GALIANO ISLAND
COMMUNITY PROFILE

December 2009

INTRODUCTION

This community profile was prepared by Islands Trust staff on behalf of the Galiano Island Local Trust Committee. It is intended to provide background information on land use and demographic trends on Galiano Island, serving as a tool for community planning and decision-making for the LTC in support of the review of its Official Community Plan. This Profile summarizes a variety of statistical information, primarily from the 2006 census.

Data Limitations

Due to population size and census procedures, there are significant limitations associated with the use of Census Canada statistics for small areas:

1. Non-response rate: there can be significant non-response rates, sometimes greater than 10%, which affect the quality of data.

2. Much of the data is gathered using a long form questionnaire which is provided to a 20% sample of households. In a community like Galiano, with a small population, this can result in significant margins of error, particularly where the data relates to a subset of the overall population.

3. Data suppression: in order to protect privacy, Statistics Canada will suppress data where numbers are small enough to result in the identification of individuals.

4. Random Rounding: in order to protect privacy, Statistics Canada also randomly rounds data to the nearest 5, resulting in variations where there are small numbers and some inconsistent totals.

POPULATION

Total Population

The following table provides the reported total population from each census since 1981, along with population changes and percent increases. These figures should be considered fairly accurate as they are from the short form distributed to 100% of households.

Table 1: Total Population (100%)

Year	Total	Change	% Change
1981	669		
1986	755	86	13%
1991	909	154	20%
1996	999	90	10%
2001	1071	72	7%
2006	1258	187	18%

Source: Statistics Canada, Census of Population and Housing

Despite some fluctuations, the population of the island has increased steadily and significantly since 1981, with the largest nominal increase noted in the most recent census period.

