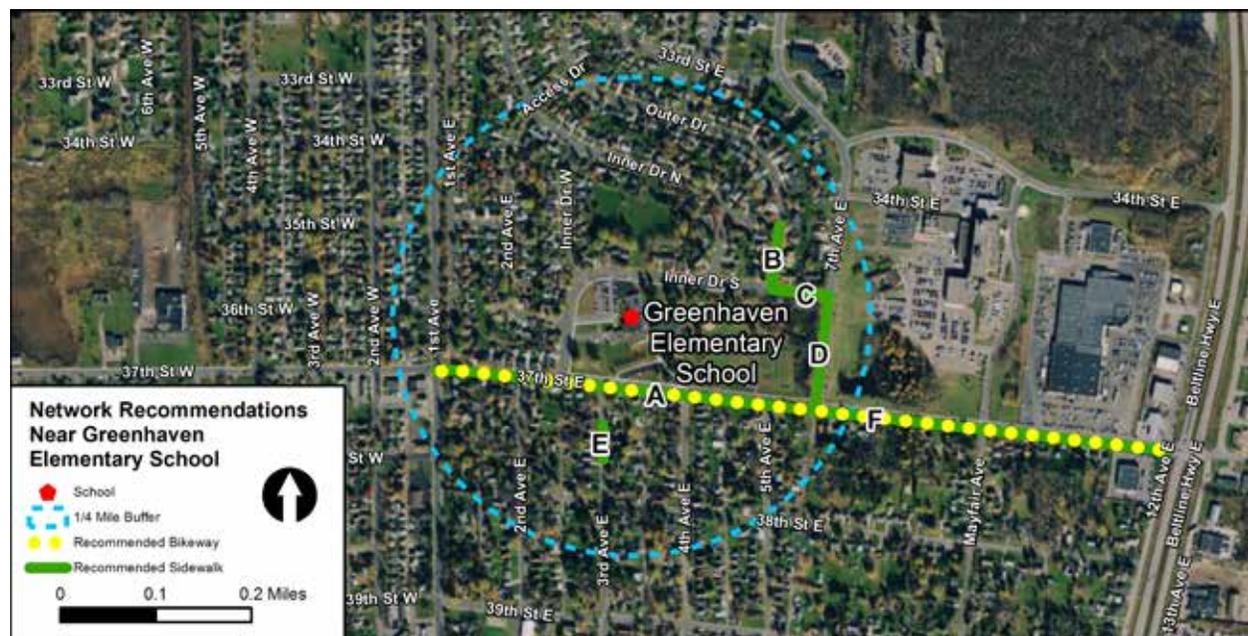


Figure 4.2: Recommended Network Improvements Near Greenhaven Elementary School.

Complete the Gaps in the Network and Enhance Network Comfort: Lincoln Elementary, Washington Elementary, Assumption Catholic, and Hibbing High School

Recommendations:

- A.** Construct a 6' wide sidewalk on the west side of Brooklyn Drive from East 21st Street to East 22nd Street, and a sidewalk on the north side of East 22nd Street from Brooklyn Drive to 12th Avenue East.
- B.** Move the sidewalk on the south side of East 23rd Street from 11th Avenue East to the pathway to the school's entrance further south to create at least a 3' buffer between the sidewalk and motor vehicle traffic on East 23rd Street. Alternatively, widen the existing sidewalk to +/- 11 feet consistent with the sidewalk on the east side of 11th Avenue E south of E 23rd Street.
- C.** Widen the sidewalk on the north side of the parking lot between the vehicle entrance and Brooklyn Drive to 8 feet.
- D.** On the south side of East 23rd Street, between 11th Avenue East and 6th Avenue East, widen the sidewalk and add a landscape buffer area between the sidewalk and street.



It is recommended that sidewalks such as this one on East 23rd Street in front of Assumption Catholic School be improved to include a planting zone to buffer pedestrians from motor vehicle traffic. This zone could be established from excess shoulder width.

See Figure 4.3 below.

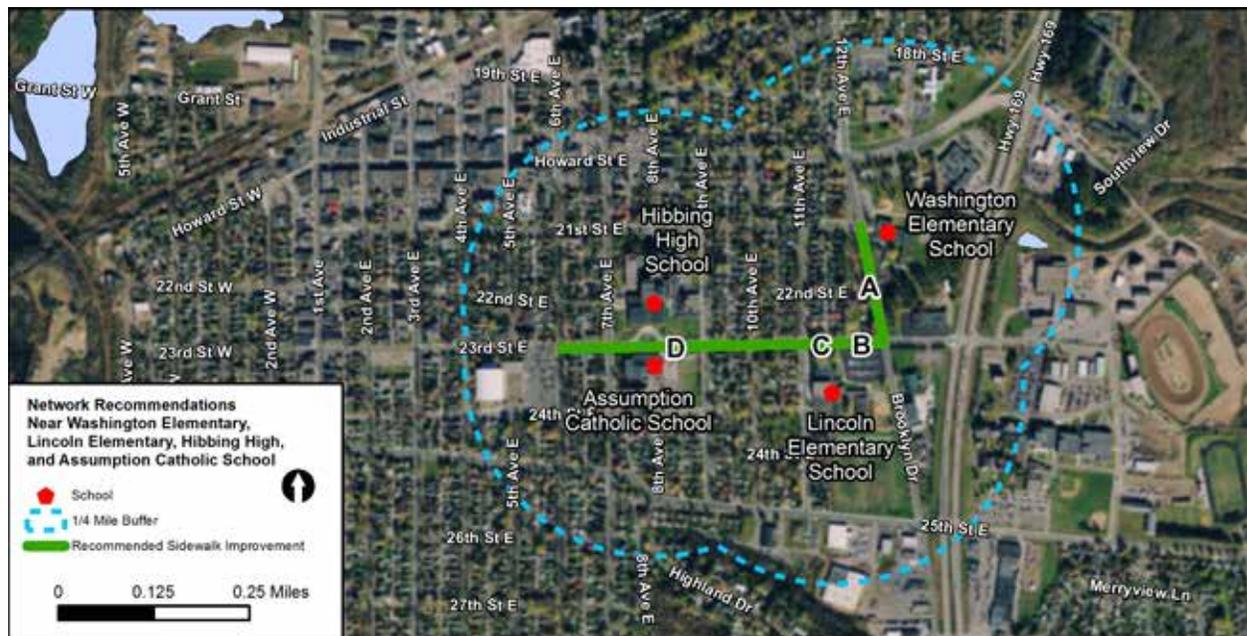


Figure 4.3: Recommended Network Improvements Near Greenhaven Elementary School.

Standardize the Construction of Sidewalks with Four Distinct Zones

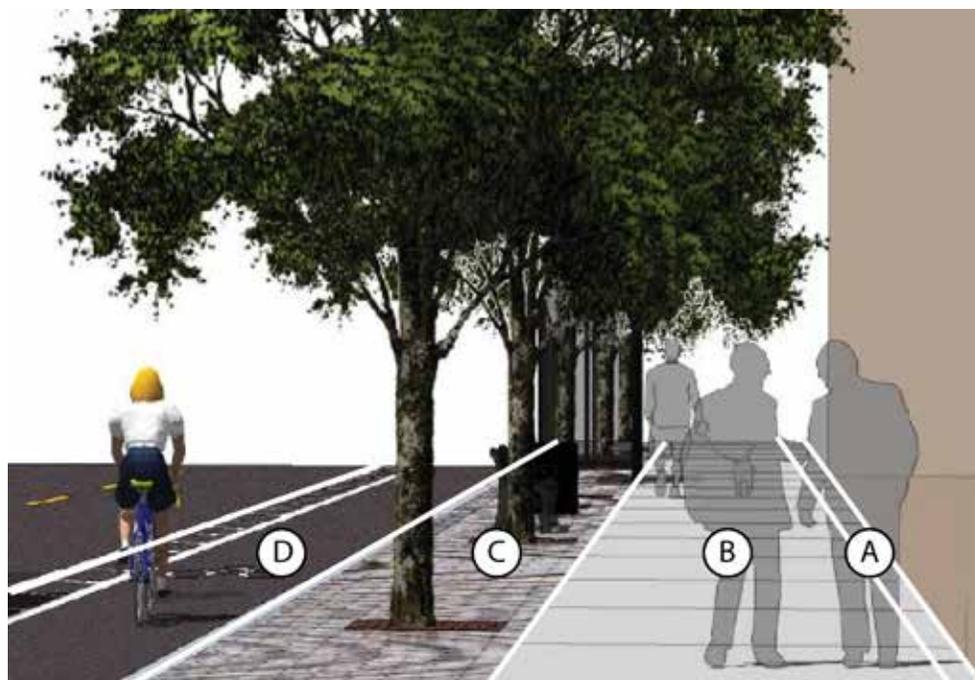
The City of Hibbing should adopt as a standard practice the development of sidewalks with four distinct zones. Those zones are:

- A. Frontage zone that extends from the building or adjacent land uses (typically 0'-2').
- B. Pedestrian through zone (5'-2').
- C. Greenscape/furnishing zone (typically 1.5'-6').
- D. Enhancement/buffer zone (typically 6').

This enhancement/buffer zone may contain shoulders, curb extensions, bike facilities, parking, or other uses. Zone widths and uses depend on the level of pedestrian activity and land uses adjacent to the sidewalk. For instance, the curb zone could be used for parking, and the greenscape/ furniture zone could be used for mowed grass in applicable settings. The Americans with Disability (ADA) minimum pedestrian zone width is 4 feet, although at least 5 feet is recommended. More information can be found here:

- ▶ https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/sidewalks204.cfm
- ▶ <http://nacto.org/publication/urban-street-design-guide/streetdesignelements/sidewalks/>

Recommended sidewalk zones



Standardize Crosswalk Placement and Type

Crosswalks indicate to pedestrians where to cross the street and to cars where to expect pedestrians to be in the road. In short, they delineate conflict zones. Crosswalks should:

- ▶ Orient perpendicular to the flow of motor vehicle traffic.
- ▶ Be located only at critical and likely pedestrian crossing locations.
- ▶ Connect to adjacent sidewalks via ADA-compliant curb ramps.
- ▶ Mark the shortest path across the street.



6-8-foot-wide continental-style crosswalks are recommended. Thermoplastic (instead of paint) can extend the life of a crosswalk marking.

All of these guidelines are meant to reduce the length of time pedestrians are exposed to potential conflicts from motor vehicle traffic. Perpendicular crosswalk placement enhances the visibility of pedestrians to motor vehicle drivers.

Recommendations:

- ▶ Implement the specific crosswalk improvements recommended in this section at priority intersections. These intersection improvements aim to increase pedestrian comfort, visibility, and safety along known priority walking routes to school.
- ▶ At Greenhaven Elementary School, eliminate the mid-block crosswalks northwest of the school along South Inner Drive.
- ▶ Place at 90-degree right (rather than oblique) angle, perpendicular to traffic, crosswalks at 3rd Avenue East and 4th Avenue East.
- ▶ Crosswalks are recommended to be installed using thermoplastic markings, in the “continental crosswalk” style, as the city standard. While thermoplastic can cost approximately five times the cost of traditional painted stripes, the higher visibility of the thermoplastic markings creates a safer environment for crossing pedestrians. The increased costs are partially offset by the nearly three times longer lifespan of thermoplastic pavement markings compared with paint. All crosswalks present around the five schools should be programmed for replacement when they become faded to the high visibility continental crosswalk style.



Painted (left) vs. thermoplastic (right) pavement markings.

Address Identified Problem Intersections

The project sheets that follow provide a suite of recommendations to address intersections, identified as priorities based on stakeholder engagement and analyzed in Section 3. The project sheets that follow are guided by the general recommendations below.

Recommendations:

- ▶ Use directional instead of diagonal pedestrian curb ramps
 - ▶ The Public Right of Way Accessibility Guidelines (PROWAG) recommends the use of directional pedestrian curb ramps when there are no significant utility or right-of-way impacts. Directional curb ramps align pedestrians to cross perpendicular to motor vehicle traffic, making pedestrians more visible to motor vehicles.
- ▶ Reduce turning radii, lane width, and crossing distance with curb extensions
 - ▶ Curb extensions physically narrow the roadway, creating a shorter crossing for pedestrians and increase the overall visibility of pedestrians by bringing them closer to the driver’s line of sight. Additionally, curb extensions reduce lane width and intersection radii, thus encouraging slower vehicle speeds. The treatment can range from a permanent concrete solution to low-cost pavement markings and flexible bollards.
 - ▶ Flexible vertical bollards can be used to add physical separation and better delineate these areas. These areas could be used as snow storage areas in the winter, so long as pedestrian lanes are maintained. Should funds become available, permanent raised concrete curbs to delineate these curb extensions are recommended and preferred.



Directional pedestrian ramps with ADA-compliant truncated domes, such as these at the intersection of East 23rd Street and 7th Avenue North, are recommended on all pedestrian intersection approaches.



Paint and flexible bollards used to delineate a curb extension in St. Paul.

Citywide Recommendations

Project Sheets

This section presents a variety of infrastructure and non-infrastructure recommendations in specific “project sheet” format. These project sheets are meant to be separated from the rest of the plan and used as a foundation for discussion, further analysis, and implementation by stakeholders.

When cost is presented, **low** means below \$25,000, **medium** signifies \$25,000-\$75,000, and **high** signifies above \$75,000. The costs provided are conceptual estimates meant to enable comparison of the relative cost of one type of project over another. Determination of real costs can and should only be done after detailed review, study, and analysis by a licensed professional engineer.

Relevant costs are presented using the following symbols:

- \$ = Low Cost
- \$\$ = Medium Cost
- \$\$\$ = High Cost



Project Sheet No. 1

INTERSECTION CONCEPT:

East 37th Street and Inner Drive Near Greenhaven Elementary

CITYWIDE

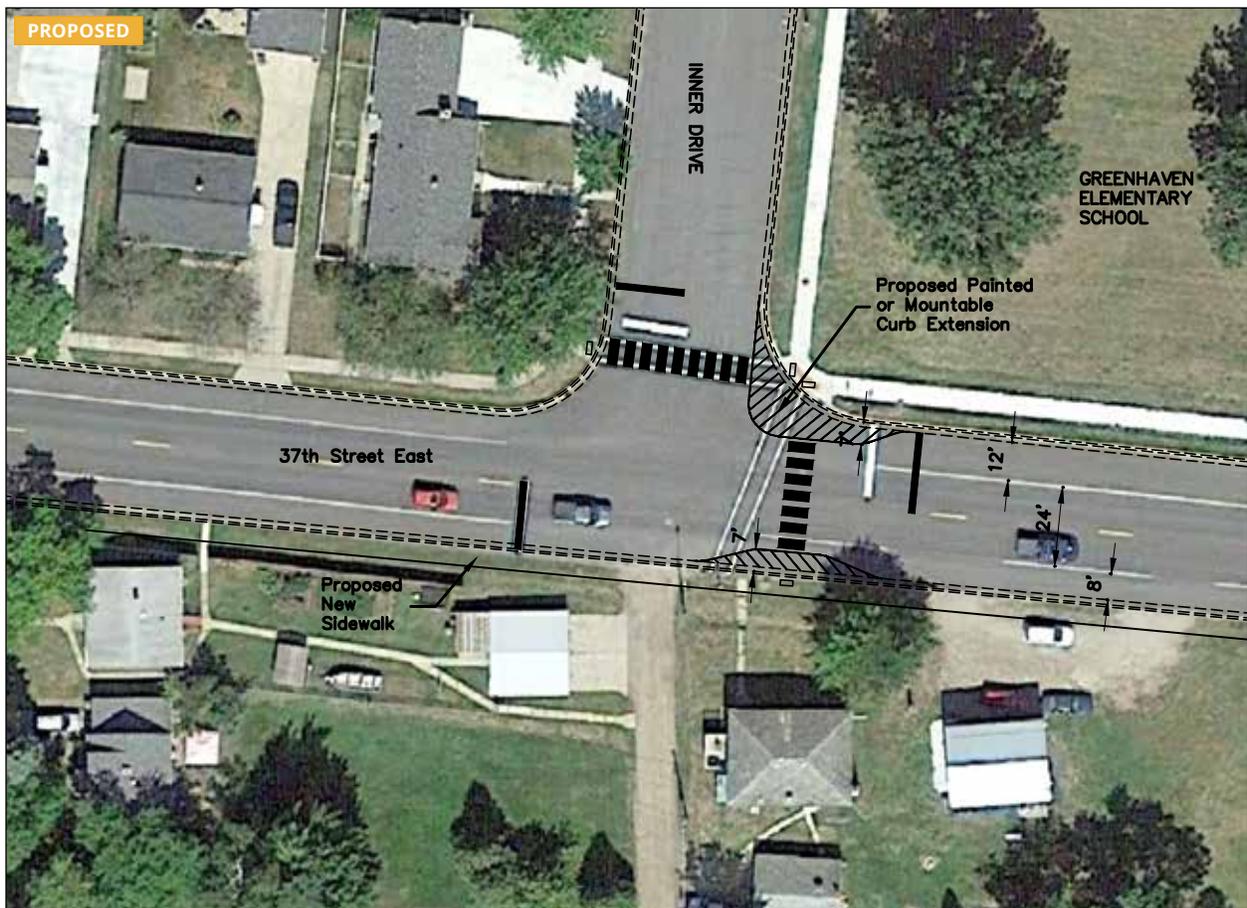
INFRASTRUCTURE \$\$

Recommendations:

- ▶ Construct painted or concrete curb extensions on northeast and southeast corners to shorten crossing distance and slow motor vehicle traffic.
- ▶ Install high-visibility continental crosswalks, as shown, perpendicular to motor vehicle traffic.
- ▶ Move back the vehicle stop bar on the north and east approach to clear crosswalk for pedestrians.
- ▶ Establish a sidewalk on the south side of East 37th Street.

Benefits:

- ▶ Reduces vehicle lane width and turning radii
- ▶ Reduces pedestrian crossing distance of East 37th Street



Project Sheet No. 2

INTERSECTION CONCEPT:

East 23rd Street and 11th Avenue East Near Hibbing High School and Assumption Catholic School

CITYWIDE

INFRASTRUCTURE \$\$

Recommendations:

- ▶ Construct painted or concrete curb extensions on northeast and southeast corners to shorten crossing distance and slow motor vehicle traffic.
- ▶ Install high-visibility continental crosswalks on all legs of the intersection.
- ▶ Move back the vehicle stop bar on the east approach to accommodate school bus turning radius and clear crosswalks for pedestrians.

