The Road Less Traveled: An Effort to Bolster Madison Metropolitan School District's Safe Routes to School Program

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Acknowledgements

Thanks to those below for assisting in my project:

- The Mendota Elementary community—parents, students, and staff—for welcoming me
- Carlettra Stanford, Mendota Elementary's principal
- The Madison Metropolitan School District (MMSD), especially Aronn J. Peterson
- Marcia Morales and Baltazar DeAnda Santana of Safe Routes to School
- Mendota Elementary's PTO, especially President Christine Elholm and Vice-President Beth Welch
- Stephen John Heiny of the National Center for Safe Routes to School
- Andi Bill of UW-Madison College of Engineering
- Christy Bachmann, City of Madison-Engineering Division
- My advisor Dave Marcouiller and committee member Alfonso Morales

This work is dedicated to the Mendota Elementary community and those who made this work possible.

Executive Summary

Every day, millions of Americans wake up and prepare for another journey to work or school, overcoming obstacles geographical, social, even political, in nature. As journeys to school changed during the last half century, *how* students travel to school has changed too, with profound health, social, and transportation consequences.

Thankfully, such consequences can be mitigated or avoided entirely with forward-thinking programs like Safe Routes to School (SRTS), which aims to increase "student physical activity through safe and active transport to and from school" (Morales, 2018). As of this writing, the Madison Metropolitan School District (MMSD) is several months into the second iteration of its SRTS program.

This report assists MMSD by leveraging **two** of the six E's of SRTS: "Engineering, Education, **Encouragement**, **Evaluation**, Enforcement, and Equity" and crafting building blocks upon which future actions may occur (Morales, 2018). Specifically, two data collection efforts focusing on parents and the school attendance area opens the door to witnessing active transportation deficiencies to Mendota Elementary School, and what changes may foster better outcomes for student and community alike.

Outreach efforts showed that parent concerns for safety—specifically facilities and speeding vehicles—were warranted, though considerable efforts in recent years have kept pedestrian/bicyclist crashes low. When combined with hypothesis testing on the facilities measured during the mapping exercise, it seems prudent to have SRTS continue with data collection efforts and building capacity while pushing for simple improvements to certain streets designated active transportation corridors.

Key Words

Madison Metropolitan School District (MMSD) | Safe Routes to School (SRTS) | Geographic Information System (GIS) | Transportation mode | Mode share | The 6 E's |

Introduction

Setting the Stage: Macro and Micro Considerations

When discussing the daily journey to and from school, the route—independent of travel mode—considers spatial constraints at scales ranging from micro to macro along social, health, environmental, and transportation lines.

Macro: Across the Globe

The battle to entice students towards walking or bicycling involves wrestling them away from motorized transport and parental perceptions. Any initial steps in supporting MMSD's SRTS program must first counteract and overcome real *or* perceived weaknesses frequently applied to active transportation.

Socially, convincing parents and overcoming stereotypes appears vital. For many, "the main deterrent against cycling [is] lack of adequate cycling infrastructure. Lack of safety (which is associated with the absence of infrastructure) and slopes are other strong obstacles" that hinder wider acceptance (Souza et al., 2014, 119). Environmental and spatial characteristics are crucial here, especially when "active travel is associated with environmental characteristics," suggesting that the places students traverse affect their mode of transport (Larsen et al., 2009, 520). While parental concerns regarding travel distance are now more easily comforted because "bicycling supports public transport by extending the catchment area of transit stops far beyond walking range," other concerns remain (Pucher et al., 2013, 79).

Because "there [is] a significant relationship between the distance between home and school and the transport mode" that continuously operates and affects transportation choices, negative outcomes persist (Dessing et al., 2014,7). Many choose to drive, sometimes with dire consequences (Figure 1 IIHS). Reality shows us that "heavy auto traffic creates both real and perceived safety dangers," leading to perverse outcomes (MMSD, 2013, 2). Reality, however, also shows that active transportation—like walking and cycling—reaps greater benefits than it suffers detriments.

Depending on local context, "loss due to fatal accidents is at least an order of magnitude smaller than the health benefit of the physical activity" (Rabl et. al., 2012, 121). Breaking the acceptance barrier is tough, but once lowered, it becomes easier to walk, bike, and pursue actions that support programs like Safe Routes to School. Many places around the globe have excellent infrastructure for active transportation, and Madison, broadly, does as well. What has been lacking is a policy that can excite the public and want them to pursue these things…and it is towards this potential we turn next.

Micro: Madison, Wisconsin: Our Kids, Our Schools, Our Community

As with the macro investigation, the micro view peers at Madison, WI to provide a broad overview of the deficiencies—and opportunities—an invigorated Safe Routes to School Plan offers.

