Transportation Report on Annual Concurrency

In support of BMC 13.70 Multimodal Transportation Concurrency

March 2012

Prepared by:

Chris Comeau, AICP, Transportation Planner
# 2012 TRAC TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Sections</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1: Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Section 2: Status of Recommendations from 2011 TRAC</td>
<td>4</td>
</tr>
<tr>
<td>Section 3: 2012 TRAC Recommendations</td>
<td>5</td>
</tr>
<tr>
<td>Section 4: Detail of Existing Conditions for 2012 TRAC Findings</td>
<td>7</td>
</tr>
</tbody>
</table>
| Section 5: 2012 Primary Pedestrian Network Completeness  
   *(From March 2012 Draft Pedestrian Master Plan; adoption expected July 2012)* | 9 |
| Section 6: 2012 Current State of Bicycle Infrastructure Completeness  
   *(From 2006 Comprehensive Plan in advance of future Bicycle Master Plan)* | 12 |
| Section 7: Observations and Implications of 2012 TRAC | 15 |
| Section 8: How Multimodal Transportation Concurrency Works | 16 |
| Section 9: Procedures for New Development and Redevelopment  
   Under BMC Multimodal Transportation Concurrency | 22 |
| Section 10: Multimodal Transportation Concurrency Resources | 24 |

Maps/Tables/Graphics

- Figure 1. Transportation Concurrency Certificates issued from 2006 through 2011 | 7 |
- Table 1. Person Trips Available by Concurrency Service Area in 2012 | 8 |
- Table 2. Primary Pedestrian Network Sidewalk Extents by CSA | 9 |
- Figure 2. Primary Pedestrian Network 2012 Sidewalk Extents by CSA | 10 |
- Figure 3. Primary Pedestrian Network 2012 Sidewalk Extents (Citywide) | 11 |
- Table 3. Bicycle Infrastructure Extents By CSA | 12 |
- Figure 4. Bicycle Infrastructure Network 2012 Bike Lane Extents by CSA | 13 |
- Figure 5. Bicycle Infrastructure Network 2012 Bike Lane Extents (Citywide) | 14 |
- Figure 6. Bellingham’s 16 Concurrency Service Areas (CSA) | 17 |
- Table 4. BMC 13.70 Table 1. Multimodal Transportation Concurrency Policy Dials | 19 |
- Figure 7. Calculation of Person Trips Available and Used Within Each CSA | 21 |
- Figure 8. Multimodal Transportation Concurrency Development Requirements | 23 |
Section 1: Executive Summary

In June 2006, the Bellingham 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)).

[*Note*: Bellingham requires financial commitment within 3 years consistent with requirements for fully funded project on 6-Year TIP]

In early 2007, consistent with 2006 warnings that traditional auto-oriented LOS methodology would not help to achieve either the City’s nor GMA infill land use goals, an LOS violation occurred and a 9-month-long moratorium on new development was imposed along Northwest Avenue. In 2008, Bellingham transportation planners hired TranspoGroup, Inc. to help develop an innovative new method to include all major transportation modes (pedestrian, bicycle, multiuse trail, transit, and automobile) rather than the traditional auto-only method used by most jurisdictions.

On January 1, 2009, Bellingham fully implemented the innovative new Multimodal Transportation Concurrency Program and in November 2009 received the American Planning Association/Planning Association of Washington Award for Transportation Planning in Washington State. A full account of these events and Bellingham’s approach to concurrency requirements titled "Moving Beyond the Automobile" is available on the City web site at [http://www.cob.org/services/neighborhoods/community-planning/transportation/awards.aspx](http://www.cob.org/services/neighborhoods/community-planning/transportation/awards.aspx)

Bellingham’s Multimodal Transportation Concurrency Program annually measures sidewalks, bicycle lanes, multi-use trails, WTA transit service, and arterial streets in the context of various land use environments found within Bellingham, currently divided into 16 Concurrency Service Areas (CSA) (Map page 17). All of these measurements are compiled and converted into Person Trips Available (PTA) by each CSA, which is Bellingham’s GMA-required adopted level-of-service standard in the Transportation Element of the Bellingham Comprehensive Plan.

The Transportation Report on Annual Concurrency (TRAC) is an annual monitoring and reporting system that Public Works has published since March 2006 to inform the City Council, 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 - PTA by CSA (See Table 1). As such, the TRAC is Bellingham’s annual documentation that the City is in full compliance with the Washington State Growth Management Act (GMA) requirements.
In addition to tracking transportation impacts from new development, the TRAC provides 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). The 6-Year TIP must be adopted by July 1 each year and must be consistent with the Transportation Element of the Comprehensive Plan.

The 2012 TRAC incorporates recommendations made in the 2011 TRAC and demonstrates that Bellingham’s Multimodal Transportation Concurrency methodology is integrating multimodal transportation system capacity and availability with various land use contexts within City limits and is further promoting both the Bellingham Comprehensive Plan and GMA goal of directing new development toward compact, mixed use urban areas where adequate transportation services and facilities are most available.

