SAFE ROUTES TO SCHOOL PLAN

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All illustrations by Jeffrey Linn unless otherwise noted

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INTRODUCTION

In this plan, the case for creating Safe Routes to School will be examined by looking at both the dangers of walking and biking as well as the dangers of *not* walking or biking. A vision of a safer environment for the kids of McDonald International School and surrounding schools will be presented, and then practical measures for creating this environment, in forms of both organization-building and engineering, will be suggested.

Creating safe routes to school is ultimately just a part of a larger process of creating safe communities. Although this document focuses on the McDonald International School and its associated reference area, schools are not isolated from the rest of the world. Increasing safety for children means increasing safety for everyone. Safe Routes to School are safe routes for all pedestrians, all bicyclists, all children, and all people.

The McDonald International School

Originally opened in 1914, the McDonald School is located in the Wallingford neighborhood of Seattle, near the small commercial area of Tangletown. It was closed as a permanent public school in 1981, and was leased to a school for alternative medicine and a school for intercultural learning. Since 1998, it has been used by Seattle Public Schools as a temporary site for student populations whose schools were being renovated. The school was itself recently renovated in response to demographic changes in the area, and will re-open in the fall of 2012 as the McDonald International School. Its core focus is language immersion, with programs in both Spanish and Japanese offered. It serves a diverse geographical area that includes portions of the neighborhoods of Wallingford, Roosevelt, and the University District. It is divided by several major arterials, and split in half by an Interstate freeway.

Problem Statement

The reference area that contains most McDonald School families is divided by a major surface arterial and a freeway. 50th Street divides the school area into north and south. Interstate 5 divides the school area into east and west. Each of these is a major barrier for pedestrians and bicyclists who may want to get to the McDonald School. 50th Street in particular, although it is a more permeable barrier, holds a high degree of danger for pedestrians from cars. With the re-opening of the McDonald School, it is critical to the safety of the children that we address the hazards of automobile traffic, and strive to create solutions that increase pedestrian and bicycle safety while maintaining mobility along the 50th Street corridor.

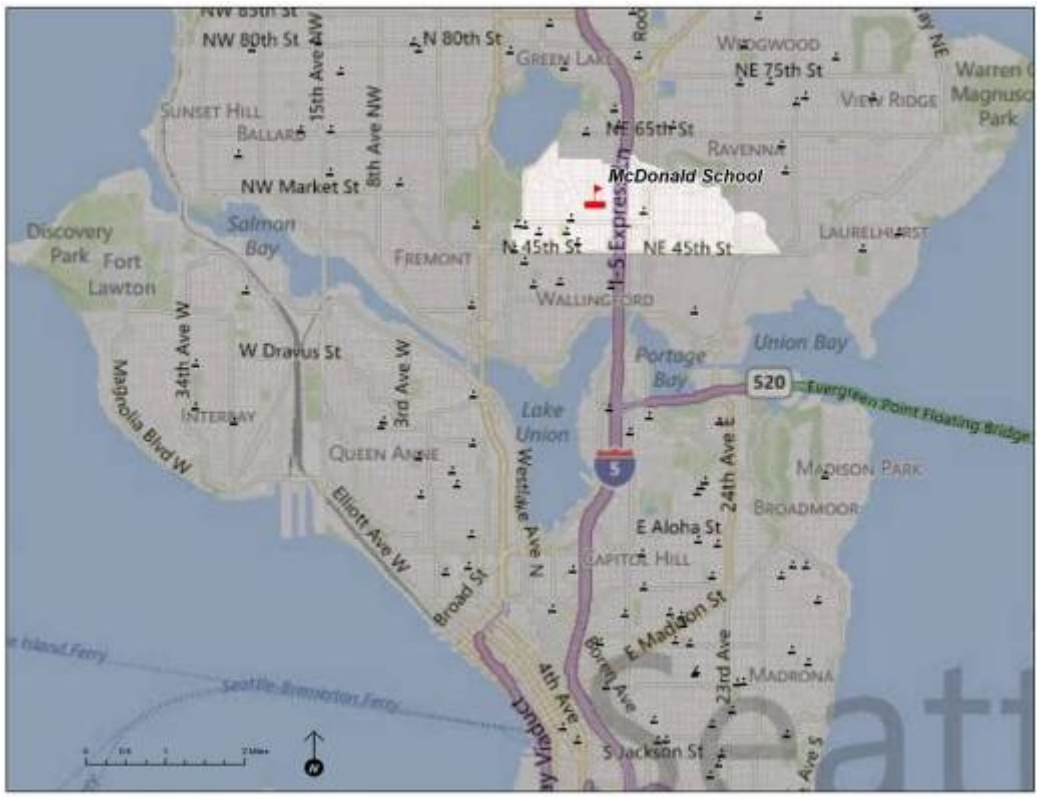

Figure 1—Location of McDonald International School reference area

Public Health

According to the Centers for Disease Control and Prevention, the number one cause of death in 2009 for children ages 1-18 was motor-vehicle-related injuries. Of these children, 14% were pedestrians or bicyclists[1]. Death by motor vehicle is a true epidemic, and we can do more to protect our most vulnerable population.

On a per-trip basis, the safest mode of travel to school for kids age 5-18 is the school bus. The most dangerous mode for the same ages is a passenger vehicle operated by a teen driver. Bicycling and walking fall between these two extremes[2].

Active Transportation and Obesity

In 1969, 42 percent of children walked or biked to school. By 2001, 16 percent did[3]. In a similar time frame, in 1971, 5% of all American children aged 2-19 were classified as obese. In 2008, nearly 17% were. Although rising obesity rates may also be attributable to diet, declining rates of active transportation such as biking and walking certainly contribute to the obesity epidemic. Studies have shown that the "…health benefits of active commuting to school include higher rates of physical activity and higher cardiovascular

[1] Centers for Disease Control, WISQARS, accessed 3/07/2012.

[2] Transportation Research Board, 2002, p. 90.

[3] CDC website: http://www.cdc.gov/nccdphp/dnpa/kidswalk/then_and_now.htm

fitness among youth, which are linked with reduced risk for coronary heart disease, stroke, cardiovascular disease, and cancer."[4]

Walking and bicycling can be dangerous short-term activities for children. *Not* walking or bicycling can be dangerous long-term behaviors for children. How do we balance the danger of cars to pedestrians and bikes with the consequences of inactivity and obesity faced by a growing number of kids? The conclusion that many parents and schools are coming to is to make biking and walking safer. The Safe Routes to School program is helping to do that.

Safe Routes to School

Safe Routes to School (SRTS) is a concept developed in Denmark. Successful programs were developed there in the late-1970s to reduce the number of children killed while walking or biking to school. The concept was brought to the United States in the mid-1990s, and in 2005 became a federally-funded program administered by the Federal Highway Administration as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU). This program distributed $612 million between 2005 and 2009 to the development of programs to enhance the safety of children whose families choose active transportation to school.[5] SRTS improves the safety of children's active transportation through what is known as the "Six E's":

Education
Safe practices and designated safe routes need to be communicated to the school community.

Encouragement
A community where active transportation is accepted and normal encourages all families to participate. Special events promoting walking and bicycling also encourage greater participation.

Enforcement
Enforcement of speed zones and distracted driving laws are crucial to creating a safe walking environment.

Engineering
Engineered solutions have an important role in creating safe, traffic-calmed streets.

Evaluation
Knowing what works and what doesn't work enables planners to make the right decisions.

Equity
It is important to create opportunities for all students to participate in active transportation to school.

The McDonald School will need to address all of these issues to create a safe, equitable environment for children on their way to school.

Although the movement is very young, Seattle has a very active and enthusiastic SRTS community. At a recent citywide organizing meeting, representatives from at least 14 schools participated. Non-profit groups like Feet First and the Cascade Bicycle Club provide schools with expertise and advocacy.

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[4] Transportation Research Board, 2002, p. 90.

[5] http://www.saferoutesinfo.org/about-us/mission-and-history , Accessed 5/14/2012.

Biking and Walking—Different Needs

Walking is a finer-grained action than bicycling—"Pedestrians must be able to cross streets and highways at regular intervals…pedestrians cannot be expected to go more than 300 to 400 ft. out of their way to take advantage of a controlled intersection."[6] Bicyclists, because of their greater speed, can be more flexible with less direct routes.

These differences make it important to plan with each of these active modes of transportation in mind—it may be reasonable and economical to have a safe crossing for bicycles every few blocks of a busy arterial, because people on bicycles can travel more quickly to the next safe crossing. It is not reasonable to do this for pedestrians, regardless of the money that may be saved on infrastructure. Pedestrian infrastructure requires a safe crossing on every block to accommodate the smaller-scale patterns of walking.

Safe Routes to School for All Ages—A Long View

The focus of most Safe Routes to School programs, as well as this document, is on the creation of safe travel for elementary school children. Although most of this plan will look at issues specific to the McDonald School, an important digression is to look at the needs of connecting to other schools—elementary schools, middle schools and high schools. Of course, younger children have a unique need for a safe environment—many parents will tell you that their elementary school kids are less aware of the dangers in their environment, and may be more likely to barrel into a dangerous place like a street without looking both ways. At the same time, it is important to discuss all stages of childhood, adolescence and adulthood. Travel routes to schools are not isolated from the rest of the world, and may be used by people of a variety of ages.

The need for safe environments does not end when a child starts middle school. Arguably, there may be even greater need as children steadily become more independent from their parents, and begin to wander further afield without adult supervision. Each ascending level of school has an expanding geographic area and an increasing number of students. As the kids grow, the distance they need to travel expands, and their active transportation needs change. Middle schools service larger geographic areas and student populations, and high schools service even more. At each stage, a cohort of students is becoming more and more independent, and will need the safety benefits provided by improvements to cycling and pedestrian infrastructure.

[6] *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*, Institute of Transportation Engineers, 2006, p141.

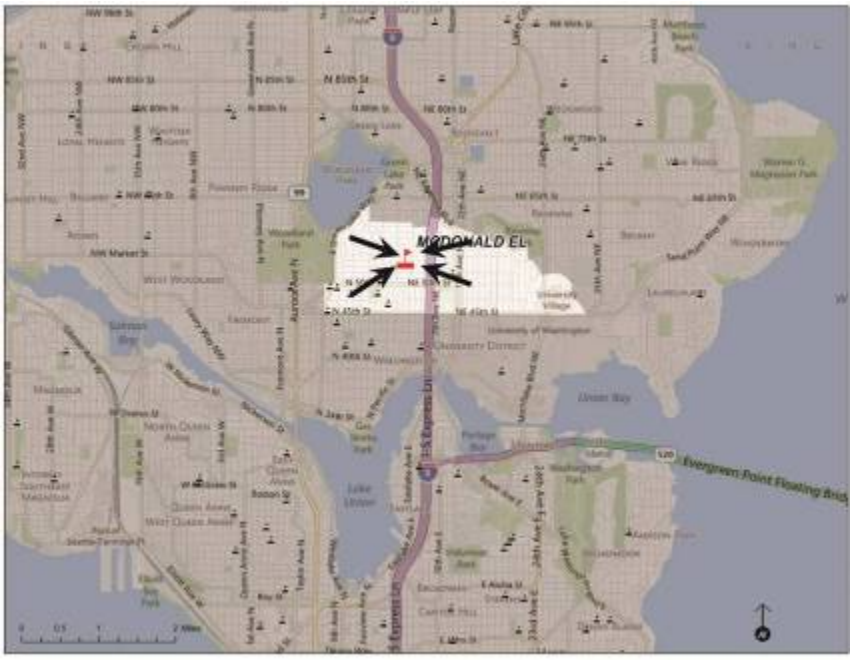

Figure 2--McDonald School Reference Area

Each ascending level of school has an expanding geographic area and an increasing number of students. As the kids grow, the distance they need to travel expands, and their active transportation needs change. Regardless of the physical obstacles that may be in their way, elementary school children generally have shorter distances to travel.

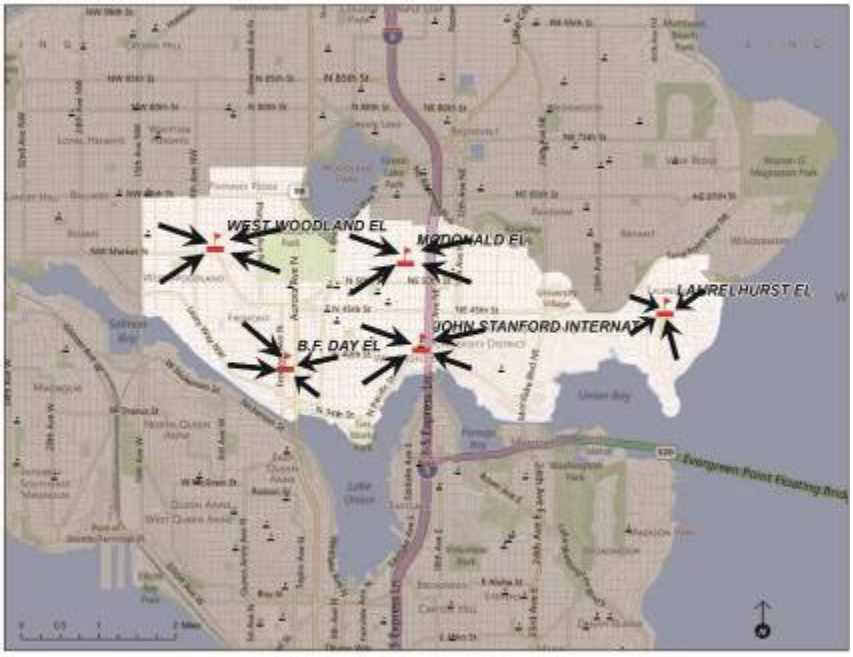

Figure 3—Hamilton Middle School Reference Area with Reference Schools

Each school in the Hamilton Middle School reference area has a relatively short distance to travel within their individual reference areas. As children transition into middle school, they may have greater autonomy, but they also have longer distances to travel, presenting new challenges to their abilities to walk or bike to school. These increased distances may also encompass new obstacles—highways, arterials and other roadway dangers.

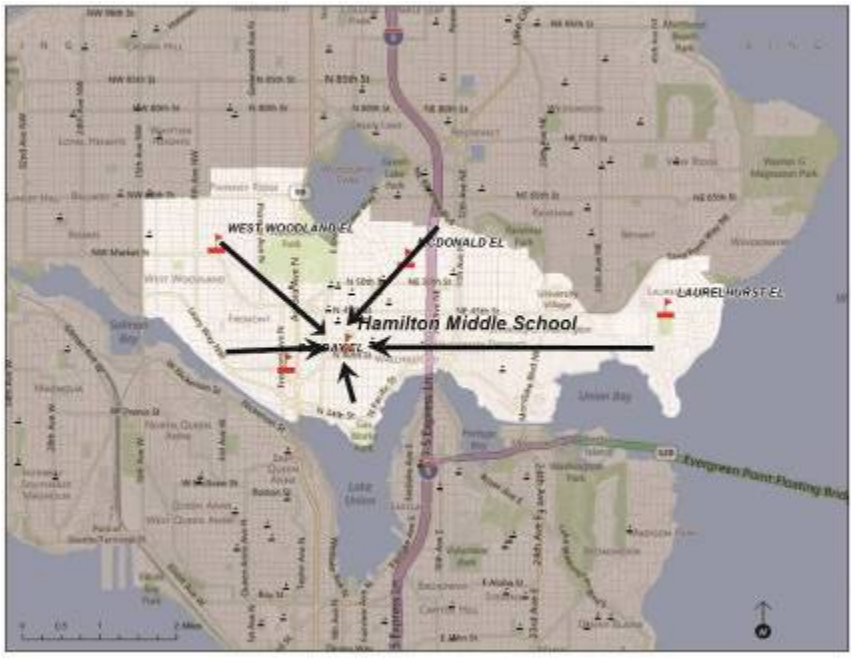

Figure 4—Hamilton Middle School Reference Area

The potential Lincoln High School reference area may have very different barriers—some students may need to cross the Lake Washington Ship Canal, which has only four pedestrian/cyclist-friendly bridges.

Figure 5—Potential Lincoln High School Reference Area

Attention to safe routes shouldn't end with childhood. College students cannot always afford to drive; if they're struggling, a car can be a financial burden that severely impacts their ability to devote time and energy to their studies. A community that supports the ability to walk and bike to school enables students to live more frugal, car-free lifestyles that are financially sustainable.

Figure 6—UW Students may potentially bike from any location in Seattle or the Eastside

This document focuses on the need of children for safe routes, but the need doesn't end with childhood. Every age of life would benefit from increased safety on city streets, especially the elderly and disabled. Safe routes to school equal safe streets and safe cities for all people.

The neighborhoods of North Seattle, especially those immediately north of the Lake Washington Ship Canal, have unique opportunities to create a system that serves all students, in all stages of life. A child is born and grows up in a walkable neighborhood of North Seattle. That child walks or is pushed in a stroller to preschool. In elementary school he or she is accompanied by parents or a caretaker as they walk or bike to school. The middle school may be further from home, but the child is independent enough, and the streets are safe enough, to ride bikes there with her friends[7]. In high school there is no need for a car, because the newly refurbished Lincoln High School is close enough to bike. Now a young adult after high school, he or she decides to attend the University of Washington. The college student may decide to live at home, stay in the dorms, or rent an apartment, but the need for local transportation is met by a safe, effective system of pedestrian infrastructure, greenways and bike lanes. Through it all, the grown child has led a lifestyle that keeps him or her healthy and fit. Safety was never in doubt because there is an excellent system of routes that calm traffic and create safe crossings of busy arterials.

Seattle Greenways

How do we tie these schools together and create a network of safe, friendly infrastructure for cyclists and pedestrians? The answer at hand may be a system of greenways.

Greenways are generally side-streets that have additional traffic-calming infrastructure and markings. They have been widely adopted in Portland, OR, and are gaining a vibrant community of advocates in

[7] Over 67% of McDonald parents responding to a survey stated that they would consider letting their child bike to school alone by the 6th grade.

Seattle. Greenways are corridors where "…cars, bicyclists and pedestrians share the roadway, all having the equal right to make use of the space."[8]

As of spring, 2012, only one greenway route has been implemented in Seattle. This greenway happens to be in Wallingford, about twelve blocks south of the McDonald School. Greenway advocacy groups from various Seattle neighborhoods are discussing the new routes that they would like to see put in place. If planned and executed with schools in mind, these routes can serve as the safe biking corridors needed for kids in Seattle, creating vital connections between neighborhoods and schools.