Madison student health outlooks—though better than statewide averages—are nowhere close to the ideal for a healthy society. Hampering transportation-health efforts is the fact that MMSD had "21 reported school related vehicle-student pedestrian crashes between 2005 and 2008, and a MMSD staff member was killed in 2007 after being struck by a vehicle dropping off a child at Cherokee Middle School" (MMSD, 2013, 3).

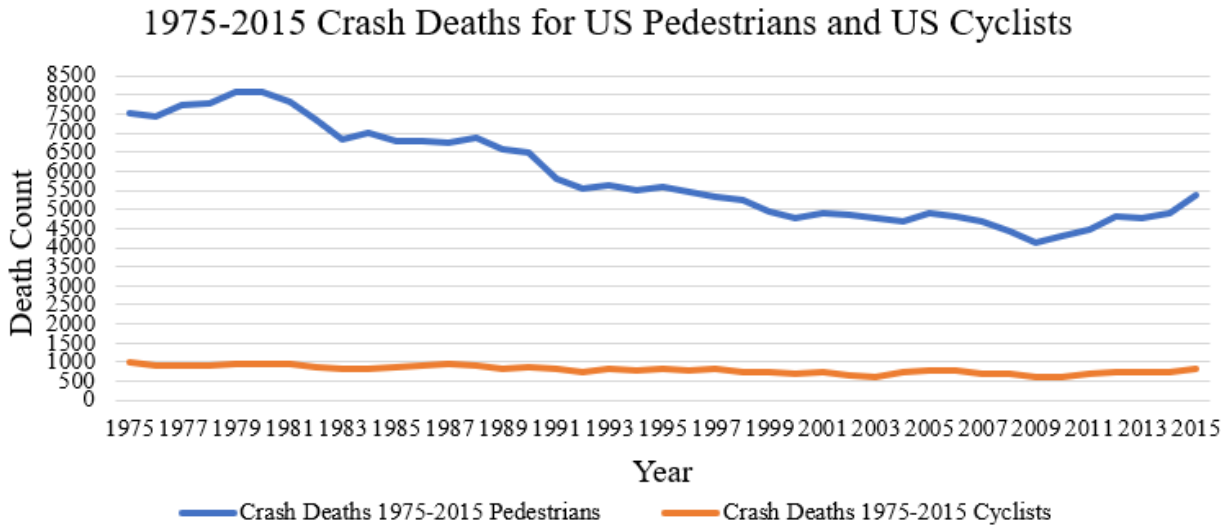

Figure 1: 1975-2015 Crash Deaths for US Pedestrians and Cyclists
Source: *http://www.iihs.org/iihs/topics/t/pedestrians-and-bicyclists/fatalityfacts/pedestrians/2015*

Clearly, the transportation-health nexus offers room for improvement, but matters are not helped by decreasing utilization of active transportation modes to get to American schools. National Personal Transportation Survey data demonstrates that "in 1969, 40.7% of students walked or biked to school; by 2001, the proportion was 12.9% [and] [while] distance to school has increased over time and may account for half of the decline in active transportation to school," around half of the decline in active transportation to US schools may NOT be explained as a function of distance (McDonald, 2007, 509). Subsequently, we must ask if policy may alleviate these barriers limiting walking and biking to school, and what the effects could be.

Due to "very large differences in numbers of children traveling by various modes among schools, especially at the Elementary School level," a one-size-fits-all approach would be inappropriate (MMSD, 2013, 18). Instead, tailored and specific school plans meeting broad district guidelines appear more desirable. Thankfully, this approach was pursued in the first iteration of MMSD's SRTS plan; unfortunately, the capacity was insufficient to keep the system running after funding had been cut. In its current iteration, building on past knowledge is tantamount, such as the fact that "forty-one percent of all students in MMSD live within a one-

mile radius of their school, and 65% live within a two-mile radius," necessitating a greater focus on the children and the community this time around (MMSD, 2013, 10).

Problem

The mode share percentage for bicycling and walking represented by Mendota Elementary students (and the district / the entire community) is lower than desirable to realize health and transportation benefits. This problem was confronted by the first iteration of MMSD's Safe Routes to School program but hampered due to erased funding and lackluster developed capacity that would have enabled staying power in the community. My work aims to help the second iteration of the program by "facilitat[ing] the development of school-based plans and programs" (MMSD, 2013, 5). By accumulating basic geographic and community knowledge, solutions to increase the desirability of walking and bicycling to school may be achieved while starting implementation of facility improvements in the attendance area.

Scoping Statement

This work aims to start accumulating the building blocks for a successful SRTS school plan for Mendota Elementary school, located at 4002 School Road Madison, WI. Geographic focus falls on the school's attendance area, and two methods of data collection are utilized. The deliverables, while fulfilling my graduation requirements, will be sent to all interested parties no later than 11 May 2018, the day of the professional project poster competition.

