

Appendix G TRANSPORTATION IMPACT FEE – BACKGROUND INFORMATION

EXISTING TRAFFIC CONDITIONS

State Law Requirements

State law requires that, prior to collecting transportation impact fees, the Comprehensive Plan must identify deficiencies in public streets and roads that serve existing development and the means by which existing deficiencies will be eliminated within a reasonable period of time (RCW 82.02.050(4)(a)).

Procedure

Through a transportation impact fee program development study performed in 2007-08, the County has developed a list of planned system improvements that are reasonably related to the impacts of projected growth and are therefore eligible for funding through impact fees. The Six-Year Transportation Improvement Program shows all projects that are programmed for construction in 2009 through 2014.

Results

The analysis of V/C ratios performed by the Whatcom County Division of Engineering did not show any County roads that are currently deficient in meeting the level of service standards set forth in the Whatcom County Comprehensive Plan.

PROJECTED 2022 TRAFFIC CONDITIONS

State Law Requirements

State law requires that the County's Comprehensive Plan must identify additional demands placed on existing public streets and roads by new development (RCW 82.02.050(4)(b)).

Procedure

The Whatcom Council of Governments contracted with a consultant to develop a computer transportation model to project future traffic on County roads. The computer transportation model assumed ~~that the total Whatcom County population would grow from 166,814 people in 2000 to 234,917 people in the year 2022, consistent with population and employment projections from~~ the Whatcom County Comprehensive Plan, ~~which was in effect at the time of the modeling. Additionally, the transportation model utilized projected population growth for each urban growth area as distributed by the Whatcom County Comprehensive Plan. The population assumptions incorporated into the transportation model are shown below.~~

	2000 Population (Based on 2000 City Limits)	2000 Population- (Cities include UGAs)	Projected 2022 Population (Cities Include UGAs)	2000-2022 Net Growth Cities Include UGAs)
Bellingham	67,171	78,040	113,055	35,015
Blaine	3,770	4,779	7,942	3,163
Everson	2,035	2,256	3,912	1,656
Ferndale	8,758	9,934	17,322	7,388
Lynden	9,020	9,604	16,900	7,296
Nooksack	851	895	1,881	986
Sumas	978	995	1,669	674
Subtotal	92,583	106,503	162,681	56,178
Unincorporated Whatcom County	74,231	60,311	72,236	11,925
Total Whatcom County	166,814	166,814	234,917	68,103

The computer transportation model assumed that total Whatcom County employment would grow from 83,195 jobs in 2000 to 116,288 jobs in 2022. Projected employment utilized in the transportation model was derived from the “baseline forecast” from *Whatcom County Population and Economic Forecasts* (ECONorthwest, May 2002), with the exception of agriculture and mining employment, which were not evaluated by the ECONorthwest study.

The Whatcom Council of Governments computer transportation model assumed that the following major road improvements would be constructed by 2022:

Road	Location	Improvement
Blaine/Birch Bay Area		
SR 543	Boblett to Border	Widen from 2 lanes to 4 lanes
Lincoln Rd (Birch Point Connector)	Shintaffer Rd to Birch Pt Rd.	New 2-lane road
Lincoln Rd	Harborview Rd to Blaine Rd	Reconstruction and new 2-lane road
Bellingham Area		
West Illinois St	W Illinois to Marine Dr	New 2-lane road
San Juan Blvd	Elwood to San Juan Blvd	New 2-lane road
Lakeway Dr	Yew St to Electric Ave	Add west bound lane
Sunset Dr	Woburn to City Limits	Widen from 2 lanes to 4 lanes
I-5 South Bound	Ohio on-ramp to Lakeway off	Widen to 3 lanes
I-5 South Bound	Lakeway off-ramp	Widen to 2 lanes
Mid County Area		
SR 539 (Guide Meridian)	Horton Rd to SR 546 (Badger)	Widen to 4 lanes
Lynden		
Drayton St Extension	2nd St to Depot Rd	New 2-lane road
Ferndale		
Nordic Way Connector	Nordic Way to LaBounty Dr	New 2-lane road
Main St/I-5 Overpass		Widen to 4 lanes
Sumas Area		
SR 9	South of Sumas	Realign
Garrison Rd	North of SR 9	Close due to realignment

Results

The results of this computer model are displayed on three attached maps:

Map # G1 Forecasted Total Daily Traffic for 2022 - Depicts total projected daily traffic on County and State roads for 2022, including the percentage of traffic generated by new development from 2000-2022.

