

Appendix D: Request Project Improvement Details

The following Table 12 is a list of locations and existing conditions that are problems that need to be improved. These recommendations are from Tukwila residents and others who have an interest in walking and biking in Tukwila and who completed the Walk & Roll Surveys, which were distributed between November 2006 and arch 2007. Maps of these recommended improvement locations can be found in Appendix B.

**Table 12: Requested Bike Lane Locations
(See Figure 18)**

#	Location	Existing Condition / Description
1	East Marginal Way S	No space to ride with heavy traffic and truck traffic.
2	West Marginal Place S	No space to ride.
3	Tukwila International Boulevard	No space to ride. Debris is often in the roadway on the outside edge of the roadway where bicyclists travel.
4	Boeing Access Road	No space to ride.
5	S Ryan Way	No space to ride.
6	S 115 th Street	One respondent uses this route as an alternative to East Marginal Way/Interurban Ave S.
7	42 nd Ave S (north of S 125th Street)	No space to ride.
8	S 125th Street/50th PI S/S 129th Street/S 130th PI	There are varying roadway widths in this area, with low traffic volumes. The route could be signed as a bike route connecting to parks (Tukwila Community Center and Codiga Farms).
9	56th Ave S	No bicycle lanes, but could be signed as a bike route connecting to parks (Tukwila Community Center and Codiga Farms).
10	S 130th Street	Survey respondents would like to be able to ride bicycles safely along this street to connect with Macadam Road S and the Tukwila Community Center.
11	S 133rd Street/S 132nd Street	Narrow roadway with steep grades. This is one possible through-connection from Tukwila International Blvd to Military Rd S.

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Table 12: Requested Bike Lane Locations (Continued)

#	Location	Existing Condition / Description
12	S 135th Street	This is one possible through-connection from Tukwila International Blvd to Military Rd S. Recent road improvements include sidewalks on both sides from 37th Ave S to 32nd Ave S. The grade on this street is less steep than S 130th.
13	S 140th Street	This is one possible through-connection from Tukwila International Blvd to Military Rd S. The grade on this street is less steep than S 130th.
14	S 144th Street (Military Rd S to 40th Ave S)	There are new bike lanes along S 144th from Tukwila International Blvd to 32nd Ave S. Extension of these bike lanes would provide the best connection from SeaTac to the west to the parks along 42nd Ave S.
15	40th Ave S	No space to ride due to narrow roadway. Bicycle lanes would provide an alternative route to busier streets, as well as bicycle connections to parks and East Marginal Way.
16	51st Ave S / Macadam Rd S	Varying shoulder widths along route from Southcenter Blvd to Tukwila Community Center. Bike lanes would provide an alternative north-south route to busier streets, as well as connections to parks, the Tukwila Community Center, and the Green River Trail.
17	53rd Ave S	There are currently paved shoulders that alternate between the east and west sides of the street. This street has the potential to provide a bicycle connection to the Park & Ride and the Green River Trail.
18	Southcenter Blvd (west of 53rd Ave S)	No bike lanes currently along this stretch of Southcenter Blvd. However, 5 foot bike lanes will be added on both the north and south sides of the street as part of the Sound Transit improvements.
19	Klickitat Drive	There is currently an elevated, metal walkway along this route. Bicyclists must walk their bikes along this stretch.
20	Southcenter Blvd (east of 53rd Ave S)	No bike lanes connecting to Tukwila Urban Center and Renton. This stretch is identified as a "failed" rating segment for bicyclists, and a high priority bicycle improvement area in Cascade Bicycle Club's <i>Left by the Side of the Road</i> regional routes study.
21	68th Ave S	No bike facilities on bridge along 68th Ave S to Tukwila Urban Center.
22	Tukwila Parkway	No bike facilities existing or planned in northern part of the Tukwila Urban Center.

Table 12: Requested Bike Lane Locations (Continued)

#	Location	Existing Condition / Description
23	S 168th Street	No bike lanes planned along S 168th Street. This segment would provide an additional east-west connection in the Tukwila Urban Center, and would provide bicycle access to Tukwila Pond Park.
24	S 200th Street	No bike lanes in South Annexation Area. Bicycle lanes in Kent continue along Russel Road east in Kent.

Table 13. Missing Linkages

See Figure 18 or 19

#	Location	Existing Condition / Description
i	Airport Way	Several survey respondents would like to see Airport Way made into a bike route, with bike lanes provided.
ii	Connection to the north from East Marginal Way.	Several respondents would like to see a safe bike route to Seattle along East Marginal Way.
iii	Trail extension along West Marginal Place	The trail is not continuous in this area, and several respondents would like to see the missing links constructed.
iv	Tukwila to Chief Sealth Trail (51st Ave S & Gazelle Street)	The Chief Sealth Trail is a new multi-use path completely separated from the streets that terminates just a couple blocks north of Tukwila's northern City limits in the Ryan Hill neighborhood.
v	Connections east to Kent from South Annexation Area	There is no bike or pedestrian facility that links Tukwila's South Annexation Area to the City of Kent.

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Table 13: Missing Linkages (Continued)

#	Location	Existing Condition / Description
vi	West side of Tukwila connection to North SeaTac Park	Several survey respondents walk or bike to North SeaTac Park and Community Center. None of the streets (with the exception of the new bike lanes along S 144th Street, provide a bike facility connection to the edge of Tukwila's City limits with SeaTac. Additionally, SeaTac plans to construct a multi-use path originating at the northwest corner of North SeaTac Park and ending at the Puget Sound waterfront in Des Moines. The City of SeaTac would like to work with Tukwila to determine the best alignment connecting their new trail to the Green River Trail.
vii	BECU	One survey respondent would like an entrance/exit to BECU from the trail.
viii	Interurban Trail	In this spot, the trail moves back behind the buildings to the river. Signage is needed to indicate this to trail users. Several survey respondents thought that the trail ends here.
ix	Monster Rd/Black River and other connections east to Renton	Several people suggested this location for a connection with Renton, and it is also identified in Cascade Bicycle Club's <i>Left by the Side of the Road</i> regional routes report. Though there is no infrastructure constructed between Fort Dent and the Black River Riparian Forest, the route is currently being used informally by bicyclists and pedestrians to get between Renton and Tukwila.
x	Grady Way/Southcenter Blvd intersection with West Valley Highway	It is difficult to cross or make east-west/north-south connections at this intersection and the surrounding area.

Table 1413: Requested Multi-Use Trails (See Figure 18)

#	Location	Existing Condition / Description
A	Airport Way S to Seattle	Shoulder is wider in Tukwila; you can tell when you have entered Seattle because shoulder narrows.
B	East Marginal Way S	Traffic is heavy, and includes a lot of trucks. A separated trail (like the section of the Green River Trail in Tukwila that is adjacent to the sidewalk along Interurban Ave) would provide a good alternative to riding in the street.
C	West Marginal Place S to West Seattle	There needs to be a link in the trail connecting the Green River Trail to Alki.

D	Minkler extension for pedestrians/bicyclists to the Green River Trail.	There are few east-west connections from the Green River Trail to the Southcenter area. Minkler is a relatively low-traffic street that could provide a link with the Green River Trail.
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**Table 15: Requested Sidewalk Locations
(See Figure 19)**

#	Location	Existing Condition / Description
1	East Marginal Way S	Ensure that sidewalks are provided the entire length of East Marginal Way S, from the northernmost area (near Boeing sites) to Interurban Ave.
2	Tukwila International Boulevard	Provide sidewalks in the northern portion of Tukwila International Blvd (north of S 116th Street) that are not currently planned for in Phases II and III improvement designs.
3	S 124th Street	No sidewalks.
4	S 126th Street	No sidewalks on residential street in proximity to Tukwila Community Center.
5	S 128th Street	No sidewalks on residential street in proximity to Tukwila Community Center.
6	S 125th/S 129th/S 130th/56th Ave S	This could be a relatively low-traffic pedestrian route to the Codiga Farm, the Tukwila Community Center, and Allentown.

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Table 15: Requested Sidewalk Locations (Continued)

#	Location	Existing Condition / Description
7	S 133rd Street/S 132nd Street	This east-west through connection from Military Rd S to Tukwila International Blvd has no sidewalks. Sidewalk construction would serve the residents as well as employees of Highline Community Hospital.
8	33rd Ave S	North of S 132nd Street, 33rd Ave S has no sidewalks.
9	S 130th Street	No sidewalks on residential street in proximity to Tukwila Community Center and other parks.
10	40th Ave S	Sidewalks are not provided along the entire length of 40th Ave S. Sidewalks on this route would provide a connection between two of Tukwila's Parks, as well as a walking route to/from the Community Center.
11	Macadam Road S/51st Ave S	This area lacks sidewalks. Several people said they would like to be able to walk safely in this area to get to the Community Center.
12	Interurban Ave (from Tukwila Park & Ride north to Gateway Drive)	There are no sidewalks to get you to the nearest signalized crossing if you're heading north from the Park & Ride on Interurban.
13	56th Ave S	Sidewalks stop at eastern end of bridge--would like sidewalks on entire length of street.
14	S 135th Street (between Military Rd & 32nd Ave S)	No sidewalks between Military Road S and 32nd Ave S. This is a school route.