The professional project will ultimately witness two deliverables prepared. This report shall act as a guide to the project's direction. Within its pages, an executive summary then introduction guides the reader to the project's focus. Subsequently, a conceptual framework coincides with an outlining methods section detailing the use of data followed by results opening the door to discussion and suggestions for further action. Additionally, a poster as a visual tool to be entered into the professional project poster contest shall be constructed as well.

Project success is to be measured by evidence-based approaches that are clear, concise, and actionable. Just as well, the recommendations must assist in building capacity and ensuring long term program success expressed by higher rates of walking and bicycling to school.

Project Implementation and Findings

Methods

In pursuit of clear, concise, and actionable recommendations to MMSD, this work features **two** of the '6-E's' in Safe Routes to School Plans. Under "Evaluating," two methods of data collection are employed. *Evaluating* means assessing the current situation. To do so, qualitative data provided by discussions with parents/community members at meetings is collected (Appendix 1). As a result, we can see differences in perceptions and reality while homing in on areas or policies of concern. Quantitatively, the author mapped Mendota Elementary's attendance area to determine potential routes for active transportation corridors. By assigning identification numbers to street segments (Appendix 2) then coding facilities of interest and their condition in an attribute table (Appendix 3), it allows the *qualifiable to be quantifiable*

with hypothesis testing. *Encouragement* in this project means making suggestions to the school/district and allowing them to leverage my report findings.

Data—Sources and Limitations

Project s*ources* came from Mendota Elementary parents, the attendance area mapping exercise by the author, as well as outreach with Andi Bill of UW-Madison College of Engineering, Christy Bachmann of City of Madison-Engineering Division, and Marcia Morales and Baltazar DeAnda Santana of Safe Routes to School.

Some *assumptions* were taken when preparing and investigating the Safe Routes to School plan for MMSD. First, an erosion in the percentage of students currently walking or bicycling was seen as unacceptable, meaning the current percentages for biking and walking appear as a FLOOR. Additionally, because enacting active transportation education and outreach is most productive with elementary and middle school-aged children, changes to high school teens behavior—though desirable—were not pursued due to them being a tougher proposition than the low-hanging fruit (and health benefits) of having our younger children consistently more active at a younger age.

Constraints for the project ranged from an ability to interview key stakeholders to the difference between policy actions and concrete actions (proposing versus doing). The mapping exercise was conducted on a cold, wintry weekday (Tuesday) in March. Some observations may directly reflect these conditions. As a note, the coding for parking was done based upon what was seen during the survey, meaning actual parking patterns or rules may reflect a norm not seen during my ride. When a facility was lackluster or absent, a lower coded value may be assigned, leading to some streets that have two sidewalks, then one, then none would be classified as zero and therefore affect the hypothesis testing. I defend this decision on the basis that I am interested in the ability of people to use facilities efficiently and safely for their travel; if the facility degrades in usefulness or any other valuable criteria, its compromised value should be noted. Finally, the data currently in possession of MMSD's SRTS program is from the first iteration of the program nearly six years ago; conditions may have changed in the intervening years.

Results and Findings

The outreach efforts and discoveries made by mapping the attendance area had broad overlaps, suggesting that parental concerns are quite real and these issues may be readily seen in the built environment. Discussions with parents frequently led to discussions regarding safety, specifically concerns about vehicle speeds and the lack of suitable infrastructure. Additionally, the parents cited a district policy imposing an age floor on bicycling alone to school as well as a railroad underpass as social and spatial considerations against walking or bicycling to school (Figure 2).

Figure 2: The Troy Rd. RR Underpass & author
Source: Author's photographs from March 13th, 2018 attendance area mapping activity

Table 1. Hypothesis Testing on Facilities in Mendota Elementary Attendance Area

Facility	n =	p =	π =	z = [(p- π)/ √ π(1-π)/√n)]	Significant at 0.05* or 0.01**?
Sidewalk	48	0.666	0.50	2.30	*Yes **No
Painted Crosswalk	48	0.125	0.50	-5.19	*Yes **Yes
Bike-Safe Sewer	48	0.104	0.80	-12.52	*Yes **Yes
Signage	48	0.146	0.80	-11.32	*Yes **Yes

Source: Data from author's mapping of Mendota Elementary attendance area on March 13th, 2018. Refer to Appendix 3.

Once completed with the mapping of the attendance area, single proportion tests were used to find significance. Sidewalks, painted crosswalks, bike-safe sewer, and signage were investigated on n=48 street segments. Population parameter π refers to the percentage of streets *expected* to have a particular facility. Sidewalks and painted crosswalks were expected on less than fifty percent of streets (H_A where $\pi < 0.50$) while bike-safe sewer grates and signage were expected on less than eighty percent of streets (H_A where $\pi < 0.80$). The higher percentage reflects the importance of bike-safe sewer grates and signage for safety. Evaluating for α values of 0.05 and 0.01 (95 and 99% confidence, respectfully) with one-tailed tests resulted in the z-scores seen in Table 1. The 99% confidence interval for sidewalks was NOT significant, suggesting that the null hypothesis MAY be true and 50% OR MORE of the streets may have sidewalks on at least one side. Save for the 99% confidence interval for sidewalks, all seven remaining tests proved significant, where the null hypothesis may be rejected.