Benefits:

- ▶ Reduces vehicle lane width and turning radii
- ▶ Reduces pedestrian crossing distance of East 23rd Street



Project Sheet No. 3

INTERSECTION CONCEPT:

East 23rd Street and 9th Avenue East Near Hibbing High School and Assumption Catholic School

CITYWIDE

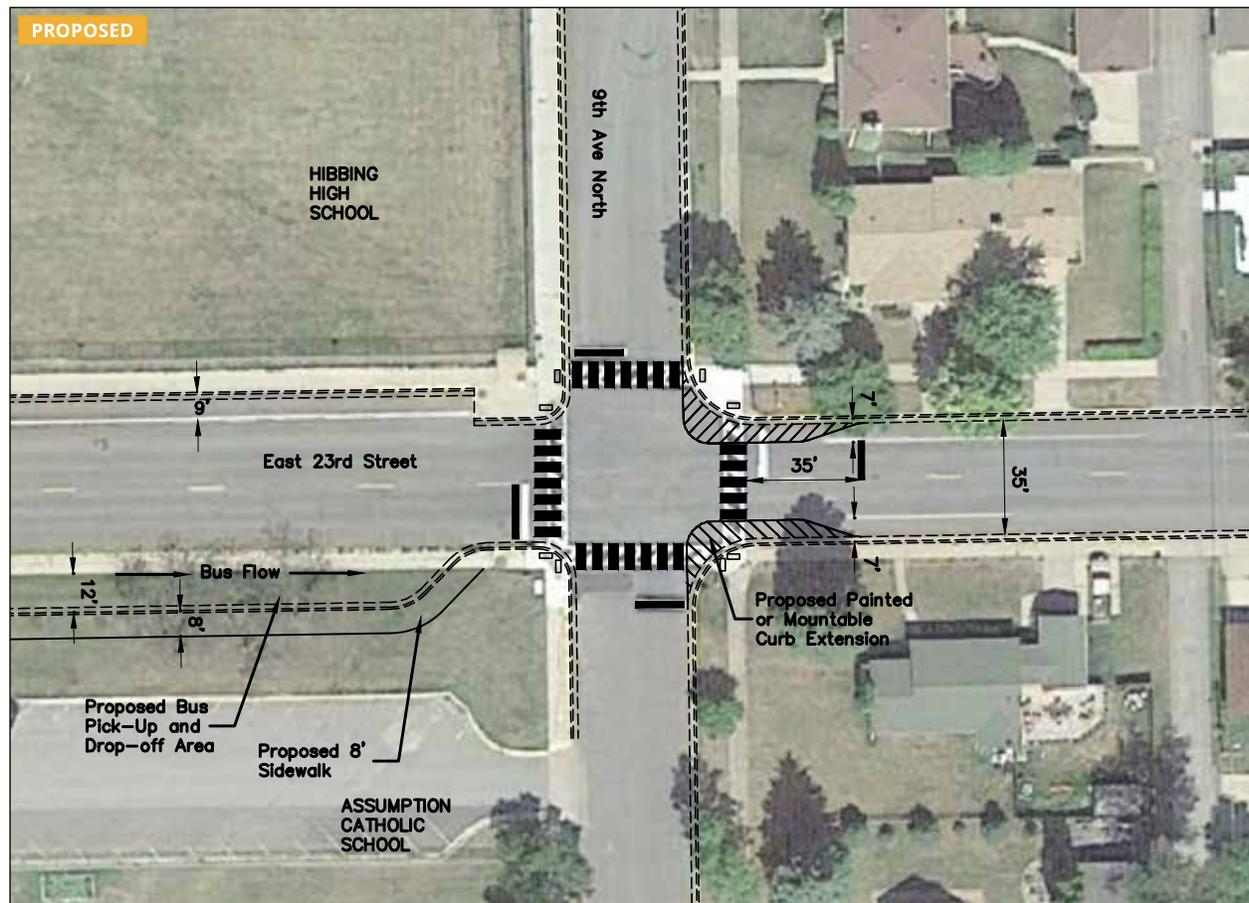
INFRASTRUCTURE \$\$

Recommendations:

- ▶ Construct painted or concrete curb extensions on northeast and southeast corners to shorten crossing distance and slow motor vehicle traffic.
- ▶ Install high-visibility continental crosswalks on all legs of the intersection.
- ▶ Move back the vehicle stop bar on the east approach to accommodate school bus turning radius and clear crosswalks for pedestrians.

Benefits:

- ▶ Reduces vehicle lane width and turning radii to slow vehicles down on East 37th Street
- ▶ Reduces pedestrian crossing distance of East 37th Street



Project Sheet No. 4

INTERSECTION CONCEPT:

East 23rd Street and 7th Avenue East Near Hibbing High School and Assumption Catholic School

CITYWIDE

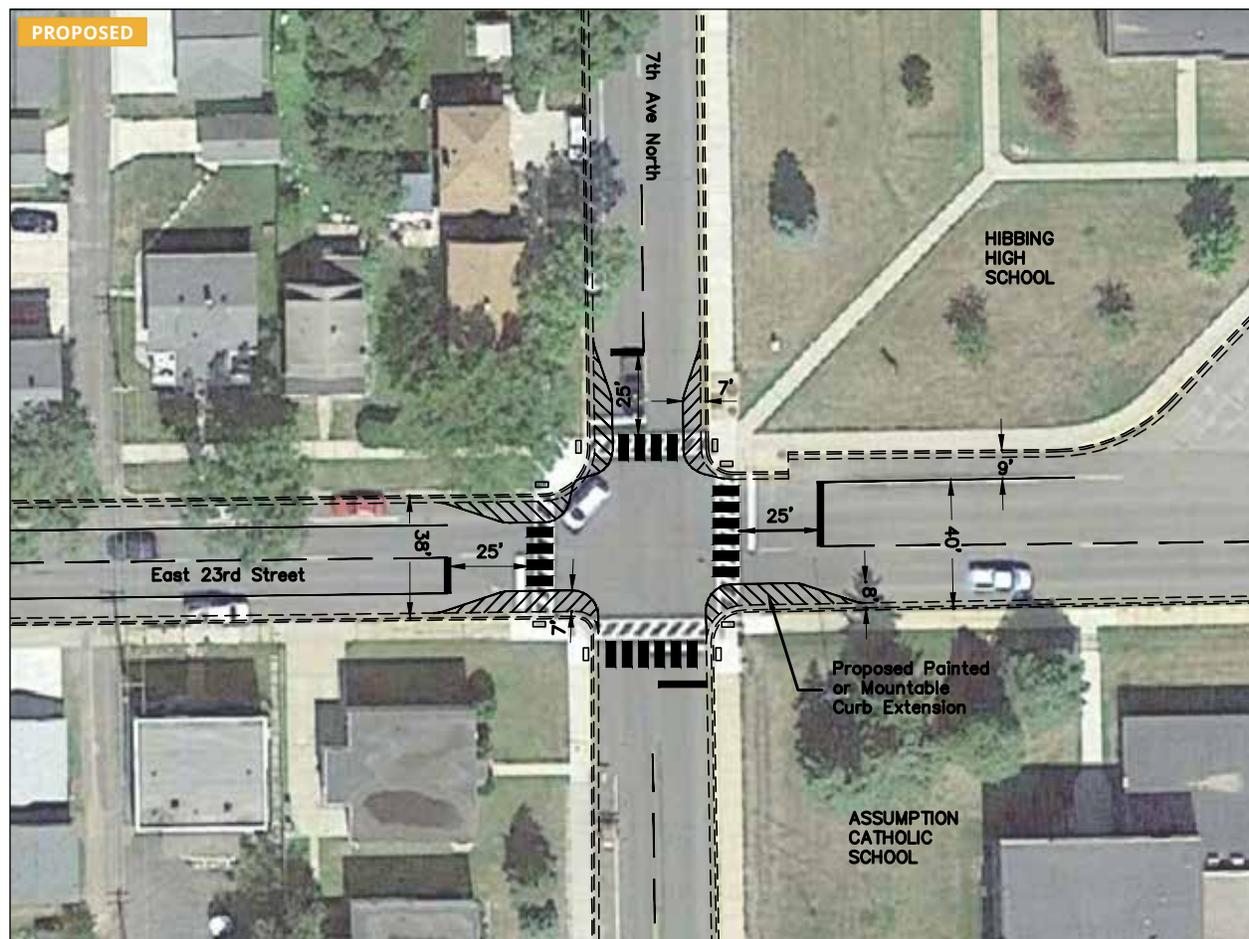
INFRASTRUCTURE \$\$

Recommendations:

- ▶ Construct painted or concrete curb extensions on northeast and southeast corners to shorten crossing distance and slow motor vehicle traffic.
- ▶ Install high-visibility continental crosswalks on all legs of the intersection.
- ▶ Move back the vehicle stop bar on the east approach to accommodate school bus turning radius and clear crosswalks for pedestrians.

Benefits:

- ▶ Reduces vehicle lane width and turning radii at all legs of the intersection
- ▶ Reduces pedestrian crossing distance of 7th Avenue North and East 23rd Street



Project Sheet No. 5

CROSSWALK CONCEPT:

Mid-Block Crossing Between Assumption Catholic School and Hibbing High School

CITYWIDE

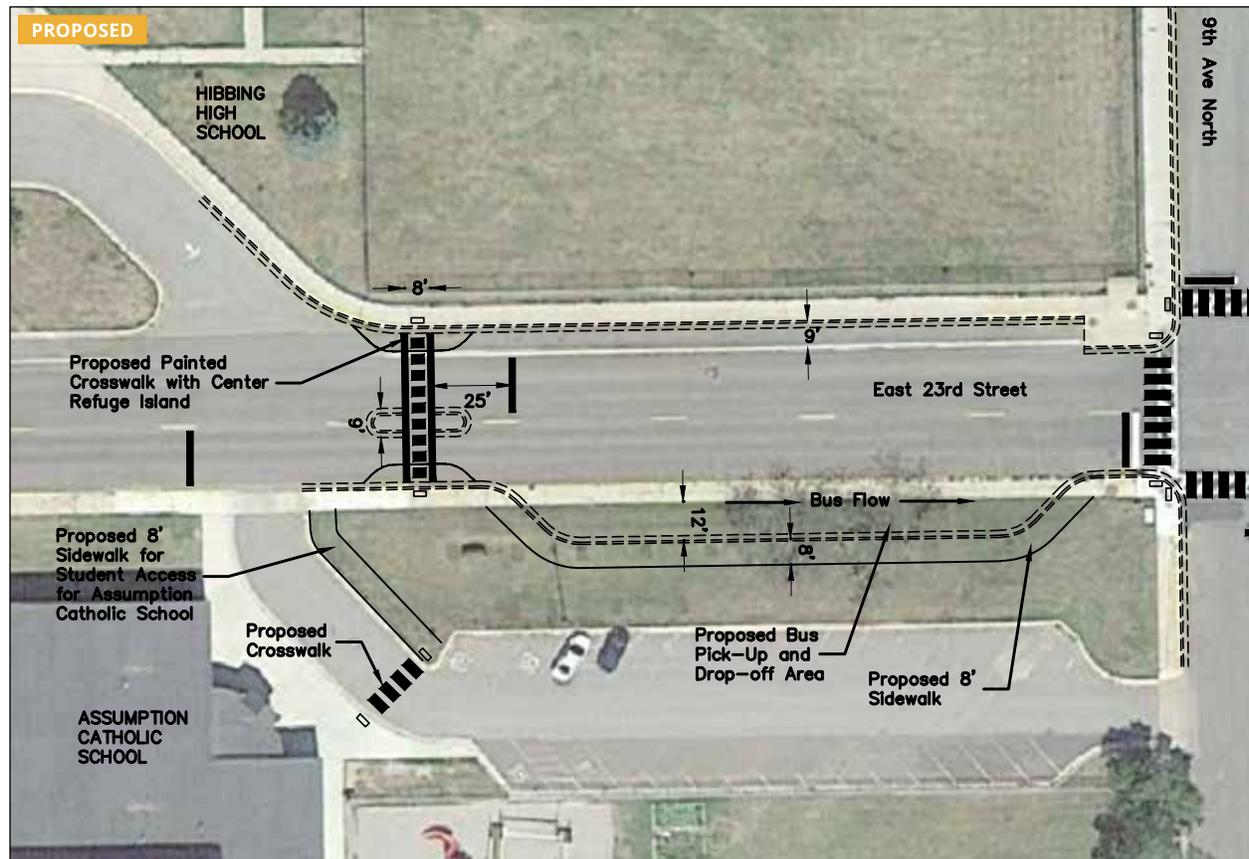
INFRASTRUCTURE \$\$

Recommendations:

- ▶ Add a marked crosswalk with center median as shown between Hibbing High School and Assumption Catholic School.
- ▶ Establish curb extensions where the crosswalk meets the curb.
- ▶ Develop a paved bus pick-up and drop-off area along East 23rd Street as show.

Benefits:

- ▶ Reduces lane width on East 23rd Street, slowing vehicles down through this corridor
- ▶ Provides a marked crossing of East 23rd Street for pedestrians, with a buffered pedestrian island



Project Sheet No. 6

INTERSECTION CONCEPT:

East 21st Street and Brooklyn Drive Near Washington Elementary School

CITYWIDE

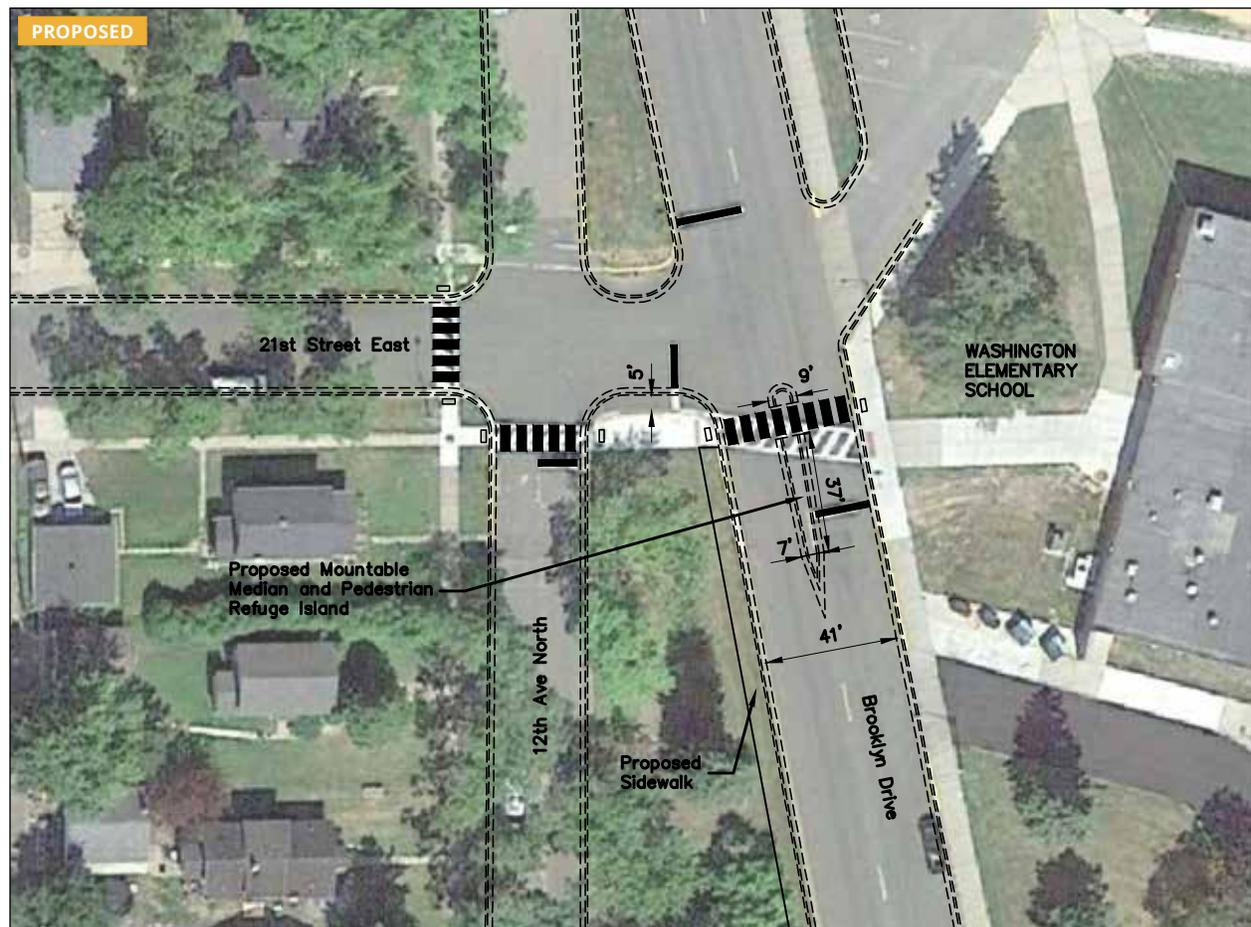
INFRASTRUCTURE \$\$\$

Recommendations:

- ▶ Extend the curb north to narrow East 21st Street.
- ▶ Install high visibility continental crosswalks as shown perpendicular to motor vehicle traffic.
- ▶ Add a sidewalk on the west side of Brooklyn Drive to East 22nd Street.
- ▶ Establish a median and pedestrian refuge island in the center of Brooklyn Drive to make the crossing more comfortable for pedestrians and to slow motor vehicles.

Benefits:

- ▶ Provides a protected median refuge island for pedestrians.
- ▶ Reduces pedestrian crossing distance of Brooklyn Drive



Establish Compliant School Zone Signage: Near Greenhaven Elementary School

Recommendations:

- ▶ Employ MN-MUTCD compliant school zone signage around Greenhaven Elementary School, including an in-street pedestrian crossing sign at the crossing of 4th Avenue East and East 37th Street.

Benefit:

- ▶ Improves predictability for pedestrians, bicyclists, and motor vehicle drivers

See Figure 4.4 below.



Figure 4.4: Recommended Placement of Signage Around Greenhaven Elementary School

Establish Compliant School Zone Signage: Near Washington Elementary, Lincoln Elementary, Hibbing High School, and Assumption Catholic School

Benefit:

- Improves predictability for pedestrians, bicyclists, and motor vehicle drivers

Recommendations:

- Employ MN-MUTCD compliant school zone signage around Greenhaven Elementary School, including marking school crossing with proper advance warning and school crossing assemblies.

See Figure 4.5 below.



Figure 4.5: Recommended Placement of Signage Around Washington Elementary School, Lincoln Elementary School, Hibbing High School, and Assumption Catholic School.

Establish Priority Snow Plow and Winter Maintenance Routes to School

Recommendations:

- ▶ Establish priority snow plow routes adjacent to schools.
- ▶ Formally and clearly designate these routes as primary routes for plowing after winter weather events.
- ▶ School maintenance crews should clear snow and ice from sidewalks along these routes in conjunction with city maintenance crew snow removal.

See Figure 4.6 at right.

