



Factoria Area Transportation Study Update Walking Audits



As part of the city of Bellevue’s update to the Factoria Area Transportation Study (FATS), Feet First conducted walking audits of the Factoria area with residents and business representatives on June 12th and July 21st, 2004.

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Walks with Residents & Community Leaders – June 12th, 2004

North and South Routes

A diverse group of Factoria area residents met at Factoria Mall to explore two routes around the neighborhood. The goal was to hear from people living in the area and to discuss ways to make walking easier and safer in the area. Our group included people of varying walking abilities, but everyone shared a common interest in having a safer, convenient, and more pleasant environment for pedestrians. Most participants turned out in response to a mailing to all households in the area. People living in Somerset, Mockingbird Hill, and residential areas to the east of Factoria Boulevard SE and to the south of SE 41st Place participated in this walk. Bellevue City Councilmember Claudia Balducci and Bellevue Transportation Planner Kevin McDonald accompanied the tours.

Walk with Business & Facility Managers – July 21st, 2004

East Route

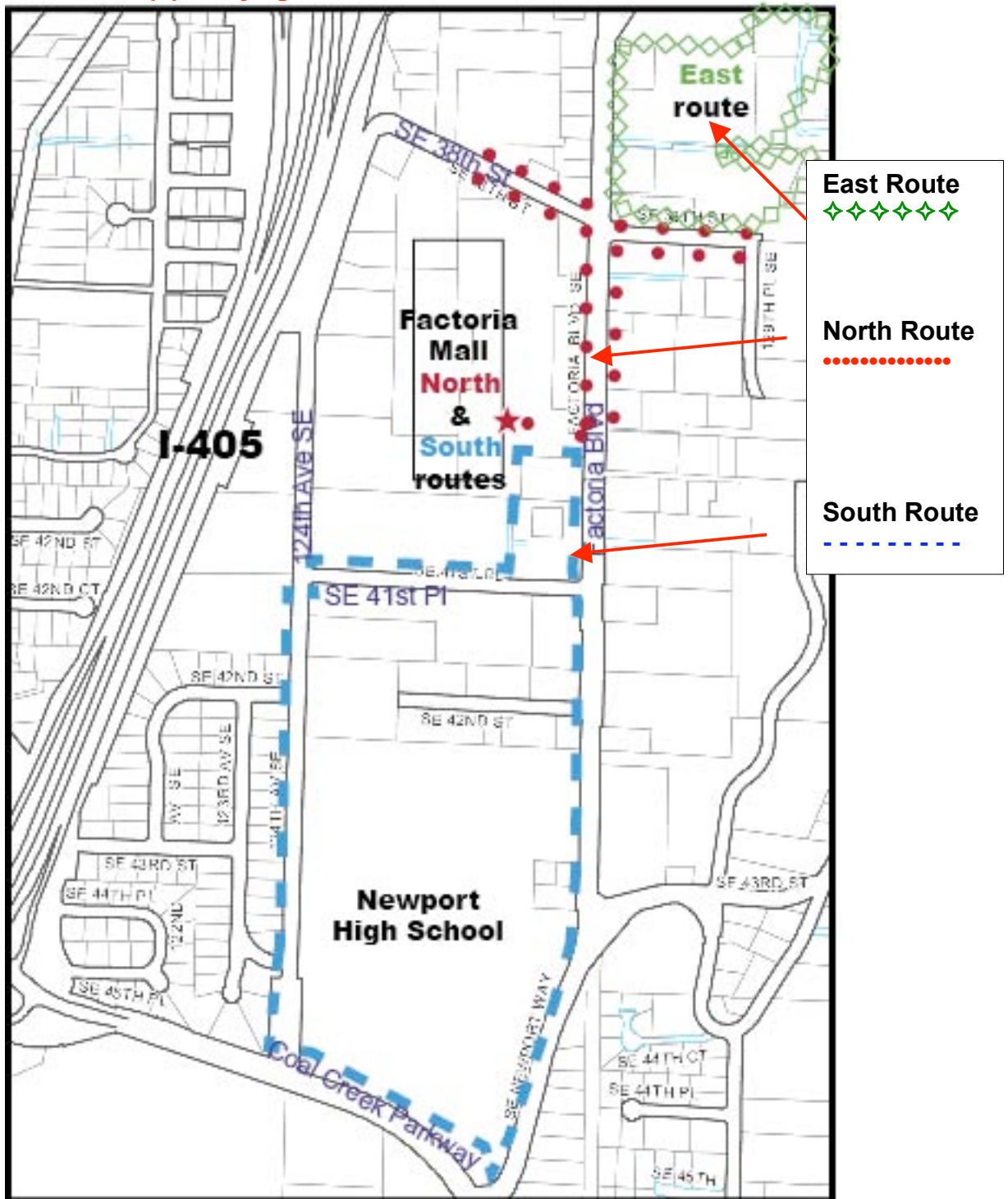
A lunch time walk with the facility managers for Factoria Mall and Bental Office Park was conducted to understand more of the needs for workers in the area. Major employment centers bring thousands of people to the area. Serving these people as pedestrians represent a significant opportunity for enhancing the economic vitality of the neighborhood. Making the area more walkable will also increase the attractiveness of using transit for commute trips and will raise the proportion of people who choose to live in the area and commute to work on foot or by other modes that reduce regional vehicle trips.