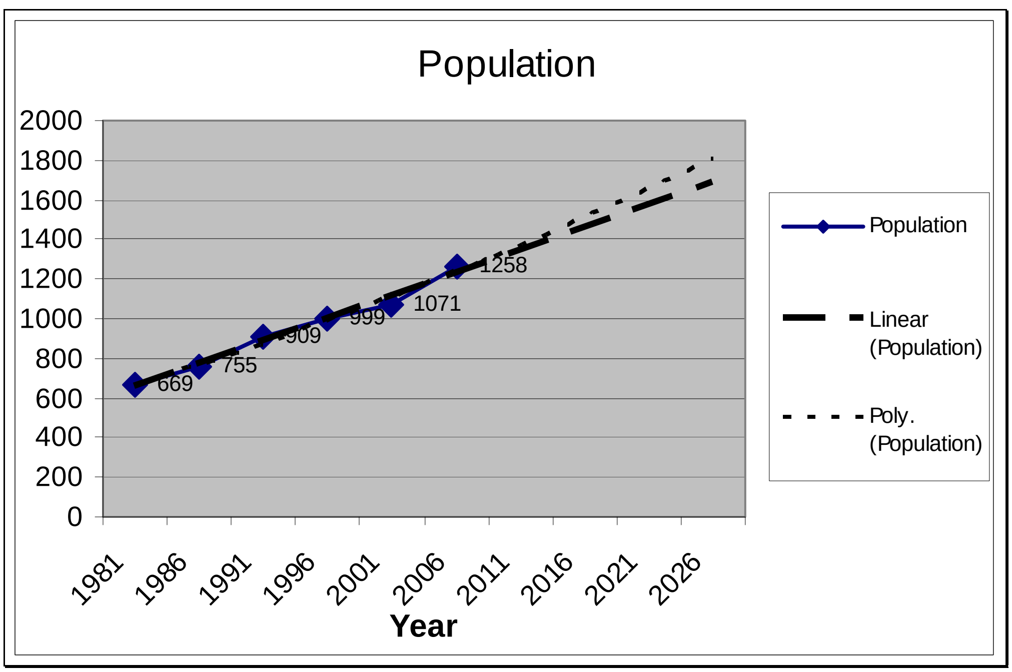

Chart 1: Population Growth

Chart 1, above, provides a simple population projection for Galiano by extending existing trends. The first method is a simple linear regression which fits a straight line to the existing data (past population) and projects it into the future. This approach, while simple, may be most appropriate for Galiano as past population changes are closely fitted to a straight line. The second approach is a polynomial regression which is intended to fit a non-linear model, for example a situation where growth has been increasing at an accelerating rate. This would be expected to be more useful if the trend seen in the past two census periods continues (i.e. variations in the rate of growth). However, the results are similar for both methods, projecting a total 2026 population of approximately 1700 and 1800 respectively, increases of approximately 450 or 550, or 1.5% or 1.8% annually.

Comparing these to population projections prepared for larger areas provides a control. The smallest unincorporated areas for which BC Stats prepares population projections are Local Health Areas. Galiano falls within the Gulf Islands Local Health Area, which consists of Salt Spring Island and the Southern Gulf Islands. BC Stats current projection for the Gulf Islands LHA projects a 2026 population of 20,076, an increase of 35% over the 2006 population of 14,861. Applying the same rate of increase to Galiano projects a population in 2026 of approximately 1700, consistent with the linear trendline projection above.

Population by Age and Sex

The following table reproduces rounded totals for the various age cohorts for males and females, with totals, and as a percentage of the Galiano population. The provincial percentages are provided for comparison.

Table 2: Population by Age and Sex (100%)

	Male	Female	Total	%	% BC
0-9	35	40	75	6%	10.30%
10-19	35	45	80	6.4%	12.90%
20-29	40	45	95	6.8%	12.50%
30-39	65	55	120	9.6%	13.30%
40-49	85	85	170	13.4%	16.50%
50-59	130	155	285	22.6%	14.80%
60-69	130	115	245	19.4%	9.30%
70-79	65	75	140	11.1%	6.40%
80+	35	45	80	6.4%	4.00%
Total	610	650	1260	100%	100%
65+	160	165	325	26%	14.60%
Median age				53	41.8

Source: Statistics Canada, Census of Population and Housing

The data indicates that the island’s age profile is heavily skewed towards the 50+ age cohorts in comparison to the province as a whole (60% compared to 34.5% for B.C.). This age profile has implications for anticipated housing demand, average household size, demand for services and transportation.

Households

The following table summarizes the number of households and the number of persons in each category of households. The results and totals vary due to rounding.

Table 3: Household Structure (20%)

	# of Hhlds	%	# of persons
One person	290	43.6%	290
Two persons	275	41.4%	550
Three persons	55	8.3%	165
Four or more	45	6.8%	215
Total	665	100%	1220
Average Household size:	1.9		

Source: Statistics Canada, Census of Population and Housing

Household size is a key determinant in assessing housing demand: people live in dwellings as households and changes in household composition and size can have significant effects on housing demand regardless of changes in overall population size. Small changes in average household size can represent significant changes in the demand for dwellings.

Mobility

Table 4 below summarizes changes in residence since the last census. The totals are not cumulative, but are subsets of the larger classes: people are either movers or non-movers, movers are either migrants or non-migrants (i.e. moved within the census area), and migrants are either intra- or inter- provincial migrants.

Table 4: Mobility (20%) 2006

	No.	%	BC %
Total – status from 5 years previous	1250	100	100
Non-movers	1070	86	53
Movers	180	14	47
Non-migrants	60	5	23
Migrants	125	10	23
Internal Migrants	125	10	18
Intraprovincial migrants	110	9	14
Interprovincial migrants	15	1	4
External migrants	0	0	5

Source: Statistics Canada, Census of Population and Housing

The data indicates that mobility is lower than the provincial average, however this is not unexpected given the demographic and tenure profile of the island: young people and renters tend to move more often. The amount of in-migration can be an indication of anticipated housing demand, and is the key component of population change on the island.

