



Transportation **R**eport on **A**nnual **M**obility

Published annually in support of:

- Comprehensive Plan Transportation Element
- Multimodal Transportation Concurrency Program
- Transportation Benefit District No. 1
- Pedestrian Master Plan
- Bicycle Master Plan
- WTA Strategic Plan

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Prepared by:

Chris Comeau, AICP-CTP
Transportation Planner

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Executive Summary

Prior to the popular rise of the national "Complete Streets" movement, Bellingham created a local "Complete Streets" approach to transportation planning by expanding the focus of City transportation planning to include multiple modes of transportation (multimodal) with goals, policies, and project recommendations to accommodate pedestrians, bicyclists, and transit riders, as well as vehicle drivers on public streets. Bellingham transportation planners worked directly with Whatcom Transportation Authority (WTA) in the development of the 2004 WTA Strategic Plan and adopted the WTA "Primary Transit Network" into the 2006 Bellingham Transportation Element. Since then, Bellingham has created a Primary Pedestrian Network and a Primary Bicycle Network through Pedestrian and Bicycle Master Plans and Bellingham's prototypical "Complete Streets" approach has evolved into a "Complete Networks" approach to citywide multimodal transportation planning.



Figure 1 - Bellingham's "Complete Networks" Approach to Transportation Planning

Since 2006, the Transportation Report on Annual Concurrency (TRAC) has provided an annual assessment of Bellingham's multimodal transportation system in terms of its ability to accommodate the amount of growth and development planned for in the Land Use Element of the Bellingham Comprehensive Plan. This is done by measuring the multimodal transportation needs of new growth and development against the adopted "Level of Service (LOS) Standard" in the Transportation Element of the Bellingham Comprehensive Plan, as required by the Washington State Growth Management Act (GMA).

The TRAC has provided an opportunity to identify concurrency issues proactively and offer recommendations for changes to the program, when and where necessary. In addition to tracking transportation impacts from new development, the TRAC provided an assessment of the existing multimodal transportation system to help Public Works and City Council plan future transportation infrastructure investments for the City's annual 6-Year Transportation Improvement Program (TIP). RCW 35.77.010 requires that the City adopt the 6-Year TIP by July 1 each year and the TIP must be consistent with the Transportation Element of the Bellingham Comprehensive Plan.

In 2009, Bellingham adopted an innovative multimodal transportation concurrency program and since then, the TRAC has documented the annual improvements to, and completeness of, Bellingham's pedestrian, bicycle, transit, and vehicle networks as well as recognizing that the multiuse Greenways trails provide a secondary transportation function in some parts of Bellingham. The TRAC has been evolving and serving as an annual report card for the multimodal transportation system and with the completion of the 2014 Bicycle Master Plan, the title is being changed to the **Transportation Report on Annual Mobility (TRAM)** to reflect the comprehensive examination it provides for each major transportation mode (Pedestrian, Bicycle, Transit, Automobile, and Freight Truck). In essence, the TRAM provides a progress report on how Bellingham provides mobility for people, goods, and services.

The 2015 TRAM reflects Bellingham's "Complete Networks" approach to transportation planning (Figure 1) and includes new chapters on Bellingham's transit, automobile, and freight truck networks, as well as a new chapter on Bellingham Transportation Benefit District No. 1 (TBD), which will serve as the annual TBD Report to the TBD Board of Directors. The TBD Report includes information on the financial status of the TBD and highlights various transportation improvements that have been and will be funded by TBD revenue. The last chapter in the 2015 TRAM is a placeholder for the Waterfront District Biennial Monitoring Program. The Port of Bellingham is required to produce a full report every two years to monitor transportation impacts as Waterfront District redevelopment occurs, which will lead to various transportation infrastructure mitigation measures agreed to by the Port and the City.

Further explanation of Bellingham's adopted LOS standards, multimodal transportation concurrency, long-range transportation planning, annual six-year transportation improvement program, transportation impact fees (TIF), the Urban Village TIF Reduction Program, and other multimodal transportation issues are available on the City of Bellingham Transportation Planning web page at <http://www.cob.org/services/planning/transportation/index.aspx>

All questions regarding the contents of the TRAM, multimodal transportation concurrency, 6-Year TIP, and citywide multimodal transportation planning in Bellingham should be directed to:

Chris Comeau, AICP-CTP, Transportation Planner
Bellingham Public Works Engineering
(360) 778-7946 telephone; Email: ccomeau@cob.org

Chapter 1: Observations and Implications of the 2015 TRAM

Major Change in Bicycle Network Completeness: The most noticeable difference in the number of Person Trips Available by Concurrency Service Area (CSA) between the 2014 TRAC and the 2015 TRAM is that the bicycle completeness percentages have dropped precipitously. This is simply the result of incorporating a much more extensive Primary Bicycle Network (160 miles) with the approval of the 2014 Bicycle Master Plan than the bicycle facilities (107 miles) adopted in the Transportation Element of the Bellingham Comprehensive Plan, which is what all previous TRACs had been based on. The net effect is that the bicycle network in most CSA's is less than 50% complete and therefore no longer have credits for the availability of bicycle facilities. This will change over the next several years as transportation planners continue to maximize investments in bicycle and pedestrian infrastructure.

Urban Villages (Green): As Table 2.1 shows, there are more Person Trips Available (PTA) [8,282] in the central urban core **CSA #7**, which includes the Downtown, Old Town, Samish, and Fountain Urban Villages, than in any other part of the City. This is due to the high degree of completeness of the primary pedestrian network (89.9%), availability of some of the bicycle facilities planned in the Bicycle Master Plan (22%), the presence of multiuse recreational trail connections relative to the planned bicycle facilities (12%), and the prevalence of high-frequency transit routes (1,088 PTA) running through the core to the downtown WTA transit hub.

Transition Areas (Yellow): The Bellingham Waterfront District **CSA #6** currently has the lowest number of PTA for any of the Type 2 transition areas in Bellingham. This is expected to change in the next few years as the City constructs new multimodal transportation infrastructure in the Waterfront District with the extension of the Granary-Bloedel arterial from Roeder Avenue to Cornwall Avenue in 2016. This Type 2 CSA cannot evolve to a Type 1 CSA until WTA high-frequency transit service is available within the CSA. This service is not likely to be provided until a justifiable transit ridership base develops, which is not expected for many years.

Suburban Areas (Red): A tremendous amount of major new commercial development has entered the development review pipeline in the northwest portion of Bellingham on the West Bakerview corridor, **CSA #18**. This CSA now has only 737 PTA, the fewest for any Type 3 suburban CSA. Additional development proposals have already been made in the first quarter of 2015, which will draw the PTA in CSA #18 down even further to 341. Other Type 3 suburban CSA's with low PTA are CSA #19 (UGA: Airport Industrial - 748 PTA) and CSA #15 (King Mountain - 1,179 PTA). There is an active annexation proposal to bring 174-acres in CSA #19 into the City, but there are many unanswered questions regarding the transportation infrastructure needs in this area and how they should be funded and constructed. The City is currently working with WSDOT on several transportation studies for Interstate 5 and the interchange at West Bakerview/I-5. As build-out of these CSA's continues over time, private development will be required to construct sidewalks on all public streets and bicycle lanes along all arterial streets. The City will also construct capital street improvements, adding sidewalks, bicycle lanes, streets, and transit connections. While all of these future improvements will add PTA to CSA #18 when completed, if there are not enough PTA to serve new development at the time of concurrency evaluation, then PTA may have to be earned through **concurrency mitigation** in order for the City to issue a Certificate of Concurrency. Concurrency mitigation can include off-site construction of sidewalk or bicycle facilities identified in the Primary Pedestrian and Bicycle Networks in the Pedestrian and Bicycle Master Plans.

General Conclusion: With the highest number of PTA in the urban core (CSA #7) and lower numbers of PTA in the outer suburban areas CSAs, the 2015 TRAM demonstrates that Bellingham's Multimodal Transportation Concurrency methodology is effectively integrating multimodal transportation system capacity and availability with various land use contexts within City limits. This helps to promote the Bellingham Comprehensive Plan and GMA goal to direct new development toward compact, mixed use urban areas where adequate transportation services and facilities are most available.

Chapter 2: Multimodal Transportation Concurrency Program in 2015

Evolution From Auto-based to Multimodal Transportation Metrics

In 2005, transportation planning staff advised that reliance on traditional auto-oriented LOS methodology would not help to achieve Bellingham's infill land use goals, but in June 2006, the City Council adopted BMC 13.70, the City's first GMA-compliant Transportation Concurrency Management Ordinance, in conjunction with the June 2006 Bellingham Comprehensive Plan and GMA requirements for:

"A transportation element that implements, and is consistent with, the land use element" (RCW 36.70A.70 (6)).

BMC 13.70 established an interim program, based on traditional automobile-oriented level of service (LOS) standards, similar to other jurisdictions, to monitor and maintain adequate transportation facilities in support of the City's infill land use strategy and GMA requirements:

"After adoption of the comprehensive plan by jurisdictions required to plan or who choose to plan under RCW 36.70A.040, local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. These strategies may include increased public transportation service, ride sharing programs, demand management, and other transportation systems management strategies. For the purposes of this subsection (6) "concurrent with the development" shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years" (RCW 36.70A.70 (6) (b)).*

*[*Bellingham requires financial commitment within three years consistent with project funding on 6-Year TIP]*

As predicted, in early 2007, a LOS violation occurred and a 9-month-long moratorium on new development was imposed along Northwest Avenue. Public Works hired TranspoGroup, Inc. to help Bellingham transportation planners develop an innovative new method to include all major transportation modes (pedestrian, bicycle, transit, and automobile) to replace the traditional auto-only methodology. On January 1, 2009, Bellingham implemented an innovative new Multimodal Transportation Concurrency Program, which received the **2009 American Planning Association/Planning Association of Washington Award for Transportation Planning in Washington State**.

In 2009, transportation planners further amended the multimodal transportation concurrency ordinance to make several changes to Urban Village Concurrency Service Areas and also incorporated a select inventory of bike-friendly multiuse recreational trails. A full account of Bellingham's past experience and struggles with auto-oriented LOS measurements and the innovative new multimodal approach to transportation concurrency titled **"Moving Beyond the Automobile"** is available on the City web site at <http://www.cob.org/documents/pw/transportation/multimodal-case-study-AICP.pdf>

Bellingham's Multimodal Transportation Concurrency Program annually measures sidewalks, bicycle facilities, multiuse trails, WTA transit service, and arterial streets in the context of various land use environments found within 23 Concurrency Service Areas (CSA) (**Figure 2.1**).