Information from this report will be incorporated into the Factoria Area Transportation Study update.



MAP OF ROUTES WALKED

Map portraying the three Factoria area routes walked:





PEDESTRIAN CONCERNS ILLUSTRATED

Issues of Concern	For Example See Item Number:	Shoppers	Commuters on Foot	Transit-Riders	School Students	Area Employees	Exercise Walkers	Parents	People with Impairments	Neighborhood Living
Street Crossings										
Adequate time to cross	N3	x	x			x		x	x	x
Shorter wait times	N7				x	x	x			x
Pedestrian Signals provide clear information	N7	x	x	x	x	x	x	x	x	x
Demand locations served	N9, S10, E3			x		x				
Shorter crossing distance	S2, S4,									
Highly Visible Markings	N7, S3,	x	x	x	x	x	x	x	x	x
Walkways										
Sidewalks Missing	N5, S6	x					x	x	x	x
Comfortable Surface		x					x		x	
Connections	N1, S1, E4	x	x		x					x
Delineated Paths	E2	x	x			x		x	x	
Buffers from Traffic	N6, S5	x	x	x	x	x	x	x	x	x
Wider Sidewalks	N8	x				x	x	x	x	
Access										
Connections to School					x					
Direct routes to stores	N4	x	x	x	x	x			x	x
Connections to Bus Stops	E6	x		x		x				
Density of Destinations	E3-5									
Transit Service Levels				x		x			x	x
Vehicular Interactions										
Motorists yield to peds	N2, N7, S7	x	x	x	x	x	x	x	x	x
Slower traffic	S4, S8, S10	x	x	x	x	x	x	x	x	x
Amenities & Aesthetics										
Shopping Carts	S1	x	x					x		x
Benches & Resting Areas	S11			x			x		x	x
Play Areas/Open Space	S12				x		x	x	x	x
Visual Detail in Environment	S11	x	x							x
Community Quality										
More People Walking			x	x	x	x	x	x	x	x
Freedom from Crime		x					x	x	x	x
Clean Sidewalks	N6	x	x	x		x		x	x	x
Air Quality							x	x		
Shade		x	x	x			x		x	
Eyes on the Street	S8	x	x	x	x	x	x	x	x	x
Noise		x	x		x	x		x	x	x





OBSERVATIONS

North Route (Factoria Boulevard to SE 38th Street)

This group included residents who live the area east of Factoria Boulevard plus one person from Mockingbird Hill. At least one member of this group works in a business east of Factoria Boulevard. A number of them walk regularly for shopping and exercise. Among these were people who enjoyed the relative calm of walking on the weekends in a loop passing through the Bentall office park. Overall impressions or concerns regarding neighborhood walkability included: the barrier that Factoria Boulevard poses, the long wait times and vehicle conflicts at the intersection with SE 38th St in particular, and a strong impression that drivers are exhibiting hostile behavior in relation to people on foot. There was a strong desire within this group for police enforcement to change driver behavior.