Education and Employment

Tables 5 through 7 tabulate data on employment and education. Because this data is based on 20% samples, and the sub-totals represent only fractions of the total population, there can be expected to be significant error in the results and these figures should be used cautiously.

Table 5: Employment (20%) 2006

	No.	%	BC %
Total population (15 and older)	1135	100	100
In the labour force	725	64	66
Employees	355	31	84
Self-employed	360	32	8
Not in labour force	410	36	34
Participation Rate		63.9%	65.6

Source: Statistics Canada, Census of Population and Housing

Table 6: Labour Force by Industry (20%) 2006

	No.	%	BC %
All industries	725	100	100
Agriculture, forestry, fishing, hunting	25	3.4	3.4
Construction	140	19.3	7.5
Manufacturing	15	2.1	8.5
Wholesale Trade	10	1.4	4.1
Retail trade	50	6.9	11.2
Transportation and Warehousing	35	4.8	5.2
Information and cultural industries	50	6.9	2.6
Real estate, rental and leasing	10	1.4	2.3
Professional, scientific and tech. services	100	13.8	7.3
Admin. & support, waste management	50	6.9	4.4
Educational Services	25	3.4	6.9
Health care and social assistance	30	4.1	9.6
Arts, entertainment and recreation	20	2.8	2.3
Accommodation & food services	85	11.7	8.1
Other services	35	4.8	4.9
Public administration	20	2.8	5.0

Source: Statistics Canada, Census of Population and Housing

Table 7: Education (20%) 2006	No.	%	BC %
Population 25 – 64	760	100	100
No certificate, diploma or degree	65	8.6	12
High school or equivalent	195	25.7	26
Apprenticeship or trade	75	9.9	12
College or other non-university	95	12.5	20
University	330	43.4	30

Source: Statistics Canada, Census of Population and Housing

Table 8: Mode of Transportation (20%)	2001%	2006%	BC %
Car/truck as driver	88%	73%	72%
Car/truck as passenger		6%	8%
Public transit		2%	10%
Walked		15%	7%
Bicycle	3.6%	2%	2%
Other	3.6%	3%	1%

Source: Statistics Canada, Census of Population and Housing

Generally these tables indicate that Galiano has a labour force participation rate comparable to the province as a whole. This is high in comparison to some other local trust areas. In addition, a significant proportion of the labour force is self-employed, this would be expected to include a high proportion who work from home, which has important land use implications. The distribution of the labour force by industry highlights reliance on construction, the professions and the tourism industry.

Table 8 looks at how the employed labour force travels to work. Although these numbers are a 20% sample of a small total, if correct the results indicate that the number and proportion of workers using single occupant vehicles to get to work has decreased on Galiano, and workers travel modes are becoming similar to those of the province as a whole.

INCOME

Household Income

The following tables summarize the available data related to income, including reported income of all households in 2000 and 2005, the level of low income by different types of households, and the source of income.

Table 9: Household Income (20% Sample)

	2000	%	2005	%	BC %
Under $10,000	35	6%	95	14%	6%
$ 10,000 – $19,999	130	24%	100	15%	10%
$20,000 – $29,999	115	21%	60	9%	11%
$30,000 – $39,999	75	14%	120	18%	11%
$40,000 – $49,999	45	8%	55	8%	10%
$50,000 – $59,999	35	6%	70	11%	9%
$60,000 – $69,999	10	2%	30	5%	8%
$70,000 – $79,999	40	7%	25	4%	7%
$80,000 – $89,999	10	2%	35	5%	6%
$90,000 – $99,999	10	2%	15	2%	5%
$100,000 and over	30	6%	55	8%	19%
Average hhld income	$41,520		$47,332		$67,675
Median hhld income	$28,901		$36,967		$52,709

Source: Statistics Canada, Census of Population and Housing

Table 10: Prevalence of Low Income* (20% Sample)