Table 15: Requested Sidewalk Locations (Continued)

#	Location	Existing Condition / Description
15	S 140th Street	No sidewalks on residential street near several schools.
16	33rd Ave S	No sidewalks on residential street. Also, provide a walkway from S 140th Street to Cascade View Elementary.
16	S 148th Street	No sidewalks on residential street near several schools.
17	53rd Ave S	This street currently has a paved shoulder that alternates its location on one side of the street. Sidewalks would provide safer access to the park.
18	S 146th Street	No sidewalks on residential street near several schools.
19	S148th Street	No sidewalks on residential street near several schools.
20	S 150th Street (between 42nd Ave S and Tukwila International Blvd)	No sidewalks on this stretch of the street. This is a school route, with kids walking to school along S 150th from apartments in the Tukwila International Boulevard area.
21	S 150th Street (between Thorndyke Elementary and 51st Ave S)	A through connection should be provided for pedestrians; there are not many through connections from S 150th to other areas.
22	S 150th--missing link to Tukwila Elementary	There is no through connection here to get from S 150th Place to Tukwila Elementary.
23	S 152nd Street	A walkway should be provided in this area between apartment to the south and the school.
24	Connection to Thorndyke Elementary	Through connection from apartments along S 152nd Street north to Thorndyke Elementary--kids already walk through the area to get to school.
25	40th Ave S (between S 154th Street & S 152nd Street)	No sidewalks on this stretch of the street. This is a school route.
26	42nd Ave S (from Southcenter Blvd to S 164th Street)	This stretch of the street is very steep and there are many pedestrians walking along the shoulder. Some kids use this as a school route Several people requested that sidewalks be provided on both sides.

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Table 15: Requested Sidewalk Locations (Continued)

#	Location	Existing Condition / Description
27	S 154th Street/Southcenter Blvd (between Tukwila International Blvd & I-5)	No sidewalks on this busy street. Kids use this as a school route. One resident who lives on S 150th Street walks to the Mall, and has to take 42nd Ave North to S 144th, then down Macadam to 150th PI to connect up with the walking trails in order to safely get to the Mall. She thinks sidewalks on Southcenter would provide the most direct and safest route.
28	Klickitat/51st Ave S	Gaps in sidewalks. This route has the potential to provide a bicycle/pedestrian connection to the Mall.
29	S 164th Street	No sidewalks on S 164th Street--residents in the area would like to be able to walk along sidewalks to the Safeway at Military Rd & S 164th Street
30	Southcenter Mall perimeter and internal walkways	Sidewalk improvements on perimeter and interior of Southcenter Mall property--one person commented that it is difficult to walk on the west side of the mall because of the narrow widths of the sidewalks. There are no sidewalks provided on the southern side of the mall between Tukwila Parkway to the southern mall entrance driveway off Strander Blvd. Also, once you are inside the Mall parking lot, there are not many internal walkways provided and it can be hazardous for pedestrians to try to navigate their way to the Mall storefronts through the parking lot areas.
31	Andover Park West bus stop	The sidewalk is discontinued along Andover Park East north of the bus stop at Baker Blvd.

Table 16: Security Concerns (See Figure 19)

#	Location	Existing Condition / Description
A	Tukwila International Boulevard	Automobile drivers disregard pedestrians and pedestrians disregard automobiles. Signalization should be changed to allow a separate pedestrian interval.
B	S 144th Street	Rude kids intimidate pedestrians and do not share room on sidewalk.

C	Bus stop/crosswalk on Southcenter Blvd in front of City Hall	Crossing Southcenter Blvd at crosswalk takes a long time in order to get traffic to stop for you. Crossing is wide and hazardous for those using it. Pedestrians have to wait a long time at the signal that is nearby to the west, discouraging use of the signalized crossing.
D	Transit Center	Transit users frequently run across street where there are no crossings. Traffic in this area is heavy, and lack of crossing facilities creates a hazardous pedestrian environment.
E	Southcenter Parkway	The high number of curb cuts makes it difficult to walk in this area. Also, some of the corners lack curb ramps.

**Table 17: Planned Improvements from CIP
(See Figure 19)**

#	Location	Existing Condition / Description	CIP Number	Expected Construction
1	37th Ave S	No sidewalks on 37th Ave S north of S 135th Street to Tukwila International Blvd.	Residential Improvements-varies	beyond 2012
2	53rd Ave S	No sidewalks on 53rd Ave S between S 137th Street and S 144th Street (includes area adjacent to park).	Residential Improvements-varies	beyond 2012
3	S 132nd Street	No sidewalks connecting Military Road to Tukwila International Boulevard. This location is the nearest east-west connection linking Highline Community Hospital to Tukwila International Boulevard.	Residential Improvements-varies	beyond 2012
4	S 150th Street	No sidewalks along S 150th between 42nd Ave S and Tukwila International Boulevard. This is a school route for Thorndyke Elementary.	Residential Improvements-varies	beyond 2012
5	40-42nd Ave S (S 160th Street - S 131st Place)	No sidewalks, only paved shoulder along 42nd Ave S between S 154th Street and S 160th Street. This is Phase III of project number 94-RS01	94-RS01 (Phase III)	beyond 2012

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Table 17: Planned Improvements from CIP (Continued)

#	Location	Existing Condition / Description	CIP Number	Expected Construction
6	40-42nd Ave S (S 160th Street - S 131st Place)	No sidewalks, only paved shoulder along 42nd Ave S between S 160th Street and S 164th Street. This is Phase IV of project number 94-RS01	94-RS01 (Phase IV)	beyond 2012
7	Macadam Winter Garden	Phase II will include development of park trails.	03-PK08	2005-2007
8	Tukwila Pond	Phase III will include construction of trails.	03-PK10	beyond 2012
9	Greenbelt Trails	"Several foot trails could be developed using WSDOT lands, City rights-of-way, and easements to provide public trails. Additional trails along the Green River could be developed" (City of Tukwila 2007-2012 CIP, p. 14)	99-PK04	beyond 2012
10	Southgate Park Improvements	Develop a trail from Tukwila International Boulevard through Southgate Park to 42nd Ave S.	90-PK03	beyond 2012
11	Codiga Farm Park	Trail access to sandbar.	98-DR06	2005-2007
12	Boeing Access Road	Bridge replacement on Boeing Access Road over BNRR Bridge Replacement. Improvements will include sidewalks on both sides.	94-RW08	beyond 2012
13	Southcenter Parkway to southern City limits.	Extension of curbs, gutters, and sidewalks to southern City limits.	84-RW37	2005-2009
14	Tukwila International Blvd-S 116th to S 132nd (Phase II)	Upgrade of roadway with curbs, gutters, sidewalks, and landscaping.	95-RW03	2005-2008
15	Tukwila International Blvd-S 132nd to S 138th (Phase III)	Upgrade of roadway with curbs, gutters, sidewalks, and landscaping.	95-RW04	2005-2008

Table 17: Planned Improvements from CIP (Continued)

#	Location	Existing Condition / Description	CIP Number	Expected Construction
16	Tukwila International Blvd- Boeing Access Rd to S 116th Street	Design and construct curb, gutter, sidewalk, drainage, and street lighting improvements	90-RW05	2011-2012
17	Interurban Ave S (S 143rd - Fort Dent Way)	Design and construct sidewalks, pavement restoration, drainage, and lighting.	03-RW02	2005-2007
18	Southcenter Blvd (I-5 to Tukwila International Blvd)	Improve roadway with medians, turn lanes, gutters, sidewalks, street lighting, and drainage.	02-RW04	2007-2008
19	East Marginal Way (Boeing Access Road to S 112th Street)	Design and construct curb, gutter, drainage, lighting, turn lanes, and traffic control. Sidewalks are assumed to be included in the project.	89-RW05	2009 and beyond
20	Minkler Blvd	Improve south side of roadway with curb, gutter, and sidewalks	84-RW07	2011
21	Ped/bike bridge over Green River in the Southcenter urban center (north of Strander).	Improve east-west ped/bike connectivity by constructing a ped/bike bridge over the Green River.	05-RW03	beyond 2012
22	S 168th Street	Construction of a new street from Southcenter Parkway to Andover Park West to include sidewalks.	84-RW08	beyond 2012

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Table 17: Planned Improvements from CIP (Continued)