Section 2: Status of Recommendations from 2011 TRAC

The March 2011 TRAC included several recommendations for enhancements to the Multimodal Transportation Concurrency Program. Public Works staff explored each recommendation and took the actions listed below.

- **Ensure Consistency Between BMC 13.70 and 2011 Comprehensive Plan Update and incorporate all changes into the 2012 TRAC**
  - As the Bellingham Comprehensive Plan is updated in 2011-2012, care should be taken to ensure that the PTA in CSA’s are updated and reflective of the overall forecasts for build-out potential in various portions of the city.
  - **ACTION:** Comprehensive Plan update delayed until 2014, adoption by 2016

- **Maintain and Update the Concurrency Evaluation Tracking Tool to 2012 data**
  - WTA will collect new transit ridership data in April 2011, the City will conduct new arterial traffic counts in 2011, and several new bicycle and pedestrian projects will be constructed throughout Bellingham. In addition, the 2011 update to the Comprehensive Plan will result in fundamental changes to plans for bicycle lanes and the creation of a Pedestrian Master Plan will result in fundamental changes to plans for sidewalks, as well as the status of the percent complete by CSA. The 2012 TRAC will incorporate all of these changes.
  - **ACTION:** 2011 WTA ridership data and arterial traffic counts incorporated into CETT by CSA; 2011 bicycle lane additions accounted for in each CSA; and 2012 Pedestrian Master Plan Network inventoried by CSA.

- **Continued Refinement of Multimodal Transportation Concurrency Methodology**
  - Public Works staff will continue to develop connectivity analysis and metrics for both project-specific impact analysis and overall multimodal transportation system planning and measurement of system effectiveness. **No funding budgeted for this.**
  - The methodology will need to be monitored to assess its effectiveness in promoting infill development. Over time, staff anticipates that there will be a need for refinements and adjustments to be made to support infill and multimodal policies. **On-going.**
o Continue to conduct additional sensitivity analysis to determine the effect of variable weighting factors on different modes of transportation and policy dials in different types of land use environments. There may be justification to award greater credit for completeness of bicycle and pedestrian facilities in Type 1 Urban Village CSA’s and less credit for Type 3 Suburban CSA’s to further the infill land use strategy. *On-going.*

o Establish an Interlocal Agreement with WTA for direct mitigation from developers.

**ACTION:** February 2012 WTA Board approved 25% discount for WTA bus pass purchases issued to residential units in support of Urban Village Trip/TIF Reductions. This can also have the effect of lowering vehicle trip generation and person trips required to pass concurrency evaluation when private developer mitigation is needed in a CSA.

### Section 3: 2012 TRAC Recommendations

- **Explore Further Refinements/Additions of Concurrency Service Areas**
  - As portions of the Bellingham UGA are annexed to the City and as urban village plans are created within Bellingham, the creation of new CSAs will be necessary.
    
    *There are two active annexation proposals in the northwestern portion of the Bellingham UGA: the 174-acre Bennett-Bakerview area between Interstate 5 and the Bellingham International Airport and the 261-acre Pacific Highway-Northwest area just north of Bakerview Road between Pacific Highway and Northwest Avenue. New CSA’s will need to be created for these areas in advance of annexation to the City, which may also require reconfiguration of adjacent CSA boundaries (See below). This may require significant staff time to develop.*

  - Continue to monitor the level of development activity surrounding the Whatcom Community College area and the WTA Cordata transit hub. A new Type 1, or Type 1 Institutional, CSA should be created for this area if an urban village plan is created for it in the future.

    *In 2010, the City approved mixed use zoning for Area 11 of the Cordata Neighborhood immediately northeast of Cordata/Stuart and a private developer is proposing significant mixed use development there. WCC does not currently have an Institutional Master Plan (IMP), but has recently expressed interest in creating a WCC IMP for Area 17E and portions of Areas 14 and 17C and other WCC landholdings in the Cordata Neighborhood. This would also require reconfiguration of adjacent CSA boundaries and may require significant staff time to develop.*

  - Continue to monitor the level of development activity surrounding the Saint Joseph’s Hospital area. A new Type 1 Institutional CSA may need to be created for this area in the future.

    *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 SJHIMP 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.

- **Continued Refinement of Multimodal Transportation Concurrency Methodology**
  - Public Works staff should continue work to develop connectivity analysis and metrics for both project-specific 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.*

- **Monitor Multimodal Transportation Concurrency Methodology for Effectiveness**
  - Continue to publish TRAC and annually report observations of system effectiveness to Planning Commission, Transportation Commission, and City Council. The methodology is still relatively new 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.*

- **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.

