

Muir Elementary School “Green Feet Project” Walk and Bicycle Audit



John Muir is a public elementary school serving approximately 350 kindergarten to fifth-grade students in the economically and ethnically diverse Mt Baker neighborhood of Seattle. The area is flanked by busy Rainier Avenue 4 blocks to the west, but is otherwise fairly residential and holds promise for walking and biking. The “**Green Feet**” project is a comprehensive Safe Routes to School (SR2S) program funded by the Washington State Department of Transportation. This report serves as a record of the built environment issues surrounding the school as observed by audit participants.

Audit route: The group began by walking along S. Horton Street for 3 blocks directly in front of the school. The group broke into two groups; one circling the school on foot to the south and east, and the other traveling by bicycle on a one-mile loop to the north and west.

Participants: The group of 21 participants included one teacher, several parents, and children ranging from pre-kindergarten to 8th grade.

Special thanks to Principal Awnie Thompson and the Muir PTA for their initiative, support, shared vision, and communications.

Please direct comments to:
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Top Observations:

- In general, the area immediately to the north of Muir Elementary School has a fairly complete sidewalk infrastructure, while the area to the south has relatively few pedestrian amenities. The school draws students equally from both directions.
- While it is a neighborhood asset in many ways, the outdoor stairway at S. Horton two blocks to the east of the school currently poses a barrier for pedestrians because of teen loitering in the area and a problematic traffic pattern at the base.
- Rainier Avenue South is a major roadway separating the southwesterly residents from the school boundary. In the '09-'10 school year, the Seattle Public Schools redrew the walk boundary, making families across Rainier eligible for busing.
- The narrow residential streets and parked cars create sightline issues for young pedestrians. Children on bicycles need to choose carefully between riding on the streets or sidewalks. Safety education is key.
- Families in the northeast corner of the walk boundary need to negotiate crossings of both 31st Ave S. and S. McClellan St.

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Top Recommendations for Improvement in Walking and Biking Conditions:

1. Identify the best traffic calming treatment to reduce vehicular speeds on South Horton Street to and from Rainier Avenue South. SDOT input and public process is necessary to prioritize and approve the options sited in this report and included in the grant application.
2. Improve the crossing conditions at the crosswalk on South Horton to the front entrance. Tools at our disposal include engineering options, speed enforcement, education, and reinforcement of complementary drop-off routines.
3. Address the traffic and pedestrian safety issues at the base of the Horton stairs.
4. Partner with law enforcement to address the problem of loitering and drug use at the Horton stairs.
5. Retain the crossing guard at S. McClellan St.
6. Further examine crossing issues at Rainier Avenue South.
7. Encourage active commuting to change norms. Much of this infrastructure will support walking and biking.



Organizer: Feet First
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 Brian Dougherty, SDOT
Photos by: Joe Zajonc, Muir Parent
Audit Date: August 10, 2009

Muir Elementary Green Feet Project / Mt Baker Neighborhood, Seattle

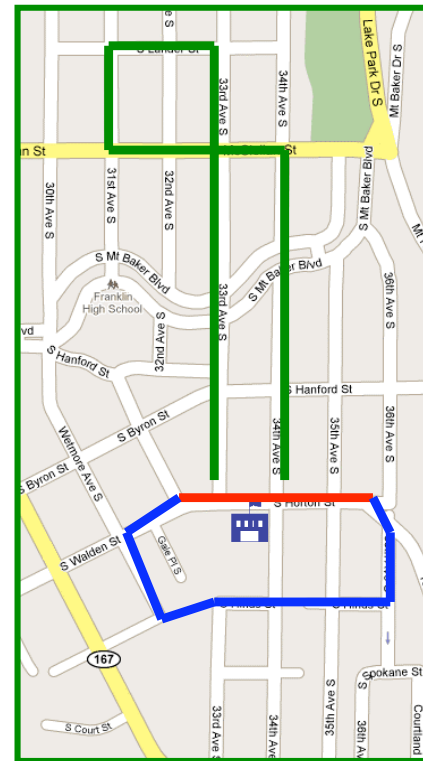
Safe Routes to School (SR2S) is the name of a growing movement to encourage and support active commuting on the part of school children and families. At the intersection of public health, public safety, education and transportation, SR2S helps communities counterbalance the effects of an increasingly car-centered society.