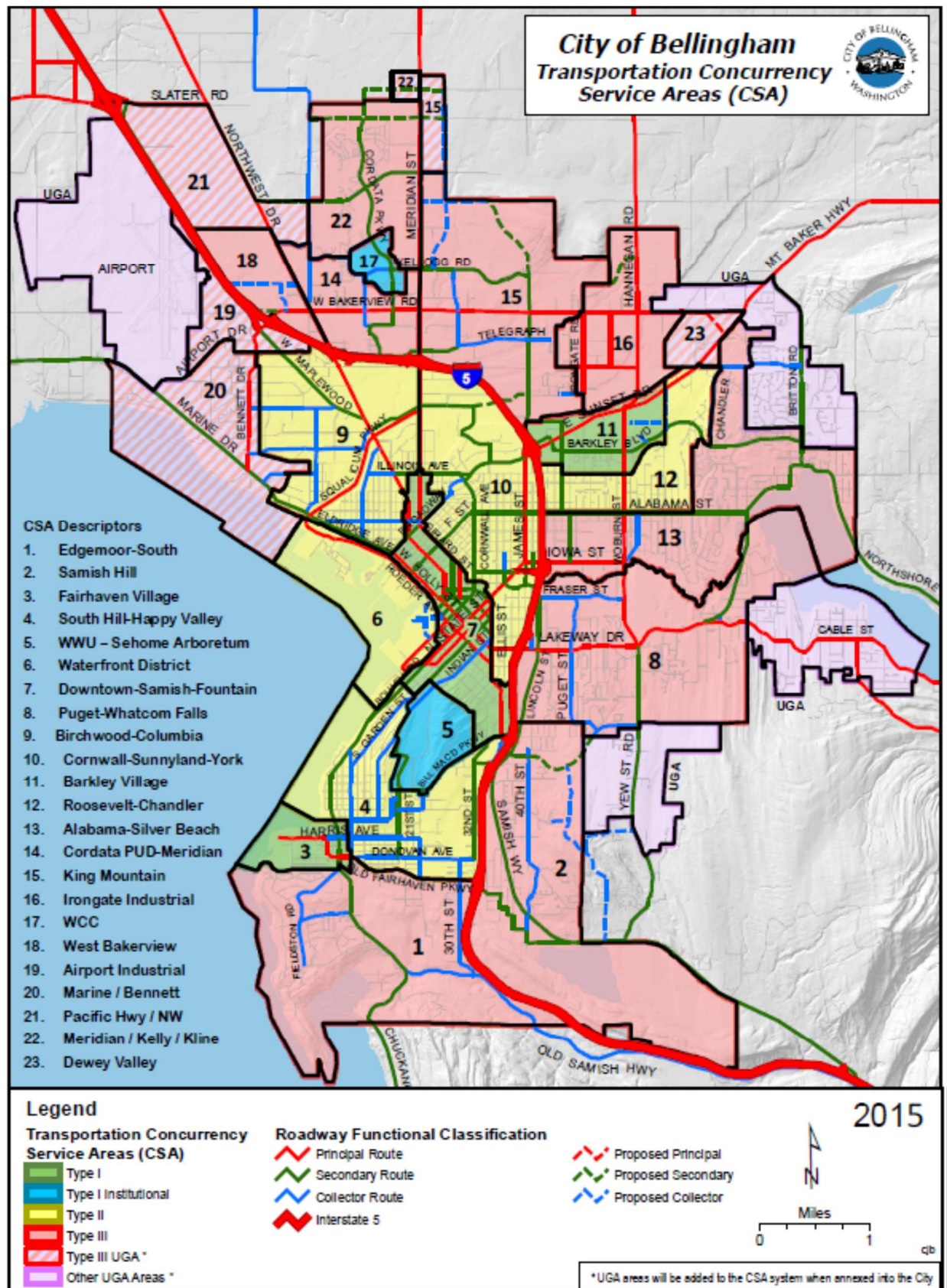


Figure 2.1 Bellingham's 23 Concurrency Service Areas (CSA) in 2015

Data Inventories

The 2015 TRAM identifies Person Trips Available (PTA) by Concurrency Service Area using arterial street traffic count data, WTA transit bus frequency, seated capacity and ridership statistics, and inventories of sidewalk and bicycle facilities, as well as select multiuse trails used for transportation purposes. The 2015 TRAM also accounts for all pipeline trips reserved for development in the Concurrency Evaluation Tracking Tool (CETT) for current conditions through December 31, 2014. The measurements of the various travel modes are compiled and converted into Person Trips Available (PTA) by each CSA, which is officially Bellingham's GMA-required adopted level-of-service standard in the Transportation Element of the Bellingham Comprehensive Plan.

Concurrency Evaluation Tracking Tool (CETT)

The Concurrency Evaluation Tracking Tool (CETT) is a spreadsheet-based tool that contains current arterial traffic volumes and capacities, seated transit capacities and ridership volumes, and completeness of bicycle and pedestrian networks. The CETT is used for Transportation Concurrency evaluations to determine whether enough Person Trips are Available, or can be provided concurrent with, development proposed within Concurrency Service Areas. The CETT provides a snapshot-in-time of the status of the citywide multimodal transportation network and its ability to accommodate new development.

Pipeline Development Projects

Person trips generated from the 197 total development proposals evaluated for transportation concurrency between June 15, 2006 and December 31, 2014 have been assigned to and withdrawn from affected CSAs.

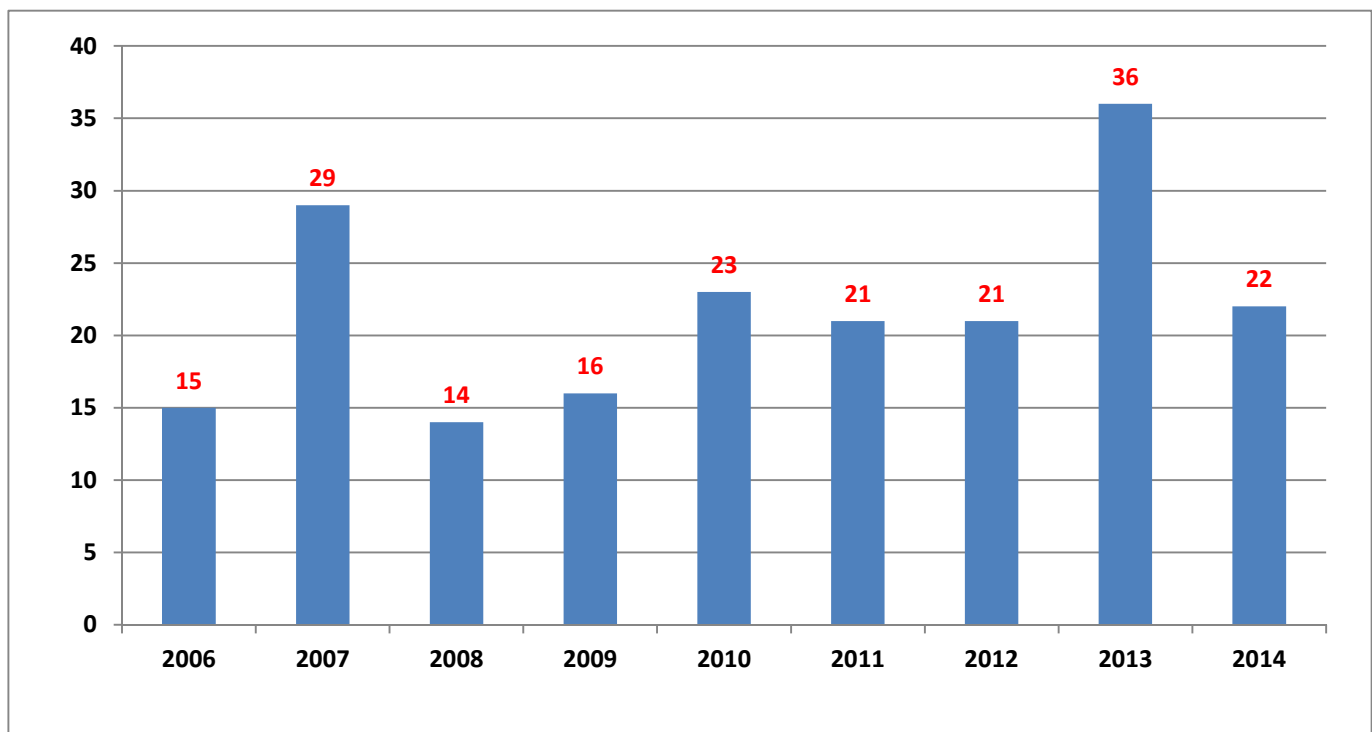


Figure 2.2. 197 Concurrency Certificates Issued from June 15, 2006* - December 31, 2014

*NOTE: BMC 13.70 effective date = June 15, 2006, consistent with 2006 Bellingham Comprehensive Plan.

Table 2.1. Person Trips Available (PTA) by Concurrency Service Area (CSA) in 2015									
	Sidewalks ¹		Multiuse Trails		Bicycle Facilities ²		WTA ³	Auto ³	2015
	%	Credit	%	Credit	%	Credit	Transit	Arterial	Net
CSA	Comp	PTA	Comp	PTA	Comp	PTA	PTA	PTA	PTA ⁴
1. Edgemoor-South	31%	0	39%	390	39.6%	0	53	975	1,401
2. Samish Hill	22.2%	0	31%	310	21.1%	0	21	2,367	2,697
3. Fairhaven Urban Village	81.3%	620	13%	130	19.3%	0	201	1,276	2,153
4. South Hill-Happy Valley	57.1%	126	16%	160	30.5%	0	127	1,611	1,915
5. WWU	82.5%	660	50%	500	74.2%	480	748	307	2,691
6. Waterfront District ⁵	43.6%	0	86%	860	21.5%	0	0	880	1,740
7. Urban Core (4 Villages)	89.9%	800	12%	120	22%	0	1,088	6,952	8,282
8. Puget-Whatcom Falls	63.9%	224	37%	370	23%	0	309	3,599	3,947
9. Birchwood-Columbia	59.6%	180	14%	140	24.1%	0	305	2,071	2,576
10. Cornwall-Sunnyland-York	80.2%	540	20%	200	10.5%	0	375	3,257	4,022
11. Barkley Urban Village	70.8%	420	16.0%	160	19.4%	0	329	3,565	2,287
12. Roosevelt-Chandler	67.6%	324	55%	550	8.6%	0	394	1,098	2,356
13. Alabama-Silver Beach	55.8%	96	61%	610	10.7%	0	74	2,551	3,323
14. Cordata South	67.7%	288	12%	120	48.7%	0	820	7,294	7,117
15. King Mountain	38.8%	0	0%	0	14.8%	0	20	2,412	1,179
16. Irongate Industrial	4.6%	0	0%	0	0%	0	0	3,529	3,192
17. WCC	86.1%	576	0%	0	26.7%	0	435	2,300	3,311
18. West Bakerview	34.6%	0	0%	0	19.7%	0	122	2,093	737
19. UGA: Airport Industrial	1.7%	0	0%	0	0%	0	0	748	748
20. UGA: Marine-Bennett	0.8%	0	25%	250	0%	0	0	1,683	1,933
21. UGA: Pacific Hwy Industrial	0%	0	0%	0	0%	0	0	1,334	1,334
22. Cordata North	55.6%	96	15%	150	21.3%	0	75	4,410	4,650
23. UGA: East Bakerview	0.0%	0	0%	0	100.0%	800	0	1,721	2,521
Citywide									65,891

Notes:

- 1.) "Percent complete" sidewalks reflects degree of completeness by CSA of "Primary Pedestrian Network" in 2012 Pedestrian Master Plan from the list of over 300 sidewalk infill projects.
- 2.) "Percent complete" bicycle lanes reflects status of facilities adopted in the Comprehensive Plan, where construction is realistically feasible, rather than absolute total of all facilities identified by the former BPAC.
- 3.) PTA for WTA transit and Auto arterials are derived from select transit and auto data collection measurement points throughout the City. Transit data is collected by WTA and auto data is collected by Public Works.
- 4.) 2013 net PTA is derived from the compilation of all five variables (Sidewalk, Bike Lane, Multiuse Trails, WTA Transit, and arterial traffic counts); minus PTA used by development proposals; minus a 500 PTA reserve in each CSA to avoid violating Bellingham's adopted multimodal LOS standards.
- 5.) Waterfront District eligible to become Type 1 Urban Village in future with Master Plan and fixed route transit.

Compliance with Washington State Planning Law

The Transportation Report on Annual Mobility (TRAM) is an annual monitoring and reporting system that Public Works has published since March 2006 (*previously titled Transportation Report on Annual Concurrency (TRAC)*). The TRAM informs the City Council, Planning Commission, Transportation Commission, the general public, and the development community which portions of the City are best suited for infill development based on adequate transportation infrastructure and services - reported as Person Trips Available (PTA) by each Concurrency Service Area (CSA) (**See Table 1**). As such, the TRAM is Bellingham's annual documentation that the City is in full compliance with the Washington State Growth Management Act (GMA) requirements.

The 2015 TRAM demonstrates that Bellingham's Multimodal Transportation Concurrency methodology is integrating multimodal transportation system capacity within various land use contexts in Bellingham and is further promoting both the Comprehensive Plan and GMA goal of directing new development toward compact, mixed-use urban areas where adequate transportation services and facilities are most available.

Transportation Concurrency Program Recommendations Moving Forward

Each year, transportation planners report on what was accomplished over the past year and what type of transportation planning is recommended for staff to focus on in the year ahead.

A. 2014 TRAC Recommendations

Public Works staff explored each of the recommendations for enhancement to the Multimodal Transportation Concurrency Program in the 2014 TRAC and took the actions listed below.

1) Maintain and Update the Concurrency Evaluation Tracking Tool with new data

The Concurrency Evaluation Tracking Tool (CETT) maintains an inventory of arterial traffic counts and capacities, high-frequency transit capacity and ridership data obtained directly from WTA, and the degree of completeness for sidewalk and bicycle facilities approved in Pedestrian and Bicycle Master Plans. The CETT is also used to track and monitor the number of person trips withdrawn for new development for each CSA.

Since January 1, 2014, the CETT has been updated to incorporate:

- ✓ Transportation Concurrency Certificates issued in 2014
- ✓ Six new Concurrency Service Areas in northern Bellingham
- ✓ A 2015 inventory of bicycle facilities comprising the "Primary Bicycle Network" in the Bicycle Master Plan
- ✓ On-street bicycle facilities constructed in 2014
- ✓ A 2015 inventory of sidewalk facilities comprising the "Primary Pedestrian Network" in the Pedestrian Master Plan
- ✓ Sidewalks on the Primary Pedestrian Network constructed in 2014
- ✓ "Multiuse trail" (bicycle-friendly) data inventoried in 2014 and incorporated into each CSA where these trails serve a clear transportation function

2) Fully Integrate the Primary Bicycle Network in the 2014 Bicycle Master Plan into the Multimodal Transportation Concurrency Program and 2015 TRAM

- ✓ *Bicycle Master Plan approved October 2014 and fully incorporated into 2015 TRAM*

3) Continued Refinement of Multimodal Transportation Concurrency Methodology

Public Works staff should continue work to develop connectivity analysis and metrics for both project-specific transportation impact analysis and overall multimodal transportation system planning and measurement of system effectiveness.