	2000	2005**
All Families	315	330
low income	50	50
% low income	16%	15%
Unattached Individuals	275	380
low income	80	119
% low income	30%	31%
Total Population	1010	1215
low income	225	224
% low income	22%	19%

*the percentage of a specific group below Statistics Canada's low income cut-offs (LICO)

** before tax, incidence of after tax low after tax is lower for all categories

Source: Statistics Canada, Census of Population and Housing

Table 11: Income Composition (20% Sample)

	2005	BC
Employment Income	63%	77%
Government Transfers	14%	9.6%
Other	22%	13.4%

Source: Statistics Canada, Census of Population and Housing

Table 12: Economic Dependency (20% Sample) –Gulf Islands*

Sector	1991	1996	2001	2006
Forestry, Mining, Fishing	6%	3%	2%	3%
Agriculture	2%	2%	2%	3%
Tourism	6%	7%	7%	7%
Public Sector	18%	18%	18%	18%
Other	17%	17%	18%	19%
Transfers	8%	21%	20%	17%
Other non-employment income	43%	31%	32%	33%

*Data prepared by BC Stats for Galiano, Mayne, North Pender, Salt Spring Saturna and South Pender Islands
Source: BC Stats

This data highlights the fact that incomes are lower than average on Galiano and that there are a significant number of individuals who meet the definition of low income. This has implications for housing demand, planning for services and economic development, and need for affordable housing. The breakdown of income sources also indicates that lower proportions of income come from employment and higher proportions come from transfers, although this may be changing based on differences between 2001 and 2006. Table 12, which is for the area as a whole, highlights how much the community is dependant on transfers, including investment and interest income (at 33% this is the highest of all areas examined by BC Stats).

HOUSING

Dwellings

The following table summarizes the reported number of occupied dwellings in 2001 and 2006, as well as the reported number of total dwellings. Occupied dwellings are those in which a household is permanently residing (also included are private dwellings where the usual residents are temporarily absent on Census Day). Total dwellings includes all dwellings reported in the census, occupied or not; this gives an indication of the number and proportion of dwellings which are seasonal, recreational properties. However, as the latter category may include reporting of cottages and tourist units, it should be considered cautiously.

Table 13: Occupied Private Dwellings (100%)

	2001	**2006**	**Change**	**% △**
Total number of dwellings	1088	1289	201	18.5%
Number of Dwellings Occupied by Usual Residents	550	668	118	21.5%
% occupied by residents	51%	52%		

Source: Statistics Canada, Census of Population and Housing

This data indicates that the proportion of dwellings occupied by permanent residents has increased at the same rate as the overall number of dwellings. Thus, while the number of net new dwellings has increased (~40 a year), the increase in the number occupied year-round has increased proportionally. The rate of increase in dwellings in this period is likely higher than average: record numbers of permits were issued in the later part of the inter-census period and a slower rate of increase should be anticipated in the next few years.

These figures indicate that about half the dwellings on the island are occupied by permanent residents; however, as noted above, this may be an over-estimate of dwellings as that term is defined by zoning.

The following tables provide an indication of the type and state of housing on Galiano. The category “other” dwellings can include attached dwellings (duplexes, suites, row houses, apartments) and mobiles. The second table indicates the proportion of dwellings in need of repair; “major repairs” is defined as the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc. The age of construction also gives an indication as to the overall condition of the existing housing stock (because of sampling and rounding the figures in Tables 15 and 16 should be used cautiously).

