

ADDENDUM TO

Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas (UGAs) Review Final Environmental Impact Statement (Final EIS)

Transportation Analysis of Preferred Alternative

OVERVIEW

Whatcom County is proposing to update its Comprehensive Plan in accordance with the Growth Management Act (GMA). The County is reviewing and updating its Comprehensive Plan elements, development regulations, and Urban Growth Areas (UGAs). As part of this review and update, the County and cities of Bellingham, Blaine, Everson, Ferndale, Lynden, Nooksack, and Sumas are collaborating on a process to allocate population and employment growth to UGAs and the areas of the County outside of UGAs. The County and cities developed growth alternatives studied in the following Final EIS: *Whatcom County 2016 Comprehensive Plan and Development Regulations Update and UGAs Review Final EIS, November 12, 2015*.

The results of the transportation analysis of the Preferred Alternative in the Final EIS are corrected for two segments of Marine Drive on the border of the Bellingham UGA that equal collectively 0.31 miles in length. Consistent with State Environmental Policy Act (SEPA) rules in Washington Administrative Code (WAC) 197-11-706, this addendum provides “additional information or analysis that does not substantially change the analysis of significant impacts and alternatives in the existing environmental document.” This addendum has been circulated to the recipients of the Final EIS per WAC 197-11- 625.

DESCRIPTION AND UPDATED ANALYSIS

Two adjacent segments of Marine Drive on the border of the Bellingham UGA were classified as City UGA with a level of service (LOS) threshold of 0.9 volume to capacity (V/C) ratio: analysis ID 293 and 294 as identified in Draft EIS Appendix F and Final EIS Appendix A. Instead the two segments should be classified as Rural with a LOS threshold of 0.75 V/C ratio. Collectively the two segments total 0.31 miles in length.

The correction would not change the results of the Draft EIS Alternatives’ analysis that showed the segments could meet either the Rural or City UGA V/C ratio threshold. Because the Final EIS Preferred Alternative shows an updated 2036 land use pattern, including a future randomized rural growth pattern consistent with Draft EIS Appendix G methods, the future segment volumes on Marine Drive are increased and the Rural LOS threshold could be exceeded.

As a result of the Preferred Alternative distribution of growth, projected buildout traffic volumes on the two Marine Drive segments would not meet the Rural roadway LOS standard and would require mitigation.

Though the results would change for the segments, the overall results of the Preferred Alternative as being in the range of the Draft EIS Alternatives’ results would not change. The percentage of deficient

miles of County roads would be 0.5% in the range of the Draft EIS Alternatives' range of 0.2% (Alternative 1) to 1.1% (Alternative 4). See Table A-1.

Table A-1. Projected Miles of County Roadway Segment Deficiencies by 2036

Type of Roadway	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Preferred Alternative: Final EIS	<u>Preferred Alternative:</u> Addendum
Total Deficient Miles of Roadway ¹	0.63	1.64	1.64	3.91	1.64	<u>1.95</u>
Percent of Deficient Miles ¹	0.2%	0.5%	0.5%	1.1%	0.5%	<u>0.5%</u>

1 Percentage of total of 358.39 miles of arterial and collector county roads.

Source: Whatcom County, 2014; WCOG, 2015; Heffron Transportation, Inc. 2015

An improvement (adding a center left turn lane west of the bridge) would allow the County's levels of service standards to be met for this roadway section. Development applications would continue to be subject to the County's concurrency standards. See Table A-2.

Table A-2. Possible Roadway Improvements to Meet Concurrency by Location, 2036

Location	Possible Improvements	Alt 1	Alt 2	Alt 3	Alt 4	Pref. Alt
Lakeway Drive, between Bellingham city limits and Terrace Avenue	Add left-turn lanes at intersections and driveways and/or widen the road to meet the urban minor arterial standard.	X	X	X	X	X
Hannegan Road, between Bellingham city limits and Van Wyck Road	Add left-turn lanes at intersections and driveways and/or widen the road to meet the urban minor arterial standard.				X	
Hannegan Road, between Van Wyck Road and Kelly Road	Add left-turn lanes at intersections and driveways and/or widen the road to meet the rural major collector standard.		X	X	X	X
Hannegan Road, between Kelly Road and Axton Road E	Add left-turn lanes at intersections and driveways and/or widen the road to meet the rural major collector standard.				X	
<u>Marine Drive from Bancroft Road to Bridge 172 (GN RR Overpass)</u>	<u>Add center left turn lane in segment west of the bridge.</u>					<u>X</u>

Source: Heffron Transportation, Inc., 2015.

Final EIS corrections by page number and chapter are listed on the following pages.

CORRECTIONS

Chapter 1: Summary

Correct summary matrix on page 1-25 as follows:

Element of Analysis	Alternative 1: No Action	Alternative 2: Historic Shares	Alternative 3: Multi-Jurisdictional Resolution (Resolution 2014-013)	Alternative 4: Targeted Land Use Change	Preferred Alternative
Total Deficient Miles of Roadway: County Roads	0.63	1.64	1.64	3.91	1.64 <u>1.95</u>
Percent of Deficient Miles: County Roads	0.2%	0.5%	0.5%	1.1%	0.5%

Correct summary matrix on page 1-26 as follows:

Mitigation Measures	Possible Roadway Improvements to Meet Concurrency by Location, 2036						
	Location	Possible Improvements	Alt 1	Alt 2	Alt 3	Alt 4	Pref. Alt
	Lakeway Drive, between Bellingham city limits and Terrace Avenue	Add left-turn lanes at intersections and driveways and/or widen the road to meet the urban minor arterial standard.	X	X	X	X	X
	Hannegan Road, between Bellingham city limits and Van Wyck Road	Add left-turn lanes at intersections and driveways and/or widen the road to meet the urban minor arterial standard.				X	
	Hannegan Road, between Van Wyck Road and Kelly Road	Add left-turn lanes at intersections and driveways and/or widen the road to meet the rural major collector standard.		X	X	X	X
	Hannegan Road, between Kelly Road and Axton Road E	Add left-turn lanes at intersections and driveways and/or widen the road to meet the rural major collector standard.				X	
	<u>Marine Drive from Bancroft Road to Bridge 172 (GN RR Overpass)</u>	<u>Add center left turn lane in segment west of the bridge.</u>					<u>X</u>

Source: Heffron Transportation, Inc., 2015.