Benefit:

- ▶ Ensure clear sidewalks and walkways for student arrival and dismissal

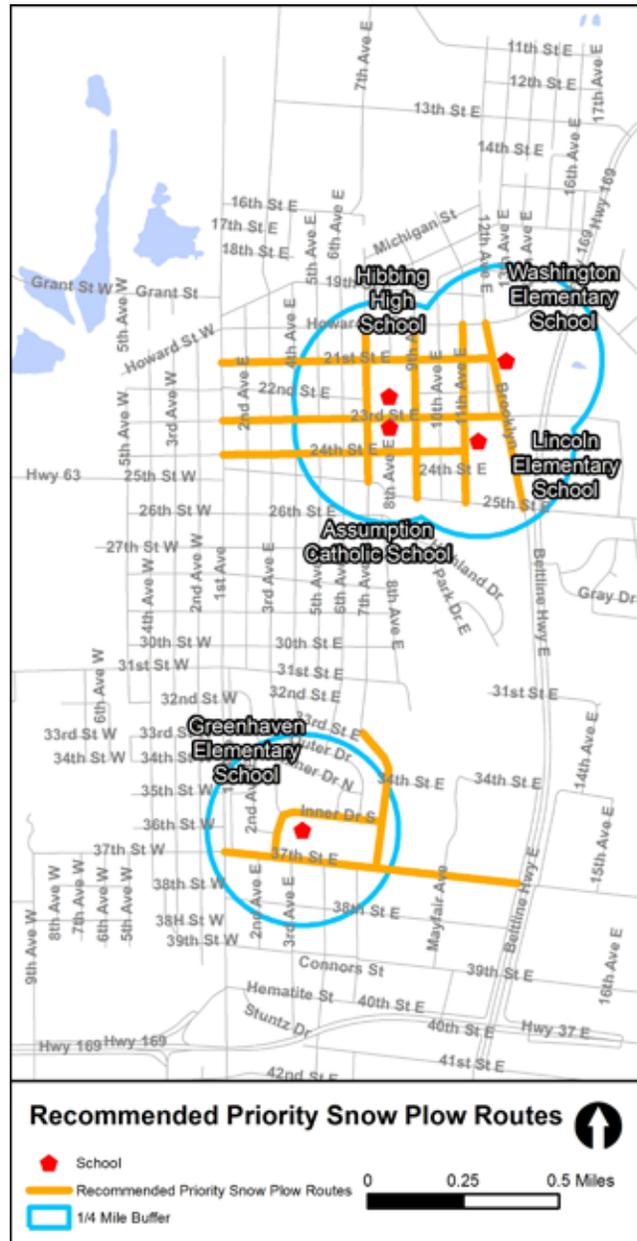


Figure 4.6: Recommended Priority City Snowplow Routes

Organize a Volunteer “Good Samaritan” Sidewalk Snow Removal Program

Recommendations:

- ▶ Organize a citywide volunteer “Good Samaritan” sidewalk snow removal program.
- ▶ Create a way for volunteers to sign up by block or street.
- ▶ The City of Hibbing should work with existing neighborhood groups to help coordinate the program and find volunteers.
- ▶ Hibbing High School students may be good candidates for clearing sidewalks on adjacent residential streets as part of the city program or otherwise.

Benefit:

- ▶ Ensures clear sidewalks and walkways for student arrival and dismissal by helping to clear sidewalks for residents who are unable
- ▶ A similar program is available in Bend, Oregon. More information about the program is available here: <http://bendoregon.gov/index.aspx?page=1076>.



Source: www.static.houselogic.com

Operate Regular Police Enforcement of Driver Compliance Near Schools

Recommendations:

- ▶ The Hibbing Public School district should work with the Hibbing Police Department to place visible police patrols near the schools during student arrival and dismissal.
- ▶ Police patrols should focus on intersections and make sure drivers are properly complying with stop controls and crosswalks.
- ▶ Police presence could coincide with an “awareness week” early in the fall or in January to help form long-term driver habits.
- ▶ East 23rd Street/7th Avenue East near Hibbing High School and Assumption Catholic School, East 21st Street /Brooklyn Drive near Washington Elementary School, and East 37th Street/South Inner Drive near Greenhaven Elementary School are recommended locations for police patrols.

Benefit:

- ▶ Increases compliance among drivers with regular police enforcement and visibility



Police conduct speed enforcement at a school zone in Columbus, OH. Source: thedispatch.com

Use Temporary Installations to Test Infrastructure Improvements

Recommendations:

- ▶ The city should work with the school district and local community organizations and partners to test out potential pedestrian and bicycle improvements recommended in this plan.
- ▶ Cones, sandbags, chalk, spray paint, and movable planters can be used to delineate bicycle lanes, curb extensions, and other enhancements.
- ▶ Improvements can be left for a single day to correspond with a specific event, or over several days or a week. Evaluation done before and after installing improvements helps to assess potential benefits in pedestrian and bicyclist use and driver compliance.

Benefit:

- ▶ Evaluate the potential effects of an infrastructure without having to contribute significant capital or make



Temporary pedestrian and bicycle improvement installations offer an opportunity to test out potential improvements before making significant investments. Sources: www.mrsc.org and www.peopleforbikes.org

Conduct an Open Streets Event

Recommendations:

- ▶ The City of Hibbing should work with the school district to plan and implement a community-wide “Open Streets” event.
- ▶ East Howard Street from 1st Avenue to 12th Avenue is recommended for such an event
- ▶ The event should occur on a Saturday or Sunday, and businesses should be encouraged to participate.

Benefit:

- ▶ Promotes appreciation and awareness of walking and biking as forms of transportation.
- ▶ Promotes community and physical activity.

- ▶ Open Streets events close streets to motor vehicle traffic and allows residents to explore on foot or bicycle. More information is available at www.openstreetsproject.org



*A “pop-up” protected bicycle lane at Minneapolis Open Streets.
Source: Knowble Media.*

Adopt a Citywide Complete Streets Policy

Recommendations:

- ▶ The City of Hibbing should adopt a citywide Complete Streets policy and set of approved pedestrian and bicycle design standards.

Benefit:

- ▶ Standardizes the city's policy for designing streets for users of all modes

- ▶ Complete streets are streets that are accessible, comfortable, and functional for users of all modes, ages, and abilities, both to travel along and to cross. Cities across the United States have adopted complete streets policies of various forms.

- ▶ These policies set direction and in some cases, specific guidance, for incorporating design standards during new and rehabilitation street infrastructure projects for accommodating those walking, biking, the disabled, as well as motor vehicle drivers.

- ▶ The City of Fergus Falls has a complete streets policy that could serve as an example for Hibbing. More information is available here:

www.dot.state.mn.us/planning/completestreets/docs/policy/fergusfallsresolution.pdf

- ▶ More information and resources about complete streets in Minnesota is available here:

www.mncompletestreets.org



A Complete Streets transformation.
Source: www.vtpi.org

School District Recommendations

General Operations and Network Recommendations

This section provides recommendations to improve the pick-up and drop-off operations at the focus schools in Hibbing. Recommendations are focused primarily on parent pick-up and drop-off operations, but some recommendations are also offered for bus pick-up and drop-off where appropriate. The efficiency of parent pick-up and drop-off makes a significant impact on the overall safety of the school campus as students arrive and go home, no matter what mode they are using. Recommendations offered may be mixed and matched as appropriate and desired, and should be championed by school personnel. Additional recommendations that address routes and intersection improvements adjacent to the schools that also serve to improve the efficiency and safety of pick-up and drop-off operations are included earlier in this section.



Improve School Pick-Up and Drop-Off Operations

GREENHAVEN ELEMENTARY SCHOOL

Current Operations and Issues

Parent pick-up and drop-off occurs in the parking lot on the north side of the school. Parents are to enter the parking lot through its west entrance and exit out of the lot's north driveway. Drop-off occurs between 7:30 and 8:00 am, and pick-up begins at 2:20 pm at dismissal. Parent drop-off in the morning peaks around 7:40-7:55 am. In the afternoon, many parents come before the 2:20 pm dismissal time to wait. In the morning, parents are instructed to either park in a designated space and walk their child into the school, or drop their child off from the curbside drop-off only lane, which is marked by signs as "Parent Drop Off Only – No Parking."

In the afternoon, parents are instructed to park and enter the cafeteria to pick up their child and escort them out of the building. Pick-up in the afternoon flows more smoothly as parents do a better job of staggering time that they arrive to pick-up their children. There are 15 parking spaces in the north parking lot designated for parent parking.

Despite signage, regular written instructions from school personnel, and the occasional presence of school personnel in the north parking lot, many parents park along the curb and on the opposite side of the driveway from the curb, leaving pick-up and drop-off congested particularly at peak times. Section 3 includes more information about existing parent pick-up and drop-off operations.

Bus pick-up and drop-off occurs in the driveway on the south side of the school and operates efficiently.

Recommendations

The following strategies and changes are recommended to make parent pick-up and drop-off operate more safely and efficiently at Greenhaven Elementary:

- ▶ Designate and keep clear the first row of 19 parking spaces on the east side of the lot as parking for parent pick-up and drop-off only. These spaces should be marked with "Parent and Visitor Parking Only" signage. Parents not wishing to use the loading and unloading zone along the curb may park in these spaces. These spaces could be used for visitors throughout the day.

- ▶ Construct a 6' wide sidewalk from the north school exit along the east side of the parking lot, meeting the existing sidewalk along South Inner Drive. This will provide a pathway for those parking in the easternmost parking spaces to access the school entrance without walking through the parking lot.

- ▶ Delineate the curb zone on the south side of the lot with yellow hatched paint markings, and yellow paint on the curb itself, to indicate a loading/unloading zone only, from the parking lot entrance to the end of the curb abutting the school. Consider also adding "Pull Forward" and "No Parking – Drop-Off Only" pavement lettering or physical standing sign in this zone.

- ▶ Delineate the north side of the parking lot entrance driveway off of South Inner Drive, along the center grass island, with red hatched paint markings and "No Stopping or Parking" pavement lettering. Consider placing orange cones in this area to deter cars from parking in this location.

- ▶ Stripe a blue line with arrowheads to indicate the desired parent vehicle circulation through the lot. It is recommended that vehicles circulate

through the west South Inner Drive entrance, around the outside drive aisle, and exit out the north exit. It is recommended that circulating vehicles do not use the center drive aisle on the west side of the lot.

- ▶ To reduce peak morning congestion, consider instituting a staggered arrival approach where parents alternate when they drop off their children on a monthly or other regular basis: one month dropping their children off between 7:35-7:45 am, and the next month dropping their children off between 7:45-7:55 am. Parents could be given a colored tag to place on their vehicle for school staff to be able to monitor compliance. Schedules with designated drop-off times could be distributed through school information channels, and parents could be divided in groups by the first letter of their last name.
- ▶ Consider placing a designated school official with a bright colored vest in the parking lot during arrival and dismissal to monitor motor vehicle compliance.

- ▶ Conduct “pick-up and drop-off safety awareness” weeks in September and January to renew focus on proper lot operations.
- ▶ Designate the space on the south side of South Inner Drive north of the school and east of the paved recess area as overflow parent parking should the designated parking within the main lot fill up. This could be communicated to parents via school communication methods.

Figure 4.7 depicts recommended improvements to pick-up and drop-off operations at Greenhaven Elementary School. Note that recommended modifications to adjacent signs and physical intersection infrastructure are found elsewhere in this section.

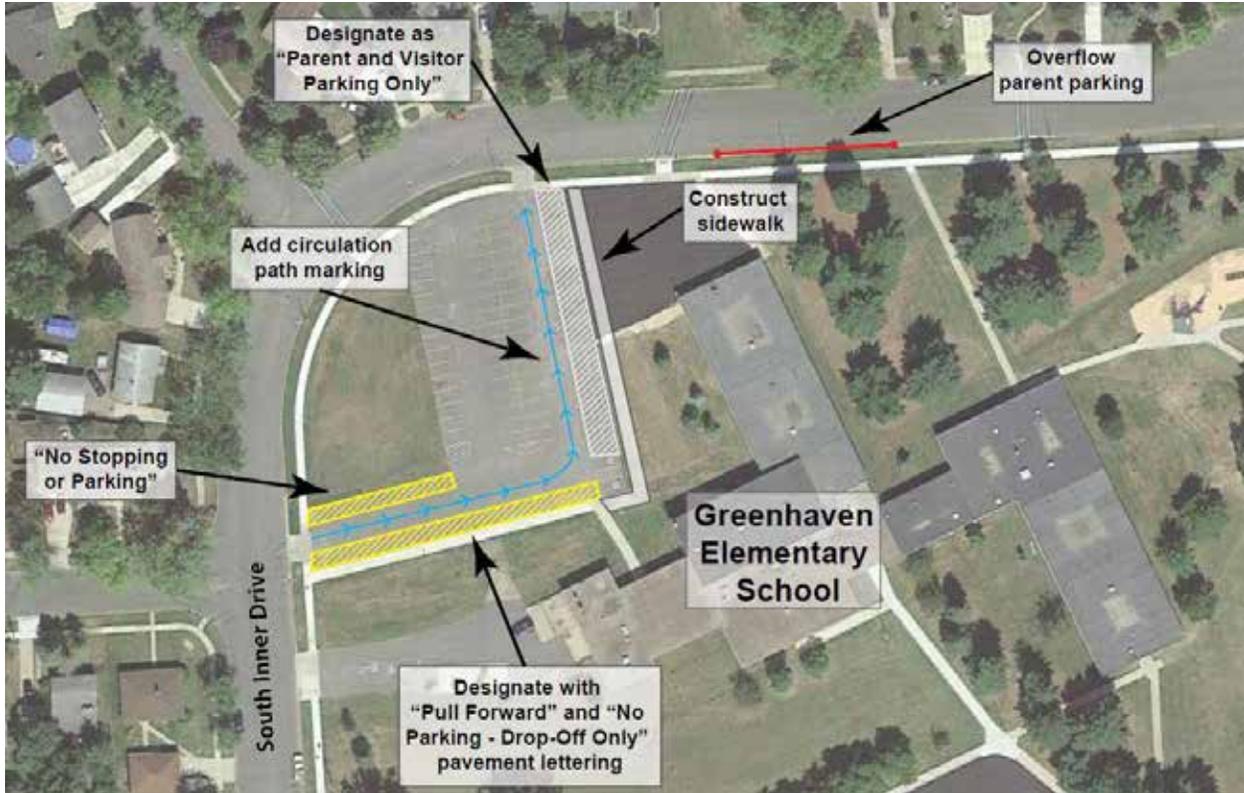


Figure 4.7: Recommended Improvements to Pick-Up and Drop-Off Operations at Greenhaven Elementary School

Improve School Pick-Up and Drop-Off Operations

WASHINGTON ELEMENTARY SCHOOL

Current Operations and Issues

Pick-up and drop-off at Washington Elementary occurs in the parking lot on the north side of the school. Parents are to enter the parking lot from its south entrance and exit from its north driveway. Like Greenhaven Elementary School, drop-off occurs between 7:30 and 8:00 am, and pick-up begins at 2:20 pm at dismissal. Parent drop-off in the morning peaks around 7:40-7:55 am, and in the afternoon, many parents come before the 2:20 pm dismissal time to wait. In the morning, parents are instructed to either park in a designated space and walk their child into the school, or drop their child off from the curbside drop-off only lane, which is marked by signs as “No Parking – Student Pick-Up or Student Drop-off Only.”

In the afternoon, parents are instructed to park and enter the cafeteria to pick up their child and escort them out of the building. Congestion often occurs during peak morning drop-off and afternoon dismissal, resulting primarily from not enough parking lot capacity to meet peak demand. Parents were observed to park at the front end of the No Parking area prior to dismissal time, in addition to most of the roughly 15 parking spaces being full. At the time of dismissal, parents were observed parked on both sides of Brooklyn Drive outside of the school, escorting their children at unmarked locations across Brooklyn Drive to access vehicles. Section 3 includes more information about existing parent pick-up and drop-off operations.

Bus pick-up and drop-off occurs in the driveway just west of the school and operates efficiently.

Recommendations

Options to expand the physical space of the parking and/or pick-up/drop-off area at Washington Elementary are not present due to space constraints. The following strategies and changes are recommended to make parent pick-up and drop-off operate more safely and efficiently at Washington Elementary:

- ▶ Extend the curb loading and unloading zone by extending the sidewalk on the east side of the parking lot to the north and west around the north side of the lot. Note that parking on the north side of the parking lot will need to be removed to make this possible.
- ▶ Delineate the curb zone in the lot with yellow hatched paint markings, and yellow paint on the curb itself, to indicate a loading/unloading zone only from the parking lot entrance to the end of the curb abutting the school. Consider also adding “Pull Forward” and “No Parking – Drop-Off Only” pavement lettering or physical standing sign in this zone.
- ▶ Working with the City of Hibbing and St. Louis County, consider closing Brooklyn Drive/12th Avenue East from 7:40 am-8:00 am and 2:20-2:40 pm to through traffic from East Howard Street on the north to East 22nd Street on the south. This would help reduce ancillary traffic on this road during peak times when parents and students are crossing the street to access vehicles. This stretch of road sees roughly 2,000 vehicles per day, according to 2013 MnDOT traffic volumes. Through traffic could be diverted to nearby U.S. Highway 169 during these times.
- ▶ To reduce peak morning congestion, consider instituting a staggered arrival approach where parents alternate when they drop off their children on a monthly or other regular basis: one month dropping

their children off between 7:35-7:45 am, and the next month dropping their children off between 7:45-7:55 am. Parents could be given a colored tag to place on their vehicle for school staff to be able to monitor compliance. Schedules with designated drop-off times could be distributed through school information channels, and parents could be divided in groups by the first letter of their last name.

- ▶ Consider placing a designated school official with a bright colored vest in the parking lot during arrival and dismissal to monitor motor vehicle compliance.
- ▶ It is recommended that an adult crossing guard with a colored vest and colored flag is present at the intersection of Brooklyn Drive and East 21st Street during arrival

and dismissal times. This would greatly increase the visibility and comfort of crossing students at this location, including those crossing the street to load and unload from vehicles parked along the west side of Brooklyn Drive.

- ▶ Conduct “pick-up and drop-off safety awareness” weeks in September and January to renew focus on proper lot operations.

Figure 4.8 depicts recommended improvements to pick-up and drop-off operations at Washington Elementary School. Note that recommended modifications to adjacent signs and physical intersection infrastructure are found elsewhere in this section.

