



Hazelwood Elementary Walking Audit



Renton School District



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Overview of Program

Communities Putting Prevention to Work

Renton School District:

Tiffany Park Elementary, Hazelwood Elementary, Highlands Elementary

Safe Routes to School (SRTS) is 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, SRTS helps communities create a balanced alternative to an automobile-centered culture.

In an effort to improve King County children’s physical health, academic performance, and personal safety, the Bicycle Alliance of Washington and Feet First will lead Safe Routes To Schools programs at eighteen schools in 2011. Through partnerships with King County school districts and other community organizations, the programs will identify safe and unsafe areas for biking and walking, design safety improvements, educate students on safe walking and biking practices, and launch events to encourage children to walk and bike. The project spans the “5 E’s” of SRTS: Education, Encouragement, Enforcement, Engineering and Evaluation.

The goal of the project is to create new or improved systems so that more children will walk and bike to school, thereby helping to combat childhood obesity. Childhood obesity rates have more than tripled in the past 30 years, while the number of children walking and biking to school has declined.

In 2009, less than 13 percent of students between the ages of five and 14 walked or biked to school, compared to 48 percent in 1969. Childhood obesity is associated with cardiovascular disease and diabetes, which contribute to the largest causes of death in the King County.

These three Renton walking audits identify and prioritize the next steps to acquiring funds for future projects. Additionally, the recommendations can be incorporated into the District and the City of Newcastle’s approach to Safe Routes to School programs at the other schools in the district.

Methodology

The first step of the program was to gain an understanding of where students live and where they are go in the afternoons. This information was gathered from the district, teachers, school staff, and PTA.

Hazelwood was chosen for the CPPW project based on its readiness to take on the program. The school’s neighborhood was visited and “ground-truthed” to compare mapping data with in-person observations. Notes and photographs were taken on pedestrian infrastructure-related assets and issues. Based on these observations, points of interest were chosen and maps were prepared for the community walking audits.

The audit was conducted on February 3rd, starting at school dismissal, and lasting 1.5 hours. Audit participants were given maps, clipboards, and digital cameras. They recorded their observations directly onto the maps and took photographs to go along with their written observations. Their comments and the cameras were collected after the audit, and these records were integrated into the final reports.

Community Participation

The principals, faculty and staff recruited community participants including parents, neighbors, concerned citizens, and the school's Girl Scout Troop. Bicycle Alliance of Washington and Feet First created and emailed fliers to the school, and coordinated meetings between the District and city planner.

Hazelwood Elementary

Overview of School

Hazelwood Elementary is a K-5 school located at 7100 - 116th Ave SE in the City of Newcastle and is part of the Renton School District. Hazelwood has 496 students, an involved, energetic PTSA (Parent Teacher Student Association) and many community volunteers. Much of the walking environment in the neighborhood has sidewalk infrastructure due to a combination of public work retrofits and development standards that require sidewalks with new construction. However, there are many locations that have not been updated. The resulting walking infrastructure is inconsistent in many neighborhoods. In particular, City of Bellevue land north of Newcastle Way lacks sidewalk and crosswalk infrastructure and has several poorly maintained crossing and walking areas. This inconsistent walking environment is often unsafe for elementary school children to walk to school.

Paved and dirt walking trails, both official and unofficial, are prevalent in the Newcastle neighborhood as well. The Newcastle Trails Association is a potential partner for assisting with community walking support and resources. In fact, there are two sets of trails in immediate proximity to the school and these may be ideal routes for walking school bus' or other adult supervised walking routes.

Drop-off and Pick-up Procedures:

School drop-off and pick-up areas often pose particular difficulty for SRTS. The combination of high numbers of family vehicles, yellow bus service, pedestrians and bicycle traffic can make the final approach to the school difficult for students and adults alike.

A general rule of thumb is to make a clear separation between different travel modes by having discreet areas dedicated to bus loading, family vehicles, and bicycle/pedestrian access. Signage and curb striping should be unambiguous, schools should distribute information that clearly states the school procedures, and adequate staffing should be provided to supervise each area.

It is outside of the scope of this walking audit to do an in-depth analysis of student drop-off and pick-up procedures for each school. However, some general observations about the school ground and drop-off/pick-up routines are noted.

The pick-up and drop-off at Hazelwood has both some aspects that are working well in addition to areas that can be improved. It was noted during the walking audit that during drop off/pick up, traffic congestion can back up onto 116th. Even though the school has a separated car and bus pick up, students who arrive at the school by foot or bike still have to navigate through entrances that prioritize cars over pedestrians.