Observations: (corresponds to photos beginning on page 7)

- | | |
|--|---|
| N1. Parking Lot Improvements | N5. Sidewalks into Mall |
| N2. Left Turning Cars | N6. Create Safer Sidewalks |
| N3. More Walk Time | N7. SE 38th & Factoria Blvd |
| N4. Convenient Routes for Pedestrians | N8. SE 38th Sidewalk |
| | N9. Mid-Block Crosswalks |

South Route (Block Surrounding Newport High School)

This group was comprised mostly of neighborhood residents living south of SE 41st Street, and included people who walk in the neighborhood or drive to Kelsey Creek Park to walk. People also reported walking in a loop on residential streets in the neighborhoods to the east of Factoria. Overall impressions or concerns regarding the neighborhood include:

An overwhelming amount of pavement and vehicle emissions; a general lack of good resting places; family walking concerns—especially children walking close to streets; and a feeling that development is too spread out less convenient than they could be if land use decisions were reconsidered. All participants expressed the desire for pedestrians to get more respect in the neighborhood. Factoria has numerous residents who either can't drive or don't wish to. Street crossing problems and the speed of traffic were cited as the two most important problems.

Observations: (corresponds to photos starting on page 11)

- | | |
|---|--------------------------------------|
| S1. Improve Access to the Mall | S7. Crosswalk at 44th Street |
| S2. Curb Extensions | S8. High Speed Turns |
| S3. More Marked Crosswalks | S9. Access to Newport HS |
| S4. SE 41st & 124th Ave SE | S10. Speed on Factoria Blvd |
| S5. 22 Reasons for Bike Lanes | S11. Richards Creek History |
| S6. Residential Street Sidewalks | S12. Signage & Wayfinding |





East Route (The block northeast of Factoria Boulevard & SE 38th Street)

This group was comprised of property managers for Factoria Mall and Bentall Office Park. Concerns for this group centered around issues on private property. Also a prime concern is enabling the easy flow of people on foot between office properties that are on opposite sides of Factoria Boulevard, north of SE 38th Street. Employees parking in Bentall’s south parking areas exit onto SE 38th Street. The number of vehicles exiting during rush hour create a great load on the Factoria & SE 38th intersection. One idea discussed on this walk was to impose parking restrictions on SE 38th Street west of Factoria Boulevard during rush hour.

Observations: (corresponds to photos starting on page 15)

E1. Elevation Gain

E2. Walkways behind buildings





E3. Crossings

E4. Connection to Factoria Blvd

E5. Loehmann’s Plaza

E6. Sidewalk without Buffer

KEY: There are four icons for items in these notes

	Solutions that neighbors and businesses can implement now at low cost
	Solutions for which existing funding resources or city programs may exist
	Solutions that require new funding sources or new policies
	General interest items





NORTH ROUTE



N1. Parking lot improvements

On the walkway between the Old Country Buffet entrance on the east side of the Mall and Factoria Boulevard, there should be stop signs where cars intersect crosswalks (see arrows). Improve sidewalk lighting to improve nighttime visibility of pedestrians to approaching vehicles.

N2. Left Turning Cars

Vehicles turning left are dangerous for pedestrians. Unless there is a dedicated left turn signal phase, pedestrians can have the WALK signal at the same time that a car has a green light. Left turns are faster maneuvers than right turns and drivers' attention is more divided. At the mall exit at SE 40th Lane and at other intersections in the area, a left turn only phase should be evaluated for exiting vehicles as it has been programmed for vehicles entering the Mall parking lot.



