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APPENDICES

GIDEON POND ELEMENTARY SCHOOL SRTS PLAN
BURNSVILLE, MINNESOTA
JUNE 2020

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Appendix A. For More Information

This appendix provides contact information for local, state, and national SRTS program resources as well as school partners.

NATIONAL RESOURCES

Safe Routes to School Data Collection System
http://www.saferoutesdata.org/

Pedestrian and Bicycle Information Center
http://www.pedbikeinfo.com/

National Center for Safe Routes to School
http://www.saferoutesinfo.org/

Safe Routes to School Policy Guide
http://www.saferoutespartnership.org/sites/default/files/pdf/Local_Policy_Guide_2011.pdf

School District Policy Workbook Tool
http://www.changelabsolutions.org/safe-routes/welcome

Safe Routes to School National Partnership State Network Project
http://www.saferoutespartnership.org/state/network

Bike Train Planning Guide
http://guide.saferoutesinfo.org/walking_school_bus/bicycle_trains.cfm

10 Tips for SRTS Programs and Liability
http://apps.saferoutesinfo.org/training/walking_school_bus/liabilitytipsheet.pdf

Tactical Urbanism and Safe Routes to School
http://www.saferoutespartnership.org/resources/fact-sheet/tactical-urbanism-and-safe-routes-school

STATE RESOURCES

Dave Cowan, Minnesota SRTS Coordinator
395 John Ireland Blvd
St. Paul, MN 55155
651-366-4180
dave.cowan@state.mn.us

Kelly Corbin, Safe Routes to School Planner
395 John Ireland Blvd
St. Paul, MN 55155
507-286-7590
Kelly.Corbin@state.mn.us

MnDOT SRTS Educational Webinars:
http://www.dot.state.mn.us/mnsaferoutes/training/planning/index.html

MnDOT Safe Routes to School Resource Website
http://www.mnsaferoutestoschool.org

Minnesota Safe Routes to School Facebook page
https://www.facebook.com/MinnesotaSafeRoutestoSchool

Walk!Bike!Fun! Pedestrian and Bicycle Safety Curriculum
http://www.bikemn.org/education/walk-bike-fun

School Siting and School Site Design
http://www.dot.state.mn.us/mnsaferoutes/planning/school_siting.html

LOCAL RESOURCES

Chris Bellmont
Principal, Gideon Pond Elementary
cbellmont@isd191.org

Shannon Wohlman
Gideon Pond PTO
shannon.wohlman@gmail.com

Melanie Hansen
Gideon Pond PTO
mmh2476@yahoo.com

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Appendix B. SRTS Talking Points

The following facts and statistics have been collected from national sources. They are intended to be submitted for use in individual school newsletters, emails, or other communication with parents and the broader school community.

Except where otherwise noted, the following are based on research summarized by the National Center for Safe Routes to School. More information, including primary sources, can be found at http://guide.saferoutesinfo.org.

TRAFFIC: COSTS, CONGESTION, AND SAFETY

- In 1969, half of all US schoolchildren walked or biked to school; by 2009, that number had dropped to just 13 percent.
- In the United States, 31 percent of children in grades K–8 live within one mile of school; 38 percent of these children walk or bike to school. You can travel one mile in about 20 minutes by foot or six minutes by bicycle.
- In 2009, school travel by private family vehicle for students in grades K through 12 accounted for 10 to 14 percent of all automobile trips made during the morning peak travel and two to three percent of the total annual trips made by family vehicle in the United States.
- Among parents who drove their children to school, approximately 40 percent returned home immediately after dropping their children at school. If more children walked or bicycled to school, it would reduce the number of cars near the school at pick-up and drop-off times, making it safer for walkers and bicyclists through reduced traffic congestion and improved air quality.
- Over the past few decades, many school districts have moved away from smaller, centrally located schools and have instead built schools on the edge of communities where land costs are lower and acreage has been more available. As a result, the percentage of students in grades K through 8 who live less than one mile from school has declined from 41 percent in 1969 to 31 percent in 2009.
- Personal vehicles taking students to school accounted for 10 to 14 percent of all personal vehicle trips made during the morning peak commute times. Walking, bicycling, and carpooling to school reduces the numbers of cars dropping students off, reducing traffic safety conflicts with other students and creates a positive cycle—as the community sees more people walking and biking, more people feel comfortable walking and bicycling.
- Conservatively assuming that five percent of today's school busing costs are for hazard busing, making it safe for those children to walk or bicycle instead could save approximately $1 billion per year in busing costs.
- In 2009, American families drove 30 billion miles and made 6.5 billion vehicle trips to take their children to and from schools, representing 10-14 percent of traffic on the road during the morning commute.
- Reducing the miles parents drive to school by just one percent would reduce 300 million miles of vehicle travel and save an estimated $50 million in fuel costs each year.
- Did you know that as more people bicycle and walk, biking and walking crash rates decrease? This is also known as the 'safety in numbers' principle. As more families walk and bike to school, streets and school zones become safer for everyone.

HEALTH: PHYSICAL ACTIVITY AND OBESITY

- The U.S. Department of Health and Human Services recommends that children do one hour or more of physical activity each day. Walking just one mile each way to and from school would meet two-thirds of this goal.
- Studies have found that children who get regular physical activity benefit from healthy hearts, lungs, bones, and muscles; reduced risk of developing obesity and chronic diseases; and reduced feelings of depression and anxiety. Teachers also report that students who walk or bike to school arrive at school alert and "ready to learn."
- Researchers have found that people who start to include walking and biking at part of everyday life (such as the school commute trip) are more successful at sticking with their increased physical activity in the long term than people who join a gym.
- One recent study showed that children who joined a "walking school bus" ended up getting more physical activity than their peers. In fact, 65 percent of obese students who participated in the walking program were no longer obese at the end of the school year.
- Childhood obesity has increased among children ages six to 11 from four percent in 1969 to 19.6 percent in 2007. Now 23 million children and teens—nearly one-third of all young people in the U.S.—are overweight or obese.
- The 2010 Shape of the Nation report from the National Association for Sport and Physical Education found that, nationwide, less than one-third of all children ages six to 17 participate in physical activity for at least 20 minutes that made the child sweat and breathe hard.
- Children aren't exercising enough and 78 percent of children aren't getting the 30 to 60 minutes a day of regular exercise plus 20 minutes of more vigorous exercise that doctors recommend.
- Children are increasingly overweight. Twenty percent of children and 33 percent of teens are overweight or at risk of becoming overweight. This is a 50 percent to 100 percent increase from 10 years ago.
- According to a Spanish study of 1,700 boys and girls aged between 13 and 18 years, cognitive performance of adolescent girls who walk to school is better than that of girls who travel by bus or car. Moreover, cognitive performance is also better in girls who take more than 15 minutes than in those who live closer and have a shorter walk to school.
- One hundred calories can power a cyclist for three miles, but it would only power a car 280 feet. If you have a bowl of oatmeal with banana and milk for breakfast, you could bike more than nine miles. How far is the trip to school from your house?
- A 2004 study in the American Journal of Preventive Medicine found that, for every hour people spend in their cars, they are six percent more likely to be obese.
- Because of the health benefits, the cost of walking is actually negative.
- Childhood obesity rates have more than tripled in the past 30 years, while the number of children walking and biking to school has declined. According to the 2009 National Household Travel Survey, 13 percent of students between the ages of five and 14 walked or biked to or from school, compared to 48 percent in 1969.

ENVIRONMENT: AIR QUALITY, CLIMATE CHANGE AND RESOURCE USE

- Did you know? When you walk, bike, or carpool, you're reducing auto emissions near schools. Students and adults with asthma are particularly sensitive to poor air quality. Approximately 5 million students in the U.S. suffer from asthma, and nearly 13 million school days per year are lost due to asthma-related illnesses.
- Did you know that modern cars don't need to idle? In fact, idling near schools exposes children and vehicle occupants to air pollution (including particulates and noxious emissions), wastes fuel and money, and increases unnecessary wear and tear on car engines. If you are waiting in your car for your child, please don't idle – you'll be doing your part to keep young lungs healthy!
- Families that walk two miles a day instead of driving will, in one year, prevent 730 pounds of carbon dioxide from entering the atmosphere.
- The United States moved into the 21st century with less than 30 percent of its original oil supply remaining.
- Americans drive more than 2 trillion vehicle miles per year.
- Short motor-vehicle trips contribute significant amounts of air pollution because they typically occur while an engine's pollution control system is cold and ineffective. Thus, shifting 1 percent of short automobile trips to walking or biking decreases emissions by 2 to 4 percent.
- There is more pollution inside a stationary car on a congested road than outside on the pavement.
- The transportation sector is the second largest source of CO2 emissions in the U.S. Automobiles and light-duty trucks account for almost two-thirds of emissions from the transportation sector. Emissions have steadily grown since 1990.
- In a year, a typical North American car will add close to five tons of CO2 into the atmosphere. Cars account for an estimated 15 percent to 25 percent of U.S. CO2 emissions.
- Transportation is the largest single source of air pollution in the United States. In 2006 it created over half of the carbon monoxide, over a third of the nitrogen oxides, and almost a quarter of the hydrocarbons in our atmosphere.
- Disposal of used motor oil sends more oil into the water each year than even the largest tanker spill.
- Going by bus instead of car cuts nitrogen oxide pollution by 25 percent, carbon monoxide by 80 percent and hydrocarbons by 90 percent per passenger mile.
- Eight bicycles can be parked in the space required for just one car.

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Appendix C. Planning Process

Planning for this SRTS plan began in the summer of 2019, after Gideon Pond Elementary School was awarded a SRTS planning assistance grant from MnDOT. In September 2019, Gideon Pond team leads, members of the consulting team, and MnDOT staff formally kicked off the planning process and met to provide an overview of SRTS and the 6 E's, review the planning process and schedule, brainstorm student and family engagement opportunities, and discuss challenges and recent efforts related to walking and biking to Gideon Pond School.

PROJECT SCHEDULE

Fall 2019: Project kickoff, data collection, Rapid Planning Workshop

Winter 2019-2020: Community engagement, identification of issues and opportunities

Spring 2020: Draft strategies and action steps

Summer 2020: Draft and final SRTS Plan

DATA COLLECTION

In fall of 2019, baseline data was collected through a variety of SRTS evaluation methods including tools from the National Center for Safe Routes to School and Minnesota Safe Routes to School Resource Center:

- **Student Travel Tallies:** Student hand tallies were conducted on three consecutive midweek days and collected information about how students traveled to school and how they planned to travel home in the afternoon.
- **Parent/Caregiver Survey:** Surveys collected information from parents and caregivers about perceptions, habits, and barriers related to walking and biking to Gideon Pond Elementary and changes that would make students more confident walking or biking. A total of 24 surveys were returned to the SRTS team.
- **Administrative Survey:** School administrators completed a school environment and policy assessment to identify policies, practices, and infrastructure that promotes or discourages walking and biking to school.
- **School Zone Hazard Observational Assessment:** Members of the Gideon Pond SRTS team observed arrival and dismissal in September 2019 and identified critical safety and behavioral issues in the area immediately surrounding school such as distracted driving, illegal parking/pickup, and unsafe crossing behavior.
- **Interactive Online Map:** An interactive online map allowed students, parents, and community stakeholders to identify destinations, routes, and barriers for walking and biking.
- **Student Engagement:** The Gideon Pond SRTS team met with a student panel during the Rapid Planning Workshop. Students shared things that they like and dislike about walking and biking to school, identified challenges, and brainstormed ideas for improvement. They identified their walking and biking routes as well as streets and intersections that are barriers for walking and biking to school.

RAPID PLANNING WORKSHOP

In December 2019, a broad group of stakeholders met for an intensive, day-long Rapid Planning Workshop at Gideon Pond Elementary School. This charrette-style event brought together school, city, and MnDOT staff, plus elected officials, students, and parents to discuss the challenge and opportunities for walking and biking to Gideon Pond Elementary School.

The Rapid Planning Workshop included:

- Introduction to SRTS for all participants including programs, infrastructure, and the planning process
- Observation of student arrival and dismissal
- Walking audit of the streets surrounding Gideon Pond
- Discussion of infrastructure issues, upcoming projects, and opportunities for improvement
- Brainstorm of existing and potential programs
- Meeting with a student panel to discuss routes, challenges, and opportunities

Information gathered during the day was used to develop preliminary draft infrastructure and program recommendations for Gideon Pond Elementary. Preliminary recommendations were shared with the Gideon Pond SRTS Team for input and refinement prior to identifying action steps and schedules for implementation.

DRAFT STRATEGIES AND ACTION PLAN MEETING

The Gideon Pond SRTS Team met in person at Gideon Pond Elementary in March 2020 to review draft program and infrastructure recommendations. Participants discussed near-term priorities as well as stakeholders and resources to help support and lead implementation.