Bicycling

Although school staff believes that most students own bikes, very few students ride to school. This is likely due to the topography, which is steep in some areas. Other factors likely play an influence as well; biking infrastructure is missing in places, vehicular speed can be high on 116th, the cul de sac street pattern lengthens trips, school policy only allows 4th and 5th graders to bike, and many students have reported that they do not know how to ride a bike. School policy reinforces the legal requirement to wear a helmet.

There are two 11-bike capacity ribbon-style racks are installed in front of the school. These are neither covered, nor locked, nor used. See the attached guide on preferred bicycle parking design and placement.

Hazelwood Elementary Community Walking Audit participants included:

Hazelwood Elementary Staff - Sheri Hanson
Hazelwood Elementary Staff - Kate Ingalls
Hazelwood Elementary Staff - Kim Magnuson
Hazelwood Elementary Staff - Cindy Farnsworth

Hazelwood Elementary Student - Sydney Collins
Hazelwood Elementary Student - Jade Gensheimer
Hazelwood Elementary Student - Jenny Morasch
Hazelwood Elementary Student - Emma Ledbetter
Hazelwood Elementary Student - Emily Baker
Hazelwood Elementary Student - Carsyn Willams
Hazelwood Elementary Student - Brooke Auvil
Hazelwood Elementary Student - Shelley Dean
Hazelwood Elementary Student - Kaya Nieves
Hazelwood Elementary Student - Bella Jacobson
Hazelwood Elementary Student - Sadie Olson
Hazelwood Elementary Student - Samantha Yee
Hazelwood Elementary Student - Elizabeth Platn
Hazelwood Elementary Student - Claire Ingalls

Hazelwood Elementary Parent - Marybeth Voss
Hazelwood Elementary Parent - Julie Collins
Hazelwood Elementary Parent - Pamela Scott
Hazelwood Elementary Parent - April Jasman
Hazelwood Elementary Parent - Melissa Ledbetter
Hazelwood Elementary Parent - Heidi Auvil
Hazelwood Elementary Parent - Joe Gensheimer
Hazelwood Elementary Parent - Michael Cohen
Hazelwood Elementary Parent - Amy Chase

Renton School District Health Director – Susan Lander
Renton School District, Transportation Director – Ron Scheepers

Hazelwood Walking Audit

Walking Audit route #1:

The walk route for Hazelwood Elementary began by examining the pick-up and drop-off challenges immediately outside the school entry area. Group one then walked south off campus grounds to a set of stairs that connect to 116th via a road stub. The group then moved north along 116th Ave SE to the entrance of the school where a crossing guard is often stationed during school hours. The group crossed the street onto 72nd St and through a dedicated open space parcel that connects the newer homes along 115th Ct SE. Traveling north, the group then connected to Newcastle Way and examined the intersection of Newcastle Way and 11^{6th} Ave SE followed by a short walk north along 116th Ave SE to SE 65th Pl and then returning south along 116th Ave SE to the school. See walking audit route map 1 on page 6.

Walking Audit route #2:

Route #2 began by examining the pick-up and drop-off area outside of Hazelwood Elementary. The group then cut east through the playfield of the school, exiting to an official City trail. The group then moved north to the intersection of 19th Pl SE and Newcastle Way where they examined the speed of traffic along Newcastle as well as the lack of safe crossings for students. The route then moved westward along Newcastle Way to the intersection with 116th Ave SE and returned to the school along 116th Ave SE. See walking audit route map 2 on page 9.