Left turn lane into the mall from northbound Factoria Boulevard.



N3. More Walk Time Desired

At SE 40th Place, don't walk light starts flashing just a couple of seconds after the Walk phase begins. Even though a red flashing hand means "Don't Start", left-turning drivers may intimidate pedestrians completing their crossing with a flashing sign. Drivers regularly express rudeness and impatience with pedestrians as they cross. Timing the walk phase to accommodate a slower walking pace will make crossing Factoria Boulevard feel safer for more of the users of the area.



N4. Connections for Pedestrians



The neighborhood needs more closely spaced connections between the residential neighborhoods and shopping and transit. Research shows a strong correlation between the directness of walking routes and the likelihood of people to walk. In cul-de-sac neighborhoods, shortcuts and paths can provide people with direct walking routes and create special walking areas. Connections in Factoria can be made through easements or purchases; these could increase economic vitality of the area and increase residential property values. 129th Avenue SE could be extended to improve office area permeability.



There is no public right of way in connecting SE 38th up the hill to neighborhoods east of Factoria.



N5. Sidewalks into Mall

The Mall entrance from SE 38th Street lacks a short segment of sidewalk to connect the brightly marked crosswalk from the store to the SE 38th Street sidewalk.

A vehicle stop line and crosswalk markings are also needed at this location.



N6. Safer & Cleaner Sidewalks

New sidewalks on Factoria Boulevard include street trees, but lack several critical elements of pedestrian design:

- Buffer – space between vehicles and pedestrians
- Pedestrian-scale lighting
- Adequate trash receptacles, especially at transit stops





N7a. SE 38th & Factoria Blvd.

This critical shopping intersection has become a great source of delay and frustration for pedestrians. Problems include: right turning traffic that fails to yield, long wait times, and wide streets of 3-5 traffic lanes to cross. Possible improvements include (see also 7b & 7c):
Short term – enforcement & markings
Mid term – new signal equipment
Long term – some have proposed the idea of a sky-bridge at this intersection. One possibility is a pedestrian scramble timing to facilitate diagonal crossing (NE to SW).



N7b. New Ped Signal Equipment

This familiar sight shows two people waiting for the signal, and a third person hammering the push button. Removing push buttons or installing lit buttons that indicate when they have already been activated reduces frustration and uncertainty. New “countdown signals” like the one pictured can be installed to show remaining time and increase a sense of safety when crossing wide streets.



A count-down signal as seen in Tacoma.



N7c. Increasing Driver Awareness of Pedestrians:

The following intersection improvements can increase driver awareness and pedestrian safety:

- High visibility crosswalk markings
- Police enforcement of failure to yield for turning vehicles
- Advance and staggered stop lines (vehicles are stopping in and blocking the crosswalks accidentally)



N8. SE 38th Sidewalk

Sidewalks should provide a minimum of six feet of walking area. In shopping districts, sidewalks should be wider, often 10 to 12 feet wide. At this location on SE 38th Street, there is overgrowth that effectively narrows the walkway width. Any future redevelopment would be an opportunity to increase the standard for sidewalks in the area.



Dog being swallowed by a juniper bush.



N9. Mid-Block Crosswalks

This stretch on 38th - east of Factoria Blvd - offers a possible location for an unsignalized mid-block crosswalk. The crosswalk found west of Factoria Blvd on 38th Street appears to function well and could be copied here. Mid-block crosswalks can be more convenient for pedestrians to negotiate as the traffic patterns tend to be simpler and they don't have to wait for a traffic signal. Adding a mid-block crosswalk here could also provide an alternative to people who would otherwise have to cross 38th at Factoria Boulevard.