In July 2009, Muir Elementary School received a Safe Routes to School grant through the Washington State Department of Transportation. The grant, in the amount of \$129,000, was awarded to fund the “Green Feet” project. The project spans the “5 E’s” of SR2S: Education, Encouragement, Enforcement, Engineering and Evaluation. This walking and cycling audit helps identify and prioritize the best uses of program energy and funds. It also serves as a baseline assessment by which to measure and recognize the changes that happen as a result of the Green Feet project.

School Walk Boundary Map ('08-'09)



Map of Walking Audit Route



Red = whole group
 Blue = walk route
 Green = bike route

Walking Audit Field Notes

Item Key

Issues and action items are labeled with icons that identify what action is recommended to make improvements. Additionally, as most of the action recommended is in the public domain, each item includes a specification for the category area that can facilitate coordination with or by the appropriate local or state agency. Items specifically addressed by the Green Feet grant are marked with a “*”.



Engineering



Enforcement



Education and Encouragement






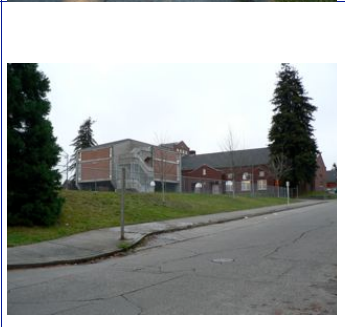




Community Asset








Issues and Action Items

WALKING AUDIT LOOP			
Item	Location	Description	Photo
1 * 	Front of school See recommendation # 7	The school entrance is set back from Horton Avenue South. Currently, students who ride bicycles to school bring them in through the front door to a bicycle rack in a protected area of the playground directly behind the school. Many people mention that a front bicycle rack would provide easier access for those equipped with bicycle locks and would be a nice addition to the school grounds. A full bicycle rack at the front of the school would not only serve cyclists well, but would increase visibility of active transportation choices and help support a norm change in this neighborhood. (photo was taken after the installation of a small bicycle rack following this walking audit!).	
2 * 	S. Horton and S McClintock See recommendation # 1	This wide intersection seems to invite eastbound travelers to increase their speed as they leave Rainier Avenue South toward the school entryway. This intersection is mentioned in the grant proposal as a desired spot for traffic calming, however, it is not wide enough for a traffic circle. Research is necessary to learn about the engineering and signage options for this location, and then public process will need to be followed to decide how best to apply grant funds to this and other designated trouble areas.	
3 * 	33 rd S. and S. Horton See recommendation # 2	The Green Feet project suggests bringing this intersection up to ADA code, using funds to create 4 and improve 2 existing curb cuts. This will increase accessibility to people using wheel chairs and strollers.	