- ✓ *There is no funding currently provided for this, but it remains a priority for transportation planning staff. In 2010, Public Works and TranspoGroup completed a demonstration of how connectivity metrics might work. In 2013, TranspoGroup and Toole Design employed ViaCity software for bicycle system connectivity analysis in the Bicycle Master Plan work. Transportation planners are still considering methods to develop a connectivity metric for transportation concurrency and transportation impact analysis (TIA) purposes.*

B. 2015 TRAM Recommendations

Bellingham transportation planning staff recommends the following actions in 2015 to further enhance the Multimodal Transportation Concurrency Program and TRAC:

1) Explore Further Refinements/Additions of Concurrency Service Areas

- As portions of the Bellingham UGA are annexed to the City and as Institutional Master Plans and Urban Village Plans are created within Bellingham, the creation of new CSAs or adjustments to existing CSA categories will be necessary, as listed below.
- The 2006 Saint Joseph's Hospital IMP (Area 7 Cornwall Park Neighborhood) allows approximately 500,000 SF of additional development and the hospital-medical complex along the Squalicum-Birchwood corridor is characteristically different than the surrounding residential neighborhood. The 2006 SJH IMP requires additional sidewalks and bicycle routes internal to the hospital campus, WTA transit service is available, and PeaceHealth has implemented a robust Commute Trip Reduction (CTR) program employing multiple transportation demand management strategies for employees on the St. Joseph Hospital campus. A new CSA should be created if St. Joseph's amends their IMP with a new transportation circulation system.
- As work on the Comprehensive Plan update continues, identify additional potential candidates for Urban Villages as future Type 1 "Urban Village" CSAs.

2) Fully Integrate the Biennial Monitoring Program Required for the Bellingham Waterfront District into the 2016 TRAM.

- In December 2013, the Bellingham City Council and the Port of Bellingham approved the long-term master plan for the Bellingham Waterfront District. One of the key elements of this plan is a Biennial Monitoring Program, which requires the Port of Bellingham to collect and report data on transportation mode choices being made into the Waterfront District every other year. The 2015 TRAM is the natural and best fit for this information to be reported to the community at large.

3) Explore the Possibility of Integrating Connectivity Metrics into Multimodal Transportation Concurrency Evaluation and Transportation Impact Analysis (TIA) for Development Review

- Public Works staff should continue work to develop connectivity analysis and metrics for both project-specific transportation impact analysis and overall multimodal transportation system planning and measurement of system effectiveness.
- Bellingham's innovative Multimodal Transportation Concurrency methodology is also fully integrated with the Urban Village Transportation Impact Fee Reduction Program <http://www.cob.org/documents/pw/transportation/uv-tif-faq-2015.pdf> but is not yet integrated with Transportation Impact Analysis (TIA) requirements, which are predominantly auto-oriented. Bellingham's TIA guidelines are in need of revision in 2015 and this offers an opportunity to try to incorporate multimodal concurrency considerations into TIA review for private development. There is no specific time or funding budgeted for this and even though this effort may require significant staff time it is a priority for transportation planners because it could result in more unified and integrated transportation planning and analysis.

4) Maintain and Update the Concurrency Evaluation Tracking Tool with new data

- The Concurrency Evaluation Tracking Tool (CETT) maintains an inventory of arterial traffic counts and capacities, high-frequency transit capacity and ridership data obtained directly from WTA, and the degree of completeness for sidewalk and bicycle facilities adopted in the Transportation Element of the Comprehensive Plan. The CETT is also used to track and monitor the number of person trips withdrawn for new development for each CSA. To maintain the effectiveness of this tool, staff must maintain upkeep of arterial traffic counts, WTA transit ridership, completeness of sidewalks and bike lanes, and, where applicable, trails that serve a transportation function.
- Update arterial traffic counts citywide either in-house or through on-call contracts with traffic data firms. Traffic count data for 2014-2015 is needed to inform the 2016 TRAM. Traffic counts are also used for grant applications, federal functional classification requests, transportation modeling, and the comprehensive plan update.
- Work hand-in-hand with WTA to update their strategic plan in 2015 in conjunction with the update to the Bellingham Comprehensive Plan. This will yield better transit data for the Multimodal Transportation Concurrency Program.

5) Monitor Multimodal Transportation Concurrency Methodology for Effectiveness

- Continue to publish TRAM and annually report observations of system effectiveness to the Planning Commission, Transportation Commission, and City Council. The methodology is relatively new and innovative in the transportation industry and continued monitoring and reporting is needed to assess long-term effectiveness in promoting infill development in Bellingham. Over time, staff anticipates that there will be a need for further refinements and adjustments to be made to support infill and multimodal policies.

This is an on-going and annual procedure. All TRAC/TRAM documents 2006 - 2015 are available at <http://www.cob.org/services/planning/transportation/multi-modal-trac.aspx>

Chapter 3: Bellingham Transportation Benefit District No. 1



In July 2010, the Bellingham City Council created Transportation Benefit District Number 1 (TBD), contiguous with the City of Bellingham corporate limits. In November 2010, Bellingham voters approved a ballot measure in the general election that authorized the TBD to collect a two tenths of one percent sales tax within TBD boundaries (city limits) for a 10-year period to fund transportation infrastructure and transit service. The TBD revenue will expire in 2021, unless re-approved by voters in 2020. The TBD is governed by a Board of Directors, which is comprised of the current elected members of the Bellingham City Council <http://www.cob.org/government/tbd/index.aspx>

The TBD began receiving sales tax receipts in July 2011 and the TBD Board directed that the TBD revenues be dedicated to the following activities in generally equal amounts (about 1/3 for each):

- Purchase of additional WTA transit bus service hours via contract between the City and WTA
- Enhance and improve pedestrian and bicycle transportation infrastructure
- Resurfacing streets to maintain the City of Bellingham's investment for all transportation users

Figure 3.1 Allocation of Total TBD Revenues 2011-2016

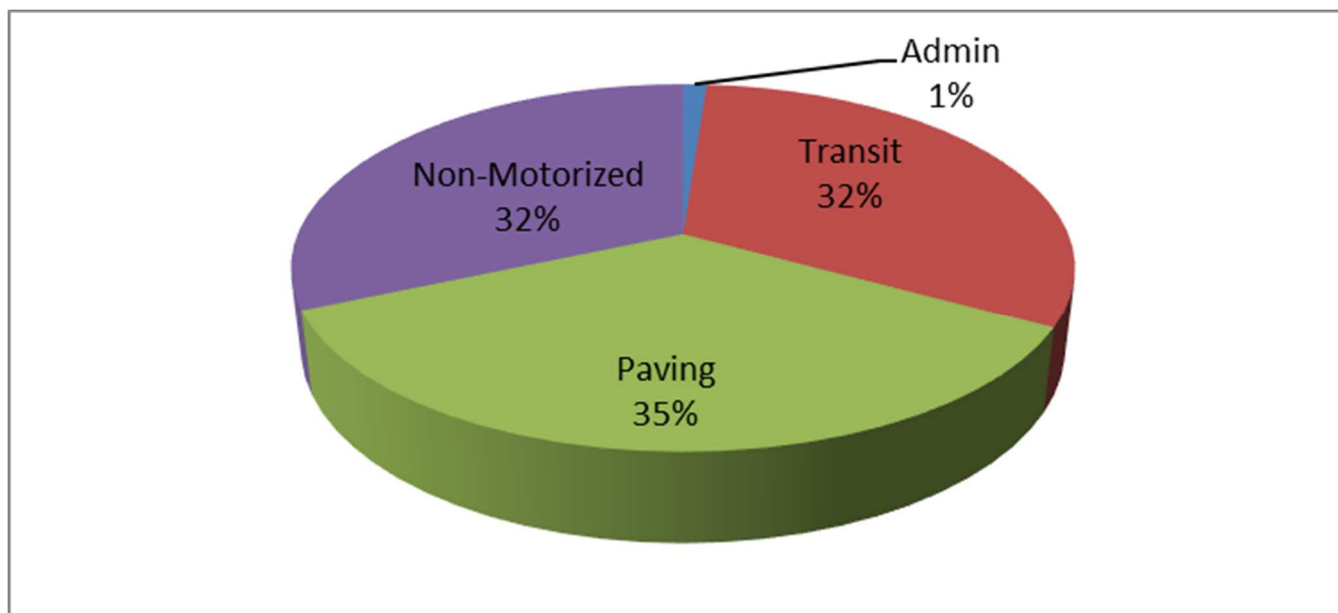


Table 3.1 Transportation Benefit District #1 Finances 2011-2016

		Actual	Actual	Actual	Budget	Actual	Budget	Budget	2011-16
Revenues		2011	2012	2013	2014	2014	2015	2016	Total
Sales Tax Receipts (.2%)		\$2,454,454	\$4,350,591	\$4,655,993	\$4,600,000	\$4,700,864	\$4,600,000	\$4,728,800	\$25,490,702
Interest		\$1,947	\$24,650	\$28,068	\$50,000	\$27,747	\$12,244	\$12,244	\$106,900
Intergovernmental Revenue-Grant			\$27,400	\$436,471		\$17,985			\$481,856
Total Specific Revenue		\$2,456,401	\$4,402,641	\$5,120,532	\$4,650,000	\$4,746,596	\$4,612,244	\$4,741,044	\$26,079,458
Expenditures									
Interfund Charges-Admin/Other		\$36,750	\$33,765	\$39,649	\$43,878	\$47,948	\$59,653	\$57,246	\$275,011
5% reserve allocation		\$122,820	\$87,180						\$210,000
Total reduction in available cash flow		\$159,570	\$120,945	\$39,649	\$43,878	\$47,948	\$59,653	\$57,246	\$485,011
Revenue/Reserves available for project expenditure		\$2,296,831	\$4,281,696	\$5,080,883	\$4,606,122	\$4,698,648	\$4,552,591	\$4,683,798	\$25,594,447
Transit									
Contractual services-WTA		\$485,703	\$1,068,531	\$1,353,497	\$1,450,000	\$1,346,099	\$1,463,000	\$1,463,000	\$7,179,830
Transit capital projects-			\$47,500		\$450,000	\$250,000			\$297,500
Total transit		\$485,703	\$1,116,031	\$1,353,497	\$1,900,000	\$1,596,099	\$1,463,000	\$1,463,000	\$7,477,330
Re-paving projects									
Capital Projects		\$600,297	\$1,070,279	\$1,537,468	\$1,540,000	\$1,497,118	\$1,580,000	\$1,630,000	\$7,915,162
Engineering			\$90,155	\$320,958					\$411,113
Projects total		\$600,297	\$1,160,434	\$1,858,426	\$1,540,000	\$1,497,118	\$1,580,000	\$1,630,000	\$8,326,275
Non-motorized capital									
Capital Projects		\$390,296	\$814,312	\$1,010,186	\$1,540,000	\$1,703,637	\$1,580,000	\$1,630,000	\$7,128,431
Projects total		\$390,296	\$882,905	\$1,221,070	\$1,540,000	\$1,703,637	\$1,580,000	\$1,630,000	\$7,407,908
Total expenditures		\$1,476,296	\$3,159,370	\$4,432,993	\$4,980,000	\$4,796,854	\$4,623,000	\$4,723,000	\$23,211,513



TBD-Funded Transit Services

In 2011, the Bellingham TBD Board of Directors signed an Interlocal Agreement with the Whatcom Transportation Authority for a 5-year period to purchase supplemental transit service in Bellingham. Initially, the TBD-funded transit service restored the Sunday transit bus service that had been cut by WTA in 2010. It has also extended evening transit service on some routes and funded an experimental transit route to see if a ridership base existed for commercial and industrial employers on the Waterfront.

The TBD - WTA Interlocal Agreement expires in 2015 and the TBD Board will need to make some decisions regarding the TBD funding allocated to enhanced transit service in Bellingham.



During 2014, WTA reported 257,664 fixed route boarding/trips and 9,517 paratransit trips on service the City of Bellingham purchased.

Further information about WTA transit service throughout Bellingham is available in Chapter 7.

TBD-Funded Street Resurfacing

Over the past century, Bellingham has made a significant investment in providing a public street system throughout the City. Public streets have a functional lifespan that varies according to the amount of use that the street receives and, at some point, all public streets require maintenance, repair, and resurfacing. Traditional sources of funding for street construction and resurfacing, such as Street and Real Estate Excise Tax (REET) funds, have been significantly diminished through budgeting decisions.

Since 2011, TBD revenue allocated to street resurfacing has helped to replace some of the Street and REET funding lost for street resurfacing projects. Approximately \$1.4 million in TBD funds have been spent each year to help maintain the City's investment in arterial streets, providing mobility for all transportation users. When streets are resurfaced, pedestrian and bicycle facilities approved in the Pedestrian and Bicycle Master Plans are also installed, whenever possible, as reflected in Tables 3.3, 3.4, 3.5, and 3.6.

