

# Maple Street Magnet School for the Arts

Kalamazoo Public School System  
Safe Routes to School



July 2020

**MICHIGAN STATE**  
UNIVERSITY





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# Purpose of this Report

This report was prepared by Michigan State University as part of a technical assistance agreement with the local Safe Routes to School (SRTS) committee for Maple Street Magnet School for the Arts. This report serves as a detailed record of the SRTS process for Maple Street Magnet School for the Arts. This document can serve in the application for the Michigan Department of Transportation (MDOT) SRTS Infrastructure Grant. This report can be used by the local SRTS team for a variety of tasks. Some include:

- ◇ Providing a summary of the projects and programs, including benefits to the community and their relation to the grant applications;
- ◇ Showcasing public input in the SRTS planning process, including community involvement through meetings and surveys;
- ◇ Providing an action plan with information regarding the concerns addressed, recommendations, implementation, and community benefits;
- ◇ Providing preliminary engineering drawings that visualize improvements to community infrastructure and guide future developments; and
- ◇ Functioning as a community resource that can be utilized for projects that are both funded or outside of the SRTS grant.

Several sections of this report can be used directly to support the SRTS grant application. See Appendix E for information on how the report can be used while completing the SRTS Grant application.



# Background of SRTS

SRTS was created by Section 1404 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law in August 2005. After SAFETEA-LU expired, the succeeding Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21) placed SRTS as one of its highest funding priorities for its Transportation Alternatives Program (TAP). TAP continues to receive funding under the Fixing America's Surface Transportation (FAST) Act of 2015.

Money provided to the state is further disseminated to communities for physical infrastructure improvements to help create safe walking and biking environments, as well as non-infrastructure programs such as events, curricula, and activities to educate, encourage, and enable students to safely walk, bike, and roll to school. Infrastructure grants cover built environment improvements such as sidewalks, crosswalks, curb extensions, etc. that are compliant with the Americans with Disabilities Act of 1990 (ADA). Non-infrastructure grants are for programs, events, and activities that encourage walking and biking to/from school, as well as support for community safety volunteerism such as crossing guards and measures to bolster law enforcement around student commutes.

MDOT manages Michigan's SRTS program with programmatic support from the Michigan Fitness Foundation. The purpose of Safe Routes to School programs are to:

- ◇ Enable and encourage children, including those with disabilities, to walk, bike, and roll to school;
- ◇ Make walking, biking, and rolling to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- ◇ Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

For more information about Michigan's SRTS program, go to [saferoutesmichigan.org](http://saferoutesmichigan.org).

# The 6 E's of SRTS

Safe Routes to School uses six guiding principles when developing a framework to increase safe walking, biking, and rolling practices as well as student health and fitness. All SRTS programmatic and infrastructural recommendations are based on these following Six “E’s:”



**EDUCATION** – Providing students and the community with the skills to walk and bicycle safely, educating them about benefits of walking and bicycling, and teaching them about the broad range of transportation choices.



**ENCOURAGEMENT** – Generating enthusiasm and increased walking and bicycling for students through events, activities, and programs.



**ENFORCEMENT** – Deterring unsafe traffic behaviors and encouraging safe habits by people walking, bicycling and driving in school neighborhoods and along school routes.



**ENGINEERING** – Creating physical improvements to streets and neighborhoods that make walking and bicycling safer, more comfortable, and more convenient.



**EQUITY** – Ensuring that Safe Routes to School initiatives are benefiting all demographic groups, with particular attention to ensuring safe, healthy, and fair outcomes for low-income students, students of color, students of all genders, students with disabilities, and others.



**EVALUATION** – Assessing which approaches are more or less successful, ensuring that programs and initiatives are supporting equitable outcomes, and identifying unintended consequences or opportunities to improve the effectiveness of each approach.

(<https://www.saferoutespartnership.org>)

# Local Planning Team

## Michigan State University Planning Team

The Michigan State University (MSU) College of Engineering and School of Planning, Design & Construction (SPDC), in cooperation with MSU Extension, along with the Michigan Fitness Foundation and the Michigan Department of Transportation (MDOT) are responsible in assisting interested schools with developing a Safe Routes to School action plan that includes design alternatives. The College of Engineering team is led by Tim Gates, with research assistants Steven Stapleton and Matt Motz. The SPDC design team is led by Jun-Hyun Kim with his research assistant Shu Yang. The SPDC planning team is led by Wayne Beyea, with research assistants Aman Pannu, Elena Cangelosi, Emma Gilbert, and Jason Derry.

## Michigan Fitness Foundation Coordinator

- ◇ Max Fulkerson

## Local Planning Team

- ◇ Michael Hughes, Principal of Winchell Elementary School
- ◇ Jeffery Boggan, Principal of Maple Middle School
- ◇ Steve Walsh, Director of Vine Neighborhood Association
- ◇ Pete Kushner, President of Oakland Drive Winchell Neighborhood Association
- ◇ Eric Boersma, Parent at Winchell Elementary School
- ◇ Sarah Willey, Parent at Maple Middle School
- ◇ David Thomas & Matt Elzinga, City of Kalamazoo Public Safety
- ◇ Anthony Ladd, City of Kalamazoo Public Services
- ◇ Christina Anderson & Katie Reilly, City of Kalamazoo Community Planning and Economic Development





# Community Input

The SRTS planning process for Maple Street Magnet School for the Arts included a walking audit and series of three community meetings to capture input and inform the plan. Parent and student surveys are also part of community input in the planning process.

# Planning Process and Timeline



**1. Walking Audit**—The Walking Audit engaged community members in identifying assets and concerns for walking and biking along routes to and from school. Using note taking, pictures, and group discussion, the group recorded their input.

- Walking Audit date: May 28, 2019
- Number of participants: 20



**2. Parent and Student Surveys**—Students and parents were surveyed about their students' behaviors, perceptions, and preferences of walking/biking to school.

- Parent & Student Surveys: Fall 2019



**3. Meeting One**—At Meeting One, participants discussed what is working, not working, and potential improvements for the students walking and biking to school. This input, the Walking Audit, and the Student and Parent Survey responses were used to design the initial engineering designs and programmatic recommendations.

- Meeting One date: May 28, 2019
- Number of participants: 20



**4. Meeting Two**—At Meeting Two the community reviewed the initial engineering improvements and programmatic recommendations developed by the MSU team to address the feedback from Meeting One, the Walking Audit, and the Student and Parent Surveys. Participants provided input on what they liked, didn't like, and what improvements they would like to see. This input was used to revise the engineering and programmatic recommendations to meet the community's needs.

- Meeting Two date: November 25, 2019
- Number of participants: 5



**5. Meeting Three**—At Meeting Three, the community reviewed the final engineering and programmatic recommendations and provided final input. This input was used to finalize the engineering and programmatic recommendations for the final action plan.

- Meeting Three date: May 27, 2020
- Number of participants: 18

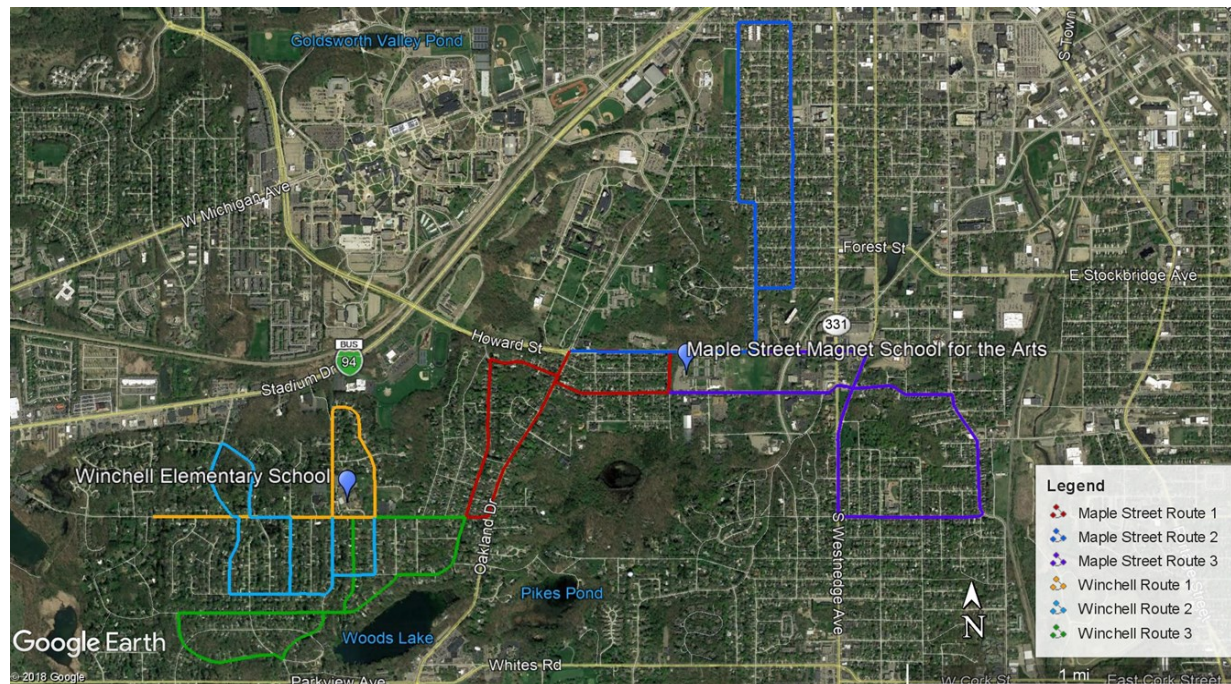


# Walking Audit

On May 28, 2019, a group of local students, parents, and teachers, along with Michigan State University staff, conducted a walking audit for Maple Magnet School for the Arts and Winchell Elementary School. This exercise was designed to document issues impacting students walking, biking, and rolling to and from campus.

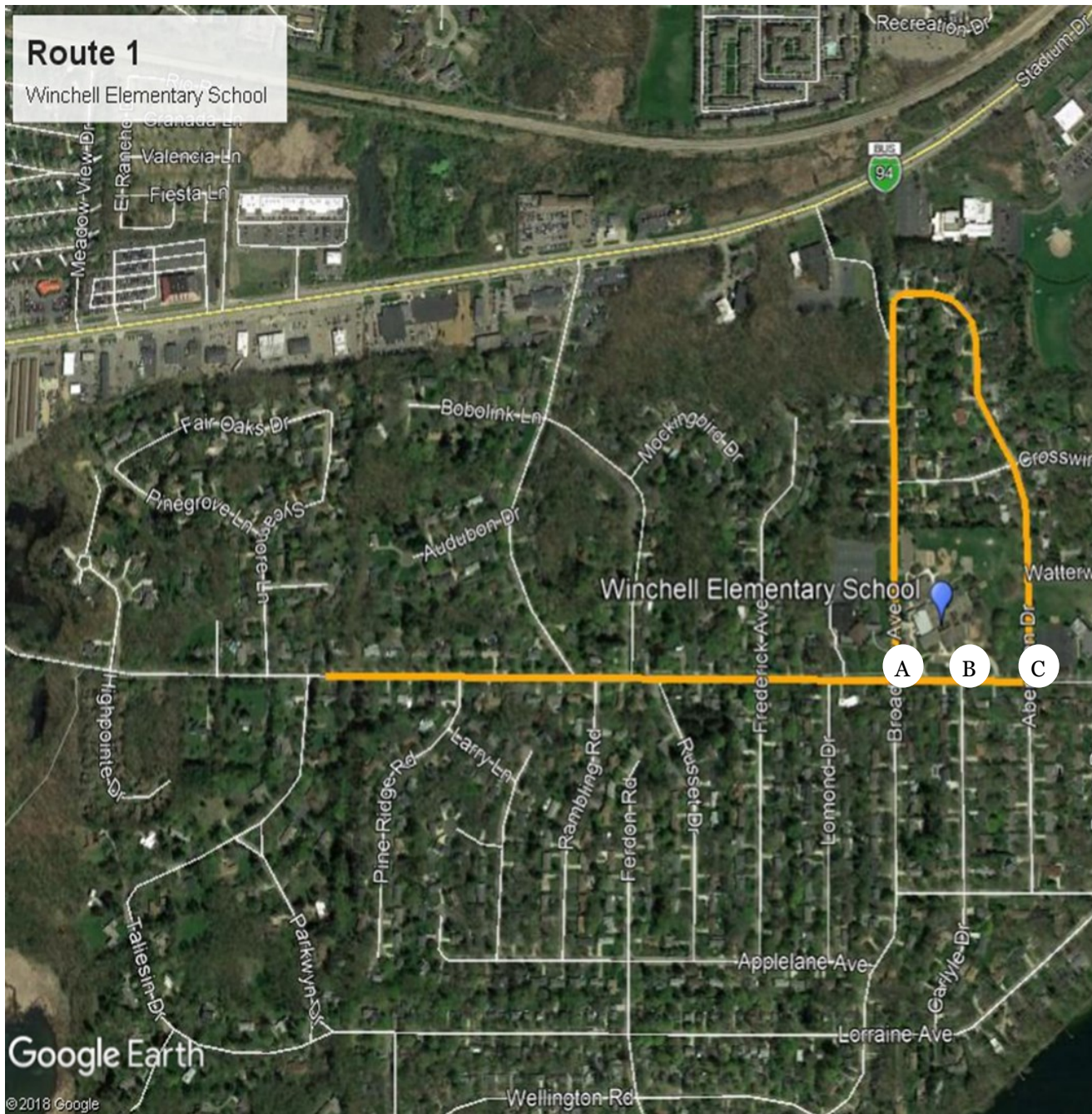
The audits covered a combined six walking routes around the schools. Participants were provided with the SRTS Walking Audit Handout, guiding them in identifying barriers faced by users for safe walking, biking, and rolling. In each group of auditors, one member was tasked to record issues identified along their route while the remaining members were in charge of taking photos to capture areas of concern.

Following the walking audit, the groups reconvened to discuss the most notable and serious issues encountered on their walk. Many of the comments revolved around the lack of sidewalks/crosswalks, speeding on major roads along the route, parking enforcement, large intersections, congestion at pick-up and drop-off, and poor snow removal. The following pages detail some of the comments and pictures taken by the walking audit participants.