The mapping exercise demonstrated that the provisioning of basic infrastructure can be lacking. There was a dearth of signage on many streets—save parking notices—as well as a lack of painted crosswalks at intersections. Sewer grates were hit or miss due to bike-safe grates that are perpendicular to the direction of travel having wide openings, while grates with smaller, angled openings—even ones that angle towards the curb—increase the risk of catching bicycle tires. When combined with wide streets that can invite greater speeds, it appears logical that parents expressed reservations about bicycling and walking.

Table 2. Facility Improvements Near Mendota Elementary Attendance Area, 2008-Present

Year	Facility	Location	Work done
2008	Sherman Avenue	Trailsway to Roth St.	Resurfacing; pavement markings installed as temporary due to bike lane controversy.
2009	Troy Drive	Between Harper Rd and Forster Drive	Installed sidewalk.
2010	Sherman Avenue	Northport Dr. to Trailsway	Resurfacing; added bike lanes and installed bike lanes at Trailsway, Windom Way, and Warner Park entrance.
2011	Northport Dr.	-	WisDOT project reconstructed the roadway and added bike lanes.
2013	Sherman Avenue	-	City Traffic Calming contract; bike lanes added and a pedestrian island installed at Sachtjen St.
2014	Huxley St.	Winchester St. to Schlimgen Ave.	Resurfacing.
2018	Northport Dr.	-	PLANNED Radar boards.
2018	Troy Rd.	RR underpass (see figure 2)	PLANNED Modifications and LED lighting.

Source: Author's March 9th, 2018 email correspondence with Christy Bachmann of the City of Madison-Engineering Division

The Mendota Elementary school attendance area **has** benefitted from street work in recent years. As seen in Table 2., there has been consistent work in the last decade to make streets inviting to travelers of all transport modes. Madison has a strong Complete Streets program that says anytime a road undergoes significant work, bicycling and pedestrian opportunities must be upgraded. Unfortunately, short term gains might be overshadowing long term losses. Because much of the pavement during the mapping exercise was in great shape, with little cracking or damage that causes so much consternation amongst bike riders, the necessity of road work with Complete Streets upgrades is currently low. Despite these concerns that must be worked through, the fact remains that the attendance area has been quite safe for bicyclists and pedestrians since January 2014, with only a handful of crashes since that point in time (Figure 3).

Conclusions

Discussion

My work sought to increase low rates of bicycling and walking to Mendota Elementary school by using Evaluation and Encouragement, two of the 6 E's used in Safe Route to School programs. For evaluation, qualitative and quantitative approaches—specifically discussions with parents and a mapping exercise of the attendance area—were used. From these efforts, I could

see patterns/ deficiencies that led students to use other non-active forms of transportation to get to school.

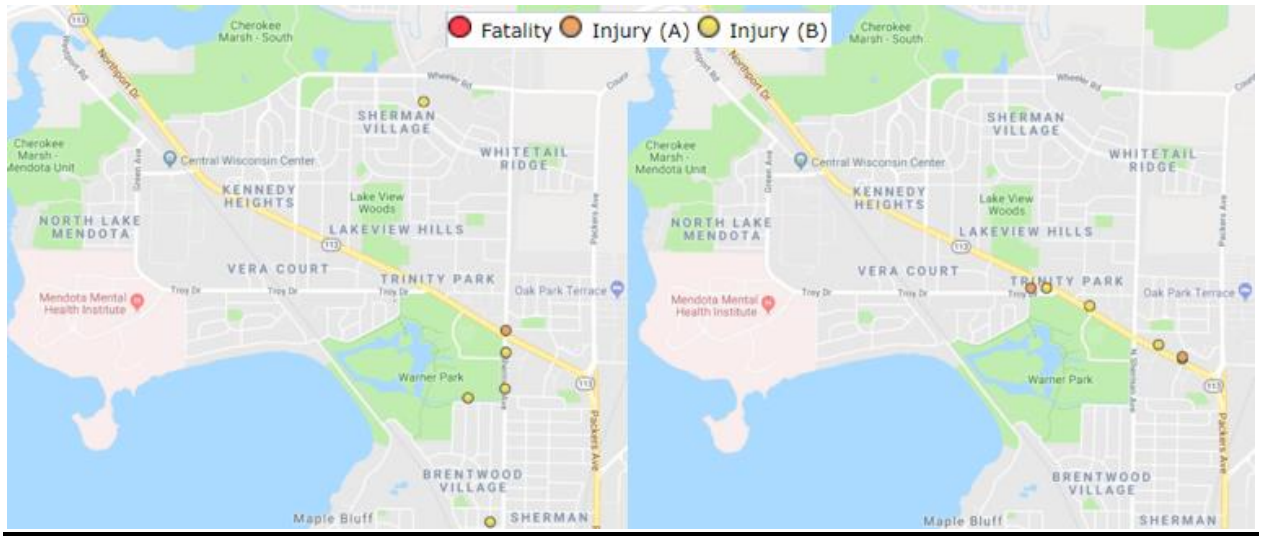

Figure 3: Bicycle (L) and Pedestrian (R) Crashes Near Mendota Elementary Attendance Area January 2014-March 2018

