

# San Juan County Community Development & Planning

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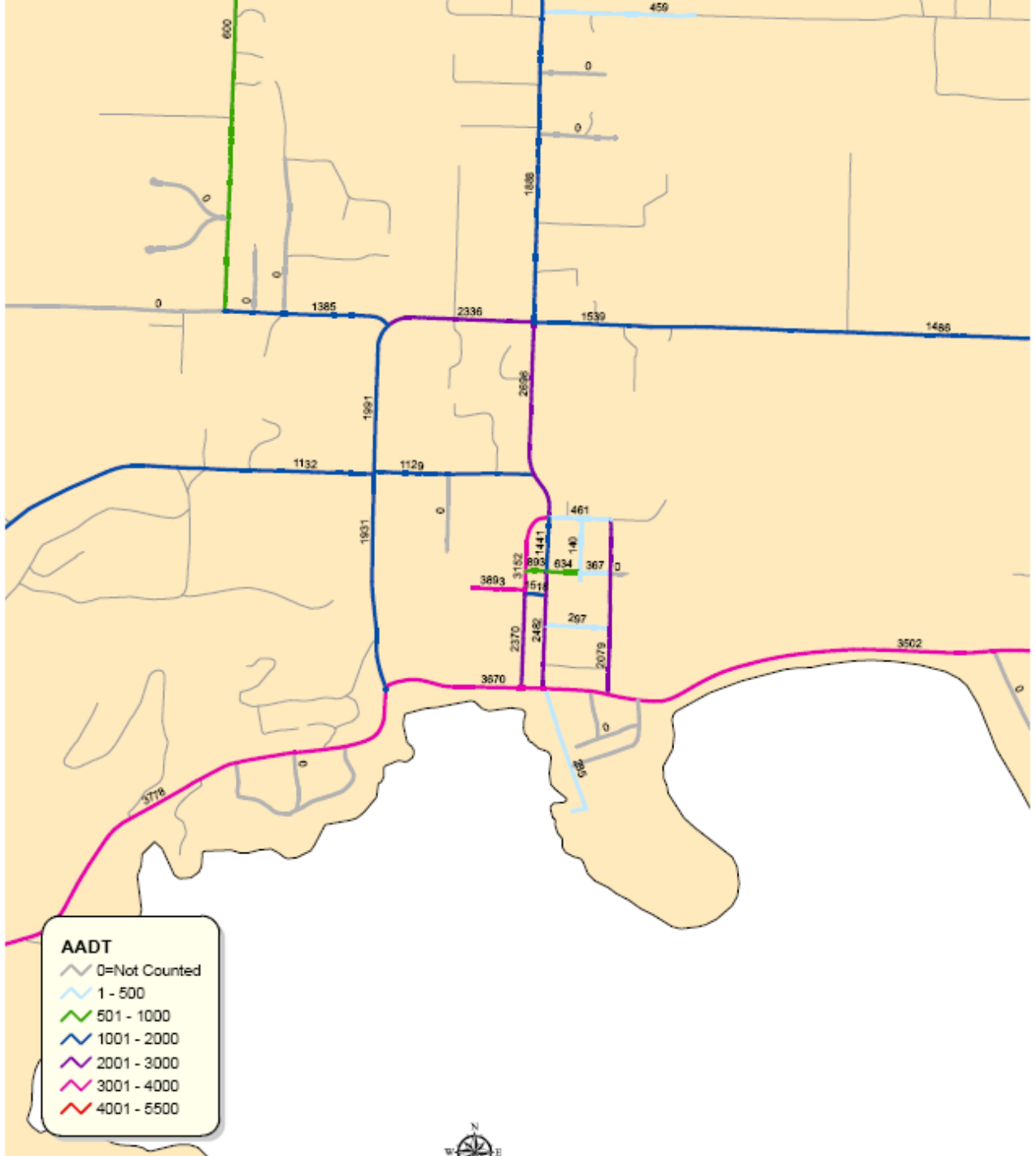
14 September 2007

## Traffic, Transportation and Roads In Eastsound

Table 1

Road and limits	Classification	ROW
"A" Street, in village	Collector	30ft
Crescent Beach Road, Main Street to Olga Road	Major Arterial	30-60ft
Enchanted Forest Road, in village	Minor Arterial	30-60ft
Enchanted Forest Road, west of Lovers Lane	Collector	30-40ft
Lovers Lane, Main Street to Mount Baker Road	Major Arterial	60ft (+/-)
Main Street, in village	Major Arterial	60ft (+/-)
Mount Baker Road, Lovers Lane to Terrill Beach Road	Major Arterial	60 ft (+/-)
Mount Baker Road, west of Lovers Lane	Minor Arterial	30ft
North Beach Road, north and south of Mount Baker Road	Collector	N40ft/S50ft
Olga Road, south of Crescent Beach Road	Major Arterial	60ft
Orcas Road south of Main Street	Major Arterial	60ft
Prune Alley, in village	Collector	50ft
Terrill Beach Road, Mount Baker Road to Crescent Beach Road	Major Arterial	50ft
Terrill Beach Road, north of Mount Baker Road	Collector	30ft
Rose St.		50ft
Pine St.		50ft
Madrona		50ft
Fern		50ft

# 2006 AVERAGE ANNUAL DAILY TRAFFIC (AADT)



**AADT**

- 0=Not Counted
- 1 - 500
- 501 - 1000
- 1001 - 2000
- 2001 - 3000
- 3001 - 4000
- 4001 - 5500