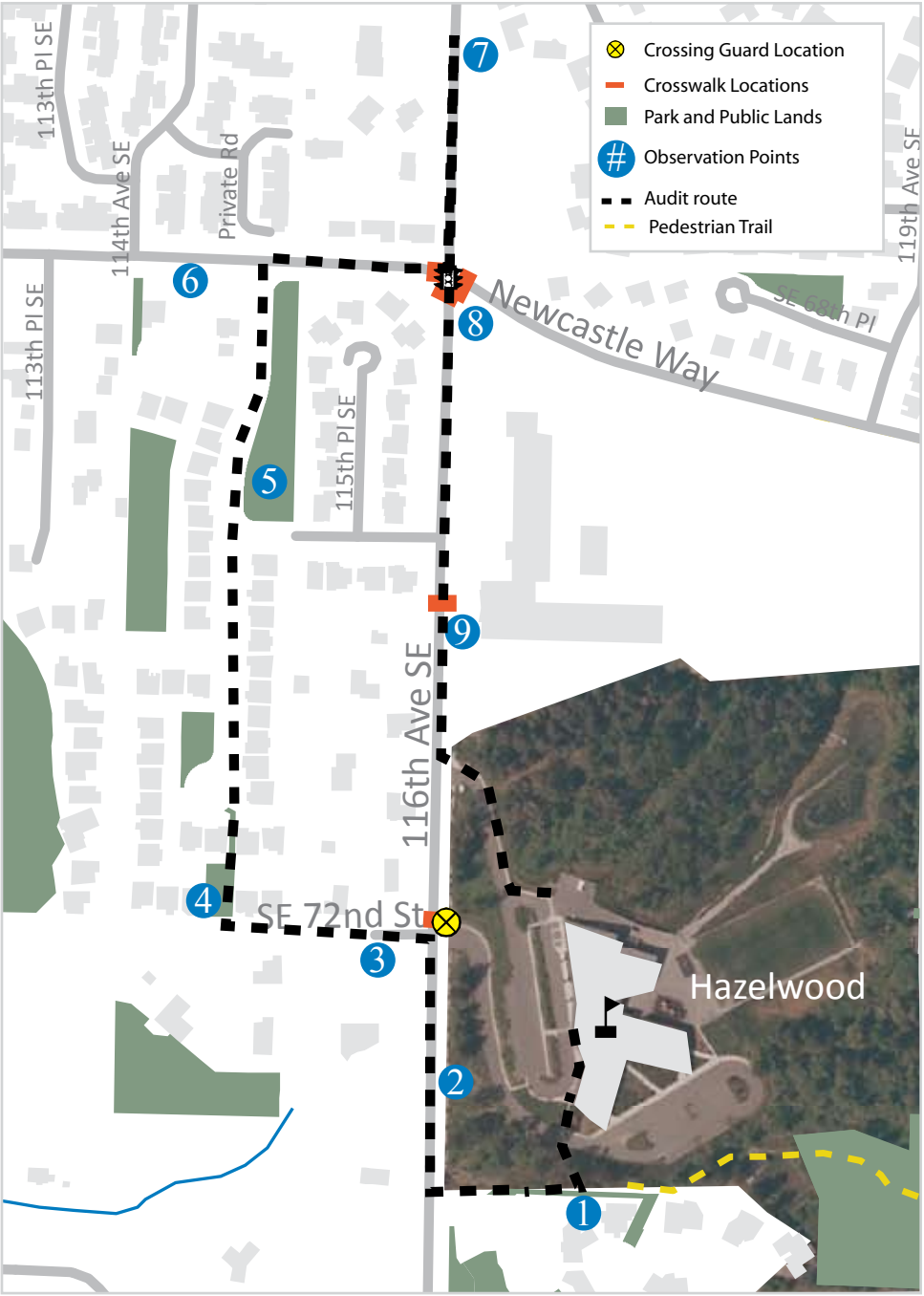
Walking Audit Top Observations

1. Speeding is a concern both on Newcastle way as well as 116th. South of the intersection with Newcastle Way, 116th has sidewalks which often have a significant and thoughtful buffer area making it relatively safe to walk. However, neighborhoods north of Newcastle Way are in significant need of safe walking options.
2. There is high community involvement at this school; with this kind of support, encouragement and education campaigns are ideal.
3. New development standards seem supportive of pedestrian safety. However, because there is a mix of new development and older infrastructure, there is inconsistency in the pedestrian infrastructure. This leads to confusing elements with sidewalks starting and stopping without notice.





Walking Audit Top Recommendations




There are a number of opportunities to improve walking conditions in the Hazelwood neighborhood. However, two points in particular rose to the top as priorities to support safe walking routes for Hazelwood Elementary.