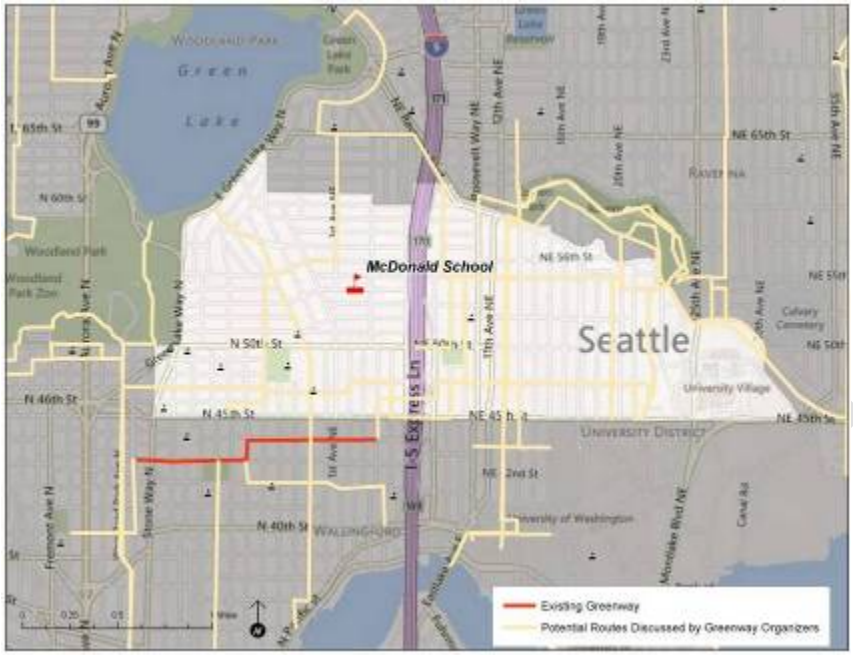

Figure 7—Existing and Potential Greenways near McDonald School

In Wallingford, there are several additional routes that are being discussed. Routes that would have the greatest effect on the McDonald School are the north/south routes connecting Wallingford to Green Lake. These greenway routes, in addition to Safe Routes to School measures, have the potential to create safer crossings of 50th Street. Two potential routes being discussed cross 50th Street at Sunnyside and 1st Ave NE. There is a connection being discussed between the University District and Wallingford on 47th Street. Above 45th, the only opportunity to connect these two neighborhoods is 50th Street. This is a difficult and dangerous route, especially west of I-5, and has not been discussed as a greenway route into Wallingford—any discussed route ends at the west side of I-5. All potential routes are loosely defined at this point, but any routes traveling near the McDonald School, or any school, should be planned and built in a manner that allows schoolchildren to use them. For greenways and Safe Routes to School to work together efficiently, they should connect all the local schools.

Other nearby Schools

[8] Seattle Neighborhood Greenways website (https://neighborhoodgreenwayssea.wordpress.com/), accessed 5/16/2012

The McDonald International School reference area is bordered on the north by the Green Lake Elementary School area, on the east by the Bryant Elementary School area, on the south by the John Stanford International School area, and on the west by the B.F. Day Elementary School and West Woodland areas. Private schools within the McDonald reference area include the University Child Development Center (UCDS), the Meridian School, St. Benedict School, and the Seattle Waldorf School. There are also many preschools in the area, including the city-sponsored Wallingford Co-Op Preschool. The interest of each of these schools has the potential for overlap—what will improve safe routes for one of these schools may also improve routes for the others. Creating safe crossings of 50th Street would benefit the Meridian School, St. Benedict, Seattle Waldorf and the Wallingford Co-Op Preschool simply by virtue of their proximity to 50th Street.

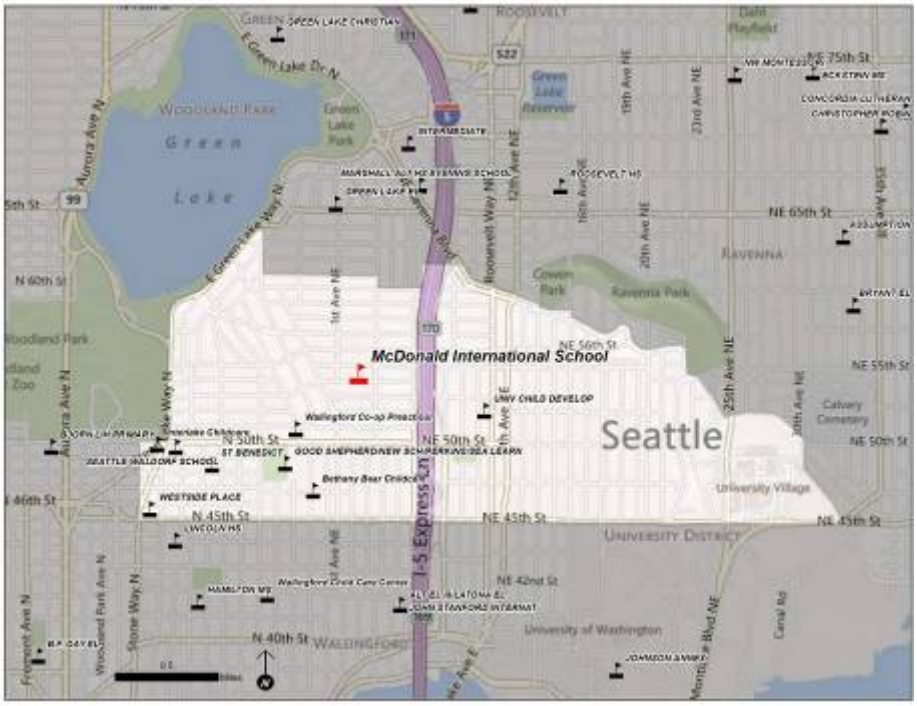

Figure 8—Schools near the McDonald International School

Beyond the preschool and elementary school levels, Hamilton Middle School and the Lincoln High School site are also nearby, just to the south of the McDonald School reference area. Creating safe routes to each of these schools may also indirectly benefit McDonald, just as creating safe crossings of 50th Street and other hazardous arterials within the McDonald area would benefit these other schools.

Relevant City of Seattle Plans

PEDESTRIAN MASTER PLAN

The Seattle Pedestrian Master Plan "…requires that pedestrian connections be made to and among parks, shops, civic spaces, work spaces, and other land uses…" This plan prioritizes potential project areas based heavily on three criteria[9]:

1. Potential pedestrian demand
2. Equity (low equity creates a high ranking)
3. Corridor function

These criteria are summarized in a Pedestrian Priorities map (Appendix 3). Interestingly, of the many priority crossings specified in the eastern half of the McDonald School reference area (within the University District/Ravenna neighborhoods), nearly all are literally along the border of the area. 45th Street and Ravenna Blvd, which define the south and north boundaries, each have five or six designated crossings. One crossing within the reference area, at 50th Street and University Way, may have some minor benefits to the kids of the McDonald School. In the western half of the reference area there are no designated tier-1 crossing priorities.

West of I-5, the 50th Street and Meridian Avenue corridors both have relatively low priority scores in the Pedestrian Master Plan. This is despite the high rankings they receive in the Corridor Function analysis. For the other two criteria, Potential Demand and Equity, these streets have low rankings. Wallingford, being a relatively well-off area, may never have a high ranking for equity issues. Potential Demand, however, should be re-evaluated in light of the re-opening of the McDonald School. There is potential to increase the Pedestrian Priority ranking of the McDonald School reference area by re-evaluating the Potential Demand.

BICYCLE MASTER PLAN

The Seattle Bicycle Master Plan, written in 2007, is being updated in 2012. This presents an opportunity to advocate for prioritization of safe routes and crossings that will benefit the kids of the McDonald School.

UNIVERSITY DISTRICT PLAN

The University District Livability Partnership "…is a three-year strategic initiative to encourage investment for a vibrant, walkable University District neighborhood." The initiative is composed of two parts: the University District Revitalization Plan focuses on the University district urban center, from Ravenna Ave to Portage Bay. The University District Urban Design Framework is focusing on the integration of light rail into the neighborhood, within a ten-minute walk of the Brooklyn Street Station[10] at Brooklyn Ave NE.[11] Both of these University District planning zones extend well into the McDonald School reference area. As with the Bicycle Master Plan, the work being done in the University District is an opportunity to bring attention to the issues with biking and walking to the McDonald School and connections across I-5 on 50th Street and 45th Street.

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[9] http://www.seattle.gov/transportation/pedestrian_masterplan/docs/Methodology_Appendix040209_fixed.pdf Referenced 5/12/2012.

[10] The name of this station is still subject to change.

[11] Appendix 4—University District Livability Partnership

A SAFE ROUTES TO SCHOOL PLAN FOR MCDONALD INTERNATIONAL SCHOOL

Vision Statement

The McDonald International School is not isolated from the rest of the world. It is surrounded by other public school reference areas, and is a part of larger reference areas for middle and high schools. There are many other schools nearby, including private, parochial, and preschools. Children walk or bike to these places as well as parks, stores, and ice cream shops. Children are an important part of the community, and the streets should be designed to meet their needs for safety as they are and as they grow. The vision of this document is a network of safe routes to help children of all ages navigate through their neighborhoods, whether they are going to school, the playground or the store.

Although the pedestrian enhancements we show in this document are based on research of current traffic-calming practices, this is not meant to be a design document. The purpose of this plan is to provide information about the McDonald reference area, and vision for possible ways we can make it safer for our children.

The McDonald School Safe Routes to School Committee

In April of 2012, a group of parents excited about active transportation for their kids, yet concerned about the dangers of traffic, began discussions about creating safer environments for their children. This committee is organizing school events to educate and encourage biking and walking at the McDonald International School, and advocates for policy and design solutions to create safer conditions for walking and biking.

Priorities

How priorities have been determined for this plan

Seattle Public School identified crossings

McDonald School parent survey results

Personal experiences of SRTS Committee members

Action of the larger community—planned or discussed greenway routes

This is primarily a plan to identify hazardous sites for walking and biking and conceptualize engineered solutions to mitigate the hazardous environment.

All of these priorities should be considered flexible. If, for example, a lower-priority project qualifies for funding, that project should then become a higher priority.

The Current McDonald School Walk Zone

Seattle Public Schools, in cooperation with the Seattle Department of Transportation, has a walking plan in place for every school in Seattle. The zone for the McDonald International School covers one-third of the school reference area, and is confined to the area west of I-5 and north of 50th Street. This leaves two thirds of the school reference area unserved by an official walking plan (Figure 9). The largest portion of the unserved areas lies east of I-5, in the University District. A smaller unserved area is west of I-5 and south of 50th Street, in the Wallingford neighborhood. The boundaries of the Walk Zone have been set with purpose—the crossings of I-5 and 50th Street present significant hazards to pedestrians and bicyclists.

Any areas that fall outside of the Walk Zone will be served by school bus service (Appendix 1). The Walk Zone itself will not be served by buses—children will need to use active transportation or be driven to the school.

In addition to a geographic extent, the Walk Zone map specifies walking routes and crossing points (Appendix 2). The various elements spelled out in this map will be one of the documents used to establish priorities in this Safe Routes to School plan. The current Walk Zone map will be a good starting point in figuring out where to focus in establishing priorities and strategies for creating safe routes and crossings. Using it, we can make sure that the elements of safe routes are implemented in places already established by SPS and SDOT as priorities. We can then work to expand the extent of the designated walking area, and create solid engineered solutions to deal with traffic hazards.

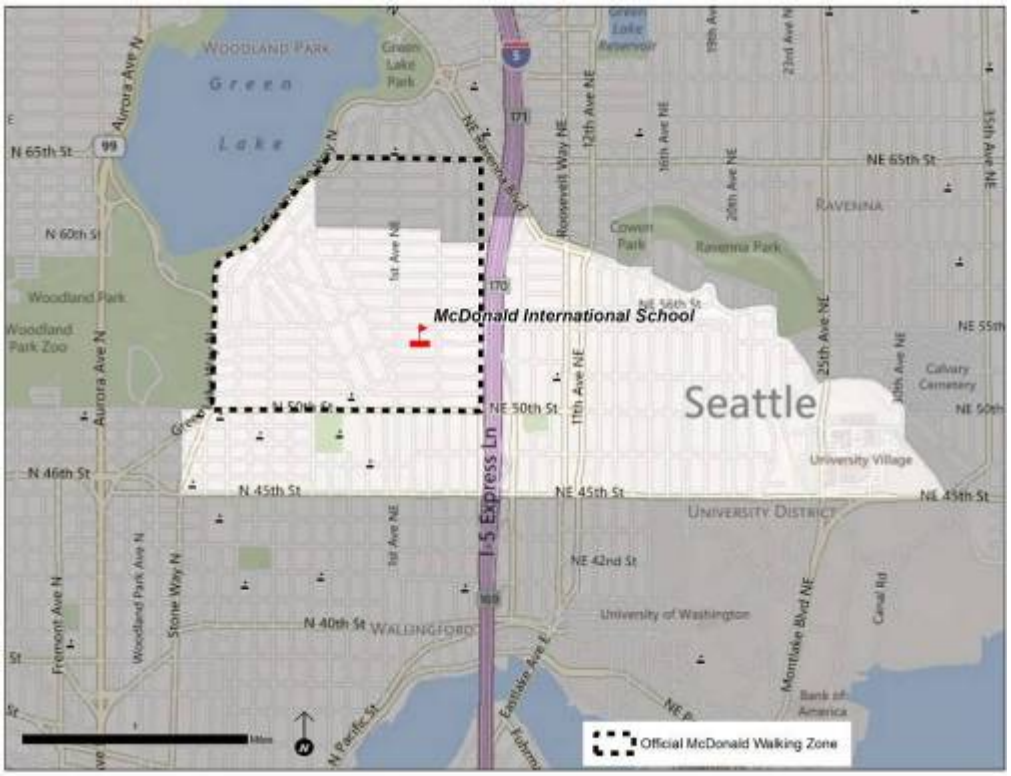

Figure 9—Extent of Official Walking Plan, with McDonald Reference Area

McDonald School Safe Routes Survey

To get information about what McDonald School parents thought about walking and biking to school, safety issues and perceived obstacles, a survey was conducted. Of approximately 120 families in the school, and about 100 incoming families, 93 responded to this online survey. Of the responses, the top issues that would affect the parents' decision to let their child walk or bike to school were:

- The age of the child (80.6%)
- Safety of intersections and crossings (72%)
- Speed of traffic along the route (62.4%)
- Amount of traffic along the route (59.1%)
- Adults to walk or bike with (57%)

There were a high percentage of parents who would let their children bike or walk to school if certain road conditions were improved. The top improvements that would make them likely to walk or bike were:

- Safety of intersections and crossings (85.3%)
- Adults to walk or bike with (86.1%)
- Lack of crossing guards (74.5%)
- Amount of traffic along route (69.8%)
- Speed of traffic along route (70.1%)

These responses are in line with discussions the McDonald Safe Routes to School Committee were having about our impressions of safety along potential walking/biking corridors.

Of the survey respondents, over 65% live within 1 mile of the school. This reflects the relatively urban, neighborhood-oriented nature of Seattle schools. It also creates opportunities to create opportunities for a walkable, bikable school for the majority of families attending, if some adverse conditions can be overcome.

Survey respondents were asked about what they saw as the worst physical obstacles between their homes and the McDonald School. Among the concerns were:

- 50th Street
- Crossing I-5
- Meridian
- Latona
- Speeding cars

Obstacles

The major obstacles for children getting to school are topography and roadway hazards. There is nothing to be done to change the topography in the area. The best we can do is to find the streets with the lowest amount of slope, and use these as the designated biking and walking routes. Roadway obstacles can be mitigated through design features and enhancements for pedestrians.

TOPOGRAPHY

There are two major topographic features in the reference area that may impede students from actively getting to school, especially biking. There are two major ridges in the reference area, one in Wallingford, the other in the University District. The Wallingford ridge, nearest the school, rises about 80 feet from I-5 to Latona Ave. Another ridge separates the University Village area from the University District, and along with the distance of this area from the school, serves to make the University Village the most isolated portion of the reference area. The topographic obstacles will affect children from the east side of I-5 more than children from Wallingford and Green Lake.

Table 1 and Table 2 show the streets that climb the ridges in Wallingford and the University District, suggesting the easiest routes for children on bikes to navigate. Based on this slope analysis, University

Village children would be best served by biking on Ravenna Blvd to get around the steep University ridge. Ascending the Wallingford ridge would be best at 47th Ave, but this may not be convenient for children crossing I-5 at 50th. These kids may be better served by 51st St, which has a relatively gentler slope (at 9.4% for 614 feet, or on 50th itself, which has a 9.5% slope, but only for 336 feet.

