

Scenic Hill Elementary Walking Audit



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Overview of Program

Communities Putting Prevention to Work: Scenic Hill, Kent School District

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 are leading SRTS programs at eighteen schools in 2011. Through partnerships with King County school districts and other community organizations, the programs 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 ultimate goal of this 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 U.S. students between the ages of five and fourteen walked or biked to school, compared to 48 percent in 1969¹. Childhood obesity is associated with cardiovascular disease and diabetes.

These three Kent walking audits will be used to identify and prioritize the next steps to acquiring funds for future projects. Additionally, the recommendations can be incorporated into the school district and City of Kent's approach to SRTS programs at other schools in the district.

¹. 2009 National Household Travel Survey, U.S. Department of Transportation

Methodology

The first step was to gain an understanding of where students live, where they are coming from in the morning, and where they are going to in the afternoons. This information was gathered from the district as well as from teachers and staff at the school. The second step of this program was to meet with community stakeholders including teachers, staff, PTA members, and other community partners, if available.

Each school's neighborhood was visited and "ground-truthed" (map data was compared 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.

Dates were set for the community walking audits based on availability of the Kent School District participants, community partners and primary school contacts. The Scenic Hill Elementary audit took place on Tuesday May 31, 2011. The audit began at the end of the school day to observe the dismissal process, and lasted 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

In order to gather participants for the community walking audits, Principal Dani Pfeiffer and Diane Ellis worked with faculty and staff at Cascade View to gather parents, neighbors, city staff, and neighborhood members. The Bicycle Alliance of Washington and Feet First created and emailed fliers to the school's main contacts, city planners, engineers, transportation specialist and the police department, and met in person with city staff.

Scenic Hill Elementary Community Walking Audit participants included:

Parent – Melanie Conwell
Student – Rodrigo
Student – Micaela
Student - Chris
Principal – Dani Pfeiffer
Assistant Principal – Diane Ellis
Teacher – Carol Noddings
Teacher – KK Young
Teacher – Sheryl Kimes
Kent School District Transportation Department – Doreen Stewart
Kent School District Transportation Department – Don Walkup
Kent School District Transportation Department – Becky Benedict
City of Kent, Public Works Department – Steve Mullen
City of Kent, Parks Department, Parks Planning and Development Manager – Hope Gibson
Bicycle Alliance of Washington, Safe Routes to School Program Manager – John Vander Sluis
Feet First Safe Routes to School Program Director – Jen Cole
Feet First Volunteer – Rie Izumi

Overview of School

School Overview

Scenic Hill Elementary serves 560 kindergarten through 6th grade students from the City of Kent. Students come from a wide variety of cultural backgrounds; Latino students form the largest segment (about 40 percent of the student body). Over 40 percent of the students are English language learners, and over 80 percent qualify for free or subsidized school lunches. The school is located at 26025 Woodland Way South, Kent, Washington.

In addition to linguistic challenges, Safe Routes to School programs at Scenic Hill should address the distance to its students' homes; a large number are bused due to distance.