#	Location	Existing Condition / Description	CIP Number	Expected Construction
23	Nelsen PI (S 158th-S 156th)	Design and construction of sidewalks, trail access, lighting, and pavement restoration	84-RW13	beyond 2012
24	S 143rd Street (Interurban-Duwamish)	Construction of curb, gutter, sidewalk, drainage, paving, lighting, and traffic control improvements.	84-RW25	beyond 2012
25	S 134th Street (S 133rd - 48th Ave S)	Construction of curb, gutter, sidewalk, drainage, paving, lighting, and traffic control improvements.	84-RW27	beyond 2012
26	S 144th bridge over I-5	Widen sidewalks across bridge.	03-RW04	beyond 2012

Appendix E: Surveys and Summaries

Short Survey



SHORT SURVEY RESPONSES (5 ONLINE SURVEYS
COMPLETED AS OF 3/21/2007)

Walk & Roll

(Tukwila's Bicycle and Pedestrian Plan)

Short Survey

Part I. Walking

1. What keeps you from walking more often (i.e., no direct route, unsafe walking conditions) **OR** what would encourage you to walk more often (i.e., more free time, construction of sidewalks in your neighborhood, walking with a friend/group)? (DESCRIBE)
 - *Would like connection to the Burke Gilman Trail. All parks should be connected by walking routes.*
 - *A habit of driving. Walking somewhere for lunch needs to be a pleasant, easy walk and under 10 minutes.*
 - *Construction of sidewalks in my neighborhood...from Military Way traveling east on 164th, from 164th traveling north on 42nd, from 144th traveling north on 99*
 - *The safety of the neighborhood and the lack of sidewalks*
 - *Unsafe walking conditions*

2. Where would you like to get to by foot, if you could? (**IDENTIFY WHERE YOU LIVE/WORK, AND WHERE YOU WANT TO GO**)
 - *S 126th to Tukwila Community Center and the Burke Gilman Trail.*
 - *Walking from work (City Hall) to the Southcenter Mall is possible in 15 minutes, but it's not a pleasant walk. Loud traffic, long waits at the lights.*
 - *To safely walk to work at Boeing's Duwamish site*
 - *33rd Ave S (home) to 134th Place (work); (2) 33rd Ave S (home) to grocery store, drugstore*
 - *I live in Tukwila and would like to walk safely to the mall. No sidewalks along 154th.*

3. Identify the top three locations or routes where it is difficult for you to walk. (**IDENTIFY CROSS-STREETS OR LANDMARKS**)
 - *To any parks other than Riverton. There are two parks nearby but no safe route.*
 - *No response*
 - *north from 144th on TIB*
 - *TIB, 33rd Ave S, Military Road*
 - *TIB north from 144th north to Boeing Field*

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4. What can be done to make these locations/routes better for walking?
 - *Safe routes for walking from traffic.*
 - *No response*
 - *Sidewalks*
 - *Sidewalks, crime/safety*
 - *Better/completed sidewalks and better lighting*

Park II. Rolling

1. What keeps you from bicycling more often (missing connections, no bike lanes, etc.) **OR** what would encourage you to ride your bicycle more often (i.e., more free time, more bike lanes, more bicycle trails, access to a bicycle, etc.)? (**DESCRIBE**)
 - *Missing links in a nice bike trail system.*
 - *I would like to bike to work at least occasionally if we had showers and a nice changing room (City Hall). For recreational biking, we need a much better connection from the Green River trail to Seattle. East Marginal is not a fun place to ride.*
 - *no bike lanes, sidewalks north of 144th on TIB*
 - *no bike lanes*
 - *more bike lanes; (2) more bicycle trails*
2. Where would you like to get to by bike, if you could? (**IDENTIFY WHERE YOU LIVE/WORK, AND WHERE YOU WANT TO GO**)
 - *S 126th to the local parks. Connection to the Burke Gilman Trail. Bike lane along Macadam.*
 - *I would occasionally bike to work (at City Hall). Also, I would occasionally recreational ride between Tukwila and Seattle.*
 - *same as above*
 - *same as walk*
 - *I live in Tukwila, I would like to bike safely to the Mall and to the Duwamish area*
3. Identify the top three locations or routes where it is difficult for you to ride your bike. (**IDENTIFY CROSS-STREETS OR LANDMARKS**)
 - *Along East Marginal Way towards Boeing--very busy and dangerous, no bike lane.*
 - *no response*
 - *same as above*
 - *same as walk*
 - *TIB north to North Boeing Field*
4. What can be done to make these areas better for biking?
 - *Dedicated safe lane along East Marginal Way towards Boeing.*
 - *We need a good bike connection from the future Tukwila Light Rail station to the Southcenter area and also north along TIB and to the Green River Trail.*
 - *bike lanes*
 - *bike lanes/paths*
 - *Better bike lanes, cleaner street (too much debris), better lighting*

Long Survey

**WALK & ROLL SURVEY RESPONSES:
COMPILED FROM A TOTAL OF 50 SURVEYS
COMPLETED (AS OF 3/21/2007).**



WALK & ROLL: CITY OF TUKWILA PEDESTRIAN & BICYCLE SURVEY

**PLEASE DROP OFF YOUR COMPLETED SURVEY AT THE TUKWILA COMMUNITY CENTER OR CITY HALL. OR, SEND IT BACK BY MAIL AT THE FOLLOWING ADDRESS:
6300 SOUTHCENTER BLVD, SUITE 100, TUKWILA, WA 98188.**

PURPOSE

The City of Tukwila is conducting this survey as part of its Walk and Roll Plan – a plan that will identify and prioritize improvements that would make walking and bicycling better. Your feedback will help the City to understand where you walk and bike within Tukwila, and what improvements would encourage you to Walk and Roll to more places more often. Funds for this survey were made available through the Washington State Department of Community, Trade and Economic Development.

PART I: WALKING

5. When you walk, why or where do you go?

(21) Social/ Recreational	(24) Health/Fitness	(4) Work	(4) School
(6) Transit/Bus	(-) Church	(-) Civic	(10) Shopping

Other (PLEASE DESCRIBE): **dinner/restaurants; dog exercise (2 responses); early at the mall; Oxbow; to Park & Ride for carpool; park**
2. Which of these phrases best describe you? (CHECK ALL THAT APPLY)
 - (14)** An advanced walker/runner who is confident traveling alone in most places.
 - (13)** A beginner/intermediate walker/runner who is only confident in heavily traveled areas (i.e. commercial malls or well-traveled sidewalks).
 - (4)** A walker/runner who only walks with others or with a pet due to safety/security concerns.
 - (3)** A person who walks by necessity (does not own a car/is not near a transit route).
 - (4)** A person who frequently walks to work/school by choice.
 - (17)** A recreational walker/runner who typically participates with family and/or friends.
3. How far to you walk to work, school or other places when you walk? (CHECK ONE)

(7) 0-1 Mile **(16)** 1-2 Miles **(14)** 2-6 Miles **(-)** 6 + Miles **(2)** Not Applicable
4. Name the three places you walk to most frequently (identify **CROSS-STREETS OR LANDMARKS**), and estimate the time it takes you to walk to these places (**IN MINUTES**):

