2023 TRAM APPENDICES

Chapter 4 - Pedestrian Projects Funded Primarily With Street Fund, Grants, Partnerships (Non-TBD dollars)

Table 4.1. Pedestrian Improvements Constructed Primarily With Street Fund, State & Federal Grants, Partnerships, or Private Development - 2011 through 2017									
			e = Low to Moderate Income Neighborhood		,				
Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood			
2011	Sidewalk, Curb Extensions, Crosswalk	South	Ellis-Kansas-Meador	n/a		Sunnyland/York/Dwtn			
2012	Multimodal Roundabout		Northwest/McLeod/I-5		Tier 1*	Birchwood			
2012	Sidewalk Infill	North	McLeod Road: Northwest to E. Rusley	n/a	n/a	Birchwood			
2012	Curb ramps, Ped refuge, Flashing Crosswalk		N. Samish/Abbott		Tier 1*	Sehome/Samish UV			
2012	Curb ramps, Ped refuge, Flashing Crosswalk		N. Samish/Consolidation		Tier 1*	Sehome/Samish UV			
2012	Curb Extensions, Crosswalks		Billy Frank/Maple; Billy Frank/Laurel; Billy Frank/Ivy		Tier 1*	Sehome			
2013	Sidewalk, Crosswalk	West	Eliza Ave: Matanuska to Bellis Fair Pkwy		n/a	Guide-Meridian			
2013	Multimodal Roundabout		State/Forest/Wharf/Blvd		Tier 3	Downtown UV			
2013	Sidewalk, Crosswalks, Ped Refuges	North	West Bakerview: Arctic to Bennett	n/a	n/a	Cordata			
2013	Curb ramps, Ped refuge, Crosswalk		West College Way/High Street (WWU)		n/a	WWU			
2014	Sidewalk, Crosswalk	East	James Street: Orchard to Sunset Pond Park	Tier 3		King Mountain			
2015	Sidewalk	East	Yew Street: Alabama to Texas	Tier 2		Roosevelt			
2015	Sidewalk, Curb Extensions, Crosswalk	South	State/Laurel to Laurel/South Bay Trail	Tier 3	Tier 3	Downtown			
2015	Curb Extensions, Crosswalks		Lincoln/Potter		n/a	Puget			
2015	Sidewalk, Crosswalk	North	Gladstone Street: Puget to St. Paul	Tier 2		Puget			
2015	Sidewalk, Crosswalk	East	Lincoln Street: Byron to Maple	Tier 2		Puget			
2015	Crosswalks		Chestnut/Bay (Bridge Rehabilitation)		n/a	Downtown			
2015	Ped Hybrid Beacon (Red)		Alabama/Ellis		Tier 1	Sunnyland			
2015	Ped Hybrid Beacon (Red)		Alabama/Grant		PMP	Sunnyland			
2015	Ped Hybrid Beacon (Red)		Alabama/Moore		PMP	Roosevelt			
2015	Ped Hybrid Beacon (Red)		Alabama/St. Paul		PMP	Roosevelt			
2015	Ped Hybrid Beacon (Red)		Alabama/Undine		PMP	Roosevelt			
2015	Ped Hybrid Beacon (Red)		Alabama/Michigan		PMP	Roosevelt			
2016	Sidewalks, Crosswalks (Private Developmen	Both	Arctic Avenue: W. Bakerview to Mahogany	Tier 3		Cordata			
2016	Sidewalk, Crosswalks (Private Development	West	Lincoln Street: Maple to Fred Meyer	Tier 1		Puget			
2017	Sidewalks, Crosswalks, Intersection	Both	James/Woodstock Intersection Realignment	Tier 1*		King Mountain			
2017-18	Sidewalk (1/2 mile)	East	W. Maplewood Avenue: Northwest to Alderwood	Tier 1		Birchwood			
				*Project planned/funded prior to 2012 PMP					

Orange = Low to Moderate Income Neighborhood										
Year	Improvement		Location	Sidewalk	Crossing	Neighborhood				
2018	Sidewalks, Traffic Signals, Crosswalks	Both	Mahogany Avenue: Northwest to Pacific Highway	Tier 3		Meridian				
2018	Sidewalk, Traffic Signals, Crosswalks	Both	Granary-Bloedel: Roeder to Cornwall	Tier 3		Waterfront				
2018	Sidewalk	West	Orleans Street: Lakeway to Potter	Tier 2		Puget				
2018	Sidewalk	East	Nevada Street: Whatcom to Thimbleberry	Tier 3		Puget				
2018	Ped Hybrid Beacon (Red)		Lakeway/Grant		upgrade	York				
2018	Ped Hybrid Beacon (Red)		Lakeway/Orleans		upgrade	Puget				
2018	Ped Hybrid Beacon (Red)		Lakeway/Toledo		Tier 1	Puget				
2018	Ped Hybrid Beacon (Red)		Lincoln/Fred Meyer		upgrade	Puget				
2018	Curb ramps, Ped refuge, Flashing Crosswalk		Otis/Maple/Samish		BMP	Samish Urban Village				
2018	Roundabout with ped refuge crosswalks		Cordata/Stuart Roundabout		Tier 3	WCC/Cordata				
2019	Sidewalk	East	Aldrich Road: Mahogany to Cordata ES	Tier 1		Cordata				
2019	Sidewalk, crosswalk	North	Sunset Drive (SR 542): Applebee's to NB on-ramp	Tier 3		Barkley				
2020	Sidewalk	West	Otis Street: Maple to Abbott (BHA- Non-Profit)	Tier 3		Samish Urban Village				
2020	Sidewalks, Crosswalks	Both	West Horton Road: Pacific Rim to Aldrich	Tier 1		Cordata				
2020	Flashing Crosswalk, Curb ramps, Refuge		Bill McDonald/35th Street		Tier 1	Sehome/Happy Valley				
2020	Sidewalk, ADA ramps, Enhance Crosswalks	North	N. Samish Way (Byron to Southbound I-5 off-ramp)	Tier 1		Samish Urban Village				
2021	Sidewalk, Traffic Signal, Crosswalks	North	Orchard Extension: James to Birchwood	Tier 1*	Tier 3*	King/Irongate/Cornwall				
2022	Flashing Crosswalk		Bill McDonald/South College Drive		n/a	WWU				
2023	Sidewalks, crosswalks, traffic signals	Both	Telegraph Rd: Deemer-James (\$1.6M federal grant)	Tier 3		King Mountain				
2023	Sidewalk, ADA, Roundabout, Crosswalks		James/E. Bakerview	Tier 3		King Mtn				
2023	Sidewalks, ADA, Flashwalk, Intersection	Varies	W. Illinois, Vallette, W. Indiana, Cornwall, Coolidge	Tier 3		Cornwall Park				
2023	Sidewalk, ADA, Roundabout, Crosswalks		Meridian St/W. Illinois St	Tier 3		Columbia/Cornwall/Fountair				
2023	Sidewalk, ADA, Traffic Signal, Crosswalks	South	Lincoln St/E. Maple St	Tier 2		Puget				
2023	Sidewalk, ADA, Flashing Crosswalk	South	Barkley Blvd (Weatherby-St Clair) & Barkley/St Clair	Tier 3	Tier 3	Barkley UV				
2023	Marked crosswalk		W. Illinois/Victor		Tier 3	Columbia				
2023	Flashing crosswalk, curb ramps		W. Illinois/Vallette		Tier 3	Cornwall Park				

Chapter 5 - Bikeway Projects Funded Primarily with Street Fund, Grants, Partnerships (Non-TBD dollars)

Table 5.1. F	Bicycle Improvements Const	ructed Primaril	y With Street Fund, State & Federal Grants, Partnership: Salmon = Low to Moderate Income Nei	•	relopment - 2010 through 202	3	
Year	Improvement	Direction	Location	Ť .	Parking Removed?	Side	Neighborhood
2010	Road diet for bike lane	East-West	Forest Street: State St to York Street	n/a*	No		Downtown UV
2011	Bike Lanes	East-West	Meador Avenue: N. State to James	n/a*	No		Sunnyland/Downtown
2012	Climbing/Shared Lane	North-South	Indian Street: Chestnut to Oak (WWU)	n/a*	No		Dwtn/Sehome/WWU
2012	Multimodal Roundabout		Northwest/McLeod	n/a*	No		Birchwood
2013	Bike Lanes	North-South	Eliza Avenue: Bellis Fair to W. Bakerview	n/a*	No		Meridian/Cordata
2013	Multimodal Roundabout		State/Forest/Wharf/Boulevard	n/a*	No		Downtown UV
2014	Bike Lanes	North-South	James Street: Orchard to Sunset Pond Park	Tier 1*	No		King Mountain
2015	Bike Lanes	East-West	Alabama Street: Cornwall to Iron	Tier 2	No		Sunnyland
2015	Bicycle Boulevard	East-West	Laurel Street: State to Railroad	Tier 2	No		Downtown
2015	Climbing/Shared Lane	East-West	Chestnut Street: Bay to Roeder	Tier 2	No		Downtown
2015	Bike Lanes	North-South	James Street: Gooding Rd to Blackstone Way	Tier 3	No		King Mountain
2016	Bike Lanes	North-South	Arctic Avenue: W. Bakerview to Mahogany	Tier 3	No		Cordata
2017	Bike Lanes	East-West	Mahogany Avenue: Northwest to Pacific Highway	Tier 3	No		Cordata
2018	Bike Lanes	East-West	Granary-Bloedel: Roeder to Cornwall	Tier 3	No		Waterfront
2018	Roundabout bike marks	Crossing	Cordata/Stuart	Tier 2	No		Cordata
2019	Bike Lane (East side)	North-South	Aldrich Road: Mahogany to W. Horton	Tier 1	No		Cordata
2019	Off-Street Multiuse Path	South	Lakway Drive: Undine St to Old Lakeway	Tier 1	No		Puget
2020	Bike Lanes	East-West	W. Horton Road: Pacific Rim to Aldrich	Tier 1	No		Cordata
2020	Buffered Bike Lanes	North-South	Samish-Maple-Ellis: I-5 to Lakeway	Tier 2	No		Sehome/Samish UV
2021	Bike Lanes	East-West	Orchard Extension: James to Birchwood	Tier 1*	No		King Mtn-Cornwall Park
2023	Bike Lanes, Bike Boxes	North-South	Telegraph Road (\$1.6 million federal grant)	Tier 3	No		King Mtn
2023	Bike Lanes, Bike Boxes	East-West	W. Illinois (Sunset Drive to Meridian St)	Tier 3	Yes		Cornwall Park/Fountain UV
2023	Bike Lanes, Bike Boxes	East-West	W. Illinois (Meridian to Lynn Street)	Tier 3	Yes		Columbia/Fountain UV
2023	Traffic Signal, Bike Boxes	E-W-N-S	Lincoln St/E. Maple St		No		Puget
2023	Protected bike lanes	North-South	Lincoln Street Road Diet: E. Maple to Fred Meyer		No		Puget
				*Project was p	lanned or funded prior to 201	4 BMP	approval