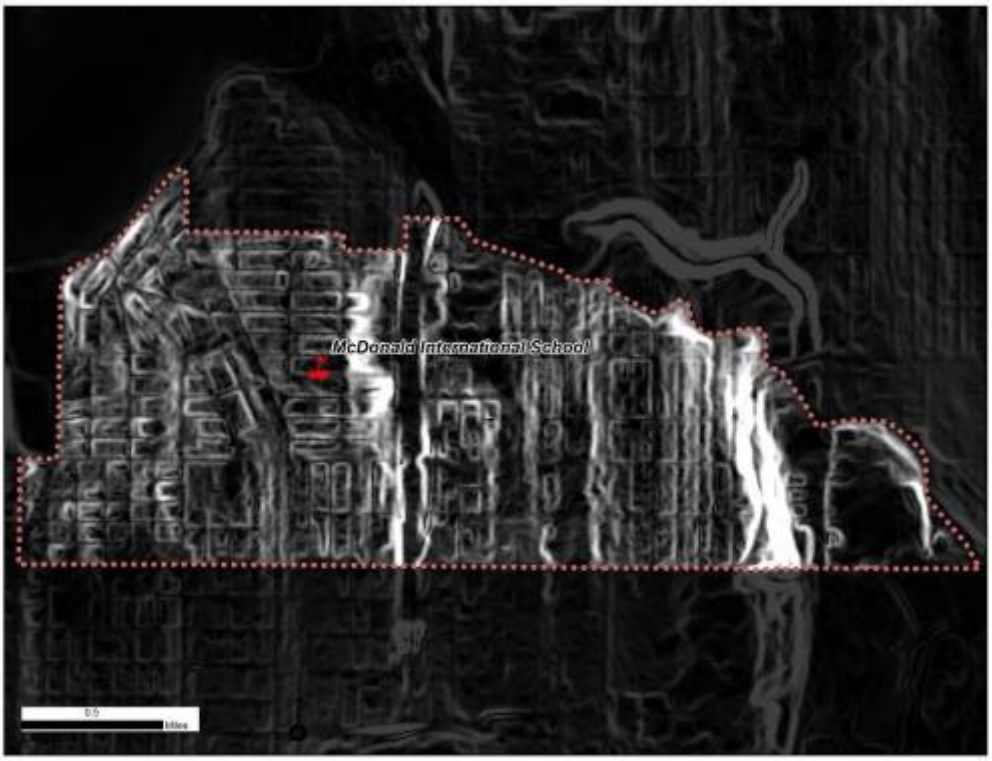

Figure 10—Steep Slopes (lighter is steeper)

street	distance	top_elev	bottom_elev	rise	slope%
47th	278	246	234	12	4.32%
50th	336	270	238	32	9.52%
51st	614	290	232	58	9.45%
52nd	598	298	224	74	12.37%
53rd	350	284	216	68	19.43%
54th	598	302	220	82	13.71%
55th	389	304	228	76	19.54%
56th	441	302	238	64	14.51%
57th	419	296	236	60	14.32%
58th	464	286	230	56	12.07%
59th	385	262	224	38	9.87%
60th	154	246	224	22	14.29%

Table 1—Steep Slopes in Wallingford (all distances and elevations in feet)

street	distance	top_elev	bottom_elev	rise	slope%
52nd	611	208	70	138	22.59%
54th	663	188	90	98	14.78%
Ravenna	2370	240	84	156	6.58%

Table 2--Steep Slopes in the University District (all distances and elevations in feet)

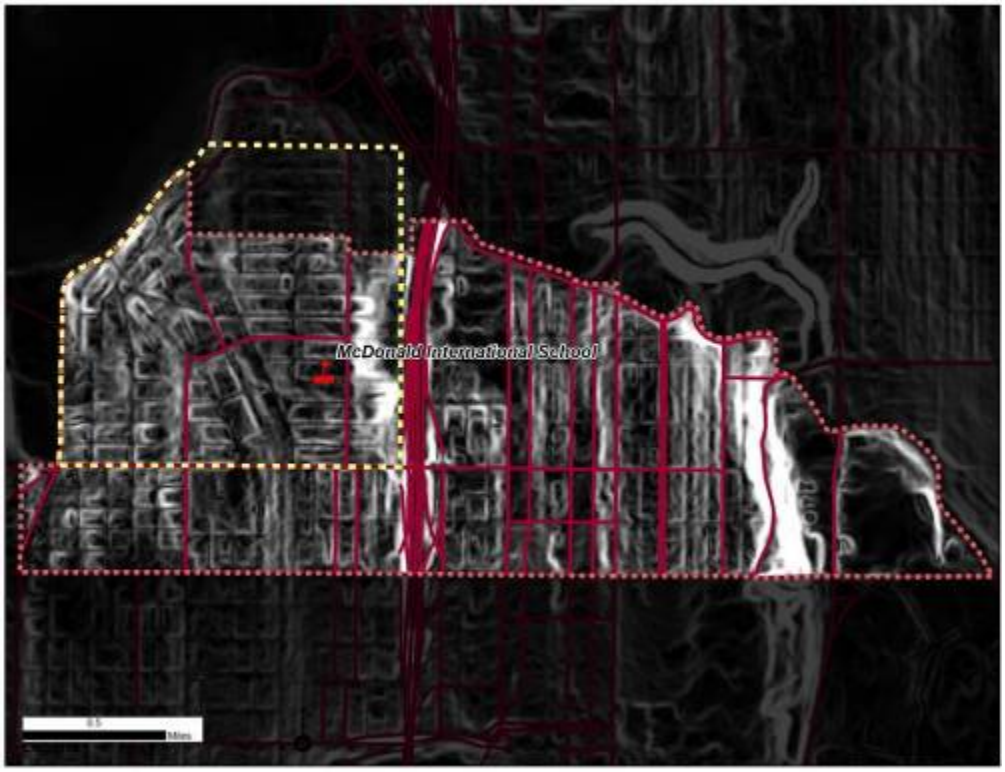

Figure 11—Arterials and Steep Slopes with SPS-Specified Walking Area

ROADWAY HAZARDS

These obstacles are primarily dangerous crossings of major arterials and freeway onramps. There are some corridor conditions that make walking along the street itself an obstacle (see the description of NE 50th in the University District). These obstacles are explained in greater detail later in this plan.

Explanation of Some Non-Engineered Solutions for Bicycle and Pedestrian Safety

There are a couple of ways to improve safety for kids without the need for more expensive built solutions. These techniques are easily implemented, require a minimum effort of organization, and can be carried out by practically any parent within walking distance of the school.

WALKING SCHOOL BUS[12]

A walking school bus is simply a group of kids walking to school together, accompanied by at least one adult. A group of children is more visible to drivers and more fun for the kids, allowing them to socialize on their way to school. All participants in a walking school bus should be taught pedestrian safety skills, and a defined walking route should be established[13]. The US Centers for Disease Control recommend an adult to child ratio as follows[14]:

[12] http://guide.saferoutesinfo.org/walking_school_bus/index.cfm, accessed 5/23/2012.

[13] http://guide.saferoutesinfo.org/walking_school_bus/index.cfm, accessed 5/23/2012.

[14] http://guide.saferoutesinfo.org/walking_school_bus/addressing_safety.cfm accessed 5/23/2012.

- One adult per three children ages 4 to 6.
- One adult per six children ages 7 to 9.
- For children 10 and older, fewer adults may be necessary.

BICYCLE TRAIN

A bicycle train is essentially a walking school bus on wheels. Bicycle safety training is recommended for both parents and children.

ENFORCEMENT

Traffic laws have the greatest effect when enforced. There are many laws which, if enforced, may increase the safety of children while traveling to school. Some of these include:

Blocking the Sidewalk

When cars are parked across the walkway, pedestrian travel can be forced out into the street. This is obviously dangerous for children and all walkers.

Distracted Driving

Talking on the phone and texting are incompatible with safe driving. At least one McDonald family has had a distracted driver hit a child while crossing 50th Street. If drivers know that distracted driving is not tolerated in school zones, some may hang it up.

Speeding

This is even more obvious and self-explanatory than the others. See the section on Speed Zones, below.

Drunk Driving

Already a law enforcement priority in Seattle, this is made more important around the McDonald School by the presence of several bars just a couple of blocks away in the Tangletown business district. Parents have expressed concern about the potential for drunk drivers to pass through the McDonald Walking Zone.

Explanation of Some Pedestrian Enhancement Techniques

Throughout this document, there will be references to different traffic calming and pedestrian safety techniques. Some techniques to calm traffic and improve pedestrian safety are explained here.

CURB EXTENSIONS

Also known as bulbouts, these create a shorter crossing for pedestrians while simultaneously increasing the visibility of people waiting to cross the street. These are the proposed solutions at several crossings in this plan.

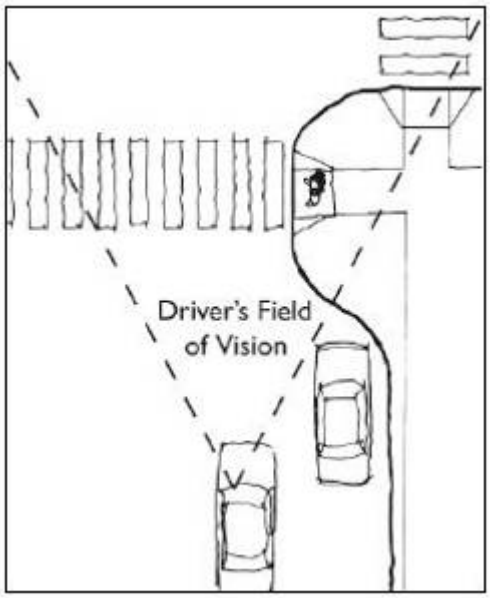

Figure 12—Curb Extensions and Field of Vision[15]

FIELD OF VISION

It is important that pedestrians approaching a crosswalk be in the driver's field of vision. Pedestrian approaches should be clear of visual obstacles, and it should be obvious that people are about to cross. Visual impediments to the field of vision can include trees, shrubs, utility poles and boxes, and street furniture. All impediments to the field of vision should be removed from the crosswalk areas.

PEDESTRIAN ISLANDS

Pedestrian islands are recommended by the Institute of Transportation Engineers where "…the crossing will be used by a number of people who will walk slower that 3.5 feet per second, such as older persons, schoolchildren, persons with disabilities…and their crossing cannot be completed in the available crossing time"[16]. Pedestrian islands create a refuge in the median of the street, shortening the path through the traveled way and allowing pedestrians and bicyclists to cross the street in two segments, stopping in the middle if needed. In this plan, pedestrian islands will be proposed at several crossings of 50th Street.

RAISED CROSSWALKS

"Raised crosswalks are speed bumps with flat tops marked for pedestrian crossings. They bring the street up to the sidewalk level, increasing pedestrian visibility and safety"[17].

Raised crosswalks may be an ideal traffic calming solution on low-volume arterials or school bus access routes where traffic circles or other measures that affect the turning radius of an intersection are impractical. Raised crosswalks will be proposed at several intersections adjacent to the McDonald School block.

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[15] Source—*Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*, Institute of Transportation Engineers, 2006, p172

[16] Ibid, p 140.

[17] *Planning and Urban Design Standards, Student Edition*, American Planning Association, 2007, p 160.

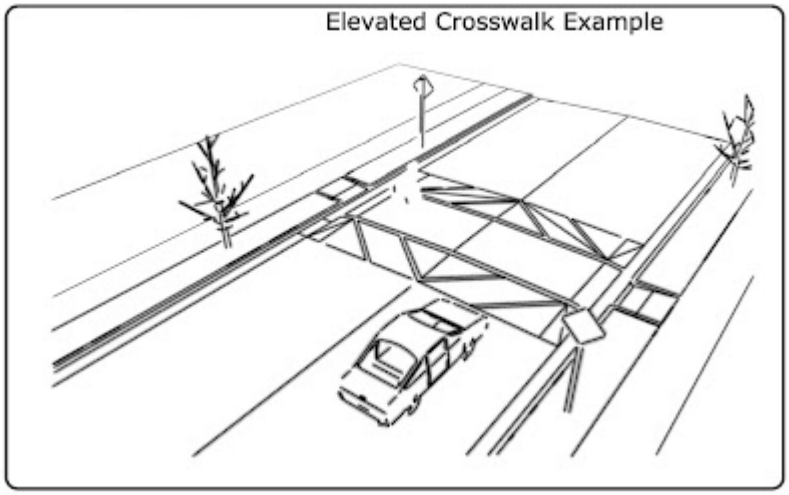


Figure 13—Raised Crosswalk[18]

TREES

A simple row of mature trees between the street and the sidewalk can increase both actual and perceived safety for pedestrians. Care must be taken, however, to make sure that they don't interfere with a driver's line of sight near crosswalks. Trees become a hazard when they obscure pedestrians from a driver's view as they are about to cross the street.

TIGHTER CORNER RADII

A tight corner radius serves a dual purpose—it slows down cars as they make a turn, and it reduces the length of the crosswalks that span the streets where they are located. As changes are made to street infrastructure, tighter corner radii should be considered as part of a traffic-calming regimen.

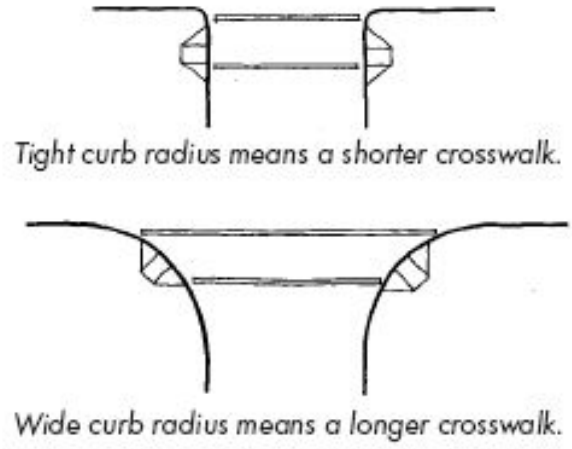


Figure 14— Benefit of Tighter Curb Radius[19]

[18] http://civilsketchup.blogspot.com/2008/04/raised-crosswalk.html , Accessed 5/25/2012.

[19] Source—*Portland Pedestrian Design Guide*, 1998

SPEED ZONES

The rate of death from pedestrian/car collisions increases dramatically as the speed of the car involved increases. Current school zone speeds in Seattle are 20 MPH, but enforcement generally begins when speeds exceed 10 MPH over the posted limit, creating a de-facto speed limit of 30 MPH in school zones. At 30 MPH, the chance of death for a pedestrian in a collision is over 40%. At 20 MPH, the chance is less than 10%.

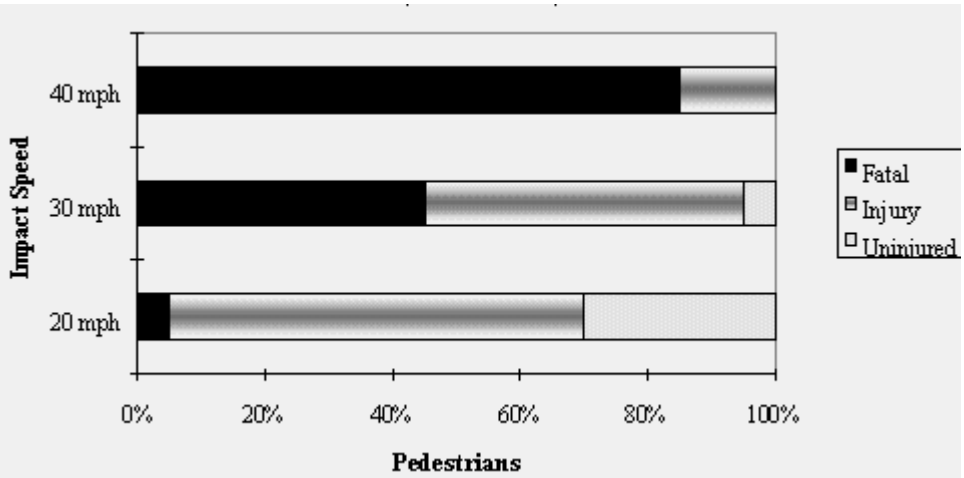


Figure 15—Pedestrian Injuries and Fatalities by Speed[20]

Some cities, such as San Francisco, have lowered their speed zones to 15 MPH around schools to address this issue. Washington state law currently prevents the City of Seattle from easily lowering these speeds, but this should be considered as a technique for hazard reduction around schools in Seattle. In addition to the lower death rate in collisions, slower speeds reduce the number of collisions that take place. They increase a driver's field of vision as well as lengthening the response time required to respond to events in the road. Slower speeds around schools are both prevention of accidents and mitigation of their effects.

[20] Source: Traffic Advisory Unit TAU, UK Department of Transport 20 mph speed limit zones Traffic Advisory Leaflet 7 91 May 1991

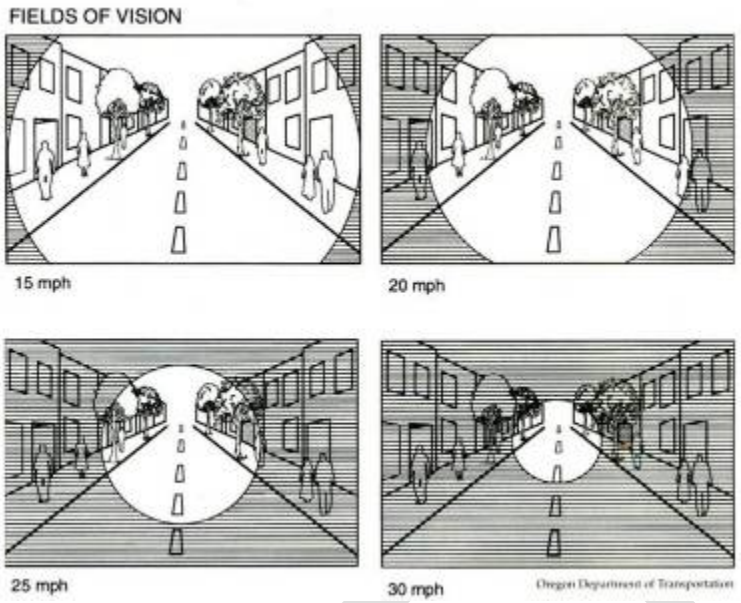


Figure 16—Effective Fields of Vision at Increasing Speeds

SIGNAGE

Signs can inform an aware driver of the presence of children, or how to navigate a stretch of road. This assumes, of course, that the driver is paying attention. Signs have little benefit for distracted or otherwise unsafe drivers, so they are no substitute for engineered traffic calming.

Figure 17—Children Crossing

Figure 18—Traffic Circle Sign

SDOT has installed Children Crossing signs (Figure 17) at every painted crosswalk in the Walking Zone. Parents, children and school staff should note when the signs are missing from the crosswalks, and inform SDOT.

Many drivers who are unaware of traffic circle protocol drive to the left of traffic circles when making left turns. This creates hazardous situations for cyclists and pedestrians who expect drivers to keep right around the traffic circles. The behavior of these uninformed motorists can be mitigated by the addition of signs (Figure 17) that show the proper way of making a left turn through these intersections.

Active Transportation Corridors for the McDonald School

The identification of active transportation corridors will enable the school, the city, and Safe Routes to School advocates to focus resources on targeted streets and sidewalks where children will be most likely to travel by foot or on bicycles, scooters or other wheeled, unpowered vehicles. Priorities for pedestrian improvements can then more easily be made, and scarce resources more effectively applied for the greatest benefit.