Issues & Action Items

<p>4</p> 	<p>Crosswalk in front of school</p> <p>See recommendation # 2</p>	<p>This is a major walk route for students arriving from north of S. Horton Street. The crosswalk paint is in fair condition, but participants describe a difficult mix here of parent drop-off vehicles, bus and pedestrian traffic during the school year. We spoke of the possibility of enhancing this crosswalk by raising it to sidewalk level and improving the paint and reflection.</p>	
<p>5</p> 	<p>S. Horton between 33rd and 34th</p>	<p>Along this stretch of S. Horton Street, participants explain that it is common for drivers to wait and idle on both sides of the street, creating a dynamic in which students often cross between cars to reach their parents. Several positive comments were made regarding the help that the crossing guards give to enforce safety rules here.</p>	
<p>6</p> 	<p>33rd S. below S. Horton</p>	<p>Buses drop off on this side of the school. The system works best when the buses proceed all the way to the curb indent by the playground. Participants explain that private vehicles also use this drop off occasionally, but that otherwise the system seems to work well. In this way, Muir has followed the most important rule for school bus zones, which is to separate bus load zones from other modes of travel, both vehicular and pedestrian. Participants emphasize again how important it is that the crossing guard helps to enforce this rule.</p> <p><i>Note: an observation of the area during school drop-off time showed that this space is used more than previously thought for drop-off and pick-up. In addition, the driving behavior noted here was more dangerous to pedestrians than at other locations, with numerous U-turns and mid-block crossings noted.</i></p>	
<p>7</p> 	<p>34th S. and S. Horton</p>	<p>Here is another opportunity for parent education. Drivers are often confused by or impatient with the rules for driving around these circles in a counter-clockwise direction, yielding to the right. Additional signage and communications to parents may serve to emphasize the importance of adhering to the convention, particularly in the school zone. Participants agree, however, that this circle is very effective in slowing down traffic and is a helpful feature for the overall safety.</p>	
















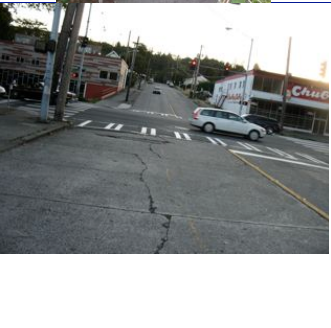
Issues & Action Items

<p>8</p>	<p>S. Horton between 34th and 35th</p>	<p>Participants noted the rough sidewalk on the south side of the street with cracks and encroaching weeds that reduce the walking area and comfort. The maintenance of sidewalks is the responsibility of adjacent homeowners. Violations may be reported by calling 206-615-0808 or by speaking with neighbors directly.</p>	
<p>9</p> 	<p>S. Horton at 35th S.</p>	<p>Cars parked along these narrow streets impede the sightlines between drivers and pedestrians, particularly younger pedestrians who are hidden to traffic by the tall vehicles. This is the reason for parking restrictions near intersections and crosswalks, and is an important concept to teach in pedestrian education,</p>	
<p>10</p> 	<p>S. Horton and S. York See recommendation # 3</p>	<p>This intersection causes a great deal of concern for the school community. In particular, people observe very fast speeds from drivers traveling down S. York toward S. Horton, as well as in the other direction. Drivers are not cautious of pedestrians here, because the angle of the roadway makes it attractive to speed, the visibility is compromised by plantings and turns, and there is not a critical mass of people who walk, making pedestrian activity unexpected. Possible engineering improvements include stop or yield signs for York traffic, “watch for ped” signage, crosswalk painting across S. York, and an “intersection repair” (in which the community would design and paint a street mural to act as a visual reminder to slow down. The Green Feet project will seek engineering advice from SDOT to learn of the feasibility and effectiveness of the different alternatives.</p>	
<p>11</p> 	<p>Triangular planting strip at S. Horton and S. York</p>	<p>Participants appreciate the artistry of this garden, but recognize that the taller plants block the view of children. People are loath to compromise this garden, which is reportedly tended by a local elderly resident. It will be critical to teach children at this intersection about the importance of clear sightlines between pedestrians and drivers, the idea of “seeing and being seen.” One resident explained that this triangle was installed to address a previous problem of drag racing along 36th Ave South, which used to connect directly through a more conventional 4-way intersection. One suggestion was made to prune the plantings just at the corner of the garden nearest the intersection.</p>	