		Table 5	.5 Bellingham Arterial Street Road Diets - Reduction of \	ehicle Lanes II	n Favor of Ins	stalling Bikeways				
Year	Arterial Street	Project Extent	Before and After Road Diet Street Configuration	Vehicle Lane Linear Feet Removed	Vehicle Lane Miles Removed	Bicycle Facility Type	Buffer Width	Bike Lane Linear Feet Installed	Bike Lane Miles Installed	Bike Lane Side(s)
2002	N. State Street	York to Wharf	3 one-way vehicle lanes to 2 lanes + bike lane	4,175	0.79	Buffered bike lane ¹	2	4,175	0.79	West
2003	Magnolia Street	Commercial to Ellis	3 one-way vehicle lanes to 2 lanes + bike lane	2,354	0.45	Buffered bike lane ²	2	2,354	0.45	South
2004	Broadway Avenue	Holly to Sunset	4 vehicle lanes to 3 lanes + bike lanes	4,000	0.76	Marked bike lane	~	8,000	1.52	Both
2010	Forest Street	Wharf to York	3 one-way vehicle lanes to 2 lanes + bike lane	4,175	0.79	Marked bike lane	~	4,175	0.79	East
2015	Alabama Street	Cornwall to James	4 vehicle lanes to 3 lanes + bike lanes	2,433	0.46	Marked bike lane	~	4,866	0.92	Both
2018	Barkley Boulevard	Newmarket to Sussex	4 vehicle lanes to 2 lanes + buffered bike lanes	6,400	1.21	Buffered bike lane	4	6,400	1.21	Both
2019	Chestnut Street	Bay to Ellis	3 one-way vehicle lanes to 2 lanes + buffered bike lane	3,590	0.68	Buffered bike lane	4	3,590	0.68	South
2019	Cordata Parkway	Kellogg to Kline	4 vehicle lanes to 2 lanes + buffered bike lanes	16,000	3.03	Buffered bike lane	4	16,000	3.03	Both
2020	James Street	Barkley to Woodstock	4 vehicle lanes to 2 lanes + buffered bike lanes	4,000	0.76	Buffered bike lane	2	8,000	1.52	Both
2020	Samish-Maple-Ellis	Bill McDonald to Lakeway	5 lanes to 3 lanes + buffered bike lanes	8,700	1.65	Buffered bike lane	4	8,700	1.65	Both
2020	Ellis-York	Lakeway to Cornwall	4 vehicle lanes to 3 lanes + buffered bike lanes	6,500	1.23	Buffered bike lane	4	6,500	1.23	Both
2023	Lincoln St (Phase 1) ³	E. Maple to Fred Meyer	5 vehicle lanes to 3 lanes + buffered bike lanes	3,100	0.59	Buffered bike lane	4	3,100	0.59	Both
				65,427	12.39			75,860	14.37	
Notes	1.) 2002 marked bike lai	ne converted to buffered bike la	ane in 2017; 2-foot buffer							
	2.) 2003 marked bike lane converted to buffered bike lane in 2020; 2-foot buffer									

^{3.)} Lincoln Street approach to Lakeway Drive requires future work with businesses to relocate or close commercial driveways before bike lanes can be installed

		Table 5	5.6 Arterial Street Removal of Vehicle Parking Lane Capa	city Resulting	in Bicycle Fac	cility Installation					
Year	Arterial Street	Project Extent	Before and After Parking Removal Street Configuration	Parking Lane Linear Feet Removed	Parking Lane Miles Removed	Bicycle Facility	Buffer Width	Bike Lane Linear Feet Installed	Bike Lane Miles Installed	Bike Lane Side(s)	
2008	Cornwall Avenue	Ohio to W. Illinois	On-street parking both sides; west side removed	4,958	0.94	Marked bike lane	~	9,916	1.88	Both	
2011	Lakeway Drive	Birch to City Limit (Scenic)	On-street parking both sides; west side removed	1,372	0.26	Marked bike lane	~	2,744	0.52	Both	
2012	Northwest Avenue	Lottie to McLeod	On-street parking both sides; west side removed	11,418	2.16	Marked bike lane	~	22,836	4.33	Both	
2015	Ohio Street	Cornwall to Grant	On-street parking both sides; south side removed	1,400	0.27	Marked bike lane	~	2,800	0.53	Both	
2017	Orleans Street	Alabama to Indiana	On-street parking both sides; west side removed	2,244	0.43	Marked bike lane	~	4,488	0.85	Both	
2017	Woburn Street	Texas to Iowa	On-street parking both sides; west side removed	1,880	0.36	Marked bike lane	~	3,760	0.71	Both	
2018	Puget Street	Lakeway to Civic Field	On-street parking both sides; east side removed	450	0.09	Buffered bike lane	1.5	900	0.17	Both	
2019	Roeder Avenue	Coho to C Street	On-street parking west side; west side removed ³	4,745	0.90	Buffered bike lane ¹	4	14,588	2.76	Both	
2023	West Illinois Street	Sunset to Cornwall	On-street parking both sides; south side removed	530	0.10	Marked bike lane		1,060	0.20	Both	
2023	West Illinois Street	Cornwall to Northwest	On-street parking both sides; north side removed	3,000	0.57	Marked bike lane		6,000	1.14	Both	
2023	West Illinois Street	Northwest to Lynn	On-street parking both sides; both sides removed	2,400	0.45	Marked bike lane		2,400	0.45	Both	
2023	Meridian Street	E. Victor to W. Illinois	On-street parking both sides; west side removed	2,100	0.40	Marked bike lane		4,200	0.80	Both	
2023	Girard Street	Broadway to C Street	On-street parking both sides; west side removed	2,000	0.38	Marked bike lane		4,000	0.76	Both	
2023	Eldridge Avenue	Broadway to City Limit	On-street parking both sides; both sides removed	13,000	2.46	Protected bike lane		13,000	2.46	Both	
2023	Cornwall Avenue	Laurel to Pine	On-street parking both sides; both sides removed	2,000	0.38	Protected bike lane		4,000	0.76	TBD	
				53,497	10.13			96,692	18.31		
Notes	Notes 1.) On-street parking only existed between Coho and C St; Buffered bike lanes from Seaview to Granary										

