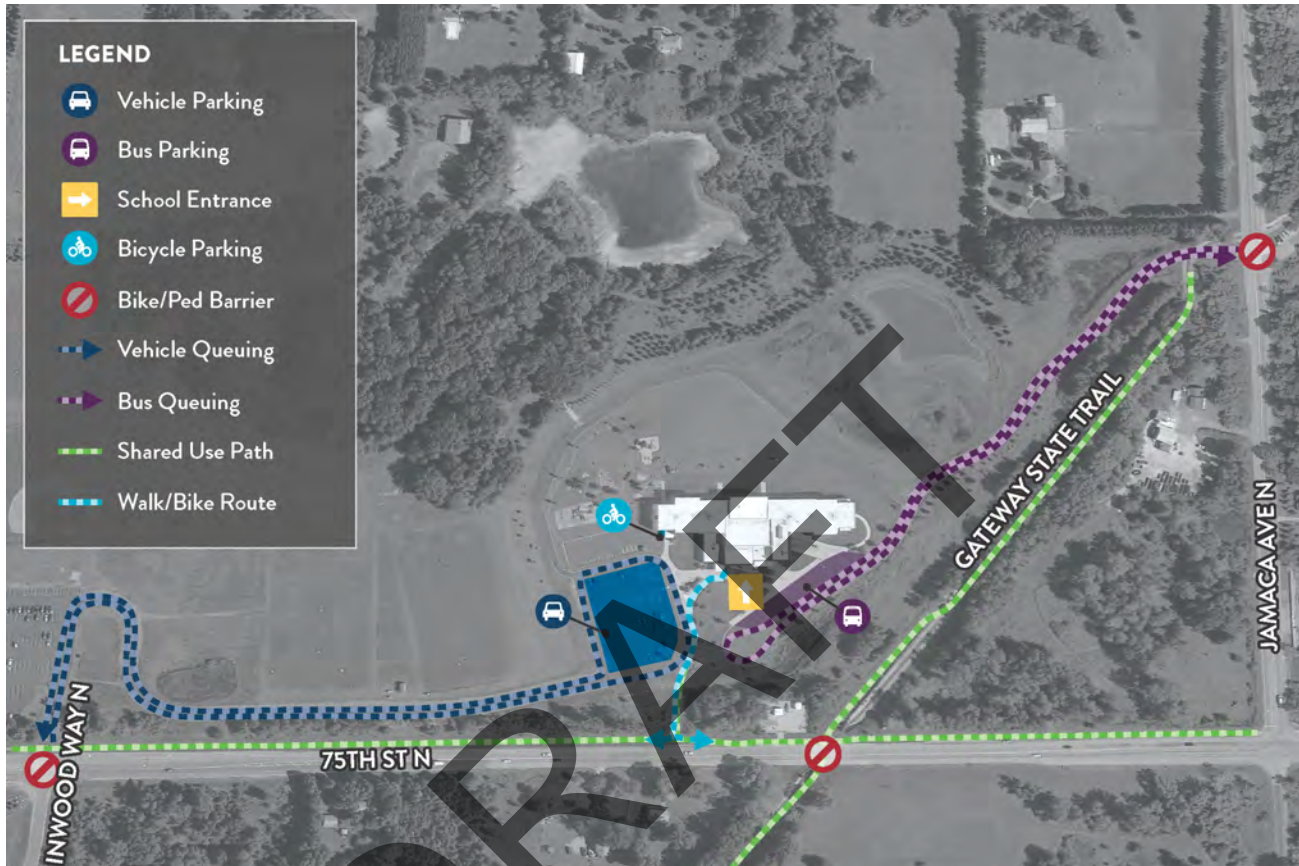


# Wildwood Elementary School

## SITE CIRCULATION



**Pedestrians:** Students may access the school from the adjacent trail along 75th Street North (Highway 12). There is a trail connection to a sidewalk that leads to the school entrance, with one unmarked crossing over a traffic lane that is closed to through traffic (connecting the main parking lot to the bus parking area and access lane).

**Bicyclists:** Students who bike with parents prefer to access the school via the school parking lot rather than the trail adjacent to 75th Street North because of poor, bumpy pavement quality on the trail and traffic noise on 75th Street North.

**School Buses:** School buses enter the school campus from the driveway off Jamaca Avenue North and line up along the southeast side of the school building. At school

dismissal, staff walk students to their buses. Buses exit northeast toward Jamaca Avenue North.

**Vehicles:** Vehicles use the driveway across from Inwood Way North to enter and exit the parking lot. There is some queuing along this driveway, which can extend its entire length. At school dismissal, each vehicle has a color-coded name tag that school staff use to facilitate student pick-up. Entering the parking lot can prove challenging when there is an event at the school and cars are parked along the driveway. “No Parking” signs have recently been posted along Highway 12 adjacent to the school to discourage parents and caregivers from picking up/dropping off students there. Trail connections to the school have also been used by parents and caregivers driving vehicles, so barriers have been placed to prevent this from happening.