In 2014 and 2015 Public Works prioritized resurfacing the following arterial streets:

Table 3.2 Street Resurfacing Funded by TBD 2014 and 2015			
Year	Resurfaced Street	From	To
2014	Hawthorn Road	12th Street	Fieldston Road
2014	Electric Avenue	Ohio Street	Portal Drive
2014	14th Street	Garden Street	Douglas Avenue
2015	Alabama Street	Cornwall Avenue	St. Clair Street
2015	Kellogg Road	Cordata Parkway	Eliza Avenue
2015	Eliza Avenue	Kellogg Road	Westerly Road

TBD-Funded Non-motorized Bicycle and Pedestrian Improvements

The TBD Board of Directors annually approves TBD funding for a number of non-motorized transportation projects that have been approved in Bellingham's Pedestrian and Bicycle Master Plans (PMP and BMP) and recommended for construction by Public Works and the Transportation Commission. As shown in the tables below, since TBD revenue became available for the construction of non-motorized transportation improvements in 2011, Bellingham TBD funding has helped transportation planners and engineers to make significant progress in implementing the 343 improvement projects in the PMP and the 185 improvement projects in the BMP.



In 2014, Bellingham transportation planners received TBD Board approval to set aside 10% of annual TBD revenue to use as local matching funds to leverage additional state and federal grant funding for pedestrian and bicycle projects, which will allow TBD funds to be maximized.

Successful examples of using TBD funds to leverage additional state and federal grant funds for pedestrian and bicycle facilities include:

- 2012 Flashing Crosswalks at N. Samish/Abbott and N. Samish/Consolidation
- 2012 Resurfacing Indian Street to add uphill climbing bike lane and downhill shared lane
- 2012 Pedestrian improvements at Indian/Maple, Indian/Laurel, and Indian/Ivy
- 2013 Curb extensions and crosswalks at State/Laurel and new sidewalk on south side of Laurel from State to South Bay Trail
- 2013 Curb extensions and crosswalks at Lincoln/Potter and new sidewalk on north side of Gladstone from Puget to St. Paul
- 2015 Sidewalk reconstruction on the east side of Yew Street from Alabama to Texas
- 2015 New sidewalk on the WWU Lincoln Street Park-N-Ride from Maple to Byron
- 2016 (*pending award by State legislature*) New sidewalk on the east side of West Maplewood from Northwest to Alderwood

The TBD Board also approved a 2.5% annual TBD reserve for transportation planners to use in the design and preliminary engineering phases of pedestrian and bicycle projects which require further study before a specific capital improvement recommendation can be made to the Transportation Commission and the TBD Board. There are several pedestrian crossing improvements listed in the Pedestrian Master Plan and several important network links in the Bicycle Master Plan that will require further study by transportation planners before engineering and construction recommendations can be made.

In November 2014, the TBD Board approved the Public Works and Transportation Commission recommendations for the following studies:

- 2015 Feasibility study for a yet-to-be-determined bicycle facility improvement on Holly Street from Ellis to Bay
- 2015 Parking survey on Pacific Street to determine feasibility of removing parking on one side of street to install bike lanes
- 2015 Parking survey on Orleans Street to determine feasibility of removing parking on one side of street to install bike lanes
- 2016 Feasibility study for a yet-to-be-determined bicycle facility improvement on Lakeway Drive from Ellis to Queen
- 2016 Feasibility study for a yet-to-be-determined pedestrian crossing improvement at the intersection of Barkley/Sussex

As demonstrated in the tables below, Public Works has already accomplished a great deal in the three years that TBD funding has been available for bicycle, pedestrian, and street resurfacing projects, but there is much more work to be done. The TBD will continue to play a critical role in funding and completing Bellingham's PMP and BMP in the most expeditious manner possible. The \$1.5 million revenue currently allocated for non-motorized transportation projects will not be enough to complete the 343 improvement projects in the PMP and the 185 improvement projects in the BMP. The planning level costs to complete the PMP are estimated to be \$225 million over 20 years and the BMP cost estimates are over \$25 million. Public Works transportation planners intend to accomplish a great deal more through the strategic efforts to capitalize on opportunities to link land use, development, and other infrastructure projects, use TBD funds for local match requirements to leverage larger state and federal grant funds, and by including pedestrian and bicycle improvements wherever possible in street resurfacing projects (see tables below).

Table 3.3. Bicycle Improvements Constructed With TBD Non-Motorized and Arterial Resurfacing Funds - 2011 through 2014

Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2011	Marked bike lanes	East-West	Lakeway Drive: Woburn to City limit	n/a*	Yes: Birch to City limit	West	Whatcom Falls
2011	Marked bike lanes	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		
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		Happy Valley/WWU
<i>*Project was planned or funded prior to 2014 BMP approval</i>							

Table 3.4. Pedestrian Improvements Constructed With TBD Non-Motorized and Arterial Resurfacing Funds - 2011 through 2014

Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
2011	Sidewalk, Curb Extensions, Crosswalk	Both	Prospect Avenue: Lottie to Bay	n/a	n/a	Downtown
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 Park
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
2012	Curb ramps, Flashing Crosswalk		Pine/Boulevard		Tier 1*	Sehome
2012	Curb ramps, extensions, and crosswalks		Dupont/Elm/Northwest		Tier 1*	Dwtn/Ltr/Col/Birchwood
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
2013	Sidewalk, Curb Extensions, Crosswalk	South	State/E. Maple		Tier 1*	Downtown
2013	Curb Extensions, Crosswalk		E. Illinois/James		Tier 1*	Sunnyland
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
2014	Sidewalk, Curb Extensions, Crosswalk	South	Hawthorn: 12th to Fieldston; Hawthorne/Bayside	Tier 3	Tier 3	Edgemoor
<i>*Project planned/funded prior to 2012 PMP</i>						

Table 3.5. Bicycle Improvements to Be Constructed With TBD Non-Motorized and Arterial Resurfacing Funds - 2015 through 2016

Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2015	Climbing/Shared Lane	East-West	Chestnut Street: Bay to Roeder	Tier 2	No		Downtown
2015	Marked bike lanes	North-South	Eliza Avenue: Kellogg to Westerly	Tier 1	No		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	Climbing/Shared Lane	North-South	Lincoln: Lakeway to Meador	Tier 1	No		Puget
2015	Corridor Study	East-West	Holly Street: Ellis to Bay	Tier 1	Unknown	?	Downtown
2016	Bicycle Boulevard	East-West	Alderwood Avenue: Northwest to W. Maplewood	Tier 3	No		Birchwood
2016	Marked bike lanes	North-South	W. Maplewood: Northwest to Alderwood	Tier 1	No		Birchwood
2016	Bicycle Boulevard	East-West	Texas Street: Michigan to Nevada	Tier 1	No		Roosevelt
2016	Bicycle Boulevard	North-South	Undine Street: Railroad Trail to Texas	Tier 2	No		Roosevelt
2016	Bicycle Boulevard	North-South	St. Paul Street: Railroad Trail to Texas	Tier 2	No		Roosevelt
2016	Bicycle Boulevard	North-South	Pacific Street: Alabama to E. Illinois	Tier 3	No		Roosevelt
2016	Marked bike lanes	North-South	Pacific Street: Alabama to Iowa	Tier 3	Yes: Texas to Kentucky	?	Roosevelt
2016	Bicycle Boulevard	North-South	Orleans Street: Alabama to Texas	Tier 2	No		Roosevelt
2016	Marked bike lanes	North-South	Orleans Street: Alabama to Barkley	Tier 2	Yes: Alabama to Barkley	?	Roosevelt
2016	Bicycle Boulevard	North-South	24th Street: Old Fairhaven Pkwy to Douglas	Tier 1	No		Happy Valley
2016	Bicycle Boulevard	East-West	Mill Avenue: 12th Street to 24th Street	Tier 1	No		Fairhaven/Happy Valley
2016	Unknown Bike Facility	East-West	Holly Street: Ellis to Bay	Tier 1	Unknown	?	Downtown
2016	Corridor Study	East-West	Lakeway Drive: Ellis to Queen	Tier 1	No		Puget/York/Downtown

Table 3.6. Pedestrian Improvements to be Constructed With TBD Non-Motorized and Arterial Resurfacing Funds - 2015 and 2016

Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
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	Cordata
2015	Curb Extensions, Crosswalks		Ohio/Ellis		Tier 1	Sunnyland/Downtown
2015	Curb Extensions, Crosswalks		Ohio/Grant		Tier 3	Sunnyland/Downtown
2015	Sidewalk	South	Birchwood: Northwest to Cedarwood	Tier 3	Tier 3	Birchwood
2015	Sidewalk, Curb Extensions, Crosswalk	East	12th/Mill	Fhvn UV	Fhvn UV	Fairhaven
2016	Sidewalk	South	Alderwood Avenue: Shuksan MS to W. Maplewood	Tier 1		Birchwood
2016	Sidewalk	East	Undine Street: Alabama to Texas	Tier 1		Roosevelt
2016	Sidewalk	West	St. Paul Street: Alabama to Texas	Tier 1		Roosevelt
2016	Curb Extensions, Crosswalk		Mill/24th St	Tier 1		Happy Valley
2016	Intersection Study		Barkley/Sussex		Tier 3	Barkley

Chapter 4: Primary Pedestrian Network Completeness - 2015

Since 2006, pedestrian improvements have been listed in the Transportation Element of the Bellingham Comprehensive Plan. Bellingham's Pedestrian Master Plan (PMP) was approved by City Council in August 2012 and the 2013 Transportation Report on Annual Concurrency (TRAC) first reported the completeness of the Primary Pedestrian Network by Concurrency Service Area (CSA). As shown in Table 4.3, below, in 2015 the citywide Primary Pedestrian Network is 61% complete. The degree of completeness varies in different parts of the City, as shown in Figures 4.1, 4.2, and Table 4.3 The 2012 PMP is available at <http://www.cob.org/services/planning/transportation/pedestrian-master-planning.aspx> and includes 343 sidewalk and crossing improvement projects that are estimated to cost about \$225 million over 20 years.

Since 2011, most sidewalk and crosswalk projects have been constructed with Transportation Benefit District (TBD) funding, but Bellingham street standards require private developers to construct ADA-compliant sidewalks for any new development on public streets and state and federal grant funding agencies require sidewalks to be included on all arterial street improvement projects.

Public Works staff tries to leverage local funding to receive outside funding whenever possible. Some pedestrian projects are funded by the Washington State Transportation Improvement Board (TIB) Sidewalk Program, some are funded by state and federal Safe Route to School Programs, and some are funded with federal funding administered by Washington State, such as the Surface Transportation Program (STP), Transportation Alternatives Program (TAP), or the Highway Safety Improvement Program (HSIP). Occasionally, pedestrian projects can be added to other grant-funded work (storm water, Parks, etc.) that is being conducted. In addition, some pedestrian improvements are funded with a combination of the above as well as funding from other public agencies and/or private development interests.

In addition to the TBD-funded pedestrian improvements listed in Chapter 3, Public Works has constructed several pedestrian improvements to the Primary Pedestrian Network since 2011 with funding from non-TBD sources, as listed in Table 4.1, below.

In 2015 and 2016, the pedestrian improvements listed in Table 4.2 below are expected to be constructed by Public Works and private development interests. There could be many more pedestrian improvements constructed by private developers throughout Bellingham in 2015 and 2016 and, if so, then those will be accounted for in the 2015 or 2016 Transportation Reports on Annual Mobility.