Issues & Action Items

<p>12</p>  	<p>Horton Stairway</p> <p>See recommendation # 4</p>	<p>This stairway provides access from the ridge to the east of the school, and is a natural walkway for Muir families. It was noted as a high-problem area, however, because it is used by area teens as a place to hang out and often do drugs, especially during the school year. A plastic baggie for marijuana was found close by during our walk, and parents say that they most often see teens smoking pot at about the halfway point of the stairs. Participants suggested that the trees should be trimmed higher to clear the sightlines and provide less cover for loitering. It will be important to work with police to help enforce the law here, especially with officers and counseling staff at Franklin High School. A walking school bus along this route will help provide parent supervision and decrease loitering along this route.</p>	
<p>13</p>   	<p>36th S. at the base of the stairs</p> <p>See recommendation # 3</p>	<p>There was a lot of discussion about the safest walk route for pedestrians coming down the stairs toward school. An intriguing suggestion was made to mark a crosswalk on the North side of S. Horton St. to keep pedestrians on the north rather than the south side of the street. This route would have pedestrians avoid the trouble at the intersection of S. York and S. Horton, though it requires education so that children know to remain on the north side of S. Horton all the way to the crossing guard posted at 33rd S.</p>	
<p>14</p>    	<p>36th S. and S. Hinds</p>	<p>One block south of S. Horton Street, the infrastructure has changed dramatically. Along S. Hinds St. there are no sidewalks or curbs on either side, which invites parking on the grass and pushes pedestrians to the center of the road.</p> <p>When infrastructure is lacking near schools, it is important for children to learn the safest ways to walk and cycle in the neighborhood. It is also critical to educate drivers and enforce the speed limit. The Green Feet project brings pedestrian and bicycle safety activities to this community.</p>	
<p>15</p> 	<p>S. Hinds cut-through</p>	<p>The cut-through from 34thS. to 33rd S. on S. Hinds was a delightful surprise to many who did not realize that this was public right of way. The path here is maintained by the neighbors to the south, who have landscaped a boundary around their garden and kept the public walkway apparent.</p>	













Issues & Action Items

<p>16</p>    	<p>S. Hinds behind the school</p>	<p>Participants explained that the school has tried to designate this block as an alternate drop-off and pick-up area, but that the effort has not proven effective to date. There is merit to the idea, as it is a best practice in pupil transportation to separate parent vehicular traffic from bus and pedestrian routes. However, the Green Feet project needs to determine that the infrastructure is sufficient to accommodate larger volumes, that communication to parents is clear about the best procedures to follow, and that traffic rules are enforced here.</p>	
<p>17</p>  	<p>School Playground</p>	<p>Watch this space! The Muir PTA and administration are working on a project to design and construct a new playground on campus. The Green Feet project is coordinating with the playground project steering committee to ensure that the playground plans enhance pedestrian access to and safety in this area.</p>	
<p>18</p>  	<p>S. Hinds P-Patch</p>	<p>The community P-Patch makes a pleasant pathway toward Rainier Avenue South. Corn and zucchini were plentiful. During the school year, many children can be seen approaching the school by this path, although it is not currently noted on the school district's walk route map. The Green Feet Project will examine the current walk route map and distribute an updated version pending school district approval.</p>	
<p>19</p>	<p>Stairway from P-Patch to S. McClintock</p>	<p>This shortcut to the school follows a stairway to the apartment complex that lets out at McClintock, where some Muir students reside.</p>	
<p>20</p>   	<p>Rainier S. and S. Horton See recommendation # 6</p>	<p>The Seattle Public Schools shortened the walk boundary this school year, and now provides bus service to students in the residential pocket west of Rainier S. While bus service across busy streets circumvents immediate safety issues, it is important to press for improvements so that students may have the ability and right to safely walk this quarter mile stretch to school. There already exists one significant amenity here: the pedestrian signal turns in advance of the car signal, giving pedestrians a head start across Rainier S. and making it more difficult for drivers to cut them off in the crosswalk. The Green Feet project has been asked to place pedestrian safety flags here. Feet First would like to see a crossing guard posted in this location.</p>	