Table 14: Dwelling Type (100%) – Occupied Dwellings

	2001	%	2006	%	No. (% △)
Single-detached	505	93%	600	90%	95 (19%)
Other	40	7%	65	10%	25 (63%)
Total	545	100%	665	100%	120 (22%)

Table 15: Maintenance (20%) – Occupied Dwellings				
	2001	%	2006	%
Regular maintenance only	280	51%	395	59%
Requiring minor repairs	220	40%	170	26%
Requiring major repairs	45	8%	105	16%

Table 16: Period of Construction (20%) – Occupied Dwellings 2006			
	No.	%	BC %
Before 1946	25	4%	8%
1946-1960	45	7%	11%
1961-1970	60	9%	13%
1971-1980	170	26%	22%
1981-1990	155	23%	18%
1991-2000	150	23%	21%
2001-2006	70	11%	8%

Source: Statistics Canada, Census of Population and Housing

The data on the housing stock not surprisingly finds that almost all dwellings are single detached houses (the others likely being mobiles, accessory dwellings, or suites), and most require only routine maintenance. That the great majority have been constructed since 1970 (~80%, compared to 70% for BC), indicates that most of the housing stock should be in good repair and significant redevelopment is not anticipated.

Housing Affordability

The following table provides some indication of housing affordability needs on Galiano. Table 17 tabulates the reported number of tenant and owner occupied dwellings for 2001 and 2006, the average rent and value, and the proportion of dwellings where households pay more than 30% of income on shelter.

Table 17 - Tenure (20%) - 2006	2001	2006	BC 2006
Number of Occupied Private dwellings	550	670	
Tenant Occupied	135 (25%)	125 (19%)	30%
Average gross rent	$719	$615	$828
Spending 30% or more of income on rent	105 (78%)	70 (56%)	43%
Owner Occupied	415 (75%)	535 (80%)	70%
Average Value	$294,523	$505,730	$418,703
Spend 30% or more of income on major payments	90 (22%)	180 (34%)	23%

Source: Statistics Canada, Census of Population and Housing

This data provides an indication of the anticipated need for affordable housing on Galiano; although the data should be used with caution as it is a 20% sample of a small subset of the total population.

LAND USE

Agriculture

The following table summarizes data from the Census of Agriculture for farms on Galiano.

Table 18: Census of Agriculture (2006)	
Total number of farms	19
Farms reporting organic production	10
Farm area:	
Under 10 acres	3
10 to 69 acres	13
70 to 129 acres	2
130 acres or more	1
Total Owned area (acres)	652
Land in crops (acres)	50
Pasture (acres)	141
Woodlands and wetlands (acres)	337

This data confirms that there are a number of working farms, and that significant areas are in agricultural use, providing support for land use deliberations concerning agricultural land.

Residential Development Potential

The *Local Government Act* (877(1)(a) requires that an OCP must include the approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least five years.

The following table provides a summary of the residential development potential on Galiano in terms of the number of existing lots, number of lots that are vacant (according to BC Assessment classification), the number of potential additional lots that could be created through subdivision given the current zoning, and a total residential development potential in terms of lots.

Table 19: Residential Subdivision Potential by zone - 2009

Zone	Existing Parcels	Vacant Parcels	Potential Additional Parcels	Estimated Total Potential Lots
AG*	42	7	41	83
F2	8	1		8
FLR	5			5
R2*	129	40	51	180
R3*	12	1	7	19
RR*	198	39	51	249
SCR	1			1
SLR*	638	78	46	684
VR1	11	2		11
VR2	166	17	25	191
TOTAL	**1210**	**185**	**221**	**1431**

*Zones which permit ‘dwellings equivalent to lots’

There are a number of caveats that should be applied to this subdivision potential calculation: the potential number of additional parcels is a theoretical maximum, it does not account for inability to actually subdivide due to:

- Topography: many lots may not be able to achieve subdivision approval at all or for the full number of potential lots due to geological conditions, particularly hazards from rockfall and landslip. The subdivision approving officer will not approve subdivisions where there is an unacceptable probability of geological hazard.
- Access: new water access only subdivisions cannot be created and some lots may need to obtain access through intervening lots that may never be subdivided. The subdivision approving officer will not approve subdivisions where new lots do not have dedicated access.
- Park dedication requirements: the requirement for dedication of up to 5% of land being subdivided for certain subdivisions could result in one fewer lot in some instances.
- There are many existing covenants granted to various agencies and bodies that in one way or another restrict future subdivision. These include explicit restrictions on further subdivision where lot averaging or dwellings equivalent to lots has occurred, conservation covenants, covenants granted to the Ministry of Environment or Ministry of Transportation that restrict further subdivision due to environmental or hazardous conditions and private restrictive covenants.
- Servicing requirements: some subdivisions may never occur due to inability to meet servicing requirements, such as proof of potable water, septic disposal, driveway access to building sites, etc.
- Costs: the costs associated with subdivision are not insignificant, particularly for lots that have access, topographical or servicing issues. These costs may preclude the ultimate subdivision of many of these lots.
- Landowner intention: there is no compulsion on a landowner to subdivide, and many landowners simply have no desire to subdivide, particularly where zoning allows for dwellings equivalent to lots.
- Subdivision or additional dwellings in the ALR must be approved by the Agricultural Land Commission. The ALC reviews each application on its own merits with respect to the effect on agriculture.

This is a calculation of residential subdivision potential only; additional dwelling units can be created as cottages in the various zones or as accessory dwelling units in the commercial zones. The number of potential maximum cottages is calculated in the table below. These are theoretical maximums only and there are many reasons why an owner would choose not to construct a cottage.

Table 20: Cottage Potential by zone			
Zone	Current Max # of Cottages	Potential Additional Cottages with full subdivision	Total
R2	129	51	180
R3	12	7	19
RR	197	51	248
SLR	366	46	412
VR1	3		3
VR2	88		88
	795	155	950

The fact that many of the rural zones permit 'dwellings equivalent to lots' means that it is not possible to simply equate the number of potential new lots that could created with potential additional dwellings units. There is currently no means of definitively determining how many of the subdividable parcels in these zones represent additional potential development, or simply the option to subdivide lots that are already built to all or part of the maximum permitted density.

Comparing the 2006 census count of 1289 dwellings with the final subdivision build-out of 1431 indicates that there is only a potential for 142 additional dwellings. However, as the census total likely includes some cottages and other accessory dwellings, it should not be used as indicative of the current level of residential dwellings in the sense that the Land Use Bylaw considers that use. A more cautious approach to addressing the minimum remaining potential is to total the number of existing vacant lots, the number of potential additional parcels in the VR2 zone (which does not permit dwellings equivalent to lots) and subdivision potential of vacant lots in the zones which do permit dwellings equivalent to lots:

1. Total vacant residentially zoned parcels = 185
2. Potential additional lots in the VR2 zone = 25
3. Number of additional potential lots from other vacant = 47
4. Total known additional potential dwellings = 257

This total of 260 +/- dwellings represents a conservative estimate of how many additional dwellings could be constructed under the existing zoning. In addition, there will be further dwellings that can be constructed on lots in zones that permit dwellings equivalent to lots, but which are currently only partly developed (somewhere between 0 and 150 additional dwellings).

This estimate gives an indication of whether or not the current land use designations can meet the *Local Government Act* requirement for 5 years of residential housing needs, or if land use changes are need to be considered to accommodate projected growth. Using the population projections created above:

1. Assuming a population increase of 1.8% per year: 1250 (2006 population) @ 1.8% per year = 1550 in 2020, or an increase of 300 permanent residents.

2. Assuming an average household size of 1.9 persons: 300 persons / 1.9 = 160 households.

3. Assuming that 60% of new dwellings are occupied by permanent residents: 160 / 60% = 265 dwellings

Using these conservative estimates, there are at least ten years of additional residential housing needs that can be accommodated under the current land uses and density. Some of this growth will also be in additional dwellings equivalent to lots constructed on parcels that are not vacant, in cottages, and potentially in some a shift from seasonal occupancy of dwellings to permanent occupancy.