1. First, address the lack of safe crossings of Newcastle Way, particularly between 116th and 123rd. Due to the significant rise to the east on Newcastle Way it may not be possible to install a crosswalk in this stretch of road. However, additional engineering (signage, beacons, etc.), and increased enforcement efforts seem appropriate to slow down vehicle speed. Feet First recommends working with city officials to understand how to best create safe crossing options and increased visibility along this section of Newcastle Way.
2. The intersection of Newcastle Way and 116th has a number of possible solutions to increase pedestrian safety. There are two relatively simple maintenance procedures Feet First would like to encourage. The first is trimming back the overgrown tree on 116th south of the intersection, which obstructs the school zone sign. Another simple maintenance solution is to repaint the existing crosswalks on all four sides of the intersection. Longer term engineering project would include working with city officials to design infrastructure solutions at this intersection. Consider creating corner bulb outs, which reduce pedestrian exposure time by extending the sidewalk while simultaneously slowing speeds, by reducing the turning radius. In particular, this could reduce speeds when turning right from 116th onto Newcastle Way.
3. Use the active parent participation at the school to increase the number of walkers and bikers and decrease the number of congestion-creating drivers at drop-off and pick-up times. Consider creating remote pick up and drop off locations, organizing bike trains and walking school buses, and creating carpool sign ups. There are a number of great trails and community parks in the area that could be used as meeting spots and wonderful experiences for students to explore.