  *Since January 1, 2012, the CETT has been updated to incorporate:*
  
  1.) *Transportation Concurrency Certificates issued in 2011;*
  2.) *Arterial traffic counts collected in 2010-2011;*
  3.) *WTA public transit ridership and service frequency data collected in 2011;*
  4.) *Marked bike lane facilities constructed in 2011;*
  5.) *A new 2012 inventory of sidewalk facilities comprising the "Primary Pedestrian Network" in the draft Pedestrian Master Plan; and*
  6.) *“Multi-use trail” (bicycle-friendly) data inventoried in 2011 and incorporated into each CSA where these trails serve a clear transportation function.*
Section 4: Detail of Existing Conditions for 2012 TRAC Findings

The 2012 TRAC identifies Person Trips Available by Concurrency Service Area using 2010-2011 traffic count data, 2011 WTA capacity and ridership statistics, 2011 inventories of marked bicycle lanes and multiuse trails, as well as pipeline trips reserved for development in the Concurrency Evaluation Tracking Tool (CETT) for current conditions through January 1, 2012. In addition, the 2012 TRAC incorporates the newly created citywide "Primary Pedestrian Network" in the Draft Pedestrian Master Plan with inventories of network completeness by CSA.

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.

Pipeline Development Projects

Person trips generated from the 118 total development proposals evaluated for transportation concurrency between June 15, 2006 and December 31, 2011 have been assigned to and withdrawn from affected CSAs.

Figure 1. 118 Transportation Concurrency Certificates Issued from June 15, 2006* through December 31, 2011

### Table 1. Person Trips Available (PTA) by Concurrency Service Area (CSA) in 2012

<table>
<thead>
<tr>
<th>CSA</th>
<th>Comp</th>
<th>PTA</th>
<th>Comp</th>
<th>PTA</th>
<th>Comp</th>
<th>PTA</th>
<th>PTA</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Edgemoor-South</td>
<td>31%</td>
<td>0</td>
<td>44%</td>
<td>442</td>
<td>79%</td>
<td>580</td>
<td>49</td>
<td>975</td>
</tr>
<tr>
<td>2. Samish</td>
<td>23%</td>
<td>0</td>
<td>27%</td>
<td>269</td>
<td>16%</td>
<td>0</td>
<td>19</td>
<td>2,367</td>
</tr>
<tr>
<td>3. Fairhaven Urban Village</td>
<td>84%</td>
<td>680</td>
<td>61%</td>
<td>611</td>
<td>50%</td>
<td>0</td>
<td>266</td>
<td>1,276</td>
</tr>
<tr>
<td>4. South Hill-Happy Valley</td>
<td>54%</td>
<td>80</td>
<td>50%</td>
<td>502</td>
<td>85%</td>
<td>700</td>
<td>168</td>
<td>1,611</td>
</tr>
<tr>
<td>5. WWU</td>
<td>80%</td>
<td>600</td>
<td>13%</td>
<td>125</td>
<td>91%</td>
<td>820</td>
<td>989</td>
<td>307</td>
</tr>
<tr>
<td>6. Waterfront District</td>
<td>51%</td>
<td>20</td>
<td>39%</td>
<td>388</td>
<td>40%</td>
<td>0</td>
<td>0</td>
<td>880</td>
</tr>
<tr>
<td>7. Urban Core (4 Villages)</td>
<td>89%</td>
<td>780</td>
<td>15%</td>
<td>148</td>
<td>67%</td>
<td>340</td>
<td>1,194</td>
<td>6,952</td>
</tr>
<tr>
<td>8. Puget-Whatcom Falls</td>
<td>65%</td>
<td>300</td>
<td>86%</td>
<td>856</td>
<td>71%</td>
<td>420</td>
<td>211</td>
<td>3,599</td>
</tr>
<tr>
<td>9. Birchwood-Columbia</td>
<td>59%</td>
<td>380</td>
<td>11%</td>
<td>113</td>
<td>47%</td>
<td>0</td>
<td>393</td>
<td>2,071</td>
</tr>
<tr>
<td>10. Cornwall-Sunnyland-York</td>
<td>81%</td>
<td>620</td>
<td>14%</td>
<td>142</td>
<td>74%</td>
<td>480</td>
<td>646</td>
<td>3,257</td>
</tr>
<tr>
<td>11. Barkley Urban Village</td>
<td>80%</td>
<td>600</td>
<td>14%</td>
<td>136</td>
<td>82%</td>
<td>640</td>
<td>482</td>
<td>3,565</td>
</tr>
<tr>
<td>12. Roosevelt</td>
<td>70%</td>
<td>400</td>
<td>56%</td>
<td>564</td>
<td>66%</td>
<td>320</td>
<td>661</td>
<td>1,098</td>
</tr>
<tr>
<td>13. Alabama-Silver Beach</td>
<td>61%</td>
<td>220</td>
<td>88%</td>
<td>879</td>
<td>85%</td>
<td>700</td>
<td>0</td>
<td>2,551</td>
</tr>
<tr>
<td>14. Cordata-Meridian</td>
<td>69%</td>
<td>380</td>
<td>3%</td>
<td>28</td>
<td>52%</td>
<td>40</td>
<td>421</td>
<td>7,294</td>
</tr>
<tr>
<td>15. King Mtn</td>
<td>39%</td>
<td>0</td>
<td>1%</td>
<td>6</td>
<td>15%</td>
<td>0</td>
<td>0</td>
<td>2,412</td>
</tr>
<tr>
<td>16. Irongate</td>
<td>5%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>18%</td>
<td>0</td>
<td>0</td>
<td>3,529</td>
</tr>
<tr>
<td><strong>Citywide</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1.) “Percent complete” sidewalks reflects degree of completeness by CSA of “Primary Pedestrian Network” in March 2012 Draft Pedestrian Master Plan (adoption expected July 2012) 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.) 2012 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.
Section 5: 2012 Primary Pedestrian Network Completeness
(From March 2012 Draft Pedestrian Master Plan; adoption expected July 2012)

Table 2.