In 2015, Bellingham Public Works will also resurface the following arterial streets and install ADA-compliant curb ramps, crosswalks, and sidewalks, where needed:

- Alabama Street from Cornwall Avenue to St. Claire Street
- Kellogg Road from Cordata Parkway to Eliza Avenue
- Eliza Avenue from Kellogg Road to Westerly Road

Table 4.1. Pedestrian Improvements Constructed With Street Fund, State & Federal Grants, Partnerships, or Private Development - 2011 through 2014						
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
2013	Curb ramps, Ped refuge, Flashing Crosswalk		N. Samish/Consolidation		Tier 1*	Sehome
2012	Curb Extensions, Crosswalks		Indian/Maple; Indian/Laurel; Indian/Ivy		Tier 1*	Sehome
2013	Sidewalk, Crosswalk	West	Eliza Ave: Matanuska to Bellis Fair Pkwy		n/a	Meridian
2013	Multimodal Roundabout		State/Forest/Wharf/Blvd		Tier 3	Downtown
2013	Sidewalk, Crosswalks, Ped Refuges	North	West Bakerview: Arctic to Bennett	n/a	n/a	Meridian
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
				*Project planned/funded prior to 2012 PMP		

Table 4.2. Pedestrian Improvements Constructed With Street Fund, State & Federal Grants, Partnerships, or Private Development - 2015 and 2016						
Year	Improvement	Side(s)	Location	Sidewalk	Crossing	Neighborhood
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	Sidewalk, Crosswalk (Private Development)	West	Lincoln Street: Maple to Fred Meyer	Tier 1		Puget
2015	Crosswalks		Chestnut/Bay (Bridge Rehabilitation)		n/a	Downtown
2015	Flashing Crosswalk (Yellow)		Alabama/Ellis		Tier 1	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	Sidewalk (<i>IF State grant is awarded</i>)	East	W. Maplewood Avenue: Northwest to Alderwood	Tier 1		Birchwood
2016	Sidewalks, Crosswalks (Private Development)		Arctic Avenue: W. Bakerview to Mahogany	Tier 3		Meridian
2016	Sidewalks, Traffic Signals, Crosswalks		Mahogany Avenue: Northwest to Pacific Highway	Tier 3		Meridian
2016	Sidewalk, Crosswalks (Private Development)		Pacific Highway: W. Bakerview to Mahogany	Tier 3		Meridian
2016	Sidewalk, Traffic Signals, Crosswalks		Granary-Bloedel: Roeder to Cornwall	Tier 3		Waterfront

Figure 4.1 Bellingham's Citywide Primary Pedestrian Network



Figure 4.2

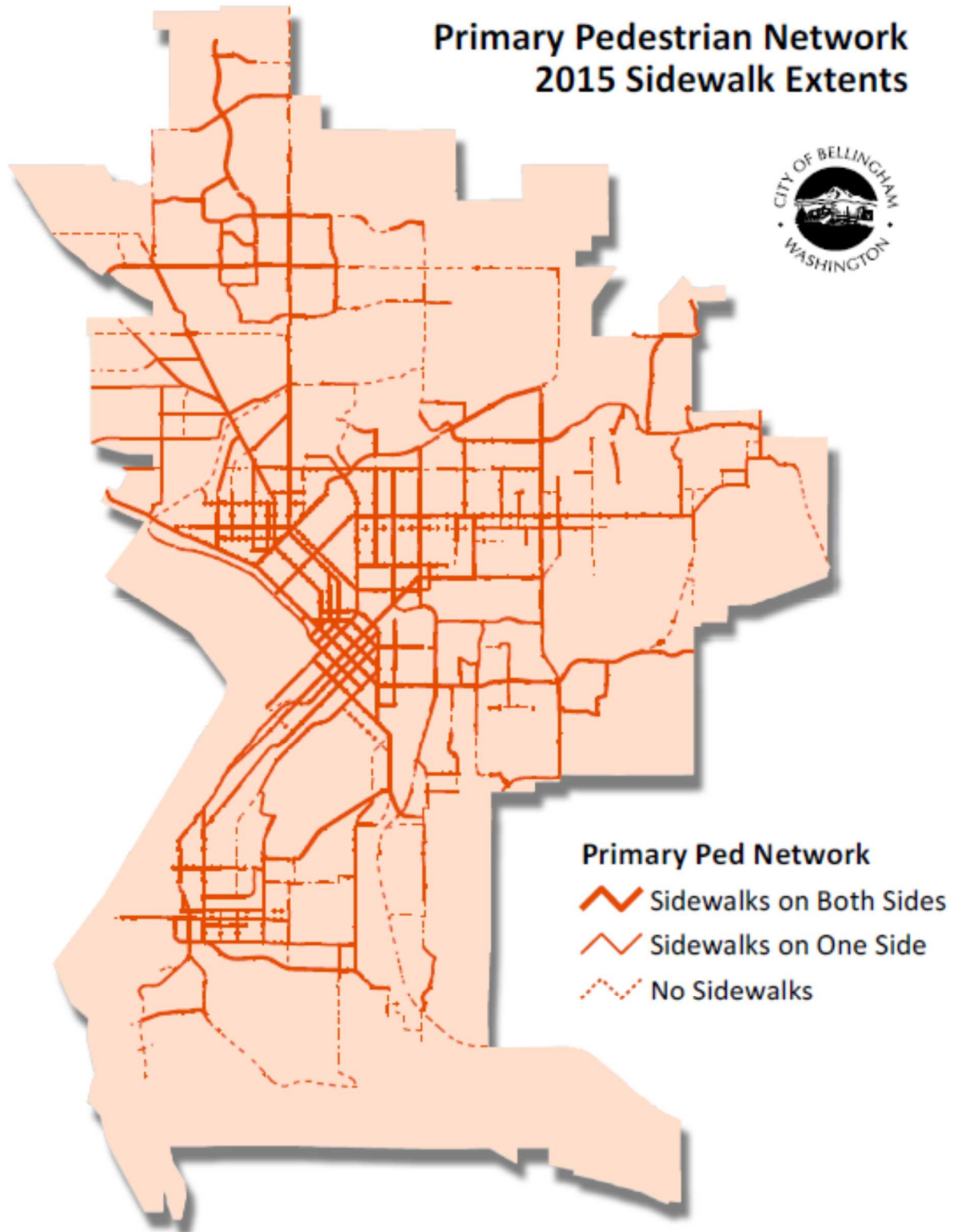


Figure 4.3

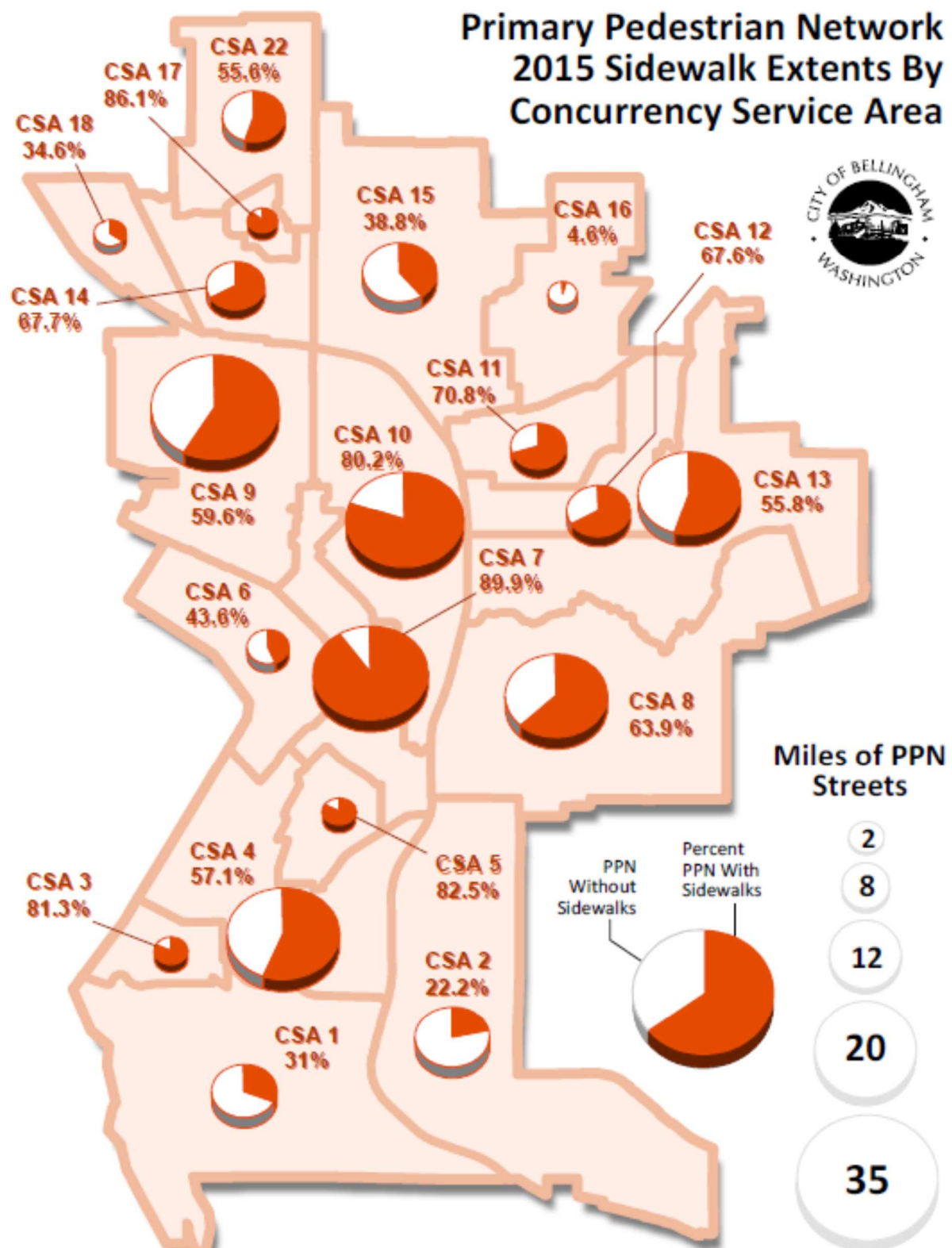


Table 4.3



Primary Pedestrian Network Sidewalk Extents by Concurrency Service Area

CSA	PPN Street Length Both Sides (Miles)	PPN Sidewalk Length (Miles)	PPN Sidewalk Percent Complete
CSA 1	10.6	3.3	31.0%
CSA 2	13.3	3.0	22.2%
CSA 3	3.3	2.6	81.3%
CSA 4	27.3	15.6	57.1%
CSA 5	3.2	2.7	82.5%
CSA 6	4.9	2.1	43.6%
CSA 7	28.3	25.5	89.9%
CSA 8	23.1	14.8	63.9%
CSA 9	34.2	20.4	59.6%
CSA 10	29.5	23.7	80.2%
CSA 11	8.0	5.6	70.8%
CSA 12	10.1	6.8	67.6%
CSA 13	23.2	13.0	55.8%
CSA 14	8.7	5.9	67.7%
CSA 15	13.2	5.1	38.8%
CSA 16	2.5	0.1	4.6%
CSA 17	2.7	2.3	86.1%
CSA 18	3.1	1.1	34.6%
CSA 19	0.0	0.0	1.7%
CSA 20	0.7	0.0	0.8%
CSA 21	0.4	0.0	0.0%
CSA 22	9.8	5.4	55.5%
CSA 23	0.0	0.0	0.0%
Grand Total	260.1	159.0	61.1%

Chapter 5: Primary Bicycle Network Completeness - 2015

Since 2006, bicycle facility improvements have been listed in the Transportation Element of the Bellingham Comprehensive Plan. Bellingham's Bicycle Master Plan (BMP) was approved by City Council in October 2014 and the 2015 TRAM provides the first report on the completeness of the Primary Bicycle Network by Concurrency Service Area (CSA). As shown in Table 5.3., below, in 2015 the citywide Primary Bicycle Network is only 22% complete because the planned network was expanded from 107 mile to 160 miles with the approval of the BMP. The degree of network completeness varies in different parts of the City, as shown in Figures 5.1, 5.2, and Table 5.3. The BMP is available at <http://www.cob.org/services/planning/transportation/bike-master-planning.aspx> and includes 185 bicycle facility improvement projects that are estimated to cost about \$25 million over 20 years.

Since 2011, most bicycle improvement projects listed in the Transportation Element of the Comprehensive Plan have been constructed with TBD funding. Bellingham street standards require private developers to construct bike lanes on arterial streets and state and federal grant funding agencies require bike lanes to be included on all arterial street improvement projects.

Public Works staff tries to leverage local funding for additional outside funding whenever possible. Some bicycle improvement projects are funded by the Washington State Transportation Improvement Board (TIB) Urban Arterial Program as larger street projects, some are funded by state and federal Safe Route to School Programs, and some are funded with federal funding administered by Washington State, such as the Surface Transportation Program (STP), Transportation Alternatives Program (TAP), or the Highway Safety Improvement Program (HSIP). In addition, some bicycle improvements are funded with a combination of the above as well as funding from other public agencies and/or private development interests.

In addition to the TBD-funded bicycle improvements listed in Chapter 3, Public Works has constructed several bicycle improvements to the Primary Bicycle Network since 2011. Prior to the 2014 approval of the Bicycle Master Plan, these bicycle improvements were listed in the Transportation Element of the Bellingham Comprehensive Plan with funding from non-TBD sources, as listed below.

In 2015 and 2016, the bicycle facility improvements listed below are expected to be constructed by Public Works and private development interests. There could be many more bicycle improvements constructed by private developers throughout Bellingham in 2015 and 2016. If so, then those will be accounted for in the 2015 or 2016 Transportation Report on Annual Mobility.