# Walking Route 1



(Broadway Ave & Winchell Ave)  
SE corner sight obstruction due to vegetation



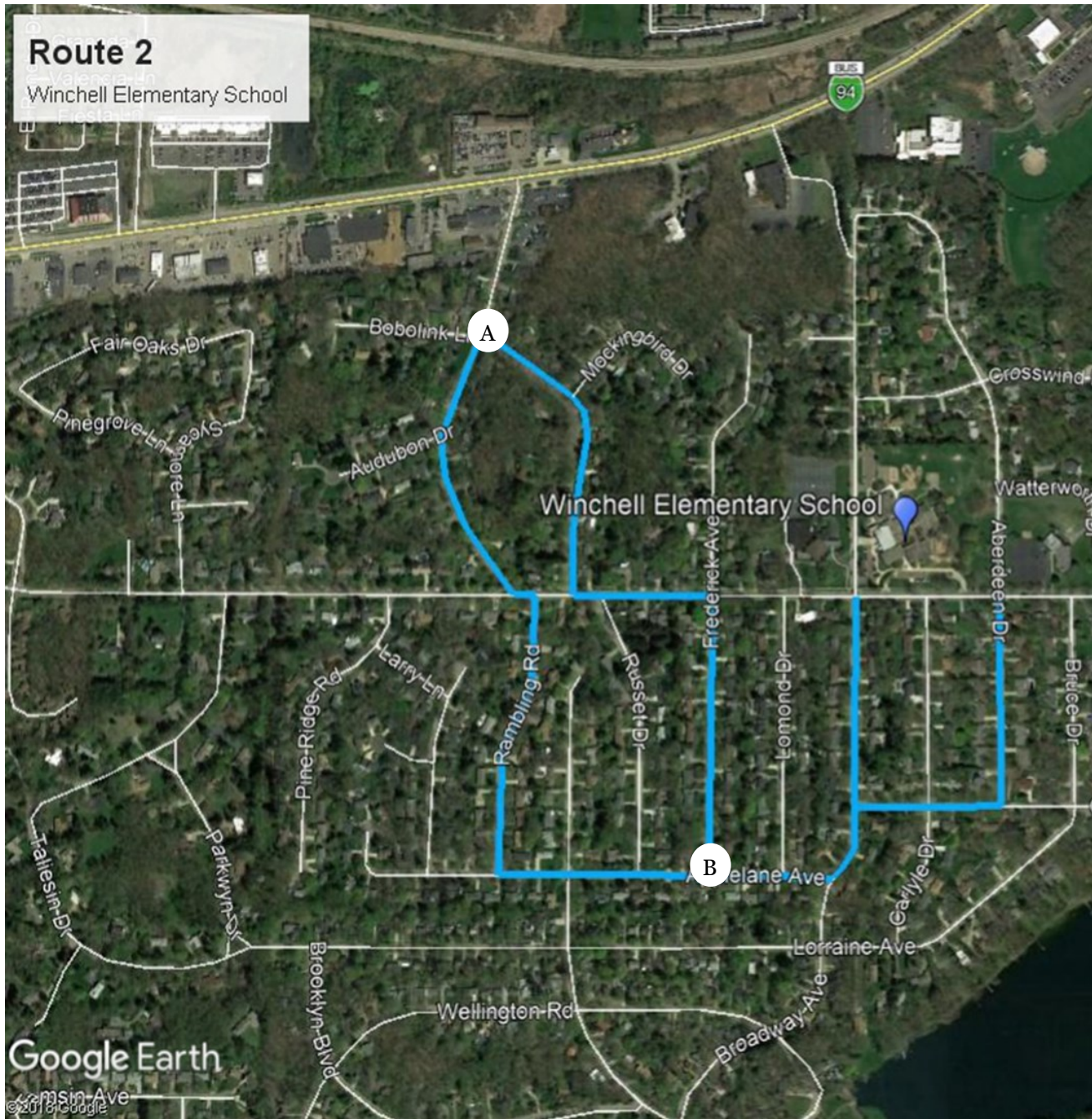
(Winchell Ave & Carlyle Dr)  
No crosswalk east of Broadway



(Winchell Ave & Aberdeen Dr)  
No sidewalks on north or south streets



# Walking Route 2



(Rambling Rd & Treehaven Dr)

Vegetation overgrowth obstructing the view of stop sign and no sidewalks



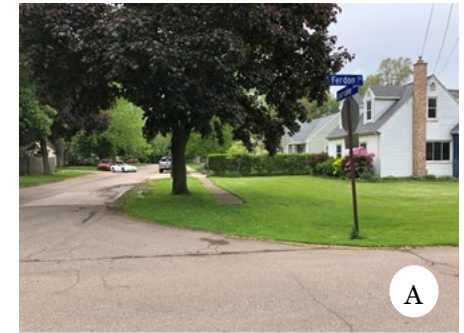
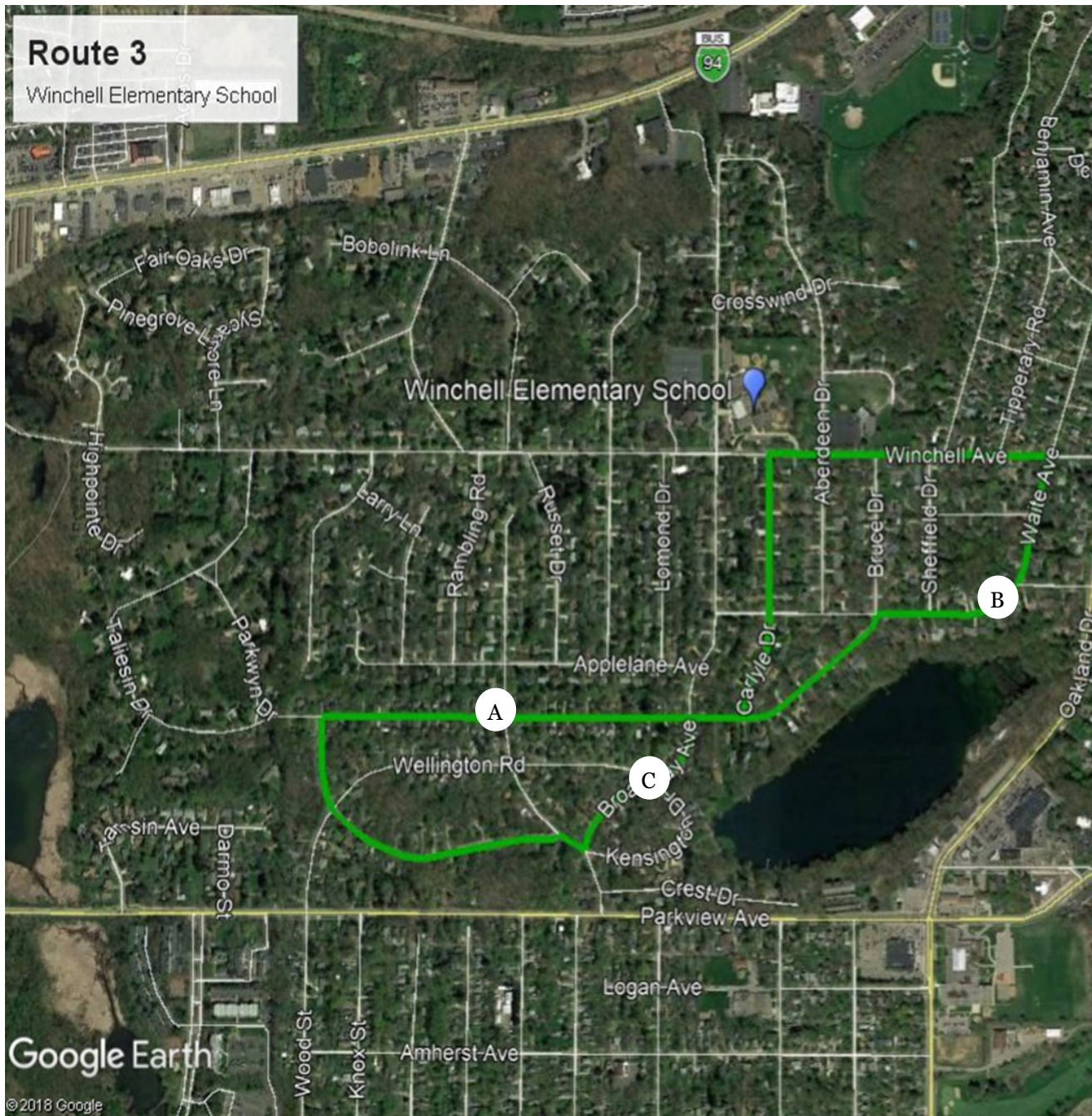
(Applelane Ave & Fredrick Ave)

No sidewalks/crosswalks at the intersection

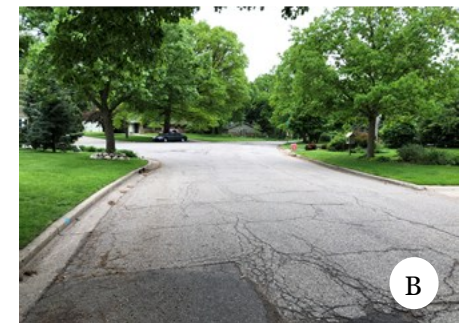
Images taken from google street view.



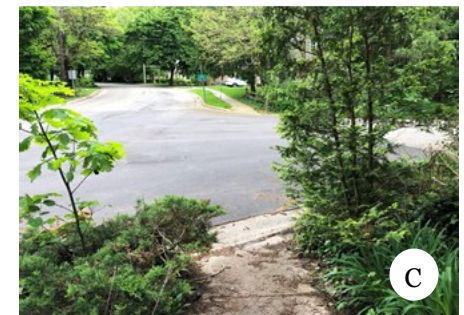
# Walking Route 3



(Lorraine Ave & Ferdon)  
Sidewalk on N Lorraine ends  
west of Ferdon



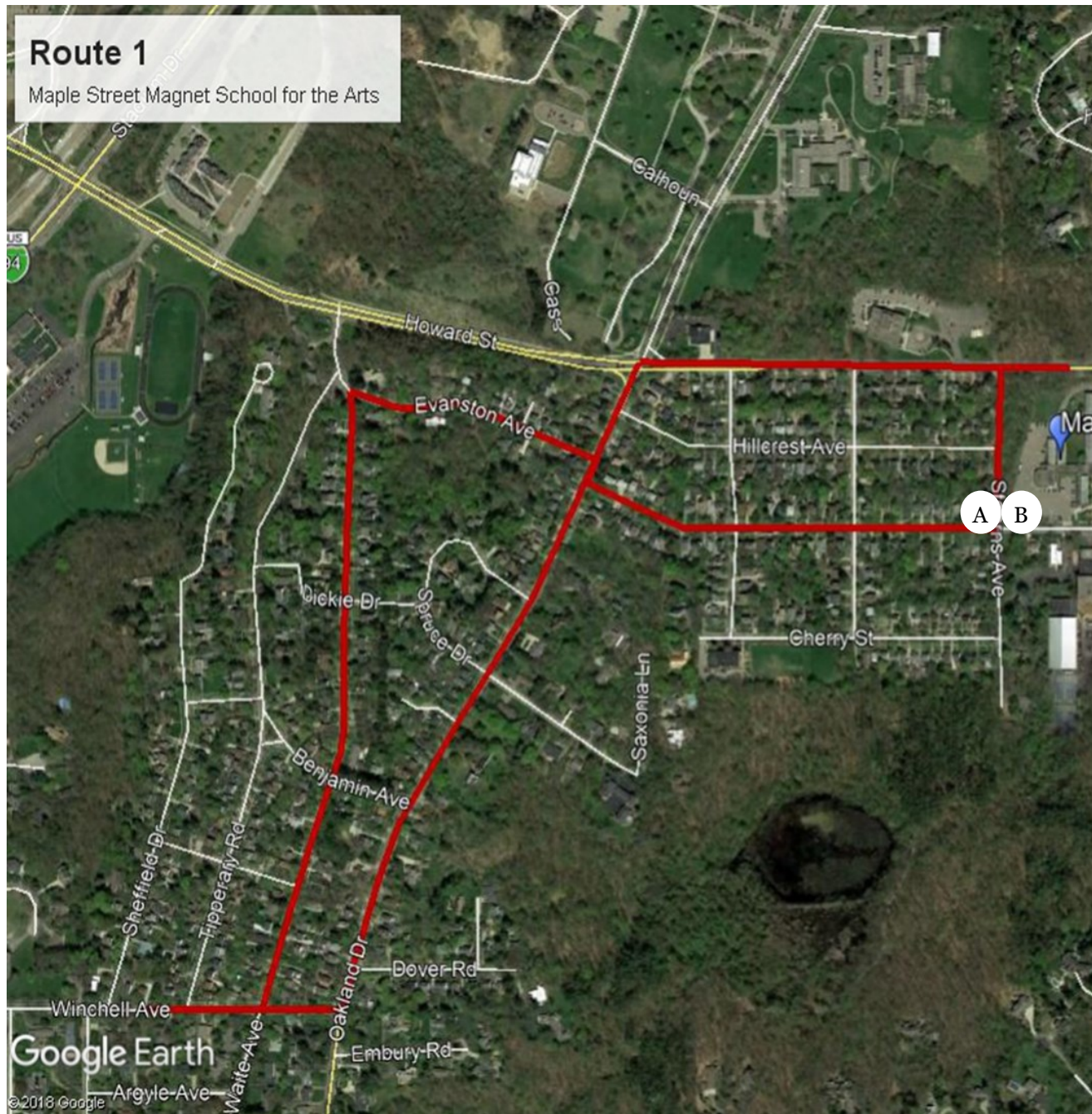
(Waite & Chevy Chase)  
Wide intersection and no  
sidewalks/crosswalks



(Broadway & Wellington Rd)  
Limited sight lines due to  
vegetation overgrowth



# Walking Route 4



(Maple St & Stearns Ave)

No crosswalk



(Maple St & Stearns Ave)

Narrow and overgrown  
vegetation on sidewalk

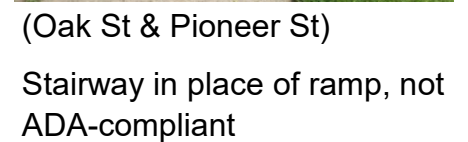
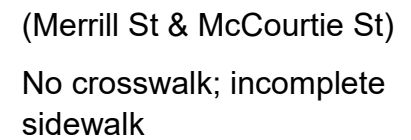
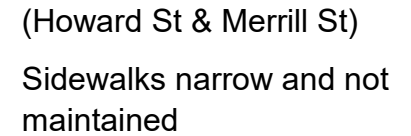


**Route 2**

Maple Street Magnet School for the Arts

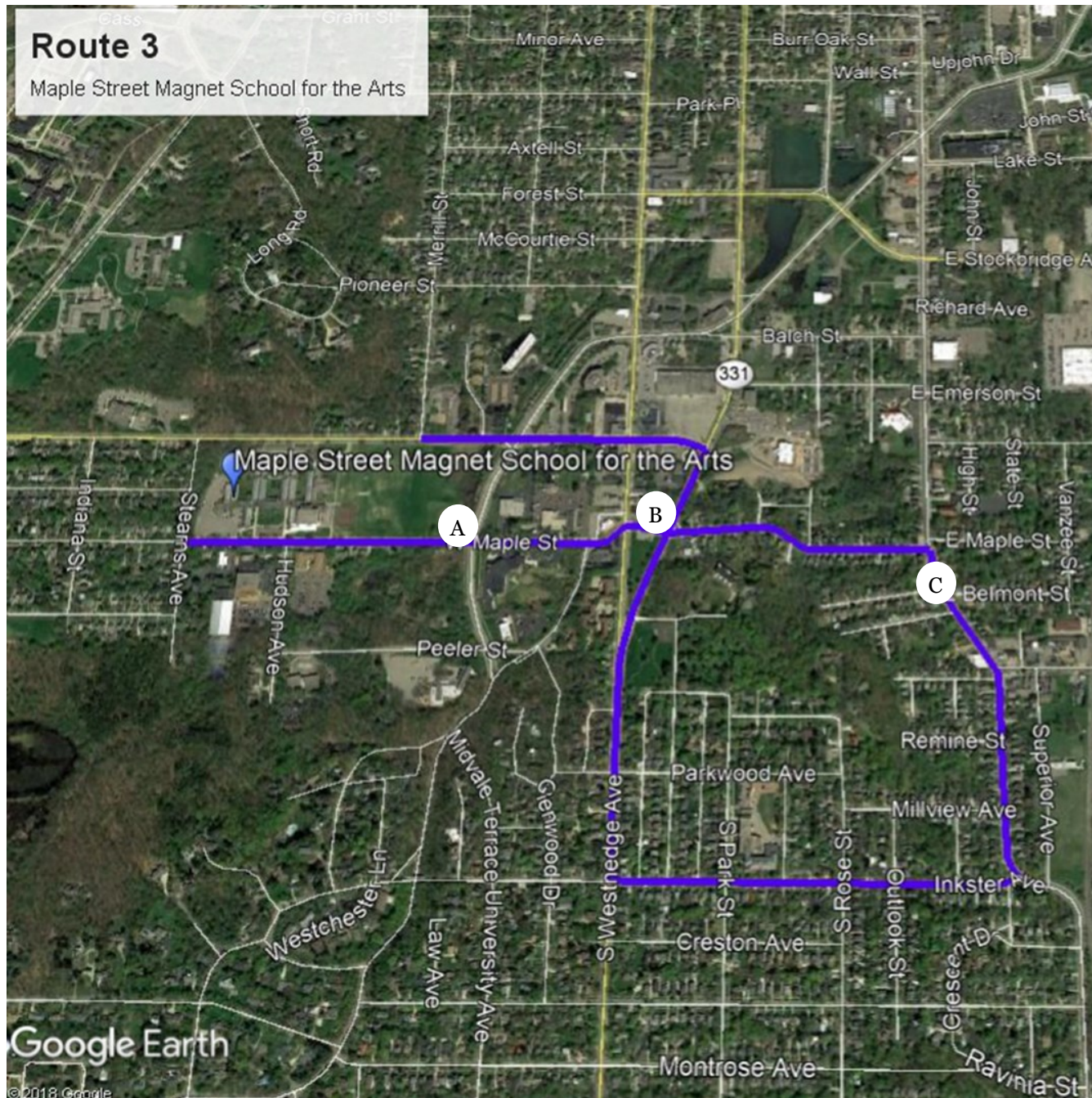
Google Earth

© 2019 Google





# Walking Route 6



(Maple St & Crosstown Pkwy)