Source: Community Maps accessed by author March 13th, 2018 (located at https://transportal.cee.wisc.edu/partners/community-maps/crash/search/BasicSearch.do)

Parent concerns frequently mirrored spatial transportation inadequacies. From signage to crosswalks to sewer grates, there are many facility challenges that would inconvenience active transportation to and from school. Several streets had sidewalks on both sides that would reduce to one side, then to nothing at all! In those circumstances, walking in the street would be the only option, and not a very pleasant one given the lackluster provisioning of signage that could ameliorate high speeds.

Within the attendance area, there was a spatial disconnect between older and newer development. While cycling near the school, more people were walking amongst the older, smaller properties, sidewalks or not. Broadly, newer developments adequately provisioned sidewalks, but overlooked implementing painted crosswalks or cycling facilities. These streets, though fun to bicycle up and down due to elevation changes, felt sterile. The streets were broad; many streets on the western edge of the attendance area had a great enough width for two travel lanes and two parking lanes (whether two lanes of parking *is* allowed is unknown).

On a more positive note, there is excitement for change in the community, especially when looking at health, transportation, and quality of life. Though street conditions are not sufficiently deteriorated to necessitate rebuilding, the good shape of the pavement suggests several simple fixes may be implementable to make it easier for students and parents to walk or bike to Mendota Elementary.

Suggestions and Avenues of Action

In the short term, Safe Routes to School and the school district should **press forward on their data collection efforts.** Much of what we know about SRTS in Madison uses data several years old. Updated information is needed, and outreach plans to collect this information are in the pipeline. Community engagement must be a central tenet of the new SRTS plan for MMSD; only with established capacity can the program—and more importantly, the acceptance and desire to walk/bike to school—thrive.

In addition to data collection and clear and effective communication, work should **proceed with choosing several streets to mark as bicycle boulevards, active transportation corridors, etc.** Preferably, these streets would not be main thoroughfares; instead, they would be in the heart of a neighborhood or area that channels pedestrians and bicyclists (this would also assist in doing walking school buses/other school programs). Choosing the right streets will hinge upon data being able to show synergistic overlaps between concentrations of student population and the facilities available.

Where facilities are lacking, efforts should be made to **inexpensively provision solutions such as posting speed signs, painting crosswalks, and replacing sewer grates where most appropriate.** These actions will keep cost down while showing residents that investments are being made in their community. Given the width of many of these streets, fears regarding parking loss could be allayed while still adding a painted bike lane or walking path where sidewalks currently do not exist.

Of course, there are limitations to the work expressed in these pages, and thus the recommendations that may be offered. While SRTS has outreach efforts planned, this research was constructed against the backdrop of the first program, meaning some data reaches back five to six years. As coded, a decrease in facility prevalence led to a lower score which would influence the hypothesis testing. A future mapping effort would do well to weight the length of a facility as compared to the street where it exists. By doing so, a weighted score for sidewalks, as an example, would better clarify the extent of facilities present and where additional resources may (or may not) be directed.

It will take vigor from SRTS and the community to take the recommendations within these pages and elsewhere to make a new, better reality. But taken together, these suggestions can enact lasting health and transportation change for Mendota Elementary school and the surrounding community.

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"UW-Madison MS Candidate with Data Question." E-mail to Christy Bachmann. March 09, 2018.

Appendices

Appendix 1: Outreach

The following meetings were attended by the author for outreach purposes: sharing knowledge, asking questions, and obtaining data:

- February 22nd, 2018 meeting with Marcia Morales of SRTS, Aronn Peterson of MMSD, and Diane of UW-Health.
    - Discussed first iteration of MMSD's program, upcoming efforts and data availability.
- February 26th, 2018 night meeting with Mendota Elementary parents and administrators
    - After presentations on Troy Farm/Community Groundworks, UW Healthy Kids Collaborative, and SRTS, I introduced myself to the community and outlined my collaborative efforts with the school.
- March 9th, 2018 Mendota Elementary PTO Silent Auction Night
    - Talked with parents and students in the gym during the silent auction activities.
    - For qualitative feedback, I asked **two questions**:

      1. What is the BIGGEST barrier to a student walking or bicycling to school?

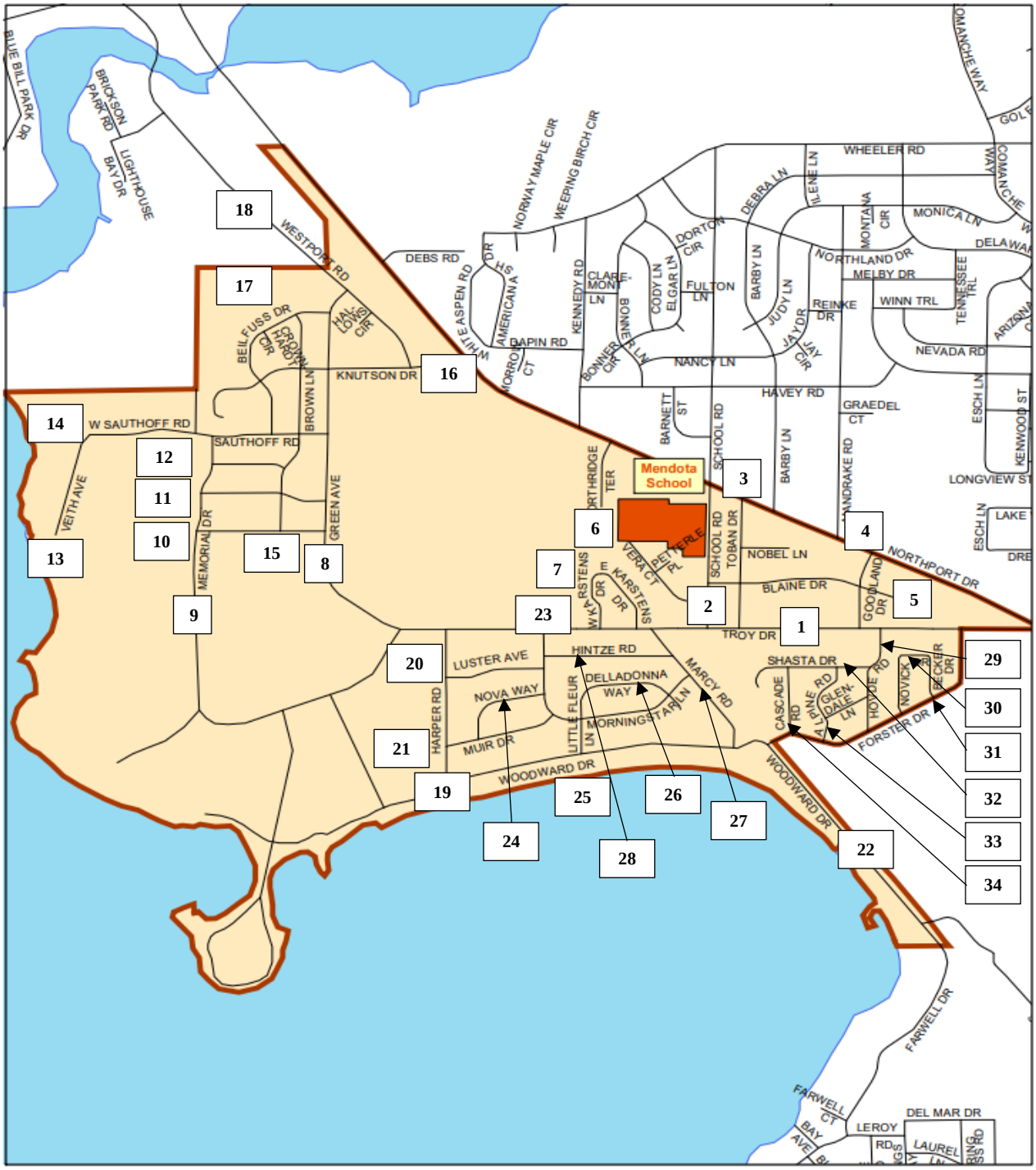
        - Safety
        - Rules—from the school district or guardians
        - Weather
        - Terrain
        - Distance