DRAFT AND FINAL SRTS PLAN

The draft Gideon Pond SRTS Plan was shared with the local planning team for review and comment in spring of 2020 using an interactive online PDF commenting tool. A final copy of the plan was delivered in June 2020.

Appendix D. Existing Conditions

The following is a summary of the existing conditions on and around Gideon Pond Elementary.

SCHOOL CONTEXT

Basic Information

Principal: Chris Bellmont
Grades: K-5
Number of students: Approximately 280
Arrival time: 9:15 am
Dismissal time: 3:55 pm

Student Locations and School Enrollment Boundary

The maps on the following page show the locations of students attending Gideon Pond Elementary School during the 2019-2020 school year. The first map shows a heat map of students who live closer to Gideon Pond while the second map shows a heat map of nearly all student locations.

School/Campus Layout

Gideon Pond Elementary is located in Burnsville less than a mile from Burnsville City Center and just northwest of Civic Center Park and City Hall. The school campus is bound by E 130th Street on the north, the Church of Apostles on the east, residences and E 131st Street on the south, and a wooded area on the west.

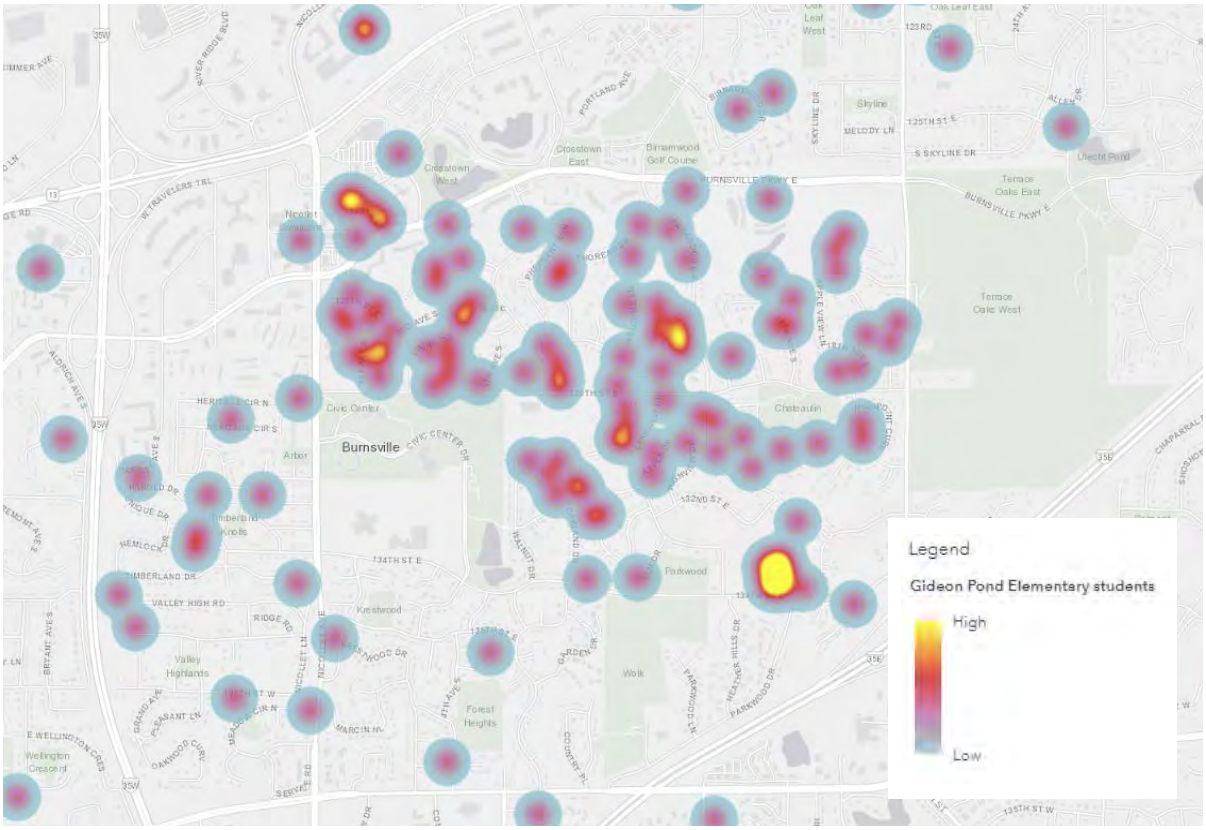
The school building is located on the northwest corner of campus. A parking lot for staff, visitors, and private vehicle circulation is located on the east side of the building. Play fields are located south of the school building. School buses pick up and drop off on the north side of the building along the south side of E 130th Street. Bike parking is located on the south side of the building and near the northeast corner of the school. During arrival and dismissal, student patrols are stationed along E 130th Street at the intersections of Portland Avenue and Oakland Drive. An adult helps direct traffic and supervise patrols at the Oakland Drive intersection, which is also aligned with the school parking lot driveway.

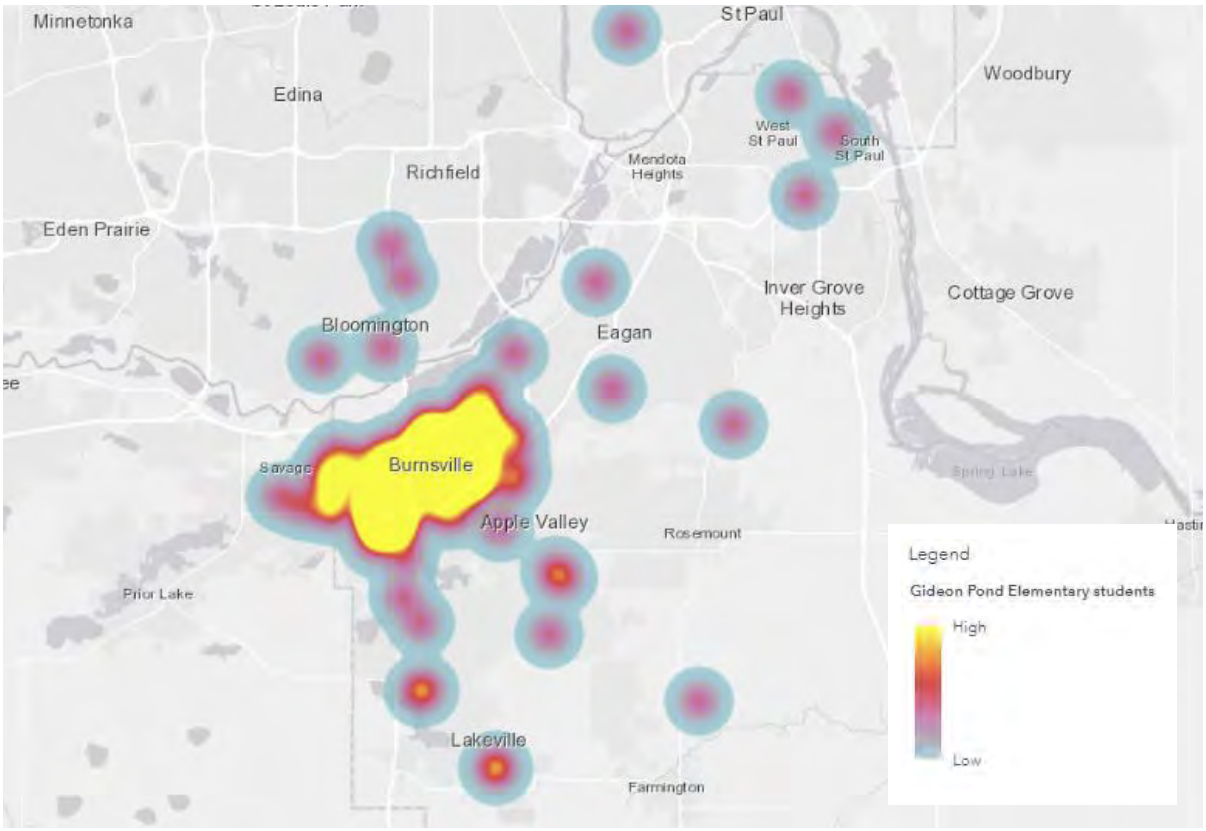
Most students and families enter and exit Gideon Pond Elementary on the north side of the building off of E 130th Street or on the east side from the school parking lot.

Surrounding Land Use

The neighborhood immediately north, east, and south of Gideon Pond Elementary School is comprised primarily of single-family residences. There are some multifamily housing developments and neighborhood parks mixed into the residential neighborhoods. Church of the Apostles is located directly east of Gideon Pond Elementary School. There is an agreement between the church and the school to allow caregivers to use the church parking lot during arrival and dismissal.

Burnsville City Center is located less than a mile northwest of Gideon Pond. This area includes a mix of uses including offices, commercial destinations, entertainment, and a higher density of multi-family housing. Burnsville City Hall, Civic Center Park, the Garage Theater, Sky Oaks Elementary, and Nicollet Middle School are located on a large super-block development southwest of Gideon Pond.





Source: ISD 191 Burnsville-Eagan-Savage; ArcGIS online

Infrastructure for Walking and Biking

Neighborhood streets surrounding Gideon Pond Elementary typically do not include sidewalks. As a policy, the City of Burnsville does not construct sidewalks on local residential streets. Nearby collector and arterial roadways including E 130th Street, E 134th Street, Nicollet Avenue, and Parkwood Drive generally have sidewalks on both sides of the street; however, there is no sidewalk on the south side of E 130th Street west of Gideon Pond.

On campus, there is a trail that connect Gideon Pond Elementary to E 131st Street south of school. There are also trails that connect to the Civic Center area including one between E 130th Street and Civic Center Parkway and one between E 132nd Street and Civic Center Parkway/Nicollet Middle School.

Pedestrian and Bicycle-Involved Crashes

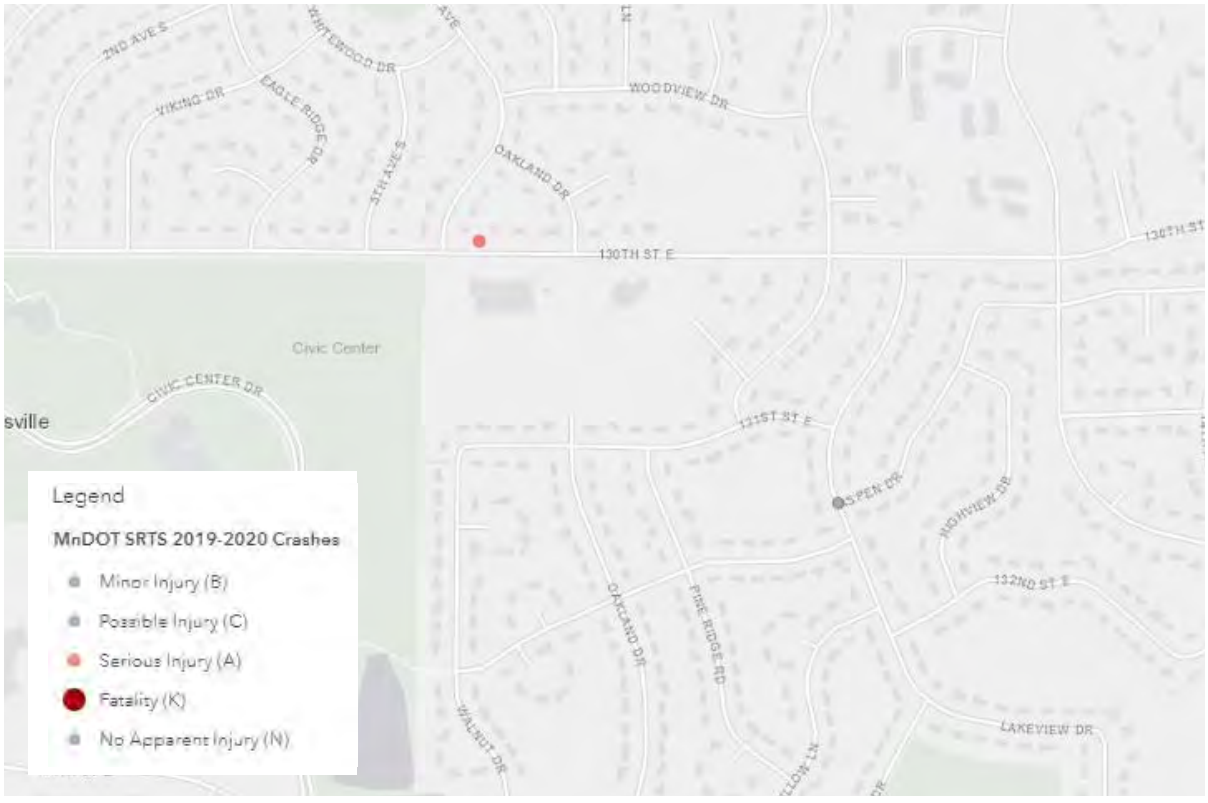
The maps below show crashes involving people walking or biking a half mile of Gideon Pond Elementary between 2009 and 2018. These include a serious injury crash involving an 8 year old boy in early June of 2018 (shown in red) and a possible injury crash involving a 13 year old boy in late July of 2015 (shown in gray).