Damaged sidewalk with



(Maple St & Park St )

No crosswalks; gravel on sidewalks



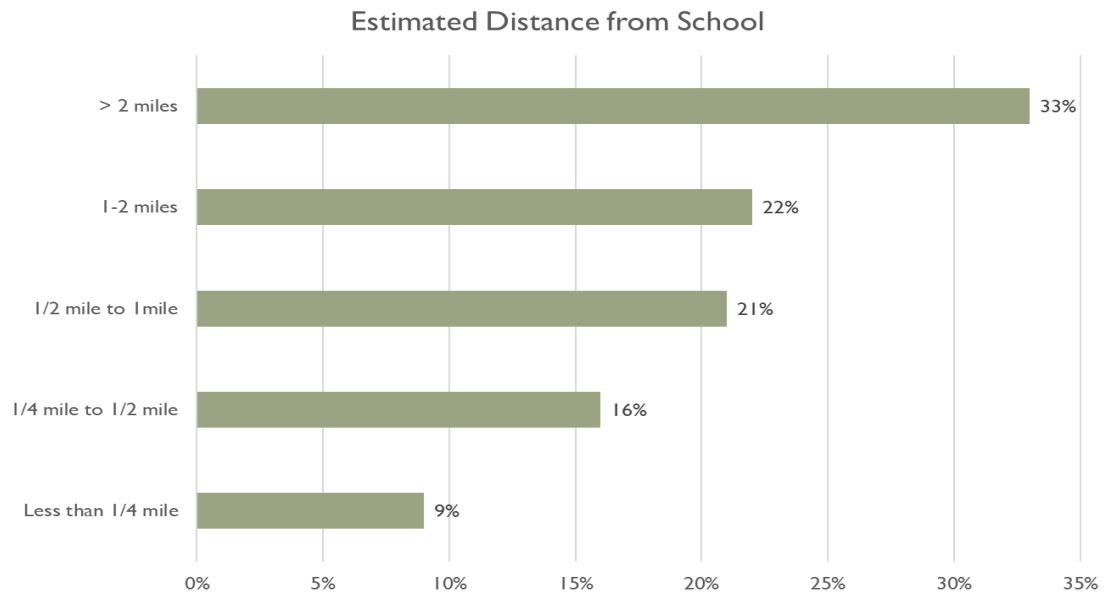
(Burdick St & Belmont St)

Mismatched sidewalks; poor line of sight; no crosswalk

# Parent Survey

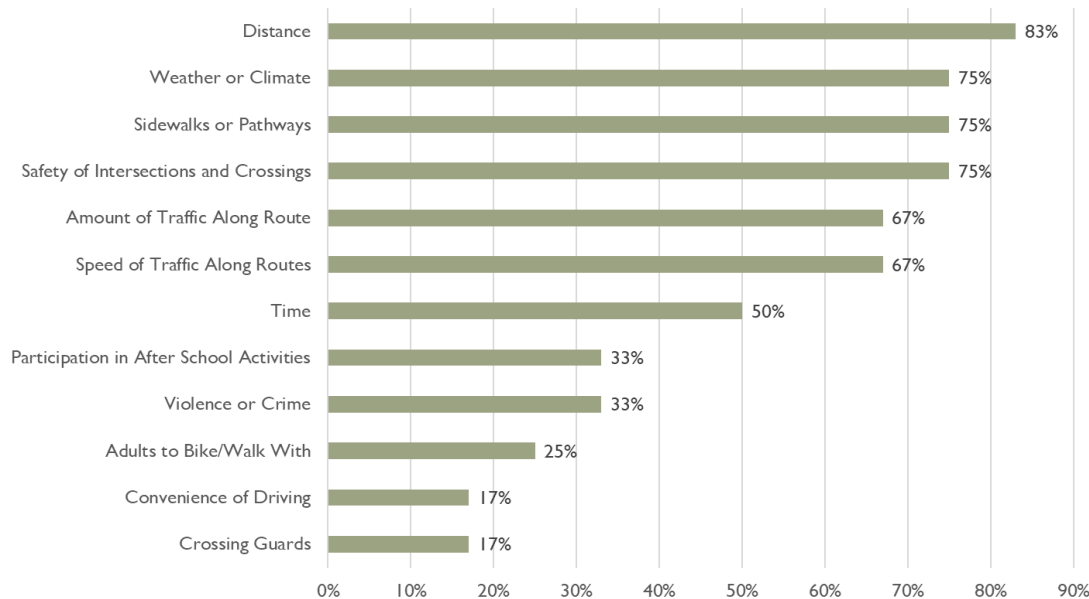
Parents from Maple Street Magnet School for the Arts were surveyed about the travel behavior of their child to and from school. The survey was administered online through the National Center for Safe Routes to School, and parents were able to complete the questions remotely.

According to the survey, most of students (33%) live more than 2 miles from school. Another 22% live between one and two miles from school, and only 9% of students live less than 1/4 mile from the school.



Number of Children: 92

Issues reported to affect the decision to allow a child to walk or bike to/from school by parents whose child does not walk/bike to school



Parents were also asked to report issues that affect their decision to not allow their child to walk/bike to and from school. 83% of parents reported that the distance of school from home as a reason to not allow their children to walk/bike. Weather or climate, sidewalks or pathways, safety of intersections and crossings, and amount of traffic along route were also among the major issues reported by parents.

Number of responses: 58

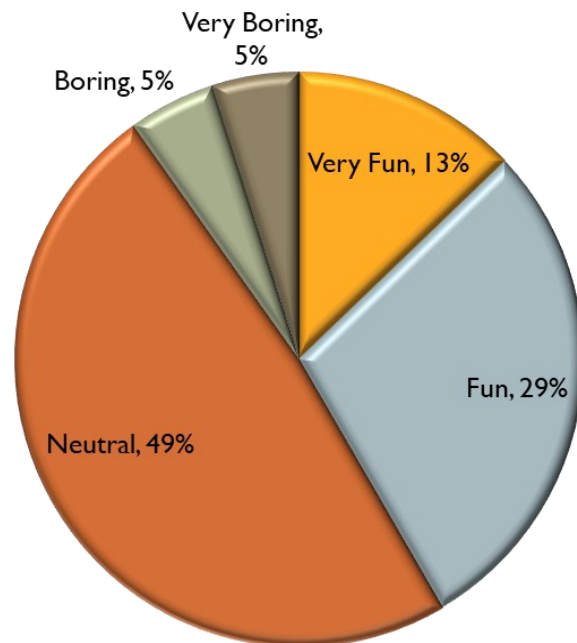


# Parent Survey

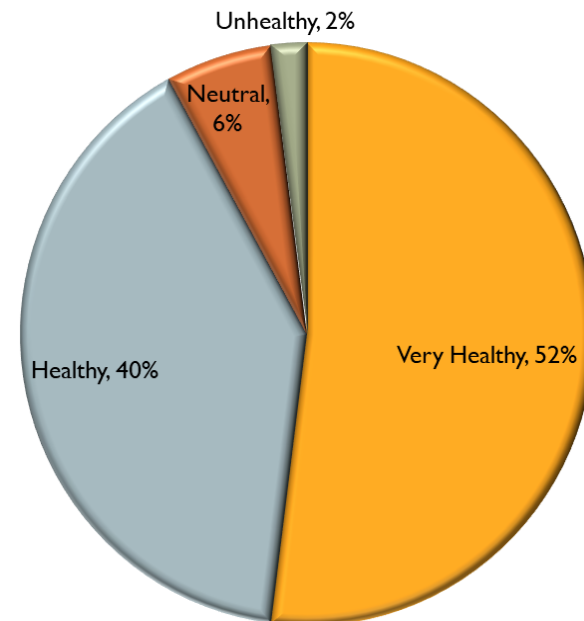
Parents were also asked about how much fun walking and biking to/from school is for their child. About half (42%) of parents responded that walking or biking to school is fun or very fun, while the other half (49%) of parents had a neutral opinion on the question. Only 10% responded that the activity is boring or very boring.

Finally, parents were asked about their opinions on how healthy walking and biking to/from school is for their child. A strong majority (92%) of parents think that walking or biking to school is healthy or very healthy. Only 2% responded that it is unhealthy to walk or bike to school.

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



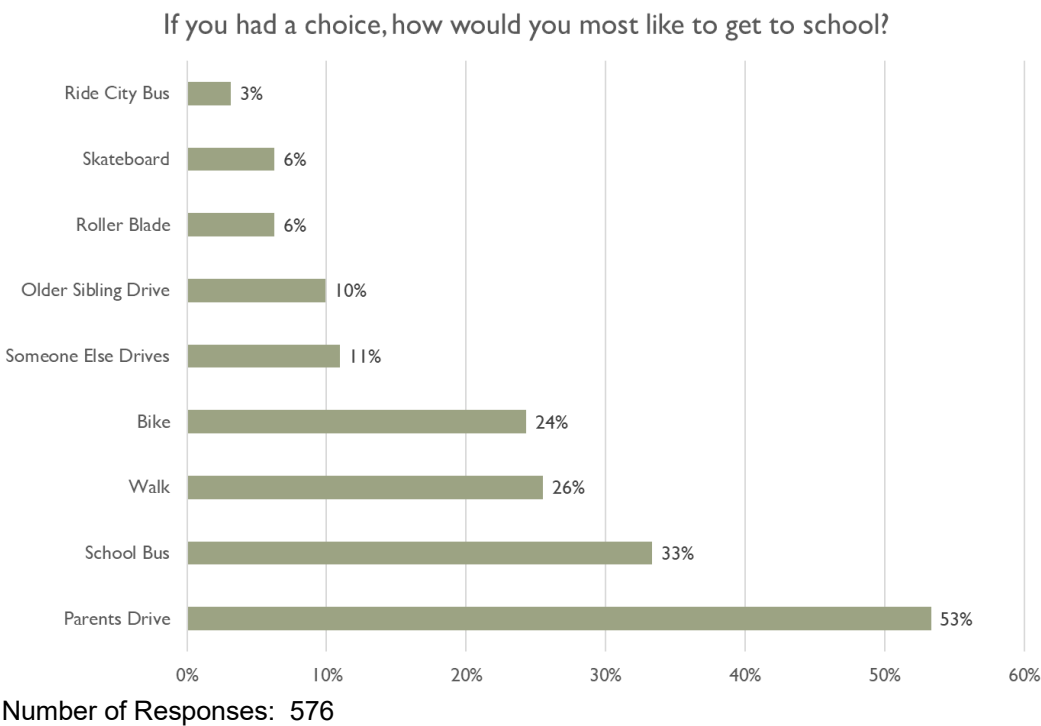
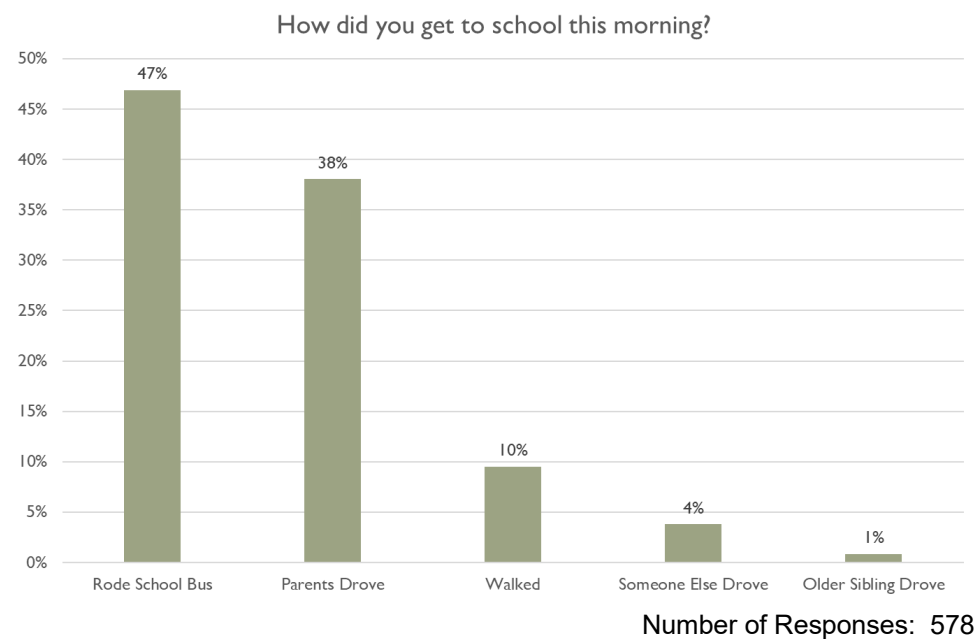
Parents' opinions about how healthy it is to walk/bike to/from school is for their child





# Student Survey

Students of Maple Street Magnet School for the Arts were surveyed about what method of transportation they used to arrive at school that morning. The survey shows that a majority of students (47%) took the school bus that morning. Another 38% of students were driven to school, and only 10% of students currently walk to school. No students indicated that they bike to/from school.

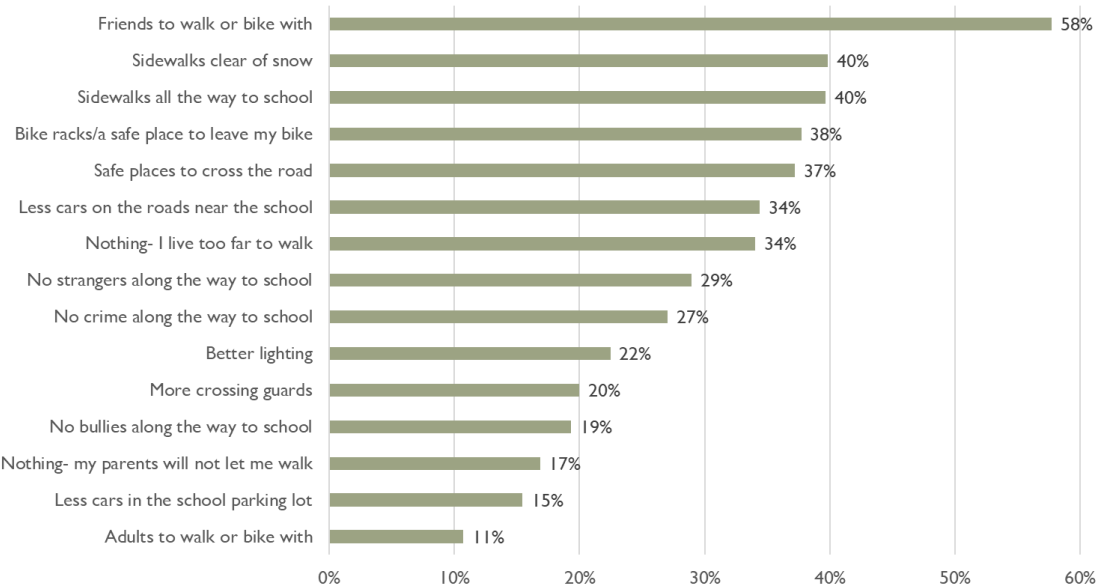


Students were then asked what form of transportation they would prefer to take to school if they had a choice. A majority of students (74%) prefer to be driven to school by their parents and 32% of the students prefer to take the school bus. Non-motorized forms of transportation were collectively the most common choice among students at 62%. Of the non-motorized choices, 26% of the students indicated that they want to walk, 24% said they would prefer to bike, and 6% responded that they would prefer to rollerblade or skateboard.