<table>
<thead>
<tr>
<th>CSA</th>
<th>PPN Street Length Both Sides (Miles)</th>
<th>PPN Sidewalk Length (Miles)</th>
<th>PPN Sidewalk Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA 1</td>
<td>10.7</td>
<td>3.3</td>
<td>31.0%</td>
</tr>
<tr>
<td>CSA 2</td>
<td>13.6</td>
<td>3.2</td>
<td>23.3%</td>
</tr>
<tr>
<td>CSA 3</td>
<td>3.2</td>
<td>2.7</td>
<td>84.4%</td>
</tr>
<tr>
<td>CSA 4</td>
<td>27.3</td>
<td>14.8</td>
<td>54.2%</td>
</tr>
<tr>
<td>CSA 5</td>
<td>3.3</td>
<td>2.7</td>
<td>80.1%</td>
</tr>
<tr>
<td>CSA 6</td>
<td>5.0</td>
<td>2.5</td>
<td>51.2%</td>
</tr>
<tr>
<td>CSA 7</td>
<td>32.0</td>
<td>28.5</td>
<td>88.9%</td>
</tr>
<tr>
<td>CSA 8</td>
<td>23.5</td>
<td>15.3</td>
<td>64.8%</td>
</tr>
<tr>
<td>CSA 9</td>
<td>35.4</td>
<td>20.8</td>
<td>58.8%</td>
</tr>
<tr>
<td>CSA 10</td>
<td>30.8</td>
<td>25.1</td>
<td>81.3%</td>
</tr>
<tr>
<td>CSA 11</td>
<td>8.4</td>
<td>6.7</td>
<td>80.2%</td>
</tr>
<tr>
<td>CSA 12</td>
<td>10.9</td>
<td>7.6</td>
<td>69.5%</td>
</tr>
<tr>
<td>CSA 13</td>
<td>23.8</td>
<td>14.6</td>
<td>61.4%</td>
</tr>
<tr>
<td>CSA 14</td>
<td>22.5</td>
<td>15.5</td>
<td>68.9%</td>
</tr>
<tr>
<td>CSA 15</td>
<td>13.4</td>
<td>5.2</td>
<td>38.8%</td>
</tr>
<tr>
<td>CSA 16</td>
<td>2.5</td>
<td>0.1</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Grand Total | 266.4 | 168.6 | 62.9% |
Figure 2.
Primary Pedestrian Network
2012 Sidewalk Extents By Concurrency Service Area

Miles of PPN Streets

Percent PPN With Sidewalks

PPN Without Sidewalks

CITY OF BILLINGHAM WASHINGTON

2 8 12 20 35

CSA 1 68.9%
CSA 9 58.8%
CSA 10 81.3%
CSA 11 80.2%
CSA 12 69.6%
CSA 13 61.4%
CSA 6 51.2%
CSA 7 88.9%
CSA 8 64.8%
CSA 5 80.1%
CSA 4 54.2%
CSA 2 23.3%
CSA 1 31%
CSA 3 84.4%
CSA 14 68.9%
CSA 15 38.8%
CSA 16 5.2%
Figure 3.
Primary Pedestrian Network
2012 Sidewalk Extents

Primary Ped Network
- Sidewalks on Both Sides
- Sidewalks on One Side
- No Sidewalks
### Table 3.