SCHOOL TRAVEL PATTERNS

Student Hand Tallies

According to the student hand tally, the most common way for students to travel to and from school is by school bus (approximately 48 percent) followed by parent vehicle (29 percent), walking (13 percent), biking (5 percent), carpool (6 percent), and other (1 percent). Percents are an approximate average of arrival and dismissal modes over three days, and may not total 100 percent due to rounding.

A full summary of data collected from the student hand tally can be found in Appendix F.



Parent Survey Summary

Twenty-four parent surveys were returned. Of those who responded, 12 estimated they live within a half-mile of campus, five estimated that they live between a half-mile and one mile of campus, three estimated that they live between one and two miles of campus, and four estimated that they live more than two miles from school. Of the twenty-four people who responded, one-third reported that their students walk to school. One person said their student takes the bus, and 14 said their students are driven in a family vehicle. One person reported that they student arrives by family vehicle in the morning and takes the school bus in the afternoon.

Survey respondents cited safety of intersections and crossings, distance, amount of traffic along route, weather or climate, and speed of traffic along route as the top issues that affect their decision to not allow their student to walk or bike to/from school. In the comments, caregivers specified the following barriers to walking or biking: winter maintenance and snow storage; crimes against children; walking along; accessing door 7 from 130th; concerns about students walking alone; the school parking lot; and walking along and across 130th Street.

Detailed results from the parent survey can be found in Appendix E.

Appendix E. Parent Survey

The following shows a summary of a survey sent home to parents in fall 2019. It asks parents about walking and biking and is a direct export from the National Safe Routes to School Data Collection System, which processed the survey responses and generated this report.

Parent Survey Report: One School in One Data Collection Period

School Name: Gideon Pond Elementary School

Set ID: 19137

School Group: Dakota County Public Health

Month and Year Collected: October 2019

School Enrollment: 414

Date Report Generated: 11/25/2019

% Range of Students Involved in SRTS: Don't Know

Tags:

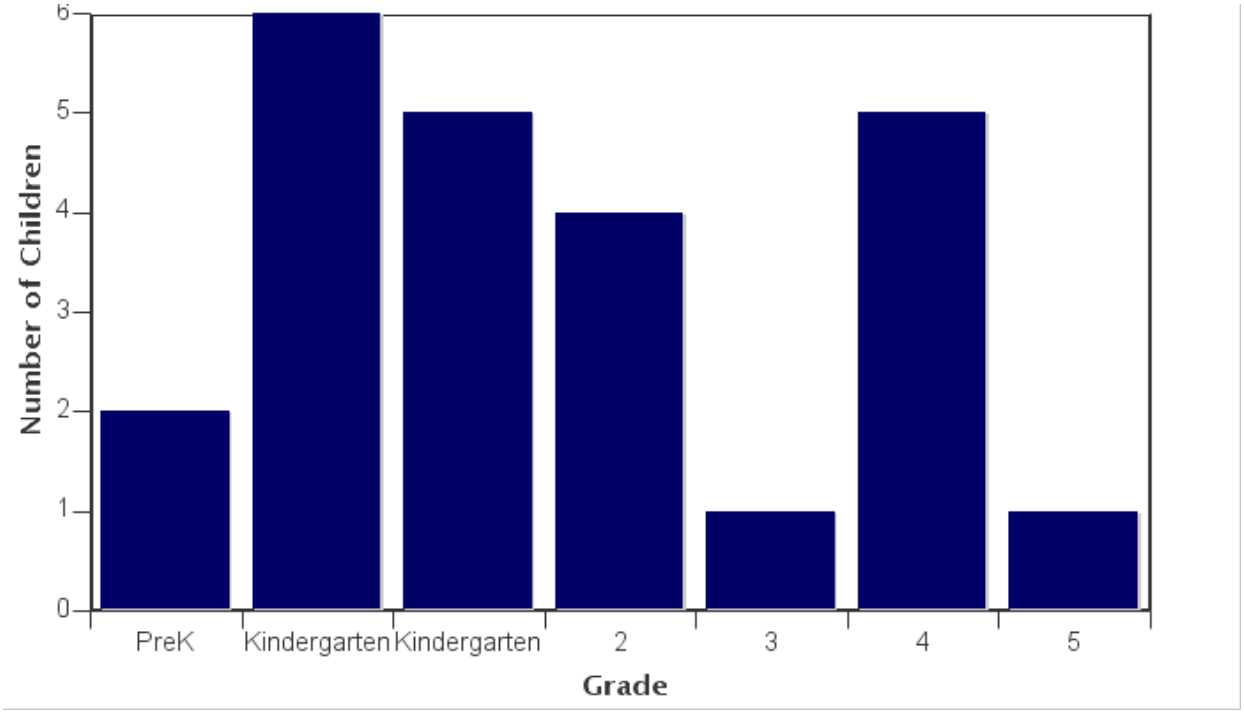
Number of Questionnaires Distributed: 0

Number of Questionnaires Analyzed for Report: 24

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

**Because less than 30 questionnaires are included in this report, each graph and table display counts rather than percentage information.

Grade levels of children represented in survey

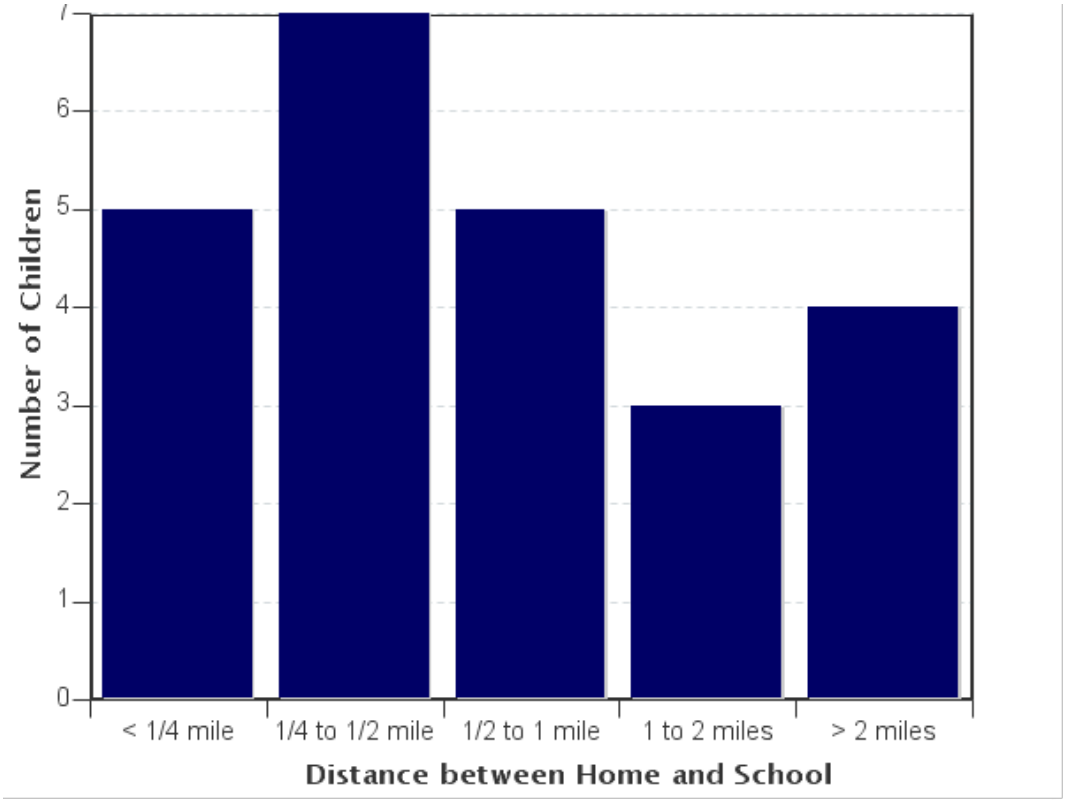


Grade levels of children represented in survey

Grade in School	Responses per grade
	Number
PreK	2
Kindergarten	6
1	5
2	4
3	1
4	5
5	1

No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Parent estimate of distance from child's home to school

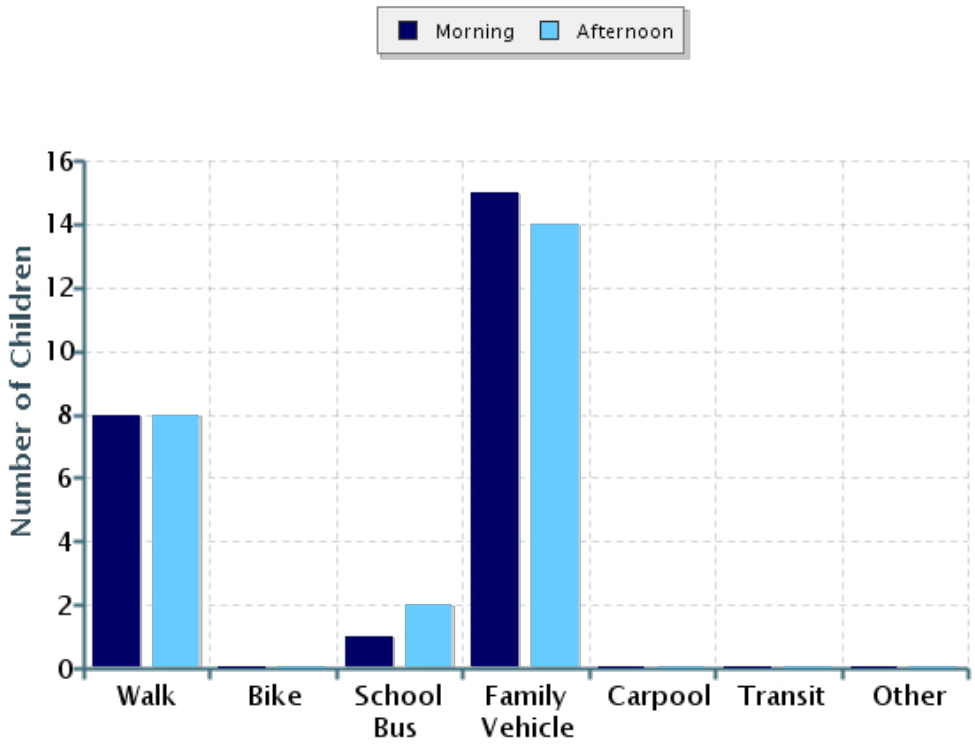


Parent estimate of distance from child's home to school

Distance between home and school	Number of children
Less than 1/4 mile	5
1/4 mile up to 1/2 mile	7
1/2 mile up to 1 mile	5
1 mile up to 2 miles	3
More than 2 miles	4

Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of arrival at and departure from school

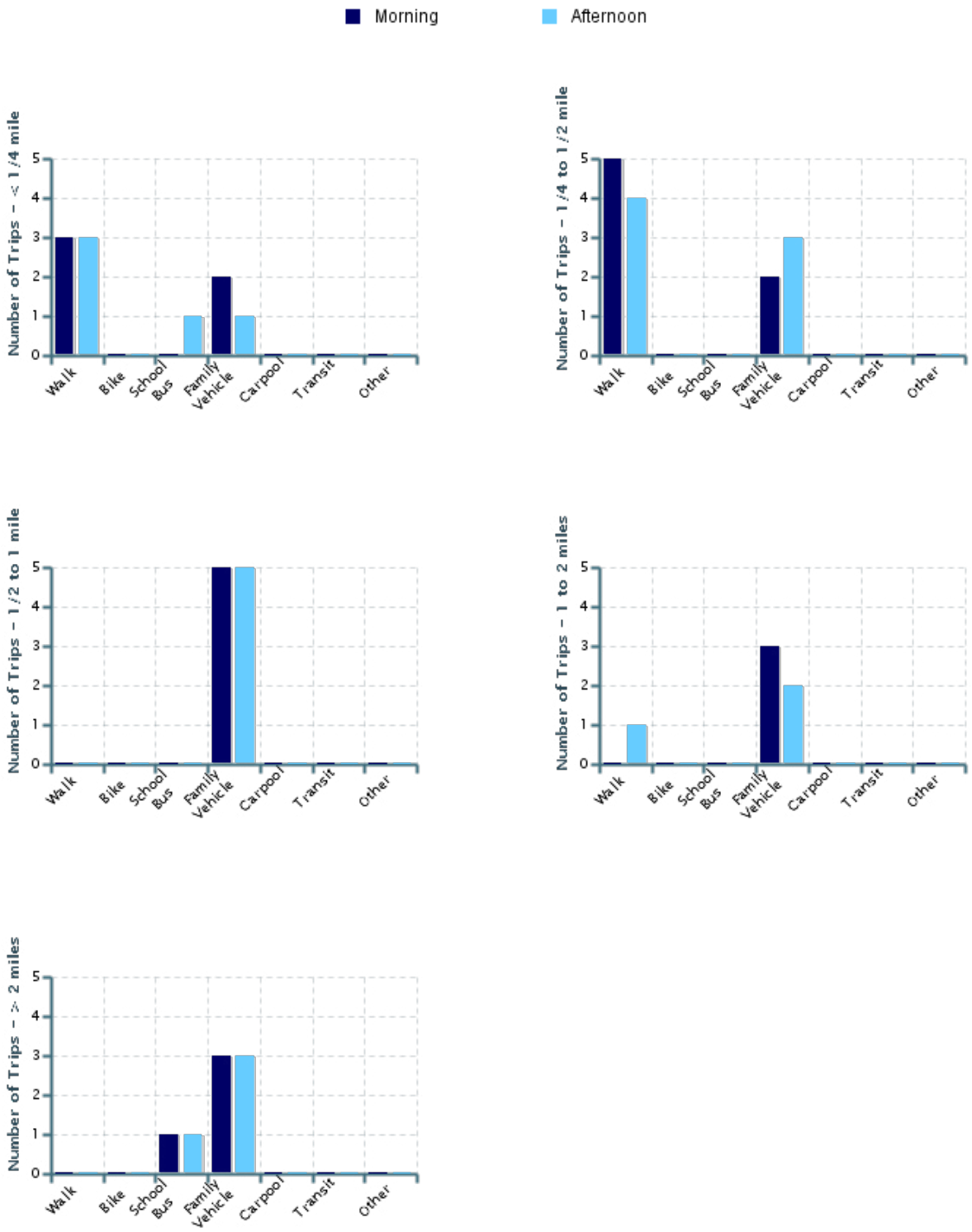


Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	24	8	0	1	15	0	0	0
Afternoon	24	8	0	2	14	0	0	0