# Student Survey

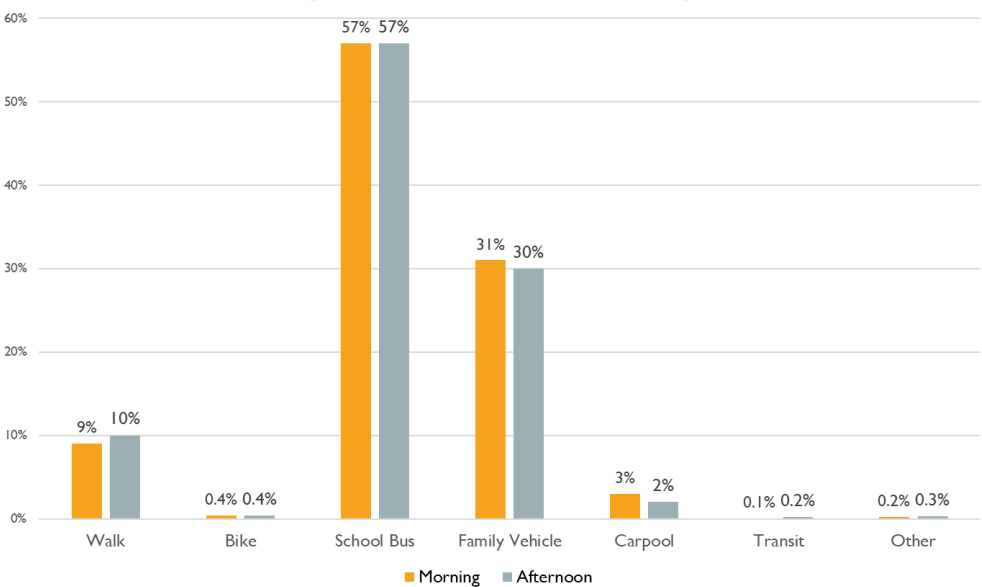
Students at Maple Street Magnet School for the Arts were also asked what would make walking or biking to school better. More than half (58%) of students prefer to have friends to walk or bike with. Presence of sidewalks and sidewalks clear of snow were also improvements desired by students. More than 30% of students also showed interest in having a bike rack or a safe place to leave their bike and having a safe place to cross the road.

What would make walking or biking to school better?



Number of Responses: 578

Morning and Afternoon Travel Mode Comparison



Homeroom teachers were asked to keep a tally of how their students traveled to and from school. The tallies show that the majority of the students took motorized modes of transportation such a family vehicle, bus, or carpooled to get to and from school. About 9% of the students walked during the morning, whereas 10% walked to school in the afternoon.

Number of Morning Commutes: 2,086  
Number of Afternoon Commutes: 2,104

# Summary of Survey Findings

In developing programmatic and engineering recommendations for Safe Routes to School, a number of key findings from the Maple Street Magnet School for the Arts student and parent surveys can be considered:

- ⇒ Parents generally have a positive response towards walking and biking in terms of fun and healthiness.
- ⇒ Most parents say distance from school to home is an issue that affects their decision to not allow their child to walk/bike to and from school, and a reported 47% of the students live more than 2 miles away from school.
- ⇒ Weather, sidewalks, and safety of intersections and crosswalks were other top concerns from parents that affect their decision to allow their child to walk/bike to and from school.
- ⇒ A majority of students take some type of motorized transit to get to/from school.
- ⇒ Most students show high interest in taking non-motorized modes of transport to and from school such as walking, biking, rollerblading and skateboarding, but only 10% of students reported walking to school in the morning.
- ⇒ More than half of the students prefer to have a friend to walk or bike with during their trip to/from school.
- ⇒ Almost half of students surveyed reported that clearing the sidewalks of snow in the winter would improve their ability to walk and bike to/from school.

# Meeting One Input

At Meeting One, on May 28, 2019, attendees were able to write and voice their thoughts about the current state of walking, biking, and rolling to school opportunities for students at Maple Street Magnet School for the Arts and Winchell Elementary School. Participants were asked three questions for small group discussion: “What is working well?”; “What is not working well?”; and “What are some improvements you would like to see?”



Pictures from Meeting One at Maple Street Magnet School for the Arts.

# Meeting One Input

## What is working well?

- ♦ Crossing guards
- ♦ Bike racks
- ♦ Walk to School Day
- ♦ LED stop lights
- ♦ 3 lanes on Oakland
- ♦ Radar on Howard
- ♦ Bike lanes
- ♦ Recent police presence
- ♦ Walking route from Oakland to Winchell
- ♦ 4 way stop at Broadway/Winchell
- ♦ Pedestrian crossing signs on Oakland/Maple

## What are some improvements you would like to see?

- ♦ Stop signs for large intersections
- ♦ More crosswalks
- ♦ More parking for parents
- ♦ More officers on duty at Howard
- ♦ More crossing guards
- ♦ Improved signage
- ♦ Add speed bumps
- ♦ Add speed signs
- ♦ Educate students to use crosswalks
- ♦ Narrow road for sidewalk, add bike lanes instead

## What is not working well?

- ♦ Winchell lacks sidewalks/crosswalks
- ♦ High speed traffic on Winchell
- ♦ Parking enforcement
- ♦ Vehicles don't stop for pedestrians
- ♦ Large intersection
- ♦ Snow removal
- ♦ Current sidewalk conditions
- ♦ School day starts too early

# Meeting Two Input

On November 25, 2019, a second community input meeting was held with parents, students, faculty, and SRTS coordinators from Maple Street Magnet School for the Arts and Winchell Elementary School to look over the preliminary program and design recommendations presented by MSU. Participants were asked three questions for small group discussion: 1) “What are the most important program and design recommendations you heard today?”; 2) “Is there anything that you would like to see changed/added?”; 3) “What additional recommendations do you have?”. Additional feedback was collected online after the meeting. The feedback is summarized below.

## **What are the most important program and design recommendations you heard today?**

- ♦ Pedestrian crosswalk sign in road to YMCA
- ♦ Lighting on Crosstown Pkwy
- ♦ Reflective gear for students
- ♦ More Walk to School Days
- ♦ Educating students/parents on SRTS routes/habits/behavior
- ♦ Incentivizing kids to walk to school
- ♦ Hawk signal on Howard St
- ♦ Remote Drop-off
- ♦ Pedestrian decoy and progressive ticketing
- ♦ Sidewalks/crosswalks south of Winchell

## **Is there anything that needs to be added or changed?**

- ♦ More lighting along the route
- ♦ Pedestrian bridge to YMCA
- ♦ Crosswalk sign in road will increase congestion on Maple St to YMCA
- ♦ Snow removal on sidewalks
- ♦ Education on where to cross for kids/parents
- ♦ Sidewalk on Hudson Ave towards YMCA
- ♦ More crossing guards (Winchell)
- ♦ Flashing 3 way stop sign at Winchell & Rambling
- ♦ Bike lanes along the route

## **What additional thoughts or recommendations do you have?**

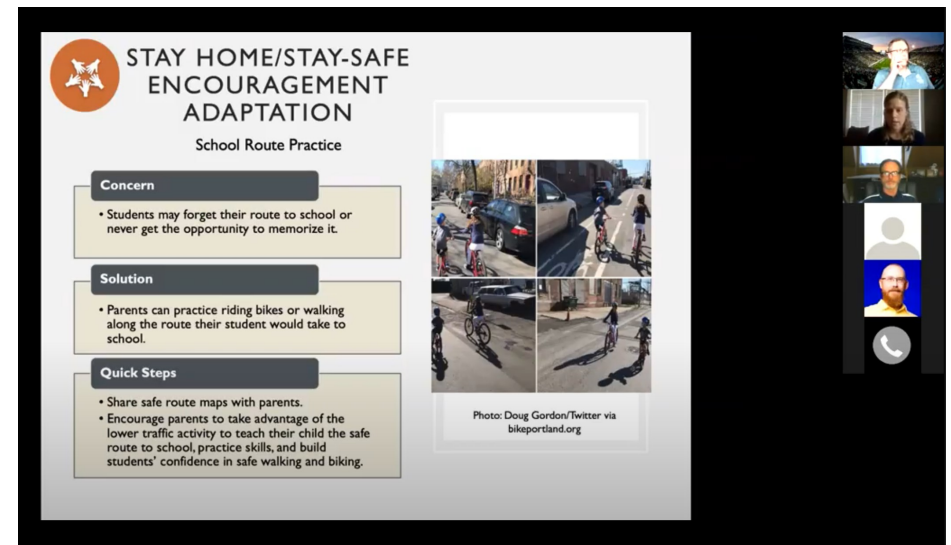
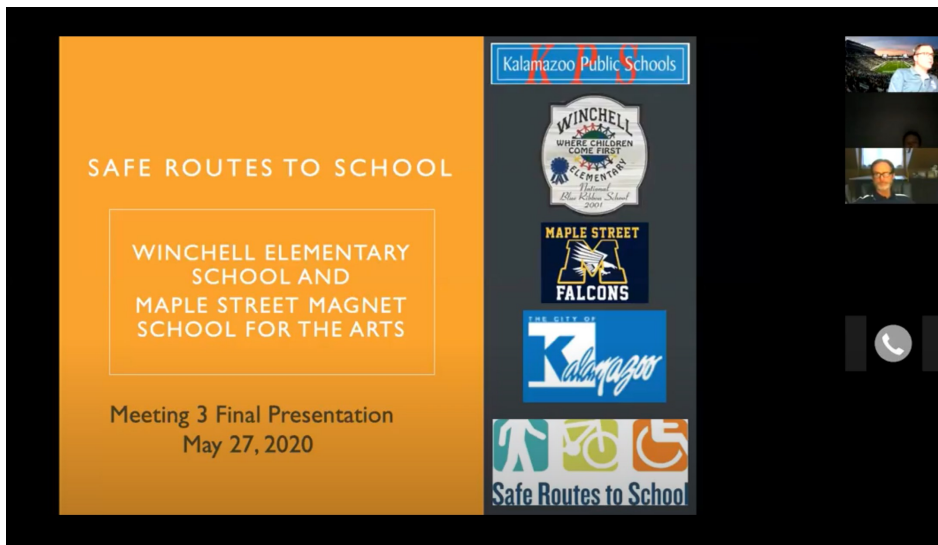
- ♦ Walking bridge to YMCA
- ♦ Snow removal on sidewalks
- ♦ Lighting on Crosstown Pkwy near Maple St
- ♦ Prioritize lighting and new sidewalks
- ♦ Work on immediate cross-sections close to school
- ♦ Safer pick-up and drop-off procedure (Winchell)
- ♦ Education targeted towards parents on safe drop-off and pick-up procedures
- ♦ Extra police presence near school
- ♦ Ways to slow down drivers on Winchell



# Meeting Three Input

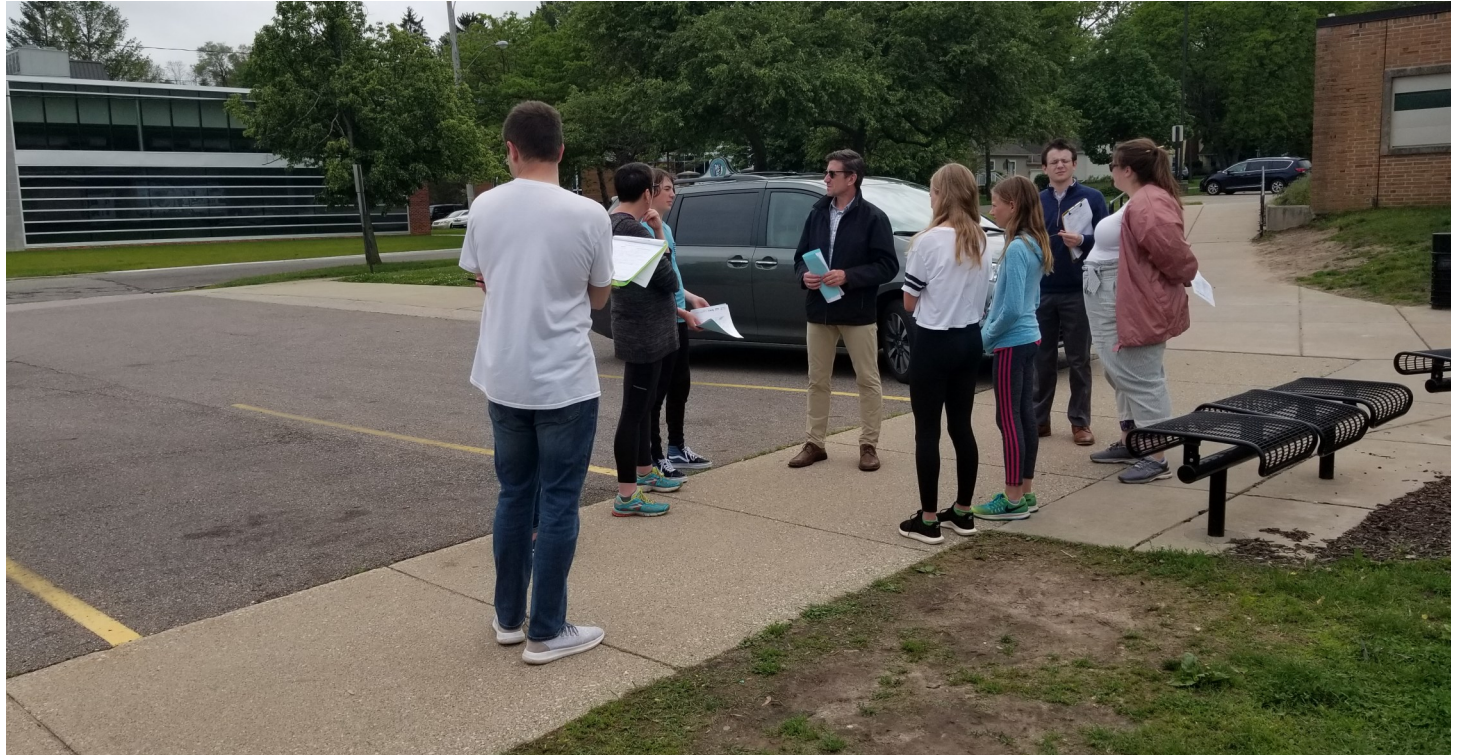
On May 27, 2020, a third community input meeting was held virtually on Zoom due to the COVID-19 pandemic and the Stay-Home/Stay-Safe orders issued by the Governor of Michigan. The meeting attendees included Kalamazoo community leaders, the local SRTS team, and Michigan Fitness Foundation staff. At the meeting, MSU presented updated program and design recommendations based on the feedback it received at Meeting Two. The next steps for the grant application process were also further explained to the community. The recommendations from the community during Meeting Three include:

- ◇ Add a stop sign to WB Winchell and Rambling
- ◇ Flip the one sided bike lane to the south side of Winchell



These pictures are screenshots from Meeting Three which was held via Zoom due to COVID-19 and the Stay-Home/Stay-Safe orders by the Governor of Michigan.





# Action Plan

This action plan will provide Maple Street Magnet School for the Arts with the framework necessary to facilitate its Safe Routes to School program. It lists the programmatic and engineering recommendations based on community input meetings, student and parent survey feedback, and walking audit observations developed by MSU SPDC and College of Engineering team with SRTS committee input. These recommendations include suggestions for the Six E's:

**Education, Encouragement, Enforcement, Equity, Evaluation, and Engineering.**

While Equity and Evaluation are not given specific recommendations, they should be part of the ongoing SRTS planning process to ensure equitable and relevant outcomes.

# Education

## #1: Walking Safety Curriculum

### Concern



Younger students are not aware of basic traffic safety rules and guidelines.

### Solution



The National Highway Traffic and Safety Administration (NHTSA) has a Child Pedestrian Safety Curriculum to help incorporate pedestrian safety into school curriculum.

### Quick Steps



Incorporate NHTSA Child Pedestrian Safety Curriculum into lesson plans.