Map # G2 Forecasted P.M. Peak Hour Traffic for 2022 – Depicts projected p.m. peak hour traffic on County roads for 2022, including the percentage of p.m. peak hour traffic generated by new development from 2000-2022.

Map # G3 Forecasted P.M. Peak Hour Level of Service for 2022 – Depicts projected p.m. peak hour level of service, in a volume/capacity ratio, for 2022.

The Whatcom Council of Governments is developing an updated transportation model for its regional 2011 Whatcom Transportation Plan. Whatcom County will use that model to update future demands and system needs for the 2011 Comprehensive Plan update. ~~It must be noted that t~~The City of Bellingham ~~is in the process of~~ forecasting traffic for the City and urban growth area using its own computer transportation model. The County will consider incorporating the results from this model in future Comprehensive Plan updates in order to refine the analysis for the Bellingham urban growth area.

Identification of Transportation Projects to Serve New Development

State Law Requirement

State law requires that impact fees may be collected and spent only for the public facilities defined in RCW 82.02.090 (including roads) that are addressed by a capital facilities plan element of a comprehensive land use plan (RCW 82.02.050(4)). State law also requires that the County's Comprehensive Plan must identify additional transportation facility improvements required to serve new development (RCW 82.02.050(4)(c)).

Procedure

~~Road projects completed in the last six years and related costs were derived from Whatcom County Public Works Department records.~~ Road projects proposed in the next six years were derived from the Six-Year Transportation Improvement Program. Projects that weren't reasonably related to the impacts of new development (i.e. maintenance projects that would have to be completed even if there wasn't any new growth) were omitted from the list of projects for which impact fees could be collected.

Results

Whatcom County has identified transportation facility improvements necessary to serve new development as shown below.

Projects Eligible for Impact Fees

Project Name	Project Limits	Project Cost (\$1,000s) Estimated
Birch Bay- Lynden Road / Portal Way	Intersection	\$3,000
Birch Bay-Lynden Road / Harborview Road	Intersection	\$3,000
Birch Bay-Lynden Road Widening	Portal Way to UGA limit just east of Blaine Road	\$1,500
Birch Bay-Lynden Road Widening	UGA limit just east of Blaine Road to Harborview	\$1,800
Birch Point Connector Road	Birch Pt. Road. to Shintaffer Road.	\$2,000
Lincoln Road Extension and Improvement	Shintaffer Road. to Blaine Road (SR 548)	\$9,000
Portal Way/Dakota Creek Bridge #500	Bridge	\$5,000
Birch Bay- Lynden Road / Blaine Road (SR 548)	Intersection	\$3,000
Grandview Road (SR 548) / Vista Drive Intersection	Intersection	\$3,000
Hannegan Rd. Intersections (4 intersections)	Intersections of Hannegan Rd with Kelly Rd., E Laurel, Ten-Mile Rd., Van Dyk Rd.	\$1,800
Hannegan Rd./SR 544 (E Pole Rd.) Intersection	Intersection	\$3,000
Haxton Way Non-motorized Improvements- 2 phases	Gooseberry Point to Slater Rd.	\$3,000
Lake Louise Rd.	Sudden Valley Gate 13 to Austin St.	\$8,000
Lake Louise Rd.	Sudden Valley Gate 13 to Whatcom Blvd.	\$8,000
Lake Whatcom Blvd. High Bridge #115	Entire bridge	\$5,500
Marine Drive	Bennett Drive to Locust St.	\$1,400
Slater Rd.	Hannegan Rd to Northwest Dr	\$4,000
Slater Rd. intersections (3 intersections in project)	Slater Rd with Imhof Rd., Ferndale Rd., and Northwest Rd.	\$3,000
Yew St. Rd.-Samish connector (amalgamation of several projects)	Yew St. (San Juan Blvd.) and Samish Way	\$1,000

Yew Street Rd. Phase 2	Samish Way to Kingsmill	\$6,000
Ferry Dock Improvements	Undefined	\$6,000
		\$7976,000