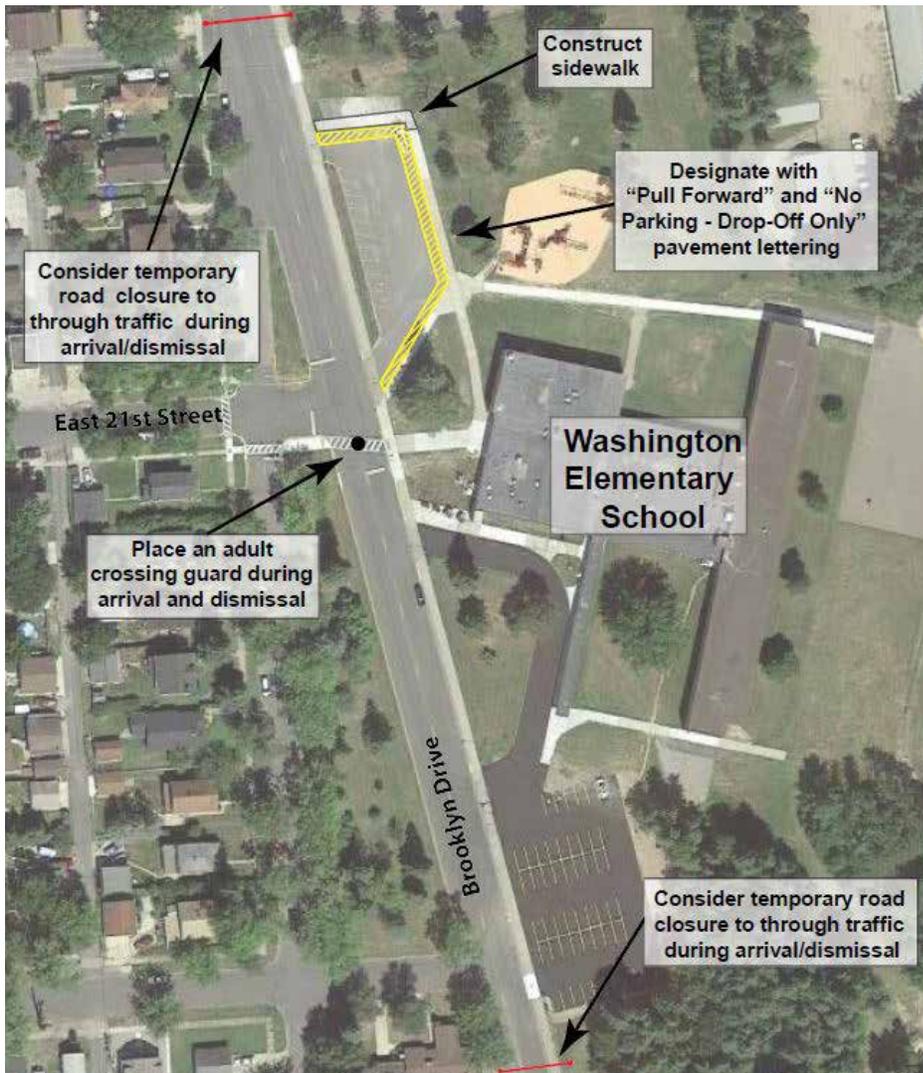


Figure 4.8: Recommended Improvements to Pick-Up and Drop-Off Operations at Washington Elementary School.

Improve School Pick-Up and Drop-Off Operations

LINCOLN ELEMENTARY SCHOOL

Current Operations and Issues

Class starts a bit later on Lincoln Elementary School, at 8:05 am. Dismissal is at 2:20 pm. Pick-up and drop-off at Lincoln Elementary School occurs in the school parking lot at the corner of East 23rd Street and Brooklyn Drive. Parents are to enter the parking lot from its north entrance off of East 23rd Street, and exit its east driveway on to Brooklyn Drive. Parents are to either use the curb for loading and unloading, or park in the lot if they would like to exit their vehicle to pick-up and drop-off their child. If they arrive early for pick-up, or would like to drop off their child during peak time, parents are asked to pull all the way forward to the end of the curb nearest Brooklyn Drive.

Observations and discussion with school personnel indicate that some parents arrive well before dismissal and park near the beginning of the curb inside the entrance off of East 23rd Street and wait for their student to be dismissed. These parents wish to be near the designated exit from which their student will be dismissed. This causes congestion near the entrance to the parking lot, sometimes queuing back on to East 23rd Street. More congestion is present in the morning close to class start time as arrivals are compressed into a shorter time period than what is typical of student pick-up in the afternoon.

Other observations include double-parked vehicles dropping off and picking up students in the middle drive aisle when curb space is limited, vehicles parked and queuing in unmarked areas on the north side of the parking lot, and students crossing Brooklyn Drive to load into vehicles parked on the street. At the time of dismissal observation, the parking lot was about one-half full. Different than what is required at Greenhaven and Washington Elementary Schools, parents and others picking up students at Lincoln

Elementary mostly stay in their parked vehicles and wait for students.

Bus pick-up and drop-off occurs along 11th Avenue west of the school and operates efficiently.

Recommendations

The following strategies are recommended to make parent pick-up and drop-off operate more safely and efficiently at Lincoln Elementary:

- ▶ Designate and keep clear the first two rows parking spaces on the southern end of the lot (38 total non-handicap spaces), on the east side of the lot, as parking for parent pick-up and drop-off only. These spaces should be marked with “Parent and Visitor Parking Only” signage. Parents not wishing to use the loading and unloading zone along the curb and those who cannot find adequate space along the curb may park in these spaces. These spaces could be used for visitors throughout the day. The row closest to the building should be filled first and cars should have their fronts facing the school building so as not to have to back up into the flow of circulating loading/unloading vehicles along the curb. Teachers and staff should be instructed to keep these spaces free.
- ▶ Delineate the curb zone in the lot with yellow hatched paint markings, and yellow paint on the curb itself, to indicate the loading and unloading zone, from the entrance of the parking lot, around the curb to the exit area near Brooklyn Drive. Consider also adding “Pull Forward” pavement lettering in this zone.
- ▶ Place through arrow markings on the interior lane to indicate the required flow of motor vehicle traffic in this lane.
- ▶ Place cones or other obstructions near the

beginning of the loading/unloading zone off of East 23rd Street in order to prevent vehicles from parking in this location. Vehicles parked here makes it difficult for other vehicles to enter the lot, causing back-ups on East 23rd Street.

- ▶ Consider establishing the east building entrance toward the end of the curb as the primary drop-off and pick-up entrance for all students, to encourage parents to pull all the way down the curb and relieve congestion at the parking lot entrance. This may require releasing students in more than one group at dismissal.
- ▶ Equip the designated school official present

in the parking lot at arrival and dismissal time with a bright colored vest to make he or she more visible while monitoring vehicle compliance.

- ▶ Conduct “pick-up and drop-off safety awareness” weeks in September and January to renew focus on proper lot operations.

Figure 4.9 depicts recommended improvements to pick-up and drop-off operations at Lincoln Elementary School. Note that recommended modifications to adjacent signs and physical intersection infrastructure are found elsewhere in this section.

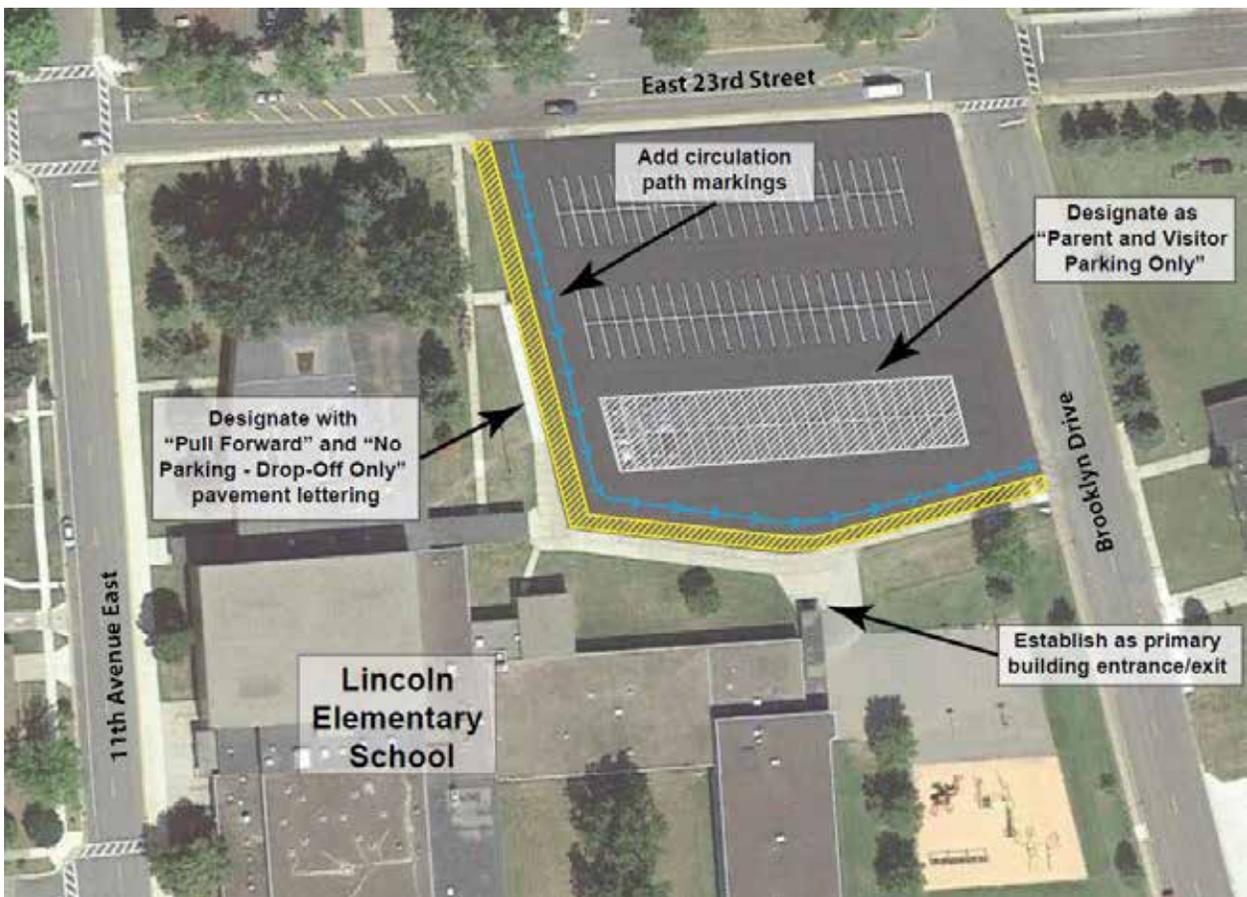


Figure 4.9: Recommended Improvements to Pick-Up and Drop-Off Operations at Lincoln Elementary School.

Improve School Pick-Up and Drop-Off Operations

HIBBING HIGH SCHOOL/ASSUMPTION CATHOLIC SCHOOL

Current Operations and Issues

High school classes begin at 8:00 am, and dismissal is at 2:40 pm. Students being driven to school in personal vehicles are to be dropped off behind the school along East 21st Street, or in the Memorial Building parking lot off of East 23rd Street. Field observation and discussion with school personnel indicate that students are dropped off on all sides of the high school building, on East 21st Street, East 23rd Street, 7th Avenue East, and 9th Avenue East, as well as the pull-in driveway off of East 23rd Street. This south loop is a bus-only zone where cars are not permitted. Vehicles dropping off students were observed stopping in the middle lane rather than the curb in some cases where curb unloading space was not possible. Vehicles were also observed unloading students from the opposite side of the road. Buses operate pick-up and drop-off on 7th Avenue East and 9th Avenue East.

Students driving themselves to school are instructed to park in the Memorial Building parking lot along East 23rd Street and walk along East 23rd Street, crossing 7th Avenue East and accessing the school's south entrance. Observation and discussion with school personnel indicates that some students park on East 24th Street and other neighborhood streets that are not marked with no parking signs instead of the Memorial Building parking lot. The intersection of East 23rd Street and 7th Avenue East is particularly congested during arrival and dismissal with students walking to and from the Memorial Building parking lot.

Pick-up and drop-off for Assumption Catholic School students occurs in the school's northeast campus parking lot. Busing is offered for Assumption Catholic students by Hibbing Public Schools.

Recommendations

- ▶ Consider moving the bus drop-off zone on the south side of East 23rd Street east of the entrance to the Assumption Catholic School parking lot. A raised crosswalk is recommended at this location to facilitate student crossings to the high school. It is recommended that buses park to the east and beyond this zone so that students can access this raised crosswalk from the sidewalk without any driveway conflict points.
- ▶ Delineate the curb zone along East 21st Street with yellow hatched paint markings, and yellow paint on the curb itself, to indicate a loading/unloading zone only, in the entire span from 7th Avenue East to 9th Avenue East. Consider also adding "Pull Forward" and "No Parking – Loading and Unloading Only" pavement lettering or physical standing sign in this zone. Much of this area is currently marked as 30-minute parking. It should be kept free of parked cars during arrival and dismissal, and parents dropping off students should be encouraged to use this area, coming from the west so that students can be unloaded to the curb closest to the school. The area could be used for short-term parking during the middle of the day.
- ▶ Feedback received indicates a crossing guard as sometimes being present at the intersection of East 23rd Street and 7th Avenue East. It is recommended that an adult crossing guard with a colored vest and colored flag is present at this intersection during arrival and dismissal times. This would greatly increase the visibility and comfort of crossing students at this location.
- ▶ Restrict right turns out of the Memorial Building parking lot onto East 23rd Street at dismissal time to alleviate congestion at the intersection of East 23rd Street and

7th Avenue East. This could be achieved with signage, monitoring/enforcement, and education of students that park in the lot.

- ▶ Conduct “pick-up and drop-off safety awareness” weeks in September and January to renew focus on proper pick-up and drop-off operations.

Figure 4.10 depicts recommended improvements to pick-up and drop-off operations at Hibbing High School and Assumption Catholic School. Note that recommended modifications to adjacent signs and physical intersection infrastructure are found elsewhere in this section.

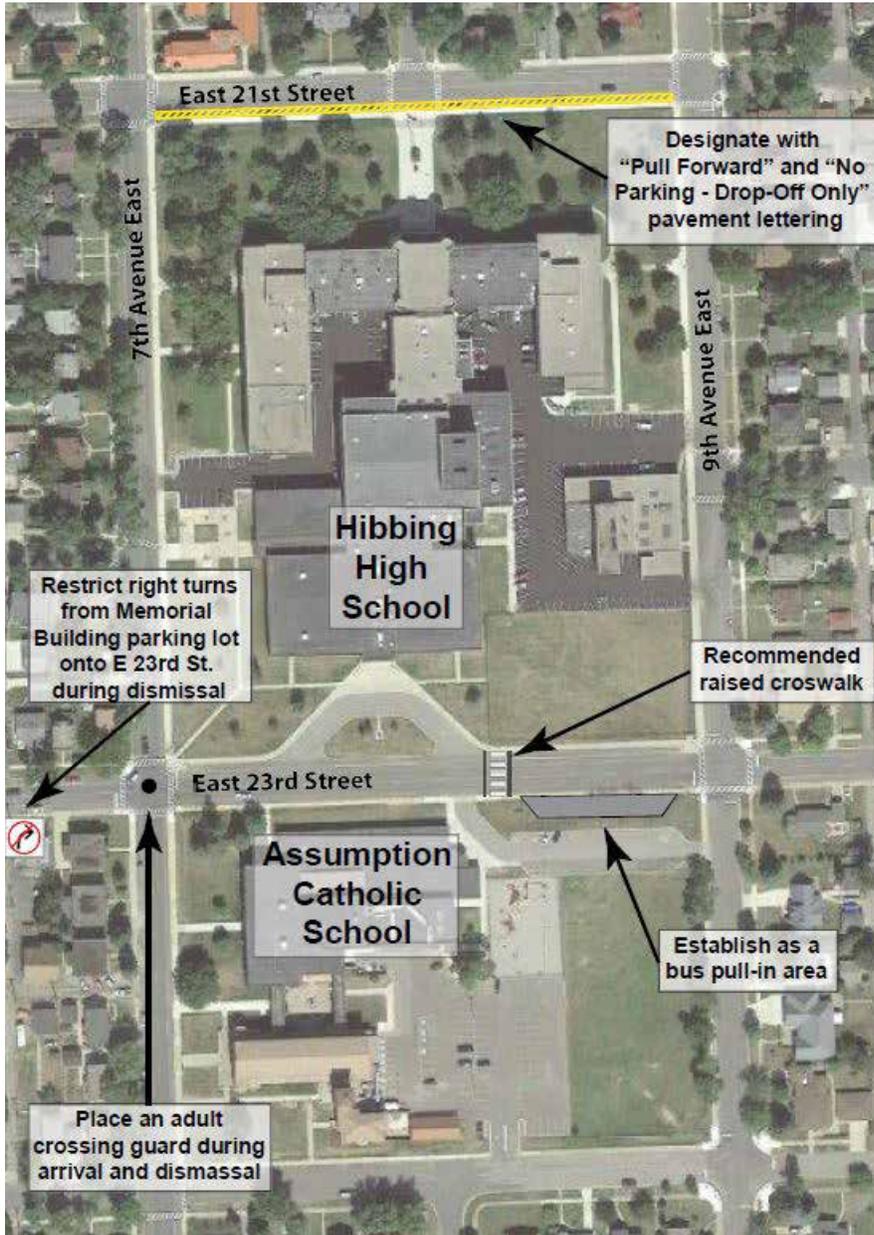


Figure 4.10: Recommended Improvements to Pick-Up and Drop-Off Operations at Hibbing High School and Assumption Catholic School.

School District Recommendations

Project Sheets

This section presents two high-priority non-infrastructure recommendations in specific “project sheet” format. These project sheets are meant to be separated from the rest of the plan and used as a foundation for discussion, further analysis, and implementation by stakeholders.



Establish an Adult Crossing Guard Program for Greenhaven and Washington Elementary Schools

Recommendations:

- ▶ Develop and execute a consistent crossing guard program at the following intersections.
 - ▶ East 23rd Street and 7th Avenue near Hibbing High School
 - ▶ East 21st Street and Brooklyn Drive outside of Washington Elementary School
- ▶ Maintain crossing guard presence up to 30 minutes prior to arrival, and until 15-30 minutes after dismissal.
- ▶ Crossing guards should wear bright vests and carry bright flags and/or signs to maintain visibility.

Benefit:

- ▶ Increases pedestrian visibility and vehicle compliance with stop locations.

A similar program is available in Bend, Oregon. More information about the program is available here:

bendoregon.gov/index.aspx?page=1076



Adult crossing guard programs can improve motor vehicle compliance at intersections.

Source: www.saferoutesinfo.org

Implement a Walking and Biking to School Education and Encouragement Campaign

Recommendations:

- ▶ The school district should work with the city to distribute information about safe walking and biking routes to school.
- ▶ Participation in the National Walk and Bike to School Day could morph into more regular “Walking Wednesdays” where walking and biking is encouraged.