Include elements of NHTSA curriculum in daily announcements during a special focus week on safe walking and biking in the fall & spring.

Education strategies focus on increasing the awareness of students, parents, and drivers in the school's neighborhood about Safe Routes to School efforts and goals. Education strategies contour closely with encouragement and enforcement efforts. In this section, there are recommendations and strategies for parent, student, and community education at Maple Street Magnet School for the Arts based on community concerns and opportunities.



Photo: [saferoutespartnership.org](http://saferoutespartnership.org)



# Education

## #2: Bike Safety Curriculum

### Concern



Students may not be aware of basic traffic safety rules or guidelines.

### Solution



The National Highway Traffic Safety Administration (NHTSA) has a Bicycle Safety Activity Kit to help incorporate bike safety into school curriculum.

### Quick Steps



Include bike safety elements with other in-class activities.

Partner with organizations like the League of Michigan Bicyclists and Kalamazoo Bicycle Club to incorporate bike safety in class curriculum and activities.

Include elements of NHTSA curriculum in daily announcements during a special focus week on safe walking and biking.



Photo: [eatsmartmovemoreesc.org](http://eatsmartmovemoreesc.org)

# Education

## #3: Bike Rodeo

### Concern



Students may not know how to maintain their bikes and/or the rules of the road.

### Solution



Initiate a Bike Rodeo.

### Quick Steps



Develop an obstacle course and repair station for students to practice their skills.

Partner with other family-oriented bike activities.



Photo: [elgruponorte.org](http://elgruponorte.org)



# Education

## #4: Publicize SRTS Efforts

### Concern



Lack of community awareness of SRTS program and routes directed to students and parents near school.

### Solution



Publicize SRTS efforts throughout the community

### Quick Steps



Install informational signs regarding pedestrian remote drop-offs, and on-street parking in highly visible locations around the neighborhood.

Distribute flyers to homes near the school. Post awareness flyers of pedestrian routes near school.



Photo: [saferoutespartnership.org](http://saferoutespartnership.org)

# Encouragement

## #5: Walk/Bike-to-School Day

### Concern



Lack of interest among students to walk/bike to school.

### Solution



Have Walk/Bike to School Days frequently to encourage kids to experience walking and biking more often.

### Quick Steps



Gauge community interest through a Walk/Bike to School Day.

Increase the frequency of Walk/Bike to School Days based on community engagement and feedback.

Introduce a Remote Drop-off to increase student turnout.

Coordinate with the police to block off streets.

Encouragement strategies are intended to build enthusiasm, excitement, and support for Safe Routes to School efforts. Often, encouragement strategies involve organizing events and activities for children and parents. These encouragement strategies dovetail the education strategies.



Photo: [theplugkcps.org](http://theplugkcps.org)



# Encouragement

## #6: Walking School Bus

### Concern



Parents are concerned about their children walking to school alone.

### Solution



Implement a Walking School Bus program where students can move in an adult moderated group to get to school safely.

### Quick Steps



Identify event coordinators and volunteers.

Introduce the event in conjunction with Walk/Bike to School Day to increase student turn out.

Combine with existing school activities like Earth Day.



Photo: witn.com



# Encouragement

## #7: Bicycle Train

### Concern



Parents are concerned about their children biking to school alone.

### Solution



Organize a series of Bicycle Train events.

### Quick Steps



Identify event coordinators and volunteers.

Introduce the event in conjunction with Walk/Bike to School Day.

Publicize the events on school website/newsletter and local media outlets.



Photo: momentummag.com

# Encouragement

## #8: Incentivize Walking/Biking to School

### Concern



The interest of students to walk and bike to school varies throughout the year.

### Solution



Implement a reward system and incentivize contests to encourage students to walk/bike to school.

### Quick Steps



Establish a Mileage Club program in age-appropriate grades, with prizes.

Continue efforts in Physical Education classes to promote exercise safety and leisure.

Incentivize students to use the Walking School Bus through tokens and prizes.



Photo: gokid.mobi



# Encouragement

## #9: Carpooling & Remote Drop-off

### Concern



Students live too far away to use non-motorized transit.

### Solution



Introduce and coordinate carpooling in conjunction with Remote Drop-off.

### Quick Steps



Introduce carpooling to parents and engage adults/parent volunteers.

Designate a Remote Drop-off spot where the children can walk together to school.

Coordinate parents who have students near each other.



Photo: gokid.mobi

# Encouragement

## #10: Bike Plow (6-8)

### Concern



Students are discouraged from biking in the winter because of heavy snow on pathways.

### Solution



Implement a bike plow system.

### Quick Steps



Encourage older students to use bikes with attached push-broom plows to clear sidewalks.

Coordinate volunteers and provide instructions and equipment to work safely.



Photo: pbar.fnal.gov



# Encouragement

## #11: Bike Festival

### Concern



Students show less interest in using non-motorized transportation options.

### Solution



Host an annual bike festival such as Pedalpalooza to encourage students to bike more often.

### Quick Steps



Coordinate the event with the assistance of parent/volunteer groups.

Involve local businesses to sponsor the event, host activities, and provide food.



Photo: meetup.com

# Encouragement

## #12: Reflective Gear

### Concern



Parents are concerned about students not being seen by motorists in dark.

### Solution



Encourage students to wear reflective gear while walking/biking to school.

### Quick Steps



Organize an in-school contest for students to compete in to create the most reflective backpacks/bicycles.

Incentivize students with a prize for the most decorated and safest creations.



Photo: Chinareflective.com



# Encouragement

## *Stay-at-Home Adaptation*

### #13: Walk-and-Wheels Wednesday

#### Concern



Due to the closing of schools during pandemic events, students are not able to walk/bike to school.

#### Solution



Introduce Michigan Fitness Foundation's Walk and Wheel Wednesdays or similar programs to families to encourage students to continue to expand walking or biking activities.

#### Quick Steps



Pick a day(s) of the week/month to hold the activity with family members.

Use social media or school communication resources to communicate about walking/biking activities.



Photo: today.com



# Encouragement

## *Stay-at-Home Adaptation*

### #14: Virtual Mileage Club

#### Concern



Due to the closing of schools during pandemic events, students are not able to walk/bike to school.

#### Solution



Introduce a virtual Mileage Club program for students and families to establish goals and work towards rewards.

#### Quick Steps



Coordinate with local running/biking organizations or businesses.

Build off existing reward systems to encourage participation.

Use social media or school communication resources to communicate about walking/biking activities.



Photo: [playmakers.com/mileage-club](https://playmakers.com/mileage-club)

# Enforcement

## #15: Progressive Ticketing

### Concern



High speed traffic in school zones and lack of parking enforcement.

### Solution



Initiate a progressive ticketing system.

### Quick Steps



Establish community awareness of the issue.

Announce the action that will be taken and why through flyers, signs, newspapers. Official warnings from officers can also serve as a reminder.

Enforcement strategies are aimed at identifying and discouraging unsafe driver, pedestrian, and cyclist behaviors along routes to school. Successful implementation of enforcement strategies will result in safer and more conscious sharing of roadways by all.

Official routes to school should be designated so that efforts will be focused in priority areas. Enforcement strategies may often require the assistance of local or state police in the areas that Kalamazoo Public Schools have prioritized. Additionally, it is best for the school to continue their strong connection with the local police.



Photo: [lprisk.com](http://lprisk.com)

# Enforcement

## #16: Pedestrian Decoy Program

### Concern



Motorists drive at very high speeds on routes surrounding the school.

### Solution



Institute a Pedestrian Decoy Program with officers disguised as pedestrians to observe motorists failing to yield to pedestrians.

### Quick Steps



Coordinate with the police department to begin the process.



Photo: nbcwashington.com



# Enforcement

## #17: School Zone Expansion

### Concern



High speed traffic and aggressive drivers around the school.

### Solution



Expand the school zone to slow traffic in a wider area around the school.

### Quick Steps



Identify roads with high-speed traffic on the designated walking routes.

Coordinate with local law enforcement.



Source: yukonok.gov

# Enforcement

## #18: Expand Crossing Guard System

### Concern



Traffic can make it difficult for students to cross streets around their school.

### Solution



Increase the number of crossing guards at locations along the routes.

### Quick Steps



Determine the interest of potential crossing guards in the community.

Assign crossing guards along the priority routes that are not currently stationed.



Photo: [orangeobserver.com](http://orangeobserver.com)



# Engineering

Engineering includes any updates to infrastructure or design adjustments for physical improvements. These engineering recommendations are the result of collaborative efforts that include the walking audit, community meetings, and analysis by the local SRTS Committee and Michigan State University. The before/after design images are included in this section with proposed engineering improvements shown in Appendix D.

## SUMMARY OF ENGINEERING IMPROVEMENTS

- ◇ Crosswalk installation
- ◇ Crosswalk re-stripping
- ◇ Installation of crosswalk signage and signaling technology
- ◇ Addition of new sidewalks
- ◇ Added signage
- ◇ Addition of new bike lanes



# Design Examples

Maple at YMCA Crossing, Looking West

**Before**



**After**



# Design Examples

Oakland at Maple, Looking North

**Before**



**After**





# Design Examples

Maple at Sterns, Looking West

**Before**



**After**



# Design Examples

Howard at Merrill, Looking East

**Before**



**After**



Alternative 1: HAWK Hybrid Signal



Alternative 2: RRFB



# Design Examples

Westnedge and Maple, East Side, Looking South

**Before**



**After**





# Design Examples

South Side of Maple, East of School,  
Looking East Towards Crosstown Pkwy

**Before**



**After**



# Design Examples

East Side of Park, Looking North Across Maple

**Before**



**After**





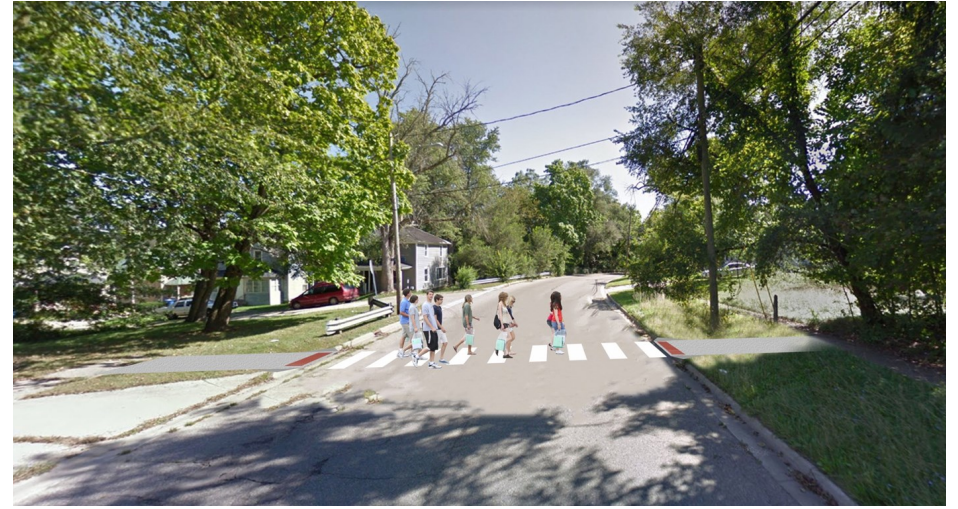
# Design Examples

Maple West of Maple, Where North Sidewalk Ends

**Before**



**After**





# Design Examples

Maple East of Maple, Where North Sidewalk Ends

**Before**



**After**



# Design Examples

Merrill at Pioneer, Looking North

**Before**



**After**





# Design Examples

Merrill at Midblock Crossing North of Howard, Looking South

**Before**



**After**



# Design Examples

Axtell at Oak, Looking East

**Before**



**After**





# Design Examples

Wheaton at Midblock Crossing near Merrill, Looking East

**Before**



**After**





# Appendix



# Appendix A: Walking Audit Report

## Route 1: (Red Route)

Image	Location	Concern
A	Maple St & Stearns Ave	No crosswalk
B	Maple St & Stearns Ave	Narrow and overgrown vegetation on sidewalk



# Appendix A: Walking Audit Report

## Route 2: (Blue Route)

Image	Location	Concern
A	Howard St. & Merrill St	Sidewalks narrow and not maintained
B	Merrill St & McCourtie St	No crosswalk; incomplete sidewalk
C	Oak St & Pioneer St	Stairway in place of ramp, not ADA-compliant





# Appendix A: Walking Audit Report

## Route 3: (Purple Route)

Image	Location	Concern
A	Maple St & Crosstown Pkwy	Damaged sidewalk with overgrown vegetation
B	Maple St & Park St	No crosswalks; gravel on sidewalks
C	Burdick St & Belmont St	Mismatched sidewalks; poor line of sight; no crosswalk



# Appendix B: Meeting Two Tallied Feedback

What are the most important program/design recommendations you heard today?	Responses
On-street pedestrian road crosswalk sign to YMCA	4
HAWK signal on Howard St	4
Lighting on Crosstown Pkwy	4
Sidewalk improvements	3
Reflective gear	3
Lighting along the routes	3
Installation of new sidewalks	3
Educating student/parents on SRTS	2
Incentivizing kids to walk/bike to school	1
Local media publicize SRTS	1
Consistent bus routes	1
Sidewalks clear of snow	1
HAWK at Merril St	1
Ticket unsafe or speeding drivers	1

Is there anything that needs to be added/changed?	Responses
More lighting	3
Walking bridge to YMCA	1
Crosswalk sign in road may increase congestion	1
Clear sidewalks	1
Education on where to cross kids and parents	1
Need better sidewalks	1
No left turn on intersection at school parking lot drop-off during busy hours	1
Visibility at crosswalk to school due to parked cars	1
Sidewalk on Hudson Ave towards YMCA	1

What additional thoughts or recommendations do you have?	Responses
Walking bridge to YMCA	2
Snow removal on sidewalks	2
Lighting on Crosstown Pkwy near Maple St and Girl Scouts Building	2
Prioritize lighting and new sidewalks	1
Remote drop-off	1
Work on immediate cross section close to school	1



# Appendix C: Action Plan Summary

## Education

<b>Proposed Recommendation</b>	<b>Variation of Recommendation by School</b>	<b>Who Will Make It Happen?</b> (Partner Organization, School, District, Municipality, Road Agency)	<b>SRTS Funding eligible?</b>
#1: Walking Safety Curriculum			
#2: Bike Safety Curriculum			
#3: Bike Rodeo			
#4: Publicize SRTS Efforts			

# Appendix C: Action Plan Summary

## Encouragement

Proposed Recommendation	Variation of Recommendation by School	Who Will Make It Happen? (Partner Organization, School, District, Municipality, Road)	SRTS Funding eligible?
#5: Walk/Bike-to-School Day			
#6: Walking School Bus			
#7: Bicycle Train			
#8: Incentivize Walking/Biking to School			
#9: Carpooling & Remote Drop-off			
#10: Bike Plow (6-8)			



# Appendix C: Action Plan Summary

## Encouragement (continued)

Proposed Recommendation	Variation of Recommendation by School	Who Will Make It Happen? (Partner Organization, School, District, Municipality, Road Agency)	SRTS Funding eligible?
#11: Bike Festival			
#12: Reflective Gear			

### *Stay-at-Home Adaptations*

#13: Walk-and-Wheels Wednesdays			
#14: Virtual Mileage Club			

# Appendix C: Action Plan Summary

## Enforcement

Proposed Recommendation	Variation of Recommendation by School	Who Will Make It Happen? (Partner Organization, School, District, Municipality, Road)	SRTS Funding eligible?
#15: Progressive Ticketing			
#16: Pedestrian Decoy Program			
#17: School Zone Expansion			
#18: Expand Crossing Guard System			