# O.H. Anderson Elementary School

## SITE CIRCULATION



**Pedestrians:** Students walking from the south walk along the west side of Warner Avenue South, crossing at the crosswalk adjacent to the school. Students walking from the north walk along the east side of Warner Avenue South, crossing the parking lot entrance at the crosswalk and continuing along the sidewalk to access the school entrance.

**Bicyclists:** A group of 10 or more students bikes to school together, cutting through Katherine Abbott Park. They use Warner Rd to access the school, which does not have bicycle facilities and can have fast-moving traffic and queuing at dropoff and pick-up times.

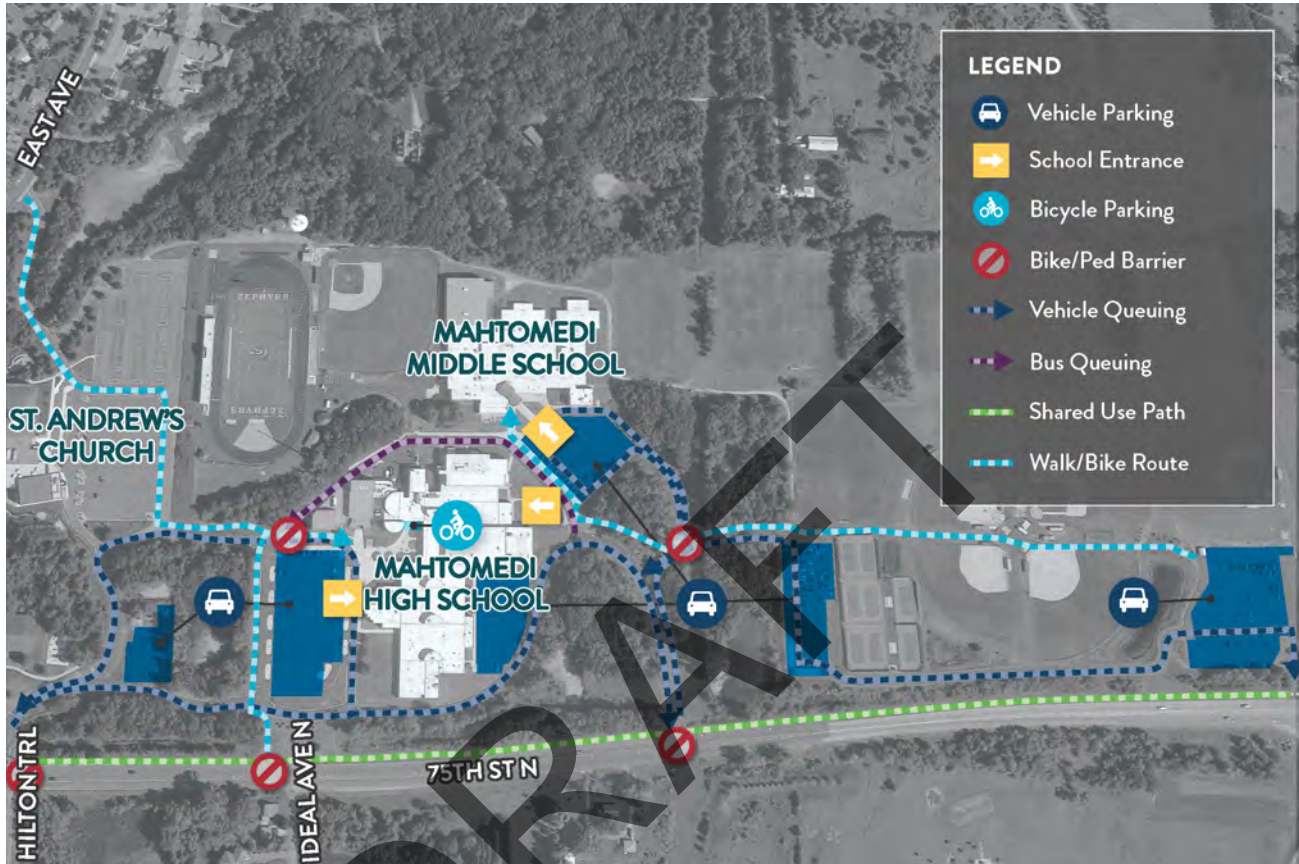
**School Buses:** School buses enter the parking lot north of the school and loop around to drop off students. At

school dismissal, school buses line up along the north side of the school to pick up students.

**Vehicles:** Vehicles enter the parking lot on the south side of the school from Warner Rd and loop around counterclockwise, turning right adjacent to the school to drop off or pick up students, and exiting through the northern driveway. During pick-up and drop-off times, traffic sometimes backs up south of the school on Warner Avenue South to Puma Lane, sometimes all the way to Bichner Lane.