Table 5.1. Bicycle Improvements Constructed With State & Federal Grants, Partnerships, or Private Development - 2011 through 2014							
Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2011	Marked 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	Multimodal Roundabout		State/Forest/Wharf/Boulevard	n/a*	No		Downtown
2014	Marked bike lanes	North-South	James Street: Orchard to Sunset Pond Park	Tier 1*	No		King Mountain
				<i>*Project was planned or funded prior to 2014 BMP approval</i>			

Table 5.2. Bicycle Improvements to be Constructed With State & Federal Grants, Partnerships, or Private Development - 2015 and 2016							
Year	Improvement	Direction	Location	BMP Priority	Parking Removed?	Side	Neighborhood
2015	Marked 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
2016	Marked bike lanes	North-South	Arctic Avenue: W. Bakerview to Mahogany	Tier 3	No		Meridian
2016	Marked bike lanes	East-West	Mahogany Avenue: Northwest to Pacific Highway	Tier 3	No		Meridian
2016	Marked bike lanes	North-South	Pacific Highway: W. Bakerview to Mahogany	Tier 3	No		Meridian
2016	Marked bike lanes	East-West	Granary-Bloedel: Roeder to Cornwall	Tier 3	No		Waterfront

Figure 5.1 Bellingham's Citywide Primary Bicycle Network

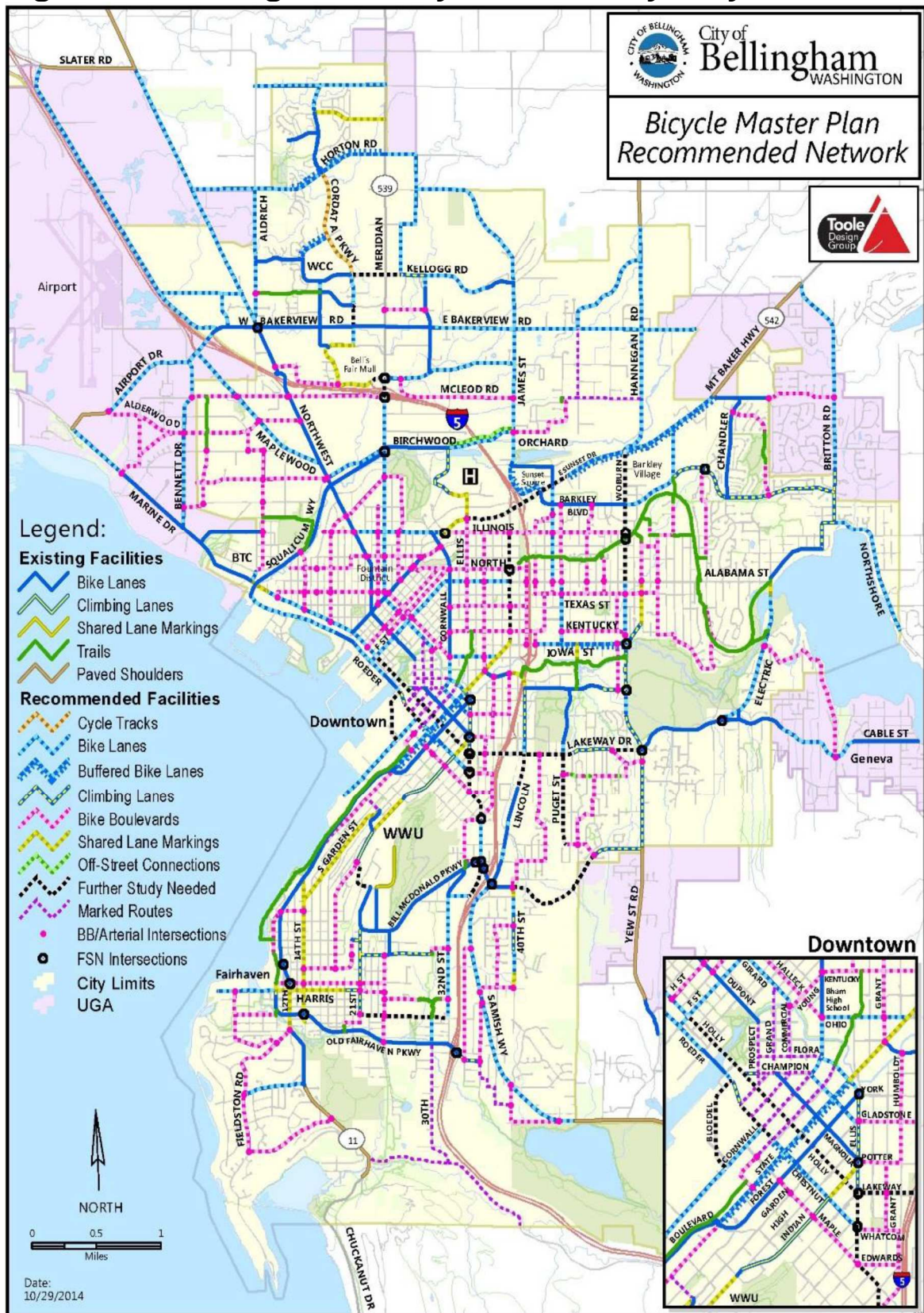


Figure 5.2

**Bicycle Infrastructure Network
2015 Bike Lane Extents**

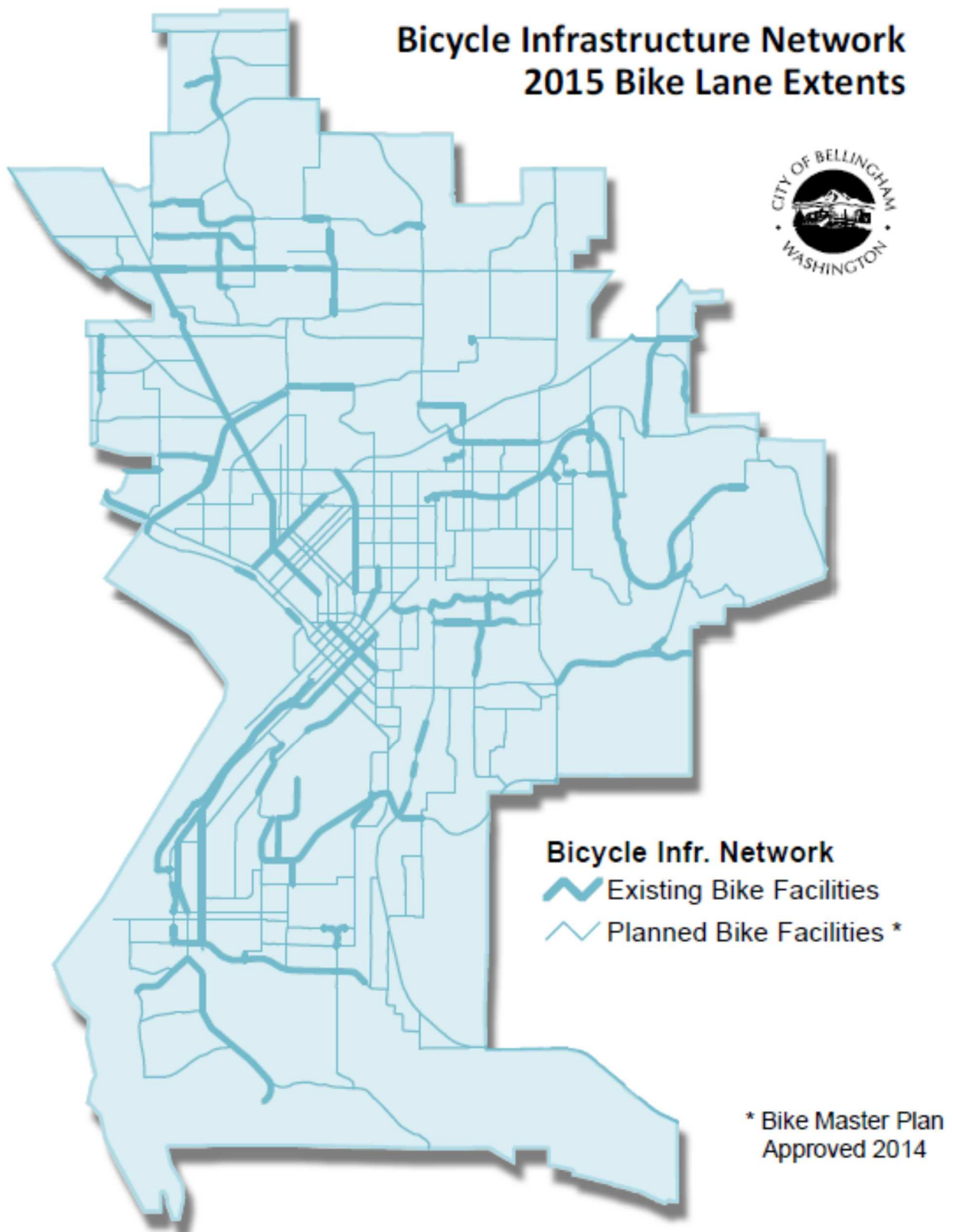


Figure 5.3

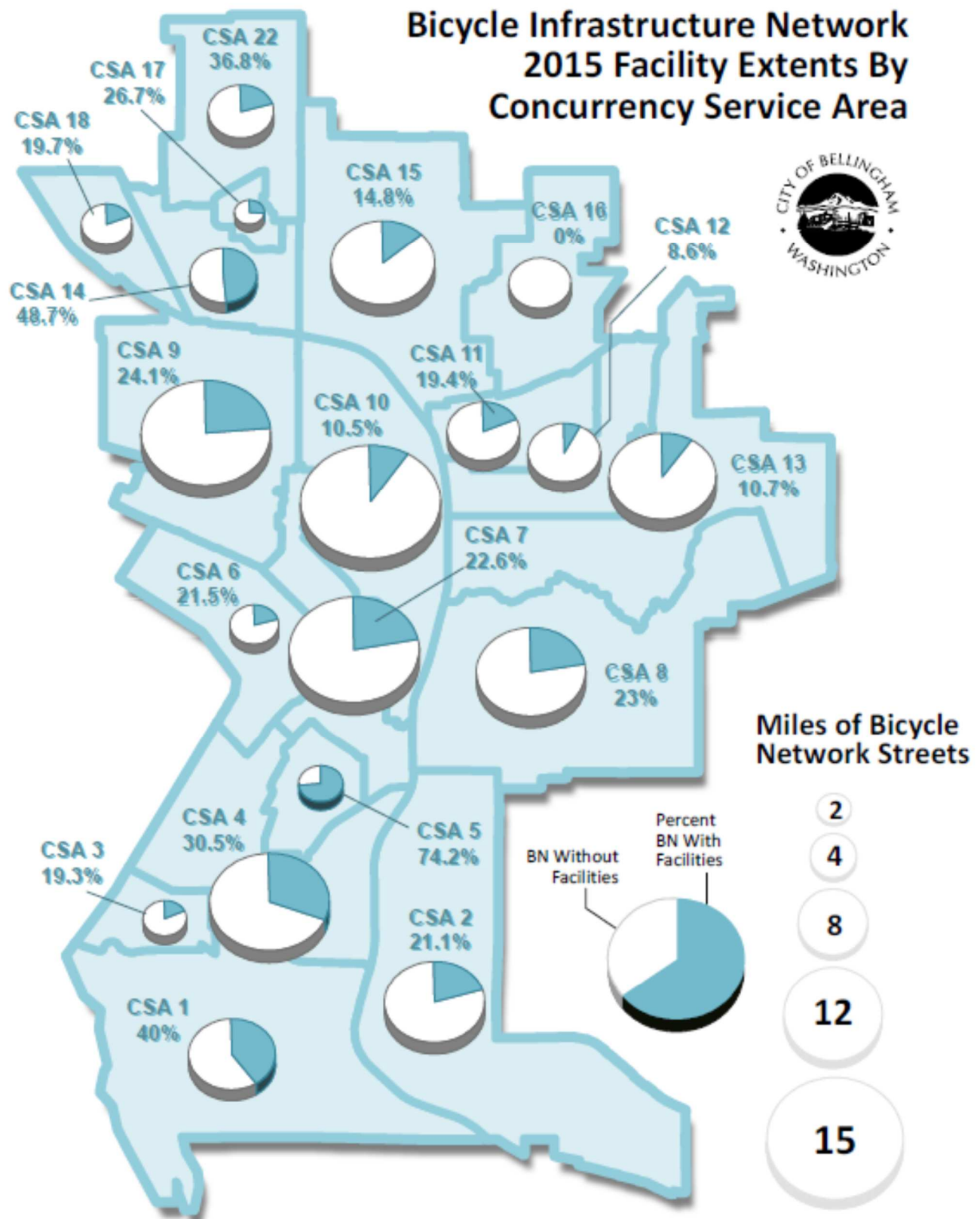




Table 5.3

Bicycle Infrastructure Extents by Concurrency Service Area

CSA	Total Recommended Network Length (Miles)	Existing Facility Miles	Recommended Upgrade Facility Miles	Recommended New Facility Miles	Recommended Network Percent Complete
CSA 1	7.7	3.0	0.0	4.6	39.6%
CSA 2	9.9	2.1	0.0	7.8	21.1%
CSA 3	2.3	0.5	0.0	1.9	19.3%
CSA 4	13.5	4.1	0.0	9.4	30.5%
CSA 5	2.4	1.8	0.0	0.6	74.2%
CSA 6	2.8	0.6	0.0	2.2	21.5%
CSA 7	15.6	3.5	0.7	11.4	22.6%
CSA 8	11.5	2.7	0.3	8.6	23.0%
CSA 9	15.5	3.7	0.0	11.8	24.1%
CSA 10	17.8	1.9	0.0	15.9	10.5%
CSA 11	5.6	1.1	1.5	3.1	19.4%
CSA 12	5.6	0.5	0.9	4.2	8.6%
CSA 13	11.1	1.2	0.9	9.0	10.7%
CSA 14	4.9	2.4	0.0	2.5	48.7%
CSA 15	10.5	1.6	0.0	8.9	14.8%
CSA 16	4.3	0.0	0.0	4.3	0.0%
CSA 17	1.2	0.3	0.1	0.7	26.7%
CSA 18	3.0	0.6	0.0	2.4	19.7%
CSA 19	1.2	0.0	0.0	1.2	0.0%
CSA 20	4.8	1.3	0.0	3.5	27.6%
CSA 21	4.1	0.7	0.0	3.3	0.0%
CSA 22	4.7	1.0	0.9	2.8	21.3%
CSA 23	0.6	0.6	0.0	0.0	100.0%
Grand Total	160.4	35.1	5.3	120.0	21.9%

Chapter 6: Off-Street Greenways Multiuse Recreation Trails - 2015

(Provide less direct and mostly unpaved alternate routes than on-street transportation network)

In 2009, Bellingham transportation planners amended the multimodal transportation concurrency ordinance to make several changes to Urban Village Concurrency Service Areas and also incorporated a select inventory of bike-friendly multiuse recreational trails. ***The inclusion of the bike-friendly multiuse recreational trails was not to declare them as an integral part of the citywide transportation network, but rather to acknowledge that some bicyclists do use these recreational trails as indirect and/or alternative routes to the on-street Primary Bicycle Network identified in the 2014 Bicycle Master Plan (BMP).*** Most of these recreational trails are not suitable for road/racing bicycles because they are primarily crushed limestone gravel surfaces, vary in width and steepness, and often do not connect to major destinations.