# Appendix D: Infrastructure Improvements

## SAFE ROUTES TO SCHOOL INFRASTRUCTURE NEEDS MAPLE STREET MAGNET SCHOOL FOR THE ARTS KALAMAZOO, MI CONCEPT DRAWINGS

### INDEX OF SHEETS

- i. MAP OF INTERSECTION DETAIL LOCATIONS
- ii. PRIORITY ROUTES TO AND FROM SCHOOL
- iii. STUDENT ADDRESSES
- 1. MAPLE STREET MAGNET SCHOOL FOR THE ARTS
- 2. CROSSING OF OAKLAND DR AT MAPLE ST
- 3. SOUTHEAST OF HOWARD ST AND OAKLAND ST
- 4. CROSSING OF HOWARD ST AT MERRILL ST
- 5. S WESTNEDGE AVE AT W MAPLE ST
- 6. S PARK ST W AT W MAPLE ST
- 7. MERRILL ST AND PIONEER ST
- 8. OAK ST AND FOREST ST
- 9. OAK ST AND MINOR AVE

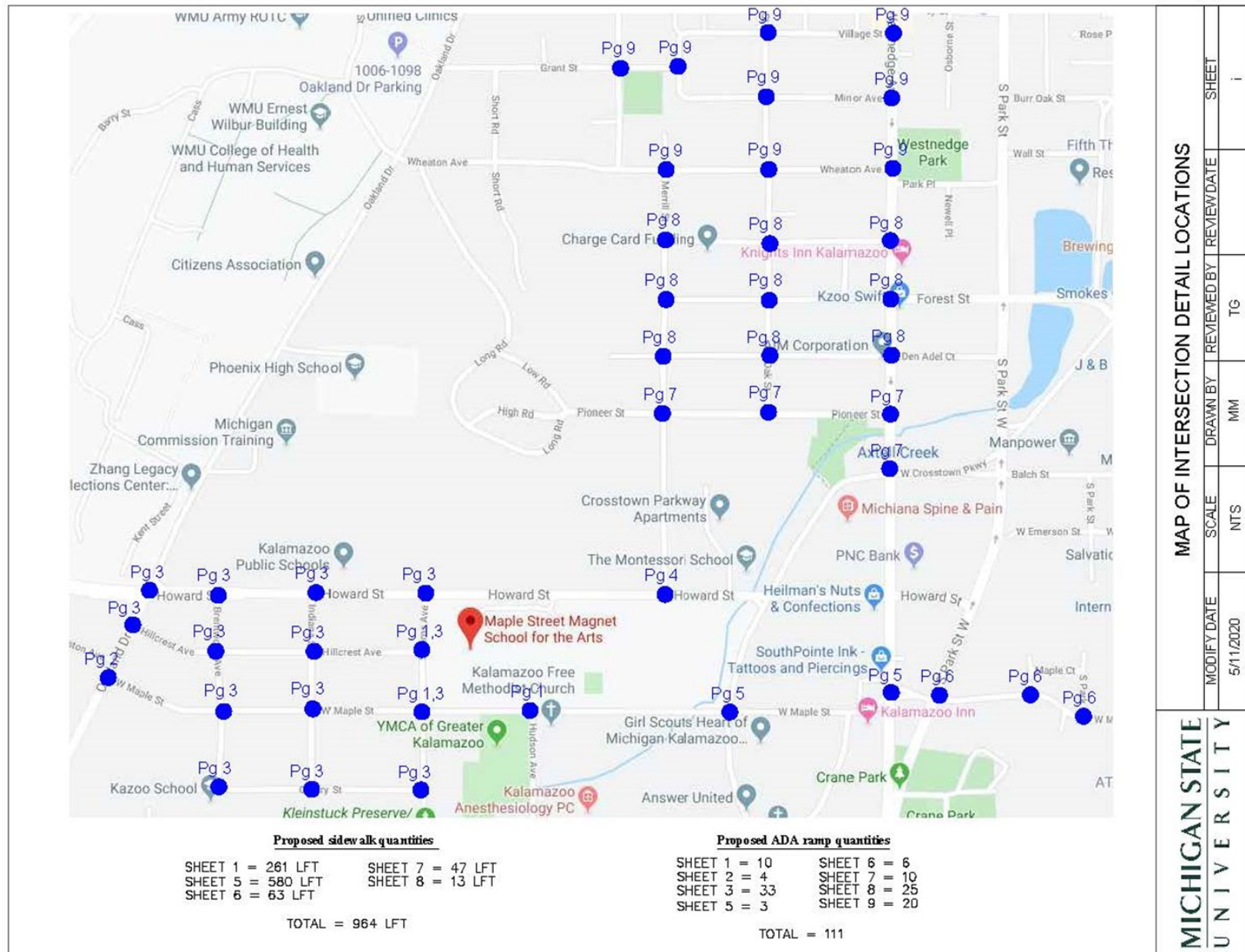
PREPARED BY:

**MICHIGAN STATE**  
**U N I V E R S I T Y**

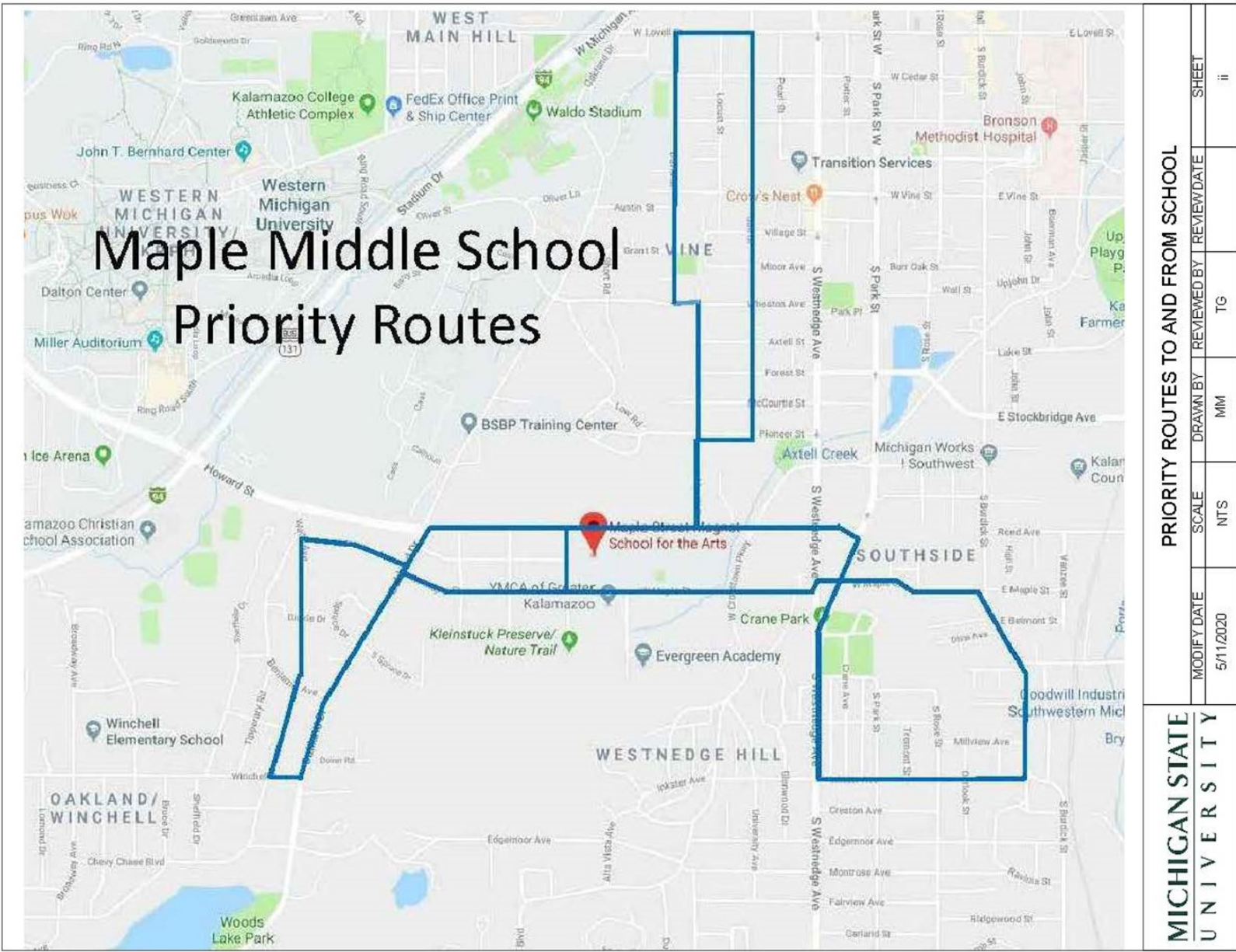
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May 11, 2020

NOTE: Non-fundable improvement may not be included.