	Actual	2011-22											
_													
Revenues	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Sales Tax Receipts (.2%)	\$2,454,454	\$4,350,591	\$4,655,993	\$4,700,864	\$4,903,512	\$5,169,348	\$5,473,547	\$5,898,842	\$6,121,740	\$5,983,493	\$7,018,779		\$64,321,770
Other Rev: Interest, Project Grants and Contributions	\$4,235	\$52,050	\$464,539	\$45,732	\$92,623	\$34,829	\$198,403	\$2,211,235	\$1,240,800	\$855,043	\$444,478	· · · · ·	\$7,356,885
Total Specific Revenue	\$2,458,689	\$4,402,641	\$5,120,532	\$4,746,596	\$4,996,135	\$5,204,177	\$5,671,950	\$8,110,077	\$7,362,540	\$6,838,536	\$7,463,257	\$9,303,524	\$71,678,655
Expenditures													T
Total Overhead / Administrative	\$94,594	\$142,748	\$313,006	\$140,471	\$57,639	\$502,068	\$636,589	\$509,401	\$759,972	\$567,650	\$798,126	\$850,262	\$5,372,527
Total WTA Transit	\$485,703	\$1,116,031	\$1,353,497	\$1,596,099	\$1,705,571	\$1,062,351	\$8,286	\$0	\$0	\$0	\$0	\$0	\$7,327,537
	•	•		•	•	•	•		•	•		•	
Individual Capital Improvement Projects													_
ER014 - State/Ellis Bridge Replacement								\$349,403	\$74,594	\$7,045	\$2,671,584	\$1,063,043	\$4,165,669
ES547 - 2019 TBD N/M Improvements									\$1,950,182	\$497,807			\$2,447,989
ES540 - 2017 TBD Overlay							\$6,312	\$273,845	\$2,045,278				\$2,325,435
ES553 - 2020 TBD N/M - 40th Street Sidewalk									\$115,690	\$1,381,814	\$738,176	\$2,255	\$2,237,935
WF1011 - Granary Ave. and Laurel Street								\$2,051,217	\$74,544	\$38,623	\$22,761		\$2,187,145
ES538 - Lakeway/Lincoln Ped and Bike							\$43,911	\$1,718,099	\$340,905	\$210			\$2,103,125
ES517 - W Maplewood Multimodal						\$47,260	\$936,387	\$1,115,120					\$2,098,766
ES556 - Mill Avenue Overlay										\$2,736	\$83,310	\$1,675,410	\$1,761,457
ES479 - 25th St. Ped & Bike			\$126,487	\$1,547,045	\$60,347	\$846							\$1,734,725
ES495 - 2015 TBD Overlay				\$1,412,033	\$173,798								\$1,585,831
ES554 - 2020 Overlay Bill McDonald Pkwy										\$1,447,155	\$60,233		\$1,507,388
ES475 - 2013 Overlay			\$1,364,658	\$849									\$1,365,507
ES535 - 2017 Ped & Bike Imps							\$40,064	\$1,172,358	\$13,836				\$1,226,258
ES539 - Texas Street Overlay								\$1,102,499	\$1,004				\$1,103,503
ES552 - Samish/Maple/Ellis M/M Improvements										\$948,180	\$100,812		\$1,048,993
ES544 - 2019 TBD Overlay Harrison James									\$184,002	\$818,795	\$28,129		\$1,030,926
ES513 - Holly St. Overlay							\$986,926						\$986,926
ES530 - Cordata/Stuart RAB								\$397,347	\$476,923				\$874,270
ES548 - Cordata/Horton/Stuart Safety Improvements									\$621,233	\$110,800			\$732,033

Table 6.1.b. Transportation Benefit Dist	rict #1 Pov	onuoc & I	Evnanditu	Iroc [Course	v Dublic Mor	ks Einansial	Comisos 1						
Table 6.1.b. Hansportation benefit bis	TICL #1 KEV	enues & i	zxpenditu	ii es įsource	: Public wor	ks Financiai .	servicesj						T
Individual Capital Improvement Projects	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
ES490 - Eliza Ave. Sidewalks				\$12,898	\$651,776	\$260							\$664,935
ES459 - 2012 Street Resurfacing / TBD		\$637,000											\$637,000
ES531 - Cordata SRTS									\$606,534				\$606,534
ES443 - 2011 Street Resurfacing / TBD	\$560,000												\$560,000
ES491 - Ohio St Bike Lanes				\$8,072	\$546,294								\$554,366
ER016 - Meador Ave Bridge Replacement										\$2,410	\$164,965	\$364,145	\$531,521
ES546 - Northwest / Bakerview Intersection										\$413,027	\$105,489		\$518,516
ES474 - Bill McDonald Parkway			\$481,373	\$36,347									\$517,721
ES399 - W Horton										\$506,938			\$506,938
ES466 - Alabama Corridor					\$500,000								\$500,000
ER015 - James St Bridge Replacement										\$2,815	\$154,821	\$322,535	\$480,172
ES512 - Nevada/Kentucky Bike Blvd					\$23,306	\$451,642							\$474,948
ES448 - TBD Non-motorized Indian St.		\$447,358	\$10,035	\$6,450									\$463,843
ES458 - State and Maple	\$14	\$9,886	\$341,905	\$2,175	\$1,500	\$15							\$355,495
ES447 - TBD-Northwest/Elm/DuPont	\$13,276	\$331,187											\$344,463
ES522 - 12th and Mill					\$159	\$10,089	\$277,822	\$41,311					\$329,381
EF154 - Electrification of Transport												\$328,759	\$328,759
ES449 - TBD Samish Ped & Bike		\$220,019	\$42,429										\$262,448
ES536 - TBD Re-Striping							\$257,238	\$241					\$257,479
ES510 - Yew St. Sidewalks				\$123	\$251,578	\$520							\$252,222
ES560 - Parkview Safe Route to Schools												\$238,055	\$238,055
ET033 - Downtown Signal Imps										\$231,000			\$231,000
ES561 - W Illinois Multimodal Improvements												\$198,781	\$198,781
ES557 - Pedestrian and Bike Plan Update												\$175,647	\$175,647
ES555 - Lincoln / Lakeway M/M Study										\$54,692	\$96,010	\$16,000	\$166,703
ES563 - Westside Non-Motorized Improvements												\$669	\$669
Other projects	\$357,465	\$299,502	\$439,579	\$129,950	\$259,294	\$136,696	\$64,021	\$30,837	\$235,828	\$33,199	\$11,388		\$1,997,758
Total TBD Projects	\$932,766	\$1,946,964	\$2,808,480	\$3,157,957	\$2,470,068	\$649,344	\$2,614,699	\$8,254,295	\$6,742,571	\$6,499,267	\$4,239,701	\$4,387,320	\$44,703,431
Total TBD Expenditures	\$1,513,063	\$3,205,743	\$4,474,983	\$4,894,526	\$4,233,278	\$2,213,763	\$3,259,574	\$8,763,696	\$7,502,543	\$7,064,897	\$5,035,806	\$5,235,560	\$57,397,432

		Orang	ge = Low to Moderate Income Neighborhood			
Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
2011	Sidewalk, Curb Extensions, Crosswalk	Both	Prospect Avenue: Lottie to Bay	n/a	n/a	Downtown UV
2011	Sidewalk, Curb Extensions, Crosswalk	South	Birchwood/Meridian	n/a	n/a	Birchwood
2011	Curb Extensions, Crosswalk	Both	Meridian/Connecticut	n/a	n/a	Columbia/Cornwall Par
2011	Sidewalk, Curb Extensions, Crosswalk	Both	Electric/Birch/Portal	Tier 1*	Tier 1*	Whatcom Falls
2011	Curb Extensions, Flashing Crosswalk		Electric/Bloedel-Donovan Park	Tier 1*	Tier 1*	Silver Beach
2012	Sidewalk, Curb Extensions, Crosswalk	West	Yew Street: Alabama to Texas/Yew	Tier 1*	Tier 1*	Roosevelt
2012	Curb Extensions, Crosswalk		Woburn/Texas		Tier 1	Roosevelt
2012	Curb ramps, Flashing Crosswalk		Alabama/St. Paul		Tier 1*	Roosevelt
2012	Curb Extensions, Crosswalk		Alabama/Yew		Tier 1*	Roosevelt
2012	Curb ramps, Traffic Signal		Woburn/Rimland (TBD + Private\$)		Tier 1*	Barkley UV
2012	Curb ramps, Flashing Crosswalk		Pine/Boulevard		Tier 1*	Sehome
2012	Curb ramps, extensions, and crosswalks		Dupont/Elm/Northwest		Tier 1*	Dwtn/Ltr/Col/Birchwoo
2013	Sidewalk Infill	North	Bill McDonald Pkwy: 35th to Birnham Wood	Tier 1	n/a	Sehome
2013	Sidewalk, Curb Extensions, Crosswalk	South	E. Maple/Cornwall	Tier 1	Tier 2	Downtown UV
2013	Sidewalk, Curb Extensions, Crosswalk	South	State/E. Maple		Tier 1*	Downtown UV
2013	Curb Extensions, Crosswalk		E. Illinois/James		Tier 1*	Sunnyland ES
2013	Crosswalk, Ped Refuge		W. College Way/High Street (WWU)		n/a	WWU
2014	Sidewalks, Curb Extensions, Crosswalk	Both	25th Street: Bill McDonald to Douglas/24th	Tier 1	n/a	Happy Valley
2014	Ped/Bike Bridge Reconstruction (Parks)		Whatcom Creek Trail: Ellis to York		n/a	Downtown UV
2014	Sidewalk, Curb Extensions, Crosswalk	South	Hawthorn: 12th to Fieldston; Hawthorne/Bayside	Tier 3	Tier 3	Edgemoor
2015	Ped/Bike Trail/Rail Crossing (Parks)		South Bay Trail: BNSF Tracks at Boulevard Park		n/a	South Hill
2015	Sidewalk Infill	West	Eliza Avenue: Kellogg to Westerly	Tier 1	n/a	WCC/Cordata
2015	Curb Extensions, Crosswalks		Ohio/Ellis		Tier 1	Sunnyland/Downtown
2015	Curb Extensions, Crosswalks		Ohio/Grant		Tier 3	Sunnyland/Downtown
2016	Sidewalk	South	Birchwood: Northwest to Cedarwood	Tier 3	Tier 3	Birchwood
2016	Sidewalk, Curb Extensions, Crosswalk	East	12th/Mill	Fhvn UV	Fhvn UV	Fairhaven UV
2016	Curb Extensions, Crosswalk		Mill/24th St	Tier 1		Happy Valley
016-17	Intersection Study		Barkley/Sussex		Tier 3	Barkley

Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
2018	Flashing crosswalk		Woburn/Fraser/Whatcom Falls Trail		Tier 1	Puget
2018	Reconstruct intersection, add crosswalks		Woburn/Kentucky		n/a	Roosevelt
2018	Curb Extensions, Crosswalks		Orleans/Illinois	Tier 1		Roosevelt
2018	Curb Extensions, Crosswalks		14th/Mill	Tier 1		South Hill
2018	Curb Extensions, Crosswalks		21st/Mill	Tier 1		Happy Valley
2018	Curb Extensions, Crosswalks, Sidewalk		Woburn/Kentucky			Roosevelt
2018	Sidewalk Infill to HAWK signal	East	Undine Street: Alabama to Texas	Tier 1	HAWK	Roosevelt
2018	Sidewalk Infill	South	Texas Street: Pacific to Valencia	Tier 1		Roosevelt
2019	Sidewalk	West	24th Street: Donovan to Old Fairhaven Parkway	Tier 1		Happy Valley
2019	Sidewalk	East	Yew Street: Alabama to Roosevelt Elementary	Tier 2		Roosevelt
2019	Curb ramps, extensions, crosswalks	West	Meridian St/North St (Fountain Urban Village Plan)		n/a	Fountain UV/Cornwall Park
2019	Flashing crosswalk		Northwest Ave/Connecticut St		Tier 3	Fountain UV/Columbia
2019	Crosswalks at compact roundabout		Cordata/Horton		n/a	Cordata
2020	Curb ramps, ped refuges, crosswalks		Northwest/Bakerview		n/a	Meridian
2020	Flashing crosswalk		Cordata Park north entrance		na	Cordata
2020	Flashing crosswalk		Cordata Park south entrance		na	Cordata
2020	Flashing crosswalk		14th Street/Old Fairhaven Parkway		Tier 1	Happy Valley/South
2020	Flashing crosswalk		James Street/E. North Street		ВМР	Sunnyland
2020	Curb ramps, extensions, crosswalks		Kentucky/Grant		Tier 3	Sunnyland
2020	Flashing crosswalk		Orleans/Railroad Trail		n/a	Roosevelt
2020	Sidewalk	East	40th Street/Elwood Ave sidewalk	Tier 3		Samish
2020	Flashing Crosswalk		11th Street/Taylor Street		n/a	South Hill
2020	Flashing Crosswalk		Woburn/Railroad Trail		Tier 1	Roosevelt
2021	Traffic Signal		State/Maple		Tier 1	Downtown UV
2021	Traffic Signal		State/Laurel (Partner w 480-bed Student Housing)		Tier 3	Downtown UV
2021	Traffic Signal		Holly/High St		n/a	Downtown UV
			Mill Avenue (40th Street to Samish Way)			

Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
2023	Road Diet; Flashwalk; Transit Island	Both	Lincoln Street (E. Maple to Fred Meyer)			Puget
2023	Curb ramps, extensions, crosswalks	Both	W. Holly/W. Champion		Tier 1	Old Town UV
2023	Flashing crosswalk, curb ramps		Cordata/Tremont		Tier 2	Cordata
2023	Flashing crosswalk, curb ramps		Eldridge/Nequalicum		Tier 2	Columbia
2023	Flashing Crosswalk, ADA, Curb ramps		Eldridge/Victor			Columbia
2023	Flashing Crosswalk, ADA, Curb ramps		Eldridge/West			Columbia
2023	Flashing Crosswalk, ADA, Curb ramps		Eldridge/Lafayette			Columbia
2023	Flashing Crosswalk, ADA, Curb ramps		Northwest/Victor		Tier 2	Columbia
2023	Flashing Crosswalk, ADA, Curb ramps		Cordata/Tremont		Tier 2	Cordata
2023	Flashing Crosswalk, ADA, Curb ramps		Cordata mid-block btwn Meadowbrook & Sequoia			Cordata
2023	Flashing Crosswalk, ADA, Curb ramps		W. Horton/Ryzex			Cordata
2023	Flashing Crosswalk, ADA, Curb ramps		Northwest/Home Lane			Meridian
2023	Flashing Crosswalk, ADA, Curb ramps		Meridian/W. Oregon			Columbia
2023	Flashing Crosswalk		Boulevard/Pine			South Hill
2023	Flashing crosswalk		Ohio/Ellis			Sunnyland
2023	Flashing crosswalk		Ohio/Grant			Sunnyland
2023	Crub extensions, marked crosswalk		W. Holly/W. Champion		Tier 1	Old Town UV
2023	Flashing crosswalk		Dupont/H Street			Lettered Streets
2023	Flashing crosswalk		Girard/H Street			Lettered Streets
2023	Flashing crosswalk		Woburn/Whatcom Creek			Whatcom Falls-Pug
2023	Flashing crosswalk		James/Sunset Pond			Irongate
2023	Flashing crosswalk		Orleans/E. Illinois			Roosevelt

Chapter 6 – Bikeway Projects Funded by Bellingham Transportation Fund (Former Transportation Benefit District)

Table 6.3. B	Table 6.3. Bicycle Improvements Constructed Primarily With TBD/T-Fund Non-Motorized and TBD/T-Fund Arterial Resurfacing Funds - 2011 through 2016 Orange = Low to Moderate Income Neighborhood										
V	I	Discosti e se		Ť I	Dauldina Daurana d	Side	Notable autonal				
Year	Improvement	Direction	Location	BMP Priority	Parking Removed?		Neighborhood				
2011	Marked bike lanes	East-West	Lakeway Drive: Woburn to City limit	n/a*	Yes: Birch to City limit	West	Whatcom Falls				
2011		East-West	Birchwood Avenue: Meridian to Squalicum Pkwy	n/a*	No		Cornwall Park				
2012	Marked bike lanes	North-South	Northwest Avenue: Lottie to I-5	Tier 1*	Yes: Lottie to McLeod	West	Dwtn/Ltr/Col/Birchwood				
2013	Climbing/Shared Lane	North-South	Highland Drive: High Street to W. College Way	n/a*	No		WWU				
2013	New Shoulders	East-West	Electric Avenue: Alabama to Ohio	Tier 3	No		Silver Beach				
2014	Shared Lanes	North-South	Hawthorne: 12th Street to Fieldston	Tier 3	No		Edgemoor				
2014	Shared Lanes	North-South	14th Street: Edwards to Douglas	Tier 3	No		South Hill				
2014	New Shoulders	East-West	Electric Avenue: Lakeway to Ohio	Tier 3	No		Whatcom Falls				
2014	Marked bike lanes	North-South	25th Street: Bill MacDonald to Douglas	Tier 1*	No		WWU/Happy Valley				
2015	Marked bike lanes	North-South	Eliza Avenue: Kellogg to Westerly	Tier 1	No		WCC/Cordata				
2015	Marked bike lanes	East-West	Ohio Street: Grant to Cornwall	Tier 1	Yes: Dean to Grant	South	Sunnyland/Downtown				
2015	Bicycle Boulevard	North-South	Grant Street: Illinois to N. State	Tier 2	No		Sunnyland/Downtown				
2015	Bicycle Boulevard	North-South	Ellis: Squalicum Pkwy to Ohio	Tier 2	No		Sunnyland/Downtown				
2015	Bicycle Boulevard	North-South	Moore-Texas-Nevada	Tier 2	No		Roosevelt				
2015	Bicycle Boulevard	East-West	Kentucky: Moore to Cornwall	Tier 1	No		Sunnyland/Downtown				
2015	Bicycle Boulevard	East-West	E. Illinois Street: Valencia to Sunset	Tier 1	No		Roosevelt/Sunnyland				
2015	Bicycle Boulevard	North-South	Michigan Street: E. Illinois to Texas	Tier 2	No		Roosevelt				
2015	Bicycle Boulevard	East-West	Texas Street: Michigan to Nevada	Tier 1	No		Roosevelt				
2015	Climbing/Shared Lane	North-South	Lincoln: Lakeway to Meador	Tier 1	No		Puget				
2015	Corridor Study	East-West	Holly Street: Ellis to Bay (Phase 1)	Tier 1	Unknown	?	Downtown				
2016	Bicycle Boulevard	North-South	24th Street: Old Fairhaven Pkwy to Douglas	Tier 1	No		Happy Valley				
2016	Bicycle Intersection	East-West	Cornwall/Kentucky/Young	Tier 1	No		Lettered Streets				
2016	Marked bike lanes	North-South	Champion Street: Ellis to Cornwall	Tier 2	No		Downtown				
2016	Corridor Study	East-West	Lakeway Drive: Ellis to Queen	Tier 1	No		Puget/York/Downtown				
2016	Corridor Study	North-South	Samish-Maple-Ellis	Tier 2	No		Samish UV/Sehome/York				
	*Project was planned or funded prior to 2014 BMP approval										