2009-2014 Transportation Improvement Program

Priority	Project Identification	Project Costs in Thousands of Dollars			
		Federal Cost by Phase	State Funds	Local Funds	Total Funds
-	-	-	-	-	-
1	Hannegan Road / SR 544 Intersection: Signalization	-	-	1,910	1,910
2	Lincoln Road - I: Reconstruction and non-motorized enhancements	-	500	-	500
3	Birch Bay Lynden Road / Blaine Road SR 548: Intersection Improvements	-	-	5	5
4	Yew Street Road, Phase 2: Reconstruction and non-motorized enhancements	1,864	1,636	-	3,500
5	Birch Bay Drive Pedestrian Facility: Pedestrian and non-motorized enhancements	-	-	5	5
6	Bay Road Fish Passage: Fish Passage project, CRP # 908012	-	-	5	5
7	West Illinois / Timson Way: New roadway	1,100	750	5	1,855
8	Hampton Road, Mormon Ditch Bridge #261: Bridge replacement	4,775	-	350	5,125
9	Baker Lake Road, Sulphur Creek Bridge #422: Replacement	1,100	-	165	1,265
10	Mesquite Lake Road, Middle Fork Bridge #140: Rehabilitation	4,150	-	-	4,150
11	Slater Road / Nooksack River Bridge	-	-	750	750
12	Lake Louise Road: Reconstruction	2,860	750	-	3,610
13	Haxton Way Non-Motorized Improvements: Pedestrian and bicycle off-road trail and safety improvements	-	1,624	430	2,054
14	Birch Bay Lynden Road / Portal Way: Intersection improvements	-	750	-	750
15	Clearbrook Road / Johnson Creek, Bridge #302: Bridge Replacement	794	-	-	794
16	Portal Way / Dakota Creek Bridge #500: Reconstruction	-	-	5	5
17	Potter Road, Bridge #148: Replacement	-	-	5	5
18	Lummi View Drive: Embankment Stabilization	-	-	5	5
19	Haxton Way: Structural overlay, paved shoulders, flood proofing	-	500	-	500
20	Tyee Drive: Reconstruction and non-motorized enhancements	-	-	5	5
21	North Shore Road: Reconstruction, non-motorized enhancements	-	-	5	5
22	Slater Road Intersections: Install turn lanes at Imhof Road and Ferndale Road	-	-	5	5
23	Lincoln Road - II: Reconstruction and new road, non-motorized enhancements	-	-	5	5
24	Siper Road: Reconstruction	-	-	5	5
25	Marine Drive: Reconstruction and bicycle/pedestrian	-	-	5	5

	facilities				
26	Marine Drive, Little Squaticum Bridge#1: Rehabilitation	-	-	5	5
27	Mountain View Road: Reconstruction	-	-	5	5
28	Hannegan Road, Scott Ditch Bridge #245: Reconstruction/replacement	-	-	40	40
29	Refurbish/Upgrade of the Whatcom Chief	-	-	40	40
30	Ferry Dock Improvements: Improvements to Lummi Island Ferry Decks	-	-	30	30
31	Various Ferry Parking and Staging	-	-	30	30
32	Gooseberry Point Ferry Dock Relocation: Relocation feasibility study	154	-	74	225
	Various Bridges Rehabilitation / Replacement: As prioritized	-	-	1,400	1,400
34	Subdivision overlays: Various locations	-	-	5	5
35	Structural Overlays: Various locations	-	-	5	5
36	Right of Way Acquisition: Various locations	-	-	30	30
37	Unanticipated Site Improvements: As prioritized	-	-	2,400	2,400
38	Gravel Conversions: Various locations	-	-	5	5
39	Storm water Quality Improvements: As Prioritized	-	-	5	5
40	Non-motorized Transportation Improvements: Various Locations	-	-	5	5
41	Fish Passage Project: Various Locations	-	-	5	5
42	Railroad Crossing Improvements: Various Locations	-	-	5	5
43	Neighborhood Traffic Calming: Various Locations	-	-	5	5
Totals	-	16,797	6,510	7,731	31,038