# Appendix D: Infrastructure Improvements

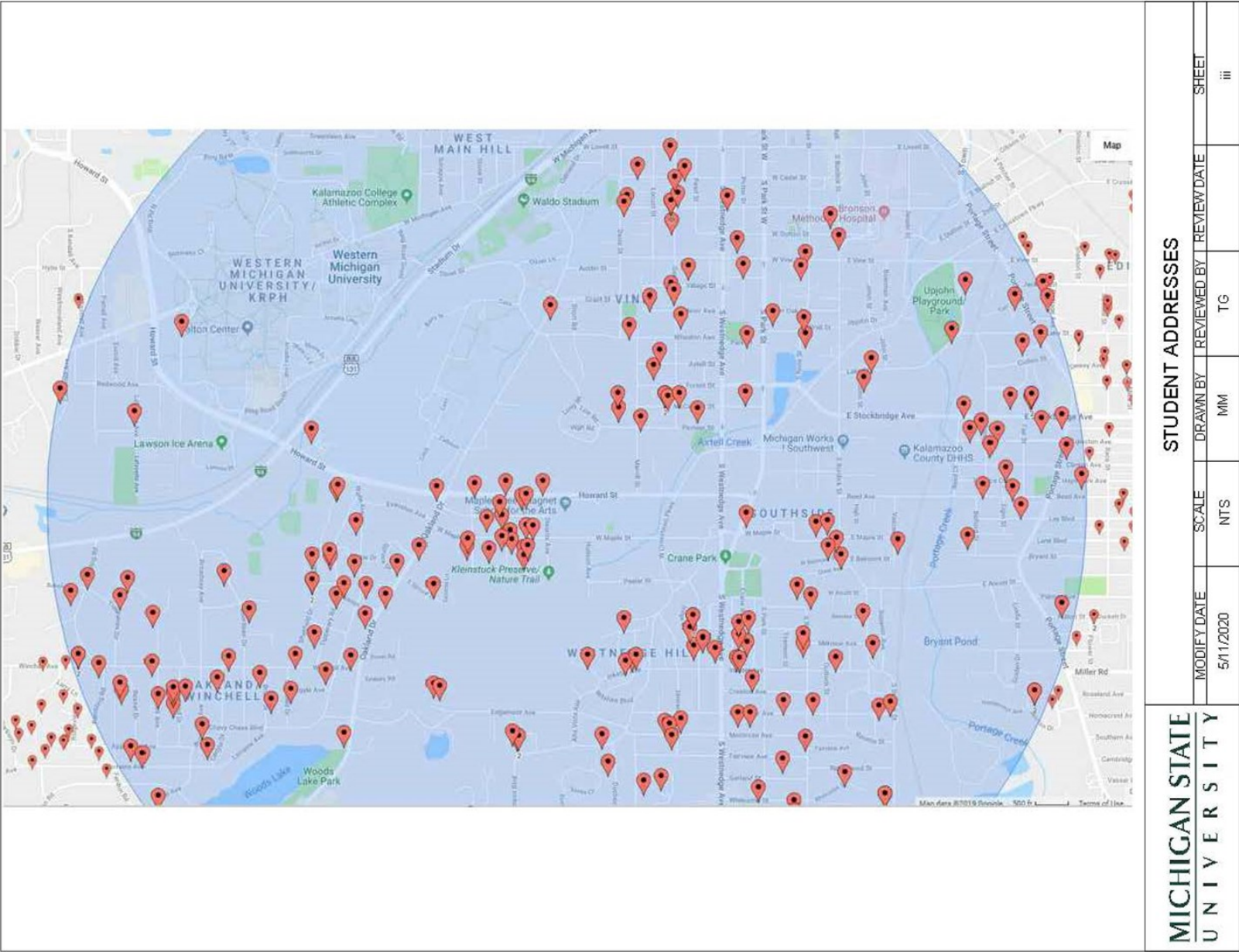


# Appendix D: Infrastructure Improvements

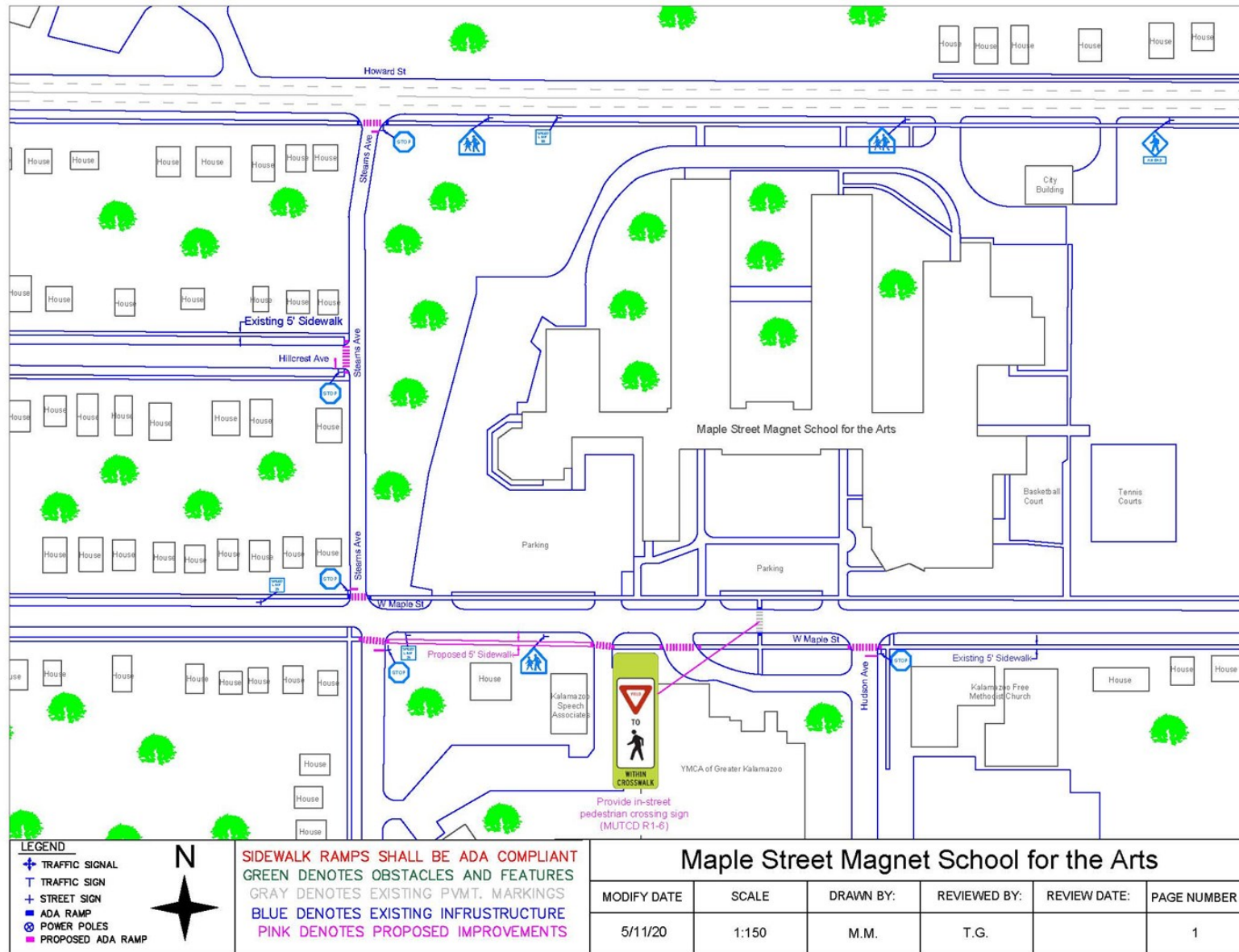




# Appendix D: Infrastructure Improvements

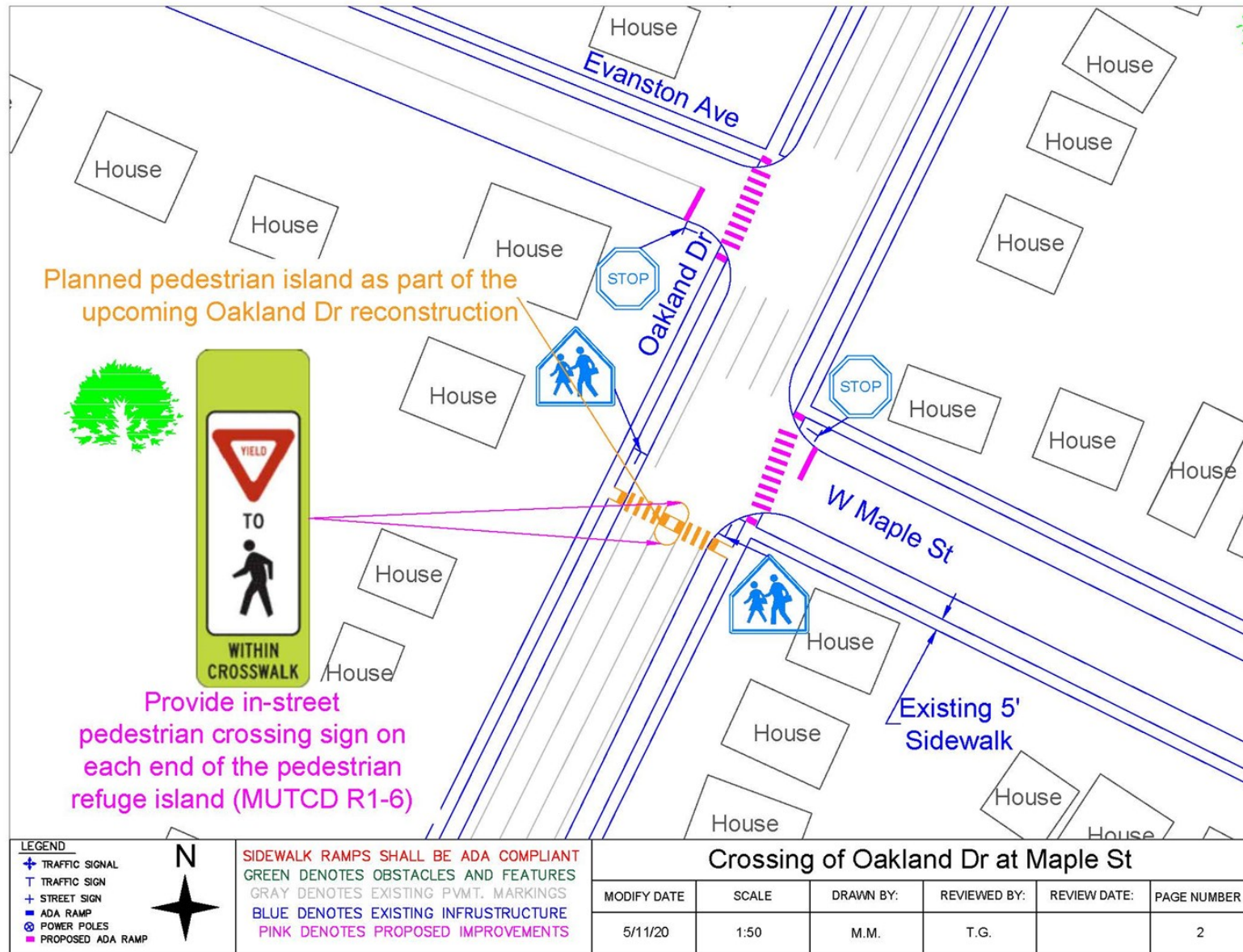


# Appendix D: Infrastructure Improvements



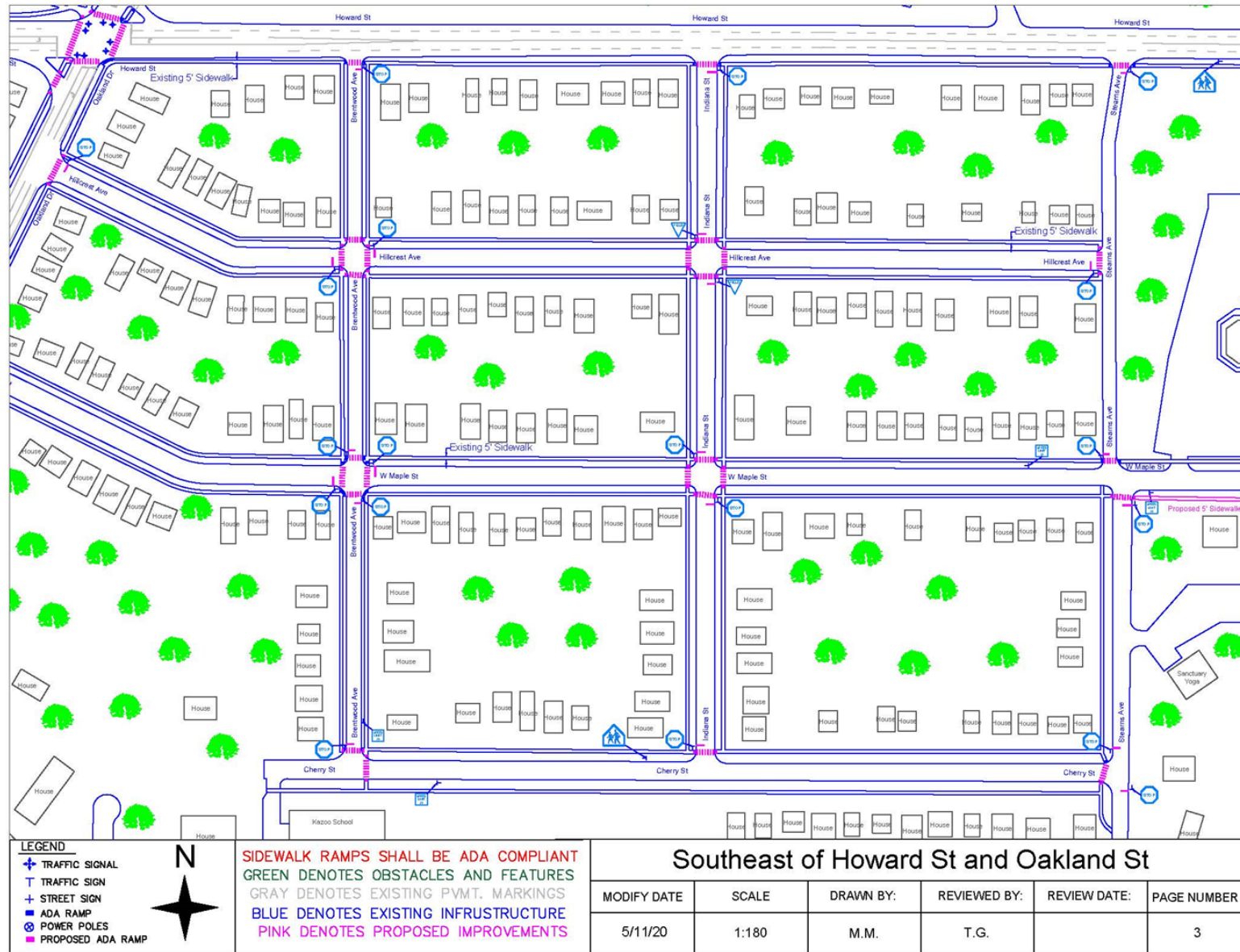


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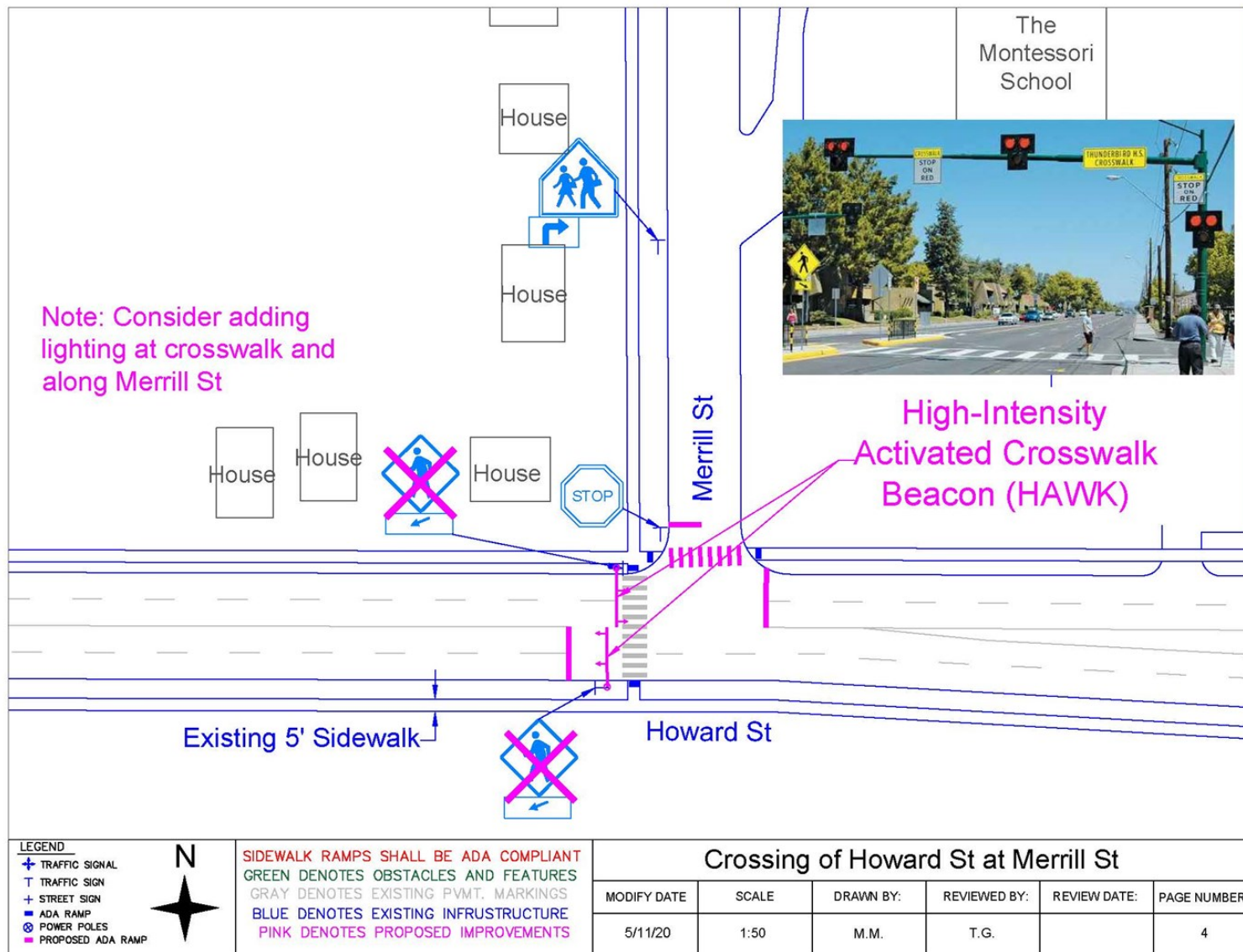




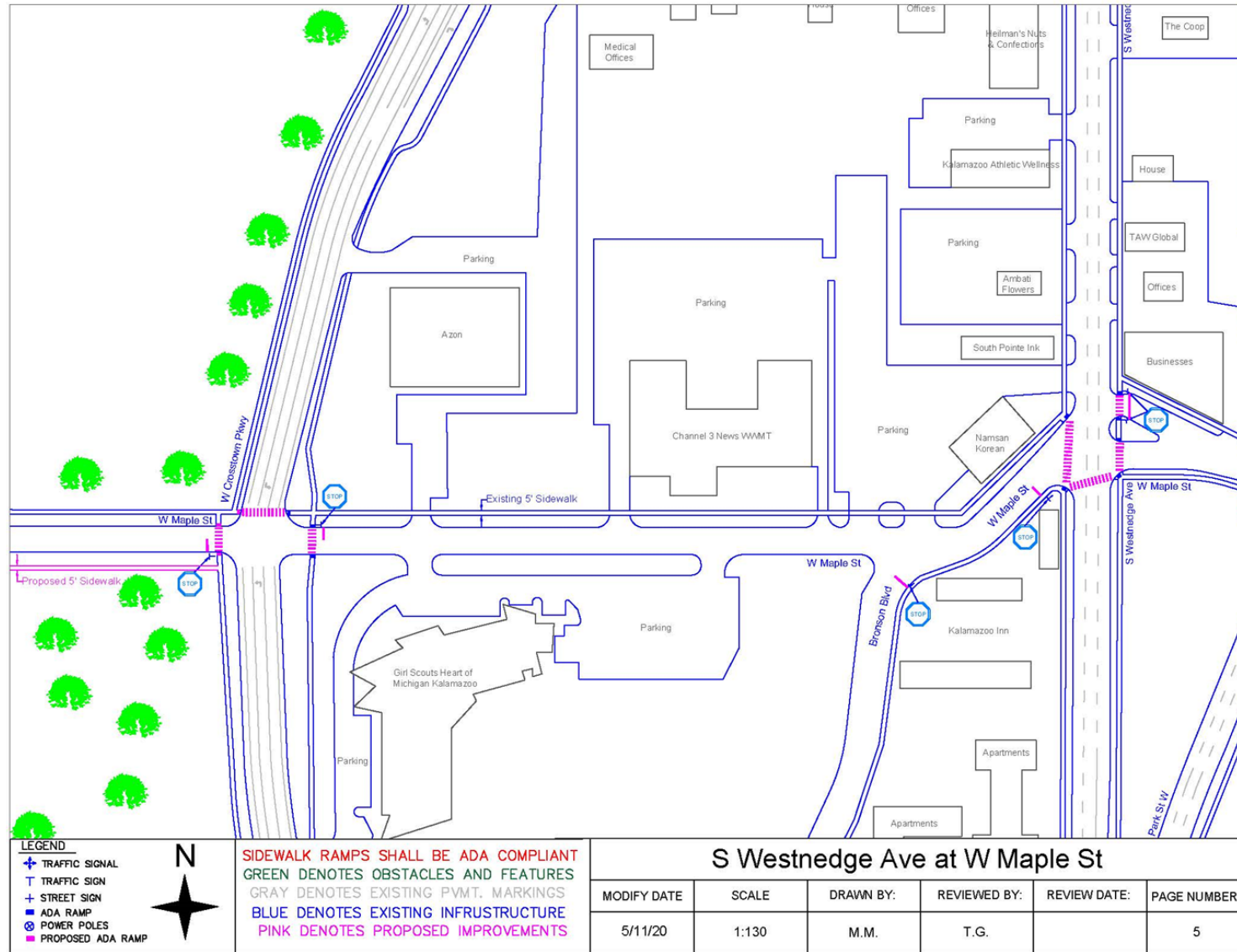
# Appendix D: Infrastructure Improvements