Table 6.3.a.	. Bicycle Improvements Con	structed Prima	rily With TBD/T-Fund Non-Motorized and TBD/T-Fund A	rterial Resurfaci	ng Funds - 2017 through 2018	}	
			Orange = Low to Moderate Income Nei	ghborhood			
Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2017	Marked bike lanes	North-South	West Maplewood Ave: Northwest to Alderwood	Tier 1	No		Birchwood
2017	Bicycle Boulevard	East-West	Alderwood Ave: Northwest to Bennett	Tier 1	No		Birchwood
2017	Marked bike lanes	North-South	James St: Sunset to Woodstock (Sunset Square)	Tier 3	No		King Mtn
2017	Marked bike lanes	North-South	Orleans Street: Alabama to Barkley	Tier 2	Yes: Alabama to Barkley	West	Roosevelt
2017	Bicycle Boulevard	North-South	Orleans Street: Alabama to Texas	Tier 2	No		Roosevelt
2017	Marked bike lanes	North-South	Woburn Street: Texas to Iowa	Tier 2	Yes: Alabama to Iowa	West	Roosevelt
2017	Climbing/Shared Lane	North-South	Woburn Street: Iowa to Lakeway	Tier 2	No		Puget
2017	Bike Lane Enhancement	East-West	Lakeway Drive: Queen to City Limit	Tier 1	No		Puget & Whatcom Falls
2017	Bicycle Boulevard	North-South	Undine Street: Texas to Railroad Trail	Tier 2	No		Roosevelt
2017	Bicycle Boulevard	North-South	St. Paul Street: Railroad Trail to Texas	Tier 2	No		Roosevelt
2017	Buffered Bike Lane	East-West	State Street: York to Wharf	Tier 2	No - Upgrade Bike Lane		Downtown
2017	Buffered Bike Lane	East-West	Forest Street: Wharf to Rose	n/a	No - Parking added		Downtown
2017	Bicycle Boulevard	East-West	Mill Avenue: 12th Street to 24th Street	Tier 1	No		Fairhaven/Happy Valley
2017	Bike Wayfinding Signs		Citywide	BMP Priority	No		2 major bike routes
2018	Buffered bike lanes	East-West	Barkley Blvd: Woburn Street to Sussex	Tier 1	No-Rechannelize/Upgrade		Barkley
2018	Marked bike lanes	East-West	Barkley Blvd: Sussex to Britton Road	Tier 1	No-Rechannelize/Upgrade		Barkley
2018	Bicycle Boulevard	North-South	Byron/34th/Pasco/Whatcom/Grant/Humboldt	Tier 1	Concert w WSDOT grant		Sehome/Samish UV/York
2018	Bicycle Boulevard	North-South	James-Gladstone (Meador to Ellis)	Tier 2	Concert w WSDOT grant		York
2018	Bicycle Boulevard	North-South	Humboldt (Meador to Gladstone)	Tier 3	Concert w WSDOT grant		Samish/Puget
2018	Bicycle Boulevard	North-South	40th/Dumas/Ashley/Byron/44th/Nevada	Tier 2	Concert w WSDOT grant		Samish/Puget
2018	Bike Lanes	North-South	Puget Street: Lakeway to Civic Field parking lot	Tier 2	Concert w WSDOT grant		Puget
2018	Bike Lanes	East-West	Lakeway Drive: Puget to Undine HAWK	Tier 1	Concert w WSDOT grant		Puget
2018	Bike Lane Enhancement	North-South	Cornwall Avenue: Ohio to Illinois	n/a	No		Letter St/Cornwall Park
2018	Bike Lane Enhancement	North-South	Northwest Avenue: Lottie to W. Bakerview	n/a	No		Dwtn/Ltr/Col/Birchwood
				*Project was pl	anned or funded prior to 201	4 BMP	approval

Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2019	Buffered Bike Lanes	North-South	Roeder Avenue: Squalicum Pkwy to C Street	Tier 2	Yes - Resurfacing		Waterfront
2019	Bike Climbing Lane	NW - SE	Chestnut Street: Railroad to Ellis (Road Diet)	Tier 1	No		CBD/Sehome
2019	Buffered Bike Lane	North-South	Cordata Pkwy: Kellogg to Kline (Road Diet)	Tier 2	Added - Tremont to Kline		Cordata
2019	Bike Lane Enhancement	East-West	W. Horton Rd: Meridian (SR 539) to Pacific Rim	n/a	No		Cordata
2019	Bike Lane Enhancement	North-South	Stuart-Kellogg: Cordata to Eliza	n/a	No		Cordata
2019	Bike Boulevard	East-West	Old Lakeway Drive: Lakeway to Yew Street	Tier 1	No		Puget
2019	Bike Boulevard	North-South	Halleck Street: Cornwall Avenue to Broadway Street	Tier 2	No		Lettered Streets
2019	Bike Boulevard	East-West	Kentucky Street: Pacific to Woburn	Tier 3	No		Roosevelt
2019	Bike Boulevard	North-South	12th Street: Mill Ave to Hawthorn Rd	Tier 3	No		Fairhaven Urban Village
2019	Bike Boulevard	North-South	14th Street: Douglas to Old Fairhaven Pkwy	Tier 3	No		Fairhaven UV/Happy Valley
2019	Bike Boulevard	North-South	N. State Street: Boulevard to Wharf Roundabout	Tier 2	No		Downtown UV/Sehome
2019	Bike Boulevard	North-South	Vallette Street: Broadway Street to Cornwall Park	Tier 3	No		Fountain UV/Cornwall Park
2019	Shared Lane Markings	North-South	Cornwall Avenue: Ohio Street to Champion Street	Tier 2	No		Downtown Urban Village
2020	Curb ramps, ped refuges, o	crosswalks	Northwest/Bakerview	n/a	n/a		Cordata/Meridian
2020	Buffered Bike Lanes	N-S-E-W	James Street (Sunset Square): Woodstock to Barkley	Tier 2	Yes - Resurfacing		Barkley/King Mountain
2020	Shared Lane Markings	North-South	Orleans Street: Indiana to Woodstock Way	Tier 2	No		Roosevelt/Barkley
2020	Buffered Bike Lanes	North-South	Ellis Street: Lakeway to Cornwall (Road Diet)	Tier 2	No - Rechannelization		Downtown UV
2020	Buffered Bike Lanes	North-South	Magnolia Street: Commercial to Ellis	Tier 2	Enhance existing bike lane		Downtown UV
2020	Bike Boulevard	East-West	Whatcom Street: Ellis St to Grant St	Tier 2	No		York
2020	Bike Boulevard	East-West	Edwards Street: Maple St to Humboldt St	Tier 3	No		York
2020	Bike Boulevard	NW-SE	E. Maple Street: Ellis St to State Street	Tier 2	No		Sehome
2020	Bike Boulevard	East-West	Victor Street: Vallett St to Eldridge Avenue	Tier 3	No		Columbia
2020	Bike Boulevard	E-W-N-S	Fruitland-Orchard	Tier 1	No		King Mountain
2020	Bike Boulevard	East-West	E. North Street (w RRFB at James St)	Tier 2	No		Sunnyland
2020	Bike Lanes	North-South	40th Street: Elwood to Adams	Tier 3	No		Samish
2022	Bike Boulevard	East-West	Mill Avenue: 40th to Samish Way	Tier 3	No		Samish
2022	Bike Boulevard	North-South	40th Street: Adams to Mill Ave	Tier 3	No		Samish
2022	Bike Boulevard	East-West	Bennett Avenue: 40th to 38th	Tier 3	No		Samish
2022	Bike Boulevard	North-South	38th Street: Bennett to Knox	Tier 3	No		Samish
2022	Bike Boulevard	North-South	34th Street: Connelly to Samish Way	Tier 3	No		Samish
2022	Bike Boulevard	North-South	36th Street: Connelly to Samish Way	Tier 3	No		Samish
2022	Bike Boulevard	East-West	Connelly Avenue: I-5 to 36th Street	Tier 3	No		Samish
2022	Bike Boulevard	Mixed	"Stair Step" Streets	Tier 3	No		Samish
2023	Protected Bike Lanes	North-South	Eldridge Avenue (Broadway to Nequalicum)	Tier 3	Yes		Columbia
2023	Protected Bike Lanes,	North-South	Cornwall Avenue (Laurel to Pine)		Yes		Waterfront
2023	Bike Lanes, Roundabout	North-South	Meridian-Girard Corridor & Meridian St/W. Illinois St	Tier 3	Yes		Cornwall/Fountain/Ltr Sts
2023	Protected Bike Lanes,	North-South	Lincoln Street Road Diet (E. Maple to Fred Meyer)		No		Puget