Benefit:

- ▶ Educates students, staff, and parents about safe walking and biking routes and encourage higher rates of walking and biking to school
- ▶ The school district should participate in national Walk and Bike to School Day in October and/or May, where parents could organize “walking school buses” or “bike trains” to travel in large groups to school. More information is available at www.walkbiketoschool.org



Walking school buses are a safe way to encourage walking and biking to school among students. Source: www.kingston-ny.gov



5 Health Impact Assessment

This section summarizes the modified health impact assessment (HIA) that was conducted as a part of the Safe Routes to School plan in Hibbing.

Introduction

To inform the infrastructure and non-infrastructure recommendations made in this plan, a brief, modified health impact assessment (HIA) was conducted in Hibbing. This HIA consisted of some of the elements of traditional HIAs and its intention was to inform the recommendations of this plan and to provide insight into public health efforts, initiatives, and priorities that can be advanced through this Hibbing Safe Routes to School Plan.

Another key objective of this modified HIA was to illustrate a basic process that could be replicated in other similar communities across Minnesota that are working on non-motorized transportation planning, engineering, and Safe Routes to School initiatives.

A critical part of this assessment was gaining the perspective public health practitioners have of government work, specifically of the City of Hibbing, in planning for and making

transportation improvements and how it can advance specific public health causes. This section describes the process that was carried out to gain insight, summarizes the key findings, and provides recommendations for the City of Hibbing and the Hibbing Public Schools in advancing public health priorities and integrating public health planning into municipal planning and work processes.

For more information about HIAs and best practices for incorporating HIA into municipal transportation planning and improvement work, please see Appendix 2.

Process

The modified HIA process conducted in Hibbing consisted of several steps:

Reconnaissance

To better understand the public health context in which Hibbing exists, conversations were had with regional public health practitioners including Annie Harala of the Healthy Northland Statewide Health Improvement Program, and Raymond Jobe of St. Louis County. A conference call was also held with MnDOT and Minnesota Department of Health public health practitioners to gain context and insight into an appropriate process. Additionally, existing documentation about health indicators, issues, and efforts in Hibbing and the region were reviewed, such as the St. Louis County Health Status Report, the 2012 Fairview Range Regional Health Services Community Health Needs Assessment Implementation Plan, and the 2016-2018 Fairview Medical Center Community Health Needs Assessment Implementation Strategy.

Development of an Approach

After initial phone conversations, a basic health impact assessment approach was developed that was appropriate given project scope, schedule, and budget. It was decided that information and insight would be sought from local practitioners through an online survey, which offered the opportunity to

easily “crowdsource” a wealth of insight and recommendations. In collaboration with local public health representatives, an e-mail list of individuals within Hibbing working on safety and public health issues was developed for survey deployment.

Stakeholder Engagement

A survey was developed and sent to a final list of 27 contacts, in addition to the project team and school representatives. The survey was open for two weeks’ time, and one interim reminder e-mail was also sent. Survey questions included the following:

- ▶ What organization do you work for/ represent?
- ▶ What is your role at this organization?
- ▶ Please describe what you believe are the key public health concerns facing the City of Hibbing and the region over the next 5-10 years.
- ▶ How can active transportation (walking and biking) and Safe Routes to School planning, engineering, and improvements support initiatives in Hibbing that address health deficiencies?
- ▶ What barriers exist in Hibbing to advancing public health initiatives? Please offer any thoughts you have on how those barriers could be overcome.
- ▶ One of the primary goals of this work is to establish health impact assessments and a public health perspective as an integral and routine part of the municipal public works planning process in Hibbing and in other Minnesota communities. Please share any perspectives or ideas you may have for making public health assessments and planning a routine part of government decision-making processes, particularly as it relates to transportation improvements.
- ▶ Please describe the role that city and county government have had in advancing public health goals and initiatives in Hibbing? Please provide any comments you may have

about how they have been involved, or how they could be involved differently moving forward.

- ▶ Do you have any specific concerns or ideas for improvement related to active transportation and walking and biking to school and around the City of Hibbing?
- ▶ Please share any recommendations you would like to see included in the Hibbing Safe Routes to School plan, as it relates to public health, active transportation, policy, or other.

Assessment and Recommendations

Responses were reviewed and are summarized below. These responses inform the recommendations included in this section.

Learnings

Ten responses were received, from representatives of the following organizations:

- ▶ United Way of Northeastern Minnesota
- ▶ Hibbing Police Department
- ▶ Itasca County
- ▶ Housing and Redevelopment Authority of Hibbing
- ▶ Hibbing Chemical Health Advisory Committee
- ▶ Fairview Range Medical Center
- ▶ St. Louis County Public Health and Human Services
- ▶ Range Center, Inc.

Responses received are summarized in the table below. A full set of responses is available in Appendix 3.

Please describe what you believe are the key public health concerns facing the City of Hibbing and the region over the next 5-10 years.

- ▶ Drug & alcohol use/abuse
- ▶ Motor vehicle injury
- ▶ Obesity
- ▶ Poverty
- ▶ Transportation issues
- ▶ Mental health
- ▶ Lack of options for physical activity
- ▶ Lack of affordable healthy food options
- ▶ Heart health issues
- ▶ Predatory adults

How can active transportation (walking and biking) and Safe Routes to School planning, engineering, and improvements support initiatives in Hibbing that address health deficiencies?

- ▶ Walking/biking can reduce childhood obesity and other related health issues
- ▶ Alleviate some transportation issues
- ▶ Increases physical activity
- ▶ Supports mental health
- ▶ Contributes to less issues with substance abuse
- ▶ Increases safe routes to school
- ▶ Reduces stress
- ▶ Creates a more attractive community/place

What barriers exist in Hibbing to advancing public health initiatives? Please offer any

thoughts you have on how those barriers could be overcome.

- ▶ Safety concerns: busy streets, uncontrolled intersections, fear of “strangers”
- ▶ Lack of funding
- ▶ Lack of promotion of mental well-being at all ages
- ▶ Weather (for winter time physical activity)
- ▶ Access and affordability of healthy food
- ▶ Lack of knowledge and understanding of how everything impacts community health from leadership Poverty
- ▶ Limited transportation
- ▶ More collaboration with schools and city government
- ▶ Mental health issues not taken seriously by the medical profession
- ▶ Lack of consistent method of getting information to parents and community members on the importance of the issues and the need for a response
- ▶ Lack of safe bike lanes

One of the primary goals of this work is to establish health impact assessments and a public health perspective as an integral and routine part of the municipal public works planning process in Hibbing and in other Minnesota communities. Please share any perspectives or ideas you may have for making public health assessments and planning a routine part of government decision-making processes, particularly as it relates to transportation improvements.

- ▶ Map out safe routes, ensure sidewalks on all streets, put in controlled intersections
- ▶ Health in All Policies approach to any decision-making, including transportation
- ▶ Utilize ARDC to provide technical assistance for compressive planning and active transportation planning
- ▶ Have meetings with the public
- ▶ Use local news channels and newspapers to create awareness
- ▶ Learn as much as possible, understand your community needs before making decisions that could be leaving large parts of the community unrepresented or missing key information, causing unnecessary duplication of services
- ▶ Increase child care
- ▶ Work with safety groups in the city
- ▶ Work with local hospitals on the assessment
- ▶ Transportation improvements for people with disabilities
- ▶ Greater cooperative effort to align city/county/state goals, which in the long run would help streamline spending with the maximum gain from the capital outlay
- ▶ Offer more public spaces for active living
- ▶ Improve the existing streets, sidewalks, and bike trails
- ▶ Increase bus transportation and emergency transportation
- ▶ Encourage public officials to be part of local groups and coalitions
- ▶ Employ more protected bike lanes in the city
- ▶ Coordinate with local committees that work toward reduction of chemical use and safe community initiatives
- ▶ Help low-income children buy bicycles

Please describe the role that city and county government have had in advancing public health goals and initiatives in Hibbing? Please provide any comments you may have about how they have been involved, or how they could be involved differently moving forward.

- ▶ City of Hibbing has made improvements to the bike paths and creating awareness of their existence
- ▶ City has been involved in supporting grant applications and projects that improve community health
- ▶ Currently working on initiatives to educate the public on parenting and healthy living
- ▶ Fairview Range has established several goals and initiatives for Hibbing

Do you have any specific concerns or ideas for improvement related to active transportation and walking and biking to school and around the City of Hibbing?

- ▶ Crossing First Avenue is a challenge because it is so busy
- ▶ Sex offenders often living within blocks of the school
- ▶ Need safer routes to cross highways where traffic moves at a higher speed
- ▶ We want to make sure that time and funding are not thrown at a project that would have little or no impact on changing people's behavior.
- ▶ Need to make the safe routes very visible to traffic
- ▶ Uncontrolled intersections are an issue
- ▶ Provide incentives for individuals using the active transportation for example pedometers or water bottles
- ▶ People don't stop for pedestrians in the cross walk on 25th street
- ▶ More sidewalks especially that are cleared and ice free in the winter
- ▶ Pedestrian lighting needs to be improved on 169
- ▶ Re-evaluate the school bus routes

Please share any recommendations would you like to see included in the Hibbing Safe Routes to School plan, as it relates to public health, active transportation, policy, or other.

- ▶ Encourage a Health in All Policies approach when developing new transportation, promoting active transportation, etc.
- ▶ Try to get support from schools on healthy living initiatives
- ▶ Create more of a barrier between the bike and car lanes, such as rumble strips or something very visible to cars
- ▶ Assess downtown parking too close to intersections. Vehicles have to "creep out" into the streets to see if any oncoming traffic is coming
- ▶ Many drivers are not aware of the laws regarding sharing the roads - more education is needed

The comments and suggestions received indicate that respondents see walking and biking as important components to a comprehensive transportation system, one that can provide several public health benefits and help address critical concerns such as obesity, road safety, and lack of physical activity options. Respondents indicated a desire for public health perspectives to be integrated into transportation planning and improvement, and other public decision-making processes, in order for benefits to be seen by those that need them.

Recommendations

Faced with the critical public health issues of mental health, drug abuse, obesity, physical inactivity, and others, government action, led by the City of Hibbing, has the potential to positively advance and promote initiatives and improvements that can have lasting positive effects. The decisions that the city and county make, particularly concerning what types of transportation improvements should be built and where, has a profound impact on residents' quality of life and daily lives. The City of Hibbing and St. Louis County, in particular, are uniquely and centrally positioned to address certain critical public health concerns.

Several recommendations are offered below to help the City of Hibbing, Hibbing Public Schools, and St. Louis County advance public health concerns and initiatives in the Hibbing region in the context of planning for and implementation of transportation and Safe Routes to School improvements. While there are certainly other city initiatives and policies that have implications for public health, the recommendations below focus on influencing public health through transportation decisions. This not only makes sense from a health, society, and public health perspective, but it will help the city most efficiently allocate scarce resources to projects that will see the greatest return on investment.

Infuse a Public Health Perspective into Decision Making

The first step in this process to recognize that integrating a health perspective in city and school processes and practices need not be difficult or time-consuming. It's about creating a "mindset" to consider the public health needs and priorities of groups of individuals (whether that be students, seniors, lower income residents, etc.) when making multi-modal transportation decisions.

At the city level, consider:

- ▶ Designating a public health "champion" or contact within the Department of Public Works to help promote public health initiatives and efforts and to liaison with regional, county, and state public health practitioners. This person could also work closely with city leadership, different city departments (such as the Policy Department), and the school district to develop coordinated strategies for addressing public health concerns.

 - ▶ Incorporating the following questions in transportation improvement decision-making processes, such as in the capital improvements planning process:
 - ▶ Who will this improvement or project benefit, if any? How?

 - ▶ Who will this improvement or project negatively affect, if any? How?

 - ▶ Is there a different way that resources can be allocated to achieve greater benefit for more people?
-

Coordinate with Public Health Stakeholders

Discussing projects and initiatives with diverse stakeholders broadens the perspective and input used to inform decisions and makes diverse groups aware of the work of the city. Stakeholder engagement is critical to understanding the essential issues and vulnerable populations, identifying potential funding opportunities, aligning efforts so that they are complementary and not duplicative, and ensuring scarce financial and personnel resources are used most appropriately and efficiently. To effectively and efficiently engage with stakeholders, the city should consider:

- ▶ Making early connection with key public health partners in the process of making decisions. **The simplest and perhaps the most effective way to integrate a public health perspective in transportation decision-making is for the city to coordinate with Healthy Northland Statewide Health Improvement Program (SHIP) and St. Louis County public health staff early on in planning processes** where it is clear there could be health impacts. Often, a simple phone call is all that is necessary. These partners should be coordinated with at least once quarterly on broader issues and strategy.
- ▶ Working with regional and county partners to set up a committee of practitioners to serve as resource for city staff and leaders on issues of transportation and public health. This committee could meet locally and be formally involved in approval processes, or may exist as an outside advisory committee that serves in more of an “on-call” capacity. This committee might consist of individuals who were involved in the 2016-2018 Fairview Medical Center Community Health Needs Assessment Implementation Strategy, as part of the Fairview Range Medical Center Community Health Steering Committee.

- ▶ Cheryl Bisping, Community Health Outreach Coordinator with Fairview Range Medical Center would be a good person to contact. She is the primary contact of a group called Mesabi Safe Communities Coalition, which is interested in addressing road safety in the region. The work of this group could be combined with efforts to implement recommendations in this SRTS plan.

Involve the School District

A critical constituent in public health efforts and non-motorized transportation improvements within Hibbing should be youth, particularly school-aged children. Obesity and physical inactivity among children and other groups is an increasing concern. Streets are often perceived to be too dangerous to cross or walk along due to infrastructure inadequacies and motor vehicle driver behavior. Vehicle traffic at parent pick-up and drop-off during school arrival and dismissal is congested and confusing. Evidence suggests that there may be pent up demand for enhanced walking and biking facilities.

As such, this plan recommends:

- ▶ The City of Hibbing work closely with the Hibbing Public Schools to identify and address issues that diminish students’ ability to walk and bike to school. This may include identifying critical infrastructure improvement needs, addressing concerns with maintenance practices, conducting enforcement at crucial intersections, and other efforts. The city and school district should work closely on identifying, planning for, funding, and implementing improvements to the transportation system that serves the schools.

Conduct a Public Health and Active Transportation Awareness Campaign

A significant concern expressed by survey respondents and heard throughout project engagement and analysis is the need for greater awareness and education among pedestrians, bicyclists, and motor vehicles in Hibbing. Drivers often drive too fast and do not comply with stop and signalized controls, especially in school zones. Pedestrians and bicyclists often do not walk or ride appropriately and predictably. New and improved infrastructure can only do so much. Human behavior is an essential component to creating a system that is more welcoming for all modes of transportation. This plan recommends the following:

- ▶ Creating and executing a public health and active living campaign to educate pedestrians, bicyclists, and motor vehicle drivers and raise awareness about how modes should coexist. This may include informational maps and brochures to students and parents, organized walking and biking events in the city or at the school, newspaper, radio, and social media, signage, and other efforts. The National Center for Safe Routes to School provides many resources for constructing encouragement and education programs (www.saferoutesinfo.org). MnDOT Safe Routes to School Mini Grants may be appropriate for to support small efforts within the city (<http://www.dot.state.mn.us/saferoutes/mini-grants.html>).

Create More Physical Separation Between Motor Vehicles and Pedestrians and Bicyclists

In general, learnings from the health impact assessment process in Hibbing and observations and analysis conducted as part of this plan indicate a need for greater separation between motor vehicles and pedestrians and bicyclists.

To the extent possible, the city should (more details are available in Section 4):

- ▶ Develop and promote a network of bikeways in the city, either on the streets as marked bike lanes, or more preferably and where possible, off-street shared-use paths that carry pedestrians and bicyclists. See Section 4 for more recommendations.
- ▶ Construct sidewalks of 5-7 feet, with a buffer (between sidewalk and curb) of 4-5 feet.
- ▶ Employ the use of vertical bollards and pavement markings, where possible, to construct pedestrian and bicycle zones that are separated from motor vehicle traffic.





6 Conclusion and Next Steps

This section concludes the plan and offers some action steps to work toward implementation of recommended improvements.

This plan offers a range of possible program, policy, and infrastructure improvements to make it easier, more comfortable, and more accessible for those wishing to walk and bike to school, and the system more efficient and predictable for other modes, including motor vehicles, trucks, and school buses. Now that there is a plan in place, you may be wondering: What now? The last thing anyone wants is for this plan and its ideas, developed based on systematic analysis of the transportation network and engagement with key stakeholders, to sit idle and without action.

There are several recommended action items to take in order to build off the motivation of the plan and affect tangible improvements with measurable results in the city. These include:

1. Identify a Champion and a Support Group

This is critical. The first step to moving forward is to identify someone who can be the champion and point person to lead the path forward.

Ideally this person is a representative of the City of Hibbing or the Hibbing Public School District. It is also helpful to identify a small team that the leader can look to for support and resources. It is recommended that the champion and support group be selected from the existing project team and stakeholders that were engaged as part of this project, potentially with others involved as needed.

This group will lead next steps, including identifying and seeking funding for improvements, educating others about desired improvements, building relationships, and working to integrate this plan's recommendations and an active transportation philosophy into the city's and schools' planning processes. It may be helpful to have this group maintain a regular meeting schedule, such as quarterly.

2. Identify Priorities

Before moving forward, the most important consideration involves identifying priorities. Critical questions to consider include:

- ▶ What does the city and school district view as the most important or necessary improvement?
- ▶ Which project would provide the most benefit relative to its cost and the effort required?
- ▶ Which project could be incorporated into improvements or other work to take place?
- ▶ Which project is most likely to receive funding?

Several infrastructure and non-infrastructure improvements recommended in this plan could be deemed top priorities. The focus for making infrastructure improvements was on offering relatively low-cost solutions to issues of motor vehicle speed and stop compliance. Potential high infrastructure priorities include suggested modifications to the intersection of East 23rd Street and 7th Avenue North, the mid-block crossing of East 23rd Street, and the improvements to the intersection of Brooklyn Drive and East 21st Street.

Potential non-infrastructure priorities include a full-time adult crossing guard program at these intersections, adopting a citywide Complete Streets policy, and conducting a prominent walk and bike to school safety education and encouragement campaign across the entire school district.

It is recommended that project partners apply for the joint MnDOT, Blue Cross Blue Shield, and Minnesota Department of Health SRTS workshop as discussed in Section 4.

3. Establish Your Path Forward, But Focus on Short-Term Next Steps

Once priorities have been identified, create a short (0-1 year), medium (1-3 years), and long-term (3-5) action plan to make Safe Routes to School improvements. This need not be detailed or complicated, but it should list improvements and goals that the group wishes to accomplish in the various time periods.

The action plan will help the group stay on track, since progress toward the plan could be reviewed at quarterly meetings. The action plan will also assist in integrating action items into work being done by the city, state, county, school district, and others. The plan will allow the team to be ready to go after funding opportunities as they arise.