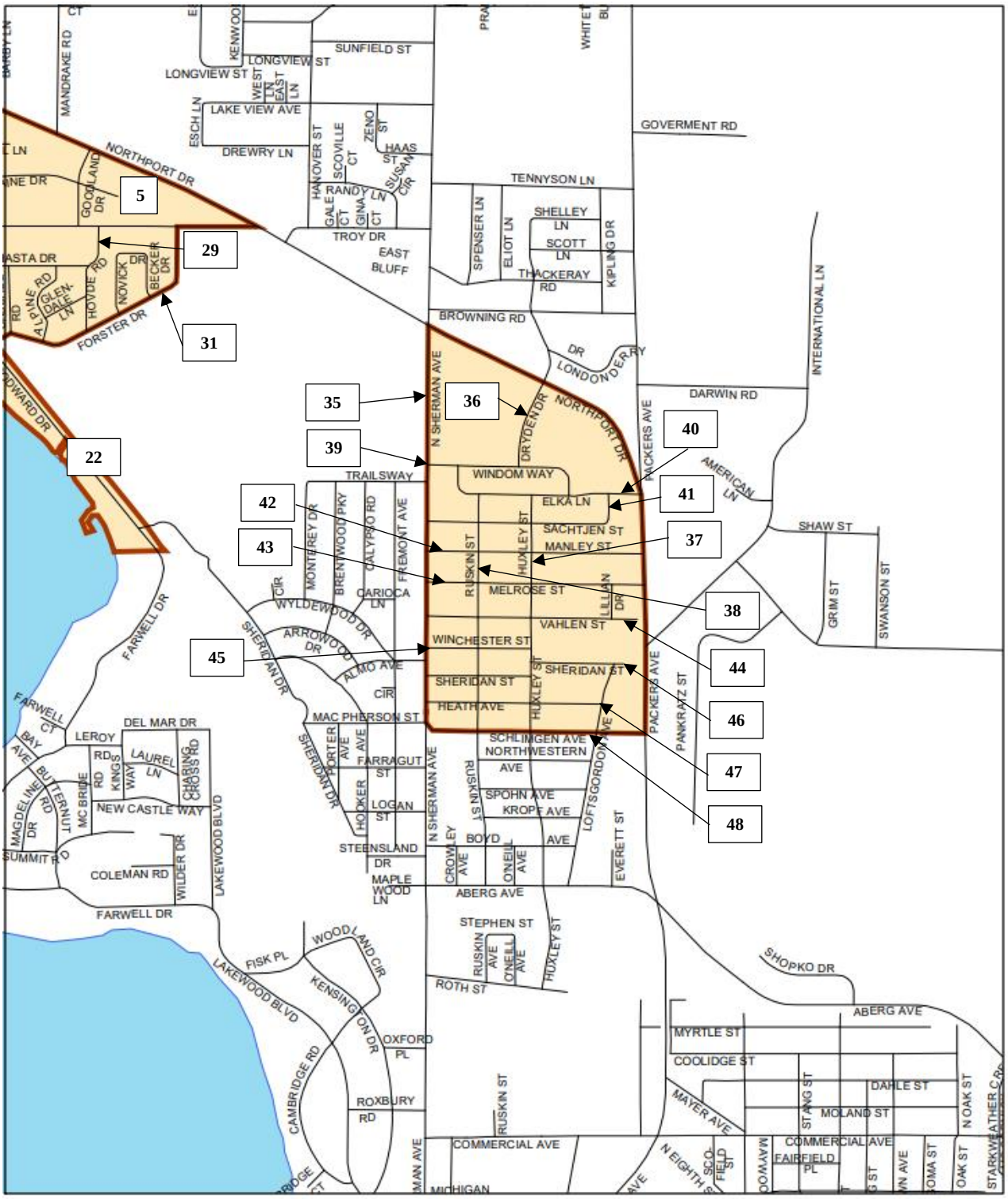
      2. What is the BIGGEST safety worry concerning students walking or bicycling?

        - Vehicle Speeds
        - No necessary infrastructure, like sidewalks or bike lanes
        - Signage
        - Lighting
        - No presence of adults / trustworthy individuals
- March 13th, 2018 Mendota Elementary PTO Meeting
    - Discussed my project and answered questions as well as solicited feedback for projects and ideas.
- March 16th, 2018 meeting with Andi Bill of UW-Madison College of Engineering
    - Discussed WisTransPortal, Crash Reports, and the geographic information system (GIS) tool Community Maps.
- Email correspondence with Christy Bachmann, City of Madison-Engineering Division and Stephen John Heiny, of the National Center for Safe Routes to School
    - Requested data access that enabled me to see recent and upcoming projects near the school attendance area.

Appendix 2: Assigning Identification Numbers to Street Segments

The following maps are from MMSD's website (located at https://www.madison.k12.wi.us/files/Mendota.pdf). The top of the page represents true North, and the numbers label street segments whose attributes may be read in Appendix 3.