These bicycle-friendly trail routes were identified and field verified for ride-ability over many years by individual members of City and County Bicycle and Pedestrian Advisory Committees, the Mt. Baker Bicycle Club, as well as City staff and Parks and Recreation Advisory Board and Greenways Committee members involved in an effort called “Green Streets.” Technical data came from the City’s GIS layers for trails and bicycle routes, digital air photos, and digital terrain models.

The criteria that staff used to add select bike-friendly multiuse recreational trails to the list of BMC 13.70.020 Definitions Specific to Concurrency Management included:

- 1.) Off-street multiuse trails that can serve a clear transportation function, in addition to the recreational benefits that they provide, and a safe alternative to unmarked bicycle routes on arterial streets
- 2.) Prepared gravel/crushed rock surface trails, or smooth dirt with adequate drainage, and smooth even surface facilitating safe travel by cyclists. Trails with stairs, large roots, rocky sections, off-camber cross-sections, or areas with persistent standing water/puddles are generally not included
- 3.) Trails that average at least 5-feet, but preferably 8-feet, in width to facilitate safe bi-directional passage of cyclists and pedestrians
- 4.) Trails with slopes/grades of generally less than 6% average with maximum grades of generally less than 12%.

The bike-friendly multiuse recreational trails identified in the multimodal transportation concurrency inventory generally adhere to the specified criteria above. Some exceptions exist where lack of an alternative on-street route and the need for a critical connection dictates use of trail network sections that may have sub-standard surfaces, narrow widths, or steep grades.

Bike-friendly multiuse recreational trails are credited person trips to each Concurrency Service Area based on each comparative 1% of the total planned Primary Bicycle Network identified in the 2014 BMP. Ten (10) rather than 20 person trip credits are awarded for each 1% of the total planned on-street Primary Bicycle Network in recognition that not all bicyclists will be able to use off-street gravel trails as alternatives to on-street bike routes. It should be noted, however, that several regional multiuse trails, such as the Whatcom Creek Trail, Railroad Trail, and Bay to Baker Trail are included in the citywide bicycle network, see Figure 5.1.

Figure 6.1

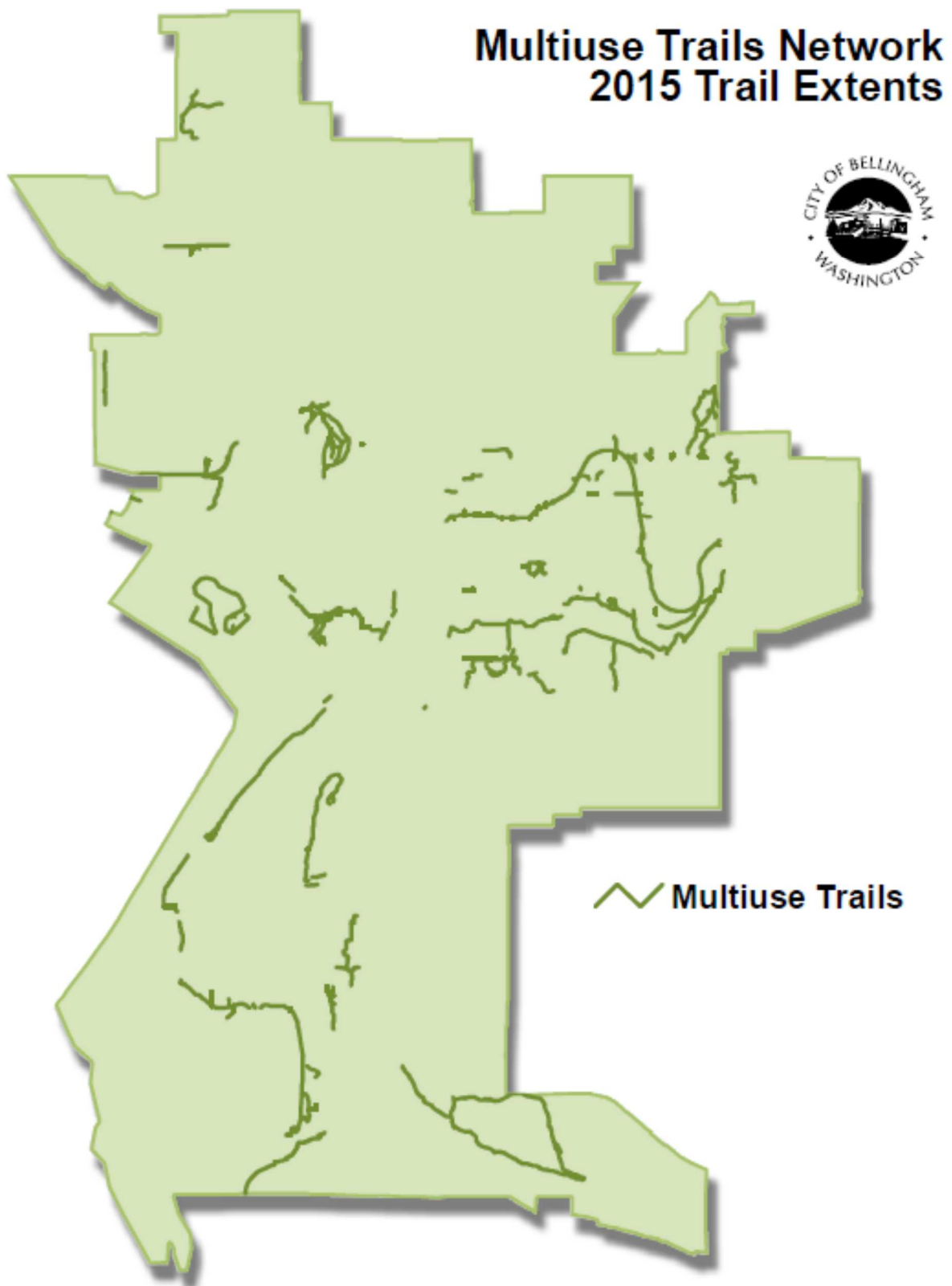


Figure 6.2

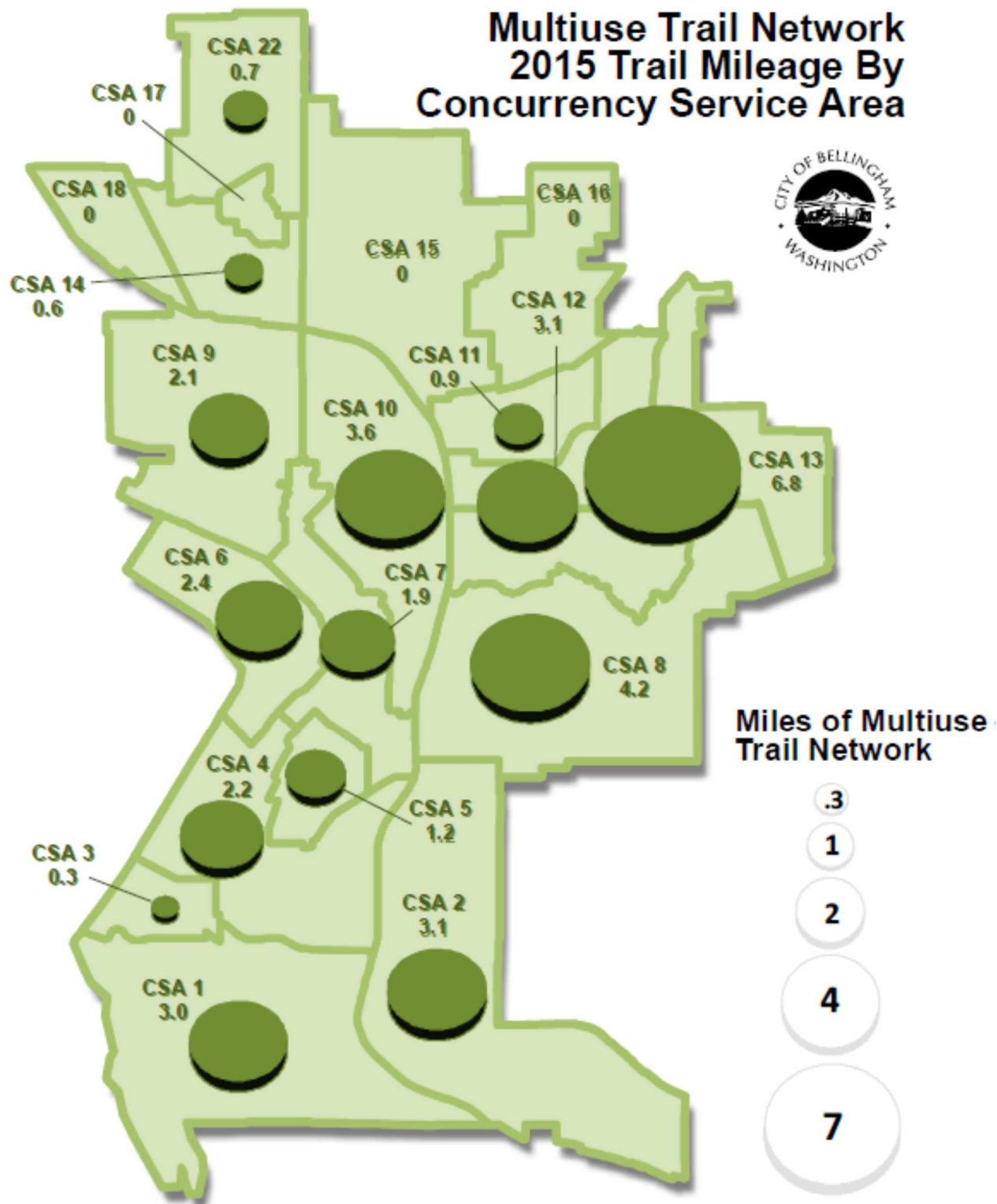


Table 6.1



Mutiuse Trails Mileage by Concurrency Service Area

CSA	Mutiuse Trails Network (Miles)
CSA 1	3.0
CSA 2	3.1
CSA 3	0.3
CSA 4	2.2
CSA 5	1.2
CSA 6	2.4
CSA 7	1.9
CSA 8	4.2
CSA 9	2.1
CSA 10	3.6
CSA 11	0.9
CSA 12	3.1
CSA 13	6.8
CSA 14	0.6
CSA 15	0.0
CSA 16	0.0
CSA 17	0.0
CSA 18	0.0
CSA 19	0.0
CSA 20	1.2
CSA 21	0.0
CSA 22	0.7
CSA 23	0.0
Grand Total	37.4

Chapter 7: Whatcom Transportation Authority Primary Transit Network

Whatcom Transportation Authority (WTA) provides public fixed route transit bus service, Paratransit bus service, and a vanpool program available to the public and employers. WTA is funded by sales tax revenue generated in a Public Transit Benefit Area (PTBA) that is contiguous with the boundaries of Whatcom County. WTA serves the City of Bellingham as well as the smaller towns and communities of Ferndale, Lynden, Blaine and Birch Bay, Lummi Nation, Sudden Valley, Kendall, Everson, Nooksack and Sumas. WTA also cooperates with Skagit Transit in neighboring Skagit County, to provide service between Bellingham and Mount Vernon. More information is available on the WTA web site at <http://www.ridewta.com/>

Fixed Route Transit Bus Service

WTA's fixed route transit bus service features 30 routes, including a network of four high-frequency corridors within Bellingham. Service is offered seven days a week, with more limited service on Saturdays, Sundays and evenings.