4. Don't Be Discouraged

Achieving success will not be easy, and cannot be done overnight. It takes time and hard work. Do not be discouraged, though; Hibbing has a lot of great assets to build off of! Focus on a couple of action items at a time, and take a step-by-step approach.

*Don't forget to celebrate your successes along the way. **Have fun and good luck!***

APPENDIX 1



Incorporating Engineering into Safe Routes to School Plans

Introduction and Context

Traditionally, the development of Safe Routes to School (SRTS) plans in Minnesota have resulted from a process led by planning principles. Public and stakeholder engagement is combined with field observation and some limited data analysis to inform plan recommendations.

The Minnesota Department of Transportation (MnDOT) has recently begun scoring applications for SRTS infrastructure grant funding higher if they are backed by a SRTS plan. Even with these plans in place, MnDOT has discovered it is often difficult to determine whether a desired improvement is warranted, would have the desired benefits, is compliant with applicable standards, and would not have detrimental effects on the operations and function of the multimodal transportation network.

The Hibbing Safe Routes to School plan is meant to be a pilot project in which a more rigorous and standards-based technical engineering approach to SRTS is employed.

Standards of engineering informed the understanding of existing conditions and the development of recommendations: standards of intersection design geometry and desired turning radii, pavement markings, turning movements and intersection level of service, the placement and operation of signs and signals, and traffic flow and congestion.

Based on what was conducted in Hibbing, this appendix summarizes a recommended approach in integrating engineering into SRTS work. The exact approach used for your project should be customized based on the objectives, timeline, and resources available, just as it was in Hibbing. To the extent possible, incorporating specific quantifiable data into the process will yield more objective results.

Suggested Process and Best Practices

Below is the recommended approach to integrating traffic, roadway, and operations engineering into a SRTS plan. This process should be led by a professional engineer.

1. FIELD REVIEW OF THE MULTI-MODAL TRANSPORTATION NETWORK, INCLUDING:

- ▶ Intersection control and lane configurations at major adjacent intersections
- ▶ Posted speed of major adjacent roadways
- ▶ Presence and condition of sidewalks, trails, on-street bike paths, curb ramps
- ▶ Intersection sight distance and visibility for motor vehicles and pedestrians
- ▶ Turning movements, lane widths, presence of congestion
- ▶ Driver behavior and compliance
- ▶ Locations of crossing guards during student arrival and dismissal
- ▶ Pedestrian and bicycle routes

The above information should be reviewed for issues and inconsistencies. Results should be documented as appropriate.

2. DATA COLLECTION AND ANALYSIS, INCLUDING:

- ▶ Focusing on identified priority intersections, use camera technology or manual counts to collect vehicle, pedestrian, and bicycle turning movement data during the peak periods of school drop-off and pick-up at priority intersections
- ▶ Collection of traffic volume and speed data of adjacent roadways
- ▶ Collection of historical crash data for the previous ten-year period along major adjacent roadways and intersections

“Hard” data collected should be compared to notes and photographs from field observation. Crash data and turning movement data, in particular, can inform the identification of the specific causes of particular hotspot locations. Camera information could be used to document both counts and intersection control compliance among all modes, if desired. Data should be collected and reviewed for peak arrival and dismissal time periods.

3. INTERSECTION CAPACITY AND GEOMETRY ANALYSIS, INCLUDING:

- ▶ Analysis of priority intersections using Synchro or HCS software, including reporting of movement delay and level of service (LOS)
- ▶ Reviewing lane width, available pavement width, and turning radii
- ▶ Reviewing warrants for increased/decreased intersection control (all-way stop, signal, etc.)
- ▶ Reviewing warrants for mid-block crossing using MnDOT’s *Pedestrian Locations: Uncontrolled Locations* resource

Analysis of intersections using appropriate software to establish delay and level of service thresholds provides justification for recommended solutions. Available turning radii should be examined using standard appropriate design vehicles before recommendations are developed to ensure adequate turning space.

Software such as AutoTurn could be used to accurately assess available turning space, if desired. Otherwise, a professional engineer’s evaluation of intersection capacity is likely appropriate at this stage of project design and development. Warrants for intersection controls per the Minnesota Manual on Uniform Traffic Control Devices (MN-MUTCD) should be reviewed.

4. SIGN AND SIGNAL INVENTORY AND PAVEMENT MARKING REVIEW, INCLUDING:

- ▶ Documenting existing signage along the major adjacent roadways and intersections
- ▶ Documenting existing pavement markings, including crosswalks, along the major adjacent roadways and intersections
- ▶ Reviewing compliance per MN-MUTCD standards
- ▶ Review possibility of reducing the number of signs
- ▶ Review presence of artificially low or high speed zones

Sign and signal type, placement, and orientation should be reviewed per MN-MUTCD standards should be reviewed for compliance. This analysis will help inform recommendations for modifying school zone signage.

5. REVIEW OF SCHOOL CIRCULATION AND DROP-OFF/PICK-UP OPERATIONS, INCLUDING:

- ▶ Reviewing entry and exit points for school parking lots
- ▶ Observing drop-off and pick-up operations and noting any deficiencies in vehicle storage, vehicle dwell times, and vehicle queuing at turning locations

Review of the traffic congestion and turning movements in and around school pick-up and drop-off locations is critical. Ask questions such as:

- ▶ Are there adequate queueing areas off-street and on-street outside of the flow of traffic?
- ▶ Does traffic back up on to adjacent streets?
- ▶ Are parents parking off-site to avoid congestion?
- ▶ Are dedicated turn lanes needed?
- ▶ If dedicated turn lanes are provided, are they long enough?
- ▶ Are there any other congestion issues or pinch points?

Finally, it is critically important to consult with partners at the MnDOT State Aid office to confirm, where applicable, that recommendations meet State Aid standards. For more information, visit: www.dot.state.mn.us/stateaid/

Recommended Sources

The following sources provide a basis for analysis and recommendations that will be effective and compliant.

National Association of City Transportation Officials

Urban Street Design Guide

<http://nacto.org/publication/urban-street-design-guide/>

Institute of Transportation Engineers

United States Access Board:

<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines/chapter-r3-technical-requirements>

Minnesota Department of Transportation

Minnesota Manual on Uniform Traffic Control Devices

<http://www.dot.state.mn.us/trafficeng/publ/mutcd/>

Minnesota Local Technical Assistance Program, Minnesota Department of Transportation, and the University of Minnesota Center for Transportation

Studies, Pedestrian Crossings: Uncontrolled Locations

http://www.mnltap.umn.edu/publications/handbooks/pedcrossingguide/documents/ped_guidebook.pdf

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APPENDIX 2

Integrating Health Impact Assessments into Transportation Planning and Engineering

Introduction

A primary responsibility of state, county, and local governments is to provide for the health and welfare of the people as they engage with their communities. Public officials make decisions that shape the form and function of the cities we live in and the streets through which we transport ourselves. Planning and designing these streets and the physical infrastructure of our neighborhoods affects our daily lives: our safety, our health and well-being, our sense of place, and how we travel to work, school, and other destinations.

Public sector decisions are short- and long-term in nature, and are informed by myriad stakeholder voices and opinions. Critical in any decision process is asking the right questions and collecting information from the right stakeholders, whose insight will help you understand the true breadth of benefits and consequences.

Incorporating health impact assessments and a public health perspective into public decision-making processes is critical and strengthens decisions and project outcomes. New and different people are engaged in the process and insights are gained about unanticipated decision outcomes—both positive and negative. Ultimately, better decisions result with more focused outcomes and a more efficient use of public resources.

Engaging this perspective and bringing health stakeholders into the decision process need not be difficult or time-consuming. This document presents best practices, lessons learned, and recommendations for incorporating health impact assessments into public sector transportation planning and engineering work, particularly non-motorized transportation and Safe Routes to School improvements.

This document was created in consultation with public health practitioners at the Minnesota Department of Health, MnDOT, and planning and health professionals from other communities.

A summary of the health assessment process done in Hibbing in support of a Safe Routes to School plan, including recommendations for city leaders and transportation officials, is available in Section 5.

What is a Health Impact Assessment?

A **Health Impact Assessment (HIA)** is formally defined by the National Research Council as “a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, or project on the health of a population and the distribution of those effects within the population.” HIA identifies appropriate actions to manage those effects.

While that definition explains what an HIA encompasses, there is not one standard way of conducting an HIA. HIAs can be tailored to the specific needs, timeline, and resources of a particular project. This flexibility has led to a range of HIA types. Two most commonly referred to in practice are **rapid HIAs** and **full HIAs**.

What is an HIA? An HIA is a process that:

- ▶ Examines potential health effects of a proposed policy, program or project.
- ▶ Uses the best available data sources and analytical methods.
- ▶ Engages impacted stakeholders in the process.
- ▶ Provides recommendations to monitor and manage potential effects.

What is the difference between a rapid and full HIA?

- ▶ A “rapid” or “desktop” HIA can be completed in a period of weeks.
- ▶ A full HIA usually involves a more comprehensive process that includes public meetings, extensive stakeholder consultation, and/or collection of new data that can be completed in 12-18 months.

Why Do a Health Impact Assessment?

- ▶ It can help identify what interventions may lead to the greatest benefit and can provide support for investing in and acquiring funding for transportation improvements.
- ▶ Broadens the conversation around transportation and brings in input from the people who will be impacted.
- ▶ Expands the public’s understanding of health to include the social determinants of health.
- ▶ In the context of SRTS, HIA assists in making decisions about whether to pursue SRTS improvements or not, which schools to prioritize in SRTS improvements, what types of policy and program improvements may be beneficial, where to site new schools for maximum positive health impact, and/or which elements should be included in the SRTS plan.
- ▶ Builds relationships between departments and organizations that might otherwise not work together, such as Public Health and Public Works. These relationships often continue beyond the HIA process and add value to other projects.

Steps of an HIA

1 SCREENING

Decide whether it makes sense to do an HIA and what value the process will bring to the project. **Determine** the depth of study necessary—whether a full HIA is needed or a rapid/"desktop" HIA will suffice. This step will likely be influenced by the availability of funding and funder requirements.

2 SCOPING

Clarify and **prioritize** the issues that the HIA will focus on, the methods used for the analysis, and a work plan. This is typically led by the project team, or driven by a group of community members. **Hold** a public meeting(s) to introduce the HIA process to your community. It can be helpful to have public health staff lead the discussion at this initial meeting.

3 ASSESSMENT

Collect and **review** research and data about health concerns in your area to determine the existing conditions and determine the impact of proposed project.

Potential Resources:

- ▶ Center for Health Statistics MN Student Survey¹
- ▶ MDH Health Equity Report²
- ▶ Contact a county or regional public health official³
- ▶ Literature review of relevant policies and other similar HIAs
- ▶ Develop a survey and engage a wide range of people using survey tool and/or interviews. *See the Additional Information page for a parent survey (available for download in 12 languages)*

4 RECOMMENDATIONS

Develop recommendations based on the assessment and gather community feedback on proposed recommendations. The recommendations could include specific and feasible strategies for mitigating potential adverse health impacts and for maximizing potential positive health impacts.

5 DOCUMENTING THE RECOMMENDATIONS

Document and **present** the HIA findings and recommendations to stakeholders and decision-makers.

6 MONITORING AND EVALUATION

Track the impacts of the HIA and report results to funders, community stakeholders, and the HIA team at the Minnesota Department of Health. This includes evaluating how the HIA affected decision-making processes, the actual decision, and effects of the project on health.

Consider the costs involved with monitoring and evaluation when drawing up the budget for the HIA process. Evaluating the results of the HIA can help demonstrate to funders the impact of HIAs and make it easier to apply for funding in the future, both for your community and other communities.

1 <http://www.health.state.mn.us/divs/chs/mss/trendreports/index.html>

2 <http://www.health.state.mn.us/divs/chs/healthequity/>

3 <http://www.health.state.mn.us/ship/>

Recommendations for Incorporating HIAs into Your Work

Key Points to Remember

- ▶ The timing of the HIA process is critical. The HIA should come before decisions have been made, but after some initial work has been done to ensure that the feasibility of the project the HIA seeks to inform.

If time is limited and there is not a specific decision the HIA is trying to influence, a full HIA may not be the right choice. However, health can be incorporated into projects/processes in other ways such as by doing a rapid HIA, connecting with the health department for assistance, doing a quick survey of key public health and community officials, setting up a health-focused steering committee for the project, etc.

- ▶ Collaboration, time, flexibility, and a back-up plan in case of political changes will create successful outcomes during the HIA process.
- ▶ Quantifying health benefits through the HIA is not always feasible or necessary. The key is using the HIA to identify how the project can benefit health and inform infrastructure, policy, and program decisions.
- ▶ Integrating health into transportation plans bring diverse voices to the conversation, offering new perspectives.

Engaging Diverse Stakeholders

- ▶ Develop a survey that can be available both online and in-person in order to reach parents and other stakeholders that can't come to meetings in person. Gathering perspectives from a wide range of people helps in understanding the bigger picture around transportation barriers with more nuance.
- ▶ A good parent survey example can be found at <http://www.saferoutesinfo.org/program-tools/evaluation-parent-survey>. The survey is available for download in 12 languages.
- ▶ Go to where people are, rather than asking them to come to your space.
- ▶ After working to engage people where they are and in their own language, if a group is still underrepresented in your engagement efforts, you can choose to give that group more weight. For example, if low-income families make up 50 percent of the study area population, but only 10 percent of the survey respondents, you can more heavily weight their responses.
- ▶ Making demographic maps can help decision makers prioritize recommendations. It's important to know who lives within a walkable and bikeable distance to school to ensure that recommendations are tailored to their challenges and barriers to walking or biking.
- ▶ Maps of population density, household incomes, and ethnic and racial diversity may be helpful.
- ▶ Overlaying demographic maps with pedestrian/bike infrastructure conditions can illuminate key areas for investment.
- ▶ Public health staff should be engaged in the HIA process, but don't necessarily have to lead the HIA process.

- ▶ Consolidate meetings with stakeholders. If the HIA is part of another process, such as an environmental review or SRTS, tag along with others that are already conducting one-on-one meetings.
- ▶ Provide adequate funding assistance for the groups you are looking to hear from, especially if you are asking the group to meet on an on-going basis.
- ▶ Work with people who are already leaders in their communities to assist with reaching more people.
- ▶ Be clear about what decisions people can and can't influence in the HIA process.

Overcoming Common Challenges

- ▶ Work through existing community groups rather than putting together a new task force. The challenge is getting on the agenda of these groups and being respectful of their time. They will have to drop other agenda items to make room for you.
- ▶ It is important to have a team, rather than just one person, working on the HIA.
- ▶ Community engagement is crucial for a full HIA process. Plan to devote much of the project's time and resources to the engagement effort.
- ▶ It's important to have technical staff engaged throughout the process and to think broadly about what stakeholders you should involve.
- ▶ Use plain language and avoid jargon altogether. HIAs are a tool that encourages collaboration across disciplines, experts, and the public so language should be accessible to all.
- ▶ Leaning on the literature is helpful in making the case for health impacts.



Photo Source: Bottineau Transitway Health Impact Assessment

Case Study Review: Challenges and Lessons Learned

This section includes case study reviews of relevant HIAs used in conjunction with SRTS plans or other active transportation plans. The case studies include a summary of what was assessed in the HIA and interviews with key personnel involved in the HIA process to provide insight into the challenges, lessons learned, and the value that the HIA brought to the process and how it informed recommendations.

Winona Active Living Plan Health Impact Assessment (Winona County, MN, 2015)

The objective of the Winona County Active Living Plan HIA was to assess the impact of the Winona County Active Living Plan on heart disease and diabetes, pedestrian and traffic safety, mental health, and education and resources for Winona County residents, and develop recommendations to mitigate negative impacts and promote positive impacts.

ASSESSMENT

- ▶ The HIA assessed the health outcomes related to implementing the Winona County's Active Living Plan.
- ▶ Data collected for the baseline information included demographic and socioeconomic information from the American Community Survey and Decennial Census; health outcome data from Minnesota Department of Health (MDH); self-reported health conditions and behaviors from the 2013 Winona County Health Needs Assessment survey; and traffic crash data from the Minnesota Department of Transportation (MnDOT).

OUTCOMES

- ▶ The HIA helped inform the Active Living Plan in a number of ways. One of those was by implementing programs such as Live Well Winona.

CHALLENGES

- ▶ The County did not have previous experience with HIAs before the Active Living HIA. MDH was instrumental in providing technical assistance and helping the County with understanding each step of the HIA process.
- ▶ Difficult to keep the steering committee together and participating in each meeting.

- ▶ Difficult to conduct the HIA in conjunction with the Active Living Plan. The Active Living Plan was a somewhat abstract project, which made it difficult to focus the HIA around.

SUCCESSSES

- ▶ The HIA was successful in that it brought a diverse group of stakeholders to the table to discuss health in their community.

LESSONS LEARNED/TIPS

- ▶ Potentially easier to conduct an HIA for a specific project rather than an abstract plan.
- ▶ Helpful to have someone leading the HIA who understands the HIA process.
- ▶ Conducting public outreach in conjunction with another health-focused plan is beneficial.

ADDITIONAL INFO

You can find the full report here: http://www.health.state.mn.us/divs/hia/docs/winona_hia.pdf



Photo Source: Winona County Active Living Plan Health Impact Assessment

Health Impact Assessment of Highway 61 Corridor Redesign (Grand Marais, MN, 2015)

The HIA was led by Sawtooth Mountain Clinic, a non-profit organization, in partnership with the City of Grand Marais, MN. Sawtooth Mountain Clinic received funding for the HIA through Minnesota Department of Health (MDH). The year-long HIA process included six steps: screening, scoping, assessment, recommendation, reporting, and monitoring and evaluation.

ASSESSMENT

- ▶ Collected baseline data on indicators of physical health and social determinants of health. Chose three health concerns to focus on: safety, access, and economic concerns. Developed research questions under these focus areas, and used data to assess the impact of Highway 61 road reconstruction on health outcomes.
- ▶ Data sources included: MnDOT, MDH, Cook County Assessor, City of Grand Marais, literature review, speed study, bicycle and pedestrian counting, focus groups, and a community survey.

OUTCOMES

- ▶ The HIA helped inform ways to create a healthier community through the reconstruction of Highway 61.
- ▶ The results of the public process represented the main outcome for the HIA.
- ▶ The HIA that was conducted for the Highway 61 corridor influenced later planning efforts, including other Safe Routes to School (SRTS) work.

CHALLENGES

- ▶ Difficult to find staff time that could be dedicated to the HIA and future HIAs.
- ▶ The city was involved in the HIA process, but looking back should have been more deeply engaged. The challenge during the HIA was that there was no local city planner in Grand Marais; however, Statewide Health Improvement Program (SHIP) coordinators can be good substitutes to coordinate between disciplines.
- ▶ Grand Marais already had a steering committee set up through SRTS work, but it can be a challenge for small communities to

create a new HIA steering committee.