Seattle Public Schools and SDOT have established de-facto corridors with their walking routes maps (see Appendix 2). Although the Walking Zone Map doesn't specify walking corridors, the specified routes direct children to walk to what are essentially collector routes. These collector routes concentrate the crossings of arterials at specially-marked crossing points, which have street signage, crosswalks and curb ramps.

Because of the high-volume arterials that create major obstacles to pedestrian travel, the Walking Zone Map only serves about ¼ of the geographical area of the reference area. Corridor design could help to expand these boundaries by creating safer crossings of the hazardous arterials.

As mentioned in the introduction, there is an emerging movement in Seattle for the creation of greenways. Greenways and Safe Routes to School have overlapping interests, and planning for either one should consider the needs of both the users of greenways and the children going to school.

Along any Safe Routes to School corridor for the McDonald School, crosswalks should be installed at every street crossing, and every corner should be made ADA accessible. Bulbouts, speed bumps and tables, raised sidewalks, and other infrastructure should be considered where appropriate for traffic calming. Street signage, hazard lights, rumble strips, and related driver-warning infrastructure should be installed at the approach to any arterial crossing.

53RD—54TH STREET CORRIDOR

53rd Street from Green Lake Way N to 54th Street and McDonald School was identified by SPS/SDOT as a walking route for the McDonald School. This route makes use of a crossing at Meridian which has fallen into disrepair and is seen by many McDonald School parents as unsafe[21]. Representatives of the McDonald School should work with greenways advocates to make sure this route is strongly considered for a greenway corridor. Because of the directness of the route to the school, it is in the interest of the McDonald School to have this corridor designated as an east-west greenway route through Tangletown.

1ST AVE NE CORRIDOR

To the north of the McDonald School, 1st Ave NE is the SPS/SDOT designated walking route, directing children south across 56th Street to the school. This route is also being considered by the Green Lake greenways group for recommendation as the north-south route through Tangletown.

LATONA AVE NE CORRIDOR

Because this is an arterial, it is not a good route for a greenway or for children bicycling in the street. It will be a walking route and sidewalk-bicycling for children approaching the school from the south. There will be a crossing guard at 50th and Latona to assist children and increase safety.

47TH STREET CORRIDOR

This street is being considered for an east-west greenway. It could also serve as a walking/biking route for children to the McDonald School. A safe crossing of Meridian Ave will need to be created for this corridor.

50TH STREET CORRIDOR

Not suitable for active transportation for children in the street; even the sidewalks can be treacherous. This is the only convenient corridor to the McDonald School for most of the eastern half of the reference area. West of the freeway has some of the highest traffic volumes of any east-west arterial in north

[21] See Safe Routes to School survey results.

Seattle. East of the freeway has lower average daily volumes, and may even be suitable for a road diet. Hazardous crossings exist on both the east and west sides of I-5, at the on and off-ramps.

RAVENNA PARK CORRIDOR

For children who live in the University Village area, this may be the best available active transportation route. The route through Ravenna Park could potentially avoid the dramatic elevation gains that would be encountered in a direct east-west route. More study needs to be done for this corridor.

OTHER UNIVERSITY DISTRICT CORRIDORS

More study needs to be done in the east half of the school reference area to determine the best corridors for McDonald School students.

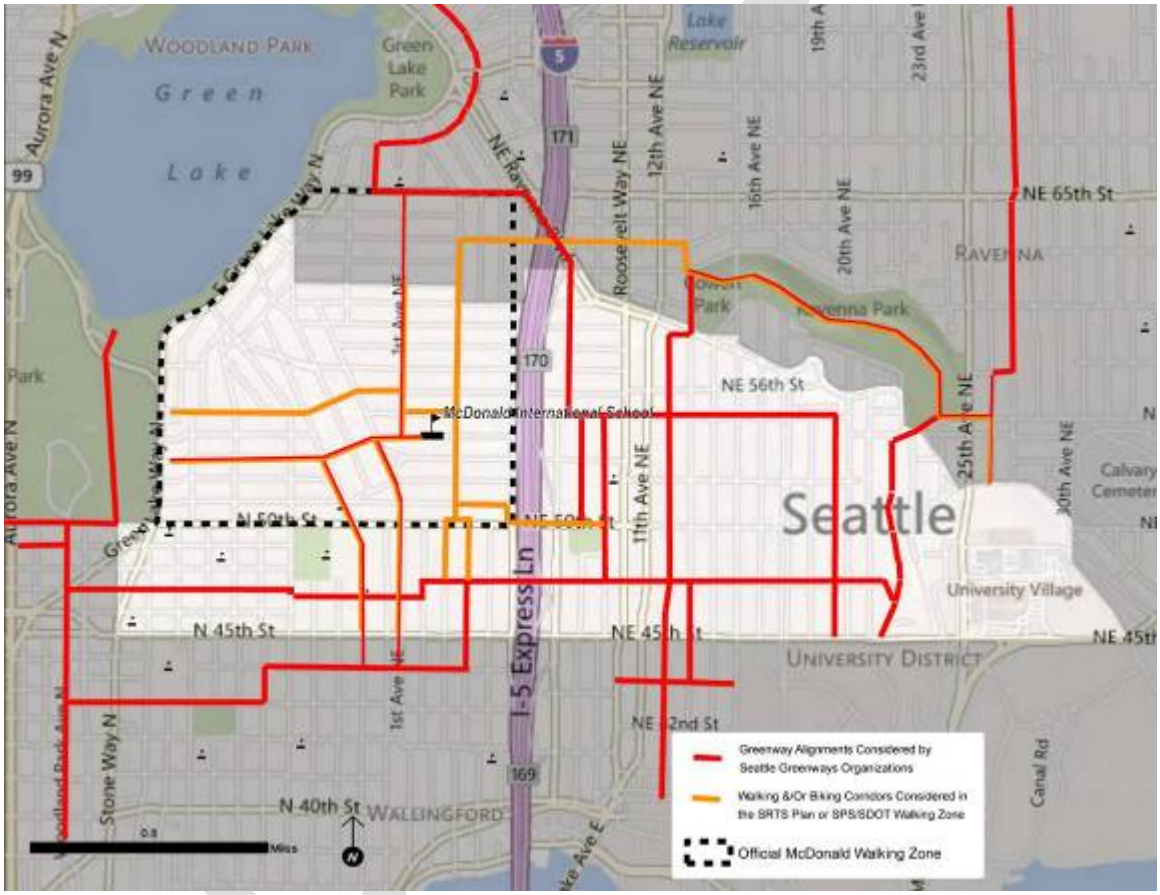


Figure 19--Corridors and Potential Corridors in the McDonald School Reference Area

PRIORITY 1 TASKS—CREATING A SAFE SCHOOL ENVIRONMENT

Priority 1 tasks are at or within one block of school, or they are at crossings and routes specified by Seattle Public Schools. They are things that can be done quickly, easily, and without a lot of money. These tasks should already have support from needed institutions, and policy that supports these improvements should already be in place.

Create Safe Routes within the Designated Walking Zone

Seattle Public Schools and the Seattle Department of Transportation have already identified walking and biking routes for kids at the McDonald School. Walking routes for every street and designated crossings have all been identified for north of 50th Street and west of I-5—the Walking Zone. As a first priority, the routes within this zone should be made as safe as possible; they should be clearly marked for both motorists and pedestrians, old crosswalk paint should be renewed where it's worn, and new crosswalks should be painted where necessary.

Mark the Walking/Biking Routes

As part of an active transportation education plan, the designated walking routes should be marked clearly so they are easily identifiable and navigable by McDonald School families. One potential strategy is to use paint and stencils to mark the routes with the "Scotty Dog", the mascot for the school.

Figure 20--Scotty Dog Route Marker

Directional arrows could be used to mark the path, and Scotty Dog stop signs could be placed at crossings to remind kids to stop and look both ways before walking into the crosswalk. These markers could be painted at strategic locations along the major walking routes. The benefits would be threefold: it would establish an easily identifiable wayfinding system, create a greater sense of community in the school area, and create a fun way for kids to get to school while using the safest paths and crossings. There is also the potential to create games associated with the Scotty Dog markers that encourage and educate the children about street safety. The route markers should be re-painted every year, and can also be

associated with an annual orientation event (see below). These routes should focus on and direct children to the corridors and crossings established by SPS and SDOT, and described earlier in this plan (see **ACTIVE TRANSPORTATION CORRIDORS FOR THE MCDONALD SCHOOL**)

Figure 21--54th St. and Latona—Existing Condition

Figure 22--54th St. and Latona—New Paint along Designated Routes with Scotty Dog Stop Signs

Organize Walking School Buses and Bike Trains

The Seattle Public Schools Transportation Department will be organizing a walking school bus for the McDonald School. The McDonald Safe Routes to School committee can assist with organization,

communication and implementation of the SPS plan. These activities should be routed toward the specified corridors in the walking plan.

Organize Educational and Social Events around Biking and Walking to School

Bike to School Month happens every May. There is an associated Bike to School Day where many Seattle schools organize events related to active transportation to school. As part of an SRTS program, the McDonald School should organize similar events. In addition to this, every summer before school starts, especially the summer before the opening of the new school, an orientation event could help children get to know the important routes and crossings between their homes and school. This can also be an organizing event for parents and children to implement the annual Scotty Dog Route Marker program.

Document and Improve Condition of Sidewalks

Sidewalks that are not broken and do not trap runoff are important for good pathways. A survey of the condition of sidewalks along the designated routes should be taken to find where repairs are needed.

Plan for Bicycle and Pedestrian Arrival and Departure

Sidewalks that are not broken and do not trap runoff are important for good pathways. A survey of the condition of sidewalks along the designated routes should be taken to find where repairs are needed.

- All crosswalks designated as crossings by SPS must be clearly marked—new paint if necessary.
    - This is being done at the McDonald School block. It needs to be done at other crosswalks in the McDonald School walking zone.
- Location of bike racks at the school should be carefully considered. Issues of access, security, and the safety and comfort of the kids are all important aspects of siting for bike racks.
- Bicycles can be valuable, high-theft items, and should be stored in secure facilities. Bicycle storage facilities should be in a location where they can be seen at all times by students or staff. Ideally, the bike racks will be under a covered structure.

Bicyclists and pedestrians should arrive at the school according to the established Walk Zone map. Children arriving from the west and south via 53rd Street will be directed to enter through the front entrance at the south side of the school. Bicyclists will have a bike rack near the entrance of the school, within view of both the playground and the front doors.

Create a Pickup and Drop-off Plan

An important aspect of creating a safe walking environment is the avoidance of confusion for all travelers to and from the school. It is also important that the McDonald School strive to be a good neighbor, and minimize the traffic impacts to the neighborhood. Having a plan for people to drive to the school will maximize drivers' understanding of the streets in the neighborhood, and minimize the confusion they have as they drive to the school. This will increase safety for everyone, and help to mitigate the impact of traffic on the surrounding neighborhood. With this in mind, a plan for three categories of car traveler, each with specific needs, should be established and communicated to all staff, bus drivers and parents who may be driving their children to school.

It is assumed that the first to arrive every morning will be the staff of the school—teachers, administrators, and support. Staff members will have a parking lot on the west of the McDonald campus,

accessed from a driveway on the north, next to the school building. Although the staff parking lot is currently being repaved, the driveway from the street is in very poor condition. The driveway is also very narrow and close to the school building and the bus loading zone. This could create conflicts between staff entering and exiting the parking lot and children on the sidewalk. A study should be done to assess the feasibility of moving the driveway further west to avoid pedestrian conflict.

Figure 23--Staff Parking Routes to McDonald School

It is necessary for school buses to approach the school from the west on NE 55th Street. This allows buses to pull up to the bus zone and load or unload children on the correct side of the bus. The buses should have minimal routing on the narrow residential streets, and the fewest number of turns along the residential blocks. Buses will be bringing children from the east side of the reference area, and will be taking either 50th or 65th Streets. A bus will also be coming from south of 50th Street. Suggested routes for each of these buses are shown in Figure 24.

The sidewalk at the bus loading zone has recently been replaced, and is in very good condition.

Figure 24—Bus Routes to McDonald School

Parents will be the most unpredictable of the groups who drive to school. It may not always be the same parent or guardian who drives, and there may be some families who usually walk or bike, but may need to sometimes drive the car. Communicating the pickup/drop-off plan to this group will be very important.

Figure 25—Parent Pick-Up and Drop-off Routes

The designated parent drop-off area will be on NE 54th Street, on at the main entrance on the south side. This will minimize any potential conflict between cars and buses, and disperse the traffic congestion that

may be created by the three groups of drivers. Parents and guardians should approach on 54th from the east, allowing a right-side egress from the car for the children being dropped off. Departing parent traffic is then routed north on Kensington, which gets traffic out of the residential neighborhood in a shorter distance than other potential routes, but may create a conflict on the block between 55th and 56th where school buses will be heading south on their way to the bus loading zone. The McDonald School will need to submit a request to the Seattle Department of Transportation to create a loading zone in this area.

Although a new sidewalk has recently been installed in this area, the condition of the parent drop-off area remains poor. The curbs have not been repaired where needed, and the configuration of the planting strip along the sidewalk is not ideal for a loading zone. Improvements that could be made here are repairing the broken curbs, and replacing some of the grass along the loading zone with a hard surface.

As part of the pickup and drop-off plan, speed bumps should be considered on both 54th and 55th Streets between 1st and Latona. This will help ensure the slow travel of motorists and increase the safety of children who might dart across the street.

PRIORITY 2 TASKS—NECESSARY CHANGES TO CREATE SAFE ROUTES

Priority 2 tasks will require planning, design and engagement in process with other stakeholders. SDOT, SPS, neighborhood groups and other groups may need to be involved in the process. These tasks are generally infrastructure projects, or related to or derived from infrastructure improvements. The timeline for Priority 2 will extend into years and require funding not currently available.

Improve Crossings at the McDonald School and Other Designated Street Crossings

Every corner at the McDonald School block should have some sort of engineered traffic calming installed. Having these improvements will create a safety zone around the perimeter of the school that doesn't depend on the whims of individual drivers. Although this document focuses on each individual intersection, the overall effect on the traffic around the school area is just as important as the safety at each specific crossing. Sites identified by Seattle Public Schools as designated street crossings should receive high priority for identification of traffic-calming and pedestrian-enhancing measures. All of these sites are within the Walking Zone, with the exception of the crossing of NE 50th Street at Latona Ave, which crosses the Walk Zone boundary.

In addition to the built elements shown at the crossings, rumble strips, warning lights and other measures should be implemented around the school.

Figure 26--McDonald School Block & Surrounding Streets

1st Ave NE at NE 54th St

Although there is an SPS-specified crossing for children at this intersection, none of the curbs currently have ramps, making them more hazardous to children who are biking, and making them inaccessible to any disabled children.

This intersection is where the SPS-specified 53rd Street route will cross to reach the McDonald School block. As such, it merits special consideration for improvements. Because of the proximity to the school and the importance of active routes through this intersection, creating curb ramps here is one of the top of the priority-2 tasks.

Figure 27—Intersection of 1st Ave NE & NE 54th St.

To simultaneously address accessibility issues and traffic calming issues, a raised sidewalk be effective here. Traffic volumes would need to be measured here to justify traffic calming. Based on conversations with an SDOT representative, it is unlikely that the volumes here would currently justify traffic calming measures. Although current policy and priorities might make this a low priority for SDOT, official priorities may change, and the proximity of this intersection to the school may someday make it a higher priority.

1st Ave NE at NE 55th St

Although there is an SPS-specified crossing for children at this intersection, none of the curbs currently have ramps, making them more hazardous to children who are biking, and making them inaccessible to any disabled children.

This intersection is where an SPS-specified route will cross to reach the McDonald School block. Because of the proximity to the school and the importance of active routes through this intersection, creating curb ramps here is one of the top of the priority-2 tasks.

Figure 28—Intersection of 1st Ave NE & NE 55th St.

To simultaneously address accessibility issues and traffic calming issues, a raised sidewalk be effective here. Traffic volumes would need to be measured here to justify traffic calming. Based on conversations with an SDOT representative, it is unlikely that the volumes here would currently justify traffic calming measures. Although current policy and priorities might make this a low priority for SDOT, official priorities may change, and the proximity of this intersection to the school may someday make it a higher priority.

Because the school buses will be passing through this intersection, it is unlikely that traffic-calming measures such as traffic circles will work here. A raised sidewalk here would be more appropriate for the location.

Latona Ave NE at NE 55th St

This intersection is the designated crossing of Latona at the McDonald School block in the Walking Zone map, and will therefore be considered a higher priority.

The school buses will make left or right turns from the west leg of this intersection after they have dropped off the kids in the morning, and after they pick them up in the afternoon. Because of the need for buses to turn at this intersection, curb extensions may not be appropriate at the west corners. Instead, raised crosswalks at the south leg of Latona and the west leg of 55th should be installed to slow down traffic. Rumble strips at each leg of Latona will warn drivers of the approaching change in street elevation, and hazard lights around school times will help to increase safety.