# Mahtomedi Middle School and High School

## SITE CIRCULATION



**Pedestrians and bicyclists:** Students use the sidewalk to and from the St. Andrew’s Church upper parking lot to connect to the middle school and high school. Students may be dropped off at a designated point in the St. Andrew’s lower parking lot or walk/bike from residences northwest of the upper schools via East Ave. St. Andrew’s upper parking lot is designated as a “Safe Walk and Bike Zone” (for walking and biking only—no car traffic) during school arrival and dismissal times. Students also walk through the campus to get to the school buildings from the parking lots and residences east of the schools. A crossing guard helps at school arrival at a point between the tennis courts and the high school where the walking route from the parking lots to the east crosses the vehicle access lane.

**School Buses:** School buses access the middle school and high school via the access lane between the two schools.

**Vehicles:** Vehicles can enter the school campus either at Hilton Trail, at the driveway between the high school and the tennis courts, or from the entrance off of East Avenue north of St. Andrew’s. There is some congestion/queueing and some conflicts with students walking through the campus. To ease congestion, parents and caregivers are encouraged to use the St. Andrew’s lower parking lot for dropoff and pickup.

# St. Jude of the Lake School

## SITE CIRCULATION



**Pedestrians and bicyclists:** Students walking or biking from the west on Hickory Street cross Mahtomedi Avenue at the crosswalk and walk along the east side of the street, turning on to the sidewalk on Grove Street and along the east side of the church buildings to access the school entrance. Students walking or bicycling from the east cross North Warner Avenue at the crosswalk and travel along the south side of Grove Street and through the parking lot to access the school entrance.

**School Buses:** School buses drop off and pick up students in the loading loop along the west side of the school.

**Vehicles:** Vehicles enter the school parking lot from Grove Street and loop around the parking lot counterclockwise. There is some vehicle queuing on the

narrow shoulder of Mahtomedi Avenue. The queuing can sometimes overlap the vehicle travel lane.



## 02. INFRASTRUCTURE



## Introduction to Infrastructure

*Physical changes to the streetscape are essential to making walking, biking, and rolling to school safer and more comfortable.*

An in-person walk audit and discussions with the Safe Routes to School Team, school and district staff, caregivers, students, community members, and city and county staff informed this summary of recommendations to address key issues and opportunities related to walking and biking in Mahtomedi.

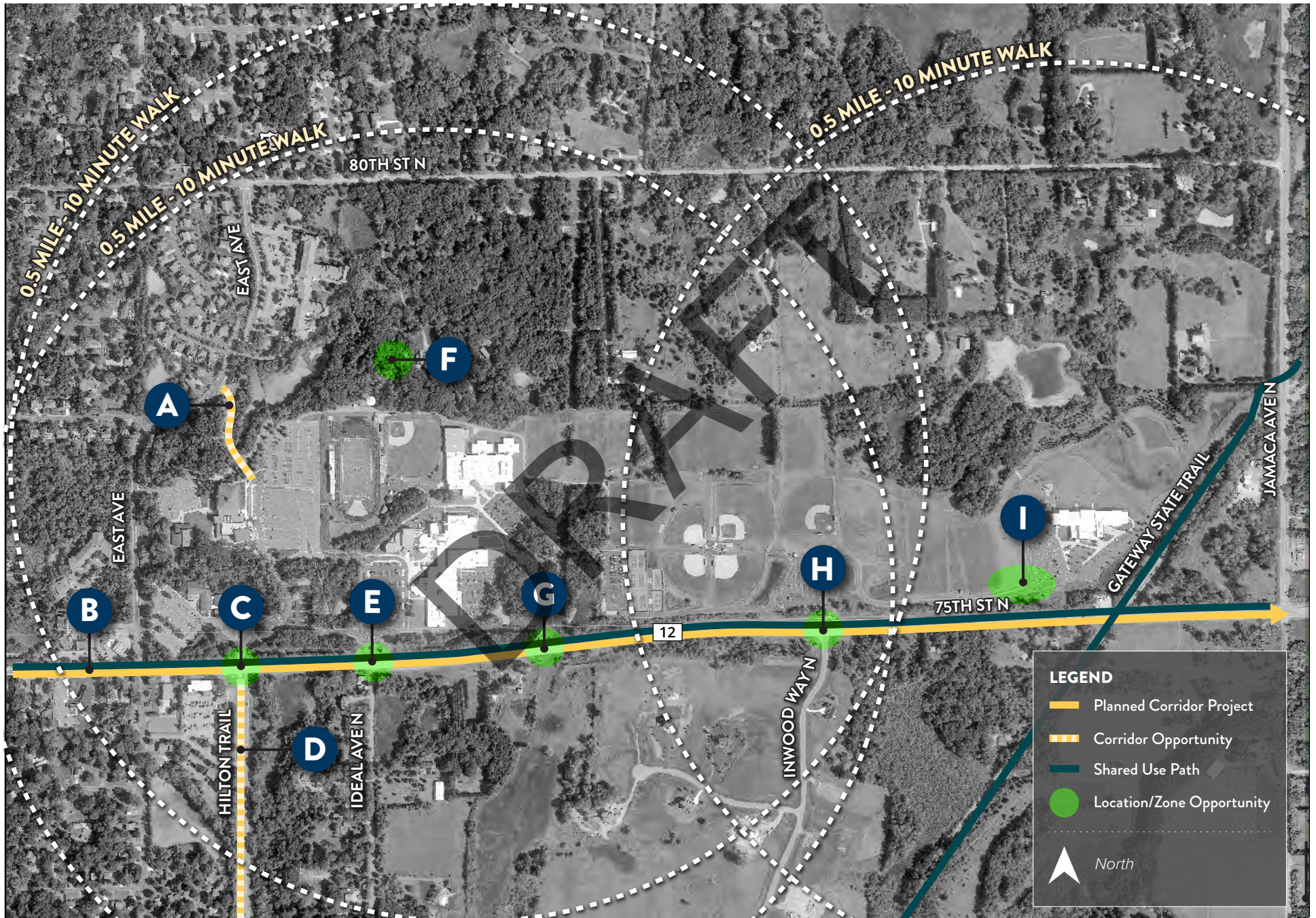
Recommendations will be prioritized on the basis of community and stakeholder input, traffic and roadway conditions, cost, number of students impacts, and benefit to equity priority populations. This planning process was designed to address historical and contemporary