*This map is a graphic representation derived from San Juan County's Geographic Information System. It is designed and intended for reference only, and is not guaranteed to survey accuracy. This map is based on the best information available as of the publication date.*



**Average Annual Daily Traffic (AADT) - 2006 Road Update**  
 San Juan, Orcas, and Lopez Islands  
 San Juan County, Washington

Figure 1

Table 2 Data Item	Actual 2006	Forecast 2020
<b>Demographic Forecasts per San Juan County Planning Documents</b>		
Orcas Island total population	4,090	6,700
Orcas Island total dwellings	1,893	3,101
UGA total dwellings	446	895
<b>Trip Generation Results</b>		
UGA residential trip generation	3,200	6,391
UGA non-residential trip generation	10,200	15,785
UGA total trip generation	13,400	22,176
<b>External Traffic Characteristics</b>		
Orcas Road west of UGA	3,200	3,619
Olga Road east of UGA	3,000	3,388
Total external trips	6,200	7,007
<i>External-internal trips</i>	4,600	5,236
<i>Through trips</i>	1,600	1,771

Sources:

Technical Memorandum, Eastsound UGA Plan Revision, Transportation /Circulation Analysis, October 2001.  
Appendix I Population Projections, corrected November 7, 2005

Traffic numbers and level of service standards (LOS) are the products of complex calculations designed to measure the impacts of the interaction of various sub routines and behaviors. The table above deals in simple aggregates and therefore doesn't begin to try and weight the streets upon which the majority of trips will take place. If one simply divides the total number of projected AADT's for 2020 into the number of Eastsound streets/segments identified in table 1, the result will be generic 1584 AADT per street/segment significantly below the 4,344 - 7,657 AADT LOS D for arterials in open terrain adopted by the county. If the total number of projected AADT's are divided equally among the arterials in Eastsound, the result is 2464 AADT, again well below the LOS D standard set by the county.

Level of Service standards adopted by the County are detailed in Comprehensive Plan, section 6.5C. In essence, the LOS standards measure speed and time spent waiting at an intersection. The LOS provides a standard upon which plans for future expansion and expenditures can be based. As the Comprehensive Plan notes in Section 6.5 C (3);

LOS D can be described as that condition during the peak hour when average vehicle operation speeds drop to 35 miles per hour, platoon sizes are typically 5-10 vehicles, and 75 percent of the motorists are delayed by congestion or slower vehicles.

<sup>1</sup> All the numbers in this chart are derived from the 2001 technical memorandum, however, as that document was premised on a larger UGA, I took the new UGA's total number of units as a percentage of the original (77%) and brought the other numbers into line with this.

Trip generation and traffic is complex phenomenon, furthermore, as the demographic profile of the islands change, tolerance for heightened peak level congestion is likely to increase, if only because the newer residents tend to be arriving from heavily trafficked areas. In addition, Island residents may prefer to maintain the status quo, or only support minor traffic pattern changes in order to forestall the expense of large scale road projects.

A cursory examination of the AADT counts below, reveals a drop in traffic in most areas from a 2002 high. This drop seems to run counter to the expectation that increased population will entail increased traffic. This decline indicates that there are fewer vehicles on the streets of Eastsound. Whether the decline indicates that difficulties in finding parking in Eastsound is discouraging casual traffic or an increased use of alternative modes of transportation such as walking or cycling out of preference is much more difficult to determine.

It appears clear that over the planning horizon considered by the Subarea Plan update, the existing road system within the Eastsound UGA is has sufficient excess capacity to absorb increased use without a corresponding decrease in the service level.

### Orcas Rd and Main Street

COUNTY	FUNCT	ISLAND	MILE	ROAD NAME	LOCATION DESCRIPTION	2000	2001	2002	2003	2004	2005	2006	2007
ROAD	CLASS	NO.	POS			AA	AA	AA	AA	AA	AA	AA	AA
4	9	2	8.20	MAIN STREET	EAST OF LOVERS LN		4003		4146		3989	3670	

### North Beach:

COUNTY	FUNCT	ISLAND	MILE	ROAD NAME	LOCATION DESCRIPTION	2000	2001	2002	2003	2004	2005	2006	2007
ROAD	CLASS	NO.	POS			AA	AA	AA	AA	AA	AA	AA	AA
53	9	2	0.15	NORTH BEACH ROAD	NORTH OF MAIN ST	2090		3469			2370		
53	9	2	0.22	NORTH BEACH ROAD	SOUTH OF PRUNE ALLEY	1664		1946			3152		
53	9	2	0.58	NORTH BEACH ROAD	SOUTH OF MT BAKER RD	2705		2641	2809		2696		1337
53	9	2	0.64	NORTH BEACH ROAD	NORTH OF MT BAKER RD	1702		2065			1888		1727

### Prune Alley:

COUNTY	FUNCT	ISLAND	MILE	ROAD NAME	LOCATION DESCRIPTION	2000	2001	2002	2003	2004	2005	2006
ROAD	CLASS	NO.	POS			AA	AA	AA	AA	AA	AA	AA
54	9	2	0.25	PRUNE ALLEY	NORTH OF MAIN ST	2573		2732			2482	
54	9	2	0.49	PRUNE ALLEY	SOUTH OF NORTH BEACH RD	1853		1722			1441	

### More information:

- **ADT:** Volume is measured by ADT (Average Daily Traffic). ADT can be defined as the total traffic volume passing over a particular point during a given time period divided by the number of days in an overall time period.
- **AADT:** Volume measured over the course of a year is defined as AADT (Average Annual Daily Traffic). AADT is calculated with seasonal fluctuation conversion factors.