**Bicycle Infrastructure Extents by Concurrency Service Area**

<table>
<thead>
<tr>
<th>CSA</th>
<th>Bike Lane Network Street Length Both Sides (Miles)</th>
<th>Bike Lane Length (Miles)</th>
<th>Bike Lane Network Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA 1</td>
<td>2.1</td>
<td>1.7</td>
<td>78.8%</td>
</tr>
<tr>
<td>CSA 2</td>
<td>6.7</td>
<td>1.1</td>
<td>16.0%</td>
</tr>
<tr>
<td>CSA 3</td>
<td>1.8</td>
<td>0.9</td>
<td>50.2%</td>
</tr>
<tr>
<td>CSA 4</td>
<td>5.4</td>
<td>4.5</td>
<td>84.7%</td>
</tr>
<tr>
<td>CSA 5</td>
<td>3.0</td>
<td>2.7</td>
<td>91.1%</td>
</tr>
<tr>
<td>CSA 6</td>
<td>3.5</td>
<td>1.4</td>
<td>39.8%</td>
</tr>
<tr>
<td>CSA 7</td>
<td>10.5</td>
<td>7.1</td>
<td>67.2%</td>
</tr>
<tr>
<td>CSA 8</td>
<td>7.6</td>
<td>5.4</td>
<td>71.3%</td>
</tr>
<tr>
<td>CSA 9</td>
<td>9.5</td>
<td>4.4</td>
<td>46.6%</td>
</tr>
<tr>
<td>CSA 10</td>
<td>4.3</td>
<td>3.2</td>
<td>73.6%</td>
</tr>
<tr>
<td>CSA 11</td>
<td>5.6</td>
<td>4.6</td>
<td>82.0%</td>
</tr>
<tr>
<td>CSA 12</td>
<td>3.5</td>
<td>2.3</td>
<td>65.8%</td>
</tr>
<tr>
<td>CSA 13</td>
<td>5.5</td>
<td>4.7</td>
<td>85.3%</td>
</tr>
<tr>
<td>CSA 14</td>
<td>17.3</td>
<td>9.0</td>
<td>52.0%</td>
</tr>
<tr>
<td>CSA 15</td>
<td>16.2</td>
<td>2.4</td>
<td>14.9%</td>
</tr>
<tr>
<td>CSA 16</td>
<td>4.6</td>
<td>0.8</td>
<td>18.0%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>107.4</strong></td>
<td><strong>56.4</strong></td>
<td><strong>52.5%</strong></td>
</tr>
</tbody>
</table>
Figure 4.
Bicycle Infrastructure Network
2012 Bike Lane Extents By Concurrency Service Area

Miles of Bicycle Network Streets

Percent B.N. Without Bike Lanes

Percent B.N. With Bike Lanes

CITY OF BELLINGHAM
WASHINGTON
Section 7: Observations and Implications of 2012 TRAC

**Urban Core:** As Table 1 shows, there are more PTA (8,768) in the central urban core CSA #7, which includes the Downtown, Old Town, Samish, and Fountain Urban Villages, than in any other parts of the City. This is due to the high degree of completeness of the primary pedestrian network (89%), marked bicycle lanes adopted in Comprehensive Plan (67%), the presence of multi-use trail connections, and the prevalence of high-frequency transit routes (1,194 PTA) running through the core to the downtown WTA transit hub.

**Waterfront:** The Waterfront District, CSA #6, has the fewest PTA (788) with only 20 credits given for pedestrian facilities and no credits provided for bicycle lanes or transit services. 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. Cornwall Avenue measures 44-feet between curb faces and on-street parking is currently allowed on both sides of the street. There is not enough physical space between existing curbs to accommodate both 12’ wide truck travel lanes and 6’ wide marked bicycle lanes unless on-street parking is removed from one side of the street in the future. 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 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 the Waterfront District Master Plan is adopted by the City Council and construction of new arterials, sidewalks, and bicycle lanes increases the PTA to serve new Waterfront development. Additional person trip credits will also be awarded if fixed route WTA transit service becomes available to the public in the Waterfront.

**Suburban Area:** Outside of the Waterfront District, CSA #15 (King Mountain annexed in 2009) has the third fewest PTA (1,918). While there are several major arterials serving this north-central portion of the City, it is primarily low density residential development lacking in sidewalks, bicycle lanes, and multi-use trail corridors, with minimal WTA transit service. This area is also segregated from central Bellingham by the presence of Interstate 5, which creates a major barrier to travel for pedestrians, bicyclists, trail users, drivers, and future transit riders. As build-out of this area occurs over time, private development will be required to construct both sidewalks on all public streets and bicycle lanes along arterial streets. The City will also construct capital street improvements that will add sidewalks, bicycle lanes, and new street connections, as well as new multi-use trails. While all of these future improvements will add PTA to CSA 15, if there is not enough PTA to serve new development at the time of concurrency evaluation, then PTA may have to be earned through concurrency mitigation, such as the off-site construction of sidewalk identified on the "Primary Pedestrian Network" in the Pedestrian Master Plan, in order for the City to issue a Certificate of Concurrency.

**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 1, 2, 8, 13, 14, 15, & 16) the 2012 TRAC 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.
Section 8: How Multimodal Transportation Concurrency Works

Adopting an appropriate level of service (LOS) for the community is required under the Growth Management Act, as follows:

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

(a) The transportation element shall include the following subelements:

(B) Level of service standards for all locally owned arterials and transit routes to serve as a gauge to judge performance of the system. These standards should be regionally coordinated;

Bellingham’s Comprehensive Plan Transportation Element adopts the following LOS:

TP-11 Establish Level of Service (LOS) standards for a range of multimodal transportation modes to identify deficiencies and need for improvements.

Bellingham’s adopted LOS standard is “Person Trips Available by Concurrency Service Area” based on arterial and transit capacity for motorized modes and on the degree of network completeness for pedestrian and bicycle modes, as listed below. The individual thresholds for each transportation mode available in each Concurrency Service Area are listed in Table 1 of BMC 13.70 Multimodal Transportation Concurrency requirements.