inequities in who benefits from and whom is burdened by transportation systems, and equity considerations accordingly will play a central role in the prioritization of infrastructure recommendations.

This plan does not represent a comprehensive list of every project that could improve conditions for walking and bicycling in the neighborhood. Instead, it calls attention to key conflict points and potential improvements. Recommendations will range from simple striping changes to more significant changes to streets, intersections, and school infrastructure.

# Preliminary Infrastructure Summary

WILDWOOD ELEMENTARY AND MAHTOMEDI MIDDLE AND HIGH SCHOOLS



**ST. ANDREW'S CHURCH DRIVEWAY**



**PRELIMINARY RECOMMENDATION**

Provide dedicated space for walking and biking, or restrict motorized vehicle during school hours.

**Short term:** Design driveway to look less like a street (with centerline) and more like a shared space where walking and biking is to be expected.

**WHY IS THIS RELEVANT?**

This is a pathway into the Middle and High School with no sidewalks or sidepath and difficult sight lines when there are cars and people on this road. St. Andrews has signs that the entrance should be only for biking/walking during school hours.

**HWY 12 (STILLWATER RD / 75TH ST N)**



**PRELIMINARY RECOMMENDATIONS**

Coordinate with the City and County to reduce speed limit. Install traffic calming to support the reduced speed limit along the corridor. Implement a school speed zone for peak school activity times. Reduce crossing distances at intersections. Implement Leading Pedestrian Interval (LPI) at signalized intersections. Coordinate with the County to upgrade the existing sidepath on the north side of the street, and implement a sidepath on the south side of the street.

**WHY IS THIS RELEVANT?**

Highway 12 is a wide roadway with many intersections that are currently uninviting, stressful and/or unsafe to cross, creating a barrier both along and across this east-west roadway. Wildwood Elementary School and Mahtomedi Middle and High Schools are located along this roadway. Much of the traffic along this roadway is related to school drop off and pick up, so there is an opportunity to reduce congestion by making walking and bicycling to school safer and more inviting. There is a sidepath along the north side of the road that has bumpy pavement conditions.



### HWY 12 AND HILTON TRAIL



#### PRELIMINARY RECOMMENDATIONS

- Implement Leading Pedestrian Interval (LPI)
- Install No Turn on Red and Stop Bars
- Implement Pedestrian Recall
- Reduce crossing distances and number of lanes

#### WHY IS THIS RELEVANT?

This is a wide and complex intersection. One caregiver mentioned their student used to love to bike to school before getting hit by a car crossing through the intersection of Hilton Trail and Highway 12. Families noted conflicts with people driving blocking the trail crossing.

### HILTON TRAIL



#### PRELIMINARY RECOMMENDATION

Add a shared use path along Hilton Trail to provide a safe walking and biking route for families to travel to O.H. Anderson, the Middle and High Schools, and Wildwood. Coordinate with Washington County to include non-motorized facilities and safety improvements as part of the upcoming County Project on Hilton Trail.

Coordinate with Location C.