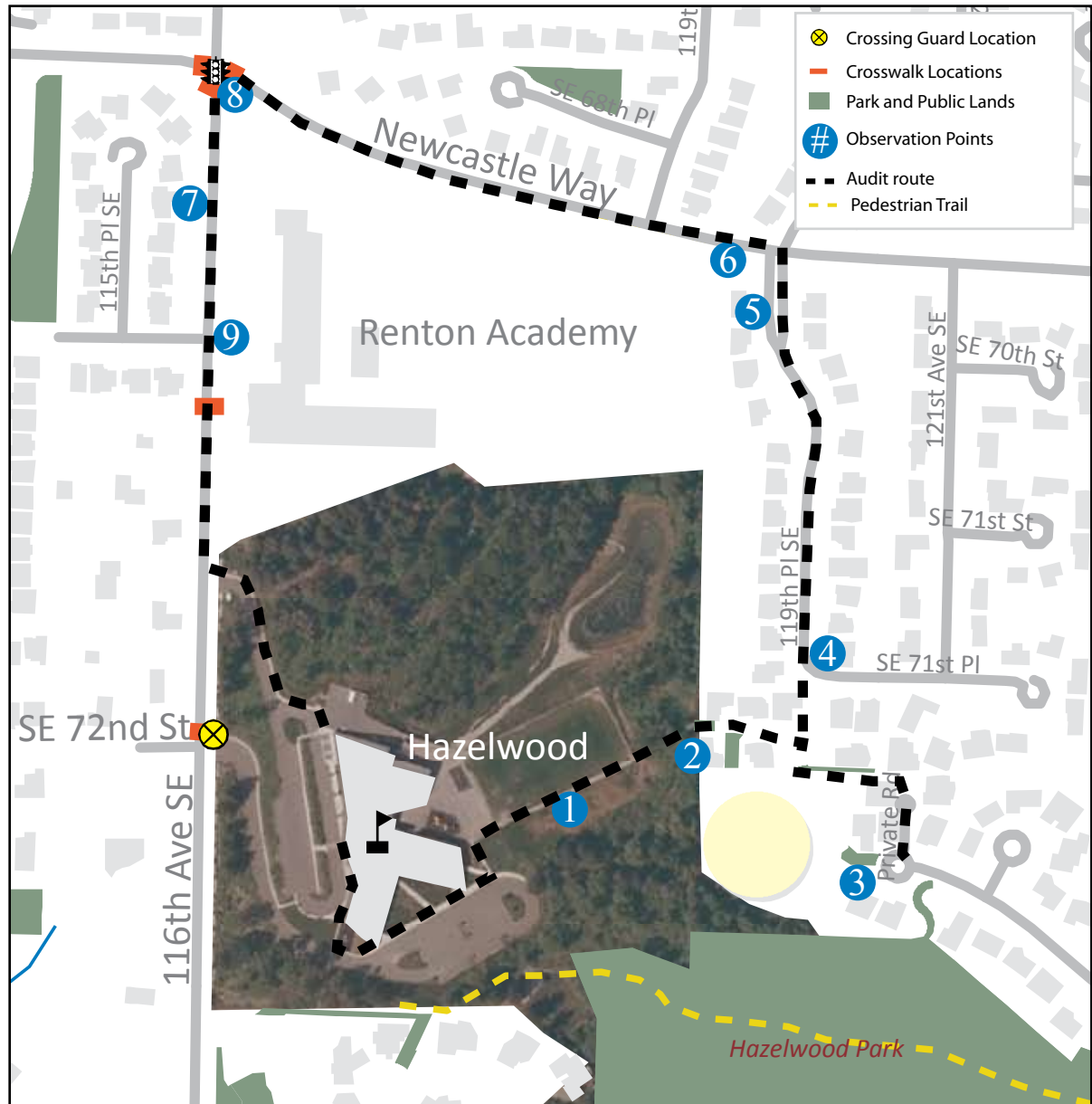


Hazelwood Elementary Walking Audit Route 1

Observation Pt.	Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observations	Recommendations	Image
1	Stairway heading west above Spur Rd.		x			x	x	<p>Only one railing, maybe need another, slippery when wet, steep stairs</p> <p>Parent pick up, too steep, not ADA, icy slope, traffic light gets very congested</p>	<p>Enforcement/Policy: Depending on school policy regarding the drop-off pick-up activity, this location could be encouraged or discouraged for parents to meet students that walk home.</p> <p>Engineering: If this is a location that the school would like to deter or encourage parents to use recommendations for improving the handrail and appeal of using this stairway. This is an opportunity to work with the Newcastle trails association on trail marking and community awareness of the local trail system.</p>	
2	116th S of 72nd	x						<p>This buffer area between street and sidewalk provides a nice walking environment.</p>		
3	72nd between 116th and 115th		x		x		x	<p>There is a small section of road along SE 72nd St that does not have sidewalks. However, the new development areas have well designed sidewalks. This section looks as though it is not maintained and has a growing tangle of blackberry bushes on the north side.</p>	<p>Engineering: Add a sidewalk connection along SE 72nd St.</p> <p>Enforcement: Identify who the property owner and work with the City to enforce the clearing of blackberry bushes that is falls under the owner's responsibility.</p> <p>Education: If students are going to be encourage to use this route, it is important to highlight for students this area information about this to note that this section of road must be pointed out as a more difficult area.</p>	
4	Public land between 72nd St & 115th Ct SE	x			x			<p>There is a well maintained path connecting through from 72nd St and 115 Ct SE. This is an ideal place for walking.</p>	<p>Education: Inform community residents about this connecting parcel and the amenities available within the community. It can also help connect students from neighborhoods to the west to the school.</p>	





Observation Pt.	Intersection	Community Asset	Engineering Enforcement	Education	Encouragement	Policy	Field Observations	Recommendations	Image
5	Public park on 115Ct SE and Newcastle Way	x			x		There is a decently sized neighborhood park with well maintained walking paths, a play area and benches	Community Asset/Encouragement: This park could be a great location for a walk with students teaching them how to cross safely across the street. It is quite close to the school and has potential as a gathering location for students to meet before school.	
6	113th and Newcastle Way		x				The sidewalk along the south side of Newcastle Way is intermittent without a safe place to cross.	Engineering: Add a sidewalk on south side of Newcastle Way to connect neighborhoods. The existing sidewalks have been added with new developments and with City projects, leading to a number of sidewalks that abruptly start and stop. Apply for a WSDOT grant in collaboration with the City of Newcastle and the City of Bellevue.	
7	116th North of Newcastle Way		x	x			There is no sidewalk on either side of 116th and the painted right-of-way alternates between being moderately wide to quite narrow. Many students have to use this section of road to walk home. Often there are commercial vehicles and large trucks parked in the ROW causing students to have to walk into the flow of traffic to get around the vehicles. Vehicles then cross the yellow painted direction line in the road to avoid the pedestrians moving into oncoming traffic.	Engineering: If possible add in sidewalks. If not possible inserting small raised barriers to prevent cars from parking in the ROW and providing a bit of protection to pedestrians. Policy: Work with City of Bellevue to develop SRTS plan. Consider holding a walking audit with Bellevue staff along this segment Verify that City policy makes it illegal to park on the ROW area, which forces children to walk in the street. Could put in bike path with low curb barriers	