School Grounds

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

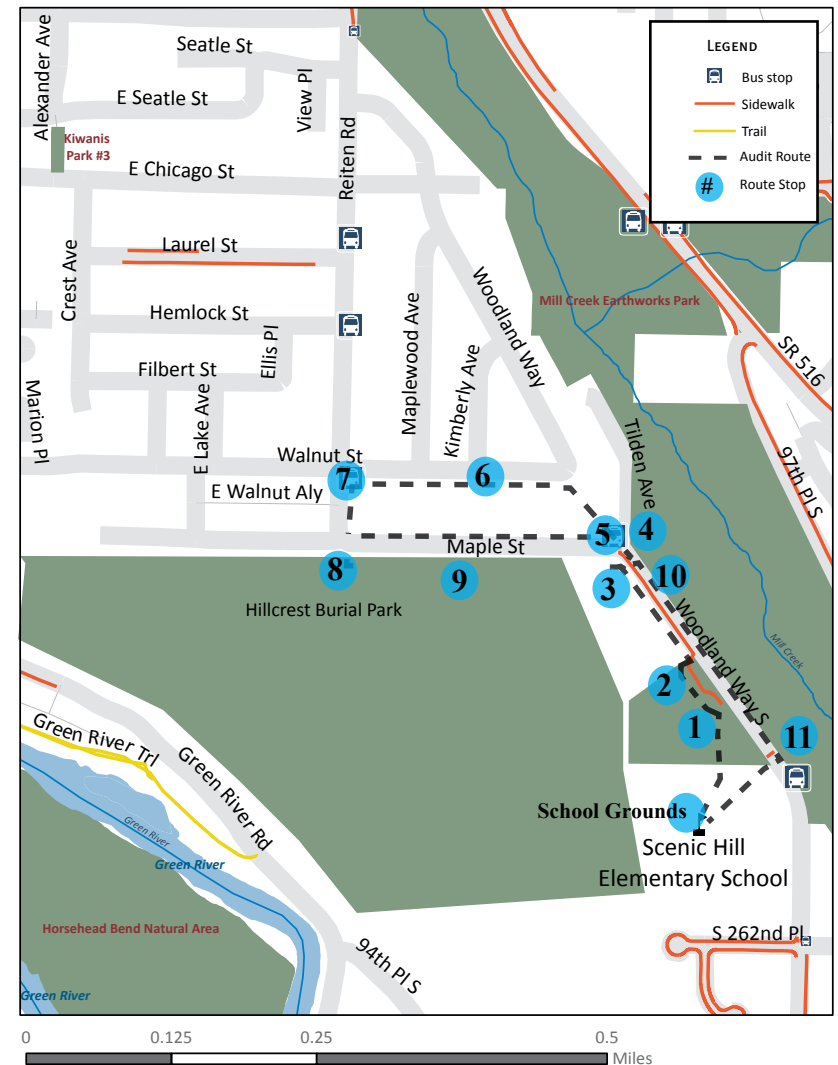
A general rule of thumb is to make a clear separation between different travel modes by having discreet areas dedicated to bus loading, family vehicles, and bicycle/pedestrian access. Scenic Hill Elementary succeeds in doing this by using the school parking area exclusively for buses, and using the adjacent park's parking lot for family vehicles. A crossing guard helps the few students on foot or bicycle navigate a minor crossing through the lot and, if necessary, Woodland Way South to the east.

Scenic Hill Elementary Walking Audit

Walking Audit Route

The walking audit route was 1.4 miles long and oriented to the north of the school campus. We walked north on Woodland Way South into the residential neighborhood that houses the largest number of students within the school's walk boundary.

Field Observation Points - The numbers on the map below correspond to the field observations made by participants on the walking audit route. See the Walking Audit Field Notes (page 6) for detailed information about each location point.



Walking Audit Top Observations

The walk boundary for Scenic Hill Elementary is limited and few students appear to arrive on foot or bicycle. Steep terrain to the west and a steep, wooded greenbelt to the east restrict walking access for all but those living in the residential area to the north and a few cul-de-sacs to the south. Within the walk zone, families are given the option to walk to nearby bus stops rather than the school, provided there is free space on the school bus. Consequently, the large majority of students receive bus service from the thirteen yellow school buses that service this school. Even within these physical constraints, however, Scenic Hill has potential to increase the safety of students walking to school.

The Kent Swim and Tennis Club just north of the school creates an additional draw to the area and potentially another stakeholder for the Safe Routes to School effort. On event days this area gets crowded with cars and becomes more hazardous for people on foot. The Swim and Tennis Club would reap benefits from increasing walkability in the area.

The east side of Woodland Way South has a low-maintenance, low-cost, gravel walkway that is effective in separating pedestrians from the road and making a welcoming option for people to walk. This treatment may be replicable at other locations in the neighborhood, such as along E Maple Street or Reiten Road.