#### WHY IS THIS RELEVANT?

The shoulder on Hilton Trail is not wide enough for students to safely bike or walk. The current condition is a point of concern and a big barrier for families thinking about their children biking to school.

**HWY 12 AND IDEAL AVE N**



**PRELIMINARY RECOMMENDATION**

Coordinate with the upcoming County project to install a pedestrian crossing across Highway 12 at Ideal Avenue North. Incorporate traffic calming and crossing enhancements to add to the conspicuity of the crosswalk.

**WHY IS THIS RELEVANT?**

This intersection is a major barrier to safe transportation to school, and it is part of the walking route of several students. Community feedback stated that even students who live less than a half mile from school feel they can't walk or bike because this intersection is too scary to cross.

**FUTURE PATH BETWEEN MIDDLE SCHOOL AND 80TH ST N / HICKORY ST**



**PRELIMINARY RECOMMENDATION**

Work with the school district and city to identify existing right-of-way to explore the feasibility of adding a trail between the middle school and 80th Street North.

**WHY IS THIS RELEVANT?**

There is an opportunity to add pedestrian and bicycle facilities to improve access for students coming from north of the school. There may be some right-of-way between the high school baseball field and 80th Street North/Hickory Street.

SAFETY

### HWY 12 AND SCHOOL ENTRANCE LN



#### PRELIMINARY RECOMMENDATION

Install a sidepath on the east side of the school entrance lane. Coordinate with the County to align proposed sidepath along the entrance lane with an enhanced pedestrian crossing across Highway 12.

Eliminate the free right turn to the school drive that leads to the parking lot by the tennis court. Install a marked crosswalk to continue the sidepath north.

#### WHY IS THIS RELEVANT?

A sidepath is planned to be added on the south side of Highway 12 as part of the county's reconstruction project, but there is currently no way to cross Stillwater Road safely into the school area from the south side. There is also no existing sidewalk/sidepath on the school property along the school lane. Families noted conflicts with people driving crossing the existing sidepath on the north side of the road.

### HWY 12 AND INWOOD WAY N



#### PRELIMINARY RECOMMENDATION

Coordinate with the upcoming County project to install a pedestrian crossing across Hwy 12 at Inwood Way. Incorporate traffic calming and crossing enhancements to add to the conspicuity of the crosswalk.

#### WHY IS THIS RELEVANT?

There is no way to cross safely to get to and from school from the neighborhood south of Highway 12. Families noted the need for a crossing point along this stretch of the road.

**WALK/BIKE ROUTE TO WILDWOOD**



**PRELIMINARY RECOMMENDATION**

Install a dedicated on-campus trail with wayfinding between Wildwood Elementary and the Middle and High Schools.

**WHY IS THIS RELEVANT?**

This route provides a connection between Wildwood Elementary and the Middle and High Schools. There is no formal or paved walking area or path here. Currently, the walking route involves using a combination of the sidepath adjacent to Highway 12 and the Wildwood driveway.

DRAFT

# Preliminary Infrastructure Summary

O.H. ANDERSON ELEMENTARY



## OLD WILDWOOD RD / ROBERT ST / CHATHAM RD



### PRELIMINARY RECOMMENDATION

- Replace bicycle and pedestrian symbols with standard size pavement marking symbols
- Add additional signs to augment the pavement markings
- Introduce a buffer and barrier between the motor vehicle travel lane and the walk/bike lane

### WHY IS THIS RELEVANT?

This road is a one-way street. Bike and pedestrian symbols on the north side of the walking path are not standard size. There may be an opportunity to standardize and make other improvements to create a low-stress active transportation priority corridor.

## KATHERINE ABBOTT PARK



### PRELIMINARY RECOMMENDATION

Implement a maintained trail between Katherine Abbott Park and Bichner Lane. Add signs and pavement markings to transform Bichner Lane (and/or Warner Way and Puma Lane) into a shared street.

### WHY IS THIS RELEVANT?

This is a “fast route” from the western neighborhoods to school; a group of students cut through Katherine Abbott park when biking to school. There is no official connecting path from their neighborhood on the west side of the park, but rather a dirt trail at the end of a cul-de-sac. This route is not maintained but numerous children use it. There is an opportunity to complete a sidewalk gap between O.H. Anderson and Bichner Ln to better connect the Park to the Elementary School (see location D).

## PADDINGTON RD



### PRELIMINARY RECOMMENDATION

Designate a Yield Roadway along Paddington Road to prioritize local access and people walking and biking in the same low-speed travel area. The Yield Roadway would need to use part of Warwick Lane and Steward Road / Penway Road to connect Warner (near O.H. Anderson) to Stillwater Road. (Reference FHWA Small Town and Rural Multimodal Networks Guide).

### WHY IS THIS RELEVANT?

Since Warner Avenue South does not have sidewalks or a sidepath north of 72nd Street, this may be an opportunity for a low-stress shared street route parallel to Warner Avenue South, from O.H. Anderson to Stillwater Road.