Chapter 3: Preferred Alternative Evaluation

Section 3.9 Transportation

Amend pages 3-12 and 3-13 section on “Level of Service Impacts on County Roads.”

Level of Service Impacts on County Roads

As population and employment are projected to increase under all of the alternatives, the resulting increase in traffic is expected to degrade the LOS on the transportation system with the Preferred Alternative. The projected effect of the Preferred Alternative on the V/C of county roadways is summarized in Appendix A.

Table 3.9-1 summarizes the county roads with 2036 V/C ratios that are projected to exceed adopted standards with the Preferred Alternative. As shown, the following county road segments are projected to exceed level of service standards:

- Hannegan Road, between Van Wyck Road and Kelly Road
- Lakeway Drive, between the Bellingham city limits and Terrace Avenue
- Marine Drive, between Bancroft Road and Bridge 172

The projected V/Cs with Preferred Alternative at these locations are similar or slightly lower than Draft EIS Alternatives 2 and 3.

Table 3.9-1. County Roadways with Deficient Segments by 2036

Analysis ID	Road Name	Location	Length (miles)	V/C Standard	Preferred Alternative
162	Hannegan Road	Van Wyck Road – Kelly Road	1.01	0.90	0.93
243	Lakeway Drive	Bellingham City Limits – Lowe Avenue	0.42	0.90	1.10
244	Lakeway Drive	Lowe Avenue – Terrace Avenue	0.21	0.90	0.97
<u>2043</u>	<u>Marine Drive</u>	<u>Bancroft Road to Old Marine Drive</u>	<u>0.2</u>	<u>0.75</u>	<u>0.82</u>
<u>2041</u>	<u>Marine Drive</u>	<u>Old Marine Drive to Bridge #172 (GN RR Overpass)</u>	<u>0.11</u>	<u>0.75</u>	<u>0.97</u>

Source: WCOG, 2015; Heffron Transportation, Inc. 2015

Table 3.9-2 summarizes the total projected miles of roadway expected to be deficient with the Preferred Alternative. As shown, the Preferred Alternative is projected to result in deficiencies over about 0.5% of the total miles of arterial and collector roadways under county jurisdiction. This is similar to the deficiencies projected with Draft EIS Alternatives 2 and 3.

Table 3.9-2. Projected Miles of County Roadway Segment Deficiencies by 2036

Type of Roadway	Preferred Alternative
Total Deficient Miles of Roadway	<u>1.64-1.95</u>
Percent of Deficient Miles ¹	0.5%

¹ Percentage of total of 358.39 miles of arterial and collector county roads.

Source: Whatcom County, 2014; WCOG, 2015; Heffron Transportation, Inc. 2015

Amend Mitigation Measures on page 3-15:

Mitigation Measures

Table 3.9-7 summarizes the roadways locations that have been identified for improvement with the Preferred Alternative in order to meet adopted County roadway segment level of service standards through 2036. The table shows improvement of sections of Lakeway Drive and Hannegan Road would be needed to address V/C impacts, similar to Draft EIS Alternatives 2 or 3, as well as improvement to a short section of Marine Drive.

Table 3.9-7. Possible Roadway Improvements to Meet Concurrency by 2036 – Preferred Alternative

Location	Possible Improvements
Lakeway Drive, between the Bellingham city limits and Terrace Avenue	Add left-turn lanes at intersections and driveways and/or widen the road to meet the urban minor arterial standard.
Hannegan Road, between Van Wyck Road and Kelly Road	Add left-turn lanes at intersections and driveways and/or widen the road meet the rural major collector standard.
<u>Marine Drive from Bancroft Road to Bridge 172 (GN RR Overpass)</u>	<u>Add center left turn lane in segment west of the bridge.</u>

Source: Heffron Transportation, Inc., 2015.

See also the summary of mitigation in Section 1.6.1 and Final EIS Appendix A.

Appendix A: Transportation: Draft EIS In-Line Edits and Preferred Alternative Analysis

Amend matrix of County Roadway 2036 LOS Analysis - Preferred Alternative:

Model Link #	Road Name	BMP	EMP	Length	From	To	Rural/City UGA/Co. UGA	FFC	Class	Lane Width	# Lanes	One-way Capacity	Two-way Capacity	Peak Volume	Peak V/C	LOS Standard
2043	Marine Dr	3.06	3.26	0.2	At Bancroft Rd	At Old Marine Dr	City UGA <u>Rural</u>	16	Minor Arterial	12	2	980	1960	1616	0.82	0.9 <u>0.75</u>
2041	Marine Dr	3.26	3.37	0.11	At Old Marine Dr	At Br #172 (GN RR Overpass)	City UGA <u>Rural</u>	16	Minor Arterial	10	2	850	1700	1648	0.97	0.9 <u>0.75</u>