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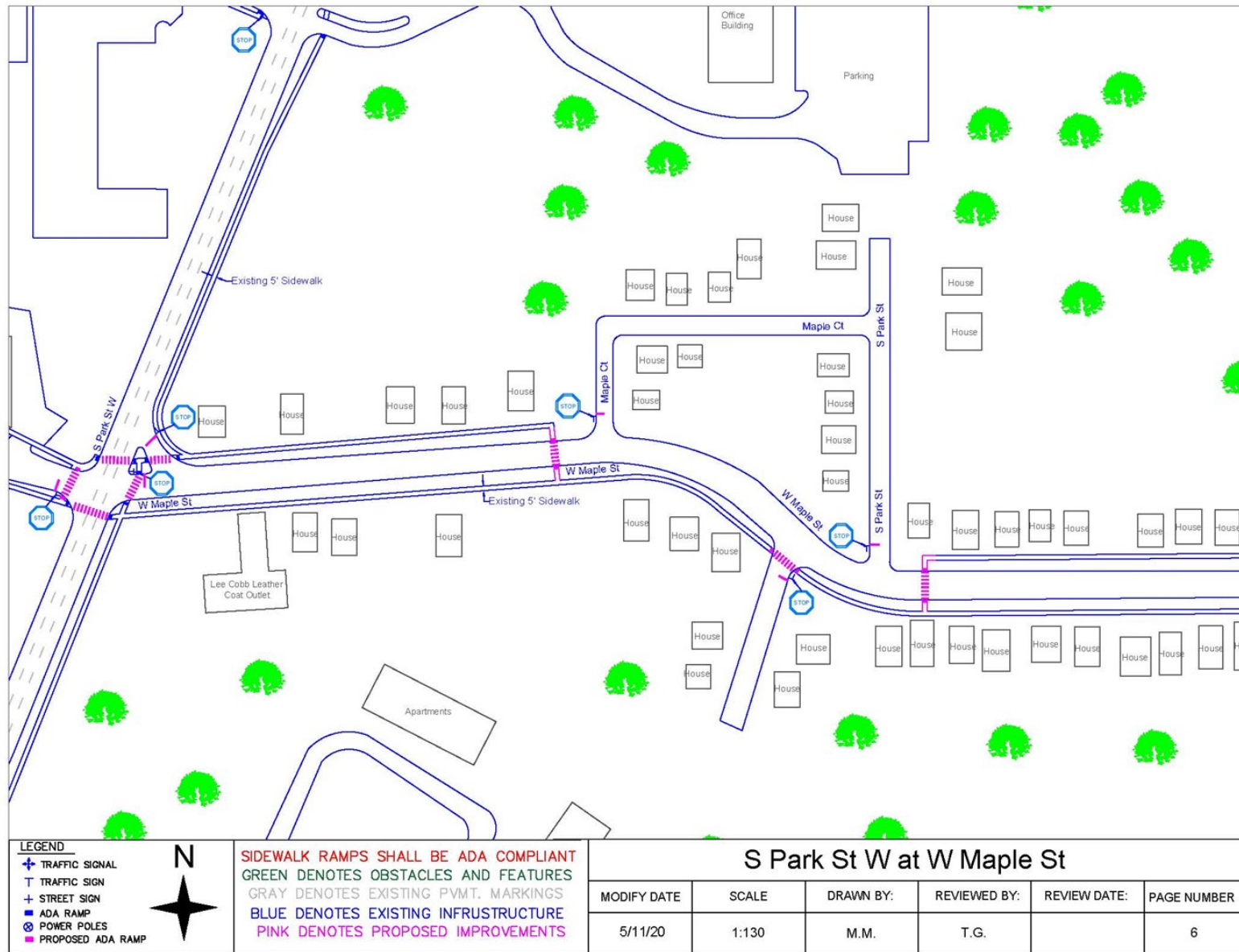


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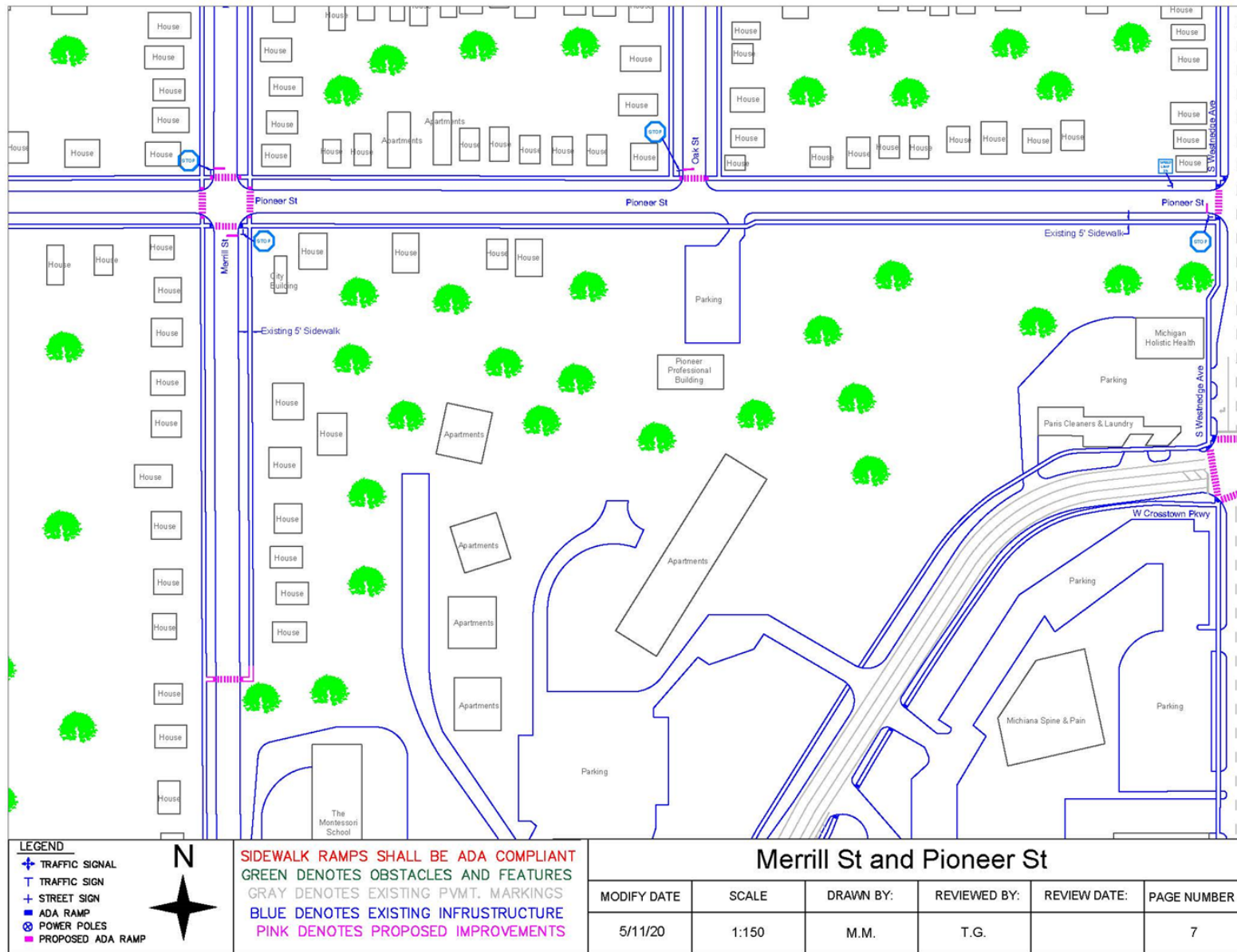




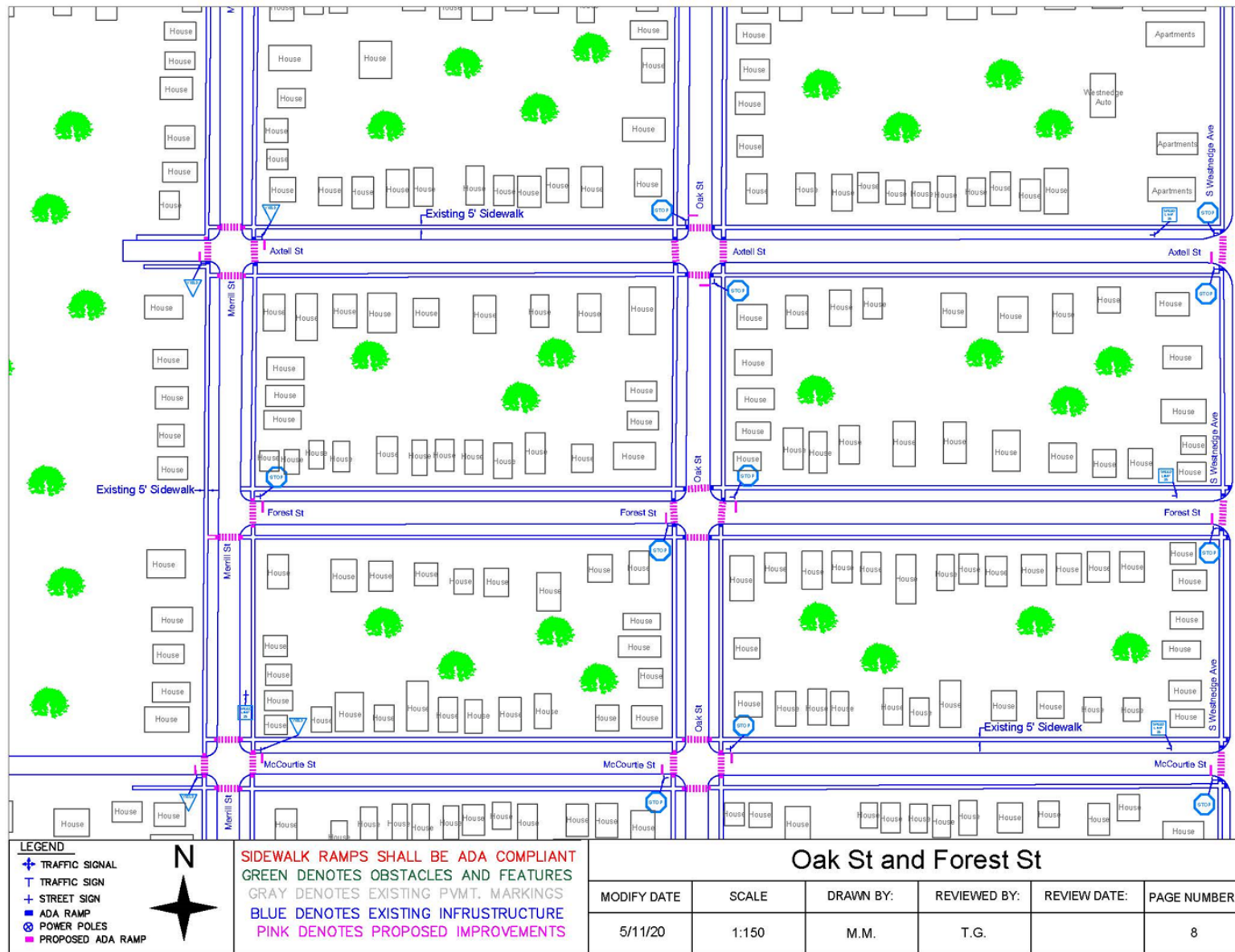
# Appendix D: Infrastructure Improvements



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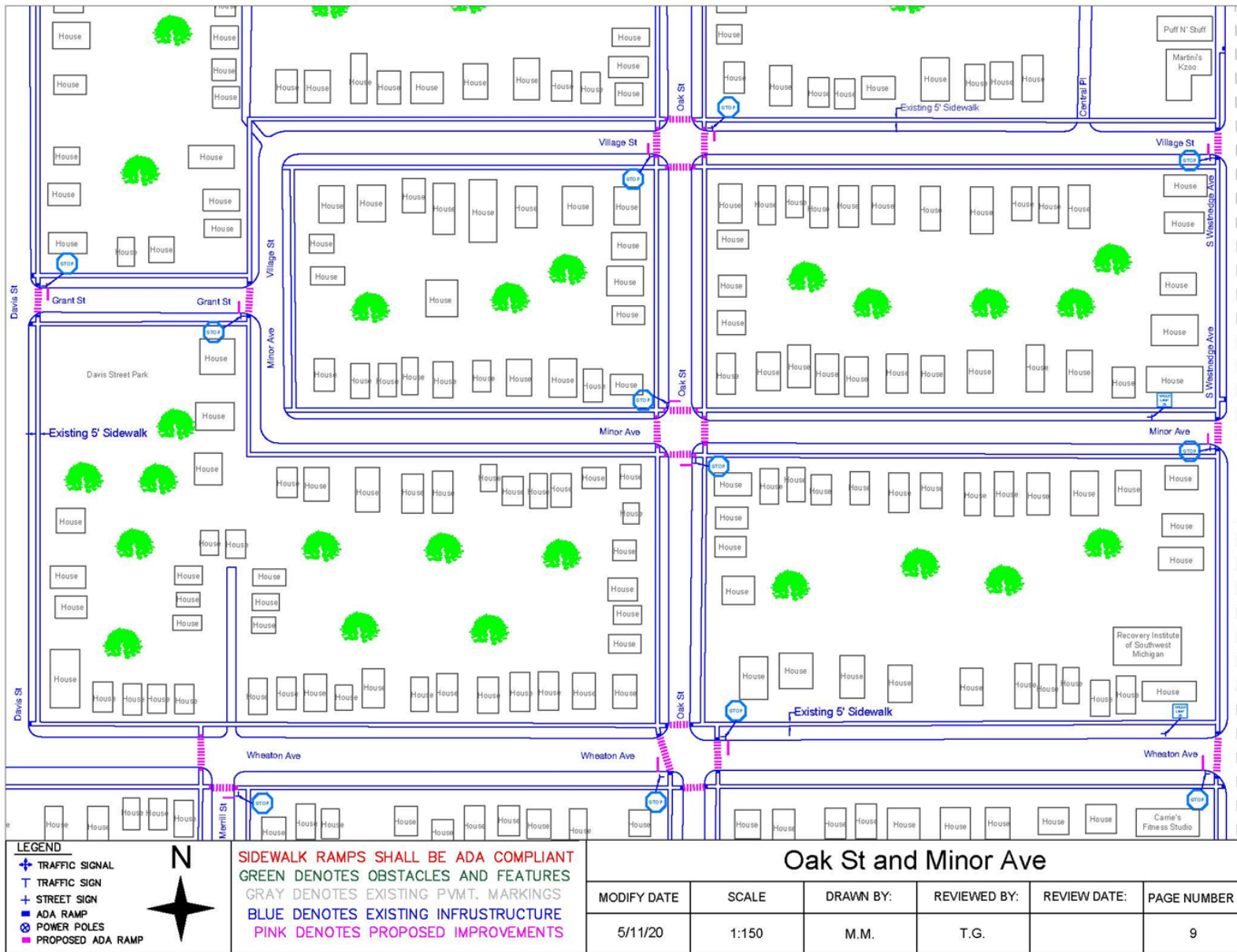


# Appendix D: Infrastructure Improvements





# Appendix D: Infrastructure Improvements



# Appendix E: How To Use This Report for the Grant Application

The list below details the report sections that can be used while applying for the SRTS Grant. Data found on the shared Google Drive is also noted. Please note that this list is a general overview and does not encompass all of the requirements listed in the grant application. The Act 51 agency submitting the grant is responsible for creating an engineering and program budget in conjunction with the school and community.

## SRTS GRANT APPLICATION REQUIREMENTS:

- ♦ **School Profile and Demographics:** Parent/Student Surveys on Google Drive provided to the community
- ♦ **Planning Process:** Page 5, SRTS Planning Team; Page 6, Community Input and Planning overview, Pages 20-23 for meeting details
- ♦ **Non-Infrastructure Program Description:** Page 24, Action Plan
- ♦ **Non-Infrastructure Budget:** Appendix C, Action Plan Summary
  - ◇ **Surveys and Evaluation**
    - \* **SRTS Survey Report:** Page 19, Summary of Survey findings, Pages 15-18 for detailed survey results
    - \* **Map of Student Addresses:** Page 69, Infrastructure Improvements
    - \* **Travel Tally Results:** Page 18, Student Tallies
- ♦ **Infrastructure Project Description:** Appendix D, Infrastructure Improvements
- ♦ **Plan View Sketch:** Pages 66-79, Engineering Images
  - ◇ **Project Photographs:** Page 44-56, Design Examples



Moving  
Forward



# Next Steps

1

Make the report accessible to community members and collect feedback and reactions to the official publication.

2

Rank the programmatic and infrastructural recommendations according to highest priority and develop cost estimates.

3

Visit the Safe Routes to School Michigan website for more details regarding the submission of the application.

4

Review the SRTS grant application deadlines and checklists provided on the Safe Routes to School Michigan website.

5

Contact your regional grant coordinator before submitting the grant application.

6

Complete the SRTS Grant Application with the help of How to Use this document located in Appendix E.