## WARNER AVE S / WARNER RD



### PRELIMINARY RECOMMENDATION

- Continue sidepath on the east side of Warner from 72nd Street to Warwick Lane (coordinate with Location C).
- Update School Speed Zone sign to 15 MPH (citywide speed limit is now 20 MPH).
- Install sidewalk or sidepath on the west side of Warner from the south school crosswalk to Bichner Lane (coordinate with Location B).

### WHY IS THIS RELEVANT?

Traffic moves quickly along this road and sidewalk gaps north of 72nd Street North create a major hurdle for safe access to O.H. Anderson Elementary School. During pick-up and drop-off hours, traffic often backs up around the school south of O.H. Anderson to Puma Lane, sometimes down to Bichner Lane. The sidepath ends south of O.H. Anderson Elementary, so students walking and biking have to share the road with cars.

### HILTON TRAIL AND 72ND ST N



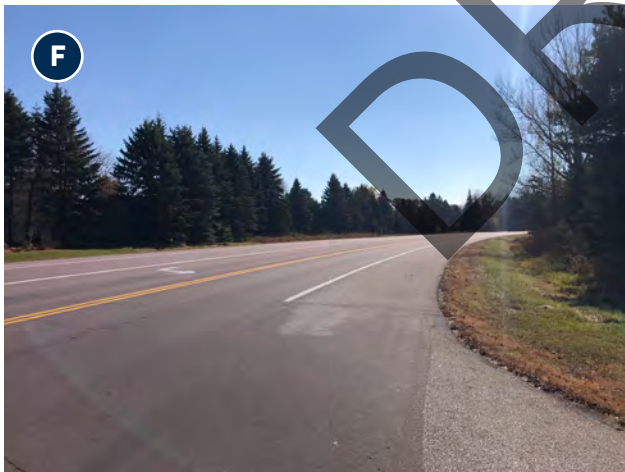
#### PRELIMINARY RECOMMENDATION

Coordinate with the upcoming County project to install a pedestrian crossing across Hilton Trail at 72nd Street. Incorporate traffic calming, reduced lanes, and crossing enhancements to add to the conspicuity of the crosswalk.

#### WHY IS THIS RELEVANT?

Traffic moves quickly along this road and crossing is a point of concern. Many people driving do not slow down to let people walking and biking cross. This is an uncontrolled intersection with no existing safety features.

### HILTON TRAIL



#### PRELIMINARY RECOMMENDATION

Add a shared use path along Hilton Trail to provide a safe walking and biking route for families to travel to O.H. Anderson, the Middle and High Schools, and Wildwood. Coordinate with Washington County to include non-motorized facilities and safety improvements as part of the upcoming County Project on Hilton Trail. Coordinate with Location E and connections to multi-modal facilities along Highway 12.

#### WHY IS THIS RELEVANT?

The shoulder on Hilton Trail is not wide enough for students to safely bike on. The current condition is a point of concern and a barrier for families thinking about their children biking to and from school.

DRAFT



# Preliminary Infrastructure Summary

SAINT JUDE OF THE LAKE SCHOOL



**MAHTOMEDI AVE / HWY 244**



**PRELIMINARY RECOMMENDATION**

Implement school zone with associated speed zone signs and pavement markings. Provide dedicated and protected space for people walking along the east side of the roadway between Hickory Street and Grove Street. Coordinate with Location B.

**WHY IS THIS RELEVANT?**

Mahtomedi Avenue/Highway 244 has limited shoulder space and no separated bicycle or pedestrian space or sidewalks. This corridor is situated north-south in front of St. Jude of the Lake and creates a barrier for children who could walk or bicycle to school.

**HWY 244 AND HICKORY ST, GROVE ST**



**PRELIMINARY RECOMMENDATION**

Enhance existing school crossing at Hickory Street with additional conspicuity (e.g., RRFB). Add an enhanced school crossing at Grove Street.

Designate Hickory Street and Grove Street as Yield Roadways (active transportation connectors) to connect to the existing Lake Links Trail.

**WHY IS THIS RELEVANT?**

There is currently a school crossing marked at Hickory Street on the south leg of the intersection with Mahtomedi Avenue/Highway 244. Sidewalks on Hickory Street end west of the school. Safety improvements at Grove Street and Mahtomedi Avenue could also help with safer school access.

### ST JUDE PARKING LOT / GROVE ST



#### PRELIMINARY RECOMMENDATION

Install a dedicated pedestrian lane or sidewalk where there is currently a gap.

#### WHY IS THIS RELEVANT?

Students walk through the Saint Jude parking lot to get to and from Grove Street and other points east of the school. This could be an opportunity for an improvement such as a pedestrian lane or walk.