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- (1) Military Road between 124th and TIB; (2) Des Moines Rd near 135th (SeaTac Park)-->30-45 minutes
- (1) Capitol Hill (downtown Seattle, not walking to but around the area); (2) Admiral District (West Seattle); (3) Lincoln Park (West Seattle)-->(1)N/A; (2) 5 minutes; (3) N/A
- Soccer field-Burien (240-300 minutes)
- (1) Coulon Park in Renton (40-45 minutes); (2) by Renton Library/Cedar River (30-40 minutes); (3) Skyway neighborhood with my dog (40 minutes)
- store (20 minutes)
- (1) Not in Tukwila!; (2) I do run on the Green River Trail (I run about 3 miles in 27 minutes or 4 miles in 36 minutes)
- (1) Green River (30 minutes); (2) North SeaTac Park/community center (5 minutes); (3) 144th and TIB (5 minutes)
- (1) Fort Dent Park (30 minutes); (2) City Hall bus stop (5 minutes)
- neighborhood (15 minutes)--Mel Roberts (Kent)
- (1) Tukwila Community Center (2 minutes); (2) Foster High School (20 minutes); (3) Starbucks on Interurban (10 minutes)
- (1) Jack In the Box/Starbucks on Interurban (25 minutes); (2) Tukwila Community Center (30 minutes); (3) Foster High School (15 minutes)
- (1) 144th Street to Tukwila Trading Post (30 minutes); (2) Interurban from the Park & Ride to Tukwila Community Center (30 minutes); (3) 144th & 55th Ave S to Southcenter Mall (45 minutes)
- (1) Federal Way (20 minutes); (2) Tukwila (30 minutes); (3) Des Moines (40 minutes)
- (1) Mall; (2) River path (116th to 180th); (3) Golf Course
- (1) Tukwila Community Center (less than 30 minutes); (2) trails (Duwamish/Green) (less than 30 minutes); (3) Fort Dent (less than 30 minutes)
- (1) work-136th & 32nd Ave S (10 minutes); (2) parks (varies, since I go to parks all around the City)
- Interurban Trail
- (1) coffee shop (15 minutes); (2) Thriftway (25 minutes); kids school (weather dependent, 30 minutes)
- (1) Safeway Store (164th & Military Rd, 15 minutes); (2) Valley View Library (Military & 178th, 35 minutes); (3) Foster High School (144th and 42nd, 20 minutes)
- (1) In the neighborhood of 150th and 42nd to the Foster High School area (20 minutes round trip)
- (1) around the Southcenter area (45-60 minutes); along the river (60-90 minutes); up those huge hills to get to the grocery store (100-120 minutes)
- (1) Lander Street (Seattle) to Pike Place Market for work (45 minutes); (2) Southcenter Mall from S 51st Street (15 minutes); (3) Safeway from S 51st Street and corner of 161st Street (15 minutes)
- (1) up hill on 65th Ave S past Tukwila Park up to Fire Station/Library (30 minutes); (2) River trail from Fort Dent to Costco (50 minutes); City Hall to Mall (10 minutes)
- (1) Duwamish/Green River Trail terminus at W Marginal Way Pl S of S 102nd Street (20 minutes); (2) Tukwila Community Center (10 minutes); (3) S 128th Street and 37th Ave S (2 minutes)
- (1) Oxbow parking lot (40 minutes)

- (1) school (20 minutes); (2) church (20 minutes)
- (1) Redondo (40 minutes); (2) Albertson's (Federal Way, 25 minutes)
- (1) Green River (10 minutes); (2) Seattle Waterfront (30 minutes); Seward Park (30 minutes)
- (1) Lake Washington Ridge neighborhood (2-3 hours)
- (1) 65th Street Park & Ride (20 minutes); U-Village (10 minutes); Boeing Duwamish Office Park (11-14 Bldg) (20 minutes)
- Interurban Trail
- Interurban Trail (45 minutes)
- (1) Highway 99 & 112th (20 minutes); (2) Interurban Trail (20 minutes); (3) Mill Creek (2miles)
- (1) Tukwila Community Center (30 minutes)
- (1) to the bus stop (20 minutes); (2) Green River Trail (40 minutes)
- (1) Interurban Trail near Boeing Duwamish site; (2) Renton Highlands Olympic/10th; (3) Liberty Park Walk Renton
- (1) Green River/Duwamish Trail (30 miles)

5. What keeps you from walking more often? (CHECK **ALL** THAT APPLY)
- | | | | |
|--|---|---|-------------------------------|
| (13) The time it takes to walk | (12) Destinations are too far | (10) Concerns about personal safety | (10) Darkness |
| (4) Poor condition of sidewalks or trails | (15) Lack of sidewalks or trails | (2) Difficult street crossings/ no crossing guards | (17) Bad weather |
| (1) Insufficient sight distances/visibility | (2) Scary dogs | (3) Unattractive scenery | (3) Afraid of vehicles |
| (10) Driving is more Convenient | | | |

Other: time to be able to enjoy it; many destinations are more than 5 minutes away; lack of lighting at night; information on good locations to walk; I use my bicycle

6. What would encourage you to walk more often? (CHECK **ALL** THAT APPLY)
- (22)** More free time **(21)** Construction of trails or sidewalks in my neighborhood
- (5)** Walking with a partner/group

Other: biking trails to popular destinations like restaurants and shops; bus stop benches for rests; change in priorities

7. Identify the top three locations, segments, or routes where it is difficult to walk:
- (1) Military Rd; (2) Des Moines Hwy; (3) 135th Street
 - Anywhere without sidewalks and street lights
 - no response
 - by Thorndyke Elementary--not many places to go
 - Southcenter Blvd
 - (1) 144th & TIB; (2) S 146th Street; (3) Cascade View Park

Nonmotorized Transportation Plan

- *Interurban Ave (gaps in pathways along route; lack of sidewalks)*
- *Anywhere without sidewalks and street lights*
- *Around areas of light rail construction (2 responses)*
- *(1) Interurban Ave; (2) Highway 99*
- *Southcenter Parkway (lack of curb ramps)*
- *up and down hills (east and west)*
- *(1) Interurban (section that is on street); (2) Mall area; (3) non-sidewalk roadway (ALL=no space to walk, lack of curb ramps; difficult street crossings; gaps in pathways along route)*
- *(1) Military Rd; (2) Crossing TIB (difficult street crossings-need overpasses)*
- *N/A I live in Lake Forest Park*
- *(1) 42nd street hill--entire hill from 164th to Southcenter Blvd; (2) Military Road; (3) Southcenter Blvd from 42nd to International Blvd; ALL=no space to walk, lack of curb ramps, inadequate lighting-->NEED SIDEWALKS*
- *(1) Foster High School area--knocked off the sidewalk by rude kids, personal safety*
- *(1) West side of Southcenter Mall--> narrow sidewalk on busy street (lack of curb ramps)--> since they're building on Southcenter Mall, make them improve the sidewalks or make access easier for that side*
- *(1) S 130th from TIB to Macadam Road on the way to the Community Center; (2) S 164th Street from 51st Ave S to Military Road to get to Safeway--no sidewalks--BOTH AREAS NEED SIDEWALKS*
- *(1) International Blvd (144th to 116th); (2) E Marginal Way (Duwamish River to 120th)-->PUT A SIDEWALK ON EVERY STREET, ROAD, AND BYWAY*
- *(1) sidewalks that I walk on are hard on my joints; I would like more natural trails*
- *(1) S 144th Street (improve street crossings, provide more lighting)*
- *(1) Dash Point Road; (2) Pac Highway--> No space to walk, gaps in pathways along route*
- *(1) S 124th between TIB & East marginal Way (add sidewalks and curbs); (2) 30th Ave NE between Blakely & 50th (add sidewalk)*
- *(1) 225 building (Boeing) on 99 (no routes)*
- *(1) TIB (many people disregard pedestrians using the crosswalk on TIB); (2) South Jackson*

9a. What makes these areas difficult to walk? (CHECK **ALL** THAT APPLY)

- | | | | |
|--------------------------------|-----------------------------------|---------------------------------------|---|
| (13) No space to walk | (10) Lack of curb or ramps | (-) Lack of transit access | (-) No school access |
| (4) Inadequate lighting | (-) Inadequate signage | (8) Difficult street crossings | (9) Gaps in pathways along route |

b. What improvements would you like to see made to these areas?

- *(1) more bike lanes; (2) keep adding sidewalks*
- *no response*
- *We have sidewalks, but they don't continue (up the hill) past our street. I would like to see more walking trails so I can walk during my lunch.*
- *sidewalk*
- *Decrease in violence*

- *connected sidewalks all along Interurban*
- *sidewalks, more crosswalks (2 responses)*
- *lighting, railings (for Interurban & TIB)*
- *escalators*
- *more east-west connections; more ped-friendly areas around the mall*
- *overpasses on Military Rd & TIB*
- *better signage and lighting*
- *SIDEWALKS!!!*
- *west side of Southcenter Mall--since they're building on Southcenter Mall, make them improve the sidewalks or make access easier for that side*
- *sidewalks*
- *S 144th Street-improved street crossings, more lighting*
- *more sidewalks and curbs everywhere*
- *more nature trails & preservation of the environment*

PART II: BIKING

5. If you ride a bicycle, why or where do you go? (CHECK **ALL** THAT APPLY)

- (17) Social/ Recreational (18) Heath/Fitness (12) Work (-) School
- (2) Transit/Bus (-) Church (1) Civic (8) Shopping

Other (PLEASE DESCRIBE):

- *I don't bike (7); transportation; errands; Wenatchee & Interurban Trail*

6. Which of these phrases best describe you? (CHECK **ALL** THAT APPLY)

- (8) An advanced rider who is confident riding in most situations.
- (9) An intermediate rider who is not really comfortable riding in most traffic situations.
- (6) A beginning rider who prefers to stick to the bike path or trail.
- (2) A commuter who rides frequently to work/school by choice.
- (-) A commuter who rides frequently by necessity (does not own a car/is not near a transit route).
- (8) A recreational rider who rides with family and/or friends.