This group also suggested identifying additional mid-block crosswalk locations along Factoria Boulevard and using pavement textures and colors to draw more attention to crossings.

SOUTH ROUTE



The south, north and west Mall entrances are lacking safe pedestrian access.

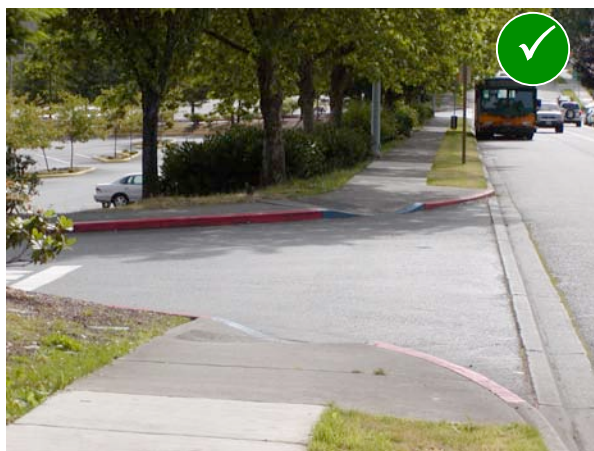
South

S1. Improve Pedestrian Access to Factoria Mall

Factoria Mall has brightly marked crosswalks near the entrances. Unfortunately, walking to the street, we found sections without crosswalks or even a walkway. Installing additional stop signs at crosswalks in the mall parking lot could encourage better yielding to pedestrians on Mall property.

S2. Curb Extensions

The group demonstrated how simple curb extensions can reduce the effective crossing distance for pedestrians. By creating a tighter turn for vehicles, curb extensions also slow turning traffic. It is possible to create a very tight and slow turn for exiting vehicles while retaining a wider radius for vehicles entering the mall. The smaller exit radius makes it possible to place the stop sign closer to the street, improving visibility for the driver as well as helping walkers.



S3. Paint is Cheap! More Paint!

Factoria Mall does an impressive job of painting crosswalks within the parking lot, but there are none painted at the entrances. Crosswalks markings at the entrances would improve the appeal of the mall to people who shop on foot. Marking these locations could be a good opportunity for a partnering between the Mall and the City of Bellevue to better serve the many residents of the neighborhood who walk in the area.



S4. Channelization Calms Speed

This four-way stop intersection at SE 41st & 124th Ave SE presents problems to pedestrians. As viewed here looking south, the intersection is used by a great number of vehicles heading to Coal Creek Parkway. A small island north of the crosswalk would create a protected area in the center of the crosswalk. It would also slow down left-turning vehicles, which would be forced around a slower path (the light colored dotted line) compared to the faster trajectory presently used (dashed line).



124th Ave SE

S5. 18 Reasons for Bike Lanes

Pedestrians benefit handsomely from the presence of bike lanes. Indeed, of the many good reasons for bicycle lanes, only one of them is actually for the bicyclists! The reasons include an increased buffer from traffic and a tendency for drivers to drive slower with the narrower perceived roadway width. See Appendix A for a complete list.

S6. Residential Street Sidewalks

People on the walk expressed a desire for sidewalks in the Mockingbird Hill neighborhood. The Factoria area project does not provide a focus on residential street improvements. Nevertheless, neighborhoods with wide residential streets may wish to pursue ideas for getting sidewalks built. Suggestions include using portable curbing to create a protected walkway between the edge of the street and parked cars. This project could be a good candidate for the Neighborhood Enhancement Program or the Neighborhood Traffic Control Program.



A wheel-stop walkway in Seattle.





S7. Crosswalk at 44th St & 124th Ave SE

People reported that motorists are regularly failing to yield to pedestrians at this crosswalk – at the west entrance to the Newport High School track. This would be a good location for enforcement and a possible candidate for additional crosswalk treatments such as in-pavement lights or pedestrian flags. (For example of these, see Appendix B.)