### FOREST AVE TRAIL CONNECTION



#### PRELIMINARY RECOMMENDATION

Install additional lighting and a conspicuous school crossing to connect St. Jude to the Forest Ave Trail.

#### WHY IS THIS RELEVANT?

Access is currently uninviting, dark, and/or unclear for students walking and biking to and from residences south of the school.

DRAFT

**MAHTOMEDI AVE / STILLWATER RD / WILDWOOD RD INTERSECTION**



**PRELIMINARY RECOMMENDATION**

(In development)

**WHY IS THIS RELEVANT?**

This intersection has multiple roads intersecting with Highway 244/Highway 12. There is one crosswalk but no sidewalks or paths along the highway.

DRAFT

**GROVE ST AND N WARNER AVE**



**PRELIMINARY RECOMMENDATION**

Convert this section of Grove Street to a Yield Roadway (prioritize walking and biking), or create dedicated space for walking and biking.

Enhance the conspicuity (e.g., add RRFB) of the existing crossing of North Warner Avenue, and convert to a School Crossing.

**WHY IS THIS RELEVANT?**

Students and families noted that it is currently uncomfortable to walk and bike between St. Jude and Grove Street and at the intersection of Grove Street with North Warner Avenue, where students walk and bike to connect with the sidepath on the east side of North Warner Avenue and other routes to residences to the east.



## 03. PROGRAMS



## Introduction to Programs

*Programs are opportunities to increase awareness, understanding, and excitement around walking, biking, and rolling to school.*

Programs are focused on educating students, families, and the broader community about walking and biking. Programs also help to build a culture that supports and normalizes walking and biking to school and other destinations. Because programs are low-cost and can often be implemented quickly by an individual school or the school district, they represent an important Safe Routes to School strategy that complements longer-term strategies, including infrastructure improvements and policy changes.

## Program Recommendations



### EXISTING PROGRAMS

Mahtomedi has strong district communications staff and several existing programs with private and non-profit partners to support walking and bicycling to school. Existing and potential partners include the PTO, National Honor Society, BikeMN, Lake Links Trail Association and local bike shops. Currently, Lake Links offers a free interactive digital map that shows all the walking and bicycling routes in the community.

#### Active or previously implemented programs include:

- School SRTS communications
- School and community safety campaign
- Free Bikes for Kids
- Drop and walk for Middle and High School students
- Lake Links route maps
- Staff crossing guards at OHA, MS/HS
- Bike to church at St. Andrews

### PROGRAM RECOMMENDATIONS

Conversations with school and district staff, caregivers, students, community members, and city and county staff led to the following program recommendations. Programs were identified to meet the needs, capacities, and interests of the community and were prioritized based on existing programs, input from local stakeholders, the extent to which the program would serve priority equity populations, and the readiness of the schools, District, and partners to launch the program.

#### Recommended Programs:

- Walk! Bike! Fun! Curriculum
- Enhanced communication strategies
- Suggested route maps
- Walk and Bike to School Days
- Walking School Bus and Bike Train
- Bike Rodeo



## WALK! BIKE! FUN! (WBF) CURRICULUM

Pedestrian and bicycle safety education aims to ensure that every child understands basic traffic laws and safety rules. It teaches students basic traffic safety, sign identification, and decision-making tools.

### When, where, and how will this be implemented?

Through MnDOT and BikeMN, teacher training and an educational curriculum called “Walk! Bike! Fun!” (WBF) is available. Educators could incorporate the curriculum into the school day, typically during PE or health class. Alternatively, safety education could be incorporated into existing events or assemblies. With inter-school partnerships, older students could help support and teach younger students.

**Why is this relevant and recommended?** WBF is tailored to meet Minnesota’s physical education standards.

**How will this address transportation inequities?** In-school curriculum provides all students an opportunity to engage with walking and biking safety, regardless of the resources available to them outside of school.

**How will this be evaluated?** Number of students with access to bike/walk education.

**Who needs to be involved to make this happen?** School staff, Bike MN, students.

**What is the timeline for implementation?** Medium-term (2-3 years).



## ENHANCED SCHOOL COMMUNICATIONS

Existing communication channels can highlight the benefits of active school travel for students and families. Sharing regular SRTS updates and events throughout the school year will keep the benefits top-of-mind for families, gradually shift perceptions about safety and convenience, and contribute to a school culture that supports walking and biking.

### When, where, and how will this be implemented?

- Back to school tour for families to introduce them to routes and each other.
- Visual marking of routes at the beginning of the year.
- Social media could connect families who are interested in walking or bicycling together.

**Why is this relevant and recommended?** This will build upon the district’s strong communications resources.

### How will this address transportation inequities?

Connecting parents with each other and with information will provide support to those who are new to the school or trying walking or bicycling for the first time.