7. Please rank you preferences for where you like riding, using numbers 1-3. (With **1 REPRESENTING YOUR IDEAL CHOICE**)

	1	2	3
1. Wide street lanes/shoulders	1	7	11
2. Striped/marked on-street bike lanes	7	10	5
3. Off-street paths/trails	17	2	3

8. How far do you ride your bicycle? (CHECK **ONE**)

- (3) 0-1 Mile (3) 1-2 Miles (6) 2-6 Miles (15) 6 + Miles (-) Not Applicable

Nonmotorized Transportation Plan

9. Name the three places you ride your bike the most frequently, and estimate the time it takes (**MINUTES**):

- (1) Bike path starting at Tukwila Community Center; (2) Military Road
- N/A
- In my neighborhood (Skyway)
- (1) Green River, (2) North SeaTac
- (1) Kent (60 minutes); (2) Duwamish River Trail (40 minutes)
- (1) work (40 minutes each way); (2) downtown Seattle (80 minutes each way); (3) Auburn (80 minutes each way)
- (1) downtown Bellevue (10 minutes); (2) downtown Kirkland (20 minutes); (3) Lake Washington Loop (around the Lake loop route)
- (1) Interurban & Green River Trails; (2) 72nd & 80th Ave
- (1) Park (local); (2) work
- (1) Tukwila Trail; (2) Federal Way trail
- (1) Valley View Library (Military & 178th, 20 minutes); (2) Foster High School (144th & 42nd Ave S, 10 minutes); (3) Safeway Store (164th & Military Rd, 10 minutes)
- (1) Along the river, 60-120 minutes; (2) to work, 15 minutes; (3) to that Asian market that isn't on top of a steep hill
- (1) Christensen Trail/Interurban Trail (1.5 hours roundtrip riding); (2) Tukwila to Alki (2.5 hours one way (I get a car ride back)); (3) Tukwila to SeaHawk/Mariners Stadium (1.2 hours one way (get car ride back))
- (1) Around Riverton and Duwamish (40 minutes); (2) South Park (45 minutes round trip)
- (1) Dash Point Road to Kent Des Moines Road (35 minutes each way); (2) Pac Highway south-less of a shoulder, perpetual construction; 16th Ave S--long-term construction
- (1) Foothills Trail - Orting
- (1) Wenatchee (10 miles-->4 hours, very scenic); (2) Auburn Interurban Trail (2 hours)
- (1) Interurban Trail; (2) Burke Gilman Trail; (3) Sammamish River Trail
- (1) trails
- (1) Burke Gilman Trail (70 minutes)
- (1) to gym (10 minutes)
- (1) Enumclaw (300 minutes); (2) Ballard (360 minutes); (3) work (100 minutes)
- (1) to work - West Seattle to Tukwila (45 minutes)

10. What keeps you from bicycling more often? (CHECK **ALL** THAT APPLY)

- | | | | |
|----------------------------|-------------------------------|------------------------------------|--------------------------------------|
| (10) Time it takes to ride | (7) Destinations are too far | (6) Concerns about personal safety | (14) Lack of bike lanes and/or paths |
| (3) Unattractive scenery | (6) Difficult intersections | (5) Rough pavement surface | (7) Insufficient width |
| (4) Lack of bike parking | (-) Lack of shower facilities | (15) Bad weather | (9) Darkness |
| (-) Scary dogs | (6) Afraid of vehicles | (7) Driving is more Convenient | (1) Lack of sidewalks/ Trails |

Other: No bike (5 responses); lack of motivation; physical compatibility: I am not able to ride a bicycle; limited carrying capacity of bike; lack of secure bike parking; no time

11. What would encourage you to ride your bicycle more often? (CHECK ALL THAT APPLY)

(5) Access to a bicycle (22) Better infrastructure (9) More time
(bike lanes & trails)

(-) Other: _____

12. Identify the top three locations, segments, or routes where it is difficult to ride a bicycle:

- (1) Military Rd; (2) Des Moines Highway
- Most neighborhoods in Tukwila and where I live in Skyway
- Interurban Ave
- (1) West Valley Highway; (2) Highway 99
- (1) Southcenter Blvd-S 154th Street-Three Tree Point Rd; (2) Getting from SW 7th & Grady Way in Renton to Fort Dent Park (Interurban Trail north); (3) Getting from SW 7th & Grady Way in Renton to Interurban Trail South; (4) Boeing Access Road (Pac Hwy to MLK Connection)
- (1) west side of the Green River near Southcenter; (2) Fort Dent (NE Corner) to Monster Rd
- (1) Hwy 99; (2) 509--route to South Seattle
- (1) Interurban (section that is on street); (2) Mall area; (3) non-sidewalk roadway (ALL=no space to walk, lack of curb ramps; difficult street crossings; gaps in pathways along route)
- (1) 42nd street hill--entire hill from 164th to Southcenter Blvd; (2) Military Road; (3) Southcenter Blvd from 42nd to International Blvd; ALL=no space to walk, lack of curb ramps, inadequate lighting-->NEED SIDEWALKS with curbs for safety
- (1) Southcenter, bad traffic (no space to ride--need either a bike lane or wider sidewalks)
- (1) Georgetown area on ride from Tukwila to Alki-no direct bicycle path; (2) West Marginal Way before Harbor Island Bridge-dangerous on-street riding-->no path=BOTH OF THESE AREAS NEED A DEDICATED BIKE PATH
- (1) W Marginal Place from 102nd Street to 14th Ave S; (2) E Marginal Way from the Duwamish River South-->EXTEND THE DUWAMISH TRAIL ALL THE WAY TO SOUTH PARK; ADD BIKE LANES
- (1) Military Road-narrow road, badly potholed or non-existent shoulder; (2) Pac Highway South-less of shoulder, perpetual construction; (3) 16th Ave S-long-term construction
- (1) Shelton to Tukwila (need more trails from the south counties)
- (1) Tukwila to Lynnwood
- (1) in King County other than the Burke Gilman Trail
- (1) Renton Highlands down to Boeing Duwamish (if there were a separate path along the freeways without interruption like the I-90 bridge then this area would be easy to ride in)
- West Valley & 405 Intersection
- (1) West Seattle to Tukwila via West Marginal Way (2) 14th Ave S (Southpark Area); (3) Boeing Access Road (these areas could be made better with bike lanes & trails)

Nonmotorized Transportation Plan

13. What are the issues that make these areas difficult for riders to navigate?
(CHECK **ALL** THAT APPLY)

- | | | |
|---------------------------------|--|----------------------------|
| (19) No space to ride | (1) Lack of ramps | (-) Lack of transit access |
| (-) No school access | (4) Inadequate lighting | (2) Inadequate signage |
| (12) Difficult street crossings | (11) Gaps in sidewalks or along pathways | |

Other: "margin" on side of road varies (need bike lanes!!!)

14. What improvements would you like to see made to these areas?

- *Bike lanes*
- *Areas with bike lanes*
- *Bike lanes*
- *Bike lanes*
- *Add missing link trail connections; improved guide signing; info/map kiosk at major route junctions; shoulder bike lane additions*
- *bike lanes (for west side of Green River--Southcenter area), and a trail (for Fort Dent to Monster Rd connection)*
- *lighting and bike lanes*
- *sidewalks with curbs for safety*
- *dedicated bike path*
- *extend the Duwamish Trail all the way to South Park; bike lanes*
- *Pac Highway South in vicinity of Boeing DC Plant very difficult to ride and hard to avoid. I'd like to see bike lanes on Pac Highway S*
- *more trails from the south counties*
- *bike lanes*
- *bike lanes*
- *bike lanes & trails*

PART III: SCHOOL ROUTES (*Skip to Part IV if you don't have children in school*)

1. How do your children get to/from school?

- | | | | |
|----------------|--------------------|---------------------------------------|-------------|
| (8) Driven | (3) Walk | (1) Bike | (-) Scooter |
| (8) School Bus | (-) Public Transit | <input type="checkbox"/> Other: _____ | |

2. What school(s)? (CHECK **ALL** THAT APPLY)

- | | | |
|------------------------|-----------------------------|-----------------------------|
| (1) Tukwila Elementary | (1) Thorndyke Elementary | (-) Cascade View Elementary |
| (-) Foster High School | (2) Showalter Middle School | |

Other: Renton School District (Bryn Mawr); other (not specified: 2 responses); Shoreline; Tye & Sylvester; KaPowsin; Griften (Thurston County)

3. If your children are not presently walking or biking to school, what changes would encourage them to do so? (CHECK **ALL** THAT APPLY)
- | | | |
|---|---|---|
| (5) Clearly designated bikeways/ sidewalks/ trails | (2) Walking/ bicycling safety training | (-) Bicycle route maps |
| (-) Walking route maps | (2) Secure bike storage facilities at school | (2) An organized walking group supervised by an adult (i.e., Walking School Bus) |
| (3) None | <input type="checkbox"/> Other: _____ | |