Motorized Transportation Modes
- Arterial Streets: Peak Hour LOS Person Trips Available (PTA) during weekday p.m. peak hour based on data collected at designated Concurrency Measurement Points for each Concurrency Service Area;

- Transit: Determine seated capacity, measure ridership, and equate to person trips available via public transit service during weekday p.m. peak hour based on data collected at designated Concurrency Measurement Points for each Concurrency Service Area;

Non-motorized Transportation Modes
- Bicycle: Credit person trips according to degree of bicycle network completeness for designated system facilities/routes for each Concurrency Service Area;

- Pedestrian: Credit person trips according to degree of pedestrian network completeness for designated system facilities/routes for each Concurrency Service Area; and

- Trails: Credit person trips according to degree of bicycle and pedestrian network completeness, where trails serve a clear transportation function for a Concurrency Service Area.

Bellingham is divided into 16 Concurrency Service Areas (CSA) classified into Types 1, 1A, 2, or 3 according to location, land use environment, and availability of multimodal transportation modes (See Figure 6).
Figure 6. Bellingham's 16 Concurrency Service Areas (CSA)
The intent of BMC 13.70 Multimodal Transportation Concurrency is to further implement the multimodal transportation policies of the Transportation Element and the infill land use strategies of the Land Use Element. Consistent with Washington’s Growth Management Act and the Bellingham Comprehensive Plan, the Multimodal Transportation Concurrency methodology promotes infill development where the greatest degree of multimodal transportation facilities are already available or have funding secured for construction.

Concurrency Service Area (CSA) Classifications

**Type 1 CSA (Green)** are Urban Villages with adopted Master Plans (Downtown, Old Town, Samish, and Barkley) or active planning processes leading toward the adoption of a Master Plan (Fountain). Type 1 CSA are characterized by a high percentage of pedestrian and bicycle facilities, high frequency transit service, and higher density land uses with a good mix of services. WWU (CSA #5) is an exception and is classified as “Type 1 Institutional” due to the extremely high transit service and ridership, campus parking limitations, and the adopted WWU Institutional Master Plan. The combination of land use characteristics and availability of transportation alternatives in Type 1 CSAs generally creates a lower degree of reliance on the private automobile for transportation mobility.

**Type 1A CSA (Blue)** are areas that have very similar transportation characteristics to Type 1 CSA’s (Green), but have different land use characteristics in that they are primarily “Institutional Uses” and/or have “Institutional Master Plans (IMP).” Western Washington University (WWU-CSA 5) is the only Type 1A CSA at present, but the Saint Joseph’s Hospital campus area, the Whatcom Community College campus area, and the Bellingham Technical College (BTC) campus area are all potential future Type 1A (Blue) CSA’s.

**Type 2 CSA (Yellow)** are essentially transition areas between Urban Villages and outlying suburban areas. With the exception of the Roosevelt-Chandler CSA #12, Type 2 CSAs are located west and south of Interstate 5. Type 2 CSA are generally characterized by grid pattern residential streets, a moderate percentage of pedestrian and bicycle facilities, some high frequency transit service, and moderate density land uses that are primarily residential with a smaller degree of mixed uses and neighborhood commercial services. The combination of land use characteristics and availability of transportation alternatives in Type 2 CSAs generally creates a moderate degree of reliance on the private automobile for transportation mobility.

**Type 3 CSA (Red)** are located furthest from the urban core at the outer edges of Bellingham and, with the exception of Edgemoor-South CSA #1, are primarily located east and north of Interstate 5. Type 3 CSA are characterized by a low percentage of pedestrian and bicycle facilities, moderate to low transit service availability, moderate to low density land use with a small to non-existent degree of mixed uses. The combination of land use characteristics and availability of transportation alternatives in Type 3 CSAs generally creates a higher degree of reliance on the private automobile for transportation mobility.