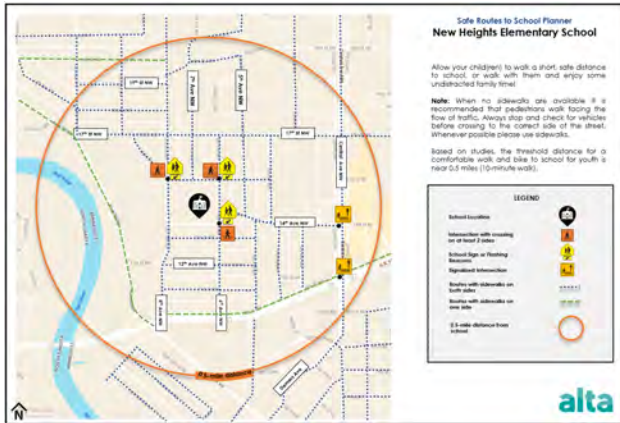
**How will this be evaluated?** Number of parents reached

**Who needs to be involved to make this happen?** District communications staff, PTO, school staff

**What is the timeline for implementation?** Short-term (1 year).







### SUGGESTED ROUTE MAPS

Route maps show signs, signals, crosswalks, sidewalks, paths, crossing guard locations, and hazardous locations around a school. They identify the best way to walk or bike to school. A well-defined route should provide the greatest physical separation between students and traffic, expose students to the lowest traffic speeds, and use the fewest and safest crossings. These route maps can build upon existing resources like the Lake Links maps.

#### When, where, and how will this be implemented?

Route maps that highlights safe routes to the district's schools can be developed and updated as safety improvements are implemented.

**Why is this relevant and recommended?** Route maps can help guide students along relatively safe routes and to navigate difficult crossings safely.

**How will this address transportation inequities?** This program will promote walking and bicycling but will not directly address transportation inequities.

**How will this be evaluated?** Counts of students walking and biking, annual caregiver survey about transportation preferences.

**Who needs to be involved to make this happen?** School and City staff

**What is the timeline for implementation?** Short-term (1 year)

### WALK AND BIKE TO SCHOOL DAYS

#### When, where, and how will this be implemented?

National Walk to School Day and Bike to School Day are opportunities for students and families to try walking, biking, and rolling to school every October and May. In addition, Minnesota celebrates Winter Walk to School Day in February. Education, encouragement, and enforcement programming can be used to promote the event and expand participation. Walk/bike to school days can also take place more frequently (e.g., Walking Wednesdays) if there is interest and capacity.

**Why is this relevant and recommended?** Walk and Bike to School Day can be a great entrypoint for families who are curious about walking and bicycling to school but who haven't tried it yet. It can also be a fun celebration for families who typically walk and bicycle and a way to recognize the kids who get to school on foot or bicycle.

**How will this address transportation inequities?** These events support walking and bicycling but don't directly address transportation inequities.

**How will this be evaluated?** Participation rates, annual caregiver survey about transportation preferences.

**Who needs to be involved to make this happen?** School staff.

**What is the timeline for implementation?** Medium-term (2-3 years).



### WALKING SCHOOL BUS AND BIKE TRAIN

A Walking School Bus or Bike Train is a group of children walking or bicycling to school with one or more adults. Parents or caregivers can take turns leading the group, which follows the same route every time and picks up children from their homes or bus stops at designated times. For High School students, a walking club could walk before or after school.

**When, where, and how will this be implemented?** Each school could recruit parent leaders to establish walking school buses and bike trains. Infrastructure improvements could be an opportunity to recruit new families.

**Why is this relevant and recommended?** These events build enthusiasm for walking and biking, and help families try out new transportation options/routines. Walking/biking in a group also helps parents and caregivers feel more confident in their student's safety.

**How will this address transportation inequities?** The district could prioritize recruitment in areas where there are transportation inequities.

**How will this be evaluated?** Annual caregiver survey about transportation preferences.

**Who needs to be involved to make this happen?** School staff, students, parents.

**What is the timeline for implementation?** Short-term (1 year)



### BIKE RODEO

Bicycle safety education should involve comprehensive skills-based session(s) designed to encourage students to bike more, by giving them the knowledge and skills they need to be able to ride a bike safely and confidently.

**When, where, and how will this be implemented?** A bike rodeo could take place as a stand-alone event or incorporated into existing community or school events.

**Why is this relevant and recommended?** Events such as bike rodeos can teach bike handling skills, as well as knowledge about the rules of the road and safe cycling practices.

**How will this address transportation inequities?** The event could target particular populations with a focus on transportation equity.

**How will this be evaluated?** Participation rates, before and after survey of participants, annual caregiver survey about transportation preferences.

**Who needs to be involved to make this happen?** School staff, PTO, BikeMN, local bicycle shops, community partners.

**What is the timeline for implementation?** Short-term (1 year).