SUCCESSES

- ▶ As a result of working through the HIA process, the project received top scoring and is now a funded project.
- ▶ The project became more than just a road reconstruction project; it included more placemaking and public involvement.
- ▶ The HIA changed the attitude people had about the project and helped to make the connection for the public between health and transportation.
- ▶ The public really got involved in this project and brought different voices to the table that would not have been there otherwise. Now the city is approaching engagement differently than before and this project has been a catalyst for that change.

LESSONS LEARNED

- ▶ MDH was a partner and a great resource throughout the HIA process. MDH can provide technical advice and assistance if your organization is new to HIAs.
- ▶ Initially thought it would be difficult to obtain data because Grand Marais is a small town, but there was more data available than expected. MDH helped provided resources for data and additional data was collected through public outreach.
- ▶ HIAs should inform a decision point.

ADDITIONAL INFO

You can find the full report here: <http://becausmovingmatters.org/wp-content/uploads/2015/11/HIA-Report-Full-Draft-Final-incl.-Executive-Summary-2015.pdf>

Bottineau Transitway Health Impact Assessment (Hennepin County, MN, 2013)

As part of the overall planning for the Bottineau light rail transit line, Hennepin County conducted an HIA to review the connections among health, transit and land use. The impetus for doing the HIA was to take a closer look at human and community health and the impact the project will have on the communities around the transitway.

ASSESSMENT

- ▶ The health determinants that were studied in the HIA included physical activity, location affordability, housing and transportation costs, employment, education, traffic safety, and access to healthy foods.
- ▶ Data sources included input from the Bottineau HIA advisory committee, interviews with stakeholders, focus group discussions, a breadth of data sources, analysis from earlier reports and processes related to the Bottineau Transitway, and an extensive literature review.

OUTCOMES

- ▶ The HIA included a set of recommendations to advance the new transitway's positive impacts on health for the agencies and governing bodies that could potentially implement or support the recommendations.
- ▶ The HIA was used as an opportunity to demonstrate why and how health and transportation were interrelated. It became more of a communication tool and has now been used in more planning efforts that are more representative of the populations being served.
- ▶ The station area planning process that followed the HIA became much more inclusive because the HIA helped build a deeper understanding of the diverse communities along the transitway. The voices from the outreach have now been woven in to the station area planning process.

CHALLENGES

- ▶ One of the initial goals for the HIA was to identify a clear decision point for the HIA to influence. However, decisions for routes and station locations were already made by the time the HIA began. Although the outcomes were different than expected, the HIA influenced future planning processes and changed the conversation to be more health focused.
- ▶ Difficult to communicate how the HIA would influence the transit planning decision-making process. Some people were frustrated that decisions were already made before the HIA began but in the end the response to the HIA was positive.
- ▶ Funding can be a challenge (although it was not with the Bottineau HIA) but is necessary for doing successful engagement and hiring groups to help. HIAs often have smaller budgets that cannot accommodate the scale of the public engagement required.

SUCCESSSES

- ▶ It had a huge impact on communities' understanding of how they can be involved with station area planning and their understanding of health.
- ▶ Hennepin County is moving towards Health in All Policies to include a health-focus in more county projects.

LESSONS LEARNED/TIPS

- ▶ Take a look at the "Why this matters for health" section from the Bottineau HIA. This can help start the conversation around health benefits and issues in transportation projects.

- ▶ Quantifying the health benefits in the HIA is not always feasible or necessary. The key is using the HIA to identify how the project can benefit health and determining how to improve the project's health impact.

ADDITIONAL INFO

You can find the full report here: <http://www.hennepin.us/~media/hennepinus/residents/transportation/documents/hia-final-report.pdf>

Columbus Safe Routes to School District-Wide Travel Plan, Health Impact Assessment (Columbus, Ohio, 2015)

During the 2013-2014 school year, Columbus Public Health, in partnership with Columbus City Schools and the Ohio Department of Transportation, conducted one of the first large district school travel plans (LDSTP) entailing 24 or more schools. Funding was allotted to perform an HIA on the plan to ensure that current social and health disparity gaps in the Columbus City School District were lessened by the plan instead of risking the inadvertent widening of those gaps.

ASSESSMENT

- ▶ The HIA assessed how the LDSTP would change existing conditions in schools by looking at social, economic, academic, and health factors.
- ▶ After analyzing the health/socioeconomic indicators, the district selected 15 schools that had the greatest need for SRTS countermeasures.
- ▶ The HIA included a literature review focusing on the relationship between the SRTS "5 E's" (education, encouragement, engineering, enforcement, and evaluation) and their impact on physical activity, traffic safety, and crime.
- ▶ Empirical evidence was used as part of the countermeasures and the HIA was used to support some of those outcomes.
- ▶ Data sources included U.S. Census, American Community Survey, Columbus city schools data, Ohio Department of Education, HIA perception mapping survey, student travel. Tallies, parent surveys, and the principal surveys administered as part of the SRTS LDSTP process along with data obtained from the Ohio Attorney General's office.

OUTCOMES

- ▶ The HIA provided recommendations on countermeasures that were given careful consideration due to their potential to create measurable and long-lasting change in the levels of physical activity, traffic safety, and crime.
- ▶ HIA recommendations included infrastructure and non-infrastructure countermeasures and were organized by issues addressed, priority, cost, timeframe, responsible party, and current implementation status to help prioritize the next steps.

CHALLENGES

- ▶ Funding became an issue near the end of the project timeline, which was approximately an 18-month-long process.
- ▶ The City of Columbus has an existing health initiative in place to integrate health into different public plans and policies. For other communities, it may be difficult to integrate health initiatives and HIAs into existing city processes if the support is not already there for it.

SUCCESSES

- ▶ The district-wide travel plan informed the HIA along the way. Both groups worked hand-in-hand and the process was very valuable.
- ▶ The prioritization matrix produced as part

of the recommendations in the HIA was a result of the SRTS countermeasures. This matrix will continue to help the school district and the city decide what SRTS improvements could be implemented first.

LESSONS LEARNED

- ▶ Collaboration, time investment, flexibility with the timeline will greatly help in the HIA process. In addition, have a back-up plan in case of political changes and regular meetings with the right people and in the right places.
 - ▶ It would be helpful to have at least one staff person dedicated to conducting HIAs.
- ▶ Requires the willingness of other groups to work with each other and breaking down silos, in addition to having the political support and the time available to concentrate on health issues.
 - ▶ Grant money for conducting HIAs can be found from National Association of County & City Health Officials (NACCHO), the Society for Public Health Education (SOPHE), and Human Impact Partners (a private/non-profit resource).

ADDITIONAL INFO

You can find the full report here: https://columbus.gov/uploadedFiles/Columbus/Departments/Public_Health/New_Programs/Healthy_Places/SafeRoutes_HIA_FullReport.pdf



Photo Source: Columbus Safe Routes to School District-Wide Travel Plan Health Impact Assessment

Additional Information

Toolkits and Guidance:

Minimum Elements and Practice Standards for HIAs:

<http://hiasociety.org/wp-content/uploads/2013/11/HIA-Practice-Standards-September-2014.pdf>

Rapid HIA Toolkit:

http://designforhealth.net/wp-content/uploads/2012/12/BCBS-Rapidassessment_011608.pdf

Guidance and Tools for Conducting a Rapid HIA:

http://publichealth.lacounty.gov/pa/reports/RHIA-20Toolkit_2018-2016_final.pdf

National Association of County & City Health Officials: HIA Quick Guide:

http://activelivingresearch.org/files/NACCHO_HIAQuickGuide_0.pdf

Parent Survey (available for download in 12 languages):

<http://www.saferoutesinfo.org/program-tools/evaluation-parent-survey>

Example of Community Engagement in a Rapid HIA:

<http://www.humanimpact.org/tag/rapid-hia/>

Equity and Stakeholder Engagement Resources:

<http://www.humanimpact.org/capacity-building/hia-tools-and-resources/>

Health Resources:

Health in All Policies:

<http://www.phi.org/resources/?resource=hiapgide>

Human Impact Partners:

<http://www.humanimpact.org/>

Health Impact Project:

<http://www.pewtrusts.org/en/projects/health-impact-project/health-impact-assessment>

Evaluating Active Transport Benefits and Costs:

<http://www.vtppi.org/nmt-tdm.pdf>

More HIA Examples:

HIAs in the United States:

<http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map>

Community Transportation Plan HIA (Decatur, Georgia):

<http://www.smartgrowthamerica.org/documents/cs/impl/ga-decatur-hia.pdf>

Safe Routes to School Health Impact Assessment of Skiles Test and Crestview Elementary Schools (Indianapolis, Indiana):

<http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map/state/indiana/safe-routes-to-school-health-impact-assessment-of-skiles-test-and-crestview-elementary-schools>

Gateway Gold Line Bus Rapid Transit: A Closer Look at Health and Land Use (Washington County, MN):

http://thegatewaycorridor.com/wp-content/uploads/2015/09/2016-06-01-Technical-Report_FINAL.pdf

24th Street Road Diet HIA (Omaha, NE):

<http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map/state/nebraska/24th-street-road-diet>

Health economic assessment tools (HEAT) for walking and for cycling (World Health Organization):

<http://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/publications/2014/health-economic-assessment-tools-heat-for-walking-and-for-cycling.-methodology-and-user-guide.-economic-assessment-of-transport-infrastructure-and-policies.-2014-update>

Health impact assessment for Groundwork SRTS projects (University of London, UK):

www.apho.org.uk/resource/view.aspx?RID=44892&usg=AFQjCNE9CLz0j8YBdQAzJlRTOxxRJWUBbA

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APPENDIX 3

Open-Ended Survey Comments

Comments received from surveys conducted in support of this plan are provided below in their raw form, with limited edits for punctuation and capitalization.

HIA Survey Comments

Q1. What organization do you work for/represent?

- ▶ United Way of Northeastern Minnesota
- ▶ Itasca County
- ▶ HRA of Hibbing
- ▶ Hibbing Chemical Health Advisory Committee
- ▶ Fairview Range
- ▶ PHHS
- ▶ Fairview Range
- ▶ Hibbing Police Department

Q2. What is your role at this organization?

- ▶ Development & Communications Manager
- ▶ Public Health Division Manager
- ▶ Executive Director
- ▶ member
- ▶ Special Projects Educator
- ▶ PHN.RN
- ▶ Community Health Outreach
- ▶ Com. Police Officer

Q3. Please describe what you believe are the key public health concerns facing the City of Hibbing and the region over the next 5-10 years.

- ▶ Drug use/abuse Alcohol-related issues
- ▶ Motor vehicle injury Obesity
- ▶ Poverty, transportation issues, mental health and chemical abuse, and chronic disease (mostly stemming from obesity)
- ▶ Keeping active during the winter months, especially when it is very cold out. Children are spending more of their time on screens and less time being physically active.
- ▶ Additionally, the convenience foods are much more common than good, clean foods.
- ▶ Substance Abuse Mental Health Active Living Poverty / Access to Resources
- ▶ Drugs both prescription and illegal and alcohol, mental health concerns (which could stem from local economy and other issues including drugs/alcohol). Smoking is also a health issue. Culture continues to be

the motivating factor in a lot of the health problems and safety issues in our area.

- ▶ Transportation and drug use.
- ▶ Mental Health and Wellness, healthy lifestyles (diet & exercise), substance use & abuse, in particular alcohol, tobacco, meth, heroin and opiates.
- ▶ Mental Health is one of the key public health concerns in Hibbing and will continue to be in the next 5-10 years.

- ▶ Use and trafficking of drugs with our young people Lack of exercise with youth
- ▶ Grown childhood obesity is still a problem. The growing concern because of the undiagnosed, self-medicating issued stemming from mental health issues for both adults and adolescents. Also, heart health issues. Another concern would be the funding of education that is both appealing and implementable to address these issues to community members.

Q4. How can active transportation (walking and biking) and Safe Routes to School planning, engineering, and improvements support initiatives in Hibbing that address health deficiencies?

- ▶ Walking and biking to school can help with reducing childhood obesity and lack of physical activity for kids.
- ▶ Active transportation can alleviate some of the transportation issues and use of active transportation support mental wellbeing as well as decrease in obesity.
- ▶ Encourage people to be active, I think most parents are fearful of the safety of their children walking or biking and would rather drop the children off at school to see that they are safe.
- ▶ Promote health and wellbeing through access to safe spaces when exercising and walking in community, being physically active can contribute to less issues with substance abuse and can promote mental health
- ▶ Certainly outdoor activities can help with health issues. As for safe routes to school for students I feel our community has other issues besides health to should be taken into consideration for students to be safe traveling to school. Neighborhood watches/alertness to actually keep children safe on their way to school either biking or walking from careless drivers or predatory adults along the way.
- ▶ Increasing safe routes for families.
- ▶ By incorporating active transportation into the city planning, the city can reduce obesity and overweight in its members/ youth. Making it easier to walk, bike, etc. will increase mental wellness as exercise increases serotonin in the brain and helps reduce stress levels. Providing a safe way for students and community members to get places without a car, will make the community a more attractive place to live.
- ▶ Research indicates increased physical exercise improve health and well-being.
- ▶ Safe routes to schools will minimize parental and school concerns about their children walking to and from school and also for our students to be on "walking field trips" that take them into the community.
- ▶ Any way to stimulate a more active lifestyle, regardless of age, is a plus. Embedding the idea and importance of an active, healthy lifestyle while the individual is young will hopefully lead to a lifelong habit.

Q5. What barriers exist in Hibbing to advancing public health initiatives? Please offer any thoughts you have on how those barriers could be overcome.

- ▶ As a parent of a young child, I do not feel like I would allow my child to walk or bike to school without me or an adult. There are many safety factors that go into this feeling/decision (cars, crossing busy streets, uncontrolled intersections, fear of “strangers”).
- ▶ Funding is always an issue as well as lack of prevention spending - meaning early promotion of mental wellbeing at all ages and even with families who are nurturing their young children. Mental wellbeing will lead to decrease in chemical use, employability, etc.
- ▶ Access and affordability of good, clean food. Many parents today are either not educated or too busy to take the time to prepare the food. Also, children favor the “convenience foods” ...pizza, mac n cheese, hot dogs are what the kids will eat and are easy for parents. The cold weather also makes it tough to stay active in winter. Would be good for the community to have a place where families could go to “move around” and not sit inside watching television.
- ▶ Knowledge and understanding of how everything impacts community health; more conversations with key leaders about benefits of changes, where successes have been in the community and how more changes could be good. Safer more accessible options for walking and biking can help boost local community members’ involvement in other activities because they can get to them. It can also improve tourist opportunities as well.
- ▶ Mainly culture. ‘If it was “ok” when I was a child it should be ok now!’ This is not necessarily a good way to look at things since our modern society is a changing! When I was young I could bike 60 miles a day and not be in danger but now children should have someone watching them on the sidewalk in front of their house! Volunteer “watchers” in our neighborhoods would be a good deterrent to “bad” things happening. Improving streets, sidewalks and bike trails wouldn’t hurt. Or even establish bike trails in certain areas of town.
- ▶ Low income (poverty) and limited transportation. Possible solution could include increased bus transportation and emergency transportation.
- ▶ Funding is always an issue. Also, we need more collaboration with the schools and city government. Encouraging public officials to be part of local groups and coalitions would help open more doors. There is a safety coalition in Hibbing (Mesabi Safe Communities Coalition). No one from the school attends. We have law enforcement involved but no one from the city engineers or council.
- ▶ Mental Health issues have a stigma and are not taken seriously by the medical profession.
- ▶ Lack of consistent method of getting information to parents and community members on the importance of the issues and the need for a response.
- ▶ Safe biking lanes. While we have the Mesaba Bike Trail, the actual biking lanes within the city proper are lacking. I think it is important to have more designated lanes just for bicycles/pedestrians. With a wife with close ties to Denmark, and after visiting that country, they have the right idea and approach. In Denmark, there are dedicated lanes for bicycles that often are away from traffic lanes throughout the country. While here, biking with my family, you often have drivers who don’t pay attention to cyclists. I see a need for driver education on this point. But on the flip side, I also see a greater need to education cyclists on the laws/rules for safe biking.

Q6. One of the primary goals of this work is to establish health impact assessments and a public health perspective as an integral and routine part of the municipal public works planning process in Hibbing and in other Minnesota communities. Please share any perspectives or ideas you may have for making public health assessments and planning a routine part of government decision-making processes, particularly as it relates to transportation improvements.

- ▶ Hibbing should not have uncontrolled intersections. They are not safe for bikers, walkers or those in vehicles.
- ▶ As the Commissioner of Health, Ed Ehlinger often speaks to, he encourages a “Health in all Policies” approach to any decision-making - including transportation. Simple initiatives including traffic counts and trail use counts would be a starting-off point for data gathering if wanting to show usage of trails. ARDC provides technical assistance for comprehensive planning including active transportation initiatives.
- ▶ Have meetings with the public on this issue, using the local news channels and newspapers to create awareness. Hold town meeting to discuss and inform.
- ▶ It makes complete sense to learn as much as possible and understand your community needs before making decisions that could be leaving large parts of the community unrepresented or missing key information causing unnecessary duplication of services.
- ▶ Get to the individuals who need the assistance. For example, Greenhaven low income housing. Also increased child care for individuals. Many individuals cannot work related to no child care or transportation.
- ▶ Work with safety groups in the city as mentioned above. Work with local hospital on the assessment.
- ▶ Fairview Range (Hibbing hospital) has completed extensive health assessments over the past 3 years. Is this information accessed? Also, transportation improvements are greatly needed for people with disabilities in our communities.
- ▶ No comment
- ▶ I believe this question could be answered to a better degree by the city engineer’s office. From a law enforcement perspective, I think that long-range planning on a city, county and state level there needs to be a greater cooperative effort to align goals, which in the long run would help streamline spending with the maximum gain from the capital outlay.

Q7. Please describe the role that city and county government have had in advancing public health goals and initiatives in Hibbing? Please provide any comments you may have about how they have been involved, or how they could be involved differently moving forward.

- ▶ Mapping out safe routes, ensuring sidewalks on all streets, putting in controlled intersections.
- ▶ I do not have knowledge of past involvement in the Hibbing Community related to public health goals and initiatives.
- ▶ The City of Hibbing has made improvements to the bike paths and creating awareness of their existence. The problem is that many vehicle drivers do not share the road well with bikers.
- ▶ It is a part of their responsibility. They have been involved in supporting grant

applications and projects that improve community health. It is always appreciated to have representation on committees that are working to create change.

- ▶ I don't feel our city has public health/safety as a goal of their work. Their bottom 'line' is their goal.
- ▶ Currently working on initiatives to educate the public in home and community on parenting and healthy living. Many of my families cannot afford the necessities like food which limits their choices of healthy eating habits.
- ▶ Consulting local public health or hospital community health before making decisions that affect health would be a good place to start.
- ▶ Fairview Range has established several goals and initiatives for Hibbing. Working together would create increased efficiency, greater focus and better results.