Figure 29—360° Panorama of Intersection of 55th and Latona

Figure 30—55th and Latona—Existing Condition

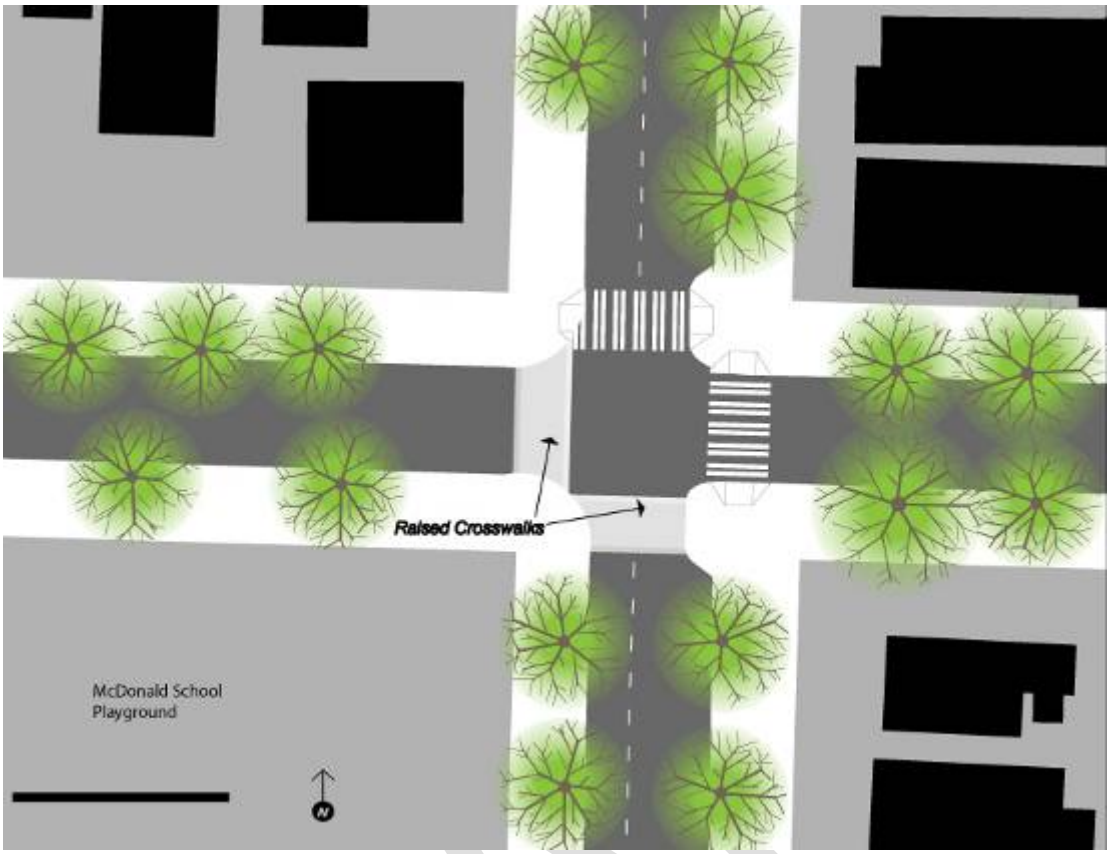


Figure 31—55th and Latona—Potential Improvements

Latona Ave NE at NE 54th St

Although this crossing is not designated in the Walking Zone map, its proximity to the school makes it an important crossing that merits traffic calming. The public bus stop on the northbound lane limits the opportunity for sidewalk extensions, but raised sidewalks would be an effective method for calming traffic here. A rumble strip on both Latona approaches, as well as warning lights will improve safety here.

Figure 32—360° Panorama of Intersection of 54th and Latona

Figure 33—54th and Latona—Existing Condition

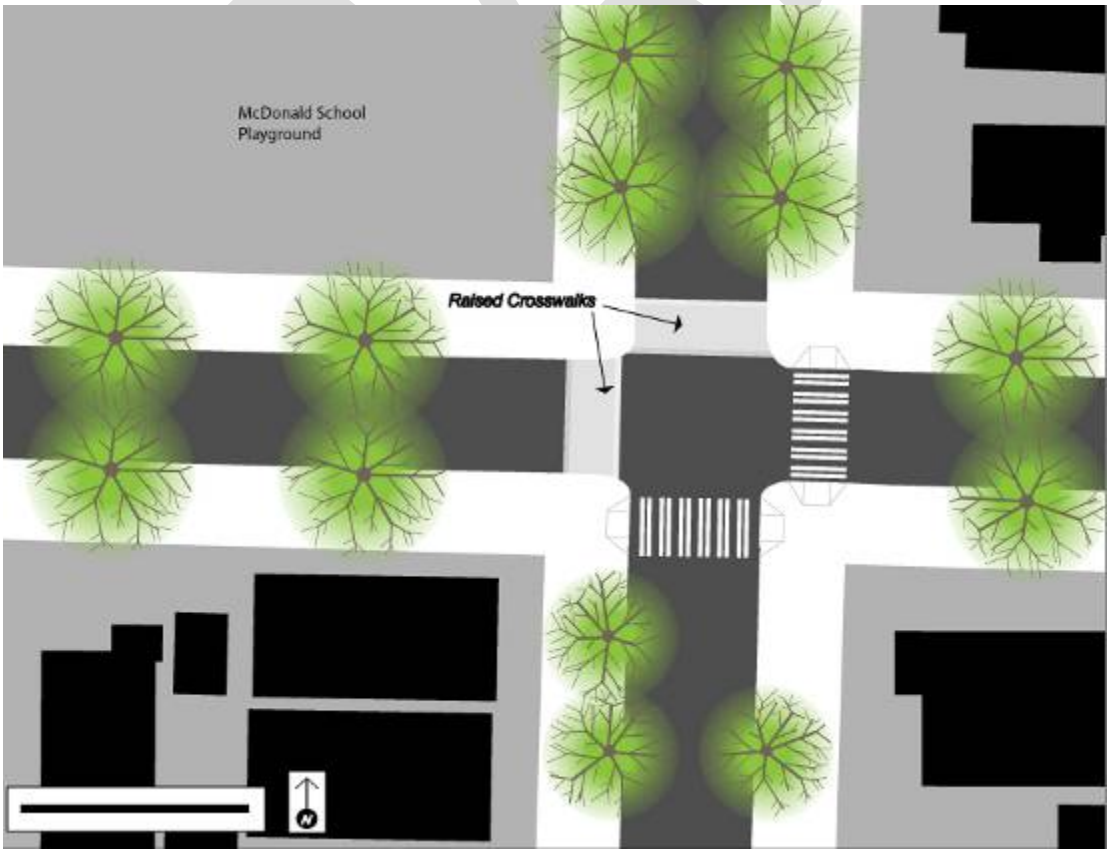


Figure 34—54th and Latona—Potential Improvements

Create safe routes outside the Original Walking Zone

According to an SDOT representative, safer routes and crossings of hazardous corridors such as 50th Street and the I-5 onramps must be created before the official Walking Zone can be expanded. These safer streets should be created not just with connecting McDonald students to their school, but with area middle schools and high schools. Today's elementary school kids will soon be attending higher levels, and will need safe routes to those schools as well. Focus on McDonald, but think of Hamilton, Roosevelt and Lincoln.

Expand the SPS/SDOT-Designated Walking Area

It is possible to expand the current McDonald School walking area. To do this, we need to create safe environments for walking and biking at the critical crossing points[22]. Expanding the walking area will go hand-in-hand with traffic calming, pedestrian enhancements and biking facilities along 50th Street and across I-5. The sections further down in this chapter detail some areas that will need to be upgraded for non-motorized crossings to create safer environments and allow the official walking zone to be expanded.

Improve Street Crossings Further from the McDonald School

These are the crossings not immediately at the McDonald School block. Although they are lower priority than the crossings at 54th and 55th Streets, they are still important for creating safe environments for kids who walk or bike, especially along 50th and the crossing of the I-5 on and off-ramps.

N 56th St/1st Ave NE

This is the crossing of 56th designated by Seattle Public Schools, and will therefore be considered a higher priority. There is a traffic-calming circle here as well as curb ramps, but no other pedestrian amenities. Because this is a site identified by SPS, it should be studied closely to identify any additional pedestrian enhancements appropriate for the site.

1st Ave is being considered for recommendation in the new Bicycle Master Plan as a north-south greenway route. If it is selected to become a greenway, it will create an exceptional opportunity to build a safer crossing here. The combination of designated greenway route and designated school crossing will be a compelling argument for strongly engineered pedestrian enhancements. Pedestrian refuges and a bike-only pass-through would be appropriate at this intersection, along with stop signs at both legs of 56th Street.

Figure 35—Intersection of 56th St NE and 1st Ave NE

[22] Per conversation with Brian Dougherty, Seattle Department of Transportation, 4/9/2012.

Figure 36--56th St NE & 1st Ave NE—Existing Condition

Figure 37—NE 56th St & 1st Ave NE—Potential Redesign

Overview of 50th Street and Associated Crossings

The crossings along 50th Street are of particular concern. 50th Street is the main connecting corridor between the east and west sides of the McDonald reference area. Ironically, it is also the greatest hazard and barrier to the safe passage of pedestrians and bicyclists in the area. Along with I-5, it is the most significant barrier to children getting to the McDonald School.

Because 50th Street is a regional collector, and is one of the main arterials connecting Ballard and other neighborhoods in the western side of Seattle with I-5 and the University District, traffic volumes are high. With an average daily volume of 25,300, it is one of the highest east-west arterials in north Seattle, only being surpassed by Northgate Way and 145th Street[23].

Other issues along 50th Street that are relevant to the safety of pedestrians and cyclists:

- Between Stone Way N and 2nd Ave NE, the street has a single lane in the eastward direction, a median/turning lane, and two lanes westward. The right lane in the westward direction is designated parking, except between the hours of 4-6 on weekdays, when it becomes a driving lane for the evening commute.
- There are no lights or stop signs between the Latona crosswalk and the pedestrian light at Sunnyside. This is about a quarter-mile along 50th that is not served by pedestrian infrastructure of any significance.
- Because of the location of so many schools along this corridor, 50th Street should be a speed-reduced zone from 4th Ave NE to Wallingford Ave N.
- Appropriate signage/hazard signals/radar speed signs should be placed appropriately at all the improved pedestrian crossing points along the 50th St corridor.
- To enable safer crossings at N 50th St and Latona Ave NE, extend the middle lane of 50th two blocks eastward from its current end at 2nd Ave NE to Latona Ave NE. This will allow a pedestrian island to be installed in the median of 50th Ave NE. Of all the individual measures suggested along 50th, this would probably be the most politically difficult to accomplish.

50th St NE/Latona Ave NE

The intersection at Latona Ave NE and 50th Street NE may be the most complex intersection in the McDonald School reference area. It is also one of the most important crossings to improve for safety. To the north of 50th Street, Latona Ave is a two-way street. South of 50th, it splits into a couplet—Latona is the northbound one-way street, with the adjacent Thackeray Place becoming the southbound one-way street. In the middle of all this is the crosswalk, extending across 50th Street from the north at the west side of Latona to the middle of the block that splits the Latona/Thackeray couplet. The configuration can create confusing conditions for motorists unfamiliar with the intersection, and this confusion can lead to dangerous conditions for pedestrians.

[23] Taken from City of Seattle, http://www.seattle.gov/transportation/docs/2010_Traffic_Flow.pdf, accessed 5/31/2012.

Figure 38—Panorama of 50th Street and Latona Ave

The intersection of Latona and 50th is the sole SPS-designated crossing of 50th for McDonald School children. The plan is to have an adult crossing guard here 20 minutes before the start of school and 30 minutes after the students are dismissed from school.

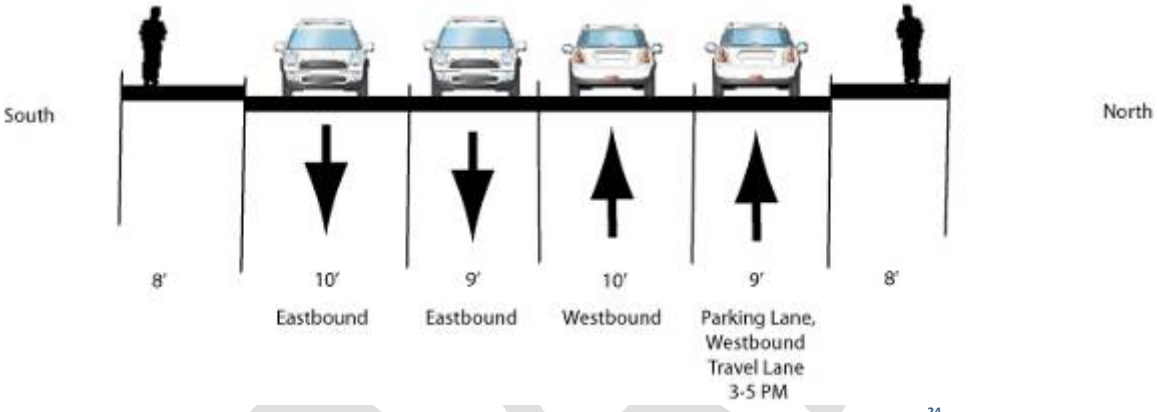


Figure 39—Cross-Section of 50th St NE at Latona, Showing Current Configuration[24]

[24] Measurements taken from City of Seattle Right of Way GIS data, and King County 2009 aerial photos. Distances are approximate.

Figure 40--50th St NE & Latona Ave NE—Existing Condition

Extend the Median

Because of the confusing and hazardous conditions here, and because Seattle Public Schools and the Seattle Department of Transportation have already specified it as an important crossing that requires a crossing guard, this intersection merits special consideration for traffic calming. Some ideas for creating a safer intersection for children here include:

The median lane of eastbound 50th Street ends two blocks to the west near 2nd Street NE. At the Latona crossing, 50th Street is two traffic lanes in each direction, with no median lane. To create opportunities for pedestrians at this site, the median lane should be extended eastward to end the south leg of Latona.

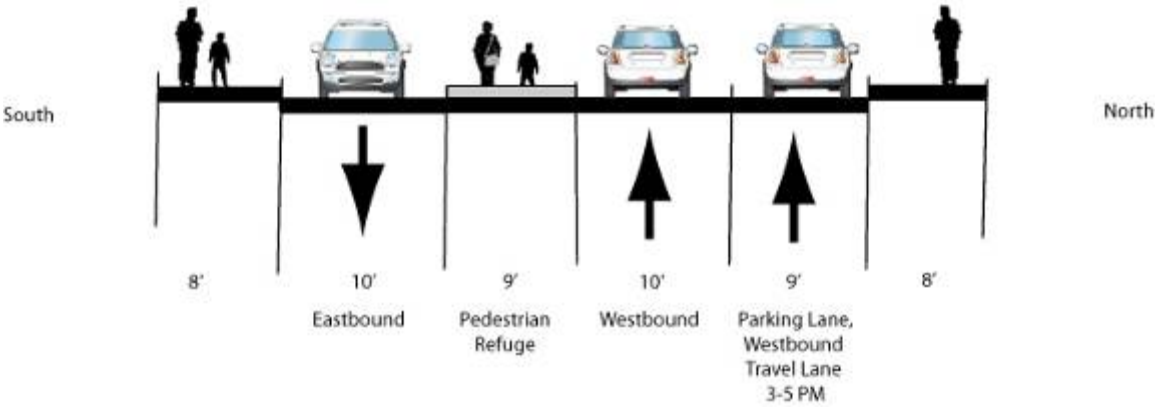


Figure 41—Cross-Section of 50th St NE at Latona, Showing Potential Configuration at Pedestrian Refuge

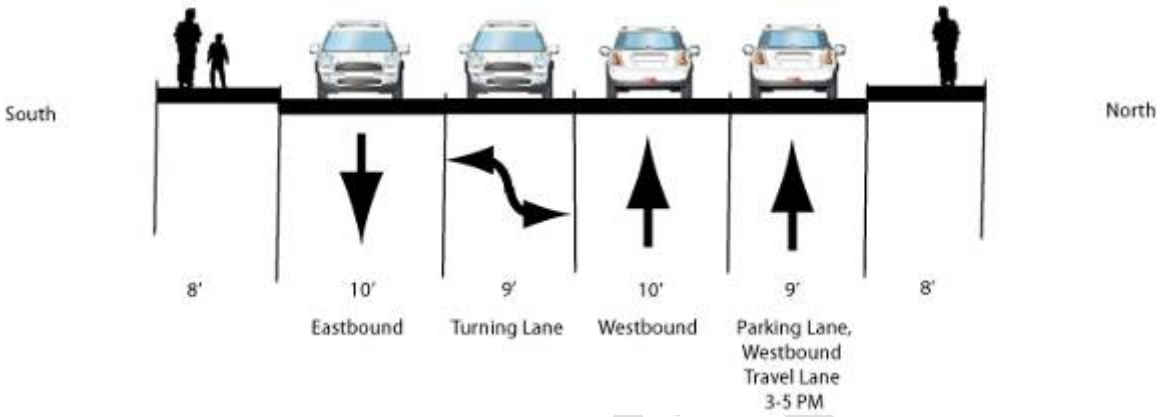


Figure 42—Cross-Section of 50th St NE at Latona, Showing Potential Configuration at Turning Lane

Create pedestrian islands

The extension of the 50th Street median lane to the east will allow the creation of pedestrian refuges. Refuges are important at this intersection to provide shorter crossings and safety for slower walkers. The width of the median lane (10') should be used to accommodate bikes with trailers[25].

[25] Ibid, p 141.

Figure 43—50th St NE & Latona Ave NE—Potential Redesign

Move the current crossing at 50th and Latona to west of the Latona/Thackeray couplet

This will allow the creation of a pedestrian refuge while still allowing space for left turns onto Latona north of 50th Street. It also removes the pedestrian crossing to outside of the couplet. This will significantly reduce the potential conflicts between cars and pedestrians. One problem with this solution is that it is less convenient—a less direct route across 50th for kids going to school. This inconvenience can be mitigated with the creation of a second pedestrian crossing to the east of the couplet.

Create a second pedestrian crossing to the east of Latona.

The Institute of Transportation Engineers recommends providing "…marked crosswalks at urban signalized intersections for all legs of the intersection…"[26] Adding the second crosswalk will follow recommended practice. It also mitigates the loss of convenience that moving the existing crossing creates, and reduces potential conflict by keeping it outside of the Thackeray/Latona couplet. Buses and other north-south through traffic maintain a clear traveled way through the intersection.

Other Pedestrian Enhancements

Pavement treatments at crosswalks (similar to how done at intersection of Wallingford Ave N & N 45th St)

[26] *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*, Institute of Transportation Engineers, 2006, p 171.

Rumble strips on each approach—from the east and from the west, to warn drivers of an approaching hazard as they near the Latona crossing.

Warning lights

Reduced-speed zone (see previous mention for all of 50th Street)

Alternative Design Solution

Another possibility for this intersection is the creation of an all-way pedestrian scramble. This would be a pedestrian-activated signal that stops traffic in all directions while the pedestrians are allowed to cross in all directions. This could potentially increase the safety of the intersection while still allowing for the higher traffic volume currently accommodated by the two dedicated eastbound lanes.

50th St NE/1st Ave NE

The small business district on 50th Ave creates an appropriate location for pedestrian improvements such as a median island. Because of the more pedestrian-oriented nature of the businesses on the west side of 1st Ave NE, this would be the appropriate side for a pedestrian-enhanced crossing.

Figure 44—Intersection of 50th St NE and 1st Ave NE

1st Ave is being considered by the Green Lake/Tangletown greenways group for recommendation as a possible new north-south greenway route in the Bicycle Master Plan. If it is selected as a greenway route, it will merit special consideration for pedestrian enhancements even more than it currently does.