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BROWNING RD
TROY DR
EAST BLUFF
TENNYSON LN
GOVERMENT RD
LONGVIEW ST
SUNFIELD ST
LAKE VIEW AVE
DREWRY LN
N SHERMAN AVE
DRYDEN DR
LONDONDERRY DR
DARWIN RD
INTERNATIONAL LN
PACKERS AVE
AMERICAN LN
WINDOM WAY
TRAILSWAY
ELKA LN
SACHTJEN ST
MANLEY ST
MELROSE ST
VAHLEN ST
WINCHESTER ST
SHERIDAN ST
HEATH AVE
MAC PHERSON ST
SHAW ST
GRIM ST
SWANSON ST
FARWELL DR
SHERIDAN DR
ARROWOOD DR
ALMO AVE
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CARIOCA LN
MONTEREY DR
BRENTWOOD PKY
CALYPSO RD
FREMONT AVE
RUSKIN ST
HUXLEY ST
LILLIAN DR
DEL MAR DR
LEROY
LAUREL LN
KINGS WAY
CHARING CROSS RD
NEW CASTLE WAY
BUTTERNUT RD
MC BRIDE
MAGDELINE DR
SUMMIT RD
COLEMAN RD
WILDER DR
LAKEWOOD BLVD
FARWELL CT
FARWELL BAY AVE
PORTER AVE
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HOOKER
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CROWLEY AVE
O'NEILL AVE
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PANKRATZ ST
STEPHEN ST
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WOOD LAND CIR
KENSINGTON DR
OXFORD PL
ROXBURY RD
CAMBRIDGE RD
SHOPKO DR
MYRTLE ST
COOLIDGE ST
DAHLE ST
MOLAND ST
MAYER AVE
COMMERCIAL AVE
FAIRFIELD PL
N OAK ST
OAK ST
N EIGHTH ST
MICHIGAN

Appendix 3: Mapping Routes with Potential to Be "Active Transportation Corridors" March 13th, 2018

Mapping Mendota Elementary's attendance area necessitated turning qualifiable observations into quantifiable commodities. To do so, the facilities were coded according to three criteria:

- Value of zero (0): The facility is not seen or provided.
- Value of one (1): The facility is on **one** side of the street. (**If present, code = 1** for painted crosswalk, bike-safe sewers, and signage).
- Value of two (2): The facility is on **both** sides of the street.

Please note that where a facility reduction occurs (ie, a street with sidewalks on both sides is reduced to just one side), the lower coded value is recorded in the attribute table below.

		Facilities					
ID	**Street**	**Parking**	**Sidewalk**	**Painted Crosswalk**	**Bike-Safe Sewers**	**Signage**	**Other**
1	Troy Dr.	0	1	1	0	1	Signage for No Parking
2	School Rd.	2	2	1	1	1	Signage for School Zone
3	Toban Dr. & Nobel Ln.	2	0	1	0	0	Half-and-half of no sidewalk / sidewalk fully provisioned
4	Goodland Dr.	0	2	0	1	1	Speed Limit 25 mph
5	Blaine Dr.	2	2	0	0	1	
6	Vera Ct & Petterle PL	1	2	0	0	1	
7	W & E Karstens Dr.	2	0	0	0	0	
8	Green Ave.	0	1	0	0	1	No Parking signs
9	Memorial Dr.	0	0	0	0	0	
10	Pine View Dr.	2	2	0	0	0	
11	Meadow Ridge Ln.	1	2	0	1	0	
12	Briar Crest St.	1	2	0	0	0	
13	Veith Ave.	0	0	0	0	0	
14	(W.) Sauthoff Rd.	0	0	0	0	0	Sidewalk transition

15	Brown Ln	1	2	0	0	0	
16	Knutson Dr.	0	0	0	0	0	Sidewalk transition
17	Beilfuss Dr.	1	2	0	0	0	
18	Westport Rd.	0	0	0	0	0	
19	Harper Rd.	0	0	0	0	0	
20	Luster Ave.	2	0	0	0	0	
21	Muir Dr.	2	2	0	0	0	
22	Woodward Dr.	0	2	0	0	0	
23	Morningstar Ln. & Lerdahl Rd.	1	2	0	1	0	
24	Nova Way	1	2	0	0	0	
25	Little Fleur Ln.	2	0	0	0	0	Sidewalk transition
26	Delladona Way	1	2	0	0	0	
27	Marcy Rd.	1	0	1	0	0	
28	Hintze Rd.	0	0	0	0	0	
29	Hovde Rd.	1	0	0	0	0	
30	Novick & Becker Dr.	0	2	0	0	0	
31	Forster Dr.	1	1	0	0	0	
32	Shasta Dr.	2	0	0	0	0	
33	Alpine Rd. & Glendale Ln.	2	0	0	0	0	
34	Cascade Rd.	1	0	0	0	0	
35	N. Sherman Ave.	0	2	1	1	1	Bike lanes present.
36	Dryden Dr.	1	2	0	0	0	
37	Huxley St.	2	2	0	0	0	
38	Ruskin St.	1	2	0	0	0	
39	Windom Way	2	2	0	0	0	
40	Elka Ln.	1	2	0	0	0	
41	Sachtjen St.	2	2	0	0	0	
42	Manley St.	2	2	0	0	0	
43	Melrose St.	1	2	0	0	0	
44	Vahlen St.	2	2	0	0	0	
45	Winchester St.	2	2	0	0	0	
46	Sheridan St.	2	2	0	0	0	
47	Heath Ave.	2	2	0	0	0	
48	Schlimgen Ave.	2	2	1	0	0	