PART IV. TELL US ABOUT YOURSELF**(20)** Male **(17)** Female2. Do you own a motor vehicle? **(33)** Yes **(3)** No

3. What type of transportation do you use most often?

(31) Car **(2)** Bus **(3)** Bike
(-) Train **(3)** Walk Other: _____

4. What type of transportation do you use second-most often?

(3) Car **(6)** Bus **(7)** Bike
(-) Train **(18)** Walk
 Other: **(-)** Run **(1)** motorcycle **(1)** motor scooter **(1)** vanpool

5. Do you ride public transit? **(19)** Yes **(17)** No

6. If you answered yes, which type of transit do you use (bus or train) and which routes?

- bus, no route specified (5 responses)
- bus route 150 (2 responses)
- bus (101, 174, 106), Amtrak
- I-90 and SR-520 routes: Bellevue to downtown Seattle
- bus 150, 126 to/from mall
- Sounder
- 174 bus to downtown
- bus 174
- bus from Southcenter to downtown Seattle
- bus 150; or if I drive to Lander Street, then any bus on the bus way
- Bus 174, 14, 7, and other downtown Seattle routes
- bus 949 while route existed; no take route from Federal Way to downtown Seattle
- bus 74
- bus 545
- bus to airport
- 174, 266

Nonmotorized Transportation Plan

7. What do you do to make your travel experience safer? (CHECK **ALL** THAT APPLY)

- (24) Wear a helmet (and other safety guards as appropriate to activity)
- (32) Obey traffic signals/signs
- (20) Ride with traffic (bikes)/ against traffic (pedestrians)
- (21) Use lights/ reflective gear (if traveling at night)
- (23) Courtesy to other travelers/ user types sharing roadways.

8. Please leave any additional comments, questions, or suggestions:

- Great effort to educate the public-perhaps a lunchtime event at schools and/or major employers would bring more folks.
- Tukwila School District extends up 42nd to 160th. Why are there no sidewalks so the kids could walk instead of riding the bus? There are people walking up and down that hill everyday with cars zooming past. It's frightening! My kids like to walk to the park on 42nd and to Safeway, but even at 13 and 15 yrs I am afraid for them. Please put in sidewalks with curbs!!!
- I have been knocked off the sidewalk in the Foster High School area. I've encountered a lot of very rude kids which makes me think twice about my personal safety. With it getting darker earlier I walk when school is letting out. My husband's getting to the point where he won't let me walk along. I prefer not to cross very busy streets (i.e., 99)--Rose Hedin
- I really like the trail along the river
- Connect river trail to Black River Riparian Forest and Springbrook trail in Renton--these areas are just minutes away!!
- A lot of cars are not stopping for pedestrians trying to cross the street using the crosswalk. Perhaps the crosswalks should be on a different sequence than the cars. Also, quite a few people run the RED light when I am trying to cross TIB. Perhaps there should be cameras on the streetlights.

Additional survey copies are available online or at the following locations: Tukwila Community Center, City Hall, Department of Community Development, Tukwila Library, and Foster Library. Contact Jaimie Reavis at (206) 431-3659 or jreavis@ci.tukwila.wa.us.

Thank you for taking the time to fill out this survey!

Survey Summary

PART I: WALKING

Reasons for Walking and Level of Experience

The main reasons why people walk in Tukwila are for improved health and fitness (17 responses), and for social and recreational activities (15 responses). A smaller number of people Walk & Roll to go shopping (9 responses), to go to school (4 responses), to get to transit (4 responses) and a few walk to work (3 responses). There is a range of different types of pedestrians in Tukwila, with the largest groups being those who are recreational walkers/runners who most often walk/run with family or friends (11 responses), advanced walkers/runners who feel confident traveling alone in most places, and beginner/intermediate pedestrians who are only confident walking/running in heavily traveled areas. Typically, people who completed the survey walk 1-2 miles or even farther when they are able to find the time. Most of those who ride a bicycle say they ride more than 6 miles for any given bicycle trip

Popular Areas for Walking (1 response unless otherwise marked)

- Military Road
- Des Moines Road near 135th
- Soccer fields in Burien
- Coulon Park in Renton
- Renton Library
- Cedar River Trail
- Skyway neighborhood
- Green River Trail – 6
- North SeaTac Park
- 144th & TIB
- Fort Dent Park - 2
- City golf course
- City Hall bus stop
- TCC - 4
- Foster High School - 5
- Starbucks (Interurban) - 2
- Jack-In-the Box (Interurban)
- Tukwila Trading Post
- Interurban from the Park & Ride to the TCC
- From 144th & 55th Ave to the Southcenter Mall
- Southcenter Mall - 2
- 136th & 32nd Ave (to work at Cascade View Elementary School)
- S 128th Street & 37th Ave S
- Parks
- Interurban Trail - 2
- Safeway (164th & Military)
- Valley View Library (Military & 178th)
- Southcenter Mall from S 51st Street

Nonmotorized Transportation Plan

- Safeway from S 51st Street and corner of 161st
- Up hill on 65th Ave S past Tukwila Park up to Fire Station/Library
- Neighborhood around 150th and 42nd Ave S
- 42nd Ave S to get to Safeway
- City Hall to Mall
- Boeing sites (Oxbow, Duwamish sites specifically mentioned)

Most Difficult Places to Walk

(1 response unless otherwise marked)

- Military Road – 3
- S 135th Street
- Anywhere without sidewalks and street lights – 4
- Near Thorndyke Elementary (not many through connections and continuous sidewalks)
- S 144th Street (rude kids, improve street crossings, provide more lighting) – 3
- Southcenter Blvd – 3 (including 1 response specific to area between 42nd and TIB, and 1 for the Southcenter area in general)
- S 146th Street
- Cascade View Park
- Interurban Ave (gaps in pathways along route and lack of sidewalks) – 2
- Interurban Ave (section that is on street)
- Around areas of light rail construction – 2
- TIB (no space to walk, gaps in pathways along route) – 6
- Southcenter Parkway (lack of curb ramps) – 2
- Up and down hills (east and west)
- 42nd Street hill (entire hill from S 164th Street to Southcenter Blvd) - 3
- S 164th Street from 51st Ave S to Military Road
- S 130th from TIB to MacAdam Road on the way to the Community Center
- East Marginal Way (Duwamish River to S 120th)
- Walking routes connecting parks
- S 126th to the Tukwila Community Center
- from City Hall to the Southcenter area
- to Boeing's Duwamish site; TIB north to Boeing Field
- from 33rd Ave S to 134th Place S
- from 33rd Ave S to the grocery store, drugstore
- Sidewalks along 154th

Major barriers that keep survey respondents from walking more often include (in order from most responses to least) (1) lack of sidewalks or trails, (2) bad weather, (3) the time it takes to walk, (4) the long distance to destinations, (5) darkness, (6) concerns about personal safety, and (7) the convenience of driving. Having more free time and construction of trails or sidewalks within respondents' neighborhoods are the major improvements cited by respondents that would encourage them to walk more often. No space to walk, lack of curb ramps, difficult street crossings, gaps in pathways along route, and inadequate lighting all contributed to the difficulty respondents had walking in difficult areas cited above. Adding sidewalks, more crosswalks, trails, bike lanes, lighting, east-west connections, overpasses on Military Road and Tukwila International

Boulevard, and better signage were all recommended improvements to Tukwila's pedestrian and bicycle network. Additionally, many respondents referred to concerns for personal safety, and one respondent said that a decrease in violence is a needed improvement.

PART II: BIKING

Reason for Biking

As far as biking goes, slightly more respondents ride their bicycles for health and fitness than for social and recreational activities, and slightly more people ride their bikes to work (total of 8 people) than those who answered that they do not own a bicycle (7 respondents). Almost as many people ride their bikes to go shopping (7 respondents) as those who bike to work.

Level of Experience

There were an equal number of respondents who were advanced riders and recreational riders who only ride with family and/or friends. Most other bicycle riders were intermediate riders who aren't comfortable riding in most traffic situations.

Preferred Improvement Types

For bicycle improvements, the most preferable improvements are listed from 1 to 3, with 1 being the most preferable, and 3 being the least:

- (1) off-street bike paths are the most-preferred bicycle facility improvement
- (2) striped/marked on-street bike lanes
- (3) wide street lanes/shoulders

Only one person cited wide street lanes/shoulders as their most-preferred alternative, and 9 respondents cited wide street lanes/shoulders as their least-preferred improvement alternative. Off-street bike paths/trails were cited as the most-preferred alternative by 11 respondents, and striped/marked on-street bike lanes were most preferred by 8 respondents.

Typical Biking Distance

Eight respondents ride their bicycles more than 6 miles, while only 4 ride 2-6 miles, and 3 respondents each for 0-1 mile and 1-2 miles.