Even if this doesn't become the crossing for a future greenway, it needs better infrastructure for pedestrians. On the east side of 1st, pedestrian crossing flags and containers have been installed on each side of 50th. This is good evidence of some local support for pedestrian enhancements. A curb extension from the southwest corner, pedestrian refuges on each leg of 50th, and a pedestrian-activated signal are all needed here to improve safety.

Figure 45--50th St NE at 1st Ave NE and 2nd Ave NE—Existing Condition

Figure 46—50th St NE at 1st Ave NE and 2nd Ave NE—Potential Redesign

50th St N/Sunnyside Ave N

This is considered by many to be one of the best spots on 50th Ave for an improved pedestrian crossing. Wallingford Co-Op preschool, Keystone Church, the Meridian School, Meridian Park, Seattle Tilth and the Good Shepherd Center are all within a block of this crossing. This is the route that is most commonly taken by Wallingford Co-Op Preschool to take children to Meridian Park. Because of the poor quality of the pedestrian infrastructure here, the preschool children currently need to cross three streets to get from their school to Meridian Park. This, combined with a short signal time, make it particularly hazardous for them.

Figure 47--Intersection of 50th St & Sunnyside Ave

New pedestrian access improvements were recently installed at the Good Shepherd Center property to access this portion of the street. This intersection is the suggested crossing for a new north-south Seattle Greenway route. The small triangular park on the north side of 50th could create some interesting opportunities to make a bold, safe, recognizable crossing for bicyclists and pedestrians.

Figure 48--50th St N & Sunnyside Ave N—Existing Condition

50th St N/Meridian Ave N

This intersection of two arterials presents problems for pedestrians and bicyclists that may not be as easily remedied. Left turns from all directions seem to be frequently used. 50th Street has dedicated left turn lanes in the median. From observation, there are a relatively high number of cyclists and pedestrians crossing here—many accessing the landmark stone archway entrance to Meridian Park, some walking to the bus stops on either side of Meridian south of 50th, and some traveling between the Wallingford business district and Tangletown.

The street design conditions here would make it difficult to create a pedestrian island without removing one of the dedicated left-turn lanes. This would probably be a politically difficult task.

N 50th St/Wallingford Ave N

Wallingford Ave N is in the closest proximity to the greatest number of schools of any arterial in the immediate area. Hamilton Middle School, the current surge school (and future re-opened high school) at the Lincoln High School site, as well as the St. Benedict School are nearby. This crossing is closest to the St. Benedict School, and will become an even more important crossing when Lincoln reopens as the local high school.

Other Non-50th Street Crossings

Meridian Ave N at N 53rd Street

There are many issues that make this intersection an important crossing at which to create pedestrian improvements. It is the SDOT-designated crossing of Meridian Ave N, and the place where children cross according to the SPS Walking Zone Map. It is under consideration by the Green Lake Greenways neighborhood group to be recommended as a new east-west greenway alignment. It has also been called out by several parents[27] as a dangerous place for their children to cross. Because of the SDOT crossing designation, potential greenway crossing and parental concern, this intersection needs special consideration for traffic calming and pedestrian enhancements. Currently, even the crosswalk paint is faded and barely visible. There are no signs warning of children crossing. The relatively wide street with low traffic volumes encourages speeding along this stretch of Meridian Ave.

As a design solution, curb extensions should be installed at each corner. This will create a “neckdown” midway between the stop sign at 56th and the stop light at 50th, ensuring that cars will pass slowly through the intersection, shortening the distance across the traveled way children must cross, and improving the visibility of pedestrians who are about to cross.

[27] See McDonald School SRTS Survey.

Figure 49—Meridian Ave at 53rd St.

Figure 50—Meridian Ave N and N 53rd St—Existing Condition

Figure 51—Meridian Ave N & N 53rd St—Potential Redesign

Meridian Ave Entrance to Meridian Park

A mid-block crossing between 48th St and 49th St, connecting to the west entrance to Meridian Park will enhance access to the park, and by extension, to the crossing of 50th at Sunnyside. This could also help slow down the traffic that tends to speed down Meridian.

N 65th St

Although this is out of the reference area, SPS still includes it in the Walking Zone. A safe crossing of this street is important for creating a network of safe routes, but may not be critical for a direct connection for kids attending the McDonald School.

Investigate options for pedestrian enhancement at the SPS Walking Plan recommended crossing at 1st Ave N.

Take advantage of the commercial area at Latona—more pedestrians at this location translates to higher need for pedestrian enhancements and traffic calming.

McDonald School SRTS volunteers should make a site visit to this location.

Communicate with Green Lake School about potential crossings here.

N 51ST ST/KEYSTONE AVE N

This was pointed out as a confusing intersection that, because of driver sightlines and acute angles of the intersecting streets, can be hazardous to pedestrians. A traffic circle already exists at this site. Investigate the implementation of further measures here to ensure pedestrian safety. Signage at the circle, such as shown in Figure 17, may be beneficial here.

N 46th St between Meridian Ave N and Densmore Ave N

46th is a major cut-through route for east-west commuters trying to avoid congestion on 50th and 45th streets. Between Meridian and Stone Way, it is unusually wide (TKTK—check width of 46th St). There is anecdotal evidence that cars tend to drive faster than is safe. I have personally seen accidents occur at 46th and Burke, and have nearly been run down by inattentive, speeding drivers. There is a traffic circle on Densmore, but no other engineered traffic calming east of Densmore. Because of its proximity to pedestrian-friendly 45th St, many pedestrians cross 46th on their way to or from the shops, restaurants, and bars on 45th.

I-5 and East of I-5

Pedestrian I-5 Crossings

Interstate 5 is the most significant physical barrier to creating Safe Routes to School for the McDonald School. It divides the reference area in half, isolating the Roosevelt neighborhood and University District families from the school. Before the construction of the freeway through Seattle, which was completed in 1962, the surface street network connected the Wallingford and Green Lake neighborhoods with the Roosevelt neighborhood and the University District in a relatively uninterrupted urban street grid. The freeway divided the neighborhoods physically as well as psychologically—creating a 600' wide barrier and cutting off most surface streets. The remaining connections—arterials crossing over or under the freeway,

became exposed, unpleasant places to be, discouraging many pedestrians from walking between these neighborhoods across the freeway right-of-way. These connections are generally designed for the convenience of automobiles, and seem to only incorporate any pedestrian design elements as an afterthought. The McDonald School reference area is served by four of these crossings—45th Street, 50th Street, Ravenna Blvd, and 65th Street.

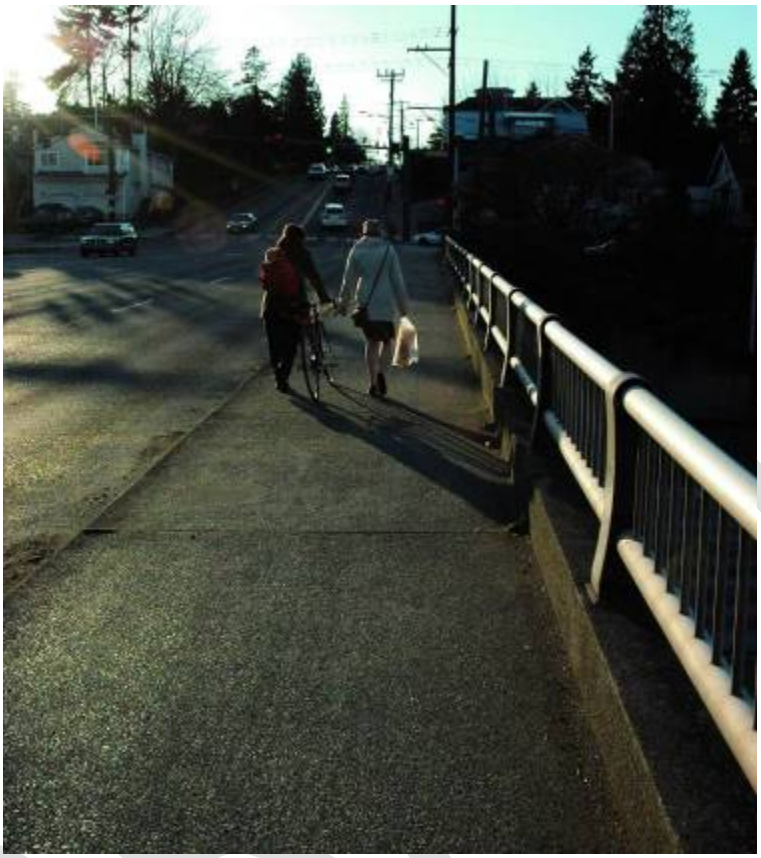


Figure 52--Current Crossing of I-5 at 50th St

Barriers installed along bridge sidewalks on 50th Ave NE and 45th Ave NE. would shield pedestrians and bicyclists from the effects of cars and create better environments for non-motorized travel.

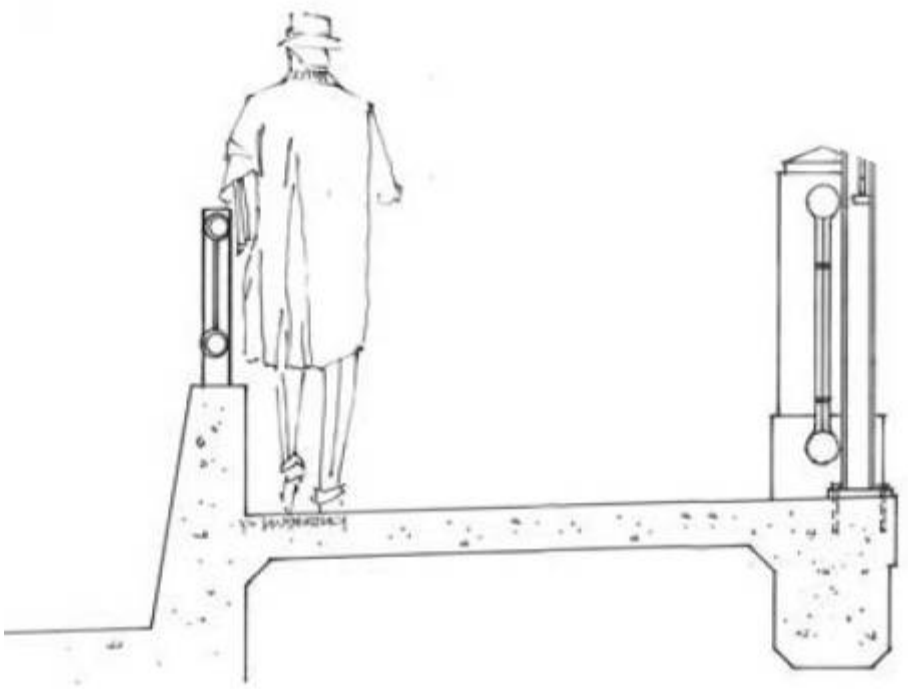


Figure 53--I-5 Crossing Sidewalk with Added Rail[28]

NE 50th St between University Way NE and I-5

The sidewalk along NE 50th Street is a narrow, cluttered passageway for pedestrians. At just over 6 feet wide in many places, it barely has enough space for both people and utilities. It does not feel like a safe place to be. A buffer between the traffic of 50th Street and the pedestrians on the sidewalk is needed along this stretch of road.

[28] Modified from image taken from *SR 99 - Aurora Bridge Fence Design Summary* Washington Department of Transportation, 2009

Figure 54—Cluttered Conditions on the South Side of 50th St NE, Looking East

Figure 55—Cluttered Conditions on the North Side of 50th St NE, Looking West

This section of NE 50th Street has less average daily traffic than Nickerson Street. According to a 2010 SDOT survey, the average annual weekday traffic for Nickerson Street was 22,300. In the same time period, NE 50th Street average annual weekday traffic was 21,800 (see **Error! Reference source not found.**). In 2011, Nickerson Street was given a road diet, reducing the number of traffic lanes from four to

three (including the middle turning lane), with great success. The possibility of 50th Street being similarly treated should be studied. Possibilities include reducing the traveled lanes from four to three, creating cycle tracks and improving pedestrian infrastructure.

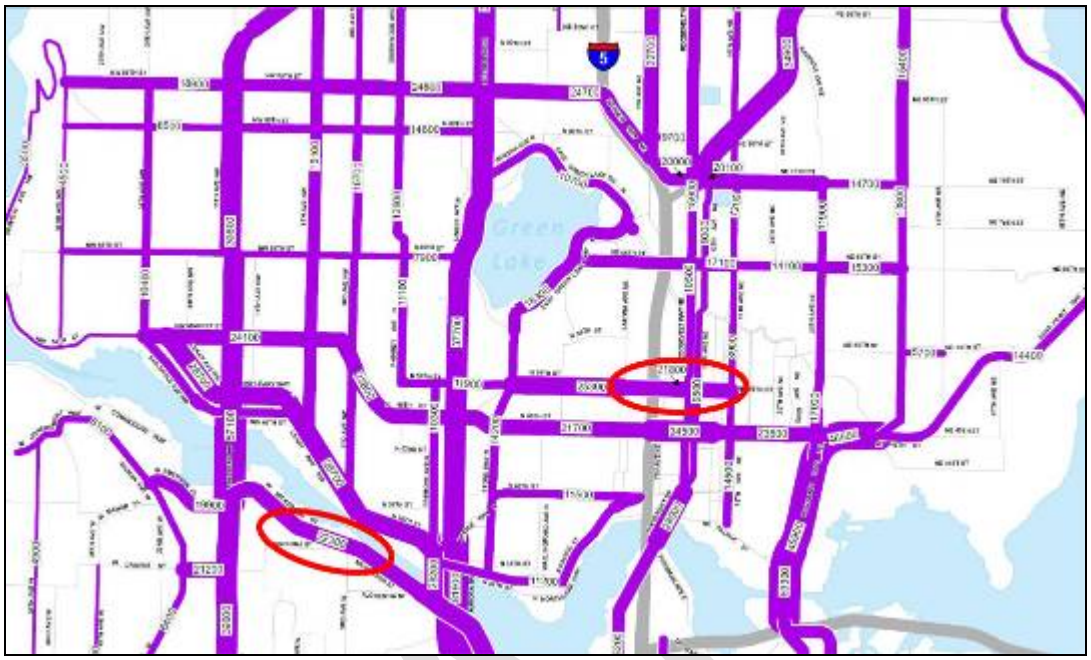


Figure 56--Average Daily Traffic Flow, Nickerson Street and NE 50th Street Circled[29]

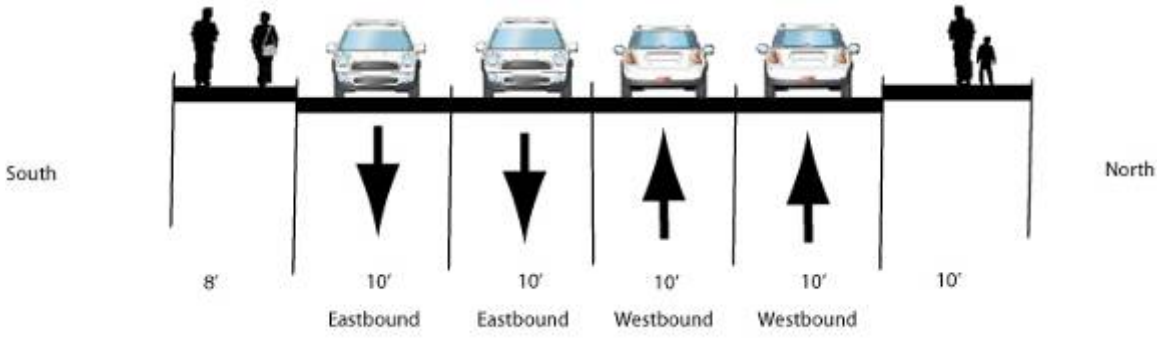


Figure 57—Cross-Section of 50th St NE, Showing Current Configuration[30]

[29] Taken from City of Seattle, http://www.seattle.gov/transportation/docs/2010_Traffic_Flow.pdf, accessed 5/20/2012.

[30] Measurements taken from City of Seattle Right of Way GIS data, and King County 2009 aerial photos. Distances are approximate.