Walking Audit Top Recommendations

The west side of Woodland Way South provides the most direct route between the school and the residences to the north. The current pathway is incomplete and poses difficulties for pedestrians. Feet First recommends installing a gravel path, asphalt walkway or sidewalk here, with special attention to pedestrian safety at the intersecting driveways. The Washington State Department of Transportation Safe Routes to School Program could be a feasible grant source for a project like this. If a major grant is sought, consider extending the walkway west on East Maple Street to provide a safer option there. Ask the Kent Tennis and Swim Club to join as a partner. (Field note #2 and #3)

Speeding along Woodland Way South (from 104th Avenue SE south of the school to Reiten Road north of the school) was identified as a barrier to walking to school. However, a city traffic study showed that most drivers caught speeding here were from the immediate neighborhood (perhaps driving their children to school!). This could be an ideal location for a “Neighborhood Pace Car” campaign, in which school families take a pledge to drive the speed limit – including the 20 mph in the school zone – and display their commitment with a neighborhood pace car bumper sticker.






An example of this program can be found here: http://www.waba.org/education/pace_car.php (Field note #11).





Walking encouragement days would help boost the number of families walking in this area and provide further indication for drivers to slow down. See www.iwalktoschool.org.




Biking Conditions

While this report's focus is on walking conditions, a few notes regarding biking are worth highlighting. Biking on Woodland Way South is likely challenging for student cyclists. The shoulder is narrow, and several corners have limited sightlines. However, the walking path and less traveled roads to the north of the school provide some comfortable biking. Students should receive training on how to bike safely under these conditions, focusing on controlled riding and visibility.





Scenic Hill Elementary Walking Audit Field Notes



	Location	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observation	Recommendation	Photo
1	Walking path on west side of Woodland Way		x					This path begins as an asphalt walkway through the park, but near the swim club it becomes a dirt path. After crossing two parking lot driveways, it expands to a more defined path covered in pea gravel -- rounded stones that roll and sink under one's feet. There are several holes and gaps in the path.	A sidewalk / walkway should be completed here so that pedestrians have consistent priority.	
2	Kent Swim and Tennis Club				x	x		On event days, parked cars line Woodland Way South and many people will cross the street between cars to get where they are going. The club would likely benefit from any Safe Routes to School efforts here.	Ask the Swim and Tennis Club to be a partner for Safe Routes to School.	
2	Driveways to Swim Club		x					The design of this club favors entry by car. Wide parking lot driveways cross the walkway at two points. Participants said they would like to see painted crosswalks across the driveways and signs to indicate that this is a walkway.		
3	Intersection of E Maple St and Woodland Way (south side)			x				The bushes near the corner of this intersection make it a blind corner between pedestrians traveling north and drivers traveling east.	Trim spring growth back several feet to increase visibility.	

	Location	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observation	Recommendation	Photo
3	Crosswalk across E Maple St at Woodland Way S	x						This crosswalk is well-placed and critical for providing access to the residential neighborhood to the north.		
4	Intersection of E Maple St, Tilden Way, and Woodland Way S	x						Although there is a good pedestrian pathway on the east of Woodland Way, there is no clear way to access it from the northeast corner where E Maple Street turns into Woodland Way. Our group chose to cross Tilden because it lacks traffic. However, the wide intersection with Woodland Way made this awkward and unsettling. There is no painted crossing between here and the school crosswalk .2 miles away.	Connectivity between the residential area and the gravel path on the east side of Woodland Way is critical. Work with city engineers to determine best crossing location and paint a crosswalk.	
5	Pedestrian connection to E Walnut St	x						A terrific asset. By connecting E Walnut St to Woodland Way S with this pedestrian only pathway, walkers have a quick, efficient, and pleasant walking option.		
5	Easement between of E Walnut St and E Maple St		x					A student who walks this way every day would like to see the grass cut on the easement between properties.		