Most Popular Places to Ride a Bicycle in and around Tukwila

(One response unless otherwise marked)

- Tukwila Community Center
- Military Road
- Skyway
- Green River Trail – 5
- North SeaTac Park
- Kent
- 72nd & 80th Ave
- Local parks
- Work (3 responses)
- Downtown Seattle
- Auburn
- Downtown Bellevue
- Downtown Kirkland
- Lake Washington Loop
- Interurban Trail – 2
- Federal Way Trail
- Valley View Library
- Foster High School
- Safeway Store
- Asian market (?)
- Tukwila to Alki
- Tukwila to SeaHawks/Mariners stadium
- South Park – 1 response
- Riverton and Duwamish neighborhoods
- Dash Point Road to Kent Des Moines Road

Barriers to Increased Bicycle Use

The top reason why respondents do not ride their bicycles more often (when they do in fact own one) is because of bad weather. Other major obstacles that prevent respondents from riding their bikes more often include lack of time, lack of bike lanes and/or paths, insufficient width, the greater convenience of driving, the far distance to many destinations, darkness, and fear of vehicles.

Most Difficult Places to Ride a Bicycle

Areas where it is difficult to ride a bike include the following:

- Military Road- 3
- Des Moines Highway
- Most neighborhoods in Tukwila
- Skyway
- West Valley Highway
- Highway 99- 3 responses
- Southcenter Blvd—S 154th Street to Three Tree Point Road, 42nd Street to International Blvd
- Getting from SW 7th & Grady Way in Renton to Fort Dent Park (Interurban Trail North)
- Getting from SW 7th & Grady Way in Renton to Interurban Trail South
- Boeing Access Road (Pac Hwy to MLK Connection)
- Southcenter area- 3
- Fort Dent (NE Corner) to Monster Rd
- 509-route to S Seattle
- Interurban (section that is on street)
- Non-sidewalk roadways
- 42nd Street hill-entire hill from S 164th to Southcenter Blvd – 2
- Georgetown area on ride from Tukwila to Alki-no direct bicycle path
- West Marginal Way before Harbor Island Bridge (dangerous on-street riding)
→both areas need a dedicated bike path
- West Marginal Place from 102nd Street to 14th Ave S
- East Marginal Way from the Duwamish River south (extend the Duwamish trail all the way to Southpark; add bike lanes)
- 16th Ave S (long-term construction)

The main reason these areas are difficult to ride in is because there is no space to ride (14 responses). Other problems include gaps in sidewalks or along pathways (7 responses), difficult street crossings (6 responses), inadequate lighting (4 responses), and inadequate signage (2 responses).

Improvement Suggestions for Difficult/Problem Areas

The most common suggestion to improve these areas is to add bike lanes (8 responses). Other commonly suggested improvements include adding missing link trail connections, the improvement or addition of lighting and signage (including information/map kiosks at major route junctions), adding sidewalks with curbs, and construction of new bike paths.

PART III: SCHOOL ROUTES

Walk & Roll for Schoolchildren

Only 15 respondents indicated that they have children who are in school. Of those, 7 say their children are driven to school every day, and 6 say that their children take the school bus. Only 2 respondents indicated that their children walk to school. Schools that respondents' children attend include Showalter Middle School, Thorndyke Elementary, and Tukwila Elementary.

Nonmotorized Transportation Plan

Improvements that would encourage parents to let their children walk or ride their bicycles to school include clearly designated bikeways, sidewalks, or trails (3 responses), an organized walking group supervised by an adult (2 responses), walking/bicycling safety training (1 response), and secure bike storage facilities at school (1 response).

PART IV: TELL US ABOUT YOURSELF

- Gender

Of those respondents who chose to fill out Part 4 of the survey, 15 were female and 13 were male. Almost all respondents own a car (24 yes responses, 3 no responses). 24 people use their cars as their primary mode of transportation, followed by 3 people who walk, 2 people who bike, and 1 person who rides the bus.

- Mode of Transportation

Most people cited walking as their second most-common form of transportation (15 people), with 6 people riding the bus, 4 people biking, and 1 person each using their car, a motorcycle, a motor scooter, and a vanpool.

14 people said they use transit, while 13 said that they do not. The bus is the most common form of transit used by survey respondents. The most popular routes include bus 150 (5 responses) and bus 174 (4 responses). Two respondents use the Sounder Train.

- Safety Precautions

The biggest safety precaution respondents take is to obey traffic laws (24 responses). 18 people wear helmets, 16 are courteous to other travelers/user types sharing roadways, 15 ride with traffic (bikes)/against traffic (pedestrians), and 14 use lights/reflective gear (if traveling at night).

Appendix F. Glossary

Access Management—The management of the interference with through traffic caused by traffic entering, leaving and crossing thoroughfares. It is also the control and regulation of the spacing and design of driveways, medians, median openings, traffic signals and intersections on arterial streets improve safe and efficient traffic flow on the road system.

Accessible Routes of Travel- “A continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person using a wheelchair and that is usable by persons with other disabilities (includes access routes across sites between building entrances and other public facilities such as parking, sidewalks, restrooms, etc.) (WSDOT Pedestrian Facilities Guidebook, p. 35; Original source: Accessibility Design for All-An Illustrated Handbook, 1995 Washington State Regulations)

“The ADA requires every site to have at least on accessible route of travel that provides a connection between exterior accessible site elements (parking, waiting and drop-off zones, sidewalks and walkways, bus stops, etc.) and an accessible building entrance. In a park or similar setting, the accessible route should connect the major features of the site, including parking, drinking fountains, restrooms, interpretive signs and other constructed facilities and points of interest..

- **Recreational Facilities**
Recreational facilities, such as trails, should provide accessible experiences as well. If terrain or other unusual conditions do not allow for the trail to serve as an accessible route of travel, other accessible connections or facilities that provide a similar recreation experience can be created” (WSDOT Pedestrian Facilities Guidebook, p. 35)
- **Width**
“When an accessible route of travel is less than 5 feet wide, passing areas measuring 5 feet by 5 feet every 200 feet are necessary. Passing areas may already be available at building entrances, plazas, and sidewalk intersections” (WSDOT Pedestrian Facilities Guidebook, p. 37).
- **Grade**
“A measure of the steepness of a roadway, bikeway or walkway, expressed as a ratio of vertical rise per horizontal distance, usually in percent; e.g. a 5 percent grade equals 5 m of rise over a 100 m horizontal distance” (WSDOT Pedestrian Facilities Guidebook, p. 219)

Accessibility—The ability to physically reach desired destinations, services and activities.

Amenity Zone- A hardscaped extension of the sidewalk to the back-of-curb, typically used instead of, or alternating with, a planting strip. Provides space for street furnishings (benches, trashcans, etc.) and street trees outside of the unobstructed walking space for pedestrians.

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Americans with Disabilities Act (ADA)- The Americans with Disabilities Act is a Civil Rights Act that guarantees access to all public places and places to which the public is invited.

Bicycle— A vehicle having two tandem wheels, propelled solely by human power, upon which any person or persons may ride (FHWA Federal Aid Policy Guide, Sec. 652.3).

Bicycle Friendly Routes/Streets—Any roadway design that supports comfortable and safe bicycling experiences. Features often include low or moderate speed roadways, or on higher speed roads, sufficient roadway or dedicated lane width or other features to create separation between higher moving traffic and bicycles (i.e. bike lanes or paved shoulders). Even narrow roads are considered bicycle friendly when speeds are 20 mph or lower.

Bicycle Lane (Bike Lane)— A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists (FHWA Federal Aid Policy Guide, Sec. 652.3).

Bicycle Trails—Also known as multi-use trails. Any bicycle facility fully separated from the roadway in an independent alignment. Paths and trails can follow a roadway, and even be proximate to the roadway when there are few or no intersecting streets or driveways. Paths or trails are generally 8-14 feet wide, and made of a compacted surface, paving or concrete.

Bicycle Route (Bike Route) – Bike routes are travel ways shared by bicyclists and motor vehicles that are signed as a navigational aid for bicyclists. Generally bike routes should have a secondary sign such as, “To downtown.”

Bicycle Shoulder, Paved Shoulder – On highways in many suburban and rural areas paved shoulders of 4 or more feet are added to each side. These are either left unmarked, or may be marked as bike lanes or bike routes.

Bikeways—Any road path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes (AASHTO, WSDOT, Sec 652.3).

Boulevard—An urban area travelway with four or more lanes and a central raised median island. Boulevards often limit cross access and turns. This approach provides fewer conflicts, efficient movement, greater safety and higher carrying capacity. Bike lanes and separate sidewalks are a preferred treatment with boulevards.

Complete Streets—A complete street is defined as a street that works for motorists, for bus riders, for bicyclists, and for pedestrians, including people with disabilities. A complete streets policy is aimed at producing streets that are safe and comfortable for everyone.