2010-2015 Transportation Improvement Program

Priority	Project Identification	Project Costs in Thousands of Dollars			
		Federal Cost by Phase	State Funds	Local Funds	Total Funds
1	Lincoln Road - I: Reconstruction and non-motorized enhancements	-	2,400	1,300	3,700
2	Birch Bay Lynden Road / Blaine Road SR 548: Intersection Improvements	-	-	20	20
3	Yew Street Road, Phase 2: Reconstruction and non-motorized enhancements	2,228	-	1,197	3,425
4	West Illinois / Timson Way: New roadway	-	-	5	5
5	Birch Bay Drive Pedestrian Facility: Pedestrian and non-motorized enhancements	-	-	10	10
6	Potter Road, Bridge #148: Replacement	795	-	105	900
7	Baker Lake Road, Sulphur Creek Bridge #422: Replacement	1,225	-	190	1,415
8	Slater Road / Nooksack River Bridge	-	-	750	750
9	Haxton Way Non-Motorized Improvements: Pedestrian and bicycle off-road trail and safety improvements	-	-	100	100
10	Birch Bay Lynden Road / Portal Way: Intersection improvements	-	750	40	790
11	Mosquito Lake Road, Middle Fork Bridge #140: Rehabilitation	450	-	-	450
12	Clearbrook Road / Johnson Creek, Bridge #302: Bridge Replacement	800	-	-	800

13	Portal Way / Dakota Creek Bridge #500: Reconstruction	-	-	5	5
14	Haxton Way: Structural overlay, paved shoulders, flood proofing	-	500	-	500
15	Point Roberts Transportation Improvement: Project location to be determined in 2010	-	-	400	400
16	North Shore Road: Reconstruction, non-motorized enhancements	-	-	50	50
17	Slater Road Intersections: Install turn lanes at Imhof Road and Ferndale Road	-	-	10	10
18	Lincoln Road - II: Reconstruction and new road, non-motorized enhancements	-	-	5	5
19	Siper Road: Reconstruction	-	-	5	5
20	Marine Drive: Reconstruction and bicycle/pedestrian facilities	-	-	5	5
21	Marine Drive, Little Squalicum Bridge#1: Rehabilitation	-	-	5	5
22	Mountain View Road: Reconstruction	-	-	5	5
23	Hannegan Road, Scott Ditch Bridge #245: Reconstruction/replacement	-	-	5	5
24	Legoe Bay Road Protection: Seawall removal and beach creation	-	-	50	50
25	Noon Road, Ten Mile Creek Bridge #240	-	-	300	300
26	Assink Road, Fishtrap Creek Bridge # 256	-	-	320	320
27	South Pass Road, Saar Creek Bridge # 212	-	-	350	350
28	Northwest Drive, Bear Creek Culvert	420	-	58	478
29	South Pass Road Repair: January 2009 storm	453	-	92	545
30	Manley Road Culvert Replacement: January 2009 storm	210	-	30	240
31	Emerald Way Slide Repair: from January 2009 storm	428	-	104	532
32	Rutsatz Road: Repair January 2009 storm damage	268	-	39	307
33	Refurbish/Upgrade of the Whatcom Chief	-	850	-	850

34	Ferry Dock Improvements: Improvements to Lummi Island Ferry Docks	-	-	600	600
35	Various Ferry Parking and Staging	-	-	10	10
36	Gooseberry Point Ferry Dock Relocation: Relocation feasibility study	10	-	5	15
37	Various Bridges Rehabilitation / Replacement: As prioritized	-	-	1,600	1,600
38	Subdivision overlays: Various locations	-	-	850	850
39	Structural Overlays: Various locations	-	-	850	850
40	Right of Way Acquisition: Various locations	-	-	180	180
41	Unanticipated Site Improvements: As prioritized	-	-	1,900	1,900
42	Gravel Conversions: Various locations	-	-	50	50
43	Storm water Quality Improvements: As Prioritized	-	-	450	450
44	Non-motorized Transportation Improvements: Various Locations	-	-	750	750
45	Fish Passage Project: Various Locations	-	-	650	650
46	Railroad Crossing Improvements: Various Locations	-	-	180	180
47	Neighborhood Traffic Calming: Various Locations	-	-	180	180
Totals		7,287	4,500	13,810	25,597