Figure 58—Portion of NE 50th Street, between University Way and Brooklyn Ave, Current Condition

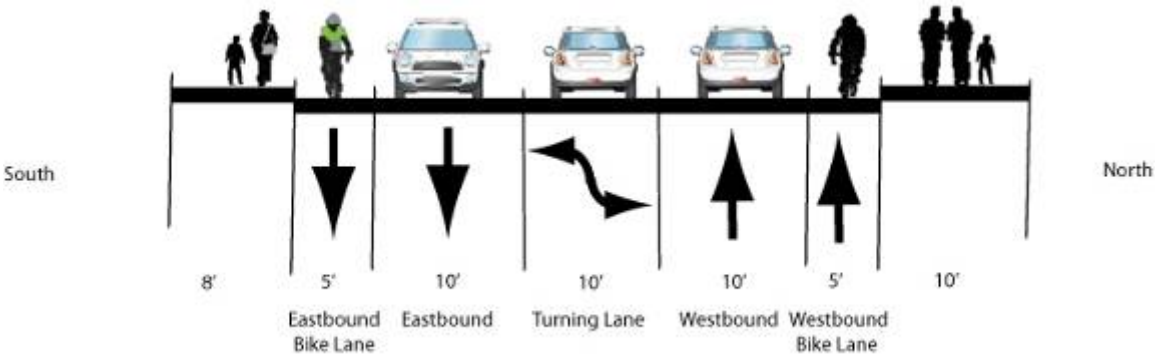


Figure 59—Cross-Section of 50th St NE, Showing Potential Configuration

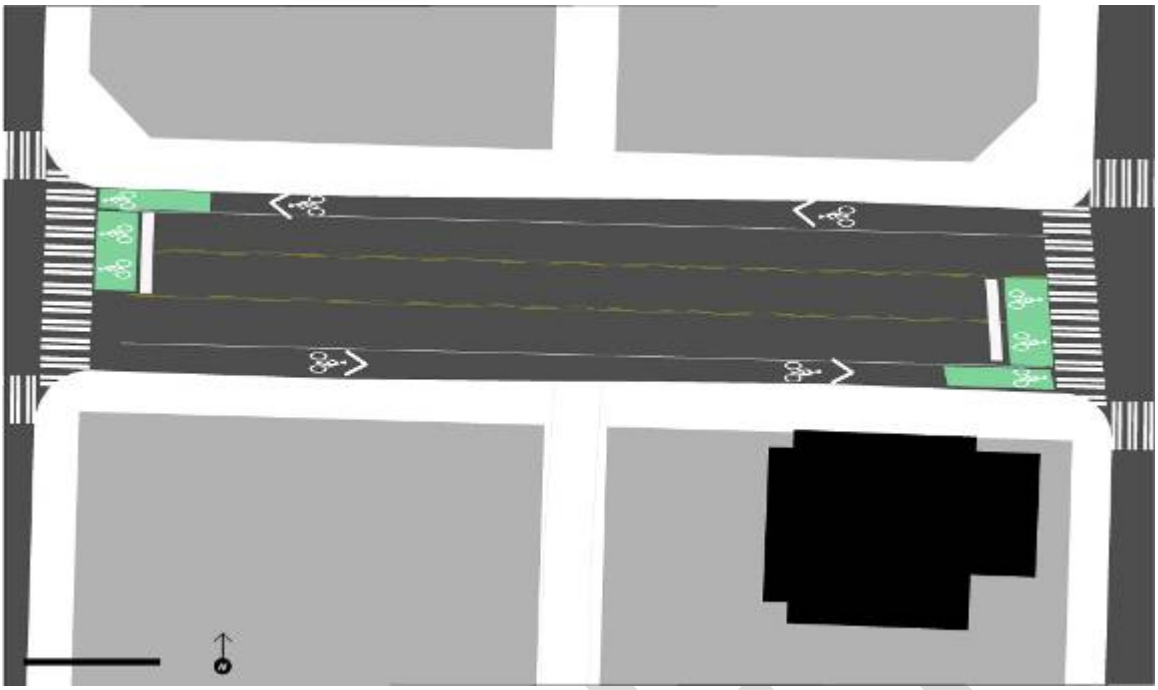


Figure 60—Portion of NE 50th Street, between University Way and Brooklyn Ave, Showing Potential Configuration

Crossing the I-5 Northbound Onramp

This is a hazardous pedestrian crossing. The wide turning radius of the intersection encourages drivers to speed up as they are turning from 50th onto the onramp. Slowing down the traffic at this intersection by redesigning the corner will need to happen before it can be considered a safe crossing.

Figure 61—Northbound I-5 Onramp at 50th Street

NE 50th Street and Roosevelt Ave NE

This intersection needs further study.

NE 50th Street and 12th Ave NE

This intersection needs further study.

PRIORITY 3 TASKS—LONG-TERM MEASURES FOR CREATING NON-MOTORIZED CONNECTIVITY

Priority 3 tasks are visionary. The timelines for these projects extend into decades, and may be very expensive to implement.

Pedestrian/bicycle bridge at 47th St.

This has been a suggested crossing of I-5 for years. It may be a great location for bicyclists, but perhaps not so much for pedestrians. This, obviously, is an expensive option.

Pedestrian/bicycle bridge at 56th St. (very long-term option, but this solution has been seriously considered at 47th St. It may make sense here as well)

This would create a very strong connection from the growing Roosevelt neighborhood / University District and the McDonald School. It is a very expensive option, but it makes sense in a variety of ways:

Connects the McDonald School directly to the "other" half of the reference area—an area that will be growing and has the potential for a greater population of children.

Removes the University/Roosevelt kids from the major arterials of 50th St, Ravenna Way, and 65th St. for safer overall travel routes.

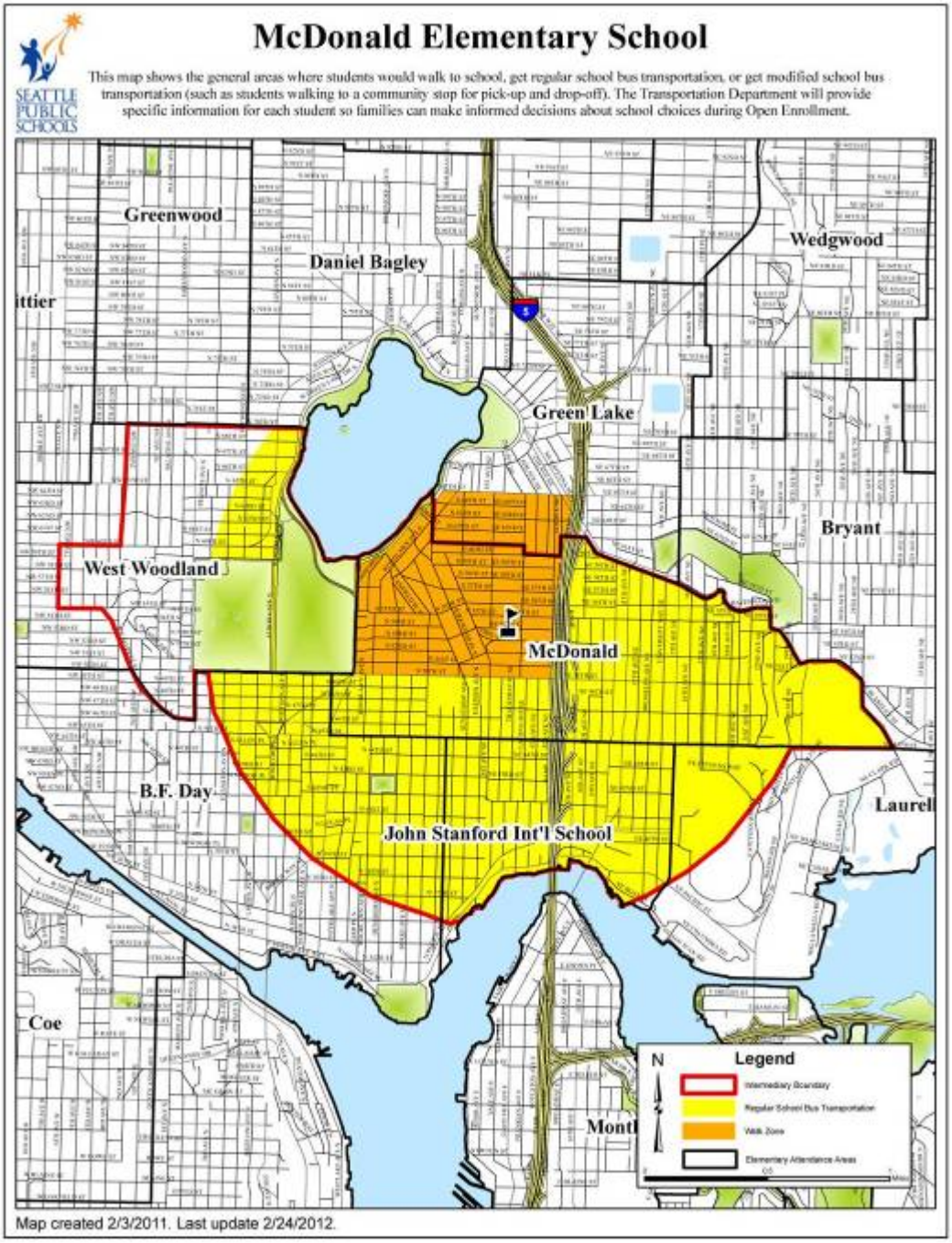
Creates a safe pedestrian/bicycle connection to the Sound Transit station slated to open in 2021.

It will create a safe connection for Roosevelt High School students crossing I-5 (may be moot point with the re-opening of Lincoln High School).

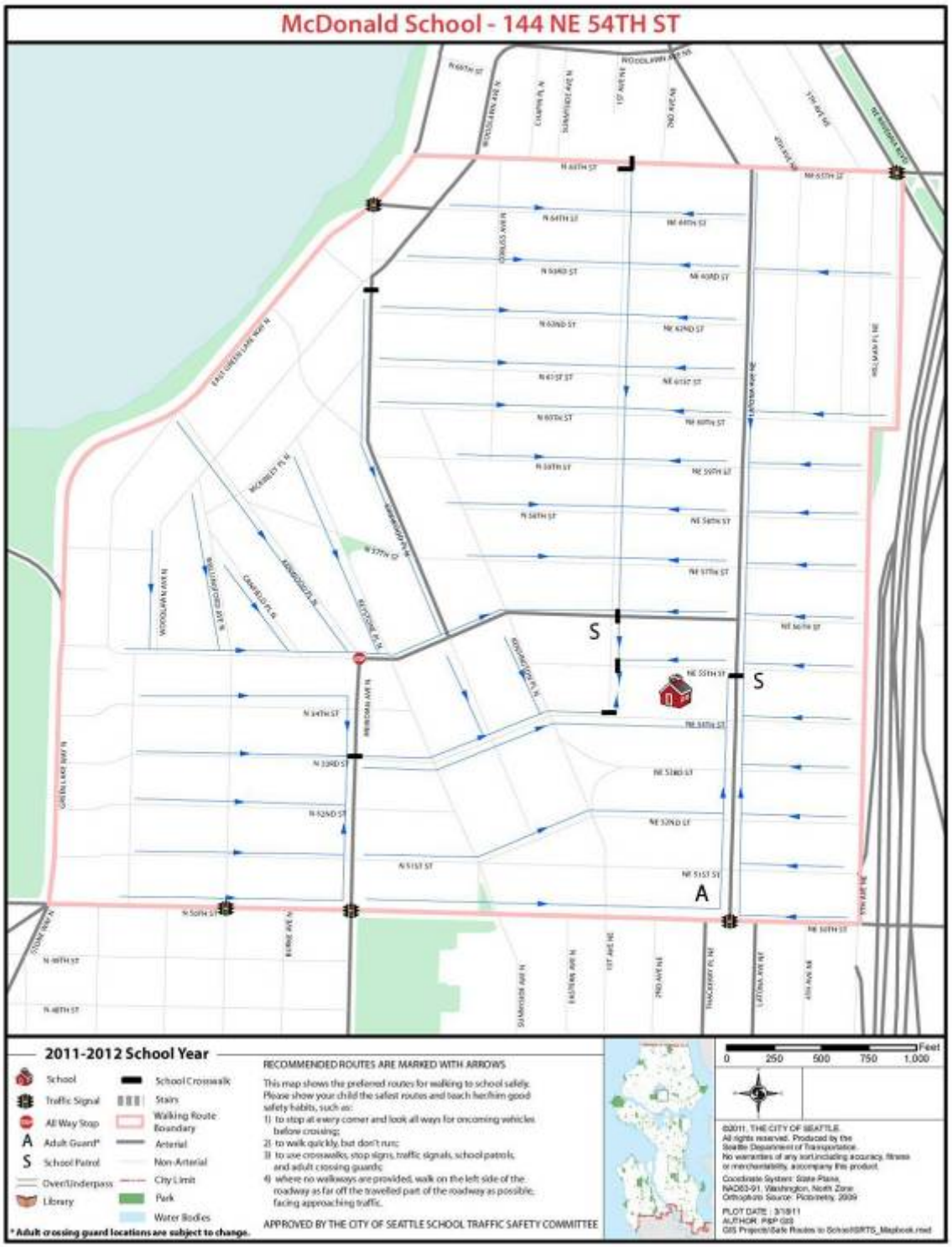
CONCLUSION

The McDonald International School faces significant challenges in creating a Safe Routes to School program that serves all students. The dangers faced by students outside of the designated Walking Zone are significant, and are not taken lightly by parents or the Seattle Public Schools administration. Many of these dangers, through good policy and design, can be overcome. The potential is there to create an equitable, safe environment that accommodates and encourages healthy lifestyles, a part of which can be active transportation to school.

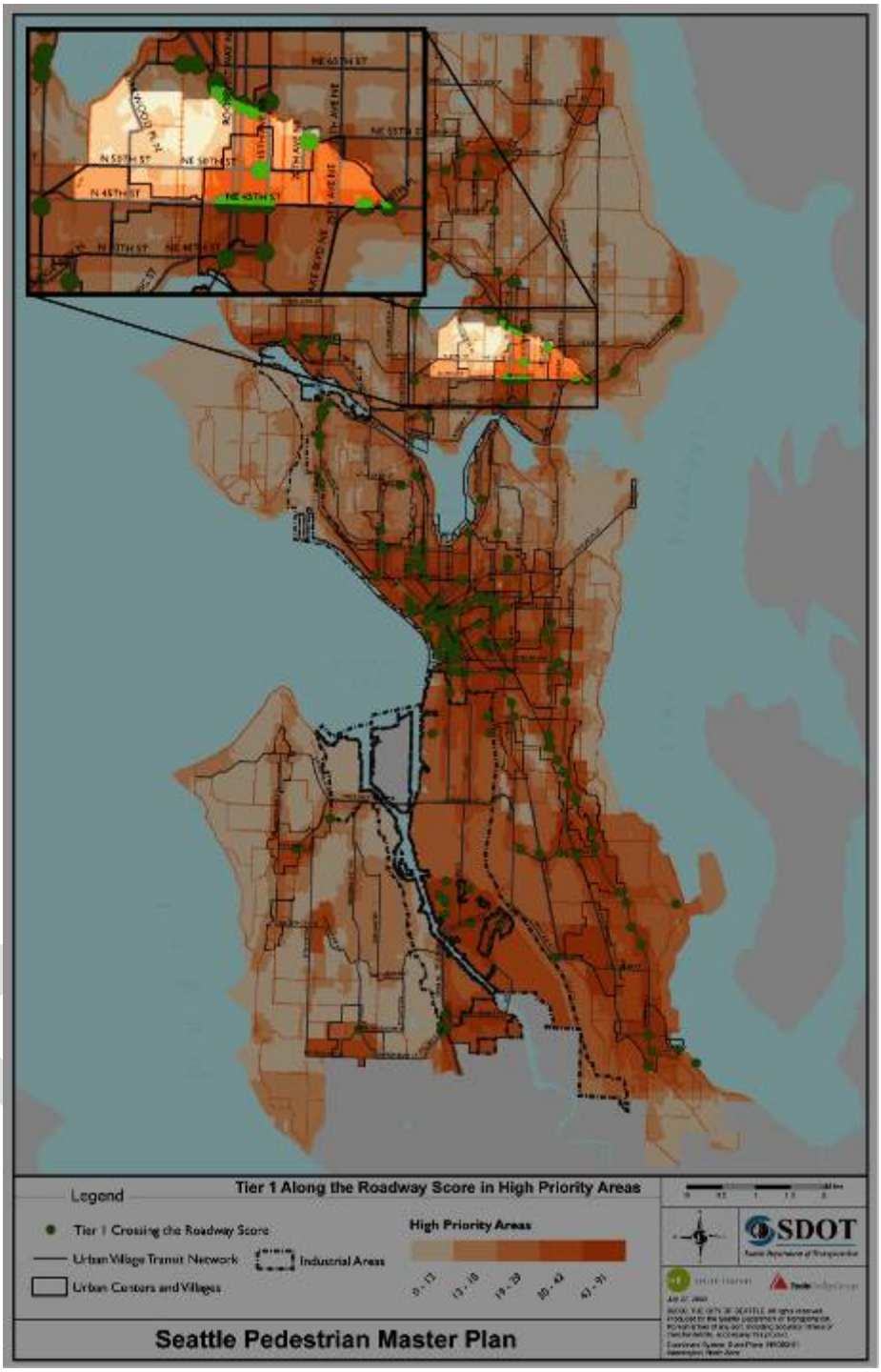
APPENDIX



Appendix 1—Official McDonald Transportation Zones



Appendix 2—Official McDonald School Walk Zone



Appendix 3—Pedestrian Priorities in Seattle—McDonald School reference area highlighted