In order to promote infill development where adequate multimodal transportation facilities already exist, higher emphasis and Person Trip Availability is awarded to Type 1 CSAs, moderate emphasis and Person Trip Availability is awarded to Type 2 CSAs, and lower emphasis and Person Trip Availability is awarded to Type 3 CSAs. This is done through weighting factors called “Policy Dials” adopted in BMC 13.70 Table 1., on the next page.
<table>
<thead>
<tr>
<th>Mode</th>
<th>Transportation Concurrency Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type 1&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Motorized</strong></td>
<td></td>
</tr>
<tr>
<td>Auto</td>
<td></td>
</tr>
<tr>
<td>Mode weight factor&lt;sup&gt;4&lt;/sup&gt;</td>
<td>0.70</td>
</tr>
<tr>
<td>Transit</td>
<td></td>
</tr>
<tr>
<td>Mode weight factor&lt;sup&gt;5&lt;/sup&gt;</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Non-Motorized</strong></td>
<td></td>
</tr>
<tr>
<td>Pedestrian</td>
<td></td>
</tr>
<tr>
<td>Percent threshold for minimum system complete&lt;sup&gt;6&lt;/sup&gt;</td>
<td>50%</td>
</tr>
<tr>
<td>Person trip credit for 1% greater than minimum threshold&lt;sup&gt;7&lt;/sup&gt;</td>
<td>20</td>
</tr>
<tr>
<td>Mode weight factor&lt;sup&gt;8&lt;/sup&gt;</td>
<td>1.00</td>
</tr>
<tr>
<td>Bicycle</td>
<td></td>
</tr>
<tr>
<td>Percent threshold for minimum system complete</td>
<td>50%</td>
</tr>
<tr>
<td>Person trip credit for 1% greater than threshold</td>
<td>20</td>
</tr>
<tr>
<td>Mode weight factor&lt;sup&gt;9&lt;/sup&gt;</td>
<td>1.00</td>
</tr>
<tr>
<td>Multi-Use Trails&lt;sup&gt;10&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Person trip credit for 1% greater than threshold&lt;sup&gt;11&lt;/sup&gt;</td>
<td>10</td>
</tr>
<tr>
<td>Mode weight factor&lt;sup&gt;12&lt;/sup&gt;</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1. Type 1 = Urban Village areas with adopted master plans, high-density mixed use zoning, or an active master plan process.
2. Type 2 = Medium density areas adjacent to and influenced by Urban Villages.
3. Type 3 = Lower density and auto-oriented areas outside of Urban Villages.
4. Auto mode weight factor considers the importance of roadways to a service area, relative to the availability of other mode alternatives.
5. Transit mode weight factor considers the availability/viability of the transit mode to a service area.
6. This is the minimum level of the planned system completed for it to be considered a viable mode alternative.
7. Person trips credited to service area based on the amount of the system completed minus the minimum threshold.
8. Pedestrian mode weight factor considers the importance of pedestrian facilities to a service area, relative to land use and travel patterns.
9. Bicycle mode weight factor considers the importance of bicycle facilities to a service area, relative to land use and travel patterns.
10. Multi-Use Trails = relatively level, multi-use trails connecting activity centers, destinations, and biking facilities.
11. Person trips credited to service area based on each comparative 1% of the total planned bike system adopted in Comprehensive Plan.
12. Multi-Use Trail mode weight factor considers the importance of bike-friendly trails to a service area, relative to land use and travel patterns.
Calculations to establish the number Person Trips Available for each CSA are made as follows:

**Motorized Vehicle Person Trips Available**

The City regularly collects vehicle traffic counts at designated Concurrency Measurement Points on arterials streets serving Concurrency Service Areas (CSA). Vehicle traffic volumes are converted to person trips using local and national data for average car occupancy rates. Motorized vehicle person trips are then used as one variable to calculate total Person Trips Available within each Concurrency Service Area (CSA). Adjustments are made based on the directional use of the corridor.

**Transit Person Trips Available**

Transit trips are determined by counting seated capacity available on WTA buses, measurements of ridership on selected routes at Concurrency Measuring Points, and conversion to Person Trips Available within Concurrency Service Areas (CSA). Transit person trips are used as one variable to calculate total Person Trips Available within Concurrency Service Areas (CSA). The City works with WTA to determine seated capacity on transit routes, regularly collect transit ridership statistics, and to calculate the number of transit person trips available in each Concurrency Service Areas (CSA) within the City. Adjustments are made based on the ability of the off-peak transit service to actually serve travel demands during the PM peak hour.

For example, each WTA high-frequency transit “GO Line” (15-minute headways) can provide the seated capacity equivalent of up to 320 person trips per hour (40-seat bus x 4 runs per hour in each direction).

**Non-Motorized Bicycle and Pedestrian Person Trips Available**

Sidewalks, bicycle lanes, and, in some cases, off-street multi-use trails also provide person trips in the multimodal transportation network. Pedestrian and bicycle trips are determined by measuring the degree of completeness of selected pedestrian and bicycle routes serving Concurrency Service Areas (CSA), and converting this to credits for Person Trips Available. The City directly measures the degree of completeness of existing vs planned pedestrian and bicycle facilities serving Concurrency Service Areas (CSA). Pedestrian and bicycle person trip credits are used as one variable to calculate total Person Trips Available within Concurrency Service Areas (CSA). The City awards 20 person trip credits for every 1% of bicycle or pedestrian facility completed above 50%.

As an example, assume that the existing inventory shows 45,000 linear feet of marked bicycle lanes serving Concurrency Service Areas (CSA) “X”. Assume that an additional 27,000 linear feet of planned bicycle lanes have been adopted in the Transportation Element and/or fully funded within the 6-Year TIP. This equates to 72,000 linear feet of “planned” bicycle network for the CSA “X”. The 72,000 planned network divided by the 45,000 existing inventory results in a 62.5% complete network, which is 12.5% above the minimum 50% threshold for awarding person trip credit. At 20 credits for every 1% above 50%, this would convert to 250 bicycle person trips available for CSA “X”. The more complete the bicycle network is, the more person trip credits are available.
Figure 7. Calculation of Person Trips Available and Used Within Each CSA
Section 9: Procedures for New Development and Redevelopment
Under BMC 13.70 Multimodal Transportation Concurrency

Multimodal Transportation Concurrency evaluation is a pre-application requirement. When new development is proposed, the project is evaluated to ensure that there are enough Person Trips Available in the CSA to serve the new development. If there are enough PTA, then the number of PTA needed are extracted from the system and a Temporary Certificate of Transportation Concurrency is issued with a one-year window to submit a complete application for the proposed development. If a complete application is not received by the City before the one year expiration date, then the certificate expires and the reserved PTA are restored to the system.