Observation Pt.	Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observations	Recommendations	Image
8	116th and Newcastle Way		x	x				<p>This busy intersection serves students to the NE and west. The crosswalk is quite faded and the curbs are not lined up, making crossing tricky. An overgrown tree obscures the school zone sign on the SW side of the intersection. Additionally, many cars cut the stop short when turning right, cutting the corners and edging into the pedestrian areas.</p>	<p>Engineering: Repaint the crosswalks. Add bulb outs to the corners to encourage full stops at the stop signs, slow turning speed, and reduce the crossing distance for students. Consider adding elevated curbs as a short term measure to tighten the turning radius.</p> <p>Consider applying for a WSDOT grant in collaboration with the City of Newcastle, the City of Bellevue, and Renton Academy.</p> <p>Enforcement: Work with local police officials to target this intersection for speeding and running stop signs when kids are walking to and from school.</p>	
9	116th in front of Renton Academy	x		x				<p>The safety offered by the nice wide sidewalk is decreased due to the two long uninterrupted driveway curbcuts for the parking lot and bus entrance. There is no crossing guard at this location.</p>	<p>Community Asset: This sidewalk is well designed with a comfortable widths and buffer area between the cars and the pedestrian.</p> <p>Enforcement: Work with Renton Academy to position adult crossing guard at this location at start and end of the school day.</p> <p>Engineering: Provide break in curbcuts - narrow to the minimum width necessary for car passage.</p> <p>Long term planning: If the Renton Academy property is redeveloped, incorporate bike/ped planning from the initial stages of the project to avoid problems like this. Preferably, locate future school developments in areas that support biking and walking (good existing infrastructure, grid street networks, and dense population).</p>	




Hazelwood Elementary Walking Audit Route 2

	Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Notes	Recommendation	Image
1	Trail from school to South end of 119th Pl.	x						Blackberry and sticker bushes hanging over the trail.	Work with the adjacent property owner to clear blackberry and sticker bushes. If this is school property it should be managed by the school district OR the school could ask the PTA to take responsibility. Add a sign for walk route and work with the Newcastle Trails group to add a sign for the trail system. Publicize network to parents.	
2	South end of 119th Pl entrance to Hazelwood Elementary School	x						There is water runoff on the trail. The stairs provide a good connection to the residential neighborhood. No ADA and challenging for beginner bikers to get down.	Imrpove drainage. Add a narrow bike channel or bike ramp so that kids can walk their bike up or down easily (see here for examples: http://www.activelivingresources.org/assets/activelivingfactsheetstair.pdf)	
3	Private Rd at the end of SE 73 Pl	x						This is a steep rocky path. It feels like you are in someone's driveway.	Add a sign for walk route and work with the group that manages the trail system to identify a sign for the trail system.	
4	121st Pl SE and 71st Pl			x			x	Cars parked on the sidewalk. The rolled curb encourages cars to park on the sidewalk.	Education: Educate residents not to park on the sidewalk. Policy: Work with the city to identify the policy for future rolled sidewalks and discourage them being installed.	
5	119th Pl and 71st Pl	x						The sidewalk is cracked. The area does not provide sufficient lighting.	Work with the City of New Castle to improve the overhead lights in this area.	

Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Notes	Recommendation	Image
Newcastle Way and 119th Ave SE		x	x				Cars speed along Newcastle Way. The separated path along Newcastle Way is bumpy and the trees are lifting up the path creating potholes. There is no crosswalk to connect with the separated path, which makes for a dangerous situation for families walking from this area. There are no sidewalks on south side of Newcastle Way.	Enforcement: Work with the Newcastle police to observe speeding in this area and issue tickets. Arrange for a mobile speed feedback trailer. Engineering: Provide better lighting. Provide a crosswalk. Fill in the potholes to make the surface area of the path more smooth.	
7 Newcastle Way and 116th		x	x					Enforcement: Work with the New Castle police to ticket drivers who do not come to a complete stop. Engineering: Restripe the crosswalks. Put stop bars at this intersection. Tighten corners. See recommendations for this intersection in Walk Route 9 #1.	
8 Newcastle Way and 116th		x					Engineering: Have the city do maintainance along 116th to trim the overgrown trees impeding in the sightline.	Engineering: Have the city do maintainance along 116th to trim the overgrown trees impeding in the sightline.	
9 Renton Academy					x		Electrical box make it difficult someone to see a person preparing to use the crosswalk.	Provide crosswalk flags at this location for pedestrians to use. Paint the electrical box with a public service message: "Watch for Pedestrians Crossing." Contact electrical agency and request that policy be changed to require low-profile electrical boxes if they must be placed next to school driveways.	

Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observations	Recommendations	Image
Front of School			x	x			Figures read "Proceed forward. No unloading or unloading". Not followed the people in the vehicles.	Provide an education campaign to parents about not stopping. Enforce the pick and drop off procedures.	
Front of School							The cars are backed up waiting to pick up their student.		
School Grounds							ADA ramps and striping between drop off loop and staff parking		
School Grounds	x						There is a decent amount of bicycle parking located in the front of the school. Although it is not covered, it seems to be ample and safe.		
Behind main entrance of school near bus loading/unloading		x					School bus pickup and drop off is located separate from parent pickup and drop off. Where the kids must cross the bus travel lane there student crossing guards.	Provide a yellow line for kids to stand behind.	

	Intersection	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observations	Recommendations	Image
	Main entrance					x	The school tries to enforce that students remain behind the yellow line during pick up times.	This procedure works due to constant supervision		

Guidelines for Bicycle Parking at Schools

Providing good quality bicycle parking for students and staff can encourage biking by decreasing the risk of conflict, theft, and damage.

Bicycle parking must be:

- visible
- accessible
- secure
- easy to use
- convenient
- plentiful

Bicycle parking should be: covered, well lit, and in plain view without being in the way of pedestrians.

Theft is a serious concern for bicyclists. Nearly 1.5 million bikes are stolen in the U.S. each year. Safe and convenient parking is as critical to bicyclists as it is for motorists. Racks should:

- Be placed in areas with high pedestrian activity and “eyes-on-the-street”
- Be more visible to staff and students than passersby
- Allow the frame and one wheel to be locked to the rack when both wheels are left on the bike
- Allow the frame and both wheels to be locked to the rack if the front wheel is removed
- Allow the use of either a cable or U-shaped lock
- Be securely anchored.



In areas with high crime concerns, schools should consider placing racks in rooms or cages that can be locked during the school day.

Location: Racks need to be sited and installed appropriately for them to be well used:

- Racks that are placed less than 2'-3' from a wall or less than 30" from another rack will end up sitting empty.
- Racks need to be clearly visible and accessible, within 50' of the building's main entrance or at several commonly used entrances.

Design Standards: Racks should:

- Support the bicycle frame, not just one wheel
- Resist cutting, rusting, bending and deformation
- Be usable by bikes with no kickstand and bikes with water bottle cages

- Be usable by a wide variety of sizes and types of bicycle
- Be promoted with bike parking directional signs
- Have roofs or be located under awnings - to provide riders with rain protection while locking their bikes *and* to prolong the life of the bikes' metal and rubber components- an important issue for low-income riders.

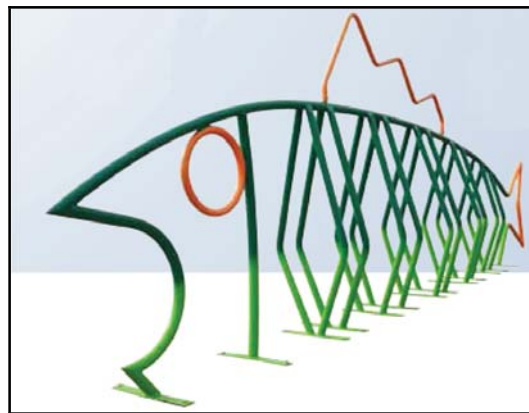


“Wheel-bender” racks (above) can damage wheels and don’t allow frames to be locked to the rack.

Costs: The cost to purchase and install bike rack varies, but is almost always cheaper and more efficient than providing car parking:

- A bike rack that parks two bikes costs \$150 to \$300.
- A locker that holds two bikes costs between \$1,000 and \$4,000 to purchase and install.
- The cost to provide two car parking spaces is \$4,400 on a surface lot and \$25,000 in a garage.
- Parking for 10-12 bikes can fit in the same space required for a single car.

Customized Designs: As long as they meet the guidelines discussed above, bicycle racks can serve a dual purpose by promoting a school’s name, mascot, or values (see below).



More Information: To learn more about how to choose a rack that is good for your school, please consult these resources:

- The Association of Pedestrian and Bicycle Professionals (APBP) <http://www.apbp.org/?page=Publications>.
- The Pedestrian and Bicycle Information Center: <http://www.bicyclinginfo.org/engineering/parking.cfm>.
- Madison, WI bike parking guidelines: <http://www.cityofmadison.com/trafficEngineering/documents/MadisonBikeParking20100715.pdf>
- John Vander Sluis, The Bicycle Alliance of Washington, JohnV@bicyclealliance.org