No Response Morning: 0
No Response Afternoon: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of school arrival and departure by distance child lives from school



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	5	3	0	0	2	0	0	0
1/4 mile up to 1/2 mile	7	5	0	0	2	0	0	0
1/2 mile up to 1 mile	5	0	0	0	5	0	0	0
1 mile up to 2 miles	3	0	0	0	3	0	0	0
More than 2 miles	4	0	0	1	3	0	0	0

Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	5	3	0	1	1	0	0	0
1/4 mile up to 1/2 mile	7	4	0	0	3	0	0	0
1/2 mile up to 1 mile	5	0	0	0	5	0	0	0
1 mile up to 2 miles	3	1	0	0	2	0	0	0
More than 2 miles	4	0	0	1	3	0	0	0

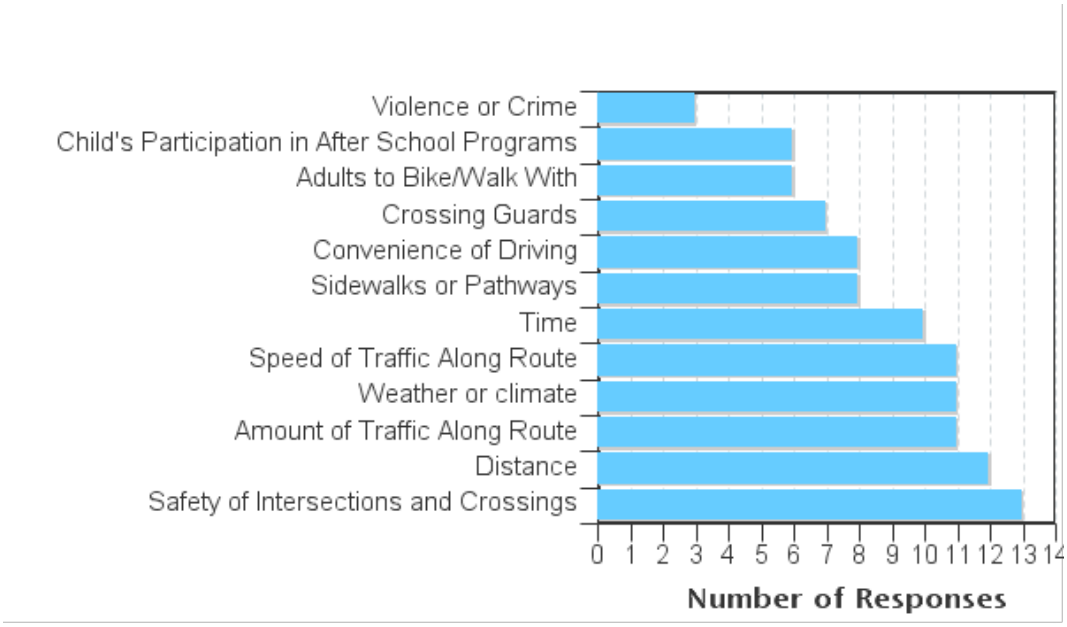
Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Number of children who have asked for permission to walk or bike to/from school by distance they live from school

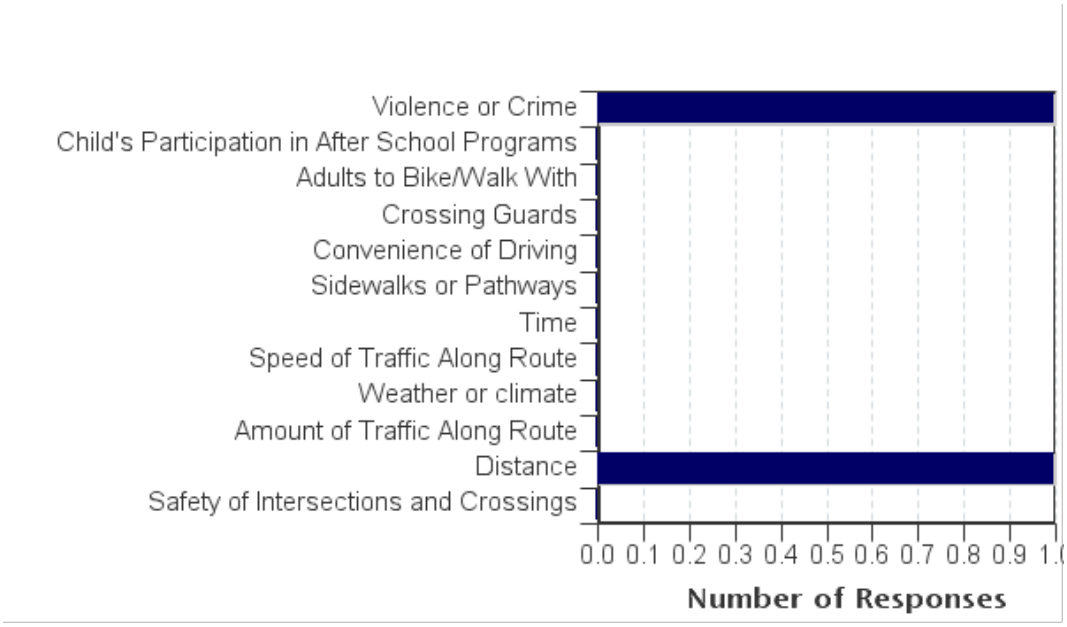
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	10	1	4	4	1	0
No	13	3	3	1	2	4

Don't know or No response: 1
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



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



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

Issue	Child does not walk/bike to school	Child walks/bikes to school
Safety of Intersections and Crossings	13	0
Distance	12	1
Amount of Traffic Along Route	11	0
Weather or climate	11	0
Speed of Traffic Along Route	11	0
Time	10	0
Sidewalks or Pathways	8	0
Convenience of Driving	8	0
Crossing Guards	7	0
Adults to Bike/Walk With	6	0
Child's Participation in After School Programs	6	0
Violence or Crime	3	1
Number of Respondents per Category	**15**	**1**

No response: 8
Note:
--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school

Level of support	Number of children
Strongly Encourages	2
Encourages	9
Neither	13
Discourages	0
Strongly Discourages	0

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

Level of fun	Number of children
Very Fun	7
Fun	9
Neutral	8
Boring	0
Very Boring	0

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

How healthy	Number of children
Very Healthy	15
Healthy	8
Neutral	0
Unhealthy	0
Very Unhealthy	0

Comments Section

SurveyID	Comment
1683068	I do have some concerns with the speed of traffic along 131st street, along with the amount of cars choosing to pick up on/drop off along that road. It is not made for that activity and does block line of sight. I'm unsure if I will let my child continue to walk/bike to school in the winter due to this concern, along with snowbanks blocking line of sight.
1683398	Considering the sheer number of child abductions and sex trafficking in this area, it would take a lot of changes for our family to feel comfortable letting our children walk or bike to school. Nothing that could be done from Gideon Pond would change this, unfortunately.
1683401	My Kindergartener is just too young to walk alone.
1683402	I do have concerns about walking to/from the Project Kids. Parents are instructed to enter/leave the school using Door 7. However, there are no sidewalks from the street on 130th into the parking lot. Therefore we must walk in the path of traffic to get to door #7. If a walkway could be made or allow entrance from another door, I would feel more comfortable.
1683403	we will carpool with neighbors in bad weather or if we have appointments, or are running late
1683410	I encourage my kids to walk from school, I feel like that is the easier option then going thru the pick up line after school
1683453	We open enroll and are too far for a walking/driving option.
1683470	My child is not mature enough to walk alone yet. I feel she gets too distracted and needs a few more years
1683472	My child is not mature enough to walk alone yet. I feel she gets too distracted and needs a few more years
1683530	My kids walk home from school now but NOT without an adult. I walk with them every single day. My answers to 9, 10, and 11 are considering if/when/why I would allow them to walk alone. We are lucky that I am available to do this everyday. Most don't have that option.
1683755	The parking lot set-up is problematic for walkers and bikers. There are no safe pathways for walkers/bikers to use as they enter/exit the lot. The "walker door" does not have adult supervision, do my children use the east door to the parking lot, but cannot then walk or bike with me home. The crossing at 130th is dangerous. The crossing guards are out very limited time, especially hard to "hit" those times in the morning before school to safely cross. In afternoon, there is so much traffic it requires an adult to safely cross 130th. Further down our walk home gets congested as well with traffic from school. Either we walk on the sidewalks on 130th and parkwood and hit many street crossing with school traffic, or we take side street with no sidewalk. All routes are very hard in winter due to snow banks.

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Appendix F. Student Hand Tally

The following pages show summaries of a hand tally of student transportation behavior in October 2019. Students were asked how they traveled to and from school on Tuesday, Wednesday, and Thursday of a single week. This report is a direct export from the National Safe Routes to School Data Collection System, which processed the tallies and generated the report.

Student Travel Tally Report: One School in One Data Collection Period

School Name: Gideon Pond Elementary School

School Group: Dakota County Public Health

School Enrollment: 0

% of Students reached by SRTS activities:

Number of Classrooms Included in Report: 16

Set ID: 5217

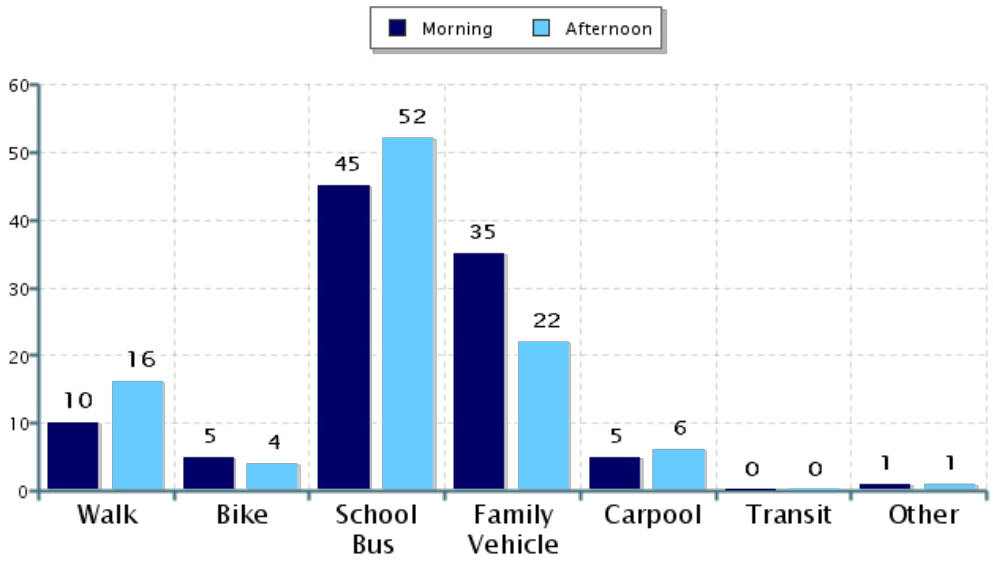
Month and Year Collected: October 2010

Date Report Generated: 11/25/2019

Tags:

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

Morning and Afternoon Travel Mode Comparison

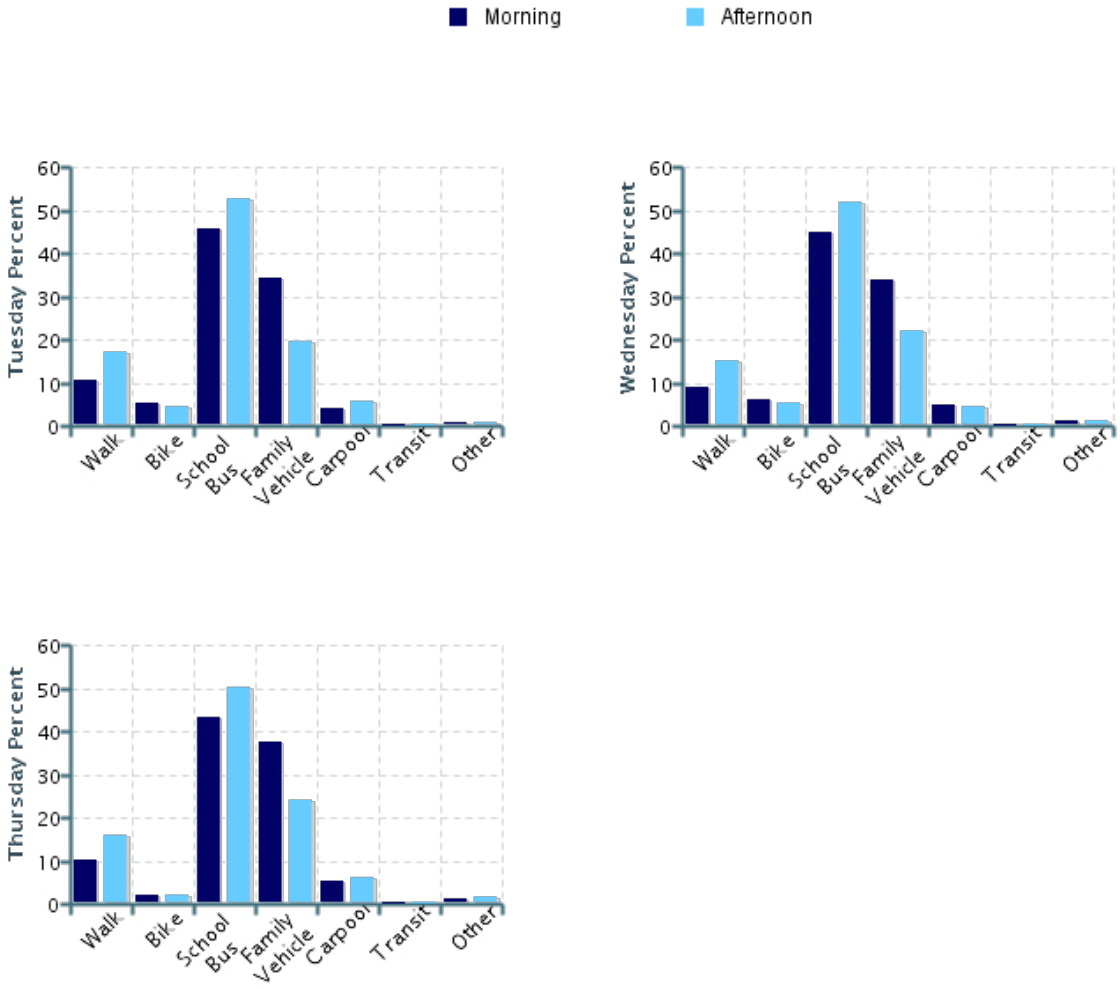


Morning and Afternoon Travel Mode Comparison

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	1124	10%	5%	45%	35%	5%	0%	0.9%
Afternoon	1052	16%	4%	52%	22%	6%	0%	1%

Percentages may not total 100% due to rounding.

Morning and Afternoon Travel Mode Comparison by Day

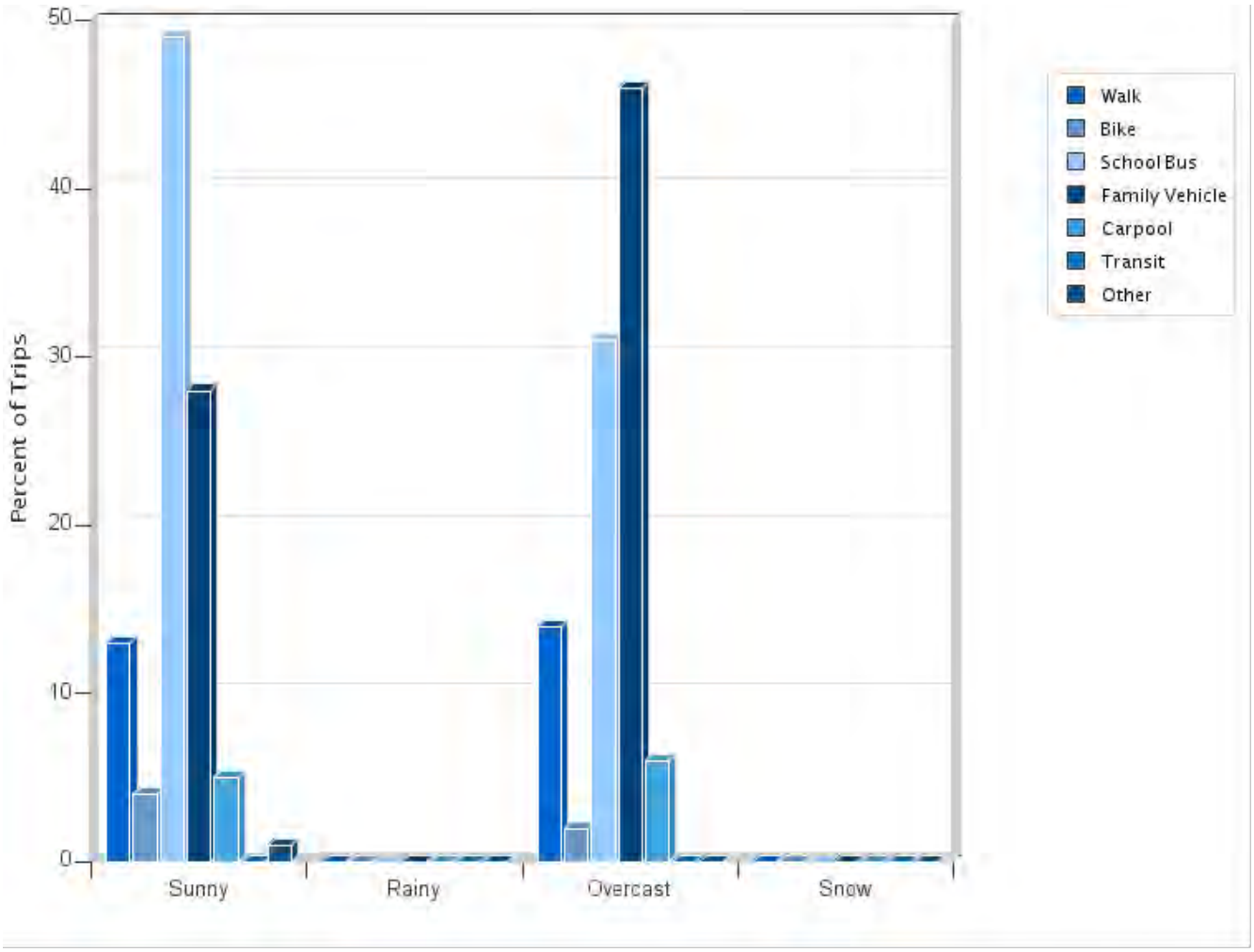


Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM	381	10%	5%	46%	34%	4%	0%	0.3%
Tuesday PM	366	17%	4%	52%	19%	6%	0%	0.8%
Wednesday AM	386	9%	6%	45%	34%	5%	0%	1%
Wednesday PM	369	15%	5%	52%	22%	5%	0%	1%
Thursday AM	357	10%	2%	43%	38%	5%	0%	1%
Thursday PM	317	16%	2%	50%	24%	6%	0%	2%

Percentages may not total 100% due to rounding.

Travel Mode by Weather Conditions



Travel Mode by Weather Condition

Weather Condition	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sunny	2092	13%	4%	49%	28%	5%	0%	1%
Rainy	0	0%	0%	0%	0%	0%	0%	0%
Overcast	84	14%	2%	31%	46%	6%	0%	0%
Snow	0	0%	0%	0%	0%	0%	0%	0%

Percentages may not total 100% due to rounding.

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Appendix G. Administrative Survey

The following pages show responses to the MnDOT Environment and Policy Assessment tool, which was completed by school administrators in fall 2019. The survey asks about programs and policies that exist at each school related to walking and biking. It also asks about the condition and presence of infrastructure surrounding school.

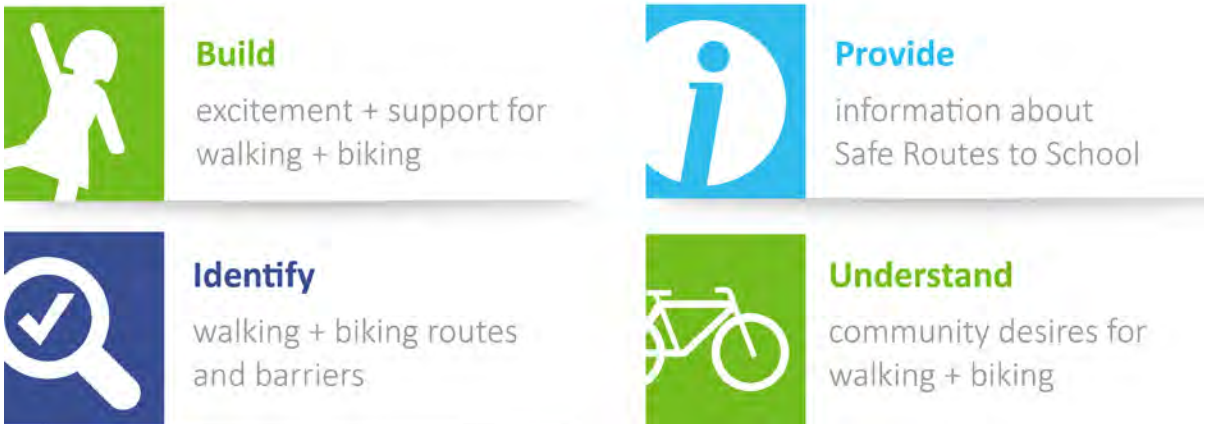
School Name	Gideon Pond Elementary
School Address	613 E 130th Street
Date Completed (D-M-Y)	11/4/2019
Name of person filling out assessment	Chris Bellmont
Phone Number	(952) 707-3001
Email Address	cbellmont@isd191.org
How does your school or district wellness policy address walking and biking?	Not Applicable
How does your school or district transportation policy address walking and biking?	Promotes walking and biking
Does your school or district collaborate with local law enforcement on enforcing speed limits or other traffic laws in the school zone?	Yes
Does your school or district have a plan for evaluating Safe Routes to School efforts?	Yes
Does your school have or participate in walking and biking events or programs such as Walk to School Day or Walking School Buses?	Yes
Does your school have or participate in walking and biking skills and safety training or curriculum?	No
How many designated and separated points of entry (e.g., sidewalk, trail, or intersection connection) onto the school property are accessible to walkers or bikers?	2-Jan
Is the bus loading/unloading area separated from parent pick-up and drop-off?	Yes
Does your school have a written arrival and dismissal policy that addresses the needs and safety of students walking and biking, such as providing staggered dismissal times or separated physical arrival/dismissal spaces for students walking and biking?	Yes, policy addresses needs and safety of students walking and biking, but it is not communicated to parents
What speed limits are posted within your school zone? Do not include signs that lower speed limits only when students are present.	All speed limits 30 mph or less
Are there signs in your school zone that lower the speed limit to less than 30 mph when students are present?	Yes
Do the streets in your school zone have sidewalks, paths, and/or protected walkways?	Yes, but gaps are present

Are sidewalks and trails in your school zone maintained in safe condition in winter (e.g., cleared of snow and ice to allow students walking and biking to safely navigate them)?	Yes, in some areas
What is the condition of the sidewalks in your school zone? (Best guesses are okay).	Good (few (< 25%) cracked, buckled, or missing sections)
How clear of obstacles (garbage bins, signs, utility poles, overgrown plants, trees, etc.) are the sidewalks in your school zone?	Some obstacles, but enough room for two people walking side-by-side
Do the streets in your school zone have dedicated bicycle lanes, trails, and/or off street paths?	Yes, but gaps are present
Does your school have a designated walking route in the school zone? if yes, consider this route when answering the following questions	Yes, but it is not promoted
Are marked crosswalks present in your school zone?	Yes, at some crossings (or within designated route)
Are pedestrian crossing signals or 'countdown' pedestrian crossing signals present at traffic signals in your school zone?	Yes, at some crossings (or within designated route)
Are adult crossing guards with safety vests and STOP paddles or flags present within the school zone?	Yes, at some crossings (or within designated route)
Is student school patrol present within the school zone?	Yes, at some crossings (or within designated route)

Appendix H. Engagement Summary

Safe Routes to School (SRTS) staff provided community engagement support to collect ideas on walking and biking from the Gideon Pond School community. SRTS staff assisted local Gideon Pond staff by hosting one event and providing materials and support so local Gideon Pond staff could run additional events.