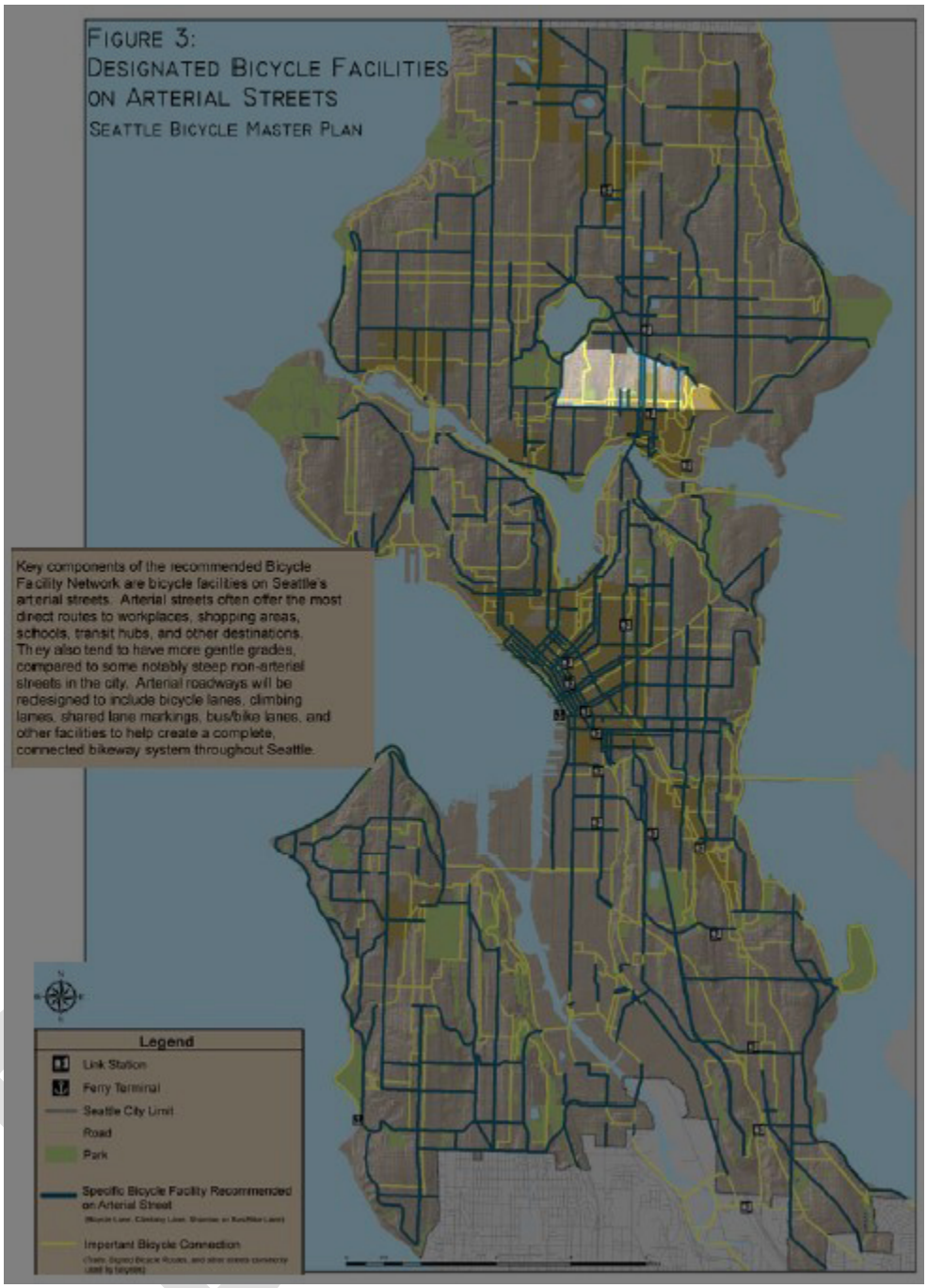
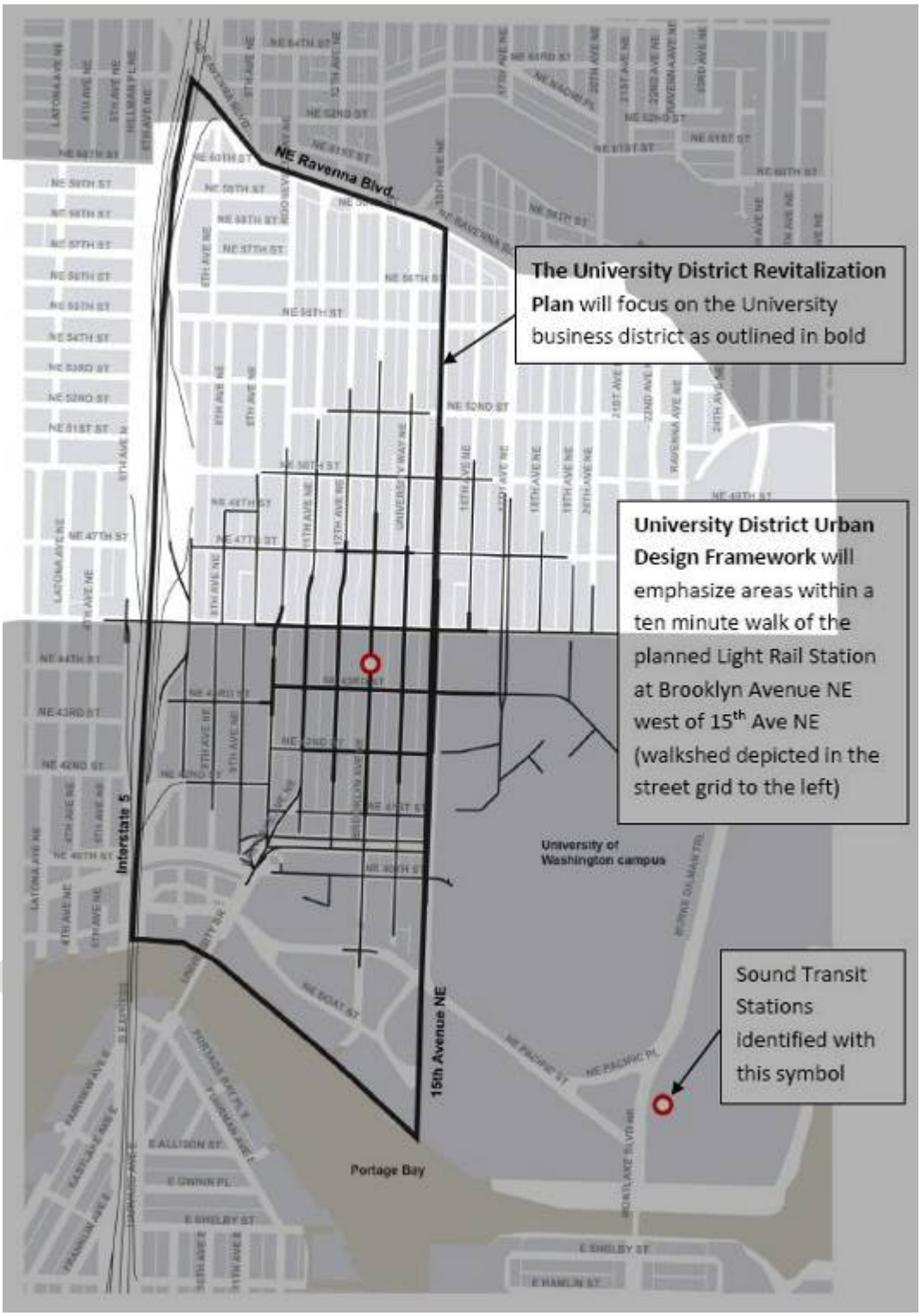


Figure 62—Designated Bicycle Facilities in Seattle—McDonald School reference area highlighted



Appendix 4—University District Livability Partnership. McDonald School reference area highlighted

McDonald School Safe Routes to School Survey Results (as of 3/31/2012)

How many children will you have in Kindergarten through 5th grade enrolled in the McDonald School next year?			
Answer Options	In McDonald School	In another elementary school	Response Count
1	74	2	76
2	15	0	15
3	1	0	1
4	0	1	1
answered question			91
skipped question			2

How far does your child live from the new McDonald School?		
Answer Options	Response Percent	Response Count
Less than 1/4 mile	23.9%	22
1/4 mile up to 1/2 mile	21.7%	20
1/2 mile up to 1 mile	19.6%	18
1 mile up to 2 miles	23.9%	22
More than 2 miles	7.6%	7
Don't know	3.3%	3
answered question		92
skipped question		1

On most days, how will your child arrive at or leave from the new McDonald School?			
Answer Options	Arrive at school	Leave from school	Response Count
Walk	41	34	42
Bike	22	17	22
School Bus	28	25	31
Family Vehicle (only children in your family)	29	30	38
Carpool (children from other families)	4	3	4
Transit (city bus)	0	0	0
Other (skateboard, scooter, inline skates, etc.)	5	4	5
answered question			92
skipped question			1

On most days, will your child be in after school care?		
Answer Options	Response Percent	Response Count
Yes	32.3%	30
Maybe	16.1%	15
No	51.6%	48
answered question		93
skipped question		0

Has your child asked for permission to walk or bike to/from school in the last year?		
Answer Options	**Response Percent**	**Response Count**
Yes	37.0%	34
No	63.0%	58
	answered question	92
	skipped question	1

At what grade would you allow your child to walk or bike to/from school without an adult?		
Answer Options	**Response Percent**	**Response Count**
Pre-K	0.0%	0
Kindergarten	0.0%	0
1	2.2%	2
2	9.7%	9
3	10.8%	10
4	10.8%	10
5	26.9%	25
6	17.2%	16
7	3.2%	3
8	4.3%	4
9	7.5%	7
10	2.2%	2
11	0.0%	0
12	0.0%	0
I would not feel comfortable at any grade	5.4%	5
	answered question	93
	skipped question	0

Would you feel comfortable letting your child walk or bike to school with another McDonald School parent?		
Answer Options	**Response Percent**	**Response Count**
Yes	91.3%	84
No	0.0%	0
Maybe	8.7%	8
	answered question	92
	skipped question	1

Would you feel comfortable letting your child walk or bike to school if they biked or walked in a group with other children?		
Answer Options	**Response Percent**	**Response Count**
Yes	45.7%	42

Maybe	37.0%	34
No	17.4%	16
	answered question	92
	skipped question	1

Which of the following issues will affect your decision to allow, or not allow, your child to walk or bike to/from the new McDonald School (Select ALL that apply)

Answer Options	Response Percent	Response Count
Distance	51.6%	48
Convenience of Driving	11.8%	11
Amount of time for walking or biking	36.6%	34
Child's before or after-school activities	31.2%	29
The age of your child	80.6%	75
Speed of traffic along route	62.4%	58
Amount of traffic along route	59.1%	55
Adults to walk or bike with	57.0%	53
Poor condition/lack of sidewalks or pathways	23.7%	22
Safety of intersections and crossings	72.0%	67
Crossing guards	38.7%	36
Violence or crime	30.1%	28
Weather or climate	37.6%	35
	answered question	93
	skipped question	0

Would you probably let your child walk or bike to/from the new McDonald School if the following problems were changed or improved?

Answer Options	Yes	No	Not Sure	Response Count
Convenience of Driving	9	23	18	50
Amount of time for walking or biking	22	19	13	54
Child's before or after-school activities	18	18	15	51
Speed of traffic along route	47	12	8	67
Amount of traffic along route	44	11	8	63
Adults to walk or bike with	62	5	5	72
Poor condition/lack of sidewalks or pathways	27	20	8	55
Safety of intersections and crossings	64	7	4	75
Lack of crossing guards	44	10	9	63
Violence or crime	29	14	10	53
		answered question		83
		skipped question		10

How much fun is walking or biking for your child?

Answer Options	Response Percent	Response Count

Very Fun	52.2%	48
Fun	37.0%	34
Neutral	10.9%	10
Boring	0.0%	0
Very Boring	0.0%	0
	answered question	92
	skipped question	1

Between your home and the new McDonald School, what are the obstacles or dangers for walking or biking (please list any that apply)?

Answer Options	Response Count
	78
answered question	78
skipped question	15

Number	Response Date	Response Text
1	May 30, 2012 9:10 PM	busy streets
2	May 30, 2012 5:57 AM	Many major streets and high crime areas, also 2 miles is a long way and that probably cannot be improved unless we move.
3	May 27, 2012 3:20 PM	Several very busy, high traffic streets: Roosevelt, 65th
4	May 26, 2012 11:54 PM	Crossing the street @ the 65th street/Ravenna offramp and crossing in front of the southbound onramp at Ravenna. Crossing from east side to west side of Latona.
5	May 26, 2012 3:21 PM	45 th st and 50th st
6	May 26, 2012 5:44 AM	crossing 45th & 50th streets
7	May 26, 2012 5:34 AM	Just too far for a 5 year old, and all uphill too!
8	May 26, 2012 3:18 AM	50th!!!!!!!!!!!!!! Lack of crosswalk on 50th & 1st Ave N.
9	May 26, 2012 12:10 AM	Crossing 50th
10	May 25, 2012 10:43 PM	45th and 50th streets
11	May 25, 2012 10:22 PM	A lot of traffic and possibly unsafe
12	May 25, 2012 10:14 PM	None
13	May 25, 2012 9:57 PM	1 not so busy street to cross
14	May 25, 2012	Crossing 50th

	9:55 PM	
	May 25, 2012	
15	9:42 PM	I don't like the idea of my child crossing over or under I-5 to get to school without an adult
	May 25, 2012	
16	9:39 PM	Distance and time.
	May 25, 2012	
17	9:38 PM	Traffic
	May 25, 2012	
18	9:23 PM	Crossing streets, fast drivers on Latona, some uneven sidewalks, no crossing guards (yet)
	May 25, 2012	
19	9:11 PM	Intersection at 50th and Latona
	May 24, 2012	Crossing I-5 at 50th, crossing 50th at any point between 9th and Latona, unsavory people on I-5
20	4:38 PM	overpass
	May 14, 2012	
21	3:30 PM	distance, traffic volume
	May 12, 2012	
22	3:10 AM	NE 155th Street crossing
	May 11, 2012	
23	5:54 PM	Speeding, speeding, speeding. Cars. Speeding cars are already a problem and Meridian Ave--the designated crossings at 50th and 53rd are unsafe for pedestrians.
	May 11, 2012	50th Street has no safe crossings for pedestrians or bicyclists. I know of several collisions
24	2:55 PM	between pedestrians and cars along the 50th St corridor.
	May 11, 2012	cars going too fast down our street, especially the intersection of 55th and 1st, where there will be
25	3:56 AM	lots of bus and drop-off traffic
	May 10, 2012	
26	10:24 PM	Meridian Avenue is the busiest street, with a crosswalk that isn't well marked.
	May 10, 2012	
27	5:48 AM	50th traffic and many homeless going to the 7/11 for alcohol and better cross walks
	May 10, 2012	
28	5:24 AM	Too far to walk
	May 9, 2012	
29	9:39 PM	Don't foresee too many.
	May 9, 2012	Need to cross I-5 via NE 50th St or pass under the freeway at Ravenna Blvd & NE 65th St. Mostly
30	6:39 PM	concerned for safety at major intersections.
	May 9, 2012	
31	4:21 PM	crossing green lake and intersection at stone and 50th
	May 9, 2012	
32	4:39 AM	Crossing 50th st
	May 8, 2012	Nothing specific, general concerns like crossing the street, stranger danger, but if there was adult
33	3:44 PM	supervision, I would like my child to walk to and from school.
	May 8, 2012	
34	3:30 PM	50th st
	May 8, 2012	
35	2:21 PM	Crossing N. 50th Street is the biggest danger.
	May 8, 2012	
36	1:58 PM	Many busy intersections. Especially 50th and Medidian
	May 8, 2012	Mainly crossing 50th. But I believe we will go up Meridian where there is a light, so it is not a big deal in our case. We can make it safely by sidewalk, I believe, from there. Perhaps I should be
37	5:12 AM	worrying, but so far it seems straight forward to us.
	May 8, 2012	
38		heavy traffic intersections, lack of safe access across I-5

	5:10 AM	
		-no crossing guards
	May 8, 2012	-traffic circles in residential areas the cars zip by
39	4:50 AM	-crossing main arterials, hi volume and speeds
	May 8, 2012	
40	4:25 AM	child too young, traffic, bad people
	May 8, 2012	
41	4:06 AM	Traffic
	May 8, 2012	Crossing a busy intersection (50th St). Homeless like to hang-out by the two convenience stores
42	4:00 AM	at 50th and 1st Ave.
	May 8, 2012	
43	3:17 AM	None, we are within one block
	May 8, 2012	
44	1:59 AM	It's a long, hilly, busy route
	May 8, 2012	
45	1:50 AM	very busy interesection
	May 8, 2012	
46	1:11 AM	Crossing one fairly busy road- meridian
	May 8, 2012	
	12:07	Distance is a bit much for a new young biker. If these new things were implemented I could see it
47	AM	happening when he's a bit older and/or going with a parent.
	May 7, 2012	
	11:52	
48	PM	Not sure, new place.
	May 7, 2012	
	11:22	
49	PM	56th St is rather busy/cars are high speed
	May 7, 2012	
	10:57	
50	PM	Crossing over I-5, or through the 65th and Ravenna Blvd intersection
	May 7, 2012	
	10:31	
51	PM	Tangletown- crossing Meridian
	May 7, 2012	
52	9:53 PM	Lots of intersections.
	May 7, 2012	
53	9:00 PM	crossing 55th.
		The kids have to cross 50th and there are a lot of homeless people that linger around 50th and 1st
	May 7, 2012	& 2nd Ave by the 7eleven/dry cleaners which is near our house, or on the way. I would consider
54	8:58 PM	having them ride over to Latona and then ride up that way if there was a crossing guard at Latona
	May 7, 2012	and 50th. They are also young, so I'd ride with them.
55	8:46 PM	45th & 50th; especially the timIng of lights on 50tb.
	May 7, 2012	
56	8:37 PM	Street crossings.
	May 7, 2012	
57	8:25 PM	Fast traffic,
	May 7, 2012	crossing over i-5. many busy intersections that I would not feel comfortable with him navigating
58	8:24 PM	without an adult
	May 7, 2012	
59	8:13 PM	Our kids are young and we live almost two miles from McDonald.
	May 7,	
60	2012	50th Street is a huge obstacle.

	7:59 PM May 7, 2012	
61	7:42 PM May 7, 2012	Just crossing 1 street, not an arterial.
62	7:30 PM May 7, 2012	I-5 we will take 1st avenue north heading south. McDonald is 10 blocks south of our house. There are no wheel accessible corners (don't know what these are called) until you hit 57th Avenue. It would be fantastic to change this.
63	7:30 PM May 7, 2012	
64	7:22 PM May 7, 2012	Crossing Meredian
65	7:18 PM May 7, 2012	too busy streets
66	7:17 PM May 7, 2012	Right now, I would be worried about him crossing streets without a crossing guard.
67	7:14 PM May 7, 2012	50th
68	7:04 PM May 7, 2012	Simply distance as we live 3 miles away.
69	6:49 PM May 7, 2012	50th is too busy for small children to cross independently. Latona is a very busy street. The cars DO NOT stop for pedestrians. We had an accident at Latona and 56th beginning of the year and SPD officer informed us that Latona is not safe. If we are encouraging walking to school we need to meet with SPD to make sure cars are at this point forced to slow down either by ticketing or putting in bumps. Also, remember Metro 26 and 26X goes on Latona, they cruise by at high speed too.
70	6:47 PM May 7, 2012	
71	6:34 PM May 7, 2012	crossing 50th St
72	6:31 PM May 7, 2012	Not many--no major intersections--but I am aware there will be lots of parents driving to school through the neighborhood so I'm primarily concerned about safety crossing the street.
73	6:23 PM May 7, 2012	I don't know of any clear obstacles or dangers. As already indicated above, we'll let our son walk to/from when WITH us, or trusted other adults. Not yet on his own. MAYBE with a group of kids we know, but that feels shaky for whatever reasons.
74	6:23 PM May 7, 2012	my daughter will need to cross a couple streets off latona ave for the most direct route
75	6:21 PM May 7, 2012	Meridian avenue We are very close to the school but have to cross Latona at 54th St. There is a marked crosswalk, but cars do not always stop and cars parked too close to the corner mean that you must stand partway out in the street in order to see what is coming. Feels unsafe even for an adult and unacceptable for children. If there is an adult crossing guard there, then I would be comfortable letting my child walk to school.
76	6:19 PM May 7, 2012	Traffic on 50th. Stream of homeless alcoholics walking up and down 50th to buy alcohol from the 7-11 and other market. The U-district is an alcohol impact area so these markets are the only option for buying certain beverages.
77	6:16 PM May 7, 2012	
78	6:11 PM	Streets with no crosswalks (but we are close and it is not enough of an obstacle to letting my child walk)

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