S8. High Speed Turns

This intersection (Factoria Blvd & SE 43rd Street) creates a hostile environment for pedestrians because of the high speed turns and the width of the parallel travel lanes. Adding refuge islands and a median of could slow the traffic and create reduce the sense of exposure pedestrians feel crossing these streets. (Item S4 provides an example of this treatment.)

S9. Access to Newport High

Pedestrians like to take the shortest route to their destination, and by providing that option, planners can make people feel more like walking. When Newport High School is redeveloped commencing in 2005, the designers could make it easier to access the school on foot by – for example – placing a set of stairs at the Factoria Boulevard side of the school.





S10. Speed on Factoria Blvd

From a pedestrian’s perspective, traffic on Factoria Boulevard is just plain too fast. A slower speed of 30 mph would create a more comfortable walking environment and increase the likelihood of drivers to yield to pedestrian’s right of way. The difference of five miles an hour is a very significant difference in pedestrian safety and in the likelihood of drivers to yield to pedestrians at important crossing locations such as such as the SE 42nd St transit stop show at right.



S11. Richards Creek History

The colored tiles in the sidewalks along Factoria Boulevard represent a segment of Richards Creek that is in a culvert. Concrete and steel and artwork near the eastern entrance to the mall creates an interesting walking environment that responds to the pedestrian pace of interaction with the environment.



S12. Signage & Way-finding

Walkers on this route pointed out a lack of pedestrian-oriented signage. As a start, they wished to see some “Stop for Me - It’s the Law” signs. No school zone signs were noticed on this route.

Way-finding signage with maps and distances could also promote more walking. Signage could identify how to get to neighborhood recreation areas such as the nearby Newcastle Beach Park.





EAST ROUTE

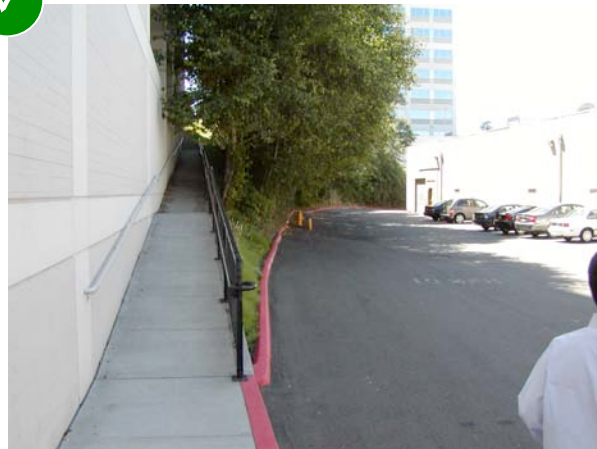


E1. Elevation Gain

The steep rise of the hill east of Factoria Boulevard is a barrier. Unfortunately, there are no public stairways up to the main entrance of the office buildings. Access to Factoria Boulevard is accomplished by using elevators and interior stairwells that lead to the parking lots and driveways west of the Bentall Office buildings. Bentall could publicize these routes for employees making this walk.

E2. Identify and Mark Walkways

The pedestrian access routes in the lots behind Bentall involve walking through parking lots and driveways. Where there is sufficient room, a walkway can be painted at the edge of the lot. For example here, a 6-8 foot swath could be striped parallel to the red fire zone curb.



E3. Crossings

This busy route between Loehmann's Plaza and the stairs to T-Mobile's offices indicated demand for a marked crosswalk. Loehmann's has no signage at the back of the Plaza, and which may indicate an untapped opportunity to market their stores to this large customer base.





E4. Walkway from Factoria

This slice of right-of-way adjacent to the Bentall parking garage presents an ideal opportunity for a stairway and walkway providing convenient access between Factoria Boulevard and Bentall Office Park. To address drainage requirements, the walkway could be constructed with permeable pavement and the stairs could be built with wood framing.