The purpose of the engagement event was to identify walking and biking challenges, to understand where people would like to go, to provide information about walking and biking safety, and to build excitement for the Gideon Pond Safe Routes to School Plan. The engagement event was chosen to make it easy for the Gideon Pond School community to talk to staff and participate in the engagement activities.



SRTS community engagement goals

SRTS staff hosted a table at the Gideon Pond Bingo Night on Friday, October 25, 2019. Staff set-up a table in a high-traffic location and talked to 40 students, parents and staff. Materials included an interactive mapping activity, a walking and biking trivia game, and an activity book with games and SRTS resources to gather feedback from participants.

The following is a summary of engagement findings:

- **Opportunities:** Many students said they would like to walk or bike to school and other nearby places like the parks more often.
- **Barriers:** The majority of students take the bus or get dropped-off/picked-up from school by car because parents feel it is unsafe for students to cross problematic roads like 130th Street and Nicollet Avenue.
- **Programs:** A walking school bus could ease parent concerns about students walking to school alone while also teaching students safe walking practices.
- **Infrastructure:** People want safer crossing on 130th Street and Nicollet Avenue to help improve driver compliance at crossings and to slow down traffic.

OPPORTUNITIES

Many students do not walk or bike to school but said they would like to walk and bike more. There are many destinations near Gideon Pond that students like to visit including other schools like Nicollet Middle School, Civic Center Park, Chateaulin Park, Arbor Park, and Timberland Knolls Park. Students said they like to go to parks and recreational areas before and after school. Many students live at the Shalimar Estate said they would like safer walking and biking routes to get to the school.

BARRIERS

Many families said they do not feel safe or comfortable walking or biking to school due to problematic roads like 130th Street and Nicollet Avenue that have high speeds and high volume of traffic. As a result, most students take the bus or get picked-up/dropped-off at school by car. Parents and students would like to have safer walking and biking routes to get to/from school and nearby destinations, especially Shalimar Estates.

Routes

130th Street: Many people said 130th Street is difficult to cross by foot or bike due to the speed of traffic and the lack of driver compliance at intersections near school.

Nicollet Avenue: A couple of people said they do not feel comfortable walking/biking along or crossing Nicollet Avenue due to the speed of traffic and the width of the road.

Intersections

130th Street and Oakland Drive: A few people said the intersection at 130th Street and Oakland Drive is busy and is difficult to cross safely. However, parents and students said it was the best intersection to cross to get to Gideon Pond Elementary School from north of 130th Street.

Nicollet Avenue and Woodcrest Drive: A couple of people said it is difficult to cross Nicollet Avenue at the intersection at Woodcrest Drive. They prefer to cross Nicollet Avenue at this intersection to get to Nicollet Middle School and Civic Center Park.

PROGRAMS

Walking School Bus: A walking school bus led by an adult could help students learn how to safely walk to school while easing parent concerns about students walking to school unsupervised. One origin for a walking school bus could be from the Shalimar Estates.

Walk and Bike to School Route: A walk and bike to school route map could identify the safest routes to get to school and other favorite destinations in the neighborhood. The map could indicate the safest places to cross problematic roads like 130th Street and Nicollet Avenue.

Bicycle Rodeo: A bicycle rodeo could create excitement for bicycling among students and teach them about safe riding techniques and skills. The rodeo could be coupled with a bike giveaway and could be run by Gideon Pond parents or staff.

INFRASTRUCTURE

People want safer walking and biking routes to get to Gideon Pond and said that improved crossing on 130th Street and Nicollet Avenue would make it easier and more enjoyable to walk and bike to school. A couple of people mentioned that students cut through the field from 131st Street or Welcome Lane to get to school and would like to see a paved pathway for the students who use this route. One staff member said this route would especially accommodate students who live at the Shalimar Estates since many of them use the cut through if they walk or bike to school.

Appendix I. Infrastructure Toolbox

This infrastructure toolbox provides an overview of different infrastructure projects. Each infrastructure project includes a pictorial representation, a brief description, a typical and estimated cost, and a list of resources for more specific engineering guidelines. References are shown at the end of this section.

ADVANCED STOP LINES

Description

An advanced stop line is a solid white line painted ahead of crosswalks on multi-lane approaches to alert drivers where to stop to let pedestrians cross. It is recommended that advanced stop lines be placed twenty to fifty feet before a crosswalk. This encourages drivers to stop back far enough for a pedestrian to see if a second motor vehicle is approaching, reducing the risk of a hidden-threat collision. Advanced stop lines can also be used with smaller turning radii to create a larger effective turning radius to accommodate infrequent (but large) vehicles.

Estimated Costs[A,E]

- $8.50 per linear foot; $85 for a ten foot travel lane

Resources

- Reducing Conflicts Between Motor Vehicles and Pedestrians: The Separate and Combined Effects of Pavement Markings and a Sign Prompt
- FHWA Signalized Intersections: Informational Guide – Pages: 192- 193
- MN MUTCD: Part 3. Markings – Page: 3B-32
- NACTO Urban Street Design Guide – Pages: 109-116, 144

CROSSING GUARD

Description

Facilitated crossings are marked crossing locations along student routes where adult crossing guards or trained student patrols are stationed to assist students with safely crossing the street. Facilitated crossings may be located on or off campus. Determining whether a location is more appropriate for an adult crossing guard or student patrol may be based on location including distance from school, visibility, and traffic characteristics. Adult crossing guards and student patrols receive special training, and are equipped with high-visibility traffic vests and flags when on duty.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 25-26
- MnDOT Minnesota Safe Routes to School: School Crossing Guard Brief Guide
- MN MUTCD: Part 7. Traffic Controls for School Areas – Pages: 7D-1-2

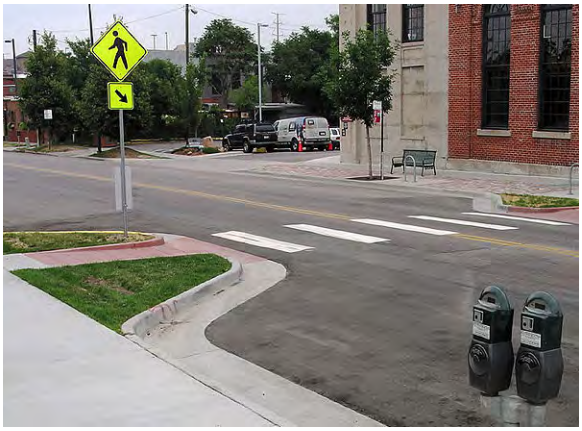
Estimated Costs[D]

- $14.00 per hour average wage for a crossing guard

CURB EXTENSION/BULB OUT

Description

Curb extensions extend the sidewalk and curb into the motor-vehicle parking lanes at intersections or mid-block crossings. Also called bump-outs or bulb-outs, these facilities improve safety and convenience for people crossing the street by shortening the crossing distance and increasing visibility of people walking or biking to those driving.



Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 11-12
- FHWA Effects of Traffic Calming Measures on Pedestrian and Motorist Behavior – Pages: 6-11
- FHWA Signalized Intersections: Informational Guide – Pages: 190-192
- NACTO Urban Street Design Guide – Pages: 45-59

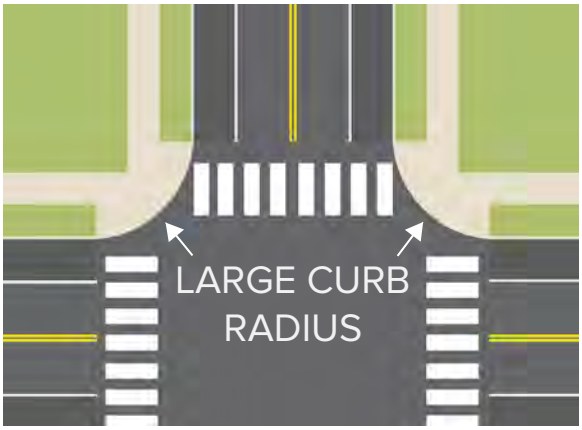
Estimated Costs[E]

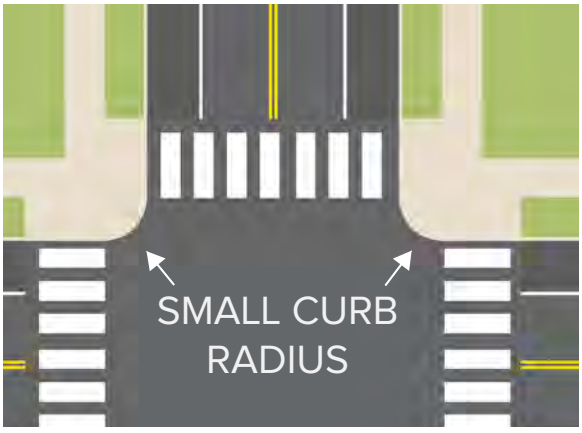
- $13,000 for a single corner

CURB RADIUS REDUCTION

Description

Curb radii designs are determined based on the design vehicle of the roadway. In general, vehicles are able to take turns more quickly around corners with larger curb radii. Minimizing curb radii forces drivers to take turns at slower speeds, making it easier and safer for people walking or biking to cross the street. An actual curb radius of five to ten feet should be used wherever possible, while appropriate effective turning radii range from 15 to 30 feet, depending on the roadway and land use context.





Resources

- FHWA Signalized Intersections: Informational Guide – Pages: 187-189
- NACTO Urban Street Design Guide – Pages: 117-120, 144-146

Estimated Costs[F, G]

- $2,000-$40,000, depending on need for utility relocation and drainage

CURB RAMPS

Description

Curb ramps provide access for people between roadways and sidewalks for people using wheelchairs, strollers, walkers, crutches, bicycles, or who have mobility restrictions that make it difficult to step up or down from curbs. Curb ramps must be installed at intersections and mid-block crossings where pedestrian crossings are located, as mandated by federal law. Separate curb ramps should be provided for each direction of travel across the street.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 1-2
- FHWA Signalized Intersections: Informational Guide – Pages: 47-50
- United States Access Board Proposed Accessibility Guidelines for Pedestrian Facilities in Public Right-of-Way – Pages: 66-67, 78-83

Estimated Costs

- Varies depending on retrofit or new construction, material used.

HAWK SIGNALS

Description

The High-Intensity Activated Crosswalk Beacon (HAWK), also referred to as a Pedestrian Hybrid Beacon System by MnDOT, remains dark until activated by pressing the crossing button. Once activated, the signal responds immediately with a flashing yellow pattern which transitions to a solid red light, providing unequivocal 'stop' guidance to motorists. HAWK signals have been shown to elicit high rates of motorist compliance.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 13-15
- FHWA Safety Effectiveness of the HAWK Pedestrian Crossing Treatment
- FHWA Evaluation of Pedestrian and Bicycle Engineering Countermeasures: Rectangular Rapid-Flashing Beacons, HAWKs, Sharrows, Crosswalk Markings, and the Development of an Evaluation Methods Report – Pages: 19-28

Estimated Costs[H]

- $80,000. Includes one HAWK signal in each direction

HIGH-VISIBILITY CROSSWALK

Description

High-visibility crosswalks help to create a continuous route network for people walking and biking by alerting motorists to their potential presence at crossings and intersections. Crosswalks should be used at fully controlled intersections where sidewalks or shared-use paths exist.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 3-8
- MnDOT Guidance for Installation of Pedestrian Crosswalks on Minnesota State Highways – Page: 3
- MN MUTCD: Part 3. Markings – Pages: 3B-34-38
- MN MUTCD: Part 7. Traffic Controls for School Areas – Pages: 7A-1-3, 7B-5-8, 7C-1
- NACTO Urban Street Design Guide – Pages: 109-116

Estimated Costs[E]

- $25,000 each, depending on materials: paint vs. thermoplastic

LEADING PEDESTRIAN INTERVAL

Description

A Leading Pedestrian Interval (LPI) provides pedestrians with a three to seven second head start when entering an intersection with a corresponding green signal in the same direction of travel. LPIs enhance the visibility of pedestrians in the crosswalk, and reinforce their right-of-way over turning vehicles. LPIs are most useful in areas where pedestrian travel and turning vehicle volumes are both high.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 20-22
- NACTO Urban Street Design Guide – Page: 128