- ▶ Coordinate with local committees that work toward reduction of chemical use and safe community initiatives.
- ▶ Both on the city and county levels of government, there seems this belief that the medical and public school side of the coin is more responsible for advancing public health goals on the social level of the "community." It seems, though, in reality, the city only seems to respond to certain issues pertaining to emergency medical issues and responses, gross public health violations etc. The county level addresses the issues of public health in differing ways, and to differing venues. There is little overlap between what the city addresses and what the county addresses. Both the city and the county have been and will continue to be plagued with shrinking budgets. It is more important than ever to now, make sure there are no duplications of efforts, and that we serve the largest segments of the community we can. I do believe this process has started, but reviewing what is going on and how things can be improved is crucial in addressing our cost effectiveness.

Q8. Do you have any specific concerns or ideas for improvement related to active transportation and walking and biking to school and around the City of Hibbing?

- ▶ For us, crossing First Avenue is a challenge because it is so busy. As mentioned above, the uncontrolled intersections are also an issue.
- ▶ My only concern would be the highways where traffic moves at a higher speed. There would need to be safe routes on or across the major highways.
- ▶ Need to make the safe routes very visible to traffic.
- ▶ See above
- ▶ Try to stay away from the bid streets and provide incentives for individuals using the active transportation for example pedometers, or water bottles.
- ▶ Yes, more sidewalks especially that are cleared and ice free in the winter. Walking in the city can be dangerous. People don't stop for pedestrians in the cross walk on 25th street. Lights are not walker friendly on 169. Many people blow the red lights.
- ▶ Is there any way to help low-income children buy bicycles?
- ▶ With sex offenders often living within blocks of the school, parents are very leery of letting their young children walk or bike to school
- ▶ Getting a perspective on how many children walk or bike to school presently as a baseline is imperative. I know the way the buses run within the city may also need

to be looked at. For example, when my oldest daughter began kindergarten a bus stopped in front of our house to pick her up for school, even though we had previously told them that bussing would be needed. Why do I think this is questionable? We live 5 blocks from the school she would have walked to. Granted, not all households have a parent or older sibling that walk with a child so young. Also obtaining an idea of how many children and adults this concept would impact if acted upon would be

important. We want to make sure that time and funding are not thrown at a project that would have little or no impact on changing people's behavior. Carefully constructed survey instruments need to be developed to help quantify this number. We also have to keep in mind the long-range goals, hoping that as education and partnering efforts gain momentum, these implementation phases keep up with a hopefully growing demand for this type of structure in our community.

Q9. Please share any recommendations would you like to see included in the Hibbing Safe Routes to School plan, as it relates to public health, active transportation, policy, or other.

- ▶ Only that this is a great initiative and I would continue to encourage a Health in all Policies approach when developing new transportation, promoting active transportation, etc.
- ▶ If there is a safe route, perhaps creating more of a barrier between the bike and car lanes. Rumble strips or something very visible to cars. As it seems that many drivers are not aware of the laws regarding sharing the roads, daily I see car that do not yield to pedestrians in the crosswalk. Many drivers have the stance that bikers should use the sidewalks.
- ▶ Try to get the schools support as when healthy living starts when individuals are young it continues throughout life.
- ▶ When adding developments, think of walking and biking first. What good is a Wal-Mart, etc. if the only way you can get to it is by car? Low income people don't always have access to vehicles and buses are not very convenient. Kids in the summer could bike there but would you want your child trying to bike to the mall?
- ▶ Assess downtown parking too close to intersections. Vehicles have to "creep out" into the streets to see if any oncoming traffic is coming.
- ▶ I think I have already addressed most of these issues in the paragraphs above. Please feel to contact me with any questions. Sgt. Jeff Ronchetti Hibbing Police Dept. jronchetti@ci.hibbing.mn.us

Parent Opinion Survey

The full set of parent opinion survey questions are provided below for reference.

- ▶ **Q1:** How many children do you have in Kindergarten through 12th Grade?

- ▶ **Q2:** Please select the school(s) your student(s) attends (please select all that apply):

 - ▶ Greenhaven Elementary

 - ▶ Lincoln Elementary

 - ▶ Washington Elementary

 - ▶ Hibbing High School

 - ▶ Assumption Catholic School

- ▶ **Q3:** What grade is your student(s) currently enrolled in (School Year 2015-2016)?

- ▶ **Q4:** What is the street intersection nearest your home? (Ex: East 27th Street and 6th Avenue East)

- ▶ **Q5:** What is the zip code where you live?

- ▶ **Q6:** On most mornings, is at least one parent/guardian present in the household when your student(s) leave home for school?

- ▶ **Q7:** On most afternoons, is at least one parent/guardian present in the household when your student(s) arrives at home from school?

- ▶ **Q8:** What mode of travel does your student(s) take to and from school?

- ▶ **Q9:** How long does it normally take your student(s) to travel to and from school?

 - ▶ Less than 5 minutes

 - ▶ 5-10 minutes

 - ▶ 11-20 minutes

- ▶ More than 20 minutes

- ▶ **Q10:** How far does your student(s) live from school?

 - ▶ Less than ½ mile

 - ▶ ½ mile to 1 mile

 - ▶ 1 to 2 miles

 - ▶ More than 2 miles

- ▶ **Q11:** At what grade would you allow your student(s) to walk or bike to school by her/his self or with classmates?

- ▶ **Q12:** If your student(s) already walks or bikes to school, what grade did you allow your student to walk or bike to school by her/his self or with classmates?

- ▶ **Q13:** Following question 11 above, please indicate whether the following factors influence your decision to permit or not permit your student(s) to walk or bike to school. (Please select one choice per row)

- ▶ **Q14:** Has your student(s) asked you for permission to walk or bike to/from school in the past year?

- ▶ **Q15:** In your opinion, how much does your student’s school encourage or discourage walking and biking to/from school?

- ▶ **Q16:** Please share any other comments or questions you have about the safety of walking and biking to school in Hibbing, and/or the circulation of vehicles and buses on school campuses.

Parent Survey Comments

Open-ended responses received on the parent opinion survey are included below.

Q16. Please share any other comments or questions you have about the safety of walking and biking to school in Hibbing, and/or the circulation of vehicles and buses on school campuses.

- ▶ We live out of town so it's not an issue. I wouldn't let them walk unless I could see them walk and go in the school door. I am fearful of someone knowing their route and taking them.
- ▶ I have none but it needs improvement for sure
- ▶ There's was talk about protected bike lanes at the public meeting, and I thought I'd share this study from N.Y.C with you....<http://www.fastcoexist.com/3035580/new-york-citys-protected-bike-lanes-have-actually-spiced-up-its-car-traffic>
- ▶ My issue even though my kids are dropped off or bused is on numerous occasions in the winter, the city of Hibbing plows insist on plowing and picking up snow between the high school and assumption at 7:25 in the morning and I have seen on many occasions kids walking across the piles of snow while the snow removal equipment is sitting and running the blades. All it will take is for a child to slip or the equipment driver to not know they are there before someone ends up dead. It's a scary feeling seeing this occur. Why can't they pick this snow up before or after the 7:20-8:00 time frame. Which is the busiest time of the morning for this street in town. And also when buses stop on 23rd street between the high school and Assumption by just pulling over and not using the lights and stop arms and kids proceed to exit that bus crossing over to the HHS. Vehicles pass these buses and these kids cannot be seen until they step out from in front of the bus. If there are kids leaving a bus and crossing a street the stop arm and lights should be mandatory. I have physically seen both of the described situations occur and it's very scary. Something needs to change when it comes to both scenarios before a tragedy occurs that can be avoided.
- ▶ My husband and I are both teachers in the Hibbing Schools. We live on 12th Ave. and 21st. Street, directly across the street from Washington School. Some of the biggest concerns we have had as both parents (our children are now grown) and educators would be the speed of traffic in school zones and inattentive driving. It is nothing short of a miracle that no one has been hurt or killed trying to cross the streets in school zones. Both my husband and I have had close calls when trying to cross the streets to our schools...we've seen it all. Parents need to slow down, get off their phones and pay attention to traffic around them. The presence of law enforcement on a regular basis would be helpful. Start ticketing people! More signs...whatever it takes! Also, often times the city chooses to plow/sweep streets around the schools between 7:00 and 8:00 a.m. ...terrible timing! Surely there must be other places in town that could be taken care of during this time- waiting until 8:00 does not seem like a lot to ask.
- ▶ When my children were in elementary school, I left for work before they needed to leave for school so I paid for before/ after school daycare for a few years so they had supervision. When my oldest wanted to "quit daycare" in 4th grade, I was not comfortable with a 2nd grader crossing the streets from Lincoln to Washington. I was grateful the transportation director allowed my younger child to catch a bus from Lincoln to Washington for my peace of mind. I work

at HHS, so my children ride with me. Off-site sports mean the oldest takes our family car to get to practice/meets some days.

- ▶ There are many high school students who walk through Assumption school and “j walk” to cross the street to get to the high school. There needs to be a cross walk there.
- ▶ We live on 11th Ave east between 22nd street and 23rd street. With the aging population on the block I clear the whole block’s sidewalk in the winter to allow safe access for students. Not all of the sidewalks are maintained on the block to the north of us or across the street. So some students have to walk on the street or trudge through the snow. Also we have no boulevard so we sometimes fight the city plowing snow up onto the sidewalk. I also feel there should be stop signs along 22nd street for the Avenues going north and south on 10th Ave E., 11th Ave. E, and 12 Ave. E. This would allow flow between the High School and Washington and slow down traffic forcing them to go out to 13th Street/Brooklyn St. for less stop signs (or maybe even 4-Way stops). We have even witnessed a school bus and car accident on the corner of 11th Ave. E. and 22nd Street. Next year our son will be going to the Washington so it will be interesting to see the traffic flow and shoveled routes to get there. Thank you for your time.
- ▶ There are way too many parent drop off and pickups and it’s very frustrating! Maybe if the bus garage allowed students to be dropped off at homes other than their house or a registered daycare, for example a grandparent’s house that is in school limits and along a current bus route, it will most likely decrease the pickup/drop off issues. The Lincoln parking lot is complete chaos! There are too many people coming and going along with staff trying to cross the parking lot to the building.
- ▶ Please do not add stop signs. The only way to control the traffic near the schools is to add more crossing guards (patrols).
- ▶ Even with the crosswalk markers in place on Howard street, still many cars do not stop.

This is why we walk our younger children to school. We live so close that it seems silly for them to take the bus.

- ▶ I’m afraid sometimes because other cars are not always watching the kids in the mornings crossing the roads
- ▶ I am mostly concerned with the 2 intersections between Assumption Catholic School and Hibbing High School. There are younger children crossing to and from Assumption, older elementary children heading to Lincoln School, and many High School age drivers and walkers going through these intersections every day. My girls and I walk through the 9th Ave E & 23rd St intersection every day as I work at Assumption. While this intersection is bad, the intersection of 7th Ave E & 23rd is even worse, with many High School Students walking from the Memorial Building. When I have driven the girls due to inclement weather, this intersection always makes me nervous, and I feel it needs crossing guards (and not student crossing guards.... adults!). I have walked with my kids to Washington, and watched them walk to Lincoln, but this intersection is the worst of any in this town and it needs attention before someone does get injured.
- ▶ The uncontrolled intersection at the corner of 11th Ave E and 22nd street is a major accident waiting to happen. Bus drivers fly through the intersection and barely tap the brakes let alone watch for walking children. The other major bad traffic area is the lack of a cross walk and/or stop sign from the small parking lot at the Assumption to the horse shoe driveway at the High School. That’s a major intersection of traffic turning to both schools and a frequently used crossing area for high school students.
- ▶ The parking insanity at Greenhaven and Lincoln is ridiculous. People don’t understand what the carline is or how to keep moving forward. If your kid needs you to walk them in, then find a spot to park and walk them up. There needs to be better enforcement of the parking at Greenhaven

because people don't leave any room for traffic nor for seeing people and kids in the parking lot. Maybe BJ Berg needs to actually be PRESENT at the school and enforce his so called rules. Actually follow through with the father figures... Instead of being a bully towards the mothers like he is so good at doing.

- ▶ High schoolers crossing 23rd Ave from memorial building parking lot are scary. When the sun is in my eyes I am at risk of not seeing them, and I have had to hit the brakes because I couldn't see them. A different solution would be better for how they cross that intersection.
- ▶ I was told that because we live east of the beltline that my boys are not allowed to bike or walk to school, is that true?
- ▶ The safety of the route is an issue. I wouldn't want a child crossing some of those streets without flashing lights or other tools present. The crime concern is also in my mind, being the parent of a sixth grade girl, so I'd prefer there be a group for her to walk with. The safety of the drop-off in the Lincoln lot is a huge issue. No matter how many times Mr. Bestul sends automated messages asking people to be conscious of safety, parents still stop in the middle of the driving lane or double-park elsewhere to let their kids out of the car, into lanes of traffic. Could HPD write tickets in the lot? Could a camera record license numbers for ticketing? I've recently heard it referred to as the Lincoln 500, some days deservedly so.
- ▶ Parent drop off is t so bad in the morning couple times I've used it, but parent pick up is an accident waiting to happen. More structure is needed for the safety of all.
- ▶ The school needs to figure out a better solution for parent pick up and drop off. Currently at the Greenhaven it is very unorganized and many parents park wherever they want even if they are parked outside the parking lines. Some parents don't follow the line of cars during drop off and skip to the front of the line. Honestly it would be nice if school staff or police

monitored school pick up/drop off. I have friends with kids in other schools and when they pick up, they pull up and someone from the school is outside and their child is sent out to them. I would consider having my children ride the bus however their options for bus stops are at busy intersections either 1st Ave and 42nd E or 4th Ave E and E 42nd St right off the highway. I think it would be safer to have a bus stop in the middle of block.

- ▶ Drop off and parent pick up is a disaster. Parents do not yield to others, they leave their car unattended in the drop off lanes forcing others to back up and go around them. I drive a large and tall vehicle, so for me to back up is dangerous as there could be a child behind me and I would not see them. People drive out the entrance and in the exit. There is double parking happening and parents not walking to their children but allowing the kids to walk in front of people exiting. The principal at the Lincoln has been very supportive of complaints and works hard to stop it, but I see parents simply not taking the extra 10 seconds it would take to ensure a safe drop off and pick up.
- ▶ A general observation I have found is that there might be a lot less parent pick-up and traffic near the schools if the school district was more accommodating with its bussing. My children have to be picked up by their grandparents rather than riding a bus to their house because they are not a "licensed daycare". If they go there every day and have my permission to do so, that should be up to me to provide that information and have them ride the bus there. I understand they can't accommodate changes every day, but for a consistent schedule, they should be more accommodating. Other districts do allow this flexibility!! Also, the Lincoln patrols are out for about five minutes in the morning and five minutes in the afternoon with no adult present to supervise or help them out. The Assumption patrols are much better organized, have an adult present at all times and present their flags and stand in a completely different fashion than the Lincoln patrols. Might be a learning

opportunity for the Lincoln patrol advisors. I can imagine there would need to be some more patrols on other corners and at other schools if walking is encouraged and will be happening more frequently.

- ▶ The bike rack at the Lincoln school needs to be placed in a more visible location during school hours. Its current location on the west side of the school is not visible to school staff during school hours. The bike rack should be placed on the east side of the school, right outside the office windows. This way someone can visible see the rack and bikes that are locked to it throughout the day.
- ▶ Sexual predators! Too many of them in our area!
- ▶ I worked for SHIP in the past on this initiative. I think it is not our culture to walk or bike to school. Parents are busy and don't make an effort. My impression is very much helicopter parents who don't want their kids to ride the bus because of bad influences from other kids. They also don't feel safe having kids walk or bike. Partly because of the helicopter/stranger danger/traffic and partly because they drop kids off on the way to work themselves. I do know parents who don't work and specifically drive kids to school. It makes for an insane amount of parents in the drop off zones. My kids have a short bus ride. I trust the bus driver to keep the bus under control, so my 3 in elementary school all take the bus. (We are too close and my 7th grader walks or will sometimes get a ride with my husband on his way to work - busing isn't an option for him.) I avoid dropping off and picking up as much as I can. I think the real safety risk for everyone is those drop off/pick up zones. Again, it's not in the culture. My 3rd grader said this morning "isn't it crazy the Assumption kids got bused to the circus". The Memorial Building is only a few blocks from their school. I don't know how to shift the culture so people think about walking as a first option. I would like to come to your meeting but am out of town traveling for work. Good Luck! Melissa Grzybowski
Melissa.grzybowski@gmail.com

- ▶ My child busses to/from daycare. School is 1 block from his daycare, yet he's on the bus for nearly 45 mins in the morning, due to the side of the street that his daycare is on. It's a bit ridiculous. If there was a crossing guard, he could simply walk, but due to the busy intersections where no one ever stops at the stop signs (7th Ave and 37th St), it's not safe.
- ▶ I would like to see a crosswalk between the high school anchor door and Assumption school.
- ▶ It would be nice if there was a crosswalk from the drive thru at the high school anchor door to the assumption school
- ▶ I have 1 child that lives 1/2 block from Greenhaven and I will not allow him to walk as the cars coming in to the parking lot, where he would have to cross the street, go WAY too fast and don't watch for anyone. Our biggest concern is the bus stop our kids wait at. It is the intersection of 2 BUSY roads with no stop signs and cars just FLY through. We have seen cars almost hit each other right in front of the bus stop WITH our children standing right there. A dog was hit on that stretch last summer due to a drive going so fast he wasn't watching. There needs to be a way to mark bus stops that make people slow down. Our kids have to cross the street to stand at the bus stop and there have been times where they start to cross and someone speeds through and almost hits them.
- ▶ I have always driven my child to and from school. My work schedule is such that I have the opportunity to do this. The school bus goes by our home, but it is pretty early in the am. By driving her myself, she has an extra 30 minutes each morning. I feel that is a benefit for us, she can use the time for extra sleep, breakfast, or homework if needed.
- ▶ My kids have practice gear to haul to and from school. They need to drive themselves in order to get to and from practices and jobs.

- ▶ The area by the Assumption and High School is always congested. Drop off at the Assumption is fairly easy, however I see so many people not allowing students to cross in the cross walk or not observing the proper traffic laws while waiting for pedestrians in the cross walk. When driving my children to school I see way too many vehicles not letting students cross the street to get to their bus stop. I stop regardless if there is a designated cross walk or not. I am one of the few. In the winter months it is a shame that students walking need to walk on the road or through the snow, because sidewalks are not clear.

- ▶ The buses need to be more respectful of walkers, bikers, and other cars.

- ▶ The busses are driving crazy don't watch for anyone!