Chapter 8 WTA - Figure 8.3 Transit Service Changes 2005 through 2021

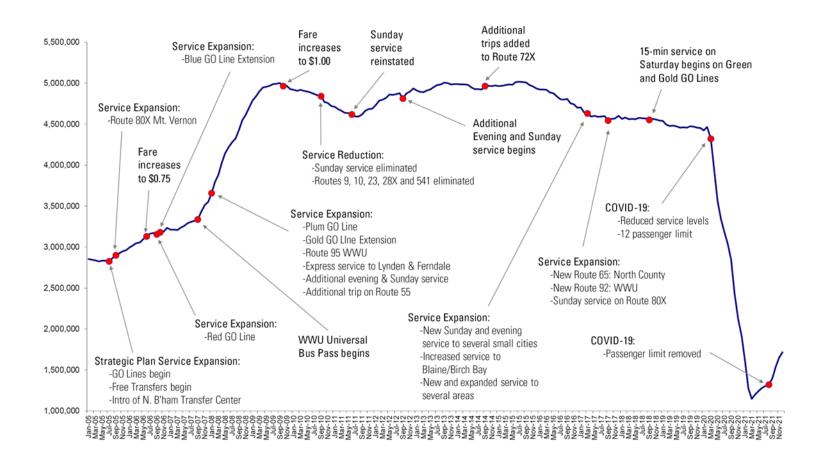
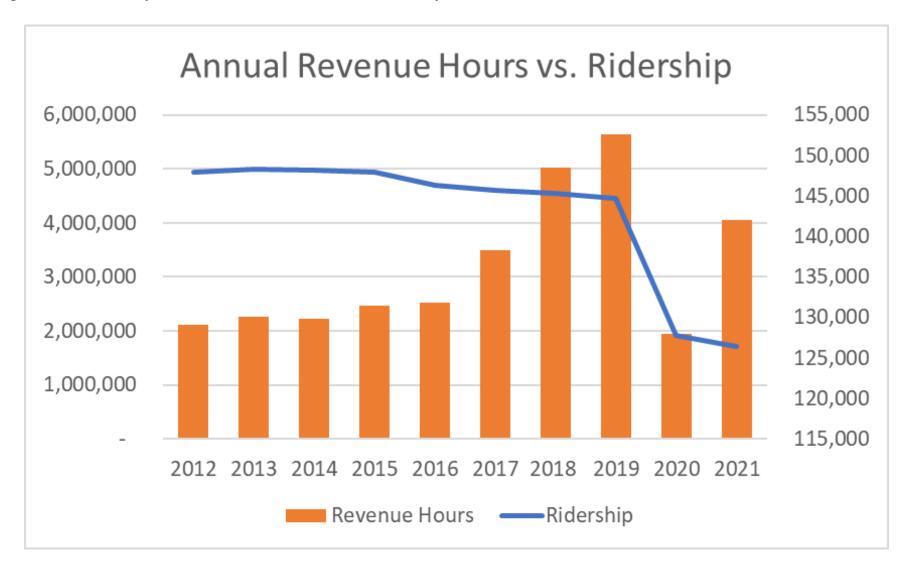
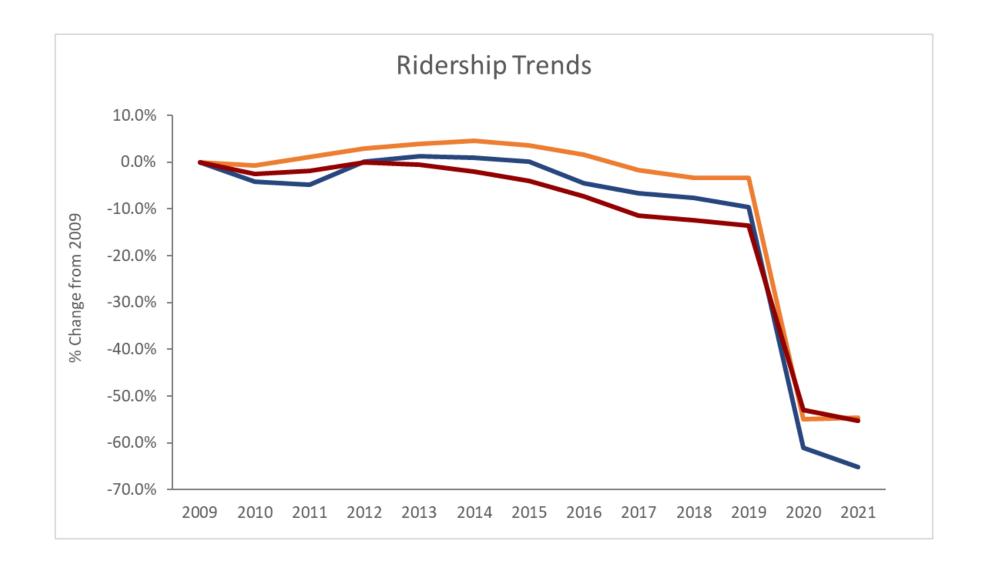


Figure 8.4 – WTA Operational Revenue Hours vs Ridership Trends



A-13

Figure 8.5 – WTA and National Transit Ridership Trends 2009 through 2021



A-14

In 2010-2011, Public Works created Bellingham's Urban Village Transportation Impact Fee (TIF) Reduction Program to provide an economic incentive for developers to help the City achieve its goals for infill growth in compact, mixed use Urban Villages served with complete sidewalk and bikeway networks and WTA high-frequency transit service. Success with this land use strategy is also expected to help the City achieve its long-term transportation mode shift goals (Figure 2.3 and Table 2.1).

A case study on the creation of this program is available in an article titled <u>The Urban Village TIF Reduction Program in Bellingham</u> on the City web site.

As shown in Figure 10.3 (above) and Table 10.1. (below), in the 12 years from March 2011 through December 2022, the Urban Village TIF Reduction Program has saved developers of 128 projects in Urban Villages over \$1,434,810* in TIFs, which is an average of about \$120,000 per year.

*NOTE: Many redevelopment projects do not require TIFs due to 100% credit for previous uses.

Bellingham Urban Village TIF Reduction (BMC 19.06.040) Cumulative Savings: March 1, 2011 to December 31, 2022 ¹										
Note: The 2021-2022 TIF Comparison Chart of 73 Cities and 5 Counties in western Washington at https://cob.org/wp-content/uploads/2021-2022-BhamWA-TIF-Comparison-Chart.pdf										
shows that Bellingham has one of the lowest TIF base rates in western Washington. Many redevelopment projects in Urban Villages do not require any TIFs due to 100% credit for previous uses.										
Data Tracked and Compile	Data Tracked and Compiled by Chris Comeau, FAICP-CTP, Transportation Planner, Public Works Engineering (360) 778-7946 or ccomeau@cob.org									
		Infill	Developmen	t Type	Automatic 22% - 25% Less		Voluntary Measures Up To 50%		Total	
Designated Urban Villages in Bellingham	Total Projects	Res Units	Comm SF	Office SF	UV TIF Cost ²	UV TIF Saved ²	Bike Rack ³	Bus Passes ⁴	CTR ⁵	TIF Saved ²
Downtown Urban Village	43	1,349	32,633	27,689	\$692,520	\$356,748	\$13,631	\$40,892	\$0	\$411,271
Fairhaven Urban Village	26	238	51,457	7,278	\$269,242	\$188,246	\$5,706	\$0	\$0	\$193,952
Barkley Urban Village	24	203	94,418	82,239	\$744,478	\$250,097	\$1,907	\$23,384	\$597	\$275,985
Samish Way Urban Village	10	429	13,934	16,446	\$239,300	\$171,117	\$2,138	\$0	\$0	\$173,255
Fountain District Urban Village	14	123	24,168	1,196	\$129,237	\$89,628	\$5,988	\$0	\$0	\$95,616
Old Town Urban Village	3	81	2,815	0	\$70,241	\$23,877	\$0	\$0	\$0	\$23,877
Waterfront District Urban Village (Granary-Laurel)	4	103	48,146	23,700	\$346,050	\$76,349	\$0	\$0	\$0	\$76,349
Institutional UV TIF Reductions (Type 1A-BMC 13.70)	4	150	0	119,802	\$400,572	\$184,505	\$0	\$0	\$0	\$184,505
Cumulative	128	Infill	Developmen	t Type	Automatic 2	2% - 25% Less	Voluntary	Measures Up	To 50%	Total
All Urban Village TIF Reductions	Total Projects	Res Units	Comm SF	Office SF	UV TIF Cost ²	UV TIF Saved ²	Bike Rack ³	Bus Passes ⁴	CTR ⁵	TIF Saved ²
Grand Total Urban Village TIF Reductions from March 1,	2011 to December 31, 2022	2,676	267,571	278,350	\$2,891,640	\$1,340,567	\$29,370	\$64,276	\$597	\$1,434,810
Notes: 1.) Urban Village TIF Reduction Program adopted February 2011, implemented March 1, 2011.										
2.) Net new TIF calculated only after 100% credit is awarded for previous uses. Most redevelopment projects do not require any new TIF due to previous use credit, which is included in this column.										
3.) Developer purchase and installation of a City-approved bike rack with capacity for four bicycles in appropriate location can reduce overall trip generation by one vehicle trip.										
4.) Developer purchase of up to 28 WTA bus passes can reduce TIF by up to maximum of 50%										
5.) 10% trip reduction for businesses with more than 1	5.) 10% trip reduction for businesses with more than 100 on-site employees, consistent with Washington State Commute Trip Reduction (CTR)law [RCW 70.94.527]									

Chapter 11 – Waterfront District Biennial Monitoring Program Report

In December 2013, the City of Bellingham and the Port of Bellingham adopted the Bellingham Waterfront District Master Plan to guide the redevelopment of over 200 acres of industrial waterfront land into a vibrant, new neighborhood filled with a mix of industrial, commercial, institutional, residential, and public uses. The Bellingham Waterfront District Master Plan and Interlocal Agreement between the City and Port of Bellingham is available on the City web site at http://www.cob.org/services/planning/urban-villages/waterfront.aspx

Section 20 of the Interlocal Agreement for Facilities within the Waterfront District requires the Port of Bellingham to provide the City with a Biennial Monitoring Program report by December 31, 2015 and every two years after, which will document transportation mobility into and out of the Waterfront District on arterial streets for pedestrians, bicyclists, transit busses, automobiles, and freight trucks. In November 2021, TranspoGroup, Inc. completed the third Biennial Monitoring Report for the Waterfront District. Highlights from this report are included in the following pages. The Port is required to update the Biennial Monitoring Report again in late 2023 and the results will be included in the 2024 Transportation Report on Annual Mobility.