E5. Improve Pedestrian Access at Loehmann's Plaza

The parking lot at Loehmann's plaza has parking that blocks access from the west entrance. A reconfiguration of the striping of parking spaces could improve pedestrian access and reduce danger to people walking from the street and from their cars to shops. The first parking space in this lot actually blocks access from the sidewalk and should be crosshatched as a no parking zone.



E6. Sidewalk Without Buffer

This Richard Road sidewalk has no buffer from traffic. The painted shoulder on this street helps channelize the traffic away from the edge of the street. These markings could be extended closer to the intersection to make the street.



NOTES & SURVEY RESPONSES

Additional Comments

- “Drivers are much more courteous to other drivers than they are to pedestrians.”
- “There was a pedestrian injury collision during the first week of June in which a Newport High student was hit crossing Coal Creek Parkway with the Walk light at 124th Street.”
- So much going on at intersections that it is harder for both pedestrians and drivers.
- “I presently walk at Kelsey Creek, but would love to be able to walk near my home in the Factoria area. This would require for me a soft, level path for walking. The hard surfaces are hard on my legs.”
- “Pedestrian safety is highly underestimated: especially with the rate of pedestrian vs. car accident during the summer season.”
- “Curb radius which are wide are less favorable to pedestrians at the mall entrance. Also on 43rd and near Mervyn’s.”
- “Crosswalks are very much needed near Factoria Blvd on 42nd.”
- “The Factoria & Newport intersection is very dangerous. There is a much needed refuge island when considering the distance from each sidewalk.”
- The Newport High School track is available for public use. One can obtain a key to the fenced track for a \$15 “Jogger Gate fee.” Phone 425.456.7417 during school hours for more information.

Mall Walking Group Comments (from Friday June 25th)

There are two mall walking groups that walk between 7:00 and 8:30 AM weekdays. Both groups meet after walking for coffee and conversation – one at the Target coffee shop and the other in front of Gyro World. There is an additional group of mothers with strollers that we did not connect with. Contact Feet First for more information about the walking groups.

Comments:

- “Remove Push Buttons at signals! This will help people to know that they can expect a Walk signal regardless.”
- “It is hard to cross Factoria Blvd to get to businesses.”

Survey Responses

Six surveys were returned from the walk. Of these five people indicated that they live in the area, one person works in the area and one indicated “none of the above”.

How many days a week do you:	0	1-2	3-4	daily
Walk	-	1	1	4
Drive	-	2	1	2
Ride Bus	1	1	-	3
Bicycle	6	-	-	-





APPENDIX

Links

More information is available about several of the items mentioned in this report.

Innovative Pedestrian Design

<http://www.walkinginfo.org/de/index.htm>

Reasons for Bicycle Lanes

<http://www.odot.state.or.us/techserv/bikewalk/whyhaveold.htm>

Washington State Department of Transportation Page

<http://www.wsdot.wa.gov/walk/>

Bellevue's Bicycling and Walking Web Page

<http://www.ci.bellevue.wa.us/page.asp?view=23968>

Note the link to the Pedestrian Bicycle Citizen Advisory Group, which meets quarterly to discuss

About Feet First

Feet First is a 501(c)(3) non-profit organization. It is our mission to promote the rights and interests of pedestrians and to encourage people to enjoy the pleasures of walking. We work throughout the Puget Sound region.

Please contact us for more information about our organization:

David Levinger, Executive Director

tel: (206) 652-2310

email: info@feetfirst.info

web: www.feetfirst.info

Visit us at: 1402 Third Ave, Suite 1121, Seattle, WA 98101

About The Factoria Area Transportation Study (FATS)

This Walking Audit was conducted as a part of the City of Bellevue Transportation Department "Factoria Area Transportation Study." For more information about this study, contact Kevin McDonald, AICP, Senior Transportation Planner, at 425.452.4558 or KMcDonald@ci.bellevue.wa.us or visit <http://www.fatsupdate.com/>.