- Between 2002 and 2014, WTA ridership increased by 86%
- In 2008, we were recognized by the Federal Transit Administration for achieving the highest annual ridership increase in the nation
- In 2014, WTA provided 4.97 million fixed route transit bus boardings, or approximately 17,000 fixed route transit bus boardings per weekday
- WTA plays a major role transporting students and employees to and from Western Washington University (WWU), Whatcom Community College, Bellingham Technical College, and Northwest Indian College, as well as Bellingham middle schools and high schools
- WWU students voted to self-fund transit passes for every student through their tuition costs and in 2014, WWU students comprised 38% of WTA's overall fixed route ridership

Paratransit Services

WTA's Paratransit service area and span of service mirrors the WTA fixed route transit bus service and area. WTA provides an average of 600 Paratransit trips per weekday.

Fleet and Facilities

WTA's fleet includes 60 full-size buses (including eight hybrid electric buses), 37 Paratransit minibuses, and 39 vanpool vans. WTA operates four transit centers: Bellingham Station, Cordata Station (in North Bellingham), Ferndale Station and Lynden Station.

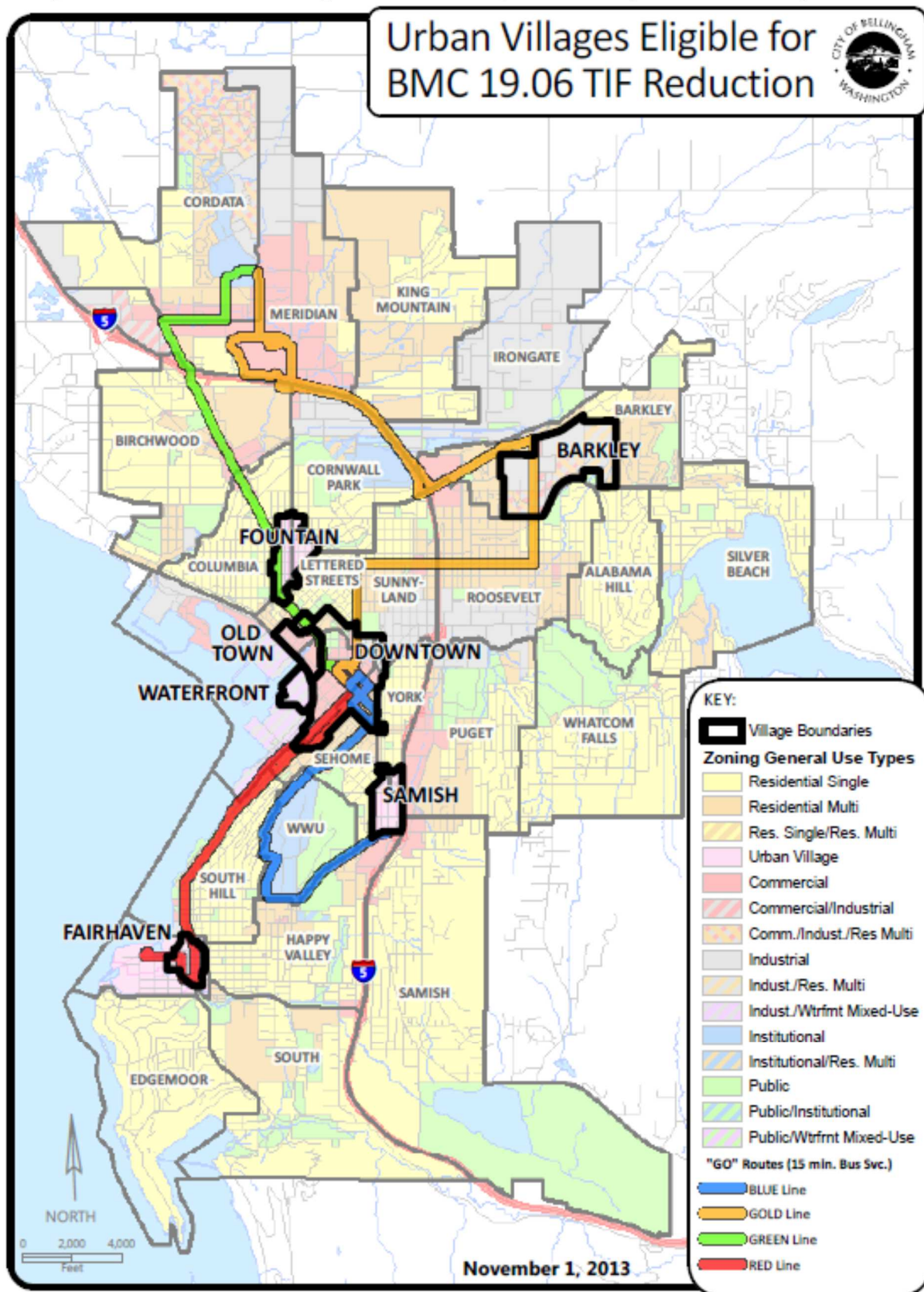
Integrated Transit and Transportation Planning

The City of Bellingham works directly with WTA on both land use and transportation issues and all of Bellingham's Urban Villages are served with high-frequency 15-minute transit service. City transportation planners worked directly with WTA in the development of the 2004 WTA Strategic Plan and WTA staff worked directly with City transportation planners in the development of the 2006 Transportation and Land Use Elements of the Bellingham Comprehensive Plan so that City and WTA plans are fully integrated with one another. The City and WTA are working directly with each other once again as both agencies update the WTA Strategic Plan and the Transportation Element in 2015 - 2016.

Figure 7.1 WTA Transit Routes in Bellingham - 2015



Figure 7.2 Urban Villages Served by WTA High-Frequency Transit



Chapter 8: Automobile and Freight Truck Arterial Networks

Arterial Streets and Traffic Signals

Arterial streets and traffic signals are available and provide benefit to all users (pedestrian, bicycle, transit, automobile, and freight truck), but previous chapters have discussed pedestrian, bicycle, and transit networks and this chapter focuses on arterial streets and infrastructure as it relates to automobile and freight trucks use. The Transportation Element of the Bellingham Comprehensive Plan is available at <http://www.cob.org/services/planning/transportation/long-range-planning.aspx> and describes the existing and planned arterial street network needed to support motorized transportation, such as transit busses, private automobiles, and freight trucks. Arterial streets and traffic signal devices are depicted on Figure 8.1.

Bellingham's arterial street network is locally classified into Principle, Secondary, and Collector arterials, with 2015 lane mile totals as follows:

- Principal Arterial: Major regional transportation corridors and State and federal highways that provide connections into Bellingham from other cities, Whatcom and Skagit Counties, and Canada. 2015 = 105 lane miles.
- Secondary Arterial: Major local transportation corridors that provide connections within and between different parts of Bellingham. 2015 = 102.5 lane miles.
- Collector Arterial: Local transportation corridors that provide connections from neighborhood residential streets to secondary and principal arterial streets. 2015 = 57.2 lane miles.

In 2015, Bellingham's arterial street network has 173 traffic signal devices, as follows:

- 118 Intersection Traffic Signals
- 27 Pedestrian-Activated Flashing Crosswalks
- 26 Automated School Zone Flashers
- 2 Variable Message Radar Speed Signs

Designated Freight Truck Routes

Bellingham has classified some arterial streets and all State and federal highways as Designated Truck Routes, as depicted on Figure 8.2. The City encourages freight shipping companies to direct their drivers to primarily use the designated freight truck routes, but freight trucks cannot be prevented from using public streets for deliveries unless there are weight restrictions on bridges or other public safety access restrictions.

Figure 8.1 Bellingham's Arterial Street Network

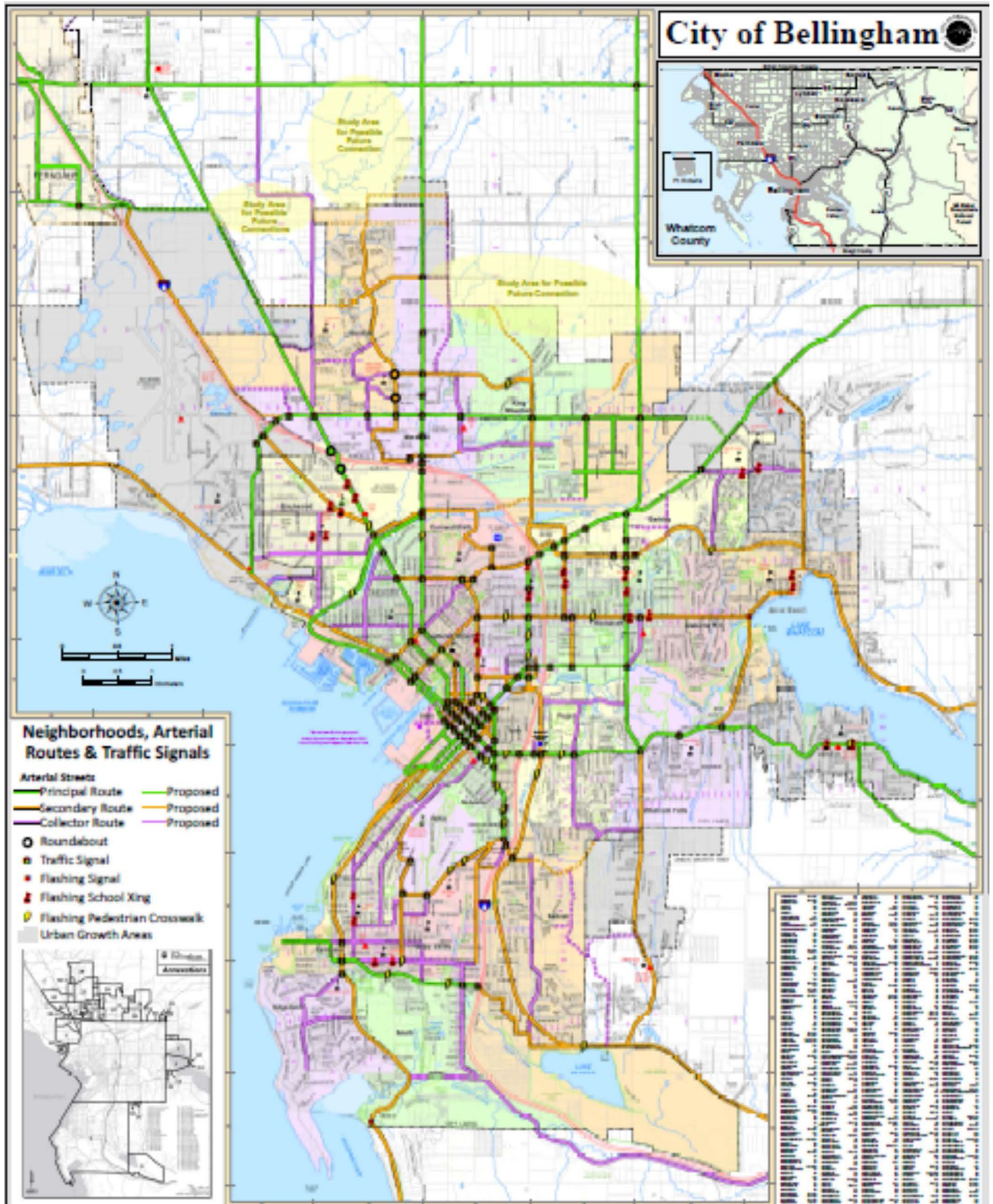


Figure 8.2 Bellingham Designated Truck Route Network



Chapter 9: Waterfront District Biennial Monitoring Program

In 2010, transportation planners created **CSA #6** for the Waterfront District in preparation for the adoption of a Waterfront District Master Plan. In 2015, CSA #6 has one of the 1,740 PTA with no credits given for pedestrian facilities, bicycle lanes, or transit services, but 860 credits provided for multiuse trails. Cornwall Avenue has continuous sidewalks on both sides between Wharf Street and West Laurel Street and from Maple to Chestnut, but lack of sidewalk on either side of the Cornwall Avenue Bridge creates a major barrier to pedestrian travel between downtown and the Waterfront. Wharf Street is a steep and narrow street without sidewalks or bicycle lanes and construction of either will require major excavation of the hillside, construction of retaining walls, and significant environmental impact mitigation. WTA transit service does not exist for the Waterfront. WTA does not currently have plans to serve the Waterfront, and it will be a very long time before fixed route transit service becomes a viable option to serve the Waterfront District. Additional person trip credits will not be awarded until new arterials, sidewalks, and bicycle lanes are constructed to increase the PTA to serve new Waterfront development. Additional person trip credits will also be awarded if and when fixed route WTA transit service becomes available to the public in the Waterfront.

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 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, which will document transportation mobility into and out of the Waterfront District on arterial streets for pedestrians, bicyclists, transit busses, automobiles, and freight trucks. The 2016 TRAM will include the Port's Biennial Monitoring Program report.

This section reserved for
2015 Waterfront District Biennial Monitoring Program
Required by the Port of Bellingham

Figure 9.1 Bellingham Waterfront District Boundaries