Estimated Costs[A]

- $0-$3,500, depending on the need for new hardware vs. revising existing signal timing

MEDIAN REFUGE ISLAND

Description

Median refuge islands (also known as median crossing islands) make crossings safer and easier by dividing them into two stages so that pedestrians and bicyclists only have to cross one direction of traffic at a time. Median refuges can be especially beneficial for slower walkers including children or the elderly. Crossing medians may also provide traffic calming benefits by visually narrowing the roadway.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 9-10, 43-44
- FHWA Effects of Traffic Calming Measures on Pedestrian and Motorist Behavior – Pages: 17-20
- FHWA Proven Safety Countermeasures: Medians and Pedestrian Crossing Islands in Urban and Suburban Areas
- MN MUTCD: Part 3. Markings – Page: 3I-2
- NACTO Urban Street Design Guide – Page: 116

Estimated Costs[E]

- $13,500, $10 per square foot

RAISED CROSSWALKS

Description

Raised crosswalks are wide and gradual speed humps placed at pedestrian and bicyclist crossings. They are typically as high as the curb on either side of the street, eliminating grade changes for people crossing the street. Raised crosswalks help to calm approaching traffic and improve visibility of people crossing.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 3-4
- FHWA Effects of Traffic Calming Measures on Pedestrian and Motorist Behavior – Pages: 12-15
- MN MUTCD: Part 3. Markings – Pages: 3B-46-49
- NACTO Urban Street Design Guide – Page: 54

Estimated Costs[E]

- $8,170 each

ACTIVATED FLASHING BEACON

Description

One type of activated flashing beacon is a rectangular rapid flashing beacon (RRFB). It uses an irregular stutter flash pattern with bright amber lights (similar to those on emergency vehicles) to alert drivers to yield to people waiting to cross. The RRFB offers a higher level of driver compliance than other flashing yellow beacons, but lower than the HAWK signal.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 16-17
- FHWA Effects of Yellow Rectangular Rapid-Flashing Beacon on Yielding at Multi-lane Uncontrolled Crosswalks
- FHWA Evaluation of Pedestrian and Bicycle Engineering Countermeasures: Rectangular Rapid-Flashing Beacons, HAWKs, Sharrows, Crosswalk Markings, and the Development of an Evaluation Methods Report – Pages: 13-18

Estimated Costs[B]

- $36,000 for two assemblies on poles

ROAD DIET

Description

A classic road diet converts an existing four-lane roadway to a three-lane cross-section consisting of two through lanes and a center two-way left turn lane. Road diets improve safety by including a protected left-turn lane, calming traffic, reducing conflict points, and reducing crossing distance for pedestrians. In addition, road diets provide an opportunity to allocate excess roadway for alternative uses such as bike facilities, parking, transit lanes, and pedestrian or landscaping improvements.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 29-31
- FHWA Road Diet Desk Reference
- FHWA Road Diet Informational Guide
- NACTO Urban Street Design Guide – Page: 14

Estimated Costs[E]

- $120,680 per mile, assuming eight blocks in a mile. Estimate includes 16 symbols, 16 signs, six curb extensions, one mini traffic circle

SCHOOL SPEED ZONE

Description

School speed zones reduce speed limits near schools, and alert motorists that they are driving near a school. School speed zones are defined as the section of road adjacent to school grounds, or where an established school crossing with advance school signs is present. Each road authority may establish school speed zone limits on roads under their jurisdiction. In general, school speed limits shall not be more than 30 mph below the established speed limit, and may not be lower than 15 mph. Speed violations within school speed zones are subject to a double fine.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 48-51
- MnDOT School Zone Speed Limits
- MN MUTCD: Part 7. Traffic Controls for School Areas – Section: 7E

Estimated Costs[A, C]

- $600 for sign and post in each direction

SHARED USE PATH

Description

Shared-use paths provide off-road connections for people walking and biking. Paths are often located along waterways, abandoned or active railroad corridors, limited access highways, or parks and open spaces. Shared-use paths may also be located along high-speed, high-volume roads as an alternative to sidewalks and on-street bikeways; however, intersections with roadways should be minimal. Shared-use paths are generally very comfortable for users of all ages and abilities.

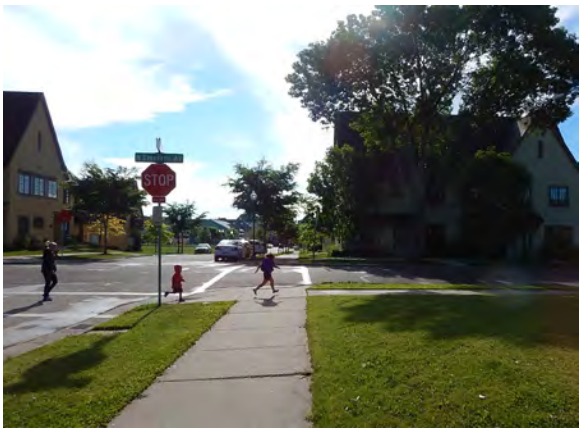
Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Page: 2
- MnDOT Bikeway Facility Design Manual – Pages: 123-168
- AASHTO Guide for the Development of Bicycle Facilities – Chapter 5

Estimated Costs[B]

- $55 per linear foot, 10 ft trail with aggregate base and associated costs

SIDEWALKS



Description

A well-connected sidewalk network is the foundation of pedestrian mobility and accessibility. Sidewalks provide people walking with space to travel within the public right-of-way that is separated from roadway vehicles. Sidewalks are associated with significant reductions in motor vehicle / pedestrian collisions.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 1-2
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities
- NACTO Urban Street Design Guide – Pages: 37-44
- United States Access Board Proposed Guidelines for Pedestrian Facilities in Public Right-of-Way

Estimated Costs[A, B]

- $84 per linear foot of 6 ft sidewalk with aggregate base

TRAFFIC CIRCLES (MINI ROUNDABOUTS)

Description

Traffic circles are raised circular islands constructed in the center of residential intersections. They may take the place of a signal or four-way stop sign, and calm vehicle traffic speeds by forcing motorists to navigate around them without requiring a complete stop. Signage should be installed with traffic circles directing motorists to proceed around the right side of the circle before passing through or making a left turn.

Resources

- MnDOT Minnesota's Best Practice for Pedestrian and Bicycle Safety – Pages: 43-44
- FHWA Technical Summary: Mini-Roundabouts
- FHWA Technical Summary: Roundabouts – Page: 7 (mention of school area siting)
- MN MUTCD: Part 3. Markings – Pages: 3C1-15
- NACTO Urban Street Design Guide – Page: 99

Estimated Costs[E]

- $35,000-$50,000 each

Sources

A: http://www.dot.state.mn.us/bidlet/avgPrice/AVGPR162015.pdf
B: http://www.hennepin.us/~/media/hennepinus/residents/transportation/bottineau-documents-mpls-gv/estimated-infrastructure-costs-and-funding.pdf?la=en
C: http://www.trafficsign.us/signcost.html
D: https://www.bls.gov/oes/current/oes339091.htm
E: http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf
F: http://guide.saferoutesinfo.org/engineering/reduced_corner_radii.cfm
G: http://www.pedbikeinfo.org/cms/downloads/Countermeasure_Costs_Summary_Oct2013.pdf
H: http://www2.ku.edu/~kutc/pdffiles/LTAPFS11-Mid-Block.pdf

Appendix J. Bike Parking for Schools

Bicycle parking at schools does more than just provide space for storage during the school day. Depending on design, bicycle parking can actually encourage students and staff to choose to ride their bikes to school. Here are some things to think about when planning bicycle parking at school.

HOW MUCH PARKING SHOULD BE PROVIDED?

The amount of bike parking needed will depend on the capacity of your school, the ages of students, and the number of staff. But remember: be aspirational! Provide parking for the number of students and staff you'd like to see biking! The following are some guidelines:

- Aim for 25 percent of the maximum student capacity of the school.
- Provide additional parking to encourage staff and faculty to bike to school

For example, if each classroom has a max capacity of 20 students and there are 10 classrooms, space for 50 bicycles should be provided. Don't forget to add some for faculty and staff!

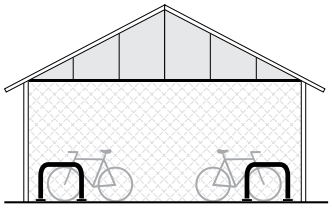
WHERE SHOULD PARKING BE LOCATED?

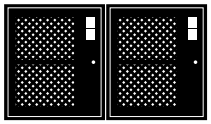
Well-located bike parking will be:

- visible to students, staff, and visitors
- near the primary school entrance/exit
- easily accessed without dismounting
- clear of obstructions which might limit the circulation of users and their bikes
- easily accessed without making a rider cross bus and car circulation
- installed on a hard, stable surface that is unaffected by weather
- often found near kindergarten and daycare entrance, which allows parents to conveniently pick up their children on their bikes

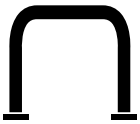
CAN MY SCHOOL PROVIDE ADDITIONAL AMENITIES?

Bike parking shelters and lockers provide extra comfort and security for those choosing to ride to school. They're also a great project for a shop class. Both can be very simple in construction and go a long way towards making biking attractive and prioritized!





WHICH RACKS ARE BEST?



INVERTED U

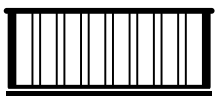
POST & RING

WHEELWELL SECURE

These racks provide two points of contact with the bicycle, accommodate varying styles of bike, allow for at least one wheel to be U-locked, and are intuitive to use!

WHICH RACKS ARE NOT RECOMMENDED?

WAVE



COMB

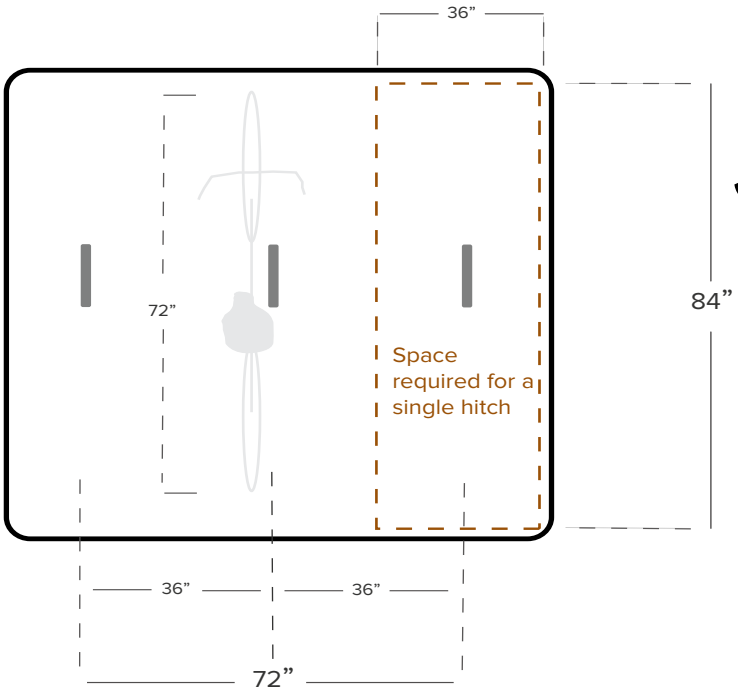
SPIRAL

WHEELWELL

These racks do not provide support at two places on the bike, can damage the wheel, do not provide adequate security, and are not intuitive to use!

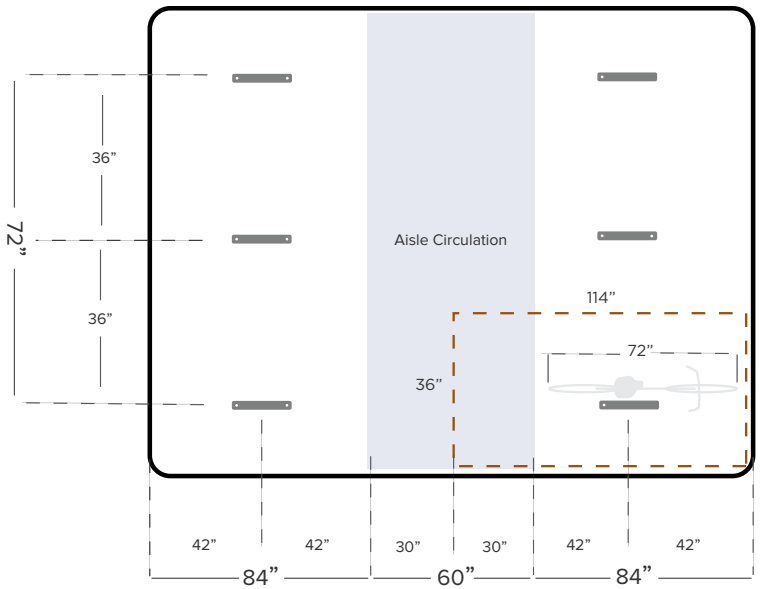
Graphics courtesy of Association of Pedestrian and Bicycle Professionals Essentials of Bike Parking report (2015).