	Location	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observation	Recommendation	Photo
8	intersection of Reiten Rd and E Maple St		x					The wide-radius turn allows faster turning by vehicles. Combined with the lack of sidewalks, this corner is very difficult for pedestrians.	Squaring the northeast corner of this intersection to a 90 degree angle would slow traffic and improve walkability. City engineers can determine if, following the squaring of the corner, this would be an appropriate location for a stop sign.	
8	Hillcrest Burial Park	x					x	Per student participant – kids prefer to walk from the school, through the neighboring woods, to the cemetery. Keeps them off Reiten, and there's a tireswing in the woods somewhere. However, homeless encampments are also common in this area.		
9	E Maple St							Although this is the most direct walkway for students directly west on E Maple St, there is no good walkway on either side. On north side, there is a wide shoulder, but it uneven with potholes and puts the traffic to walkers' back when going west. On the south side there is a grassy shoulder, but it is steep and bound by a drainage ditch and feels as if it belongs to the cemetery. Walking in the roadway on the south side should be prohibited in either direction, although there is a path beaten in the grass (called a "desire line") indicating that it is used.		
10	East side of Woodland Way S	x						A well-maintained walking path is separated from the roadway. Wide buffer zones between walkway and street (both sides) saves Woodland Way s from being completely unwalkable. Unlike the pea-stone path on the west side, this path is covered in crushed rock, which remains in place better (thank you City of Kent participants, for that information!)		

Scenic Hill Elementary Walking Audit Field Notes - School Grounds

Location	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observation	Recommendation	Photo
School Grounds / Buses	x						Many visitors remarked that the student bus pick-up is well organized and effective.		
School Grounds / Cars	x						The vehicle pick-up and drop-off area is entirely separated from the school bus area, which prevents safety problems that can be common at schools. Additionally, many parents choose to park and walk in to the courtyard area to meet their children on foot, which allows for community-building encounters and calmer procedures.		
School Grounds / Pedestrians or Bicyclists					x		Very few students were observed traveling by foot, and none were seen on bicycle during the walking audit. The crossing guard mentioned one family of regular walkers from the south, and a supervised group of students that go to an after-school care facility to the north. Students on the walk mentioned that occasionally students will walk through Mill Creek Park to get to the apartment complex to the east.	With so few pedestrians present, the crossing guard watches both the parking lot crosswalk as well as the crosswalk across Woodland Way. If this school holds a walk-to-school encouragement event, a second adult should be stationed at one of the crossings.	
Street to east of parking lot	x		x				The sightlines at the crosswalk are blocked by low trees and bushes.	Work with the property owner to trim the tree limbs back so that there is a clear distance of 6-8' from the ground. Explain to the property owner that this maintenance will improve sightlines and is recommended by law enforcement to decrease the risk of burglary. This could be a good opportunity to engage community members to volunteer and improve safety for students walking to school.	

Location	Community Asset	Engineering	Enforcement	Education	Encouragement	Policy	Field Observation	Recommendation	Photo
School Ground/Parking lot		x					Signage could be clearer, although this should be a low priority based on level of school concern and other conditions.	Ex. "Student Drop off" sign could be One Way Arrow, "Buses Only 8:00-8:45 AM, 2:20-3:10 PM" could be No Entry Symbol or a car with a line through it, painted arrows on pavement.	
School Grounds/Parking lot entrance		x					Bushes planted to hide utilities block sightlines for exiting cars.	Remove the bushes so that drivers can see and	

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.

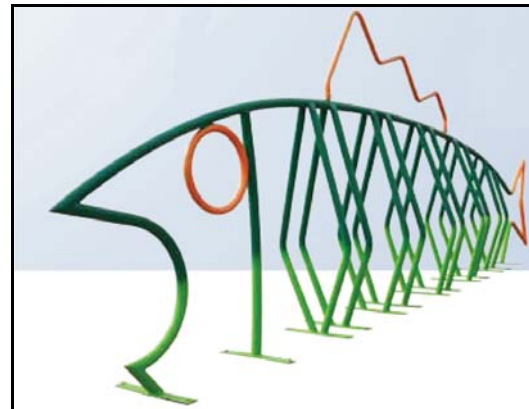


“Wheel-bender” racks (above) can damage wheels and don’t allow frames to be locked to the rack.

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