Issues & Action Items

BICYCLE AUDIT LOOP			
Item	Location	Description	Photo
21 	34 th S. and S. Hanford	There are no corner curb cuts at this intersection, nor are there at many other corners in this residential pocket. This poses a challenge for accessibility by wheelchair or stroller.	
24 	Mt. Baker Blvd at 34 th S.	Mt. Baker Blvd winds and curves through an otherwise regular north/south grid. The effect can be visually pleasant and opens up green space used by neighbors and students of nearby Franklin High School. However, at this intersection the intersecting angles create a blind turn, which is exacerbated by parked cars. Students traveling on foot or on bicycle here need to be taught to take extra caution with this crossing, as do drivers.	
25	34 th S. and S. McClellan	This 4-way stop with flashing red light provides a good infrastructure for crossing S. McClellan St. from the block east of the school. However, with most families living to the north and west, the more direct crossing is one block over at 33 rd Ave. S.	
26	North of McClellan between 31 st and 34 th	This residential pocket is a very appealing area for people on foot and bicycle, although the lack of curb cuts poses accessibility issues for people with disabilities.	

Issues & Action Items

<p>27</p>  	<p>33rd S. and S. Lander</p>	<p>The neighborhood is also missing curb cuts here. Children will need to learn some bicycling skills, and will thanks to the education components provided by the Cascade Bicycle Club.</p>	
<p>28</p> 	<p>31st S. and S. Lander</p>	<p>The intersections immediately to the north of S. McClellan Street along 31st Ave S. are all treated with stop signs for the east-west side streets. Six such crossings repeat north to the end of the walk boundary, leaving residents in the area north of S. McClellan and west of 31st S. to either travel all the way to S. McClellan to cross 31st S. with stopped traffic, or to negotiate a crossing of busy 31st S. While the school walk route map suggests the former, locals know that the residential pocket to the east provides some of the most pleasant and carefree pedestrian and bicycle travel. Suggestions were made to place a flag bucket or crossing guard at one of these corners to help make the crossing more feasible. Sight lines are good, traffic gaps happen, and driver behavior is still not reliable.</p>	
<p>29</p>  	<p>31st S. and S. Bayview</p>	<p>A digital speed-reader board has been installed in this location as part of a community effort to slow northbound traffic on 31st S. (An identical sign is up the hill for southbound drivers). The Green Feet Project should make connections with residents working on this other very compatible effort.</p>	
<p>30</p>   	<p>33rd S. and S. McClellan See recommendation # 5</p>	<p>The City of Seattle provides a crossing guard in this location, which is well chosen because of the high volume of traffic along S. McClellan St. The guard assigned to this corner for the past several years has resigned, and the position be refilled with a new guard.</p>	

Issues & Action Items

ADDITIONAL NEIGHBORHOOD "HOT SPOTS" (as identified by area residents and reviewed by Feet First, but NOT visited during the walking audit)		
Item	Location	Description
31		During the walking audit, residents shared concerns about problems that were outside of our immediate area, but important in terms of their decisions to walk to school. They are mentioned here in the interest of serving the larger community, and in recognition of the fact that our walking and bicycling audits covered only a small amount of ground. Problems were reported by residents and checked out by Jen Cole, who also photographed them for this addendum.
32	 Ferris and Mt. St. Helens	A blind turn and poor driver behavior pose a hazard for pedestrians, cyclists and drivers alike. Residents would like to speak with traffic police and engineers about possible ways to improve safety here.
33	  34 th S. below S. Spokane	There is a gap in the sidewalk on the west side of the street next to the parking lot for residents of the apartment complex here. Parked and disabled cars fill the street shoulder and force pedestrians into the roadway. The sidewalk continues again north of S. Spokane. The gap needs to be completed to increase connectivity on this walk route to school.

Next Steps and Priorities:

- Conduct travel mode measurements to ensure our ability to measure program impact.
- Conduct a "Walking Wednesday" campaign in October to celebrate International Walk to School Month.
- Work with SDOT to begin public process for engineering improvement decisions.
- Contact the Seattle Police Department and the security officers at Franklin High School.
- Work with the Cascade Bicycle Club to provide safety education to Muir students and families.

Contacts & Project Information

For more information about this report, (name of project) or Feet First, please contact:

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Feet First is a 501(c)(3) non-profit organization. Feet First promotes walkable communities through advocacy, community organizing, research, and education.