Context Sensitive Solutions: CSS is the result of developing transportation projects that serve all users and are compatible with the surroundings through which they pass—the community and environment. Successful CSS results from a collaborative,

multidisciplinary and holistic approach to transportation planning and project development.

Contrast materials—Materials used in roadway, pathway or walkway construction can be made of contrasting materials or one material that is two or more separate colors (i.e. asphalt and concrete). Use of contrast helps pedestrians see subtle change in grade, which, in turn, reduces the chance of a fall and can be especially helpful for those with visual impairment such as the elderly.

Crosswalks—The crosswalk generally refers to the most direct pedestrian pathway across a given leg of an intersection, whether marked or unmarked. For the purposes of these Guidelines, however, “crosswalk” refers to the marked portion of the street that is specifically designated for pedestrian crossing, whether at an intersection or a mid-block crossing. Crosswalks clearly define the pedestrian space, enhancing safety and comfort for all users. Crosswalks are an important part of the pedestrian network - they form a continuation of the pedestrian’s travel path and enhance pedestrian connectivity. Crosswalks support the overall transportation system because other users, such as motorists, bicyclists and transit users will be pedestrians at some point during their trip and may need to cross the street.

Curb Extension—A feature that extends from the sidewalk into the pavement at an intersection or at a mid-block crossing (also sometimes called a “curb bulb”, “neckdown” or “bulbout”). A curb extension can be hardscape, landscaped, or a mix of both. Reduces street width both physically and visually, thereby shortening pedestrian. Reduced crossing distance at crosswalks and potentially helping to reduce traffic speeds. Provides increased visibility for pedestrians and motorists. Moves parked vehicles away from street corners, improving visibility and access for large vehicles.

Curb Radius—The curved section of the curb connecting the curb lines of two intersecting streets. The curb radius measurement is taken from the back of the curb. The curb radius defines the space for (and helps direct) vehicle turning movements at intersections. The curb radius dimension can affect ease and speeds of vehicular turning movements.

Handicapped Pedestrian— A pedestrian, or person in a wheelchair, who has limited mobility, stamina, agility, reaction time, impaired vision or hearing, or who may have difficulty walking with or without assistive devices (WAC 236-60-010)

Highway: Total right-of-way of a public way; some or all of which may be paved. Total right-of-way area included in the definition of a highway can include sidewalks and trails.

Leading Pedestrian Interval (LPI) - Used at signalized intersections, the Leading Pedestrian Interval (LPI) is a signal phase that provides a pedestrian crossing signal a few seconds before the green signal for vehicles. Allows pedestrians to enter the crosswalk ahead of turning vehicles, thereby establishing their right-of-way. Improves visibility of pedestrians by providing them with a “head start” before vehicles are allowed to move. Reduces potential conflicts with turning vehicles.

Livable Community—A neighborhood, community or region with compact, multi-dimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling and transit access to employment, education, recreation,

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entertainment, shopping and services.

Median—A raised barrier that separates traffic flows. Generally used to control access and reduce vehicular turning movements. Separates opposing traffic flows, reducing or eliminating vehicular conflicts. Can be used for access management, by restricting turning movements into driveways or side streets. If properly designed, can provide a pedestrian and bicycle refuge on wider streets. If properly designed, can provide a landscaped element to the streetscape.

Mobility—The degree to which the demand for the movement of people and goods can be satisfied. Mobility is measured by the quantity, quality, accessibility and utilization of transportation facilities and services.

Mode—Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger and freight), transit, space and water.

Paved Shoulders The AASHTO Guide for the Development of Bicycle Facilities notes that "adding or improving paved shoulders often can be the best way to accommodate bicyclists" and they have the additional attraction of providing a variety of benefits to pedestrians and as well

Quiet roadways—Those roadways where traffic is of low volume and noise, where walking and bicycling are comfortable in an environment shared with motorized vehicles. Really quiet roadways have both low volumes and speeds. These places do not require walkways, bike lanes or trails.

Rail-Trail— A shared use path, either paved or unpaved, built within the right-of-way of an existing or former railroad (AASHTO Bicycle Facilities Guide, p. 3)

Right-of-Way—A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes (AASHTO Bicycle Facilities Guide, p. 3)

Road diet—A physical conversion of the street, wherein one or more travel lanes is converted to another use, often to support the use of other modes. A "narrowing" of the motor vehicle travelway. Converts excess vehicle capacity on a street into useable space for other modes. For example, a four-lane street might be narrowed to two lanes, with bike lanes and a median. When a street is dieted to two lanes, this helps to calm traffic, in part by eliminating the opportunity for passing, thus allowing the prudent driver to set the speed. Can enhance aesthetics and livability of adjacent land uses.

Roadway— The portion of the highway, including shoulders, intended for vehicular use (AASHTO Bicycle Facilities Guide, p. 3).

Rumble Strips— A textured or grooved pavement sometimes used on or along shoulders of highways to alert motorists who stray onto the shoulder (AASHTO Bicycle Facilities Guide, p. 3)

Shared Roadway— A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved

shoulders (AASHTO Bicycle Facilities Guide, p. 3) Any roadway upon which a bicycle lane is not designated and which may be legally used by bicycles regardless of whether such facility is specifically designed as a bikeway (FHWA Federal Aid Policy Guide, Sec. 652.3).

Shared Use Path— Also known as a multi-use trail or multi-use path. A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the street right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers and other nonmotorized users (AASHTO Bicycle Facilities Guide, p. 3)

Shoreline—Through use of color or contrast the edge of a sidewalk, driveway, crossing or other traveled way is marked to guide people with low visual acuity (blind) along their route of travel. Tactile features are sometimes added to help with guidance. The edge of a building or a set of landscape materials might also act as shore lines.

Shoulder— The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use and for lateral support of sub-base, base and surface courses (AASHTO Bicycle Facilities Guide, p. 3)

Shy Distance Pedestrians, cyclists and motorists will keep a certain distance away from objects and conditions they view as hazards, such as fixed objects (walls, rails, bollards, curbs), abrupt drop-offs, and unrideable surfaces (gravel shoulders and pavement joints running parallel to their direction of travel). This distance is known as a "shy distance" and decreases the width of a pathway that is available for them to use. The shy distance from fixed objects is approximately 2 feet, while the shy distance from unrideable surfaces is a bit less at approximately one foot. The effect of the shy distance is a reduction in the "usable" width.

Sidewalk—The portion of a street right-of-way designed for preferential or exclusive use by pedestrians (AASHTO Bicycle Facilities Guide, p. 3). "The minimum desirable width for sidewalks is 5 feet on local neighborhood streets, and 6 feet elsewhere, which meets the ADA minimum clear width of 3 feet." (WSDOT Pedestrian Facilities Guidebook, p. 37).

Sidewalk or walkway connectivity—A series of facilities along corridors and through districts that are well connected to support continuous pedestrian travel. A well designed and laid out community where people are not forced to walk in streets is said to have "high connectivity."

Signed Shared Roadway— A shared roadway which has been designated by signing as a preferred route for bicycle use (AASHTO Bicycle Facilities Guide, p. 3) These routes serve to (a) Provide continuity to other bicycle facilities (usually Bike Lanes); or (b) Designate preferred routes through high-demand corridors (AASHTO Bicycle Facilities Guide, p. 7)

Surveillance— The quality of a space that allows it to be observed by others, creating a sense of security. A sidewalk, trail, road, plaza, park or other area that is well watched over with buildings built to the street, where retail level stores have at least 60% window and door coverage is said to have good surveillance. The terms transparency and "glazing" also refer to buildings that provide quality surveillance features.

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Traffic Calming - A set of strategies used by urban planners and traffic engineers that aim to slow down or reduce traffic, thereby improving safety for pedestrians and bicyclists as well as improving the environment for residents. The 3 "E"'s referred to when discussing traffic calming are engineering, (community) education, and (police) enforcement.

Universal Design- Design of physical environments to meet the needs of all people.

Unpaved Trail- Paths not surfaced with asphalt or Portland cement concrete.

Wide Curb Lane – Wide curb lanes are outside lanes of traffic, greater than 12 feet in width, that are meant to accommodate both automobile and bicycles in the same traffic lane. These are usually constructed when a paved shoulder is not provided. A width of 14 feet is recommended for a wide curb lane, with 15 foot widths recommended in areas where bicycles are expected to need the extra room, such as steep hillclimbs. However, wide curb lanes greater than 14 feet are not recommended for continuous stretches of the roadway, since they may encourage the operation of more than one vehicle within the lane. When wide lanes are used to support bicycling they are referred to as a wide curb lane. The typical wide curb lane is 14-15 feet. These are not marked for bicycling.

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