As per RCW 36.70A.070 (6) (b), new developments must be prohibited unless there are an adequate number of Person Trips Available within the Concurrency Service Area (CSA) of the development, or improvements to the multimodal transportation system to accommodate the impacts are made concurrent with the development or unless the multimodal transportation network affected by the new development meets one of the three exceptions listed below, consistent with the concurrency management requirements of the Growth Management Act.

Consistent with transportation concurrency requirements of the Growth Management Act (RCW 36.70A.070 (6) (b)), land use and building permits for new developments may be issued as long as:

1.) The Concurrency Service Area (CSA) affected by the proposed development has an adequate number of Person Trips Available (PTA), or

2.) The Concurrency Service Area (CSA) affected by the proposed development has new or expanded multimodal transportation facilities or services scheduled and fully funded for improvement within the first, second, or third year of the City's Six-Year Transportation Improvement Program or within WTA's adopted budget; or

3.) The transportation facilities affected by the proposed development are designated as “Highways of Statewide Significance” not subject to local transportation concurrency standards. As per RCW 36.70A.070 (6)(a)(iii)(C) “Highways of Statewide Significance” (HSS), such as Interstate 5 and Guide Meridian (SR 539) within Bellingham, are not subject to transportation concurrency requirements. The Washington State Department of Transportation (WSDOT) is responsible for setting LOS standards for Highways of Statewide Significance (HSS) and has established LOS D in urban growth areas.

If there are not enough Person Trips Available in the CSA to serve a proposed development, then the applicant may propose to reduce or delay project or implement concurrency mitigation measures (sidewalk, bike lane, transit, TDM, etc) to provide the number of person trips needed to serve the proposed development. For motorized modes, this may require the addition of capacity for vehicles or transit through a variety of measures. For non-motorized modes, this may include the construction of sidewalk or bicycle lanes.
Transportation concurrency mitigation refers only to the addition of motorized transportation capacity or completeness of non-motorized transportation network, whether through the addition of a new travel lane or turn lane for vehicles, sidewalks, bicycle lanes, ride-sharing and other TDM programs, or transit service. Figure 3. above, shows that “Concurrency” is only one piece of the transportation mitigation puzzle.

In addition to the pre-application requirements of BMC 13.70 Multimodal Transportation Concurrency, all new development proposed in Bellingham is also required to:

1.) Conduct a traffic impact analysis study for any project expected to generate 50 or more p.m. peak hour vehicle trips or where known level of service issues exist on arterials or at intersections;
2.) Fund and construct street frontage improvements (curb, gutter, sidewalk) that are required by City development regulations;
3.) Fund and construct transportation improvements that are required to mitigate impacts identified through the State Environmental Policy Act (SEPA) project review process; and
4.) Pay Transportation Impact Fees (TIF) at the time of building permit issuance consistent with the base rate applied on the date of application for building permit (2011 TIF = $1,927 per p.m. peak hour vehicle trip).
Section 10: Multimodal Transportation Concurrency Resources

All questions regarding Bellingham’s Multimodal Transportation Concurrency requirements, the Transportation Report on Annual Concurrency (TRAC), or the Transportation Element of the Bellingham Comprehensive Plan should be directed to:

Chris Comeau, AICP, Transportation Planner
City of Bellingham Public Works Department
210 Lottie Street (City Hall)
Bellingham, WA 98225
(360) 778-7900 telephone; (360) 778-7901 fax;
Email: ccomeau@cob.org

Bellingham Transportation Planning Documents

Public Works web site: www.cob.org, click on “Departments”, click on “Public Works”

City of Bellingham 2006 Comprehensive Plan, Transportation Element
http://www.cob.org/services/neighborhoods/community-planning/transportation/long-range-planning.aspx

BMC 13.70 Multimodal Transportation Concurrency
http://www.cob.org/services/neighborhoods/community-planning/transportation/multi-modal-trac.aspx

BMC 19.06 Transportation Impact Fees (TIF)

2000-2018 Adopted 6-Year Transportation Improvement Programs (TIP)
http://www.cob.org/services/neighborhoods/community-planning/transportation/tip.aspx

NOTE: Draft 2013-2018 TIP will be available in May 2012 and must be adopted by July 1, 2012.

Web sites for Bellingham/Whatcom Transportation Information

Bellingham Public Works Department ................................................................. www.cob.org/pw
Bellingham Planning Department ................................................................. www.cob.org/pcd
Whatcom Transportation Authority ............................................................. www.ridewta.com
Whatcom County ............................................................................................ www.co.whatcom.wa.us
Port of Bellingham ......................................................................................... www.portofbellingham.com
Whatcom Council of Governments ............................................................... www.wcog.org
Washington State Department of Transportation ........................................ www.wsdot.wa.gov
U.S. Federal Highway Administration .......................................................... www.fhwa.dot.gov
U.S. Department of Transportation ............................................................... www.dot.gov