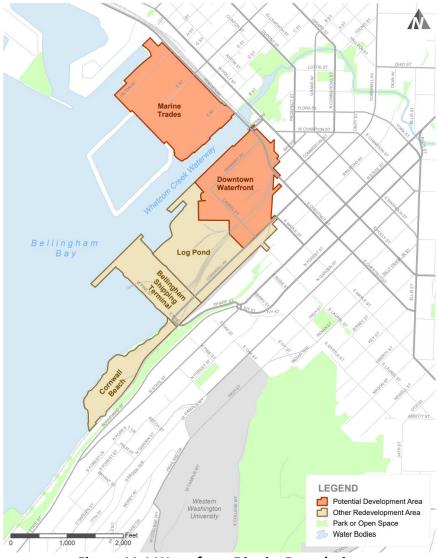
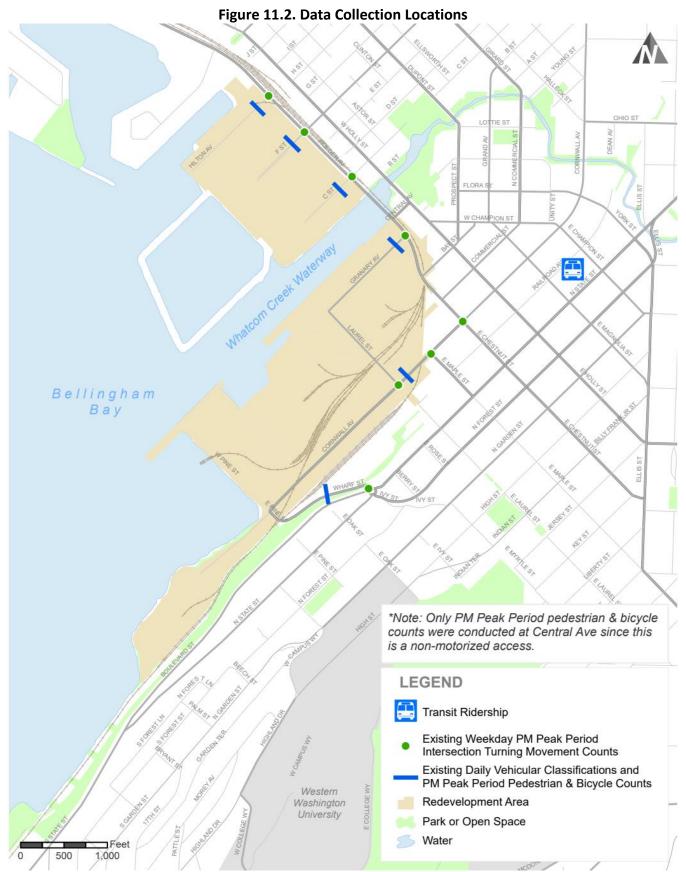


Figure 11.1 Waterfront District Boundaries



Current Conditions

The COVID-19 pandemic continues; however, data was collected in the same manner as previous studies as required by BMC requirements. Western Washington University was in full session at the time of the data collection and no stay-at-home orders were in place.

Figure 3 illustrates the average hourly distribution of traffic to and from the Waterfront District. This includes all trucks, cars, and bicycles to and from the site. The highest traffic levels for the site occurs around 4 p.m. and overall daily traffic volumes are consistent with the 2019 biennial monitoring study. Additional comparison to previous monitoring studies is provided in a later section.

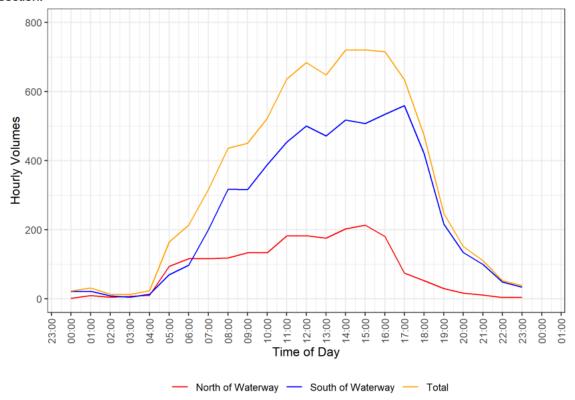


Figure 3 Waterfront District Daily Traffic Distribution

Vehicle classifications were also collected at the access points. Similar to previous monitoring studies, travel by car represents the majority of the vehicles to and from the site both north and south of the Waterway with about 65 percent of travel by car. Figure 4 illustrates the average daily vehicle classifications for the Waterfront District. Mode splits are generally consistent with the 2019 monitoring study. The number of daily trucks is higher north of the waterway compared to south given that all of the uses north of the waterway are marine and industrial.

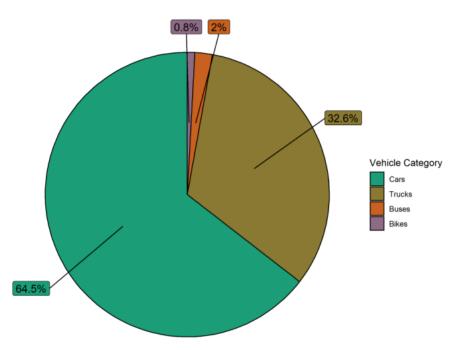


Figure 4 Waterfront District Average Daily Vehicle Classification

Figure 5 and Table 3 summarize the weekday daily and PM peak hour traffic volumes for the Waterfront District. The data collected was used to determine the weekday PM peak hour trips and mode splits for north and south of the Waterway.

Table 3. Existing (2021) Weekday	y Vehicular Traffic	Volumes ¹	
	Inbound	Outbound	Total
-	North of Wate	rway	
Daily Volumes	1,026	1,056	2,082
PM Peak Hour Volumes	35	119	154
PM Peak Hour % of Daily Volumes	3%	11%	7%
	South of Wate	rway	
Daily Volumes	3,011	2,952	5,963
PM Peak Hour Volumes	268	262	530
PM Peak Hour % of Daily Volumes	9%	9%	9%
	Waterfront Distri	ct Total	
Daily Volumes	4,037	4,008	8,045
PM Peak Hour Volumes	303	381	684
PM Peak Hour % of Daily Volumes	8%	10%	9%

Table 4 summarizes vehicle and non-motorized trips as well as the mode splits for north and south of the Waterway.

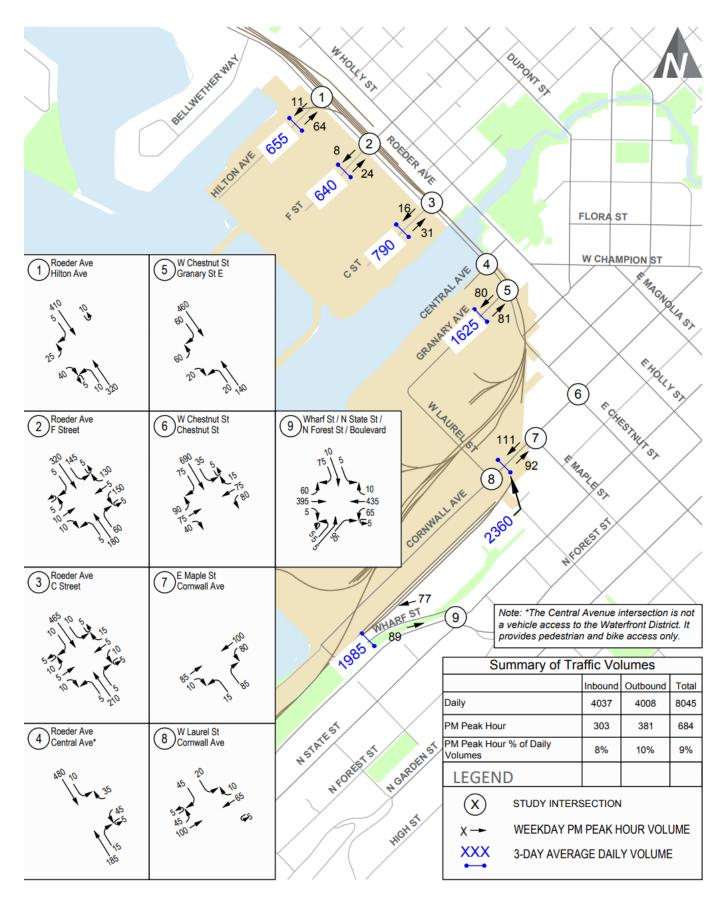


Table 4. Existing (2021) Weekday PM Peak Hour Trips and Mode Splits								
	Trips ¹					Mode Splits ¹		
		Auto			Auto			
Site Access	Inbound	Outbound	Total	Non-Motorized		Non-Motorized		
		No	rth of Water	way				
Hilton Avenue	11	64	75	9	89%	11%		
F Street	8	24	32	5	86%	14%		
C Street	16	31	47	5	90%	10%		
Subtotal	35	119	154	19	89%	11%		
		Sou	uth of Water	way				
Central Avenue ²	0	0	0	41	0%	100%		
Granary Avenue	80	81	161	47	77%	23%		
Cornwall Avenue/ Laurel Street ³	111	92	203	19	91%	9%		
Wharf Street	77	89	166	13	93%	7%		
Subtotal	268	262	530	120	82%	18%		
	-	Water	front Distric	t Total				
Total	303	381	684	139	83%	17%		

Based on data collected in October 2021.