SPACE REQUIREMENTS



The space requirements shown here assume a person parking their bike would have open access forward and from behind.

The space requirements shown here assume the area is confined on either side (left and right). Access is located at the top and bottom of the image, requiring a center aisle for circulation.



RESOURCES FOR EQUIPMENT

Dero
Sportworks
Urban Racks

MORE INFORMATION

APBP Essentials of Bike Parking
Bike Shelter Development Guide -Portland Public Schools

Appendix K. Equity in SRTS Planning

When planning and implementing your SRTS programming, it is important to design events and activities that are inclusive of students of all backgrounds and abilities. This appendix identifies potential obstacles to participation and suggests creative outreach, low-cost solutions, and flexible program implementation to address language barriers, students with disabilities, personal safety concerns, and barriers related to school distance.

LANGUAGE AND/OR CULTURAL BARRIERS

To encourage families that do not speak English, are learning English, or have recently immigrated to participate in Safe Routes to School programs, it is important to communicate how the program can benefit families and address parental concerns. Hiring a bilingual staff person is the best way to communicate and form relationships with a community.

Provide Materials in Multiple Languages

Some concepts can lose their meaning and be confusing when translated literally. Also, words may have different meanings depending on the regional dialect.

- Ask families with native speakers to help communicate the message to others.
- Use images to supplement words so that handouts are easy to read and understand.

Use a Variety of Media

In schools where families speak different languages, it can be a good idea to present information in multiple ways.

- Use a variety of mechanisms to communicate the benefits of walking and bicycling to parents.
- Have students perform to their parents, such as through a school play.
- Encourage youth-produced PSAs to educate parents on why biking and walking are fun and healthy events.
- Provide emails, print materials, etc., in multiple languages.
- Use a phone tree, PTA, or events to reach parents.
- Engage an assistant who speaks multiple languages to reach out to parents at events.
- Employ staff from similar ethnic backgrounds to parents at the school.
- Parents increasingly use texting more than emails. Find out how parents communicate with each other and use their methods.

Meet People Where They Are

Some families may not feel comfortable coming to your events or participating in formal PTA and organizations.

- Attend established meetings to reach groups who may not participate in school PTAs or other formal meetings.
- State required English Learner Advisory Committees (ELACs) are good partners.
- Conduct outreach or table at school events (such as: Movie nights, family dance nights, Back to School nights, etc.).

Residents are often aware of traffic and personal safety issues in their neighborhoods, but don't know how to address them.

- Provide a safe place for parents to voice concerns to start the conversation about making improvements. Listen to their concerns, help parents prioritize, and connect them with the responsible agency to address the concerns.
- Encourage staff or parent volunteers to host house meetings, in which a small group gathers at the home of someone they know to voice concerns and brainstorm solutions.
- Seek common goals for community improvement that can be addressed through collaborative efforts with all parent groups.
- When looking for volunteers, start by looking to friends and neighbors to build your base group.

- Be creative; consider going to community events like Farmer's Markets and neighborhood gathering spots to recruit. Try different ways of engaging with participants; the City as Play Design Workshops have creative ideas for asking attendees to build their visions.
- Look for small victories: adding a crossing guard, signage and paint gives parents confidence that their issues can be addressed.

Host Parent Workshops

All parents desire for their children to be successful. Workshops are a good opportunity to articulate how services and programs can reduce barriers to students' success and help them be successful.

- Create simple ways for parents to get involved and help put on events and activities with their children, who can often help navigate the situation.
- Hold a "Parent University," or workshops where parents can voice their concerns.
- Listen to and act on parents' suggestions to build trust in the community and address concerns.
- Include an icebreaker activity to introduce yourself and to make the participants more comfortable sharing their thoughts and opinions.

Establish Flexible Programs

Create a trusting and welcoming environment by not requiring participants to provide information about themselves, which could be a deterrent to undocumented immigrants.

- Establish a training program for volunteers that does not require background checks or fingerprints since some parents who would like to volunteer may not be able to pass background checks.

Often working parents have limited time to volunteer with their children's schools. The hours and benefits associated with many jobs can make it challenging for parents to be available for school activities and take paid time off.

- Host meetings and events at varying times to accommodate differing work schedules.
- Make specific requests and delegate so no single person has to do the majority of the work.

Communicate Health Benefits

Families who are not as well-connected to the school community may not be as aware of the benefits of SRTS programming.

- Publicize to parents that walking and biking to school is exercise and to children that it is fun, like an additional recess.
- Encourage caregivers to attend health fairs that highlight biking and walking to create an association between those commute options and their benefits. Encouragement competitions such as the Golden Sneaker Award and Pollution Punch Card can show how many calories students have burned.

STUDENTS WITH DISABILITIES

Some students may not be able to walk or bike to school because of physical or mental disabilities, but they can still be included in SRTS programs.

- Invite children with physical disabilities to participate in school infrastructure audits to learn how to improve school access for all.
- Understand that students with mental disabilities may have differing capacities for retaining personal and traffic safety information, but programs like neighborhood cleanups and after-school programs can be fun ways to socialize and participate with other students.
- Involve special education instructors and parents of disabled students in the planning and implementation of these programs to better determine the needs of children with disabilities.
- Create SRTS materials that recognize students with disabilities. Include pictures of students with disabilities in program messaging to highlight that SRTS programs are suitable for all students.

Additional Resources

- National Center for SRTS's Involving Students with Disabilities
- Safe Routes Partnership's: Serving Students with Disabilities

PERSONAL SAFETY CONCERNS

In some communities, personal safety concerns associated with crime activity is a significant barrier to walking and bicycling. These can include issues of violence, dogs, drug use, and other deterrents that can take precedence over SRTS activities in communities. These neighborhoods may lack sidewalks or other facilities that offer safe access to school, and major roads may be barriers.

Neighborhood Watch Programs

Establishing neighborhood crime watches, parent patrols, and safety zones can involve the community in addressing personal safety concerns as supervision reduces the risk of bullying, crime, and other unsafe behavior.

- Set up parent patrols to roam areas of concern. Safe Passages or Corner Captain programs station parent or community volunteers on designated key street corners to increase adult presence to watch over children as they walk and bicycle to school.
- Issue special hats, vests, or jackets to give the volunteers legitimacy and identify them as patrol leaders.
- Provide walkie-talkies to allow parents to radio for help if they are confronting a situation they have not been able to resolve.
- Work to identify "safe places" like a home along the route where children can go to in the event of an emergency, or create a formal program with mapped safe places all children can go to if a situation feels dangerous.

SchoolPool with a Group

SchoolPool, or commuting to school with other families and trusted adults, can address personal safety concerns about traveling alone.

- Form Walking School Buses, Bike Trains, or carpools. For information about how to set up a SchoolPool at your school, read the Spare the Air Youth SchoolPool guidebook at http://www.sparetheairyouth.org/schoolpool-guidebook. More information about organizing a Walking School Bus or Bike Train is available online at http://www.sparetheairyouth.org/walking-school-buses-bike-trains.

Sponsor Neighborhood Beautification Projects

Clean neighborhoods free of trash and graffiti can create a sense of safety and help reduce crime rates.

- Host neighborhood beautification projects around schools, such as clean-up days, graffiti removal, and tree planting to help make families feel more comfortable and increase safety for walking or biking to school.
- Host a community dialogue about positive and negative uses of public space.

Education Programs

Teach students and their families about appropriate safety issues. Parents may not want students to walk or bike if they are not confident in their child's abilities.

Safety Information for Students

- Use time at school, such as during recess, PE, or no-cost after school programs, to teach children how to bike and walk safely.
- Utilize either existing curricula or bring in volunteer instructors from local advocacy groups and non-profit organizations.
- Teach children what to do in the event of an emergency and where to report suspicious activity or bullying.
- Provide helmets and bikes during the trainings will allow all students to participate regardless of whether or not they have access to these items.
- Organize an Open Streets event as a strategy to create safe zones to teach new skills in the street.

Safety Information for Parents

- Provide information about how to get to around safely.
- Develop and distribute suggested routes to school maps that highlight streets with amenities like sidewalks, lighting, low speeds, and less traffic.
- Identify informal shortcuts and cutthroughs that students may take to reduce travel time. Consider whether these routes may put students at risk (for example, by cutting through a fence, across a field, or near railroad tracks) and work with your city planners to improve the route.
- Provide flyers for parents about how to find other families groups to commute with or what to do in the event of an emergency to educate themselves and their children.
- Offer pedestrian safety training walks. Make these fun and interactive and address parents' safety concerns as well as provide tips for them to teach their children to be safe while walking.

Resources

- SRTS National Partnership's Implementing Safe Routes to School in Low-Income Schools and Communities http://www.saferoutespartnership.org/sites/default/files/pdf/LowIncomeGuide.pdf

BARRIERS RELATED TO SCHOOL DISTANCE

Some students simply live too far from school to reasonably walk or bike. However, there are programs that may be implemented to include these students in healthy physical activities, such as walking or biking.

Remote Drop-off

- Suggest remote drop-offs for parents to drop their children off a couple blocks from the school so they can walk the rest of the way. Volunteers wait at the drop-off and walk with students at a designated time to ensure they arrive to school safely and on time.
- Remote drop-off sites can be underutilized parking lots at churches or grocery stores that give permission for their property to be used this way.
- Identify potential park and walk areas on route maps.

Walk to School Bus Stops

- Incorporate physical activity into students' morning schedule by encouraging them to walk to bus stops.
- Utilize walking school bus programming to organize nearby students to walk in groups to a more centrally located bus stop, which may translate into fewer bus stops because more students will be boarding at each stop.

Frequent Walker Programs

- Implement programs that identify walking opportunities on campus, which can be defined in terms of routes or by amount of time spent walking. This will allow students who arrive to school by bus or parent vehicle to benefit from the physical benefits provided by walking or biking to school.

Additional Resources

- Safe Routes to School National Partnership Rural Communities: Making Safe Routes Work
- Safe Routes to School National Partnership Rural Communities: Best Practices and Promising Approaches for Safe Routes
- Safe Routes to School National Partnership Rural Communities: A Two Pronged Approach for Improving Walking and Bicycling

Appendix L. Maintenance Planning

ANNUAL MAINTENANCE

School routes and crosswalks should be prioritized for maintenance. To ensure high visibility crosswalks maintain their effectiveness, review all crosswalks within one block of the school each year. If there is notable deterioration, crosswalks should be repainted annually. In addition, crosswalks on key school walk routes should be evaluated annually and repainted every other year or more often as needed.

SEASONAL PLANNING AND MAINTENANCE

Walking and cycling generally diminish during the cold winter months as poorly maintained infrastructure and unpleasant weather conditions create barriers for pedestrians and bicyclists. However, maintaining infrastructure and planning inviting winterscapes for students can facilitate the convenience of biking and walking as well as provide new opportunities to encourage students to be outside more.

Snow removal and maintenance of school routes should be prioritized. Snow removal is a critical component of pedestrian and bicycle safety. The presence of snow or ice on sidewalks, curb ramps, or bikeways will deter pedestrian and cyclist use of those facilities to a much higher degree than cold temperature alone. Families with children will avoid walking in locations where ice or snow accumulation creates slippery conditions that may cause a fall. Curb ramps that are blocked by ice or snow effectively sever access to pedestrian facilities. Additionally, inadequately maintained facilities may force pedestrians and bicyclists into the street. Identified routes to school should be given priority for snow removal and ongoing maintenance.

While it is important to prioritize maintenance, additional planning should be employed to create new opportunities to encourage students to be outside more through design. According to the City of Edmonton's Winter Design Guidelines, the five main design principles for designing cities that are inviting and functional for outdoor public life year-round include blocking wind, capturing sunshine, using color, lighting, and providing infrastructure that supports desired winter activities.

Lighting is important year-round, but becomes increasingly important in the winter for creating more inviting winterscapes for pedestrians and bicyclists. Lighting can contribute to inducing a sense of warmth and safety, as well as be used for wayfinding and as passive public art displays.

Lastly, providing infrastructure that supports desired winter activities can also encourage more active transportation. Some particularly encouraging strategies beyond providing ice skating rinks that have been employed in Edmonton, Canada include harnessing plowed snow piles and stored snow to create new play opportunities for students. These snow piles can be strategically placed in parks along walking routes and mounded into winter slides. Other practices have included regularly compacting snow to make it malleable enough for students to construct their own snow house structures, with maintenance crews compacting the snow every few days to prevent it from forming into denser ice.

Resources

Winter Design Guidelines: Transforming Edmonton into a Great Winter City
https://www.edmonton.ca/city_government/documents/PDF/WinterCityDesignGuidelines_draft.pdf