Table 4 shows the primary mode of travel to the site is currently via auto, which is consistent with 2019 and 2017 monitoring studies. The evaluation of mode splits only considers auto and non-motorized (pedestrian and bicycle) trips. There are no WTA bus stops located within the site. The nearest transit route operates along Holly Street. The Downtown Transit Station, which is the closest transit hub, currently has an average of approximately 1,700 boardings². Transit ridership has been impacted by the COVID-19 pandemic and is approximately 50 percent what WTA has seen historically. Existing transit riders to the Waterfront District are captured as pedestrian or bicycle trips to and from the site; however, with on-site transit routes and bus stops transit ridership could be isolated in future studies. The Waterfront District Master Plan envisioned transit within the site; however, there are currently no plans for routes or stops.

Comparison to Previous Studies

This section provides a comparison of the 2021 traffic volumes and mode splits to the three previous Waterfront District traffic monitoring studies. Table 5 summarizes the daily, weekday PM peak hour and mode splits for north and south of the waterway.

² Data collection by Whatcom Transit Authority 2021, which represents the most recent ridership data.

^{2.} Pedestrian/bicycle access only.

Vehicle traffic is based on the weekday PM peak hour trips along Cornwall Avenue between Maple Street and Laurel Street since Port traffic uses Laurel Street as well as accesses driveways along Cornwall Street. The uses along Cornwall Street are industrial; therefore, non-motorized trips are reflective of data along Laurel Street.

		Monitoring	Study Year	
	2015	2017	2019	2021
1	North of Waterway			
Daily Auto Volumes	1,460	1,780	1,745	2,082
PM Peak Hour Auto Volumes	88	171	172	154
PM Peak Hour % of Daily Volumes	6%	10%	10%	7%
PM Peak Hour Non-Motorized Volumes	10	19	9	19
PM Peak Hour Auto Mode Split	90%	90%	95%	89%
PM Peak Hour Non-Motorized Mode Split	10%	10%	5%	11%
\$	South of Waterway			
Daily Auto Volumes	4,330	5,345	5,825	5,963
PM Peak Hour Auto Volumes	401	664	701	530
PM Peak Hour % of Daily Volumes	9%	12%	12%	9%
PM Peak Hour Non-Motorized Volumes	54	103	252	120
PM Peak Hour Auto Mode Split	88%	87%	77%	82%
PM Peak Hour Non-Motorized Mode Split	12%	13%	23%	18%
Wa	terfront District Tot	al	<u>-</u>	-
Daily Auto Volumes	5,790	7,125	7,570	8,045
PM Peak Hour Auto Volumes	489	835	873	684
PM Peak Hour % of Daily Volumes	8%	12%	12%	9%
PM Peak Hour Non-Motorized Volumes	64	122	261	139
PM Peak Hour Auto Mode Split	88%	87%	80%	83%
PM Peak Hour Non-Motorized Mode Split	12%	13%	20%	17%

1. Based on data collection from the 2015 - 2021 Bellingham Waterfront Biennial Traffic Monitoring Study.

Traffic volumes have increased within the Waterfront District on a daily basis; however, the weekday PM peak hour auto and non-motorized volumes are down. Some of the changes could be related to the COVID-19 pandemic. Other factors such as collection of non-motorized data along Laurel Street in 2021 rather than only along Cornwall Avenue may have also caused these volume changes, no longer accounting for non-Waterfront related pedestrians and bicyclists along Cornwall. The 2019 monitoring study identified the need to collect data at Laurel Street to better isolate non-motorized trips to and from the Port since this street provides the main access for pedestrian and bicycle travel on the southeast side of the Waterfront District especially due to new non-motorized facilities. Land uses south of Laurel Street that are accessed via Cornwall Avenue are generally industrial with limited non-motorized activity, meaning that the estimate of non-motorized traffic in the previous monitoring studies could have included non-Waterfront related activities. The reduction in non-motorized trips in 2021 results in a higher auto mode split compared to 2019; however, the 2021 auto mode split continues to be less than the 2015 and 2017 monitoring study findings.

As more mixed-use (i.e., office, retail, residential, etc.) development occurs on-site and the infrastructure becomes more walkable, it is anticipated that pedestrian, bicycle, and transit activity would continue to increase and be monitored more closely.

Comparison to Previous Studies

This section provides a comparison of the future weekday PM peak hour trip generation projection for the Waterfront District monitoring studies that have been conducted. Table 7 summarizes estimated weekday PM peak hour trip generation for the horizon year of each monitoring study.

able 7. Waterfront District Estimated Future Weekday PM Peak Hour Trip Generation ¹								
	Future Horizon Year							
_	2019	2021	2023	2025				
Nor	th of Waterway	-		-				
Projected 4-Year Future Pipeline Development (sf)	50,000	45,000	49,750	21,214				
Existing Development	88	171	172	154				
Future Pipeline Development	41	31	39	85				
Internal	<u>-11</u>	<u>-15</u>	<u>-18</u>	-28				
Net Offsite	118	187	193	211				
Sou	th of Waterway			-				
Projected 4-Year Future Pipeline Development (sf)	473,874	962,462	624,348	328,798				
Existing Development	401	664	701	530				
Future Pipeline Development	493	780	589	389				
Internal	<u>-77</u>	<u>-101</u>	<u>-103</u>	<u>-128</u>				
Net Offsite	817	1343	1187	791				
Waterf	ront District To	tal		-				
Projected 4-Year Future Pipeline Development (sf)	523,874	1,007,462	674,098	350,012				
Existing Development	489	835	873	684				
Future Pipeline Development	534	811	628	474				
Internal	<u>-88</u>	<u>-116</u>	<u>-121</u>	<u>-156</u>				
Net Offsite	935	1,530	1,380	1,002				

Notes: sf = square-feet

As shown in the table, estimated future net offsite trips are less in 2021 than projected for the two previous monitoring studies. The lesser trip generation is due to overall fewer existing trips and less development projected in the next 4 years. North of the waterway, the future forecasted trip generation in 2025 is higher than projected in the previous monitoring studies with less square-footage being developed due to the mix of land use including retail and restaurant development by 2025 whereas the previous studies assumed only industrial and office uses.

Future Traffic Volumes and Transportation Infrastructure Phasing Plan

The future vehicle trips were distributed to the site access points based on the location of the proposed development as well as consideration of planned infrastructure improvements and offsite travel patterns. The access points and capacity were identified in the Waterfront District EIS. North of the waterway vehicle trips are distributed to Hilton Avenue, F Street and C Street. South of the waterway vehicle trips are distributed to Granary Avenue, Cornwall Avenue/Laurel Street/Maple Street, and Wharf Street. The existing trips were not reassigned since there are no new site access points proposed. Table 8 provides a summary of the existing and future outbound PM peak hour trips for site access points as well as the remaining capacity with the future development over the next 4-years and the planned infrastructure.

Based on data collection from the 2015 – 2021 Bellingham Waterfront Biennial Traffic Monitoring Study.

Table 8. Future (2025) Infrastructure Capacity Summary										
PM Peak	Hour Outbound Veh	icle Trips	Estimated Vehicle	Remaining Capacity						
Existing Trips ¹	Net New Trips ²			Trips	Square-feet ⁴					
	North of Waterway⁵									
119	30	149	400	251 (63%)	350,000					
South of Waterway [€]										
262	143	401	900	499 (55%)	850,000					

- Based on October 2021 traffic counts.
- Calculated based on person trip methodology outlined in the Waterfront District EIS and assigned based on the location of development with consideration of planned infrastructure improvements and offsite travel patterns.
- Based on the infrastructure phasing analysis as documented in the memorandum subjected The Waterfront District Subarea Plan Transportation Analysis Update for 2012 SEIS Addendum, October 2012 with consideration of improvements that have been completed.
- Approximate millions of square-feet (sf) of development is provided for reference and is based on the average outbound vehicle trip rate
 as documented in the memorandum subjected The Waterfront District Subarea Plan Transportation Analysis Update for 2012 SEIS
 Addendum. October 2012.
- 5. Infrastructure capacity is based on access via Hilton Avenue, F Street and C Street.
- 6. Infrastructure capacity is based on access via Granary Avenue, Cornwall Avenue/Laurel Street/Maple Street and Wharf Street.

As shown in Table 8, the proposed infrastructure would accommodate the anticipated development over the next 4-years. North of the Waterway, the proposed development is anticipated to use approximately 37 percent of the infrastructure capacity leaving 63 percent of the capacity available for future development. South of the Waterway, the proposed development is anticipated to use approximately 45 percent of the infrastructure capacity. The remaining capacity would accommodate additional development; however, the location of future development will also need to be considered when determining if it can be accommodated without additional infrastructure improvements. Conducting the traffic monitoring study every 2-years will capture changes in development estimates, location and timing of development and verify infrastructure needs

Findings

Based on the review presented above, no additional infrastructure improvements are recommended. Plans for development beyond what has been analyzed herein should consider the available capacity for each area. In addition, the evaluation of infrastructure capacity remaining for the site after the projected 2025 development is conservative since all existing site uses are anticipated to remain, and as development occurs existing uses may be redeveloped reducing trips from the site.